

MOTORHOME SERVICE BULLETINS INDEX



ALL MODELS



TRUCK & COACH DIVISION
GENERAL MOTORS CORPORATION
Pontiac, Michigan 48053

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**INDEX
OF
GMC MOTORHOME SERVICE BULLETINS**

This is a list of the GMC Motorhome Service Bulletins. Motorhome Service Bulletins are written to help maintenance personnel keep abreast of product improvements and recommended maintenance methods.

A complete knowledge of bulletin contents is essential if maximum service is to be obtained from the GMC Motorhomes which are maintained under your supervision. Maintenance personnel should become thoroughly familiar with the contents of each bulletin.

TRUCK & COACH DIVISION
GENERAL MOTORS CORPORATION
Pontiac, Michigan 48053

Bulletin #	(Group #)	Subject	Year Issued
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0 – MAINTENANCE

74-IM-7	(0-1)	LPG Tank Moisture & Line Freezing (23' & 26' Motorhomes)	1974
74-IM-8	(0-2)	Instamatic Gas/Electric Refrigerator Usage (All)	1974

1 – CAB & BODY

73-IM-15	(1-2)	Entrance Door Key	1973
74-IM-19	(1-1)	Front Access Door Supports (1973 & 1974 - 230 and 260 Motorhomes).	1974
74-IM-20	(1-2)	Strap - Rear Access Doors (1973 & 1974 - 230 and 260 Motorhomes)	1974
75-IM-3	(1-1)	Entrance Door Seal (1973 & 1974 - 230 and 260 Motorhomes)	1974
75-IM-19	(1-4)	Automotive Air Conditioning High Speed Blower Fuse Holder (All equipped with automotive type air conditioning)	1975
75-IM-21	(1-5)	Run Channel - Sliding Side Windows: First Type (1973, 1974 & 1975 Motorhomes and Transmodes)	1975
75-IM-23	(1-6)	"Hehr" Living Area Side Window Assemblies (1975 Models)	1975
75-IM-25	(1-8)	Windshield Wiper Motor Filter (All Models).	1975
77-IM-3	(1-1)	Window Rattle - Sliding Side Windows	1976
77-IM-9	(1-4)	Sealant - Water Leaks	1977
78-IM-1	(1-1)	Glass Replacement (Motorhomes).	1977
78-IM-2	(1-2)	Paint Codes	1977
73-TM-4	(1-)	Mark IV Roof Mounted Air Conditioner (TZE033 & TZE063).	1973
73-TM-5	(1-2)	Marker Lamp Water Leaks (All)	1973
73-TM-7	(1-3)	Stove Vent Noise While Driving (TZE033 & TZE063).	1973
73-TM-8	(1-4)	Potable Water Tank Breakage & Leaking (TZE033 & TZE063)	1973
73-TM-9	(1-5)	Window Sash Discoloration (All TZE0s)	1973
73-TM-13	(1-6)	Rub Rail Insert Retention	1973
74-TM-8	(1A-1)	Temperature Control Cable Binding (TZE063 & TZE033).	1974
74-TM-9	(1B-1)	Step-Riser Splash Shields (All 1973 & 1974 - 230 & 260 Motorhomes)	1974
74-TM-12	(1A-2)	Hot Water Shut-off Valve (All equipped with chassis air RPO-C70)	1974
75-TM-1	(1-1)	Roof to Side Body Joint Seal (1973 & 1974 - 230 and 260 Motorhomes)	1974
75-TM-5	(1-2)	Sliding Window Stops (1973 & 1974 - 230 and 260 Motorhomes)	1974
75-TM-6	(1-3)	Mounting Plate - Driver & Passenger Single Swivel Seat (1973 & 1974 - 230 and 260 Motorhomes).	1974
75-TM-7	(1-4)	End Cap Screw Retention (1973 & 1974 - 230 and 260 Motorhomes)	1974
75-TM-10	(1-5)	Water Leak Diagnosis & Correction (1973 & 1974 - 230 and 260 Motorhomes	1975
75-TM-10A	(1-5)	Supplement to 75-TM-10, Water Leak Diagnosis & Correction (1973, 1974, 1975).	1975
75-TM-12	(1-6)	Splash Shield - Lower Step Riser (1975 Motorhomes and Transmodes).	1975
75-TM-16	(1-7)	Chassis Air Conditioning Condenser Discharge Tube (All Motorhomes equipped with chassis air conditioning).	1975
75-TM-19	(1-8)	Entrance Door Fit (1973 thru 1975 - All Models)	1975
75-TM-20	(1-9)	Instrument Panel Repair Procedure (All Models)	1975
75-TM-21	(1-10)	Entrance Door Restraint (1973 thru 1975 Motorhomes)	1975
75-TM-22	(1-11)	Entrance Door Lock (1975 Motorhomes prior to TZE165V101121 and Transmodes prior to TZE365V101122).	1975

Bulletin #	(Group #)	Subject	Year Issued
76-TM-1	(1-1)	Chassis Air Conditioning Duct Addition For Increased Efficiency (All Motorhomes prior to TZE166V100062 and Transmodes prior to TZE366V100049)	1975
76-TM-1A	(1-1)	Supplement to 76-TM-1	1976
76-TM-3	(1-2)	Auxiliary Temperature Door Adjustment (All 1976 Models with chassis air conditioning)	1976
76-TM-5	(1-3)	Power Air Vent Molding Attachment (Late 1975 plus early 1976 Motorhomes)	1976
77-TM-1	(1-1)	Cold Weather Driver & Passenger Comfort	1977
3 - FRONT AXLE & SUSPENSION			
73-IM-8	(3-1)	Heavy Duty Shocks (All)	1973
75-IM-15	(3-1)	Front End Alignment (1975 Transmodes)	1975
75-IM-17	(3-2)	Front End Alignment (All Motorhomes & Transmodes)	1975
76-IM-6	(3-1)	Service Procedure for Installing Steering Knuckle Seal (All Motorhomes & Transmodes)	1976
76-IM-15	(3-2)	Front Wheel Bearing Puller (All Motorhomes & Transmodes)	1976
77-IM-2	(3-1)	Suspension, Steering and Tire Wear Diagnosis (All)	1976
73-TM-2	(3-1)	Ride Height, Front Suspension (Also see Bulletin 73-TM-3, Rear Suspension Group)	1973
77-TM-6	(3-1)	Final Drive Bracket (1977 Motorhomes with 403 engines)	1977
4 - REAR AXLE & SUSPENSION			
73-IM-9	(4-1)	New Air Bellows Part Number (23' & 26' Motorhomes)	1973
75-IM-9	(4-1)	Repair Air Line Fittings (All Models)	1975
75-IM-12	(4-2)	Deletion of Drain Cock on Air Reservoir Tank (All Models)	1975
75-IM-28	(4-3)	Rear Control Arm Spacer Kit (All Motorhomes prior to TZE064V101024)	1975
76-IM-3	(4-1)	Timing the Dana Air Compressor (All Models equipped with Dana Two-Cylinder Air Compressor)	1975
76-IM-17	(4-2)	Electro-Level Air Suspension System (1976 Models)	1976
77-IM-10	(4-1)	Motorhome Front & Rear Alignment (All)	1977
73-TM-3	(4-1)	Ride Height, Rear Suspension (Also see Bulletin 73-TM-2, Front Suspension Group)	1973
74-TM-5	(4-1)	Air Compressor Failure (All)	1974
74-TM-7	(4-2)	Plumbing of Air Compressor Pressure Switch (TZE033 and TZE063)	1974
75-TM-4	(4-1)	Service Kit for Rear Suspension Bushing Replacement (All Motorhomes preceding TZE064V101010)	1974
75-TM-4A	(4-1)	Service Kit for Rear Suspension Bushing Replacement (Supplement to 75-TM-4) (All Motorhomes preceding TZE064V101010)	1975
75-TM-23	(4-2)	Servicing Rear Suspension Bushings (All Models later than TZE064V101010)	1975
75-TM-24	(4-3)	Air Compressor Replacement (All Models Equipped with Brown Compressors)	1975
77-TM-2	(4-1)	Dana Air Compressor Failures (All)	1977
5 - BRAKES			
74-IM-10	(5-1)	Front Brake Disc & Hub Assembly Torque Specification (All)	1974
6A - ENGINE GASOLINE			
73-IM-3	(6A-1)	Oil Filter Cooler Adapter Seepage	1973
73-IM-14	(6A-2)	Silastic Valve Cover Gasket Installation	1973

Bulletin #	(Group #)	Subject	Year Issued
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6M – ENGINE FUEL SYSTEM

73-IM-11	(6M-1)	Fuel Filter and System Maintenance (All)	1973
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6Y – ENGINE ELECTRICAL

75-IM-10	(6Y-1)	Battery and Starter Cable Connections to Battery Boost Magnetic Switch (All Models)	1975
75-IM-11	(6Y-2)	HEI Distributor Pickup Coil Identification (1975 Motorhomes & Transmodes)	1975
76-IM-11	(6Y-1)	Delco-Remy Maintenance Free Batteries (All Models equipped with maintenance free batteries)	1976
75-TM-2	(6Y-1)	Battery Cap Retention (1973 & 1974 - 230 and 260 Motorhomes)	1974

7 – TRANSMISSIONS & CLUTCHES

73-IM-5	(7-0)	Transmission Detent-Downshift Switch Adjustment (All Models)	1973
76-IM-8	(7-1)	Detent Solenoid - 425 Model Transmission (All Models)	1976

9 – STEERING SYSTEM

74-IM-9	(9-1)	Steering Torque Specifications (All Motorhomes)	1974
74-IM-13	(9-2)	Front End Geometry Adjustment Diagnosis (All 1973 and 1974 Motorhomes)	1974

10 – WHEELS & TIRES

75-IM-16	(10-1)	Removal of Wheels from Hubs (All Motorhomes)	1975
76-IM-10	(10-2)	Tire Valve Stem Extension (All Models)	1976
77-IM-1	(10-1)	Use of Radial-Ply Tires on GMC Motorhomes (All Models)	1976

12 – CHASSIS – ELECT. & INSTRUMENTS

73-IM-12	(12-1)	Battery System (TZE063 & TZE033)	1973
73-IM-13	(12-2)	Light Bulb Specifications (All)	1973
74-IM-12	(12-0)	Availability of Warning Telltale Light Bulbs (All)	1974
74-IM-17	(12-2)	Generator Telltale Light (TZE063V and TZE033V)	1974
74-IM-18	(12-3)	Battery Boost Switch (All)	1974
73-TM-1	(12-1)	Electronic Low Fuel Indicator (ZE-06081 and ZE-06581 with RPO C96 - Warning Lights) . .	1973
73-TM-10	(12-2)	Junction Block to Magnetic Switch Cable (Early 23' and 26' Motorhomes)	1973
73-TM-12	(12-3)	Cruise Control Light (TZE033 & TZE063)	1973
77-TM-3	(12-1)	Cruise Control Servo Chain Length (All)	1977
77-TM-4	(12-2)	Living Area Battery Cable (1974 - 1977 Models)	1977

14 – BUMPERS

75-TM-8	(14-1)	Front Bumper Mounting Bracket (1973 & 1974 - 230 and 260 Motorhomes)	1975
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24 – MISCELLANEOUS

73-IM-2	(24-1)	Protective Covering on Carpets	1973
73-IM-4	(24-2)	Motorhome Bath and Closet Door Latches	1973
73-IM-7	(24-3)	Bath and Closet Door Latches (All)	1973
73-IM-16	(24-4)	Winterization Procedure for Living Area Water System (TZE063 & TZE033)	1973
74-IM-2	(24-1)	Onan Generator Stopping during Operation (4KW and 6KW)	1974

Bulletin #	(Group #)	Subject	Year Issued
74-IM-3	(24-2)	Mobile Radio Transmitters (Motorhomes)	1974
74-IM-4	(24-3)	Servicing the Printed Circuit Board on All Onan Generators (TZE033 & TZE063)	1974
74-IM-5	(24-4)	Onan Generator Circuit Boards	1974
74-IM-6	(24-5)	Thermasan Screen & Probe Change (TZE033 & TZE063)	1974
74-IM-11	(24-6)	Kohler Generator Cooling Air Shroud (All with RPO KLD-Kohler Generator)	1974
74-IM-14	(24-7)	Onan Motor Generator Starter Removal Procedure (All Models equipped with an Onan 4KW or 6KW Generator)	1974
74-IM-16	(24-8)	New Design Pistons and Rings for Onan 4KW Generator (All Models equipped with an Onan 4KW Generator)	1974
75-IM-1	(24-1)	Triad-Utrad Converters (All Motorhomes)	1974
75-IM-2	(24-2)	Bath Module Fiber Glass Construction (1973 thru 1975 Motorhomes)	1974
75-IM-5	(24-3)	City Water Inlet Valve (1973 & 1974 - 230 and 260 Motorhomes)	1975
75-IM-6	(24-4)	Installation of Water Filter in Fresh Water System (All 1973 and 1974 Motorhomes)	1975
75-IM-7	(24-5)	Inline Restrictor for Thermasan Vacuum Switch (1973 and 1974 Motorhomes equipped with Thermasan)	1975
75-IM-13	(24-6)	Sol-Aire Furnace (1975 Motorhomes)	1975
75-IM-14	(24-7)	Bio-Degradeable Toilet Tissue (All Motorhomes)	1975
75-IM-18	(24-8)	Plumbing Repair Kit (1975 Motorhomes)	1975
75-IM-20	(24-9)	Water Tank and Holding Tank Sending Units (1973 thru 1975 Motorhomes)	1975
75-IM-22	(24-10)	Bath Module Fiberglass Repair (All Motorhomes)	1975
75-IM-26	(24-11)	Onan Fuel Recommendations (All Motorhomes and Transmodes equipped with Onan Generators)	1975
75-IM-27	(24-12)	Onan Generator Specifications (All Motorhomes and Transmodes equipped with Onan Generators)	1975
76-IM-2	(24-2)	Testing Triad-Utrad Converters (All Motorhomes)	1975
76-IM-4	(24-3)	GMC Motorhome Maintenance Manual X-7425 Correction (1973 - 1974 Motorhomes)	1975
76-IM-7	(24-4)	Water Pump Pressure Switch Assembly (All Motorhomes prior to TZE165V1001451)	1976
76-IM-9	(24-5)	LP-Gas Tank Purge (All Motorhomes)	1976
76-IM-13	(24-6)	Onan 4KW Piston Ring Set and Piston Ring Expander (1973 and 1974 230 Motorhomes)	1976
76-IM-14	(24-7)	New Type Dipstick and Tube for 4KW Onan Generators (1973 & 1974 Motorhomes equipped with 4KW Onans)	1976
76-IM-16	(24-8)	Carburetor Preheater - Onan Motor Generator (All with 4KW & 6KW Onan Generators)	1976
77-IM-4	(24-1)	Mark II Water Naturalizer	1977
77-IM-6	(24-3)	Major RV Upfitters	1977
77-IM-7	(24-2)	GMC Motorhome Maintenance Manual X-7625 Correction (1976 Motorhomes)	1977
77-IM-8	(24-4)	Duo-Therm Furnace (All Motorhomes with Duo-Therm Furnaces)	1977
78-IM-3	(24-1)	Service Agencies for Thermador Thermatronic Ranges (1978 Motorhomes)	1977
78-IM-4	(24-2)	Shower Head Temperature Fluctuation (1977 - 1978 Models)	1978
78-IM-5	(24-3)	Draperies (All)	1978
73-TM-6	(24-1)	Delamination of Wood Surfaces and Doors (TZE033 and TZE063 - All)	1973
73-TM-11	(24-2)	Pilot Adjustment on Suburban Furnace (TZE033 and TZE063)	1973
74-TM-1	(24-1)	Velcro Carpet Fastener (TZE033 and TZE063)	1974

Bulletin #	(Group #)	Subject	Year Issued
74-TM-2 #2	(24-2)	Fresh Water Pump (All Motorhomes)	1975
74-TM-3	(24-3)	Onan Ignition Coil Condenser Wire Breakage (TZE033 and TZE063 equipped with Onan 4KW Generators)	1974
74-TM-4	(24-4)	12-Volt Converter Noise (TZE033 and TZE063)	1974
74-TM-6	(24-5)	Aqua-matic Toilet Ball Valve (All)	1974
74-TM-10	(24-9)	Onan Motor Generator Choke Adjustment (All with Onan Generator Set)	1974
74-TM-11	(24-6)	Exterior Power Cord Binds (All with 110 Volt Generator)	1974
75-TM-3	(24-1)	Onan Motor Generator Performance (All Models equipped with an Onan Motor Generator) . .	1974
75-TM-9	(24-2)	Improving Norcold Refrigerator Performance (1973 & 1974 Motorhomes)	1975
75-TM-11	(24-3)	Routing of the Thermasan Vacuum Switch Hose (All equipped with Thermasan switch disposal system)	1975
75-TM-13	(24-4)	Rear Side Facing Settee Latch Modification (Eleganza II)	1975
75-TM-14	(24-5)	Triad-Utrad Voltage Converter Hum (1973 & 1974 Motorhomes)	1975
75-TM-15	(24-6)	Rear Settee Kick Panels (1975 Eleganza II Motorhomes)	1975
75-TM-17	(24-7)	Dinette Seat Operation (Eleganza II)	1975
75-TM-18	(24-8)	City Water Valve Drain Cock (All Motorhomes)	1975
76-TM-2	(24-1)	Norcold Inverter Assembly Failure Analysis (All Models equipped with Norcold refrigerator)	1976
76-TM-4	(24-2)	Water Heater Pre-Heat (1975 & 1976 Motorhomes with Water Pre-Heat)	1976
77-TM-5	(24-1)	Air Conditioning Outlet Fit (1977 Motorhomes and Transmodes)	1977
78-TM-1	(24-1)	Ignition Pak Replacement (All with Sol-Aire Furnace except twin bed Models)	1978

RC - RECALL CAMPAIGNS

74-C-1		1973 ZE033 and ZE063 Motorhomes	1973
74-C-05	(10-1)	Motorhome Radial Tire (1973 and 1974 ZE050000)	1974
74-C-07		1973 and 1974 ZE05000 Motorhomes	1974
75-SPECIAL	(24)	Type II Suburban Furnaces - 22,000 BTU and 30,000 BTU (Certain 1973 and 1974 ZE05000 Motorhomes)	1975
75-C-08	(6K)	Preheat Hose Connection Tube Assembly (1973 - 1975 Motorhomes with RPO UNG)	1975
76-C-03	(9)	Lower Steering Shaft Assembly (TZE166V, 336V, and 366V Motorhomes and Transmodes) . .	1976
77-C-13	(24)	Onan Generator Possible 110V AC Conduit Interference with Positive Battery Stud (1976 - 1977 Motorhomes equipped with RPO KNC)	1977
78-C-05	(1)	Transmode Seatbelt Assemblies (1978 ZEO06583 and ZEO06083)	1978
81-SPECIAL	(10)	8.75R16.5LT Load Range D Tires	1981

... **SECTION 0** ...

MAINTENANCE



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

MT 1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 74-1M-7

GROUP: 0-Maint.-1

DATE: January, 1974

SUBJECT: LPG Tank Moisture and Line Freezing

MODELS: 23' and 26' Motor Home

Due to extreme cold winter weather conditions, there is a possibility of moisture collecting in the LPG tank due to condensation. This condition may cause the LPG regulator or line to freeze.

To prevent the occurrence of these conditions in the LPG system, you may find it desirable to add 1/2 pint of dry methyl alcohol during each winter fill-up of the LPG tank.

The use of dry methyl alcohol should only be added during extreme winter operating conditions, and only by an authorized LPG dealer.



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

AT 1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 74-1M-8

GROUP: 0-Maint.-2

							DATE: February, 1974

SUBJECT: Instamatic Gas/Electric Refrigerator Usage

MODELS: All

The following steps will assist GMC Motor Home owner with the Instamatic Gas/Electric Refrigerator achieve maximum cooling efficiency during period of owner usage.

1. The user should start the unit up well in advance of actually using the refrigerator, since a gas refrigerator is slower in drawing down the cabinet temperature.
2. In hot sunny weather the coach should be parked with the refrigerator vent side away from the sun, or if possible, in the shade.
3. In extreme hot weather the user may remove louvered service door to allow more air intake. This will also allow more draft behind the refrigerator and remove the warm air more efficiently.
4. In extreme hot weather, we recommend that the refrigerator door be opened only when necessary.
5. Since gas refrigerator liquid circulates by gravity flow, visual off-level parking will affect the operation.
6. The performance of each refrigerator will depend heavily on the ambient temperature, humidity, and leveling of the vehicle in which installed.

... **SECTION 1** ...

**CAB
&
BODY**



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

MT 1492

IMPORTANT—All Service Personnel Should Read and Initial

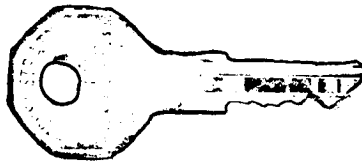
NUMBER: 73-1M-15
GROUP: 1-Cab Body

							DATE: Dec. 14, 1973

SUBJECT: Entrance Door Key

Since vehicle TZE063V102100, Motor Homes have been built with a pin and jaw type door lock. The new door lock cylinder rotates 15° clockwise to unlock the door and 15° counter-clockwise to lock the door. Also, the key is similar to the electrical utilities compartment and potable water filler cap keys and can be distinguished as follows:

OCTAGONAL
HEAD



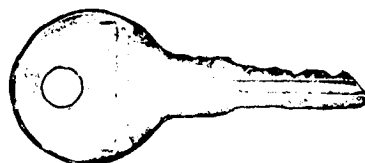
ENTRANCE
DOOR KEY

ROUNDED
SQUARE HEAD



ELECTRICAL UTILITIES
COMPARTMENT KEY

ROUND
HEAD



POTABLE WATER
FILLER CAP KEY



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 74-IM-19

GROUP: 1-CAB & BODY-1

DATE: May, 1974

SUBJECT: FRONT ACCESS DOOR SUPPORTS

MODELS: 1973 & 1974 230 AND 260 MOTOR HOMES

Front access door supports were incorporated on late 1974 model motor homes. Vehicles built prior to the change can be modified at the owner's expense.

PARTS INFORMATION

<u>Quantity/Vehicle</u>	<u>Part Number</u>	<u>Description</u>
1	709361	Support — right front access door
1	709362	Support — left front access door
4	700368	Rivet

INSTALLATION INSTRUCTIONS

1. Install right access door support as shown in figure 1.
2. Locate and drill $\frac{3}{16}$ " hole $3\frac{5}{8}$ " up from access opening on center pillar as shown in figure 2.

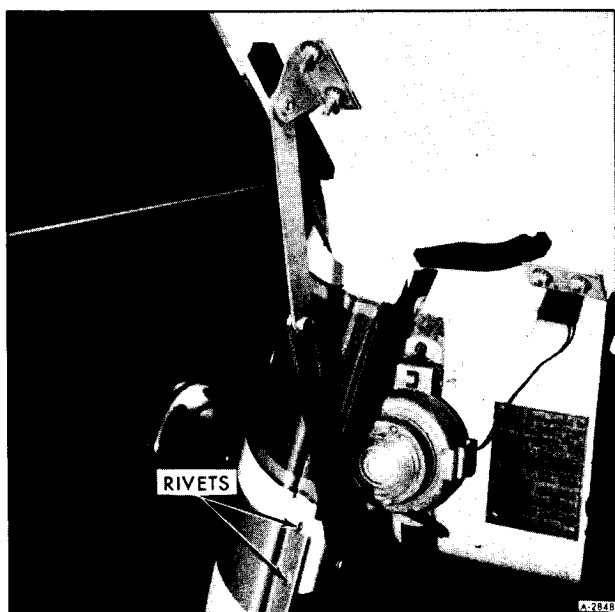


Figure 1

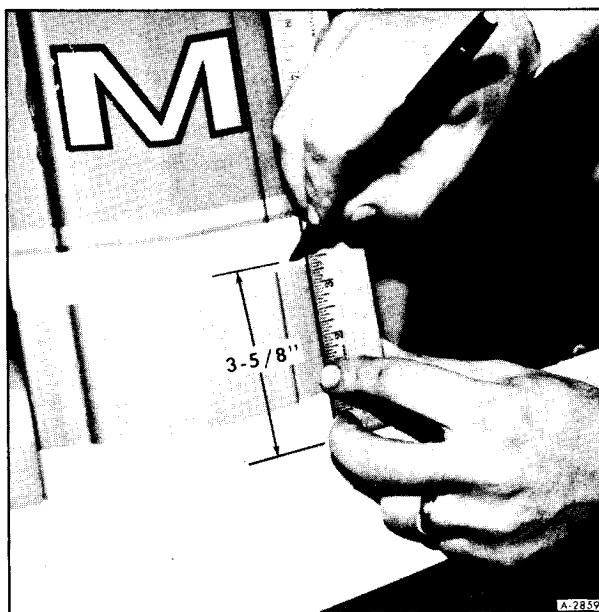
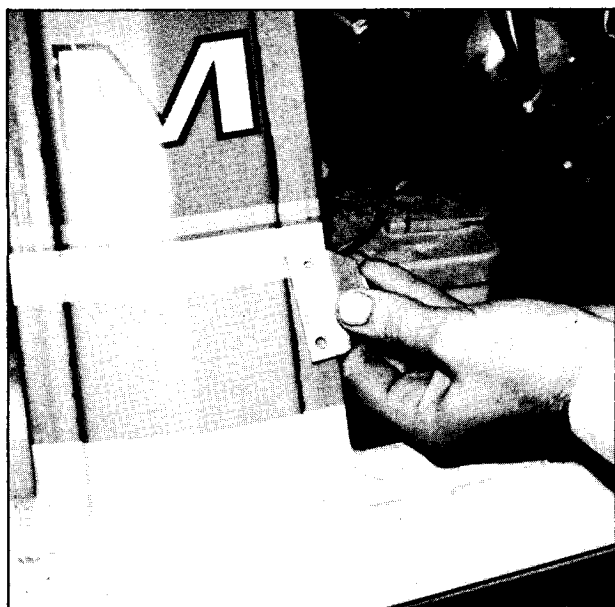
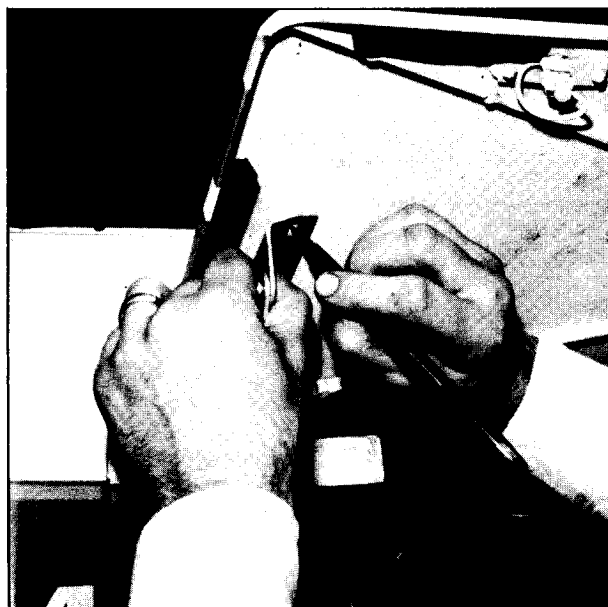
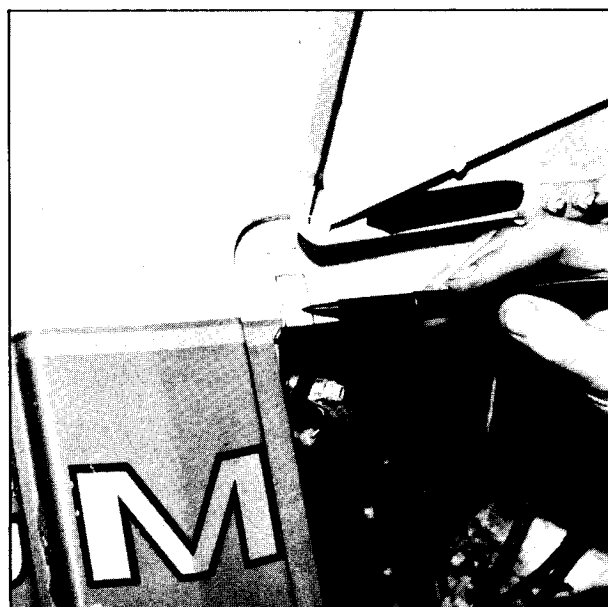


Figure 2

**Figure 3****Figure 4**

3. Position left access door support bracket as shown in figure 3 and mark and drill lower 3/16" hole.
4. Rivet left access door support bracket behind center pillar.
5. Raise left access door to equal opening of right access door. Mark and drill 3/16" holes for door bracket as shown in figure 4.
6. Attach left support to door with stainless steel machine screws, star washers and nuts.
7. Cut notch in access opening to clear left door support as shown in figure 5.

**Figure 5**



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 74-1M-20

GROUP: 1-Cab & Body-2

							DATE: June, 1974

SUBJECT: Strap - Rear Access Doors

MODELS: 1973 & 1974 230 and 260 Motor Homes

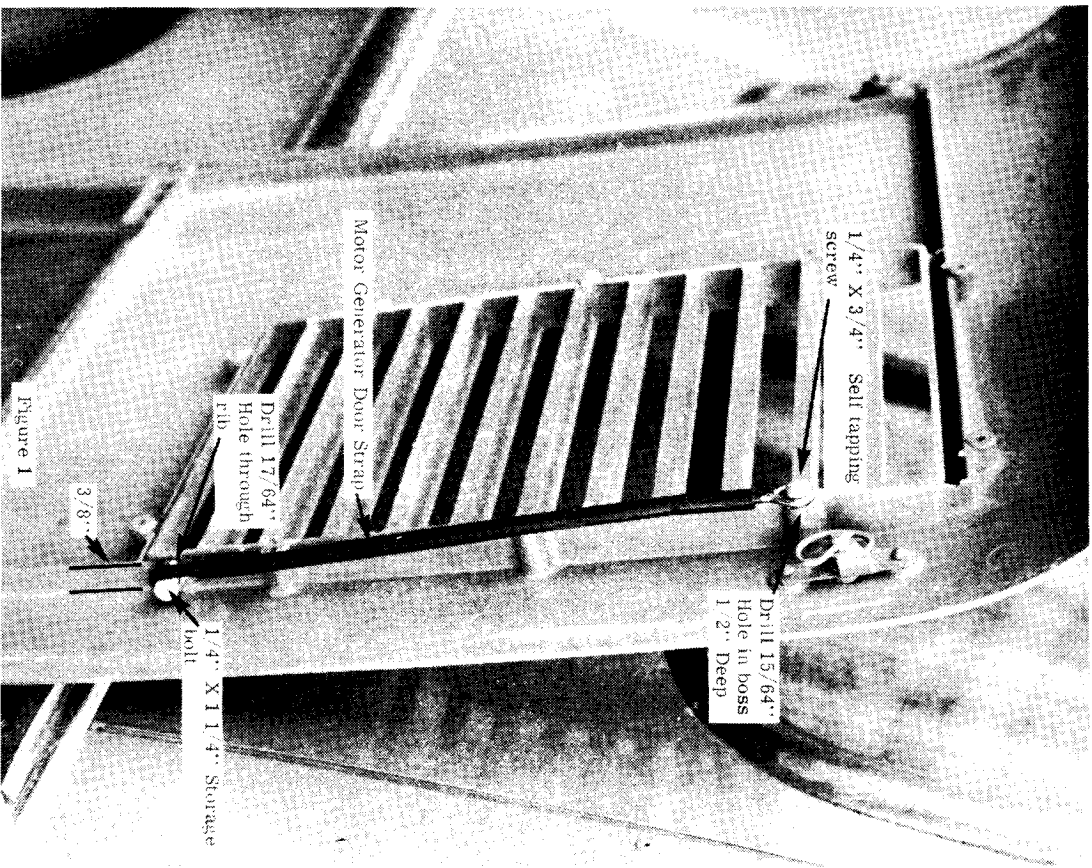
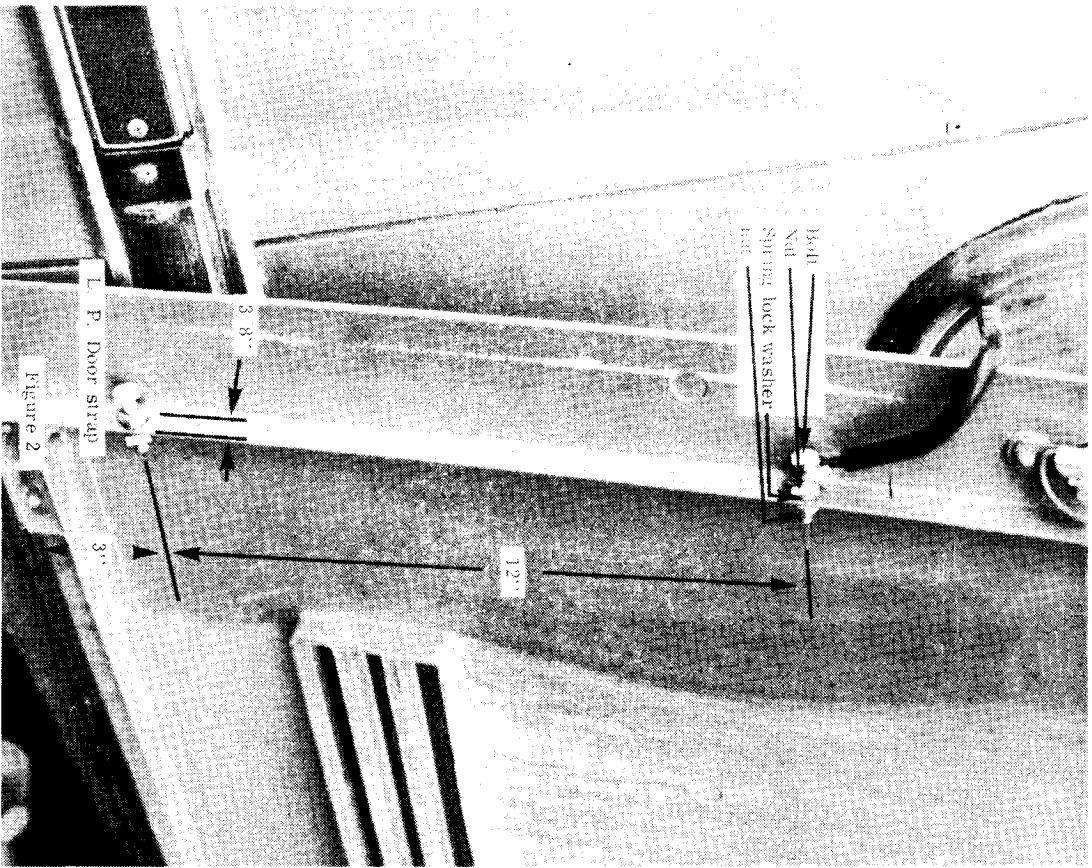
Generator and L.P. compartment door straps are now available for GMC Motor Homes.

Parts Information

<u>Qty/Veh.</u>	<u>Part Number</u>	<u>Description</u>
2	713229	Strap Assembly
3	Procure Locally	1/4" x 1-1/4" Bolt
6	Procure Locally	1/4" Nut
6	Procure Locally	1/4" Spring Lock Washer
1	Procure Locally	1/4" x 3/4" Self-tapping screw

Instructions

1. Raise and support generator compartment door.
2. Locate and drill 15/64" hole 1/2" deep as shown in Figure 1.
3. Locate and drill 17/64" hole as shown in Figure 1.
4. Install strap with self-tapping screw.
5. Install storage bolt as shown in Figure 1. Store strap and lower door.
6. Raise and support L.P. compartment door.
7. Locate and drill two 17/64" holes as shown in Figure 2.
8. Install strap with 1/4" bolt nuts and washers as shown in Figure 2.
9. Install storage bolt as shown in Figure 2. Store strap and lower door.





Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-IM-3

GROUP: 1-Cab & Body-1

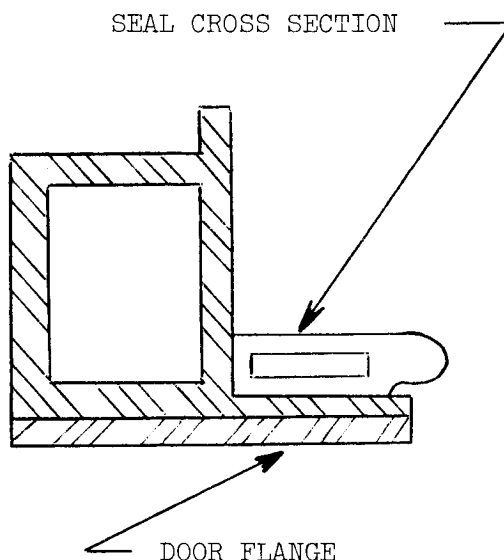
DATE: December, 1974

SUBJECT: Entrance Door Seal

MODELS: 1973 and 1974 230 & 260 Motor Homes

As a product improvement, a one piece box section type door seal was released for the 1975 model motor home.

The new model seal, part #716228, can be used on prior models that require a replacement door seal.





Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-IM-19

GROUP: 1-Cab & Body-4

							DATE: May, 1975

SUBJECT: Automotive Air Conditioning High Speed Blower Fuse Holder

MODELS: All Motor Homes Equipped With Automotive Type Air Conditioning

This fuse holder located inside the front right hand access door, under certain conditions, may melt due to high internal contact resistance. A service kit complete with installation instructions has been released as an "As Required" item under part number 8885540. This kit contains the following parts:

<u>Quantity</u>	<u>Part Number</u>	<u>Description</u>
1	12000864	Fusible Link
1	8881315	Instruction Sheet



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-IM-21
GROUP: 1-CAB & BODY-5
DATE: JUNE, 1975

SUBJECT: Run Channel - Sliding Side Windows: First Type

MODELS: 1973, 1974 and 1975 GMC Motor Homes and Transmodes

A flocked rubber run channel is now available for replacement use in first type sliding side windows on 1973, 1974 and 1975 GMC Motor Homes and Transmodes. When installing the flocked rubber run channel, the bottom portion should be cut at the sash drain slots and the channel should be glued to the sash with weatherstrip adhesive.

PARTS INFORMATION

<u>Part Number</u>	<u>Description</u>
702600 (Original)	Cloth window run channel 134-1/2" long
2003071 (Service Only)	Flocked rubber window run channel - 25' long (ctl)

First Type Side Window
Sash With Flocked Rubber
Run Channel Installed





Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-IM-23

GROUP: 01-Cab & Body-6

DATE: July, 1975

SUBJECT: "HEHR" LIVING AREA SIDE WINDOW ASSEMBLIES

MODELS: 1975 GMC MOTORHOMES AND TRANSMODES

A new type living area side window is now in production on 1975 GMC MotorHomes and TransModes. The window assembly is identified by its one piece sash and center latch and handle. The fiber glass screen, the vent (sliding) glass, and the stationary glass are services with the window assembly in the vehicle as follows:

SCREEN AND VENT ASSEMBLY

Removal

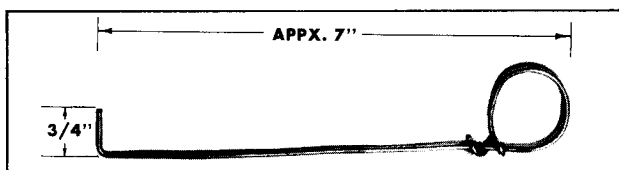


FIGURE 1

1. Remove the top screen track using a reasonably stiff wire shaped to form the tool shown in Figure 1. Insert the tool at the outer end of the screen track and pull the track from the window frame assembly, Figure 2.
2. Unlock the window, open the vent, and slide back the screen. Lift the screen up and forward into the sash assembly. Then pull it out.



FIGURE 2

3. Close the vent. Remove the top vent track in the same manner as the screen track. Refer to Figure 2.



FIGURE 3

4. Now, open the vent. Lift the vent up into the window frame assembly. Pull the bottom of the vent forward and remove vent as shown in Figure 3.

NOTE: Observe that the screen track is wider than, and sits in front of, the vent track.

Installation

1. The screen and vent are installed by reversing the removal procedure. Move the vent to the closed position.



FIGURE 4

2. Place the vent track in the groove and push it against the adjacent top vent track, Figure 4. Use a hammer and a 1/8" thick plexiglass or plywood block to seat the track in place, Figure 5.



FIGURE 5

3. Install the screen into the widest channel of the bottom screen track.
4. With the vent glass and screen in the closed position, seat the top screen track in place in the same manner as the vent track. Refer to Figures 4 and 5.

CAUTION: Do not use a screwdriver to install the track. The screwdriver may fracture the glass.

STATIONARY GLASS ASSEMBLY

NOTE: Before stepping outside the vehicle to remove the stationary glass, release the window latch. It is not necessary to remove the vent glass when servicing the stationary glass.

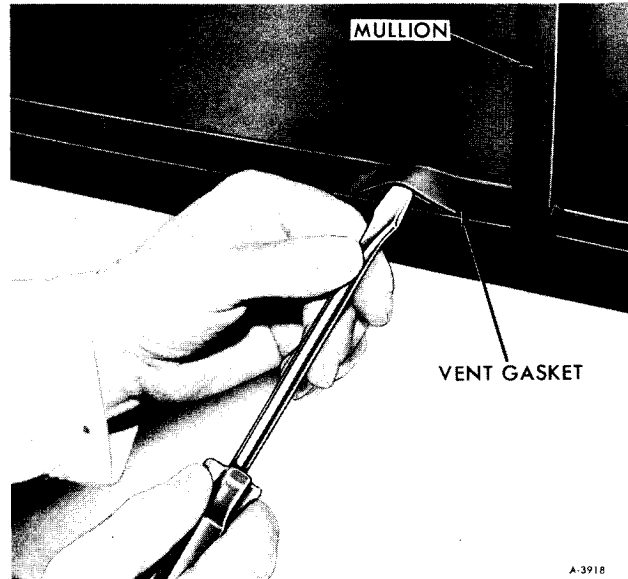


FIGURE 6

1. Use a screwdriver to unseat the vent gasket as shown in Figure 6. Pull the gasket back about six inches.
2. Dislodge the mullion (center bar) with the block and hammer, Figure 7. Pull the mullion to the side and lift it out of the window frame.
3. Using a screwdriver, remove the stationary gasket (or glazing bead) completely from the assembly.

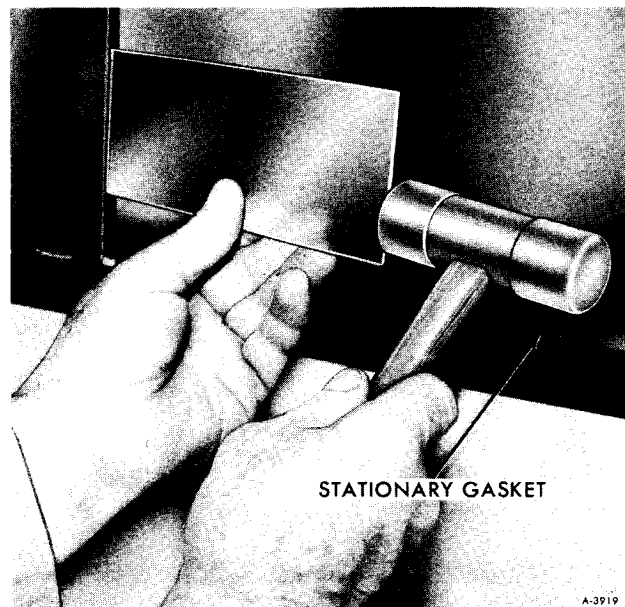


FIGURE 7

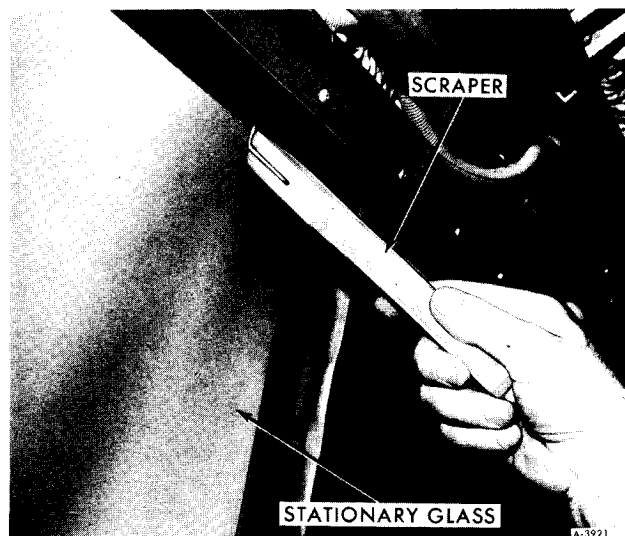


FIGURE 8

4. From inside the vehicle, pry the stationary glass from the butyl sealer, using a scraper as shown in Figure 8. An assistant, standing outside the vehicle, should support the glass during removal.
5. Observe the position of the four plastic spacers, Figure 9. Lift the spacers from the butyl sealer.
6. Use a putty knife to remove all old butyl sealer from plastic spacers and window frame.

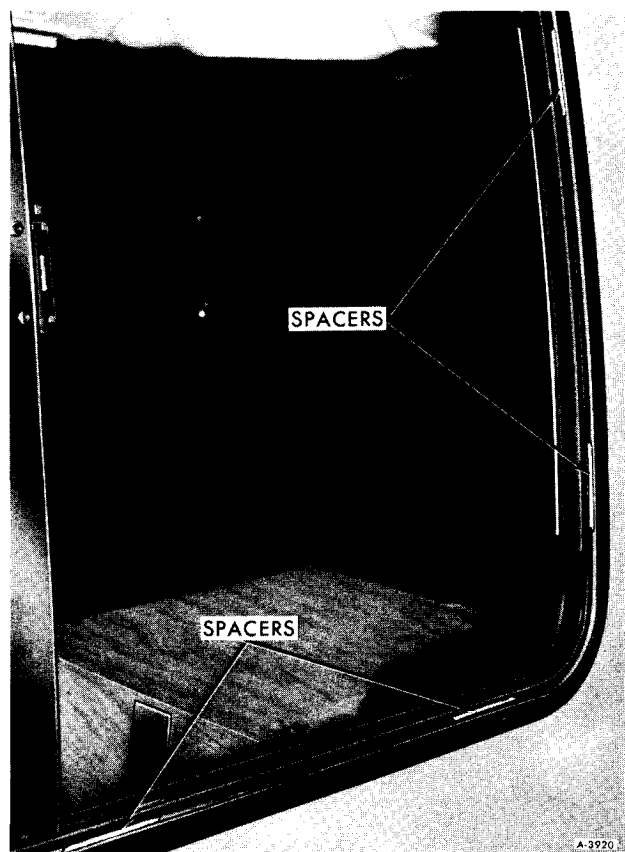


FIGURE 9

Installation

1. Install new butyl sealer in window frame. (A little water on the fingertips will prevent the butyl from sticking.)
 2. Lay the plastic spacers in place as shown in Figure 9.
- NOTE:** Be sure when installing spacers to position them so as to contact the edge of the window glass.
3. Use suction cups to install the glass. Press the glass firmly against the butyl sealer to insure bonding.
 4. Using the hammer and block, install the mullion.



FIGURE 10

5. Install the stationary gasket by pushing it into place and locking the grooves into the window frame, Figure 10.

NOTE: Push the stationary gasket back while installing it to avoid being left with an extra length of gasket. It may be useful to soften the gasket in hot water (150°F) (65.6°C) before installation. Avoid leaving corner installation to last. After installation, if lumps or uneven seams appear, the gasket is improperly seated. Loosen it and seat the gasket again.

6. Seat the vent gasket back into place.
7. Using liquid butyl sealer, seal ends of stationary and vent gasket at the mullion.



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-IM-25

GROUP: 1 Cab & Body 8

DATE: August, 1975

SUBJECT: Windshield Wiper Motor Filter

MODELS: All GMC MotorHomes and TransModes

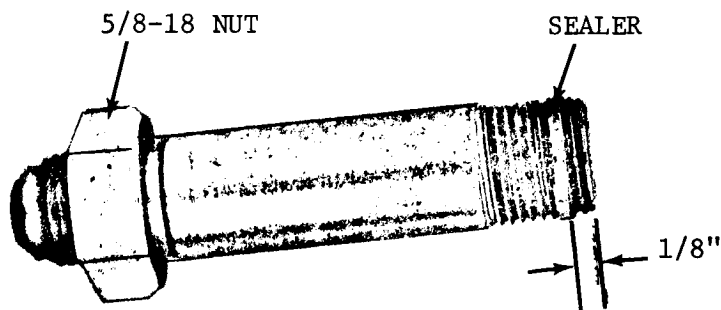
In the event of a power steering pump repair, the windshield wiper motor filter should be replaced. Following is the replacement procedure.

Parts Information

<u>Qty/Veh.</u>	<u>Part No.</u>	<u>Description</u>
1	717027	Filter Assembly
As Required	NPN	Pipe Joint Sealer
As Required	NPN	Nut, 5/8-18

Instructions

1. Disconnect hose from windshield wiper motor filter.
2. Remove filter from windshield wiper motor and discard.
3. Apply pipe joint sealer to filter threads 1/8" from end of filter as shown.
4. Carefully screw filter into wiper motor. Do not get foreign material on motor end of filter.
5. Torque filter to 25 ft.lbs. using a 5/8-18 nut as shown.
6. Reconnect hose to filter.





Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 77-IM-3

GROUP: 1-CAB & BODY-1

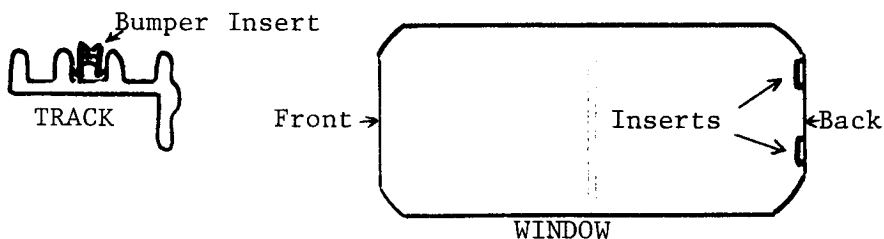
DATE: December, 1976

SUBJECT: Window Rattle - Sliding Side Windows

MODELS: 1976 and 1977 GMC MOTORHOMES & TRANSMODES

A bumper insert is now available for placement in the sliding side windows on 1976 and 1977 GMC Motorhomes and Transmodes to eliminate window rattles.

<u>Part Number</u>	<u>Description</u>
2004681	Bumper - 8' Length to Pkg. (ctl)



Broken stop may be lodged in back bottom corner - be sure to remove.



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Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION

GENERAL MOTORS CORPORATION

IMPORTANT-All Service Personnel Should Read and Initial

NUMBER: 77-IM-9

GROUP: 1-CAB & BODY-4

DATE: JULY, 1977

SUBJECT: SEALANT - WATER LEAKS

MODELS: ALL MOTORHOMES AND TRANSMODES

The Technical Service Department has received several requests for a water leak sealant. Our recommendation for a water leak sealant is Silaprene[®] by Uniroyal, Inc. and/or equivalent.

The physical characteristics of Silaprene[®] and/or equivalent are as follows:

1. Can be painted after skinning.
2. Resistant to water, ozone, and salt.
3. Shrinkage minimal.
4. Comes in colors - off-white, gray, black, neutral (light green), super white, aluminum, and tan.
5. Solvent - toluene.
6. Can be applied by ordinary caulking gun.

NOTE: Surfaces should be free from oil, grease, or excessive dust before applying sealant.

CAUTION: Silaprene[®] should not be used or stored near fire or open flame.

Silaprene[®] should be ordered directly from Uniroyal at the following address:

Uniroyal Plastics Products
Division of Uniroyal, Inc.
Adhesives and Coatings Department
312 N. Hill Street
Mishawaka, Indiana 46544

PHONE: (219) 255-2181

For water leak diagnosis and correction procedures, please refer to Dealer Service Technical Bulletins 75-TM-10 and 75-TM-10A.

<u>CODE</u>	<u>DESCRIPTION</u>	<u>MODEL</u>	<u>GMC</u>	<u>NAG</u>	<u>MANUF.</u>
A	F/V – TOP (15x28)	ALL	698140	V5144	LOF/EXCEL
B	F/V – LWR.FRNT.MOV. (2 HL.) (14x15)	ALL	698142	V5146	LOF/EXCEL
C	F/V – LWR.RR.STA. (14x16)	ALL	698144	V5148	LOF/EXCEL
D	S/W – R.FRNT.MOV. (2 HL.) (14x33)	23' (12/74-73)	704619-18	D5151	LOF/GMC
	S/W – R.FRNT.STA. (15x33)	23' (12/74 UP)	2005386	D5456	HEHR/PPG
	S/W – R.FRNT.MOV. (2 HL.) (30x33)	26' (12/74-73)	704617-16	D5153	LOF/GMC
	S/W – R.FRNT.STA. (30x33)	26' (12/74 UP)	2004686	D5458	HEHR/PPG
E	S/W – R.RR.STA. (14x33)	23' (12/74-73)	702579-78	D5152	LOF/GMC
	S/W – R.RR.MOV. (2 HL.) (15x23)	23' (12/74 UP)	2005385	D5457	HEHR/PPG
	S/W – R.RR.STA. (30x33)	26' (12/74-73)	689639-40	D5154	LOF/GMC
	S/W – R.RR.MOV. (2 HL.) (30x33)	26' (12/74 UP)	2004685	D5459	HEHR/PPG
F	S/D – R.STA. (23x33)	ALL (12/74-73)	689636-38	D5150	LOF/GMC
	S/D – R.STA. (23x33)	ALL (12/74 UP)	2004699	D5455	HEHR/PPG
	S/D – R.LWR.STA. (OPT.) (17x23)	ALL (11/75-74)	706037-706999	D5452	LOF/GMC
	S/D – R.TOP MOV. (2 HL.) (OPT.) (17x23)	ALL (11/75-74)	706043-707000	D5451	LOF/GMC
	S/D – R.LWR.MOV. (3 HL.) (OPT.) (17x23)	ALL (11/75 UP)	2009394	D5454	HEHR/PPG
	S/D – R.TOP STA. (OPT.) (17x23)	ALL (11/75 UP)	2009395	D5453	HEHR/PPG
G	QTR – R.FRNT.MOV. (2 HL.) (18x33)	ALL (12/74-73)	704615-14	Q5155	LOF/GMC
	QTR – R.FRNT.STA. (18x33)	ALL (12/74 UP)	2004692	Q5460	HEHR/PPG
H	QTR – R.RR.STA. (18x33)	ALL (12/74-73)	689635-37	Q5156	LOF/GMC
	QTR – R.RR.MOV. (2 HL.) (18x33)	ALL (12/74 UP)	2004691	Q5461	HEHR/PPG
I	BACK	ALL	691650 (CLEAR) 691649 (TINT)	4618T	LOF
J	QTR – L.RR.STA. (18x33)	ALL (12/74-73)	689635-37	Q5156	LOF/GMC
	QTR – L.RR.MOV. (2 HL.) (18x33)	ALL (12/74 UP)	2004691	Q5461	HEHR/PPG
K	QTR – L.FRNT.MOV. (2 HL.) (18x33)	ALL (12/74-73)	704615-14	Q5155	LOF/GMC
	QTR – L.FRNT.STA. (18x33)	ALL (12/74 UP)	2004692	Q5460	HEHR/PPG
L	GALLEY – L.STA. (23x33)	26' (12/74-73)	689636-38	D5150	LOF/GMC
	GALLEY – L.STA. (23x33)	26' (12/74 UP)	2004699	D5455	HEHR/PPG
	GALLEY – L.LWR.STA. (OPT.) (17x23)	26' (11/75-74)	706037-706999	D5452	LOF/GMC
	GALLEY – L.TOP MOV. (2 HL.) (OPT.) (17x23)	26' (11/75-74)	706043-707000	D5451	LOF/GMC
	GALLEY – L.LWR.MOV. (3 HL.) (OPT.) (17x23)	26' (11/75 UP)	2009394	D5454	HEHR/PPG
	GALLEY – L.TOP STA. (OPT.) (17x23)	26' (11/75 UP)	2009395	D5453	HEHR/PPG
M	S/W – L.RR.STA. (30x33)	ALL (12/74-73)	689639-40	D5154	LOF/GMC
	S/W – L.RR.MOV. (2 HL.) (30x33)	ALL (12/74 UP)	2004685	D5459	HEHR/PPG
N	S/W – L.FRNT.MOV. (2 HL.) (30x33)	ALL (12/74-73)	704617-16	D5153	LOF/GMC
	S/W – L.FRNT.STA. (30x33)	ALL (12/74 UP)	2004686	D5458	HEHR/PPG
O	F/V – TOP (15x28)	ALL	698141	V5145	LOF/EXCEL
P	F/V – LWR.FRNT.MOV. (2 HL.) (14x15)	ALL	698143	V5147	LOF/EXCEL
Q	F/V – LWR.RR.STA. (14x16)	ALL	698145	V5149	LOF/EXCEL
R	WINDSHIELD – L	ALL	691607	W833	LOF
S	WINDSHIELD – R	ALL	691606	W832	LOF



Motor
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Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION

GENERAL MOTORS CORPORATION

ATTENTION:

GENERAL MANAGER ☐

PARTS MANAGER ☐

CLAIMS PERSONNEL ☐

SERVICE MANAGER ☐

IMPORTANT- All Service Personnel Should Read and Initial

NUMBER: 78-IM-2

GROUP: 1-CAB & BODY-2

DATE: NOVEMBER, 1977

SUBJECT: PAINT CODES

MODELS: 1973 THRU 1978 GMC MOTORHOMES AND TRANSMODES

This bulletin cancels and supersedes 77-IM-5 (April, 1977) and 77-IM-5A (May, 1977), all copies of which should be destroyed.

1973-74 EXTERIOR

COLOR	RPO	MODEL USAGE	FISHER NO.	DITZLER NO.	DUPONT REFINISH NO.
White	532	All	WEA-5585	8006	508A
Camel	533	All	WEA-5842	23700	55843A
Yellow	527	Sequoia Painted Desert	WEA-5928	82015	59549A
Green	577	Sequoia	WEA-4560	44940	-----
Bittersweet	575	Painted Desert Canyon Lands	WEA-5891	60672	7736A
Sky Blue	554	Glacier	WEA-5228	14676	-----
Chamois	525	Eleganza SE	WEA-4326	2537	5481A

NOTE: It has been found that the enamel used on 1973 and 1974 models can be matched more closely by removing the mirror bracket and taking it to your paint supplier.

1975 EXTERIOR

COLOR	RPO	MODEL USAGE	FISHER NO.	DITZLER NO.	DUPONT REFINISH NO.
Buttercup	531	Glenbrook	WUEK-5241	82277	43916U
Frosted Mint	553	Palm Beach	WUEK-5254	45197	44017U
Beige	534	Eleganza II	WUEK-4527	2646	42807U
White	521	Transmode	WUEK-5111	2185	817U

NOTE: Effective with VIN TZE165V100089, vehicles are being painted with Dupont Urethane paint, trademarked IMRON. Paint repairs should be made with IMRON (Dupont Refinish No. ends in "U") or equivalent or a high grade enamel (Dupont Acrylic Enamel Refinish No. ends with "A") automotive paint.

Lacquer should not be used to repair body finish on these vehicles.

1976 EXTERIOR

COLOR	RPO	MODEL USAGE	FISHER NO.	DITZLER NO.	DUPONT REFINISH NO.
Beige	534	Eleganza II Glenbrook	WUEK-4527	2646	42807U
Frosted Mint	553	Palm Beach	WUEK-5254	45197	44017U
Aspen Gold	557	Glenbrook	WUEK-5267	82280	44313U
Cameo White	558	All	WUEK-3967	2058	5338U
White	521	Transmode	WUEK-5111	2185	817U
Buckskin	583	Edgemont	WUEK-5275	24603	44572U
Creame White	585	Crestmont Birchaven	WUEK-5222	90070	44570U

1977 EXTERIOR

COLOR	RPO	MODEL USAGE	FISHER NO.	DITZLER NO.	DUPONT REFINISH NO.
Beige	534	Eleganza II	WUEK-4527	2646	42807U
Frosted Mint	553	Palm Beach	WUEK-5254	45197	44017U
Cameo White	558	All	WUEK-3967	2058	5338U
Yellow	580	Transmode	WUEK-5269	82277	44365U
Cream White	585	Birchaven Transmode Crestmont	WUEK-5222	90070	44570U
Santa Fe Tan	581	Kingsley	WUEK-5236	2777	43486A*

* Dupont does not supply this color for refinish in IMRON; and therefore, it will be necessary to use an acrylic enamel which the above Dupont Refinish No. represents.

1978 EXTERIOR

PAINT RPO CODE & COLOR*	VEH. RPO	MODEL USAGE	FISHER NO.	DITZLER NO.	DUPONT REFINISH NO.
39P White 36S Saffron	641	Kingsley	WUEK-5252 WUEK-6205	90035** 24575**	43976U 45558U
38P Frost Beige 35S Medium Beige	697	Eleganza II	WUEK-6201 WUEK-6202	24573** 24574**	45554U 45555U
41P Frost Green 37S Medium Green	698	Palm Beach	WUEK-6203 WUEK-6204	45399** 45400**	45556U 45557U
42P Cameo White 42S Cameo White		Transmode	WUEK-3967	2058 **	5338U
38P Frost Beige 38S Frost Beige		Transmode	WUEK-6201	24573**	45554U

* Must specify both Primary & Secondary Color.

**Paint available in urethane, acrylic lacquer and acrylic enamel, by using following prefix with Ditzler No.

DU - Urethane DDL - Acrylic Lacquer DAR - Acrylic Enamel

INSTRUMENT PANEL PAINT CODES

COLOR	RPO	MODEL USAGE	FISHER NO.	DITZLER NO.	PONTIAC COATINGS CODE NO.	DUPONT REFINISH NO.	DETROIT AUTOBODY NO.
Midnight	690	Sequoia	W25A-4300	UCV2-183	---	9994LH	4300**
Neutral	692	Painted Desert	"	"	"	"	"
	693	Glacier	"	"	"	"	"
	695	Canyon Lands	"	"	"	"	"
	---	Transmode - (Pre 1977)	"	"	"	"	"
Dark Amber	696	Eleganza SE	W25A-4530	UCV2-214	---	42911LH	4530**
Dark Saddle	697	Eleganza II	WOA-4098	UCV 152	GMT-544*	----	4098**
	681	Glenbrook	"	"	"	"	"
	641	Kingsley	"	"	"	"	"
	---	Transmode 1977	"	"	"	"	"
Avocado	698	Palm Beach	WOA-4926	UCV2-405	GMT-551*	10049LH	---

* Vinyl coating manufactured by: Pontiac Coatings, Inc.
30 Brush Street, Box 45
Pontiac, MI 48056

** Vinyl coating manufactured by: Detroit Autobody Equipment Company
(Requires No. 4000 non-glare
clear top coat) Box 717
Royal Oak, MI 48068



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

3MT 1491

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 73-TM-4

GROUP: I - Cab & Body

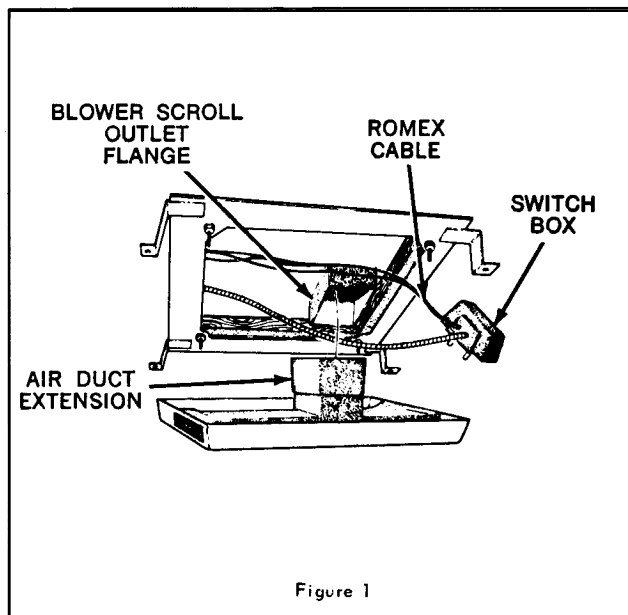
DATE: 9-14-73

SUBJECT: Mark IV Roof Mounted Air Conditioner

MODELS: TZE033 and TZE063

It has been brought to our attention that a few units may have been shipped with the thermostat sensing tube incorrectly mounted. The tube should extend across the center of the inlet air opening and be free of any kinks or sharp bends. The units in question may have had a sensing tube wrapped around the electrical conduit. This sensing tube should be unwrapped and correctly routed.

Another condition which can cause insufficient cooling of the roof top air conditioner is when the air duct extension is not properly fit into the blower scroll outlet flange (see figure 1). Make sure that the galvanized sheet metal duct has no gaps between it and the outlet flange. If a gap exists, this can cause cooled air to escape into the plenum chamber, prematurely shutting down the unit. Regular furnace duct tape may be wrapped around the flange and duct extension to correct this condition.





Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1491

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER:

GROUP:

73-TM-5

1 CAB &

BODY-2

DATE:

OCTOBER 22, 1973

SUBJECT: Marker Lamp Water Leaks

MODELS: All

For a short period of time, the marker lamp mounting pads were not sealed to the roof on GMC Motor Homes. The lack of sealant may cause water leaks.

To correctly seal the marker lamp pad to the body, do the following:

1. Remove marker lamp lens.
2. Remove marker lamp mounting screws.
3. Separate marker lamp body from mounting pad.
4. Remove mounting pad carefully.
5. Apply an even coating of weather strip adhesive to the bottom of the mounting pad.
6. Install the mounting pad to the roof.
7. Install marker lamp body and mounting screws.
8. Install marker lamp lens and retainer screw.



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IT 1491

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 73-TM-7
GROUP: 1-CAB & BODY-3

							DATE: OCTOBER 29, 1973

SUBJECT: STOVE VENT NOISE WHILE DRIVING

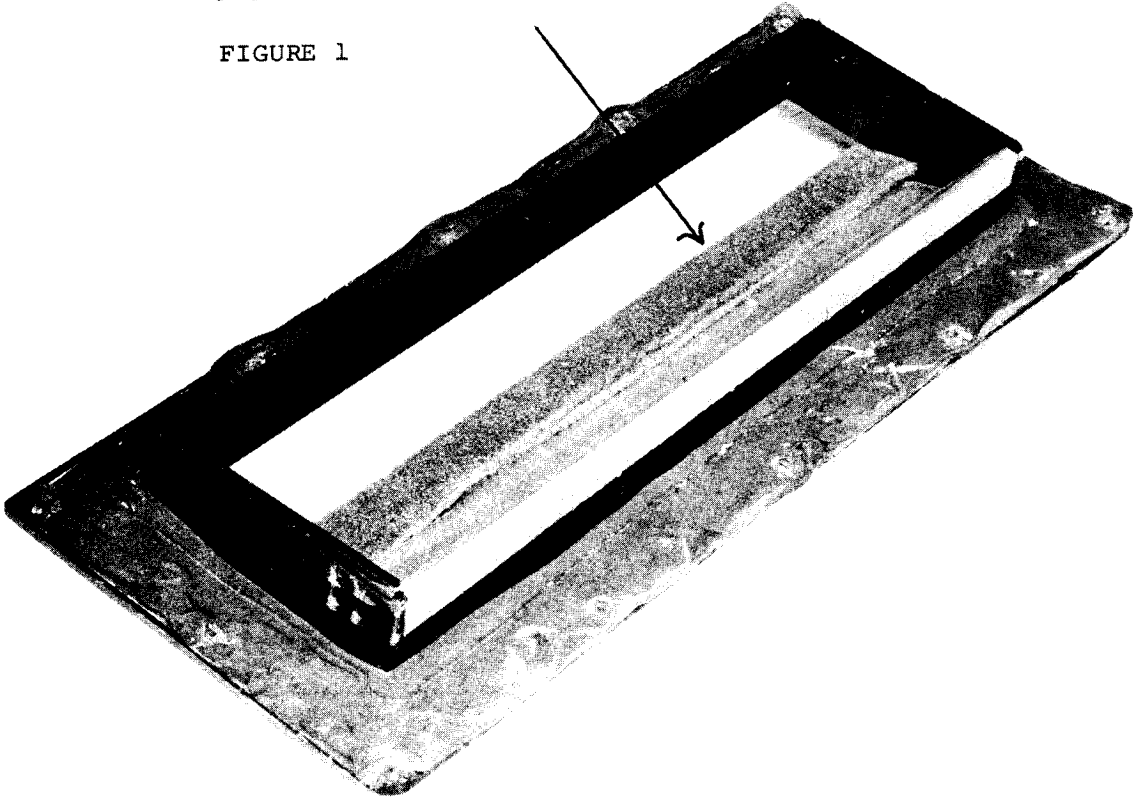
MODELS: TZE033 & TZE063

A new outside stove vent assembly has recently been released in production. The new "flapper valve" is made of dense foam rubber to cut out noise caused by vibration of the earlier plastic one.

The early model "flapper valves" may be modified to eliminate noise by the addition of a soft rubber strip across the bottom of the "flapper" where it contacts the housing (See Figure 1). The smaller piece of foam rubber can be added to the upper portion on the outside of the housing (See Figure 2).

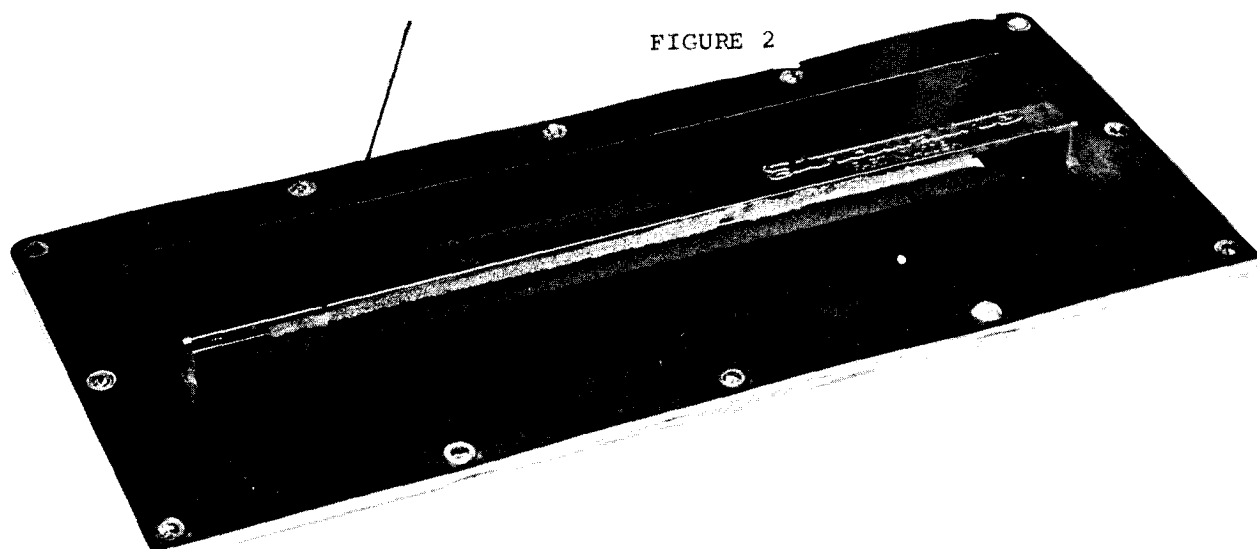
Rubber strip glued to flapper

FIGURE 1



Thin rubber strip glued to housing

FIGURE 2





Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

MT 1491

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 73-TM-8
GROUP: 1-Cab & Body-4

DATE: Nov. 8, 1973

SUBJECT: Potable Water Tank Breakage & Leaking

MODELS: TZE033 and TZE063

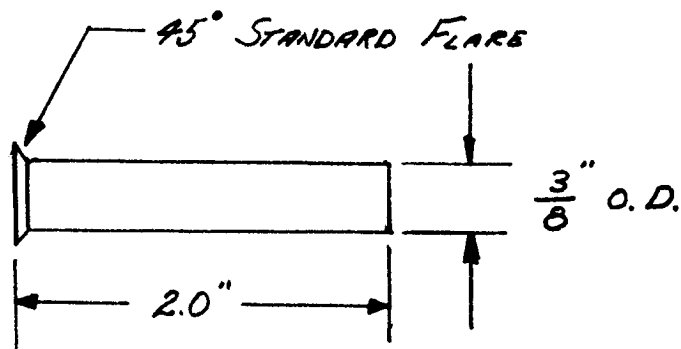
There have been reports that the outlet tube has been breaking. This can cause water to leak out of the storage cabinets and wet carpets.

It is recommended that if the tank is cracked or broken it should be replaced. Generally cracks or breaks are due to variation in wall thickness with a "cold weld" process.

If seeps are encountered at the outlet tube due to the hose clamp distorting it, the following is recommended:

Install a piece of $\frac{3}{8}$ " O.D. copper tubing approximately 2" long inside the tube.

In order to keep the tube from working its way inside the tank, a standard 45° flare should be put at the outlet end. This copper tube will help reinforce the plastic and prevent distortion. Part number of the tank is 706126.





Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1491

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 73-TM-9
GROUP: 1-Cab & Body-5
DATE: Nov. 26, 1973

SUBJECT: Window Sash Discoloration

MODELS: All TZE0's

It has been reported that the black side window sash discolors. The discoloration is due to insufficient anodizing sealer during manufacture.

In order to repair this condition it is recommended that the sash be sanded to remove anodizing and allow proper primer and paint adhesion. Mask the glass and Motor Home painted areas and prime using a suitable aluminum primer such as GM Reference Paint No. 63-2022. Complete the repair using a flat black paint such as used on the grille GM Paint Reference No. W60E.

Refinishing the entire sash on the affected window is recommended since it is difficult to blend various shades of flat black.



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1491

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 73-TM-13
GROUP: 1-Cab & Body-6

DATE: Dec. 14, 1973

SUBJECT: Rub Rail Insert Retention

Since vehicle TZE063VI01415, an aluminum retainer has been used to secure the rub rail vinyl insert to the body. Vehicles built prior to the change used a double-faced tape to secure the insert.

If it is necessary to reinstall the rub rail insert on a vehicle built prior to the change, proceed as follows:

1. Remove rub rail insert end caps.
2. Remove vinyl insert from tape and tape from rub rail.
3. Install insert retainer, part number 8884090, using existing rub rail screws, (it is necessary to drill the retainer and cut to length).
4. Remove back strip of vinyl insert by slitting as shown in Figure 1.
5. Install vinyl insert by sliding over retainer being careful not to stretch insert.
6. Install insert end caps.

PARTS INFORMATION

<u>Part Number</u>	<u>Description</u>
8884090	Retainer - 96 inches long, drill holes and cut to length as required.

VINYL RUB RAIL CROSS SECTION

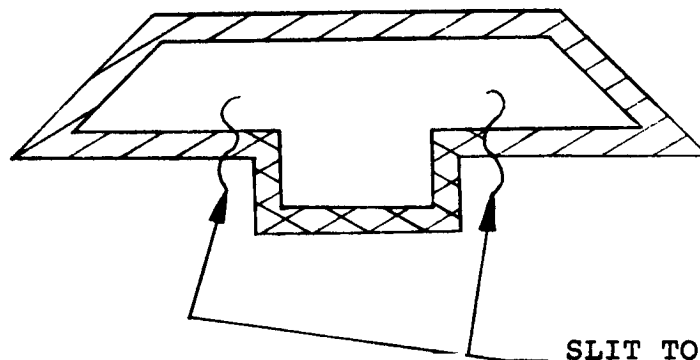


FIGURE 1

**SLIT TO ALLOW ENTRY
OF RETAINER**



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1491

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 74-TM-8
GROUP: 1A-Heating-
Air Conditioning-
DATE: April, 1974

SUBJECT: Temperature Control Cable Binding

MODELS: TZE063 and TZE033

Recent reports indicate that there is a possibility that the temperature control lever located on the instrument panel may bind. The situation which occurs is that the lever cannot be moved all the way to the "Hot" position or all the way to the "Cold" position. This is a result of the control cable being out of adjustment.

Adjustment for the proper length of the cable may be made by turning the turnbuckle adjusting connection located under the instrument panel cover (see illustration).

Simply move the control lever back and forth from Cold to Hot while turning the adjusting connection until you receive full travel of the lever. This will allow full opening and closing of the temperature control door in the heater core and evaporator housing.

WARRANTY INFORMATION (When applicable)

Flat Rate Time

0.2 hr.

Labor Operation

W3016-00





Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1491

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 74-TM-9
GROUP: 1B-Cab & Body-1

							DATE: May, 1974

SUBJECT: Step-Riser Splash Shields

MODELS: All 1973 and 1974 230 and 260 Motor Homes

On some 1973 and 1974 model GMC Motor Homes, the step-riser splash shields may not be adequately sealed. As a result a water leak could develop at the base of the step when the vehicle is driven over a wet road.

PARTS INFORMATION

<u>Quantity/Vehicle</u>	<u>Part Number</u>	<u>Description</u>
as required	718253	Clear Sealer

INSTRUCTIONS

The following instructions apply to the right or left side of the step riser, whichever side exhibits the water leak.

1. Remove front wheelhouse.
2. Remove lower step-riser splash shield as shown in figure 1.
3. Clean existing sealer from splash shield and mating surfaces on step-riser and body.
4. Apply sealer to splash shield mating surface edges and reinstall lower shield.
5. Inspect step splash shield and upper step riser splash shield for sound sealing.
6. If seal is not sound, remove shields and correct as in steps 3 and 4.
7. Reinstall wheelhouse.

WARRANTY INFORMATION (When Applicable)

<u>Labor Operation No.</u>	<u>Description</u>	<u>Flat Rate</u>
G 2772-33	Floor Board Repairs (Entrance Step Area)	S.T.

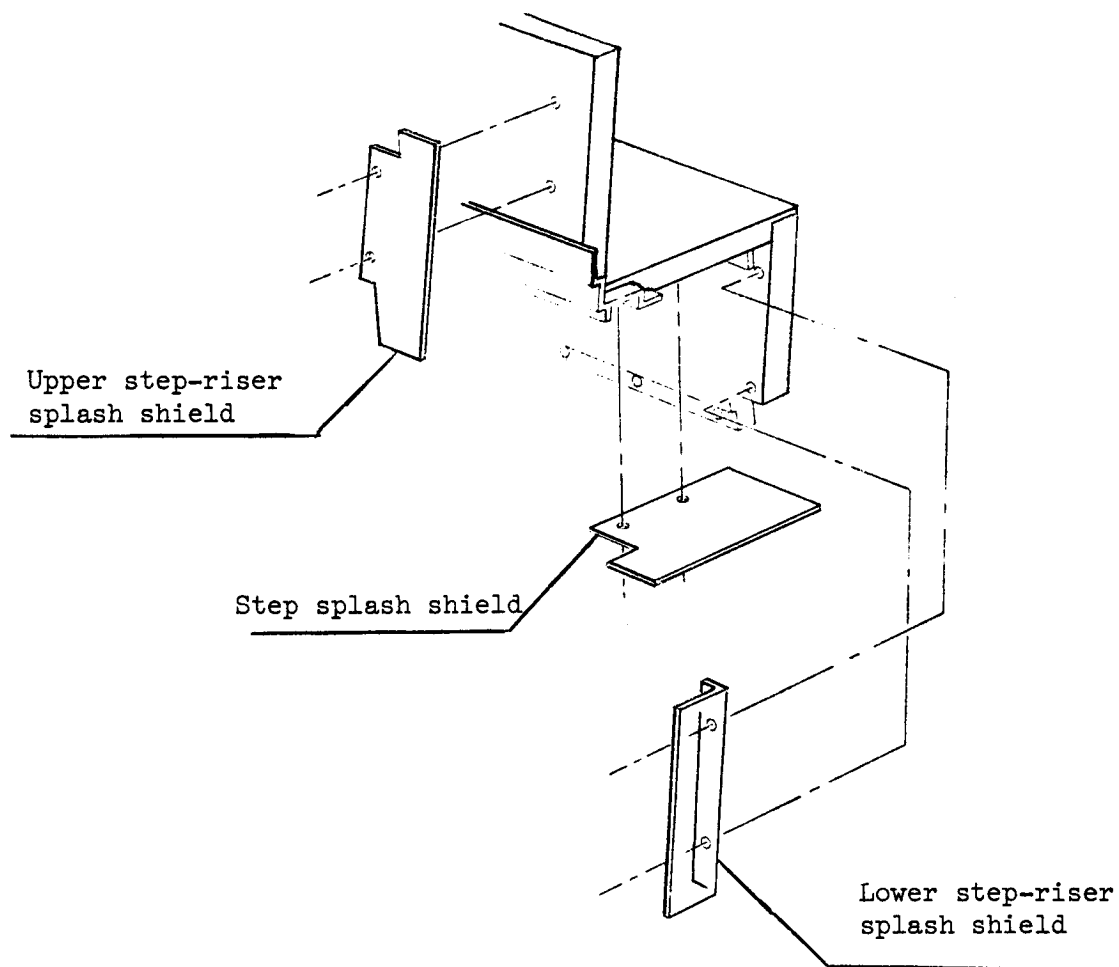


FIGURE 1



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1491

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 74-TM-12
GROUP: 1A-Heating &
Air Cond. 2
DATE: September, 1974

SUBJECT: Hot Water Shut Off Valve

MODELS: All Equipped With Chassis Air Conditioning (RPO C70)

It is possible that a few units may have the hot water shut off valve installed incorrectly in the water line leaving the heater core instead of it's proper location, in the inlet water line. The purpose of this vacuum actuated valve is to shut off heated engine coolant to the heater core when the temperature controls are set in by the air conditioning mode.

The incoming line is 5/8" diameter and the return line from the heater core is 3/4".

If you are experiencing air conditioning complaints, this should be checked first.

If the valve is installed incorrectly it should be reinstalled. The air conditioned output air will be cooler.

Make sure the arrow on the valve points in the direction of the coolant flow, towards the heater core.



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1491

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-TM-1

GROUP: 1-Cab and
Body-1

DATE: October, 1974

SUBJECT: Roof to Side Body Joint Seal

MODELS: 1973 & 1974 230 and 260 Motor Homes

Water entry may be experienced on some of the subject motor homes due to the roof panel joints not being adequately sealed.

PARTS INFORMATION

<u>Qty/Veh.</u>	<u>Part Number</u>	<u>Description</u>
As Required	718255	Clear Vinyl Acrylic Sealer

INSTRUCTIONS

The following instructions apply to the right or left upper rubber rail, whichever side exhibits the water leak.

1. Remove upper rub rail attaching screws, end caps and rail.
2. Clean joint at front of longitudinal beam and front body end cap as shown in Figure 1.
3. Apply sealer to thoroughly fill cavity as shown in Figure 2.
4. Clean and seal longitudinal beam to side panel joint and all blind rivets, working from front to rear of vehicle.
5. Clean joint at rear of longitudinal beam and rear end cap as shown in Figure 3. Fill joint thoroughly with sealer.
6. Water test vehicle.
7. Drill three 1/8" holes in bottom of rub rail, one at each end and one in the middle as shown in Figure 4.
8. Reinstall upper rub rail and end caps.
9. Clean excess sealer from vehicle using mineral spirits.

WARRANTY INFORMATION

<u>Labor Operation No.</u>	<u>Description</u>	<u>Flat Rate</u>
T094125	Right Side	
T094225	Left Side	
	(All Models)	.9 Hrs.

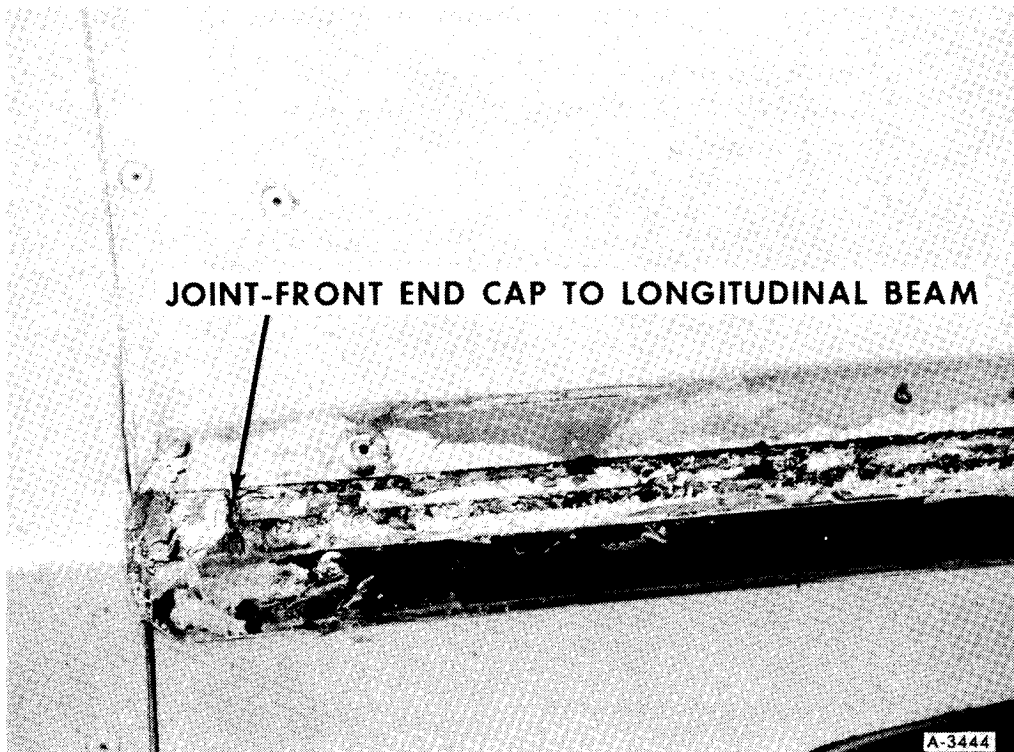


FIGURE 1

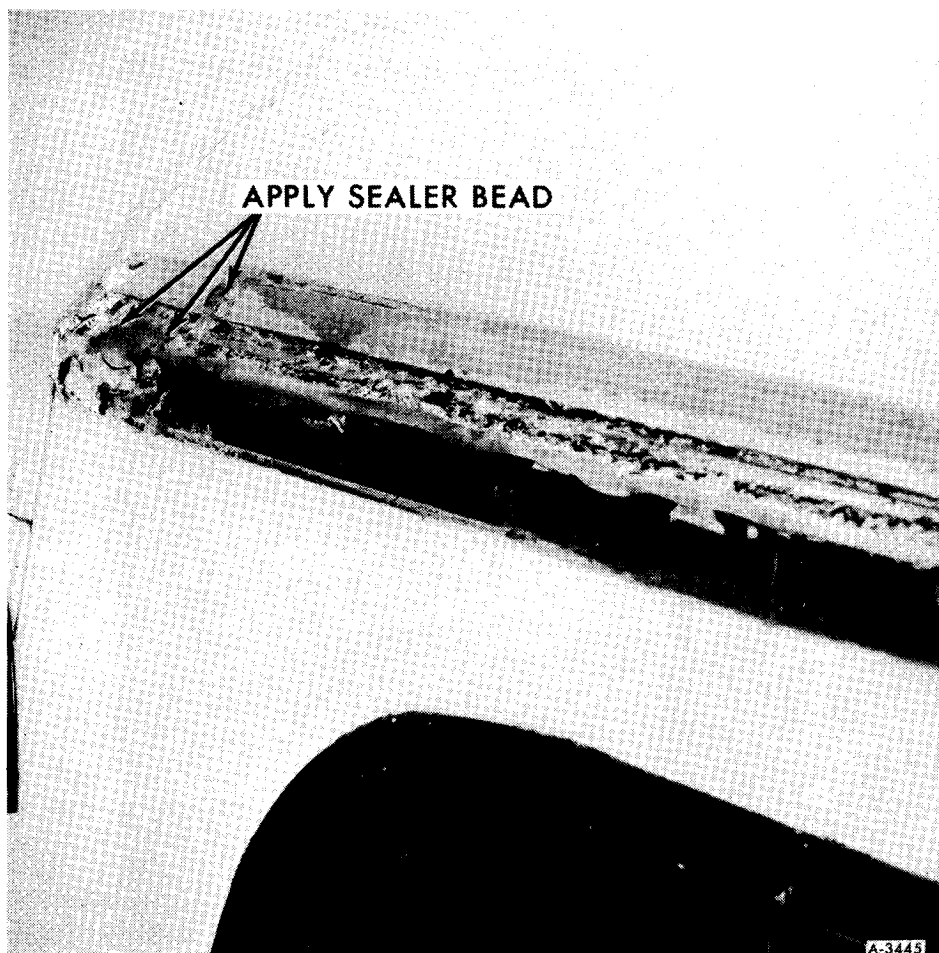


FIGURE 2

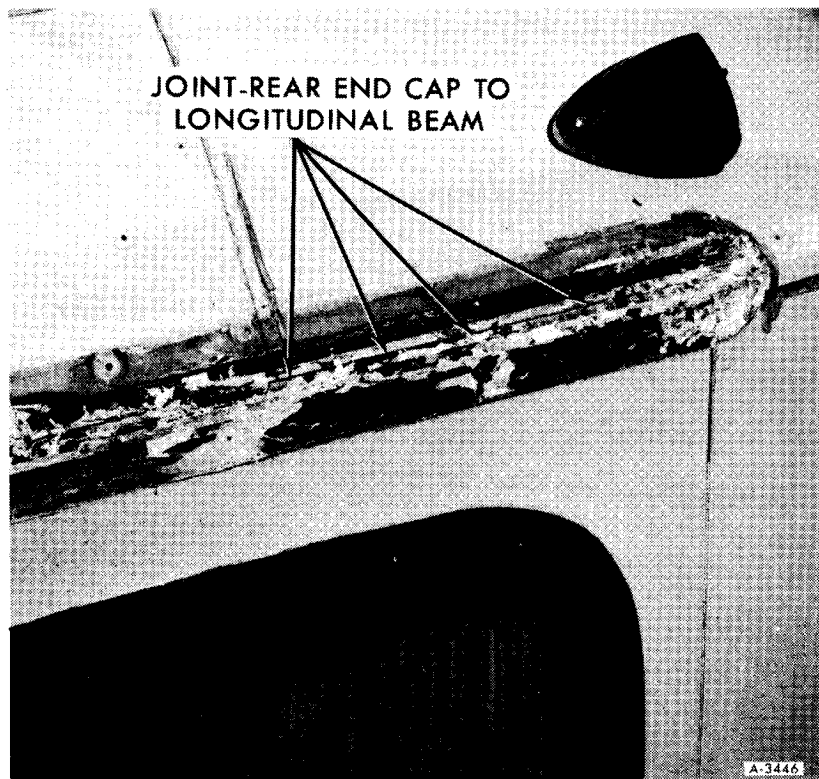


FIGURE 3

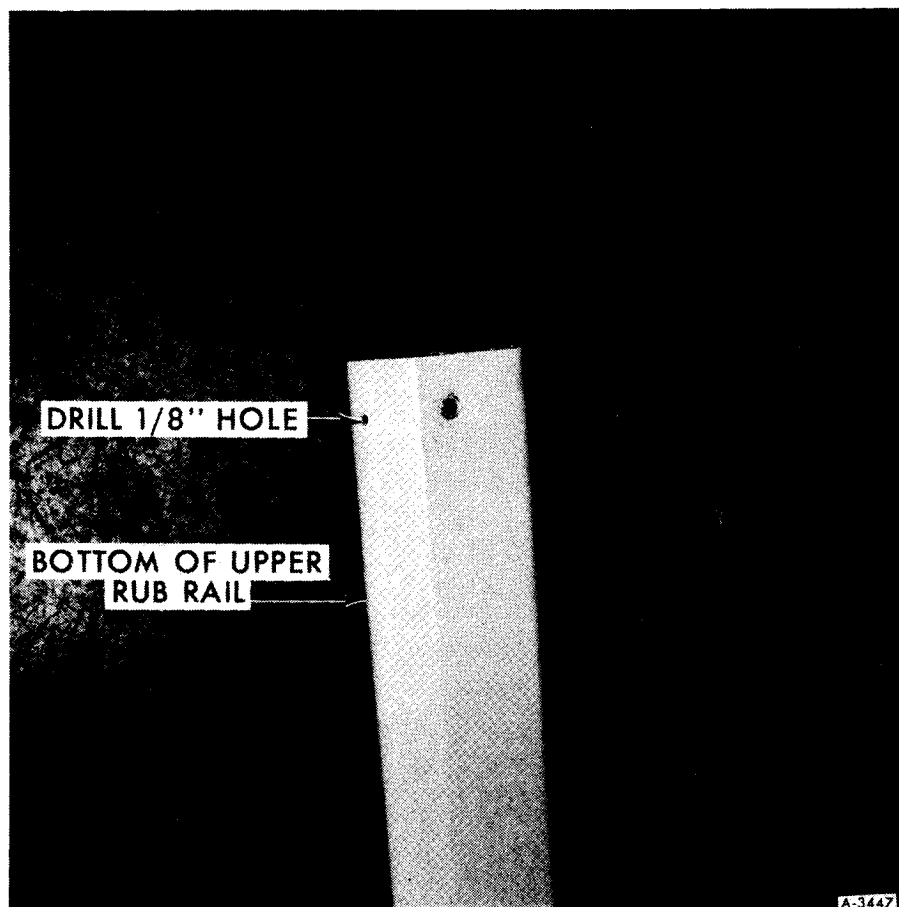


FIGURE 4



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1491

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-TM-5

GROUP: 1-Cab & Body-2

DATE: December, 1974

SUBJECT: Sliding Window Stops

MODELS: 1973 and 1974 230 and 260 Motor Homes

As a product improvement, stops were added to the 1974 model motor home sliding windows early in the model year.

Vehicles built prior to the change can be modified as follows:

Parts Information

<u>Qty/Veh.</u>	<u>Part Number</u>	<u>Description</u>
AR	NPN	Weather Strip Adhesive
1	712111	Sliding Window Stop

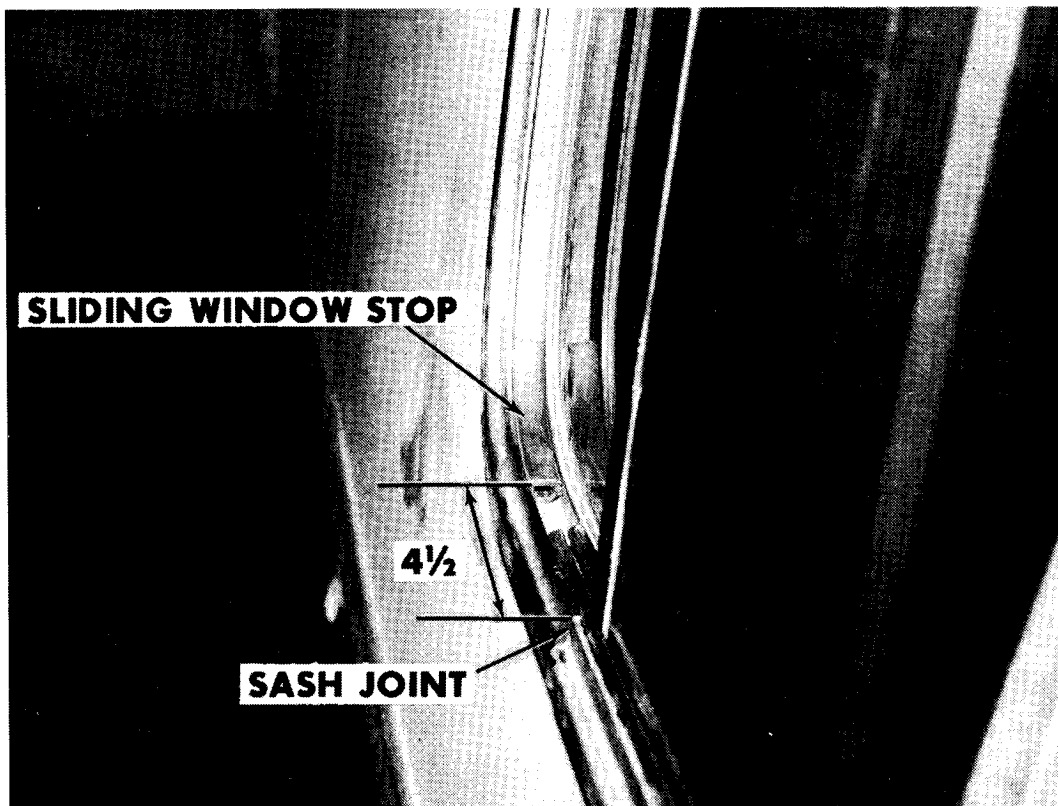
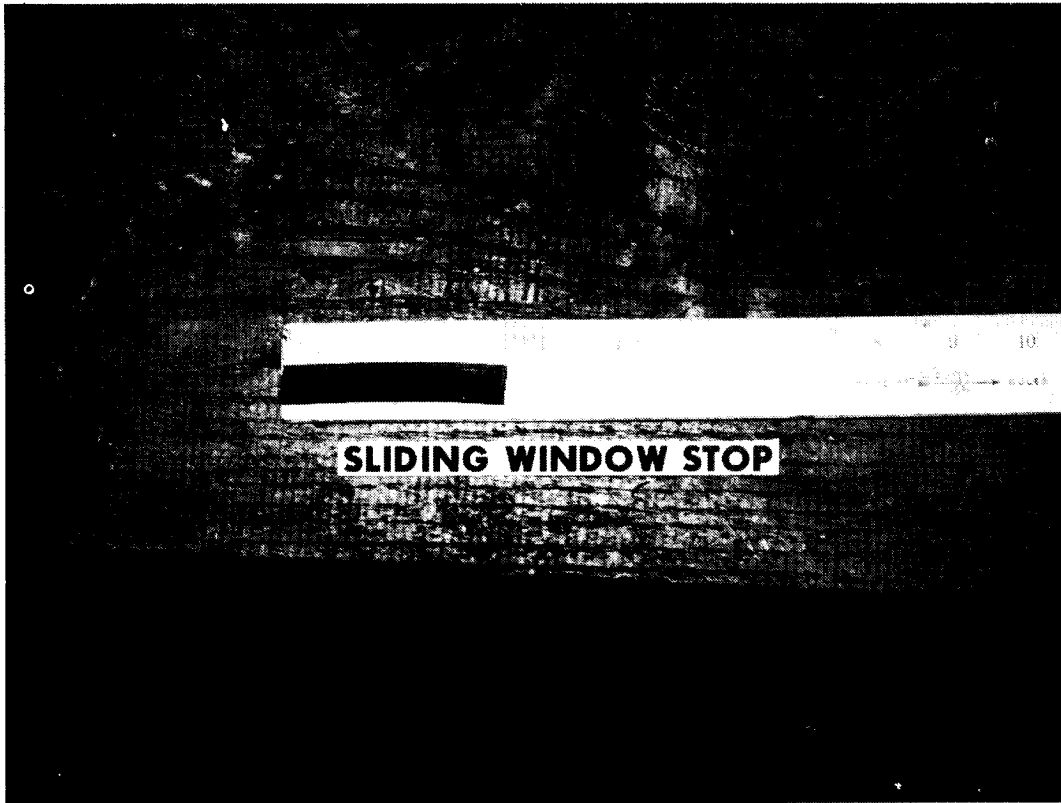
Instructions

1. Cut stop, part #712111, into ten (10) 3" pieces as shown.
2. Install stops 4-1/2" from sash joint with weather strip adhesive as shown at both the top and bottom of the sash.

Warranty Information

When the repairs are within the published warranty use:

<u>Labor</u>	<u>Description</u>	<u>Time</u>	<u>Trouble</u>
<u>Operation</u>		<u>Allowance</u>	<u>Code</u>
T114101	Install Window Stops	.3 Hr.	92





Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1491

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-TM-6

GROUP: 1-Cab & Body-3

DATE: December, 1974

SUBJECT: Mounting Plate - Driver & Passenger Single Swivel Seat

MODELS: 1973 and 1974 230 and 260 Motor Homes

Some 1973 and 1974 230 and 260 model GMC Motor Homes were built with a driver or passenger single swivel seat mounting plate that is too short. The shortness of the plate causes the seat swivel pads to disengage when the seat is rotated more than 90°.

Parts Information

<u>Qty/Vehicle</u>	<u>Part Number</u>	<u>Description</u>
1 Per Single Swivel Seat	701346	Seat Mounting Plate

Instructions

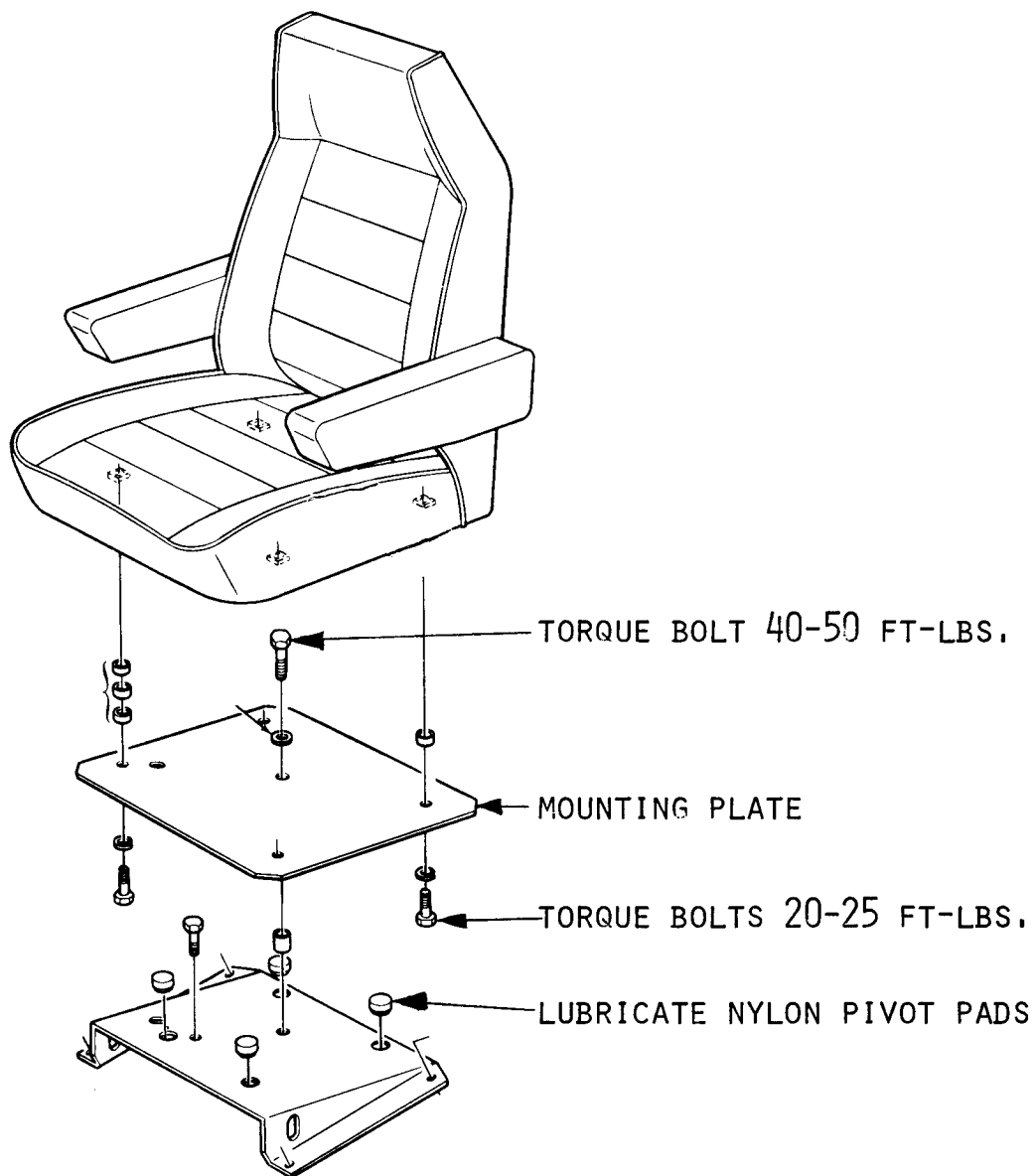
To correct a mounting plate that is too short, replace with a new plate as follows:

1. Rotate seat 45° and remove four (4) mounting plate to seat bolts.
2. Remove seat.
3. Remove mounting plate pivot bolt and remove mounting plate.
4. Lightly lubricate four (4) nylon swivel pads.
5. Install new mounting plate and torque pivot bolt 40-50 ft.lbs.
6. Reinstall seat, bolts and spacers. Torque bolts 20-25 ft.lbs.

Warranty Information

When repairs are within the published warranty use:

<u>Labor Operation</u>	<u>Time Allowance</u>	<u>Trouble Code</u>
W240300	.4 Hr.	37





Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1491

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-TM-7

GROUP: 1-Cab & Body-4

DATE: December, 1974

SUBJECT: End Cap Screw Retention

MODELS: 1973 & 1974 230 & 260 Motor Homes

On some 1973 and 1974 Model 230 and 260 Motor Homes, one or more of the end cap attaching screws could be stripped due to misalignment.

Parts Information

<u>Qty./Vehicle</u>	<u>Part Number</u>	<u>Description</u>
As Required	722427	"Hi-Lo" Screw

Instructions

Stripped end cap screws can be corrected as follows:

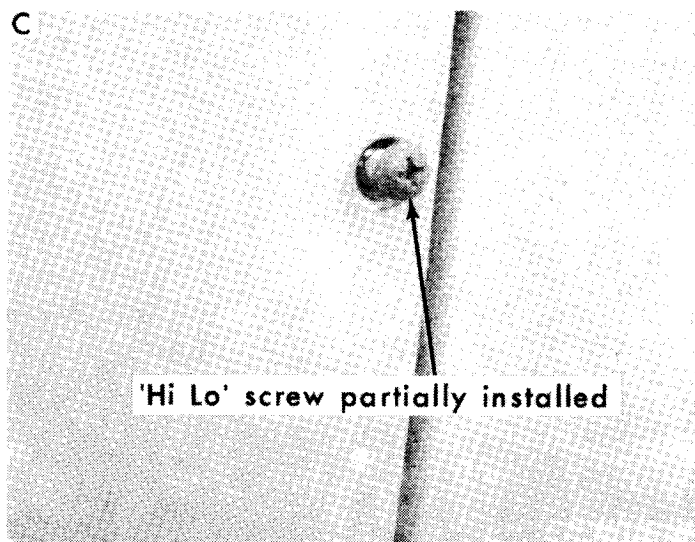
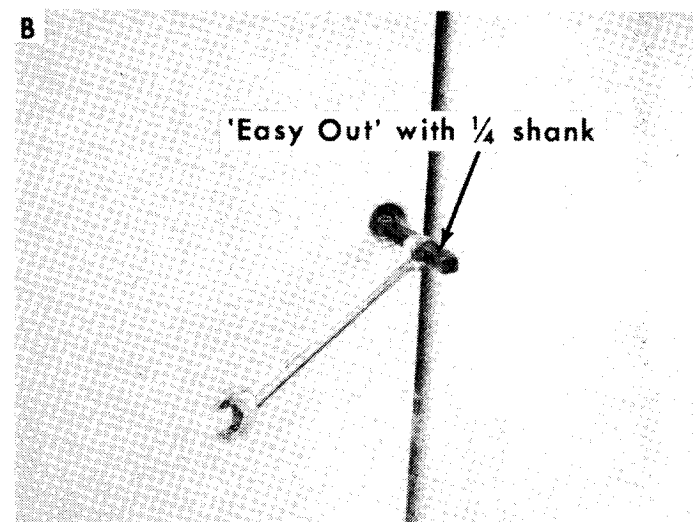
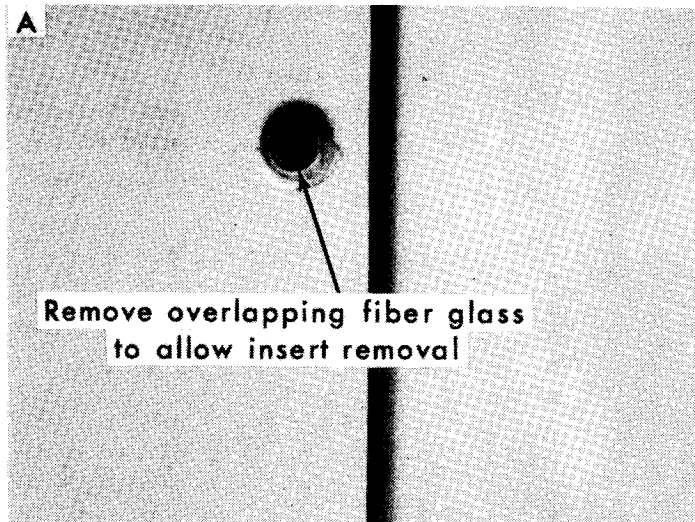
Refer to Views A, B, C and D.

1. Remove screw and threaded insert.
2. If threaded insert does not come out with screw, use a rotary file to remove fiberglass above threaded insert.
3. Use an "easy out" with a 1/4" shank to remove threaded insert.
4. Install "hi-lo" screw.

Warranty Information

When repairs are within the published warranty use:

<u>Labor Operation</u>	<u>Time Allowance</u>	<u>Trouble Code</u>
T104122	S.T.	03





Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-TM-10

GROUP: 1—Cab & Body—5

DATE: January, 1975

SUBJECT: Water Leak Diagnosis & Correction

MODELS: 1973 and 1974 230 and 260 Motor Homes

The following diagnosis chart is presented to aid in the efficient correction of water leaks on 1973 and 1974 230 and 260 model motor homes.

PARTS INFORMATION

Part Number

Description

718253	Cartridge—Black Adhesive Sealant
718254	Can—Clear Pumpable Vinyl Acrylic Small Joint Sealant
718255	Cartridge—Clear Vinyl Acrylic Small Joint Sealant

NOTE: The above sealants must be applied to a *surface* with a *temperature* above 65°F for proper adhesion. Use heat lamp or gun to preheat surface as necessary. Also, surface should be clean and dry.

WARRANTY INFORMATION

When the repairs are within the published warranty, appropriate labor operation numbers can be found in the body section of flat rate schedule X-7427, pages W2-4A thru W2-5B.

