

Custom Instrument Panel Sales & Manufacturers

GMC MOTORHOME INSTRUMENT PANEL NEW/UPGRADE



OWNER'S MANUAL

16331 So. Visalia Avenue Carson, CA 90746 Mac & Shirley McNeal (310) 515-4974

INTRODUCTION

Congratulations on your purchase of a new instrument panel for your Motorhome.

The new *GMC Custom Instrument Panel* is designed to replace the old style cluster gauges and tell-tale warning lights with a more elegant, sophisticated driver command instrument and controls.

We have made every effort to include as much information as possible for you to remove and install your new instrument panel.

This manual will take you through the two main installation types, removal of the old panel and the installation of the new. It is important to read each section before beginning the installation procedures.

Some of the diagrams, removal and installation instructions were taken from the GMC Motorhome Maintenance Manual X-7525B.

We would also like to make reference to Bristol Marine and Seaward Products for their assistance in formulating what we believe is the finest instrument panel for your GMC Motorhome.

Our gauges are functional and come with a 2-Year Limited Warranty which you will find on the back page of this manual.

OWNER'S RECORD:

Model No.:/	PB2626HL	
Serial No.:3	016219460F	
Purchase Date:	JUN 2 1 1994	

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INSTALLATION

Tools

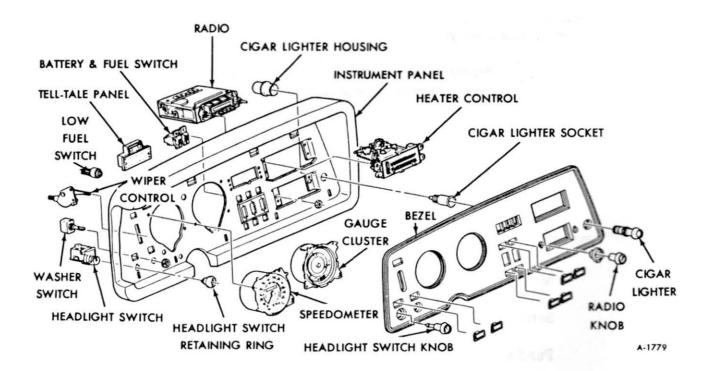
We recommend the following tools for a typical installation:

- Screwdriver straight blade and phillips
- 2. Pliers
- 3. Needle nose pliers
- 4. Wire stripper & cutter
- 5. Soldering gun & solder
- 6. Metal shears (electrical or hand shears)

- 7. Saber saw with metal blades
- 8. Metal file
- 9 Wire crimpers
- 10. Open-end wrench
- 11. Electric drill, drill bits, hole saw

Precautions:

- 1. Disconnect the negative terminal of the vehicle's battery.
- 2. Engage the parking brake



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DASH PANEL REMOVAL & REPLACEMENT

Instrument Panel Rear Cover Removal

- 1. Remove the two cover retaining screws on each side of the cover.
- Lift cover straight up and work from behind the cluster assembly.
- To install, reverse steps 1-2.

Dash Panel Removal

- Remove gear shifter from steering column by knocking out pin.
- Disengage the fiber optic ribbon from the source bulb assembly located on the lower left side of the instrument panel assembly. This can be serviced from below the dash panel.
- Remove wiper control knob.
- Remove the four (4) upper bezel edge retaining screws and remove bezel from instrument panel.

GAUGE AND SWITCH REMOVAL

Headlight Switch

- Disconnect negative battery cables.
- Pull the switch knob out to the full "ON" position, then reaching up behind the
 instrument panel, press the springloaded release button of the switch. Remove the
 switch rod and knob by pulling straight out with button depressed.
- 3. Remove the switch retaining nut by inserting a flatblade screwdriver with a wide head into the nut while holding the switch from behind the instrument panel.
- Remove the switch from the instrument panel and disconnect the multiple wire connector from the switch.
- Reverse steps 1-4 for switch installation.

