SUPPLEMENTARY INSTALLATION INSTRUCTION FOR GMCMH ROSTRA'S ULTRACRUISE II

Date: October 17 1999 Reference: Rostra Form #2784 (Installation & Owner's Manual)

STEP 1: Throttle Cable Set-up (Two Bead Connector & Extension Bracket w/Snap-In Adapter)

- A) Cut & bend Extension Bracket for use of Square Hole inboard of OEM square hole
 Accelerator cable mount. Attach (Rivet, weld or bolt) Ext. Bracket onto OEM Throttle Cable
 bracket next to & inboard of OEM Square hole. Similar to Fig 22 only new cable is inside position
 & OEM Accelerator cable is outboard position. Alternate: Bracket w/corner braces (90 deg)
 to carb. mounting bolts (remove excess bracket material @ square hole).
- B) Attach "Two Bead Connector" (Fig 7) w/bead chain connector & cover.

 Note: Bead chain w/OEM Throttle connector (Metal Only) may be used.
- C) Thread 1/4-20 nut onto Cable assemble approximately 2" of total thread (Fig 19 & 20)
- D) Install Snap-On Adapter onto cable & adjust for approximate length required to fit Carburetor Cruise Control Shaft. Note: Don't snap into bracket at this time.

Step II: Signal Generator Installation

- A) Disconnect Speedometer Cables (2) from OEM Cruise Control Sensor. Remove OEM Cruise Control Sensor, Vacuum actuator unit & Vacuum tubing (plug/seal vacuum tubing).
- B) Route T-mission Cable inboard with large loop of cable end toward Port side (outboard). Attach cable to Signal Generator's small black male threaded fitting (use small o-ring).
- C) Route cable to speedometer outboard with large cable loop in front of Vertical Step section. Attach to large black male threaded fitting using large o-ring (if included).

Step III: Actuator Assembly (AA) Program Switch Setting (ref. pp 7)

- A) Remove the rubber cover (rectangular) from AA & view Switches/LED.
- B) Set Programming Switches (10) as follows: (2, 7 & 9 switch is On)

Sw# 1	Off	Sw # 6	Off		
Sw# 2	On	Sw# 7	On		
Sw# 3	Off	Sw# 8	Off		
Sw# 4	Off	Sw# 9	On		
Sw# 5	Off	Sw# 10	Off	Note:	Replace Rubber Cover

Step IV: Actuator Assemble (AA) Installation

- A) Route Cruise Control's Throttle Cable beside OEM Throttle Cable & the Distributor Cap thru the Square hole (do not snap in place).
- B) Locate & mount the AA to bottom of floorboard (Port Side) near Engine Cover Opening (above

T-mission Dip Stick & aft of Air Cleaner Horn). Cut off of the mounting bracket if clearance is required, leaving a large hole at end of bracket & attach to AA with bracket aimed in the direction of the throttle cable. Attach bracket via the end large hole (or center if not cut off) to the floorboard using the existing 5/16" bolt that is thru the floorboard & metal frame (seat pedestal). Aim the throttle cable aft & slightly outboard such that a large arc is formed. Snap cable into Square Hole & attach the Two Bead Connector & cable to the carburetor's Cruise Control shaft. Install slip-on clip to secure the loop cable (cut small section of clip & spread to allow installation over the shaft end). Push on for final position. Adjust cable for slight slack w/accelerator throttle closed.

Alternate: Use original Metal connector & clip on cruise control shaft with Bead Chain & adjust.

Step IV: Wiring Installation (DO NOT USE BLUE SELF STRIPPING CONNECTORS)

- A) Route portion of AA wire harness aft:
 - 1) 2 wire connector to Signal Generator (shorten twisted blue & gray as necessary—plug in connector & tape to seal)
 - 2) blue wire to Ground w/black wire (not Distributor's Tack output connector terminal as stated in general installation book)
 - 3) Black Ground wire. Clean "Engine Opening" metal frame & attach Black Ground Wire (use battery corrosion prevention material (or other) on metal frame & attachment parts).
- NOTE: Install a section of the split tubing over the aft wires to the Signal Generator & remaining tubing over the forward wires. Tape the ends/center of the split tubing.
- B) Remove Dash Instrument cover(next to windshield) & Route remaining AA wire harness forward into the existing bulkhead hole w/rubber grommet (behind Radio & contains wires & Temperature Control Bowlin cable from Heater Control Panel). Disconnect the square 4-wire connector for ease of routing thru the bulkhead hole. Lift Bowlin cable & insert square 4-wire connector, Violet & Gray wires thru the hole. Stow the Gray wire for future use. Mate the square 4-wire connector & tape close for seal & prevent accidental disconnection.
- C) Route <u>Brown wire w/fuse holder</u> thru dashboard (under Radio) to fuse panel behind Glove Box. Insert onto/under Accessory/Heater Fuse (non fused end).
- D) Remove Lower portion of Instrument (cover for lower steering column) & Locate Brake Switch (above Brake Peddle) & note connector w/3 wires (orange, white & blue) or two wires (white & blue on late models).

Probe these wires & determine which is "hot" all the time. Trace these wires to area near 4-wire (in-line) connector.

Remove insulation on section of the "Hot" wire (Orange or Blue) & solder onto it the Red wire w/fuse holder.

Remove insulation on section of White wire & solder onto it the Violet wire. Tape over solder connections.

E) Install Control Switch onto OEM Turn Signal Lever.

Disable/disconnect (pull off) the OEM Cruise Control Disable Switch (near/top of Brake Light Switch w/ Pink & Brown wire) & then cut off the OEM Turn Signal Lever w/Tube Cutter.

Cut & stow internal wires.

Route 4-wire connector (flat/in-line) up thru bottom of Dash Board near Steering Column to area where wires were routed thru rubber grommet (below radio).

Mate 4-pin connector (in-line) & tape up to seal & prevent accidental disconnection. END !!!

CHAONES TO ROSTRA

TURN IGNITIONS CRUISE SOUTH OFF

(SURGING)

ON RESET & 2 TO OFF

(SURGING)

ON RESET & 3 TO ON

1 2 3 4 5 6 7 8 9 10