WATER LEAK DIAGNOSIS**Water Evidence @****Probable Entry @**

● Ash Tray	● Upper "A" window sash gasket
● Horn Button	● Upper windshield weatherstrip
● Passenger's or Driver's Lap	
● Side Curtains	● Body side panels to upper longitudinal beams to joints and rivets
● Seat Cushions	
● Dinette Table	
● Bottom of Side Windows	● Top of side windows
● Floor and Step Behind Driver or Passenger Seat	● Lower "A" window sash gasket
● Bottom Step	● Step to body splash shields
● Side Floor	● Lower rub rail
● Rear Radio Speakers	● Upper longitudinal beams to front or rear end cap joints
● Inside Rear View Mirror Bracket	● Front roof marker lamps
● Rear Window	● End cap gasket ● End cap screw hole ● Rear roof marker lamps
● Rear Floor Kick-Up Joint	● Rear lateral floor sill LP or MG compartment
● Floor in Front of Closet Module	● City water valve failure ● Rear wheel house to floor joint
● Floor in Front of Bath Module	● Fresh water plumbing in bath module ● Show drain ● Holding tank vent pipe
● Under Fresh Water Tank	● Rear wheelhouse to floor joint ● Fresh water tank outlet, vent, inlet or gage

Correction	Reference Illustration
<ul style="list-style-type: none"> ● Apply bead of clear pumpable sealant to gasket 	Figure 1
<ul style="list-style-type: none"> ● Apply clear pumpable sealant between weatherstrip and windshield opening 	Figure 2
<ul style="list-style-type: none"> ● Remove upper rub rail and seal with clear cartridge sealant 	Figure 3
<ul style="list-style-type: none"> ● If sash flange to body gap is $\frac{1}{16}$" or more, check window installation ● Apply clear cartridge sealant 	Figure 4
<ul style="list-style-type: none"> ● Apply bead of clear pumpable sealant—remove rear vertical window molding to observe if leak is corrected. 	Figure 5 Figure 6
<ul style="list-style-type: none"> ● Remove right or left front wheelhouse. Remove lower stepper splash shield screws and shield. Clean existing sealant from splash shield and mating surfaces on stepper and body. Apply black sealer to mating surfaces of shield and reinstall. 	Figure 7
<ul style="list-style-type: none"> ● Remove lower rub rail and apply clear cartridge sealant 	Figure 8
<ul style="list-style-type: none"> ● Remove upper rub rail and seal with clear cartridge sealant ● Remove marker lamp lens screw and lens. Remove marker lamp body mounting screws. Separate marker lamp body from mounting pad. Carefully remove mounting pad and apply an even coating of clear pumpable sealant to bottom of pad. Install mounting pad to roof. Install lamp body and screws. Install lamp lens and screw. 	Figures 9 and 10
<ul style="list-style-type: none"> ● Install new end cap gasket ● Apply clear cartridge sealant ● Remove marker lamp lens screw and lens. Remove marker lamp body mounting screws. Separate marker lamp body from mounting pad. Carefully remove mounting pad and apply an even coating of clear pumpable sealant to bottom of pad. Install mounting pad to roof. Install lamp body and screws. Install lamp lens and screw. 	
<ul style="list-style-type: none"> ● Apply black cartridge sealant 	Figures 11 and 12
<ul style="list-style-type: none"> ● Replace city water valve ● Apply black cartridge sealant 	Figure 13
<ul style="list-style-type: none"> ● Correct fitting or line leak ● Caulk drain flange ● Secure connection 	
<ul style="list-style-type: none"> ● Apply black cartridge sealant ● Correct as necessary 	Figure 13

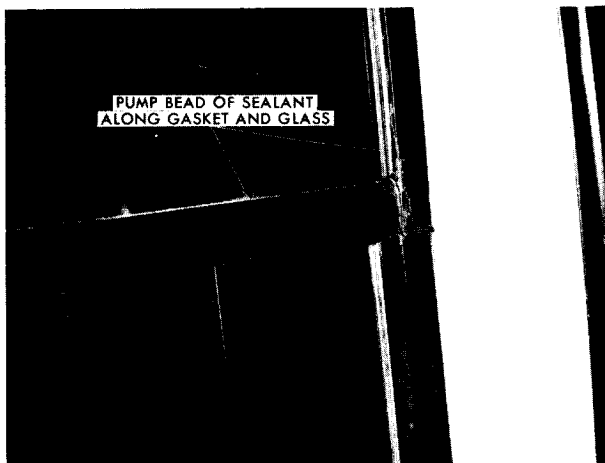


FIGURE 1-UPPER "A" WINDOW SASH GASKET

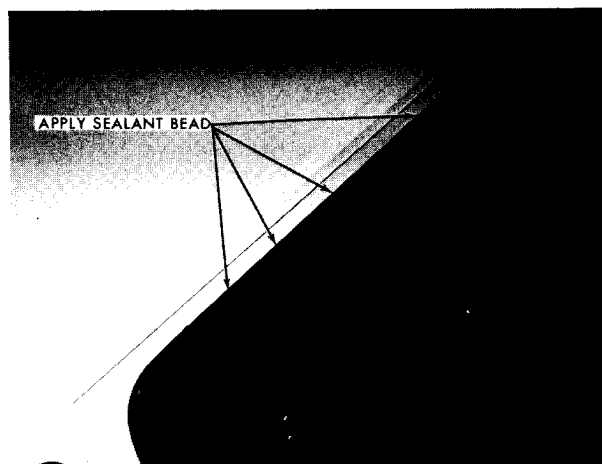


FIGURE 4-SIDE WINDOW SASH TO BODY JOINT

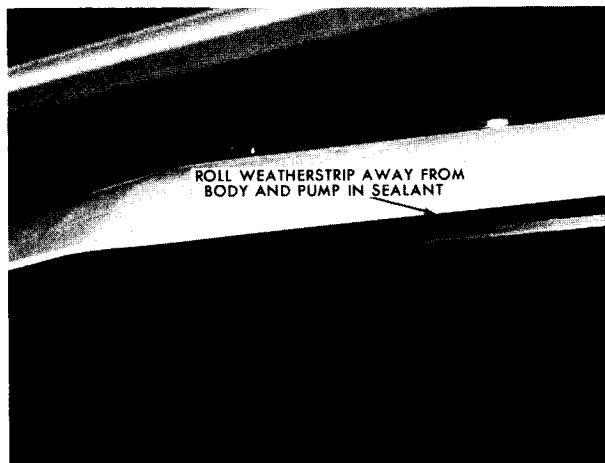


FIGURE 2-WINDSHIELD UPPER WEATHERSTRIP



FIGURE 5-LOWER "A" WINDOW SASH GASKET

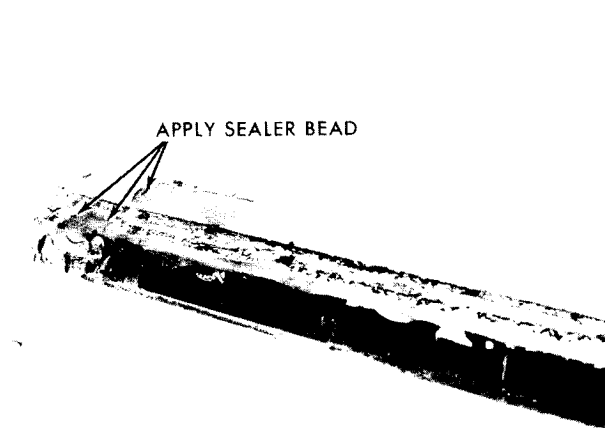


FIGURE 3 - UPPER LONGITUDINAL BEAM SEALING



FIGURE 6-"A" WINDOW VERTICAL MOLDING REMOVED

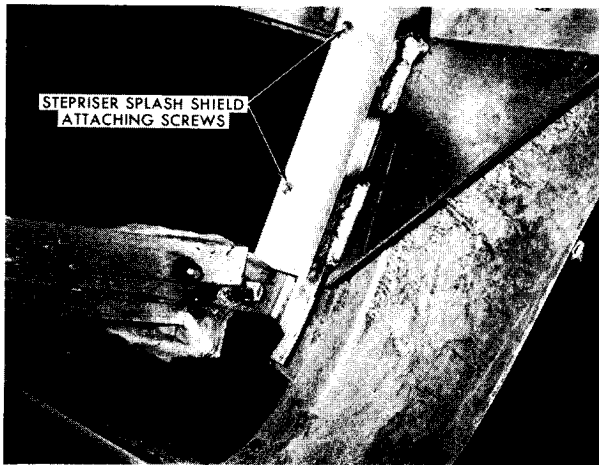


FIGURE 7-STEPRISER SPLASH SHIELD (LEFT SIDE SHOWN)

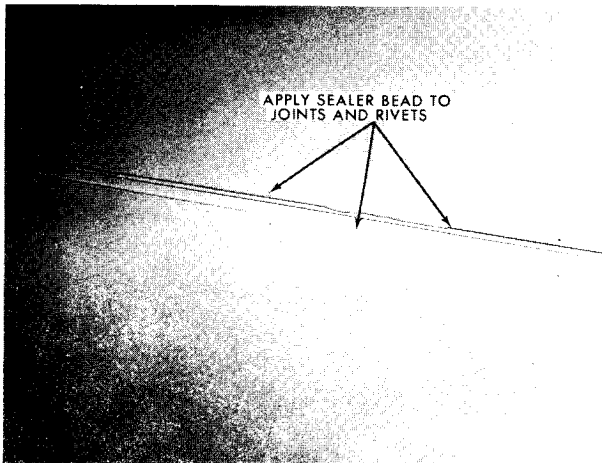


FIGURE 8-LOWER RUB RAIL PANEL JOINTS

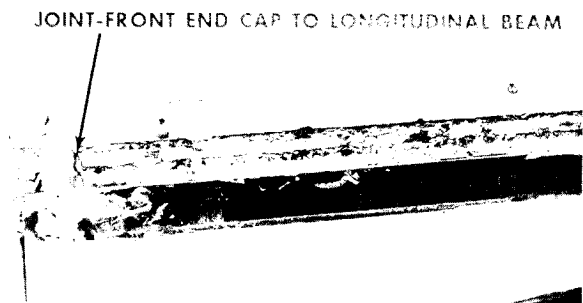


FIGURE 9 - UPPER LONGITUDINAL BEAM FRONT JOINT TO END CAP

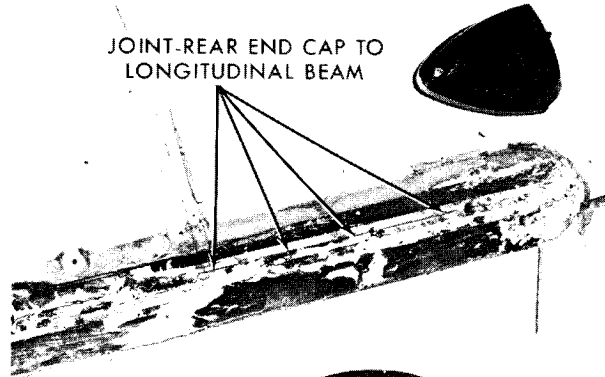


FIGURE 10 - UPPER LONGITUDINAL BEAM REAR JOINT TO END CAP



FIGURE 11-MOTOR GENERATOR COMPARTMENT SILL

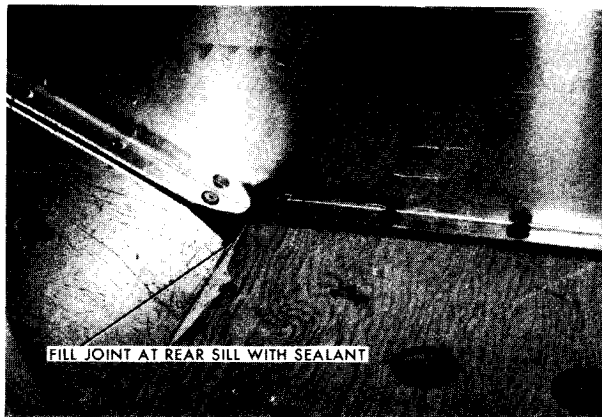


FIGURE 12-LP COMPARTMENT LATERAL SILL

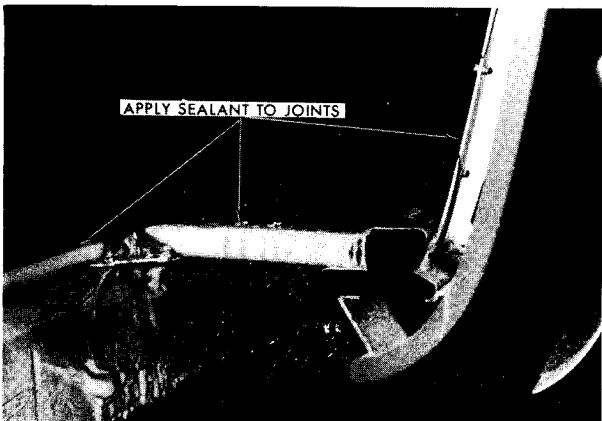


FIGURE 13-LEFT REAR WHEEL HOUSE



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1491

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-TM-10 A

GROUP: 1-Cab & Body-5

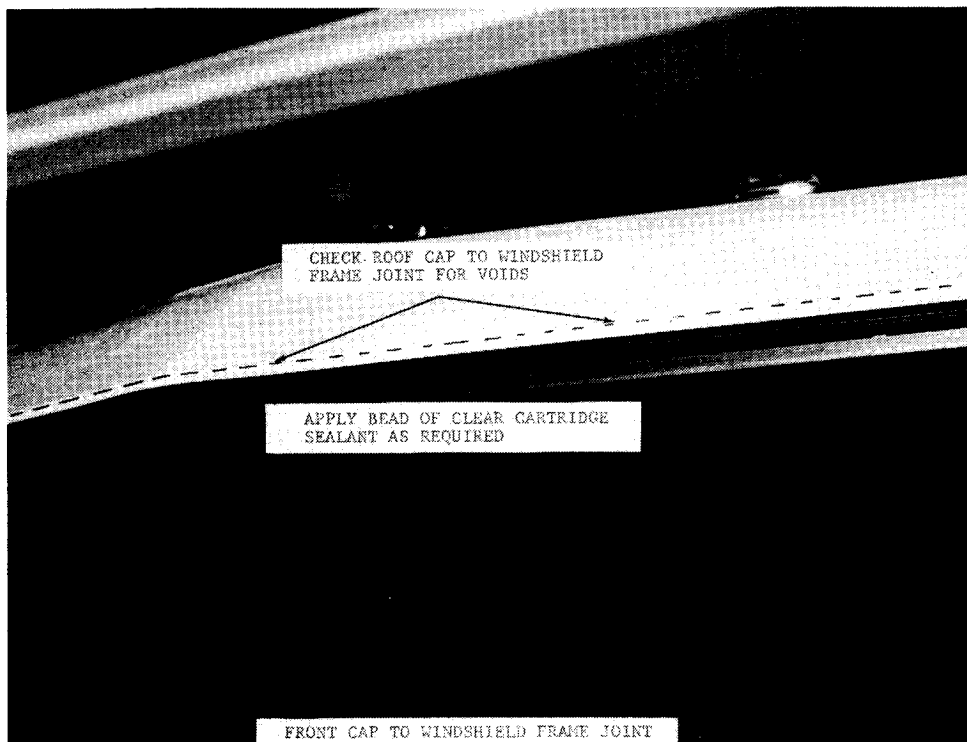
DATE: April, 1975

SUBJECT: Supplement to Bulletin 75-TM-10,
Water Leak Diagnosis and Correction

MODELS: 1973, 1974 and 1975 GMC Motor Homes

Please add the following to the diagnosis chart:

<u>Water Evidence @</u>	<u>Probable Entry @</u>	<u>Correction</u>
. Horn Button	. Front cap to windshield frame joint.	. Apply clear cartridge sealant to voids in joint as shown.
. Passenger or Driver's Lap		
. Inside Rear View Mirror Bracket		





Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1491

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-TM-12

GROUP: 1-Cab & Body-6

DATE: February, 1975

SUBJECT: Splash Shield - Lower Step Riser

MODELS: 1975 Motor Home and Transmode

Early production 1975 model GMC Motor Homes and Transmodes serial number 5V100001 to 5V100367, may have been built without the lower step riser splash shield. Omission of the shield may result in a water leak at the base of the step.

PARTS INFORMATION

<u>Qty/Vehicle</u>	<u>Part Number</u>	<u>Description</u>
2	701439	Shield - Lower Step
4	NPN	1/4 - 14 x 3/4 Pan Head Self-Tapping Screw
As Required	718253	Cartridge - Black Adhesive Sealant

INSTRUCTIONS

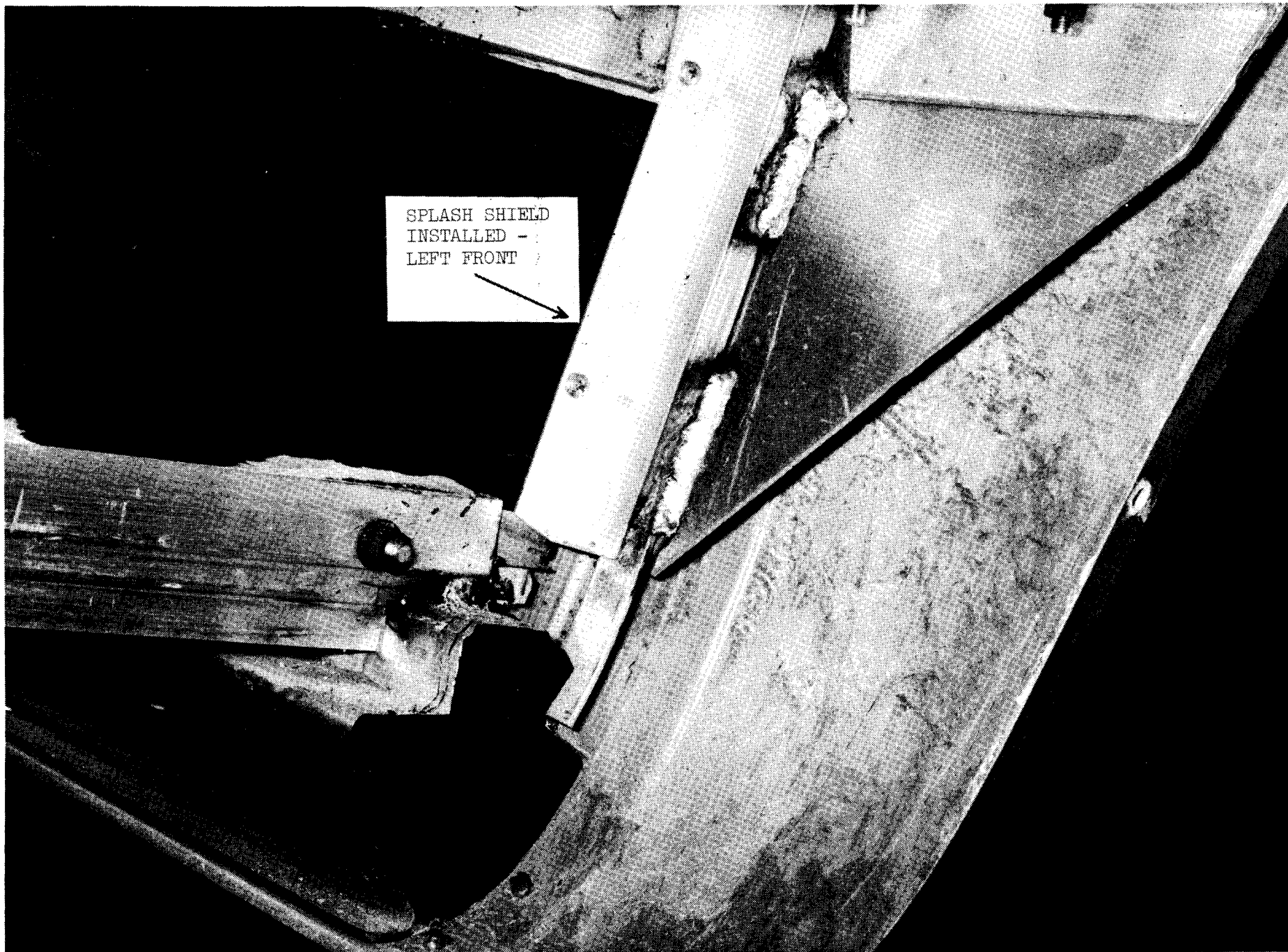
1. Remove right and left front wheel houses.
2. Position splash shields and mark two holes for each shield.
3. Drill four 7/32" holes as marked.
4. Apply black adhesive sealant to outer edges of shields and install using 1/4 - 14 x 3/4 pan head screws.
5. Apply black adhesive sealant to top of shields at bottom of step to fill void.

WARRANTY INFORMATION

When the repairs are within the published warranty use:

<u>Labor Operation</u>	<u>Time Allowance</u>	<u>Trouble Code</u>
T015127	.5 Hr.	92

SPLASH SHIELD
INSTALLED -
LEFT FRONT





Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-TM-16

GROUP: 1-Chassis Air
Conditioning-7

DATE: April, 1975

SUBJECT: CHASSIS AIR CONDITIONING CONDENSER DISCHARGE TUBE

MODELS: ALL MOTOR HOMES EQUIPPED WITH CHASSIS AIR CONDITIONING

GMC Technical Service in cooperation with Engineering has recently released a new method of mounting the receiver dehydrator. The new mounting location, on the evaporator assembly housing, is designed to relieve stress on the condenser discharge tube and give a more stable mounting to the receiver dehydrator. (Figure 1 - Old Style Mounting) (Figure 2 - New Style Mounting)

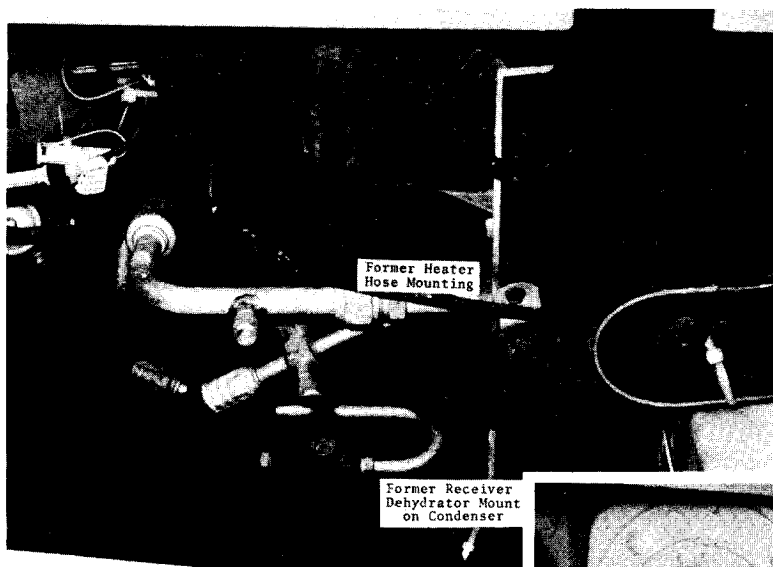


FIGURE 1 - FORMER INSTALLATION OF RECEIVER DEHYDRATOR

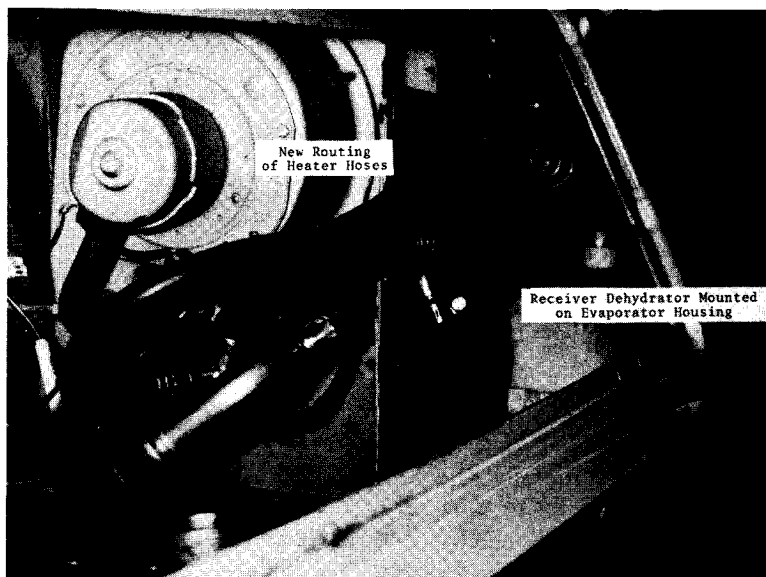
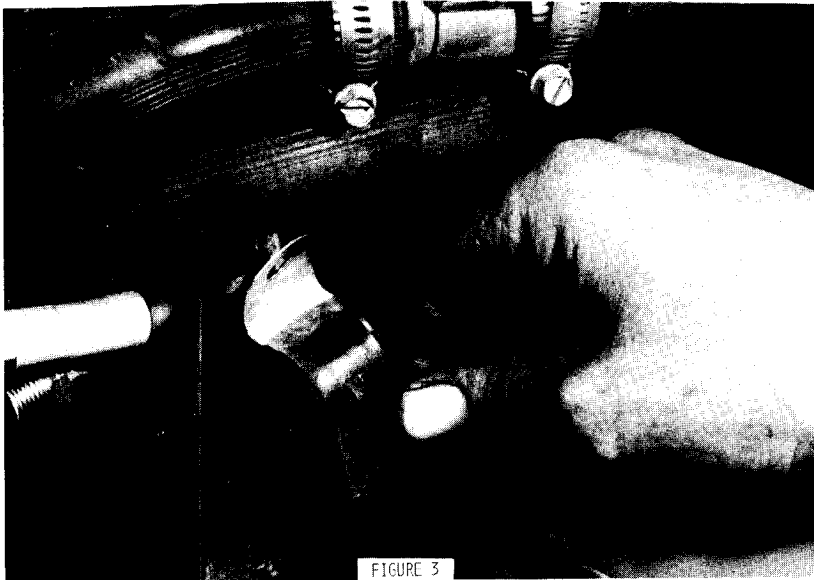


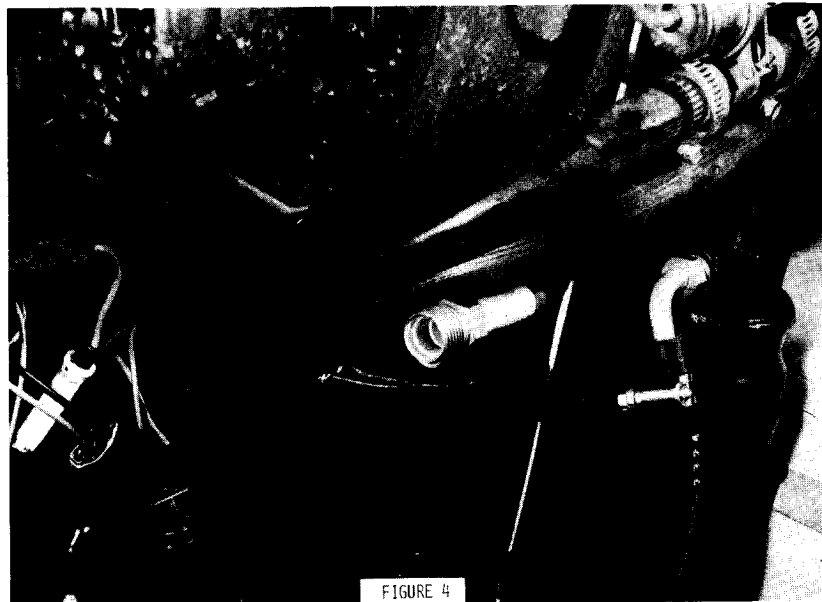
FIGURE 2 - CURRENT INSTALLATION OF RECEIVER DEHYDRATOR

PROCEDURE

1. Purge system as outlined in the maintenance manual. Remove the heater hose clamp noting cap screw located underneath clamp (Figure 3). This screw will be used to hold the top bracket of the receiver dehydrator in its new position.



2. Remove high and low pressure air conditioning lines entering the evaporator housing.



3. Reroute heater hose lines as indicated in Figure 4 over the top of the air conditioning lines.
4. Drill hole for sheet metal screw in the center of the recirculating air opening on the evaporator housing assembly. Clamp heater hoses in place as shown in Figure 5.

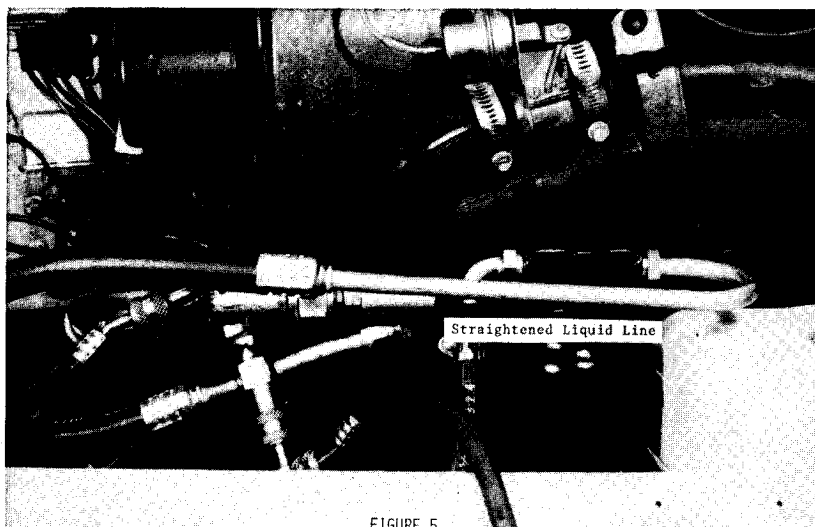


FIGURE 5

5. Remove liquid line from receiver dehydrator and straighten as shown in Figure 6.

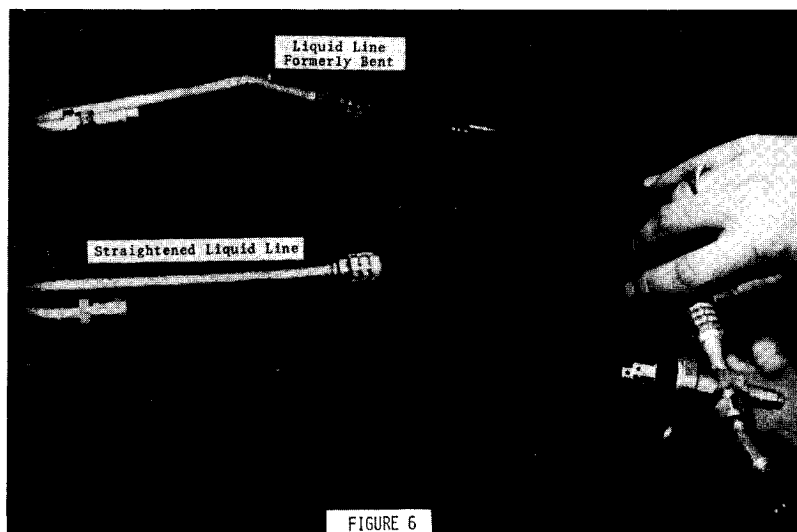


FIGURE 6

6. Remove the receiver dehydrator and brackets from the condenser and remount using screws #9419622 and washers #9421089 on the evaporator housing as shown in Figure 2. Mount the drier and bracket together. You will not be able to mount the drier into the brackets if they are mounted first.
7. Attach condenser discharge tube extension, part #2000385, between the condenser discharge tube and the new location of the receiver dehydrator.
8. Install straightened liquid line between outlet of receiver-dehydrator and inlet of the evaporator housing. Clip condenser discharge tube, using clamp #8876975, to old receiver dehydrator top mounting bracket using clip supplied. You may have to gently bend the tube up to position it.
9. Evacuate, charge, and leak check as outlined in the Motor Home Maintenance Manual.

WARRANTY INFORMATION

When the repairs are within the published warranty use:

<u>LABOR OPERATION</u>	<u>DESCRIPTION</u>	<u>TIME</u>	<u>TROUBLE CODE</u>
T025205	Remount receiver dehydrator and install discharge tube extension.	1.2 Hr.	92



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-TM-19

GROUP: 1-Cab & Body

DATE: June, 1975

SUBJECT: ENTRANCE DOOR FIT

MODELS: 1973, 1974 and 1975 MOTOR HOMES AND TRANSMODES

The entrance door on the subject vehicles can be bent out of adjustment by swinging the door against the lower body rub rail. This condition can be recognized by the door corners not fitting on the striker side of the door and the door binding on the hinge side. To correct such a condition proceed as follows:

INSTRUCTIONS

1. Install clamps and engine lifting "come-along" (J24603-20) to the door as shown in Figure 1. NOTE: Shield curtain to avoid soiling.
2. Tighten "come-along" to match door curvature to jamb curvature.
3. Remove clamps and check door fit.
4. Repeat Steps 1, 2, and 3 as required.

WARRANTY INFORMATION

When the repairs are within the published warranty use:

Labor Operation

Time Allowance

Trouble Code

T045101

.5 Hr.

92

TOOL FABRICATION INSTRUCTIONS

The clamps used to bend the entrance door are fabricated as follows:

Materials

<u>Quantity</u>	<u>Description</u>
4	2" x 4" x 8" Wood Block
2	3/16" x 2" x 8" Wood Strip
4	1/2-13 x 4-1/2 Bolt
2	1/2-13 x 5 Bolt
6	1/2-13 Nut
6	1/2" Flat Washer

Drill twelve (12) 1/2 inch holes as shown in Figure 2. Tack wood strips as shown and assemble clamps.

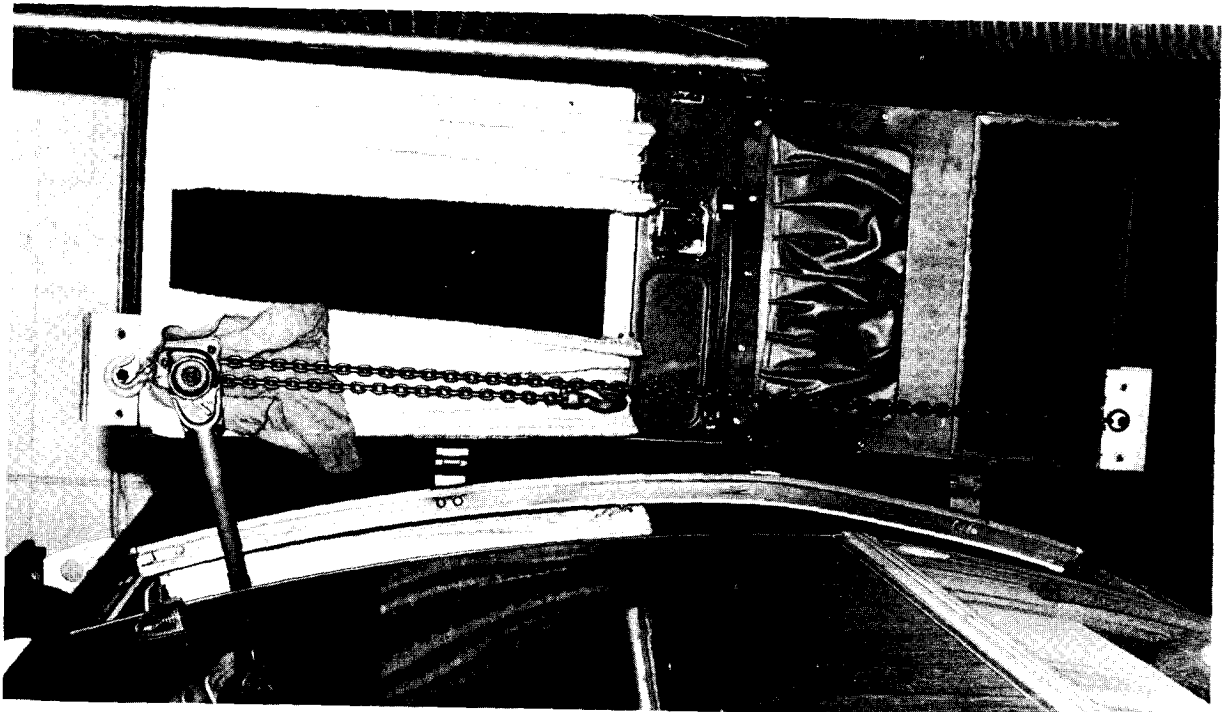


FIGURE 1

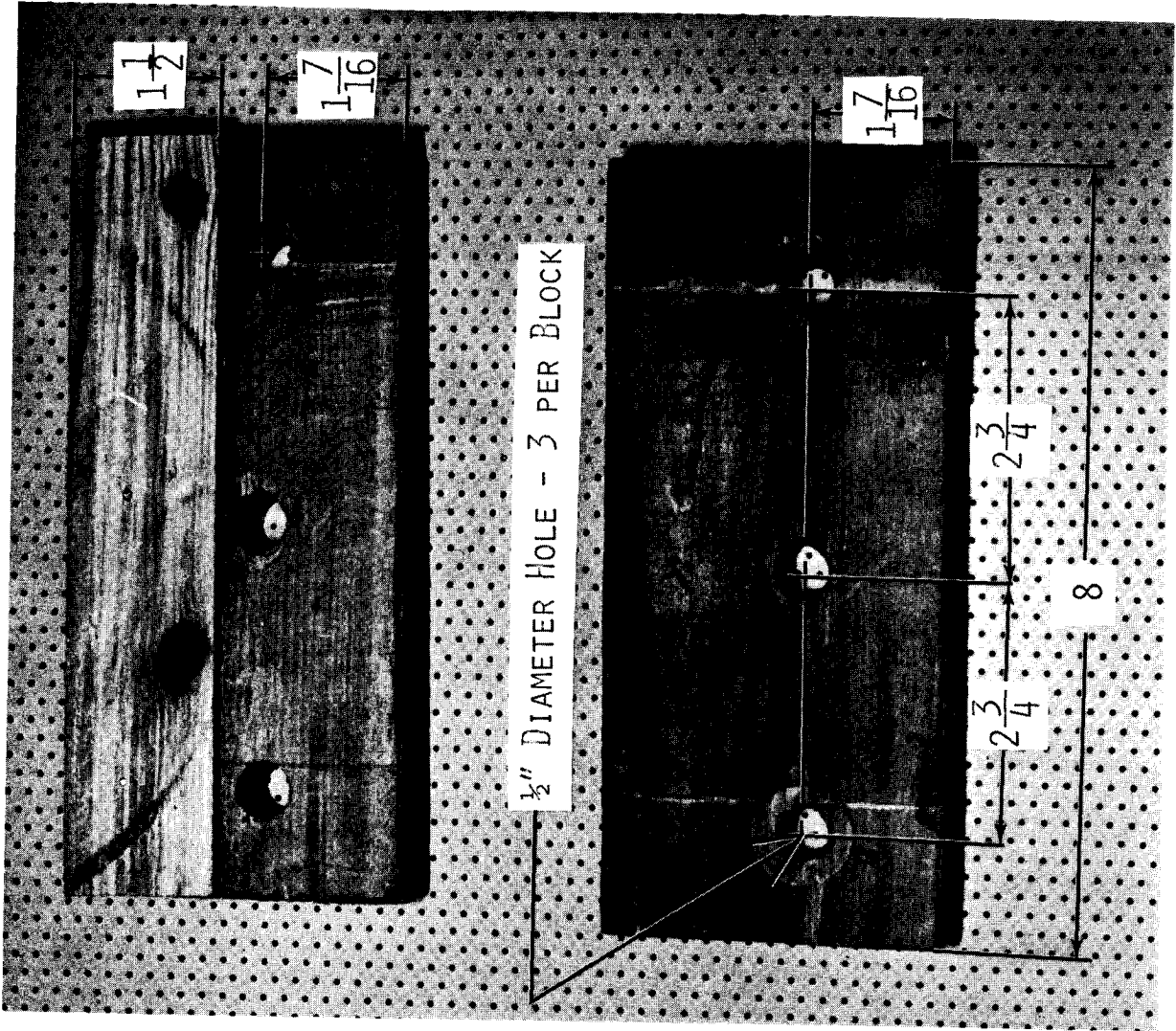


FIGURE 2



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-TM-20

GROUP: 1-Cab & Body-9

DATE: June, 1975

SUBJECT: INSTRUMENT PANEL REPAIR PROCEDURE

MODELS: ALL GMC MOTOR HOMES AND TRANSMODES

Following is the repair procedure for the hard plastic instrument panel and adjoining side panels: (See Figures 1 and 2)

1. Remove right or left windshield as necessary.
2. Remove attaching instrument panel screws to allow clamping.
3. Clamp broken parts into alignment.
4. Apply 3M #8101 structural adhesive or equivalent to fracture and adjoining surface.
5. After allowing curing time specified on adhesive, sand repair and feather to panel.
6. Clean with "Prep-Sol" or equivalent.
7. Prime.
8. Sand prime and clean.
9. Apply color coat (dry spray).

[Mix one part lacquer to one part thinner. Use 15-20 psi on spray gun with a wide fan on the nozzle. Gun should be held approximately 18" from panel. Do not let paint get wet on the panel, keep the gun moving. Continue coating until damage and/or repair is hidden.]

10. Reinstall attaching instrument panel screws. DO NOT USE POWER SCREW DRIVER.
11. Clean windshield(s) edges and weatherstrip.
12. Reinstall windshield(s).

WARRANTY INFORMATION

When the repairs are within the published warranty use:

<u>Labor Operation</u>	<u>Description</u>	<u>Time</u>	<u>Trouble Code</u>
W250200	Remove & Replace Right Windshield	1.2	92
W250100	Remove & Replace Left Windshield	1.2	
T055301	Right Side Instrument Panel - Repair	S.T.	
T055401	Left Side Instrument Panel - Repair	S.T.	
T055501	Right Side Trim Panel - Repair	S.T.	
T055601	Left Side Trim Panel - Repair	S.T.	

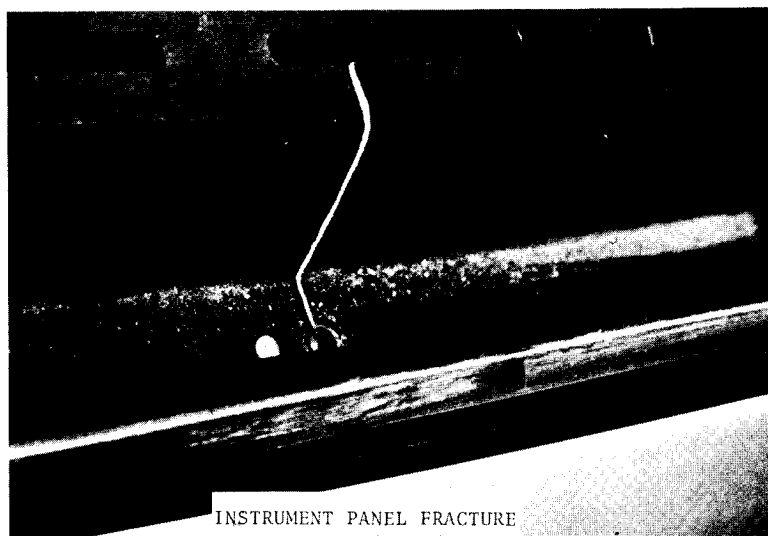


FIGURE 1

INSTRUMENT PANEL FRACTURE

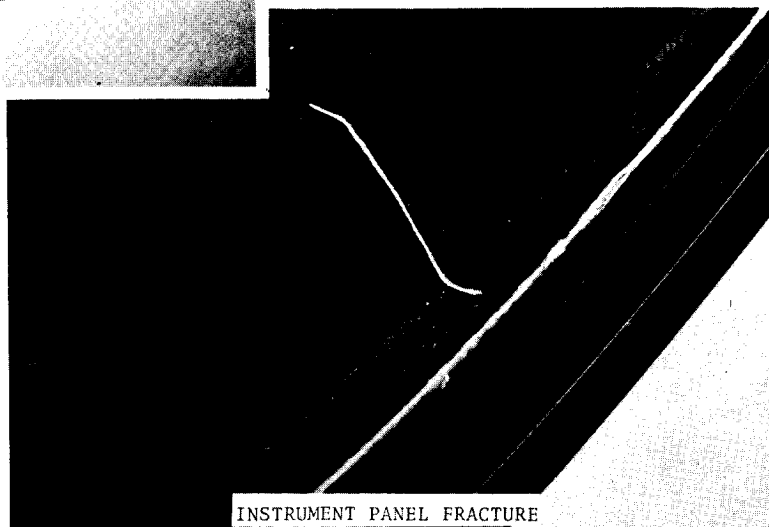


FIGURE 2

INSTRUMENT PANEL FRACTURE



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-TM-21

GROUP: 1-Cab & Body-10

DATE: June, 1975

SUBJECT: ENTRANCE DOOR RESTRAINT

MODELS: 1973, 1974 and 1975 GMC MOTOR HOMES

An entrance door restraint is now available for use on 1973, 1974 and 1975 GMC Motor Homes. The restraint limits the door opening angle to 120°, but has a pin release if a wider opening is desired.

PARTS INFORMATION

<u>Quantity/Vehicle</u>	<u>Part Number</u>	<u>Description</u>
1	3794769	Bracket
1	3959858	Strap Assembly
1	3794770	Pin
4	NPN	1/4-14 x 3/4" Hexagon Washer
		Head Tapping Screw

INSTRUCTIONS

1973 and 1974 Models

1. Mark center line for door strap as shown in Figure 1.
2. Position strap assembly and pin bracket and center punch four holes.
3. Drill four 7/32" holes.
4. Install strap, bracket and pin using four screws.

1975 Models

1. Remove dinette table bracket.
2. Remove door jamb trim strip on hinge side.
3. Pull dinette trim panel from wall and push forward to clear side of jamb for drilling.
4. Mark center line for door strap as shown in Figure 1.
5. Position strap assembly and pin bracket and center punch four holes.
6. Drill four 7/32" holes.
7. Install strap, bracket and pin using four screws.
8. Reposition trim panel and mark location of strap bracket.
9. Cut clearance notch for strap bracket as shown in Figure 2.

10. Slit trim panel at edge and thread strap through notch and slit.
(See Figures 3 and 4)
11. Reinstall jamb trim strip and connect strap to door.
12. Reinstall dinette table bracket.

WARRANTY INFORMATION

When the repairs are within the published warranty use:

<u>Labor Operation</u>	<u>Description</u>	<u>Time</u>	<u>Trouble Code</u>
T055712	Entrance Door Restraint Installation		
	1973-1974 Models	.3 Hr.	92
	1975 Models	.4 Hr.	92

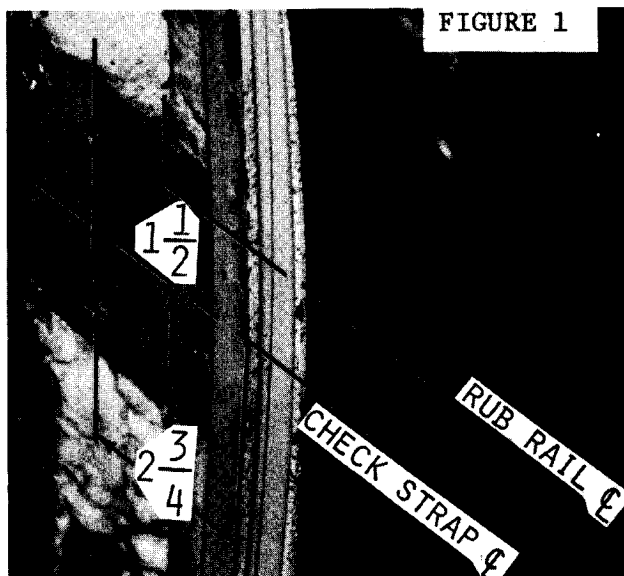


FIGURE 1

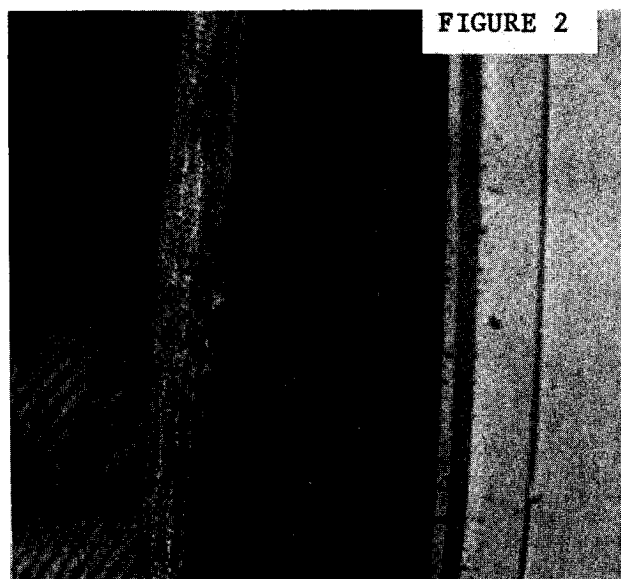


FIGURE 2

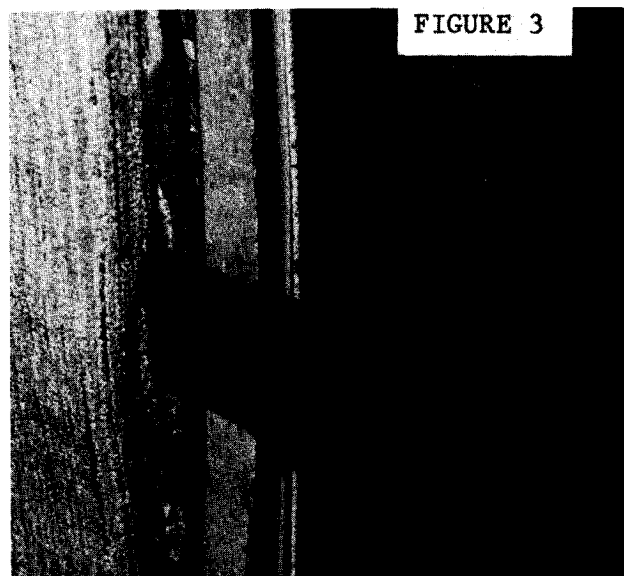


FIGURE 3

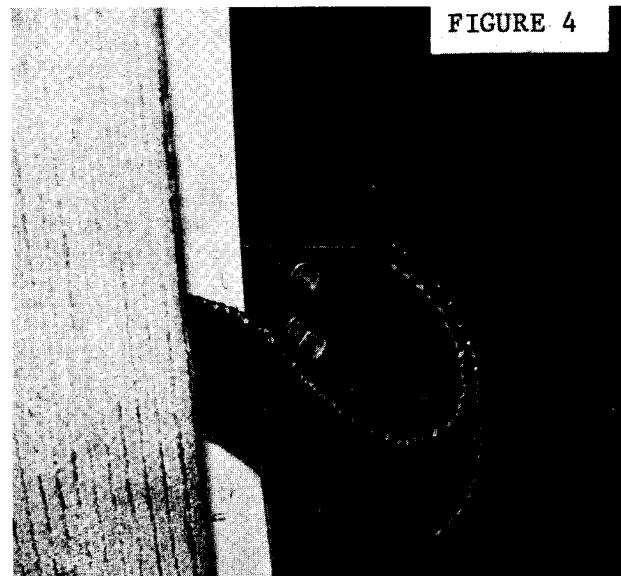


FIGURE 4



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1491

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-TM-22

GROUP: 1-Cab & Body-11

DATE: July, 1975

SUBJECT: ENTRANCE DOOR LOCK

MODELS: 1975 MOTOR HOMES AND TRANSMODES PRIOR TO TZE165V101121
AND TZE365V101122

The entrance door lock may be difficult to operate on some 1975 GMC Motor-Homes and TransModes manufactured prior to TZE165V101121 and TZE365V101122 due to assembly tolerances. The possibility of such a condition occurring was corrected in production effective with the above vehicles by enlarging the interior release handle relay rod hole at the latch end. Vehicles built prior to the change that exhibit difficult door lock operation should be corrected as follows:

1. Remove entrance door curtain and three bottom pieces of window molding.
2. Remove lower window retainer screws and retainer.
3. Remove the two inboard door latch screws and loosen two outboard screws.
4. Remove door lock plunger knob.
5. Remove lower door panel screws and panel.
6. Remove interior door handle plate screws and rotate plate 90°.
7. Remove pin clip from relay rod and remove plate assembly.
8. With a 9/32" drill bit, enlarge hole in relay rod.
9. Reinstall plate assembly to door latch with pin clip.
10. Reinstall plate and screws.
11. Reinstall lower panel and screws.
12. Reinstall latch screws.
13. Reinstall lower window retainer and screws.
14. Reinstall lower window molding and entrance door curtain.

WARRANTY INFORMATION

When the repairs are within the published warranty use:

<u>Labor Operation</u>	<u>Description</u>	<u>Time</u>	<u>Failure Code</u>
T065102	Entrance Door Lock Modification	.4	92



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 76-TM-1

GROUP: 1-Cab & Body - 1

DATE: November, 1975

SUBJECT: CHASSIS AIR CONDITIONING DUCT ADDITION FOR INCREASED EFFICIENCY

MODELS: ALL GMC MOTORHOMES PRIOR TO TZE166V100062 AND TRANSMODES PRIOR TO TZE366V100049

A new field service procedure for improved efficiency of the chassis air conditioning system has been developed. This additional ducting basically reroutes conditioned air over the evaporator coil when the system is set on the "Recirc" mode.

If the modifications described in Bulletin 75-TM-16 (Chassis Air Conditioning Condenser Discharge Tube) have not yet been done; they should be completed at this time, as the air conditioning system is being purged and the heater lines removed to perform the operations listed below.

PARTS INFORMATION

The following are details of Kit #2008727:

<u>Qty.</u>	<u>Part Number</u>	<u>Description</u>
1	3035092	End Baffle Plate
1	3035088	Top Baffle Plate
1	3035095	Top Baffle Seal
1	3035096	Side Baffle Seal
1	3028767	Valve Assembly — Temperature (Auxiliary Temper- ture Door)
1	3035093	Valve Lever (Bell Crank)
1	3035035	Connecting Link Clip (Pink)
1	3033435	Connecting Link Clip (White)
1	3035056	Connecting Link Rod
1	3034832	Retainer Clip
2	1602464	Outlet

Also required, in addition to each kit, are:

<u>Qty.</u>	<u>Part Number</u>	<u>Description</u>
3	9419328	10-16 x 1/2 Pan Head Tapping Screw (Procure Locally)
1	9431531	10-16 "U" Shaped Spring Nut — Short Type (Procure Locally)
1	2005509	Duct Assembly (Mid- night Neutral)
1	2005508	Duct Assembly (Eleganza & Glen- brook)
	2005243	Duct Assembly (Palm Beach)

PROCEDURE

1. Remove the evaporator and heater core assembly as outlined in Section 1, Page 1-62, of the GMC Motor-Home Maintenance Manual.

NOTE: For easy access, remove grille.

2. With the assembly out on the bench, remove the front cover and carefully remove the grommet from around the heater core pipes (Figure 1).

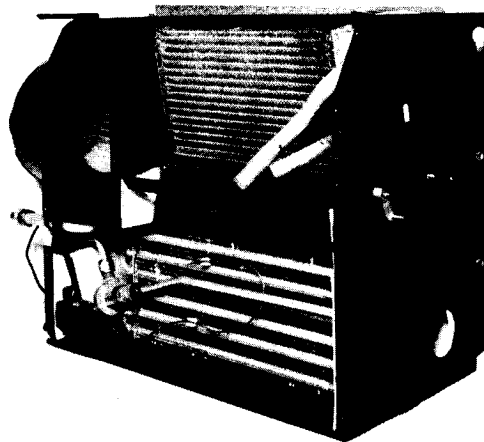


FIGURE 1

3. Remove plastic bottom and steel holding strap (Figure 2).

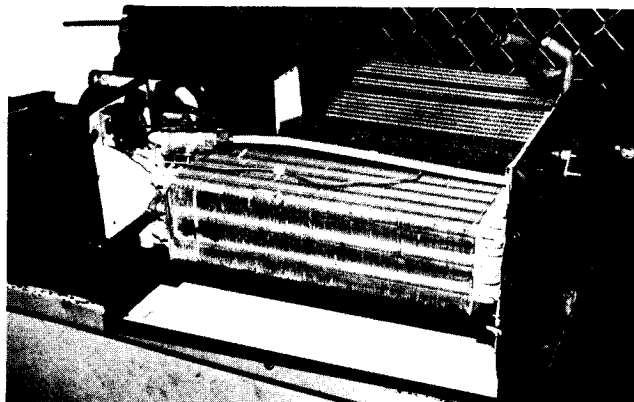


FIGURE 2

4. Carefully remove thermostat sensing tube from the evaporator core and bend it out of the way. Remove the

heater core and evaporator core. The evaporator is best removed leaving the expansion valve connected (Figure 3).

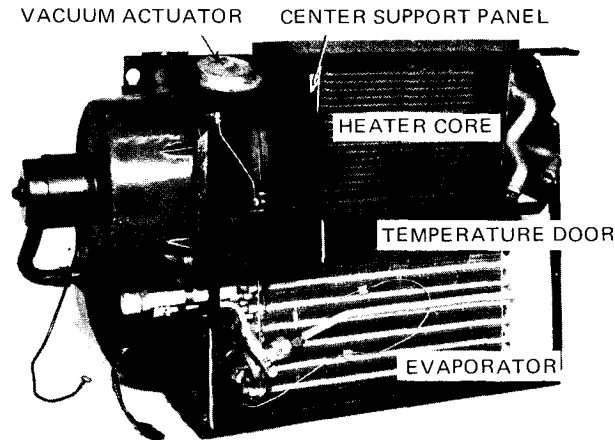


FIGURE 3

5. Remove screws holding the vertical center support panel. Be careful not to lose the temperature control door stop (Figure 4).

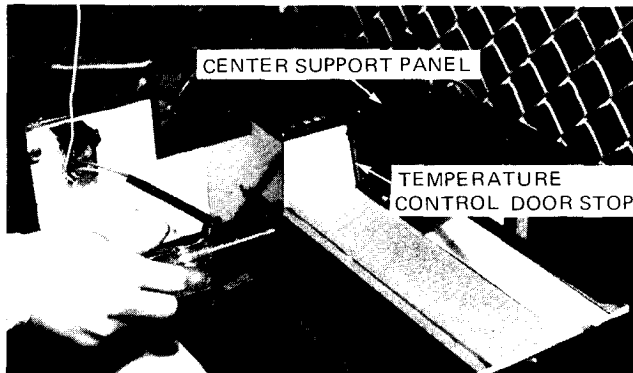


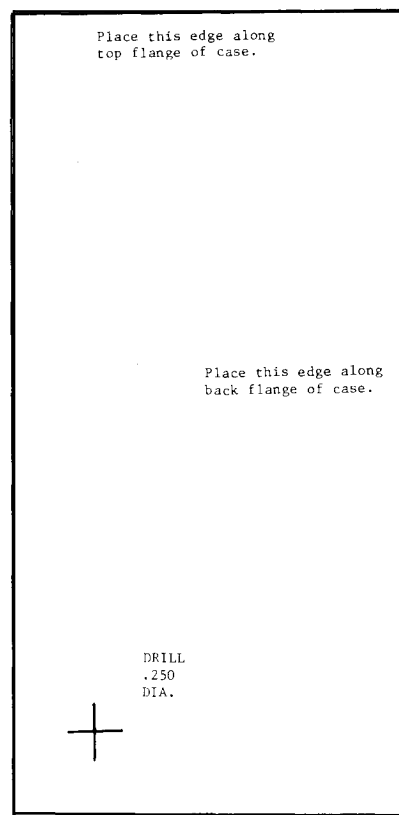
FIGURE 4

6. Remove "recirc" door vacuum actuator and bracket. Remove the spring nut and linkage connecting the "recirc" door and the actuator (Figure 5).



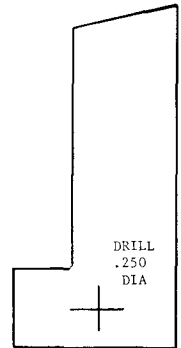
FIGURE 5

7. Gently pry the front of the center support panel to the left, and the rear of the panel to the right. This will cause the panel to come free and the "recirc" and temperature control doors to drop out of their supporting holes in the center support panel (Figure 6).



TEMPLATE B

SAMPLES
(Not to Size)



TEMPLATE A

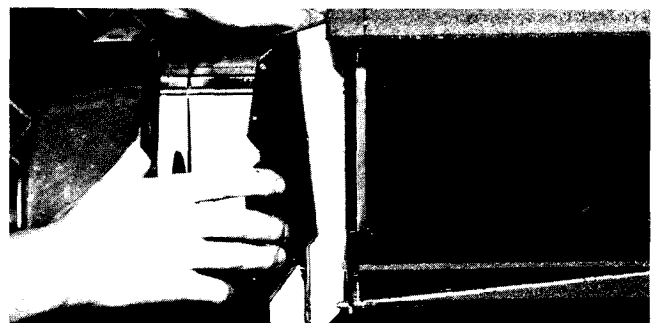


FIGURE 6

8. Place template "A" so its tapered edge lines up with the bottom edge of the inside of the center support panel at the lower rear corner as shown (Figure 7). Punch and drill a 1/4" hole where indicated by the template. Using the same template "A", fold the "L" portion of the template over the edge and mark with an



FIGURE 7

awl as shown (Figure 8). Cut this piece away to give clearance for new bell crank which will be installed later.



FIGURE 8

9. Plate template "B" on the evaporator housing right end panel (opposite the blower motor) as indicated on the template and shown in Figure 9. Punch and drill a 1/4" hole where indicated.

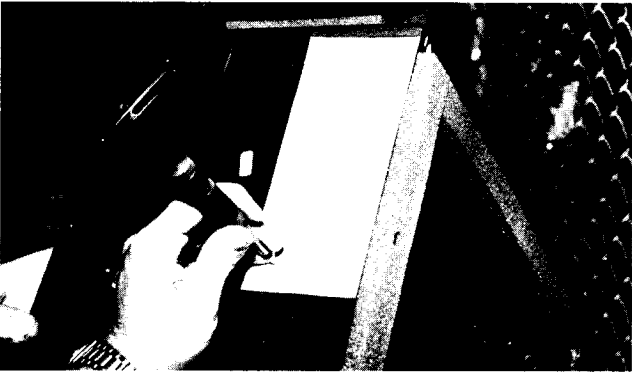


FIGURE 9

10. Lay the evaporator housing so the inboard portion, the side facing the firewall, is up. Starting at the lower left corner, mark off a 2-1/2" x 11-3/4" slot. You may wish to drill the corners for easier cutting. Cut the slot out (Figure 10).

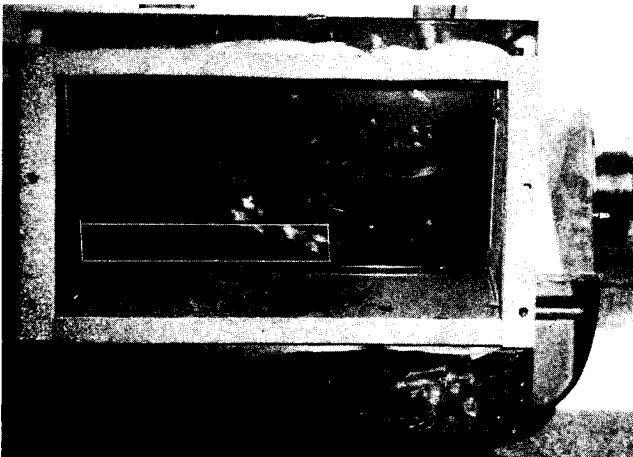


FIGURE 10

11. Enlarge the hole in the vacuum actuator lever to 15/64" (Figure 11). This is done to accommodate the new linkage which will be attached from the actuator to the new auxiliary temperature control door.



FIGURE 11

12. Pop rivet end baffle (P/N 3035092) to top baffle (P/N 3035088). Using the assembled baffles as a template, mark and drill 1/8" holes into the inner wall of the evaporator housing and pop rivet into place over the hole cut in Step 10 (Figure 12).



FIGURE 12

13. Rubber cement foam rubber seals (P/N 3035095 and 3035096) into place on the installed baffle assembly (Figure 13).

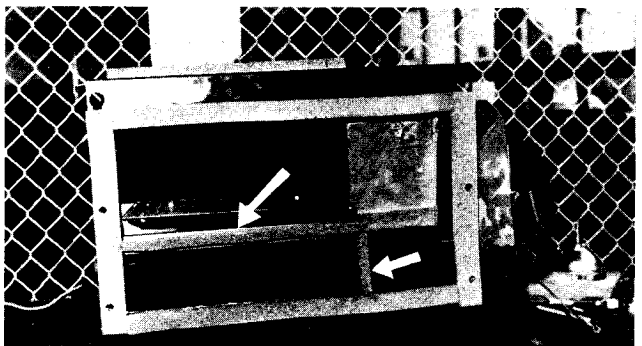


FIGURE 13

14. Install new auxiliary temperature door (P/N 3028767) to the center support panel. This is done by putting the door shaft with the flat end through the 1/4" hole drilled in Step 8 and attaching the new bell crank (P/N 3035093) to it by tapping it on (Figure 14).
15. With the auxiliary temperature door installed to the center support panel, put the center support panel back into position. At the same time, make sure that the other end of the auxiliary temperature door shaft fits into the 1/4" hole drilled into the housing end panel created in



FIGURE 14

Step 9. Also make sure the temperature control door shaft goes back into its position in the center support panel (Figure 15).

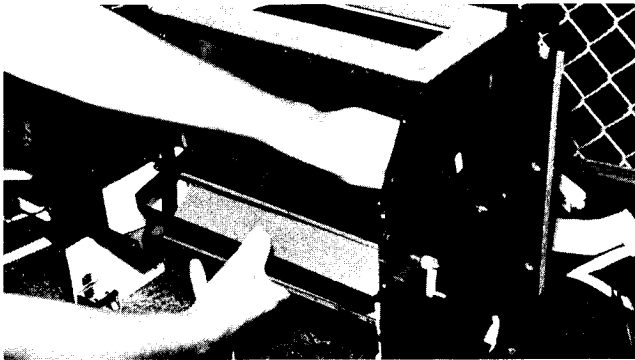


FIGURE 15

16. Screw center support back into place, making sure not to forget the temperature control door stop. Do not install the two screws behind the "recirc" door as they will be used later to hold the "recirc" door in position.
17. Install evaporator.
18. Install heater core.
19. Install vacuum actuator and bracket.
20. Install plastic bottom panel and metal stop.
21. Install thermostat probe into the evaporator core.
22. Install pink plastic connecting link clip (P/N 3035035) onto vacuum actuator lever (Figure 16).



FIGURE 16

23. Install white plastic clip (P/N 3033435) to the new bell crank on the auxiliary temperature door.
24. Make sure the auxiliary temperature is held in the closed position and install the connecting link rod (P/N 303-5056) with a slight preload tension on the actuator to make sure the door remains closed. Install retainer clip (P/N 3034832) over the white clip (Figure 17).

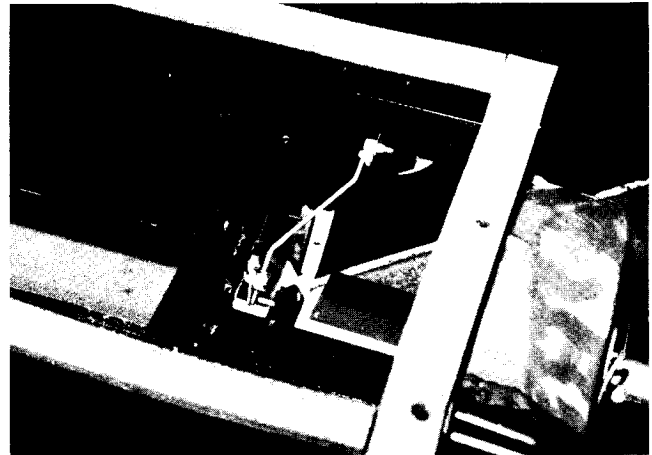


FIGURE 17

25. Cut the end of the "recirc" door pivot shaft off. Place the "recirc" door, with the foam insulation down, over the former "recirc" hole on the inner wall of the evaporator assembly (Figure 18).



FIGURE 18

26. Using the remaining two center support panel screws, add a flat washer and reinstall from the inside to hold the "recirc" door in place (Figure 19).

All necessary modifications to the evaporator assembly are now complete.



FIGURE 19

27. Before reinstalling the evaporator assembly to the motor home, it will be necessary to cut a 5/8" x 11-3/4" section out of the existing air passage hole in the firewall (Figure 20). The remainder of the hole should be covered by pop riveting a piece of sheet metal over it (Figure 21).

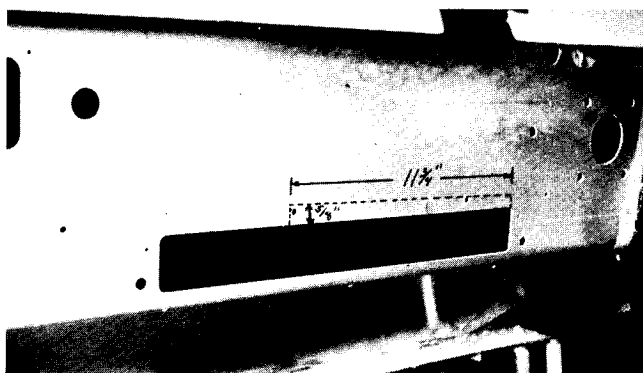


FIGURE 20

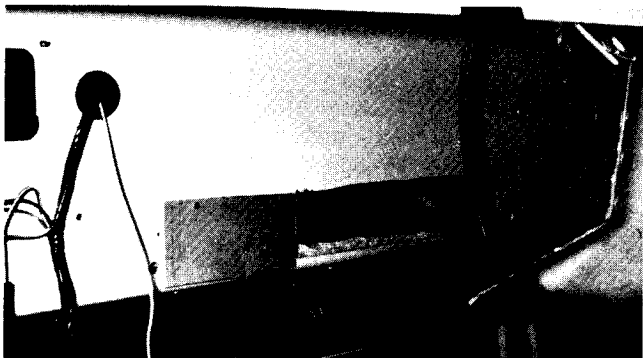


FIGURE 21

28. Reinstall the evaporator housing to the firewall and make all electrical and refrigerant hose connections.
29. Install "U" nut in duct assembly (Figure 22).



FIGURE 22

30. Remove the bezel trim piece from duct assembly and install bezels into trim pieces (Figure 23).
31. Before reinstalling trim pieces and bezels into duct assembly, place the duct assembly in position under the dash and, using an awl, mark the location of the "U" nut on the glovebox where marked (Figure 24).
32. Reinstall trim pieces with bezels into duct assembly (Figure 25).

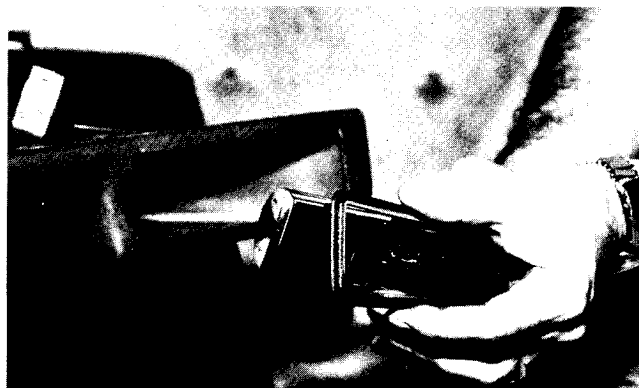


FIGURE 23

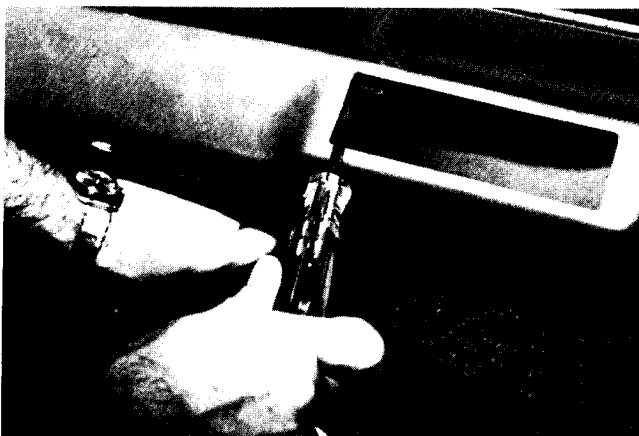


FIGURE 24

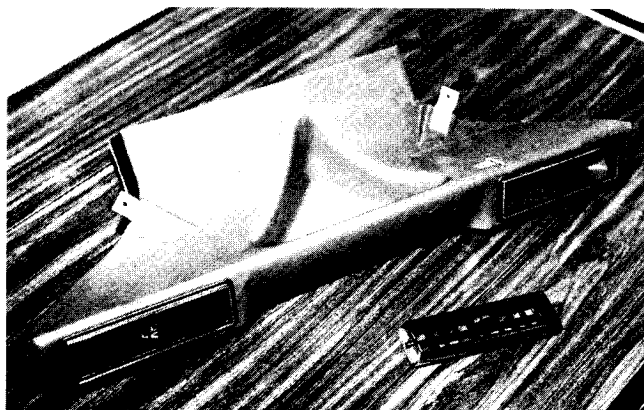


FIGURE 25

33. Remove lower left glovebox screw (Figure 26). This screw will be used to hold the right side attaching tab on the duct assembly.

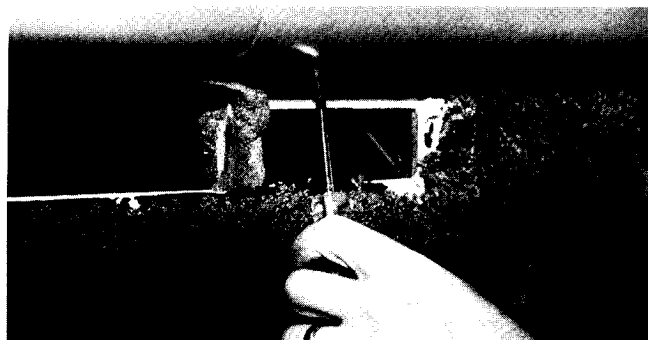


FIGURE 26

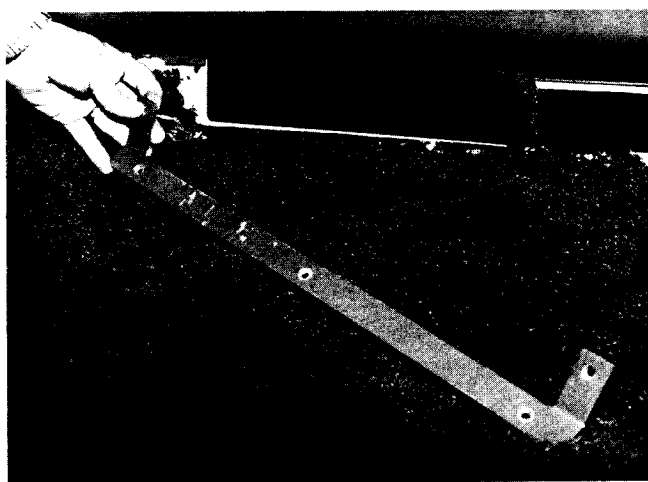


FIGURE 27

34. Remove and discard carpet trim strip around "recirc" hole (Figure 27).



FIGURE 28

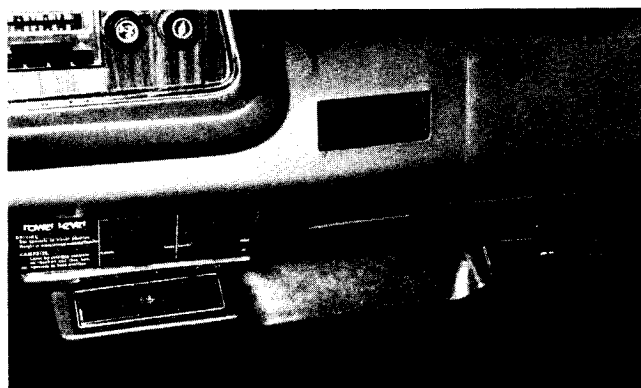


FIGURE 29

35. Install duct assembly making sure to get it through the enlarged hole in the firewall to prevent air loss. It may be necessary to trim some excess carpet. Left tab is screwed into instrument panel. Don't forget to install screw into "U" nut from inside glovebox (Figure 28). Installation of duct assembly is now complete (Figure 29).
36. Remove the instrument panel cover; thus, exposing the back of the temperature control panel. If equipped, disconnect the wire leading from the lower blade on the blower switch to the rotary switch. Disconnect it at the blower switch as the other end is crimped and soldered. The wire is orange with black stripes.

WARRANTY INFORMATION

When repairs are within the published warranty — use:

<u>Labor Operation</u>	<u>Description</u>	<u>Time Allowance</u>	<u>Trouble Code</u>
T095108	Install A/C Duct Addition	5.0 Hrs,	92

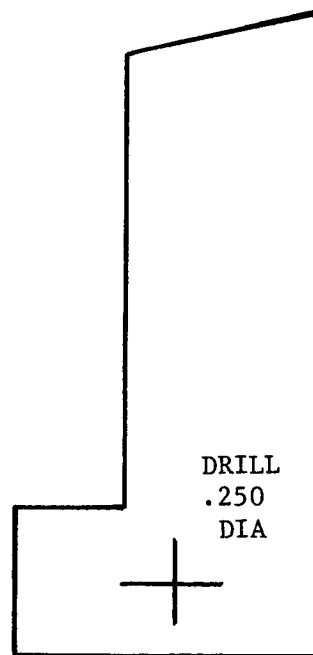
Place this edge along
top flange of case.

Place this edge along
back flange of case.

DRILL
.250
DIA.



TEMPLATE B



TEMPLATE A



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 76-TM-1A

GROUP: 1-Cab & Body-1

DATE: June, 1976

SUBJECT: Chassis Air Conditioning Duct Addition for
Increased Efficiency

MODELS: All GMC Motorhomes Prior to TZE166V100062 and
Transmodes Prior to TZE366V100049

This bulletin is a supplement to Bulletin 76-TM-1, dated
November, 1975.

Under the section Warranty Information and under the sub-
heading Time Allowance, 5.0 Hrs. should be changed to read
6.2 Hrs.

This change in the Labor Time Guide Allowance is the result
of new studies made.



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 76-TM-3

GROUP: 1-Cab & Body-2

								DATE: May, 1976

SUBJECT: AUXILIARY TEMPERATURE DOOR ADJUSTMENT

MODELS: ALL 1976 MOTOR HOMES AND TRANSMODES WITH CHASSIS AIR CONDITIONING

Some owners may experience leakage of cold air through the duct below the instrument panel in all heater modes due to the auxiliary temperature door not closing completely. The following is the procedure for the adjustment of the auxiliary temperature door.

PARTS INFORMATION

Quantity	Part Number	Description
As Required	3008845	Strip Sealer

PROCEDURE

1. Loosen heater hose bracket to allow freedom of movement of heater hoses. (Figure 1)
2. Disconnect hot wire from blower motor.
3. Remove two nuts holding blower motor fan shroud to evaporator housing. Wires from compressor discharge pressure switch may have to be removed to provide wrench clearance.
4. Lift out blower motor and fan housing making sure to lift upward to clear the air outlet passage.

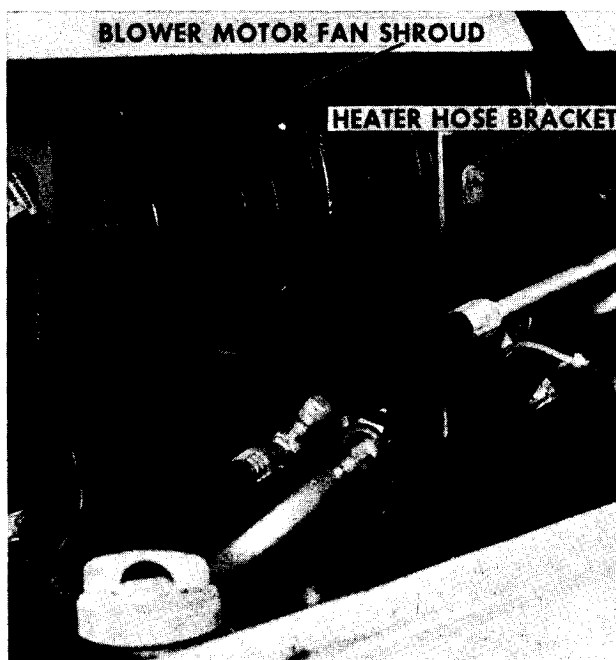


Figure No. 1

5. Remove retaining clip on bell crank lever; then pull rod free of connecting ring (white clip). (Figure 2)
6. Gently push the rod upwards against vacuum actuator about a quarter of an inch and re-clip rod to white clip. This supplies a constant force pushing the door closed for better sealing.
7. Replace connecting ring retainer clip.
8. Reseal around blower motor fan shroud and air outlet passage with strip seal.
9. Reinstall blower motor fan and shroud to evaporator housing and connect wires.
10. Tighten heater hose bracket.

WARRANTY INFORMATION

When the repairs are within the published warranty use:

Labor Operation	Description	Time Allowance	Trouble Code
T056005	Auxiliary Temperature Door — Adjust	.5	92



Figure No. 2



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 76-TM-5

GROUP: 1-Cab & Body-3

							DATE: June, 1976

SUBJECT: POWER AIR VENT MOLDING ATTACHMENT

MODELS: LATE 1975 PLUS EARLY 1976 MOTOR HOMES

In late 1975 production, the framing around the power roof vents was removed. Because of this, the screws that hold up the screen attach only to the headliner material which results in the screen sagging. This bulletin details a procedure to add an aluminum tab at each corner of the vent frame to secure the screen. This eliminates the problem of the screen and headliner sagging. See Figure 1.

PARTS INFORMATION

Quantity	Part Number	Description
8	Procure Locally	1/8" Pop Rivets
8	Fabricate	Tabs of Aluminum Angle Stock.

PROCEDURE:

1. Fabricate eight tabs from aluminum angle stock as pictured in Figure 2.
2. Remove screen.

3. Drill an 1/8" hole in each corner of the frame so that it lines up with the hole in the headliner approximately 1/2" up the side from the bottom flange. (Figure 3)

4. Using blocks or screw driver handles (Figure 3) hold the headliner away from the vent frame. Mark each tab for drilling. (Figure 4)

5. Drill the hole that was just marked in each tab.

6. Rivet the tabs to the frame. (Figure 5)

7. Drill a 7/64" hole in each tab using the holes in the headliner for a guide. (Figure 6)

8. Replace screen making sure the screws thread in the tabs.

WARRANTY INFORMATION

When the repairs are within the published warranty use:

Labor Operation	Description	Time Allowance	Trouble Code
T056220	Install roof vent retainer tabs.	.5	92

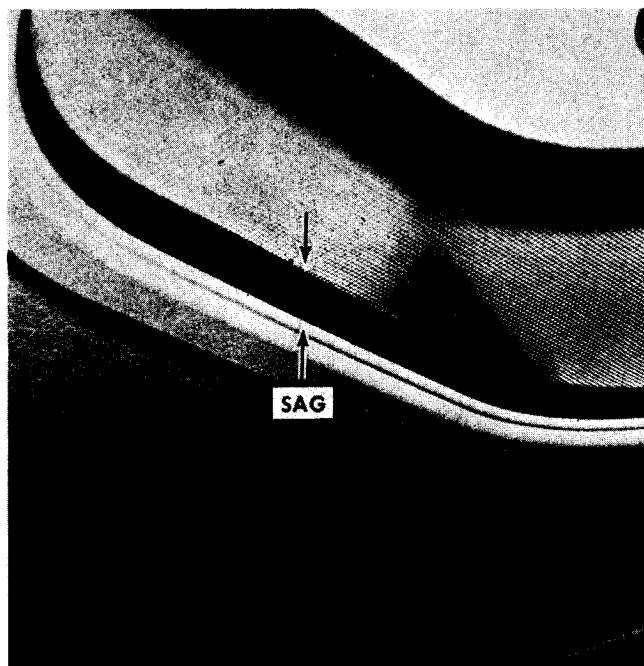


Figure 1

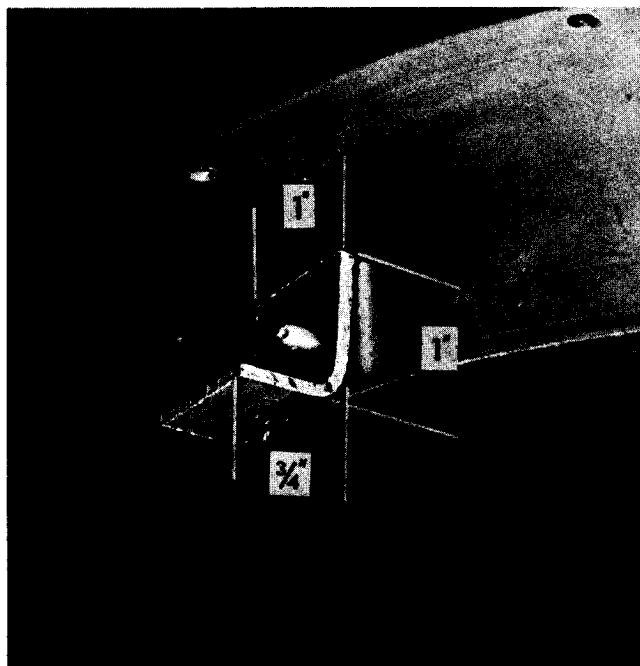


Figure 2

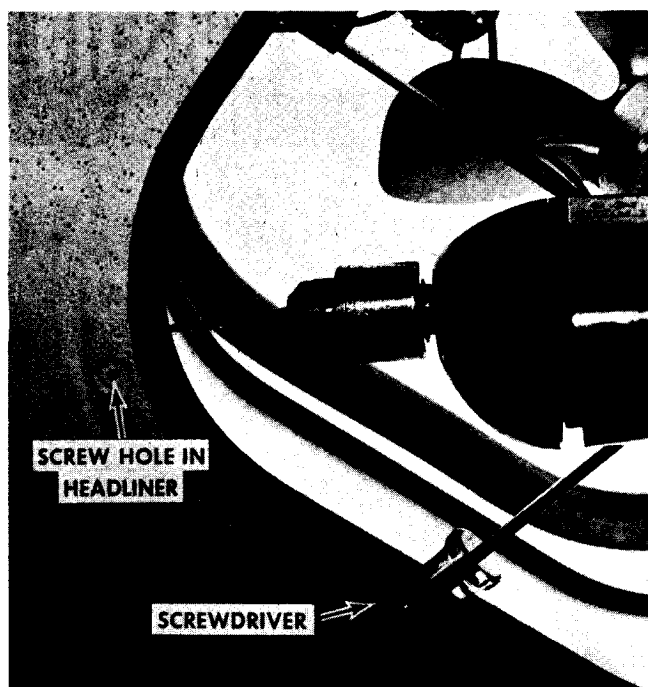


Figure 3

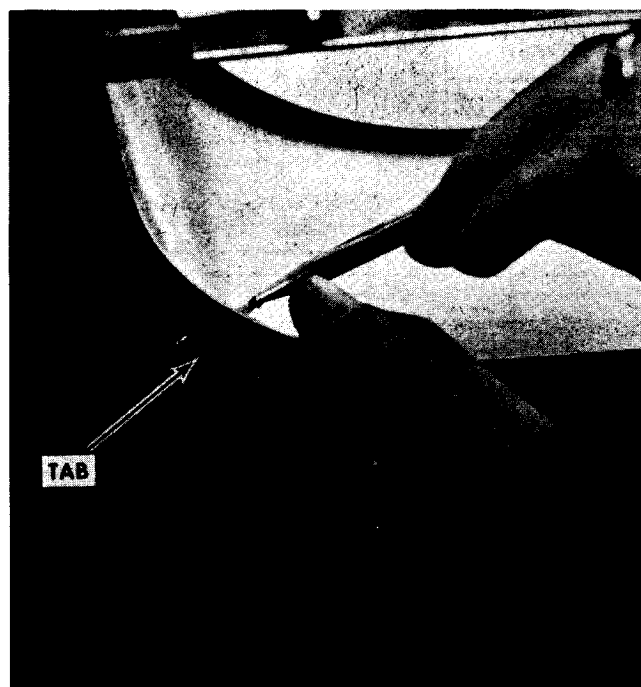


Figure 4

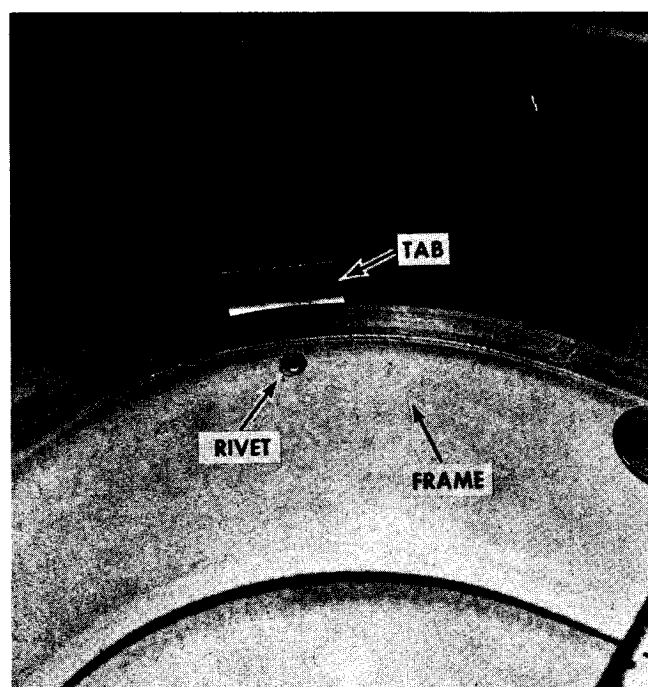


Figure 5 — Shown on bench for clarity



Figure 6



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 77-TM-1

**GROUP: 1—CAB &
BODY—1**

DATE: FEBRUARY, 1977

SUBJECT: COLD WEATHER DRIVER AND PASSENGER COMFORT

MODELS: ALL MOTORHOMES AND TRANSMODES

Complaints of inadequate heat from the automotive heater while operating the motorhome in subfreezing temperatures are usually the result of cold air leaks. By eliminating these cold air leaks, adequate driver and passenger comfort should be obtained. The cold air leaks described in this bulletin should be eliminated before any other corrective measures are taken.

PARTS INFORMATION:

Putty type sealer (Procure locally)

Silicone sealer supplied in tubes (Procure locally)

NOTE: Before applying sealers, the surface to which they are applied must be clean to insure proper adhesion.

NOTE: Illustrations in this bulletin depict one side of the motorhome. Both sides should be checked and sealed as required. Figure 5 should be used to determine the location on the vehicle of the following figures.

PROCEDURE

1. Referring to Figure 1, the areas indicated should be sealed using the putty type sealer.

2. The seam indicated in Figure 2 should be sealed with the sealer supplied in tubes.

3. The rubber seal shown in Figure 3 should be checked for proper location and sealing. If the seal is inadequate, fill with putty type sealer.

4. Inspect lower corner (Refer to Figure 4) and seal with putty type sealer as required.

For the next operations, it will be necessary to remove both front wheel housing. Refer to 1975 and 1976 Motorhome Maintenance Manual, pages 1–22 for proper removal and installation procedures.

5. Check the top of the step and riser assembly (Refer to Figure 6) for proper sealing area. Seal as required using sealer supplied in tubes.

6. At the area where the step and riser meet, (Refer to Figure 7) seal the area indicated.

7. At the hollow channel running along the rocker panel, check for proper positioning of the rubber seal shown in Figure 8. The areas indicated by the arrows should also be checked for proper sealing and sealed if required using putty type sealer.

8. The three-sided vertical rib (Refer to Figure 9) should be completely plugged using putty type sealer.

9. Inspect all grommets where harnesses, cables, and vacuum lines pass through the dash to insure that they are properly positioned; apply putty type sealer as required.

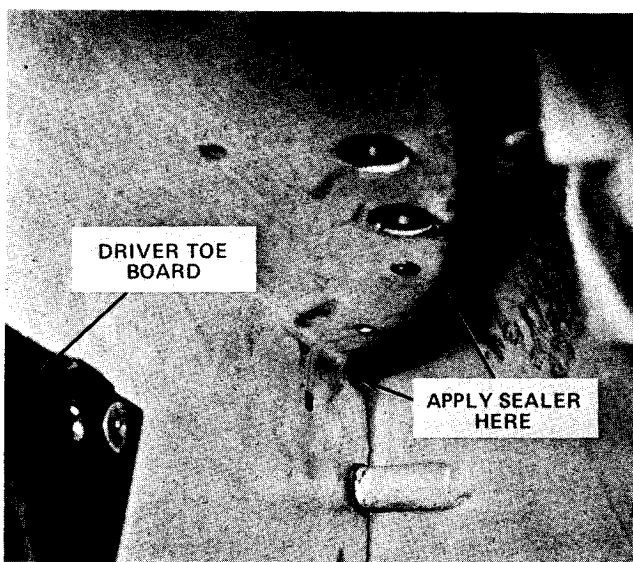


FIGURE 1

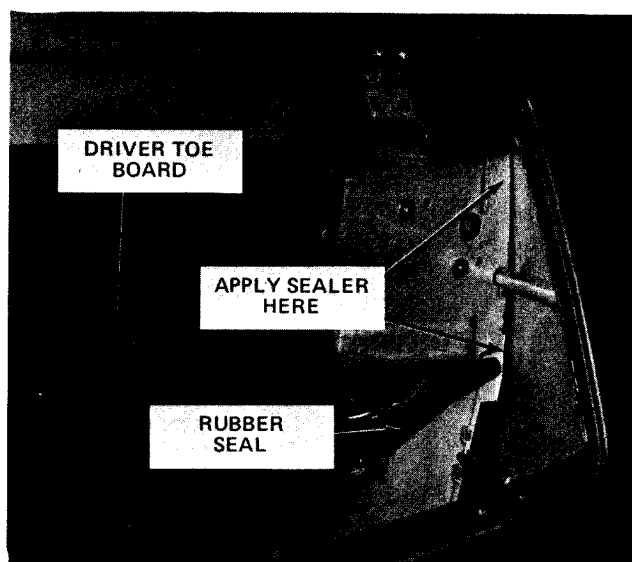


FIGURE 2

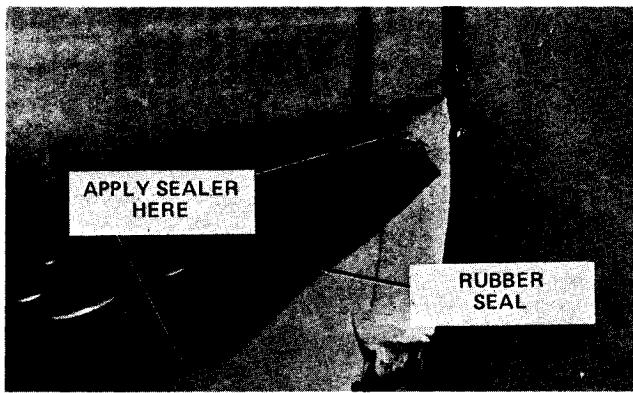


FIGURE 3

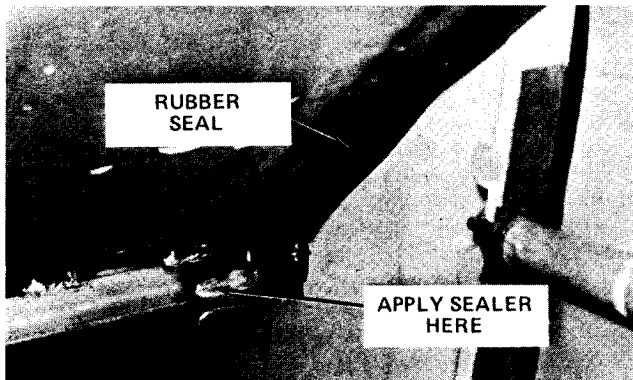


FIGURE 4

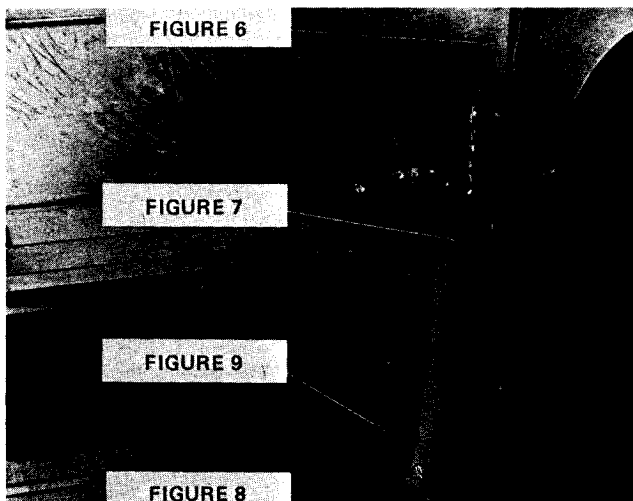


FIGURE 5

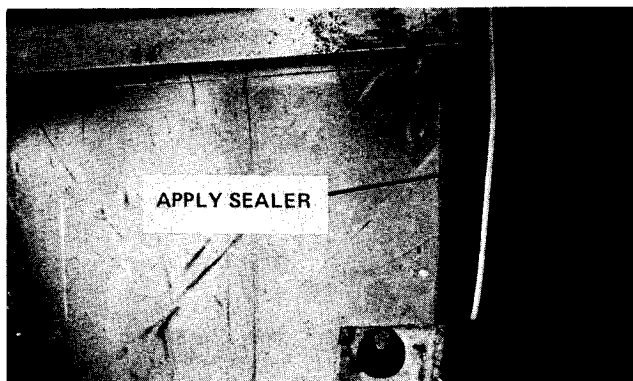


FIGURE 6

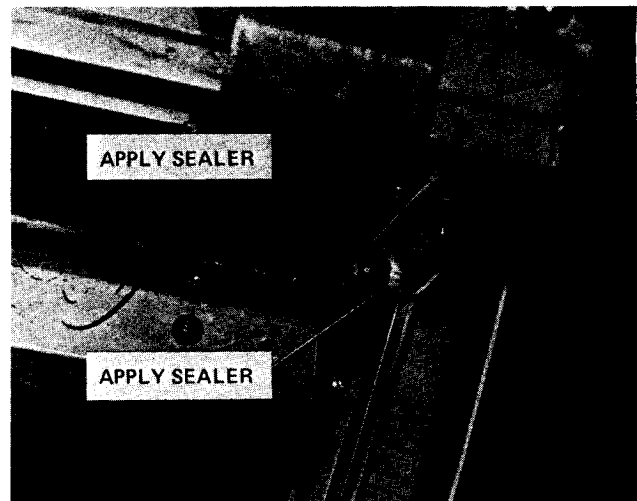


FIGURE 7



FIGURE 8

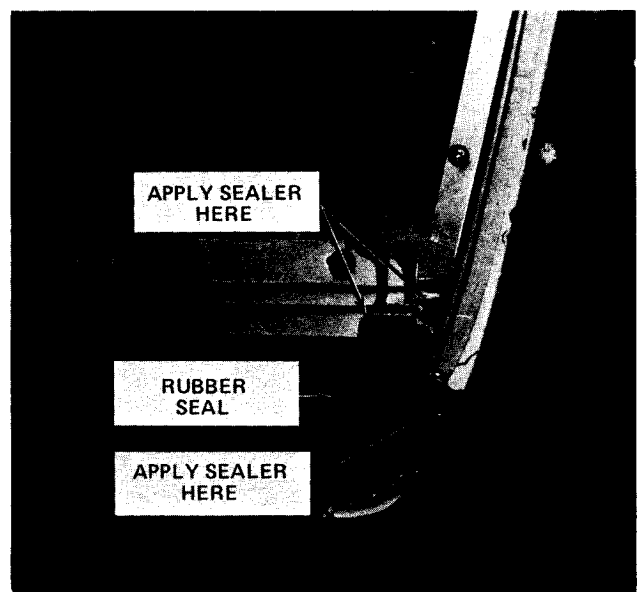


FIGURE 9

... **SECTION 3** ...

**FRONT AXLE
&
SUSPENSION**



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

T 1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 73-IM-8

GROUP: 3-Front

Suspension-1

DATE: October 24, 1973

SUBJECT: Heavy Duty Front Shocks

MODELS: All

Heavy duty front shocks have been placed in production to improve ride quality.

Production Starting Point: Serial Number 100121

Parts Information

Original Part Number - 3192374

Latest Part Number - 4975483

Parts Identification

The part number is stamped on the side of the shock.

NOTE: It is advised that the front ride height be checked and adjusted prior to replacement of shocks. With a low front ride height improper diagnosis of "weak shocks" can result due to complaint of bottoming or improper ride quality.



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

MT 1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-IM-15

GROUP: 3-Front Axle &

Suspension-1

DATE: April, 1975

SUBJECT: Front End Alignment

MODELS: 1975 Transmodes

Because of the varied modifications done to GMC Transmodes after they are delivered by GMC, it is recommended that the selling dealer or upfitting agency be advised to check ride height and front end alignment specifications after the upfitting and interior modifications are completed.



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-IM-17

GROUP: 3-Front Axle
& Suspension-2

DATE: May, 1975

SUBJECT: FRONT END ALIGNMENT

MODELS: ALL MOTOR HOMES AND TRANSMODES

For 1975, GMC Engineering has released for production and service, new attaching hardware for the upper control arm cam adjusters in motor homes and transmodes. This new hardware necessitates a change in torque specifications.

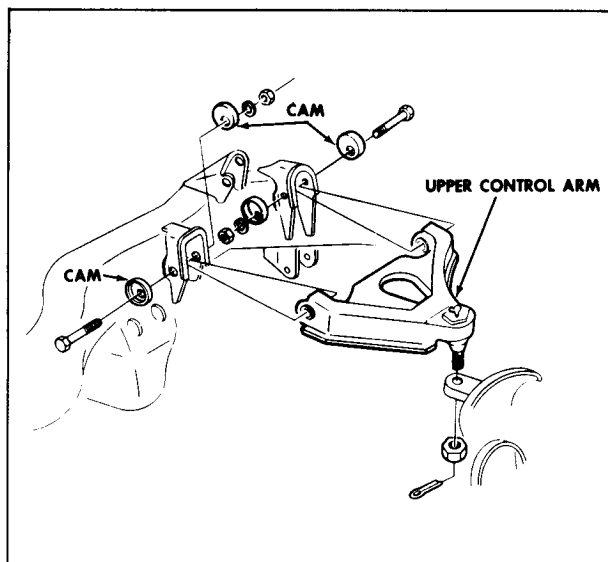


FIGURE 1

CAUTION:

These fasteners are important attaching parts in that they could affect the performance of vital components and systems. **DO NOT** substitute fasteners. Torque values must be used as specified to assure proper retention of part.

PROCEDURE

In order to avoid any possible confusion, photos of the three adjusting hardware setups you could possibly encounter are included.

1973, 1974, and Early 1975 Motor Homes

A free-spinning nut with a lock washer was used in production of the above models (Figure 2). This setup may continue to be used in service on these production built vehicles and the nut torque specification remains 80-110 lbs. ft. hand torqued.



FIGURE 2

1975 Motor Homes and Transmodes

A free-spinning nut with a hardened steel flat washer is used on 1975 models (Figure 3). A new nut torque specification of 80-95 lbs. ft. hand torque must be used.

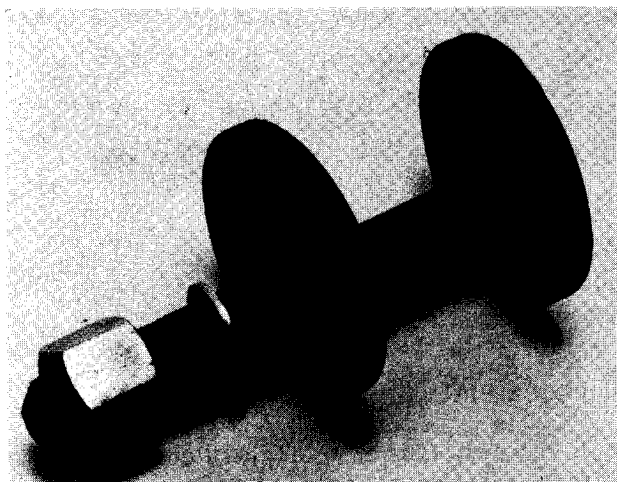


FIGURE 3

On some 1975 motor homes and transmodes a prevailing torque nut with a hardened steel washer was used (Figure 4). To facilitate front end adjustment it is necessary that **all** the bolts, nuts and washers be changed to: 395039 – bolt, 394382 – free-spinning nut, and 794360 – hardened washer, four (4) required per vehicle. Nut torque specification of 80-95 lbs. ft. hand torque must be used.

**DO NOT
REINSTALL USED
MATERIAL**

•

**DISCARD
USED MATERIAL**



FIGURE 4

In all cases the outer surfaces of the upper control arm frame brackets in the mating area of the adjusting cams must be inspected for weld spatter (4 places) (Figure 5). If encountered, the surfaces (4 places) must be cleaned of all weld and weld spatter to provide for proper clamp load.

NOTE: Prior to final alignment, vehicle **must** be trimmed to proper ride height. After final alignment, torque cam nuts while holding bolt heads securely so that adjustment is not changed. Refer to Maintenance Manual for all additional information.

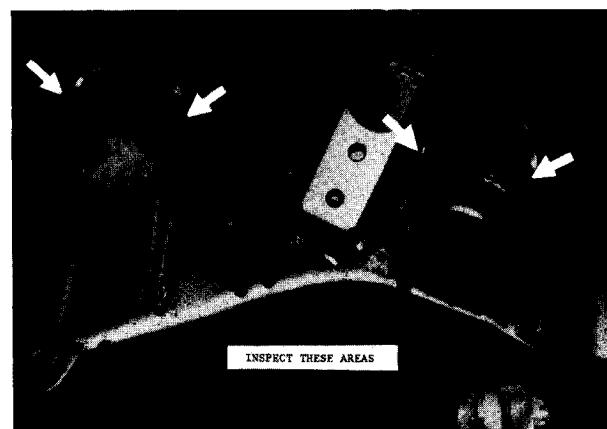


FIGURE 5



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 76-1M-6

GROUP: 3-Front Axle &
Suspension - 1

DATE: January, 1976

SUBJECT: SERVICE PROCEDURE FOR INSTALLING STEERING KNUCKLE SEAL
MODELS: ALL MOTOR HOMES AND TRANSMODES

An improved service procedure for replacing the steering knuckle inner seal has been developed by GMC Motor Home Service. The release of special tool J-26485 (seal installer) allows the installation of the seal from the outboard side of the knuckle. This procedure eliminates the need of removing the knuckle from the control arms (left side) or removing the output shaft (right side). It further facilitates seal replacement in conjunction with wheel bearing replacement, when necessary.

PROCEDURE

Removal

1. Remove disc and hub. (See DISC AND HUB REMOVAL, Section 3A in Maintenance Manual.)
2. Pry seal from knuckle (Figure 1).

Installation

1. Place knuckle seal on Tool J-26485 (Figure 2). Insert tool as far as possible into knuckle and then drive it in with a hammer until it bottoms (Figure 3). Remove tool.
2. Install disc and hub as described in the Maintenance Manual.

WARRANTY INFORMATION

When repairs are within the published warranty, use the labor operations outlined in Flat Rate Schedule X-7527, Page Y1-3A with the following time changes:

Y 1410 00	Both Sides	2.5
Y 1411 00	Right Side	1.3
Y 1412 00	Left Side	1.3

The above times will be included in the next revision to X-7527.



Figure No. 1

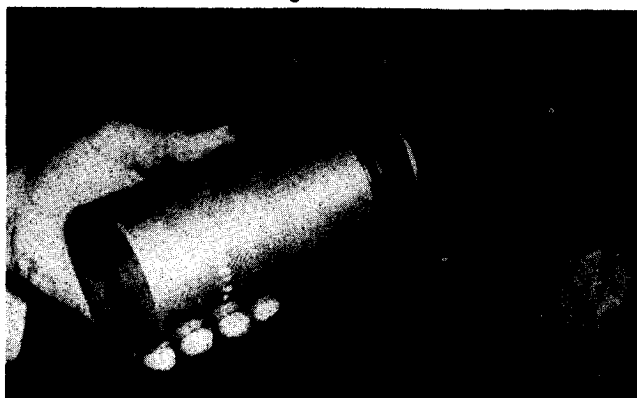


Figure No. 2



Figure No. 3



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 76-IM-15

GROUP: 3—Front Axle &
Suspension—2

DATE: July, 1976

SUBJECT: FRONT WHEEL BEARING PULLER

MODELS: ALL TRANSMODES AND MOTORHOMES

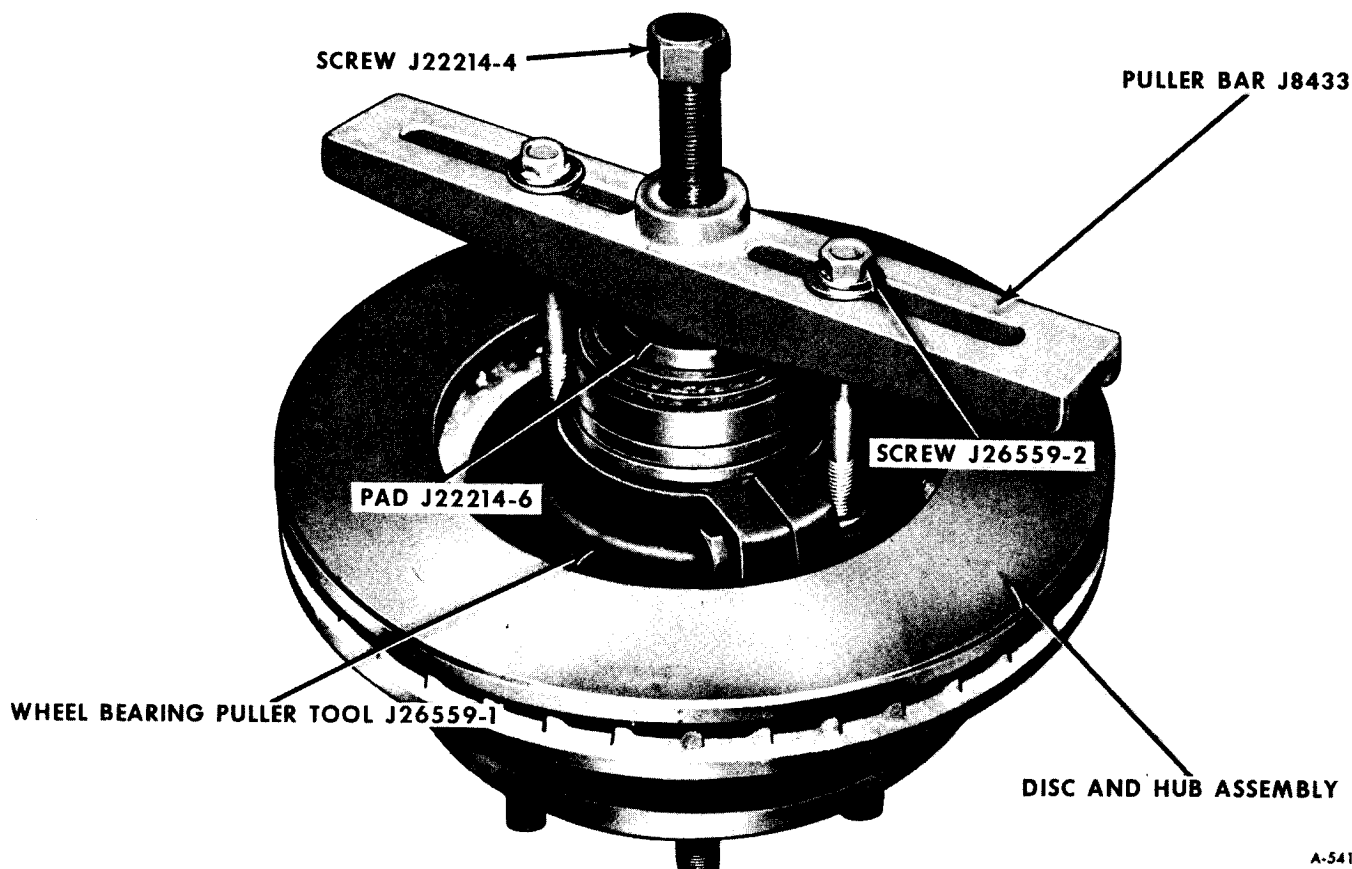
A revised tool is available from Kent Moore to facilitate the removal of front wheel bearings from the front hub/rotor assembly. As shown in the photograph, this new tool is used in conjunction with Puller Bar J-8433.

TOOL INFORMATION

<u>Quantity</u>	<u>Part Number</u>	<u>Description</u>
1	J-26559	Bearing Puller Ring

Removal of the bearing retainer bolts may be expedited by the use of Front Door Hinge Bolt Wrench J-22585.

New tool may be used to replace J-23345-1 and "C" clamp now called out in Maintenance Manual X-7525.





Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 77-IM-2

GROUP: 3-Front Axle
& Suspension-1

DATE: December, 1976

SUBJECT: SUSPENSION, STEERING AND TIRE WEAR DIAGNOSIS

MODELS: ALL MOTORHOMES AND TRANSMODES

Several inquiries have been received from technicians regarding the diagnosis of suspension, steering and tire wear problems.

This Bulletin will provide you with a convenient reference for resolving many of your suspension, steering and tire wear problems.

Before making any adjustment to a vehicle, it is necessary to make a preliminary inspection of all moving parts from the steering wheel to the road wheels.

Wear, looseness or binding of any of the moving parts on the steering system and suspension system will affect the vehicle alignment. You cannot align with binding or looseness. An inspection should be made, even if you think you know the cause of the problem.

INSPECTION PROCEDURE

(Reference 1975-76
Maintenance Manual)

1. Inflate tires to proper pressure -
 - . Steel belted bias ply tires - 60 psi.
 - . General Jumbo steel belted radial tires - 65 psi.
2. Check ride height for sag and unevenness. On a level surface, set ride height as shown in Figure #1.