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WINDSHIELD WASHER SWITCH

Switch Removal

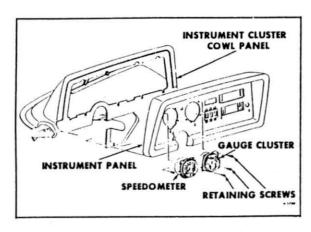
- With a flatblade screwdriver engage the switch ring with the screwdriver blade while holding the back side of the switch.
- Remove the retaining ring from the switch and bring the switch down to a more accessible position.
- Disconnect the wiring harness connector from the switch.
- Remove the switch from the panel.

Windshield Washer Control Arm

Remove the two screws and remove the control arm from dash panel.

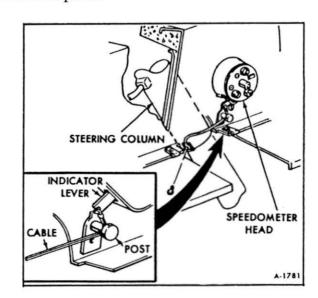
SPEEDOMETER HEAD REMOVAL

- Remove the three (3) speedometer retaining screws (see illustrations) and ground wire.
- Hold the speedometer cable spring retaining clip down and pull cable away from speedometer head.
- Disconnect four (4) wire pin connector from the back of the speedometer head.
- 4. Pull the speedometer head out and disconnect the transmission gear indicator cable.
- 5. Remove the speedometer head from the instrument panel.



Speedometer and Gauge Cluster

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GAUGE CLUSTER REMOVAL

(Fuel, Oil & Water)

- 1. Remove the three (3) gauge retaining screws and pull gauge out as far as possible.
- 2. Disconnect the seven (7) wire pin connector from the gauge and remove gauge.

BATTERY SELECTOR SWITCH REMOVAL

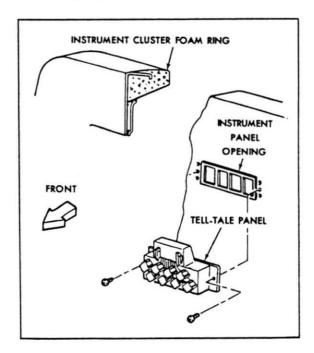
- 1. Remove the two (2) switch retaining screws.
- 2. Pull switch out as far as possible and disconnect the connector from the switch.

FUEL SELECTOR SWITCH REMOVAL

- Remove the two (2) switch retaining screws.
- 2. Pull switch out as far as possible and disconnect the connector from the switch.

TELL-TALE LIGHT PANEL REMOVAL

- Remove the two (2) panel retaining screws and remove the panel.
- Disconnect the tell-tale light panel electrical connector.



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AIR CONDITIONING CONTROL ASSEMBLY

- 1. Remove four (4) screws holding control assembly to instrument panel.
- Disconnect the bowden cable, vacuum harness and electrical harness at the control.
- CAUTION: Be sure not to kink the bowden cable.
- 4. OR: Try to turn assembly sideways, back to the panel opening and lay it on the dash.

RADIO

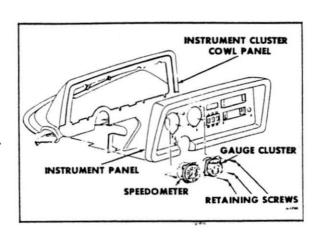
- 1. Remove two (2) mounting nuts, washers from face side of radio.
- 2. Remove radio from panel. Lay on dash.

CIGAR LIGHTER REMOVAL

- 1. Remove the element portion of the lighter from the instrument panel.
- 2. Locate the cigar lighter connector and remove the lighter housing.
- Turn the lighter housing (rear) counter-clockwise while holding the front portion, remove the lighter assembly when the (2) pieces disengage.

INSTRUMENT PANEL HOUSING REMOVAL

- 1. Remove ten (10) retaining screws:
 - A. Four (4) at the top.
 - B. Four (4) at the bottom.
 - C. Two (2) one at each end of housing.
- Remove from GMC Motorhome to work bench.



