



# SPEED CONTROL

## 4 AND 6 CYL. JEEP WRANGLER

### INSTALLATION INSTRUCTIONS

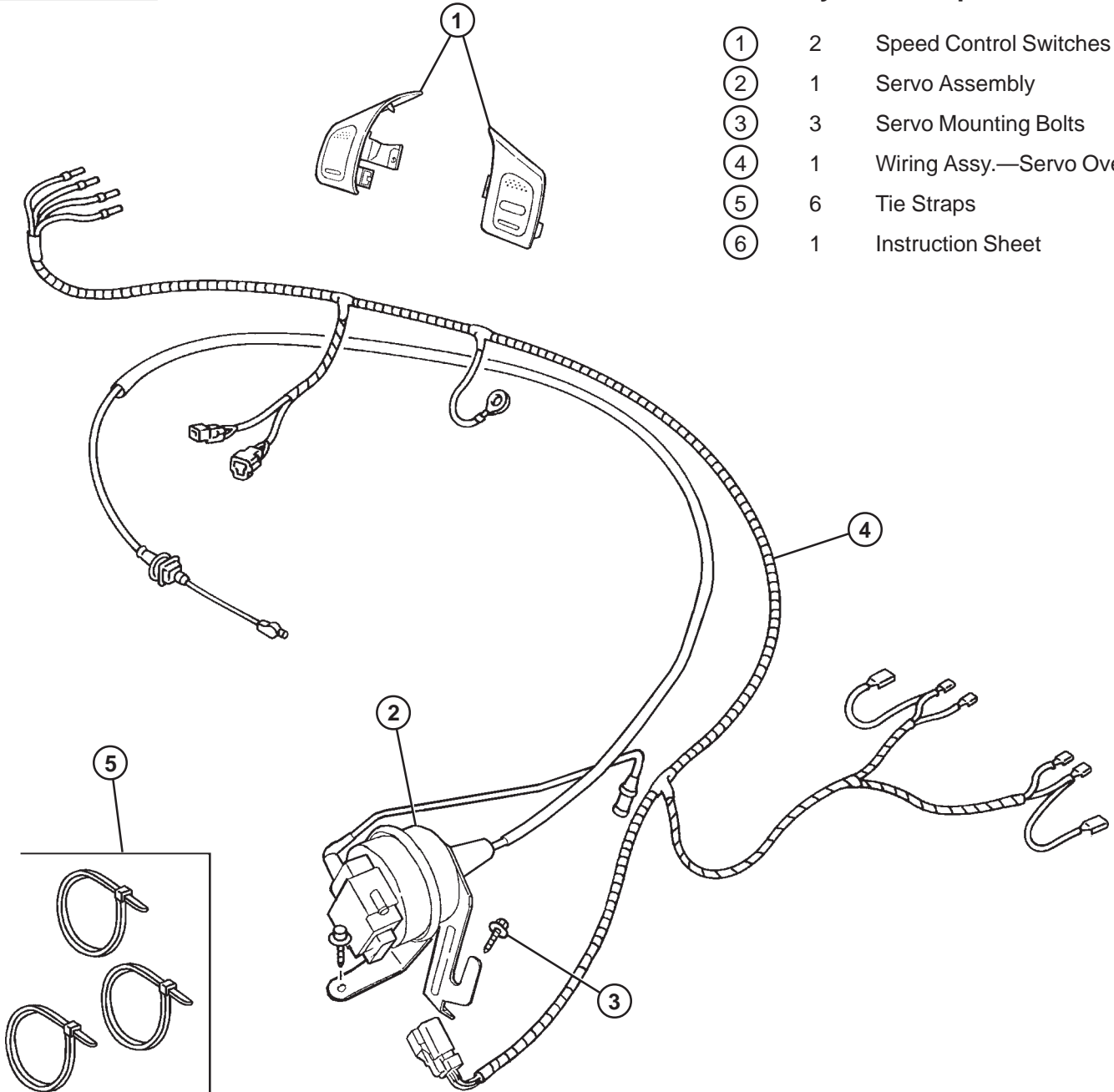
*Read entire instructions thoroughly before starting.*

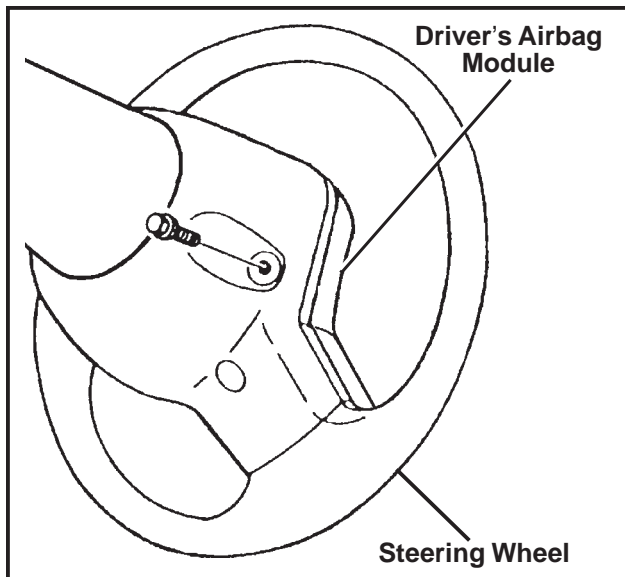
**TOOLS REQUIRED:**

- Complete socket set
- Phillips screwdriver
- Torx drivers
- Pin drill
- 3/32" drill bit
- Small flat head screwdriver
- Modeler's knife
- Long, narrow punch
- Needle nose pliers