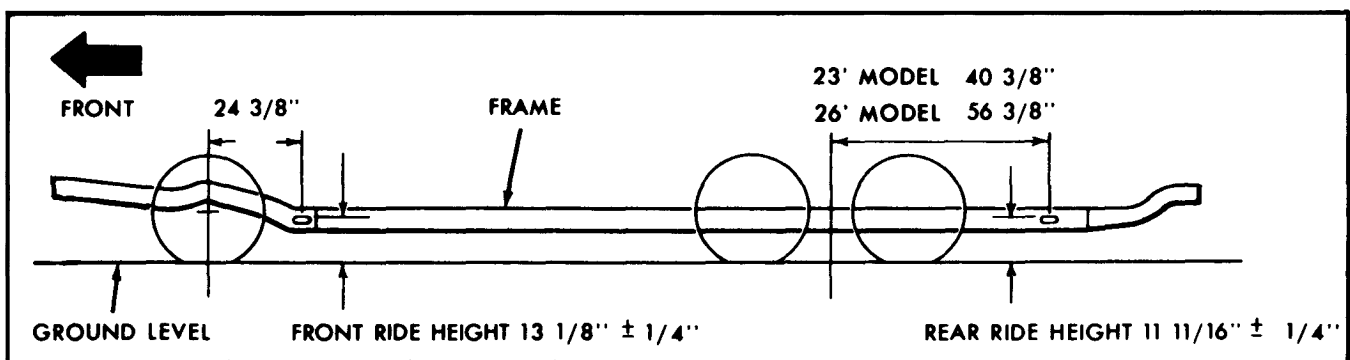


Figure No. 1— Ride Height Adjustment

2. (Continued)

The procedure for adjusting ride height may be found in the 1975-76 Maintenance Manual as follows:

- . Front ride height 3A-20
- . Rear ride height 4-34

Before adjusting front ride height, have the vehicle parked on a known level surface and adjust the rear ride height first. If you are unable to adjust the front ride height to 13-1/8" plus or minus 1/4", it will be necessary to change the torsion bar anchor arm. Use the following guide to select the proper anchor arm:

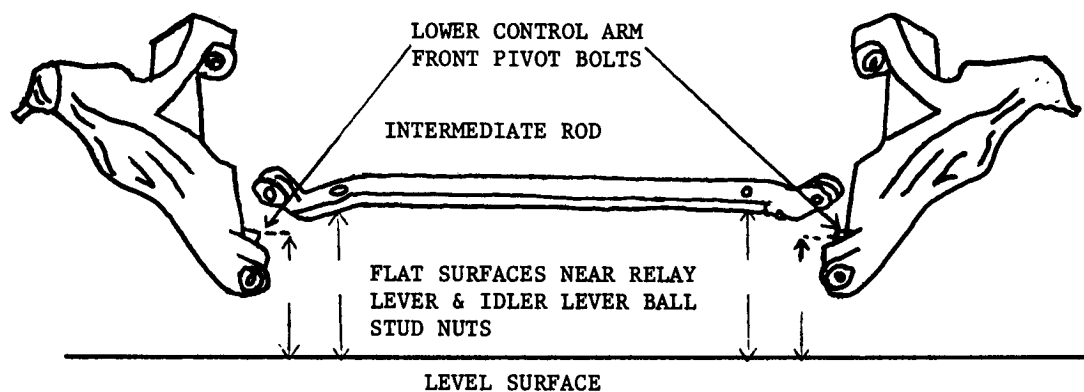
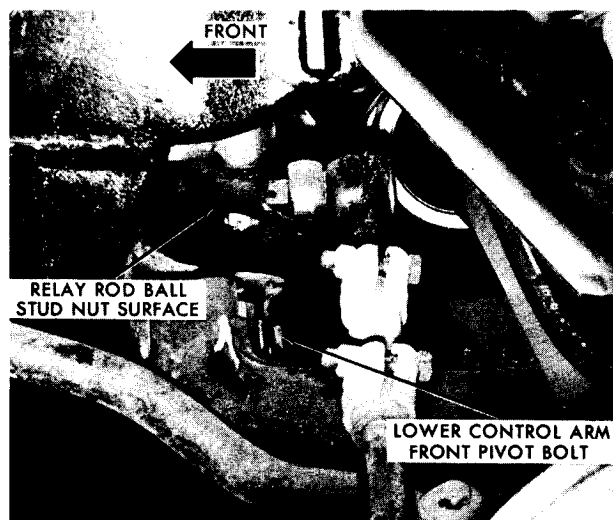
<u>CONDITION</u>	<u>USE PART NUMBER</u>	<u>ANCHOR ARM ANGULARITY</u>
. Vehicle too high	413683	23°
. Vehicle too low	418352	25-1/2°
. Vehicle extremely low	416373	28°

If changing the anchor arm does not correct the ride height, inspect the lower control arm for galling, bulging or splitting, and inspect the control arm end of the torsion bar for wear. Replace as necessary.

- 3. Check shock absorber control 3A-4
- 4. Check wheels and tires for runout and wobble 10-9
- 5. Check tires for side wear, misalignment wear, cornering wear or uneven wear 10-7
- 6. Check brakes for dragging 5-5
- 7. Check front hub bearings for wear or adjustment 3A-8
- 8. Check ball joints for looseness 3A-16
- 9. Check all steering connections for looseness or binding 9-2

Inspect the intermediate rod for parallelism with the front axle to eliminate the possibility of front tires wearing unevenly. The parallelism can be measured and corrected as follows:

- . Position vehicle on a level surface (See Figure #2)



MEASURING INTERMEDIATE ROD PARALLELISM

FIGURE #2

9. (Continued)

. Record the following measurements:

		<u>COLUMN 1</u>	<u>COLUMN 2</u>
ENTRY D	DISTANCE FROM THE FLAT SURFACE SURROUNDING THE RELAY LEVER BALL STUD NUT TO LEVEL SURFACE		XXXXXXXXXX
ENTRY E	DISTANCE FROM LOWER L.H. CONTROL ARM FRONT PIVOT BOLT TO LEVEL SURFACE		XXXXXXXXXX
ENTRY F	SUBTRACT ENTRY "E" FROM "D" AND RECORD IN COLUMN 2	XXXXXXXXXX	
ENTRY A	DISTANCE FROM THE FLAT SURFACE SURROUNDING THE IDLER LEVER BALL STUD NUTS TO LEVEL SURFACE		XXXXXXXXXX
ENTRY B	DISTANCE FROM LOWER R.H. CONTROL ARM FRONT PIVOT BOLT TO LEVEL SURFACE		XXXXXXXXXX
ENTRY C	SUBTRACT ENTRY "B" FROM ENTRY "A" AND RECORD IN COLUMN 2	XXXXXXXXXX	
ENTRY G *	SUBTRACT ENTRY "C" FROM ENTRY "F" AND RECORD IN COLUMN 2	XXXXXXXXXX	

* IF ENTRY "G" IS .125" OR GREATER, ADD TWO HARDENED STEEL WASHERS UNDER THE IDLER LEVER PIVOT AS SHOWN IN FIGURE #3. OTHERWISE, THE INTERMEDIATE ROD PARALLELISM IS ACCEPTABLE.

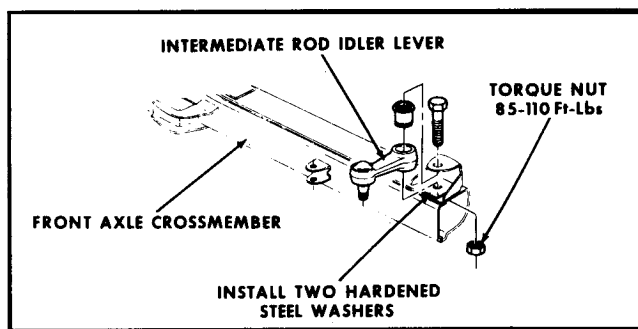


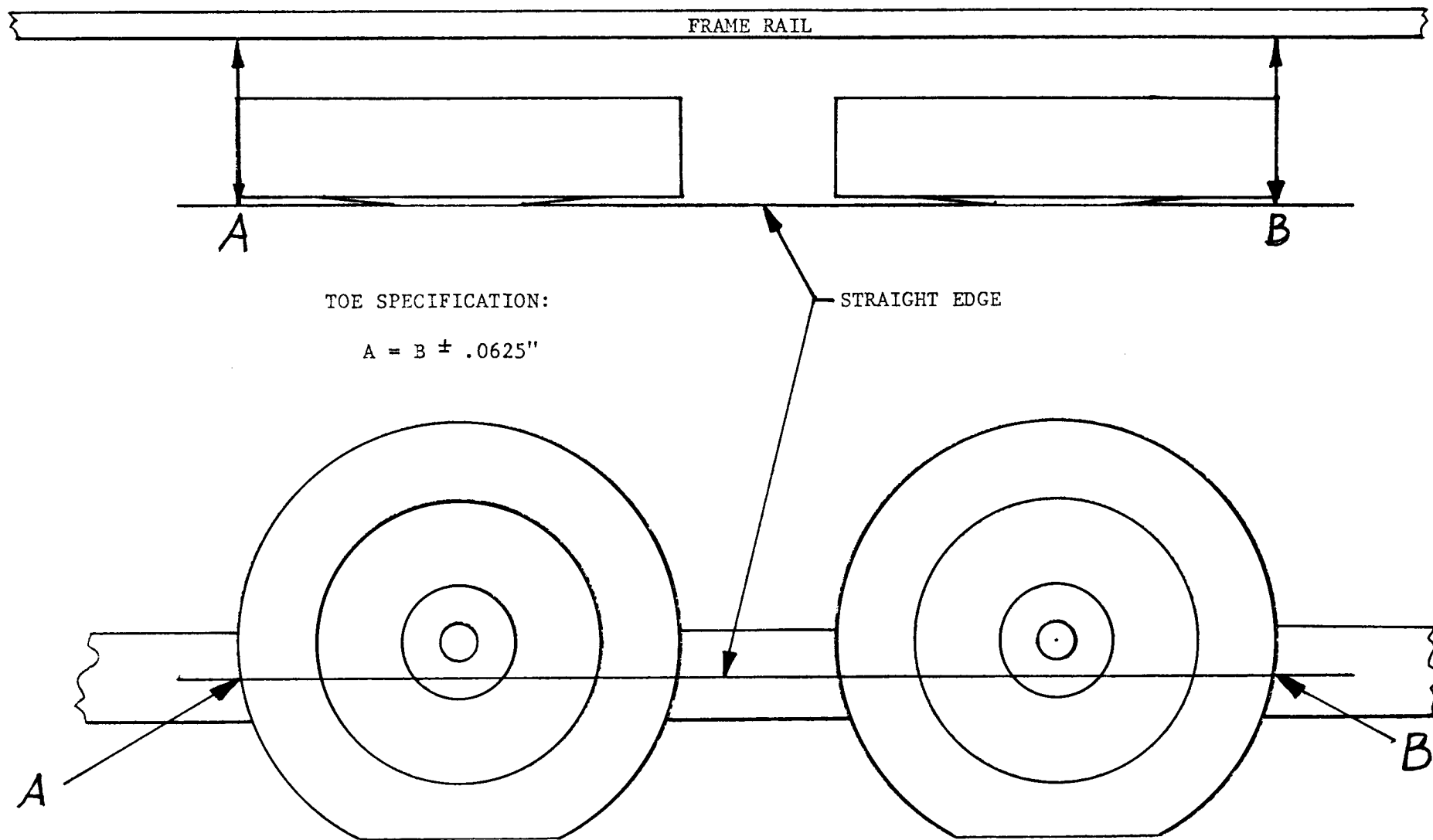
Figure No. 3 — Installing Washers Under Idler Pivot

DEALER SERVICE TECHNICAL BULLETIN
Suspension, Steering and Tire Wear Diagnosis
Page 5

10. Check rear suspension for alignment - Bulletin 76-IM-5A.

If one side of the Motorhome rear suspension appears to be the primary cause of excessive toe, use the following procedure for measuring toe on one side of the vehicle. This will assist you in determining which rear suspension component is defective or damaged.

- . Drive vehicle straight forward onto a level surface.
- . Remove wheel covers and outer dust cap.
- . Place straight edge across face of wheels as shown in Figure #4.
- . Measure distance from straight edge to frame at front tire and rear tire as shown. Toe should be $A = B$ plus or minus .0625".
- . Add toe shims as required. One toe shim changes $A = B$ by .125".



LEFT OR RIGHT REAR SUSPENSION

Figure 4

DEALER SERVICE TECHNICAL BULLETIN
Suspension, Steering and Tire Wear Diagnosis
Page 6

(Reference 1975-76
Maintenance Manual)

11. Check steering gear for adjustment, binding and centering
12. Check rear suspension bushings for wear - 75-TM-23
75-TM-4

9-7

GMC MOTORHOME SUSPENSION AND STEERING TROUBLE DIAGNOSIS

<u>PROBLEM</u>	<u>POSSIBLE CAUSE</u>	<u>CORRECTION</u>
HARD STEERING - EXCESSIVE EFFORT REQUIRED AT STEERING WHEEL	<ol style="list-style-type: none">1. Low or uneven tire pressure.2. Steering linkage or suspension ball joints need lubrication.3. Tight or frozen relay lever pivot or idler lever pivot.4. Steering gear to column misalignment.5. Steering gear adjusted too tightly.6. Front wheel alignment incorrect.7. Relay arm or idler arm pivot over-torqued.8. Power steering partially or not operative.	<ol style="list-style-type: none">1. Inflate to specified pressures.2. Lube with specified lubricant.3. Lube or replace as necessary.4. Align column.5. Adjust preload to specification.6. Check alignment and ride height and correct as necessary.7. Torque to specification.8. Check power steering components for proper operation.
FRONT WHEEL SHIMMY (SMOOTH ROAD SHAKE)	<ol style="list-style-type: none">1. Tire and wheel out of balance or out-of-round.2. Worn steering rod ends.3. Worn suspension ball joints.4. Malfunctioning shock absorber.5. Worn or loose wheel bearings.	<ol style="list-style-type: none">1. Balance tires, check runout.2. Replace tire rod end.3. Replace ball joints.4. Diagnose shock absorbers.5. Replace or adjust wheel bearings.
VEHICLE PULLS TO ONE SIDE (NO BRAKING ACTION)	<ol style="list-style-type: none">1. Low or uneven tire pressure.2. Broken torsion bar.3. Incorrect front wheel alignment (camber).4. Wheel bearings worn out.5. Brakes dragging.	<ol style="list-style-type: none">1. Inflate tires to the proper recommended pressure.2. Replace torsion bar.3. Check ride height and align front suspension.4. Replace wheel bearings.5. Inspect and adjust brakes.

<u>PROBLEM</u>	<u>POSSIBLE CAUSE</u>	<u>CORRECTION</u>
POOR DIRECTIONAL STABILITY	<ol style="list-style-type: none">1. Suspension and steering ball joints need lubrication.2. Low or uneven front or rear tire pressure.3. Steering gear not on high point.4. Incorrect front wheel alignment (caster).5. Broken torsion bar.6. Malfunctioning shock absorber.7. Broken stabilizer bar or missing link.8. Intermediate rod not parallel.	<ol style="list-style-type: none">1. Lubricate at proper intervals.2. Inflate tires to the proper recommended pressure.3. Adjust steering gear.4. Check ride height and align front suspension.5. Replace torsion bar.6. Replace shock absorbers.7. Replace stabilizer or link.8. Correct to specification.
EXCESSIVE PLAY OR LOOSENESS IN STEERING SYSTEM	<ol style="list-style-type: none">1. Front wheel bearings loosely adjusted.2. Worn couplings or steering shaft U-joints.3. Worn upper ball joints.4. Steering wheel loose on shaft.5. Steering gear improperly adjusted.6. Loose pitman arm, tie rods, steering arms or steering linkage ball studs. Worn intermediate rod or tie rod sockets.7. Loose relay arm pivot.8. Loose idler arm pivot.	<ol style="list-style-type: none">1. Adjust bearings or replace with new parts as necessary.2. Replace.3. Replace.4. Tighten to specified torque.5. Adjust to specification.6. Replace loose or worn parts.7. Replace.8. Replace.
EXCESSIVE LOOSENESS IN TIE ROD OR INTERMEDIATE ROD PIVOTS, OR EXCESSIVE VERTICAL LASH IN IDLER PIVOT OR RELAY ARM PIVOT	<ol style="list-style-type: none">1. Seal damage and leakage resulting in loss of lubricant, corrosion and excessive wear or improper torque.	<ol style="list-style-type: none">1. Replace damaged parts as necessary and check torque.

<u>PROBLEM</u>	<u>POSSIBLE CAUSE</u>	<u>CORRECTION</u>
POOR RETURNABILITY	<ol style="list-style-type: none">1. Steering linkage or suspension ball joints need lubrication.2. Steering gear adjusted too tightly.3. Steering gear to column misalignment.4. Front wheel alignment incorrect.	<ol style="list-style-type: none">1. Lube with specified lubricant.2. Adjust to specification.3. Align column.4. Check ride height alignment and correct as necessary.
NOISE IN FRONT END	<ol style="list-style-type: none">1. Suspension ball joints and steering linkage lubrication.2. Shock absorber loose or bushings worn.3. Worn control arm bushings.4. Worn steering rod ends.5. Loose stabilizer bar.6. Loose wheel nuts.7. Loose suspension bolts.	<ol style="list-style-type: none">1. Lubricate at recommended intervals.2. Tighten bolts and/or replace shocks.3. Replace.4. Replace tie rod ends.5. Tighten all stabilizer bar attachments.6. Tighten the wheel nuts to proper torque.7. Torque to specifications or replace.
TIRE THUMP	<ol style="list-style-type: none">1. Tire and wheel out-of-balance.2. Tire and wheel out-of-round.3. Blister or bump on tire.4. Improper shock absorber action.	<ol style="list-style-type: none">1. Balance wheels.2. Replace tire.3. Replace tire.4. Replace shock absorber.

<u>PROBLEM</u>	<u>POSSIBLE CAUSE</u>	<u>CORRECTION</u>
EXCESSIVE OR UNEVEN TIRE WEAR	1. Underinflated or over- inflated tires. 2. Improper toe-in. 3. Wheels out-of-balance. 4. Hard driving. 5. Overloaded vehicle. 6. Improper camber. 7. Unparallel intermediate rod.	1. Inflate tire to proper recommended pressure. 2. Realign front end. 3. Balance wheels. 4. Instruct driver. 5. Instruct driver. 6. Realign front end. 7. Correct as necessary.
WEAR IN THE SECOND TREAD ROW ON EACH SIDE OF TIRE	1. Underinflation or inherent problem of bias belted tires.	1. Inflate tire to proper recommended pressure and rotate tires.
SCUFFED TIRES	1. Toe-in incorrect. 2. Excessive speed on turns. 3. Tires improperly inflated. 4. Rear suspension arm bent or twisted. 5. Intermediate rod not parallel. 6. Incorrect ride height.	1. Realign. 2. Advise driver. 3. Inflate tires to proper recommended pressure. 4. Replace arm. 5. Correct to specifications. 6. Adjust ride height.
CUPPED TIRES	1. Shock absorbers defective. 2. Worn suspension ball joints. 3. Wheel and tire out-of- balance. 4. Excessive tire or wheel runout.	1. Replace shock absorbers. 2. Replace ball joints. 3. Balance wheel and tire. 4. Compensate for runout.



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 73-TM-2

GROUP: 3-FRONT

SUSPENSION-1

DATE: June 25, 1973

Subject: RIDE HEIGHT, FRONT SUSPENSION
(Note: Also see Bulletin 73-T-3, 4 Rear Susp. -1)

This is to acquaint the service technician with correct ride height specifications and procedures. Incorrect ride height can result in premature suspension bottoming or incorrect suspension settings.

Specifications

Front Ride Height - $13 \frac{1}{8}" \pm \frac{1}{4}"$

Rear Ride Height - $11 \frac{3}{4}" \pm \frac{1}{4}"$

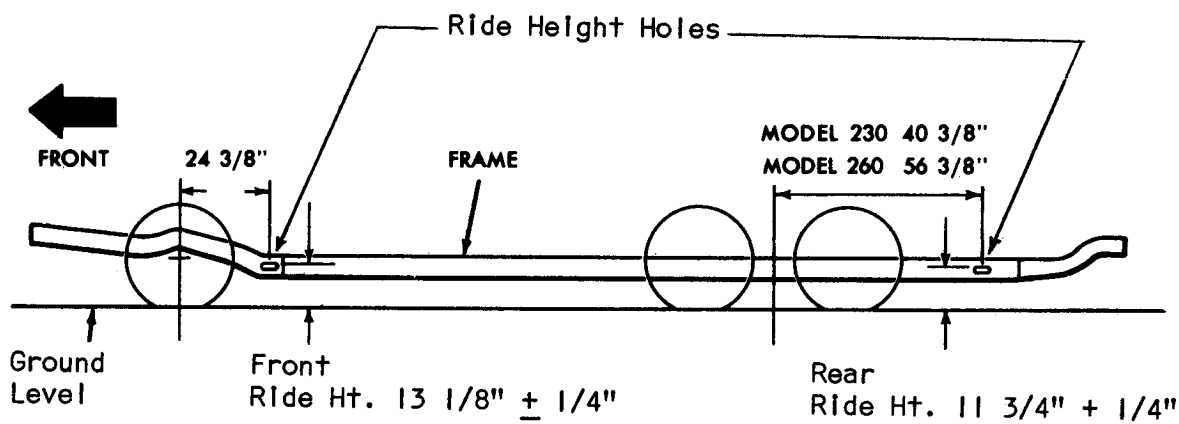
Procedure

1. Checking Ride Height

Vehicle Rear Suspension Control should be in "travel" position and vehicle on level area.

2. A ruler or tape measure should be used to check ride height.

- A. Locate ride height holes in frame rails (See Fig. #1).
- B. Measure from top of hole to ground on both sides in the front and rear.
- C. If the ride height settings are correct, no further work is required.



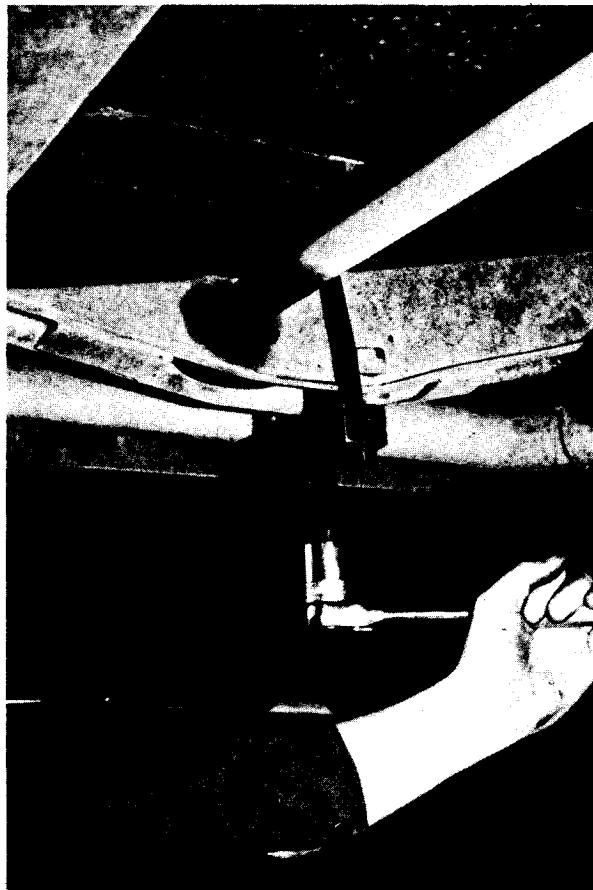
CHECKING MOTOR HOME RIDE HEIGHT Fig. 1

3. Front Height Adjustment

NOTE: Tool #J 22517-01 (BT6601) (Shown in Fig. 2) must be used to reset ride height. This tool will raise or lower the torsion bar rear anchor arm so that the adjusting bolt is not loaded.

The torsion bar rear anchor arm adjusting bolt controls the front frame height. To increase or lower the front frame height, the bolt must be rotated clockwise to increase height and counterclockwise to decrease front height.

When the tool has adjusted the torsion bar anchor arm to the correct height, the bolt should be rotated to contact the anchor arm.



SETTING FRONT RIDE HEIGHT Fig. 2



Motor
Home
Service

Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION

GENERAL MOTORS CORPORATION

IMPORTANT-All Service Personnel Should Read and Initial

NUMBER: 77-TM-6

GROUP: 3-FRT. AXLE AND
SUSPENSION-1

DATE: SEPTEMBER, 1977

SUBJECT: FINAL DRIVE BRACKET

MODELS: 1977 MOTORHOMES EQUIPPED WITH
403 CU. IN. ENGINES

Alternator misalignment can occur on some 1977 Motorhomes equipped with a 403 cu. in. engine and a final drive to engine bracket (P/N #397476). Alternator misalignment may permit the drive belt to be thrown off the alternator pulley. When alternator drive belt problems are encountered on Motorhomes equipped with the 403 cu. in. engine and a final drive to engine bracket, the bracket should be removed.

The final drive bracket is removed by removing bolts X, Y and Z as shown in Figure #1 below. After the final drive bracket is removed, install bolt "X" and torque to 110 ft. lbs. Tighten and torque bolts "Y" and "Z" to 55 ft. lbs.

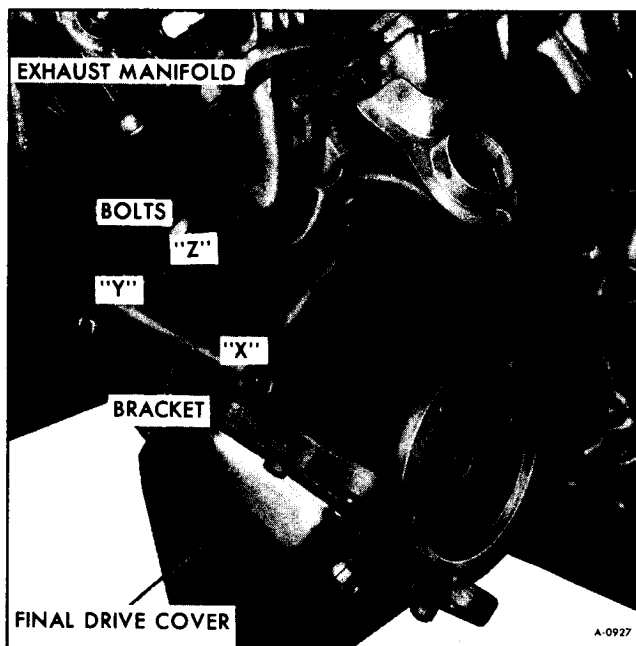


Figure #1

WARRANTY INFORMATION

Labor Operation

Description

Time

Trouble Code

T087111

Remove Final Drive Bracket

.5

92

... **SECTION 4** ...

REAR AXLE
& SUSPENSION

4

**REAR AXLE
&
SUSPENSION**



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 73-1M-9

GROUP: 4-Rear Suspension

DATE: October 25, 1973

SUBJECT: New Air Bellows Part Number

MODELS: 23' and 26' Motor Homes

New air bellows of more rigid construction are now in production.
Production Starting Point: Serial #101031

Parts Information

Original Part Number - 699406

New Part Number - 708502

Parts Identification

The new part may be identified by the part number 708502 case into the side of the air bag.

Installation

The same installation procedures as described in preliminary no. 2 X7335 Maintenance Manual are to be followed in installing the new air bellows.



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-IM-9

GROUP: 4-Rear Suspension-1

							DATE: March, 1975

SUBJECT: REPAIR AIR LINE FITTINGS

MODELS: ALL MOTOR HOMES AND TRANSMODES

Engineering has recently released seven suspension air line fittings for service use in the field. The fittings are identified in Figure 1.

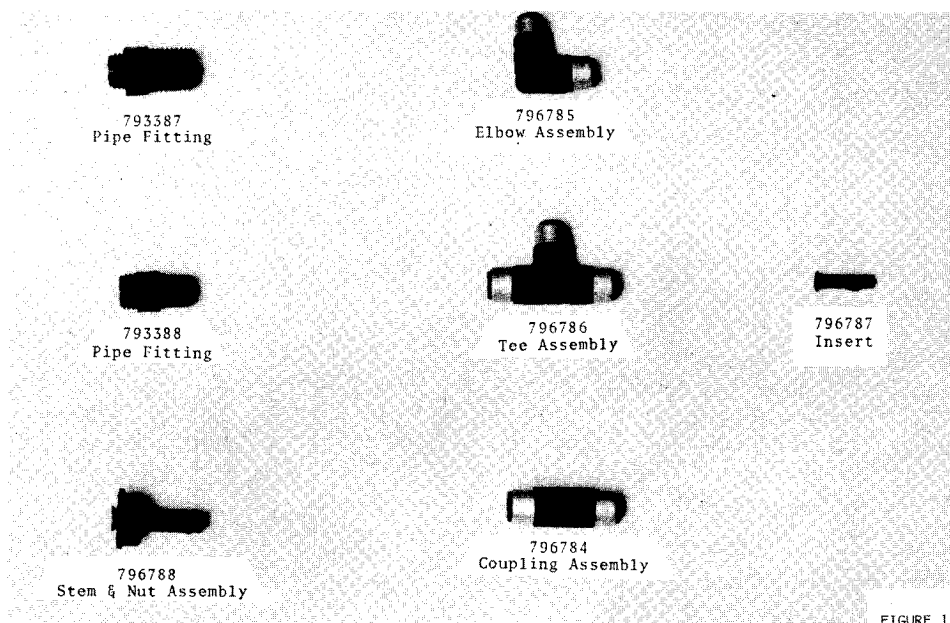


FIGURE 1

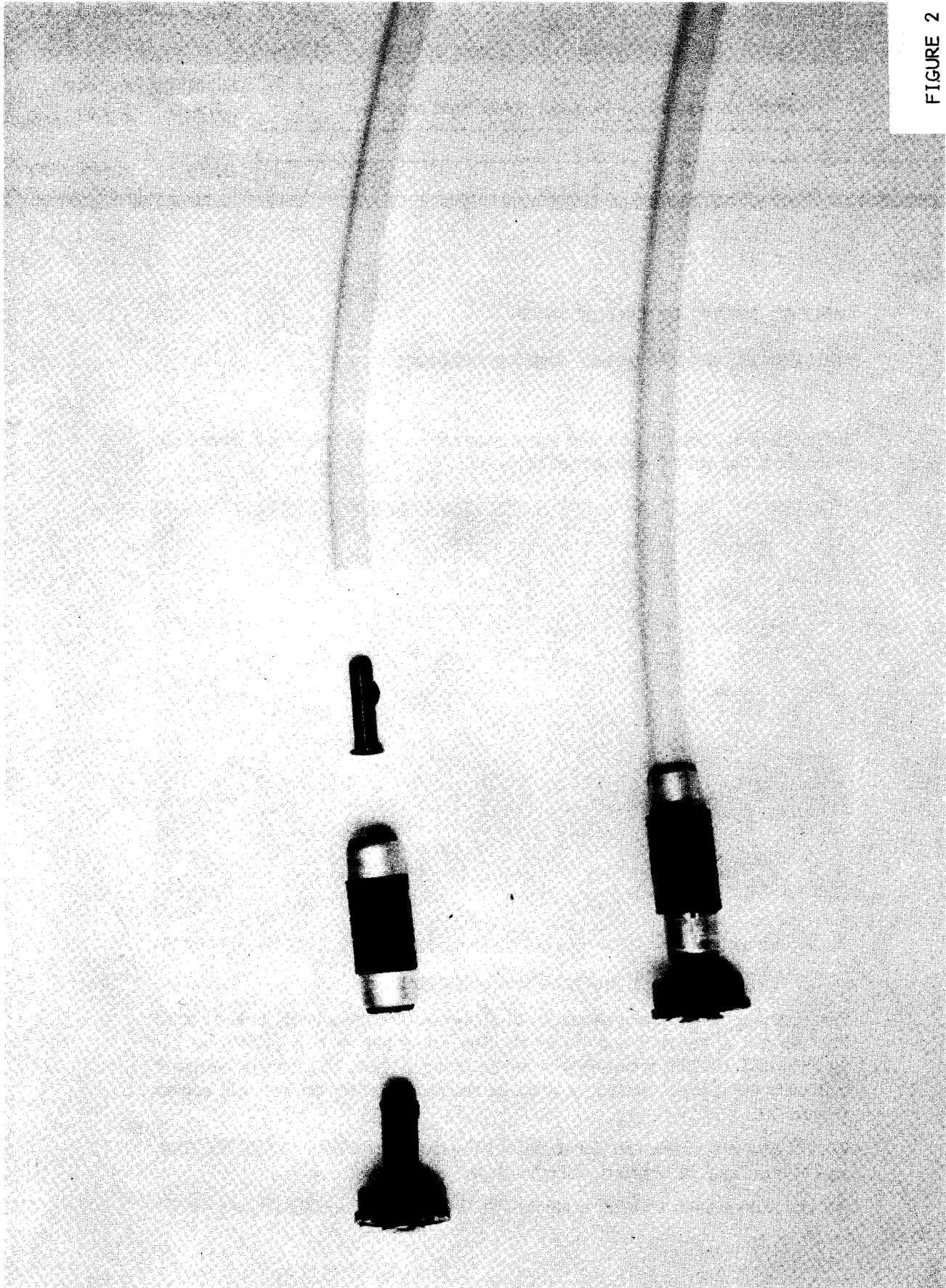
INSTALLATION PROCEDURE

First, remove the old fitting by cutting it off square. The brass insert is then placed into the end of the tube and the appropriate fitting put on over it. (Figure 2). Special tool J-25520 is necessary to crimp the fitting in place. This tool is so designed that once the crimp is started, it must be completed before the tool will release (Figure 3).

Correct torque for stem and nut assemblies to pipe fitting is 10 to 15 lb. ins. Also, pipe fitting should be wrapped with teflon tape.

Air line leaks may be repaired using the 796784 coupling assembly (Figure 4).

FIGURE 2



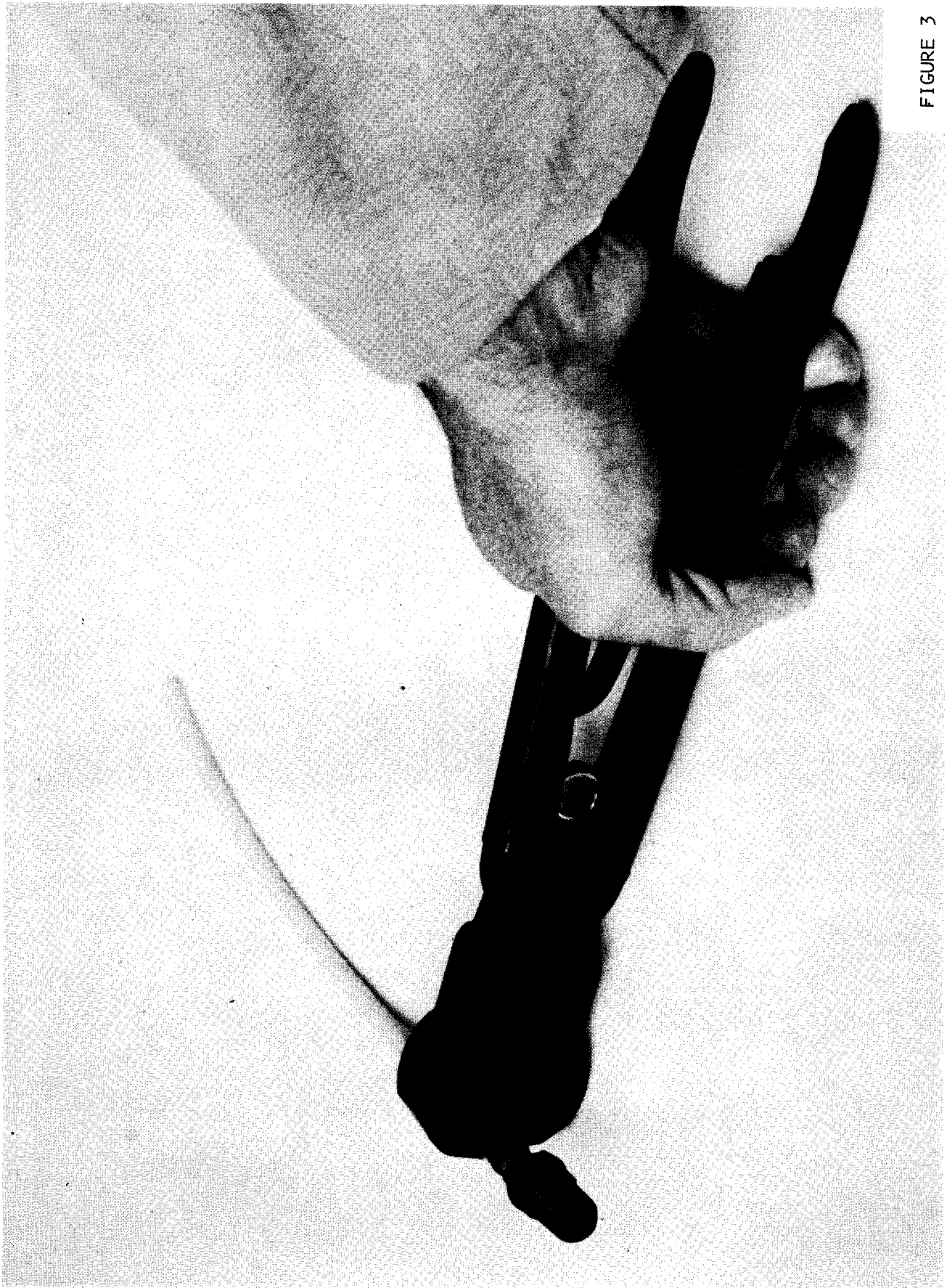
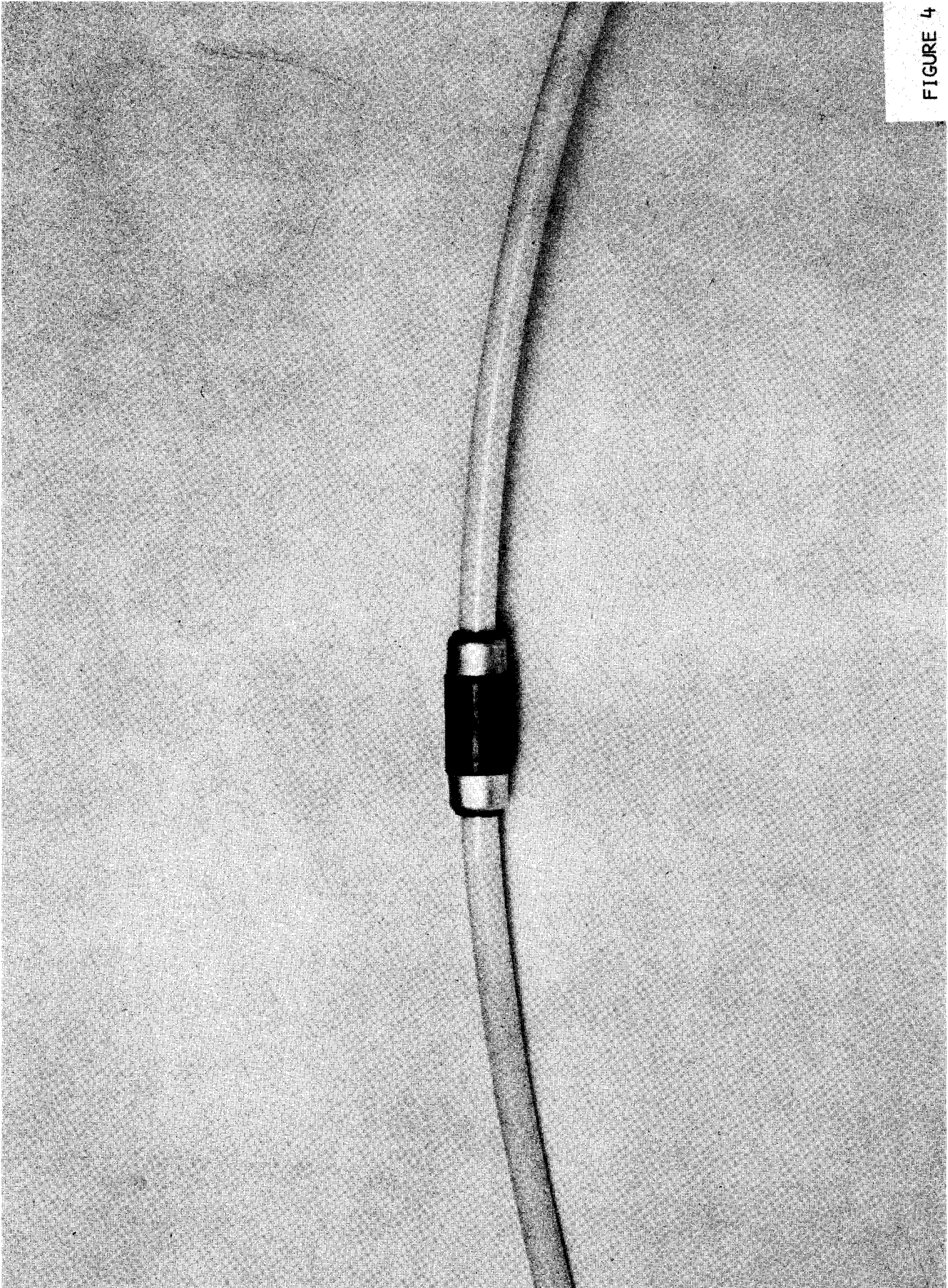


FIGURE 3

FIGURE 4





Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-IM-12
GROUP: 4-Rear Axle & Suspension-2
DATE: April, 1975

SUBJECT: Deletion of Drain Cock on Air Reservoir Tank

MODELS: All Motor Homes and Transmodes

The drain cock on the air reservoir tank may be a source of an air leak in the suspension system. If this condition exists, remove and discard the drain cock. In place of the drain cock, relocate the Schrader valve from the side of the tank. A half-inch pipe plug should be installed in the hole where the Schrader valve was previously located.

The Schrader valve should be used as a drain eliminating the need for the drain cock. To drain moisture from the tank, depress the valve core stem until all moisture is exhausted from the tank.



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-IM-28

GROUP: 4-Rear Axle
& Suspension

DATE: October, 1975

SUBJECT: Rear Control Arm Spacer Kit

MODELS: All GMC MotorHomes Prior to TZE064V101024

Rear suspension control arms, part numbers 706862 and 706863, used on GMC MotorHomes built prior to the above serial number are no longer available.

A new spacer kit has been released to convert the current production rear control arm, part numbers 721316 and 721317, to the previous style arms. This kit reduces the center pivot pin hole from the current 1-1/2" dia. to the former 1-1/4" dia.

PARTS INFORMATION

When it is necessary to replace a 706862 or 706863 control arm, both a new control arm and spacer kit must be ordered. If the rear suspension bushing and pivot pin replacement described in Dealer Service Technical Bulletin 75-TM-4 has not been made, it will be necessary to make the modification at this time.

<u>Qty/Veh.</u>	<u>Part Number</u>	<u>Description</u>
1	2003732	Spacer Kit (Includes bushings, spacers, thrust washers & instruction sheet.)
As Required	721317	Control Arm
As Required	721316	Control Arm
As Required	723332	Bushing Kit

PROCEDURE

1. Remove existing 1-1/2" dia. bushing from control arm, part numbers 721316 or 721317, if installed.
2. Press the 1-1/4" dia. spacer into the arm until the spacer is flush with the machined surface of the arm. (Figure 1)
3. Install the 1-1/4" dia. bushing inside the steel spacer using tool J-25369. (Refer to Bulletin 75-TM-4)
4. After both bushings are installed in the control arm, ream to size using reamer J-25281. (Refer to Bulletin 75-TM-4)

PRESSED FIT
STEEL SPACER



FIGURE 1



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 76-IM-3

GROUP: 4-Rear Axle &
Susp.-1

DATE: November, 1975

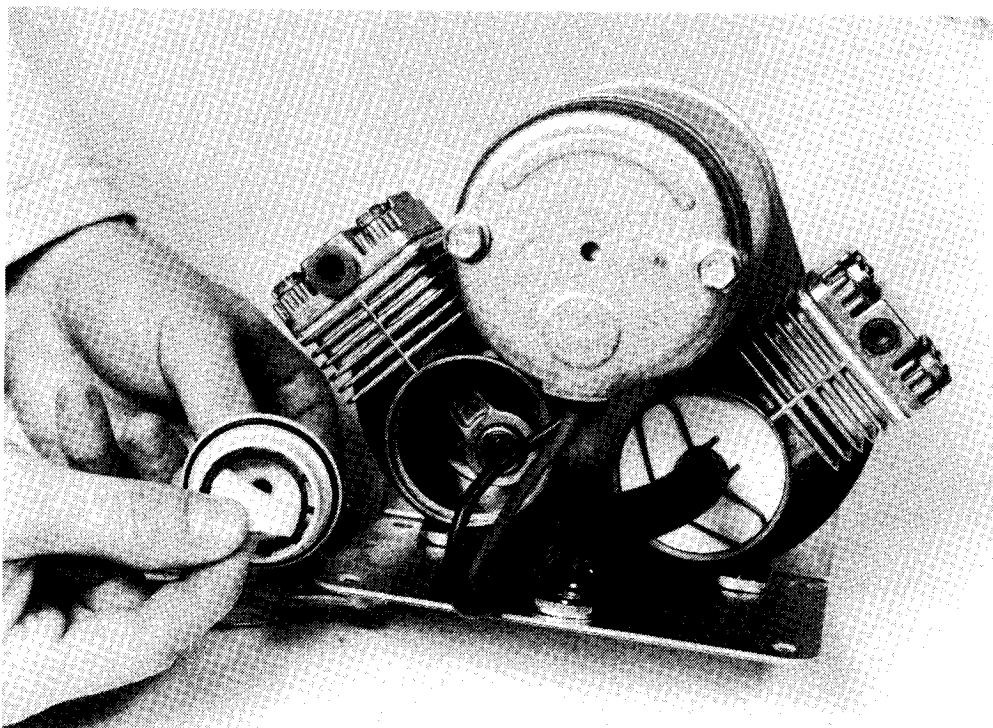
SUBJECT: Timing the Dana Air Compressor

MODELS: All GMC MotorHomes and TransModes Equipped With The
Dana Two-Cylinder Air Compressor

If the occasion should arise that a belt on the Dana compressor is either thrown or broken, a new belt must be installed. As there are no timing marks on the belt pulleys, the following procedure should be used to time the compressor:

1. Remove the air intake assemblies and hoses (Figure 1). Filters should also be cleaned at this time.
2. Rotate the compressor pulleys to a position where one piston and rod assembly is at the top of its stroke and the other at the bottom of its stroke (Figure 2).
3. Place the timing belt on the pulley with the flange to the front and gradually work the belt onto the other two pulleys (Figure 3). Rotate the compressor by hand until the timing belt is completely on the pulleys.
4. Replace the belt guard.

Fig. 1



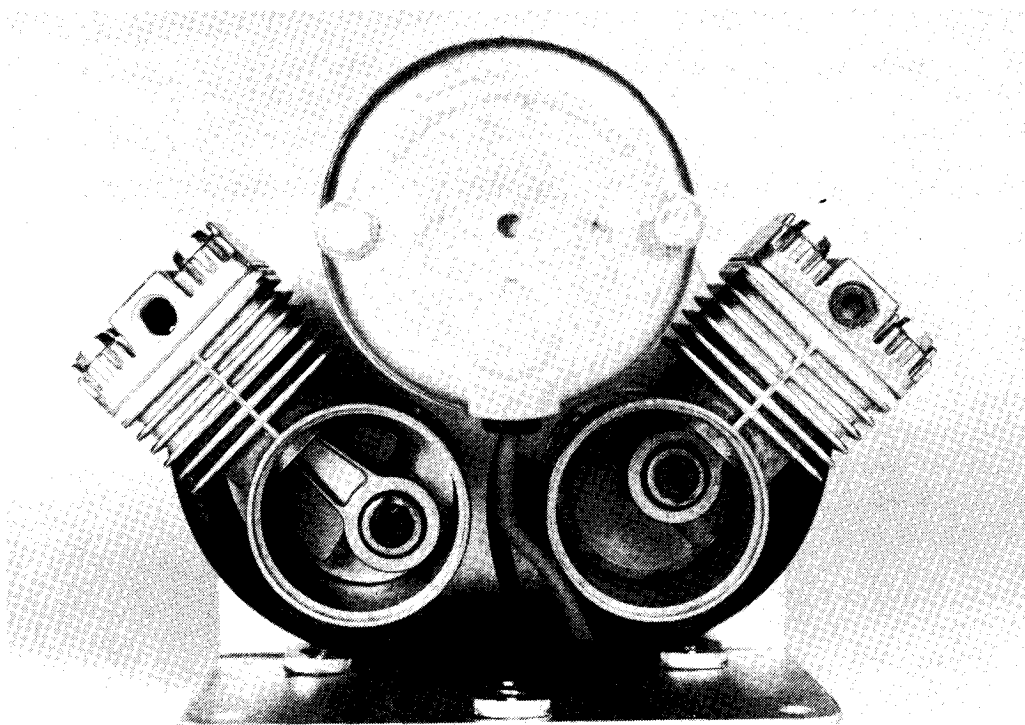


Fig. 2

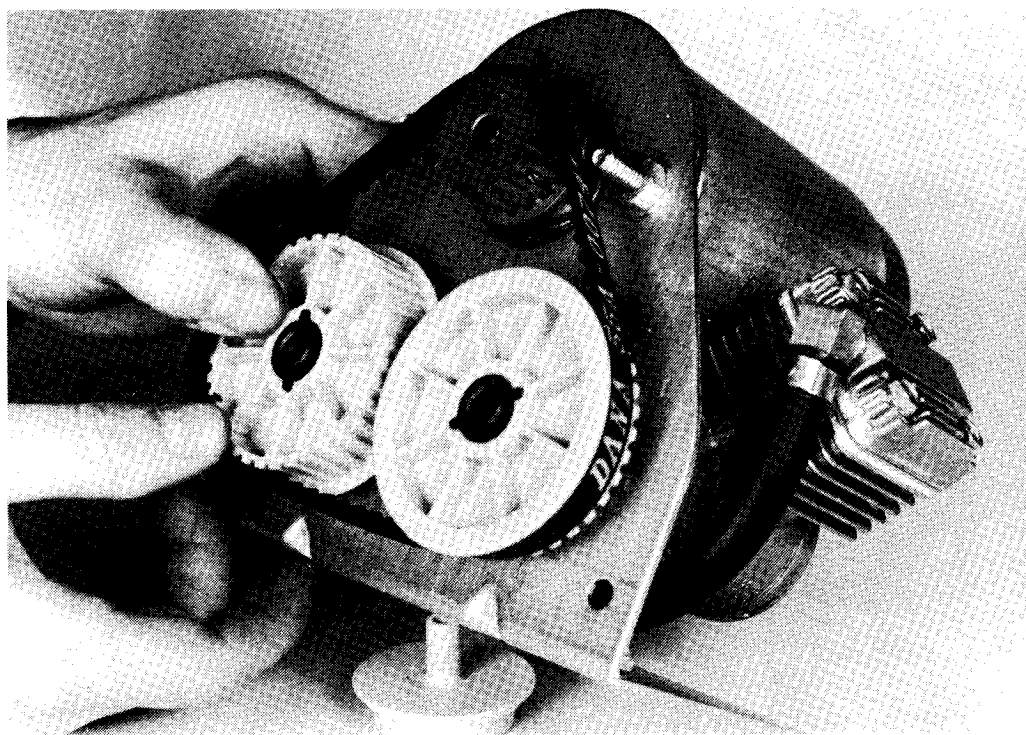


Fig. 3



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 76-IM-17

GROUP: 4-Rear Axle
& Suspension-2

DATE: July, 1976

SUBJECT: ELECTRO-LEVEL AIR SUSPENSION SYSTEM MODELS: 1976 MOTORHOMES AND TRANSMODES

The optional Electro-Level System provides the ability to level the vehicle at campsite or parking area where the surface is not level. This system can raise or lower the rear of the vehicle approximately four inches from normal ride height.

The Electro-Level controls are located to the right of the steering wheel at the lower portion of the dash panel. (Figure 1)



Figure 1

NORMAL OPERATION:

The controls consist of three rocker switches that function to automatically or manually level the vehicle. The center rocker switch (TRAVEL) is used for an automatic or hold mode, and the two outer rocker switches (RAISE-LOWER) are used to raise or lower the vehicle.

DRIVING:

A reminder light in the dash panel is designed to light momentarily any time the engine is running and the transmission selector lever is moved to "D" (Drive Range). The normal position for the RAISE-LOWER switches should be placed in the middle position "OFF". The TRAVEL switch should be moved to "AUTO" for the first five minutes, if vehicle has been parked in a raised or lowered position. Then move the switch to "HOLD" after ride height is achieved. It is not necessary to move the TRAVEL switch to "AUTO" if vehicle has not been leveled at a campsite or vehicle load has not changed significantly.

NOTE: The "HOLD" position is to be used for normal highway driving, when the vehicle is in operation. This allows the vehicle to maintain a designed ride height and eliminates unnecessary operation of the air compressor.

CAMPSITE OR PARKING AREA:

The two RAISE-LOWER switches may be used as necessary to raise or lower the vehicle. When using Electro-Level at a campsite, the vehicle engine need not be running to operate the system; however, the ignition switch must be in the "ON" or "ACCESSORY" position.

"RAISE" — With a rocker switch in this position, the appropriate side of the vehicle will raise to any desired position, up to a maximum of approximately four inches above normal ride height. When desired height is reached, return rocker switch to "OFF" position.

"LOWER" — With a rocker switch in this position, the appropriate side of the vehicle will lower a maximum of approximately four inches below the normal ride height. In order to maintain a desired height, return rocker switch to "OFF" position.

NOTE: It is possible that the air compressor may operate for a short period when a rocker switch is in "LOWER" position.

IMPORTANT: When both sides of the vehicle have been leveled, be sure the TRAVEL switch is moved to "HOLD" and turn ignition switch to "OFF".

COMPONENTS AND THEIR OPERATION:

The hardware for the system is basically the same as the former system with the addition of six electrically actuated air solenoids. These solenoids give positive air flow or stoppage; whichever is called for. Four of the solenoids

(two per side) are three-way and two (one per side) are two-way. (Figures 2 and 3) A small wet tank replaces the former large reservoir.

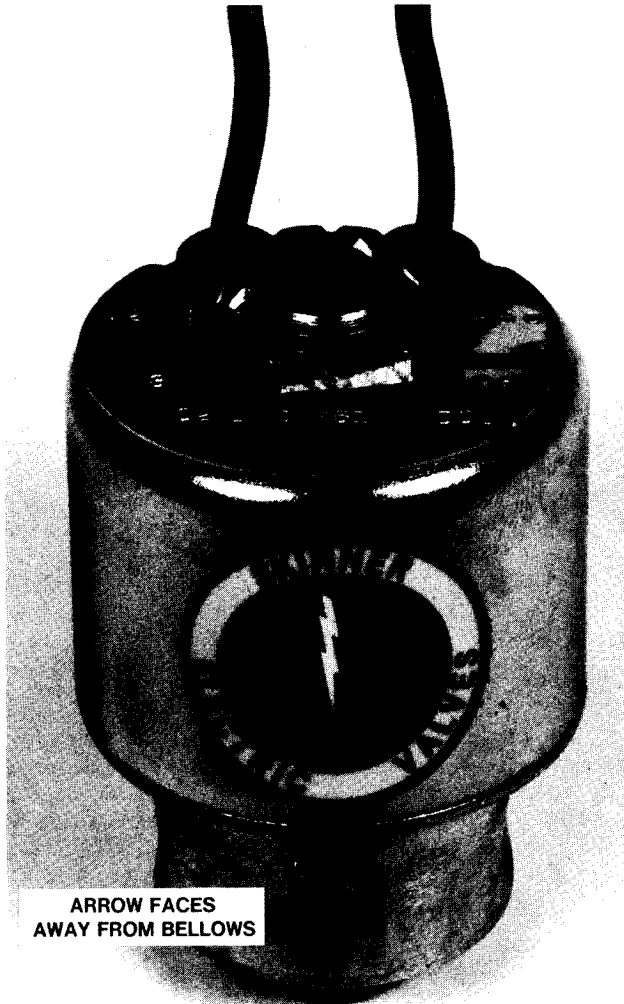


Figure 2

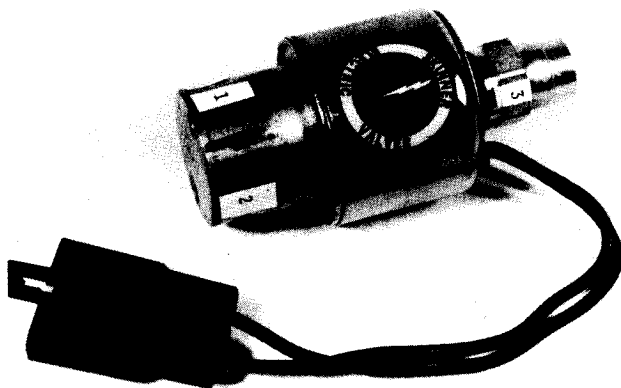


Figure 3

All components except the control panel, air bellows and height control valves, (located as before) are located in the lower cabinet of the closet module. The assembly

consisting of the air compressor, pressure switch, check valve, wet tank connecting fittings, and solenoids is referred to as the air control module. (Figure 4)

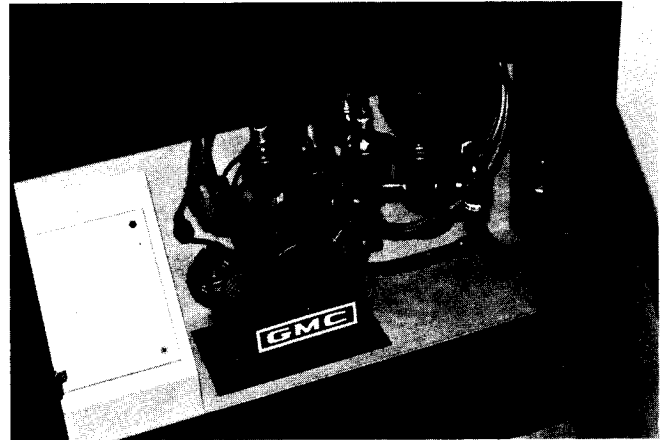


Figure 4

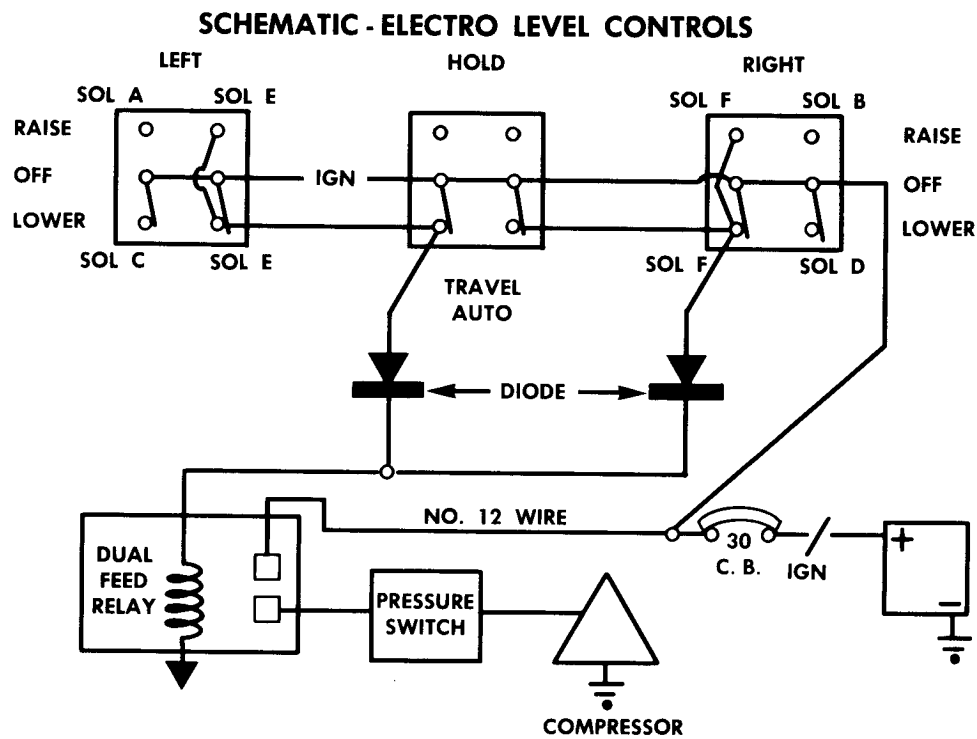
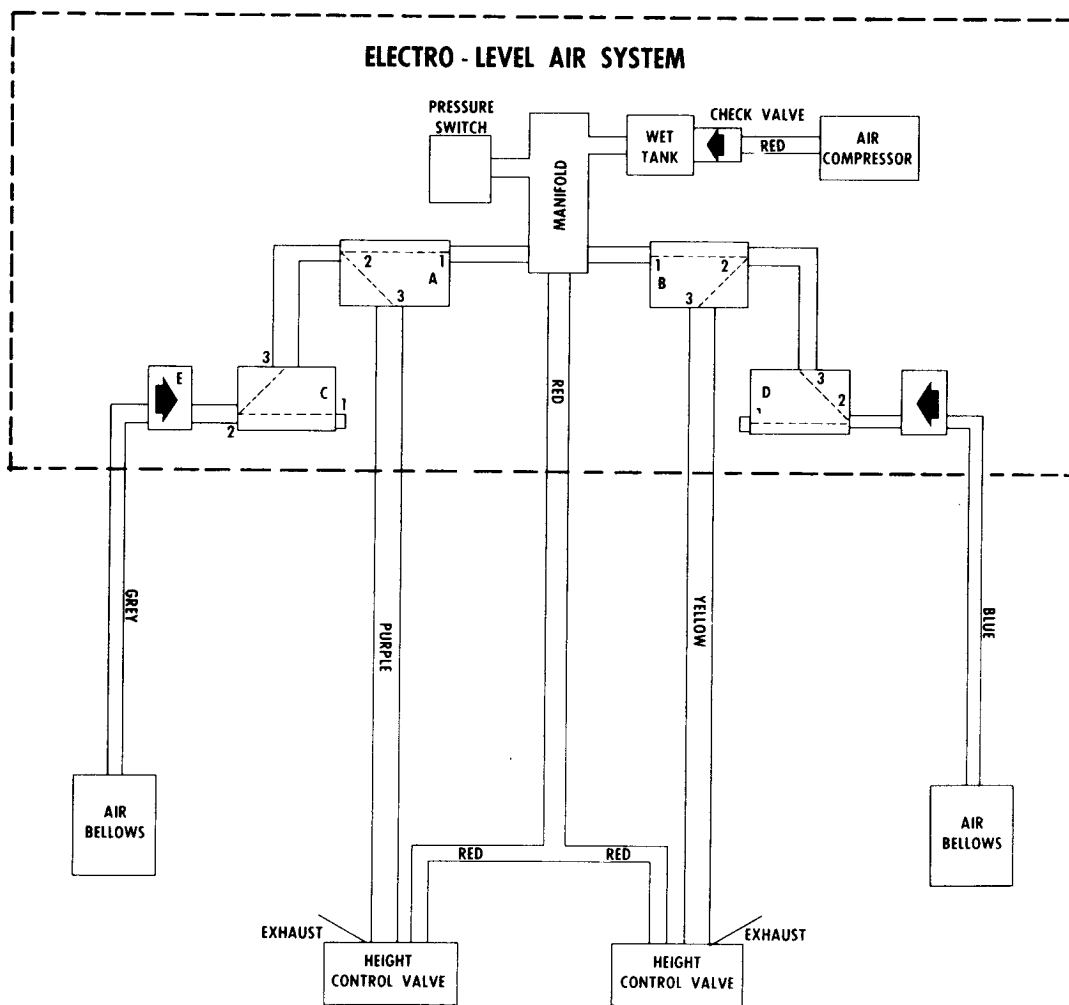
AIR FLOW:

The main function of this system is to provide air to the bellows, and maintain a proper height with a minimum possibility of a leak-down. This is accomplished by the two-way solenoids, "E" and "F". The purpose of these solenoids in a normal operating condition; i.e. while the vehicle is operating and the "TRAVEL" switch is in "HOLD" with the "RAISE-LOWER" switches in the center "OFF" position is to remain closed, trapping air in the bellows and isolating the bellows from the rest of the system. This means the only possible areas of leakage will be the bellows themselves, the fitting on the bellows, the fittings at the solenoids or the air line running between. The rest of the system is not in any way functional. This same air flow situation exists when the vehicle is parked and the key is off.

When the vehicle is operating with the "TRAVEL" switch in "AUTO", solenoids "E" and "F" are open. This allows air to flow from the compressor through the height control valve and further through solenoids "A", "C" and "E" on the left side. On the right side, it will flow through solenoids "B", "D", and "F" to the bellows. Height of the vehicle in the "AUTO" mode will simply be regulated by the height control valves. The three-way solenoids will allow air to pass from the No. 3 port to the No. 2 port. This is the normal air flow of these valves when they are not energized.

If a vehicle is put in the "RAISE" position by use of the "RAISE-LOWER" switch, air flow is a little different. System pressure air no longer goes through valves "A" or "B" from the No. 3 port to the No. 2 port. Instead, this passage is closed and air flows from the No. 1 port to the No. 2 port. This means the height control valve is now taken out of the system and air going through solenoids "A" or "B" is regulated only by the rocker switch on the dash panel. Air will continue through solenoids "C" and "E" to the left side or "D" and "F" on the right side.

To lower the system, the "RAISE-LOWER" switches on the dash will be set in the "LOWER" position energizing solenoids "C" or "D" which causes the normal passage of air between the No. 3 port to the No. 2 port to be altered. Instead, the solenoid opens the passage between the No. 2 and No. 1 ports which goes to the atmosphere allowing the vehicle to lower by expelling air.



OFF-ROAD OPERATION:

In order to gain maximum ground clearance both "RAISE-LOWER" switches should be placed in the "RAISE" position. It is recommended that a speed of 15 mph should not be exceeded since the air suspension in this position has maximum pressure supplied.

EMERGENCY OPERATION:

In the event of total air loss for any reason, the vehicle may be driven at a speed of 5-15 MPH (depending on road surface) with the rear of the vehicle in the fully "DOWN" position. Care should be exercised since ground clearance at the rear will be at a minimum. Vehicle should be taken to nearest dealer.

Depending on the type of failure, it may be possible to add air to the rear suspension at the wet tank (shop air fill valve located on tank) at a local gas station. (DO NOT EXCEED 120 PSI). Be sure the engine is running or the ignition switch is turned to "ON" or "ACCESSORY" position, and the outer rocker switches in "RAISE" position until vehicle is leveled. Then move "RAISE-LOWER" switches to "OFF" and "TRAVEL" switch to "HOLD".

MAINTENANCE:

No routine maintenance is required on the Electro-Level System other than draining moisture in the wet tank. Expel moisture into cup or rag. (Figure 7)

PARTS INFORMATION

<u>Number</u>	<u>Description</u>
2006761	2-Way Solenoid
2006799	3-Way Solenoid
2006798	3-Way Solenoid
2007701	Raise-Lower Switch
2007702	Travel Switch
8907496	Diode
12002604	Harness

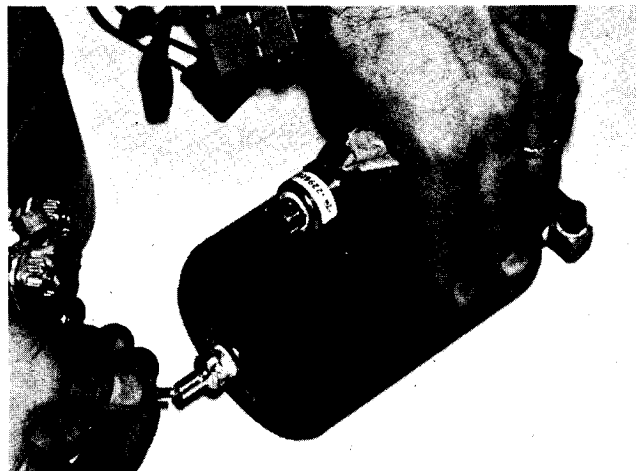


Figure 7

ELECTRO-LEVEL

TROUBLE DIAGNOSIS

<u>PROBLEM</u>	<u>POSSIBLE CAUSE</u>	<u>CORRECTION</u>
Compressor not operating. No air pressure.	1. Open circuit breaker. (Circuit breaker is located behind glove box door.)	1. Find cause of circuit breaker being open and correct it.
	2. Faulty wiring. (Compressor feed or ground not connected.)	2. Check to see that wiring is intact.
	3. Low battery.	3. The compressor runs off the automotive battery. Check its condition and correct as necessary.
	4. Faulty or pitted contacts on pressure switch.	4. Replace pressure switch.
	5. Motor has developed an open circuit.	5. Motor brushes or commutator worn out. Replace motor.
	6. Defective diode. (Electro-Level option only.)	6. Replace diode.
	7. Defective relay.	7. Replace relay.

<u>PROBLEM</u>	<u>POSSIBLE CAUSE</u>	<u>CORRECTION</u>
Compressor operates. No air pressure.	<ol style="list-style-type: none"> 1. Leak in air system. 2. Compressor valve seat or valve spring worn or broken. 3. Piston rings are worn — air leaks heavily at rings. 4. Pressure switch not properly adjusted. 	<ol style="list-style-type: none"> 1. Eliminate air leaks in system. 2. Replace valve seat and/or valve spring. 3. Replace piston rings. 4. Adjust pressure switch settings to operate at the 100-120 PSI range.
Air pressure in system. Compressor operates erratically — takes too long to pressurize system.	<ol style="list-style-type: none"> 1. Air leak in system. 2. Compressor valve seat valve spring broken or worn. 3. Piston rings are worn — air leaks heavily by rings. 4. Pressure switch contacts are pitted causing improper compressor action. 5. Battery voltage too low to operate motor. 6. Bearing failure may cause unit to seize occasionally and break loose if galling occurs. 	<ol style="list-style-type: none"> 1. Eliminate air leaks in system. 2. Replace valve seat and/or valve spring. 3. Replace piston rings. 4. Replace pressure switch. 5. Charge battery. 6. Replace bearings or parts with bearings.
Air lines frozen up.	<ol style="list-style-type: none"> 1. Water in lines. 	<ol style="list-style-type: none"> 1. Drain wet tank.
Complete or partial loss of air with travel switch in "HOLD".	<ol style="list-style-type: none"> 1. Leak in air bellows. 2. Leak at air lines between bellows and solenoid. 3. Leak in 2-way solenoid. 	<ol style="list-style-type: none"> 1. Eliminate air leak. 2. Eliminate air leak. 3. Service or replace solenoid.
Complete or gradual loss of air overnight at camp-site with ignition off.	<ol style="list-style-type: none"> 1. Leak in air bellows. 2. Leak in air line between solenoid and bellows. 3. Leak at fitting between solenoid and air line or bellows and air line. 4. Defective 2-way solenoid valve. 	<ol style="list-style-type: none"> 1. Eliminate air leak. 2. Eliminate air leak. 3. Eliminate air leak. 4. Replace solenoid valve.
Complete or partial loss of air with travel switch in "AUTO", ignition on. (Compressor runs too frequently.)	<ol style="list-style-type: none"> 1. Air leak in system. 2. Defective height control valve. 	<ol style="list-style-type: none"> 1. Eliminate air leak. NOTE: Vehicle should be operated with travel switch in "HOLD" position. Do not operate vehicle with travel switch in "AUTO". 2. Service or replace valve.

<u>PROBLEM</u>	<u>POSSIBLE CAUSE</u>	<u>CORRECTION</u>
Travel switch in "AUTO". Nothing happens.	<ol style="list-style-type: none"> 1. Compressor not operating. 2. Defective control switch. 3. Defective pressure switch. 4. Defective diode. 5. Defective wiring. 6. Check relay. 7. Defective solenoid valves. 8. Leak in air bellows. 9. Leak in air lines. 	<ol style="list-style-type: none"> 1. Check feed at ground wire. 2. Replace switch. 3. Replace switch. 4. Check diode. Replace as required. 5. Check wiring and electrical connections. 6. Replace relay. 7. Service or replace solenoid valves. 8. Eliminate air leak. 9. Eliminate leak.
Left or right switch in "RAISE" position. Vehicle does not raise. Compressor runs.	<ol style="list-style-type: none"> 1. Leak in air lines. 2. Solenoid valves plumbed incorrectly. (Raise solenoid). 3. Faulty hold solenoid valve. 4. Faulty raise solenoid. 5. Faulty control switch. 6. Defective wiring between control switch and solenoid. 	<ol style="list-style-type: none"> 1. Eliminate air leak. 2. Properly install solenoid valve. 3. Service or replace valve. 4. Replace solenoid. 5. Replace switch. 6. Check wiring and electrical connections.
Left or right switch in "RAISE" position. Vehicle does not raise. Compressor not operating.	<ol style="list-style-type: none"> 1. Open circuit in compressor motor. 2. Defective relay. 3. Open in pressure switch. 4. Battery undercharged. 5. Defective diode. 6. Defective wiring. (Compressor feed or ground wire not connected.) 7. Open circuit breaker. 8. Faulty control switch. 	<ol style="list-style-type: none"> 1. Motor brushes or commutator worn out. Replace motor. 2. Clean contacts or replace relay. 3. Pitted contacts. Replace pressure switch. 4. Charge or replace automotive battery. 5. Replace diode. 6. Check wiring and electrical connections. 7. Check for cause or open circuit breaker. Reset. 8. Replace switch.
Left or right switch "LOWER" position. Vehicle does not lower.	<ol style="list-style-type: none"> 1. Lower solenoid valve incorrectly plumbed. 2. Undercharged battery. 3. Defective wiring. 4. Open circuit breaker. 	<ol style="list-style-type: none"> 1. Correctly install solenoid valves. 2. Replace or charge battery. 3. Check wiring and electrical connections. 4. Find cause for open circuit breaker. Reset.

PROBLEM**POSSIBLE CAUSE****CORRECTION**

Start vehicle. Move transmission selector lever to "DRIVE" position. Tell-tale light does not illuminate.

5. Defective solenoid valves.
6. Defective control switch.
1. Defective bulbs (two bulbs).
2. Defective time delay relay.
3. Defective tell-tale warning light fuse.
4. Defective wiring.
5. Defective neutral start, B/U and safety switch.

5. Service or replace solenoid valves.
6. Replace switch.
1. Replace light bulb.
2. Replace relay.
3. Replace fuse. (Fuse is located in fuse panel behind glove compartment.)
4. Check wiring and electrical connections.
5. Adjust switch or replace as necessary.

Start vehicle. Move transmission selector lever to "DRIVE". Tell-tale light only partially illuminates.

1. Defective light bulb.

1. Replace burnt out bulb.

Start vehicle. Move transmission lever to "DRIVE" position. Tell-tale light remains on after 10-15 second delay.

1. Defective time delay relay.

1. Replace relay.

Start vehicle, tell-tale light intermittently lights when moving transmission selector lever to "DRIVE".

1. Defective time delay relay.
2. Defective neutral, start, B/U and safety switch.

1. Replace relay.
2. Adjust switch or replace as necessary.

**DIODE LOCATED IN WIRING HARNESS
BEHIND CONTROL PANEL**

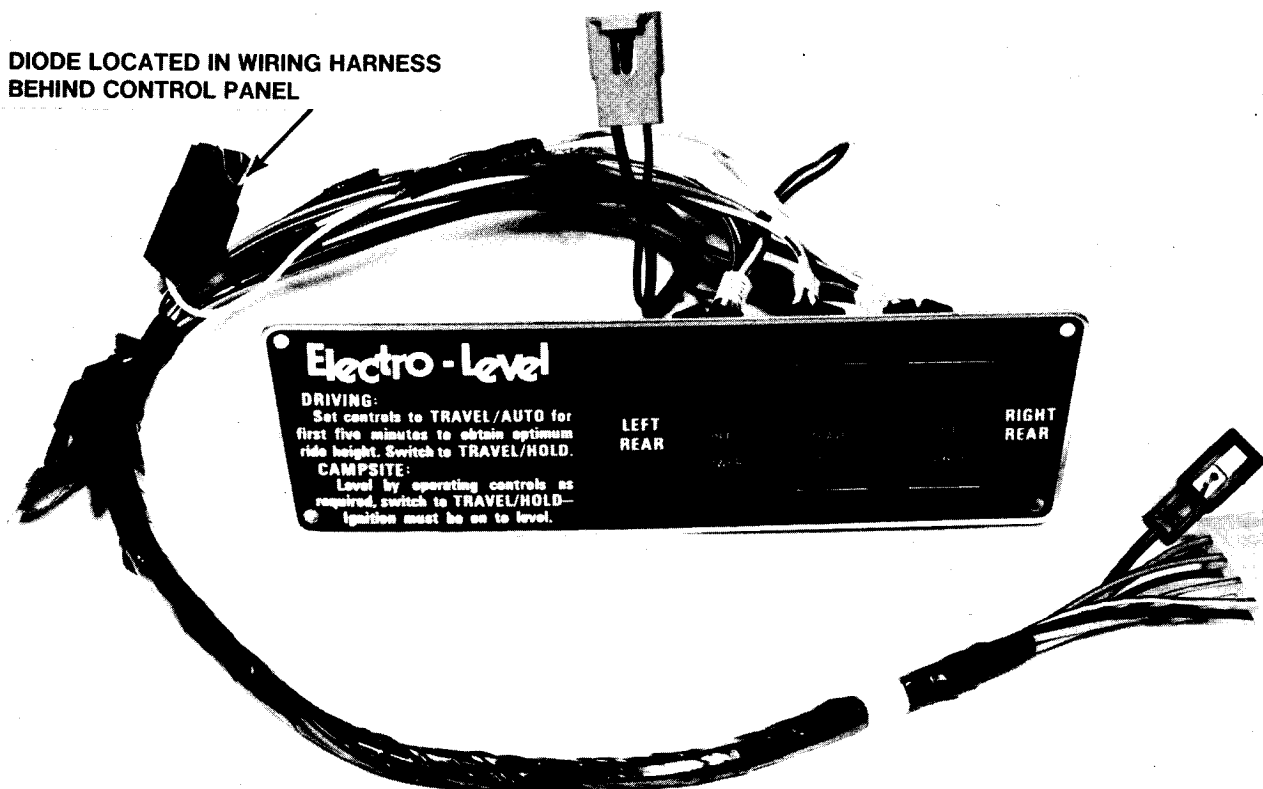


Figure 8



Motor
Home
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Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION

GENERAL MOTORS CORPORATION

IMPORTANT-All Service Personnel Should Read and Initial

NUMBER: 77-IM-10

GROUP: 4-Rear

Suspension-1

DATE: July, 1977

SUBJECT: MOTORHOME FRONT AND REAR ALIGNMENT

MODELS: MOTORHOMES AND TRANSMODES

This bulletin cancels and supersedes 74-IM-1 (January 1974), 74-IM-15 (May 1974), and 76-IM-5A (February 1976), all copies of which should be destroyed.

Effective with TZE167V101401, every GMC Motorhome is inspected for proper alignment before and after the body is installed. Transmodes are inspected and aligned the second time after being upfitted by the final manufacturer.

The initial alignment on the front suspension assembly is conducted before the front suspension assembly is secured to the frame rails. The rear frame and bogie reinforcement crossmember assembly are mated and checked for camber and toe at the rear suspension bracket mounting point. Based on the camber and toe readings at this point, shims are added as required when the rear suspension bracket is secured to the frame rails.

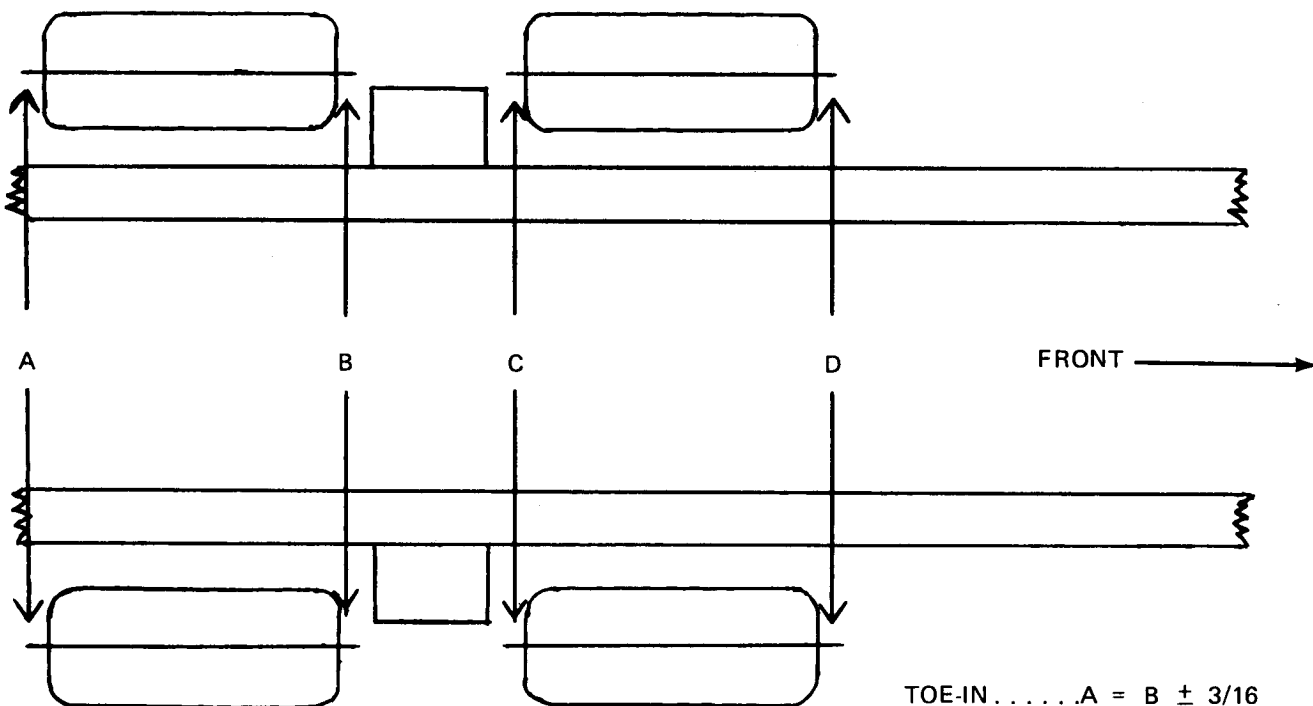
After the frame and body are mated and completed upfitted, the front and rear alignment are rechecked and corrected as necessary.

The rear wheel alignment specifications and procedures for GMC Motorhomes and Transmodes have been revised to give more even tire wear on the rear suspension. The following details the diagnosis and correction procedure for rear suspension alignment:

PARTS INFORMATION

<u>Quantity/ Vehicle</u>	<u>Number</u>	<u>Description</u>
As Required	702245	Rear Suspension Toe Shim
As Required	702246	Rear Suspension Camber Shim

REAR SUSPENSION



TOE-IN A = B \pm 3/16

C = D \pm 3/16

CAMBER 0 TO + 1°

Figure 1

SPECIFICATIONS

Front Suspension

Caster: $+2^{\circ}$ plus or minus $1/2^{\circ}$ (maximum $1/2^{\circ}$ difference right to left side)

Camber: L.H. $+3/4^{\circ}$ plus or minus $1/4^{\circ}$
R.H. $+1/2^{\circ}$ plus or minus $1/4^{\circ}$
(L.H. camber must be more positive than R.H.)

Toe: $-1/8''$ plus or minus $1/16''$

A $1/8''$ plus or minus $1/16''$ toe out reading when the vehicle is in a stationary position will assure a "O" toe reading when the vehicle is moving. These specifications apply to bias-belted tires and radial tires.

Rear Suspension

Camber: 0° to $+1^{\circ}$

Toe: 0 to plus or minus $3/16''$ Front Tandem Wheels
0 to plus or minus $3/16''$ Rear Tandem Wheels

INSTRUCTIONS

Front Suspension Alignment

Reference the 1976 Maintenance Manual Supplement – Section 3A – Front Suspension.

Rear Suspension Alignment

Before checking for correct rear wheel alignment, perform the following:

1. Check tire inflation. Bias belted tires. 60 PSI
Radial tires. 65 PSI

2. Check wheel bearing adjustment and correct if necessary. For procedure, refer to wheel bearing section later in this bulletin.

NOTE: Rear wheel alignment requires the vehicle to be at correct ride height while being checked.

TOE-IN MEASUREMENT (FIGURE 1)

Toe-in is measured from center of the tire tread. Measurements at both wheels must be made in same relationship.

NOTE: Both sets of tandems should be checked for toe-in to assure alignment of front and rear tandems.

Hoist the vehicle and spin wheels to obtain a center line on tire tread. Roll vehicle ahead several feet to where the inspection is to be made. This will remove any slack caused by looseness in wheel bearings.

Measure toe on the front tandem wheels and the rear tandem wheels.

If the toe reading on the front tandem wheels or rear tandem wheels exceed plus or minus $3/16''$, shims must be added to bring the rear suspension into proper alignment.

NOTE: Prior to adding a shim, determine the effect it will have on each set of tandems. If adding a shim brings one set of the tandems into specification and moves the other out of specification, refer to the "Misalignment between front and rear tandems" later in this bulletin.

TOE-IN ADJUSTMENT

If toe-in is not correct, it must be shimmed as shown in Figure 2. Follow this procedure for adjustment.

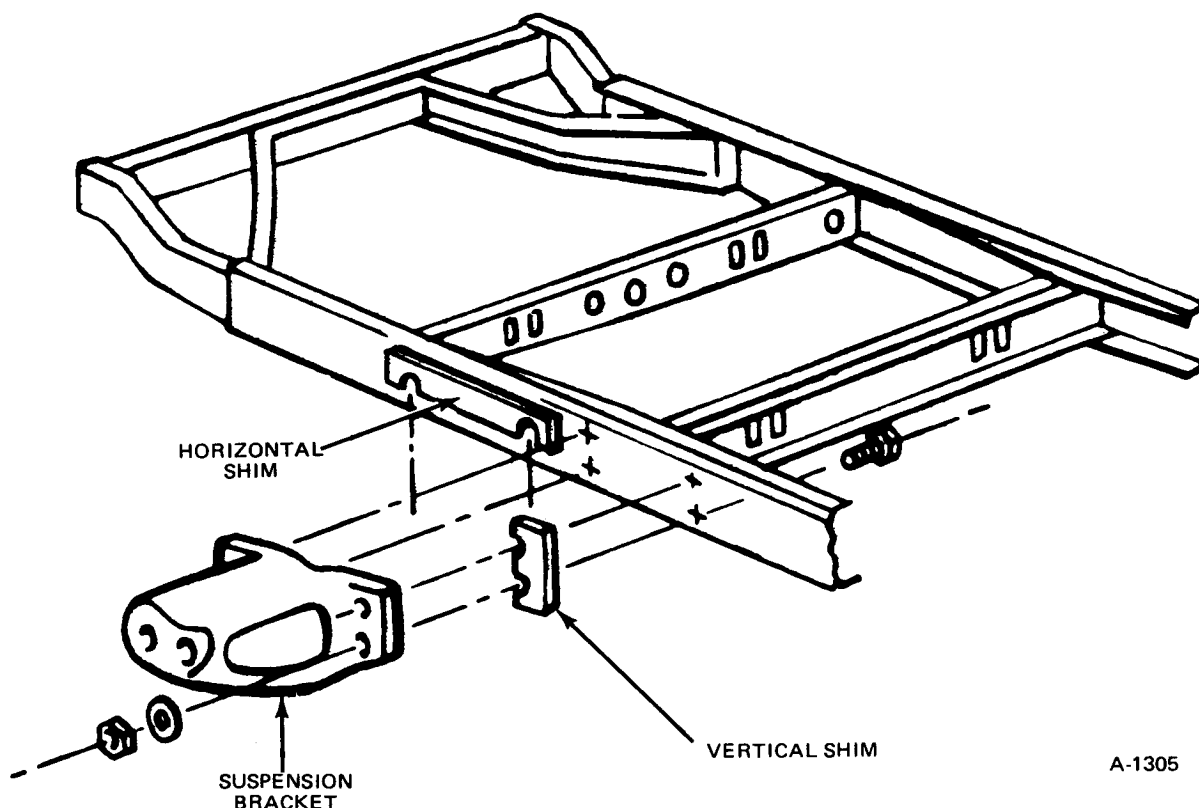


Figure 2 – Installing Rear Suspension Shims

1. Raise vehicle off floor.
2. Loosen six bolts on mounting bracket.
3. Insert proper shims as shown in Figure 2.
4. Tighten four retaining nuts on frame rail to 65-85 lbs. ft. torque. Tighten two retaining nuts on crossmember to 50-80 lbs. ft. torque.
5. Lower vehicle to floor and roll backward and forward several feet.
6. Recheck alignment.

CAMBER MEASUREMENT

The rear wheels are set with positive camber. Positive camber is the outward inclination of wheels at the top.

In checking camber, it is recommended that an accurate gauge be used. Both sets of tandem should be checked at this time. The camber should be set at 0° to $+1^{\circ}$.

Excessive positive camber or lack of positive camber can result in irregular tire wear.

CAMBER ADJUSTMENT

Camber is adjusted by shimming as shown in Figure 2. Following the same shimming procedure as that used before to set toe-in.

MISALIGNMENT BETWEEN FRONT AND REAR TANDEM

If one side of the rear suspension appears to be the primary cause of excessive toe, review the following factors to assist you in determining which rear suspension component is defective or damaged.

1. Loose wheel bearings
2. Worn control arm bushings
3. Loose suspension bracket bolts
4. Bent control arm
5. Bent wheel assembly
6. Bent frame

Loose Wheel Bearings

If a loose wheel bearing is found, it should be inspected and then adjusted according to the following procedure.

While rotating hub assembly —

1. Tighten nut to 25-30 lbs. ft. torque.
2. Back off nut $1/2$ turn.
3. Retighten nut finger tight; secure if possible.
4. If unable to secure at finger tight, back off to first securing position.
5. Rear hub must be rotated at least three revolutions of spindle nut during tightening and retightening operations.
6. Check dimensions — .001 — .005 end play between hub and spindle.

Worn Control Arm Bushing

1. Raise vehicle.
2. Remove wheel bearing dust caps, and wipe grease from end of spindle.
3. Place dial indicator at end of spindle. Mount dial indicator on a suitable stand.
4. Check wheel and control arm assembly. Total indicated reading on dial indicator should not exceed .050". If lateral movement is greater than this, bushings and/or mounting pins should be replaced.

Loose Suspension Bracket Bolts

Be sure bracket bolts to frame rail have a bolt torque of 65-85 lbs. ft., and the retaining nuts to the crossmember have a torque of 50-60 lbs. ft.

If any of these nuts are found to be loose, inspect all components for wear. Replace worn parts as required.

Bent Control Arm (Figure 3)

1. Raise vehicle.
2. Remove the wheels, wheel covers, outer dust cap, and inner dust cap on the side of the motorhome that appears to be the primary cause of rear suspension misalignment.

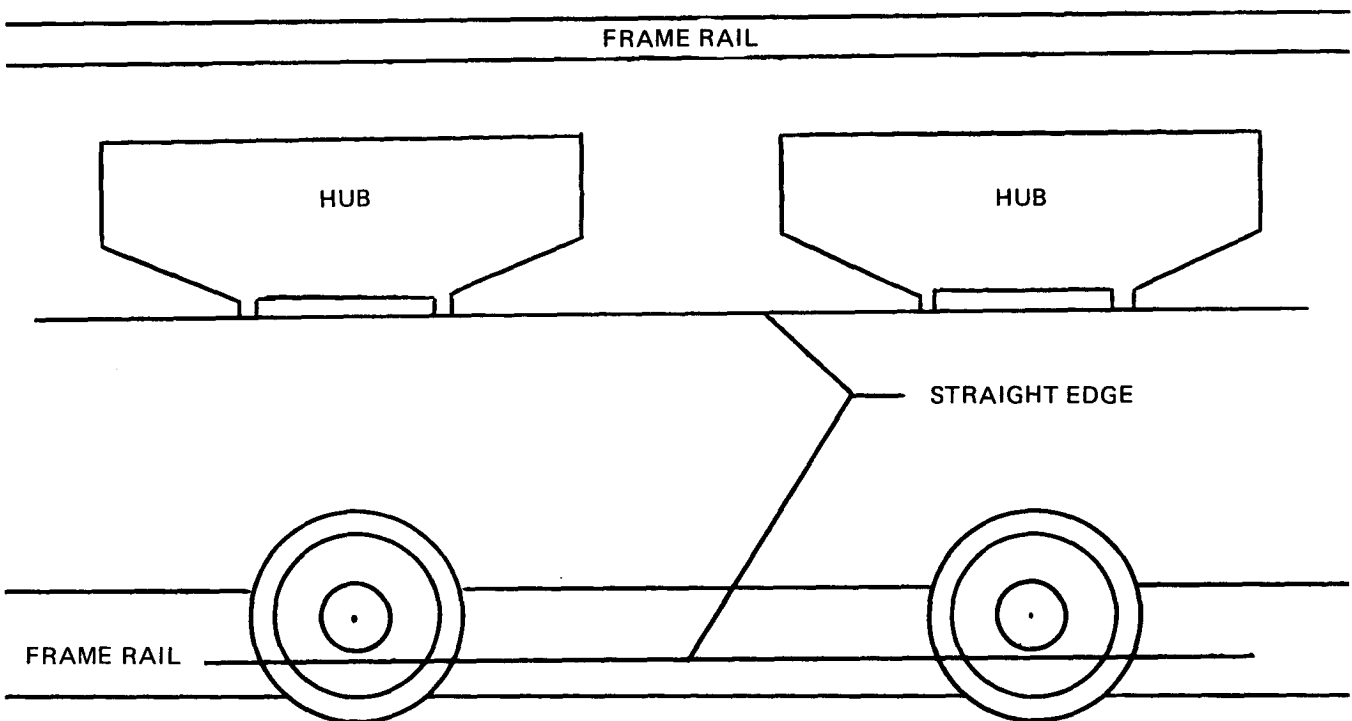


Figure 3 — Left or Right Rear Suspension

3. Place a straight edge across the face of the hubs as shown in Figure 3.
4. The straight edge should lie flat on each hub as shown in Figure 3. If the straight edge does not visibly rest on both points of each hub, a bent control arm will be evident and it should be replaced.

Bent Wheel Assembly

Check lateral run-out of wheel assembly. Refer to Section 10 of the Motorhome Maintenance Manual.

Bent Frame

Check frame for straightness following the procedure set forth in Section 2 of the Motorhome Maintenance Manual.

WARRANTY INFORMATION

Due to the fact that every GMC Motorhome and Transmode is completely aligned before and after final upfitting, it should not be necessary to realign the vehicles within the published warranty period. However, if realignment is necessary, the before and after alignment readings must be recorded on the warranty repair order and Zone authorization secured. This will provide an accurate record of any

alignment problems encountered, and also permit us to evaluate our alignment procedures. We suggest that you contact your GMC Zone Service Manager for details regarding this policy.

When the repairs are within the published warranty use:

Labor Operation	Description	Time	Failure Code
T125109	Check intermediate relay rod level Add: If necessary to install washer under idler arm	.2 .3	92
S201210	Align front suspension (Includes check and adjust tire pressure, check front and rear ride height) Add: If necessary to adjust front ride height. If necessary to adjust rear ride height.	1.0 .5 .2	92
T125209	Align rear suspension	2.1	92



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 73-TM-3

**GROUP: 4-REAR
SUSPENSION-1**

DATE: June 25, 1973

Subject: RIDE HEIGHT, REAR SUSPENSION
(Note: Also see Bulletin 73-T-2, 3 Front Susp. -1)

This is to acquaint the service technician with correct ride height specifications and procedures. Incorrect ride height can result in premature suspension bottoming or incorrect suspension settings.

Specifications

Front Ride Height - $13 \frac{1}{8}" \pm \frac{1}{4}"$

Rear Ride Height - $11 \frac{3}{4}" \pm \frac{1}{4}"$

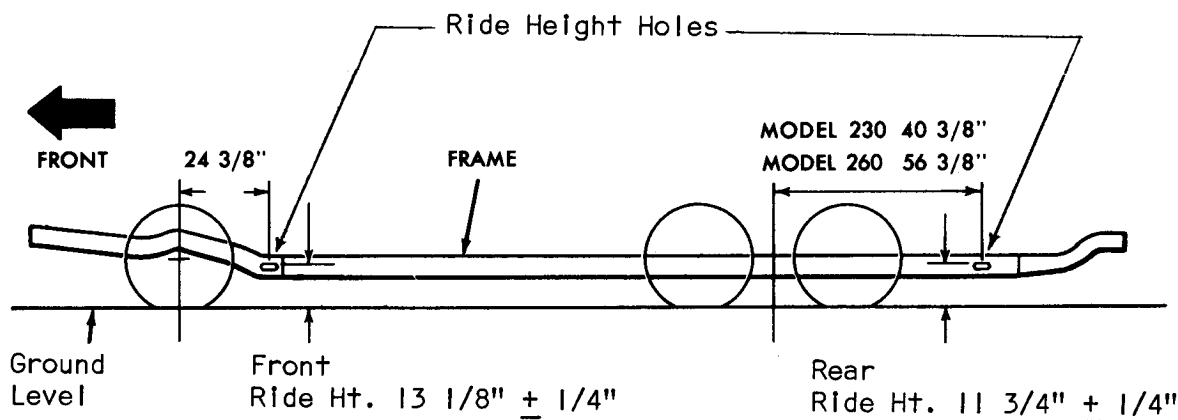
Procedure

1. Checking Ride Height

Vehicle Rear Suspension Control should be in "travel" position and vehicle on level area.

2. A ruler or tape measure should be used to check ride height.

- A. Locate ride height holes in frame rails (See Fig. #1).
- B. Measure from top of hole to ground on both sides in the front and rear.
- C. If the ride height settings are correct, no further work is required.



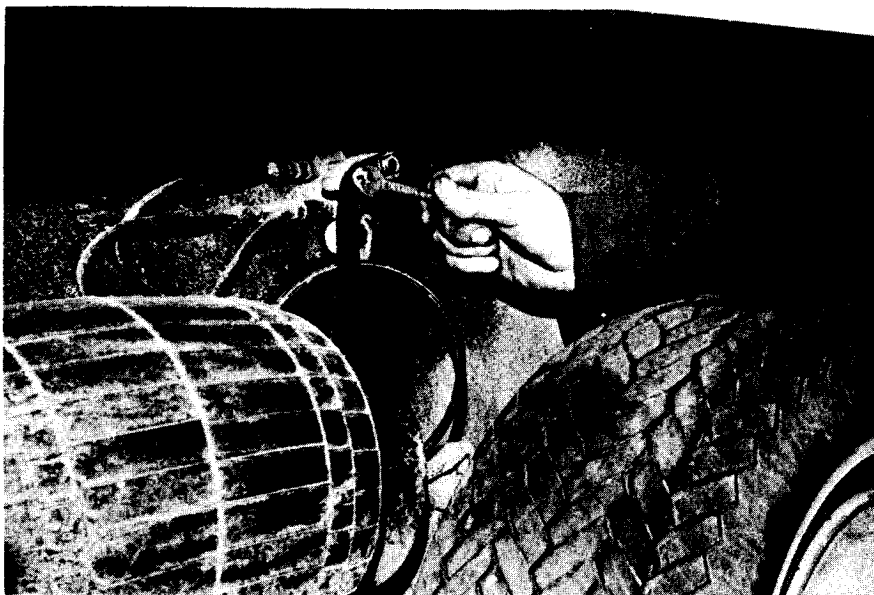
CHECKING MOTOR HOME RIDE HEIGHT Fig. 1

3. Rear Height Adjustment

The position of the lever on the height control valve (Fig. #2) may be varied to enable the ride height to meet specifications. This is done by loosening adjusting nut and moving lever fore or aft after determining whether frame height must be raised or lowered.

NOTE: End of height control valve lever will move 1/2" fore or aft without causing any valve action due to a time delay in valve.

Tighten the adjusting nut and drive the vehicle for 100 ft. and wait for the air compressor to shut off. Recheck the frame height according to previous instructions. After adjusting a number of units, the service technician will be able to judge how much of a change is required at the lever to make a corresponding change in ride height.



SETTING REAR RIDE HEIGHT Fig. 2



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IT 1491

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 74-TM-5
GROUP: 4-Rear
Suspension-I
DATE: April, 1974

SUBJECT: Air Compressor Failure

MODELS: All

Air system leaks are often a contributing factor to air compressor failure. In order to minimize repeat failure of the air compressor caused by air system leakage, the following procedure should be used.

With the air system at normal operating pressure, coat all suspension air line connections with soap and water solution. Air leakage will produce soap bubbles. Leakage at air line connection can sometimes be stopped by tightening connections. If this does not stop the leak, replace the affected fittings.

Procedure for checking leakage in the air system caused by the height control valve and the power level valve are located in Section (4) of the Motor Home Maintenance Manual. The Microsonic Detector (Model EI500) is a valuable aid in locating leakage throughout the air system.



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1491

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 74-TM-7

GROUP: 4-Rear

Suspension-2

DATE: April, 1974

SUBJECT: Plumbing of Air Compressor Pressure Switch

MODELS: TZE033 and TZE063

Engineering has recently released a new method of plumbing the air compressor pressure switch into the air system. Kits have been released for field service use.

PARTS INFORMATION

Kit #724404 - for compressor 704386

(pressure regulator switch located below compressor)

Kit #724405 - for compressor 717683

(pressure regulator switch located above compressor)

Detailed instructions for the installation of this new plumbing setup will be incorporated in each service kit.

It has been found that by tapping the pressure regulator switch into the line going from the compressor to the air tank, that a leak-down condition of that line from the check valve back through the compressor can cause excessive compressor cycling. The new method plumbs the pressure switch into the system after the check valve on the tank, thereby reading a more constant system pressure. The below line drawing illustration shows the basic change.

WARRANTY INFORMATION

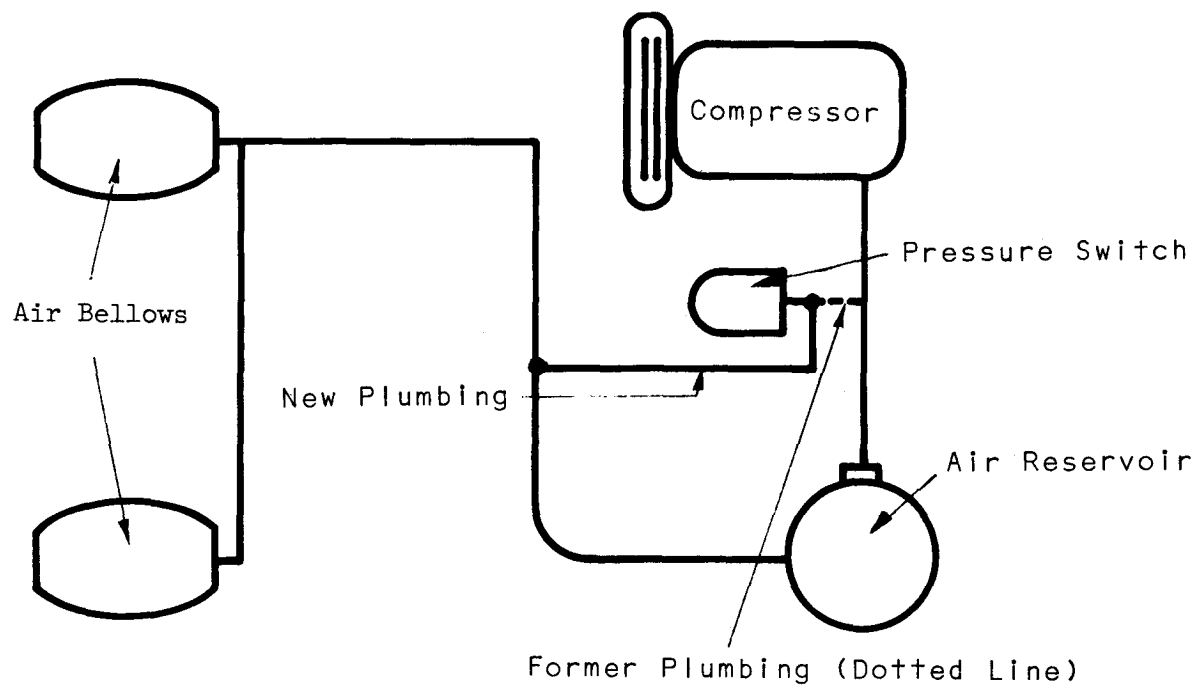
(When applicable)

Flat Rate Time

0.5

Labor Operation

W4521-33





Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1491

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-TM-4

GROUP: 4-Rear

Suspension-1

DATE: December, 1974

SUBJECT: Service Kit for Rear Suspension Bushing Replacement

MODELS: All Motor Homes With Serial Numbers Preceding TZE064V101010

A new service kit offering improved durability for the rear suspension bushings on motor homes has recently been released by GMC. This kit is applicable only to those motor homes manufactured prior to the above indicated serial number. Vehicles produced after this number have 1-1/2" diameter pins and bushings which supercede the former 1-1/4" pins and bushings.

The new bushing kit should be used only when the former style bushings show wear. Wear is determined by measuring the amount of inward and outward travel of the arm at the spindle. Total travel at this point should not exceed .125. Anything in excess of this warrants replacement.

A new bronze bushing replaces the former teflon type. This change necessitates a new machined pin, spacer, and nut. A keeper for the pin has also been added. Other parts included in the kit, which should be changed when performing bushing replacement, are the same as former production parts.

Kit part number 723332 consists of:

Parts Information

<u>Part Number</u>	<u>Name</u>	<u>Qty Req'd.</u>
699225	Cab Screw	4
723340*	Bushing	8
711448	Thrust Pack	8
711449	Seal	8
723473*	Spacer	4
2421884	"O" Ring	4
723472*	Keeper	2
723474*	Pin	4
791148*	Nut	4
9411010	Lube Fitting	4
8881313	Instruction Sheet	1

*New Parts

Tools

The tools required to perform this replacement operation are contained in Kent Moore Kit J25474. The kit consists of J25368 Remover, J25369 Installer, and J25281 Reamer. Also necessary, but not part of the kit, is the standard Kent Moore Drive Handle J8092 (Figure 1).

Procedure

1. Remove the control arms as described in Section 4 of the Motor Home Maintenance Manual. However, it is not necessary to remove the spindles.
2. Place a control arm securely in a vice, thread the remover tap J25368 into the old bushing approximately 1" (Figure 2).
3. Using a brass drift, tap on J25368 to remove the old bushing from the control arm (Figure 3).
4. Mount installer J25369 on handle J8092. Place the new bushing with the lubrication purge groove towards the head of the installer on the installer (Figure 4).
5. Install the bushing into the control arm using gentle taps on the drive handle and making sure not to cock the bushing (Figure 5).
6. Repeat this procedure on all other control arms. Each arm takes two bushings, inner and outer.
7. After both bushings are installed in a control arm, ream to size using reamer J25281. Remember, always turn the reamer in a clockwise direction (Figure 6).
8. Clean chips out of the bushings with an air hose. The arm is now ready for installation.
9. Install control arms according to the procedures set forth in Section 4 of the Maintenance Manual using the new parts.

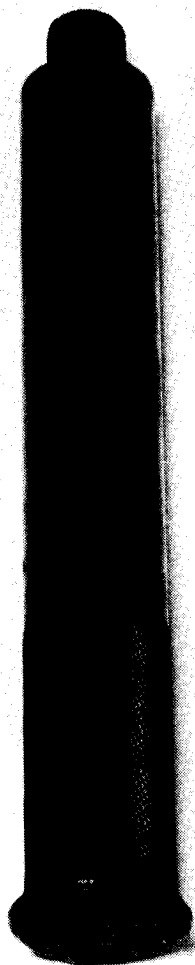
Warranty Information

When the repairs are within the published warranty use:

<u>Labor Operation</u>	<u>Description</u>	<u>Time Allowance</u>	<u>Trouble Code</u>
W401100	One Bushing Replace	3.3 Hrs.	6
W401200	Two Bushings Replace (Same Side)	4.0 Hrs.	6
W401000	All Bushings Replace	7.8 Hrs.	6



J-25269



J-8092



J-25281



J-25368

FIGURE 1



FIGURE 2



FIGURE 3

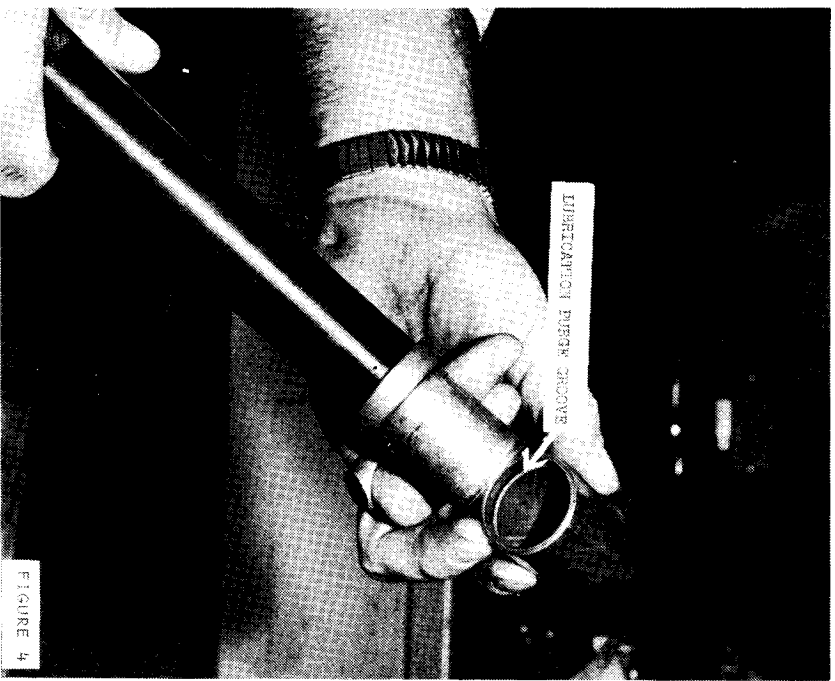


FIGURE 4

IMPROVED PAPER ANCHOR

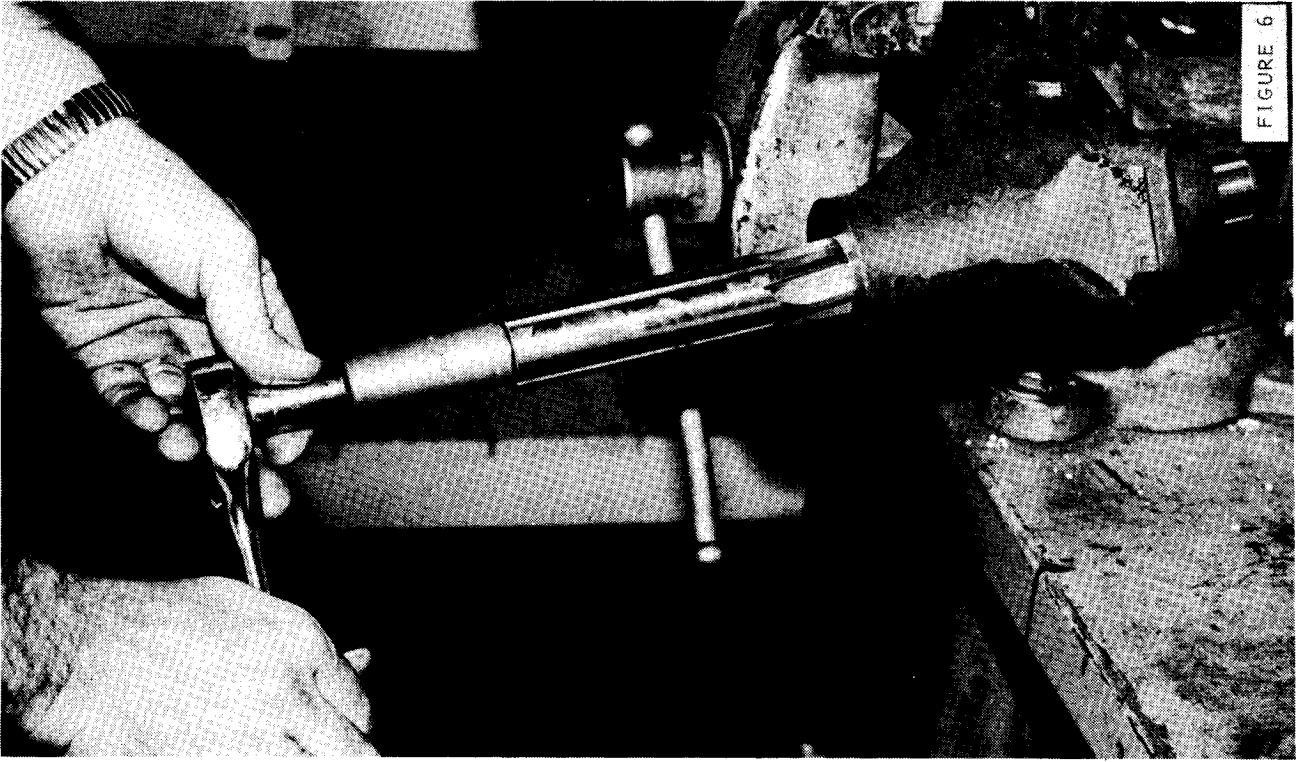


FIGURE 6

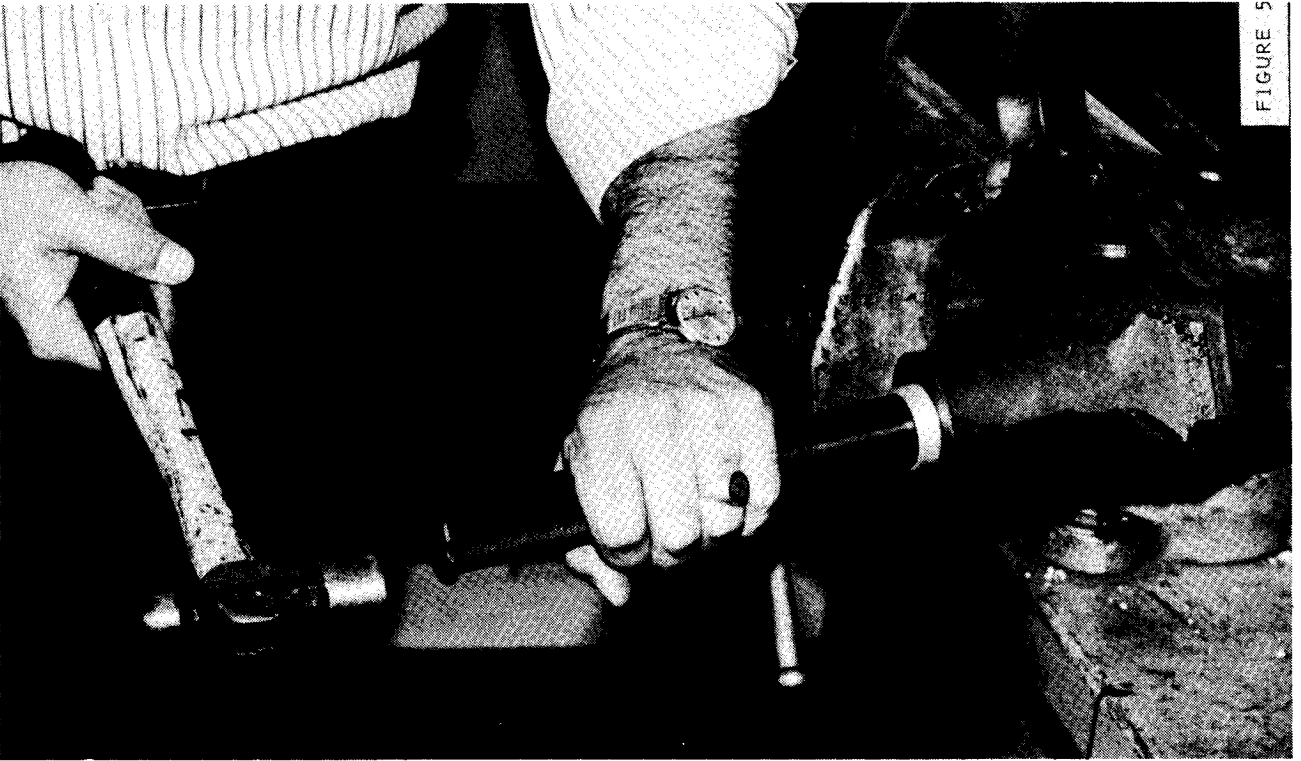


FIGURE 5



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1491

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-TM-4 A
GROUP: 4-Rear
Suspension-1
DATE: August, 1975

SUBJECT: Service Kit for Rear Suspension Bushing Replacement

MODELS: All Motor Homes with Serial Numbers Preceding TZE064V101010

This supplement is to correct Installer part #J-25269 to J-25369 in Technical Service Bulletin 75-TM-4 as follows:

1. Under the heading "Tools" J-25269 installer is listed. It should read J-25369 installer.
2. Item 4 under "Procedure" should be changed from J-25269 to J-25369.
3. This same number should be corrected on the tool illustration.