CHECK ALL OF THE STEPS BE SURE EVERYTHING HAS BEEN DONE!

INSTALLATION OF NEW PANEL

Cutting Housing

- 1. Instrument panel housing must be cut for new panel.
- Use template to mark housing.
- 3. After marking, use cutter to cut metal.
- Try new panel to see if it fits.
- 5. Make any adjustments for fitting new panel.

NEW PLUGS

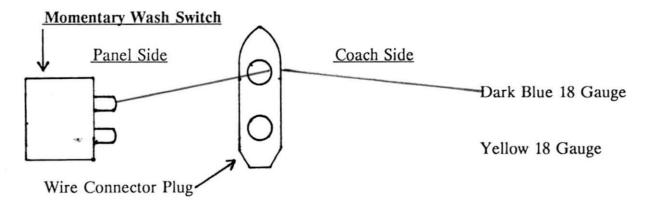
(Start from left to right)

Washer Switch

This connection takes a two (2) pin plug.

- Cut yellow and blue wires to switch.
- 2. Strip each wire about 3/8".
- 3. Crimp a male pin on each wire then solder.
- 4. Plug each wire into new plug with the corresponding color. (See illustration below)

WIRE HARNESS CONNECTORS



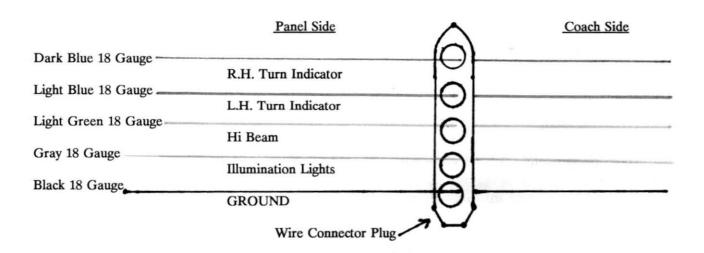
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LIGHT CONNECTOR

Directional signal and illumination wires are found on the back of the speedometer. This connection takes a five pin plug.

- Cut wires off of plug.
 - A. Dark Blue, Light Blue, Light Green, Grey and Black.
- 2. Strip each wire about 3/8".
- 3. Crimp a male pin on each wire, then solder.
- 4. Plug each wire into new plug, matching corresponding colors. (See illustration below)

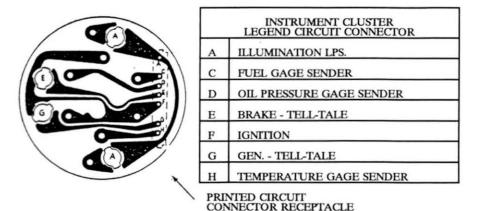
Light Connector (found on speed-o gauge)



See gauge cluster wires, remove gray wire, add a piece to it and connect it to the gray wire shown above.

GAUGE INSTRUMENT WIRE HARNESS

The connection for these wires are on the back of the Gauge Cluster. A nine (9) pin connector plug is needed. (See illustration below)