**CONTENTS:**

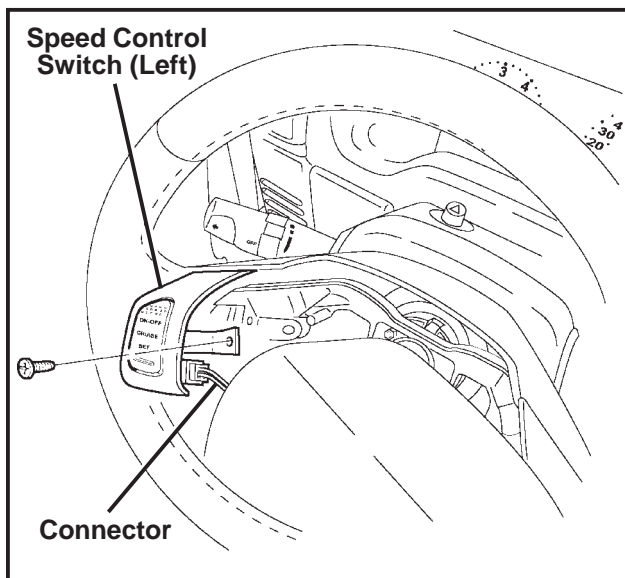
Item	Qty.	Description
①	2	Speed Control Switches
②	1	Servo Assembly
③	3	Servo Mounting Bolts
④	1	Wiring Assy.—Servo Overlay
⑤	6	Tie Straps
⑥	1	Instruction Sheet



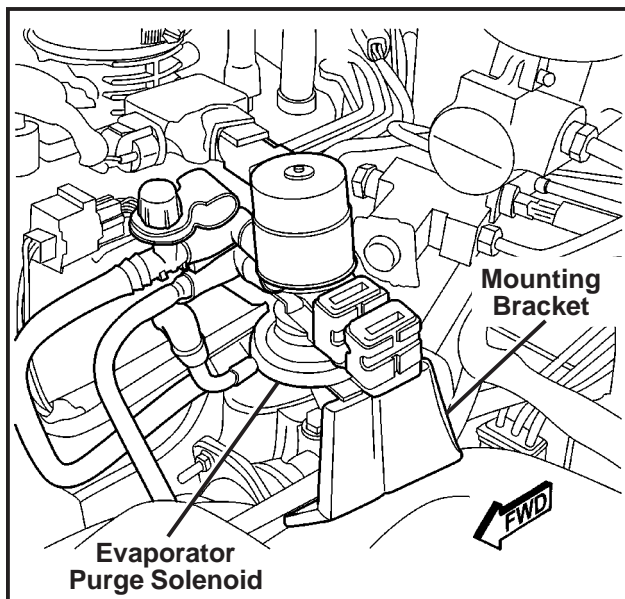


***A – Install Speed Control Switches:***

- 1) Disconnect and isolate the negative battery cable.
- 2) Using an 8mm socket wrench, remove two screws that attach the driver's airbag module to the steering wheel.
- 3) Carefully pull the module away from the steering wheel and leave it connected.

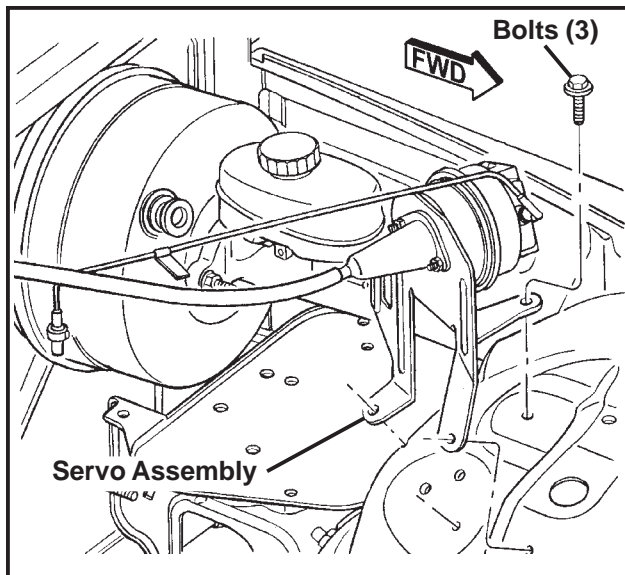


- 4) Using a phillips driver, remove two screws from the speed control blanks.
- 5) Remove the blanks but save the screws for re-use.
- 6) Connect and install speed control switches (Item 1).