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-TM-23

GROUP: 4-Rear Suspension-2

DATE: Sept., 1975

SUBJECT: SERVICING REAR SUSPENSION BUSHINGS

MODELS: ALL GMC MOTORHOMES AND TRANSMODES WITH VIN LATER THAN TZE064V101010

Technical Service has recently released a set of tools designed to service the rear suspension bushings for the above models. These models have a 1-1/2" diameter steel backed bronze bushing, Part #5155839.

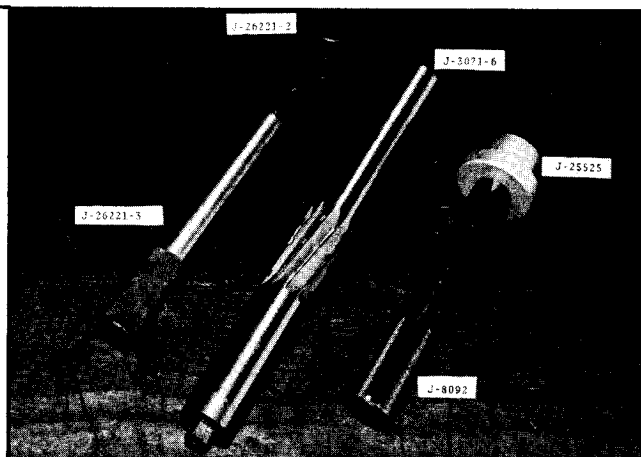
New bushings should be installed only when wear is indicated. Wear is determined by measuring the amount of inward and outward travel of the arm at the spindle. Total travel at this point should not exceed .125. Anything in excess of this warrants replacement.

TOOLS

The tools required to perform this replacement operation are as follows:

J-8092	Drive Handle
J-25525	Installer
J-3071-6	Reamer
J-26221-2	Remover
J-26221-3	Drive Handle

(J-26221-1 may be used with J-26221-3 for removing the former style and/or service replacement 1-1/4" bushings.)



PROCEDURE

FIGURE 1

1. Remove control arms as described in Section 4 of the Motor Home Maintenance Manual. However, it is not necessary to remove the spindles.

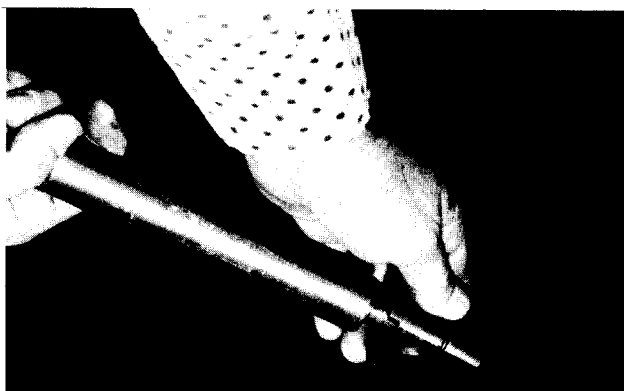


FIGURE 2

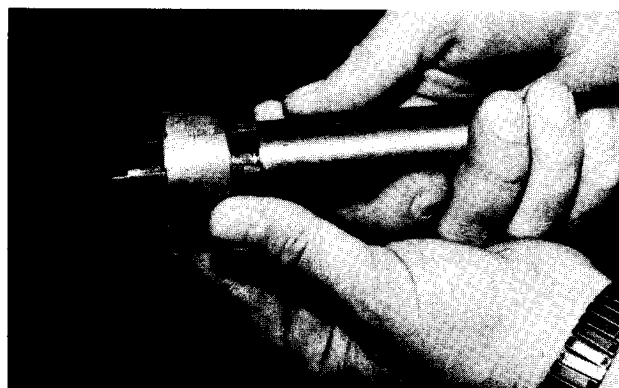


FIGURE 3

2. Anchor the control arm securely in a vice. Install remover J-26222-2 on drive handle J-26221-3. (FIGURE 2) The lip of the remover will catch on the inner edge of the bushings. (FIGURE 3)

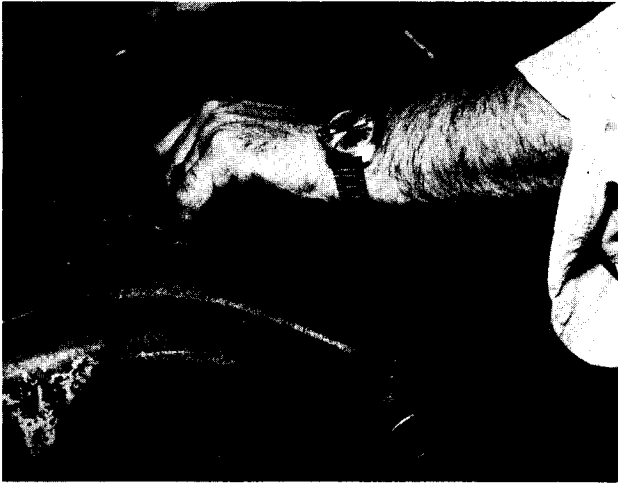


FIGURE 4



FIGURE 5

3. Remove old bushings from control arm by driving them out with a hammer. (FIGURE 4) Repeat procedure for remaining two bushings on the opposite side of the arm.
4. Install new bushing on installer J-25525. (FIGURE 5)



FIGURE 6



FIGURE 7

5. Gently tap new bushing into the arm. (FIGURE 6)
6. After both sets of bushings are installed, ream to size using reamer J-3071-6. Remember, always turn the reamer in a clockwise direction using a hand wrench. (FIGURE 7)
7. Clean chips out of the bushing with an air hose. The arm is now ready for installation.
8. Install control arms according to procedures set forth in Section 4 of the Maintenance Manual.

WARRANTY INFORMATION

When the repairs are within the published warranty, use the applicable labor operation and failure codes published in X-7527, GMC MotorHome Flat Rate Schedule.



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-TM-24

GROUP: 4-Rear Axle & Susp.-3

DATE: September, 1975

SUBJECT: AIR COMPRESSOR REPLACEMENT

MODELS: ALL GMC MOTORHOMES AND TRANSMODES EQUIPPED WITH BROWN COMPRESSORS

The Dana compressor, presently being used in production, is now available for service and can be used when replacing failed Brown compressors.

PARTS INFORMATION

<u>Quantity</u>	<u>Description</u>	<u>Part Number</u>
1	Compressor	795622
1	Bracket	795261 - F -
1	Brass Fitting	652628

PROCEDURE

NOTE: 1975 motor homes and transmodes equipped with Brown compressors will require only that the air compressor and bracket be switched and the air inlet and outlet lines be hooked up and wires connected. It is not necessary to remount the regulator as it is already mounted in the reservoir. Therefore, Steps #1 through #7 are all required for 1975 vehicles equipped with Brown compressors.

1. Remove grille for easier working access.
2. Disconnect all air lines and wires from the compressor and the regulator.



FIGURE 1

3. Using either a hoist or jack, slightly raise and support the radiator horse-collar to relieve pressure on the radiator mounting brackets in order that the compressor and its mounting bracket can easily be removed (Figure 1).

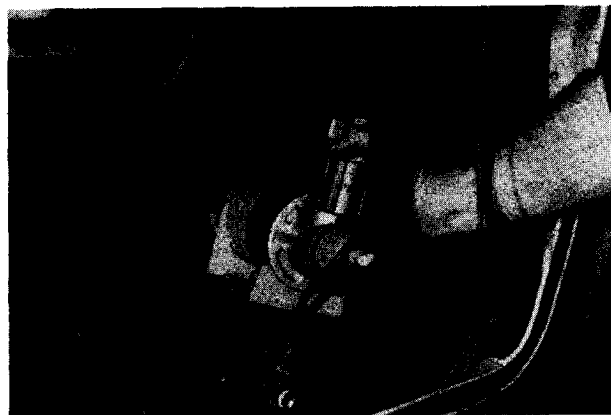


FIGURE 2

4. Remove all compressor mounting bracket attaching bolts. Remove compressor and bracket (Figure 2).
5. For easier installation, mount the Dana compressor (Part #795622) on the new bracket (Part #795261). The 90° flange on the mounting bracket goes to the rear.
6. Secure the new compressor and bracket. The new bracket has the same mounting bolt pattern as the former bracket.
7. Remove the hoist or jack supporting the radiator horsecollar.

8. On 1973 and 1974 models, remove the regulator from the former compressor or mounting bracket, as it will be reused.



FIGURE 3

9. Drill a 3/16" hole through the face of the regulator making sure not to hit any of the working components (Figure 3).
10. Using the drilled regulator as a template, mark the position on the left hand air conditioning condenser mounting bracket, which is attached to the radiator horsecollar, to show where to drill a 3/16" hole for mounting. Drill hole.

CAUTION: Be careful not to drill through the air conditioner condenser coils.

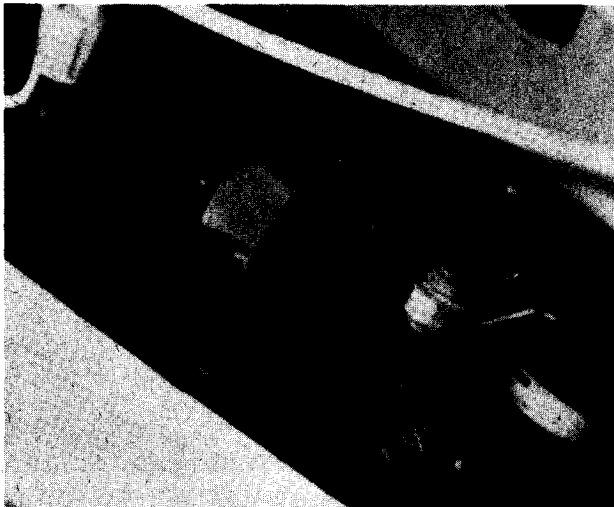


FIGURE 4

11. Using a machine screw, lock washer and nut; mount the regulator. It is desirable to mount the regulator on a slight angle in order to facilitate future adjustments on the regulator if required (Figure 4).
12. The air line from the regulator should be plumbed into the air line going to the rear wheel air bag, if this has not already been done as described in previous Technical Service Bulletin 74-TM-7 in Group 4 - Rear Suspension. This is done using either a brass or nylon tee. A piece of new air line may be required to achieve proper length (Figure 5).

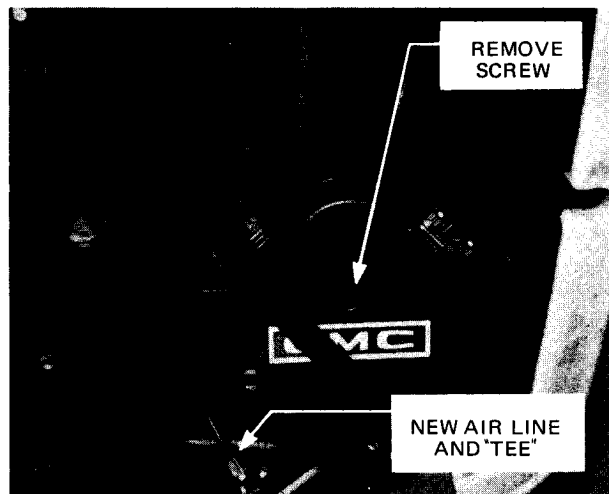


FIGURE 5

13. Screw fitting (Part #652628) into the left hand head of the new compressor. Use a good sealer on the thread (Figure 6). There will be a red plastic plug in the head which is to be removed. Connect the air line running between the compressor to the reservoir. An additional piece of air line may be required to achieve proper length (Figure 7).

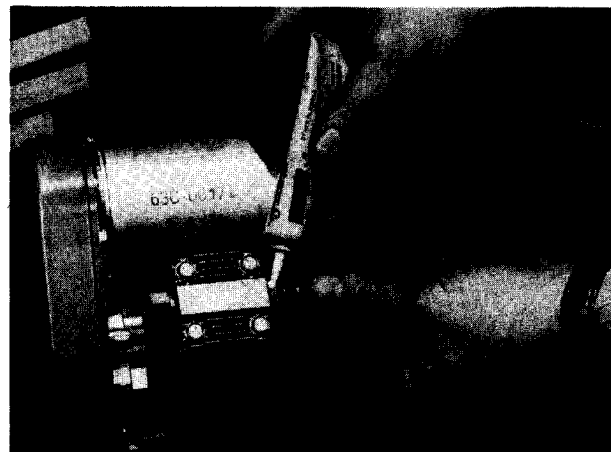


FIGURE 6

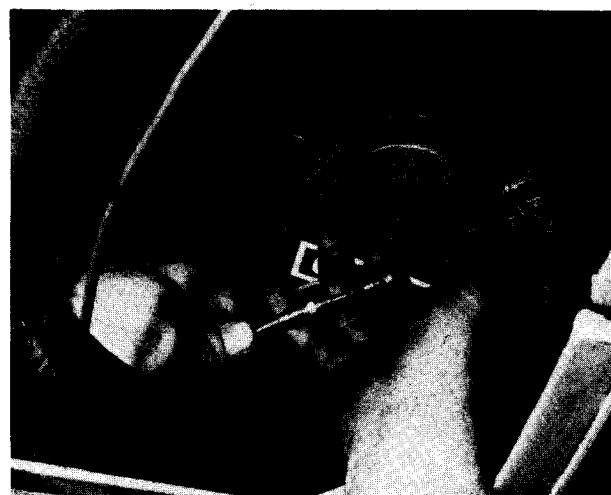


FIGURE 7

14. Connect compressor air intake line to plastic connector on compressor hoses.

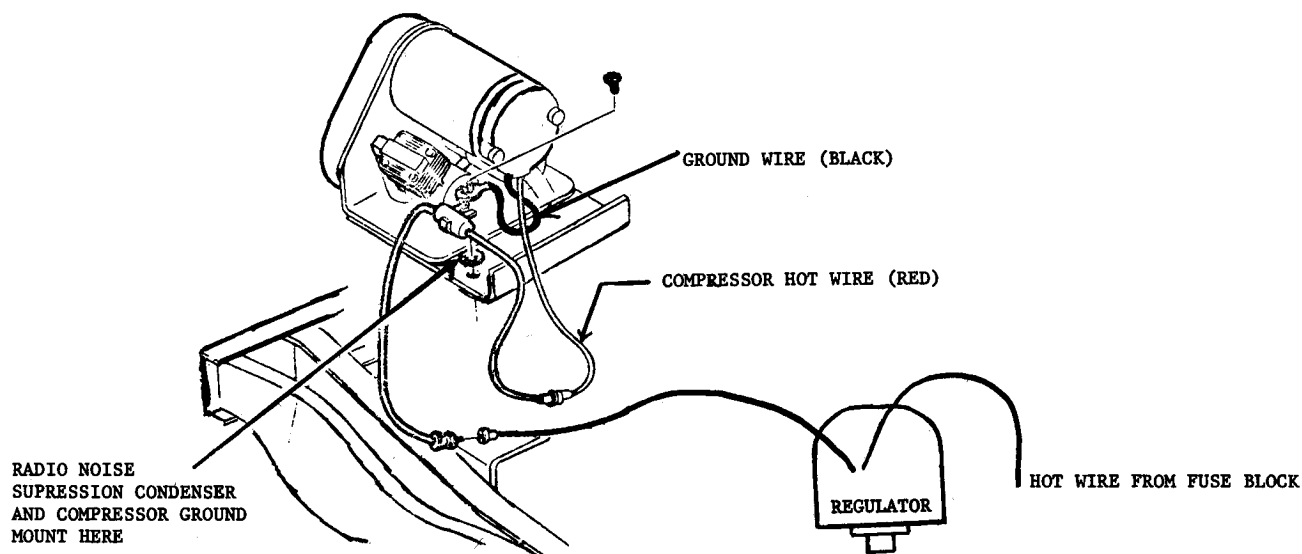


FIGURE 8

15. Wire compressor and regulator as shown (Figure 8). Standard wire splices may be used instead of the connectors shown.

CAUTION: If compressor is wired backwards, the rotation of the pump will be backward causing severe damage to the compressor. Check compressor rotation by removing front cover and viewing.

16. Make a soap bubble test at all new air connections for leaks.

WARRANTY INFORMATION

When the repairs are within the published warranty use:

<u>Labor Operation</u>		<u>Time Allowance</u>	<u>Trouble Code</u>
T085120	1975 Motor Home and TransMode	.7 Hr.	92
	1973-1974 Motor Home	1.5 Hr.	92



Motor
Home
Service

Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION

GENERAL MOTORS CORPORATION

IMPORTANT-All Service Personnel Should Read and Initial

NUMBER: 77-TM-2

GROUP: 4-Rear
Suspension-1

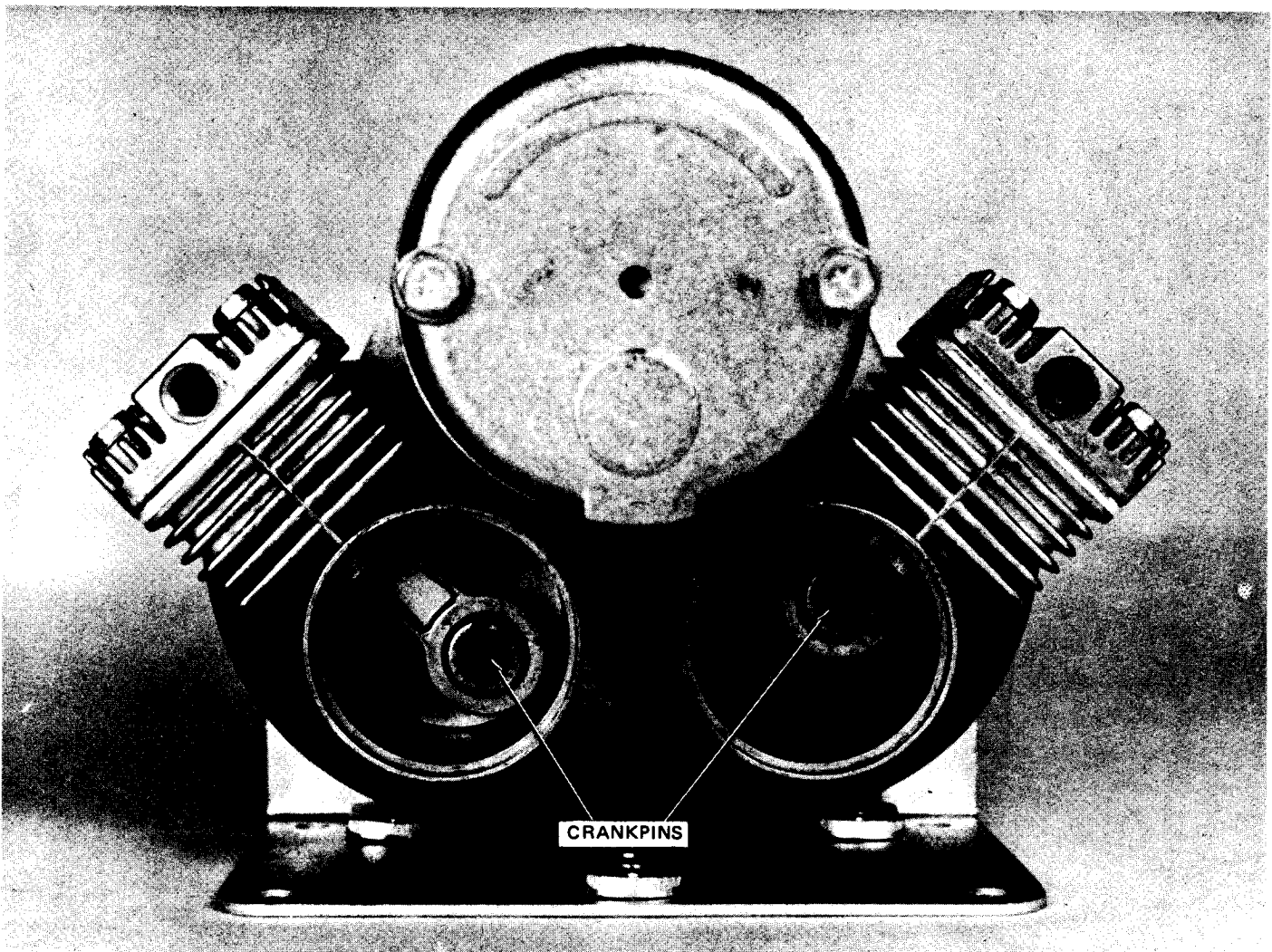
DATE: May, 1977

SUBJECT: DANA AIR COMPRESSOR FAILURES

MODELS: ALL MOTORHOMES AND TRANSMODES

On some replacement Dana air compressors, crankpins have been backing out of the crankshaft and causing compressor failures. This problem has been evident on compressors built prior to May 26, 1976. The assembly date is stamped on the side of each compressor motor in black numerics.

The crankpin torque should be checked on all replacement Dana air compressors built prior to May 26, 1976 and torqued to 95 in.lbs. The crankpins are torqued by removing the air intake assembly and securing the crankpin to the lower end of the connecting rod with a hex key wrench.



... SECTION 5 ...

BRAKES

5

BRAKES



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 74-1M-10

GROUP: 5-Brakes-1

							DATE: March, 1974

SUBJECT: Front Brake Disc and Hub Assembly
Torque Specification

MODELS: All Motor Homes

Due to a typographical error in the G.M.C. Motor Home Maintenance Manual X7425, (Section 5 - Brakes). The torque specification for the brake disc and hub assembly installation to drive axle, page 5-42, step 6, reads incorrectly.

This should read as follows:

6. Install drive axle washer and nut. Torque nut to 110 ft. lbs. If necessary to align cotter pin slot, tighten nut and install NEW cotter pin and crimp. Torque not to exceed 280 ft. lbs.

NOTE: Do not back off nut to install cotter pin.

... **SECTION 6A** ...

ENGINE
GASOLINE

ENGINE
GASOLINE

6A



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 73-IM-3

GROUP: 6A-ENGINE-1

DATE: June 25, 1973

Subject: OIL FILTER COOLER ADAPTER SEEPAGE

The following is how to correct oil seepage at the oil cooler fittings at the oil filter cooler adapter. Only a few of the first motor homes produced may experience the seepage problem.

Recommendations

When oil seepage is experienced at the oil filter cooler adapter fittings, the adapter should be removed from the oil filter base as follows:

1. Remove the oil filter.
2. Remove the adapter bolt.
3. Disconnect the oil cooler lines at the adapter fittings.
4. Remove the fittings from the adapter.
5. The threads for the oil cooler lines in the adapter should be tapped with a 1/2-14 Dryseal NPTH thread tap.
6. The adapter should be thoroughly cleaned and rinsed to rid it of all metal particles and reassembled to the engine.
7. Apply pipe joint compound to adapter fittings and install.
8. Connect oil cooler lines.
9. Install adapter bolt.
10. Install oil filter.



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

NT 1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 73-1M-14
GROUP: 6A-Engine-2
DATE: Dec. 6, 1973

SUBJECT: Silastic Valve Cover Gasket Installation

A new silastic sealer was started in production on May 1, 1973, to take the place of the production gasket. The production gasket will be used for back up on machine repairs only.

The silastic sealer may be used for field service repairs in place of the rubber service gasket now being used. Remove existing gasket material with a gasket scraper; however, it is not necessary to remove all minute traces of the silastic sealer when resealing the valve cover during repairs. The silastic sealer allows a better valve cover bolt torque retention and also makes a better oil seal.

The silastic sealer is supplied in tubes; it is suggested that a tube wringer (J-25027) be purchased to allow uniform application. The tube wringer (J-25027) can be purchased from Kent-Moore, 1501 South Jackson Street, Jackson, Michigan 49203, for \$3.95 and the silastic sealer can be purchased from G.M.P.D., Part No. 1051435.

Use the following procedure for the installation of the silastic sealer:

1. Remove valve cover.
2. Remove existing gasket material with a gasket scraper.

NOTE: It is not necessary to remove all minute traces of silastic sealer from valve cover.

3. Thoroughly clean valve cover of all grease and air dry.
4. Position valve cover so that it is firmly retained such as in jaws of a vise.

CAUTION: Do not distort cover.

5. Using Tube Wringer J-25027 apply a 3/32" bead of silastic sealer on the valve cover gasket surface as shown in Fig. 1. Be sure to run a continuous bead on the inside of the valve cover bolt holes and be sure that there is no gap in the sealer bead.

6. Wipe sealing surface of cylinder head to remove all traces of oil.

CAUTION: Use parts cleaning solvent or equivalent to remove all traces of oil.

7. Position valve cover on head aligning holes in valve cover with holes in head.
8. Install valve cover bolts and torque to 7 ft. lbs.

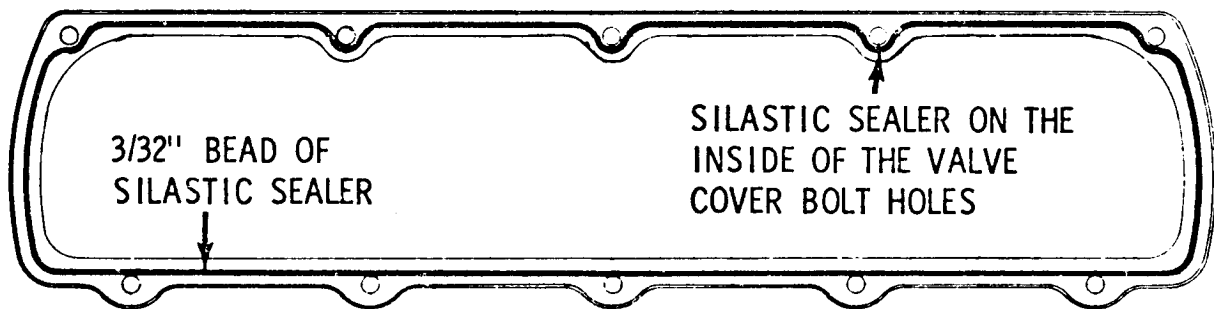


FIGURE 1

... **SECTION 6M** ...

**ENGINE
FUEL
SYSTEM**

ENGINE
FUEL SYSTEM **6M**



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IT 1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 73-1M-11

GROUP: GM-Engine Fuel-1

DATE: November 6, 1973

SUBJECT: Fuel Filter and System Maintenance

MODELS: All

Several cases of poor engine performance and/or rough engine idle have been reported.

The cause was determined to be a clogged fuel filter at the carburetor thus starving the engine of fuel. The filter is a pleated 2" long paper element as shown in the Parts Book X-173019 on Page 12-10.

It is recommended that the filter be changed at 12,000 miles or 12 month intervals as outlined in the maintenance schedule. In some cases due to excessive dirt and foreign material in fuels or fuel system, this would be shortened.

... **SECTION 6Y** ...

ENGINE
ELECTRICAL

ENGINE
ELECTRICAL

6Y



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-IM-10

GROUP: 6Y - ENGINE
ELECTRICAL - 1

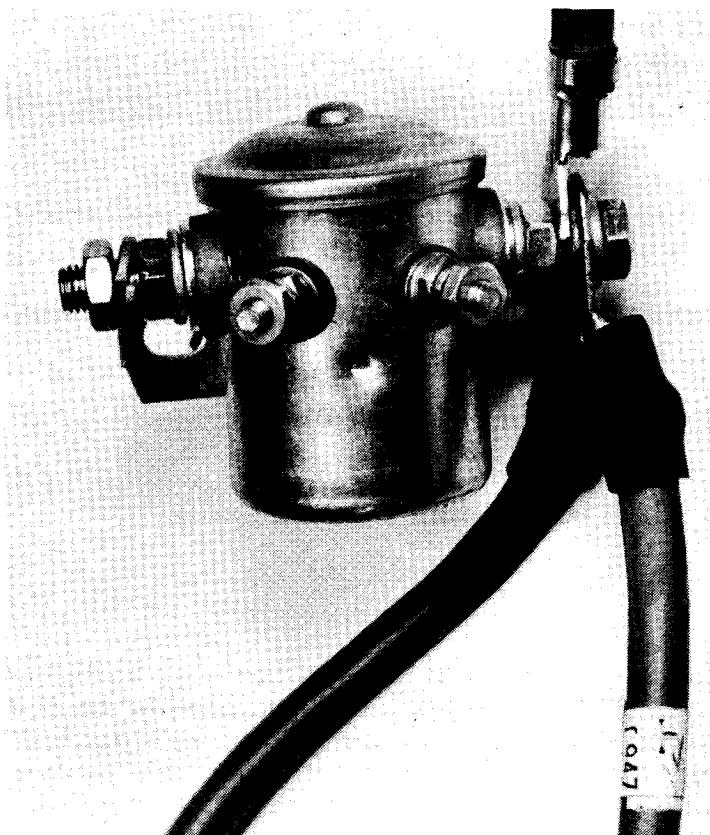
DATE: March, 1975

SUBJECT: Battery and Starter Cable Connections to
Battery Boost Magnetic Switch

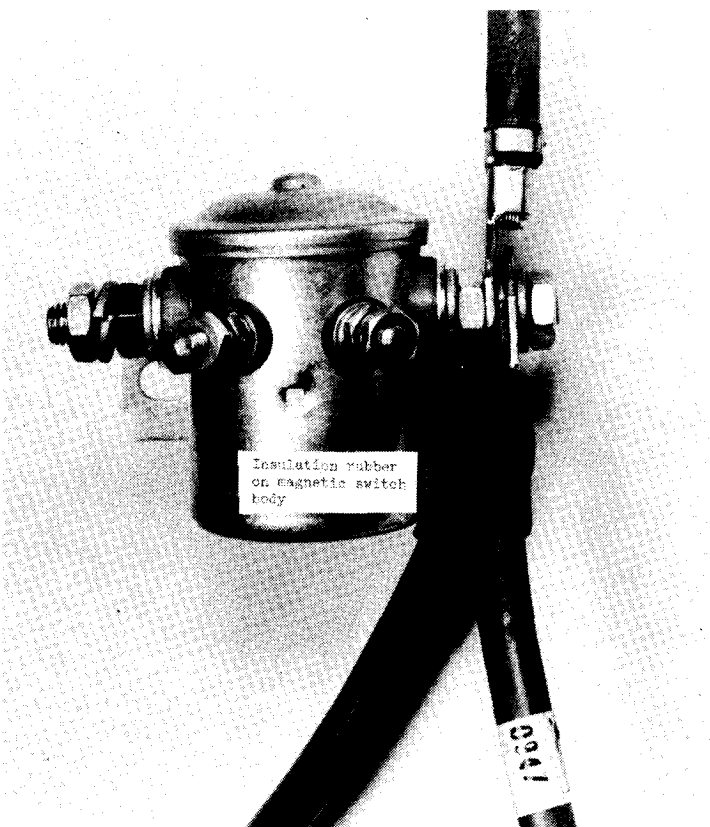
MODELS: All Motor Homes and Transmodes

Technical Service has received information that battery and starter cables terminating at the magnetic switch located on the fire wall as well as the wires terminating at the living area magnetic switch located in the battery compartment may have been improperly installed on some vehicles by dealers. If the cables are installed incorrectly, a ground may be created to the magnetic switch.

Proper method of installing these cables to the magnetic switch is to be certain that the flat side of the cable ends are installed towards the magnetic switch, being certain that the rubber insulator does not touch the switch itself. (See Photographs)



CORRECT METHOD OF TERMINATING CABLE ENDS



INCORRECT METHOD OF TERMINATING CABLE ENDS



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

MT 1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-IM-11
GROUP: 6Y-Engine
Electrical-2
DATE: April, 1975

SUBJECT: HEI Distributor Pickup Coil Identification

MODELS: 1975 Motor Homes and Transmodes

Starting with Transmode TZE365V100472 and Motor Home TZE165V100473, these vehicles are equipped with High Energy Ignition (HEI). The HEI pickup coil is similar to the pickup coils used on other GM vehicles, but is identified by a yellow plastic tie around the two leads located about one inch from the pickup coil.



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 76-IM-11

**GROUP: 6Y-Engine
Electrical-1**

DATE: April, 1976

SUBJECT: DELCO-REMY MAINTENANCE FREE BATTERIES

**MODELS: GMC MOTORHOMES AND TRANSMODES EQUIPPED WITH MAINTENANCE
FREE BATTERIES**

The Delco-Remy maintenance free batteries have been scheduled to be used in the following applications:

<u>Application</u>	<u>Type</u>
MotorHome Main (automotive) Battery	Freedom Catalog No. R89-5
TransMode:	
Main Battery	Freedom Catalog No. R89-5
Auxiliary Battery	Freedom Catalog No. R89-5
MG Cranking Battery	Freedom Catalog No. R85-5

A general description and testing procedure of the maintenance free batteries is in Section 6Y of the 1975-76 Maintenance Manual. The following information has been released to supplement the 1976-76 Maintenance Manual.

Under normal operation, two indications can be observed.

1. GREEN DOT VISIBLE

Any green appearance is interpreted as a "green dot" and the battery is ready for testing. On rare occasions following prolonged cranking, the green dot may still be visible. Should this occur, charge battery as described in "Charging Procedure" section.

2. DARK – GREEN DOT NOT VISIBLE

If there is a cranking complaint, the battery should be tested as described in Section 6Y under the heading "Testing the Maintenance-Free Battery".

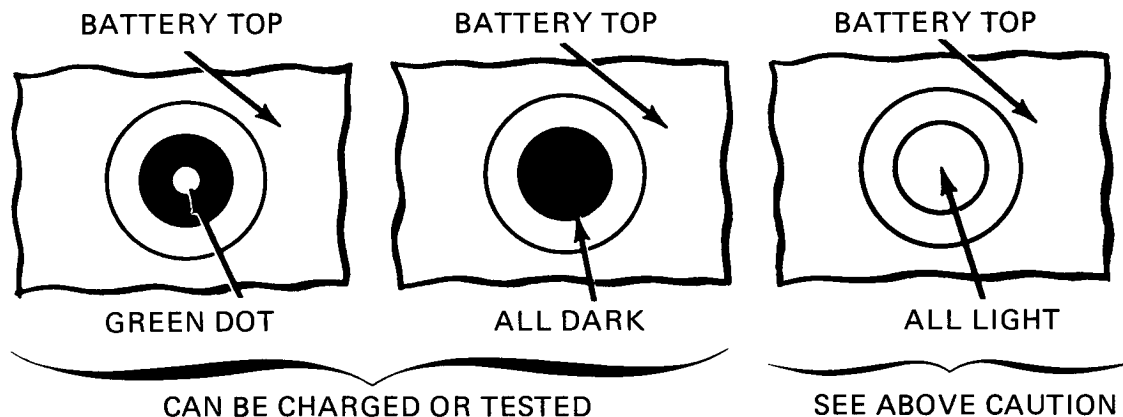
CHARGE INDICATOR

The charge indicator is to be used with accepted diagnostic procedures **only**. It is **not** to be used to determine if the battery is good or bad or charged or discharged. The indicator is a built-in hydrometer in one cell and provides visual information for battery testing.

It is important when observing the indicator that the battery be relatively level and have a clean indicator top to see the correct indication. A light may be required in some poorly-lit areas.

CAUTION

ON RARE OCCASIONS, THE INDICATOR WILL TURN LIGHT YELLOW. NORMALLY, THE BATTERY IS CAPABLE OF FURTHER SERVICE. HOWEVER, IF A CRANKING COMPLAINT HAS BEEN REPORTED, CHECK FOR THE LIGHT OR DARK INDICATION. IF "LIGHT", DO NOT TEST, CHARGE, OR JUMP START; OR AN INTEGRAL SPARK WITHIN THE BATTERY MAY CAUSE THE BATTERY TO EXPLODE AND POSSIBLY CAUSE PERSONAL INJURY.



BATTERY CHARGING PROCEDURES

Charging equipment for ordinary batteries is suitable for maintenance free batteries.

DO NOT CHARGE A BATTERY IF THE INDICATOR IS LIGHT YELLOW.

12-VOLT MAINTENANCE-FREE BATTERY CHARGING GUIDE

Stop charging when the **green dot** appears or when the maximum charge shown below is reached.

Battery Model	Slow Charging Rate	Fast Charging Rate
85-5	5A @ 10 Hours 10A @ 5 Hours	20A @ 2-1/2 Hours 30A @ 1-1/2 Hours
89-5	5A @ 15 Hours 10A @ 7-1/2 Hours	20A @ 3-3/4 Hours 30A @ 2-1/2 Hours 40A @ 2 Hours 50A @ 1-1/2 Hours

TO AVOID DAMAGE charging rate must be reduced or temporarily halted if:

1. Battery case feels hot (125° F).
2. Violent gassing or spewing of electrolyte occurs.

After charging in accordance with the tables, the green-dot may appear after slightly tipping the battery from side to side a few times. If the **green-dot** does not appear, the battery is still sufficiently charged for testing.

TESTING THE MAINTENANCE-FREE BATTERY

Following the procedure outlined in Section 6Y of the 1975-76 Maintenance Manual for testing of the maintenance free battery, the maintenance free battery test specifications are as follows:

Dry Cat. No.	Volts	Amps. for Load Test	Reserve Capacity (Minutes)	COLD CRANKING CURRENT S.A.E. SPEC. J537h	
				@ 0° F (in Amps.)	@ - 20° F (in Amps.)
85-5	12	170	80	350	270
89-5	12	230	125	465	375



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1491

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-TM-2
GROUP: 6Y-Engine
Electrical-1
DATE: Nov., 1974

SUBJECT: Battery Cap Retention

MODELS: 1973 and 1974 230 and 260 Motor Homes

Loss of the battery caps on the 1973 and 1974 230 and 260 Motor Homes may be caused by lateral motion of the batteries in the tray.

PARTS INFORMATION

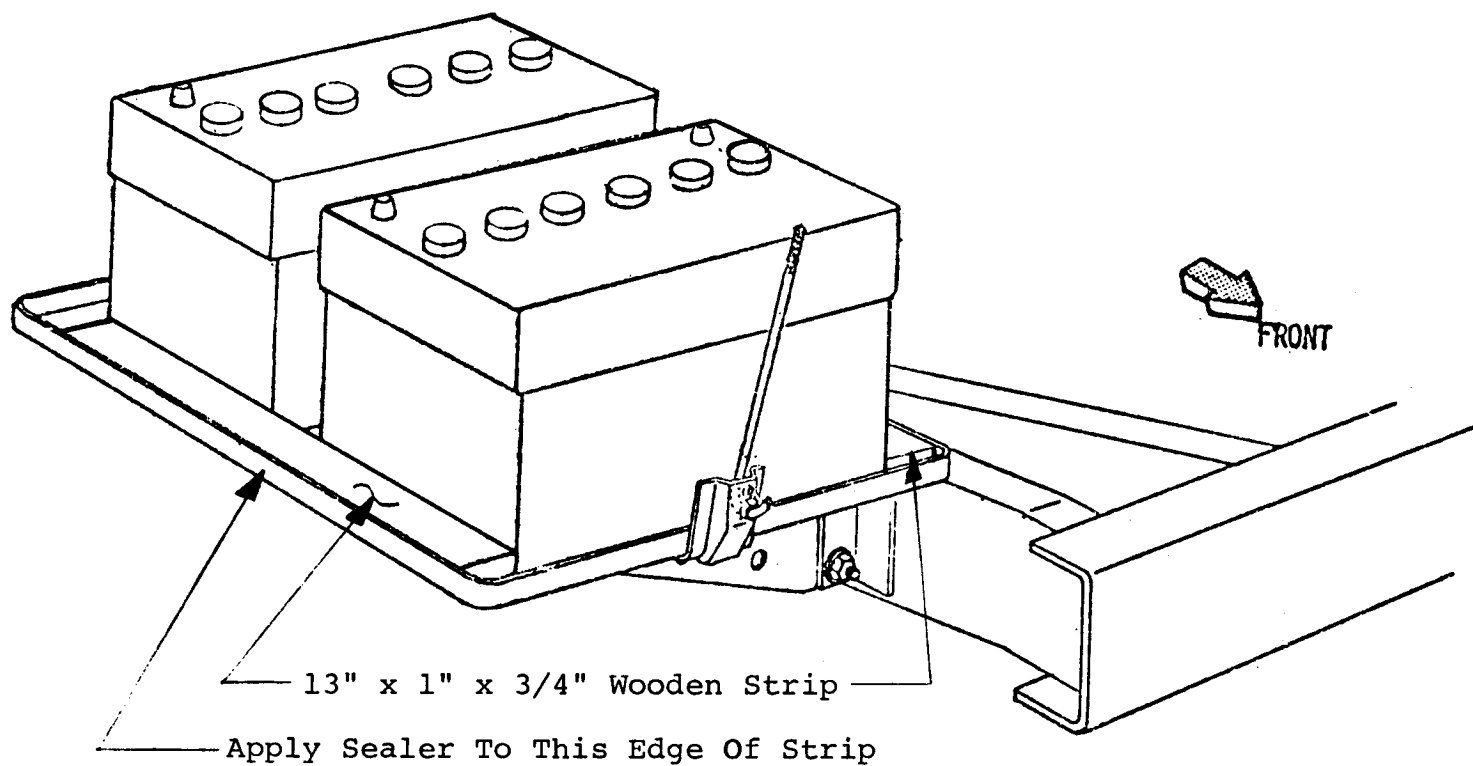
<u>Qty.Veh.</u>	<u>Part Number</u>	<u>Description</u>
2 As Required	NPN 718253	13" x 1" x 3/4" Wood Strip Sealer

INSTRUCTIONS

Apply sealer to one edge of wood strips and install on either side of batteries in battery tray. Side of wood strip with sealer should be installed toward the outer edge of the battery tray as illustrated.

WARRANTY INFORMATION

<u>Labor Operation</u>	<u>Description</u>	<u>Flat Rate</u>
T104124	Battery Cap Retention	.3 Hr.



... **SECTION 7** ...

TRANSMISSIONS
&
CLUTCHES

TRANSMISSIONS
& CLUTCHES

7



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IT 1402

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 73-1M-5

GROUP: 7 Trans

DATE: September 5, 1973

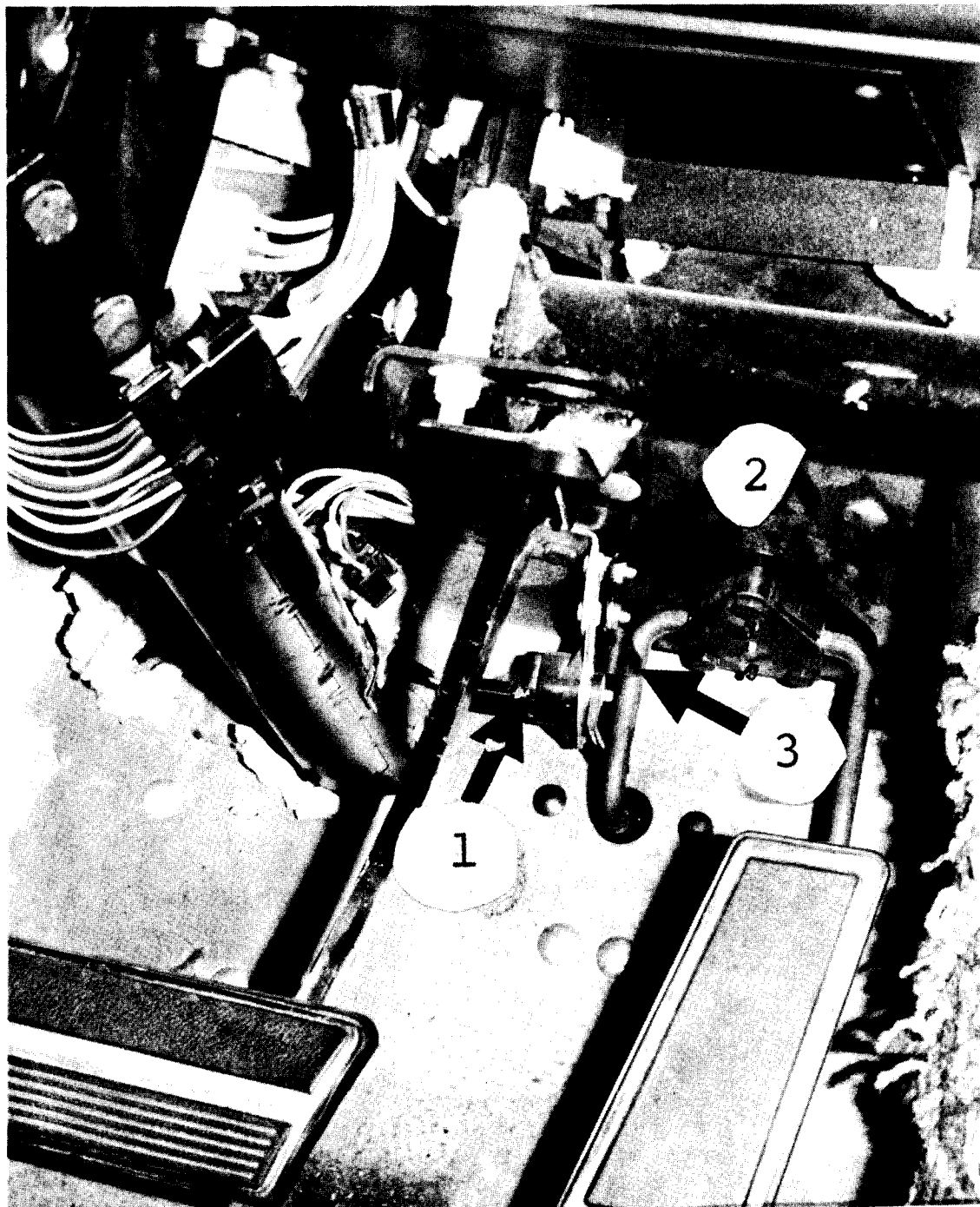
SUBJECT: Transmission Detent-Downshift Switch Adjustment

MODELS: All

The procedure for adjusting the transmission detent-downshift switch is:

1. Remove engine cover and air cleaner and assure that vehicle has full throttle travel, (adjust toe panel accelerator cable bracket if necessary).
2. Reinstall air cleaner and engine cover.
3. Connect test light to upper terminal on downshift switch, (see item 1, figure 1).
4. Loosen downshift switch mounting bolts, item 2, figure 1.
5. Fully depress accelerator pedal and turn ignition to run position.
6. Rotate downshift switch upward until test lamp lights - continue rotation 10°.
7. Tighten downshift switch mounting bolts.
8. Release accelerator pedal and secure stop, item 3, figure 1.

NOTE: Refer to photo on back page.



1. TERMINAL TO
TRANSMISSION SWITCH
2. DOWNSHIFT SWITCH
MOUNTING BOLTS
3. ACCELERATOR PEDAL STOP



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 76-IM-8

GROUP: 7-Transmission
& Clutches-1

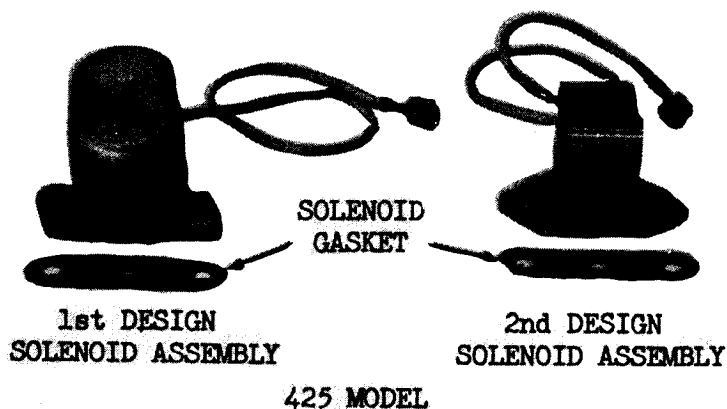
DATE: January, 1976

SUBJECT: Detent Solenoid - 425 Model Transmission

MODELS: All GMC MotorHomes and TransModes

A new detent solenoid has been released for the 425 model transmission used in all GMC MotorHomes and TransModes. The new solenoid has a thinner base and requires shorter screws for proper installation.

Parts package 8626975 (order on an "As Required" basis) includes the new solenoid and shorter screws and supersedes part number 1993319.



... **SECTION 9** ...

**STEERING
SYSTEM**



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 74-IM-9

GROUP: 9-Steering-

DATE: February, 1974

SUBJECT: Steering Torque Specifications

MODELS: All Motor Homes

The torque specifications for the upper and lower intermediate steering shaft pinch bolts in the Motor Home Maintenance Manual X7425, page 9-63, read incorrectly. The torque specification for the upper intermediate steering shaft pinch bolt in the Dealer Product Improvement Program, page 6, also reads incorrectly. The torque specifications in both publications should read:

Upper Intermediate Steering Shaft Pinch Bolt

Tighten nut to 40-45 ft. lbs. after bolt head and nut have been firmly seated.

Lower Intermediate Steering Shaft Pinch Bolt

Torque nut to 35-45 ft. lbs.



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 74-IM-13

GROUP: 9 - Steering - 2

DATE: April, 1974

SUBJECT: FRONT END GEOMETRY ADJUSTMENT DIAGNOSIS
MODELS: ALL 1973 & 1974 GMC MOTOR HOMES

The following is a guideline for diagnosis of improper front end adjustment.

Improper adjustment can be affected by a number of minor items which are a part of normal maintenance checks.

- First, check for proper vehicle loading. That is, uniform weight distribution throughout the vehicle.
- The tires should be checked for proper inflation — GMC recommends 60 psi. Under-inflated tires can cause a condition which appears to be improper front end adjustment.
- Curb and ride height should be checked for proper settings.
- Front end alignment should be checked for proper specifications.

If after these have been checked and proper adjustment cannot be made, the problem may lie in improper steering gear over-center adjustment or by improperly adjusted worm thrust bearings.

It is necessary that the steering gear assembly be completely removed from the vehicle for these adjustments to be made. An in-vehicle check of the steering gear will not pinpoint a thrust bearing adjustment error. Also adjustment of the steering gear in the vehicle is discouraged because of the difficulty encountered in adjusting the worm thrust bearing preload and the confusing effects of the hydraulic fluid

in the gear. Since a gear adjustment is made only as a correction and not as a periodic adjustment, it is better to take the extra time and make the adjustment correctly the first time.

BACKGROUND

Motor home steering gear assemblies will incorporate a new input shaft lower thrust bearing configuration. The thrust bearing itself remains unchanged, but both bearing races are conical, and essentially become axial spring washers to prevent loss of thrust bearing preload. See Figure 1.

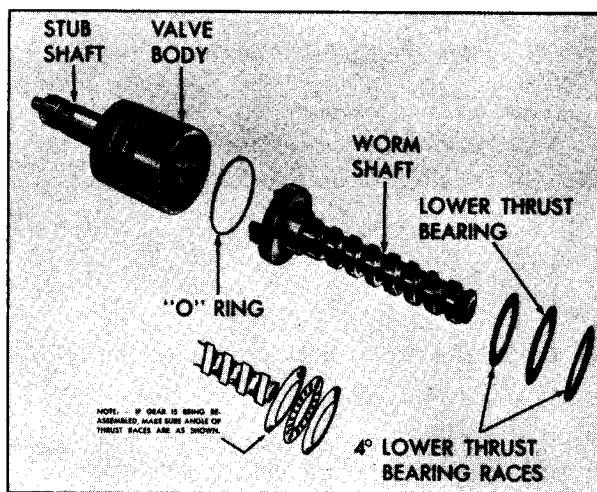


Figure 1.

ADJUSTMENT PROCEDURES

THRUST BEARING ADJUSTMENT (new type)

If a gear is known to contain the new thrust bearing parts, thrust bearing adjustment in service is simplified.

Recommended procedure:

1. Drain power steering fluid from gear by rotating the stub shaft full travel in both directions several times.



Figure 2.

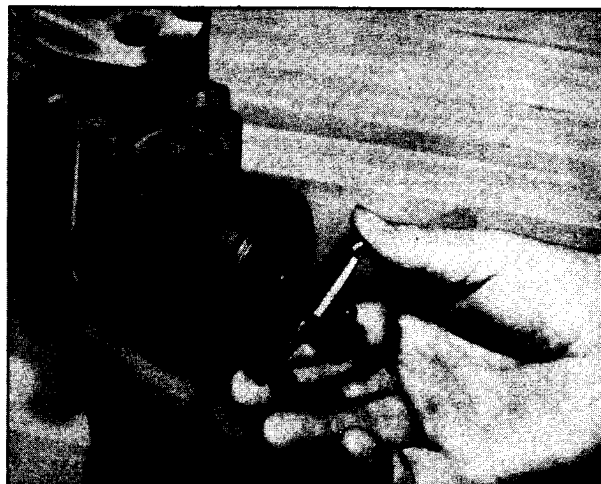


Figure 3.



Figure 4.



Figure 5.

2. Loosen and remove adjuster plug lock nut. (Fig. 2 and 3)
3. Turn the adjuster plug in (clockwise) until the plug and thrust bearing are firmly bottomed — approximately 20 ft. lb. (Fig. 4)
4. Mark the housing even with one of the holes in the adjuster plug. (Fig. 5)
5. Measure back (CCW direction) $\frac{3}{16}$ to $\frac{1}{4}$ inch and remark housing. (Fig. 6)
6. Rotate adjuster (CCW) until hole in adjuster is in line with second mark. (Fig. 7)
7. Tighten lock nut securely. Hold (or have held) adjuster plug to maintain alignment of hole with mark. (Fig. 8)

8. Using an in. lb. torque wrench, turn the stub shaft to the right stop and then back $\frac{1}{4}$ turn. Measure the torque. Reading should be taken with beam of torque wrench near vertical while turning CCW at an even rate. (Fig. 9). If reading is less than 4, or more than 10 in. lbs., use other adjustment procedure listed.

THRUST BEARING ADJUSTMENT (previous type)

Since past model steering gears, service kits, and service gears contain the flat, non-springy, thrust bearing races, the first adjustment procedure listed cannot be used. If there is any doubt about the type of races, use this procedure to adjust the thrust bearing preload:

1. Drain gear by rotating stub shaft from stop to stop several times.

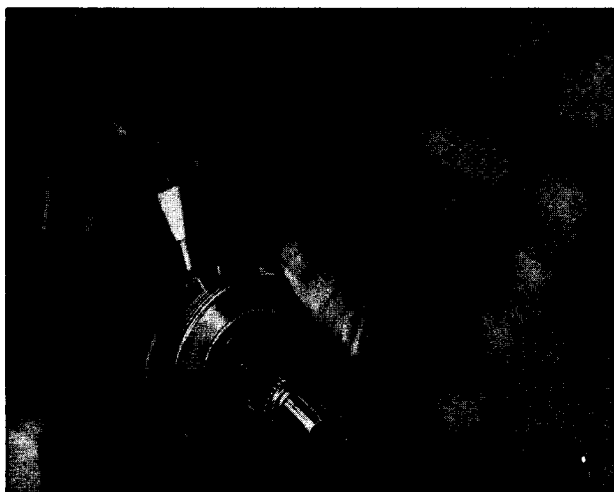


Figure 6.



Figure 7.

2. Loosen pitman shaft preload adjuster screw lock nut and turn the preload adjuster screw 1-1/2 turns CCW. Retighten the lock nut. (Fig. 10) (If when turning the preload screw CCW, it bottoms, turn back CW 1/2 turn).
3. Loosen (but, do not remove) the adjuster plug lock nut. (Fig. 2)
4. Loosen the adjuster plug one (1) turn CCW. (Fig. 11)
5. Turn the stub shaft to the right stop and then back 1/4 turn. Measure the drag torque, using an in. lb. torque wrench. (Fig. 9) Bottom the adjuster plug firmly (approximately 20 ft. lbs.) by turning it CW. (Fig. 11) Then back it off until the total torque reading is 3-4 in. lbs. in excess of the drag torque. (Ex: drag torque reading - 3 in. lbs. Total torque reading with adjuster plug tighten 6-7 in. lbs.)

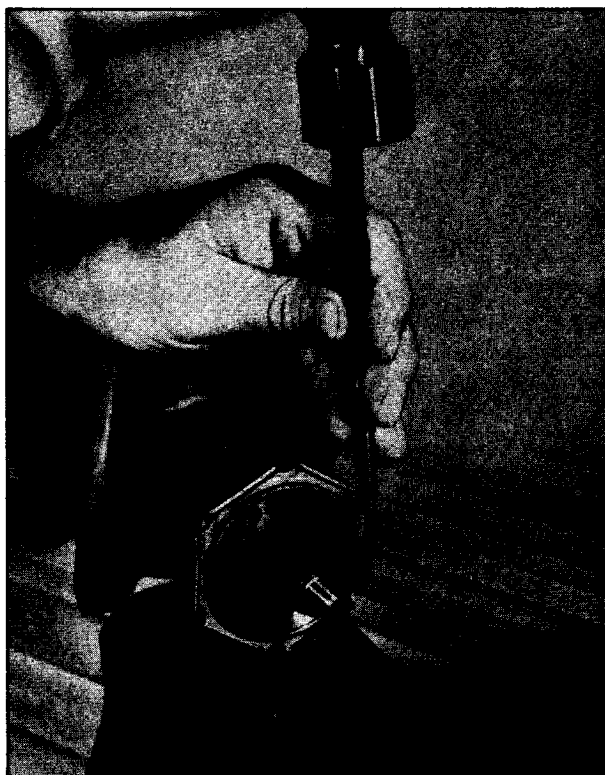


Figure 8.



Figure 9.

6. Tighten the adjuster plug lock nut securely. (Fig. 8)



Figure 10.



Figure 12.



Figure 11.

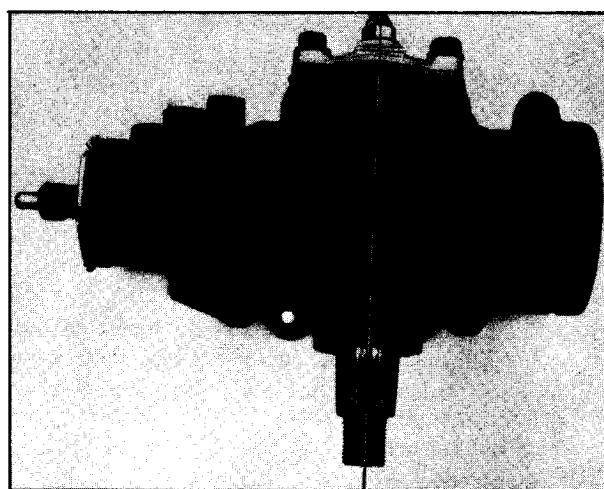


Figure 13.

NOTE: Preload torque tends to drop off when the lock nut is tightened. Therefore, the torque reading must be rechecked with the lock nut tight, and the torque must still be 3-4 in. lbs. in excess of the seal drag.

CAUTION: It is not possible to properly adjust the thrust bearing preload unless the adjuster plug is firmly bottomed out and the torque set while the adjuster plug is being loosened. Never attempt to adjust the thrust preload while tightening or advancing the adjuster plug into the gear assembly.

PITMAN SHAFT "OVER-CENTER" SECTOR ADJUSTMENT (all types)

1. Turn the stub shaft from stop to stop, counting the total number of turns. Divide this number by 2. Starting at either stop, turn the stub shaft 1/2 the total number of turns. This is the "center" of the gear. (The flat on the stub shaft is normally up and parallel with the side cover when the gear is "on center" (Fig. 12), and the block tooth on the pitman shaft is in line with the over-center preload adjuster. (Fig. 13)



Figure 14.

2. Rotate the torque wrench approximately 45 degrees each side of center, and "read" near or on center

(highest reading). (Fig. 14) Loosen the lock nut and turn the preload adjusting screw CW until the correct "O" center torque, in excess of the reading just taken, is obtained. (Fig. 14)

Limits for "new" and "used" gears are different, as follows:

- (a) "New" gear over-center torque to be 4-8 lbs. in. additional torque, but total over-center torque must not exceed 18 lb. in.
- (b) "Used" gear (400 or more miles). Over-center torque to be 4 to 5 lbs. in. additional torque, but total over-center must not exceed 14 lbs. in.

Tighten the lock nut to 35 ft. lbs. while holding the preload adjuster screw. Recheck the "O" center adjustment.

... **SECTION 10** ...

**WHEELS
&
TIRES**



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

MT 1492

IMPORTANT—All Service Personnel Should Read and Initial

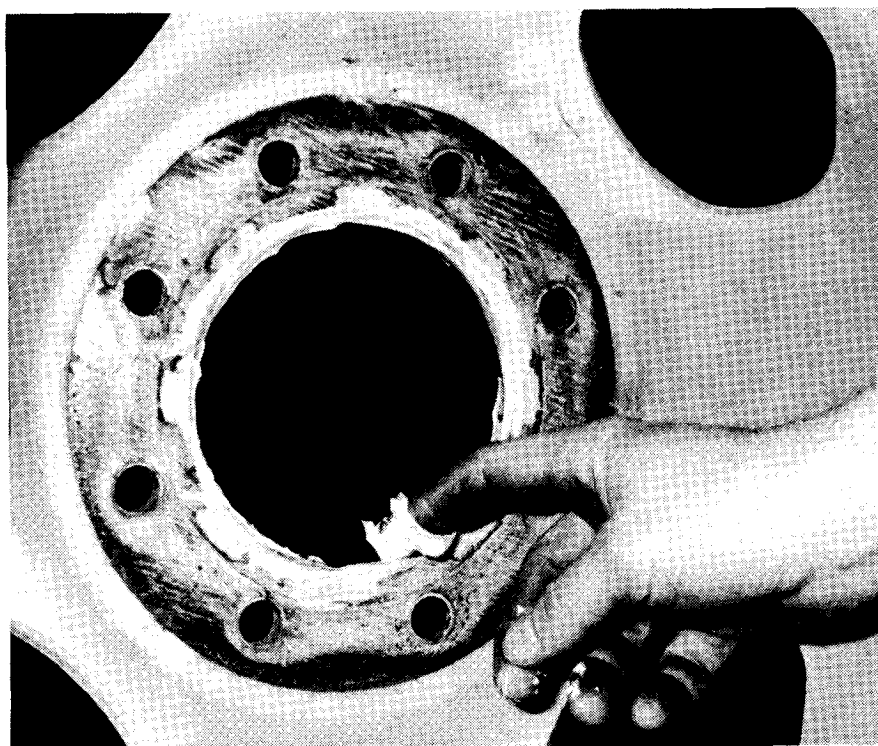
NUMBER: 75-IM-16
GROUP: 10-Wheels &
Tires-1
DATE: April, 1975

SUBJECT: Removal of Wheels from Hubs

MODELS: All Motor Homes

It is suggested that if difficulty is encountered in removing a wheel from a hub, that the hub and wheel mounting area be cleaned and a light coating of grease be applied to the inner surface of the hub hole of the wheel before reinstallation. This will assist in the prevention of unnecessary binding at the hub.

CAUTION: MAKE SURE NO GREASE CONTACTS THE WHEEL STUDS.





Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 76-IM-10

GROUP: 10-Wheels and
Tires-2

DATE: March, 1976

SUBJECT: Tire Valve Stem Extension

MODELS: All GMC MotorHomes and TransModes

A two inch tire valve extension is now being used on 1976 GMC MotorHomes and TransModes. The extension allows the owner to check and adjust tire inflation without removing the wheel cover. The new extension can be used on all GMC MotorHomes and TransModes.

PARTS INFORMATION

2" Tire Valve Extension - Procure Locally

INSTALLATION INSTRUCTIONS

1. Remove wheel cover.
2. Tighten tire valve core.
3. Install tire valve stem extension.
4. Inflate tire to 60 psi.
5. Install wheel cover so that a hand hole lines up with tire valve stem.
6. Repeat for remaining wheels and tires.



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 77-IM-1

GROUP: 10-WHEELS &
TIRES-1

DATE: November, 1976

SUBJECT: Use of Radial-Ply Tires on GMC Motorhomes

MODELS: All GMC Motorhomes and Transmodes

There appears to be some confusion among dealers and owners as to the use of radial-ply tires on GMC Motorhomes. This confusion is aggravated by GMC Dealer Recall Campaign No. 74C05 cautioning against use of radial tires.

The GMC policy regarding the use of radial-ply tires is as follows:

All GMC Motorhomes, starting with Serial No. TZE165V101674, are equipped with Wheel Part No. 359402. This wheel is designed to accept the loads imposed by radial-ply and bias-ply tires and is stamped with the word "Radial" on the inner rim of each wheel.

GMC Engineering has evaluated various makes and designs of radial-ply tires especially tailored to vehicle suspensions such as that used on the motorhome.

The General Jumbo Steel Belted Radial Tire or its equivalent is currently the only tire approved by GMC for optimum ride and handling characteristics.

A GMC owner may at his election install radial-ply tires on vehicles built after the subject serial number or purchase seven wheels of the correct part number for installation on older models. However, dealers and/or zone service personnel should make it clear to the owner that GMC assumes no further responsibility for ride and handling complaints which result from the operation of the motorhome with radial-ply tires other than the General Jumbo Steel Belted Radial or its equivalent.

Under no circumstances should radial-ply tires be installed on the former style wheels.

If you have any questions regarding this policy, please feel free to contact the Motorhome Service Department.

... **SECTION 12** ...

**CHASSIS —
ELECTRICAL &
INSTRUMENTS**

CHASSIS —
ELECTRICAL &
INSTRUMENTS

12



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

MT 1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 73-1M-12

GROUP: 12-Electrical-1

DATE: November 12, 1973

SUBJECT: Battery System

MODELS: TZE063 & TZE033

One of the recent Motor Home improvements is a 10-GA wire running from the living area fuse block to the motor generator positive battery cable. This in effect connects, in parallel, the living area and the motor generator batteries, thus increasing the living area battery capacity.

We feel that it is important to understand the procedures of operation in order to obtain maximum electrical capacity with a minimum of inconvenience.

BATTERY BOOST SWITCH

The battery switch on the dash should be left in the "BAT NORMAL" position, except when additional power is needed for either battery circuit for short periods of time. It is not recommended to leave the battery switch in the "BAT BOOST" position for extended periods.

NOTE: If the battery boost switch is left in the "BAT BOOST" position for extended periods this can result in all batteries being discharged.

LIVING AREA BATTERIES

The living area battery and the motor generator battery, once connected together in the previously described improvement, will act as a single power source. In this mode the living area battery capacity is greater but should this become depleted the battery that starts the motor generator is also depleted. Should this happen, the quickest way to recharge the system is to start the vehicle engine and let it run for approximately five minutes. It is not necessary to put the battery switch in "BAT BOOST."

NOTE: It is not recommended to attempt to start the motor generator by putting the battery switch in "BAT BOOST" as this could cause an overload condition in the living area circuit breaker or fusible link.

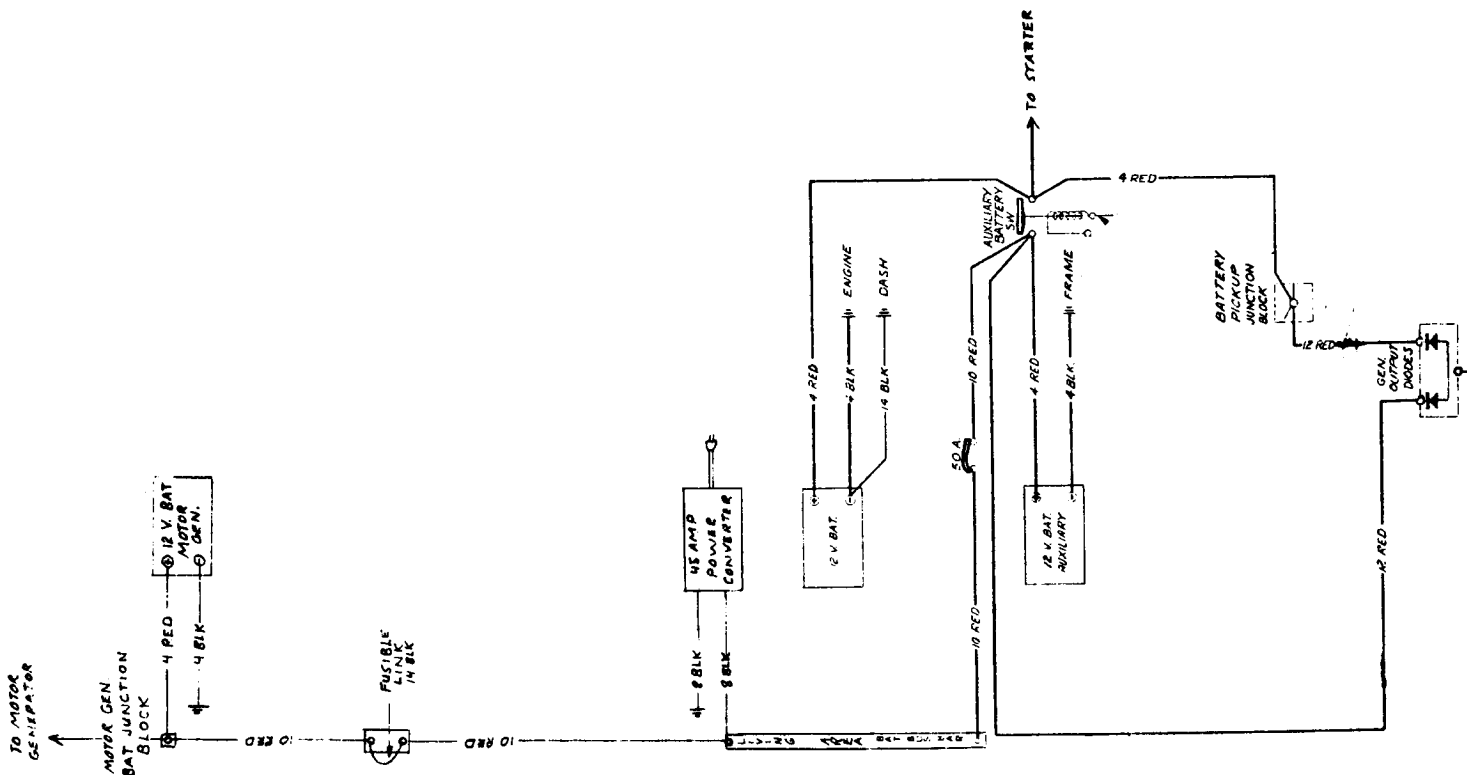
Now start the motor generator - the motor generator battery should be sufficiently recharged by this time. Once the motor generator has started the vehicle engine may be turned off as the living area system is now being charged through the power converter.

Another way of recharging the living area battery system is by simply connecting the vehicle to an external power source. Recharging will take place through the power converter.

CAUTION: Never leave batteries in a discharged state, as permanent damage will occur.

BATTERY SWITCH SOLENOID

Should the occasion ever arise that all the Motor Home batteries are dead, the vehicle can of course be started by jump starting the vehicle battery as described in the owner's manual. But it should be understood that it can also be started by connecting the vehicle to an external power source. The battery boost switch should be in "BAT NORMAL" position and the living area and motor generator batteries should be allowed to charge for approximately one hour. Now put the battery switch in the "BAT BOOST" position, there should be an audible click as the solenoid, located behind the right front access door, engages. This solenoid is activated by the vehicle battery; therefore, if the vehicle battery is completely dead and the solenoid will not engage, make sure the battery switch is in the "BAT BOOST" position and momentarily touch a piece of wire to both of the large terminals on the sides of the battery switch solenoid. This will engage the solenoid and it should remain engaged. At this point the vehicle should start.





Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

MT 1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 73-1M-13

GROUP: 12-Chassis
Elect.-2

DATE: Dec. 6, 1973

SUBJECT: Light Bulb Specifications

MODELS: All

REF: Motor Home Owners Manual, Page 124

Specifications on light bulbs used in the 230 and 260 models have been changed in some areas. The bulb number changes are marked with an asterisk.

Light Bulb Specifications (Instrument panel)

<u>Usage</u>	<u>Quantity</u>	<u>Bulb No.</u>
Alternator Tell Tale	1	161
Brake System Tell Tale	1	161
Generator Tell Tale	1	161
Park Brake Tell Tale	1	74*
Cruise Control Tell Tale	1	74*
Door Ajar Tell Tale	1	74*
Low Fuel Tell Tale	1	74*
High Beam Indicator	1	161
Turn Signal Indicator	2	168
Instrument Cluster Lights	2	194
Speedo Cluster Lights	2	194
Dome Lights	2	211
Radio Dial (AM/FM/Stereo/Tape)	1	566
Radio Dial (Exc. AM/FM/Stereo/Tape)	1	1893
Heater Control	1	1895
Power Level Tell Tale	2	74*

Light Bulb Specifications (Exterior)

Clearance and I.D.	10	67
License	1	67
Side Markers - Front	2	194
Side Markers - Rear	2	194
Back-up Lights	2	1156
Parking and Turn Signals	2	1157
Stop and Tail	2	1157
Headlights	2	6014

<u>Usage</u>	<u>Quantity</u>	<u>Bulb No.</u>
R.H. Dinette Light	2	1141
L.H. Dinette Light	2	1141
Kitchen Light	2	1141
Hall Light	2	1141
Porch Light	1	1141
Compartment Lights	5	1141
Range Hood Lights	2	1156
Rear Compartment Reading Lights	2	1383
Bathroom Lights	6	93
Aisle Lights	3	68*
Step Light	1	68*



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

MT 1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 74-IM-12

GROUP: 12-Chassis Elect.
& Instruments

DATE: April, 1974

SUBJECT: Availability of Warning Tell Tale Light Bulbs

MODELS: All

Ref: Dealer Service Information Bulletin #73-IM-13

Technical Service has received several reports complaining that standard bulb #74 is unavailable through local miniature bulb suppliers. This bulb has a low volume of usage in automotive applications and, therefore, most distributors do not stock it.

This bulb is available, however, through GMC Service Parts Department in a package of 10 bulbs under part number 1550706.



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

T 1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 74-1M-17

GROUP: 12-Elect-2

DATE: April, 1974

SUBJECT: Generator Telltale Light

MODELS: TZE063V and TZE033V

Technical Service has received several reports of the generator telltale light glowing dimly at all times. This condition can exist even though the alternator is operating correctly. It may be caused by a partially discharged vehicle battery or by the small voltage drop across the dual diode isolator.

If the above condition is encountered and the owner of the vehicle expresses concern over it, the following procedure should be followed to assure that it is not being caused by a malfunctioning alternator. The owner should then be assured that the condition is normal and will not cause any trouble in the system.

1. Disconnect the battery ground cable.
2. Connect an ammeter in the circuit at the "BAT" terminal of the generator (see illustration).
3. Reconnect the battery ground cable.
4. Turn on radio, lights high beam, and blower motor high speed. Connect a carbon pile across the battery (see illustration).
5. Operate the engine at a moderate speed as required, and adjust the carbon pile as required to obtain a maximum current output.
6. If ampere output is within 10% of rated output (80 amps) generator is not defective.

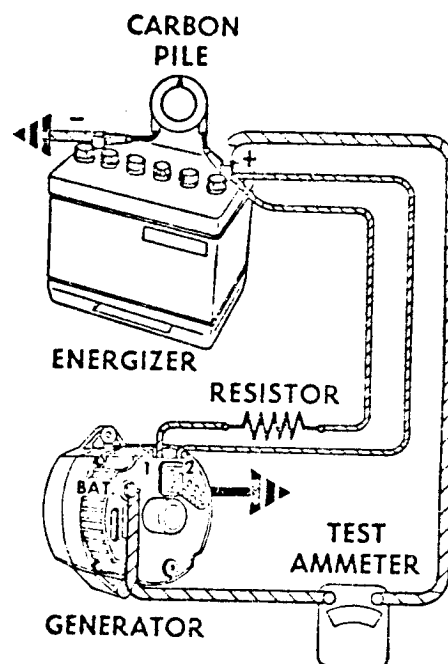
WARRANTY INFORMATION (When applicable)

Flat Rate Time

0.2 hr.

Labor Operation

Y2577-33



TEST CIRCUIT



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 74-IM-18

GROUP: 12-Elec

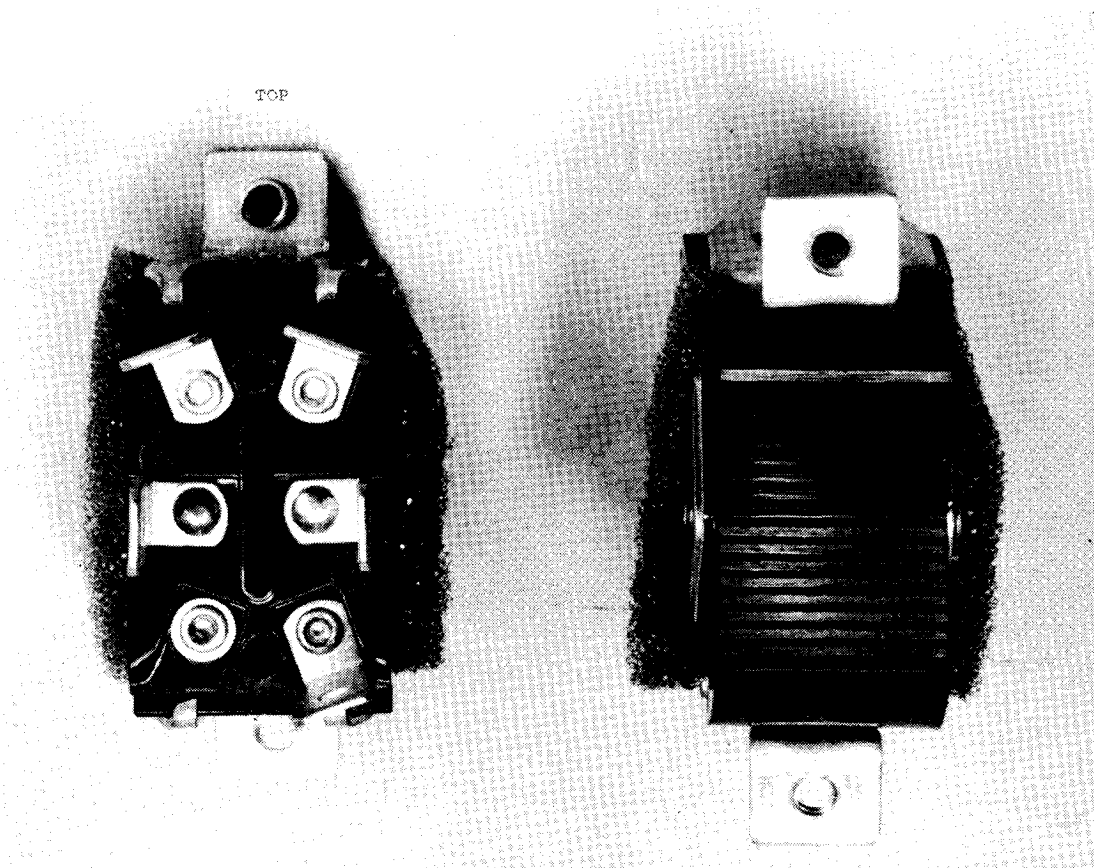
DATE: April, 1974

SUBJECT: Battery Boost Switch

MODELS: All

It has been found that it is possible to install the battery boost switch on the instrument panel upside down. This will cause the batteries to be connected in the boost mode when the switch indicates that they are in the battery normal mode.

The top of the switch is the end with two connector terminals. The bottom has only one terminal (see illustration). If a chronic complaint of the vehicle battery being drained by the living area facilities is encountered the installation of this switch should be checked. Care should be taken when installing a new switch to be sure it is right side up.





Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 73-TM-1

GROUP: 12-CHASSIS

ELECTRICAL & INSTRUMENTS-1

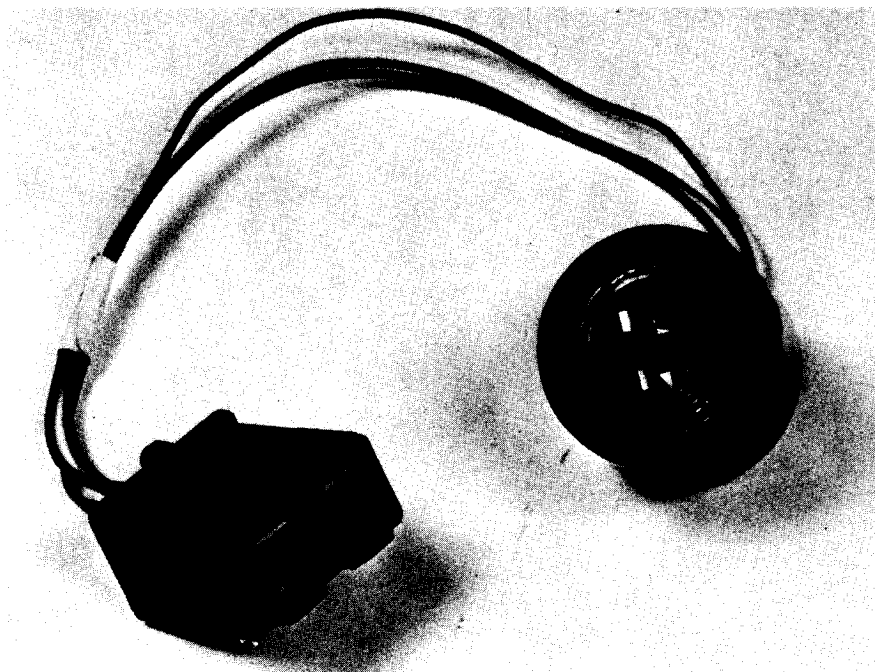
DATE: June 25, 1973

Subject: ELECTRONIC LOW FUEL INDICATOR
MODELS ZE-06081 and ZE-06581 WITH RPO C96 (WARNING LIGHTS)

An improved design electronic low fuel indicator package has recently been released by Engineering for both production and service. With the former package, there were reports that the "tell-tale" lamp on the dash would glow regardless of the amount of fuel in the tank. This was the result of insufficient resistance in the package.

If this problem is encountered, install unit #6495299* to replace unit #1596747. The unit is located in the dash between the gauge cluster and the speedometer and simply plugs in from behind.

*This part should be ordered on an "as required" basis.





Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

T 1491

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 73-TM-10
GROUP: 12-Chassis
Elect-2
DATE: Nov. 26, 1973

SUBJECT: Junction Block to Magnetic Switch Cable

MODELS: Early 23' and 26' Motor Homes

A heavier cable is currently being used in production. Production starting point: The heavier cable started with serial #100371.

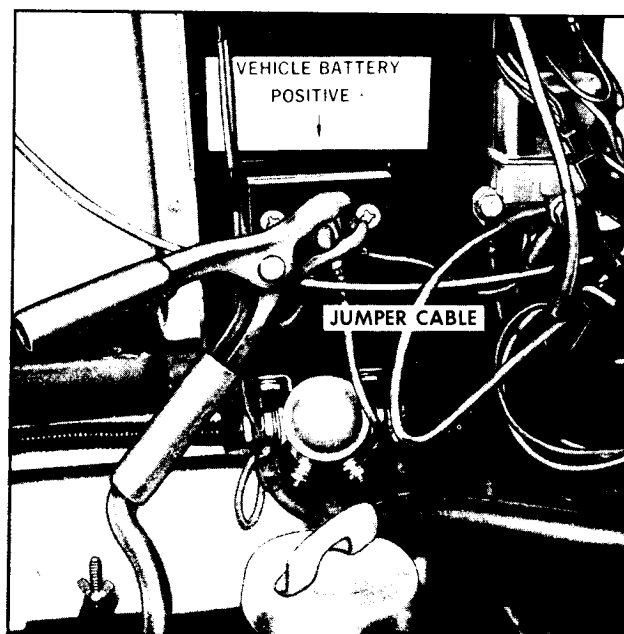
Parts Information

New Part Number - 8910949

Parts Identification

Reference is made to the picture in the upper left hand corner of pg. 54, in the Owners Operating Manual X7321A, supplied with each motor home for location of cable. The new cable is 8 gauge copper wire with a red insulation.

NOTE: The heavier cable would only be required if both batteries were dead and it was necessary to jump start the vehicle as described in the Owners Operating Manual in the section mentioned above.



*Connecting Jumper Cable to
"VEHICLE BATTERY POSITIVE" Stud*



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IT 1491

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 73-TM-12
GROUP: 12-Chassis
Elect.-3
DATE: Dec. 6, 1973

SUBJECT: Cruise Control Light

MODELS: TZE033 and TZE063

An improved design of the cruise control light filter has been recently released by Engineering for both Production and Service. There were reports of the earlier models giving off excessive amounts of light during night time driving.

If this condition is encountered, install unit #6499754* to replace existing lense.

*This part should be ordered on an "as required" basis.



Motor
Home
Service

Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION

GENERAL MOTORS CORPORATION

IMPORTANT-All Service Personnel Should Read and Initial

NUMBER: 77-TM-3

GROUP: 12-Chassis

Electrical-1

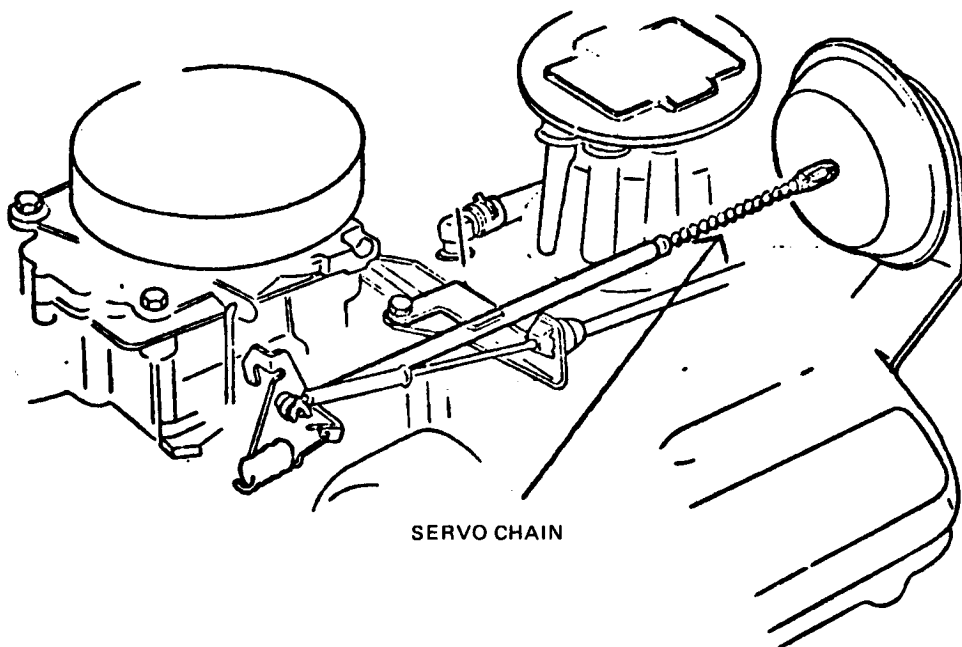
DATE: May, 1977

SUBJECT: CRUISE CONTROL SERVO CHAIN LENGTH

MODELS: ALL MOTOR HOMES

Excessive slack in the cruise control servo chain has been encountered on several GMC Motorhomes. This condition is most evident when the motor home is ascending a hill and the vehicle speed drops off several miles per hour.

The servo chain slack can be eliminated by shortening or adjusting the servo chain length at the servo unit end to minimum slack with the carburetor on slow idle cam and the engine not running.



SERVO CHAIN



Motor
Home
Service

Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION

GENERAL MOTORS CORPORATION

IMPORTANT-All Service Personnel Should Read and Initial

NUMBER: 77-TM-4

GROUP: 12-Chassis

Electrical-2

DATE: June, 1977

SUBJECT: LIVING AREA BATTERY CABLE

MODELS: 1974 – 1977 MOTORHOMES AND TRANSMODES

Living area battery cable abrasion has occurred on some 1974 through early model 1977 motorhomes and transmodes. The abrasion occurs between the firewall and the magnetic solenoid auxiliary battery switch.

Effective with TZE167V101456, the convoluted conduit on the living area battery cable was extended from just above the left headlamp to the magnetic solenoid auxiliary battery switch.

If battery cable abrasion has occurred on vehicles built prior to TZE167V101456, utilize the following procedure:

- Remove the clips that secure the battery cable to the frame.
- Cover the area in which abrasion has occurred with electrical tape.
- All convoluted conduit, (P/N #8885537), from the magnetic solenoid switch to the existing conduit which covers the battery cable. Approximately 65 inches of conduit will be required per vehicle.

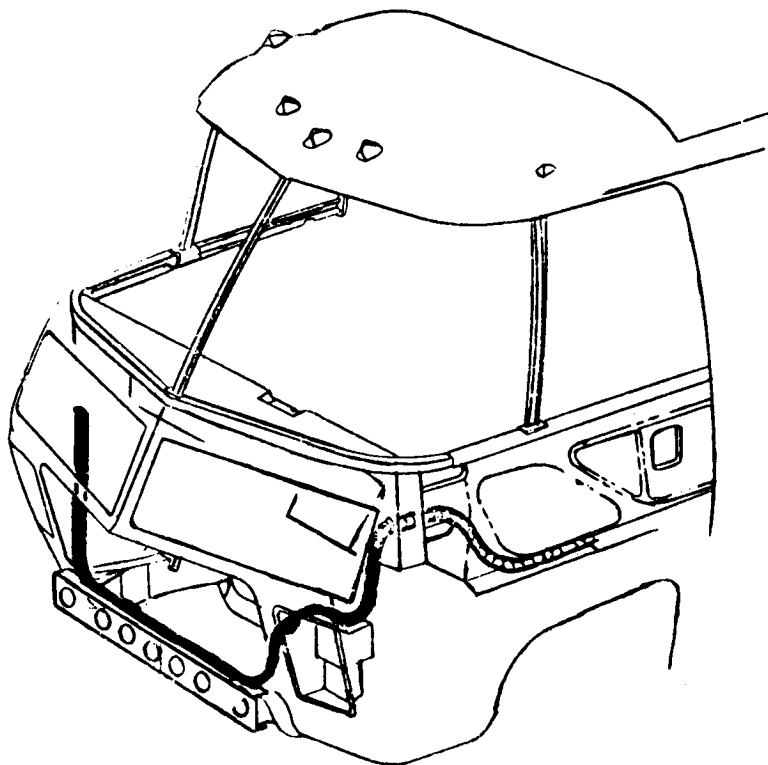
- Secure each end of the conduit with electrical tape.
- Secure the battery cable and conduit to the frame.

PARTS INFORMATION

<u>Quantity</u>	<u>Part Number</u>	<u>Description</u>
As Required	8885537	Convoluted Conduit (25 ft. Roll)

WARRANTY INFORMATION

<u>Labor Operation</u>	<u>Description</u>	<u>Time Allowance</u>	<u>Trouble Code</u>
T067103	Install Convoluted Conduit	0.4	92



... **SECTION 14** ...

BUMPERS



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

3MT 1491

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-TM-8

GROUP: 14-Bumpers-1

DATE: January, 1975

SUBJECT: Front Bumper Mounting Bracket

MODELS: 1973 and 1974 230 and 260 Motor Homes

An additional front bumper bracket is now being used on 1975 model motor homes to prevent front bumper distortion when raising the motor home with its own jack.

The additional front bumper mounting bracket can be installed on 1973 and 1974 230 and 260 model motor homes as follows:

Parts Information

<u>Qty/Vehicle</u>	<u>Part Number</u>	<u>Description</u>
2	790546 *	Bracket-Bumper Mtg.

* Order as an "As Required" part.

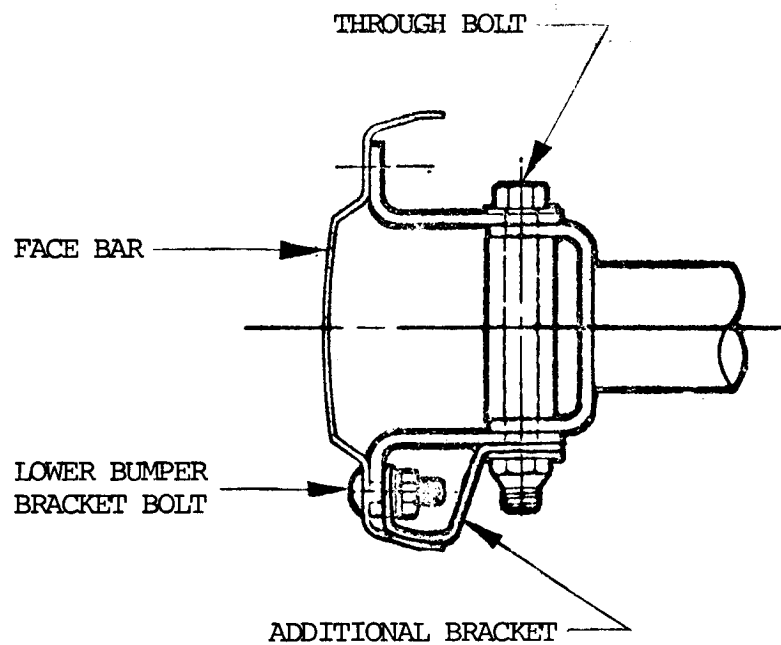
Instructions

1. Remove front bumper through bolt nuts and washers.
2. Remove front bumper lower bracket nuts and washers.
3. Install new brackets using through bolt washers and nuts as shown.
4. Reinstall lower bumper bracket washers and nuts, torque nuts to 35 ft.lbs.
5. Tighten through bolt nuts to 70 ft.lbs.

Warranty Information

When the repairs are within the published warranty use:

<u>Labor Operation</u>	<u>Description</u>	<u>Flat Rate</u>
T124104	Install Front Bumper Bracket	.4 Hr.



FRONT BUMPER
CROSS SECTION

... **SECTION 24** ...

MISCELLANEOUS



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 73-IM-2

GROUP: 24-INTERIOR-1

DATE: June 25, 1973

Subject: PROTECTIVE COVERING ON CARPETS

All motor homes currently produced include a protective carpet covering of 3 mill plastic with a waffle construction. The protective covering is used to eliminate soiling of the carpet during production and delivery.



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 73-IM-4

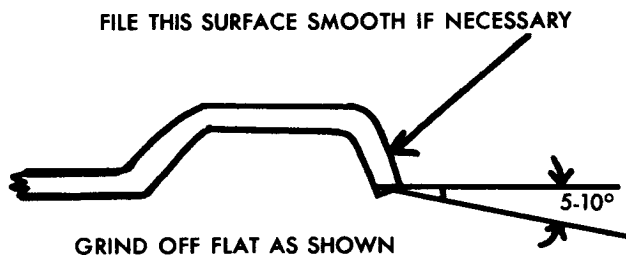
GROUP: 24-INTERIOR-2

DATE: June 25, 1973

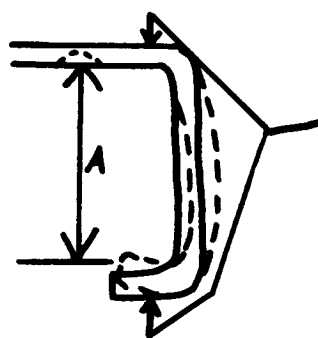
Subject: MOTOR HOME BATH AND CLOSET DOOR LATCHES

Some reports have been received concerning subject doors becoming unlatched while the motor home is in motion. The following procedures are suggested to rework latches when this condition is encountered:

1. Remove the latch assembly from the door and grind the striker end flat as shown in Figure #1. In some cases, it will be necessary to hand-file the excessive tool marks off of the back side of this striker also.
2. Depending on the door fit and the amount of metal removed in Step #1 above, it may be necessary to remove the catch plate and bend it as shown in Figure #2 to provide a snug fit of the latch striker behind the catch when the door is closed. The catch should be positioned so that the locking lip covers the entire ground surface of the striker with the door shut and the striker fully extended. Make sure the door hinge attaching screws are tight also.



LATCH STRIKER (PART NUMBER 101602)



CATCH PLATE (PART NUMBER 101355)



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 73-IM-7
GROUP: 24-Interior-3

DATE: October 24, 1973

SUBJECT: Bath and CLOset Door Latches

MODELS: All

A new door latch assembly has been released for production. The new latch has a sliding bolt with a positive detent (Figure 1).

The new latch may be installed in place of the former style latch if desired. If you wish to replace the door latches, a simple procedure of removing the old latch and cutting a larger hole to accommodate the new latch assembly may be done.

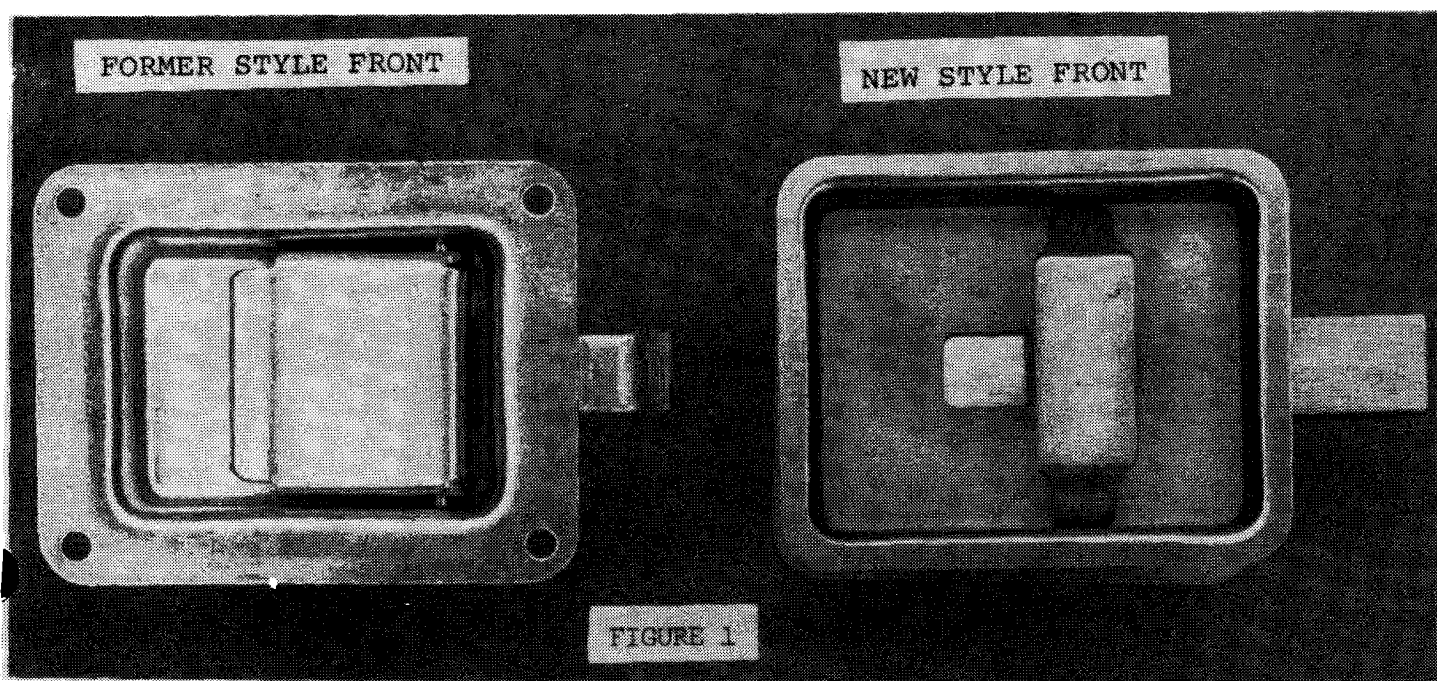
Figure 2 is a template showing the size of the new hole to be cut and a drawing (Figure 3), shows how to use it.

PARTS INFORMATION

New Latch Asm. Part No. 716120

Striker Asm. Part No. 716121

Both the latch assembly and striker are needed for replacement.



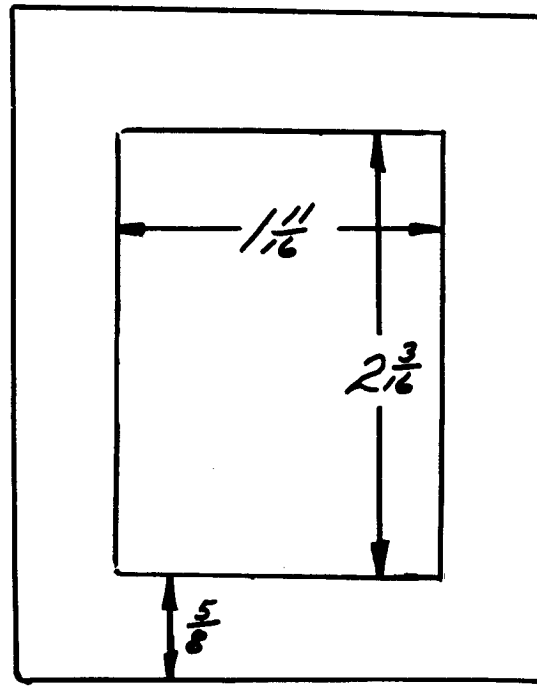


FIGURE 2

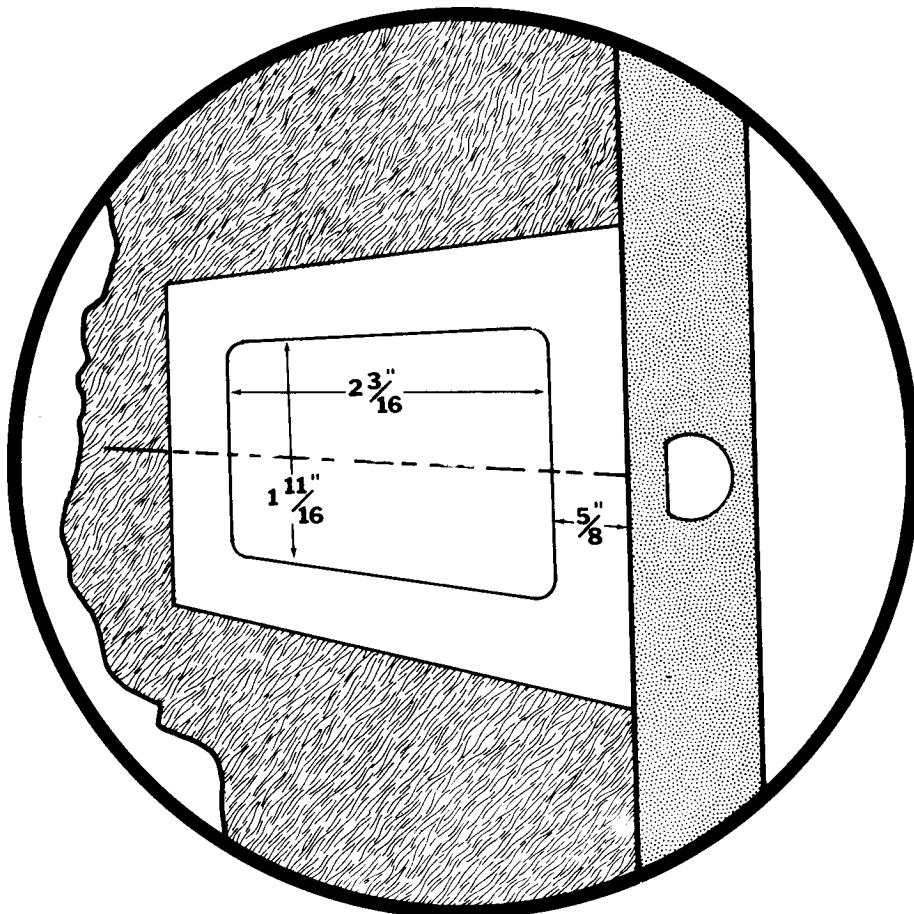


FIGURE 3



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

T 1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 73-1M-16
GROUP: 24-Misc.-4

							DATE: Dec. 14, 1973

SUBJECT: Winterization Procedure for Living Area
Water System for Winter use of Motor Home

MODELS: TZE063 and TZE033

This is to acquaint the Service Technician with the correct procedure to winterize GMC Motor Home living area water and drainage system.

Procedure

1. Completely drain water and holding tank system*.
2. Let water pump run until water system is completely pumped dry.
3. All line and tank drains shall then be closed.
4. If galley has a purifier, close valve between purifier and water system. This must be done before pumping anti-freeze into the water system.
5. Use only a non-toxic, non-flammable anti-freeze. Add (5) gallons of anti-freeze and (5) gallons of water to fresh water tank.
6. Start water pump and open all faucets, galley, and bath.
7. When a colored water comes out the faucets, stop water pump and close all faucets.
8. Flush toilet once. If galley has a water purifier, open valve which was shut.
9. Pour a small amount (approximately 1/2 cup) of anti-freeze into all P-traps in the drainage system.
10. From this point on, no additional water need be added in the water system, so long as the vehicle is considered in winterized storage conditions.

*See page 105-106 (Owner Operating Manual) for complete winterization and draining procedure.



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

T 1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 74-IM-2

GROUP: 24-Misc-1

DATE: Jan. 1974

SUBJECT: Onan Generator Stopping During Operation

MODELS: 4KW and 6KW

The Onan generators are equipped with a low oil pressure shut down switch. The switch is activated at pressures below 8-13 psi. It is possible to activate this switch in a tight turn or a stop if the generator is low on oil. This condition can be eliminated by filling the crankcase to the full mark (do not over fill).



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

T 1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 74-1M-3

GROUP: 24-Misc-2

							DATE: Jan. 1974

SUBJECT: Mobile Radio Transmitters

MODELS: Motor Homes

The extent to which mobile transmitting equipment may interfere with the Motor Home components depends upon the operating frequency and the degree to which the transmitted power is coupled into the system.

Every user and installer of mobile radio transmitting equipment has the obligation to make sure that the operation of the transmitter does not, because of any shortcomings in the equipment or installation, cause interference with the vehicle electrical system. Mobile radio transmitters have been and can be installed on Motor Homes provided:

1. Installations are made in accordance with equipment manufacturer's specifications and supervised by Federal Communications Commission licensed technicians.
2. Power supply leads are filtered in the equipment to prevent radio frequencies and low frequency interference from being directly conducted into the vehicle electrical system.
3. The positive power supply voltage lead is connected directly to the positive living area battery terminal and the negative power supply voltage lead is grounded with the shortest possible lead to the body or frame member.

NOTE: An "ON-OFF" switch must be provided for the operator to prevent battery rundown since power will not be controlled by the ignition switch. Do not control transmitter power through the vehicle ignition switch or fuse-blocks.

4. Transmitter is properly shielded. The shielding in all cases must be grounded to the vehicle body or frame member.
5. The antenna feeds be shielded and properly matched to the transmitter final stage to minimize the standing wave ratio. Antenna feeds are to be kept short and separated as far as possible from the vehicle electrical wiring harness.