Gauge Cluster Printed Circuit

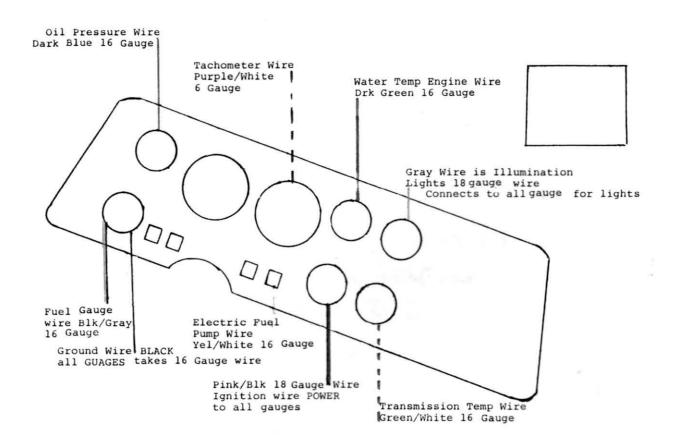
- A Illumination LPS wire gray. Move to light connector. Not used with the new plug.
- E Brake tell-tale wire tan. Move to tell-tale plug. You may need to add wire here (wire is provided). See next section.
- G Gen. tell-tale wire Dark Brown. Move to tell-tale plug. You may need to add wire (wire is provided). See next section.
- C, D, F and H will be used on new plug.
- Cut the remaining wire off plug.
- Strip each wire about 3/8".
- 3. Crimp a male pin on each wire, then solder.
- Plug each wire into the new plug, with corresponding color.
- The new plug is already wired. Be sure to put the wire in the correct hole (with corresponding color).
- 6. Black ground wire is the number 10 wire. It was screwed to the metal back-plate.
 - A. Add a piece of #14 wire to it, so you could put a male pin on it, then solder.

GAUGE INSTRUMENT WIRE HARNESS (Cont.)

- 7. Yellow/White wire goes to the electric fuel pump.
- 8. Purple/White wire goes to the Tachometer.
- 9. Green/White wire is the Transmission Temperature wire.

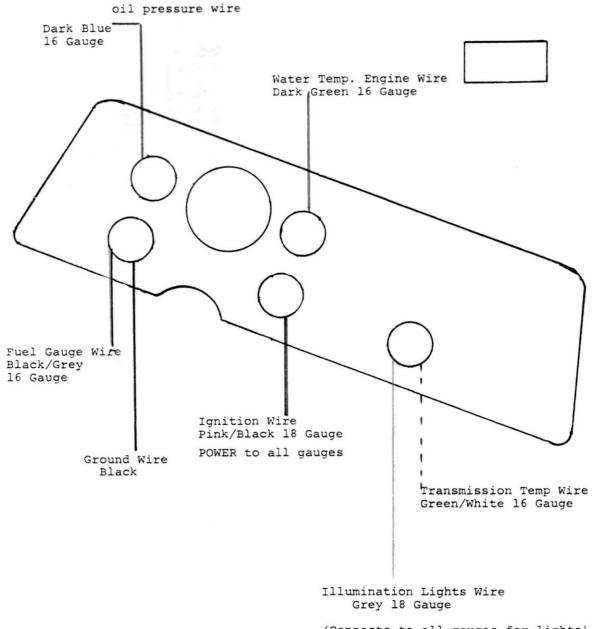
(See illustrations below and next page)

DELUXE BOARD



GAUGE WIRE HARNESS CONNECTIONS

BASIC BOARD



(Connects to all gauges for lights)

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TELL-TALE WARNING LIGHTS

These indicator lights are for illumination for various warnings. They are designed to inform you, the driver of the status of certain systems or conditions of which you should be aware of. Among these are: (See illustration below)

925 - Dark Green

900 - Dark Brown (See note below)

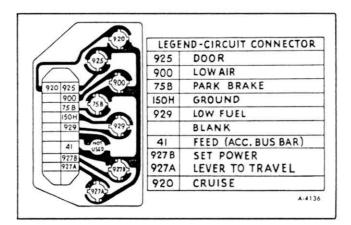
75B - Light Green

150H - Black 929 - White

41 - Dark Brown/White Stripe

927B - Yellow 927A - Yellow

920 - Dark Blue



Tell-Tale Printed Circuit

There is a light blue wire on the late 1976-1978 coaches for low water.

Brake Tell-Tale wire is Tan. (See section on Gauge Instrument Wire Harness)

Gen/Alt Tell-Tale wire is Dark Brown. (See section on Gauge Instrument Wire Harness).

NOTE: Low air or (the new word) Air compressor light is a Dark Brown 16 gauge wire on the 1973's to early 1976 coaches.

The late 1976 to early 1977 coaches or those with Electro Level I are connected the same way, to the hot side of the pump.

