## SUPPLEMENTARY INSTALLATION INSTRUCTION FOR GMCMH ROSTRA'S ALL ELECTRIC CRUISE CONTROL

**<u>Reference</u>:** Rostra Form for 250-1223

Date: Sept, 08

STEP 1: Throttle Cable Set-up (Three 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 23 only new cable is inside position & OEM Carb. Accelerator cable is outboard position.
- B) Thread <sup>1</sup>/<sub>4</sub>-20 nut onto Cable assemble approximately 2" of total thread (Fig 20 & 21)
- C) 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 OEM Speedometer Cables (2) from OEM Cruise Control Sensor. Remove OEM Cruise Control Sensor, Vacuum actuator unit & Vacuum tubing (plug/seal vacuum tubing).
- B) Route Speedometer Cable from T-mission inboard with large loop of cable w/end toward Port side (outboard) about 2 feet from Distributor. Attach cable to Signal Generator's small black male threaded fitting (use small o-ring).
- C) Route Speedometer Cable to speedometer outboard with large cable loop in front of Vertical Step section. Attach to Signal Generator's large black male threaded fitting. Secure PG w/wire ties, against the vertical step near the port side of the engine cover opening

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

- A) Remove the rubber cover (rectangular) from AA & view Switches/LED.
- B) Set Program Switches (12) as follows: (2, 3, 4, 11 & 12 Switch is on)

Sw# 1	Off	NOTE: See Manual (pp 8) for other custom setting,
Sw# 2,3,4,11 &12	ON	desired !!!!!
Sw# 5,6,7,8,9 &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 dipstick & aft of Air Cleaner Horn). Cut off of the mounting bracket <u>if</u> 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 (<u>or</u> center if not cut off) to the Floorboard using the existing 5/16" bolt that is thru the floorboard & metal frame (seat pedestal, middle bolt fore & aft). Aim the throttle cable aft & slightly outboard & then inboard such that a large arc is formed. Snap cable into Square Hole & attach the Three Bead Connector & cable to the carburetor's Cruise Control shaft. Install slip-on clip (GM Hat Clip, item N) to secure the Three Beads Connector (cut small section of clip & spread to allow installation over the shaft end). Push on for final position. Adjust cable for slight slack w/throttle closed.

## Step V: Wiring Installation (DO NOT USE BLUE OR RED SELF STRIPPING CONNECTORS)

- A) Route a portion of AA wire harness aft:
  - 1) 2 wire connector to Signal Generator (shorten twisted blue & gray as necessary--plug connector in "ALL THE WAY" & tape to seal)
  - 2) Blue wire to Distributor's Tack output connector terminal as stated in installation book, pp 7 OR to chassis Ground w/black wire IF excessive "Drop Outs Occur".
  - **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).

**<u>NOTE</u>**: 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 below floorboard & up into the existing bulkhead hole w/rubber grommet (behind Radio & contains wires & Temperature Control Bowden cable from Heater Control Panel). Disconnect the square 4-wire connectors for ease of routing thru the bulkhead hole. Lift Bowden cable & insert square 4-wire connectors w/ wires thru the hole. <u>NOTE</u>: Stow or remove Gray wire...not used. Mate the square 4wire connectors & 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. Remove insulation on section of the <u>"Hot" wire</u> (Orange or Blue) & solder onto it the <u>Red wire w/fuse holder</u>. Remove insulation on section of <u>White wire</u> & solder onto it the <u>Violet wire</u>. Tape over solder connections.

Note: ALTERNATE WIRING FOR VIOLET WIRE: Locate the OEM Cruise Control Disable Switch (near/top of Brake Lite Switch w/Pink & Brown wires) & cut both wires from switch w/a few inches of wire remaining on switch connector. Attach the Violet wire to one of Switch lead wires (pink) & attach a short wire to the other Switch wire (Brown). Route this wire (Brown) to a good chassis ground. SEE NOTE 3.

- E) Install Control Switch onto OEM Turn Signal Lever (Loctite set screws). If Alternate violet wire method is not used, 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.
- F) See pp19 for installation instructions for the Light Green Neutral Safety (NSS) & the Orange Enable Output (ENO) wires if desired. SEE NOTE 2.

## END !!! HAPPY GMC CRUISING !!!! Rostra's Technical Assistance 800-732-4744

## NOTE:

(1) Some Alternators create Electrical Interference with the CC. Best to add a 6 AWG wire between the Alternator & the Engine cover frame to minimize the Electrical Interference as a precautionary step.

2) If you want the Dash's Tell-Tale CC Light (Green) to function, connect the Orange wire to the OEM CC's Transducer/Regulator wire of the single wire connector at the Transducer/Regulator.

3) Verify CC OEM Electrical Dump Switch adjustment as follows:

After Violet wire & Ground wire is attached to the switch, verify the switch adjustment with a DC Test Lite. Attach Test Lite wire to +12v DC & probe the Violet wire. Test Lite should glow. Press on the brake peddle & lamp should go out. Release the brake peddle & lamp should glow. Repeat to verify operation. Adjust brake lite mounting nuts as necessary to obtain proper operation.