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

T 1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 74-IM-4

GROUP: 24-Misc-3

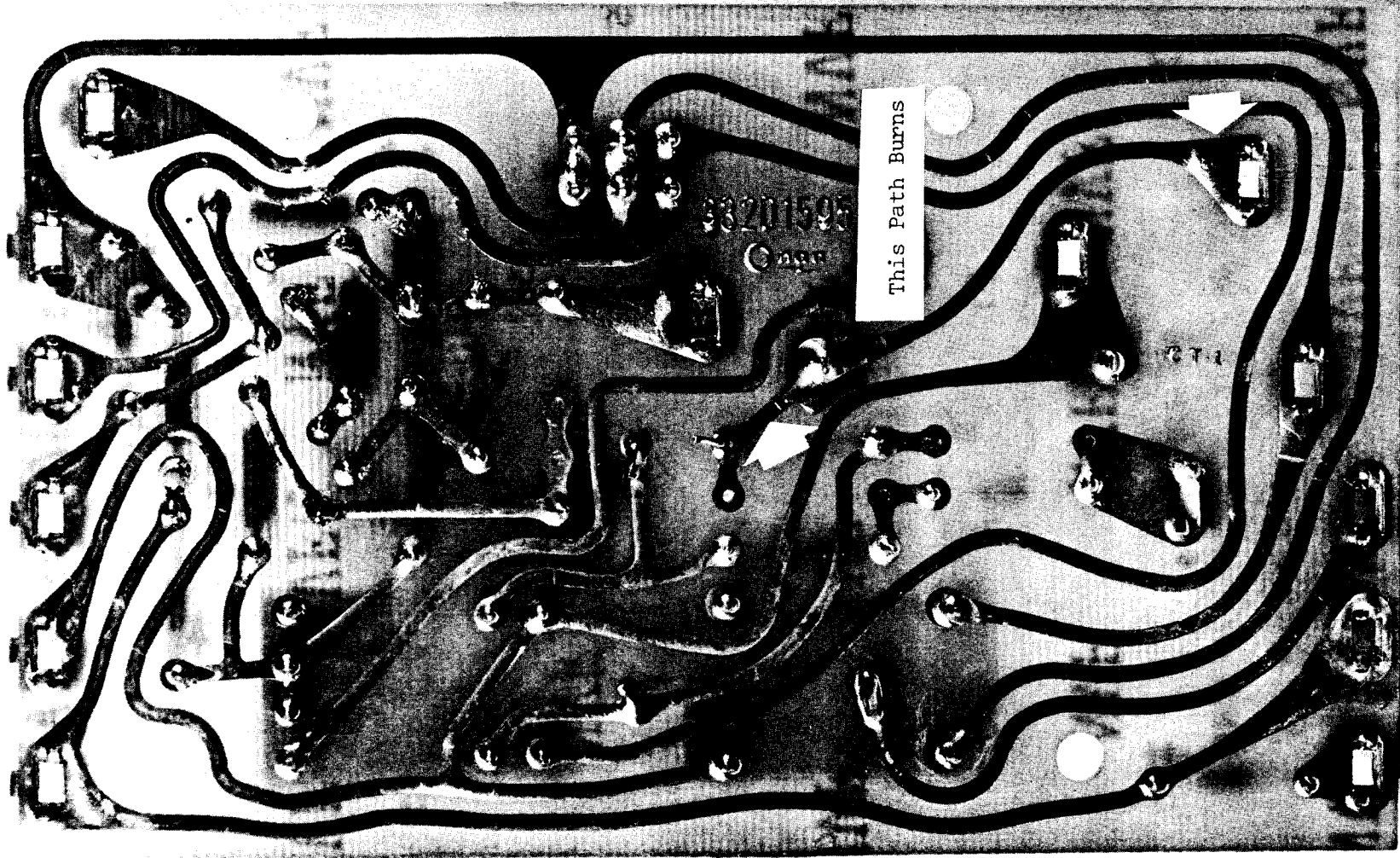
DATE: January, 1974

SUBJECT: Servicing the Printed Circuit Board on all
Onan Generators

MODELS: TZE033 and TZE063

A number of Onan printed circuit boards (Pt. #707144) returned on warranty have been damaged during trouble shooting. The most common damage has been burning off the path between the F1 fuse and terminal 11. This damage is caused by grounding the fuse terminal which is in the path to terminal 11. It appears this damage is caused when a screwdriver is used to remove the fuse and touches terminal #12 which goes to ground (see illustration).

It is recommended that when work is being done on the board, which does not include reading voltages, that the battery be disconnected. It would also be advisable when removing a fuse to use a standard plastic fuse puller and installer which is available at any auto parts store.

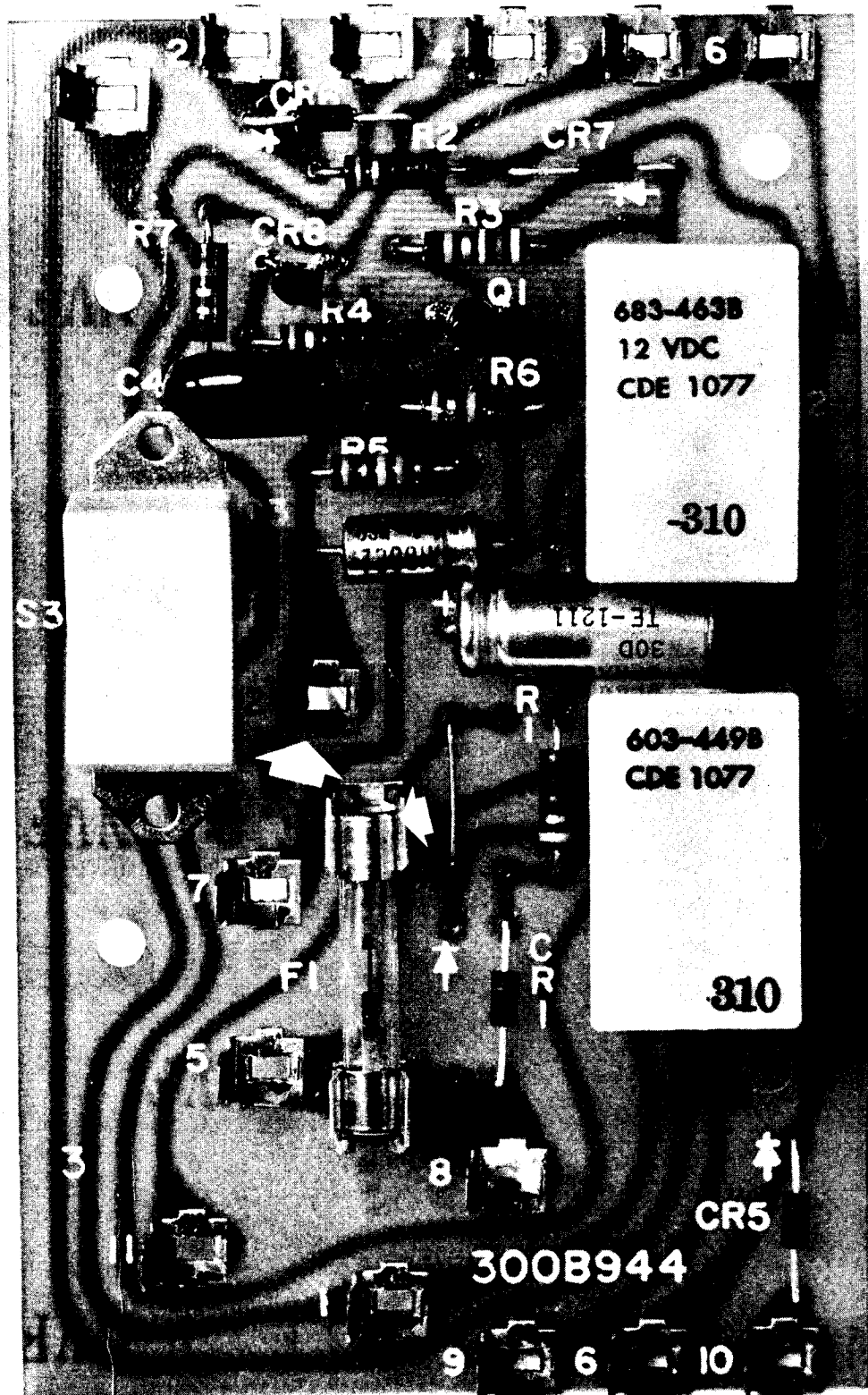


This Path Burns

33201595

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101





Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

MT 1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 74-IM-5

GROUP: 24-Misc.-4

DATE: January, 1974

SUBJECT: Onan Generator Circuit Boards

It has been brought to the attention of the Service Department that quite a number of boards are being returned with the switch or one of the two relays damaged or missing from the board. This type of damage is not considered warranty by Onan or GMC.

Future circuit boards being returned in this condition will be rejected by the GMC Warranty Claims Inspection Department. Care should be taken in the handling and shipping of these boards.



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

MT 1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 74-1M-6

GROUP: 24-Misc -5

DATE: January, 1974

SUBJECT: Thermasan Screen and Probe Change

MODELS: TZE033 and TZE063

A new screen and probe assembly has been released for production. The new screen and probe assembly has a finer mesh screen to prevent clogging.

INSTALLATION

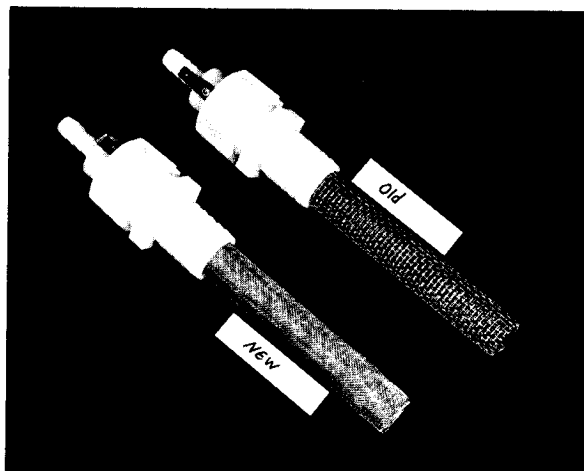
The new screen and probe assembly can be installed in place of the earlier production assembly. The same installation procedures as described in section 24M Motor Home Maintenance Manual are to be followed in installing the new Thermasan screen and probe assembly.

PART INFORMATION

Screen - Old 705130
New 719678

Probe - Old 705136
New 719679

This part should be ordered on an "as required" basis. The old screen and probe assembly should not be returned.





Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IT 1492

IMPORTANT—All Service Personnel Should Read and Initial

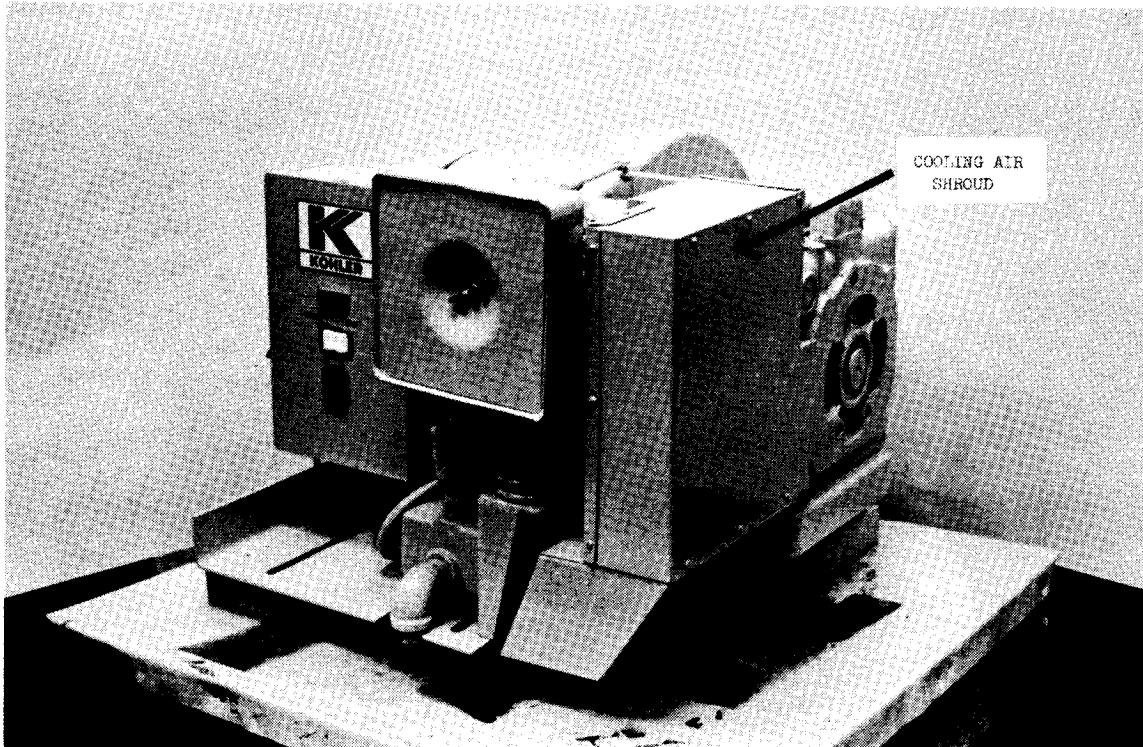
NUMBER: 74-1M-11
GROUP: 24-Misc-6

DATE: March, 1974

SUBJECT: Kohler Generator Cooling Air Shroud
Paint Discoloration

MODELS: All with RPO KLD-Kohler Motor
Generator

Discoloration of the paint on the cooling air shroud is normal and does not affect the operation of the unit. Heat from the exhaust manifold, which is contained inside the shroud, may cause some discoloration.





Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 74-IM-14

GROUP: 24-Misc-7

DATE: May, 1974

SUBJECT: ONAN MOTOR GENERATOR STARTER REMOVAL PROCEDURE
MODELS: ALL MODELS EQUIPPED WITH AN ONAN 4KW OR 6KW GENERATOR
REF.: MOTOR HOME SERVICE MANUAL, PAGE 24C-31

The procedure published in the motor home service manual for removing the Onan starter motor assembly has been revised. It is not necessary to remove the generator, left hand air shroud, exhaust manifold, nor the blower scroll backing plate. The correct procedure is printed below:

1. Disconnect the cable from the positive terminal of the motor generator battery (if the vehicle has had the motor generator battery hooked in parallel with the living area battery — as per the Motor Home

Product Improvement Program — the hot wires should be disconnected from the living area fuse block).

2. Disconnect the wires from the motor generator starter motor solenoid (see Figure 1).
3. Remove the slide out door by removing the six attaching bolts (see Figure 2).

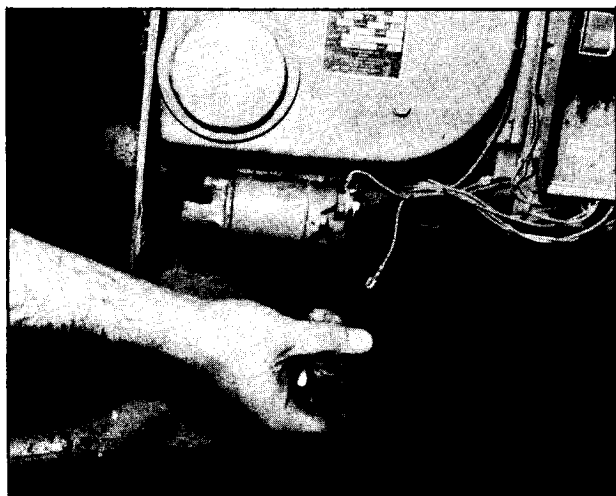


Figure 1.

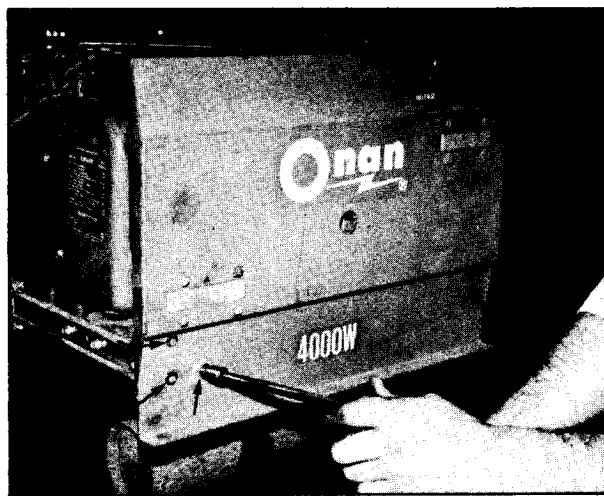
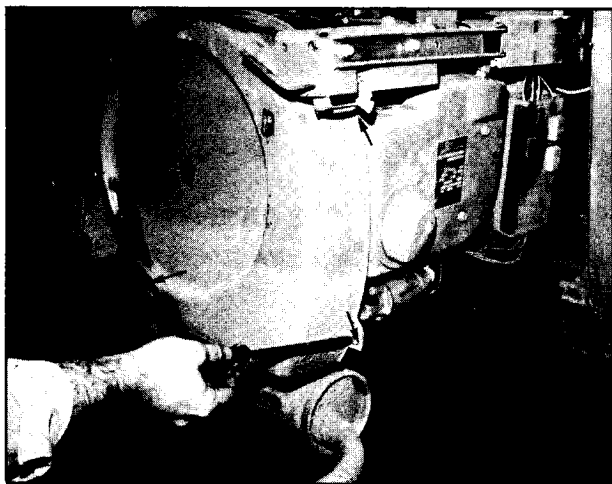
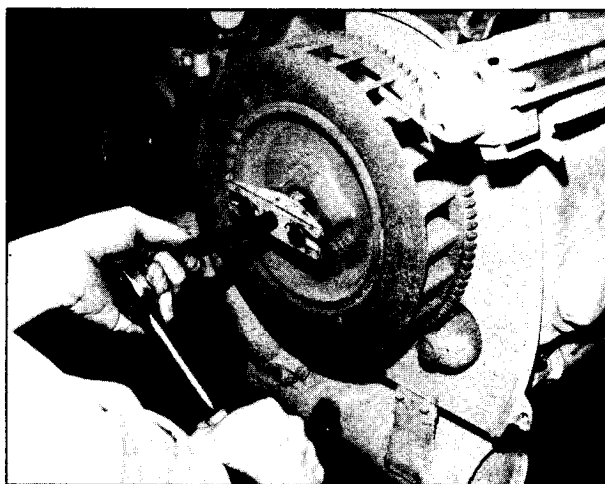
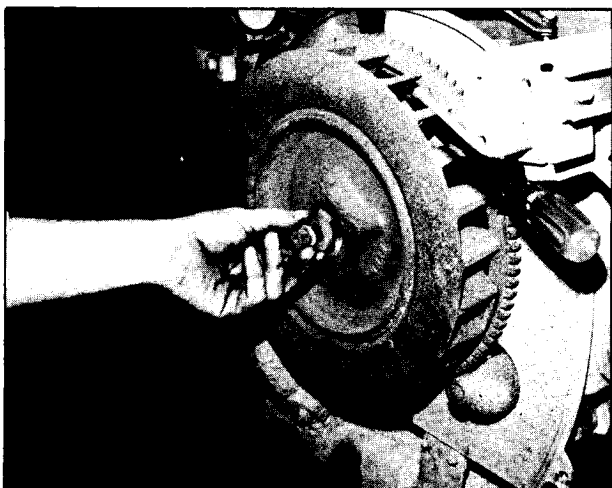


Figure 2.

**Figure 3.****Figure 5.****Figure 4.****Figure 6.**

4. Remove the blower housing scroll by removing the four attaching bolts (see Figure 3).
5. Remove the flywheel center bolt, washer, and lockwasher (see Figure 4).
6. Reinstall only the flywheel center bolt.
7. Pull the flywheel with a straight bar puller utilizing the centering hole in the center bolt (see Figure 5).
8. Pull the flywheel straight off being careful not to contact the alternator stator, (see Figure 6).

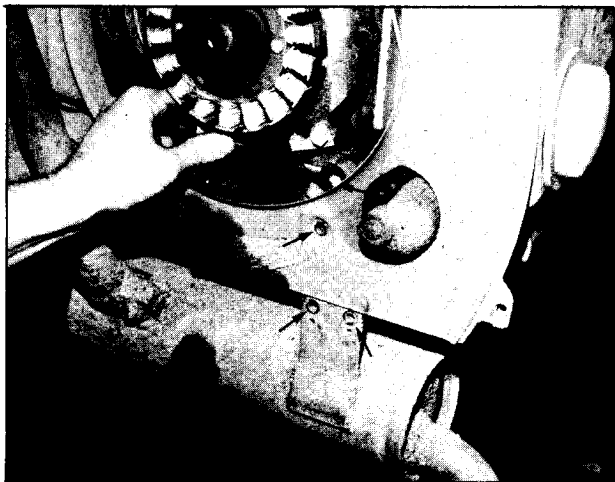


Figure 7.

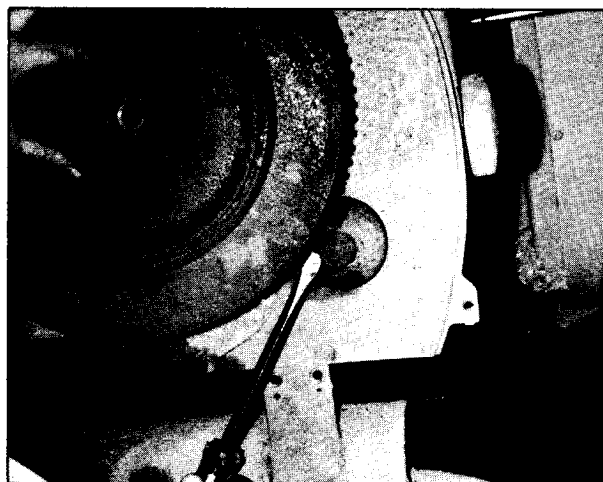


Figure 10.

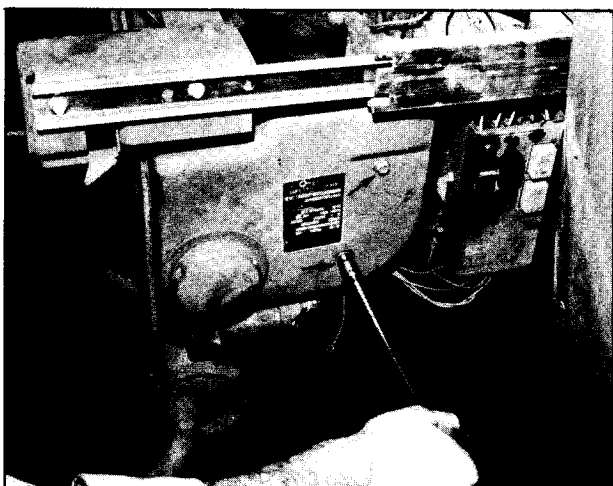


Figure 8.



Figure 11.

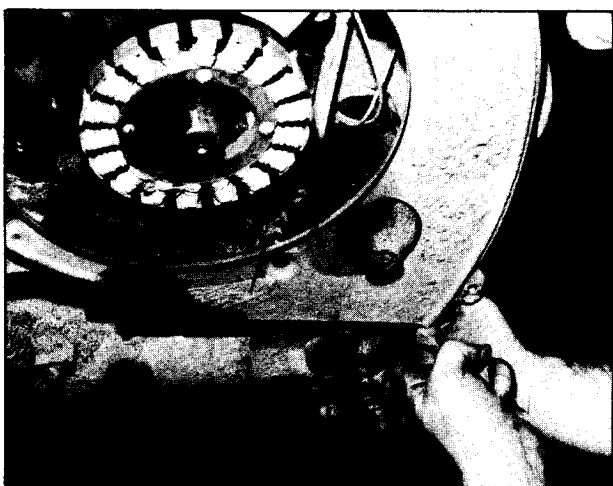


Figure 9.

9. Remove the rear muffler mounting bracket by removing the four attaching bolts (see Figure 7).
10. Remove the right hand air shroud to expose the starter motor by removing the two attaching bolts (see Figure 8).
11. Remove the two starter motor attaching bolts (see Figure 9).
12. Remove the starter motor assembly.

Reassembly is done in the reverse order of disassembly. When reinstalling the flywheel, be sure to align the starter pinion gear with the ring gear (see Figure 10) and torque the flywheel center bolt to 45 ft. lbs. (see Figure 11).



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 74-1M-16

GROUP: 24-Misc.-8

DATE: April, 1974

SUBJECT: New Design Pistons and Rings for Onan 4KW Generator

MODELS: All Models Equipped With an Onan 4KW Generator

Onan Corporation has changed the design of the pistons and rings for the 4KW-BF generator. These new parts are completely interchangeable with the old parts.

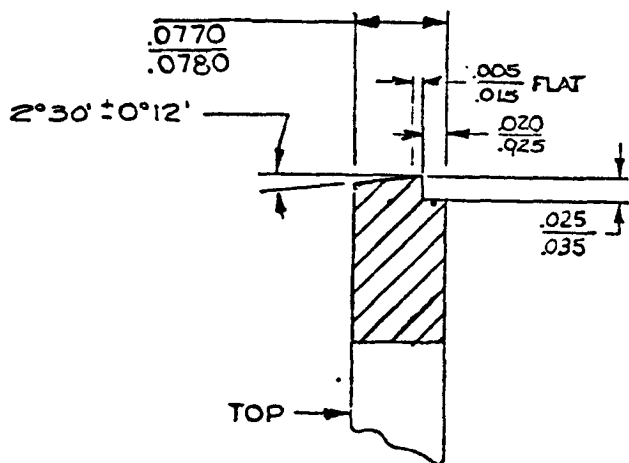
The new and old pistons are readily identifiable from each other by the Onan part number cast into the inside of the skirt area.

New Design - 112-134

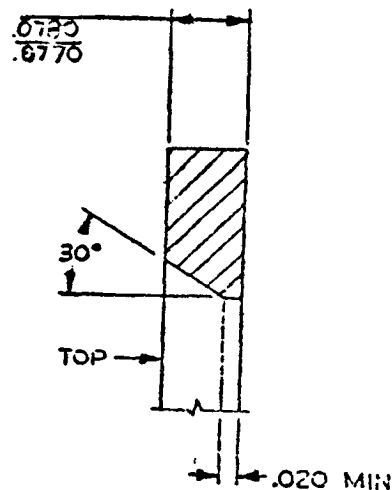
Old Design - 112-123

The most significant change in the rings is in the top compression ring. This ring is shaped differently and is slightly thicker (see illustration). The other change is that the oil control ring now has only seven drain slots instead of the former eight slots.

All parts have the same GMC part numbers as the former parts. All service parts stock of the old design parts has been purged.



NEW STYLE COMPRESSION RING



OLD STYLE COMPRESSION RING



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-IM-1

GROUP: 24-Misc.-1

							DATE: December, 1974

SUBJECT: Triad-Utrad Converters

MODELS: All Motor Homes

Several dealers and customers have commented on the ability of the Triad-Utrad converter to charge the motor home batteries. Through this feedback it has been found that there are several misconceptions about the correct functioning of the system. This bulletin is intended to clear up these misconceptions.

First of all the Triad-Utrad converter is not, strictly speaking, a battery charger. Depending on temperature, a battery requires at least 14 volts to charge at an appreciable rate. While the converter will put out slightly over 14 volts at no load, this voltage begins dropping as soon as a load is applied until it reaches 12 volts when 45 amperes are being drawn (this is full rated load condition). This means that if there is no other load on the converter it will charge the battery slowly, this charge rate falls off however, as other loads are added, and eventually the voltage goes low enough that it will not charge the battery at all.

Secondly on 1973 and 1974 models the converter will not put any charge whatsoever in the motor generator battery or the vehicle battery. The converter is connected into the living area electrical system only and will charge only the living area battery. The exceptions to this rule are as follows:

1. If the third wire modification has been made to parallel the motor generator battery to the living area system, the M/G battery will charge along with the living area battery. If this modification has not been made, the M/G battery is charged only by the small DC alternator built into the motor generator.
2. If the battery boost switch is put in the boost position and there is enough power available in the vehicle battery to energize the boost magnetic switch, the vehicle battery will be charged by the converter. Otherwise the vehicle battery is only charged by the 80 amp. alternator mounted on the engine.

In some cases the performance of the Triad-Utrad converter can be improved by attaching the converter's ground wire directly to the hat section channel that runs along the belt line of the vehicle.



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-IM-2

GROUP: 24-Misc.-2

							DATE: December, 1974

SUBJECT: Bath Module Fiber Glass Construction

MODELS: 1973, 1974 and 1975 GMC Motor Homes

The fiber glass bath module used in GMC Motor Homes is composed of:

Basic Material - General Purpose Fiber Glass

Finish - Sanitary Gel Coat

Color - American Standard White



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-IM-5

GROUP: 24-Misc.-3

DATE: January, 1975

SUBJECT: City Water Inlet Valve

MODELS: 1973 and 1974 230 and 260 Motor Homes

For the 1975 model GMC Motor Homes, a city water inlet valve with an internal pressure regulator is being used. This valve supercedes the 1973 and 1974 valve.

PARTS INFORMATION

<u>Qty/Vehicle</u>	<u>Part Number</u>		<u>Description</u>
	<u>Previous</u>	<u>Current</u>	
1	711467	790333	Inlet Valve Assembly



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-IM-6

GROUP: 24-Misc.-4

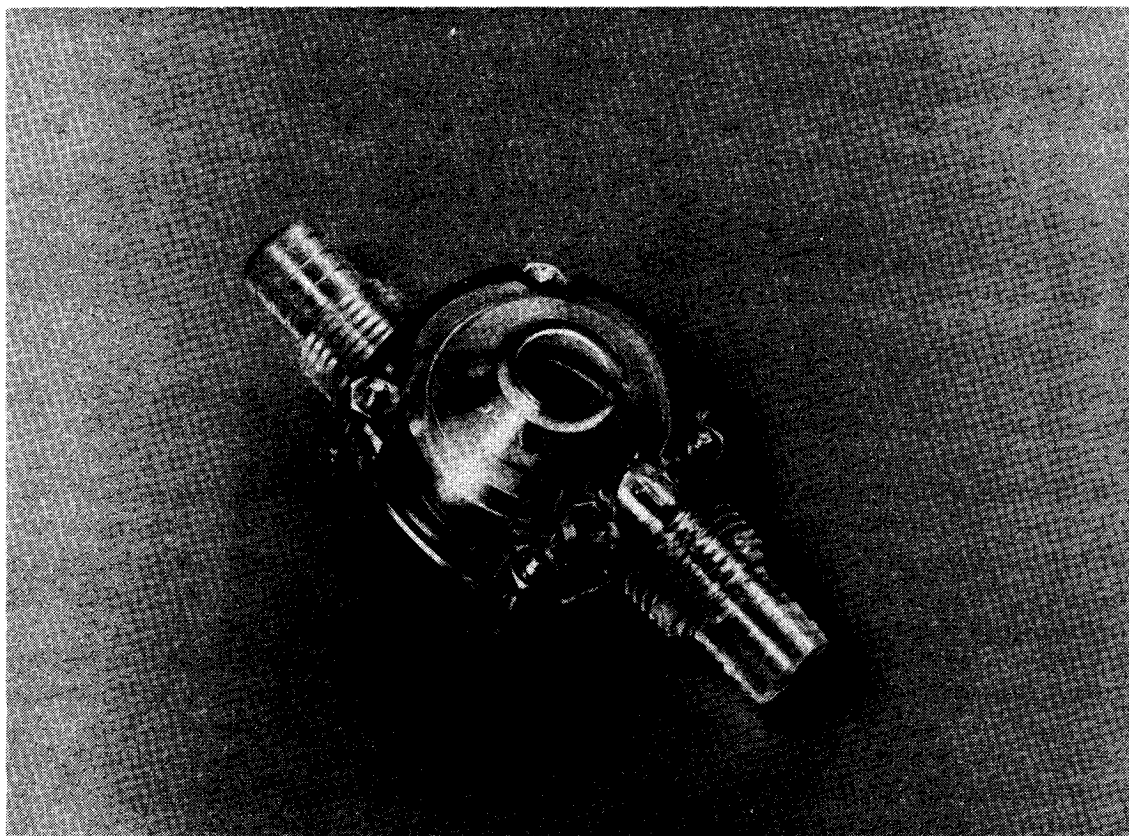
							DATE: January, 1975

SUBJECT: Installation of Water Filter in Fresh Water System

MODELS: All 1973 and 1974 Motor Homes

It is possible that fresh water pumps may be damaged when foreign material enters the valves in the pump. When such a situation is encountered, it is recommended that a newly released in-line water filter, part #790334, should be installed. Before installation the tank should be flushed out and the water pump valves cleaned or replaced.

The filter should be installed in the hose coming from the water tank to the pump. There are arrows imprinted on the valve to show the direction the water should flow.





Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-IM-7

GROUP: 24-Misc.-5

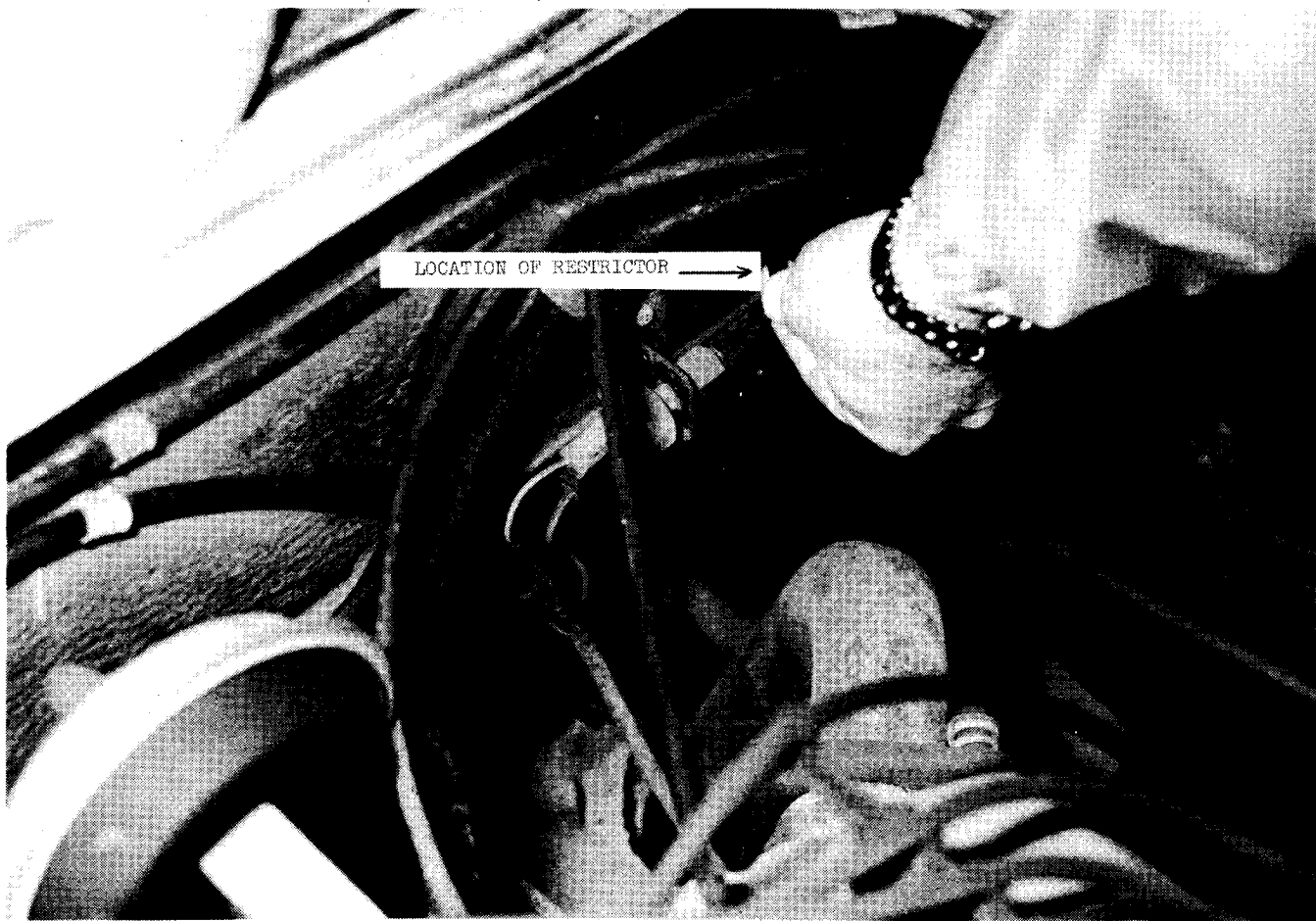
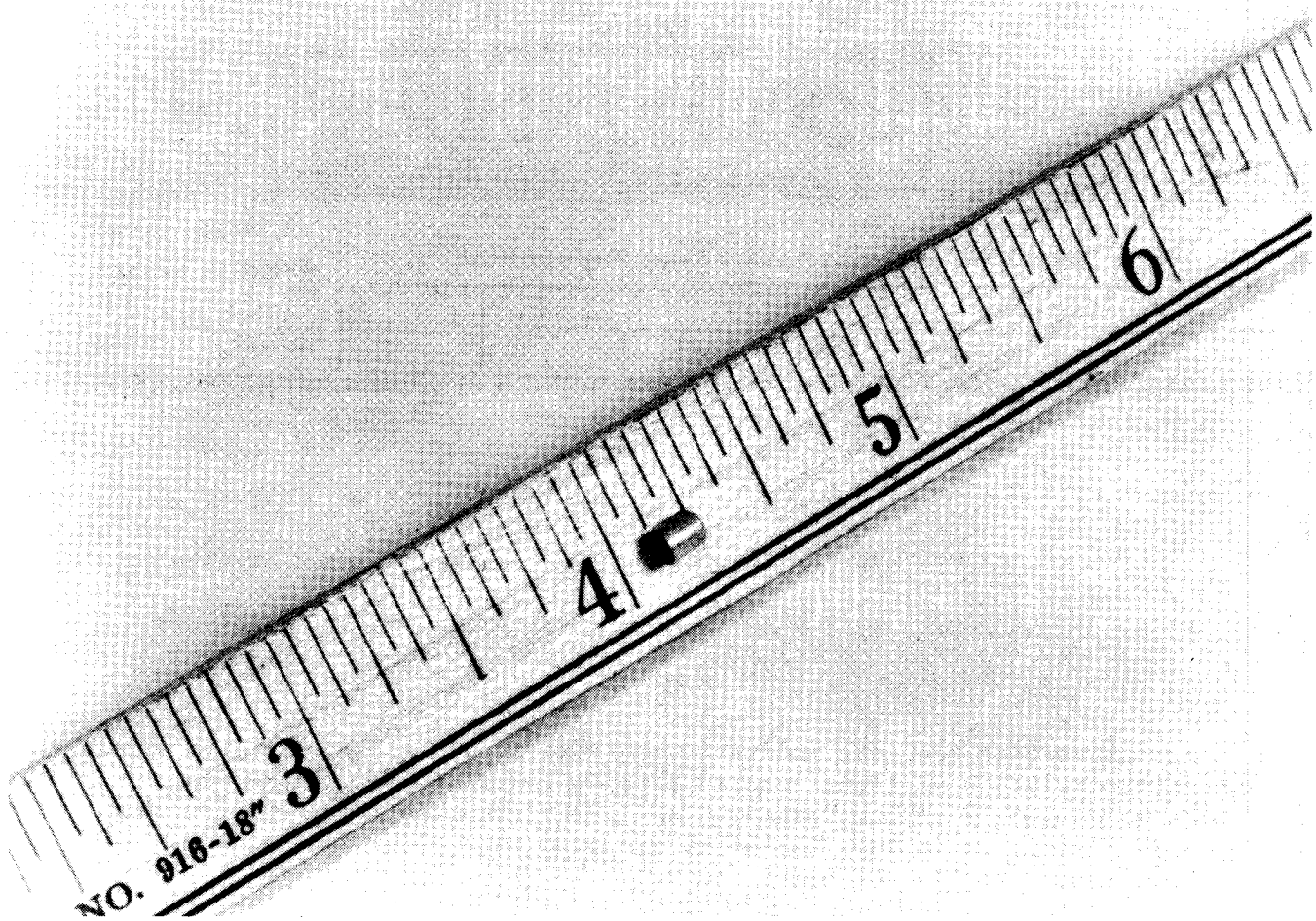
							DATE: February, 1975

SUBJECT: Inline Restrictor for Thermasan Vacuum Switch

MODELS: 1973 & 1974 Motor Homes Equipped With Thermasan

Recent service contacts indicate that some of our dealers are not aware of the inline restrictor located between the manifold and the vacuum sensor assembly on the Thermasan unit. It has also been reported that this restrictor in some instances has been removed by servicing dealers. This restrictor is not to be removed.

The function of this powdered metal restrictor is to create a positive action of the vacuum sensor assembly. Without the restrictor, there will be a clicking sound in the control head on the dash panel. Also, the red reaction light will flicker on and off during acceleration and deceleration at approximately the 30 MPH range.





Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-IM-13

GROUP: 24-Misc-6

DATE: April, 1975

SUBJECT: SOL-AIRE FURNACE

MODELS: ALL 1975 MOTOR HOMES

This bulletin is intended to provide information for servicing the Sol-Aire furnace used in 1975 Motor Homes. Contained in this bulletin are trouble diagnosis charts, diagram of the furnace labeling all the major components, and a very brief description of the proper method for removing the furnace from the vehicle.

Removal Procedure

1. Shut off gas valve at LPG tank.
2. Remove the bottom half of the front davo.
3. Disconnect the furnace from the LPG line and the electrical connections.
4. Remove the screws attaching the furnace to the side mounting bracket.
5. Remove the four screws attaching the bottom mounting bracket to the floor.
6. Disconnect all ducts from the furnace.
7. Slide the furnace slightly toward the center of the motor home to disengage it from the exterior vent tubes.
8. Pull the furnace forward out from under the galley.

IMPORTANT NOTE: Before any diagnosis is attempted on the furnace, there are two necessary and sufficient external conditions that must be met.

1. With the thermostat calling for heat, there must be 12V (absolute minimum of 10.5V) present at the furnace.
2. With the thermostat calling for heat, there must be a gas pressure of 11" of water present to the furnace measured at the cooking range.

BURNER WILL NOT LIGHT

Check	Results	Go To	Problem
1. a. Turn off gas.			
b. Make sure ignition wire is secure in the ignition pack.	Spark Present	#2	
c. Remove locking nut from the igniter.			
d. Turn on thermostat.	No Spark	#3	
e. Hold igniter approx. 1/2" from the burner and check for sparking.			
2. a. Replace the igniter. (Turn the locking nut on finger tight.)	Gas Present		Primary air adjustment too lean.
b. Turn on L.P.G.			
c. Turn on the thermostat.	No Gas Present	#7	
d. Sniff for L.P. fumes at the right hand exterior furnace vent.			
3. a. Check to make sure the ignition pack ground is connected to ground at the burner housing and at the ignition pack.	Ground wire not connected.		Loose ground to the ignition pack.
	Ground wire securely connected.	#4	
4. a. Check for correct polarity at the ignition pack, ground (black wire) on right; hot (red wire) on left.	Polarity not correct.		Polarity wrong, switch wires.
	Polarity is correct.	#5	
5. a. Check the voltage at the hot wire (red wire) at the ignition pack with the thermostat on.	12 volts		Defective ignition pack.
	0 volts	#6	

Check	Results	Go To	Problem
6. a. Remove the furnace from the Motor Home.	0 volts		Defective control box.
b. Connect the furnace to a 12V power supply.			
c. Short across the thermostat wires.	12 volts		Broken wire between the control and the ignition pack.
d. Check voltage at the #12 terminal of the control box.			
7. a. With the furnace on, check the voltage at the gas valve.	12 volts	#8	Defective gas valve.
	0 volts		
8. a. Remove the furnace from the vehicle.	12 volts		Defective centrifugal switch.
b. Connect the furnace to a 12V power supply.	0 volts		Defective control box.
c. Short across the thermostat wires.			
d. Check the voltage at the #11 terminal on the control box.			

**FURNACE LIGHTS BUT RESET
POPS IN LESS THAN ONE MINUTE**

	Results	Go To	Problem
1. a. Allow heat relay to completely cool, 3-5 minutes.	Less than 35 seconds.		Defective heat relay in control box. Replace control box.
b. Press the reset button.			
c. Turn the thermostat on.	35 - 45 Seconds	#2	
d. Check the length of time before the furnace shuts off.			

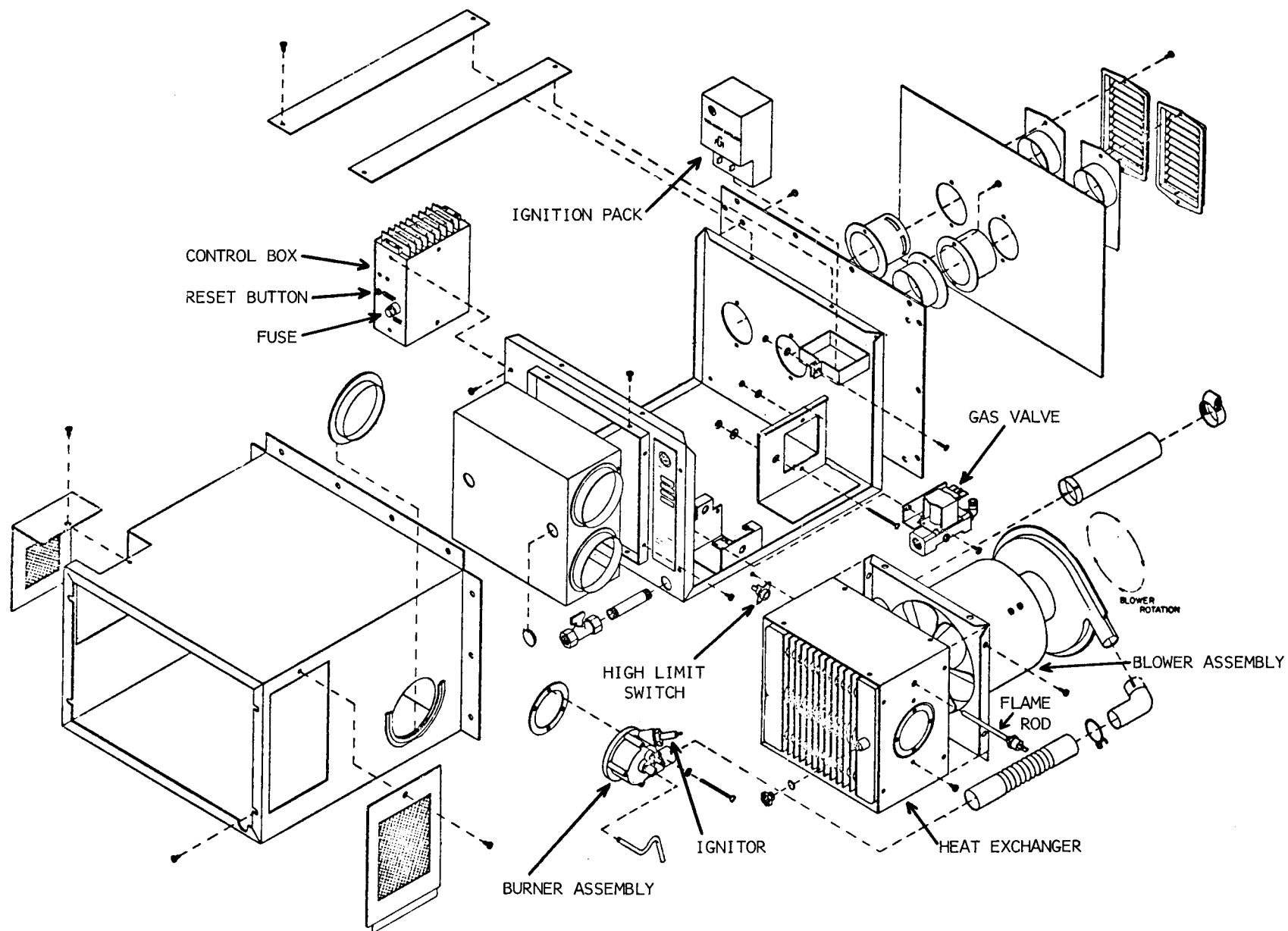
Check	Results	Go To	Problem
2. a. Disconnect both wires from the flame rod.	Resistance does not drop to 0 ohms.		Defective flame rod.
b. Connect an ohm meter across the terminals on the flame rod.			
c. Allow the heat relay to cool for 3-5 minutes.	Resistance does drop to 0 ohms.		Defective control box.
d. Push the reset.			
e. Turn on the thermostat.			
f. Check to see if the resistance of the flame rod goes to approx. 0 ohms before the furnace shuts off.			

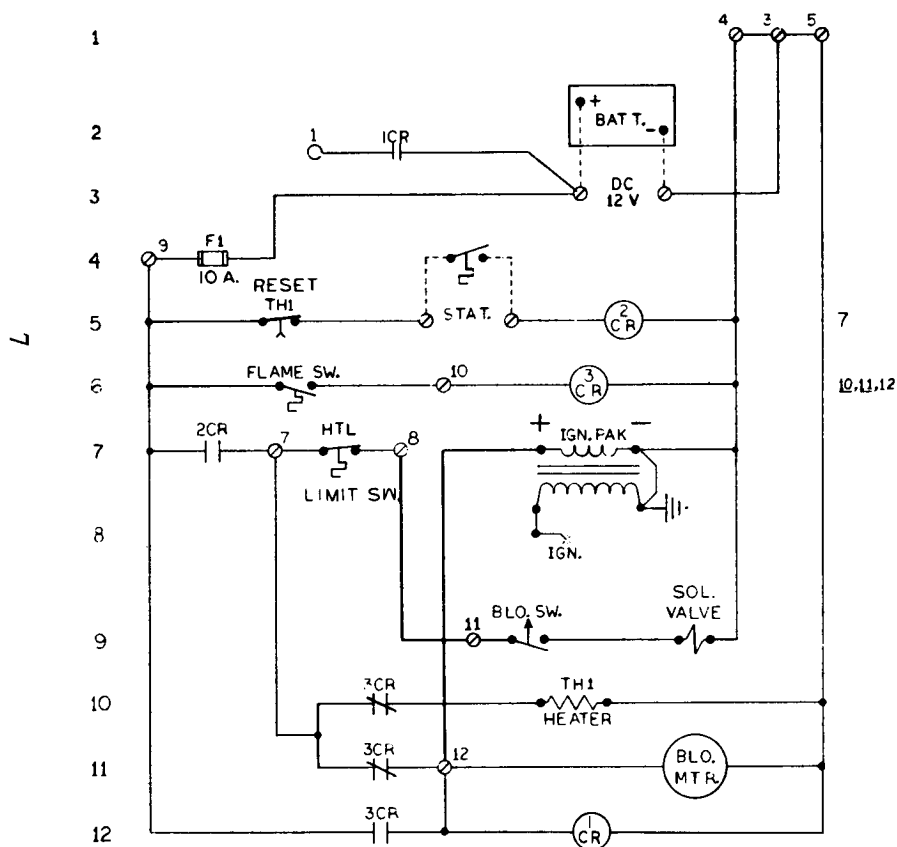
**BLOWER DOES NOT COME ON
WHEN THERMOSTAT IS CALLING FOR HEAT**

Check	Results	Go To	Problem
1. a. With thermostat calling for heat press in reset button.	Furnace turns on.		Reset was not set.
	Furnace does not turn on.	#2	
2. a. Check the 10 amp fuse in the furnace.	Fuse OK	#3	
	Fuse blown	#5	
3. a. Short across the two thermostat leads at the connection by the furnace.	Furnace starts		Defective thermostat or broken wire.
	Furnace does not start.	#4	
4. a. Remove furnace from vehicle.	Blower runs.		Defective control circuit.
	Blower does not run.		Defective blower assembly.

Check	Results	Go To	Problem
5. a. Install a new fuse in the furnace. Turn the thermostat on.	Furnace starts and runs.		Surge current blew fuse, furnace OK.
	Fuse immediately blows again.	#6	
6. a. Remove furnace from vehicle. b. Disconnect the wires from terminals #11 and #12 on the control box. c. Install a new fuse in the furnace. d. Connect the furnace to a 12V source. e. Short across the thermostat wires.	Fuse blows immediately.		Defective control box.
	Fuse does not blow.	#7	
7. a. Reconnect the wire to the #12 terminal on the control box. b. Short across the thermostat leads with the furnace connected to a 12V source.	Fuse blows.		Defective ignition pack.
	Fuse does not blow.		Defective blower assembly.

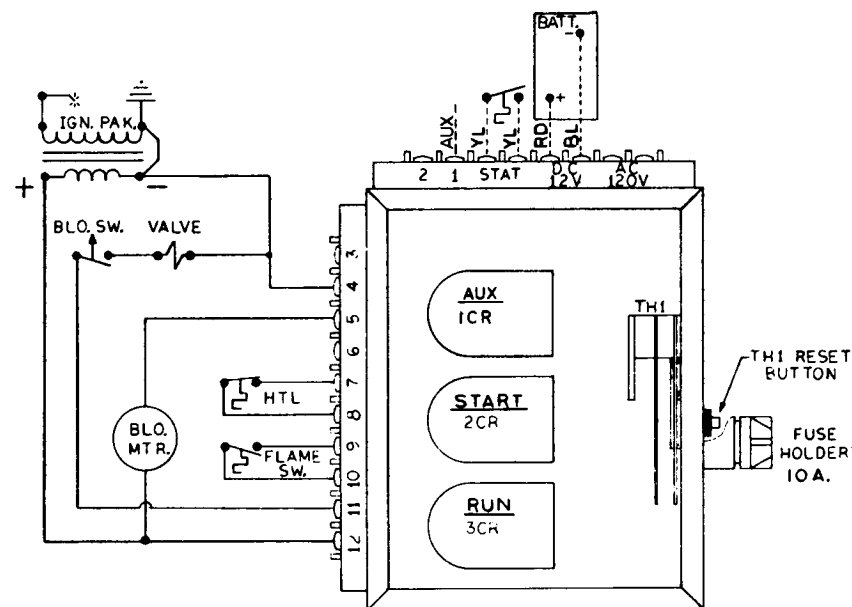
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NOTES

1. DASHED LINES DENOTE EXTERNAL CONNECTIONS TO FURNACE.
2. ALL WIRE TO BE U.L. AND C.S.A. LISTED, WITH 105°C, 600V INSULATION AND U.L. LISTED TERMINALS.



INTERCONNECTION DIAGRAM



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-IM-14
GROUP: 24 - Misc.-7
DATE: April, 1975

SUBJECT: Bio-Degradeable Toilet Tissue

MODELS: All GMC MotorHomes

In order to increase the effectiveness of the holding tank system and related components, GMC Technical Service recommends that only part number 705411, or equivalent which is a bio-degradeable toilet tissue, be used. This tissue breaks up when in contact with liquid and results in cleaner operation of the Thermasan probe, the holding tank sending unit float, and also avoids the unnecessary collection of debris on the bottom of the tank.



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-IM-18

GROUP: 24-Misc.-8

DATE: May, 1975

SUBJECT: PLUMBING REPAIR KIT

MODELS: ALL 1975 MOTOR HOMES

1975 Motor Homes utilize polybutulene plumbing for the living area water system. Service has recently released a service kit for repairing water lines and fittings.

PARTS INFORMATION

The kit consists of three sub kits for each water line size used on the Motor Home.

Complete Kit 2001630

Kit 2001631 for 3/8" lines

Consists of: 10 Flare nuts
10 Flare inserts
4 Couplings
1 Tee
1 Elbow

Kit 2001632 for 1/2" lines

Consists of: 10 Flare nuts
10 Flare inserts
4 Couplings
1 Tee
1 Elbow

Kit 2001633 for 5/8" lines

Consists of: 10 Flare nuts
10 Flare inserts
3 Couplings
1 Tee

PROCEDURE

All repair kit fittings require the use of a flare nut and flare insert further requiring a flare on the end of the line (Figure 1).

Special tool, J-26227, is used to flare the ends of the lines (Figure 2). The tool has three pilots, one for each line size.

To flare a line, make sure it is cut off square. Place the line to be flared on the proper pilot, which should be turned out about one-half inch. Grasp the line holding it tight to the pilot with the holding tool and turn it so the pilot screws into the tool making a flare (Figure 3).

Water leaks can be repaired using an appropriate size coupling and simply cutting the leaking area out of the line (Figure 4).

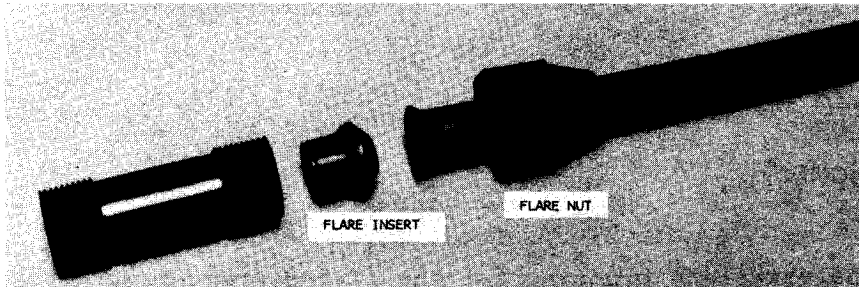


FIGURE 1

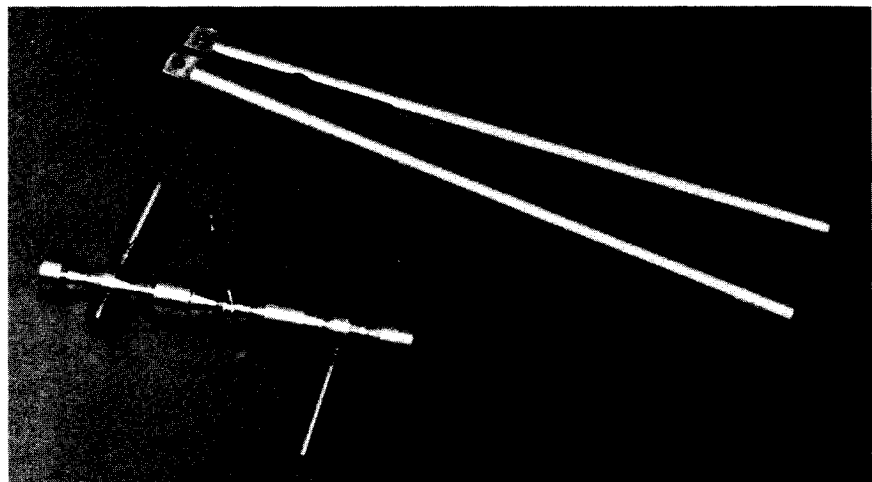


FIGURE 2

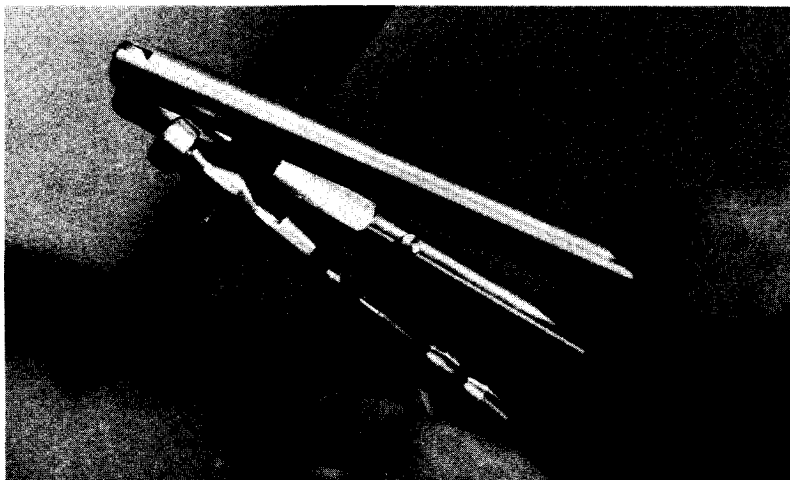
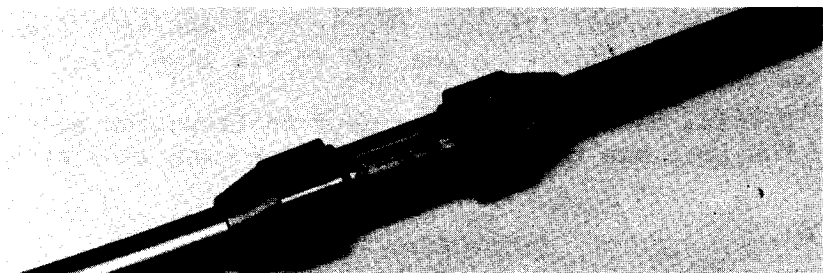


FIGURE 3

FIGURE 4





Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-IM-20
GROUP: 24 MISC. 9

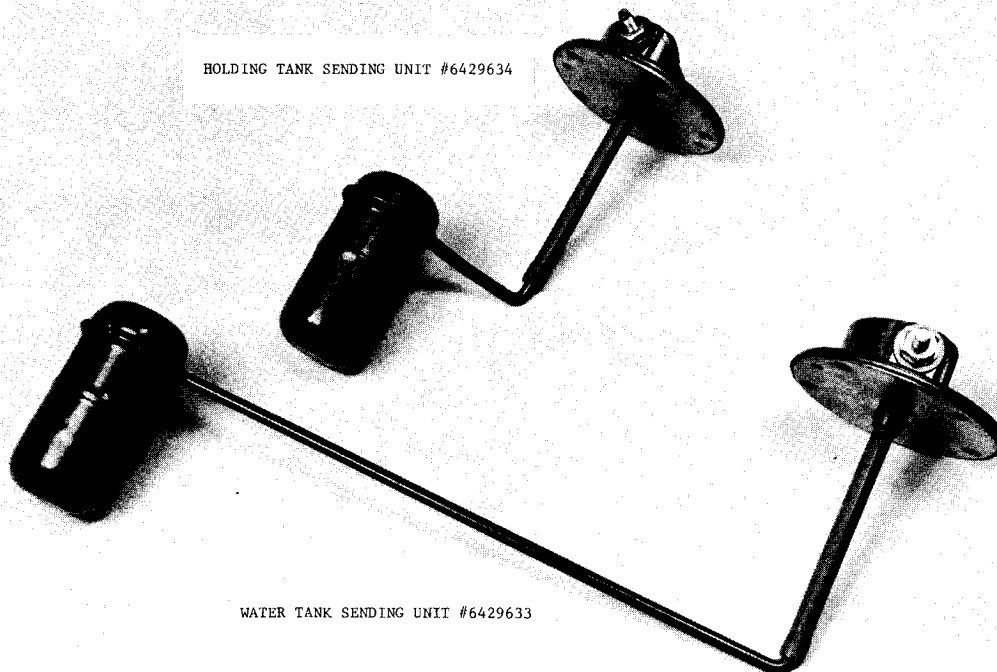
DATE: JUNE, 1975

SUBJECT: Water Tank and Holding Tank Sending Units

MODELS: All 1973, 1974 and 1975 GMC Motor Homes

Interchanging of the water tank and holding tank sending units must be avoided. Although both sending units and their gauges are similar, the pivoting action of the floats differ.

Therefore, in order to have the gauges on the monitor panel read correctly, it is important that the proper sending unit be used at all times.





Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-IM-22

GROUP: 24-Misc.-10

							DATE: July, 1975

SUBJECT: BATH MODULE FIBERGLASS REPAIR

MODELS: ALL GMC MOTORHOMES

The fiberglass bath module on all GMC MotorHomes can be repaired as follows:

Structure

Use the procedures described in General Motors Service Information Bulletin B-4. Copies of the fiberglass repair bulletin, B-4, may be ordered from:

General Motors Service Information
P.O. Box 7124
Detroit, Michigan 48202

Materials

<u>Part Number</u>	<u>Description</u>
1051906	Fiberglass Repair Kit

Finish

The following is a paint system offered by Rinshed-Mason Paint Company to refinish the GMC MotorHome bath module. This system or equivalent should be used to refinish the bath module.

The paint can be ordered through R-M jobbers located throughout the United States and is available in Alpha-Cryl Tintometer acrylic lacquer only. The R-M stock number is A-2910 White.

The following is the Alpha-Cryl Tintometer formula:

A-2910 White

<u>Base</u>	<u>Setting</u>
PNT-90	100
AT-190	749
AT-142	760
AT-174	766
AT-178	770
AT-176	772
AT-100	1000

Use 900 Pre-Kleano to thoroughly clean the module before spray painting. This is necessary to remove wax and mold release agent. Sand the area to be painted with a fine sandpaper. The A-2910 Alpha-Cryl should be reduced 125% with PNT-90 Color Thinner.

With aging, some of the modules may turn darker and yellower in color. A-2910 White can then be tinted, using AT-176 Tinting Base to make the color darker and yellower.



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-IM-26
GROUP: 24-MISC.-11
DATE: August, 1975

SUBJECT: Onan Fuel Recommendations

MODELS: All GMC MotorHomes and TransModes Equipped with Onan Generators

GMC recommends unleaded gasoline with a research octane of 91 should be used in the GMC MotorHomes and TransModes. Technical Service has received several questions as to whether this fuel is compatible with the fuel recommendations for the Onan generator.

Most gasoline contains some lead additives (Tetraethyl lead) which accumulate in engine combustion chambers.

Since generator sets operate at constant (Governor-controlled) speeds, it is difficult for the engine to "blow out" these lead deposits through the exhaust ports as is possible with engines operating at variable speeds. Therefore, constant speed engines may require more frequent removal of deposits and more maintenance.

For this reason, Onan recommends the use of low-lead and non-leaded gasoline. Onan has run several conclusive tests with leaded vs non-leaded gasoline on various governor controlled engines. Findings indicate that using non-leaded gasoline helps reduce problems such as:

- Cylinder Head Deposits (low power)
- Sticking Valves or Burned Valves
- Spark Plug Fouling
- Piston Wear
- Ring Wear and Sticking
- Cylinder Wall Wear, etc.
- Poor Oil Control After Ring Fouling

For new Onan engines, the use of non-leaded gasoline is recommended from the start. On older engines, if you desire to change from leaded gasoline to non-leaded, the generator engine head must be taken off and all lead deposits removed from the engine. This is done by using a wire brush on a drill motor.

CAUTION: If lead deposits are not removed from the engine before switching from leaded to non-leaded gasoline, pre-ignition may occur causing severe damage to the engine.

NOTE: The information in this bulletin on the use of lead free or low-lead gasoline pertains to Onan-built engines ONLY.



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-IM-27

GROUP: 24-MISC.-12

DATE: August, 1975

SUBJECT: ONAN GENERATOR SPECIFICATIONS

MODELS: ALL GMC MOTORHOMES AND TRANSMODES EQUIPPED WITH ONAN GENERATORS

The following is a list of Onan generator specifications for your information:

Onan Corporation notes that these specifications may be changed without notice. If new specifications are forwarded to GMC by Onan, they will be passed on in a future service bulletin.

	<u>4KW</u>	<u>6KW</u>
LENGTH	25"	28"
WIDTH	30"	32"
HEIGHT	21"	23"
WEIGHT	345 LBS.	436 LBS.
NUMBER OF CYLINDERS	2	2
DISPLACEMENT (CU.IN.)	40.3000	60
STROKE	2.6250	3.0000
BORE HONED	3.1245 3.1255	3.5625 3.5635
PISTON DIAMETER	3.1225 3.1235	3.5600 3.5610
CLEARANCE IN CYLINDER	.0010 .0030	.0015 .0035
RING GAP	.0100 .0200	.0100 .0200
VALVE SEAT DIAMETER (INTAKE)	1.4460 1.4470	1.5690 1.5700

	<u>4KW</u>	<u>6KW</u>
VALVE SEAT DIAMETER (EXHAUST)	1.1920 1.1930	1.2550 1.2560
VALVE STEM DIAMETER (INTAKE)	.3425 .3430	.3425 .3430
VALVE STEM DIAMETER (EXHAUST)	.3410 .3415	.3410 .3415
VALVE GUIDE DIAMETER I.D.	.3440 .3460	.3440 .3460
VALVE LIFTER DIAMETER	.7475 .7480	.7475 .7480
VALVE LIFTER BORE	.7505 .7515	.7505 .7515
DIAMETER CRANKSHAFT MAIN	1.9992 2.0000	1.9992 2.0000
DIAMETER CRANKSHAFT ROD JOURNAL	1.6252 1.6260	1.6252 1.6260
CRANKSHAFT END PLAY	.0060 .0120	.0050 .0090
MAIN BEARING DIAMETER	2.0015 2.0040	2.0015 2.0040
MAIN BEARING CLEARANCE	.0025 .0038	.0025 .0038
CONNECTING ROD SIDE CLEARANCE	.0020 .0160	.0020 .0160
CONNECTING ROD BEARING CLEARANCE	.0020 .0033	.0005 .0023
CAMSHAFT BEARING CLEARANCE	.0015 .0030	.0015 .0030
CAMSHAFT END PLAY	.0030 MIN.	.0030 .0120
CAMSHAFT LIFT	.3000	.3000
CAMSHAFT BEARING DIAMETER 1	1.3760 1.3770	1.3760 1.3770
CAMSHAFT BEARING DIAMETER 2	1.3760 1.3770	1.3760 1.3770

	<u>4 KW</u>	<u>6 KW</u>
CAMSHAFT JOURNAL DIAMETER 1	1.3740 1.3745	1.3740 1.3745
CAMSHAFT JOURNAL DIAMETER 2	1.3740 1.3745	1.3740 1.3745
IGNITION POINT GAP (INCHES)	.0250 NOM	.0200 NOM
SPARK PLUG GAP	.0250 NOM	.0250 NOM
IGNITION TIMING RUNNING	21	25
COMPRESSION (PSI SEA LEVEL)	110-120	100-120
PISTON PIN DIAMETER	.6875 .6877	.7500 .7502
PISTON PIN FIT IN ROD	.0002 .0004	.0002 .0007
PISTON RING GROOVE WIDTH TOP 1	.0800 .0810	.0955 .0965
PISTON RING GROOVE WIDTH TOP 2	.0800 .0810	.0955 .0965
PISTON RING GROOVE WIDTH TOP 3	.1880 .1890	.1880 .1890
SIDE CLEARANCE (RING)	.0020 .0040	.0020 .0080
VALVE SPRING FREE LENGTH	1.6620	1.6620
VALVE SPRING COMPRESSED LENGTH	1.3750	1.3750
VALVE SEAT ANGLE°	45	45
VALVE FACE ANGLE° EX/INT	44	44
VALVE SEAT WIDTH	1/32-3/64	1/32-1/8
VALVE SEAT (INTAKE) BORE DIAMETER	1.4430 1.4440	1.5645 1.5655
VALVE SEAT (EXHAUST) BORE DIAMETER	1.1890 1.1900	1.2510 1.2520



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 76-IM-2

GROUP: 24-Misc.-2

DATE: November, 1975

SUBJECT: Testing Triad-Utrad Converters

MODELS: All Motor Homes

Many Triad-Utrad converters returned to us for warranty credit, when tested, have proven to be in good operating condition. Before a converter is replaced, it should be tested in the following manner:

1. Check the motor generator frequency setting. It should be 63 cycles at 120 volts no load. The converter is sensitive to frequency and will not function properly below 60 cycles. If you plan to bench test the unit, make sure the wall socket is producing 60 cycles. This can also be checked with your frequency meter.
2. Disconnect the converter leads from the motor home. This assures that only the converter is being checked.
3. Connect the leads to a good, fully charged, battery and plug in the converter (Figure 1).
4. Using a good calibrated voltmeter, read output voltage across the battery. It should be between 13 to 15 volts.

Converter humming is not considered to be a failure. Humming should be corrected by installing mounting pads as described in Dealer Service Technical Bulletin 75-TM-14 dated March, 1975.

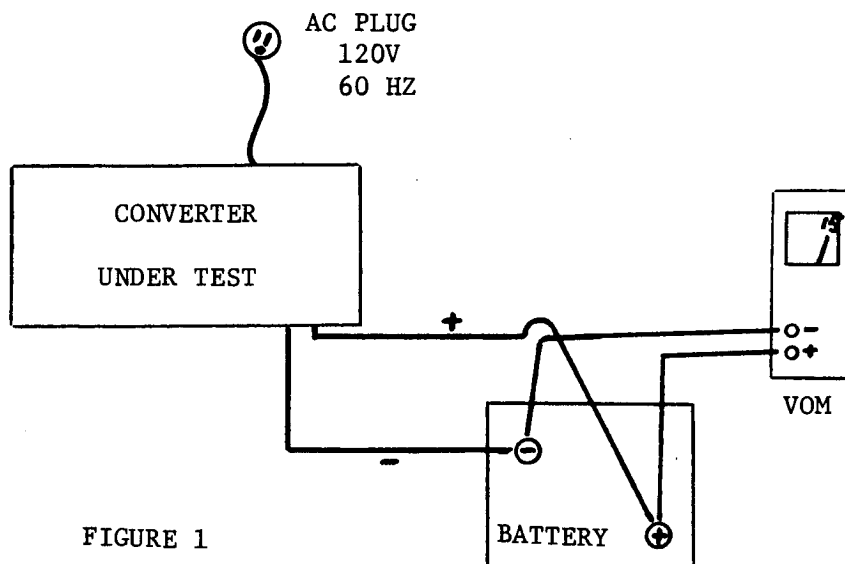


FIGURE 1



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1492

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 76-IM-4

GROUP: 24-Misc.-3

							DATE: December, 1975

SUBJECT: GMC MotorHome Maintenance Manual X-7425 Correction

MODELS: 1973-1974 GMC MotorHomes

This bulletin cancels and supersedes 76-IM-1 dated November, 1975, all copies of which should be destroyed.

Please revise the refrigerator COMPRESSOR VOLTAGE testing procedure on Page 24D-2 as follows:

COMPRESSOR VOLTAGE

The voltage is checked at the compressor terminals with an A.C. voltmeter (Figure 1).

NOTE: A standard (RMS) A.C. voltmeter will read a high A.C. compressor voltage on D.C. operation. The reason being the inverter does not produce a true sine wave on D.C. operation. The 120-volt A.C., 60 cycles/second, will produce a true sine wave which an A.C. voltmeter is designed to read.

If the voltage at the compressor is not adequate the voltage source should be checked.

A.C. OPERATION

Using a standard (RMS) A.C. voltmeter the voltmeter reading should be:

6 cubic foot model	= 19 to 21 volts
7-1/2 cubic foot model	= 22 to 24 volts

D.C. OPERATION

Using a standard (RMS) A.C. voltmeter the voltmeter reading should be:

6 cubic foot model	= 27.2 to 29.2 volts
7-1/2 cubic foot model	= 31.5 to 33.5 volts



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 76-IM-7

GROUP: 24-Misc.-4

DATE: January, 1976

SUBJECT: WATER PUMP PRESSURE SWITCH ASSEMBLY
MODELS: ALL GMC MOTORHOMES PRIOR TO TZE165V1001451

A new automatic pressure switch has been added to the fresh water pump in production. When changing pressure switches on motor homes prior to TZE165V1001451, it will be necessary to use the conversion kit, which is included in the same package with the new switch. The new pressure switch part number is 2009958.

INSTRUCTIONS

1. Turn off power to pump. Bleed pressure from system. Disconnect power leads from pressure switch.
2. Remove switch cover. Remove two lower screws inside case. Pull switch straight out to separate from pump. Dislodge O-ring and sleeve from pressure switch port of base. (Some pumps may not have a sleeve.)
3. Inspect pressure switch port on pump base. If port is counterbored to accept O-ring, proceed with Step A. If port is not counterbored, proceed with Step B.
 - A. Moisten small O-ring with water and place in counter bore of base. Take care to seat O-ring at bottom of counterbore. Place brass sleeve over stub of the conversion plate.
 - B. Moisten small O-ring with water and place around stub of conversion plate (brass sleeve not used).
4. Align conversion plate mounting holes with those in base. Insert stub of conversion plate into pump base with a smooth straight push. Secure conversion plate to base with screws provided (Figure 1).
5. Metallic supported washer (metallic side faces switch) should be placed onto switch threads. Screw replacement switch into conversion plate until snug. The washer should be compressed between switch and conversion plate.
6. Reconnect power leads to pressure switch (Figure 2).

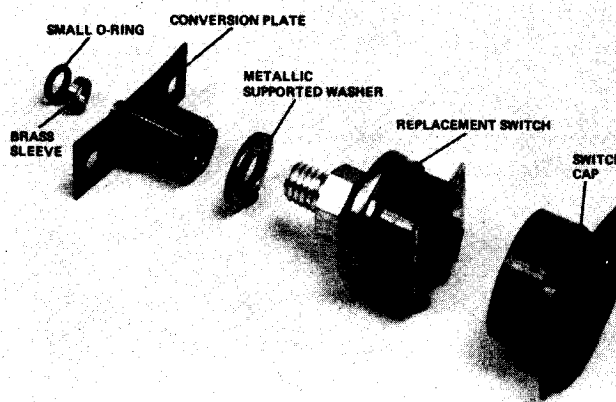


Figure No. 1



Figure No. 2



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 76-IM-9

GROUP: 24-Misc.-5

DATE: January, 1976

SUBJECT: L.P. GAS TANK PURGE

MODELS: ALL GMC MOTORHOMES

Unnecessary complaints concerning furnace operations can be minimized or eliminated particularly when LP gas tanks are new by adhering to the following information: (This is in Maintenance Manual X-7525, Section 24F-8.)

New LP gas tanks that have not yet been filled, have air and moisture inside which can cause problems in the system once it is in use. The LP gas tank should be purged before it is filled for use.

An LP gas tank that has been allowed to run dry while appliances are in use can have air and moisture enter through the appliances. If an LP gas tank runs dry in such a manner it should be purged before it is refilled.

NOTE: The LP gas tank should not be allowed to run dry. The regulator cannot meter a correct LP gas and air mixture when pressure in the tank has dropped too low.

If the container is not properly purged, air in the container dilutes the LP gas vapor. Appliances then require constant adjustment and pilot lights won't stay lit. This condition could exist for several months until all air is depleted, leaving pure LP gas vapor.

PURGING

The LP gas tank is purged with vaporized LP gas, not liquid gas used to fill the tank for operation. Gas used to purge the system must be taken from a filled bottle that has a vapor withdrawal system. Purging should be done by an authorized LP gas dealer.

WARNING: PURGING MUST BE DONE WELL AWAY FROM ANY FLAMES OR SOURCE OF SPARKS THAT MIGHT IGNITE LP VAPORS CAUSING DAMAGE TO COMPONENTS AND/OR INJURY TO PERSONNEL.

1. Bleed off all the air that will escape from tank.
2. Put LP gas in vapor form in the tank to raise the internal tank pressure to about 15 psi. Then open the valve and allow LP gas to escape slowly.
3. Repeat 8-10 times. Allow enough time between each filling and releasing for the gas to dissipate. Properly fill LP tank with LP liquid.



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 76-IM-13

GROUP: 24-Misc.-6

DATE: June, 1976

SUBJECT: Onan 4KW Piston Ring Set and Piston Ring Expander

MODELS: 1973 and 1974 230 Motor Homes

For improved oil control, a new ring expander, part number 2014414* is available for installation behind the second compression ring.

A new ring set, part number 2014413, is available which includes the new ring expander.

The new ring set or expander is for use on the Onan 4KW only.

You may continue to use your stock of the 721454 ring sets on the Onan 4KW by adding the 2014414* ring expander behind the second compression ring.

*Part 2014414 to be ordered on "AS REQUIRED" basis.



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 76-IM-14

GROUP: 24-Misc.-7

DATE: June, 1976

SUBJECT: NEW TYPE DIPSTICK AND TUBE FOR 4 KW ONAN GENERATORS

MODELS: 1973 AND 1974 MOTOR HOMES EQUIPPED WITH 4KW ONAN GENERATORS

Technical Service has released a new style dipstick and dipstick tube for the 4KW Onan generators. This new style dipstick is a screw-in type replacing the former push-in style for the purpose of eliminating the possibility of oil leakage. With the former style push-in type, it was possible for the dipstick to work loose allowing oil to escape or blow out while the generator is running.

PROCEDURE

1. Remove former type dipstick.
2. Remove, by unscrewing, the former type dipstick tube.
3. Screw in new type dipstick tube and install dipstick.
4. Add any oil needed to bring it up to proper level.

PARTS INFORMATION

	<u>Former Style</u>	<u>New Style</u>
Dipstick	707125	2000339
Dipstick Tube	707283	2000350

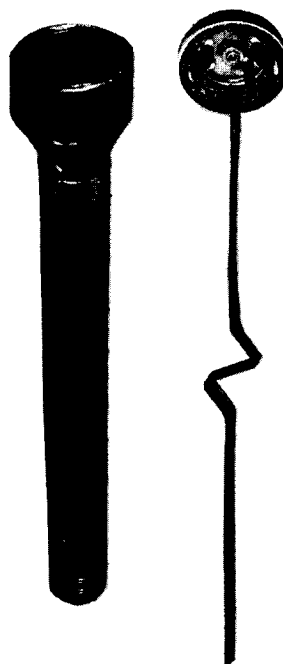
WARRANTY INFORMATION

When the repairs are within the published warranty, use:

<u>Labor Operation</u>	<u>Description</u>	<u>Time</u>	<u>Trouble Code</u>
TO26123	Oil level dipstick and tube assembly — Replace	.2	92



NEW STYLE
Screw-in Type



FORMER STYLE
Push-in Type





Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 76-IM-16

GROUP: 24-Misc.-8

DATE: July, 1976

SUBJECT: CARBURETOR PREHEATER — ONAN MOTOR GENERATOR
MODELS: ALL VEHICLES WITH 4KW AND 6KW ONAN MOTOR GENERATOR

Onan Motor Generators may experience carburetor icing under certain weather conditions. An air preheater kit is now available that utilizes air heated by the exhaust pipe for induction into the carburetor. The customer must be cautioned that the kit must be partially removed to make it ineffective once the ambient temperature reaches 50°F; otherwise, serious engine damage may result.

PARTS INFORMATION

Quantity	Part Number	Description
1	2018248 *	Air Preheater Kit (6000W)
1	2018249 *	Air Preheater Kit (4000W)

*At this time, order on "As Required" basis.

PROCEDURE

6000 Watt Models

- Slide out generator. Generator does not have to be removed from the vehicle.
- Remove air filter.
- Insert filter in air cleaner jacket as shown in Figure 1. Use two washers to space between the filter and the jacket on the bottom.
- Install air cleaner assembly on generator by sliding it around the back of the generator. Make sure that the hole in the side points towards the exhaust pipe.
- Remove bolts securing the LH cylinder housing and discard bolts.
- Attach the air duct to the cylinder housing thread using the 1/4 - 20 x 1-1/4 bolt on top and a 1/4 - 20 x 1/2 bolt on the bottom. Do not overtighten the top bolt to avoid crushing the duct. See Figure 2.
- Connect hose from jacket to duct and clamp. See Figure 3.
- IMPORTANT.** Affix decals on the air duct.

4000 Watt Models

- Slide out generator. Generator does not have to be removed from the vehicle.
- Remove air filter.
- Remove spring from air filter stud, but save. (This must be used when jacket is removed during warmer temperatures.)
- Insert the filter in the air cleaner jacket using two flat washers as spacers between the air filter and the jacket. See Figure 4.
- Push the stud through the assembly, place the adapter on top of the assembly and fasten the assembly to the carburetor. The carburetor bowl may have to be rotated to provide clearance between adjustment screw and jacket. Make sure that the slot points toward the exhaust pipe.
- Remove the bolts that hold the LH cylinder housing in place and discard. Fasten the air duct to the housing and the head using a 1/4 x 20 x 10 bolt on top and a 1/4 - 20 x 1/2 bolt on the bottom. See Figure 5.
- Connect the jacket to the duct with the tab using two #10-32 x 5/16 bolts. See Figure 6.
- IMPORTANT:** Affix decals on the air duct.

WARRANTY INFORMATION

When these repairs are within the published warranty use:

Operation Number	Description	Time Allowance	Trouble Code
T056105	Install engine preheater kit on Onan 4 or 6KW Motor Generator.	.3	92



Figure 1

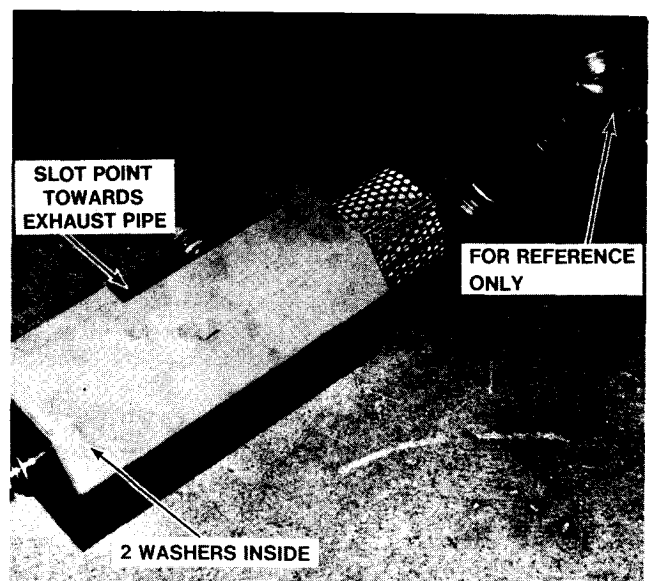


Figure 4

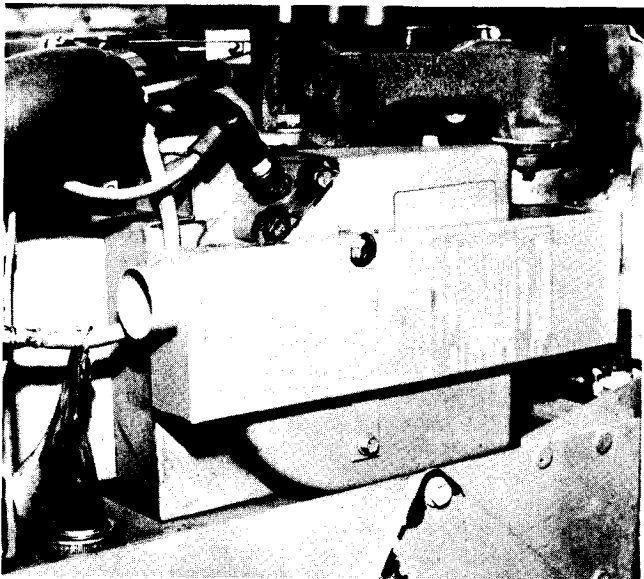


Figure 2

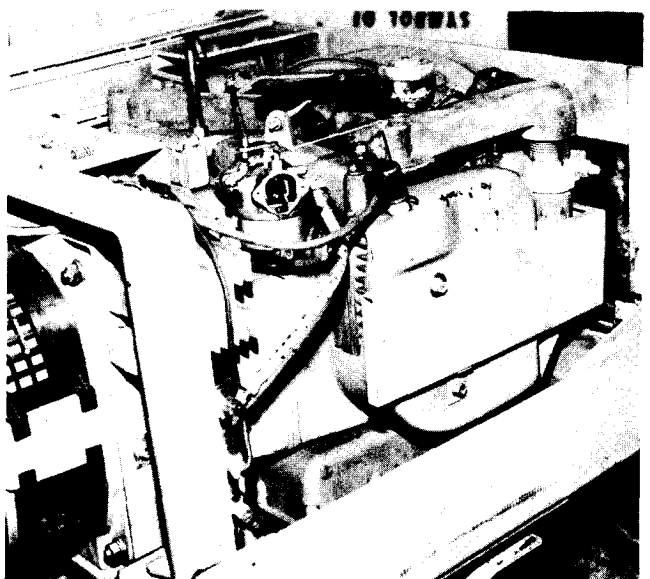


Figure 5

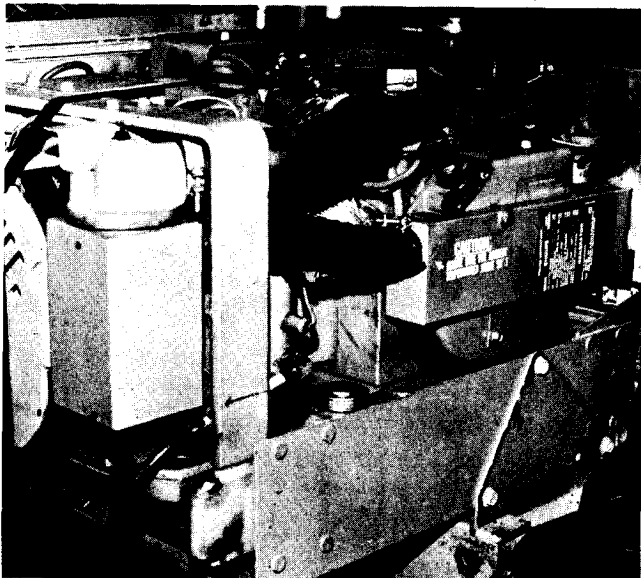


Figure 3

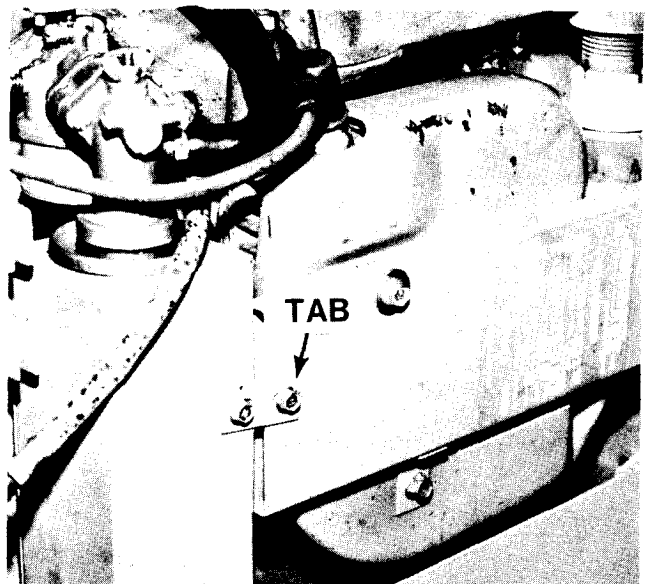


Figure 6



Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 77-IM-4

GROUP: 24-Misc.-1

DATE: January, 1977

SUBJECT: MARK II WATER NATURALIZER

MODELS: ALL GMC MOTORHOMES

This bulletin is to clarify a few misunderstandings regarding the Mark II Water Naturalizer, Part #2234773.

Some naturalizers in stock still have the old Installation, Operation and Maintenance Instruction #947-308. Under Item 1 of Instructions for Use, they read:

"Replace the primary cartridge 'A' when the flow rate diminishes significantly. Cartridge 'B' may also require replacement after an extended period of use. This replacement is to be made when the replacement of the primary cartridge 'A' fails to restore the flow rate of the unit to a satisfactory level. Contact your local dealer or P.C.P. for replacement cartridges."

New Installation, Operation and Maintenance Instructions #947-326, should read:

"Replace cartridge 'B', when the flow rate diminishes significantly. Contact your local dealer or P.C.P. for replacement cartridges."

You can expect a Mark II Water Naturalizer to last approximately one to two thousand gallons or two years (depending upon the quality of the municipal water).

When the flow rate decreases significantly, it may be time to replace the cartridge. BEFORE doing so, a few quick checks should be done first. Be certain that water is free to flow from the supply valve through all lines and fittings, and finally through the spigot. If any of these have an obstruction, remove and clean. When the above has been satisfied and the flow rate still has not improved, run water backwards through the unit. Only after these have been done can you determine that the unit has been exhausted and needs a new cartridge.

If the unit serial number begins with a "1", replace only the first cylinder. When the serial number begins with a "2" replace only the second cylinder (B cylinder). By doing so, you will be increasing the flow rate to its original condition. However, if an odor exists on those beginning with a "2", replace only the third, or 'A' cylinder with a 'AA' cylinder. The 'AA' cylinders are not stocked through normal parts channels. Call Motorhome Service for assistance in ordering.



Motor
Home
Service

Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION

GENERAL MOTORS CORPORATION

IMPORTANT-All Service Personnel Should Read and Initial

NUMBER: 77-IM-6

GROUP: 24-MISC.- 3

DATE: JUNE, 1977

SUBJECT: MAJOR RV UPFITTERS

MODELS: TRANSMODES

If difficulty is encountered in service or parts in interiors installed by a major RV upfitter, please contact the following personnel for assistance:

Coachmen Customer Service

P.O. Box 1000

Middlebury, IN 46540

John M. Helm

Vice President - Service

(219) 825-8213

George B. Jordan

Owner Relations Manager

(219) 825-8249

(Jimmy Parts)

Coach-Lite Midwest (Coachmen Parts)

P.O. Box 379

Middlebury, IN 46540

William A. Kokorelis

VP & General Manager

1-800-348-7558

Jimmy Motor Homes

P.O. Box 236

Elkhart, IN 46514

R. J. Simpson

Service Manager

(219) 262-2645

Leisure & Recreational Products (LRP)

601 E. Centralia

Elkhorn, WI 53121

Ira Williams

(414) 723-4466

Recreational Industries (RICO)

5232 Tod Avenue

Warren, OH 44485

Ann Menz

(216) 393-1518

Midas International (All Midas Products)

Frolic Homes

55667 (R7) CR-15S

Elkhart, IN 46514

Jim Jamison

(219) 294-1575



Motor
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Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION

GENERAL MOTORS CORPORATION

IMPORTANT-All Service Personnel Should Read and Initial

NUMBER: 77-IM-7

GROUP: 24-MISC.-2

DATE: MAY, 1977

SUBJECT: GMC MOTORHOME MAINTENANCE MANUAL X-7625 CORRECTION

MODELS: 1976 MOTORHOMES

Please revise the "Norcold Refrigerator Specifications" on Page 24D-2 as follows:

NORCOLD REFRIGERATOR SPECIFICATIONS

MODEL	6 CUBIC FOOT	7.5 CUBIC FOOT
Compressor Power	40 Watts	60 Watts
Compressor Amps Required	2 Amps	2.6 Amps
Compressor Volts Required (A.C. Operation)	19 to 21 Volts A.C.	22 to 24 Volts A.C.
Compressor Volts Required (D.C. Operation)	27.2 to 29.2 Volts A.C.	31.5 to 33.5 Volts A.C.
Compressor Motor Resistance	2 to 3 Ohms	2 to 3 Ohms
Compressor Motor Speed	60 Strokes/Sec.	60 Strokes/Sec.
Inverter Output	11 Volts A.C.	11 Volts A.C.
Transformer Output	20 Volts A.C.	23 Volts A.C.
Input Voltage	12 Volts D.C. or 120 Volts A.C.	12 Volts D.C. or 120 Volts A.C.
Refrigerant	R 12	R 12
Refrigerant Charge	2.56 Ounces	3.17 Ounces



Motor
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Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION

GENERAL MOTORS CORPORATION

IMPORTANT-All Service Personnel Should Read and Initial

NUMBER: 77-IM-8

GROUP: 24-MISC.-4

DATE: July, 1977

SUBJECT: DUO-THERM FURNACE

MODELS: ALL MOTORHOMES EQUIPPED WITH DUO-THERM FURNACES

During the 1977 Model Year, the 30,000 B.T.U. Duo-Therm furnace (Figure 1) was installed as standard equipment in the GMC Motorhome. The furnace is located in the compartment, at floor level, under the kitchen sink. The identification plate is located at the front of the combustion chamber assembly. The furnace has no pilot light but is ignited by a direct spark ignition system.

The furnace utilizes a sealed combustion system. The combustion air is drawn in from outside the vehicle, passes through the combustion chamber, and returned to the outside. Air inside the vehicle is drawn through the front panel on the furnace and passed around the heat chamber then discharged into heat ducts located on the front and rear sides of the furnace casing.

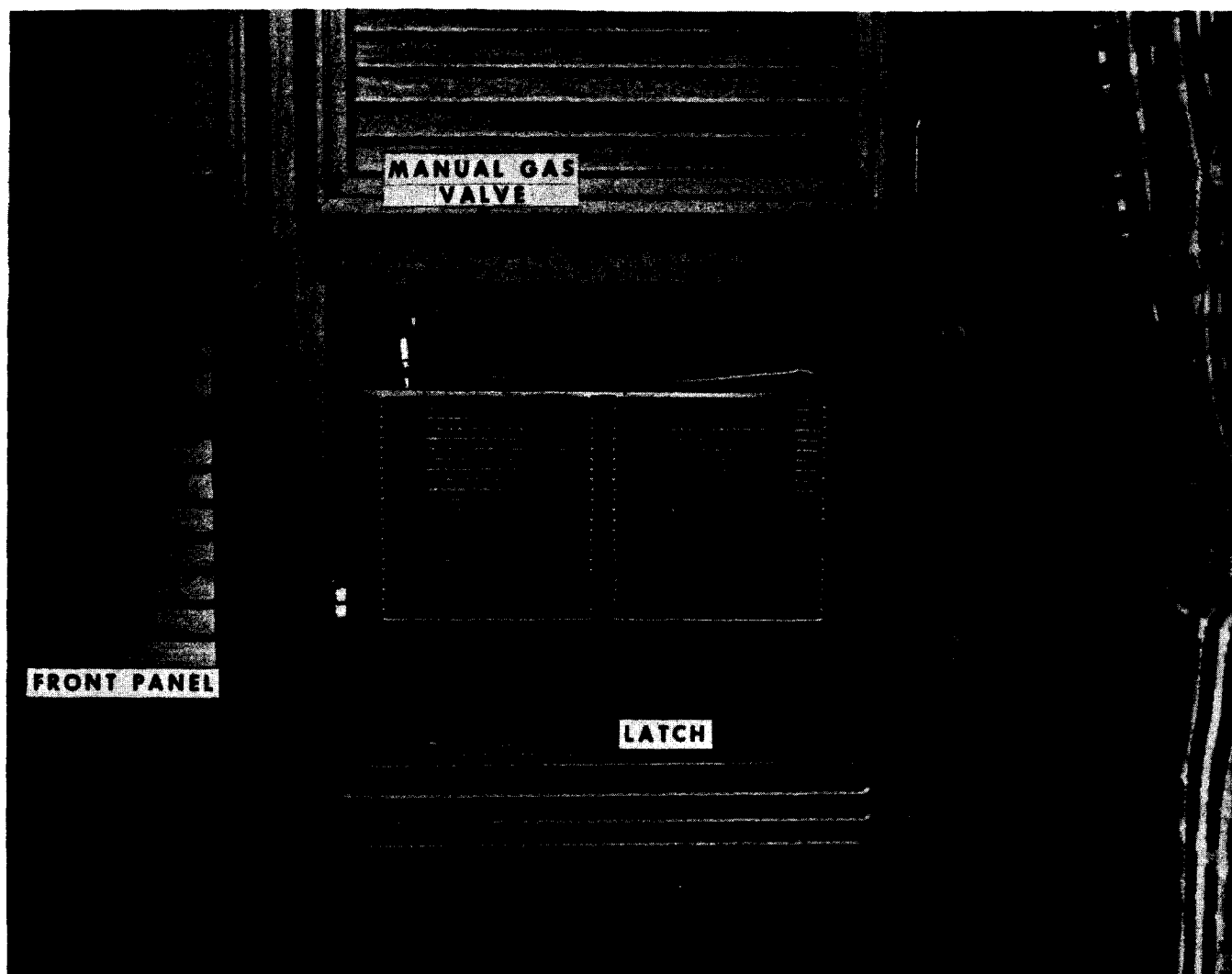


Figure 1 – Duo-Therm Furnace Installed

NOTE: An auxiliary furnace blower located behind the kitchen range/oven aids in conducting heated air to the bathroom module.

The furnace operates on 12-volts D.C., and its wiring diagram is shown in Figure 2.

COMPONENT DESCRIPTION

Gas Valve

The gas valve (Figure 3) contains a manual shutoff for the LP gas supply to the furnace. Also included in

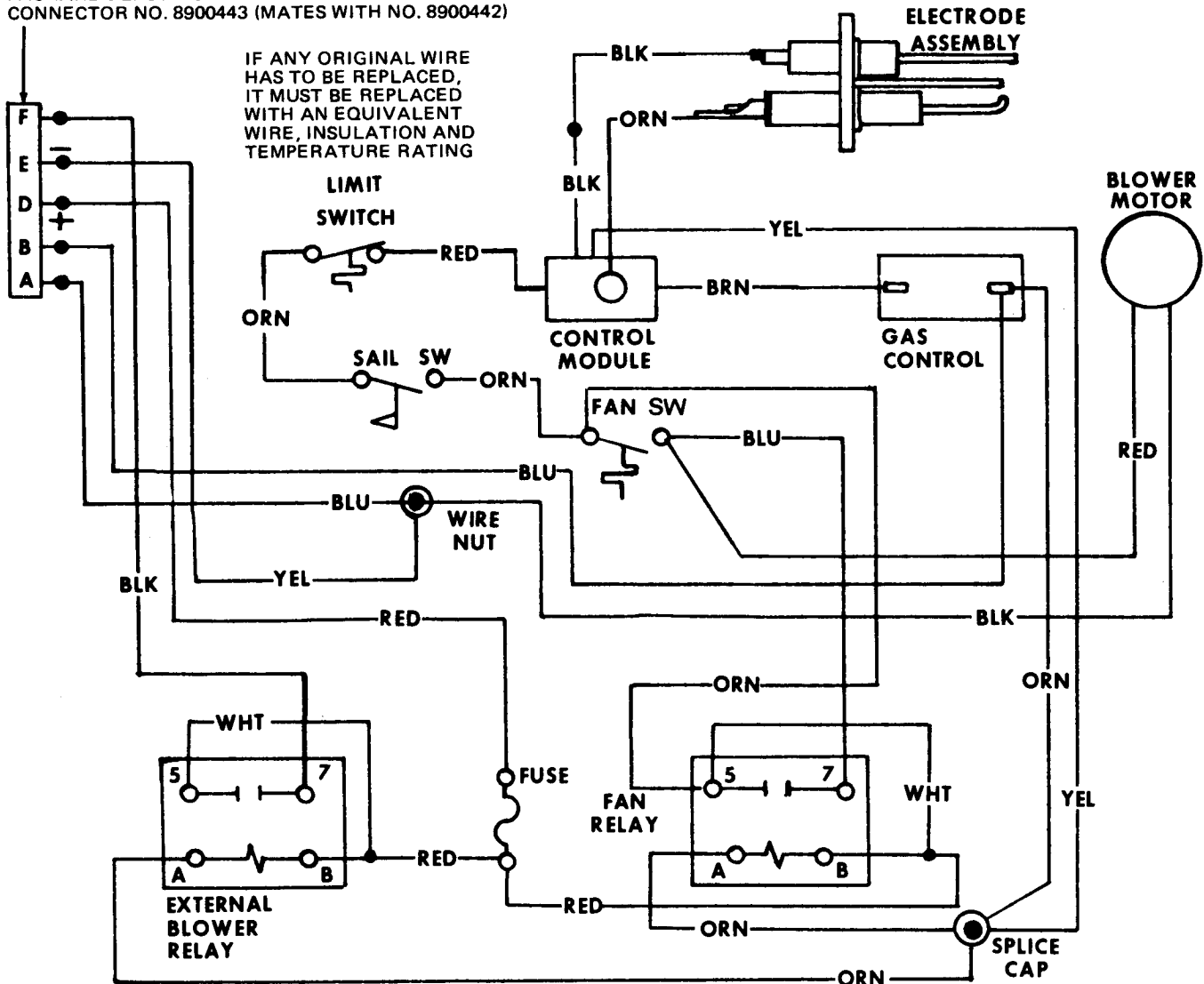
the valve is a pressure regulator which limits LP gas to the furnace between 10-1/2 and 11-1/2 inches of water pressure.

NOTE: This valve is in addition to the LP gas regulator valve located at the LP gas tank.

Gas Solenoid Valve

The gas solenoid valve (Figure 3) controls the flow of LP gas to the burner assembly. Opening and closing of this valve is controlled by the sail switch and the ignition system.

PACKARD ELECTRIC DIV. GENERAL MOTORS CORP.
CONNECTOR NO. 8900443 (MATES WITH NO. 8900442)



MODEL 65930-926 INCLUDES A RELAY TO POWER THE REMOTE BLOWER LOCATED WITHIN THE DUCT SYSTEM. THE OPERATIONAL SEQUENCE PERMITS THE REMOTE BLOWER AND THE FURNACE BLOWER TO OPERATE WHEN THE THERMOSTAT IS CALLING FOR HEAT. WHEN THE THERMOSTAT IS SATISFIED, THE REMOTE BLOWER WILL STOP AND THE FURNACE BLOWER WILL CONTINUE TO RUN UNTIL THE FAN SWITCH WITHIN THE FURNACE IS SATISFIED.

Figure 2 – Duo-Therm Furnace Wiring

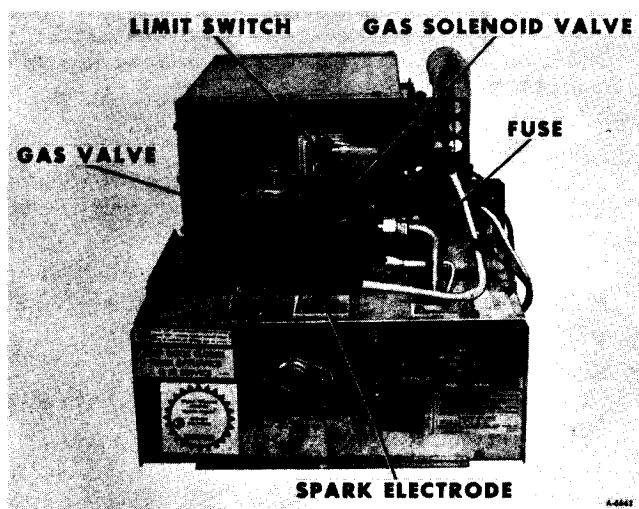


Figure 3 – Furnace Components (Front View)

Limit Switch

The limit switch function is to turn off the gas supply to the burner assembly if furnace temperature exceeds the high temperature limit of 200°F (93°C). If this temperature is exceeded during furnace operation, the limit switch will open causing the gas solenoid valve to close, thus shutting off LP gas to the furnace.

Blower Assembly

The furnace blower assembly contains one motor that is used to drive both the combustion air and circulating air blower wheels. The combustion air blower is sealed so as to allow no passage of air between it and the circulating air blower. The combustion air blower wheel draws air from outside the vehicle into the combustion chamber and forces combustion products out the exhaust tube. The circulation air blower wheel pulls air into the front of the furnace, forces it across the heat chamber, and discharges it to the heat ducts located on both sides of the furnace casing.

Relays

Two relays (Figure 4) are located on the right side of the furnace. The auxiliary blower relay is energized when the thermostat contacts close (calling for heat). When energized, this relay feeds current to the auxiliary blower motor located behind the range/oven. When the thermostat contacts open, the auxiliary blower motor will shut off.

The blower relay energizes the blower motor when the thermostat calls for heat. When the thermostat contacts open, the blower relay contacts open; thus, the ground circuit for the relay is broken. The blower will continue until the fan switch shuts off the blower.

Fan Switch

The fan switch (Figure 4) controls the sequence of blower operation. The fan switch is a two pole switch. When the bimetal disc in the switch is heated to operating temperature, the switch changes position. The blower will continue to run as long as the circulating air chamber is hot, even though the thermostat contacts are open and the gas solenoid valve is closed. When the chamber cools, the fan switch changes back to its original position and shuts the blower off.

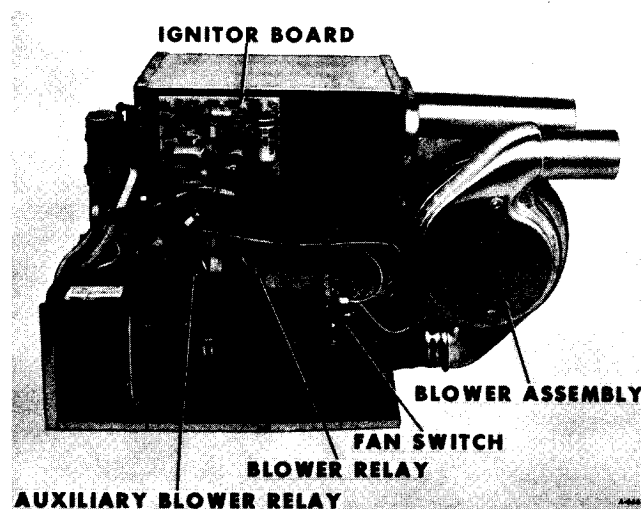


Figure 4 – Furnace Components (Side View)

Sail Switch

The sail switch is located on the bottom of the blower assembly. The switch operates in response to the flow of air generated by the blower. If for any reason the air from the blower is not sufficient, the switch will not operate. This may be caused by a slow motor due to low voltage, restricted return air, or lint accumulation on the blower wheel. Once the switch engages, the solenoid valve opens, gas flows to the burner, and ignition occurs.

Ignition System

The direct spark ignition system consists of a solid-state printed ignitor board, an ignitor assembly and connecting high and low voltage wires. The ignitor board is not field repairable.

The thermostat contacts when closed allow current to the ignitor board to open the gas solenoid valve, and provide the ignition spark. As soon as the flame is established, the spark ceases. Should the flame not be established within a period of 15 seconds, the system will close the gas solenoid valve.

Electronic flame sensing circuitry in the spark electrode detects the presence or absence of main burner flame. If the flame is extinguished during normal operation, the ignitor board will provide one re-try for ignition, then close the gas valve.

SEQUENCE OF OPERATION

When the thermostat calls for heat, the furnace blower motor is energized immediately. When the blower reaches minimum operating speed (approximately 1-2 seconds), the main burner of the furnace is designed to ignite. The furnace will continue to run until the thermostat is satisfied or is turned to a lower setting. Following approximately one minute of burner operation, a slight "snap" will be heard from within the furnace. This is the furnace fan switch changing to its normal run position. After this occurs and the thermostat is satisfied or is turned to a lower setting, the main burner flame will go out; but the blower will continue to run for a short period of time and then shut off. If thermostat is adjusted to a lower setting or to "OFF" before the furnace has operated for one minute, the blower and main burner will shut off at the same time.

OPERATING FURNACE

This furnace has no pilot light but is ignited by a direct spark ignition system. No manual lighting is required.

Start-Up

1. Set thermostat located in rear of motorhome living area to "OFF" position. Remove front panel from furnace. Turn gas valve on furnace to "OFF" position. Wait five minutes.

This will allow any LP gas fumes in the combustion chamber to dissipate.

NOTE: Be sure control valve at LP gas tank is fully open.

2. Open furnace manual valve fully. The manual valve is located just above the furnace. Do not attempt to operate furnace with valve partly opened as proper operation depends on valve being fully open.
3. Turn furnace gas valve to "ON" position. Do not attempt to operate furnace with valve partly opened as proper operation depends on valve being fully opened.

4. Set thermostat to "ON" position and adjust to the desired temperature setting. When furnace ignites, it will continue to run until thermostat is satisfied or is turned to a lower setting.

5. Allow 15 seconds for burner to ignite. Look for flame at furnace view port. Install furnace front panel when ignition is obtained. Furnace will now operate automatically.

6. If burner does not light, set thermostat on "OFF" position, wait 15 seconds, and repeat steps 4-5.

7. If ignition is not obtained after three tries, go to shutdown and determine the cause.

Shutdown

1. Turn gas valve to "OFF" position.
2. Set thermostat on "OFF" position.

FURNACE DIAGNOSIS

BURNER DOES NOT LIGHT		
<u>PROBLEM</u>	<u>POSSIBLE CAUSES</u>	<u>CORRECTION</u>
No Voltage to Furnace	1. Blown fuse living area fuse block 2. Blown fuse at furnace	1. Correct short and replace fuse 2. Correct short and replace fuse
Blower Does Not Operate	1. Defective blower relay	1. Replace blower relay
Blower Speed Inadequate To Close Sail Switch	1. Insufficient voltage — furnace operating voltage is 9 to 15 volts D.C.	1. Charge batteries or connect to shore power
Sail Switch Not Closing	1. Insufficient voltage 2. Loose connection 3. Defective switch	1. Charge batteries or connect to shore power 2. Repair connection 3. Replace switch
Gas Solenoid Valve Not Opening	1. Open or short in gas solenoid valve coil 2. Voltage not present at gas solenoid valve during ignition phase	1. Replace gas solenoid valve 2. Repair defective wiring to gas solenoid valve or replace ignitor board or replace sail switch
No Spark at Ignitor	1. Short or open in high voltage lead 2. Ignitor not grounded 3. Incorrect spark gap 4. Cracked ceramic on ignitor 5. Defective ignitor board	1. Replace high lead voltage 2. Correct ground 3. Set spark gap to $1/8" \pm 1/32"$ 4. Replace ignitor 5. Replace ignitor board
Limit Switch Open	1. Limit switch is normally closed below 200°F.	1. Replace limit switch if there is no continuity across switch below 200°F

FURNACE LIGHTS BUT SHUTS DOWN AFTER A PERIOD

<u>PROBLEM</u>	<u>POSSIBLE CAUSES</u>	<u>CORRECTION</u>
Furnace Lights But Shuts Down After a Few Seconds	<ol style="list-style-type: none"> 1. Ground screw loose 2. Burner assembly mounting screws loose 	<ol style="list-style-type: none"> 1. Secure the green grounding wire to grounding screw located near the blower relays <p>NOTE: On early furnaces, the green wire is grounded in the furnace junction box</p> <ol style="list-style-type: none"> 2. Tighten burner assembly mounting screws
Furnace Lights But Randomly Shuts Down During Duty Cycle	<ol style="list-style-type: none"> 1. Check flame sensor electrode lead for continuity 2. Flame sensing electrode not located properly 3. Air in L.P.G. line or regulator frozen 	<ol style="list-style-type: none"> 1. Replace lead 2. Position flame sensing electrode so that tip is in flame. The current should be 5-15 microamps through the electrode lead 3. Purge L.P.G. tank and add methanol alcohol

COMBUSTION CHAMBER ASSEMBLY REPLACEMENT

WARNING: BEFORE ANY REMOVAL OR DISASSEMBLY PROCEDURES ARE PERFORMED ON THE FURNACE, BE SURE LP GAS IS COMPLETELY TURNED OFF AT THE LP GAS TANK AND REMOVE FURNACE FUSE FROM FUSE BLOCK TO AVOID PERSONAL INJURY.