Electro Level II coaches have two air compressors. These coaches require two wires. One for the right side (green) and one for the left side (red). Each wire is 16 gauge and is connected to the hot side of each pump.

- 1. Cut all wires off of the tell-tale warning light housing.
- 2. Strip each wire about 3/8". Crimp male pin on each wire, then solder. Plug each wire into new plug, matching corresponding colors.
- The two brown and white wires are the feed bust wires. These two wires must be tied together on one pin.
- 4. The two yellow wires are the power level wires. These two wires must be tied together on one pin.

TELL-TALE WARNING LIGHTS (Cont.)

- 5. The light green wire is the park brake. Repeat steps 1 & 2.
- 6. The Dark Blue wire is the Cruise Control. Repeat steps 1 & 2.
- 7. The Dark Green wire is the Door Ajar light. Repeat steps 1 & 2.
- 8. The Black and White wires are the low fuel. Repeat steps 1 & 2. (See the following illustrations)

Tell-Tale Warning Lights

Wire Harness Connection

Right s	o-Level 2 Only side Dark Green 16 de Red 16 Gauge							
	Air Compressor Dark Brown 18 Gauge			Wire Connec	tor Plug	4		
	Power Level Set 2 Yellow 18 Gauge		Feed Bust Wire Power		Γ		Low Fuel	Power White
	Park Brake Light Green 18 Gauge		Brake System	0	4	•		Low Fuel Ground
	Brake System Tan 18 Gauge		Power Level	0	0	0		Door Ajar
	Generator/Alternator Dark Brown 18 Gauge		Air Compressor —	0	0	0		Cruise Control
	Cruise Control Dark Blue 18 Gauge				,			Park Brake
	Door Ajar Dark Green 18 Gauge							
	Low Fuel Black/Ground 18 Gauge White/Power 18 Gauge							

The Dark Brown/White stripe wire is the \underline{FEED} BUST WIRE that controls the power to all tell-tale lights except LOW FUEL. 18 gauge wire.

1973 To Early 1976

	A ir Comp Level Level Brake System Generator Cruise Control Ajar	Low Fuel
C D Low B Low Set C O Air P r F Power C O Air P r F F F F F F F F F F F F F F F F F	Door Cruise Low Power Air Park Brake Ajar Control Fuel Level Comp Brake System Level Comp Brake System WIRE HARNESS COLORS DOOR AJAR DARK BLUE 18 GAUGE BLOOM TO B GAUGE DARK BRAKE 1977-1976 DARK BROWN 18 GAUGE DARK BRAKE TAM 18 GAUGE CHOW ON INST. Cluster) CHOUND ON INST. CLUSTER) CHOUND ON INST. CLUSTER)	(found on inst. Cluster) The Dark Brown/White stripe wire is the feed bust wire that controls the power to all tell-tale lights except Low Fuel. 18 gauge wire.

Brake System

Park Brake

Power

Air Comp

1992-Hodel

Set Level To Travel Auto

Late 1976 To 1978

Cruise

Fee

Door

Gen

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Reference: GMC Motorhome Maintenance Manual X-75258

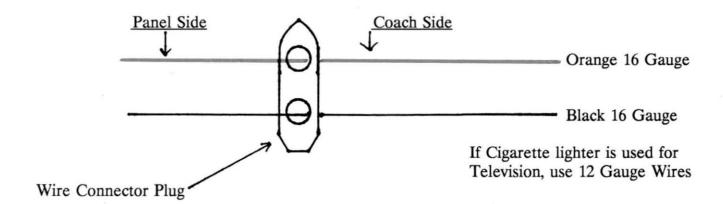
CIGARETTE LIGHTER

This connection takes a two pin plug.

- 1. Cut orange and black wires to the old plug.
- 2. Strip each wire about 3/8".
- 3. Crimp male pin on each wire, then solder.
- 4. Plug each wire into new plug, matching corresponding color.

(See illustration below)

Cigarette Lighter Plug Wires



BATTERY BOOST SWITCH

(Momentary Switch)

- 1. This connection takes either a four (4) pin or five (5) pin plug.
- Connecting this plug incorrectly can cause your batteries to drain.
- 3. Cut the wires one at a time off of the old connection.
- Strip each wire about 3/8".
- Crimp male pin on each wire, then solder.
- Plug each wire into the new plug.

NOTE: Be sure to look at the following illustrations, to identify the proper way to connect the plug for your year coach.

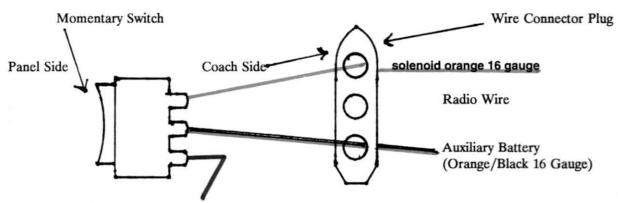
BATTERY BOOST SWITCH

1973-1974

Original GM Switch



New Dash Switch and Plug Connector

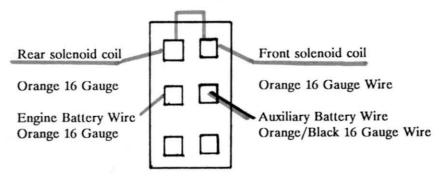


Bottom pin is for electric fuel pump switch. Solid red wire power supply, 16 Gauge.

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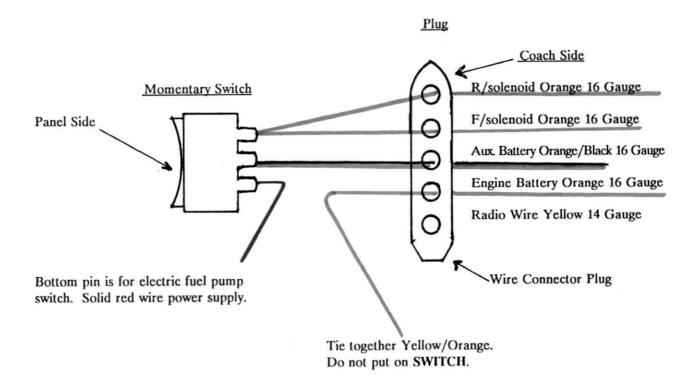
BATTERY BOOST SWITCH 1975-1976

GM Switch Original



Radio Wire Yellow 14 Gauge Wire

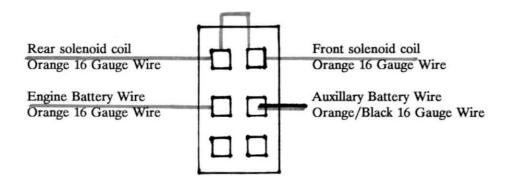
New Dash Switch and Plug



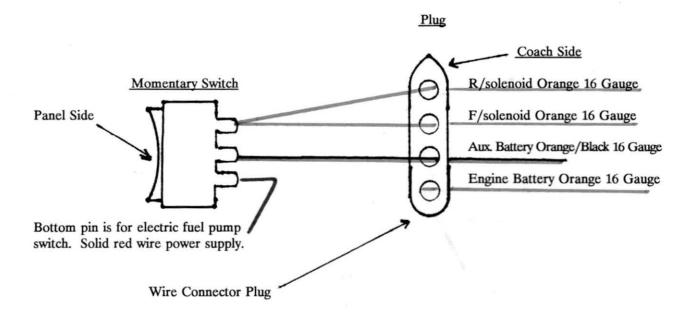
BATTERY BOOST SWITCH

1977-1978

GM Switch Original



New Dash Switch and Plug



Engine battery wire.

Do not connect to SWITCH.