WARNING: DUE TO THE POSSIBILITY OF PERSONAL INJURY ON SHARP SHEET METAL, CARE SHOULD BE TAKEN ANY TIME SERVICE IS PERFORMED ON THE FURNACE.

REMOVAL

1. Shut off LP gas at LP gas tank and remove furnace fuse from fuse block in living area electrical compartment.
2. Remove toe board in front of furnace at floor level (Figure 5) by removing two retaining screws. Then remove front panel from furnace.

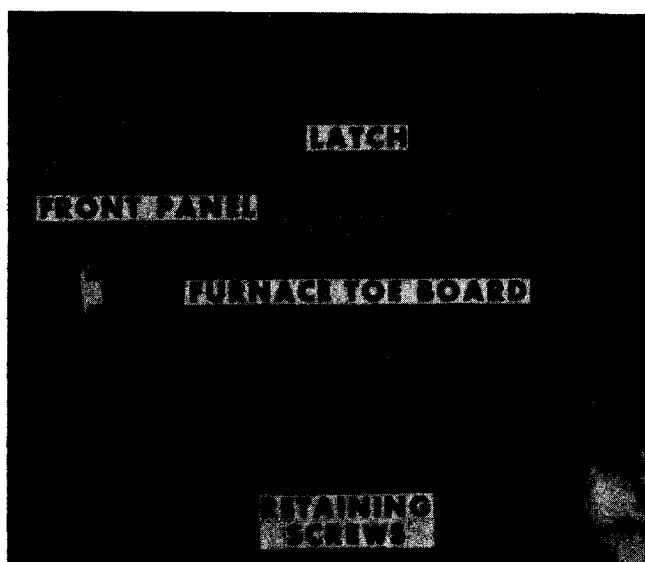


Figure 5 – Removal of Furnace Toe Board

3. Close manual gas valve. (NOTE: This valve is located just above furnace).

4. Disconnect gas line lower fitting from furnace gas valve (Figure 6). Loosen gas line upper fitting. Rotate gas line 90° to allow for removal of combustion chamber assembly (Figure 8)

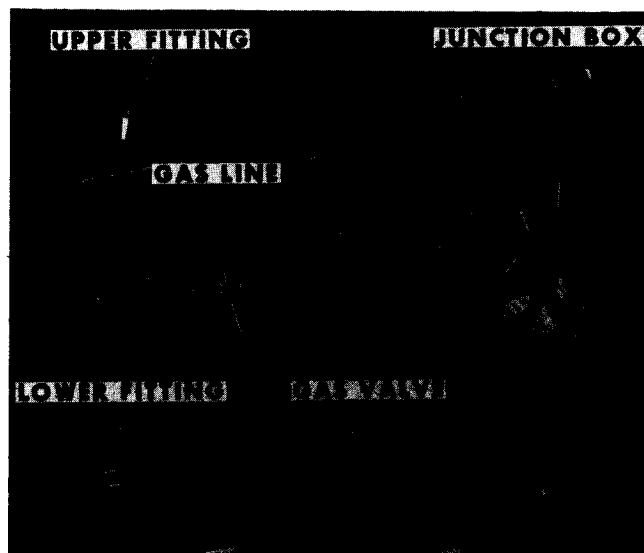


Figure 6 – Disconnecting Furnace Gas Line

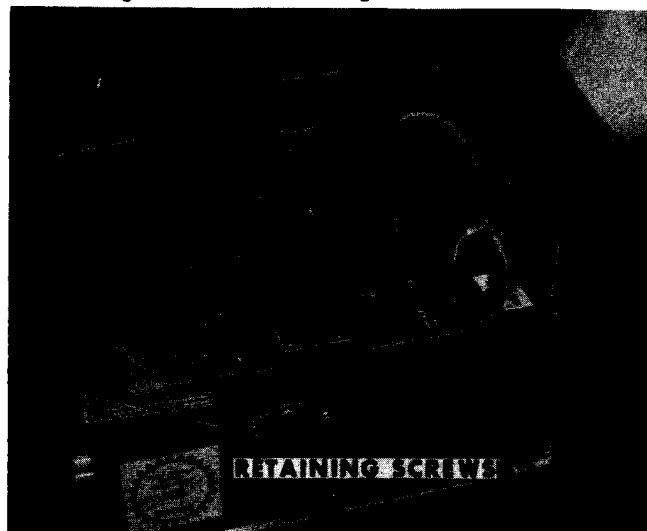


Figure 8 – Removing Combustion Chamber Assembly Retaining Screws

5. Remove cover from junction box (Figure 6).
6. Inside the junction box remove the wire nuts retaining wiring harness to furnace wiring. Carefully, separate wires in junction box. Using pliers, apply light pressure on special grommet. Pull grommet and furnace wiring from junction box (Figure 7).

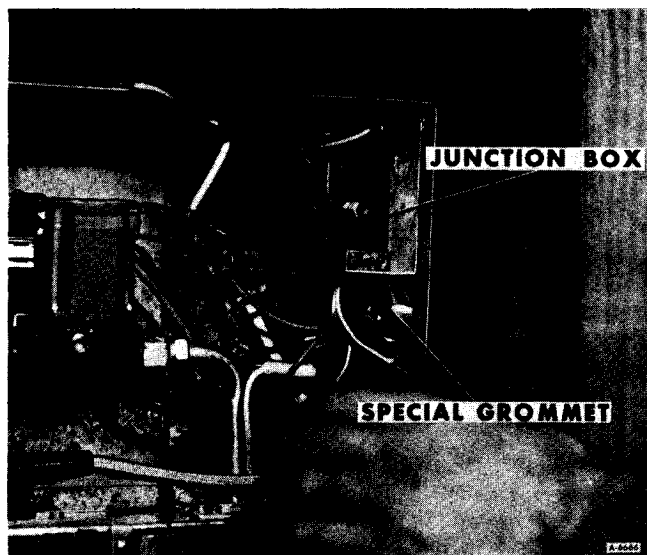


Figure 7 – Removing Wiring from Junction Box

7. Remove two combustion chamber assembly mounting screws (Figure 8).
8. Carefully pull combustion chamber assembly out of furnace casing (Figure 9). Remove from vehicle.

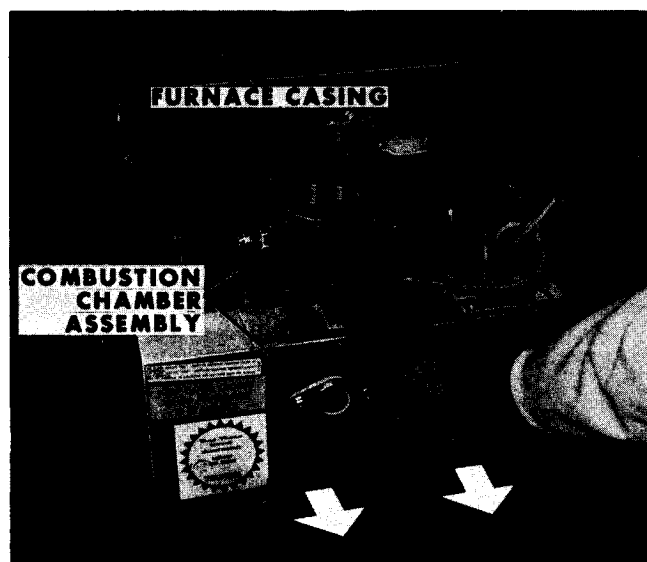


Figure 9 – Removing Combustion Chamber Assembly

INSTALLATION

NOTE: To aid in installation of combustion chamber assembly, remove inlet and outlet vent caps from outside of motorhome. (Figure 10).

1. Carefully slide combustion chamber assembly into furnace casing.
2. Install two combustion chamber assembly retaining screws (Figure 8).

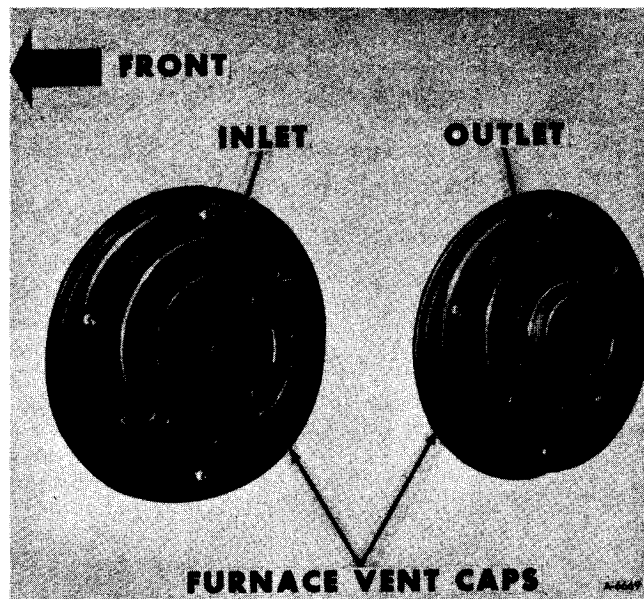


Figure 10 – Furnace Vent Caps

3. Install furnace wiring and special grommet into junction box (Figure 7).
4. With aid of wiring diagram (Figure 2), connect wiring harness to furnace wiring using solderless connectors in the junction box. Install junction box cover.
5. Connect gas line to furnace gas valve (Figure 6). Tighten upper and lower fittings on gas line.
6. Install furnace toe board with two retaining screws (Figure 5).
7. Carefully install furnace vent caps from outside of vehicle (Figure 10).
8. Move vehicle outside of service building to be sure of adequate ventilation while operating furnace. Check furnace for proper operation by performing furnace "Start-Up" and "Shutdown" as described earlier in this section.

COMPONENT REPLACEMENT

The following components (Figure 3) can be inspected and replaced without removing the combustion chamber assembly from the vehicle.

- | | |
|-----------------------|-----------------|
| 1. Gas Valve | 3. Limit Switch |
| 2. Gas Solenoid Valve | 4. Furnace Fuse |

Removal of the combustion chamber assembly is required for replacement of other furnace components.

WARNING: BEFORE ANY REMOVAL OR DISASSEMBLY PROCEDURES ARE PERFORMED ON THE FURNACE, BE SURE LP GAS IS COMPLETELY TURNED OFF AT THE LP GAS TANK AND REMOVE FURNACE FUSE FROM FUSE BLOCK TO AVOID PERSONAL INJURY.

WARNING: DUE TO THE POSSIBILITY OF PERSONAL INJURY ON SHARP SHEET METAL, CARE SHOULD BE TAKEN ANY TIME SERVICE IS PERFORMED ON THE FURNACE.

GAS VALVE REPLACEMENT

Removal

1. Close manual gas valve. (NOTE: This valve is located just above furnace).
2. Disconnect gas line from gas valve (Figure 6).
3. Remove gas solenoid valve from main burner gas line (Figure 11).
4. Separate gas valve from gas solenoid valve.

Installation

1. Connect gas valve to gas solenoid valve using nipple.
2. Connect gas solenoid valve to main burner gas line (Figure 11).

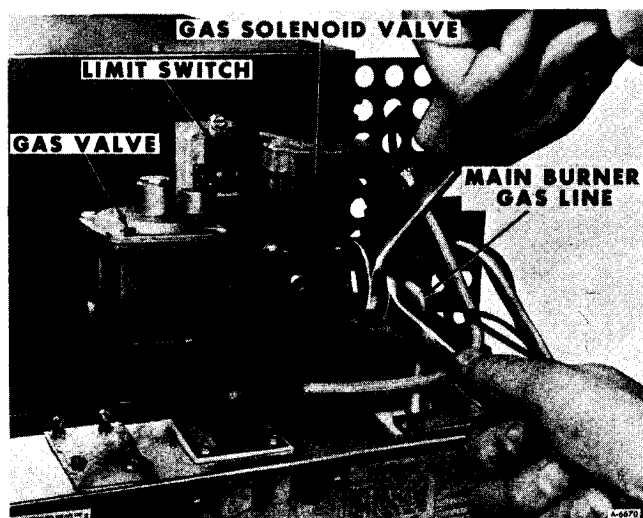


Figure 11 – Removing Gas Solenoid Valve

3. Connect gas line to gas valve (Figure 6).

GAS SOLENOID VALVE REPLACEMENT

Removal

1. Close manual gas valve. (NOTE: This valve is located just above furnace).
2. Disconnect gas line from gas valve (Figure 6).
3. Remove gas solenoid valve from main burner gas line (Figure 11).
4. Separate gas solenoid valve from gas valve.

Installation

1. Connect gas solenoid valve to gas valve using nipple.
2. Connect gas solenoid valve to main burner gas line (Figure 11).
3. Connect gas line to gas valve (Figure 6).

LIMIT SWITCH REPLACEMENT

Removal

1. Remove gas solenoid valve as described earlier in this section under "Gas Solenoid Valve Replacement".

2. Disconnect electrical leads from limit switch (Figure 12).

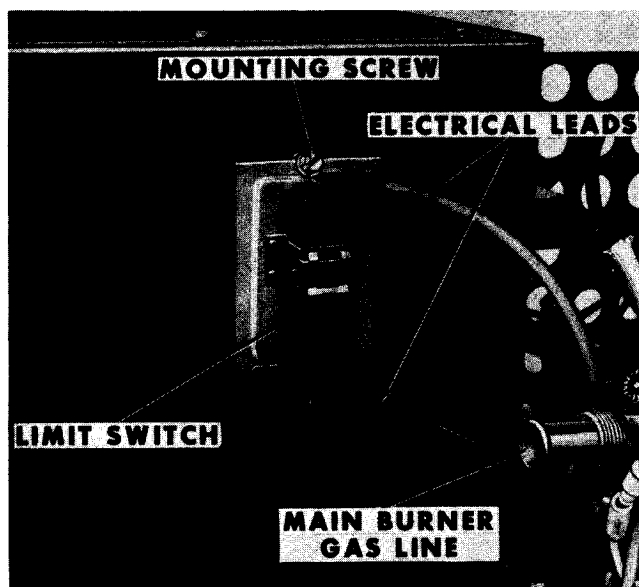


Figure 12 – Limit Switch Installed

3. Remove limit switch mounting screw. Carefully remove limit switch from combustion chamber assembly.

Installation

1. Carefully install limit switch into opening on front of combustion chamber assembly. Retain switch in position with mounting screw (Figure 12).
2. Connect electrical leads to limit switch.
3. Install gas solenoid valve as described under "Gas Solenoid Valve Replacement" earlier in this section.

FAN SWITCH REPLACEMENT

Removal

1. Remove the combustion chamber assembly as described under "Combustion Chamber Assembly Replacement" earlier in this section.
2. The fan switch is located on the right side of the furnace (Figure 4).
3. Disconnect electrical leads from fan switch (Figure 13).
4. Remove two mounting screws and separate fan switch from warm air housing.

Installation

1. Locate fan switch on warm air housing (Figure 13). Retain switch in position with two mounting screws.
2. Connect electrical leads to fan switch.
3. Install combustion chamber assembly as described under "Combustion Chamber Assembly Replacement" earlier in this section.

SAIL SWITCH REPLACEMENT

NOTE: The sail switch (also sometimes called combustion air switch) is located on the bottom of the blower assembly (Figure 14).

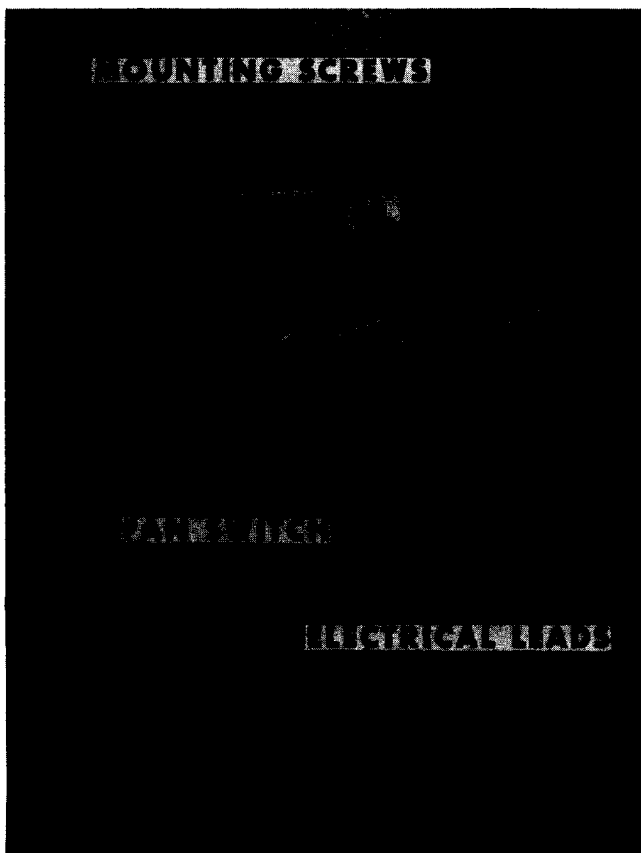


Figure 13 — Fan Switch Installed

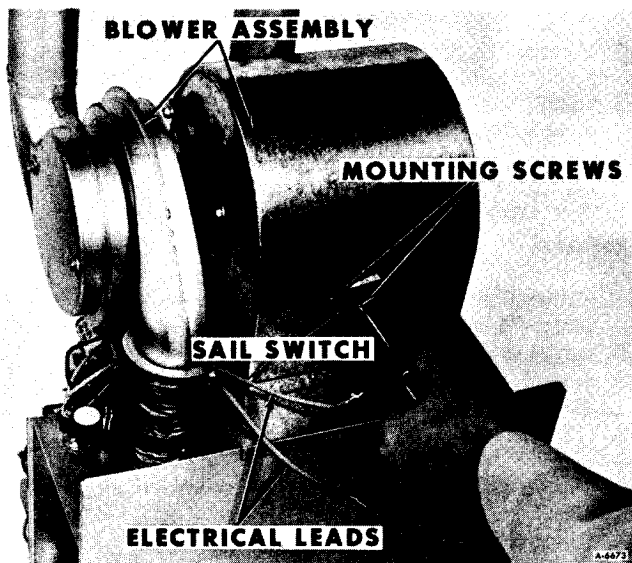


Figure 14 — Removing Sail Switch

Removal

1. Remove the combustion chamber assembly as described under "Combustion Chamber Assembly Replacement" earlier in this section.
2. Disconnect electrical leads from sail switch (Figure 14).
3. Remove two mounting screws. Carefully lift sail switch away from blower assembly.

Installation

1. Carefully position sail switch on bottom of blower assembly. Install two mounting screws. Check that sail arm on the sail switch does not contact sheet metal on blower assembly.

2. Connect electrical leads to switch.

3. Install the combustion chamber assembly as described in "Combustion Chamber Assembly Replacement" earlier in this section.

FURNACE RELAY REPLACEMENT

NOTE: Two relays are located on the right side of the furnace (Figure 4). The auxiliary blower relay, when energized, activates the auxiliary blower motor that is located behind the oven. The blower relay, when energized, activates the furnace blower assembly. Replacement procedures for either relay is the same.

Removal

1. Remove the combustion chamber assembly as described under "Combustion Chamber Assembly Replacement" earlier in this section.
2. Remove two relay panel mounting screws (Figure 15).

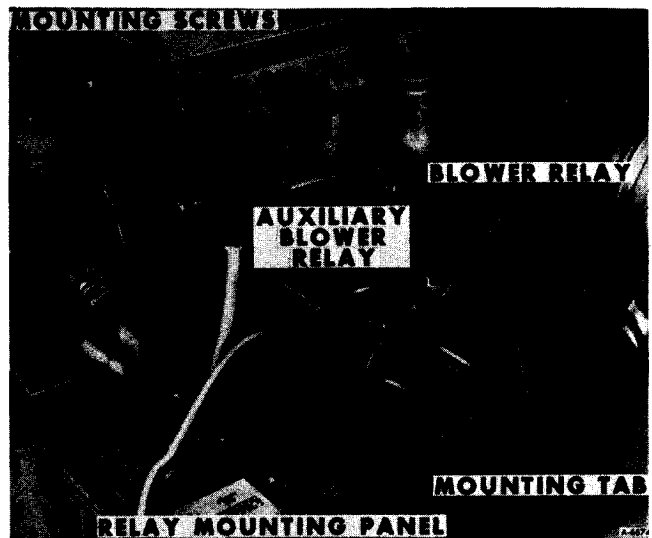


Figure 15 — Furnace Relay Mounting Panel Installed

3. Carefully raise relay mounting panel, sufficiently to allow access to relay mounting screw.
4. Remove relay mounting screw (Figure 16).



Figure 16 — Removing Blower Relay

5. Tag relay electrical leads to aid in proper location during relay installation. Disconnect electrical leads from relay. Remove relay.

Installation

1. Connect electrical leads to relay (Refer to Figure 2, if necessary).
2. Install relay mounting screw (Figure 16).
3. Be sure relay mounting panel engages mounting tab (Figure 15). Install two panel mounting screw.
4. Install the combustion chamber assembly as described in "Combustion Chamber Assembly Replacement" earlier in this section.

IGNITOR BOARD REPLACEMENT

Removal

1. Remove the combustion chamber assembly as described under "Combustion Chamber Assembly Replacement" earlier in this section.
2. Remove special shoulder bolt (Figure 17).

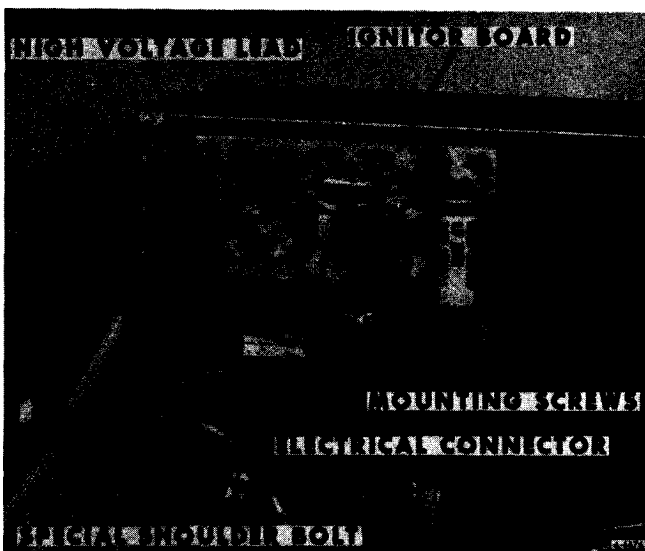


Figure 17 — Location of Ignitor Board

3. Remove electrical connector from ignitor board.
4. Remove high voltage lead from ignitor board.
5. Remove four mounting screws and remove ignitor board.

Installation

1. Position ignitor board on combustion chamber assembly.
2. Install four ignitor board mounting screws (Figure 17).
3. Attach electrical connector to ignitor board. Retain electrical connector in proper position by installing special shoulder bolt.
4. Connect high voltage lead to ignitor board.
5. Install the combustion chamber assembly as described in "Combustion Chamber Assembly Replacement" earlier in this section.

SPARK ELECTRODE ASSEMBLY REPLACEMENT

Removal

1. Remove combustion chamber assembly as described under "Combustion Chamber Assembly Replacement" earlier in this section.
2. Disconnect high voltage lead from spark electrode (Figure 18). Remove high voltage plate and gasket.

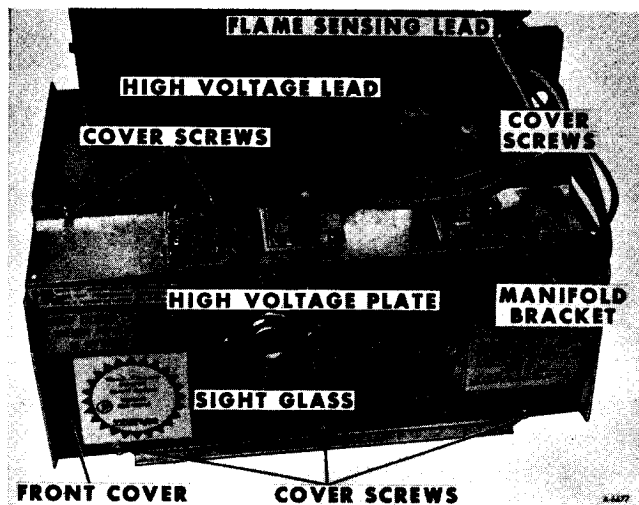


Figure 18 — Location of Furnace Front Cover

3. Disconnect flame sensing lead near manifold bracket.
4. Remove manifold bracket and gasket.
5. Remove sight glass and gasket.
6. Remove front cover screws and then carefully remove front cover.
7. Remove four spark electrode mounting screws (Figure 19).



Figure 19 — Spark Electrode Installed

8. NOTE: Spark electrode must clear burner orifices during removal (Figure 20). Carefully move spark electrode assembly to the right. Gently tilt upward as shown, and remove from burner cover.

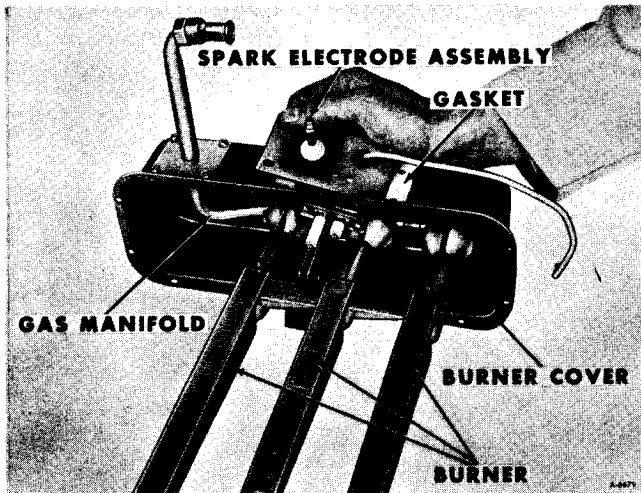


Figure 20 — Removing Spark Electrode Assembly

Installation

NOTE: Before installing spark electrode assembly, check the spark gap. The gap between the spark electrode and ground electrode should be $1/8'' \pm 1/32''$ (Figure 21).

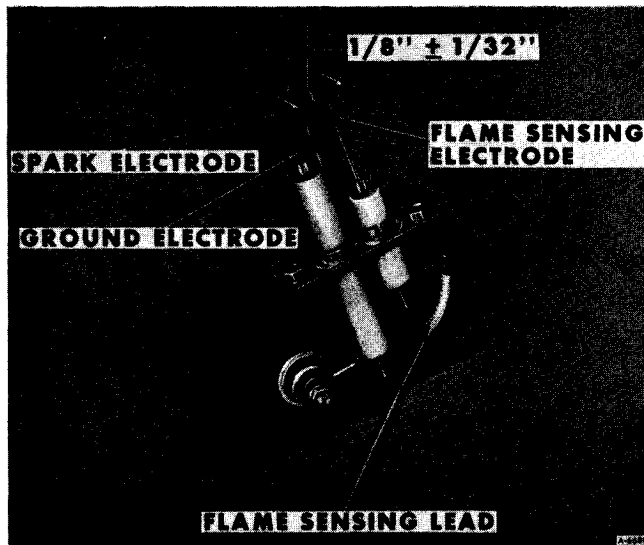


Figure 21 — Spark Electrode Assembly

1. Noting the location of burner orifices (Figure 20), carefully install spark electrode assembly and gasket. Secure spark electrode assembly with four mounting screws (Figure 19).
2. Install furnace front cover (Figure 18). Be sure flame sensing lead is located next to main burner gas line.
3. Install sight glass and gasket.
4. Install manifold bracket and gasket.
5. Connect flame sensing lead near manifold bracket.

6. Install high voltage plate and gasket. Connect high voltage lead to spark electrode.

7. Install the combustion chamber assembly as described in "Combustion Chamber Assembly Replacement" earlier in this section.

BURNER ASSEMBLY REPLACEMENT

NOTE: The burner assembly of the furnace is composed of three burners which are attached to the burner cover (Figure 20).

Removal

1. Remove spark electrode assembly as described earlier in this section under "Spark Electrode Assembly Replacement".
2. Remove burner cover and gasket from combustion chamber (Figure 19).

NOTE: The burners are attached to the burner cover (Figure 22).

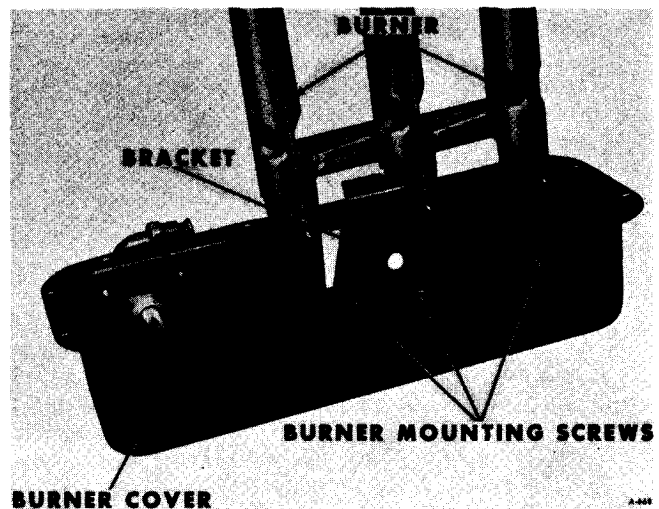


Figure 22 — Burner Mounting to Burner Cover

3. Remove burner mounting screws and then carefully remove burners from burner cover.

Installation

NOTE: Be sure any accumulated soot deposits are removed from inside the combustion chamber. If soot deposits are excessive, check for high LP gas pressure as necessary when assembly of furnace is complete. There is no main air adjustment on this furnace.

NOTE: At this time, the three burner orifices should be checked for obstructions. The orifices can be cleaned using a wooden tooth pick if required, or replaced if necessary.

1. Position burners and bracket in burner cover, and secure with the mounting screws.
2. Install burner assembly and burner cover and gasket in combustion chamber (Figure 19).
3. Install spark electrode assembly as described earlier in this section under "Spark Electrode Assembly Replacement".

BLOWER MOTOR REPLACEMENT

Removal

1. Remove sail switch as described earlier in this section under "Sail Switch Replacement".
2. Disconnect flexible air duct from blower assembly (Figure 23). Disconnect blower motor electrical leads.

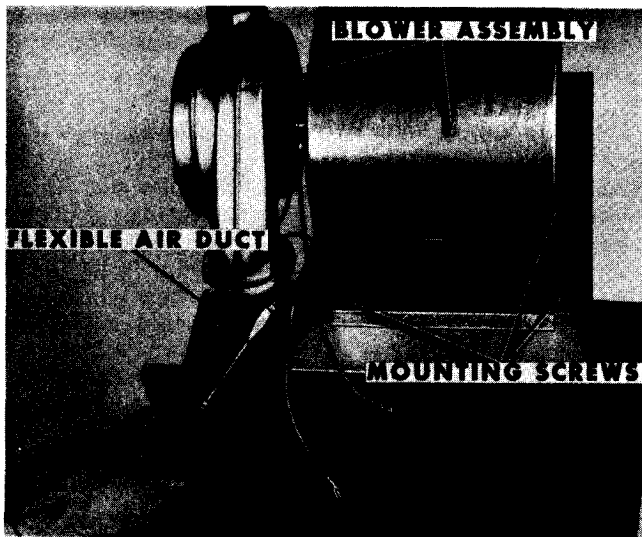


Figure 23 – Disconnecting Flexible Duct from Blower

3. Remove three blower assembly mounting screws. Remove blower assembly from furnace.
4. Remove outer combustion air housing attaching screws (Figure 24). Remove housing and metal plate located between inner and outer housing.

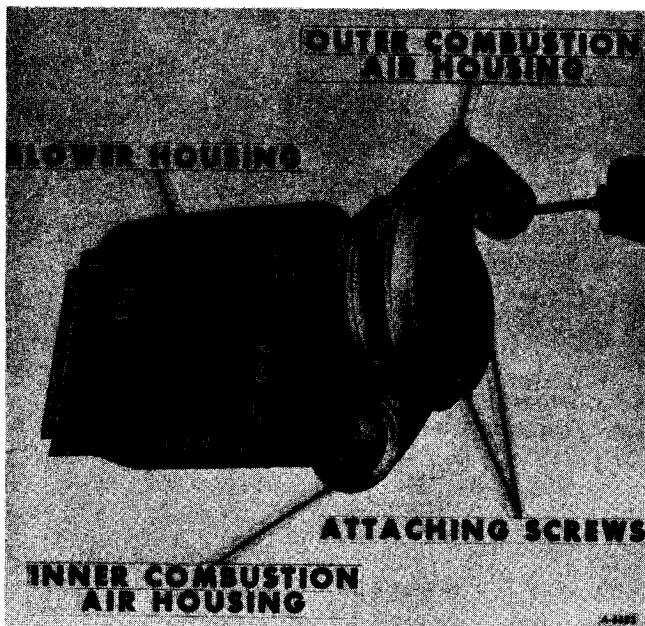


Figure 24 – Removing Outer Combustion Air Housing

5. Using a 5/64" hex wrench, remove combustion air blower wheel (Figure 25).
6. Remove two retaining nuts holding inner combustion air housing to blower motor (Figure 26). Remove housing.

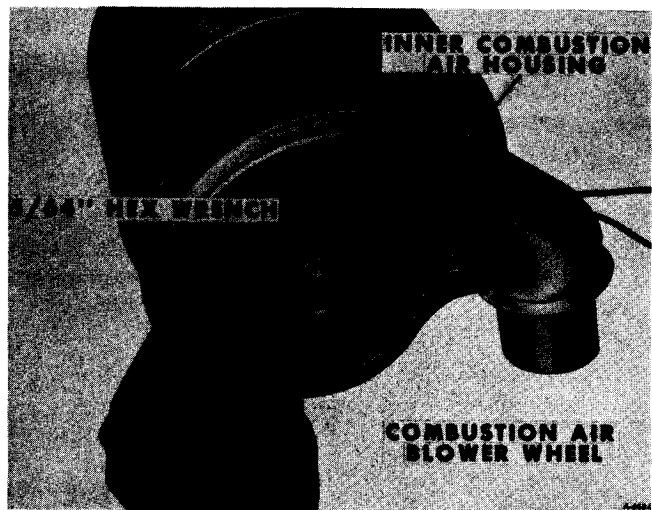


Figure 25 – Removing Combustion Air Blower Wheel

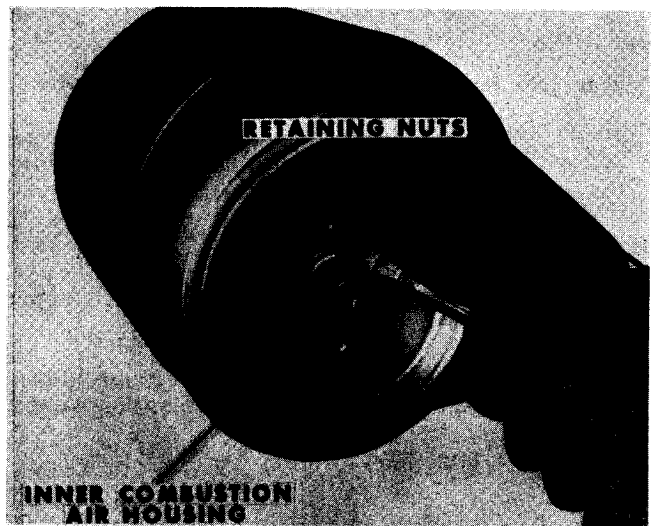


Figure 26 – Removing Inner Combustion Air Housing

7. Loosen the recirculating air blower wheel retaining screw using a 1/8" hex wrench (Figure 27).



Figure 27 – Loosening Recirculating Air Blower Wheel Retaining Screw

8. Remove three blower motor retaining screws and washers (Figure 28). Carefully remove blower motor from blower housing.

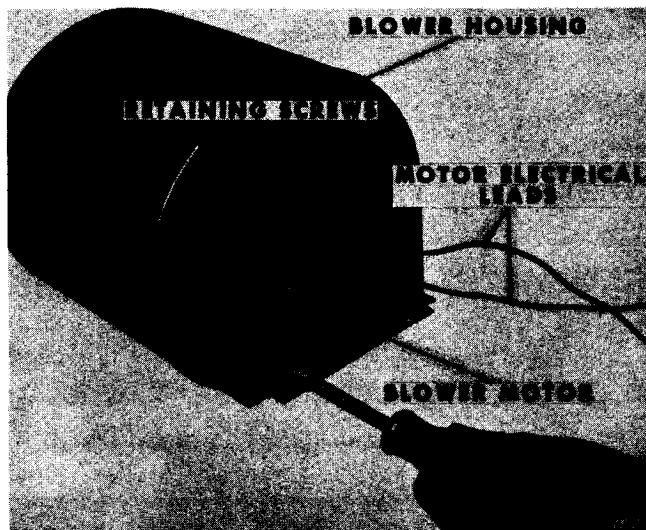


Figure 28 — Removing Blower Motor Retaining Screws

NOTE: When the blower motor has been removed from the blower housing, this will allow recirculating air blower wheel to be removed.

Installation

1. Position the recirculating air blower wheel in blower housing.
2. Install blower motor to blower housing using three retaining screws. Before installing the retaining screws,

check to be sure the motor is positioned as shown in Figure 28, with motor electrical leads facing blower housing mounting flange.

3. Install recirculating blower wheel retaining screw (Figure 27). Before tightening retaining screw, be sure blower wheel is clearing both sides of blower housing. Also, be sure retaining screw is tightened onto flat surface on the blower shaft.
4. Install the inner combustion air housing to the blower motor (Figure 26). Be sure inner housing is aligned as shown in Figure 24 with blower housing.
5. Install combustion air blower wheel (Figure 25).
6. Position metal plate between inner and outer combustion air housings. Install outer combustion air housing (Figure 24).
7. Install blower assembly to furnace with three mounting screws (Figure 23). Connect blower electrical leads and flexible air duct.
8. Install sail switch as described earlier in this section under "Sail Switch Replacement".

SPECIFICATIONS

Duo-Therm Furnace	Model No.	65930-926
GM Part Number		2028332
Operating Voltage Range	Maximum —	15 Volts D.C.
	Minimum —	9 Volts D.C.
BTU Input		30,000
BTU Output		24,000
Furnace Fuse (Automotive Type)		15 Amp.



**Motor
Home
Service**

Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION

GENERAL MOTORS CORPORATION

ATTENTION:

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PARTS MANAGER ☐

CLAIMS PERSONNEL ☐

SERVICE MANAGER ☐

NUMBER: 78-IM-3

GROUP: 24-Misc.-1

IMPORTANT- All Service Personnel Should Read and Initial

							DATE: November, 1977

**SUBJECT: SERVICE AGENCIES FOR THERMADOR THERMATRONIC RANGES (RPO UND)
MODELS: 1978 MOTORHOMES**

Due to low volume of sales, expense of tools, and training required to service the range, GMC has elected to make use of the established Thermador Service Centers for repairs on the Thermatronic range.

The following list of Thermador Central Service Agencies is provided to assist you in locating a sub-agency for repairs:

LIST OF THERMADOR CENTRAL SERVICE AGENCIES

Call for location of closest Service Agency, or contact:

National Service Manager
Thermador
5119 District Boulevard
Los Angeles, California 90040

ALABAMA

Hapsco
3221 First Avenue North
Birmingham, AL 35201
205/324-2102

ALASKA

General Appliance Repair
3685 Arctic Boulevard
Anchorage, AK 99503
907/277-3563

ARIZONA

G & A Service
505 W. Dunlop
Phoenix, AZ 85021
602/249-2247

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King Parts and Service
2992 Lamar Avenue
Memphis, TN 38114
901/743-8770

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Jim Baker Electrifier
818 - 19th Street
Bakersfield, CA 93301
805/327-5523

W. J. Peterson
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Cathedral City, CA 92234
714/328-4707

Dunn's A/C & Appliance
47A Ashworth Place
China Lake, CA 93555
714/446-4086

Electrical Appliance Service
145 Van Ness
Fresno, CA 93721
209/268-4494

Johnson's A/C Company
280 North Jacinto Street
Hemet, CA 92343
714/685-7231

Wally Clauson Service
P. O. Box 518
Lake Arrowhead, CA 92352
714/337-1910

Thermador/Waste King Customer Serv.
6135 District Boulevard
Los Angeles, CA 90040
213/588-6131

Electrical Appliance Service
4238 Broadway
Oakland, CA 94611
415/642-9391

Herb's Appliance Service
1712 Amethyst Drive
Perris, CA 95315
714/657-4740

Town & Country
P. O. Box 74
32302 Inadale Court
Running Springs, CA 92382
714/867-2844

Thermador/Waste King Service
8195 Ronson Road - Suite A
San Diego, CA 92111
714/292-1361

Electrical Appliance Service
803 South 1st Street
San Jose, CA 95110
408/292-1762

Electrical Appliance Service
290 Townsend Street
San Francisco, CA 94107
415/777-1900

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Electrical Appliance Service
1116 "F" Street
Sacramento, CA 95814
916/446-5241

Appliance Sales & Service
320 West Cabrillo Street
Santa Barbara, CA 93101
805/966-1733

Bark's Appliance Service Center
1700 North Broadway
Santa Maria, CA 93454
805/925-6537

Midway Home Appliance Center
15313 - 7th Street
Victorville, CA 92392
714/245-2814

Boyd's Appliance Service
842 Seventh Street
Wasco, CA 93280
805/758-5840

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Best Service Company
929 West First
Denver, CO 80223
303/892-9462

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Glendale, NY 11227
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4441 W. Diversey
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807 Oak Hill Road
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2711 West 43rd Street
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913/236-7800

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Dallas, TX 75235
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Houston, TX 77080
713/464-8271

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Brownsville:
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8611 Botts Lane
San Antonio, TX 78209
512/824-0181

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202/529-9300

WASHINGTON

Appliance Service Station
12546 Aurora North
Seattle, WA 98133
206/365-9310

WEST VIRGINIA

Chandlers Plywood Products
3715 Waverly Road
Huntington, WV 25722
304/429-1311

WISCONSIN

Automatic Appliance Parts
4441 W. Diversey
Chicago, IL 60639
312/278-5520

WYOMING

Western:
Oscar E. Chytraus Company
175 W. 2700 South Street
Salt Lake City, UT 84110
801/487-7442

Central and Eastern:
Best Service Company
929 W. First
Denver, CO 80223
303/892-9462



Motor
Home
Service

Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION

GENERAL MOTORS CORPORATION

ATTENTION:

GENERAL MANAGER ☐

PARTS MANAGER ☐

CLAIMS PERSONNEL ☐

SERVICE MANAGER ☐

IMPORTANT- All Service Personnel Should Read and Initial

NUMBER: 78-IM-4

GROUP: 24-MISC.-2

DATE: FEBRUARY, 1978

SUBJECT: SHOWER HEAD TEMPERATURE FLUCTUATION

MODELS: 1977 - 1978 MOTORHOMES

Pulsation between hot and cold water may occur due to a stack up of tolerances with the shower head currently being used. This pulsation is generated at the water pump; and since the water pump is a demand type pump, pressure pulsation cannot be done away with easily.

The current shower head (P/N #2025601) has a "poppet" type shut-off valve, which in the open position, fluctuates with the water pump pressure and inadequately mixes hot and cold water. This fluctuation can be eliminated by installing a shower head with a "spool" type shut-off valve, (P/N #702086).



Motor
Home
Service

Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION

GENERAL MOTORS CORPORATION

ATTENTION:

GENERAL MANAGER ☐

PARTS MANAGER ☐

CLAIMS PERSONNEL ☐

SERVICE MANAGER ☐

IMPORTANT- All Service Personnel Should Read and Initial

NUMBER: 78-IM-5

GROUP: 24-MISC.-3

							DATE: JUNE, 1978

SUBJECT: DRAPERIES

MODELS: GMC MOTORHOMES

Due to the fact that Quality House of Marlette, Inc. can no longer place fabric orders in sufficient quantities to justify production, as of June 1, 1978, they will no longer be able to supply drapes for the following models on a continuing basis:

<u>MODEL NAME</u>	<u>MODEL YEAR</u>	<u>FABRIC COLOR AND TYPE</u>
Sequoia	1973-74	Fiberglass White
Painted Desert	1973-74	Illusion Foamback
Glacier	1973-74	Flax Foambacked
Canyon Lands	1973	Fiberglass Beige
Eleganza S.E.	1974	Flax Foambacked
Eleganza & Glenbrook	1975-76	Grasscloth Gold Foambacked
Palm Beach	1975-76	X1000 Yellow Foambacked
Eleganza II	1976	Grasscloth Gold Lined
Edgemont	1976	Dorango Natural Foambacked
Palm Beach	1977	X1000 Yellow Lined
Coco Cola	1977-78	Bonaire Ivory Lined

They will make every effort to service drapery needs on a direct basis with dealers. They will supply drapes to original specs where possible and will recommend suitable substitute when necessary. Quality House will also make custom drapes on request. Customer supplies fabric 48 inches wide and 32-40 yards long depending on fabric pattern match, plus a check for \$268 (covers labor and lining). They will also need to know year, model and whether it is a 23 ft. or 26 ft. motorhome. Their address is:

Quality House of Marlette, Inc.
Attn: Fritz Stieler
P.O. Box 187
Marlette, MI 48453



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IT 1491

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 73-TM-6
GROUP: 24-INTERIOR-I
DATE: OCTOBER 29, 1973

SUBJECT: DELAMINATION OF WOOD SURFACES AND DOORS

MODELS: TZE033 AND TZE063 - ALL

Some separation of the "Textolite" Laminate from the base materials may be encountered. This may occur on bath and closet doors, table tops, drawer fronts, etc.

The following is a process for reattaching the "Textolite" to the base material. Material for this repair may be obtained from your local 3M distributor. It is suggested that you do not substitute for this material since a contact cement without the correct chemical base may not be strong enough to hold the "Textolite" in place.

PARTIAL DELAMINATION: For repairing delamination of a part or corner of a panel.

1. Eliminate all open flames - materials being used are flammable.
2. Peel corner and prop up; then clean both surfaces with 3M - #707 Degreaser. Do not put solvent into the crack of the peel.
3. After both surfaces are clean, let dry for 30 minutes.
4. When completely dry, apply an even coat of 3M - #88 Contact Cement to both surfaces and let dry for 5 minutes.
5. Apply strong hand pressure across the area that is being mended.
6. Use a small amount of the solvent on a rag and wipe away any overspray.

COMPLETE DELAMINATION: For repairing delamination of a complete panel from its base material.

1. Eliminate all open flames - materials are flammable.
2. Clean both surfaces that are to be bonded thoroughly with 3M - #2 solvent.

3. Let both parts dry for 30 minutes.
4. When surfaces are clean and dry, apply an even coat to each surface with a paint brush or roller. (Use 3M Scotch grip #2210 Contact Cement) Let dry for 20-30 minutes.
5. Carefully put the panel in place and apply strong hand pressure across entire part.



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1491

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 73-TM-11

GROUP: 24-Misc-2

DATE: Nov. 26, 1973

SUBJECT: Pilot Adjustment on Suburban Furnaces

MODELS: TZE033 and TZE063

Some confusion has been reported on the adjustment of the pilot flame on the Suburban furnace. The following procedure should be used:

1. Remove lighter cap
2. Remove pilot adjustment cover
3. Rotate pilot adjustment screw counter-clockwise to where the pilot flame envelops the thermocouple tip and extends above at approximately 1/2".

Reference is made to Page 49, of the Motor Home Operating Manual, X-7321A, which illustrates the above procedure. The new information is underlined for easy adjustment.

This will assure that any modulation of the flame will not leave the thermocouple tip out of flame at any time. Too low of a flame can cause the thermocouple tip to give a faulty reading and shut off the furnace prematurely.

Any good gas fitting sealer may be used on the pilot adjustment screw to make sure that it does not rotate, changing pilot settings.

NOTE: The above information is especially helpful in states where use of the furnace is allowed while on the road.



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1491

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 74-TM-1

GROUP: 24-Misc-1

							DATE: January, 1974

SUBJECT: Velcro Carpet Fastener

MODELS: TZE033 and TZE063

Recent reports indicate that the new style Velcro carpet fastener at the step going to the driver's compartment has on occasion caused damage on the rubber backing of the motor home carpeting. The problem is caused by incorrect installation of the Velcro fastening strips. The correct installation of the Velcro strips is as follows:

The piece of Velcro loop (male member) is attached to the carpet and should be longer than the piece of Velcro hook (female member) which is attached to the bulkhead. The hook portion should be stapled as well as glued (see illustrations).

If the Velcro hook on the bulkhead is longer or the same length as the Velcro loop on the carpet, it will have a tendency to tear the rubber backing away from the carpet.

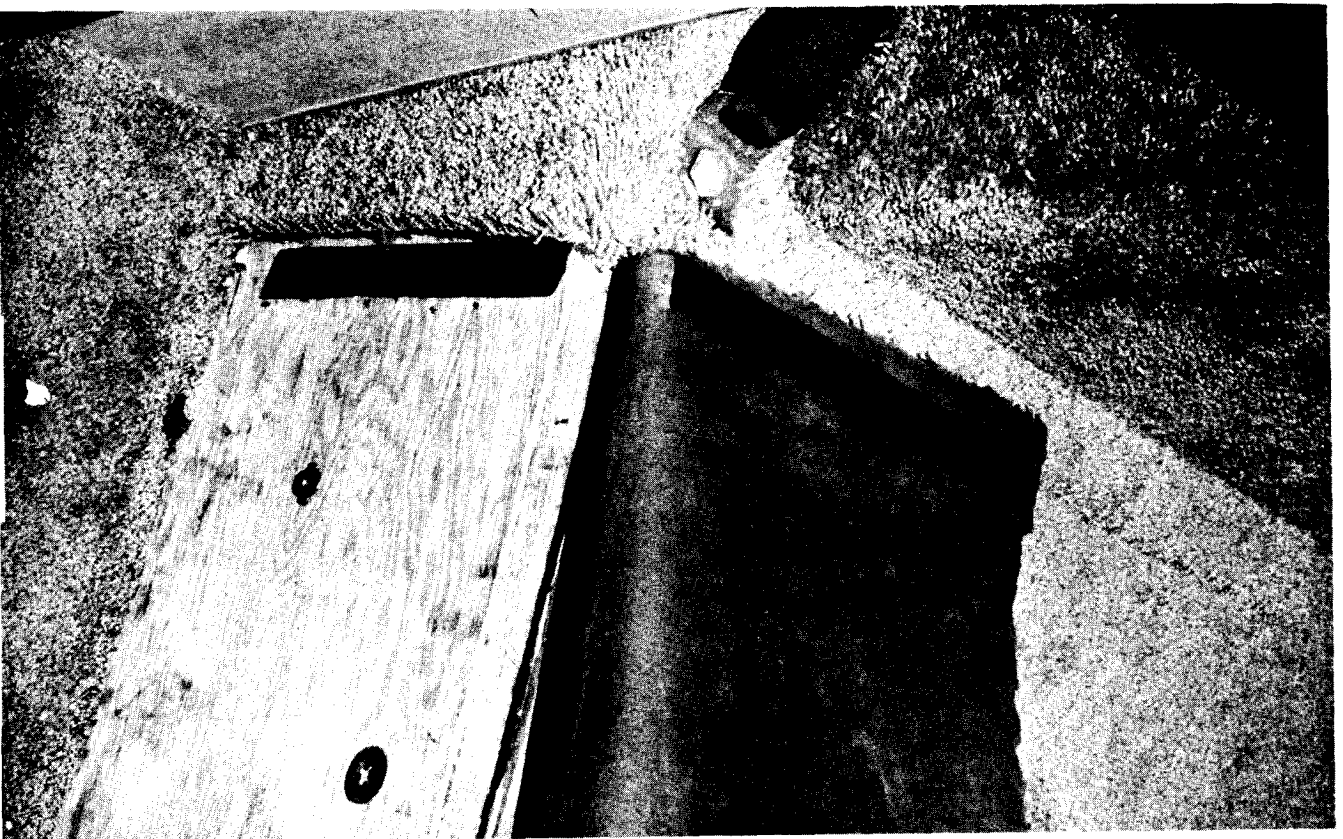
PARTS INFORMATION

To properly do the job you will need approximately 48" of both Velcro loop No. 1000 and Velcro hook No. 65. It should be 1" wide. This material can be purchased locally from most hardware stores, upholstery shops or carpet shops.

INCORRECT



CORRECT





Dealer Service Information Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 74-TM-2 #2

GROUP: 24-Misc.-2

DATE: April, 1975

SUBJECT: Fresh Water Supply Pump Service

MODELS: All Motor Homes

(This bulletin supersedes 74-TM-2 dated Feb. 1974. All copies of that bulletin should be removed and destroyed.)

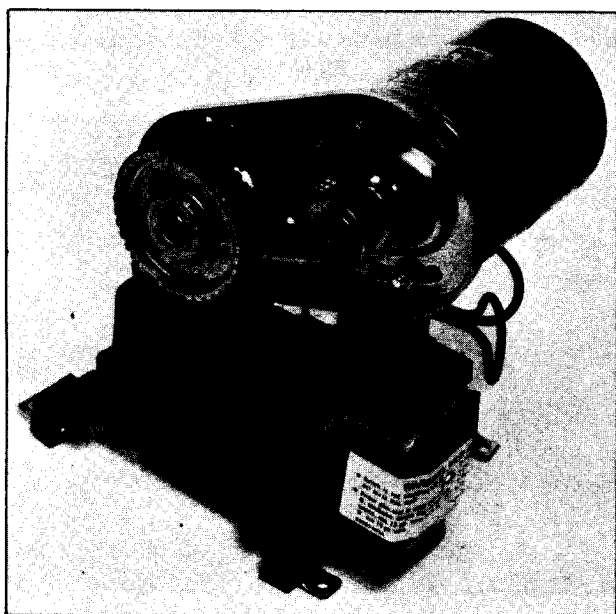


Figure 1

The purpose of this bulletin is to give complete information on servicing the fresh water supply pump and its sub-assemblies. Complete water pumps will no longer be accepted under warranty.

ON VEHICLE CHECKS AND ADJUSTMENTS

Belt Tension

To obtain maximum life from the water pump belt it should be adjusted to no more than $\frac{1}{8}$ " deflection. Adjustment is made by loosening the motor nuts and pivoting the motor; then tighten nuts.

Voltage Check

Check the voltage at the pump. Follow instructions below for testing:

- Turn on all electrical fixtures inside the vehicle.
- Fully open a faucet.
- Using a DC voltmeter, read the minimum voltage across the line terminals on the pressure switch. (Figure 2)

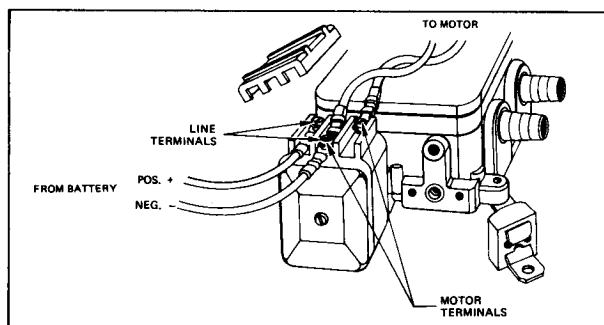


Figure 2

- If the pump draws current from two alternative power supplies (battery or AC-DC converter), a voltage check must be made for each operational mode. Voltage reading at the pump must not fall below 10.5 volts.

Cut-On and Cut-Out Adjustment

Both the cut-on and cut-out points may be adjusted after removing the pressure switch cover. (NOTE: The cover may be removed despite sticker which reads contrary. This is a vendor sticker and not recognized under the GMC warranty.) You may wish to remove the four pump hold down screws to provide better access. Adjustment is made as shown in Figure 3. Cut-on is 20 psi and cut-out is 30 psi.

Visual checks for leaking lines, fittings, valves, and the pump itself can also be made on the vehicle.

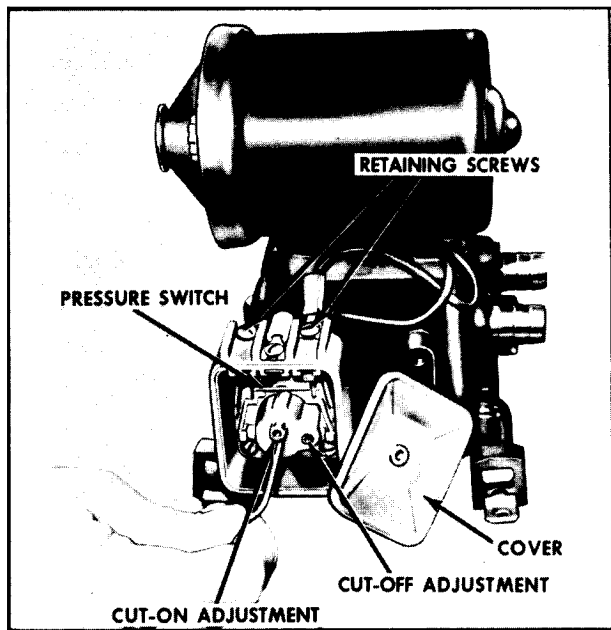


Figure 3

Removing the Water Pump on 1973 & 1974 Models

1. Remove cushions and wood cover over water tank compartment.
2. Open tank drain valve and drain tank.
3. Make sure pump wall switch is turned off and remove fuse.
4. Disconnect hoses from water pump. See Figure 4.
5. Disconnect tank fill elbow at the tank if equipped.
6. Remove four (4) pump hold down screws. See Figure 4.

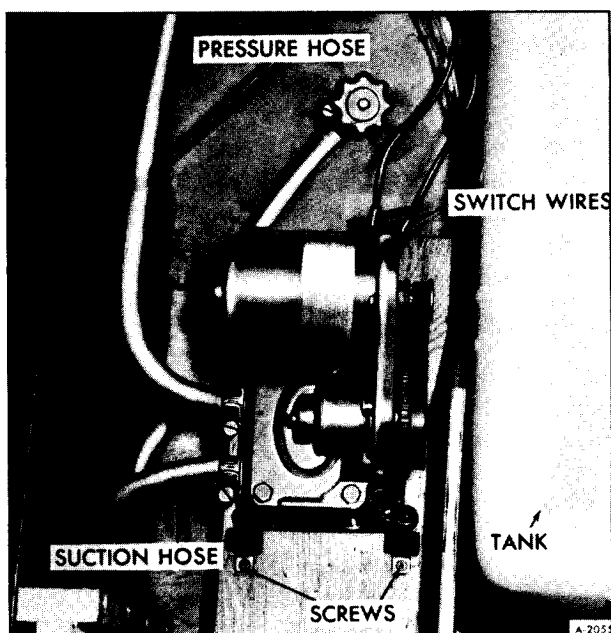


Figure 4

7. Lift pump assembly out and disconnect wires from the pressure switch.

1975 Models

1. Remove the front kick panel by simply pulling. Velcro strips hold it in place. (Figure 5)
2. Remove the two (2) settee seat attaching screws. (Figure 6) Remove seat by pulling out and up.
3. Remove the top cover screws and cover exposing the water pump and tank. (Figures 7-8)
4. Open tank drain valve and drain tank.
5. Make sure pump wall switch is turned off and remove fuse.
6. Disconnect hoses from water pump.
7. Remove four (4) pump hold down screws.
8. Lift pump assembly out and disconnect wires from the pressure switch.



Figure 5

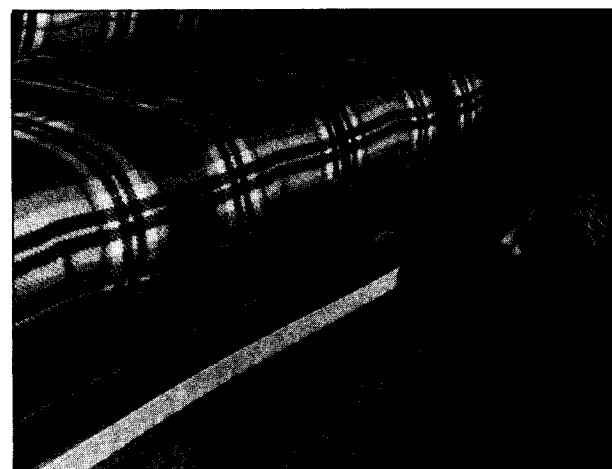


Figure 6



Figure 7

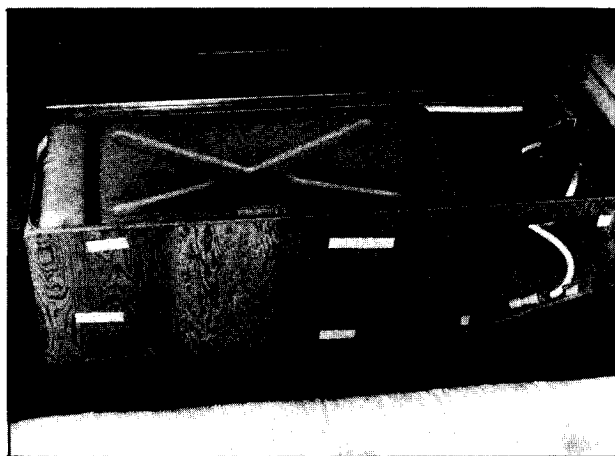


Figure 8

TROUBLE SHOOTING

Pump Does Not Operate

Pump runs but no water appears at the faucet. Solution:

- Be sure faucets are open.
- Check water level in tank.
- Check all hoses for kinks.
- Check for leaks in suction line.
- Check for clogged intake and discharge lines. "Sticky" or hard-to-open check valves could cause an air-lock. Filter may need cleaning or replacing. Dismantle pump and inspect check valve assembly for foreign material between the valve and valve seat causing loss of suction.

Pump Cycles with Faucets Closed

The pump goes on and off in short intervals although all the faucets are closed. Solution:

- Check for water leaks in lines, joints, and fittings.

All leaks must be corrected no matter how small.

- Check for internal leaks in flush toilets. Look for water leaks inside toilet bowl through bypass tubes and around flush valves.
- Check internal leak in water pump. Remove discharge hose from the pump and plug the outlet port securely. Turn power on to pump. The pump should come on and shut itself off in a few seconds. If it remains off, the pump is good. Recheck pressure side of plumbing for leaks. Check city water valve for leaks.
- If pump is determined to be leaking internally, disassemble and inspect discharge check valve for trapped foreign material and proper seating. Open pump base and inspect the inside for any crack which may allow leakage between discharge and intake chambers.

Excessive Noise from Pump

Pump operates roughly and has excessive noise and vibration. Solution:

- Check to see if plumbing (especially intake) is restricted. Check for kinks or collapsed conditions in intake hose when pump is delivering maximum flow.
- Be sure hose on both ports are of adequate length to absorb normal pump vibration. Pump ports must not be directly connected to rigid plumbing.
- Check pump and balance of plumbing to see that it is not hitting anywhere and amplifying what may be normal pump vibration.
- Dismantle pump to check pulsation dampener for permanent deformation, ruptures or loss of air.
- Check connecting rod bearing for excessive wear.

Pump Fails to Turn On

Pump fails to start when faucet is opened. Solution:

- Pressure switch may be jammed by frozen water. Allow ice to thaw.
- Disconnect discharge hose from the pump. If the pump goes on, the problem is a restriction in the plumbing, not the pump.
- Check voltage across line terminals on the pressure switch to be sure that full voltage is available at the motor terminals.

Pump Does Not Shut Off

Pump fails to stop when faucets are closed. Solution:

- Fully open the faucet to observe if a full stream of water flows through. If water sputters, either

the tank is empty or intake line has a leak permitting air to enter the pump and cause an air-lock.

- If a full stream of water flows through the faucet, tap the pressure switch lightly and try closing the faucet again to see if the problem is corrected. Do not leave the faucet closed if pump fails to shut itself off in a few seconds.
- Check for low voltage condition. Partially discharged battery could cause the pump motor to run sluggish and fail to build up pressure to shut itself off. Measure voltage at the pump with only one faucet opened. An alternative method is to operate the pump from a fully charged battery. If the pump shuts itself off, correct low voltage condition in the electrical system.
- Remove far end of pump discharge hose and plug securely. Turn power on to pump, making sure that full voltage is available. Pump should come on and shut off automatically in a few seconds. If the pump does not shut off, replace the pressure switch.

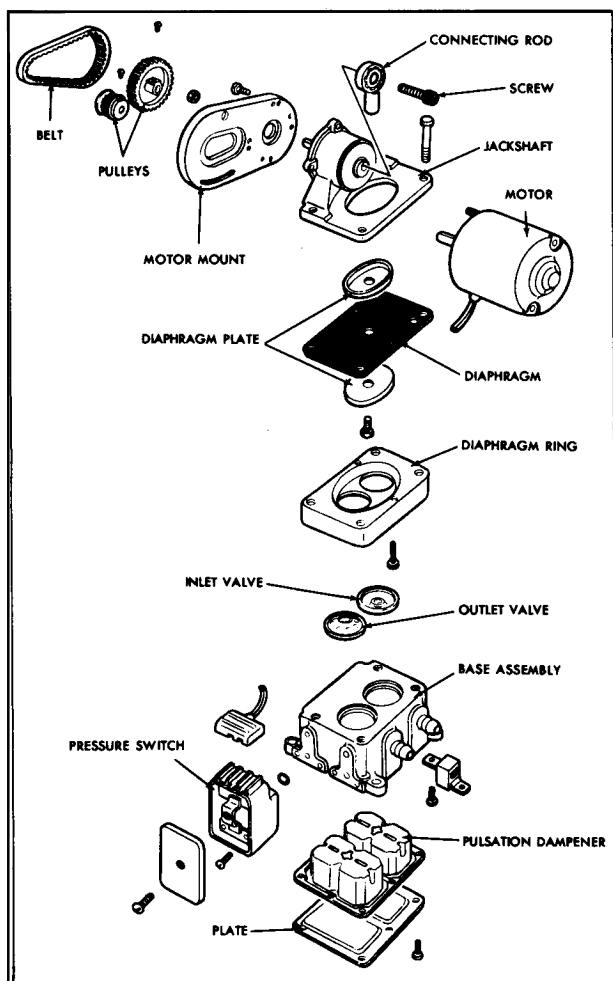


Figure 9

Valves Replacement

1. Turn off power to pump.
2. If system is filled with water, open a faucet to relieve pressure. Close intake and discharge lines near pump.
3. Remove motor and four tie down screws. (Figure 10)
4. Expose valves by lifting jack shaft and attached diaphragm assembly from pump base. (Figure 11)
5. Lift valves from pockets. Clean all foreign materials from valves and seats. (Figure 12)
6. Reinstall valves into same pockets, being sure rubber valve with small hole is UP on intake and rubber valve without the small hole is DOWN on discharge. NOTE: Do not use valve with small hole in rubber on discharge side of pump.
7. When reassembling, adjust belt tension to $\frac{1}{8}$ " play.

Diaphragm & Connecting Rod Replacement

1. Turn off power to pump.
2. If system is filled with water, open a faucet to relieve pressure. Close intake and discharge lines near pump.
3. Remove motor and four tie down screws then lift jack shaft and attached diaphragm assembly from pump base.
4. Expose diaphragm by removing two diaphragm retain screws and detaching. (Figure 13)
5. Remove diaphragm screw to separate diaphragm and plates from connecting rod. Inspect diaphragm for cuts and ruptures. (Figure 14)
6. Remove eccentric screw to separate connecting rod from jack shaft. (Figure 15)
7. When reassembling, be sure to align diaphragm and connecting rod so that rod slips straight onto jack shaft and diaphragm rests squarely on diaphragm retainer. Misalignment will create a strain on diaphragm and significantly shorten its life. Adjust belt tension to $\frac{1}{8}$ " play.

Pulsation Dampener Replacement

1. Turn off power to pump.
2. If system is filled with water, open a faucet to relieve pressure. Close intake and discharge lines near pump.
3. Remove pump from installation.

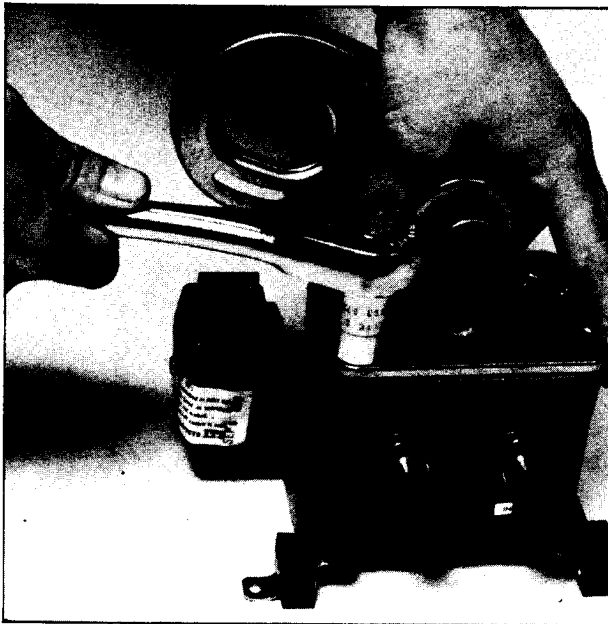


Figure 10

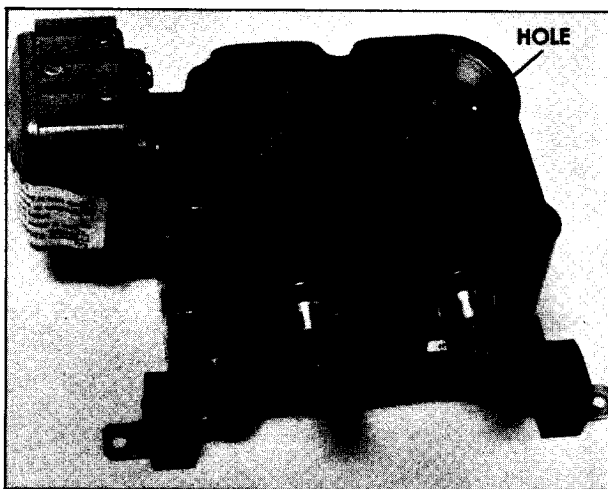


Figure 11



Figure 12

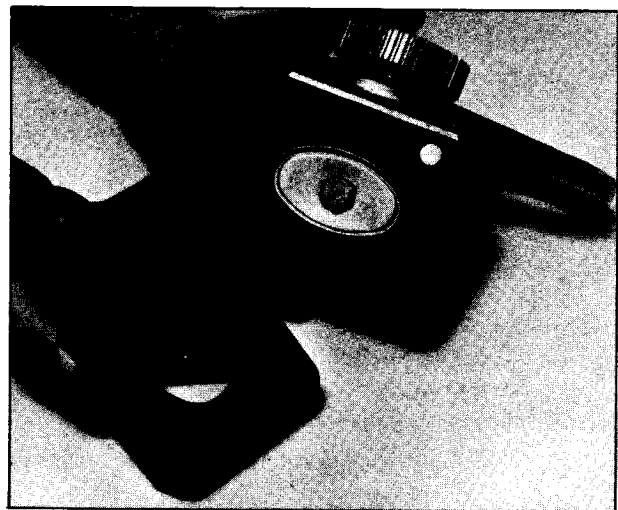


Figure 13

4. Remove nine screws from bottom of base and bottom plate. (Figure 16)
5. Pull out rubber pulsation dampener from base.
6. Inspect dampener for excessive deformation, ruptures and cuts. (Figure 17)
7. When installing new pulsation dampener, make sure flange is well-seated to effect a proper water and air seal.

Motor Replacement

1. Turn off power to pump.
2. Disconnect motor wires from pressure switch terminal.
3. Remove two motor nuts to separate motor.
4. Loosen screw to slide off small pulley from motor shaft.
5. When reassembling, be sure to adjust belt tension before tightening motor nuts. Proper adjustment is made when belt can be depressed one-quarter inch at a point halfway between pulleys.

Pressure Switch and Dry Tank Switch Replacement

1. Turn power off to pump and open a faucet to relieve pressure from the system.
2. Disconnect all wires from pressure switch.
3. Remove switch front cover and two screws located at bottom corners inside switch case. (Figure 18). Pull switch from base. Retain the metal spacer and O-ring located between switch and base. (Figure 19)
4. When installing new switch, be sure metal spacer and O-ring are seated properly. Care must be taken to avoid thread damage.

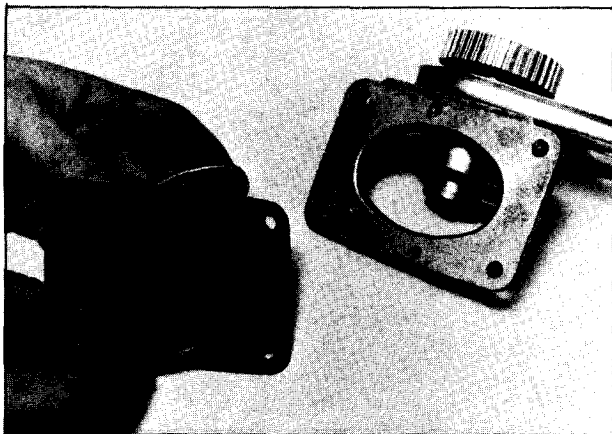


Figure 14



Figure 17

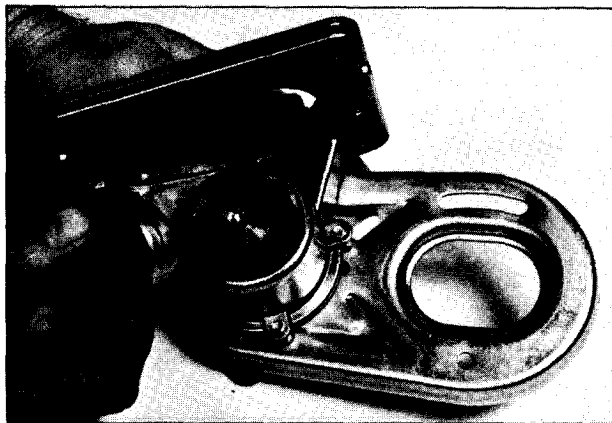


Figure 15



Figure 18

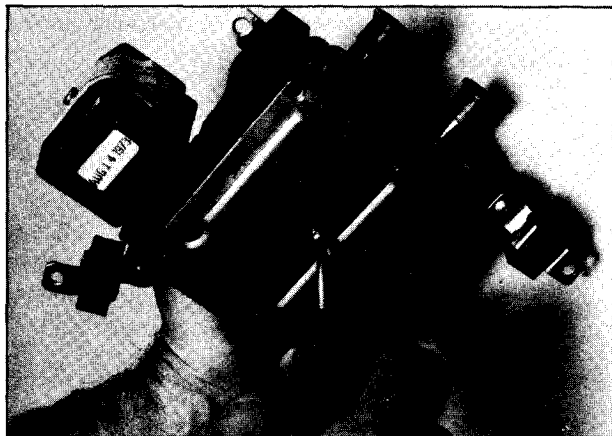


Figure 16

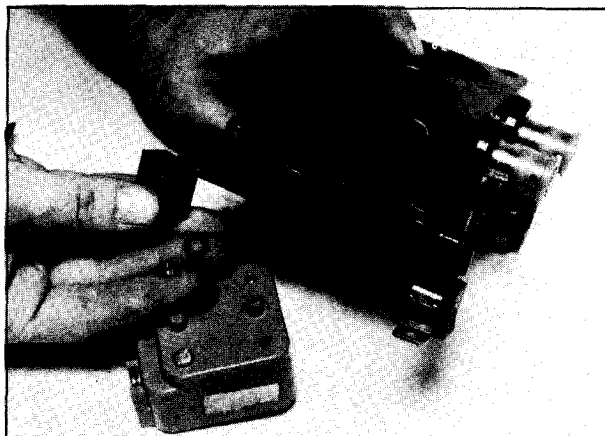


Figure 19

MAINTENANCE

Winter Storage

The fresh water pump with its unique pulsation dampener will withstand frozen water damage, provided the system is not under pressure prior to freezing. To prevent accidental damage, the entire water system must be "winterized" thoroughly for winter storage. This requires complete draining and preparation as outlined in the Owner's Manual.

WARRANTY INFORMATION

When the repairs are within the published warranty use:

LABOR OPERATION	DESCRIPTION	TIME ALLOWANCE
G172100	Water Pump Assembly—R & R Includes: Draining Water Storage Tank	
	All Models (Except Eleganza II)	.7 Hr.
	Eleganza II	.9 Hr.
	Add:	
	To Replace Pulsation Dampener	.1 Hr.
	To Replace Valves	.3 Hr.
	To Replace Diaphragm, Diaphragm Plates, Diaphragm Ring, and/or Connecting Rod	.4 Hr.
	To Overhaul Water Pump—Complete (Includes Complete Disassembly, Cleaning, Replacing all Parts, and all Adjustments)	.5 Hr.
	Total Additions Not To Exceed Overhaul Time	
	Applicable failure code: Broken 01, Seized 15, Leaks 42.	
G174100	Belt, Water Pump Drive—Replace (Water Pump Not Removed) Applicable failure code: Broken 01, Worn 06	
	All Models (Except Eleganza II)	.2 Hr.
	Eleganza II	.4 Hr.
G175100	Motor, Water Pump—Replace (Water Pump Not Removed) Includes: Replacing belt Applicable failure code: Broken 01, Electrical failure 50	
	All Models (Except Eleganza II)	.2 Hr.
	Eleganza II	.4 Hr.
G172800	Switch, Water Pump Pressure—Replace (Water Pump Not Removed) Includes: Switch Adjustment Applicable failure code: Broken 01, Electrical failures 50	
	All Models (Except Eleganza II)	.2 Hr.
	Eleganza II	.4 Hr.



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

T 1491

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 74-TM-3
GROUP: 24-Misc.-3
DATE: March, 1974

SUBJECT: Onan Ignition Coil Condenser Wire Breakage

MODELS: TZE063 and TZE033 Equipped with Onan
4KV Generators

A few reports have been received indicating that the wire from the ignition coil condenser has broken off due to an interference condition with one of the battery cables.

This condition can be corrected by turning the condenser over so that the pigtail lead comes off on the other side.

You may bend down the holding bracket in order to facilitate installation.



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1491

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 74-TM-4

GROUP: 24-Misc.-4

							DATE: March, 1974

SUBJECT: 12-Volt Converter Noise

MODELS: TZE063 and TZE033

Some owners may object to the operational sound of the Triad-Utrad converter.

In order to lower the sound level, disconnect the converter, remove its mounting bolts and reinstall the converter on some quarter-inch closed cell rubber pads between it and the plywood base.



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1491

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 74-TM-6

GROUP: 24-Misc.-5

							DATE: April, 1974

SUBJECT: Aqua-matic Toilet Ball Valve

MODELS: All

It has been brought to the attention of the Technical Service Department, that a large number of flush valve assemblies (No. 711062), are being returned because of cracks. These cracks most often occur in the ball valve assembly (No. 713334) during use in cold weather operation from freezing water trapped in the ball valve assembly. If this condition is encountered, the ball valve assembly may be ordered for replacement through the GMC Parts Department.

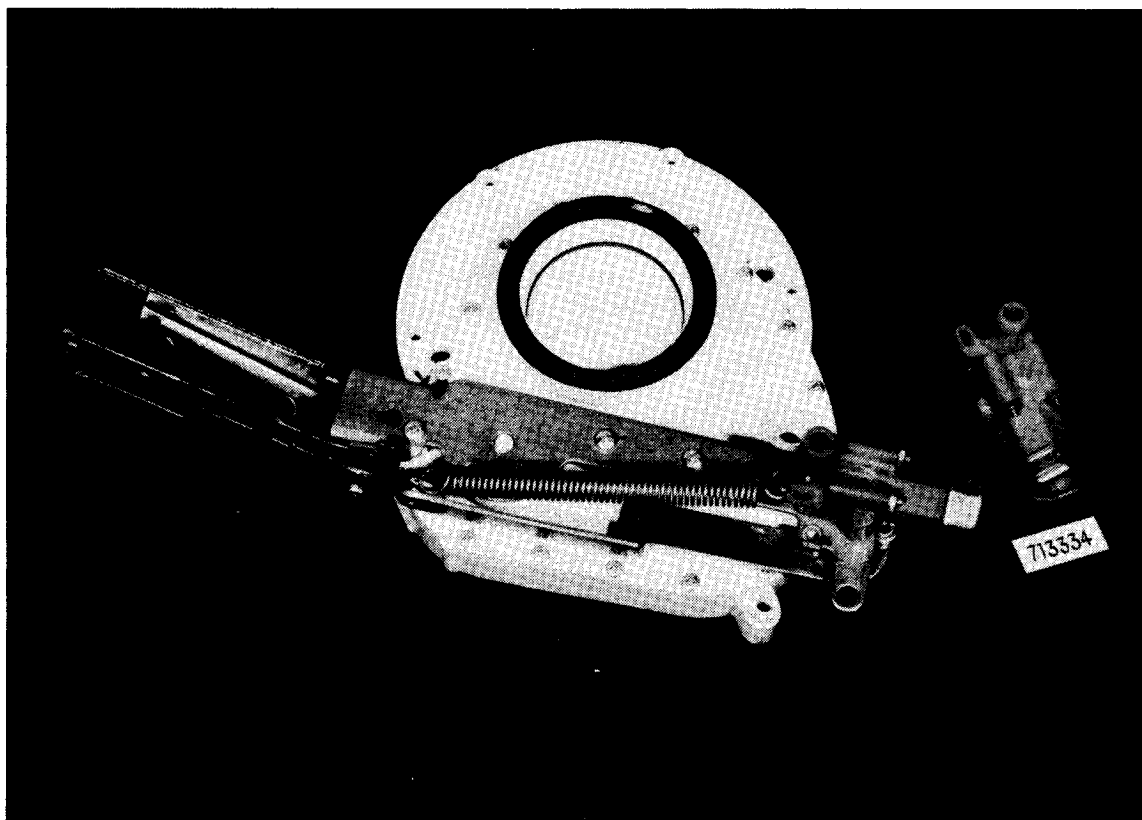
Part Information

Part Number

Part Name

713334

Ball Valve





Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1491

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 74-TM-10
GROUP: 24-Misc.-9
DATE: July, 1974

SUBJECT: Onan Motor Generator Choke Adjustment

MODELS: All models equipped with an Onan Motor Generator Set

Some trouble has been experienced in cold starting Onan motor generator sets. This difficulty is due to either an inoperative or misadjusted choke. The following is an explanation of choke operation, adjustment, and testing for the Onan 4KW and 6KW power plants.

Onan power plants use an electric solenoid type choke (see illustration). The magnetic coil and core assembly A is mounted at the top of the assembly. The hinged magnet reaction arm B is connected to a U-shaped bimetal strip D by means of link C. The bimetal strip bears against the shaft plate E which operates the shaft F. The choke lever G is mounted on shaft F and is connected by linkage to the carburetor choke lever.

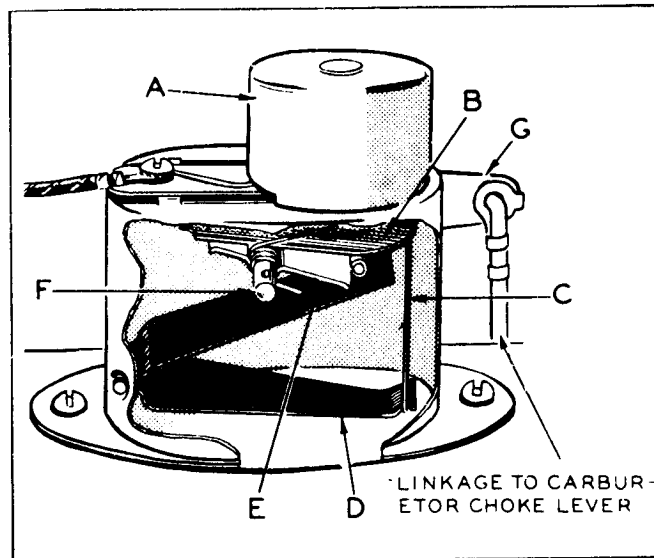
When the start button for the power plant is pressed the magnet is energized pulling the magnet reaction arm B upward. If the plant is being started "cold", the bimetal strip D is sufficiently spread to allow lever G to move far enough to completely close the carburetor choke plate. As soon as the plant starts and the start button is released, the magnet is de-energized and the magnet reaction arm drops down to a position determined by the bimetal strip D opening the carburetor choke slightly. As heat from the manifold affects the bimetal strip, its ends come closer together permitting the carburetor choke to open still wider. When the plant is started at operating temperature, the bimetal strip ends are close together preventing the magnet from pulling the shaft plate upwards.

This choke requires no seasonal readjustment. If the adjustment has been disturbed, adjust in the following manner:

1. The engine must be "cold" in order to adjust the choke.
2. Disconnect the choke linkage from the carburetor choke shaft.
3. Rotate lever G upwards until the hole in shaft F is aligned with the notch in the shaft bearing. Insert a 1/16" diameter rod through the shaft hole and engaging the rod in the notch of the mounting flange. This will lock the shaft in place.
4. Loosen the choke lever clamp screw enough to permit moving the lever on the shaft.

5. Reconnect the linkage to the carburetor choke shaft.
6. Remove the air cleaner from the carburetor so that the choke plate can be seen.
7. Adjust the choke assembly lever so that the carburetor choke plate is just completely closed or not more than 1/16" open. Tighten the choke lever clamp screw and remove the locking rod from the shaft.
8. Test the adjustment to see that when the choke lever is pulled upward to its limit, the carburetor choke plate is closed or nearly so. Press downward on the choke lever against the tension of the bimetal strip to the limit of its travel. The carburetor choke plate should open completely. If it will not completely open, adjust the position of the carburetor choke shaft lever as necessary. Recheck the adjustment.
9. When the plant is at operating temperature, the carburetor choke plate must be wide open.

The choke cannot operate properly if there is any binding in the connecting linkage, the choke assembly shaft or the carburetor shaft. To test the magnet of the choke assembly, hold a screwdriver blade 1/4" from the top center riveted post. When the start button is pressed, the magnet coil should be energized pulling the screwdriver to the center post. If no magnetic pull is felt check the choke electrical circuit. Replace the choke if the magnet coil is defective.





Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1491

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 74-TM-11
GROUP: 24-Misc.-6
DATE: July, 1974

SUBJECT: Exterior Power Cord Binds - Plugged Into
Vehicle Generator Receptacle

MODELS: All models equipped with a 110 volt generator

In the event the AC power cord binds against the top of the external utilities compartment (see Figure 1) it might prevent the plug from being completely inserted in the receptacle.

Correct such a condition by removing the two screws that retain the receptacle mounting plate and rotate the plate and receptacle 180° so that the cord will extend downward when plugged in (see Figure 2).

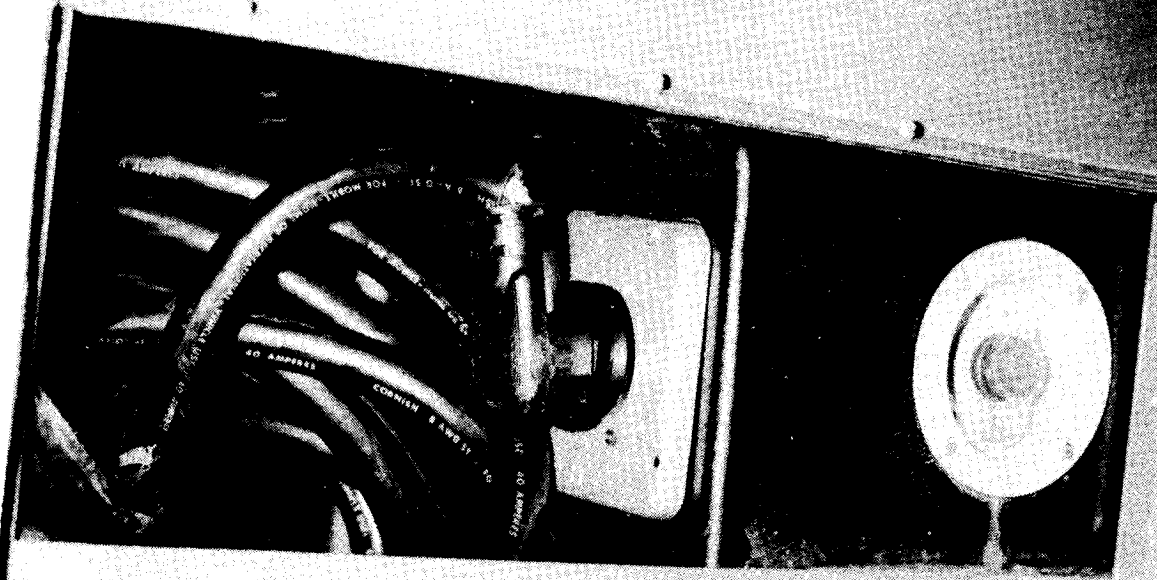


FIGURE 1

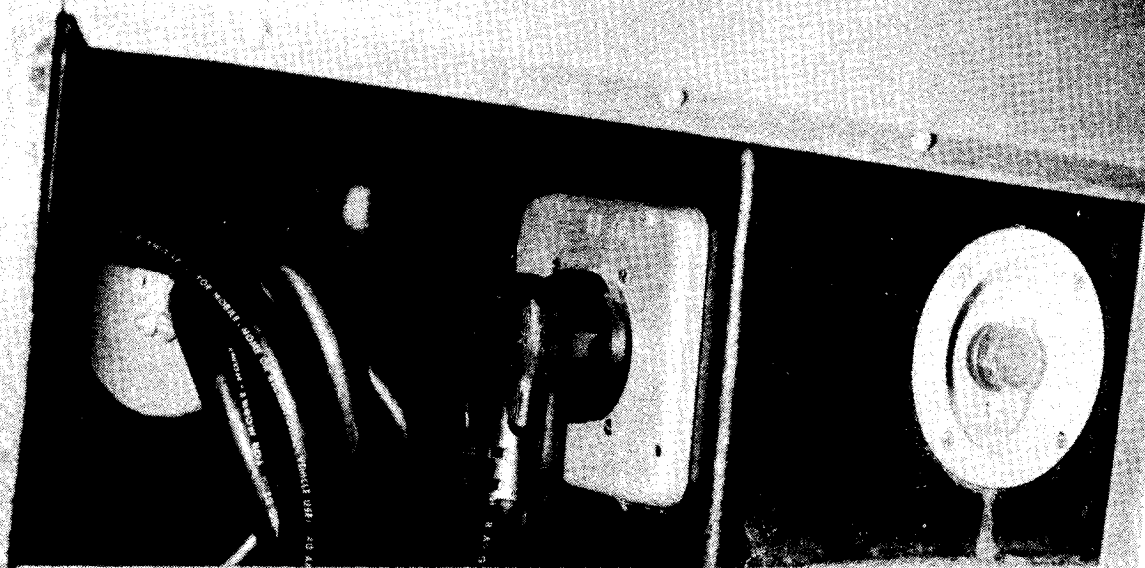


FIGURE 2



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1491

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-TM-3

GROUP: 24-Misc.-1

DATE: Nov., 1974

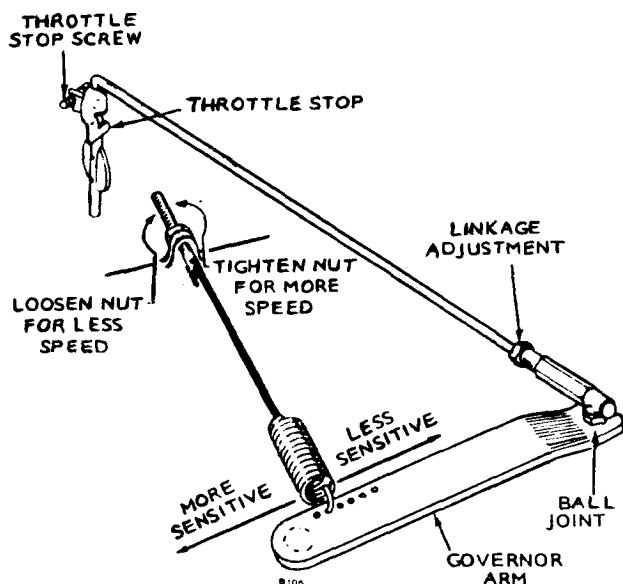
SUBJECT: Onan Motor Generator Performance

MODELS: All Models Equipped With An Onan Motor Generator

When an Onan Motor Generator is encountered that will not perform properly, the first thing to check is the output frequency. If the frequency is only 1 or 2 hertz off the correct frequency, the output voltage will drop off.

The correct procedure for setting the frequency is as follows:

1. Turn off all 110V appliances in the Motor Home (air conditioner, hot water heater, power converter).
2. Start the Onan and allow it to warm up.
3. Plug a frequency meter (Kent Moore Tool #J-24673) into any interior outlet and check the frequency.
4. Adjust the frequency to 63 hertz (cycles per second) by tightening or loosening the governor adjusting nut. (See illustration.)



VOLTAGE CHART FOR CHECKING GOVERNOR REGULATION	120 VOLT 1 PHASE 2 WIRE
MAXIMUM NO-LOAD VOLTAGE	126
MINIMUM FULL-LOAD VOLTAGE	110

SPEED CHART FOR CHECKING GOVERNOR REGULATION	
MAXIMUM NO-LOAD SPEED (RPM)	1890
HERTZ (CURRENT FREQUENCY)	63
MINIMUM FULL-LOAD SPEED (RPM)	1770
HERTZ	59



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-TM-9

GROUP: 24-Misc-2

DATE: January, 1975

SUBJECT: IMPROVING NORCOLD REFRIGERATOR PERFORMANCE

MODELS: ALL 1973 AND 1974 MOTOR HOMES

An improved venting system has been released for the Norcold all electric refrigerators. This new system gives greatly increased cooling airflow past the refrigerator condensor thus allowing much better heat transfer from the condensor and improving the efficiency of the refrigerator tremendously.

This fix will work equally as well on a 23' or 26' motor home with a 6 cu. ft. or 7.5 cu. ft. refrigerator. This modification should only be installed in those cases where the customer complained of poor refrigerator performance.

REIMBURSEMENT INFORMATION

The installation of this modification will be paid by GMC regardless of the mileage on the vehicle. The labor operation and time allowances for this modification are as follows:

LABOR OPERATION	DESCRIPTION	TIME	MATERIAL
T114307	Norcold Refrigerator Venting Modification (6 and 7.5 cu. ft.)	3.6 Hrs.	\$2.95
Includes—Refinish top and side vents.			

PARTS INFORMATION

The following parts are necessary for the refrigerator vent modification and are to be procured through normal parts channels.

QTY/VEH.	PART NUMBER	DESCRIPTION
1	792854	Refrigerator Side Vent
1	792853	Refrigerator Roof Vent

Plywood, furring strips, rivets, and insulation should be procured locally.

SIX CUBIC FOOT NORCOLD REFRIGERATOR FIX

1. Disconnect and remove the refrigerator from the motor home.
2. Approximately 12" up from the floor of the refrigerator compartment cut a small hole (approximately 6" x 6") in the upsom board in the back of the module. (See Figure 1)
3. Through this hole locate the aluminum framing for a refrigerator side vent and expand the hole in the upsom board to the size of the frame. (See Figures 2 & 3)
4. From the inside of the motor home drill a $\frac{3}{8}$ " hole through the outer skin of the motor home at each inside corner of the vent frame.
5. From the outside of the vehicle cut out the vent opening using the four corner holes to locate the opening. (See Figure 4)
6. Install the side vent in the opening using strip caulk sealer along the vent flange between the flange and the body and pop riveting the vent in place using sixteen (16) $\frac{3}{16}$ " x $\frac{1}{2}$ " pop rivets. (See Figure 5)
7. Cut a second small hole through both layers of upsom board in the top of the refrigerator module immediately behind the hallway edge of the module. (See Figure 6)
8. Use the small hole to locate the aluminum framework for the roof vent and expand the hole to the size of the frame. (NOTE: The opening in a 23' motor home is much smaller than the opening in a 26' motor home; be careful that you do not over-cut the opening.) (See Figure 7)
9. Drill a $\frac{3}{8}$ " hole through the vehicle skin at each corner of the roof vent frame and cut out the vent opening from the outside of the vehicle. (NOTE: Cut the hole from the inside corners of the four holes. This allows better sealing of the roof vent.) (See Figure 8)
10. Install the bottom half of the roof vent over the opening using strip caulk between the vent flange and the vehicle body. Pop rivet the vent in place using thirty (30) $\frac{3}{16}$ " x $\frac{1}{2}$ " pop rivets. (NOTE: The vent assembly is somewhat longer than the opening; center it over the hole and pop rivet it in place.) (See Figure 9) Place a drop of silicone sealer on top of each rivet.
11. Use silicone sealer to seal between the upsom board and the roof vent opening aluminum frame.
12. Use insulation or sealer to seal any other opening in the upper cabinet. (See Figure 10)
12. Stuff household fiberglass insulation or foam rubber between the upsom board and the side of the body around the side vent. (See Figure 11)
13. Cut a hole 5" x 16" out of the back of the shelf in the cabinet above the refrigerator. (See Figure 12)
14. Cut a 21 $\frac{1}{8}$ " x 3 $\frac{3}{4}$ " piece of sheet metal or plywood and paint it flat black.
15. Install the above piece behind the small interior refrigerator vent above the refrigerator using four small screws to secure it in place. Insert black strip caulk in any open spaces around the plywood or aluminum piece. (See Figure 13)
16. Apply strip caulk to the back edge of the top cabinet door and screw the cabinet shut with two wood screws.
17. Cut a 23" x 8" piece of $\frac{1}{4}$ " plywood. Mount this piece just below the bottom of the side vent straight across to where the back of the refrigerator sits. (See Figure 14) This piece should be mounted using two pieces of 1" x 1" x 8" wood, screwed to the sides of the module and glueing, nailing or stapling the piece of plywood to the top of these strips.
18. Cut a second piece of plywood 23" x 9 $\frac{1}{2}$ " x $\frac{1}{4}$ " and install it so that it extends from the top of the side vent down to a line 5" up from the first piece of plywood and 4" from the back of the refrigerator. (See Figures 15 and 16) Attach this piece in the same manner as above using two (2) 1" x 1" x 9" pieces of wood. (CAUTION: When attaching the 1" x 1" strips in a 23' motor home, be careful not to drill completely through the side of the module behind the dinette.)
19. Reinstall the side vent louver assembly and screw or pop rivet it in place to prevent it from blowing off in the wind.
20. Install the top half of the roof vent and secure it by bending over the four tangs on the bottom half of this vent. (See Figure 17)
21. Install a piece of close cell rubber foam in the back of the bottom opening in the refrigerator behind the inverter to prevent cold air from blowing out of the inverter vent.
22. Reinstall the refrigerator.
23. Paint both vents to match the vehicle.

7.5 CUBIC FOOT NORCOLD REFRIGERATOR FIX

1. Disconnect and remove the refrigerator from the motor home.
2. Approximately 12" up from the floor of the refrigerator compartment cut a small hole (approximately 6" x 6") in the upsom board in the back of the module. (See Figure 1)
3. Through this hole locate the aluminum framing for a refrigerator side vent and expand the hole in the upsom board to the size of the frame. (See Figures 2 & 3)
4. From the inside of the motor home drill a $\frac{3}{8}$ " hole through the outer skin of the motor home at each inside corner of the vent frame.
5. From the outside of the vehicle cut out the vent opening using the four corner holes to locate the opening. (See Figure 4)
6. Install the side vent in the opening using strip caulk sealer along the vent flange between the flange and the body and pop riveting the vent in place using sixteen (16) $\frac{3}{16}$ " x $\frac{1}{2}$ " pop rivets. (See Figure 5)
7. Cut a second small hole through both layers of upsom board in the top of the refrigerator module immediately behind the hallway edge of the module. (See Figure 6)
8. Use the small hole to locate the aluminum framework for the roof vent and expand the hole to the size of the frame. (NOTE: The opening in a 23' motor home is much smaller than the opening in a 26' motor home; be careful that you do not over-cut the opening.) (See Figure 7)
9. Drill a $\frac{3}{8}$ " hole through the vehicle skin at each corner of the roof vent frame and cut out the vent opening from the outside of the vehicle. (NOTE: Cut the hole from the inside corners of the four holes. This allows better sealing of the roof vent.) (See Figure 8)
10. Install the bottom half of the roof vent over the opening using strip caulk between the vent flange and the vehicle body. Pop rivet the vent in place using thirty (30) $\frac{3}{16}$ " x $\frac{1}{2}$ " pop rivets. (NOTE: The vent assembly is somewhat longer than the opening, center it over the hole and pop rivet it in place.) (See Figure 9) Place a drop of silicone sealer on top of each rivet.
11. Use silicone sealer to seal between the upsom board and the roof vent opening aluminum frame. Use insulation or sealer to seal any other opening. (See Figure 10)
12. Stuff household fiberglass insulation or foam rubber between the upsom board and the side of the body around the side vent. (See Figure 11)
13. Cut a 23 $\frac{1}{4}$ " x 3 $\frac{3}{4}$ " piece of sheet aluminum or plywood and paint it flat black.
14. Install the above piece behind the small interior refrigerator vent above the refrigerator using four small screws to secure it in place. Insert black strip caulk in any open spaces around the plywood or aluminum piece. (See Figure 13)
15. Cut a 24" x 11" piece of $\frac{1}{4}$ " plywood. Mount this piece just below the bottom of the side vent straight across to where the back of the refrigerator sits. (See Figure 14) This piece should be mounted using two pieces of 1" x 1" x 11" wood screwed to the sides of the module and stapling, nailing or glueing the piece of plywood to the top of these strips.
16. Cut a second piece of plywood 24" x 9 $\frac{1}{2}$ " x $\frac{1}{4}$ " and install it so that it extends from the top of the side vent down to a line 5" up from the first piece of plywood and 4" from the back of the refrigerator. (See Figures 15 and 16) Attach this piece in the same manner as above using two (2) 1" x 1" x 9" pieces of wood. (CAUTION: When attaching the 1" x 1" strips in a 23' motor home, be careful not to drill completely through the side of the module behind the dinette.)
17. Reinstall the side vent louver assembly and screw or pop rivet it in place to prevent it from blowing off in the wind.
18. Install the top half of the roof vent and secure it by bending over the four tangs on the bottom half of this vent. (See Figure 17)
19. Install a piece of close cell rubber foam in the back of the bottom opening in the refrigerator behind the inverter to prevent cold air from blowing out the inverter vent.
20. Reinstall the refrigerator.
21. Paint both vents to match the vehicle.

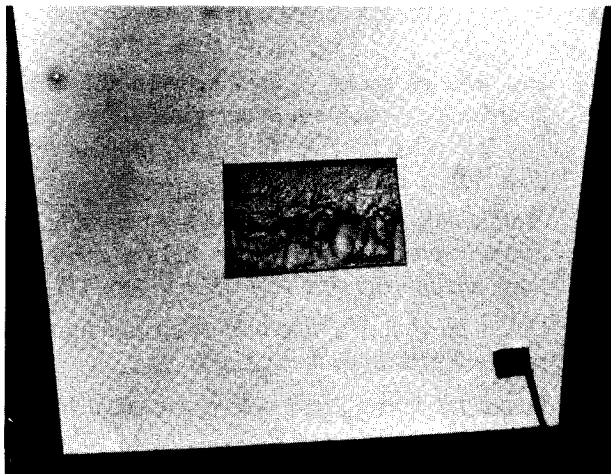


Figure 1

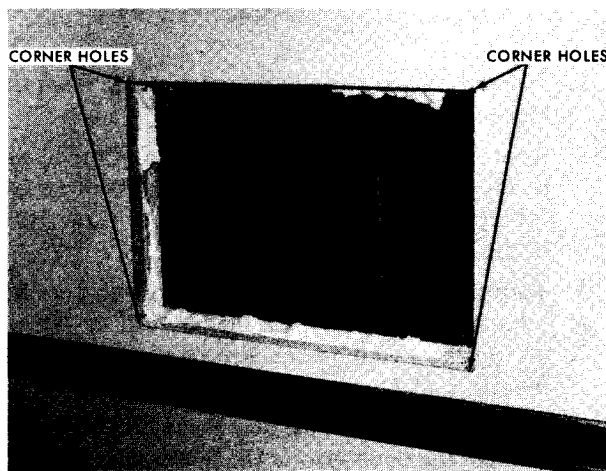


Figure 4

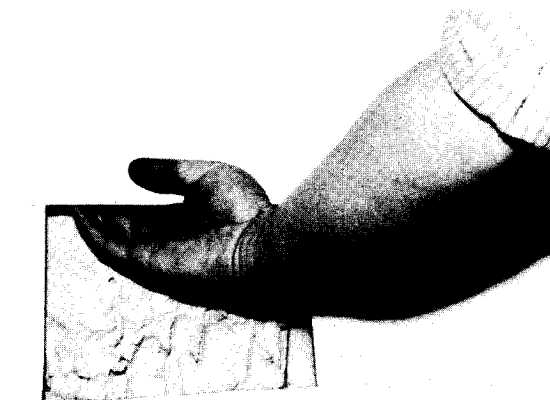


Figure 2



Figure 5



Figure 3

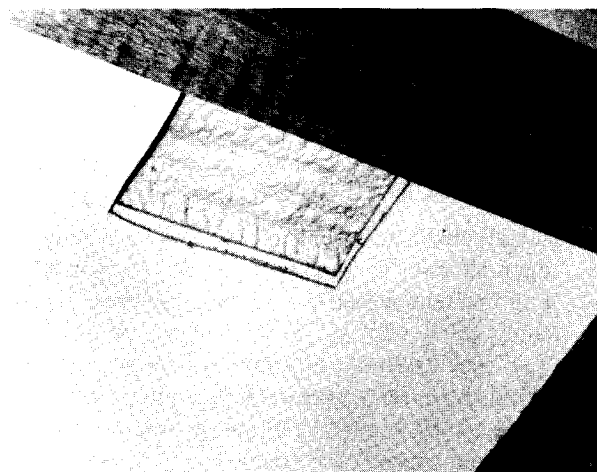


Figure 6

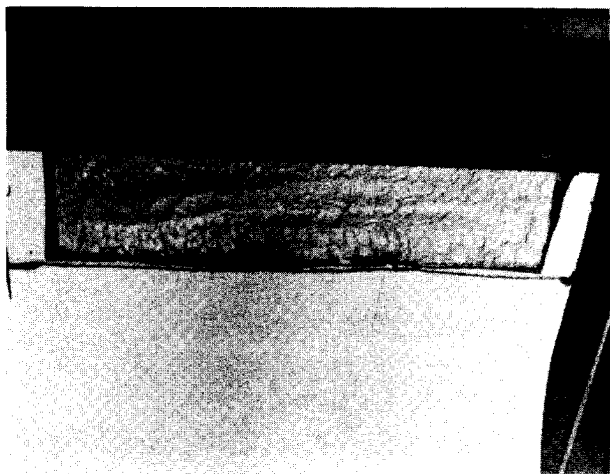


Figure 7

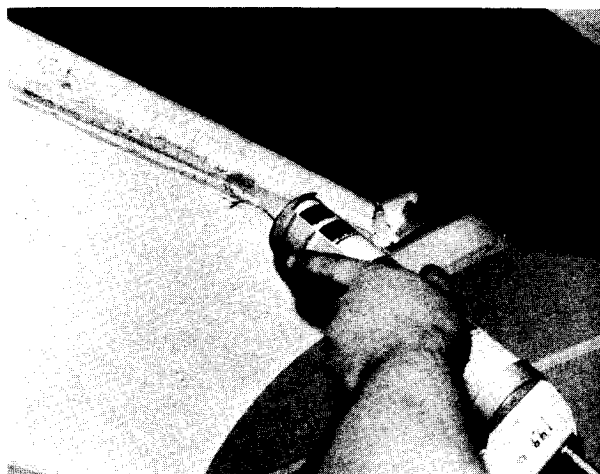


Figure 10

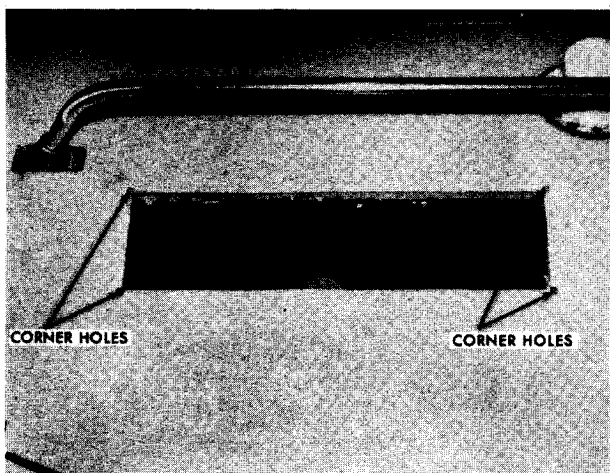


Figure 8



Figure 11



Figure 9

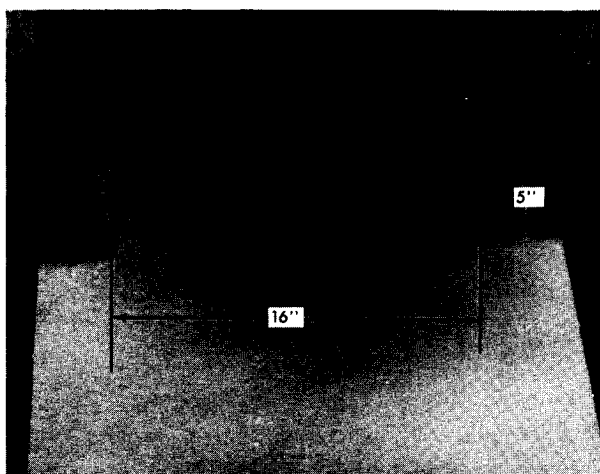


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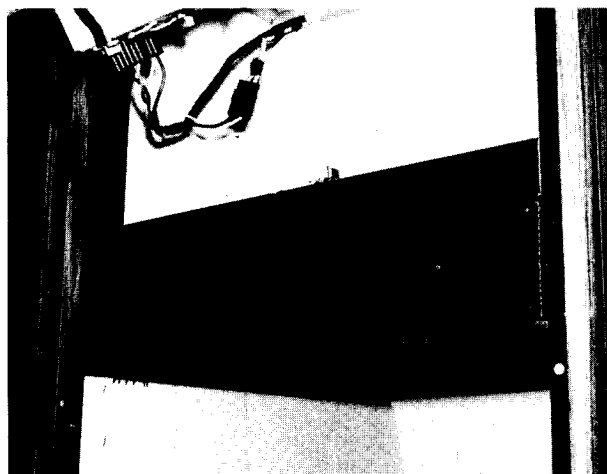


Figure 13

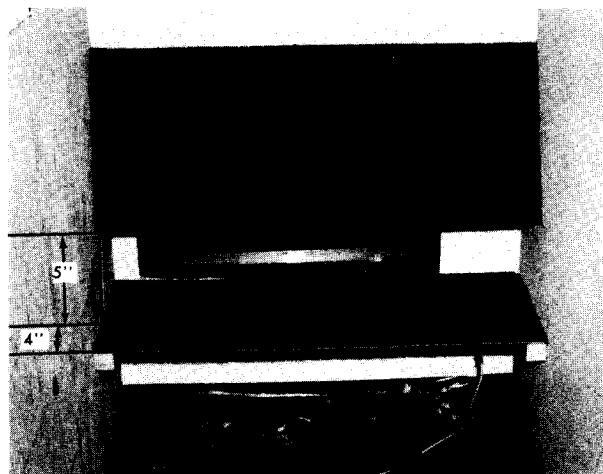


Figure 15

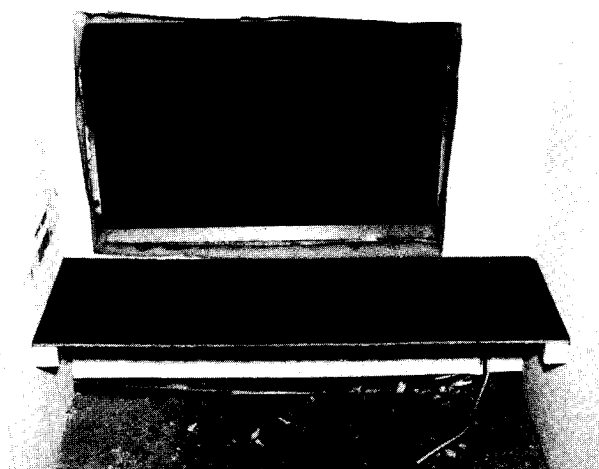


Figure 14

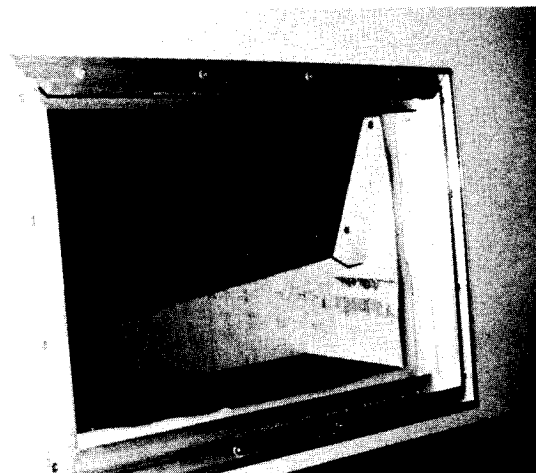


Figure 16

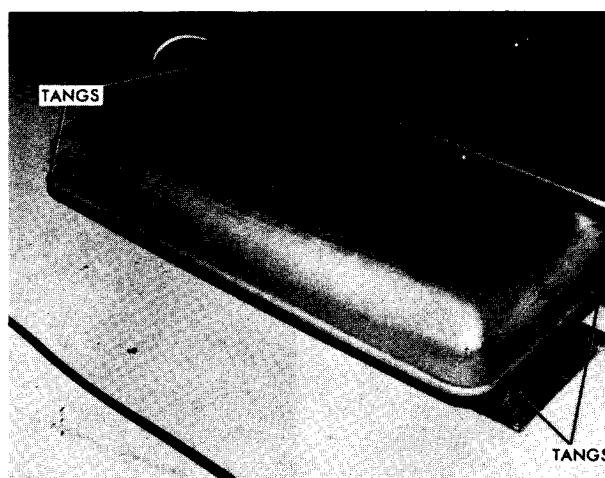


Figure 17



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1491

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-TM-11

GROUP: 24-Misc.-3

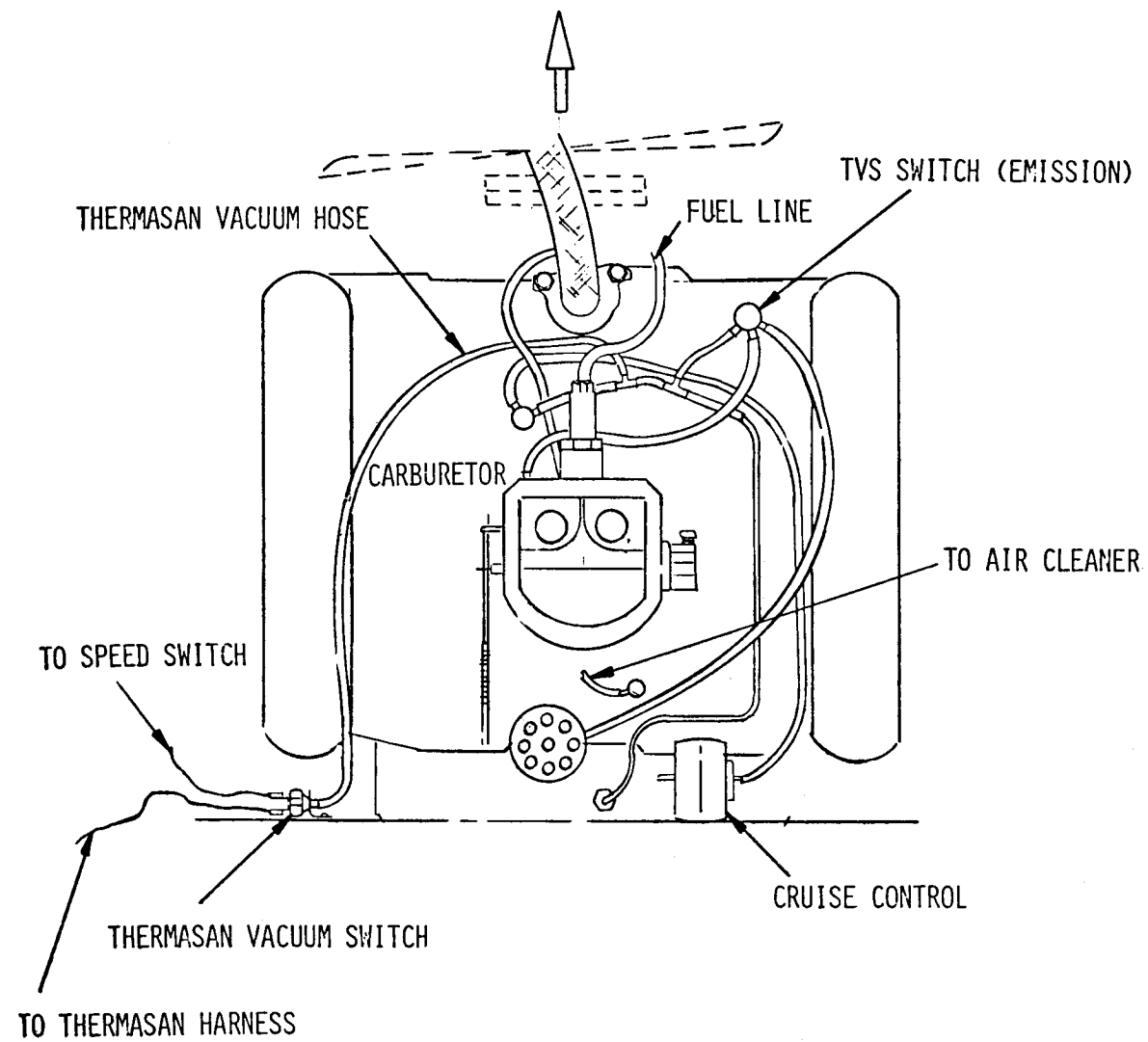
DATE: January, 1975

SUBJECT: Routing of the Thermasan Vacuum Switch Hose

MODELS: All Equipped with Thermasan Switch Disposal Systems

It has been brought to the attention of the Technical Service Department that a number of motor homes equipped with Thermasan were delivered with the Thermasan vacuum switch supply hose incorrectly tapped into a vacuum source. Reports indicate that the switch has on occasion been tapped on to the vacuum hose coming from the distributor or the Thermac air cleaner would give insufficient vacuum. What is needed is a constant source of vacuum down from the manifold.

The line drawing shows the correct routing and tap-in of the Thermasan vacuum switch.





Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

3MT 1491

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-TM-13
GROUP: 24-MISC.- 4
DATE: March, 1975

SUBJECT: Rear Side Facing Settee Latch Modification

MODELS: Eleganza II Motor Home

The rear side facing settee may be difficult to release on some Eleganza II Motor Homes. To correct the condition, the latch on the rear side facing settee should be modified as follows:

NOTE: DO NOT MAKE THE LATCH MODIFICATION ON THE FRONT FACING OR REAR FACING DINETTE SEATS.

INSTRUCTIONS

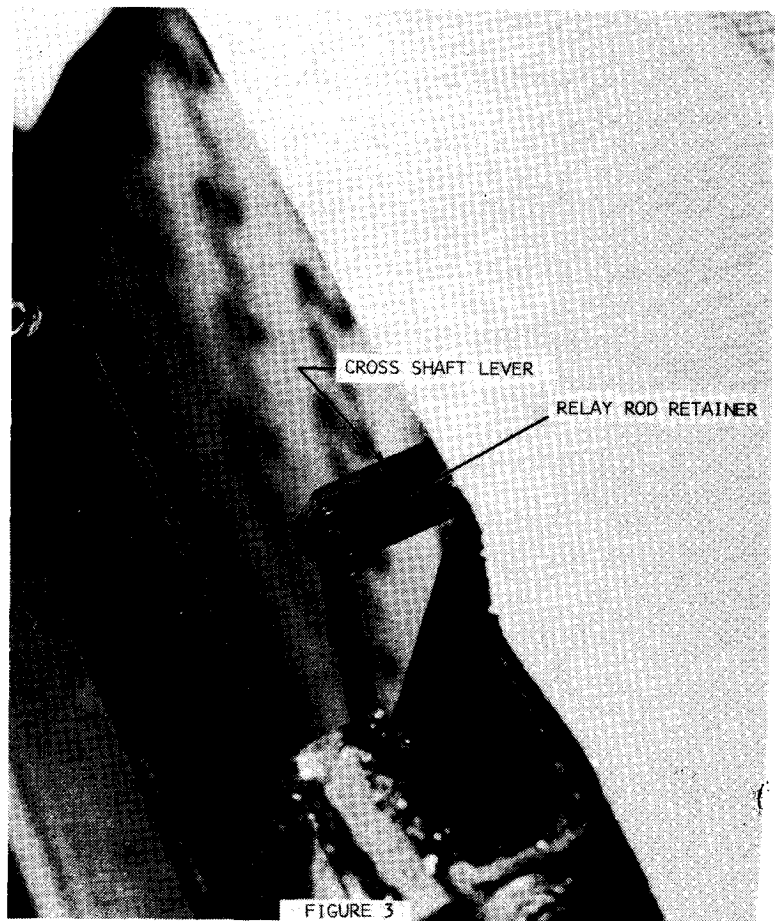
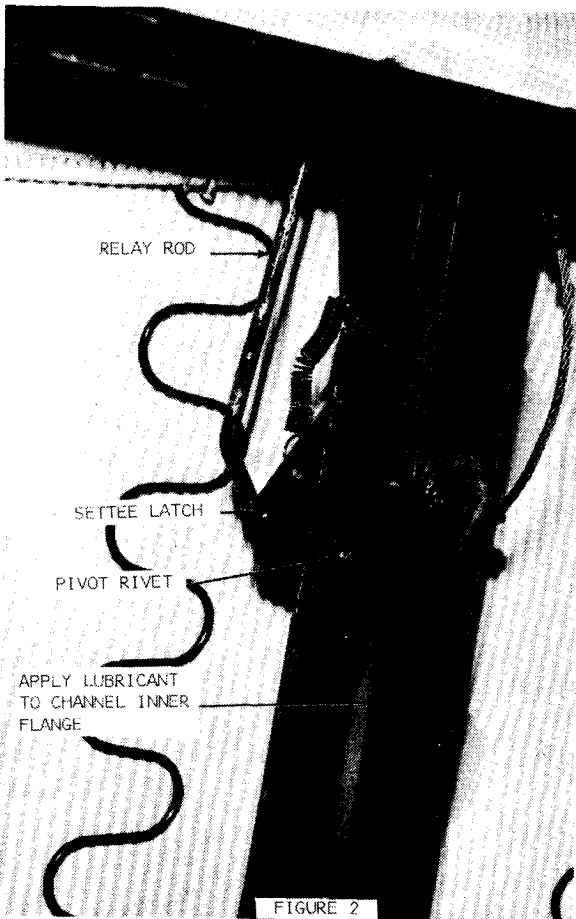
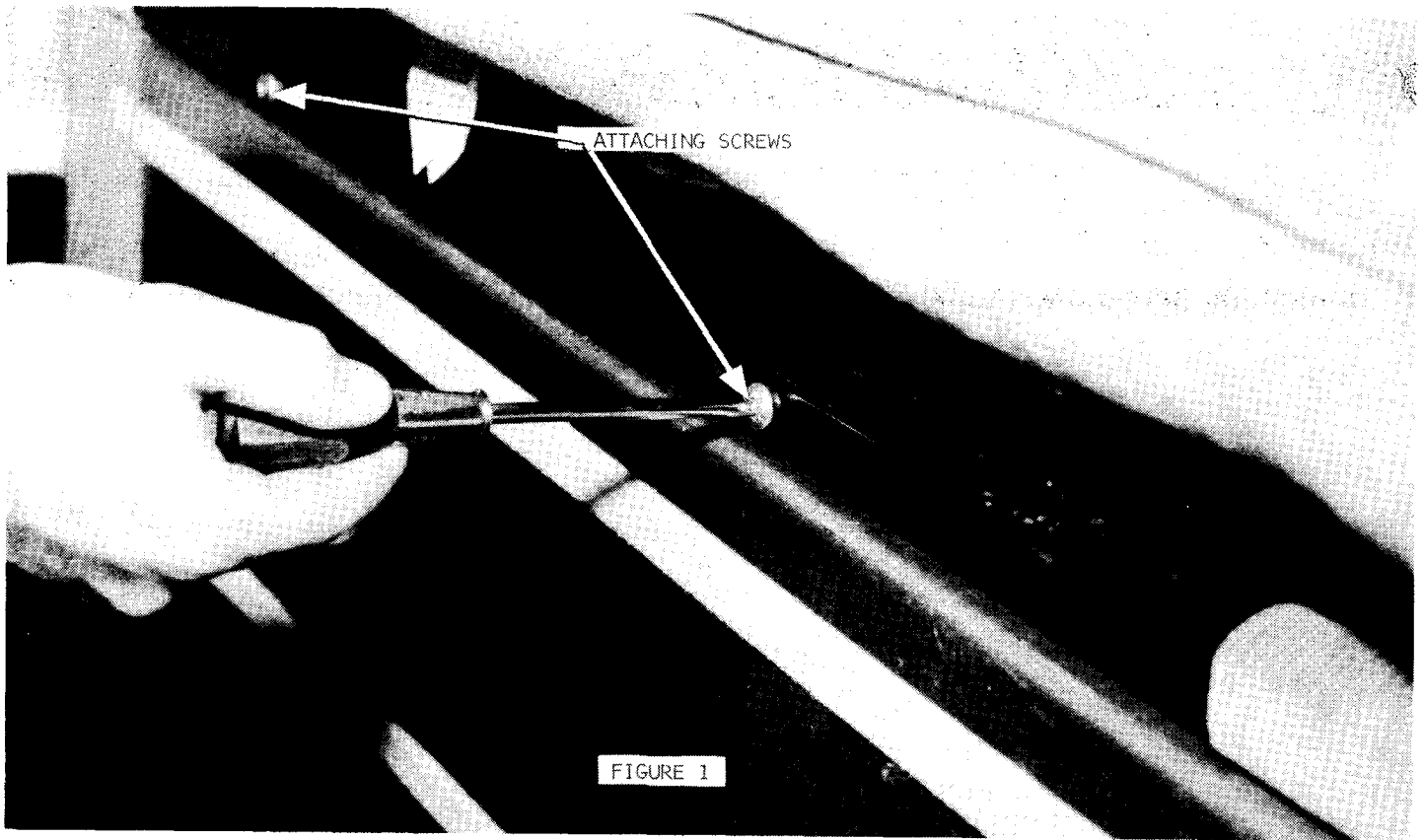
(For right or left side facing settee)

1. Remove kick panel.
2. Remove two (2) frame attaching screws, Figure 1.
3. Tip settee onto its back.
4. Drill out two (2) latch pivot rivets with a 1/4" bit, Figure 2.
5. Remove relay rod retainers at cross shaft levers, Figure 3.
6. Remove two relay rods, springs and latches, Figure 1.
7. Apply lubricant to frame channel inner lower flange.
8. Reposition settee, install frame attaching screws and install kick panel.
9. Repeat for opposite side if necessary.

WARRANTY INFORMATION

When the repairs are within the published warranty use:

<u>Labor Operation</u>	<u>Time Allowance</u>	<u>Trouble Code</u>
T025121 Right Side	.3 Hr.	92
T025221 Left Side	.3 Hr.	92





Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1491

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-TM-14

GROUP: 24-MISC.- 5

DATE: March, 1975

SUBJECT: Triad-Utrad Voltage Converter Hum

MODELS: All 1973 and 1974 Motor Homes

Many owners have complained of an annoying buzzing sound being made by the Triad-Utrad converter. This noise can be greatly reduced by mounting the converter on special rubber mounts to isolate it from the vehicle.

PARTS INFORMATION

The following parts are necessary to make this modification:

<u>Qty/Vehicle</u>	<u>Part Number</u>	<u>Description</u>
2	792176	Mount
2	792175	Mount
1	790181	Spacer
1	790182	Spacer

The following parts should be procured locally:

<u>Qty/Vehicle</u>	<u>Part Number</u>	<u>Description</u>
2	NPN	3/8-16 x 1-1/4 Bolt
2	NPN	1/4-20 x 1-1/2 Bolt
16	NPN	No. 10-16 x 3/8 Wood Screw

INSTALLATION INSTRUCTIONS

1. Disconnect and remove the voltage converter.
2. Temporarily attach two mounts, part #792176, to spacer, part #790182, using two 3/8-16 x 1-1/4" bolts.
3. In similar manner, attach two mounts, part #792175, to spacer, part #790181, using two 1/4-20 x 1-1/2" bolts.

4. In the same position as the voltage converter was originally mounted, locate the two mount and spacer assemblies with the large mounts toward the back of the compartment and the small mounts in front. Space the mounts 12" apart center to center and be sure the two assemblies are square to each other.
5. Mark the location of the mount attaching holes. Using an 1/8" drill bit, drill the holes for the screws in the compartment floor.
6. Remove the mounts from the spacers and attach them to the floor of the compartment using 10-16 x 3/8" wood screws.
7. Attach the converter to the mounts and spacers with the transformer end (heavy end) over the large mounts. (NOTE: It is necessary to drill out the holes in the converter for the 3/8" bolts.) Reconnect the converter to the electrical system.

WARRANTY INFORMATION

When the repairs are within the published warranty use:

<u>Labor Operation</u>	<u>Time Allowance</u>	<u>Trouble Code</u>
T025103	.6 Hr.	92



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1491

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-TM-15
GROUP: 24-Misc.-6
DATE: April, 1975

SUBJECT: Rear Settee Kick Panels

MODELS: 1975 Model Eleganza II Motor Homes

The rear settee kick panels on some 1975 model Eleganza II Motor Homes may interfere with the settee bottom support channels. Also, the "velcro" used to hold the kick panels in position may tear from the panel. To correct these conditions, do the following.

INSTRUCTIONS

Interference

1. Lay out trim line on back side of both kick panels as shown in Figure 1.
2. Trim bottom of each panel using a saber saw from the back side.

Retention

3. Remove "velcro" from kick panels.
4. Install "velcro" loop strips vertically on kick panels with contact cement as shown in Figure 2.

WARRANTY INFORMATION

When the repairs are within the published warranty use:

LABOR OPERATION

T035107

TIME ALLOWANCE

.5 Hr.

TROUBLE CODE

92

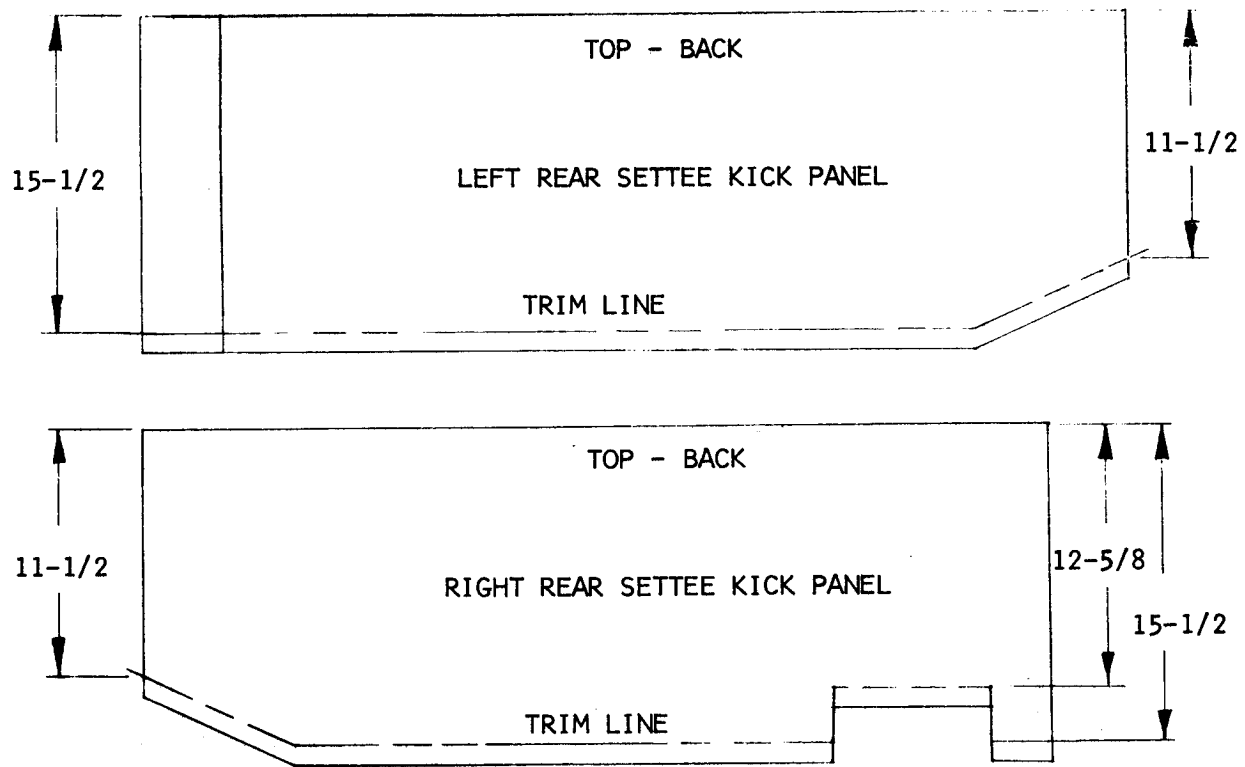


FIGURE 1

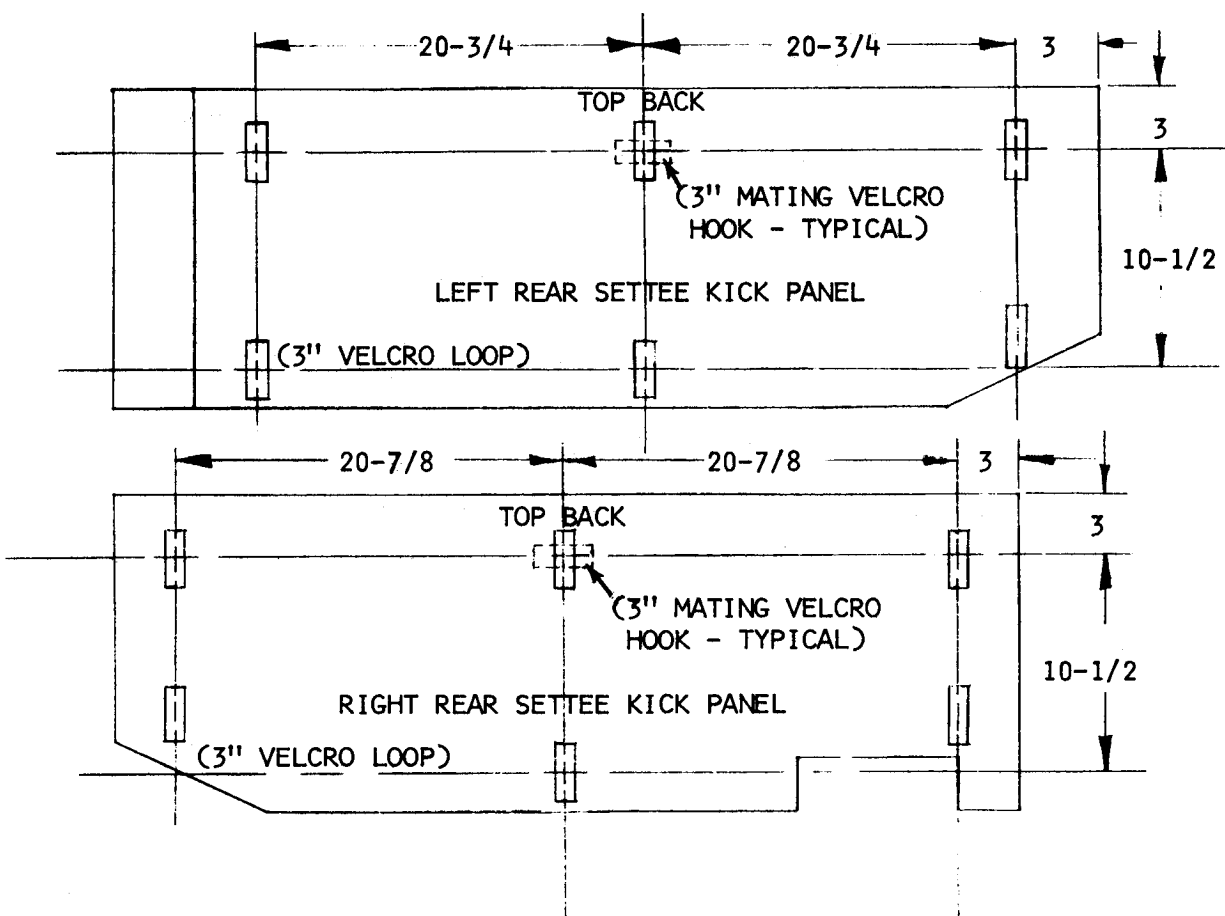


FIGURE 2



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

GMT 1491

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-TM-17

GROUP: 24-Misc.- 7

DATE: April, 1975

SUBJECT: Dinette Seat Operation

MODELS: Eleganza II

The dinette seat may be difficult to operate on some 1975 Eleganza II Motor Homes due to lack of lubricant in the slide channel and release mechanism.

INSTRUCTIONS

1. Raise dinette seat and lightly lubricate release mechanism and slide channels, as shown, with a general purpose dry film silicone-type lubricant.
2. Repeat for opposite dinette seat.

WARRANTY INFORMATION

When the repairs are within the published warranty use:

LABOR OPERATION

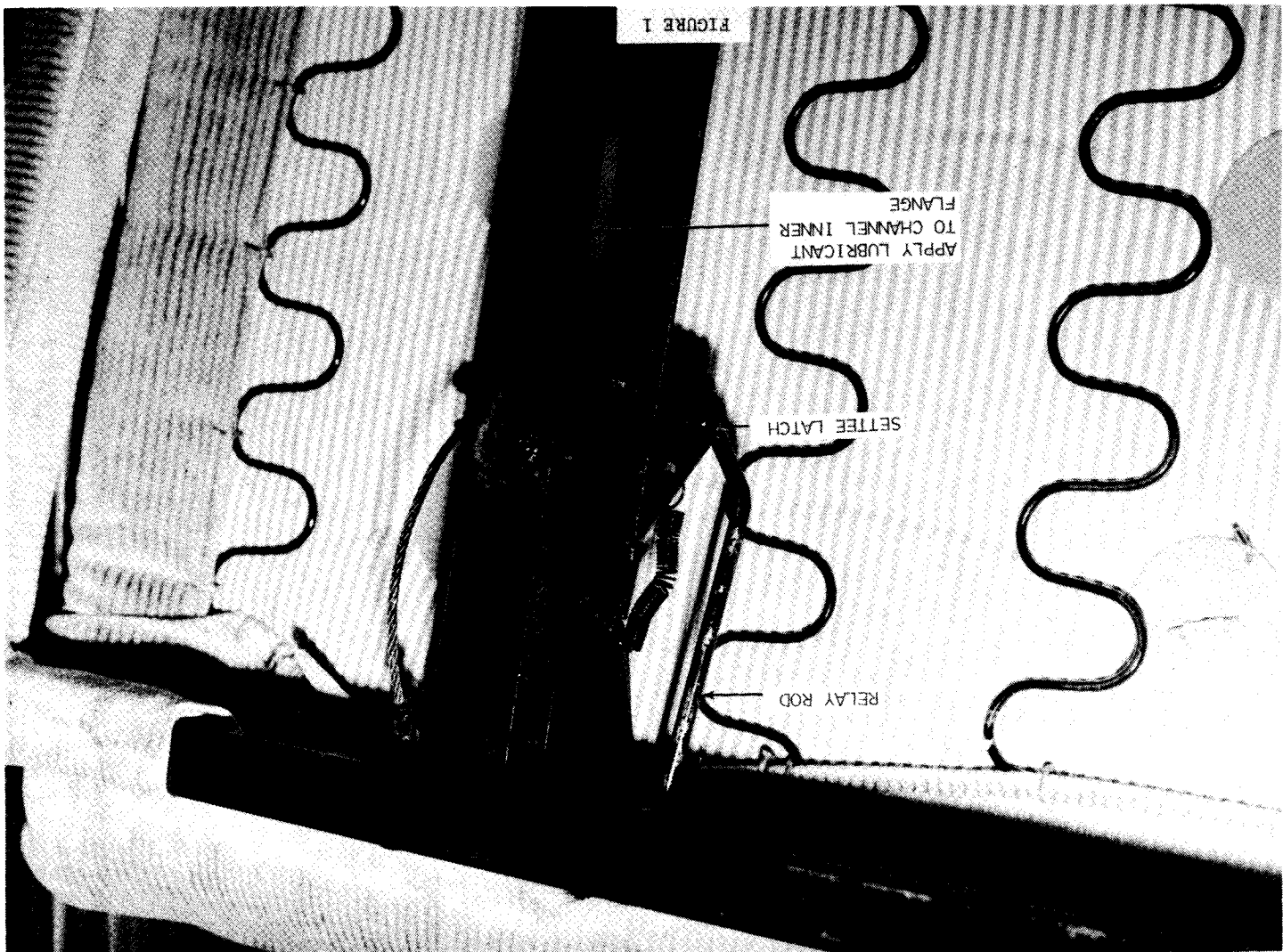
TIME ALLOWANCE

TROUBLE CODE

T035110

.2 Hr.

92





Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-TM-18

GROUP: 24-Misc -8

DATE: May, 1975

SUBJECT: CITY WATER VALVE DRAIN COCK

MODELS: ALL GMC MOTOR HOMES

A check valve and drain cock have been added to the 1975 model GMC Motor Home city water line. The addition of the drain cock allows water to be drained away from the city water valve so that the valve will not be damaged by freezing. All 1975 model motor homes should be modified to prevent freezing of the city water valve. However, 1973 and 1974 model motor homes should be modified only when the city water valve requires replacement.

PARTS INFORMATION

<u>Quantity/Vehicle</u>	<u>Part Number</u>	<u>Description</u>
1	798359	Tee
6 Inches	8885531	Hose - 25 Feet
1	796778	Valve - Check
1	9427524	Valve - Drain
1	9417325	Clamp
1	793398	Nipple
1	Procure Locally	Coupling (1/2-14 to 1/4-18 Pipe Reducer)
As Required	790333	Valve - City Water

INSTRUCTIONS

1975 Models

1. Turn off water pump.
2. Open galley cold water drain valve and turn galley cold water on.
3. Carefully remove carpet from city water valve access panel in closet.
4. Remove city water valve access panel screws and remove panel.
5. Disconnect water line from city water valve.
6. Remove adapter sleeve from city water valve and install on nipple.
7. Install coupler, check valve, tee, nipple, and drain cock as shown in Figure 1. Use pipe dope on threads.

8. Install line to check valve tee and city water valve as shown in Figure 1.
9. Drill 3/4" diameter hole below drain cock through wheelhouse with hole saw. DO NOT DRILL THROUGH WIRING.
10. Install 6" of hose to drain valve with hose clamp and seal to wheelhouse with silicone caulk type sealant as shown in Figure 1.
11. Close galley drain valve and galley cold water.
12. Connect vehicle to city water, run water at galley and inspect and correct leaks as necessary.
13. Disconnect vehicle from city water (leave dust cap off).
14. Open and close city water drain valve.
15. Tape template "A" (Figure 2) on city water valve access panel. Drill a 3/8" diameter hole and make cuts with saber saw as shown on template. Break sharp edges on hole.
16. Reinstall city water valve access panel.
17. Restaple carpet to panel.
18. Cut carpet to match opening of access hole as shown in Figure 3.

1973 and 1974 Models

1. Turn off water pump, open galley cold water drain valve and cold water tap.
2. Remove city water access box from closet.
3. Disconnect city water line from valve.
4. Cut city water line 5-1/4" from bend as shown.
5. Remove city water valve and install new valve, P/N 790333.
6. Install nipple, check valve, tee, drain cock, and short plastic line as shown in Figure 4. Use pipe dope on threads.
7. Drill 3/4" diameter hole in wheel house below drain cock. DO NOT DRILL THROUGH WIRING.
8. Install 6" of hose to drain cock with hose clamp and wheelhouse hole as shown in Figure 4.
9. Seal wheelhouse to hose with silicone caulk type sealant.

10. Close drain cock, galley cold water drain, and tap.
11. Connect vehicle to city water and turn cold water tap on. Check for leaks and correct as necessary.
12. Disconnect city water, open and close city water drain cock.
13. Tape template "A" (Figure 2) to city water access box as shown on template.
14. Drill a 3/8" hole as shown on template and make cuts with saber saw. Break sharp edges on hole.
15. Reinstall city water valve access box.

WARRANTY INFORMATION

When repairs are made within the published warranty, use the following:

	<u>Labor Operation</u>	<u>Description</u>	<u>Time</u>	<u>Trouble Code</u>
75 Models	T045822	Install city water valve drain cock.	1.0 Hr.	92
73-74 Models	T045922	Install city water valve and drain cock.	.9 Hr.	92

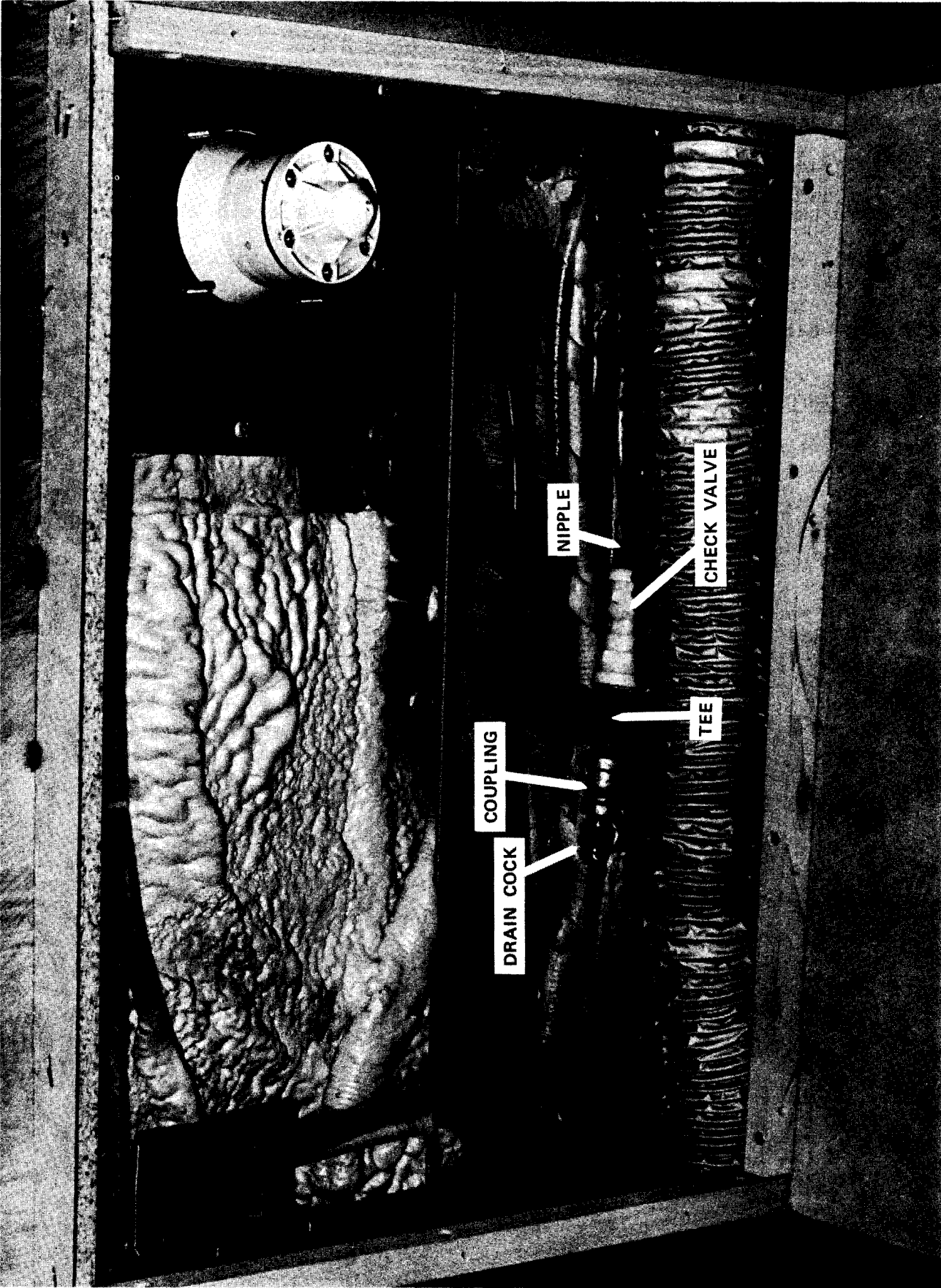
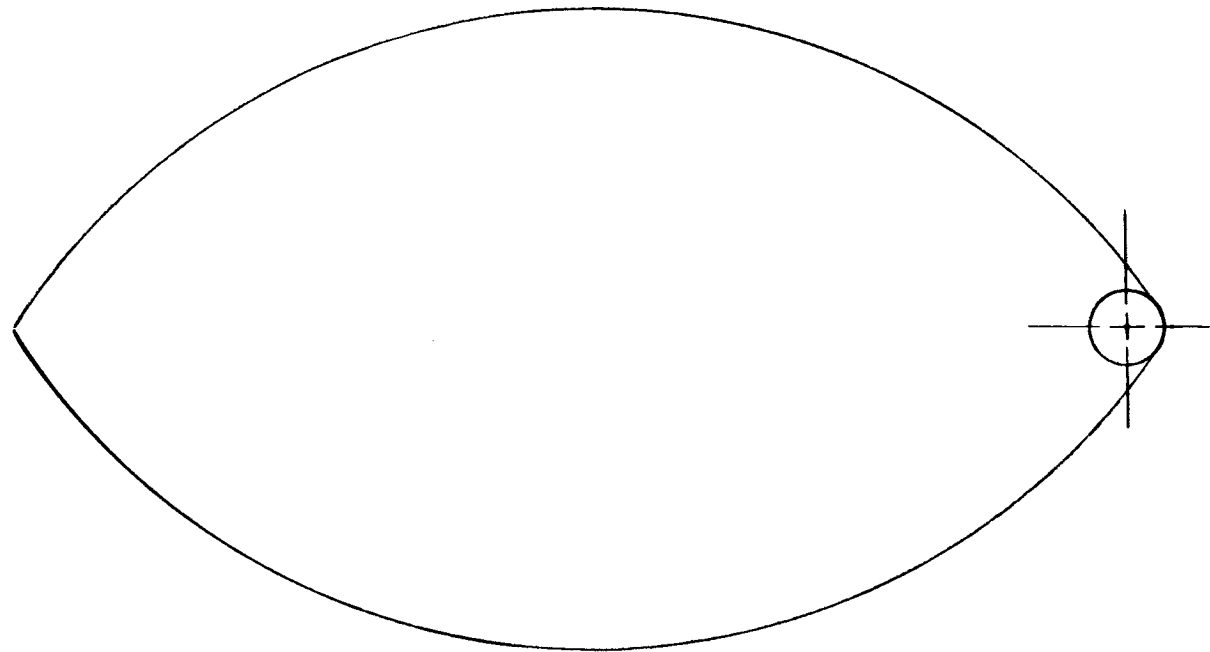


FIGURE 1

TEMPLATE "A"

EDGE OF CITY WATER VALVE ACCESS PANEL - 1975 MODELS



EDGE OF CITY WATER ACCESS BOX - 1973 & 1974 MODELS

BOTTOM EDGE OF PANEL OR BOX

FIGURE 2

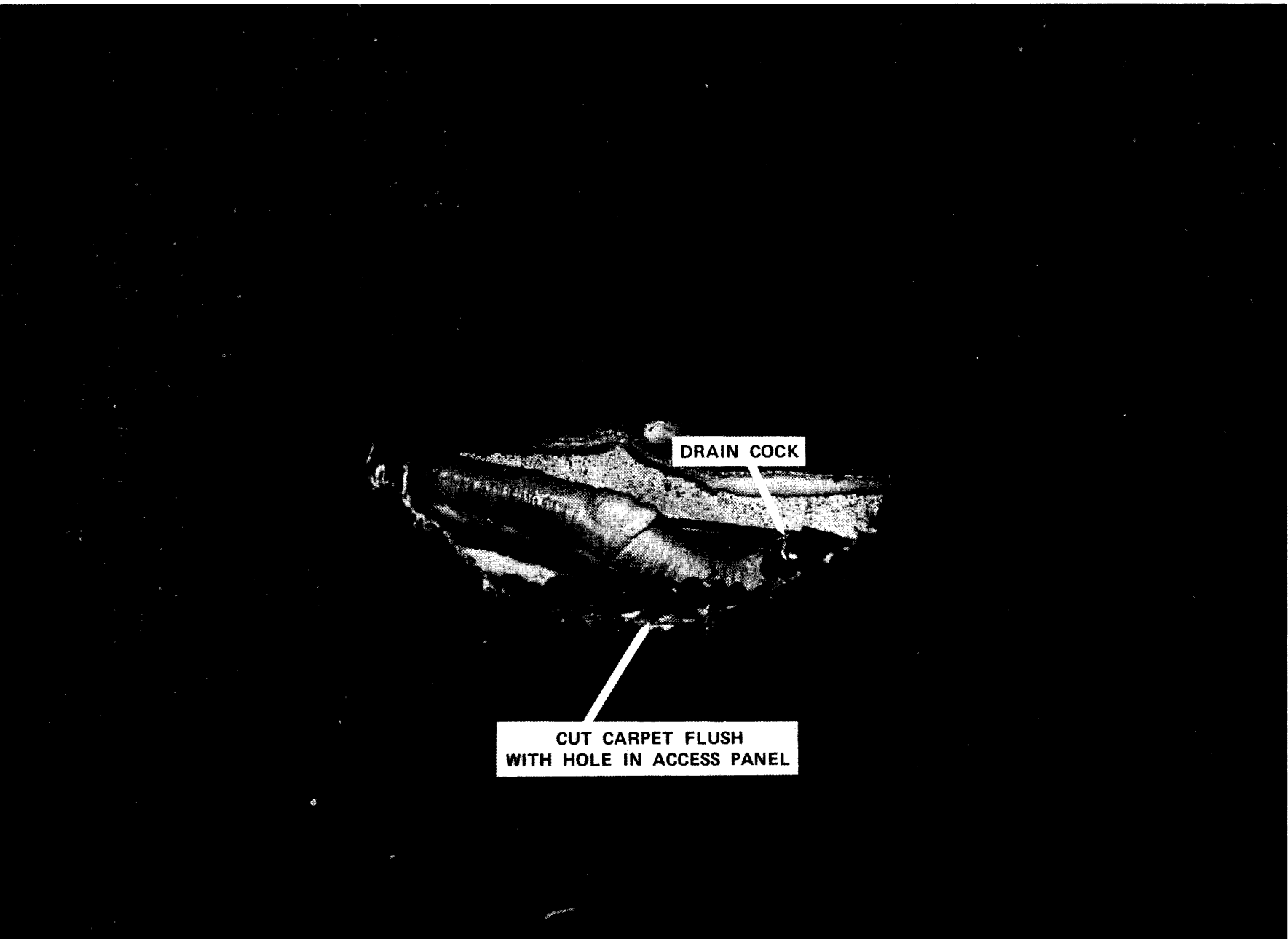
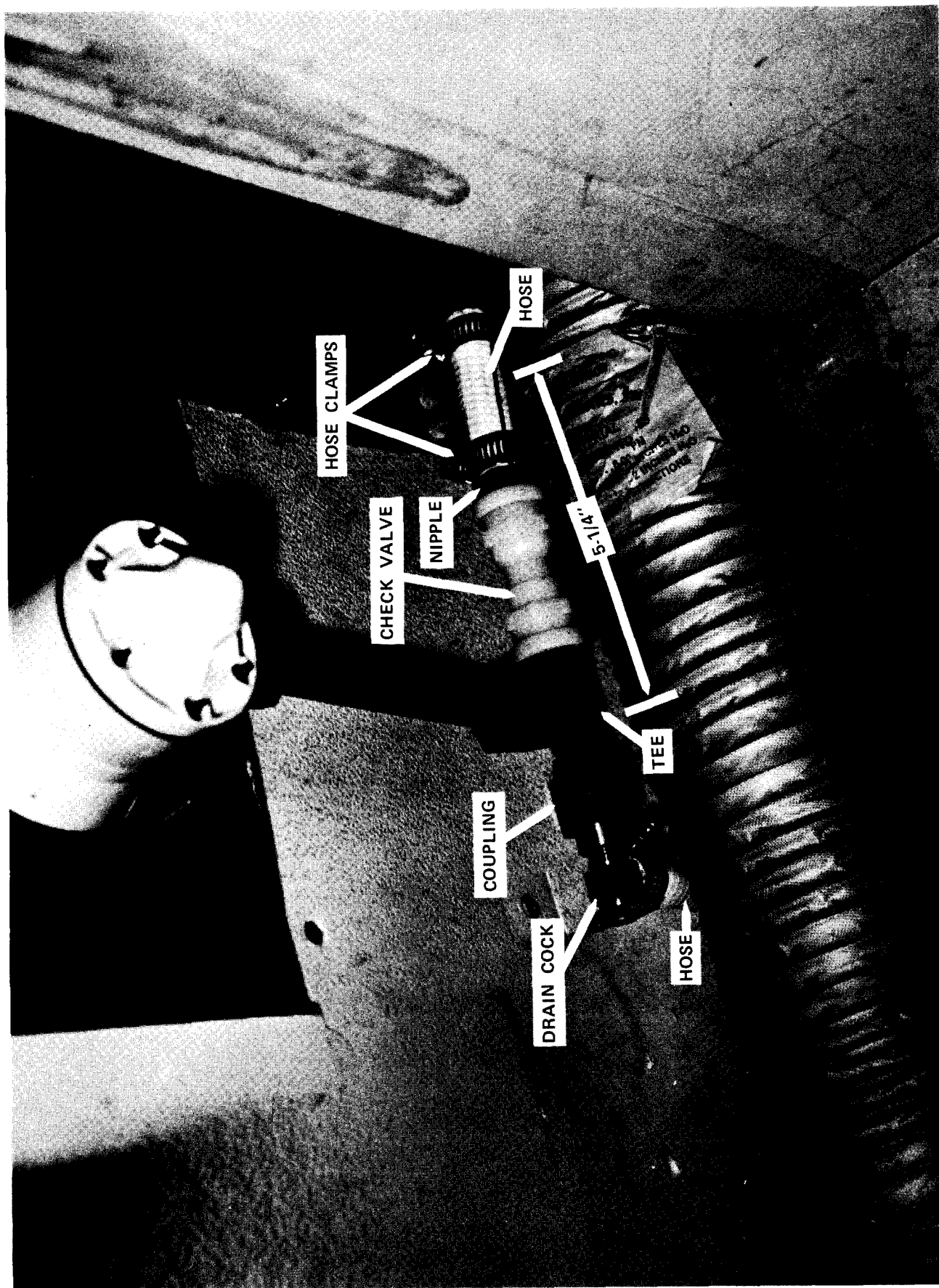


FIGURE 3



IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 76-TM-2

GROUP: 24 Misc.-1

DATE: April, 1976

SUBJECT: NORCOLD INVERTER ASSEMBLY FAILURE ANALYSIS

MODELS: ALL MODELS EQUIPPED WITH A NORCOLD REFRIGERATOR

Effective with this bulletin, the inverter assembly transformers or inverters may be replaced as individual components rather than as a complete assembly.

The procedure for determining which component failed within the inverter assembly is as follows:

1. Remove kick plate from the front of the refrigerator.
2. Disconnect the 12 volt source at connection "B" and the 110 volt source at connection "D". (Refer to Figure 1)
3. Thermostat Check (Refer to Figure 1).
 - A. Separate connection "A".
 - B. On the thermostat side of connection "A" connect ohmmeter leads to the gray thermostat leads.
 - C. With the thermostat "on" (position #5), the ohmmeter should read 0 Ω (continuity). If the ohmmeter indicates no continuity:
 1. Check for improper or loose connections.
 2. If connections check out, replace the thermostat.
4. Transformer Check (Refer to Figure 1).
 - A. Secondary Windings
 1. Separate connection "A".
 2. Connect the positive ohmmeter lead to the blue transformer lead and connect the negative ohmmeter lead to the yellow transformer lead.
 3. The ohmmeter should read approximately 3/4 Ω . If not, replace the transformer. (Transformer Part No. 2011860).
- B. Primary (117V Winding) (Refer to Figure 1).
 1. Separate connection "C".
 2. On the transformer side of connection "C" connect the positive ohmmeter lead to the white wire with a green tracer and the negative ohmmeter lead to the white wire.
 3. The ohmmeter should read approximately 12 Ω . If not, replace the transformer.
 4. Touch the mounting plate to make sure the winding is not grounded. The ohmmeter should read no continuity.
5. Inverter Check (Refer to Figure 1).
 - A. Reconnect connection "C".
 - B. Separate connection "A".
 - C. Jump the two gray leads on the transformer side of connection "A".
 - D. Separate connection "B".
 - E. On the inverter side of connection "B", connect the positive ohmmeter lead to the red wire and the negative ohmmeter lead to the black wire. A reading of approximately 35 Ω should be indicated. However, any reading in the range of 4 Ω to 60 Ω is acceptable. If not, replace the inverter. (Inverter Part No. 2011861).
6. Reconnect all inverter assembly connections, including the 12 volt and 110 volt sources and turn on refrigerator.

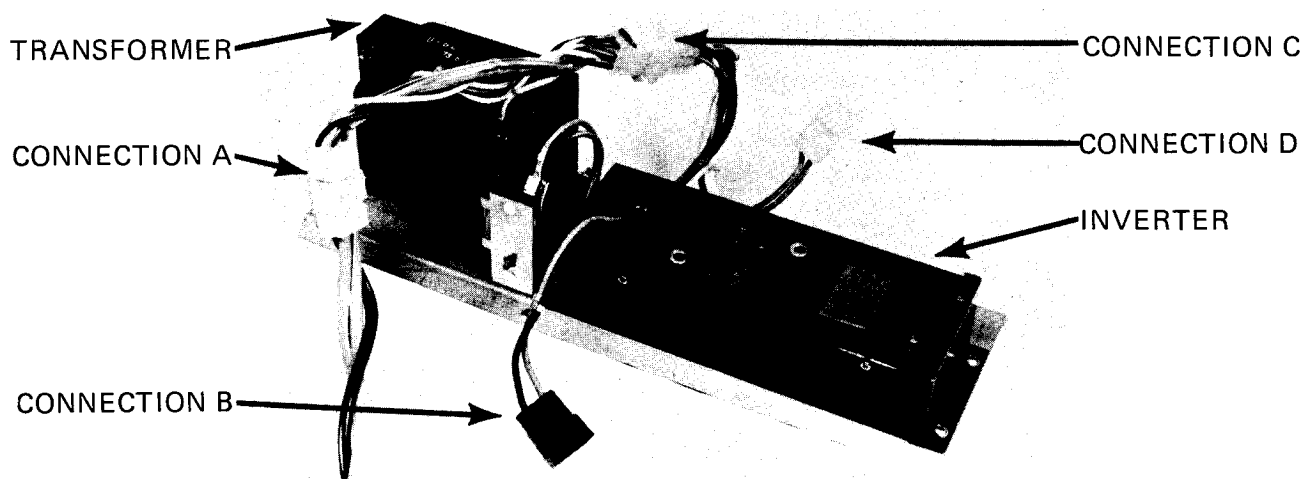


Figure No. 1 — Norcold Inverter Assembly



Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 76-TM-4
GROUP: 24-MISC.-2

DATE: June, 1976

SUBJECT: WATER HEATER PRE-HEAT

MODELS: 1975 and 1976 MOTOR HOMES WITH WATER PRE-HEAT

After periods of sustained driving, it has been found that the water heated in the water heater by the engine tends to back up into the cold water system. This bulletin details the procedure for installing a check valve in the cold water line just before it enters the hot water heater. This will prevent hot water from entering the cold water system. This check valve became standard equipment effective with TZE166V100529.

PARTS INFORMATION

Quantity	Part Number	Description
1	796778	Check Valve
As Required	Procure locally	Pipe Joining Compound
1	Procure locally	1/2" Nipple

PROCEDURE

1. Turn off water pump.
2. Run water to release pressure.

3. Remove sliding doors, door frame and shelf in bath vanity.

4. Disconnect cold water line.

5. Remove adapter and/or nipple from water heater.

6. Connect check valve to water heater with the nipple; make sure the arrow points toward the water heater. Use pipe sealing compound on all threads.

7. Attach the cold water line to the check valve.

8. Turn on water pump and check for leaks.

9. Replace shelf, door frame and sliding doors.

WARRANTY INFORMATION

Labor Operation	Description	Time Allowance	Trouble Code
T056321	Install check valve in water heater cold water line.	.5	92

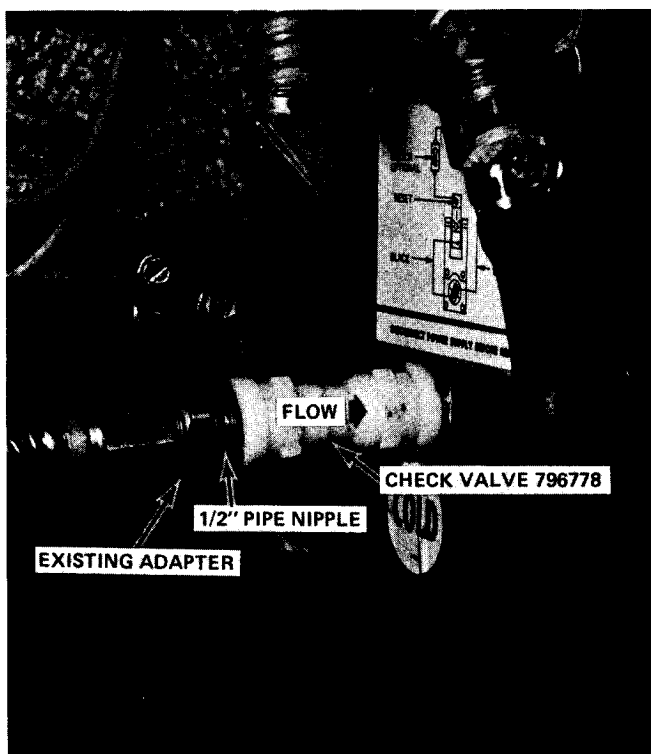


Figure 1

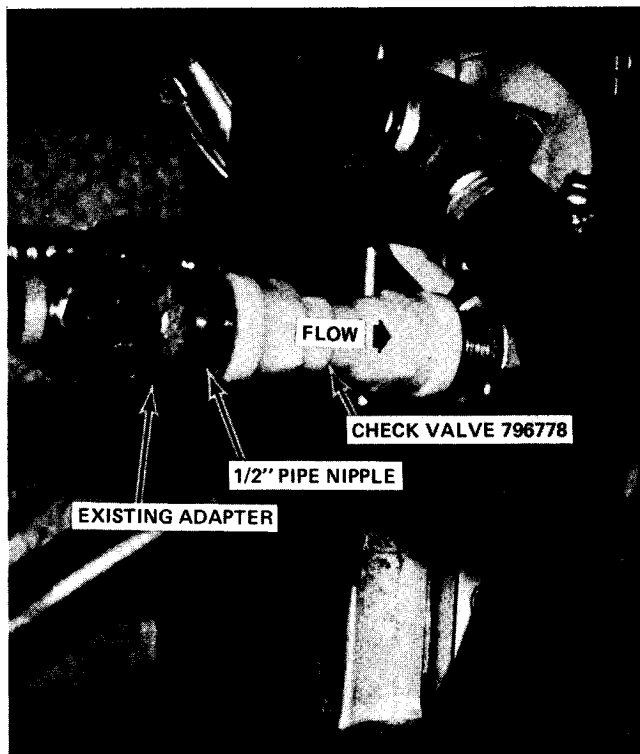


Figure 2



Motor
Home
Service

Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION

GENERAL MOTORS CORPORATION

IMPORTANT-All Service Personnel Should Read and Initial

NUMBER: 77-TM-5

GROUP: 24-MISC.-1

DATE: JUNE, 1977

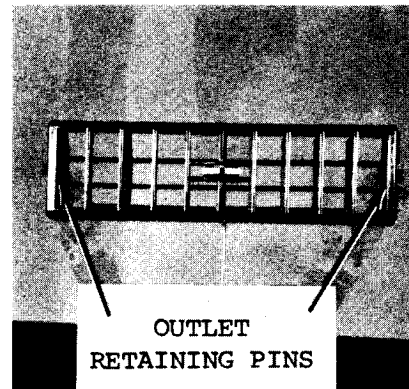
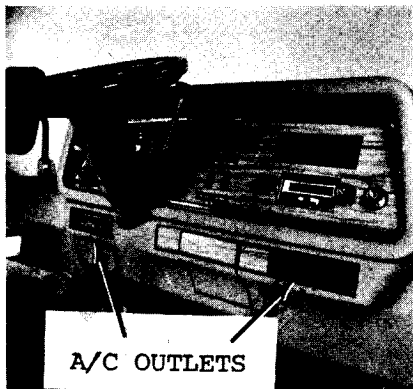
SUBJECT: AIR CONDITIONING OUTLET FIT

MODELS: 1977 MOTORHOMES AND TRANSMODES

In some cases, the air conditioning outlets in the L.H. valence panel will not secure properly and a resultant looseness occurs. This is caused by the outlet retaining pins not seating properly in their respective bezel mounting holes. Thus, in a relatively short period of time, the retaining pins take a set in the outlet and looseness occurs.

The outlet looseness can be corrected by utilizing the following procedure:

- . Remove with a file any excess flashing from the outlet bezel mounting holes.
- . Submerge the affected outlets in hot water for a few moments.
- . Remove the outlets from the hot water and hold the retaining pins out with a screwdriver. After the retaining pin cools, it should retain its proper position.
- . Reinstall the outlets in the outlet bezel mounting holes.
- . Check to see if the outlets fit properly and correct as necessary.



Warranty Information

Labor
Operation

Description

Time
Allowance

Trouble
Code

T067203

Adjust A/C Outlet

0.3

92



Motor
Home
Service

Dealer Service Technical Bulletin

GMC TRUCK & COACH DIVISION

GENERAL MOTORS CORPORATION

ATTENTION:

GENERAL MANAGER ☐

PARTS MANAGER ☐

CLAIMS PERSONNEL ☐

SERVICE MANAGER ☐

IMPORTANT- All Service Personnel Should Read and Initial

NUMBER: 78-TM-1

GROUP: 24-MISC.-1

DATE: March, 1978

SUBJECT: IGNITION PAK REPLACEMENT

MODELS: ALL MOTORHOMES WITH SOL-AIRE FURNACE EXCEPT TWIN BED MODELS

This bulletin is intended to provide information for simplifying the service procedure required to remove and replace the ignition pak. This will replace the procedure in Maintenance Manual X-7525, Page 24G-13.

REMOVAL

1. Disconnect furnace duct from right side of furnace.
 - A. If vehicle is equipped with davo, raise seat and then disconnect duct from right side of furnace.
 - B. If vehicle is equipped with swivel chairs, remove retaining duct panel assembly to floor. Carefully raise panels and disconnect duct from right side of furnace.
2. By reaching through duct opening, disconnect high tension cable (Figure 1) from ignition pak.
3. Disconnect two electrical wires from ignition pak (Figure 1). Be sure to note which terminal each wire is removed from to aid in proper installation.
4. Loosen mounting screw and remove ignition pak.

INSTALLATION

1. Position ignition pak under mounting strap as shown in Figure 1. Tighten mounting screw.
2. Connect two electrical wires to terminals on ignition pak.
3. Connect high tension cable to ignition pak.
4. Install heat duct on side of furnace.
5. Install remaining trim panel on vehicles equipped with swivel chairs.

WARRANTY INFORMATION

NOTE: Labor Operation G109500 changes as follows:

	<u>Time</u>
Ignition Pak Assembly — Replace (Return Parts)	
Includes: R&R furnace (Twin Bed Only)	
All Sol Aire Models (Except Twin Bed)	.5
All Sol Aire Models (Twin Bed)	2.0

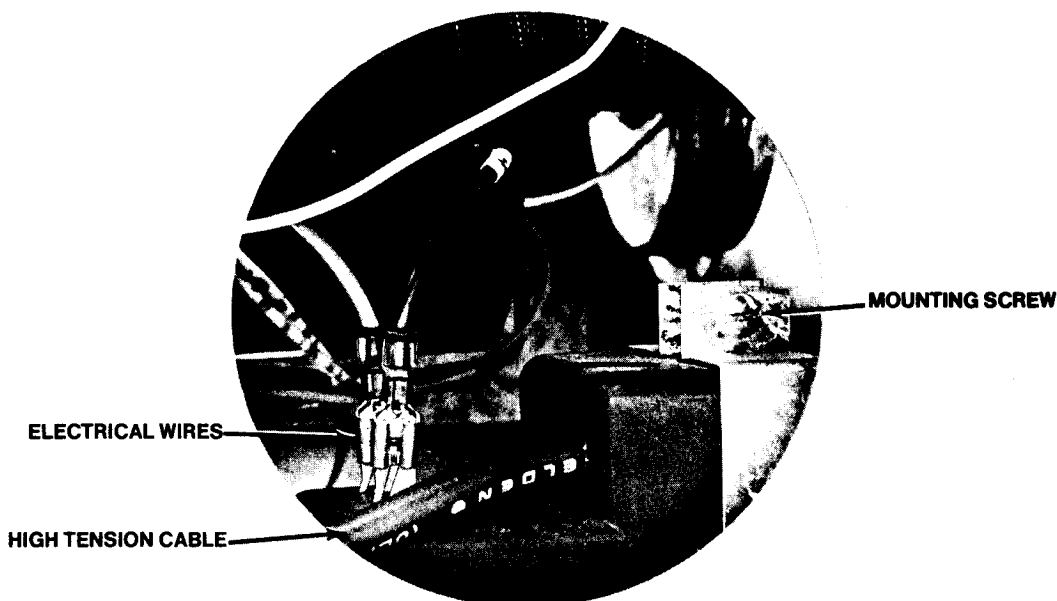


Figure 1

... **SECTION RC** ...

RECALL
CAMPAIGNS



Dealer Product Campaign Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

NUMBER: 74-C-1

IMPORTANT—All Service Personnel Should Read and Initial

DATE: SEPTEMBER, 1973

MODELS: 1973 ZE033 AND ZE063 MOTOR HOMES

GMC Truck & Coach Division has determined that one or more safety related defects may exist on some 1973 GMC Motor Homes as follows:

- The synthetic rubber tee in the fuel filler line may crack resulting in a considerable leakage of fuel or the gasket in the fuel gage sending unit portion of the fuel tanks may have been improperly installed, allowing fuel leakage from the top of the tanks if the tanks are completely filled, including the filler neck. Should a spark or flame occur, either of these conditions may result in a fire which could injure occupants of the vehicle and persons in the vicinity.
- The living quarter seat belts may have been installed with inadequately locking seat belt anchor fasteners. As a result, the fasteners may separate due to vibration rendering the seat belt ineffective and increasing the possibility of personal injuries to occupants in the event of a vehicle crash. It is not necessary to check side facing seat belts as the attachments are satisfactory.
- The cotter key which secures the brake pedal push rod clevis pin to the brake pedal bracket may be missing. This condition could cause the clevis pin to become detached from the push rod, resulting in a complete loss of braking action which could cause vehicle crash without prior warning.

VEHICLES INVOLVED

All 1973 GMC Motor Homes shipped prior to August 1, 1973, are included in this campaign.

Seat Belt Inspection

All forward and rear facing living quarter seat belt anchor bolts are to be removed, coated with Loctite and replaced as follows:

Twenty-Six Foot Models

1. Remove all dinette seat belt anchor bolts, clean bolts and apply Loctite Type 277 (GM part #9985148) or equivalent per package instructions and reinstall. Torque bolts to 35-45 lb. ft.

NOTE: IT IS NOT NECESSARY TO REMOVE THE SEAT BELT ANCHOR BOLTS ON ANY SIDE FACING SEAT.

Twenty-Three Foot Models

1. Remove the seat belt anchor bolts on the rear facing dinette seat, clean bolts and apply Loctite Type 277 (GM part #9985148) or equivalent per package instructions and reinstall.
2. Remove the forward facing seat belt bolts using tool J-23457. On most vehicles it will be necessary to remove the seat assembly prior to removing the bolts.

In the event the forward facing seat belt anchor nuts are not secured to the understructure they may fall off when the bolt is removed. If this occurs it will be necessary to remove the front fuel tank to replace the nuts.

NOTE: IF LOWERING OF THE FRONT FUEL TANK IS NECESSARY, DO NOT REINSTALL UNTIL THE FUEL SYSTEM MODIFICATION HAS BEEN PERFORMED.

3. Torque all bolts to 35-45 lb. ft.

Fuel System

Make certain the fuel tanks are below 1/4 full. If necessary remove fuel from tanks by removing drain plugs.

Replace the liquid vapor separator as follows:

The ball check assembly, hoses and stone shield have been preassembled. The liquid vapor separator is located behind the left rear front wheel.

1. Remove the left rear front wheel.
2. Disconnect the four hoses at the liquid vapor separator canister and remove the canister.
3. Install the new ball check assembly over the two existing bolts and secure with existing nuts and flat washers. The ball check, bracket, stone shield and hoses have been preassembled.

The ball check serves as a liquid vapor separator and improves the fill rate of air pressure to more readily perform the leak test.

4. Cut off the 3/8 inch fuel tank drain line approximately 3 inches from the fuel tank and plug with a 3/8 inch bolt and hose clamp.
5. Feed the 16 inch long 1/4 inch hose, part number 9432754 through to underside of vehicle. This line connects to the charcoal canister vent line.
6. Remove the existing union from the vent hose and replace with union, part number 1099429 and connect part number 9432754 hose to vent line with existing clamps.
7. Connect the two 5/16 inch lines from the fuel tanks to the tee on the ball check assembly.
8. Adjust all hoses to be certain there are no sharp bends and secure all clamps.

IMPORTANT: BE CERTAIN ALL HOSE CONNECTIONS ARE TIGHT.

9. Remove rear vent line from the charcoal canister and pull line through to outside of vehicle and connect hose from leak tester, J-24888, to vent hose.
10. Connect leak tester to shop air.
11. Check to be certain fuel filler cap is tight.
12. Open the regulator on the tester to pressurize the fuel system until a pressure of 20-24 inches of water is obtained.
13. Turn the regulator to the full off position. The gage should read 20-24 inches water. If the gage reads less, continue to fill until the correct reading is obtained. If the gage reads more, loosen the fill cap to release pressure.

If the gage reading drops two or more inches of water in ten minutes, a leak is present.

14. If the test indicates a leak is *not* present proceed to Step 15. If the test indicates a leak is present, the following procedure is to be followed.
 - A. Listen for an audible air leak at the filler cap. Tighten the cap until the leak stops or replace the cap if necessary.
 - B. If no leak was detected at the fill cap, drain all remaining fuel, lower both fuel tanks and replace the "O" ring in the fuel gage sending unit.
 - C. Check to be certain all fuel and vent line clamps on top of the tanks are tight.
 - D. While the tanks are lowered, remove the rubber fuel line tee and replace with the metal tee, part number SK14875, hose part number SK14876 to the tank and hoses part number 695637 to the fuel fill lines. The rubber hoses should be slid on the existing fill lines with the clamps, part number 2337379, positioned loosely. The tee can then be installed by sliding the hoses on the tee and tightening the clamps.
 - E. Reinstall the fuel tanks and connect the metal tee to the front tank.
 - F. Tighten all visible hose clamps in the fuel system.
 - G. Repeat the leak test procedure. If a leak is still present (2 inch water drop in 10 minutes) check all connections with the Microsonic Detector. An audible signal will be heard in the ear phones if a leak is present. Correct leaks as required.

If this procedure does not detect a leak it will be necessary to loosen the inner trim panel on the driver side of the vehicle as follows:

- A. Remove the rear trim piece from the driver side window.
- B. Loosen carpet along the panel and remove the screws and staples along the floor.
- C. With an electric soldering gun and a plastic cutting attachment, cut the trim panel all the way through from top to bottom 1/2 inch from the back side. The panel is now free to be pulled away at the rear.

After the panel is free, position and tighten the two clamps on the fuel filler neck and

the clamp on the vent line and check for leaks using J-24888.

Reinstall the inner panel adding an aluminum trim piece as required.

15. IF A LEAK WAS NOT INDICATED ON THE INITIAL TEST THE RUBBER TEE IS TO BE REPLACED AS FOLLOWS:

(Tanks do not have to be lowered for this operation.)

Remove the rubber fuel tee and replace with metal tee, part number SK14875, hose part number SK14876 to the tank and hoses part number 695637 to the fuel fill lines. The rubber hoses should be slid on existing fill lines with clamps, part number 2337379, positioned loosely. The tee can then be installed by sliding the hoses on the tee and tightening the clamps.

Brake Push Rod Clevis Pin Inspection

1. Remove the four screws which hold the power level system controls in place and pull the power level system controls out of the opening.
2. Check to make certain the brake push rod clevis pin cotter key is properly installed.
3. Replace the power level system controls.

PARTS INFORMATION

<u>Part Number</u>	<u>Qty.</u>	<u>Description</u>
717090	1	Fuel Fill Tee Kit
3893116	2	Fuel Gage Sending Unit "O" Ring
717091	1	Ball Check Valve Assembly

Parts for this campaign are to be ordered through normal parts channels.

WARRANTY INFORMATION

<u>Labor Operation Number</u>	<u>Description</u>	<u>Time Allowance</u>	<u>Trouble Code</u>
A311101	Remove forward and rear facing living area seat belt bolts, apply Locktite and reinstall. 23 Foot Model 26 Foot Model	.8 Hr. .4 Hr.	96 96
A311202	Remove and replace the liquid vapor separator.	.5 Hr.	96
A311303	Perform leak test.	.3 Hr.	96
A311404	Lower the fuel tanks and replace the "O" rings as required.	2.4 Hr.	96
A311505	Remove and replace the fuel fill line tee.	.4 Hr.	96
A311606	Leak test the fuel system and repair as required. Includes removal of driver side inner panel if required.	S.T.	96
A311707	Inspect brake push rod clevis pin cotter key installation.	.2 Hr.	96
A110011	Dealer Administration Time	.1 Hr.	None

CAMPAIGN IDENTIFICATION LABEL

Each vehicle modified in accordance with the instructions outlined in the Product Campaign Bulletin will require a "Campaign Identification Label." Labels have been furnished each involved dealer and involved Zone. Each label provides a space to include the five (5) digit Dealer Code of the dealer performing the Campaign service. This information may be inserted with a ball-point or felt-tipped pen. Each "Campaign Identification Label" is to be located next to the Vehicle Identification Plate located inside the right front engine access door.

NOTE: APPLY CAMPAIGN IDENTIFICATION LABEL ONLY ON A CLEAN SURFACE.

OWNERS NOTIFICATION

Owners of record known at this time, will be notified of this campaign on their vehicles by GMC Truck and Coach Division. A sample owner notification letter is enclosed.

CAMPAIGN RESPONSIBILITY

Dealers are to service all vehicles subject to this campaign regardless of the mileage, age of vehicle or owner. Also, these corrections must be made on all affected vehicles in your new or used inventory prior to their sale from this time forward.

CAMPAIGN PROCEDURE

Procedures for handling this campaign are outlined in Section 7, "GMC Truck Service Policies and Procedures Manual" (Revised 5-73).

GMC TRUCK & COACH DIVISION

General Motors Corporation

880 South Boulevard, East
Pontiac, Michigan 48053
313/857-5000

(SAMPLE OWNER NOTIFICATION LETTER)

Dear GMC Motor Home Owner:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

GMC Truck & Coach Division has determined that one or more defects, which relate to motor vehicle safety, exist on some 1973 GMC Motor Homes as follows:

- The synthetic rubber tee in the fuel filler line may crack or the gasket in the fuel gage sending unit portion of the fuel tanks may have been improperly installed. If the synthetic rubber tee should crack, with both tanks full, as much as twenty-five gallons of fuel could leak out while the vehicle is parked. If the gasket was improperly installed, it is possible that when the vehicle is being fueled, fuel could overflow from the top of the tanks if the service station attendant continues to try to "top-off" the filler neck after the tanks are filled. Should a spark or flame occur, either of these conditions may result in a fire which could injure occupants of the vehicle and persons in the vicinity. Until these conditions can be corrected avoid filling fuel tanks more than 1/2 full. If you detect signs of fuel leakage under your vehicle or the strong odor of gasoline fumes, immediately have your vehicle corrected.
- The living quarter seat belts may have been installed with inadequately locking seat belt anchor fasteners. As a result, the fasteners may separate due to vibration rendering the seat belt ineffective and increasing the possibility of personal injuries to occupants in the event of a vehicle crash. Until this condition can be corrected, the living quarter seat belts should be checked by pulling on each seat belt near its attachment to make certain the fasteners are intact.
- The cotter key which secures the brake pedal push rod clevis pin to the brake pedal bracket may be missing. This condition could cause the clevis pin to become detached from the push rod, resulting in a complete loss of braking action which could cause vehicle crash without prior warning. If you wish, you may inspect for a properly installed cotter key as shown on the attached illustrations. Your dealer will verify that the cotter key is properly installed as part of the campaign service.

To prevent the possibility of these conditions occurring on your vehicle, please contact your dealer who, at no charge to you, will:

- replace the synthetic rubber tee with a new metal tee.
- leak test the fuel system and, if necessary, replace the fuel gage sending unit "O" ring gaskets.
- remove the seat belt anchor fasteners, apply locking sealant and reinstall the fasteners.
- inspect brake pedal push rod clevis pin and, if necessary, install a cotter key.

It is suggested that you contact your dealer prior to taking your vehicle in so that an appointment can be made and the service can be performed in an orderly manner. It is estimated that instructions and parts for this correction will be available to the dealer by October 15, 1973. The actual time necessary to perform the labor required to complete all these corrections is approximately six hours.

The enclosed campaign card identifies your vehicle. Presentation of this card to your dealer will assist him in completing the necessary corrections to your vehicle in the shortest possible time.

In the event you have recently sold your GMC Motor Home, we would like to know the name and address of the person to whom the vehicle was sold so that a notification letter can be sent to the current owner. Please complete and mail the enclosed pre-printed and pre-stamped "Owner Reply Card" indicating the new owner's name and address.

We are sorry to cause you this inconvenience; however, we have taken this action in the interest of your safety and continued satisfaction with our products.

Very truly yours,

GMC Truck & Coach Division
General Motors Corporation

Encl.



Dealer Product Campaign Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

NUMBER: 74-C-05

GROUP: 10-Wheels & Tires - 1

IMPORTANT—All Service Personnel Should Read and Initial

DATE: February, 1974

Subject: MOTOR HOME RADIAL TIRE

Models: 1973-74 ZEO50000

GMC Truck and Coach has determined that the wheels on the GMC Motor Home are not compatible with radial tires. Although radial tires were not offered as either original or optional equipment, some owners may have replaced the original equipment bias ply tires with radial tires consistent with the Operating Manual.

Operation with a radial tire causes excessive stresses on the wheel and may cause the wheel to crack. A cracked wheel may result in sudden loss of tire pressure. Should this occur, the driver could lose steering control, and a vehicle crash without prior warning could occur.

To correct this condition, all wheels that have radial tires mounted on them must be replaced. To caution the owner against having radial tires installed on his vehicle, pages 97 and 98 of the Motor Home Operating Manual have been rewritten to inform the owner that radial tires should not be used on the Motor Home. A sample owner notification letter is enclosed. A sticker will also be affixed to the inside of the glove box next to the tire pressure placard. The sticker will state the following:

CAUTION

Do not install radial tires on this vehicle. Radial tires can cause wheel failure which may result in vehicle crash and possible personal injury.

VEHICLES INVOLVED

All 1973-74 GMC Motor Homes are included in this campaign.

DEALER RESPONSIBILITY

Dealers will receive an adequate supply of revised pages 97 and 98 of the Motor Home Operating Manual and caution stickers to be placed in the glove box for all vehicles in dealer inventory. Insertion of the new pages and application of the sticker are described under Service Procedure in this bulletin.

SERVICE PROCEDURE

1. Remove page 97 and 98 from Motor Home Operating Manual, as shown in figure 1.
2. Install new page in its place, as shown in Figure 2.
3. Install caution sticker on inside of glove box door next to tire inflation placard as shown in Figure 3.

NOTE: Apply caution sticker only on a clean surface.

4. If Motor Home is or has been equipped with radial ply tires, the wheels and tires will be removed and replaced with new tires and wheels.
5. Remove old wheels.
6. Install new wheels and install all wheel stud nuts loosely, then finger tighten only the nuts marked by arrows (Figure 4).
7. Tighten all nuts to 250 ft. lbs. in sequence shown in Figure 4. Never use oil or grease on studs or nuts.
8. Wheel stud nut torque should be checked after 500 miles.

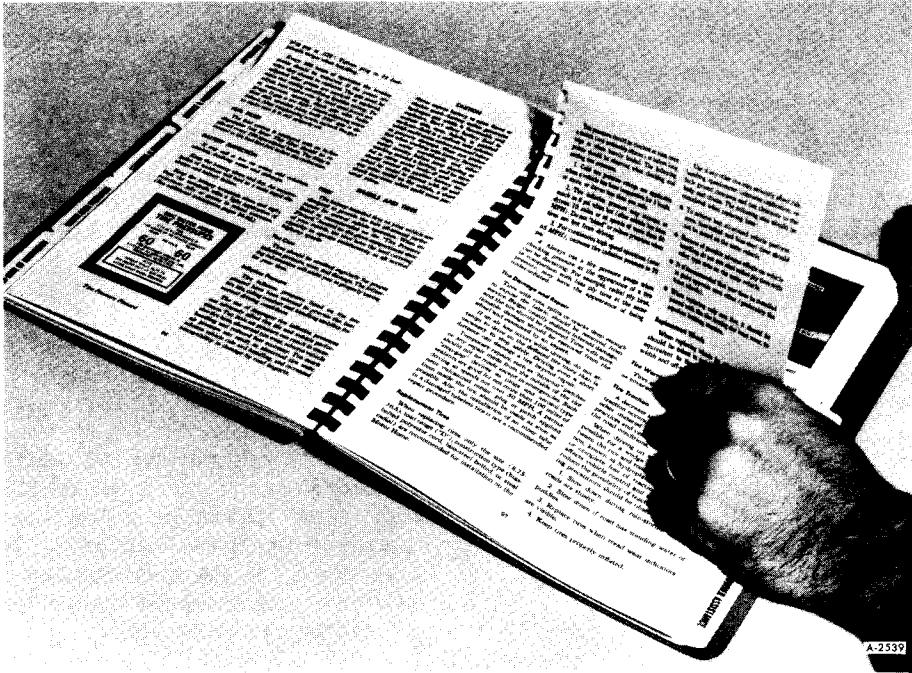


Figure 1

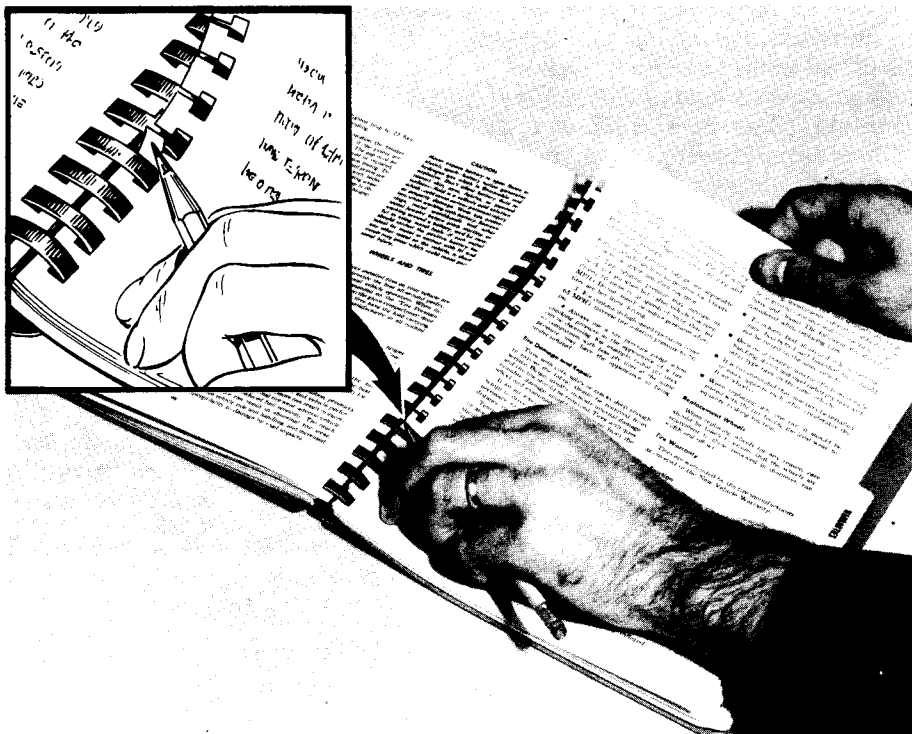


Figure 2

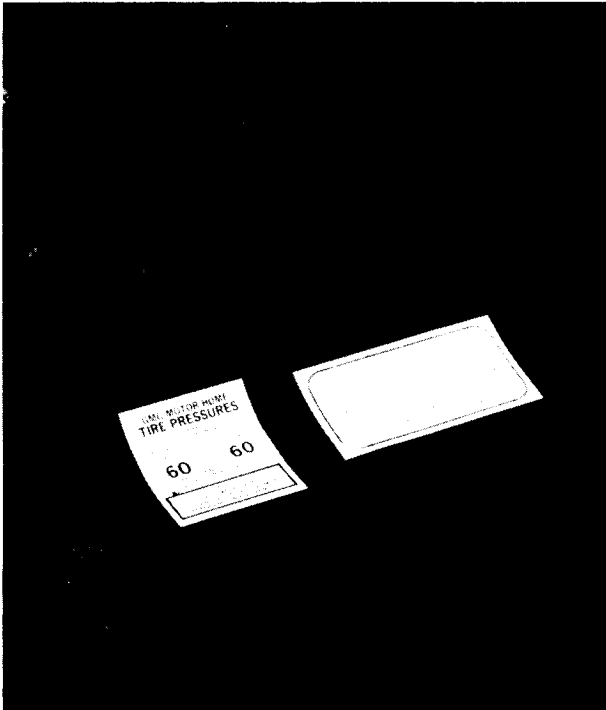


Figure 3

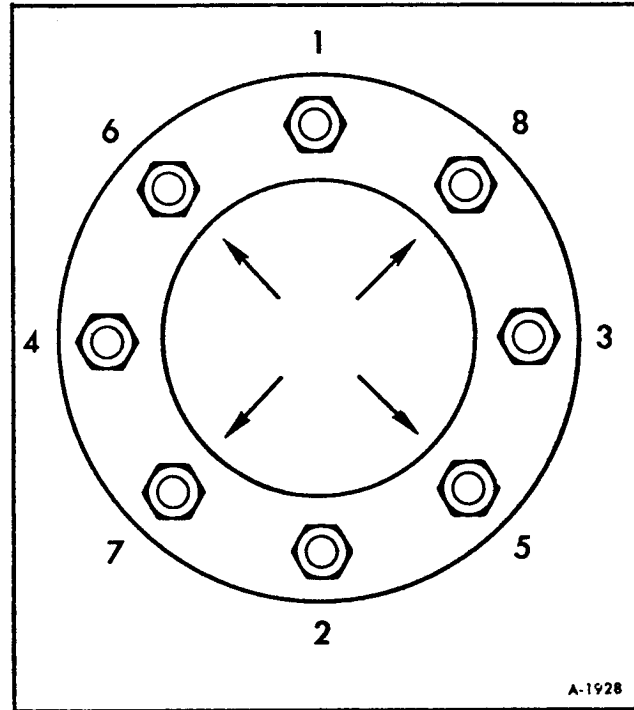


Figure 4—Wheel Stud Tightening Sequence

PARTS INFORMATION

Radial tires currently installed on vehicles will be replaced with a new steel belted bias ply tire and wheel assembly. Orders for these tires must be placed through the Home Office Motor Home Service Department. This department will expedite each order to assure parts are shipped as quickly as possible.

TELEPHONE: (313)857-4784
(313)857-4785

NOTE: Removed radial tire and wheel assemblies must be held for zone office disposition. Tires are not to be returned to owners.

OWNER NOTIFICATION

Owners of record known at this time will be notified of this campaign on their vehicle by

GMC Truck & Coach Division. Tire manufacturers are also being notified of this campaign. A copy of a typical letter to a tire manufacturer is included for your information.

CAMPAIGN RESPONSIBILITY

Dealers are to service all vehicles subject to this campaign regardless of the mileage, age of vehicle or ownership. These corrections must be made on all affected vehicles in your new or used vehicle inventory prior to their sale from this time forward.

CAMPAIGN PROCEDURE

Procedures for handling this campaign are outlined in Section 7, "GMC Truck Service Policies and Procedures Manual" (Revised 5-73).

WARRANTY INFORMATION

<u>Labor Operation Number</u>	<u>Description</u>	<u>Time Allowance</u>	<u>Trouble Code</u>
A122001	Remove & Replace Front Wheels .....	.4	96
A122002	Remove & Replace Rear Wheels .....	.7	96
A122003	Remove & Replace Spare Wheel .....	.1	96
A122004	Remove & Replace All Wheels (7)	1.2	96
A122005	Insert revised pages 97 and 98 in Operators Manual and apply caution sticker to glove box .....	.2	96
A110011	Dealer Administration Time .....	.1	None

GMC TRUCK & COACH DIVISION

(SAMPLE OWNER NOTIFICATION LETTER)

General Motors Corporation
660 South Boulevard, East
Pontiac, Michigan 48053
313/857-5000

Dear GMC Motor Home Owner:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act. GMC Truck and Coach Division has determined that a defect which relates to motor vehicle safety exists in GMC Motor Homes.

It has been determined that the wheels on the GMC Motor Home are not compatible with radial tires. Although radial tires were not offered as either original or optional equipment, some owners may have replaced the original equipment bias ply tires with radial tires consistent with the Operating Manual.

Operation with a radial tire causes excessive stresses on the wheel and may cause the wheel to crack. A cracked wheel may result in sudden loss of tire pressure. Should this occur, the driver could lose steering control, and a vehicle crash without prior warning could occur.

As a reminder to yourself not to use radial tires on your GMC Motor Home and as a warning to this effect to subsequent owners, we are enclosing a caution sticker to be placed on the glove compartment door and a new page to be inserted in your Motor Home Operating Manual pursuant to the enclosed instructions.

In addition, if your GMC Motor Home is now being or has ever been operated with radial tires, you should return it to your GMC Motor Home dealer who will install new wheels and new steel belted bias ply tires, including a spare, at no charge to you. Although most GMC Motor Home dealers do not carry an inventory of these wheels, we are not shipping sets of wheels to all dealers because we believe only a few Motor Homes have been equipped with radial tires, and we have no way of knowing which dealers will be asked to make these replacements. However, we will expedite shipment of wheels and tires to dealers promptly upon receipt of orders.

It is suggested that you contact your dealer to make an appointment for this service. In this way he can order the wheels and tires and be prepared to replace the wheels and tires when you come in. The actual time necessary to perform the labor required to complete this wheel and tire replacement is approximately two hours.

- 2 -

The enclosed campaign card identifies your vehicle. Presentation of this card to your dealer will assist him in completing the necessary corrections to your vehicle in the shortest possible time.

In the event you have not installed radial tires on your vehicle, it will only be necessary for you to apply the caution sticker and replace the operating manual page. If you have recently sold your GMC Motor Home, we would also like to know the name and address of the person to whom the vehicle was sold so that a notification letter can be sent to the current owner. Accordingly, please complete and mail the enclosed pre-printed and pre-stamped "Owner Reply Card".

We are sorry to cause you this inconvenience; however, we have taken this action in the interest of your safety and continued satisfaction with our products.

Very truly yours,

GMC Truck & Coach Division
General Motors Corporation

Encl.

74-C-05

GMC TRUCK & COACH DIVISION

General Motors Corporation

660 South Boulevard, East
Pontiac, Michigan 48053
313/857-5000

(SAMPLE TIRE MANUFACTURER LETTER)

Tire Manufacturers:

This is to notify you that GMC Truck & Coach Division has determined that the wheels on the GMC Motor Home are not compatible with radial tires. Operation with radial tires causes excessive stresses on the wheel and may cause the wheel to crack. A cracked wheel may result in sudden loss of tire pressure which could cause the driver to lose steering control causing vehicle crash without prior warning.

Pursuant to the provisions of the National Traffic and Motor Vehicle Safety Act we are presently in the process of notifying owners of GMC Motor Homes that they should not buy radial tires for their vehicles. For your information we are enclosing a copy of the notification letter which is being sent to owners.

As an additional safeguard, we urge that you take the steps necessary to notify all sellers of your radial tires that they should not be sold for use on GMC Motor Homes.

Very truly yours,

GMC Truck & Coach Division
General Motors Corporation

Encl.

74-C-05



Dealer Product Campaign Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

NUMBER: 74-C-07

IMPORTANT—All Service Personnel Should Read and Initial

DATE: May, 1974

MODELS: 1973 AND 1974 ZE05000 MOTOR HOMES

GMC Truck and Coach Division has determined that two safety-related defects exist on 1973 and 1974 Motor Homes:

- Water can enter the accelerator cable sheath and may freeze, thereby preventing the throttle from returning to the idle position. Vehicle control could be lost while the vehicle is being driven.
- The rear suspension outer wheel bearings may fail and a rear wheel could separate from the vehicle and cause property damage or personal injury.

To prevent these conditions from occurring, all four outer rear wheel bearings and related parts and the accelerator linkage must be replaced.

Until parts are available, owners are being instructed to return their vehicle to a GMC Motor Home dealer for inspection and adjustment of rear wheel bearings. (Refer to page 2 for complete instructions.)

VEHICLES INVOLVED

All 1973 and 1974 GMC Motor Homes shipped prior to May 1, 1974 are included in this campaign.

PARTS INFORMATION

Kit part number 790867 includes the following parts:

Wheel Bearing Change:

Part Number	Description	Quantity
721507	Rear Spindle	4
9420892	Spindle Bolt	16
2436163	Washer	16
9422297	Nut	16
2623488	Brake Asm. L.H.	2
2623489	Brake Asm. R.H.	2
3857731	Hub Seal Assembly	4
7451228	Inner Bearing	4
721424	Hub & Drum Assembly	4
103386	Cotter Pin	4
7450344	Outer Cone & Roller Asm.	4
3936464	Washer—Adjusting Nut	4
3953436	Nut—Adjusting	4
721381	Outer Dust Cap	4
3936465	Inner Dust Cap	4

Accelerator Linkage Change:

Part Number	Description	Quantity
723593	Accelerator Lever Asm.	1
723589	Reinforcement—Accel. Rod Support	1
723591	Bracket—Trans. Downshift Switch	1
723592	Accelerator Cable Assembly	1
723590	Spring—Accelerator Rod	1
479314	Pedal Assembly	1
9428794	Push on Nut	1
1242101	Downshift Switch	1
9419400	Screw—Downshift Switch	1
2973407	Connector Body	1
724069	Clip	1
271178	Nut	1
9418918	Bolt	1
271184	Nut	1
9417950	Bolt	1
724013	Plate	1
9417950	Bolt	2
2436162	Washer	2
9422275	Nut	2
724014	Spacer	1
724012	Cover	1
718253	Sealer (not included in kit—order as required)	
1233539	Retainer	1
724070	Clip	2
724308	Clip	3
9419006	Bolt	1
L-6330	Installation Drawing	1
156033	Screw	3
8877976	Strap	1
3759924	Nut	3
3980590	Screw	1
9419892	Washer	2

ONLY PART NUMBERS 790867, AND 718253 ARE TO BE ORDERED. One kit is required per vehicle and one tube of 718253 sealer will do approximately 16 vehicles.

Parts required to complete this modification are to be ordered by the dealers from their GMC Parts Distribution Center. Dealers should order kits only for those vehicles known to be in their geographic area.

VEHICLE INSPECTION

At the initiation of this campaign certain parts connected with the wheel bearing modification will be in limited supply. As a result, owners are being instructed to take their vehicle to a GMC Motor Home dealer for inspection and adjustment of all four rear wheels. (See sample owner notification letter.) This service is to be provided at no charge to the owner. The inspection and adjustment service is to be performed only if the necessary parts are not available.

NOTE: Performance of the inspection and adjustment service is not to be considered as completion of the campaign. All four rear wheel bearings must be replaced as soon as parts are available.

The following procedure is to be followed for the inspection service:

REAR WHEEL BEARING INSPECTION (all four rear wheels)

NOTE: This inspection is to be performed at the customer's request and is not part of the campaign change.

1. Raise vehicle to convenient working height.
2. Remove outer and inner hub caps.
3. Remove spindle cotter pin, nut, washer, and outer bearing.
4. Inspect bearing for damaged rollers at the ends and sides of the rollers. **DO NOT WASH LUBRICANT FROM BEARING.** Replace **COMPLETE** bearing as required.
5. Lightly coat bearing with high quality lithium soap base chassis grease.
6. Install bearing, washer and nut. Torque nut to 35 ft. lbs. while rotating wheel. Back nut off ½ turn. Tighten nut with fingers. Insert cotter pin in spindle if nut slot aligns. If not, back nut off to align slot and insert and crimp cotter pin.
7. Install inner and outer hub caps.
8. Lower vehicle.

SERVICE PROCEDURE

REAR WHEEL BEARING CHANGE

REMOVAL

1. Unscrew parking brake adjustment knob and put suspension power lever controls in hold position.
2. Raise vehicle to convenient working height.
3. Disconnect parking cable from guide rod at right rear of engine rear crossmember as shown in figure 1.

NOTE: The following applies to all **FOUR** rear wheel components.

4. Remove tire and wheel assembly.
5. Remove outer and inner hub caps.
6. Remove cotter pin and spindle nut.

7. Remove brake drum and hub assembly.
8. Disconnect parking brake cable from backing plate and then from brake reaction arm.
9. Disconnect hydraulic brake line. Cover end of hydraulic brake line to prevent foreign material from entering brake system.
10. Remove brake backing plate attaching bolts and remove backing plate.
11. Apply penetrating oil to wheel spindle and suspension arm mating surfaces. Position screw pad J-25265-6 as shown in figure 2.
12. Install spindle removing tool as shown in figure 3.
13. Tighten tool through bolts and then reaction set screw as shown in figures 3 and 4.
14. Press out spindle by turning forcing screw, (it may be necessary to tap spindle end lightly after preloading screw).

INSTALLATION (applies to all four rear wheels)

1. Install new spindle with keyway up as shown in figure 5 using old bolts and nuts to draw spindle into suspension arm.
 2. Remove old spindle bolts and nuts.
 3. Install new backing plate assembly with new bolts, washers and nuts as shown in figure 6. Torque bolts 35-45 ft. lbs.
 4. Pack inner and outer wheel bearings with high quality *lithium* soap multi-purpose grease meeting GM specification 6031-M.
 5. Install inner wheel bearing and seal into hub using a wooden block to seat seal flush to hub.
 6. Remove hydraulic wheel cylinder plug and install brake line.
 7. Pull parking brake cable so that end slug is free of spring, (see fig. 7) and install cable in reaction arm and backing plate.
 8. Install hub and drum assembly, outer bearing, washer and nut.
 9. Torque spindle nut to 35 ft. lbs. while rotating hub. Back spindle nut off ½ turn. Tighten spindle nut finger tight. Install cotter pin if nut slot aligns with spindle hole; if not, back off nut to nearest hole and install and crimp cotter pin.
 10. Install inner and outer hub caps.
 11. Reconnect parking brake cable to guide rod at right rear of engine rear crossmember.
 12. Adjust parking brake lever knob for firm lever action and apply parking brake.
 13. Bleed rear brake system starting with the right side.
 14. Install wheels and tires.
 15. Lower the vehicle.
 16. Torque wheel nuts to 250 ft. lbs. in sequence as shown in figure 8.
- NOTE:** Remind owner to check torque after 500 additional miles.

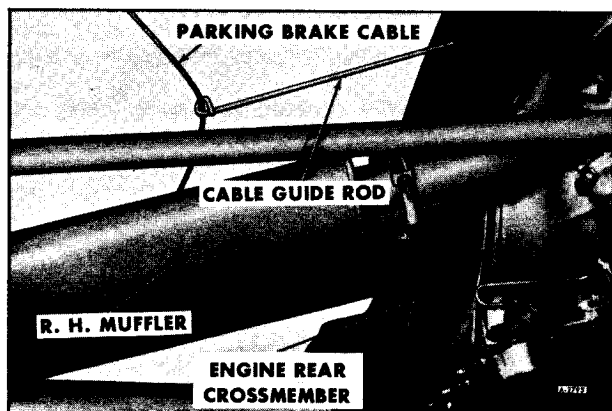


Figure 1

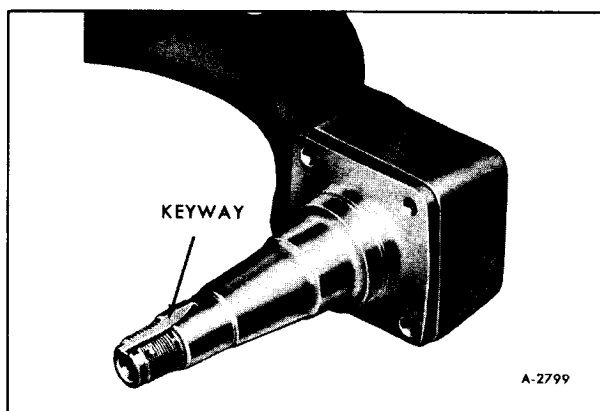


Figure 5

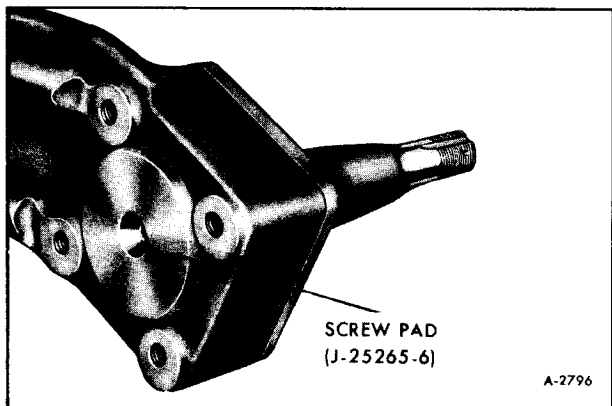


Figure 2

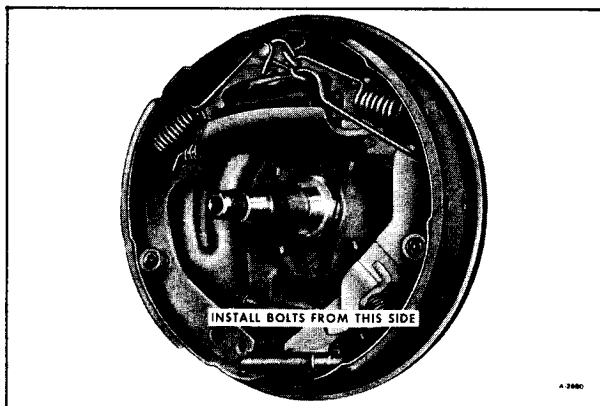


Figure 6

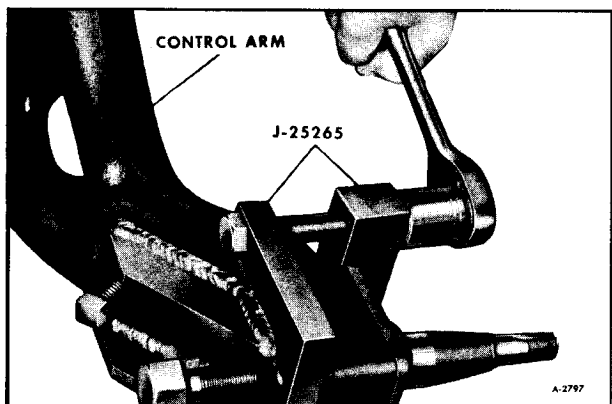


Figure 3

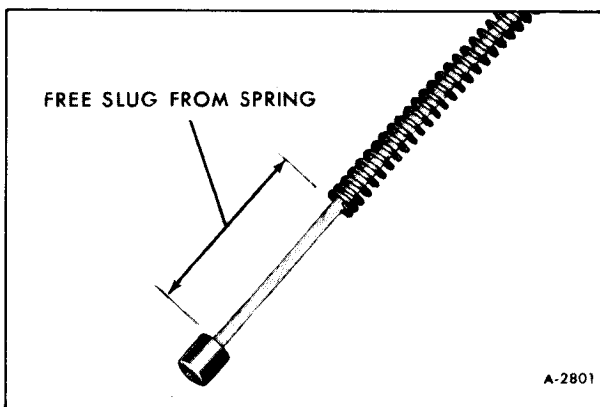


Figure 7

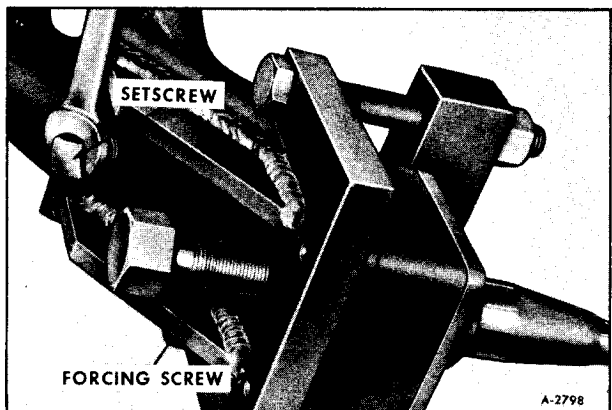


Figure 4

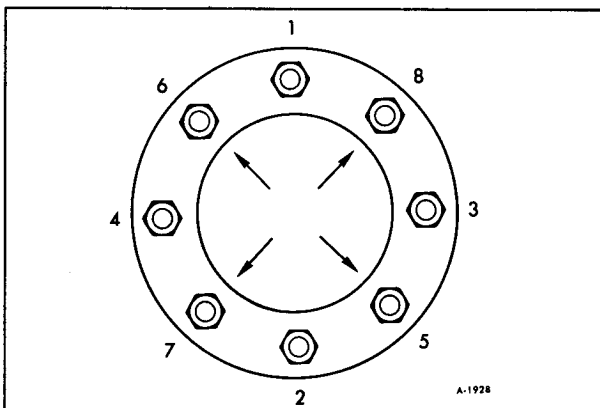


Figure 8

ACCELERATOR CABLE CHANGE INSTRUCTION

1. Raise and support left front access door.
 2. Disconnect accelerator cable from pedal lever.
 3. Remove two pedal lever boot attaching nuts and washers and remove boot grommet. Also, remove two accelerator cable bracket attaching nuts and washers.
 4. Remove three accelerator lever pivot bolts and remove lever and pedal assembly.
 5. Remove accelerator lever boot and install cover plate coated with sealer part number 718253, as shown in figure 9.
 6. On early models, disconnect detent switch wire and remove two attaching bolts and remove switch and pedal lever stop. On late models, disconnect wire from detent switch.
 7. Remove right hand toe pan mat trim strip, and roll mat over to steering column under brake pedal.
 8. Using template part number 724011 (J-25318), drill three $\frac{1}{8}$ " pilot holes as shown in parts kit layout drawing.
 9. Drill two $\frac{1}{8}$ " pilot holes in toe panel right side as shown on parts kit layout. A drill stop must be used!
 10. Drill 1" hole for accelerator cable as shown on layout.
 11. Drill three $\frac{11}{32}$ " holes, two at the cable retainer and one at the upper clip hole as shown in the layout. Use a drill stop.
 12. Drill one $\frac{9}{32}$ " hole at lower toe pan clip hole as shown in the layout. Use a drill stop.
 13. Coat cable retainer plate with sealer part number 718253 and install attaching bolts, washers and nuts. Torque bolts to 10 ft. lbs.
 14. Insert new accelerator cable into retainer plate with lock tabs at top and bottom as shown in the layout.
 15. Install clip on accelerator cable at back of windshield wiper motor as shown in figure 10.
NOTE: Yellow paint on accelerator cable must be completely covered by clips.
 16. Install clip on accelerator cable at side of toe pan using two bolts as shown in figure 9 and torque as shown in the layout. Insert washer in clip as shown in figure 11.
 17. Reinstall toe pan mat and retainer. Cut $\frac{3}{4}$ " hole in mat for accelerator cable and install retainer as shown in layout.
 18. Install accelerator pedal on lever shaft using spring nut. Push spring nut on as shown in the layout.
 19. Install accelerator pedal and lever using new cover plate and previous pivot bracket and bolts. Torque bolt nuts to 75 in. lbs.
 20. Remove two brake pedal bracket bolts and install spacer and detent switch bracket as shown in the layout. Torque nuts as shown on the layout.
 21. Install accelerator pedal lever return spring as shown in layout.
 22. Install detent switch as shown.
 23. Install new connector on detent switch wires. Pull wires to proper length, connect to switch and tie wrap to wiring harness as shown.
 24. Raise engine cover and remove air cleaner assembly.
 25. Cut old accelerator cable between engine bracket and step riser clip.
 26. Remove accelerator cable clip from step riser.
 27. Remove accelerator cable from throttle rod and engine bracket.
 28. Locate, drill, and countersink three holes as shown in the layout. Assure that metal chips do not enter engine alternator or carburetor.
 29. Route new accelerator cable into engine compartment and clip as shown in figure 12 and layout.
- NOTE:** Yellow paint on accelerator cable must be completely covered by clips.
30. Position cable and clip on step riser as shown on layout using existing bolt. Drill $\frac{1}{4}$ " diameter hole $\frac{5}{8}$ " deep and install washer in clip and screw as shown in figures 11 and 13.
 31. Remove step riser clip bolt and install vacuum line clip to step riser with the bolt.
 32. Install accelerator cable to engine bracket so that lock tabs are at the left and right of the cable.
 33. Install grommet and nylon sleeve into cable end and attach cable to carburetor lever with washer and spring retainer, see figure 14.
 34. Check new linkage operation.
 35. Reinstall air cleaner assembly.
 36. Secure engine cover.
 37. Remove old accelerator cable and bracket at front access door and secure access door.

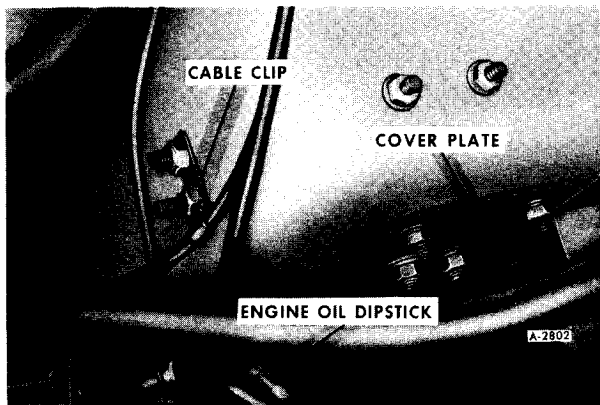


Figure 9

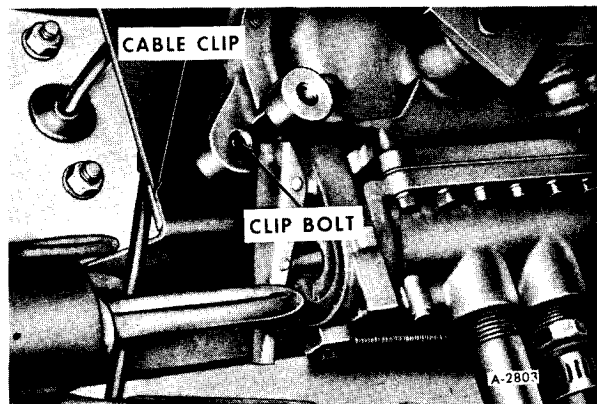


Figure 10

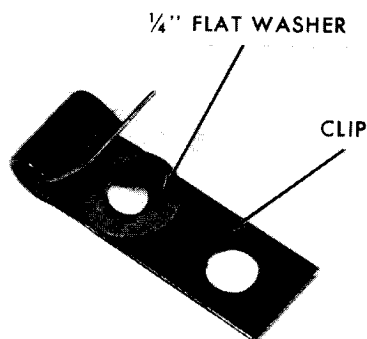


Figure 11

A-2858



Figure 12

A-2804

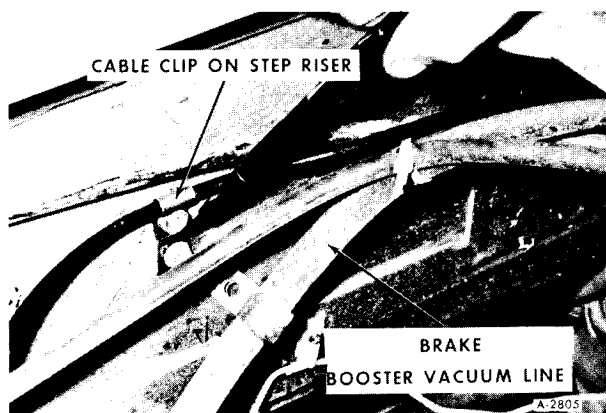


Figure 13

A-2805

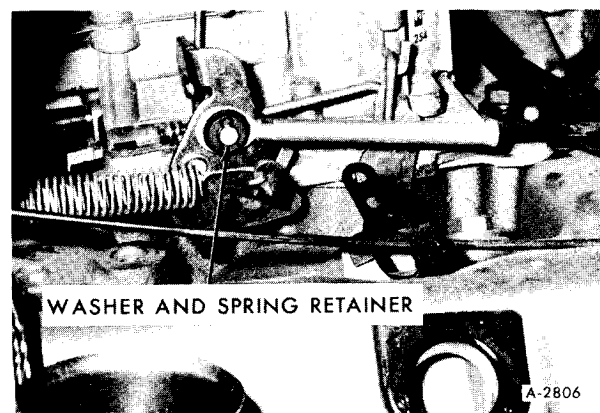


Figure 14

A-2806

WARRANTY INFORMATION

Labor Operation No.	Description	Time Allowance	Trouble Code
A041850	Inspect rear wheel outer bearings	.6 hr.	96
A041851	Replace rear wheel outer bearings	.4 hr.	96
A052002	Remove and replace rear wheel bearings, spindle, hub and drum and brake assemblies. Remove and replace accelerator linkage.	per wheel 6.2 hr.	96
A110011	Dealer administration time	.1 hr.	None

CAMPAIGN IDENTIFICATION LABEL

Each vehicle modified in accordance with the instructions outlined in the Product Campaign Bulletin will require a "Campaign Identification Label". Labels have been furnished each involved dealer and involved Zone. Each label provides a space to include the five (5) digit Dealer Code of the dealer performing the campaign service. This information may be inserted with a ball-point or felt-tipped pen. Each "Campaign Identification Label" is to be located next to the "Emission Control Information" decal.

NOTE: APPLY CAMPAIGN IDENTIFICATION LABEL ONLY ON A CLEAN SURFACE NEXT TO THE EMISSION CONTROL INFORMATION DECAL.

OWNER'S NOTIFICATION

Owners of record known at this time will be notified of this campaign on their vehicles by GMC Truck & Coach Division.

CAMPAIGN RESPONSIBILITY

Dealers are to service all vehicles subject to this campaign regardless of the mileage, age of vehicle, or owner. All vehicles in dealer inventory are to be serviced prior to retail delivery.

CAMPAIGN PROCEDURE

Procedures for handling this campaign are outlined in Section 7. "GMC Truck Service Policies and Procedures Manual" (revised 5-73).