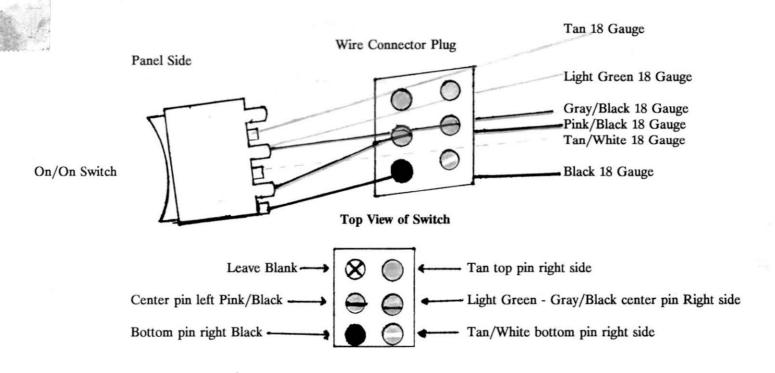
FUEL SELECTOR SWITCH

This switch allows driver to change the fuel pickup and fuel gauge sending unit from the main tank as it goes empty. This connection takes a six (6) pin plug.

- Cut all wires from the old plug.
- 2. Strip each wire about 3/8".
- 3. Crimp a male pin on each wire, then solder.
- Plug each wire into new plug with the corresponding color.

(See illustration below)

Fuel Transfer Switch



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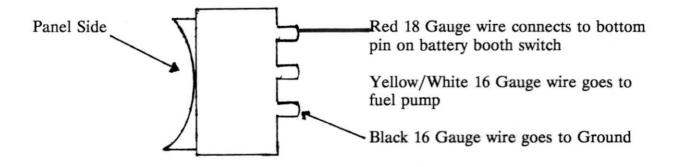
ELECTRIC FUEL PUMP SWITCH

This switch is an addition you may or may not have on your coach. You may want to use this on/off switch for some other function.

There is no wire to cut. This switch is already wired in.

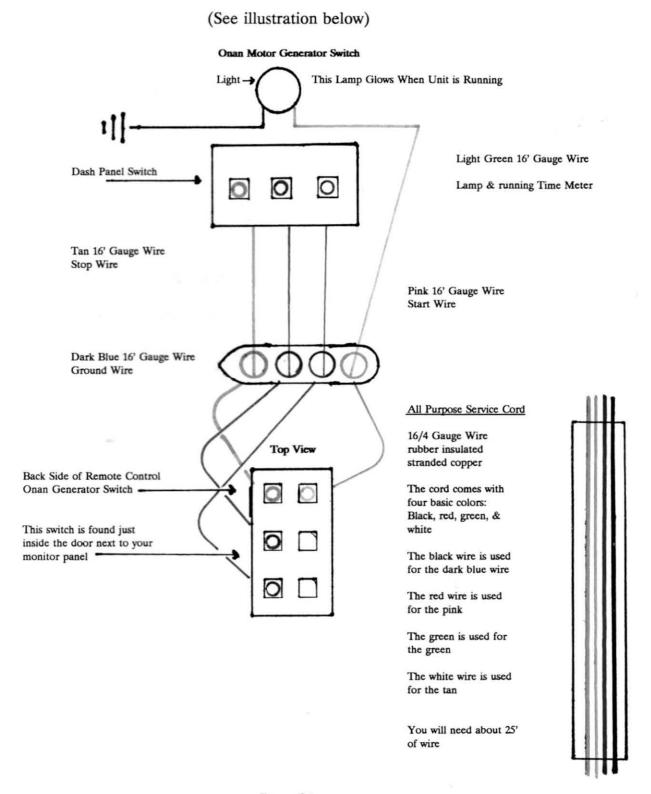
(See illustration below)

Electric Fuel Pump Switch



ONAN MOTOR GENERATOR SWITCH

This is a new switch added to the instrument panel. The switch has already been wired to the instrument panel. Your responsibility will be to run the 16/4 wire cable to your original Onan switch next to the monitor panel by the entrance door.



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SETTING THE INSTRUMENT PANEL IN THE DASH

Now that you have completed the sections on removing and installing the instrument panel, you are now ready to put the finishing touches on your installation job.