GMC TRUCK & COACH DIVISION

General Motors Corporation

660 South Boulevard, East
Pontiac, Michigan 48053
313/857-5000

(Sample Owner Notification Letter)

Dear GMC Motor Home Owner:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

GMC Truck and Coach Division has determined that two defects, which relate to motor vehicle safety, exist in 1973 and 1974 GMC Motor Homes as follows:

- . Water can enter the accelerator cable sheath and freeze at temperatures below 32°F preventing the throttle from returning to the idle position. In the event this occurs while the motor home is being driven, the vehicle will not slow down when the driver removes his foot from the accelerator pedal. Vehicle crash can occur without prior warning unless the driver brings the vehicle to a stop by immediately turning off the ignition key and applying the brakes. The transmission should be left in drive.
- . An outer wheel bearing in the rear tandem wheels may fail and allow the hub and wheel assembly to separate from the vehicle. The separated wheel and tire could strike or interfere with other vehicles or persons in the vicinity resulting in their being injured.

To prevent the possibility of these conditions occurring on your vehicle, please contact your GMC Motor Home dealer who, at no charge to you, will:

- . Replace the accelerator cable and related linkage with parts of a new design.
- . Replace the four rear wheel bearings with larger bearings. This will also require replacement of the spindle, backing plate and brake assembly, and the hub and drum assembly.

The actual time necessary to perform the labor required is approximately 6.2 hours. It is estimated that instructions and a limited number of parts for this correction will be available to dealers by May 30, 1974.

In the event you intend to use your motor home prior to the time that parts are available to your dealer, you should make an appointment to have the four rear wheel bearings inspected and adjusted by the GMC Motor Home dealer. This inspection and adjustment will also be provided at no charge to you. The time necessary to perform the labor required for this inspection and adjustment is approximately 36 minutes.

We are sorry to cause you this inconvenience; however, we have taken this action in the interest of your safety and continued satisfaction with our products.

Your prompt cooperation is urged.

GMC Truck & Coach Division
General Motors Corporation

74-C-07



Dealer Product Campaign Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTOR CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75 Special Issue

GROUP: 24 Miscellaneous

DATE: March, 1975

**SUBJECT: TYPE II SUBURBAN FURNACES
22,000 BTU AND 30,000 BTU**

**MODELS: CERTAIN 1973 AND 1974 ZE 05000
MOTOR HOMES**

As a courtesy to and in cooperation with Suburban Manufacturing Company, GMC Truck and Coach Division is requesting your assistance in conducting a recall campaign involving certain 1973 and 1974 model GMC Motor Homes equipped with Suburban Dynatrail furnaces manufactured by Suburban.

Suburban Manufacturing Company has determined that a defect which relates to motor vehicle safety exists in some Dynatrail model NT-22 and Model NT-32 furnaces that were manufactured between January 4, 1973, and August 31, 1973. The serial numbers of the involved furnaces range between 0282292 and 0364780. Included within these serial numbers are furnace models not included in the recall.

The defect involves corrosion stress cracks which can develop in both the 3/8" brass machined flare nut downstream of the furnace inlet, and in the 3/8" brass machined compression nut ahead of the main burner (Figure #1). Such a condition can, in the extreme, permit a combustible gas mixture to accumulate in the vehicle.

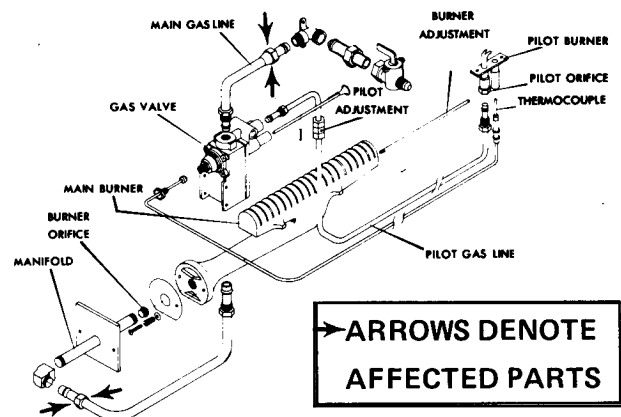


Figure #1

Suburban Manufacturing Company has initiated this recall campaign with respect to the furnaces and GMC Truck and Coach has provided them with the owner names and addresses of the vehicles involved. Fittings and related gas lines must be replaced on all affected vehicles.

VEHICLES INVOLVED

Those 1973 and 1974 GMC Motor Homes equipped with Type II Suburban Furnaces with furnace serial numbers in the range of 0282292 to 0364780. Owner notices are being sent by Suburban Manufacturing Company only to owners of those vehicles involved. Any questions on involvement of vehicles should be directed to Suburban Manufacturing Company, Dayton, Tennessee 37321. Area Code (615) 775-2131.

PARTS INFORMATION

Dealers will receive an initial quantity of parts to do the number of vehicles sold by the dealership shipped direct at no charge from Suburban Manufacturing. Additional kits may be ordered per attached letter from Suburban Manufacturing. These will also be shipped no charge.

VEHICLE INSPECTION

1. Remove cabinet front (one retaining screw at top of cabinet front) (Figure #2).

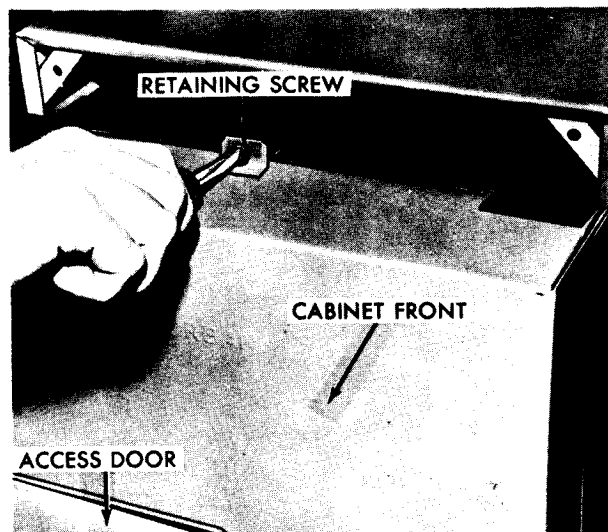


Figure #2

2. Check identification plate to see if furnace falls into the subject serial number range (Figure #3).

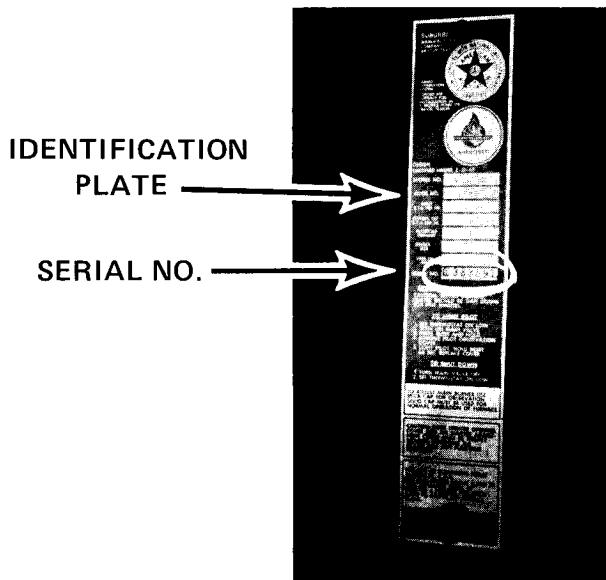


Figure #3

3. If furnace serial number does not fall into subject range, replace cover. If furnace is within subject range, proceed with the following steps listed under REMOVE FURNACE and INSTALL FURNACE.

REMOVE FURNACE

CAUTION: Before any removal or disassembly procedures are performed on the furnace, be sure L. P. gas is completely turned off at the L. P. gas tank. Also turn gas valve at furnace off.

CAUTION: Due to the possibility of injury on sharp sheet metal, care should be taken any time service is performed on the furnace.

1. Be sure L. P. gas is turned off at the tank (Figure #4). Turn the electricity off at the thermostat by moving control to the "OFF" position.

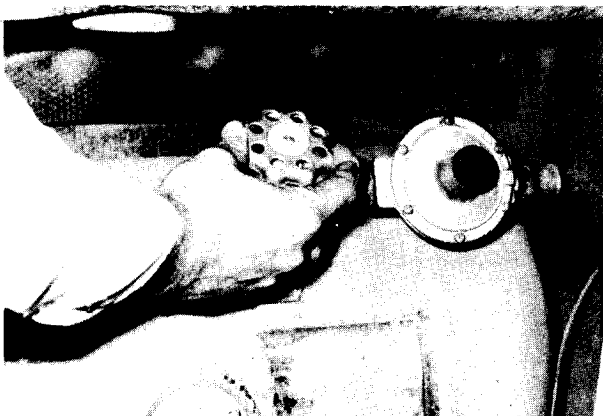


Figure #4

2. Disconnect the main gas line at inlet valve.
3. Remove the screw securing chamber to cabinet (lower right corner) as shown in Figure #5.

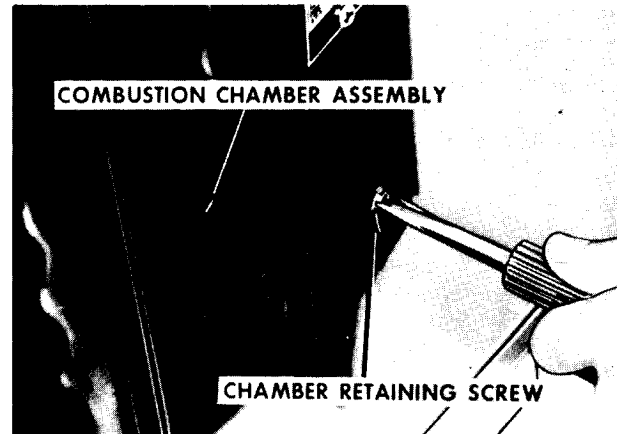


Figure #5

4. Remove the four vent cap screws (outside vehicle). Then remove the vent cap adapter screws (two) to free the exhaust tube (see Figures #6 and #7).

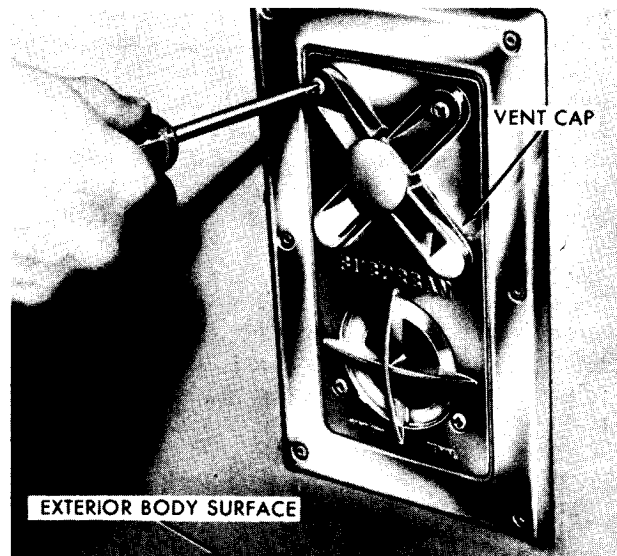


Figure #6

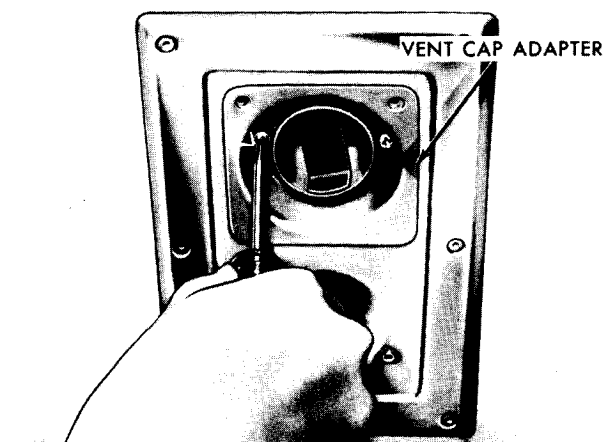


Figure #7

5. Pull chamber forward until wires can be disconnected at the terminal connector (see Figure #8). Remove chamber.

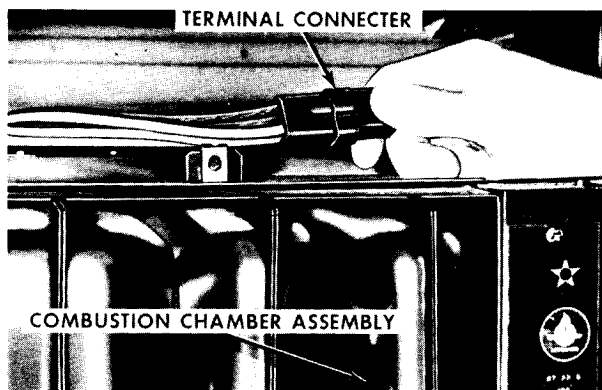


Figure #8

6. With chamber removed gas lines 713708 and 713706 can be removed and the new lines (modification kit) installed. (See Figure #9).

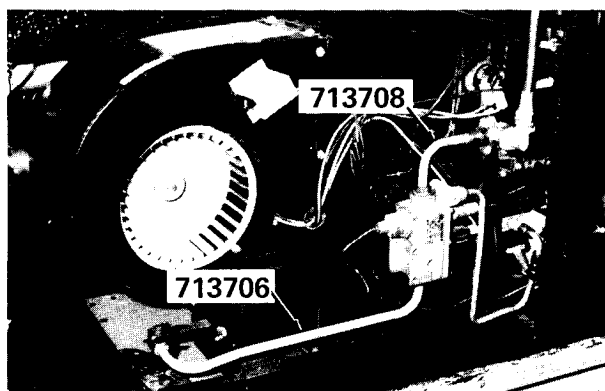


Figure #9

CAUTION: Make sure to use two appropriate sized wrenches when loosening and tightening all LPG fittings and connections. This guards against possible damage to other components and undue stress on the lines (Figure #10).

*Please see Figure #10
Below*

7. Male fittings at the gas valve should be sealed with "Rec-To-Seal" or equivalent sealer (Figure #11).



Figure #11

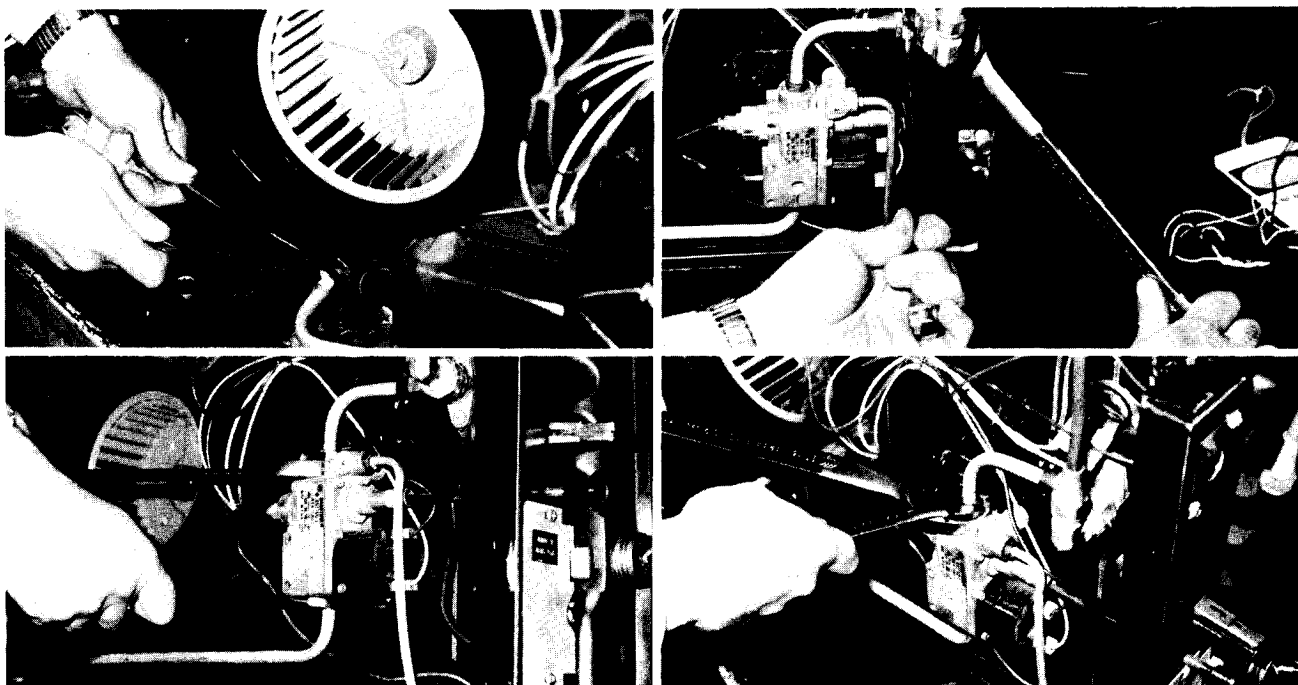


Figure #10

8. Connect a gas source and leak check using a soap solution. Make sure the soap solution contains no mercury or ammonia which could create corrosion and weaken fittings (Figure #12).

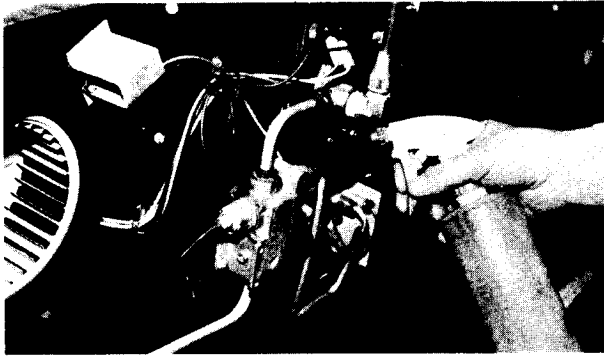


Figure #12

INSTALL FURNACE

1. Position rear of combustion chamber in cabinet slides, and move it partially in until the wires can be connected at the terminal connector (see Figure #8). Push chamber all the way into cabinet.
2. Install vent cap adapter and be sure rubber cup is properly seated. Install the vent cap (outside vehicle) (see Figures #6 and #7).
3. Install screw securing chamber to cabinet (lower right corner) (Figure #5).
4. Install cabinet front being sure the edges are set properly in all grooves. Secure with one screw at top (see Figure #2).
5. Connect the main gas line and connect or turn on electricity at thermostat.

LABOR REIMBURSEMENT

Suburban Manufacturing Company will reimburse the dealer \$10.00 per correction upon receipt of card shown below. WRO's are not to be submitted to GMC Truck & Coach Division.

CAMPAIGN NO. 74E-492		SUBURBAN MANUFACTURING COMPANY DAYTON, TENNESSEE 37321		CERTIFIED MAIL
Customer Name	Street Address		City & State	Phone No.
Vehicle Manufacturer	Furnace Model and Serial No.		Date	
I hereby certify that the inspection has been performed to my satisfaction.		The undersigned agency hereby certifies that he performed the indicated work and hereby applies for the \$10.00 allowance.		
X	Customer Signature	(See Instructions on Reverse Side)		

NOTE: INCLUDE VIN NO. IN VEHICLE MANUFACTURER BLANK

SUBURBAN MANUFACTURING DEALERS

Enclosed is a copy of Suburban Manufacturing's Factory Recommended Service Centers and Parts Distributors for your information.

OWNER'S NOTIFICATION

Owners of record known at this time will be notified of this campaign on their vehicles by Suburban Manufacturing.



Dealer Product Campaign Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 75-C-08

GROUP: 6K—Engine Cooling System

DATE: August, 1975

SUBJECT: PREHEAT HOSE CONNECTION TUBE ASSEMBLY

MODELS: 1973, 1974 AND 1975 GMC MOTOR HOMES WITH RPO UNG

GMC Truck & Coach has determined that certain GMC Motor Homes equipped with living area hot water tanks incorporating an optional feature which uses engine heat to preheat the fresh water have a steel connection tube which may corrode and break. This connection tube is located in front of the right front tandem wheel. The portion of this tube which is underneath the vehicle can be exposed to road splash. Corrosion of this portion of the tube caused by such road splash could result in a loss of the engine coolant passing through the tube which could eventually cause damage to the vehicle engine.

To eliminate the possibility of this condition occurring, it will be necessary to replace the steel preheat connection tube with a section of rubber hose spliced in and properly clamped.

VEHICLES INVOLVED

All 1973 and 1974 GMC Motor Homes with RPO UNG and all 1975 GMC Motor Homes prior to VIN TZE165V-101058 are included in this campaign.

PARTS INFORMATION

The parts required are being serviced by kit. Please order by kit numbers.

1973 and 1974 Models

Kit #8885553 includes:

<u>Description</u>	<u>Quantity</u>	<u>Part Number</u>
Clamp Hose	4 Additional (8 Total)	1470030
Hose	2	2003222
Grommet	2	705144
Screw	2	9414723
Grommet	2	2100525
Bracket	1	2003216
Nipple	4	2003223

1975 Models

Kit #8885554 includes:

<u>Description</u>	<u>Quantity</u>	<u>Part Number</u>
Clamp	4 Additional (8 Total)	1470030
Hose	2	2003222
Grommet	2	2003217
Blind Rivet	2	700368
Grommet	4	2100525
Bracket	1	2003216
Nipple	4	2003223

INSTRUCTIONS

1973 and 1974 Models

1. Drain and save engine coolant from preheat system by disconnecting hoses from elbow at floor bottom. (See Figure #1).



Figure #1

CAUTION: USE ADEQUATE SKIN AND EYE PROTECTION FROM HOT COOLANT.

2. Disconnect preheat hoses from elbow atop floor beneath refrigerator on 26 ft. models or beneath range on 23 ft. models. Remove vacuum cleaner on 26 ft. models so equipped. (See Figures #2 & #3).

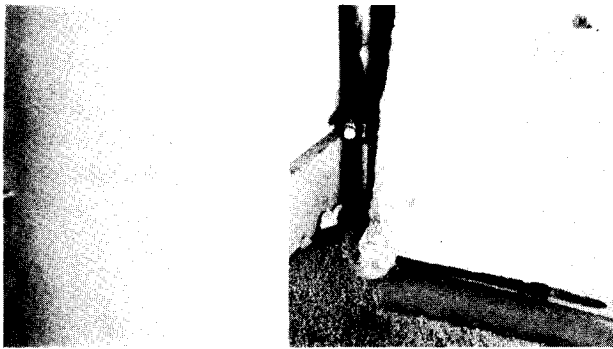


Figure #2

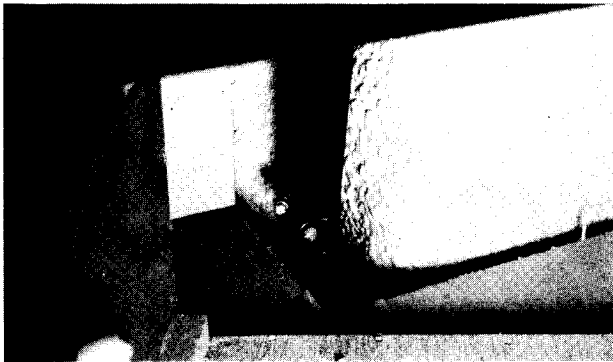


Figure #3

3. Remove preheat elbow from floor sill.
4. Enlarge preheat elbow holes in floor sill to 1-1/4" using a hole saw.
5. Install hose bracket to floor sill by using bracket as a template to drill two 5/32" holes for 10-16 x 5/8 screws. (See Figure #4).

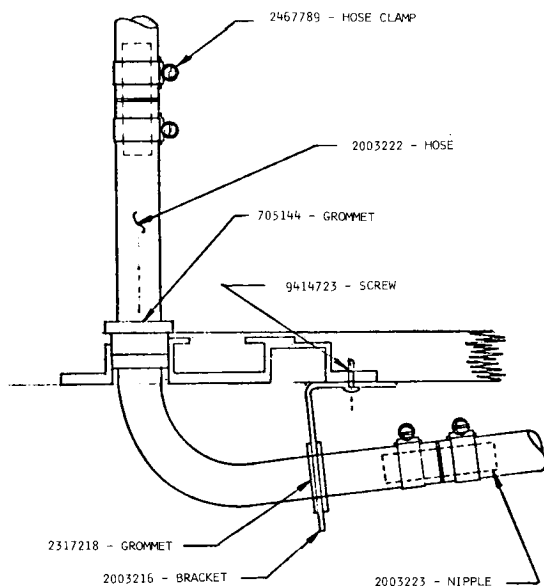
PREHEAT HOSE AND FLOOR BRACKET
INSTALLATION - 1973 & 1974 MODELS

Figure #4

6. Install two 14" hose splices into preheat line using grommets, nipples, and hose clamps. Shorten each interior and exterior preheat hose by 5". (See Figure #4).

7. Reinstall drained coolant, start vehicle engine, and check preheat connections for leaks.

8. Reinstall vacuum on 26 ft. models so equipped.

1975 Models

1. Drain and save engine coolant from preheat system by disconnecting hoses from elbow at floor bottom.

CAUTION: USE ADEQUATE SKIN AND EYE PROTECTION FROM HOT COOLANT.

2. Remove two attaching screws from elbow and break elbow by bending. (See Figure #5).



Figure #5

3. Pull interior hoses through refrigerator side vent. (See Figure #6).

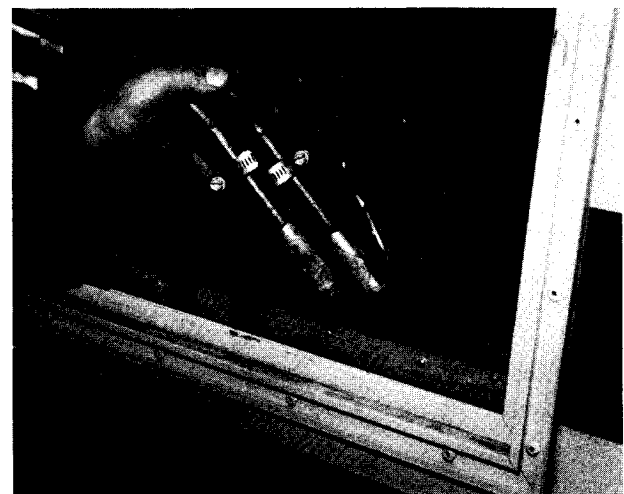


Figure #6

4. Enlarge preheat elbow holes through floor to 1-1/4" using a hole saw.

5. Install hose bracket to floor sill using bracket as a template to drill two 13/64" holes for attaching blind rivets. (See Figures #7 & #8).

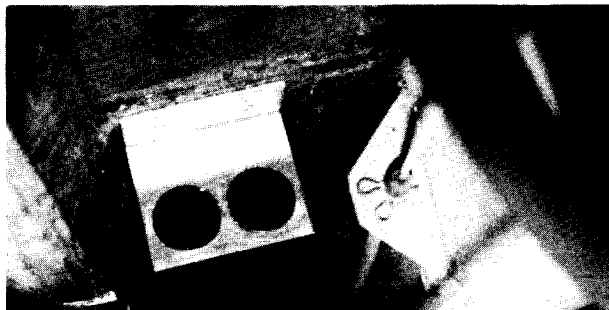


Figure #7

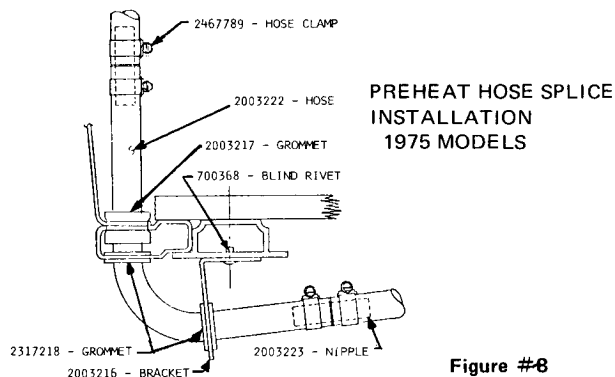


Figure #8

6. Remove elbow tubes from interior preheat hoses. Install 14" splice with nipple on each interior hose. Reverse elbow tube into splice. (See Figure #9).



Figure #9

7. Install grommet and insert inboard, then outboard hose through floor from vent opening. (See Figures #9 & #10).



Figure #10

8. Cut 4" from each exterior preheat hose and connect splice with nipples and hose clamps. (See Figure #8).
9. Reinstall drained coolant, start vehicle engine, and check connections for leaks.

Enclosed with this bulletin are stickers stating the following:

NOTE

When using the hose connection to fill water tank from pressurized water system, remove the auxiliary water fill cap. When tank is full, water will spill from auxiliary water fill cap outlet.

The sticker is to be affixed only to 1975 GMC Motor Homes below the "Potable Water Only" warning sticker, which is located to the left of the right rear access door.

WARRANTY INFORMATION

Payment* Code (for card only)	Labor Operation Numbers (for WRO only)	Description	Time Allowance	Trouble Code
1	A014201	Pre-heat hose connection modification without vacuum cleaner, all models (1973, 1974)	1.0	96
	A110011	Administration time (Parts Required: 8885553 Kit)	0.1	96
2	A014202	Pre-heat hose connection modification without vacuum cleaner, all models (1975)	1.1	96
	A110011	Administration time (Parts Required: 8885554 Kit)	0.1	96
3	A014203	Pre-heat hose connection modification - 26 ft. (with vacuum cleaner) (1973, 74).	1.2	96
	A110011	Administration time (Parts Required: 8885553 Kit)	0.1	96
4	A014204	Pre-heat hose connection modification - 26 ft. (with vacuum cleaner) (1975)	1.3	96
	A110011	Administration time (Parts Required: 8885554 Kit)	0.1	96

* Only one payment code may be used per card. Enter payment code that applies in "Payment Code" box on campaign card. Dealer Administration Time is automatically added if payment card is submitted.

CAMPAIGN IDENTIFICATION LABEL

Each vehicle modified in accordance with the instructions outlined in the Product Campaign Bulletin will require "Campaign Identification Label." Labels have been furnished each involved dealer and involved zone. Each label provides a space to include the five (5) digit dealer code of the dealer performing the campaign service. This information may be inserted with a ball-point pen or felt-tipped pen. Each "Campaign Identification Label" is to be located next to the "Emission Control Information" decal.

NOTE: APPLY CAMPAIGN IDENTIFICATION LABEL ONLY ON A CLEAN SURFACE NEXT TO THE EMISSION CONTROL INFORMATION DECAL.

OWNER'S NOTIFICATION

Owners of record known at this time will be notified of this campaign on their vehicles by GMC Truck & Coach Division.

CAMPAIGN RESPONSIBILITY

Dealers are to service all vehicles subject to this campaign regardless of the mileage, age of vehicle or ownership. These corrections must be made on all affected vehicles in your new or used vehicle inventory prior to their sale from this time forward.

Whenever a vehicle subject to this campaign is taken into your used vehicle inventory in the future, you should take the steps necessary to be sure the campaign correction has been made before reselling the vehicle.

CAMPAIGN PROCEDURE

Procedures for handling this campaign are outlined in Section 7, "GMC Truck Service Policies and Procedures Manual" (revised May, 1973) as modified by the Warranty Information Letter dated April, 1975.

GMC TRUCK & COACH DIVISION

General Motors Corporation

660 South Boulevard, East
Pontiac, Michigan 48053
313/857-5000

(SAMPLE OWNER NOTIFICATION LETTER)

Dear GMC Motor Home Owner:

Certain GMC Motor Homes are equipped with an optional feature for utilizing engine coolant to preheat fresh water in the living area hot water tank. GMC Truck and Coach has determined that a steel connection in the tube, connecting the engine cooling system with the hot water tank, is susceptible to excessive corrosion which eventually may cause it to break. Such breakage could result in a loss of engine coolant and possible engine damage.

To prevent the possibility of this condition occurring on your vehicle, please contact your GMC motor home dealer who will replace the steel connection tube with a section of rubber hose at no charge to you.

It is estimated that the actual time necessary to perform the labor required is approximately one hour and fifteen minutes.

The enclosed campaign card identifies your vehicle. Presentation of this card to your dealer will assist him in making the necessary correction to your vehicle in the shortest possible time. If you have sold or traded your vehicle, please let us know by completing the postage paid owner reply card and returning it to us.

We are sorry to cause you this inconvenience; however, we have taken this action in the interest of your continued satisfaction with our products.

GMC TRUCK & COACH DIVISION
GENERAL MOTORS CORPORATION

Enc.

75-C-08



Dealer Product Campaign Bulletin

GMC TRUCK & COACH DIVISION GENERAL MOTORS CORPORATION

IMPORTANT—All Service Personnel Should Read and Initial

NUMBER: 76C03

GROUP: 9-Steering

DATE: February, 1976

SUBJECT: LOWER STEERING SHAFT ASSEMBLY
MODELS: TZE 166V, 336V, 366V MOTORHOME AND TRANSMODE

The National Traffic and Motor Vehicle Safety Act, as amended, provides that each vehicle which is subject to a product safety campaign must be adequately repaired within a reasonable time after the owner has tendered it for repair. A failure to adequately repair within 60 days after tender of a vehicle is prima facie evidence of failure to repair within a reasonable time. If the condition is not adequately repaired within a reasonable time, the owner may be entitled to an identical or reasonable equivalent vehicle at no charge or to a refund of the purchase price less a reasonable allowance for depreciation.

In order to avoid having to provide these burdensome solutions, every effort must be made to promptly schedule an appointment with each owner and to repair his vehicle as soon as possible. As you will see in reading the attached copy of the letter which is being sent to owners, the owner is being instructed to contact the nearest GMC Zone Office if his dealer does not remedy the condition within 5 days of the mutually agreed upon service date. If the condition is not remedied within a reasonable time, he is instructed on how to contact the National Highway Traffic Safety Administration.

DEFECT INVOLVED

GMC Truck & Coach Division has determined that a defect which relates to motor vehicle safety exists in some 1976 MotorHomes and TransModes. The lower steering shaft assembly may have been assembled without a steering shaft companion flange nut and/or cotter pin. If the steering shaft is not properly secured, the steering shaft may become detached from the companion flange. If this happens, it would result in complete loss of steering control and, should the vehicle be in motion, a vehicle crash could occur without prior warning.

VEHICLES INVOLVED

Certain 1976 GMC MotorHomes and TransModes prior to Vehicle Identification Number TZE166V100834 are included in this campaign. Some of the vehicles within this VIN range were corrected at the plant prior to shipment.

A listing of the vehicles involved are being furnished to the involved dealers with this bulletin. Any dealer not receiving a computer listing was not shipped any of the vehicles involved.

OWNER NOTIFICATION

Owners will be notified of this campaign on their vehicles by GMC Truck & Coach Division. See copy of owner letter included with this bulletin. A listing of owner names

and addresses from state motor vehicle registration records may have been furnished to enable you to follow up with owners involved in this campaign. The use of such motor vehicle registration data for any other purpose is a violation of law in several states. Accordingly, you are urged to limit the use of this listing to this campaign.

DEALER CAMPAIGN RESPONSIBILITY

Dealers are to service all vehicles subject to this campaign regardless of the mileage, age of vehicle or ownership from this time forward.

Whenever a vehicle subject to this campaign is taken into your new or used vehicle inventory in the future, you should take the steps necessary to be sure the campaign correction has been made before reselling the vehicle.

On vehicles involved in this campaign that have been recently sold to a retail owner where no owner's name and address was available to GMC Truck & Coach at the time of campaign initiation the dealer will determine the owner's name and address from the dealership sales records and forward them to.

GMC Truck & Coach
Division of General Motors Corporation
Technical Service Dept.
660 South Boulevard East
Pontiac, MI 48053

SERVICE PROCEDURE

1. Raise left front access door.
2. Remove lower steering shaft upper pinch bolt and nut (Figure 1).

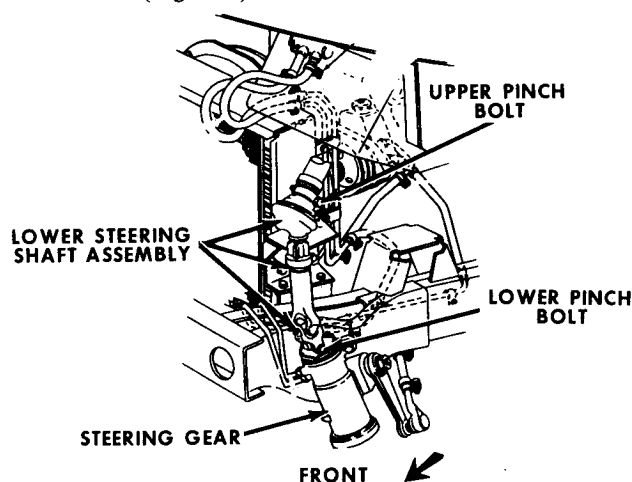
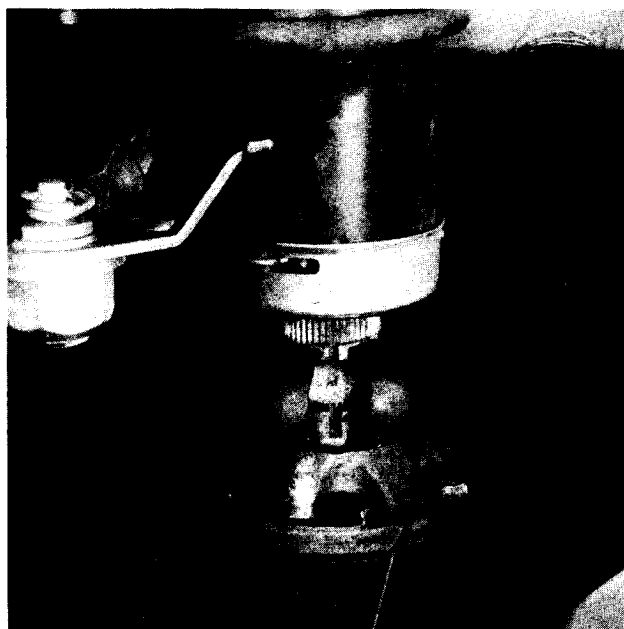
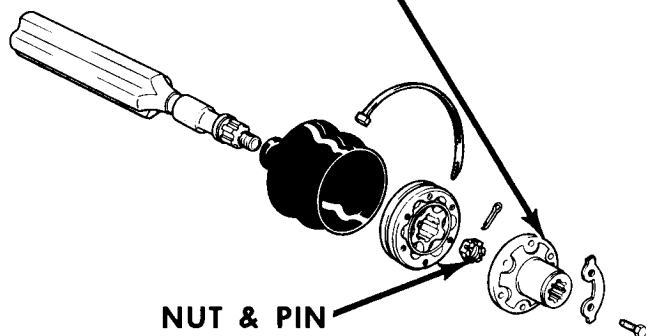


Figure No. 1



**COMPANION
FLANGE**



NUT & PIN

**INSERT FINGER
AND FEEL FOR NUT
AND COTTER PIN**



Figure No. 2

3. Separate lower steering shaft from upper shaft.
4. Insert finger into companion flange and feel for presence of slotted nut and cotter pin (Figure 2).
5. If nut and pin are present, reinstall lower shaft and torque upper pinch bolt nut 40–45 ft. lbs.
6. If nut and/or cotter pin is missing, install a new complete lower steering shaft assembly, torque upper pinch bolt nut 40–45 ft. lbs. and torque lower pinch bolt nut 35–45 ft. lbs.

PARTS INFORMATION

The part will be available through your local zone office.

<u>Qty. Per Vehicle</u>	<u>Part Number</u>	<u>Description</u>
1 (if required)	692860	Lower Steering Shaft Assy.

NOTE: IT IS ESTIMATED THAT LESS THAN 1% OF THE TOTAL VEHICLES INVOLVED WILL ACTUALLY REQUIRE THE REPLACEMENT OF A SHAFT ASSEMBLY

WARRANTY INFORMATION:

<u>Payment Code (for card only)</u>	<u>Labor Operation Numbers (for WRO only)</u>	<u>Description</u>	<u>Time Allow- ance</u>	<u>Trouble Code</u>
01	A199617	Inspect Lower Steering Shaft. Slotted Nut and Cotter Pin Present – No Further Action Required.	.3 Hr.	96
	A110011	Administrative Time	.1 Hr.	
02	A199618	Inspect Lower Steering Shaft. Slotted Nut And/Or Cotter Pin Missing – Replace Lower Steering Shaft Assembly.	.4 Hr.	96
	A110011	Administrative Time.	.1 Hr.	

*Only one payment code may be used per card. Enter payment code that applies in "Payment Code" box on campaign card. Dealer Administrative Time is automatically added if payment card is submitted.

CAMPAIGN IDENTIFICATION LABEL:

Each vehicle modified in accordance with the instructions outlined in the Product Campaign Bulletin will require "Campaign Identification Label". Labels have been furnished each involved dealer and Zone. Each label provides a space to include the five (5) digit code of the dealer performing the campaign service. This information may be inserted with a ball point pen or felt-tipped pen. Each "Campaign Identification Label" is to be located next to the "Emission Control Information" decal.

NOTE: APPLY CAMPAIGN IDENTIFICATION LABEL ONLY ON A CLEAN SURFACE NEXT TO THE EMISSION CONTROL INFORMATION DECAL.

ADMINISTRATIVE PROCEDURE

Procedures for handling this campaign are outlined in Section 7 of your dealership's "GMC Truck Service Policies and Procedures Manual" (revised May, 1973).

**GMC TRUCK & COACH**

Division of General Motors Corporation

660 South Boulevard East Pontiac, Michigan 48053
313/857-5000

Dear GMC MotorHome Owner:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

GMC Truck & Coach Division has determined that a defect which relates to motor vehicle safety exists in some 1976 MotorHomes and TransModes.

The lower steering shaft assembly may have been assembled without a steering shaft companion flange nut and/or cotter pin. As a result the steering shaft may become detached from the companion flange. If this happens, it would result in complete loss of steering control and, should the vehicle be in motion, a vehicle crash could occur without prior warning.

To prevent the possibility of this occurring, please contact your GMC MotorHome Dealer on or after February 10, 1976. Your dealer will inspect the lower steering shaft and, if the nut and/or cotter pin was omitted, replace the lower steering shaft assembly at no charge to you. You should make an appointment prior to taking your vehicle to your dealer to arrange a mutually satisfactory service date.

Instructions for making this correction have been sent to all GMC MotorHome Dealers. It is estimated that parts will be available on February 10, 1976, and that the actual time necessary to perform the inspection will be approximately 20 minutes. If it is determined that the lower steering shaft assembly requires replacement, an additional 10 minutes will be necessary.

If you take your vehicle to your dealer on the mutually agreed upon service date and he does not remedy this defect without charge on that date or within five days, you should contact your nearest GMC Zone Office either in person or by telephone for assistance. The locations and phone numbers of Zone Offices are listed in your Owner's Manual. If your dealer or General Motors fails or is unable to remedy this defect without charge within a reasonable time, you may wish to notify the Administrator, National Highway Traffic Safety Administration, Washington, D. C. 20590.

The enclosed campaign card identifies your vehicle. Presentation of this card to your dealer will assist him in making the necessary correction to your vehicle in the shortest possible time. If you have sold or traded your vehicle, please let us know by completing the postage paid owner reply card and returning it to us.

We are sorry to cause you this inconvenience; however, we have taken this action in the interest of your safety and continued satisfaction with our products.

GMC Truck & Coach Division
General Motors Corporation

Enclosure

76C03



**Motor
Home
Service**

Dealer Product Campaign Bulletin

GMC TRUCK & COACH DIVISION

GENERAL MOTORS CORPORATION

IMPORTANT-All Service Personnel Should Read and Initial

NUMBER: 77-C-13

GROUP: 24-Miscellaneous

DATE: August, 1977

SUBJECT: ONAN GENERATOR POSSIBLE 110V AC CONDUIT INTERFERENCE WITH POSITIVE BATTERY STUD

**MODELS: 1976-1977 MOTORHOMES EQUIPPED WITH RPO KNC
(Onan 6.0 KW Generator)**

The National Traffic and Motor Vehicle Safety Act, as amended, provides that each vehicle which is subject to a product safety campaign must be adequately repaired within a reasonable time after the owner has tendered it for repair. A failure to adequately repair within 60 days after tender of a vehicle is prima facie evidence of failure to repair within a reasonable time. If the condition is not adequately repaired within a reasonable time, the owner may be entitled to an identical or reasonable equivalent vehicle at no charge, or to a refund of the purchase price less a reasonable allowance for depreciation.

In order to avoid having to provide these burdensome solutions, every effort must be made to promptly schedule an appointment with each owner and to repair his vehicle as soon as possible. As you will see in reading the attached copy of the letter which is being sent to owners, the owner is being instructed to contact the nearest Zone Office if his dealer does not remedy the condition within 5 days of the mutually agreed upon service date. If the condition is not remedied within a reasonable time, he is instructed on how to contact the National Highway Traffic Safety Administration.

DEFECT INVOLVED

The 110 Volt AC conduit on these Onan generators may contact the positive battery terminal or starter solenoid post resulting in a short to ground of battery power. Also the 110 Volt AC conduit and cable insulation may wear through from contact with the negative battery terminal causing a short to ground of 110 Volt AC power. Such shorting will damage wiring and generator components and can result in a fire. A fire may result from shorting of the battery power to ground even if the Onan generator is not operating. The fire may burn the fuel supply hose to the generator unit resulting in a gasoline fed fire. Fires originating at the Onan generator could spread to the passenger compartment and cause burn injuries and asphyxiation of occupants.

The correction consists of moving the positive battery terminal, adding a cover over the starter solenoid battery post, and inverting the negative battery terminal post so that the head end is up.

VEHICLES INVOLVED

Certain 1976-1977 Motorhomes and Transmode models equipped with RPO KNC, 6.0 KW Onan Generator, having

a generator serial number within the ranges specified here.

Starting Generator Serial Number

J 753129056
A763143736
A773229669

Ending Generator Serial Number

L753136992
L763221938
B773237969

Vehicles have been identified by serial number computer listings. The listings have been furnished to involved dealers with the campaign bulletin.

OWNER NOTIFICATION

Owners will be notified of this campaign on their vehicles by GMC Truck & Coach Division. See copy of owner letter included with this bulletin. A listing of owner names and addresses from state motor vehicle registration records may have been furnished to enable you to follow up with owners involved in this campaign. The use of such motor vehicle registration data for any other purpose is a violation of law in several states. Accordingly, you are urged to limit the use of this listing to this campaign.

DEALER CAMPAIGN RESPONSIBILITY

Dealers are to service all vehicles subject to this campaign regardless of mileage, age of vehicle, or ownership from this time forward.

Whenever a vehicle subject to this campaign is taken into your new or used vehicle inventory in the future, you should take the steps necessary to be sure the campaign correction has been made before reselling the vehicle.

On vehicles involved in this campaign that have been recently sold to a retail owner, where no owner's name and address were available to GMC Truck & Coach Division at the time of campaign initiation, the dealer will determine the owner's name and address from the dealership sales records and forward this information to:

GMC Truck & Coach
Division of General Motors Corporation
Technical Service Department
660 South Blvd., East
Pontiac, Michigan 48053

2. Slide unit out of compartment and check Generator Serial Number. If serial number falls within suspect ranges, proceed to step 3. If serial number is **not** within the suspect ranges, proceed to step 14.
3. Disconnect ground cable at living area battery.
4. Remove two screws located under the control board. (Refer to Figure 1).
5. Position solenoid shield as shown in Figure 2, and install retaining screws. The control panel ground wire must be properly secured at this time. Secure starter cable with clip as shown in Figure 1.
6. Raise vehicle, refer to hoisting instructions on Page 0-3 of X-7525, The 1975 & 1976 Maintenance Manual, for proper procedure.
7. Disconnect positive battery stud located at back of mounting pan (Refer to Figure 2).
8. Drill a 5/8" hole located two inches forward of existing hole as shown in Figure 2.
9. Install cable on stud making sure that the insulating washers are installed as shown in Figure 3.
10. Seal top and bottom of stud using Dow Corning Silastic Sealer 732 RTV Sealant or equivalent.
11. Remove negative battery stud and invert the stud, installing the cable to the frame on top of the stud and the cable leading to the body on the bottom of the stud. Tighten nuts on stud.

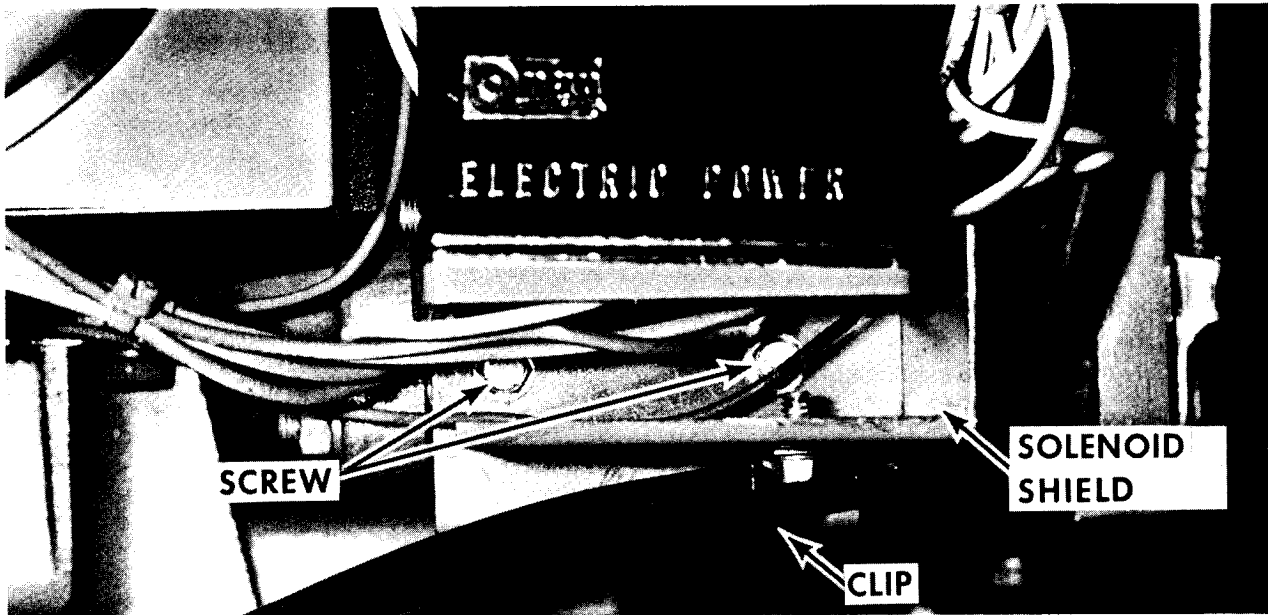


Figure 1

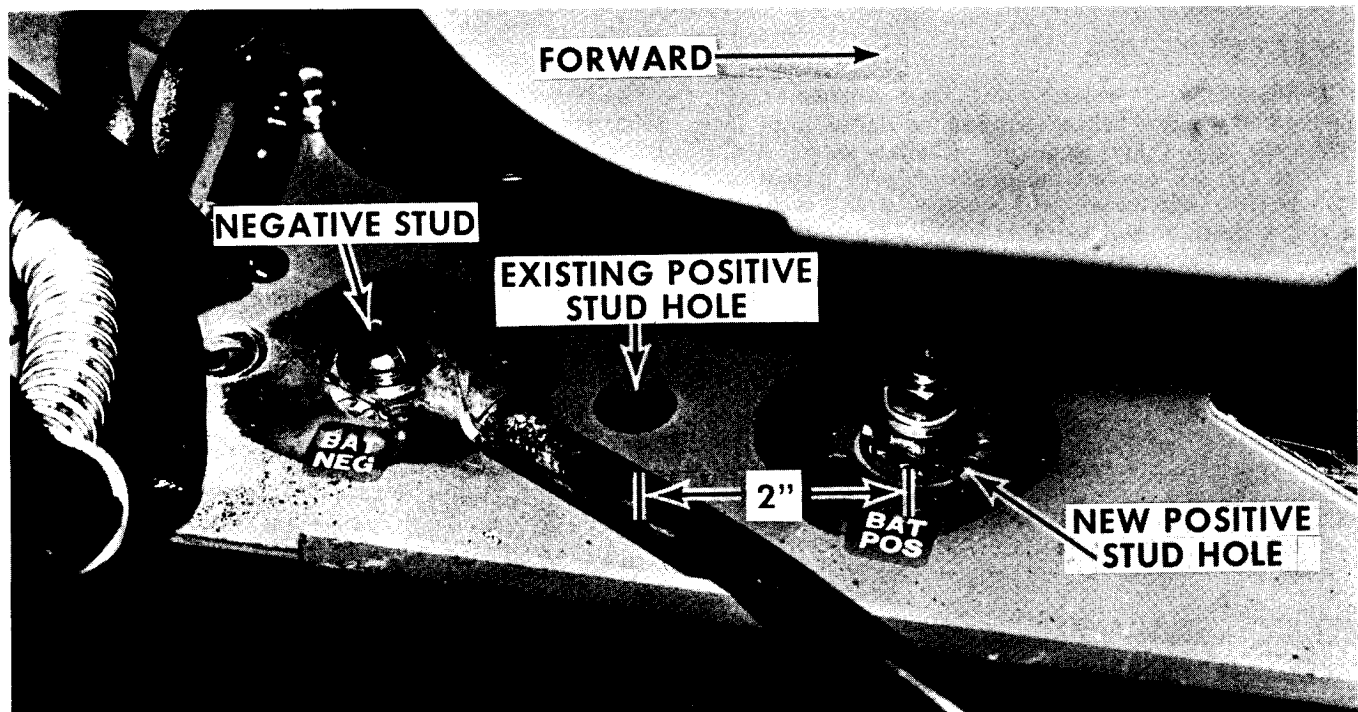


Figure 2

12. Lower vehicle.
13. Connect ground cable at living area battery.
14. Slide unit back into the compartment.
15. Close motor generator access door.

PARTS INFORMATION

Parts required to complete this modification should be ordered through the GMC Parts Distribution Centers.

<u>Part Number</u>	<u>Description</u>	<u>Quantity</u>
2033074	Solenoid Shield	1
707263	Screw	1

WARRANTY INFORMATION

<u>Labor Operation Number</u>	<u>Description</u>	<u>Time Allow- ance</u>	<u>Trouble Code</u>
A199753	Inspect Generator Serial Number. No further action needed.	0.2	96
A199754	Inspect Generator Serial Number; install solenoid shield; invert negative battery stud; move positive battery stud forward.	0.5	96
A110011	Administration Time	0.1	

CAMPAIGN IDENTIFICATION

Each vehicle modified in accordance with the instructions outlined in this Product Campaign Bulletin will require a "Campaign Identification Label." Each label provides a space to include the five (5) digit Dealer Code of the dealer performing the campaign service. This information may be inserted with a typewriter or ballpoint pen.

Each "Campaign Identification Label" is to be located on the radiator core support in an area which will be visible when the vehicle is brought in for periodic servicing by the owner.

Apply "Campaign Identification Label" only on a clean dry surface.

ADMINISTRATIVE PROCEDURE

Procedures for handling this campaign are outlined in Section 7 of your dealership's "GMC Truck Service Policies and Procedures Manual" (revised January, 1977).

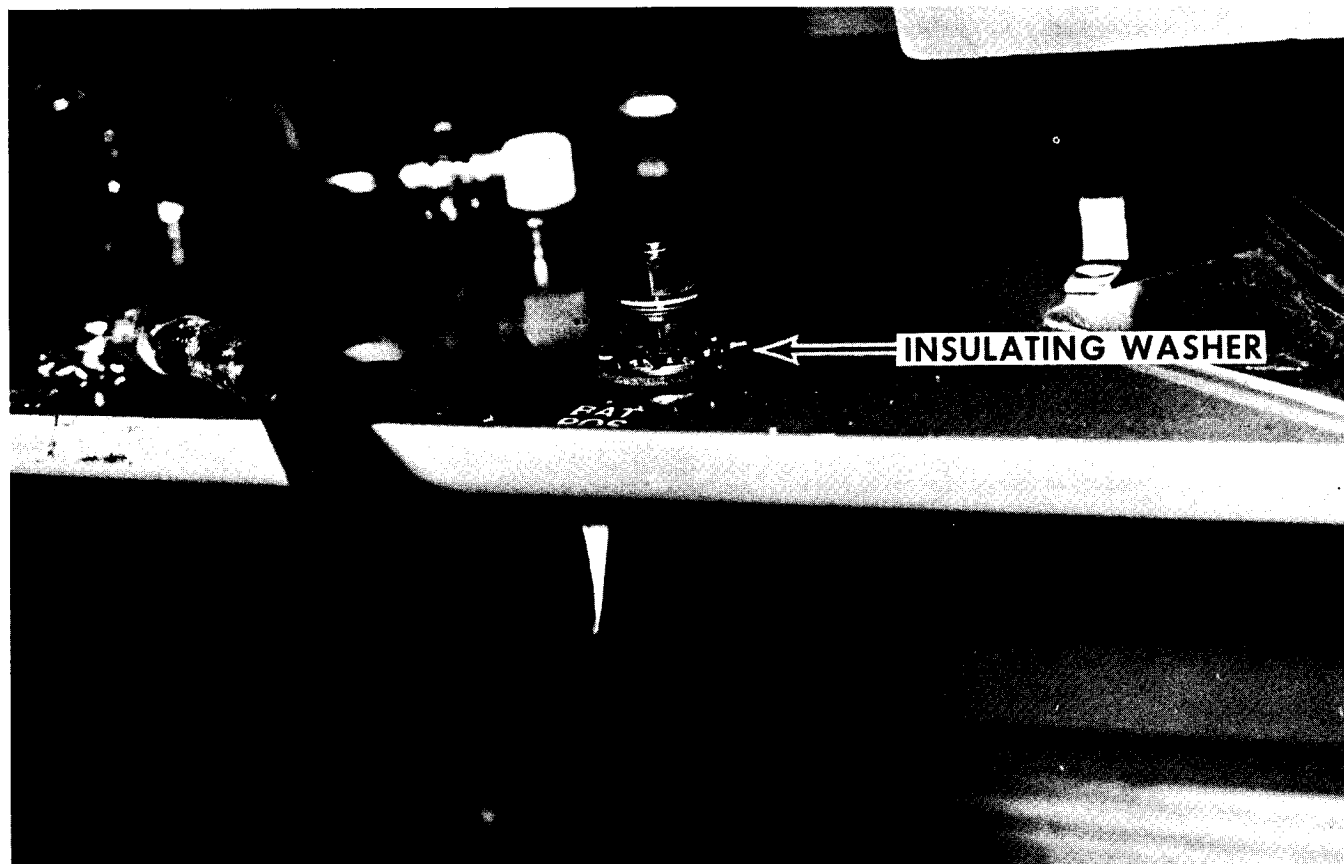


Figure 3



GMC TRUCK & COACH
Division of General Motors Corporation

660 South Boulevard East, Pontiac, Michigan 48053, 313/857-5000

(SAMPLE OWNER NOTIFICATION LETTER)

Dear GMC Motorhome Owner:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

General Motors has determined that a defect which relates to motor vehicle safety exists in some 1976 and 1977 GMC Motorhomes or Transmode models equipped with the Onan 6.0 KW motor generator.

The 110 Volt AC conduit on the generator may contact the positive battery terminal or starter solenoid post resulting in a short to ground of battery power. Also the 110 Volt AC conduit and cable insulation may wear through from contact with the negative battery terminal causing a short to ground of 110 Volt AC power. Such shorting will damage wiring and generator components and can result in a fire. A fire may result from shorting of the battery power to ground even if the Onan generator is not operating. The fire may burn the fuel supply hose to the generator unit resulting in a gasoline fed fire. Fires originating at the Onan generator could spread to the passenger compartment and cause burn injuries and asphyxiation of occupants.

To prevent the possibility of this condition occurring on your vehicle, please contact your GMC dealer on or after August 15, 1977 to arrange an appointment to have the Onan electrical connections on your vehicle modified at no charge to you.

Instructions for making this correction have been sent to all motorhome dealers. It is estimated that parts will be available on or after August 15, 1977 and that the actual time necessary to perform the correction will be approximately 30 minutes.

If you take your vehicle to your dealer on the mutually agreed upon service date and he does not remedy this defect without charge on that date or within five days, you should contact your nearest GMC Zone Office either in person or by telephone for assistance. The locations and phone numbers of Zone Offices are listed in your Owner's Manual. If your dealer or General Motors fails or is unable to remedy this defect without charge within a reasonable time, you may wish to notify the Administrator, National Highway Traffic Safety Administration, Washington, D. C. 20590.

The enclosed campaign card identifies your vehicle. Presentation of this card to your dealer will assist him in making the necessary correction to your vehicle in the shortest possible time. If you have sold or traded your vehicle, please let us know by completing the postage paid owner reply card and returning it to us.

We are sorry to cause you this inconvenience; however, we have taken this action in the interest of your safety and continued satisfaction with our products.

GMC TRUCK & COACH DIVISION
GENERAL MOTORS CORPORATION

Enclosure

77C13



Motor
Home
Service

Dealer Product Campaign Bulletin

GMC TRUCK & COACH DIVISION

GENERAL MOTORS CORPORATION

ATTENTION:

GENERAL MANAGER ☐

PARTS MANAGER ☐

CLAIMS PERSONNEL ☐

SERVICE MANAGER ☐

IMPORTANT- All Service Personnel Should Read and Initial

NUMBER: 78-C-05

GROUP: 1-CAB & BODY

								DATE: April, 1978

SUBJECT: TRANSMODE SEAT BELT ASSEMBLIES

MODELS: 1978 ZE06583 AND ZE06083

The National Traffic and Motor Vehicle Safety Act, as amended, provides that each vehicle which is subject to a campaign of this type must be adequately repaired within a reasonable time after the owner has tendered it for repair. A failure to adequately repair within 60 days after tender of a vehicle is prima facie evidence of failure to repair within a reasonable time.

If the condition is not adequately repaired within a reasonable time, the owner may be entitled to an identical or reasonably equivalent vehicle at no charge, or to a refund of the purchase price less a reasonable allowance for depreciation.

In order to avoid having to provide these burdensome solutions, every effort must be made to promptly schedule an appointment with each owner and to repair his vehicle as soon as possible. As you will see in reading the attached copy of the letter which is being sent to owners, the owner is being instructed to contact the nearest GMC Zone Office if his dealer does not remedy the condition within five days of the mutually agreed upon service date. If the condition is not remedied within a reasonable time, he is instructed on how to contact the National Highway Traffic Safety Administration.

DEFECT INVOLVED

General Motors has determined that some 1978 GMC Transmodes were manufactured with seat belt retractors which fail to conform to Federal Motor Vehicle Safety Standard No. 209 Seat Belt Assemblies. The right hand seat belt retractors used at both the driver and front passenger seat positions may have been misassembled with the result that they may not lock during a collision. If the retractors do not lock during a collision, the seat belts would not restrain the occupant, increasing the possibility of injury.

VEHICLES INVOLVED

Certain 1978 Transmode models with the following vehicle breakpoints are involved:

<u>From</u>	<u>To</u>
TZE368V100550	TZE368V100743

Vehicles have been identified by serial number computer listings. The listings have been furnished to involved dealers with the campaign bulletin.

OWNER NOTIFICATION

Owners will be notified of this campaign on their vehicles by GMC Truck & Coach Division (see copy of Owner Letter included with this bulletin). A listing of owner names and addresses has been furnished to the involved dealers to enable dealers to follow up with owners involved in this campaign. This listing may contain owner names and addresses obtained from state motor vehicle registration records. The use of such motor vehicle registration data for any other purpose is a violation of law in several states. Accordingly, you are urged to limit the use of this listing for the follow up necessary to complete this campaign.

DEALER CAMPAIGN RESPONSIBILITY

Dealers are to service all vehicles subject to this campaign regardless of mileage, age of vehicle, or ownership from this time forward.

Whenever a vehicle subject to this campaign is taken into your new or used vehicle inventory in the future, you should take the steps necessary to be sure the campaign correction has been made before reselling the vehicle.

On vehicles involved in this campaign that have been recently sold to a retail owner, where no owner's name and address were available to GMC Truck & Coach Division at the time of campaign initiation, the dealer will determine the owner's name and address from the dealership sales records. The Owner Reply Card should be completed with the owner's name and address and forwarded to:

GMC Truck & Coach
Division of General Motors Corporation
Technical Service Department
660 South Blvd., East
Pontiac, Michigan 48053

SERVICE PROCEDURE

1. Remove complete seat belt assembly on both driver and passenger seats.
2. Install new seat belt assemblies. Torque to 35-45 ft.lb.

PARTS RETURN PROCEDURE

Parts are to be returned following normal failed parts procedures, with WRO attached, identifying each assembly with proper Vehicle Identification Number.

PARTS INFORMATION

Parts to complete this modification are being supplied direct to all involved dealers on a no-charge basis.

WARRANTY INFORMATION

<u>Labor Operation Number</u>	<u>Description</u>	<u>Time Allow- ance</u>	<u>Trouble Code</u>
A199831	Remove and replace driver and passenger seat belt assemblies	.3	96
A110011	Admin. Time	.1	

CAMPAIGN IDENTIFICATION LABEL

Each vehicle modified in accordance with the instructions outlined in this product campaign bulletin will require a "Campaign Identification Label". Each label provides a space to include the five (5) digit Dealer Code of the dealer performing the campaign service. This information may be inserted with a typewriter or ballpoint pen.

Each "Campaign Identification Label" is to be located on the radiator core support in an area which will be visible when the vehicle is brought in for periodic servicing by the owner.

Apply "Campaign Identification Label" only on a clean dry surface.

ADMINISTRATIVE PROCEDURE

Procedures for handling this campaign are outlined in Section IV of your dealership's "GMC Truck Service Policies and Procedures Manual" (revised October, 1977.)

**GMC TRUCK & COACH**

660 South Boulevard East, Pontiac, Michigan 48053, 313/857-5000

April, 1978

(SAMPLE OWNER NOTIFICATION LETTER)

Dear GMC Transmode Owner:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

General Motors has determined that some 1978 GMC Transmodes were manufactured with seat belt retractors which fail to conform to Federal Motor Vehicle Safety Standard No. 209 Seat Belt Assemblies. The right hand seat belt retractors used at both the driver and front passenger seat positions may have been misassembled with the result that they may not lock during a collision. If the retractors do not lock during a collision, the seat belts would not restrain the occupant, increasing the possibility of injury.

To prevent the possibility of this condition occurring on your vehicle, please contact your GMC dealer on or after April 11, 1978 in order to arrange an appointment to have the driver and front passenger seat belt assemblies in your vehicle replaced. The seat belt assembly replacement will be made at no charge to you.

Instructions for making this correction have been sent to all Transmode dealers. It is estimated that parts will be available on or after April 11, 1978 and that the actual time necessary to perform the correction will be approximately 20 minutes.

If you take your vehicle to your dealer on the mutually agreed upon service date and he does not remedy this defect without charge on that date or within five days, you should contact your nearest GMC Zone Office either in person or by telephone for assistance. The locations and phone numbers of Zone Offices are listed in your Owner's Manual. If your dealer or General Motors fails or is unable to remedy this defect without charge within a reasonable time, you may wish to notify the Administrator, National Highway Traffic Safety Administration, Washington, D. C. 20590.

The enclosed campaign card identifies your vehicle. Presentation of this card to your dealer will assist him in making the necessary correction to your vehicle in the shortest possible time. If you have sold or traded your vehicle, please let us know by completing the postage paid owner reply card and returning it to us.

We are sorry to cause you this inconvenience; however, we have taken this action in the interest of your safety and continued satisfaction with our products.

GMC TRUCK & COACH DIVISION
GENERAL MOTORS CORPORATION

Enclosure

78C05



THE GENERAL TIRE & RUBBER COMPANY

ONE GENERAL STREET

AKRON OHIO 44329

Number: 81 Special Issue
Group: 10 Wheels & Tires
Date: February 1981

Gentlemen:

This notice is being sent to you in accordance with the National Traffic and Motor Vehicle Safety Act. The General Tire & Rubber Company has determined that the 8.75R16.5 LT Jumbo Steel and Jet Steel Radial Load Range D, when used in conjunction with a GMC motor home, contains a defect which relates to motor vehicle safety. The serial numbers involved are listed on the attached sheet.

Our evaluation of the performance of this tire indicates that it is being operated in an overloaded condition due to underinflation. This condition will manifest itself in a separation of the components of the tire. Such a separation may be noticed by the operator of the motor home. A notice will be in the form of a thumping or erratic movement of the vehicle. If this warning is not heeded, the tire will continue to separate and fail causing loss of control of the vehicle.

The chances of this occurring can be minimized by maintaining 65 psi in the tire along with a close monitoring of the load distribution in the vehicle.

Records provided to us by the Motor Vehicle Manufacturer indicate that the vehicle purchased by you may be equipped with the above tire(s). The vehicle identification number of the vehicle on which this tire may have been mounted is listed on the attached Owner Reply Card. The Owner Reply Card must be completed and returned to us so that we can forward FREE IMPORTANT TIRE/VEHICLE MAINTENANCE INFORMATION to you. The information contained on the Owner Reply Card is also used in complying with Government Regulations.

(over)

If you believe you may have a tire as described above, please contact your General Tire Service Store or General Tire dealer to have the tires on your vehicle inspected. Any tires identified by the specific serial numbers involved will be replaced with a Jet Steel Load Range E tire at no charge to you if returned within 90 days of receipt of this letter. Tires returned thereafter will be replaced at a charge based upon treadwear used. Any replacement herein will include balancing at no extra cost.

Please bring this letter with you to the store or dealer, as it will assist them in the identification of the tires involved. We believe that the dismounting and mounting of the new tire will take approximately two hours.

If you believe the remedy herein is inadequate, you may submit a complaint to the Administrator of the National Highway Traffic Safety Administration, Washington, D.C. 20590 or call the toll-free Auto Safety Hotline at 800-426-9393 (Washington, D.C. area residents may call 426-0123).

We regret any inconvenience this notification may cause you, but we are sure that you will understand our interest in your safety and satisfaction with our tires.

If you have any questions concerning this defect notification letter, you may call Mr. K. D. Kimmel, (216) 798-2887.

A handwritten signature in black ink, reading "Ralph W. Meyer". The signature is fluid and cursive, with the first name "Ralph" being the most prominent.

Ralph W. Meyer
Marketing Manager
Replacement Sales

jcf

TIRE SERIAL NUMBERS 875R16.5 JUMBO STEEL LR "D"

Serial numbers for both White & Black Sidewall are Identical

AAXKWNB216	AAXKWNB416	AAXKWNB087	AAXKWNB287
AAXKWNB226	AAXKWNB426	AAXKWNB097	AAXKWNB297
AAXKWNB236	AAXKWNB436	AAXKWNB107	AAXKWNB307
AAXKWNB246	AAXKWNB446	AAXKWNB117	AAXKWNB317
AAXKWNB256	AAXKWNB456	AAXKWNB127	AAXKWNB327
AAXKWNB266	AAXKWNB466	AAXKWNB137	AAXKWNB337
AAXKWNB276	AAXKWNB476	AAXKWNB147	AAXKWNB347
AAXKWNB286	AAXKWNB486	AAXKWNB157	AAXKWNB357
AAXKWNB296	AAXKWNB496	AAXKWNB167	AAXKWNB367
AAXKWNB306	AAXKWNB506	AAXKWNB177	AAXKWNB377
AAXKWNB316	AAXKWNB516	AAXKWNB187	AAXKWNB387
AAXKWNB326	AAXKWNB526	AAXKWNB197	AAXKWNB397
AAXKWNB336	AAXKWNB536	AAXKWNB207	AAXKWNB407
AAXKWNB346	AAXKWNB017	AAXKWNB217	AAXKWNB417
AAXKWNB356	AAXKWNB027	AAXKWNB227	AAXKWNB427
AAXKWNB366	AAXKWNB037	AAXKWNB237	AAXKWNB437
AAXKWNB376	AAXKWNB047	AAXKWNB247	AAXKWNB447
AAXKWNB386	AAXKWNB057	AAXKWNB257	
AAXKWNB396	AAXKWNB067	AAXKWNB267	
AAXKWNB406	AAXKWNB077	AAXKWNB277	

TIRE SERIAL NUMBERS 875R16.5 JET STEEL LR "D" WHITE SIDEWALL

AAXKTAB216	AAXKTAB416	AAXKTAB087	AAXKTAB287
AAXKTAB226	AAXKTAB426	AAXKTAB097	AAXKTAB297
AAXKTAB236	AAXKTAB436	AAXKTAB107	AAXKTAB307
AAXKTAB246	AAXKTAB446	AAXKTAB117	AAXKTAB317
AAXKTAB256	AAXKTAB456	AAXKTAB127	AAXKTAB327
AAXKTAB266	AAXKTAB466	AAXKTAB137	AAXKTAB337
AAXKTAB276	AAXKTAB476	AAXKTAB147	AAXKTAB347
AAXKTAB286	AAXKTAB486	AAXKTAB157	AAXKTAB357
AAXKTAB296	AAXKTAB496	AAXKTAB167	AAXKTAB367
AAXKTAB306	AAXKTAB506	AAXKTAB177	AAXKTAB377
AAXKTAB316	AAXKTAB516	AAXKTAB187	AAXKTAB387
AAXKTAB326	AAXKTAB526	AAXKTAB197	AAXKTAB397
AAXKTAB336	AAXKTAB536	AAXKTAB207	AAXKTAB407
AAXKTAB346	AAXKTAB017	AAXKTAB217	AAXKTAB417
AAXKTAB356	AAXKTAB027	AAXKTAB227	AAXKTAB427
AAXKTAB366	AAXKTAB037	AAXKTAB237	AAXKTAB437
AAXKTAB376	AAXKTAB047	AAXKTAB247	AAXKTAB447
AAXKTAB386	AAXKTAB057	AAXKTAB257	
AAXKTAB396	AAXKTAB067	AAXKTAB267	
AAXKTAB406	AAXKTAB077	AAXKTAB277	

(serial numbers continued on next page)

TIRE SERIAL NUMBERS 875R16.5 JET STEEL LR "D" BLACK SIDEWALL

AAXKPUB216	AAXKPUB416	AAXKPUB087	AAXKPUB287
AAXKPUB226	AAXKPUB426	AAXKPUB097	AAXKPUB297
AAXKPUB236	AAXKPUB436	AAXKPUB107	AAXKPUB307
AAXKPUB246	AAXKPUB446	AAXKPUB117	AAXKPUB317
AAXKPUB256	AAXKPUB456	AAXKPUB127	AAXKPUB327
AAXKPUB266	AAXKPUB466	AAXKPUB137	AAXKPUB337
AAXKPUB276	AAXKPUB476	AAXKPUB147	AAXKPUB347
AAXKPUB286	AAXKPUB486	AAXKPUB157	AAXKPUB357
AAXKPUB296	AAXKPUB496	AAXKPUB167	AAXKPUB367
AAXKPUB306	AAXKPUB506	AAXKPUB177	AAXKPUB377
AAXKPUB316	AAXKPUB516	AAXKPUB187	AAXKPUB387
AAXKPUB326	AAXKPUB526	AAXKPUB197	AAXKPUB397
AAXKPUB336	AAXKPUB536	AAXKPUB207	AAXKPUB407
AAXKPUB346	AAXKPUB017	AAXKPUB217	AAXKPUB417
AAXKPUB356	AAXKPUB027	AAXKPUB227	AAXKPUB427
AAXKPUB366	AAXKPUB037	AAXKPUB237	AAXKPUB437
AAXKPUB376	AAXKPUB047	AAXKPUB247	AAXKPUB447
AAXKPUB386	AAXKPUB057	AAXKPUB257	
AAXKPUB396	AAXKPUB067	AAXKPUB267	
AAXKPUB406	AAXKPUB077	AAXKPUB277	



IMPORTANT

IMPORTANT

YOU AND YOUR TIRES

IT'S

UP

TO

YOU

!!!!!!

Proper tire inflation and air pressure maintenance is essential to obtain optimum tire performance and is also critical to your personal safety. AN UNDERINFLATED AND/OR OVERLOADED TIRE CAN CAUSE TIRE FAILURE POSING A SAFETY HAZARD TO YOU AND OTHER MOTORISTS.

ONLY YOU CAN prevent these potentially dangerous situations through proper tire inflation and a constant awareness of cargo loads and weight distribution.

The following procedures will assist you in maintaining proper air pressures in your tires and proper cargo load distribution in your Motor Home.


PROPER INFLATION

Air pressures must be set and maintained at a minimum of 80 PSI COLD in your new 8.75R16.5 (Load Range E) tires. Enclosed is a replacement sticker specifying the new Load Range E size and tire inflation pressure recommendation. This should be placed over the existing tire information placard located in the vehicle glove box and should not be removed.

When tires are “hot” from driving, it is normal for pressures to increase above the recommended cold pressure. CAUTION: NEVER “BLEED” OR REDUCE AIR PRESSURE WHEN TIRES ARE HOT.

Air pressure should ONLY be checked “cold” (or when the vehicle has been driven less than 1 mile) with an accurate air pressure gauge as follows:

- a) Prior to any road trip.
- b) At least once per month.
- c) Weekly, when traveling in areas where temperatures vary considerably. (As a rule of thumb, for every 10 degree drop in temperature, you can expect a tire to lose 1 pound of air pressure.)

We have supplied you with valve extensions that will assist you in maintaining a minimum of 80 PSI inflation pressure in your tires. We also recommend that you consider purchasing a dual foot truck tire air gauge, (as pictured).  This type of gauge will allow you to accurately check air pressures without removing the hub caps.

You should also be aware of the following:

- a) The hand holes in your rims and hub caps are designed to align; however, under normal driving conditions, stress from torque and braking may cause the hub cap to turn on the rim misaligning the holes. This makes checking air pressure impossible. When this is noted, hub caps must be removed and holes realigned.
- b) If you have installed special wheel covers that bolt on with no hand holes, they must be removed prior to checking inflation pressure.

LOAD DISTRIBUTION

When loading your Motor Home it is important that the cargo load be properly distributed. You should remember the following points but always consult your owner's manual for more detailed loading conditions of your vehicle.

- a) Cargo load should be equally distributed from side to side and located as centrally and low to the floor as possible.
- b) Locate the vehicle identification plate behind the front access door. The following information is listed on this plate:

G.V.W.R. (Gross Vehicle Weight Rating) — Maximum weight of the vehicle and cargo.

G.A.W.R. (Gross Axle Weight Rating) — Maximum weight that can be carried by each of the axles.

- c) Although the replacement 8.75R16.5 (Load Range E) tire inflated to 80 PSI provides additional reserve load carrying capacity, the Gross Vehicle Weight (fully loaded) **SHOULD NEVER EXCEED** the Gross Vehicle Weight Rating or the Maximum Front and Rear Gross Axle Weight Ratings specified. As stated in your owner's manual, the **ONLY** way **ACTUAL WEIGHTS** can be accurately determined is by weighing the vehicle.

LIMITED WARRANTY

Your new Load Range E tires are covered by the enclosed Limited Warranty and Adjustment Policy. If you take care of your tires, they will take care of you.

GMC Motor Home

Tire Pressures For

8.75R16.5

E Load Range - Tires Only

COLD INFLATION

Front

80 PSI

Rear

80 PSI

CAUTION:

***Never "bleed" or reduce
air pressure when tires are
hot from normal driving.***



THE GENERAL TIRE & RUBBER COMPANY

ONE GENERAL STREET

AKRON OHIO 44329

March 4, 1981

The
GENERAL TIRE
Dealers & Stores

Attention: Owner/Manager

Service Bulletin: 005 - Balancing Information
8.75R16.5 LR E on Bud Type Wheel off of GMC Motor Home

Gentlemen:

The attached information supplied by Hennesy Industries, Inc. outlines the proper procedure for handling a problem that may be encountered in balancing the 8.75R16.5 Jet Steel on the eight-hole bud type wheel used on GMC's motor homes.

This assembly weighing approximately 85 pounds can be balanced very effectively on either the 7300 or 7402 Nortron Balancer providing your balancer is in proper calibration.

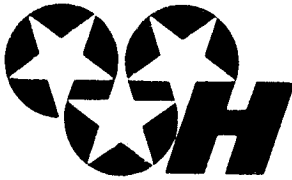
If you encounter problems that cannot be corrected through these procedures, please feel free to contact one of the local Hennesy service managers listed on the first page.

THE GENERAL TIRE & RUBBER COMPANY

William Foster
National Service Manager

mw

Attachment



Hennessy Industries Inc.

P.O. BOX 66389

AMF - O'HARE, ILL. 60666

TELEPHONE (312) 437-1402

Auto Service Group — Chicago Pneumatic Tool Company

RECEIVED

FEB 02

TO: All General Tire & Rubber Company Dealers

Subject: Mounting and Balancing Procedures for the General Jet Steel Radial 8.75 X R16.5 mounted on a 16.5 Budd type wheel on the Nortron 7300 and 7402 Balancers.

The Nortron 7300 and 7402 Balancers are capable of balancing the above mentioned wheel assembly. Following the few simple procedures which you will find attached will make your job easier and ensure a balanced wheel assembly.

If you encounter any problems concerning the mounting or balancing of these wheels, you may contact your local Hennessy Service Manager at the following locations:

Eastern Region

Charles Rajewski
West Paterson, New Jersey
201-256-3110
800-526-5181

Southeastern Region

Greg Smith
Norcross, Georgia
404-447-9357
800-241-7463

Southern Region

John Scogin
Houston, Texas
713-931-7700
800-231-0294
800-323-0178

Central Region

Jim Sylvester
Elk Grove, Illinois
312-437-8944
800-323-0661

Western Region

Jeff Lund
San Diego, California
714-566-9770
800-854-2632

Sincerely,

George Fredrich
National Service Manager

GF/ws
Attachment

PROCEDURE FOR HANDLING PROBLEM ENCOUNTERED IN BALANCING 8.75 X R16.5
ON BUDD TYPE WHEEL

A. Nortron 7300 Balancer

- (1) Make sure the balancer is in calibration. If in doubt, follow the Calibration Check Procedure and if necessary, the Calibration Procedure which you will find attached.
- (2) If the Balancer is in calibration and no difficulty is found in balancing passenger car wheels but there is a problem in balancing the above mentioned wheel, the most likely cause is the sensor carriers are out of adjustment.

Symtoms: Many weights placed on the wheel but it is still not balanced. The cure for this problem is an adjustment of the sensor carriers which can be performed by any Authorized Nortron Service Depot.

B. Nortron 7402 Balancer

The model 7402 requires no calibration or mechanical adjustments. If unable to balance the wheel assembly, contact a Hennessy Region Service Manager or an Authorized Nortron Service Depot.

C. General Mounting Procedures.

The same technique can be used for both the 7300 and 7402 Balancers since the adapters are interchangeable. It is necessary to use either the 4 lug Universal Adapter or the Combination Adapter. Follow the attached instructions for using Lug Bolt Circle Adapters.

Due to the size and weight of the wheel assembly in question, it is recommended that the Lug Adapter be mounted on the wheel off the machine ensuring that the lugs are centered. The wheel with the adapter attached can then be mounted to the face plate.

LUG BOLT CIRCLE ADAPTERS

Lug bolt circle adapters are used as follows:

Note 1: Use the 4 lug Universal Adapter or set the Combination Adapter to handle 4 lug wheels.

1. Attach adapter to face plate with two faceplate nuts.

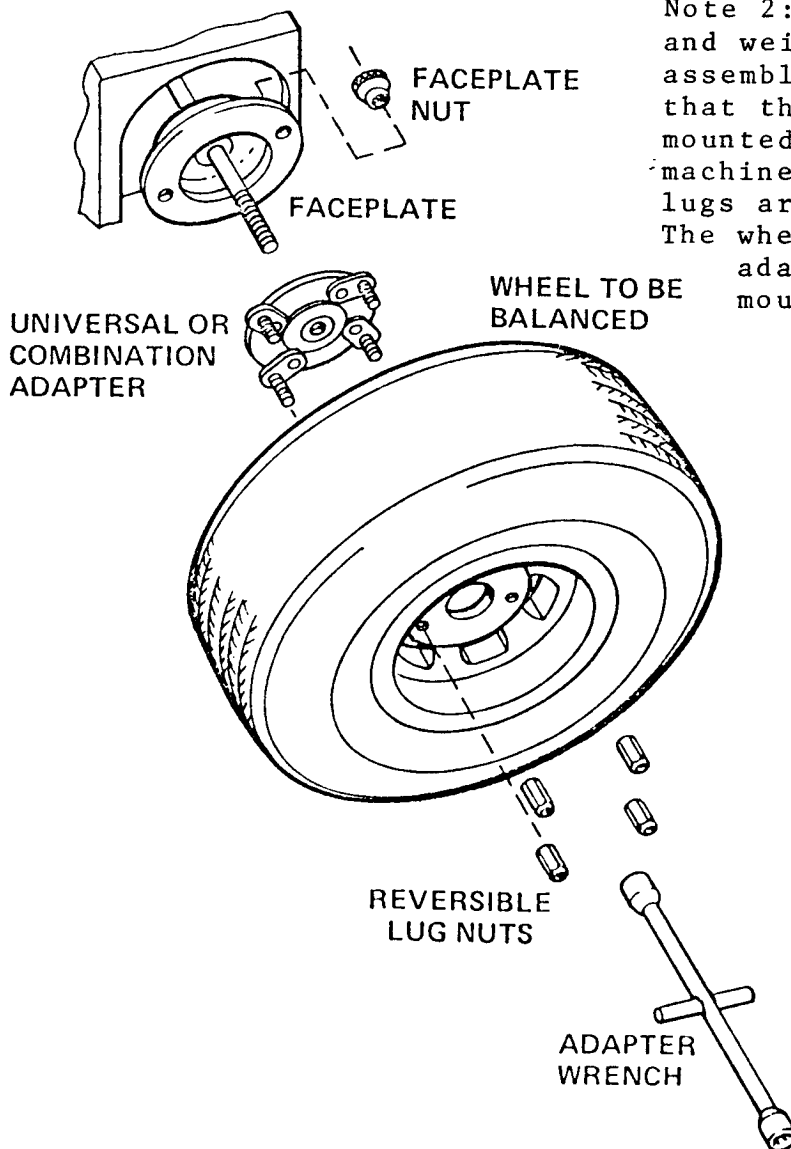


FACEPLATE NUTS MUST BE HAND TIGHTENED. ROTATE FACEPLATE WHILE TIGHTENING TO ENSURE CENTERING.

2. Rotate lug swivels to match wheel bolt circle. Mount wheel and run up lug nuts by hand. Tighten lug nuts with adapter wrench, rotating wheel and using a star or criss-cross pattern.



LUG NUTS MUST BE CENTERED AND THREAD AT LEAST FOUR FULL TURNS. REVERSE LUG NUTS AS REQUIRED. USE ONLY ADAPTER WRENCH FURNISHED WITH BALANCER. DO NOT USE AIR TOOLS OR IMPACT WRENCHES.



Note 2: Due to the size and weight of the wheel assembly, it is recommended that the lug Adapter be mounted on the wheel off the machine ensuring that the lugs are centered. The wheel with the attached adapter can then be mounted to the face plate.

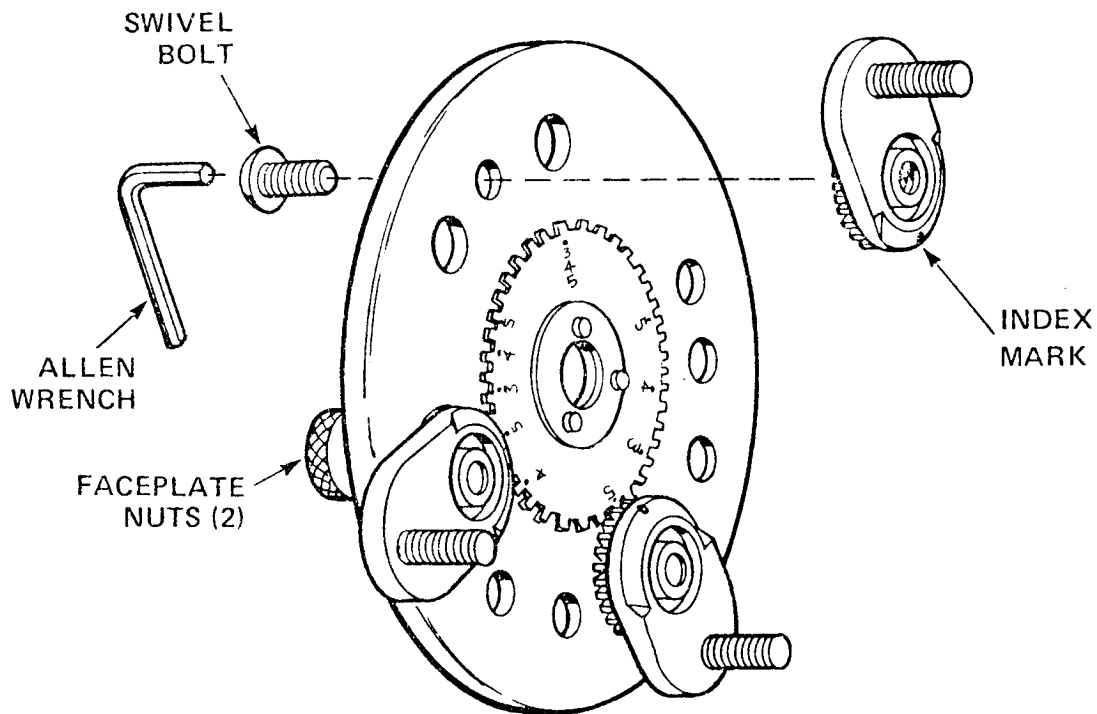
NOTE: Specialty wheels with "uni-lug," "K-lug," or slotted hole mounting: use adapter from wheel kit or European lug nuts or a combination of fittings to ensure wheel runs true before balancing.

COMBINATION

ADAPTER.

Combination adapter may be used for 3-, 4-, or 5-lug wheels by installing lug swivels in adapter plate hole pattern. Set up adapter as follows:

1. Install a lug swivel in adapter plate "common" hole. Line up center gear to match "3 4 5" mark with index mark on lug swivel. Insert swivel bolt (recessed-head) through BACK of adapter plate and run up, DO NOT TIGHTEN. NOTE: This lug swivel is used for all bolt circle patterns.
2. Install proper number of lug swivels in adapter plate holes marked "3," "4," or "5" as required. Insert swivel bolts through back of adapter plate and run up, DO NOT TIGHTEN. Ensure that index marks on all swivels line up with the appropriate "3," "4," or "5" mark on center gear.



3. Install combination adapter on wheel. Run up lug nuts by hand. Tighten lug nuts with adapter wrench, using a star or criss-cross pattern.



LUG NUTS MUST BE CENTERED AND
THREAD AT LEAST FOUR FULL TURNS.
REVERSE LUG NUTS AS REQUIRED.
USE ONLY ADAPTER WRENCH FUR-
NISHED WITH BALANCER. DO NOT USE
AIR TOOLS OR IMPACT WRENCHES.

4. Tighten swivel bolts with Allen wrench.
5. Attach wheel and adapter to faceplate with two faceplate nuts.



FACEPLATE NUTS MUST BE HAND
TIGHTENED. ROTATE WHEEL WHILE
TIGHTENING TO ENSURE CENTERING.

6. Adapter should remain on faceplate for additional wheels with same bolt circle.

CALIBRATION CHECK PROCEDURE

The calibration check procedure may be performed by the operator to ensure that the balancer is operating correctly and is properly calibrated. NORTRON wheel balancers will enable perfect balancing even when not in calibration. The purpose of calibration check and calibration is to trim balancer to yield single-spin balancing. Operator time is decreased and production rate increased.

1. Mount a standard domestic 14" x 6" wheel with an F78-14 tire using the small cone. Ensure that the wheel is not bent or misaligned and that center hole is free of nicks and burrs. Remove any existing weights from wheel. NOTE: DO NOT PERFORM CHECK UNLESS SPECIFIED WHEEL AND TIRE ARE AVAILABLE.
2. Set RIM DIA control to 14.
3. Align the sensor sights with the inner and outer tire surfaces.
4. Follow BALANCING PROCEDURE through Fine Balance until 0.0 weight readings appear on INNER and OUTER displays. A position number should appear on position displays.
5. Install a four ounce weight on the outer rim at the position indicated by the OUTER POSITION display.
6. Spin. The new weight reading should be 3.8, 3.9, or 4.0 ounces. The new position reading should be opposite (25 divisions away) the installed weight position within one division. If the weight reading is out of tolerance, check the sensor sight position and RIM DIA settings and re-spin. If the weight reading is still wrong, change to a new weight and repeat. Weight readings on the inner display should be 0.5 ounce or less and results from interference between the two balancing planes.
7. Remove four ounce weight and spin using Fine Balance. INNER and OUTER WEIGHT displays should again read 0.0 and a position number should appear on POSITION displays.
8. Repeat step 5 and 6 with four ounce weight installed on inner rim at position shown on INNER POSITION display. Spin at least five times. Weight readings should be constant plus or minus 0.1 ounce. Position readings should be constant plus or minus one division.
9. Remove four ounce weight and spin using Fine Balance. INNER and OUTER WEIGHT displays should be 0.0.
10. Loosen Hub nut, rotate wheel 180° on cone, tighten hub nut. Re-spin. New weight readings should be less than 0.5 ounce indicating that wheel is actually balanced to less than 0.25 ounce. If a reading of greater than 0.5 ounce persists after five spins, install a different wheel and repeat the entire check procedure.
11. If balancer fails to yield results required by this procedure, perform the CALIBRATION PROCEDURE.

CALIBRATION PROCEDURE

CAUTION

Calibration should be performed by trained personnel only.

The balancer may be calibrated by performing the following steps:

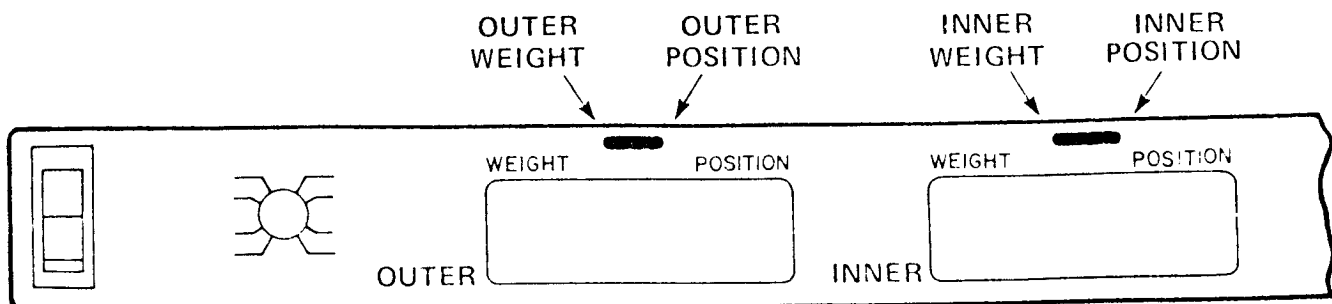
1. Perform CALIBRATION CHECK PROCEDURE through step 4.
2. Remove plugs from Calibration adjustment access holes.



HIGH VOLTAGE IS PRESENT AT CONTROL PANEL. USE ONLY THE CALIBRATION TOOL PROVIDED WITH BALANCER. DO NOT TOUCH CONTROL CIRCUITRY.

3. Install measured four ounce weight on outer rim at position indicated.
4. Take repeated readings, adjust OUTER WEIGHT potentiometer to obtain a reading of 3.9 ounces on the OUTER WEIGHT display.
5. Adjust OUTER POSITION potentiometer to read a position 25 units away (180°) from the test weight position.
6. Remove four ounce weight and spin using Fine Balance. OUTER WEIGHT display should read 0.0. If residual weight is shown on display, rebalance wheel and repeat steps 1 through 5.
7. Spin with the four ounce weight on inner rim at position indicated.
8. Take repeated readings, adjust INNER WEIGHT potentiometer to obtain a reading of 3.9 ounces on INNER WEIGHT display.
9. Adjust INNER POSITION potentiometer to obtain a reading 25 units away (180°) from the test weight position.
10. Remove four ounce weight and spin using Fine Balance. INNER WEIGHT display should read 0.0.

NOTE: Adjust weight calibration potentiometers clockwise for a numerically higher reading.





NORTON

SERVICE DEPOTS

ALABAMA

Service Equipment, Inc.
2728 Fourth Ave., South
Birmingham, AL 35233
205-251-0202

Wiregrass Distributing Co.
106 Inez Road
Dothan, AL 36301
205-792-2034

Flanders Electronics
3957 Cresthaven Dr.
Mobile, AL 36609
205-344-5200

Rayco
3432 Loch Haven Road
Montgomery, AL 36109
205-272-5524

ALASKA

Call B & E Equipment Co.
Seattle, Washington

ARIZONA

Southserv
3815 N. 16th St.
Phoenix, AZ 85016
602-265-6272

ARKANSAS

Prock Equipment
811 N. E Street
Ft. Smith, AR 72901
501-783-3714

Nu-Way Inc.
5301 McClanahan Dr., 3D
No. Little Rock, AR 72116
501-753-4754
501-835-1672 evenings

CALIFORNIA

Auto Test Electronics
622 North Brookhurst
Anaheim, CA 92801
714-635-5100

Comtel Corporation
2201 No. Hollywood Way
Burbank, CA 91505
213-849-6701

D M Electronic Service
5832 Robertson
Carmichael, CA 95608
916-489-1614

KNAP Installation Technology
17106 Roberto Street
Castro Valley, CA 94546
415-276-4585

Chico Discount Tire
2519 Esplanade
Chico, CA 95926
916-345-7901

Industrial Electronic Service
2138 North Fine
Fresno, CA 93727
209-252-8079

Valley Scientific Co.
5510 Air Terminal Drive
Fresno, CA 93727
209-291-0684

Charles E. Thomas Company
13701 South Alma
Gardena, CA 90249
213-321-8420 or 323-6730

Newport-Irvine Tire
18021 Sky Park
Irvine, CA 92714
714-557-4666

Servitronics
602 Victor Way #3
Mountain View, CA 94040
408-744-0796

Dales Radio & TV
2400 Athens Ave.
Redding, CA 96001
916-243-7084

Century Tire & Battery
214 So. G Street
San Bernardino, CA 92410
714-884-6245

Comtel Corporation
5046 Ruffner Street
San Diego, CA 92111
714-292-1090

K & L Automotive
160 Tenth Street
San Francisco, CA 94103
415-621-4555

Hydra-Air
3958 Downey Court
Simi Valley, CA 93063
805-526-7563

Bud's Equipment
6822 Homer Street
Westminster, CA 92683
714-897-0175

COLORADO

Francone Equipment & Service Co.
4101 Inca Street
Denver, CO 80211
303-433-8857

Tools, Inc.
260 Yuma Street
Denver, CO 80223
303-744-2779

CONNECTICUT

Ken-Tronics Communications
391 Prospect Street
East Hartford, CT 06101
203-289-6954

Baltimore Electronic Service
1348 Dixwell Avenue
Hamden, CT 06514
203-248-7553

DELAWARE

Call H & H Electronic Service
Philadelphia, PA
or
Professional Electronics
Baltimore, MD

DISTRICT OF COLUMBIA

Call Allen Equipment Service
Alexandria, VA

FLORIDA

Al Arias Automotive Equipment
869 Southeast, 9th Ct.
Hialeah, FL 33010
305-887-4654

Petroleum Engineering Co., Inc.
P.O. Box 52355
Jacksonville, FL 32201
904-355-9626

Auto Quip
210 Gunnery Road
Lehigh Acres, FL 33936
813-369-4595

Retreaders Supply Company
3000 N.W. 62nd
Miami, FL 33147
305-638-5010

Accurate Equipment Service
1007 LaQuinta Trail
Orlando, FL 32809
305-851-6811

Wiregrass Distributing Co.
Panama City, FL
Call Wiregrass Distributing
Dothan, Alabama

Heindel Industrial Electronics
4386 Shelfer Road
Tallahassee, FL 32304
904-877-6435

Accurate Equipment Service
5805 N. 50th Street
Tampa, FL 33610
813-621-7984

GEORGIA

Dugco Supply Co.
242 Falcon Drive
Forest Park, GA 30050
404-366-2491

Hydraulics & Pneumatics of Ga.
Highway 78 West
Harlem, GA 30814
404-556-3338

Turner Tribble Equip. & Repair Service
P.O. Box 118, 2037 Greentree Pkwy. L.W.W.
Macon, GA 31210
912-477-9628

Kaala Equipment Co.
944 Industrial Park Dr.
Marietta, GA 30062
404-427-8461

HAWAII

Tesco
268 Kalihi Street
Honolulu, HI 96819
808-841-0262

IDAHO

Industrial Electronics
314 E. 35th
Boise, Idaho 83704
208-343-2621

ILLINOIS

Sertec
3708 W. 121 St.
Alsip, IL 60658
312-371-2710

S/B Scope, Inc.
RR #4 - Box 60
Greenup, IL 62428
217-923-3720

Central Illinois Autotronics
209 Court Street
Pekin, IL 61554
309-382-3748 or 309-346-8217

Long's Equipment Service
2807 - 36th St.
Rock Island, IL 61201
309-786-7607

Les Davis Sales & Service
4111 Mallard Drive
Rockford, IL 61109
815-874-7964

INDIANA

Southlake Industries
5300 Hayes Street
Merrillville, IN 46410
219-980-8500

Teaco, Inc.
2117 Ohio Street
Michigan City, IN 46360
219-874-6234

Lou Stathas Sales & Service
5332 Crawfordville Rd.
Speedway, IN 46224
317-293-6734

IOWA

Seneca Corp.
5637 N.E. 17
Des Moines, IA 50313
515-262-9741

Turner Hydraulics Service
3011 6th Avenue
Des Moines, IA 50313
515-282-8381

KANSAS

C & N Repair
5507 Fox Ridge Road
Shawnee Mission, KS 66205
913-262-6200

KENTUCKY

T & K Company
671 North Broadway
Lexington, KY 40505
606-233-0656

Gold Star Auto Electric
1300 Belmar Drive
Louisville, KY 40213
502-458-2645

LOUISIANA

J & M Sales & Service
10735 Cherry Hill
Baton Rouge, LA 70814
504-292-4660

PMS Service Center
P.O. Box 5524
Bossier City, LA 71111
318-865-5922

Electric Instrument Service, Inc.
1407 Danville Street
Kenner, LA 70062
504-722-3077

MAINE

Colonial Electronics
259 St. John Street
Portland, ME 04102
207-774-6666

MARYLAND

Marine Communication Systems
326 First Street #22
Annapolis, MD 21403
301-267-7447

Ferguson Sales Co.
659 E. 25th St.
Baltimore, MD 21218
301-467-8980

Group Sales Corporation
15990 Shady Grove Road
Gaithersburg, MD 20760
301-840-0550

Riker Electronic Incorporated
3-5 Lee Street
Hagerstown, MD 21740
301-791-2112

MASSACHUSETTS

A & H Tool Co.
12 Old Colony Road
Quincy, MA 02169
617-472-7526

MICHIGAN

Rowley Bros. Inc.
3596 Wilder Road
Bay City, MI 48706
517-686-1144

B & L Radio & TV
668 West Leonard Street
Grand Rapids, MI 49509
616-456-7149

Auto-Tronics
10334 Portage Rd.
Portage, MI 49081
616-323-3914

H & H Wholesale Inc.
20070 Trentwood Court
Trenton, MI 48183
313-479-2130

Hydraulic Service Co.
21251 Ryan Road
Warren, MI 48091
313-758-0100

MINNESOTA

Gene's Service
7233 Vincent Ave. South
Minneapolis, MN 55423
612-866-5771

MISSISSIPPI

B & E Equipment Co., Inc.
509B - Hwy. 82 East
P.O. Box 2344
Columbus, MS 39701
601-328-7757

Jackson Auto Equipment Service
P.O. Box 160
D'Lo, MS 39602
601-847-3221

MISSOURI

Petry's Elect. Co.
326 Capital Ave.
Jefferson City, MO 65101
314-636-7711

Dennis Two Way Radio
Rt. 9 Box 485 - Hwy. 67 S
Poplar Bluff, MO 63901
314-785-1217

Richmeyer Electronics
5912 Hampton Ave.
St. Louis, MO 63109
314-353-4500

Stoddard Equipment Co.
3536 E. Sunshine
Springfield, MO 65804
417-881-2727

MONTANA

O-M Equipment Co.
234 Moore Lane
Billings, MT 59101
406-259-8526

Sullivan & Son
1915 First Ave. Southwest
Great Falls, MT 59404
406-727-2323

S.C.H. Enterprises, Inc.
P.O. Box 1015
Laurel, MT 59044
406-698-7901

Stephens Equipment Co.
298 Catlin
Missoula, MT 59801
406-543-3708

NEBRASKA

Neuman Equipment Company
8906 "L" Street
Omaha, NE 68100
402-331-1900

Thacker Electric
2209 Cuming Street
Omaha, NE 68102
402-341-2264

NEVADA

Westech
5115 So. Industrial Rd. #703
Las Vegas, NV 89118
702-736-4351

Ted Dash Electronics
505A W. 10th St.
Reno, NV 89503
702-323-4277

NEW HAMPSHIRE

Call A & H Tool Co.
Quincy, MA

NEW JERSEY (Northern)

Herrick Electronics
P.O. Box 44
Wanaque, NJ 07465
201-839-0465

NEW JERSEY (Southern)

Call H & H Electronic Service
Philadelphia, PA

NEW MEXICO

Logic Service Corp.
6322 Linn N.E.
Albuquerque, NM 87108
505-255-5600

D & P Electronics
P.O. Box 416
Edgewood, NM 87015
505-281-5744

NEW YORK

Tri-Cities Communications, Inc.
117 Hawley Street
Binghamton, NY 13901
607-723-5301

Kenilworth Electronics
860 Niagara Falls Blvd.
Buffalo, NY 14223
716-837-6666

Seaway Communications, Inc.
770 Shore Walk
Lindenhurst, NY 11757
516-884-7171

Wizard Electric
308 E. Molloy Rd.
Mattydale, NY 13211
315-455-2381

Eastern Tech. Electronics
213 Broadway
Menands, NY 12204
518-434-1412

CSI Newburgh Elec. Svc., Inc.
1134 Union Ave.
Newburgh, NY 12550
914-564-4300

University Electronics Corporation
1180 East Main Street
Rochester, NY 14609
716-482-3630

NORTH CAROLINA

McCurry Automotive Equipment
207 West Ave. - Box 245
Ayden, NC 28513
919-746-4188

Tool Sales & Service, Inc.
200 Foster Avenue
Charlotte, NC 28203
704-525-5321

Target Tire & Automotive Corp.
2221 Lejeune Blvd.
Jacksonville, NC 28540
919-353-4300

Electronic Sales & Service
403 W. Peace Street
Raleigh, NC 27603
919-833-4191

Wilmington Hydraulics
707 Willington Avenue
Wilmington, NC 28401
919-762-1090

Johnson's Electronics
1437 Miller Street
Winston-Salem, NC 27103
919-727-1559 or 727-3962

NORTH DAKOTA

United Electronic Service & Supply
308 First Ave. North
Fargo, ND 58102
701-237-0200

OHIO

Boardman Electronics
723 Bev Rd.
Boardman, OH 44512
216-758-6191 or 772-5082

Makuh Electrolab
3315-19 Brook Park Road
Cleveland, OH 44134
216-661-4505

Fets Inc.
82 Compark Road
Dayton, Ohio 45459
513-433-0295

Trans Engineering
920 Earick Rd., R-12
Mansfield, Ohio 44903
419-529-5463

OKLAHOMA

Burdette Supply
100 N. Quapah
Oklahoma City, OK 73107
405-943-8504

Ma-Dor Equipment
2919 South 140th
Tulsa, OK 74134
918-437-4992

OREGON

W. A. Labs Electronic Equip.
420 - 2nd Avenue
Gold Hill, OR 97214
503-855-7477

Northwest Tire Shop Supply
105 N. E. 9th
Portland, OR 97214
503-233-8545

PENNSYLVANIA

Ray Electronics Company
630 Hanover Ave.
Allentown, PA 18103
215-435-3001

Bovaird Company
181 Main Street
Bradford, PA 16701
814-368-7141

Paul L. Lenig Two-Way Radio
6427 Carlisle Pike
Mechanicsburg, PA 17055
717-766-8991

H & H Electronic Service
389 Helene Place
Philadelphia, PA 19116
215-482-5005

Modern Instruments
1401 N. St. Clair Street
Pittsburgh, PA 15206
412-361-4229

RHODE ISLAND

Call A & H Tool Co.
Quincy, MA

SOUTH CAROLINA

L & S Electronics
2736 Shadow Lane
Charleston, SC 29405
803-553-5040

Barker & Associates, Inc.
P.O. Box 21663
Columbia, SC 29169
803-796-1566

Greentron, Inc.
4 Newland Avenue
Greenville, SC 29609
803-232-3880

SOUTH DAKOTA

Royal Equipment & Supply
2101 Cambell
Rapid City, SD 57702
605-342-2636

TENNESSEE

Robert J. Conley, Inc.
1446 Central Ave.
Chattanooga, TN 37408
615-756-0372

Automotive Products, Inc.
806 East Magnolia
Knoxville, TN 37917
615-525-7151

D & J Enterprises
5660 Glade View Drive
Memphis, TN 38117
901-767-1795

Harris Supply Company
Rte. 7, Box 322
Murfreesboro, TN 37130
615-893-0732

TEXAS

G. E. Jones Electric Co.
212 N. Polk
Amarillo, TX 79105
806-372-5505

Holland-White
P.O. Box 269
Ballinger, TX 76821
915-365-3528 or 653-1200

Gold Crest Electric Co., Inc.
1655 So. 23rd St.
Beaumont, TX 77707
713-842-4652

N. R. Johnston Electric
4717 Westway
Corpus Christi, TX 78408
512-882-4387

Electrical Specialists, Inc.
P.O. Box 7572
Corpus Christi, TX 78415
512-853-6391

Calk Service Company
2545 Pine Bluff
Dallas, TX 75228
214-321-3340

Border Electronic Service Inc.
1704 East Paisano Dr.
El Paso, TX 79923
915-532-2524

All Type Business Machines Co.
5301 C. Bissonett
Houston, TX 77401
713-665-2804

Valley Automotive
1717 Santa Augustine
Laredo, TX 78040
512-722-0901

Advanced Electronics, Inc.
1310 19th Street
Lubbock, TX 79401
806-763-8246

Central TV & Appliances
2114 No. 10th
McAllen, TX 78501
512-682-1495

Hydraulic Equipment Service
1256 South Grant Street
Odessa, TX 79763
915-337-4931

Paris Rubber Co.
1323 N. Main
Paris, TX 75460
214-784-4348

Dynametrics
3815 Meadowlark
San Antonio, TX 78210
512-534-3758

UTAH

Air Wave Company
338 W. First South St.
Salt Lake City, UT 84101
801-322-2429

VERMONT

North Country Electronic Services
Box 651
Williston, VT 05495
802-658-6513

VIRGINIA

Gilliken Equipment Service Corp.
2383 So. Dove Street
Alexandria, VA 22314
703-836-2940

Professional Communications Inc.
108 Washington St.
Blacksburg, VA 24060
703-552-4443

Kube Equipment Service
909 Cold Harbor Road
Mechanicsville, VA 23111
804-746-1626

WASHINGTON

B & E Equipment Co.
3201 Fourth Ave.
Seattle, WA 98124
206-624-2102

Mosey & Mosey
414 Eighth Ave. N.
Seattle, WA 98109
206-622-8830

Trusty Automotive Equip. Inc.
E. 7125 Trent Street
Spokane, WA 99206
509-928-2632

WEST VIRGINIA

Communications Service, Inc.
2614 7th Ave.
Charleston, WV 25322
304-346-0468

Communications Service, Inc.
Milford St. Ext.
Clarksburg, WV 26330
304-624-7511

WISCONSIN

Electric Construction Inc.
1585 Greenway Cross
Madison, WI 53713
608-271-2046

Midwestern Electric Co.
4104 North 34th St.
Milwaukee, WI 53216
414-871-9700

WYOMING

Casper Pump Service, Inc.
P.O. Box 9070
Casper, WY 82602
307-265-6557

IF SATISFACTORY SERVICE CANNOT BE OBTAINED FROM A SERVICE CENTER NEAR YOU,
CALL (TOLL FREE):

CHICAGO, IL	800/323-0661
HOUSTON, TX	800/231-0294
ATLANTA, GA	800/241-7463
WEST PATERSON, NJ	800/526-5181
SAN DIEGO, CA	800/854-2632