- Reinstall the instrument panel housing.
 - A. Place four (4) screws at the top of housing.
 - B. Place two (2) screws, one at each end of the housing.
 - C. Do not put the four (4) screws in the bottom of the housing yet.
- Reinstall the radio.
- 3. Reinstall the air conditioning control assembly.
- 4. Reinstall the wiper control assembly.
- 5. Connect the multiple wire assembly to the light switch.
- 6. Now install the new panel, placing it into the instrument panel housing.
- Plug in all the wire connector plugs. Be sure to check every plug to see if the color wires are matched.
- 8. Connect negative battery cables.
- 9. Now start the engine. Check all the gauges to be sure they are working.
- 10. Now is everything is working, finish connecting your new panel.
 - Speedometer cable.
 - B. Place light switch on back of new panel. Put retaining nut on switch and tighten nut.
 - C. Now put all eight (8) screws in panel.
 - 1. Four (4) at top
 - 2. Four (4) at bottom
 - D. Connect the transmission gear indicator cable. (See section on speedometer gear removal)

TECHNICAL SERVICE

Your new instrument panel should be performing excellent. We have made every effort to include as much information as possible for you to install your new instrument panel. However, we can not assume responsibility for any, pre-existing problems or problems arising from your installation.

All of our instrument panels are pre-tested prior to shipping, utilizing a test simulation method which includes being plugged-in to ensure proper functioning of all lighting, wiring and plugs.

Should you feel the need for assistance, you may call us at (310) 515-4974. All long distance calls will be at your own expense.



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2 YEAR LIMITED WARRANTY

We warrant to the original retail purchaser that TELEFLEX Marine products have been manufactured free from defects in materials and workmanship. This warranty is effective for two years from the date of original retail purchase, excepting that where Teleflex Marine products are used commercially or in any rental or other income producing activity, then this warranty is limited to ninety days from the date of original purchase.

We will provide replacement product without charge, for any Teleflex Marine product not meeting this warranty, which is returned (freight prepaid) within the warranty period to the dealer from whom such products were purchased, or to us at the appropriate address. In any such case Teleflex Marine products found to be defective and covered by this warranty, will be replaced or repaired at Teleflex's option, and returned to the customer.

Teleflex's sole responsibility under this warranty is limited to the repair or replacement of product which is, in Teleflex's opinion, defective. Teleflex is not responsible for charges connected with the removal of such product or re-installation of replacement or repaired parts.

We will have no obligations under this warranty for any product;

- Which has been improperly installed.
- Which has been used in an installation other than as recommended in our installation or operation instructions or specifications.
- Which has failed or has been damaged due to an accident or abnormal operation including racing, misuse or alterations outside our factory.
- Which has been repaired or modified by other than Teleflex.
- Which has been used on an engine/boat combination where the engine horsepower exceeds the boat horsepower rating established by the boat manufacturer.
- Which has been used with other products which, in Teleflex's opinion, are incompatible with the Teleflex product.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, OBLIGATIONS OR LIABILITIES ON THE PART OF TELEFLEX AND WILL BE THE CUSTOMERS EXCLUSIVE REMEDY EXCEPT FOR ANY APPLICABLE IMPLIED WARRANTIES UNDER STATE LAW WHICH ARE HEREBY LIMITED IN DURATION TO TWO YEARS FROM THE DATE OF ORIGINAL PURCHASE. IN NO EVENT WILL TELEFLEX BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY RELATING TO THE PRODUCTS. Some states do not allow limitations on an implied warranty, or the exclusion of incidental or consequential damages, so the above exclusions may not apply to you. You may also have other rights which vary from state to state.

Teleflex Marine products returned under this warranty must be tagged with the customer's name and address to ensure proper handling, and returned freight prepaid, to the selling dealer or to the appropriate address.

Cus on Instrument Panel Sales & Manufacturers

MOTORHOM

MOTORHOM

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