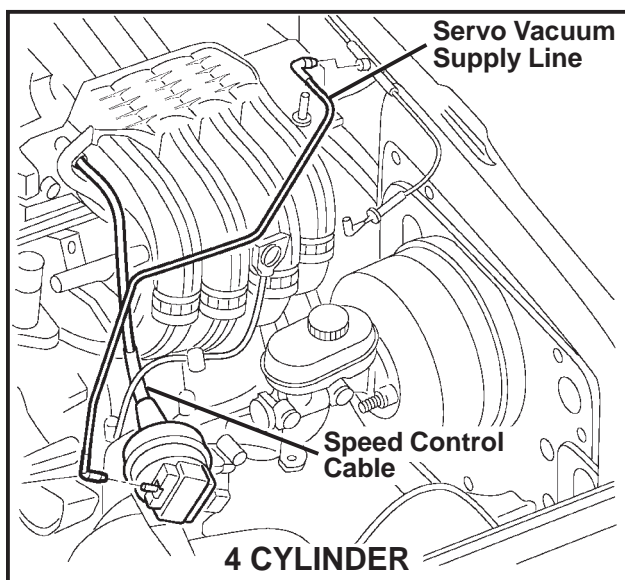


***B – Install Speed Control Servo:***

- 1) Open the hood. Locate the evaporator purge solenoid just forward of the brake master cylinder.
- 2) Slide the solenoid off of its mounting bracket.
- 3) Remove and discard the mounting bracket and fasteners.

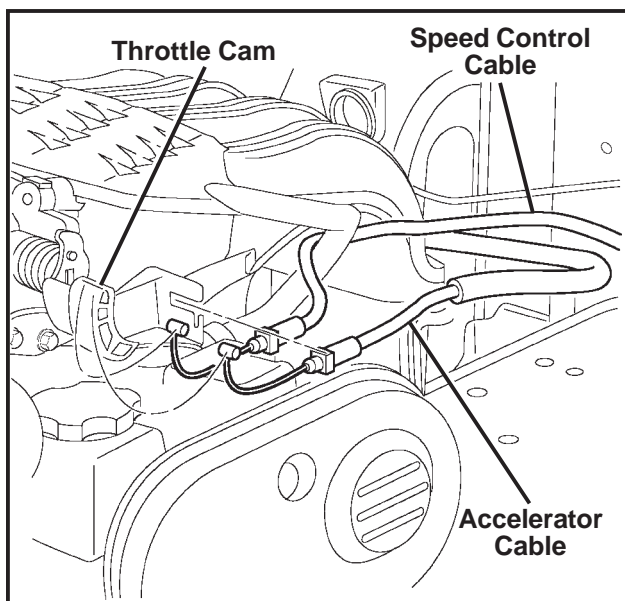


- 4) Install the servo (Item 2) with three supplied bolts (Item 3) using a 10mm socket wrench.
- 5) Slide the evaporator purge solenoid onto the servo mounting bracket tab.



***C – Install Servo Vacuum and Cable—4 Cylinder:***

- 1) Install servo vacuum supply line to the capped port on the tee fitting of the engine vacuum line.
- 2) Route speed control cable across to the engine throttle body as shown.

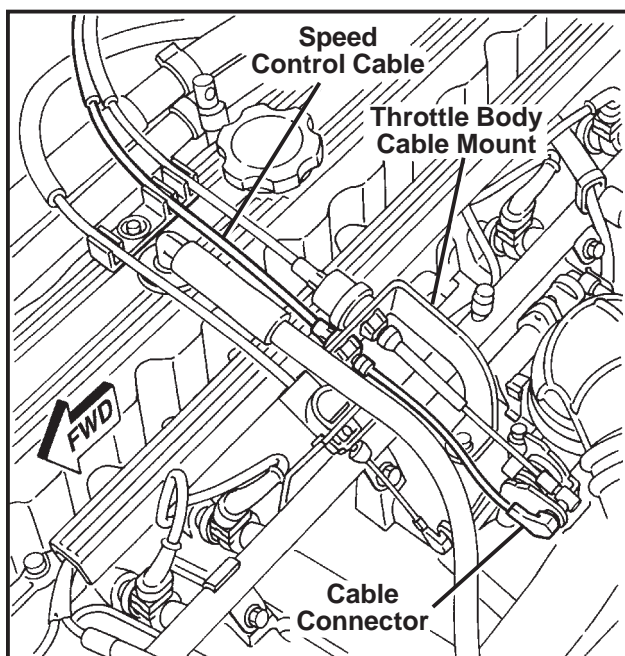
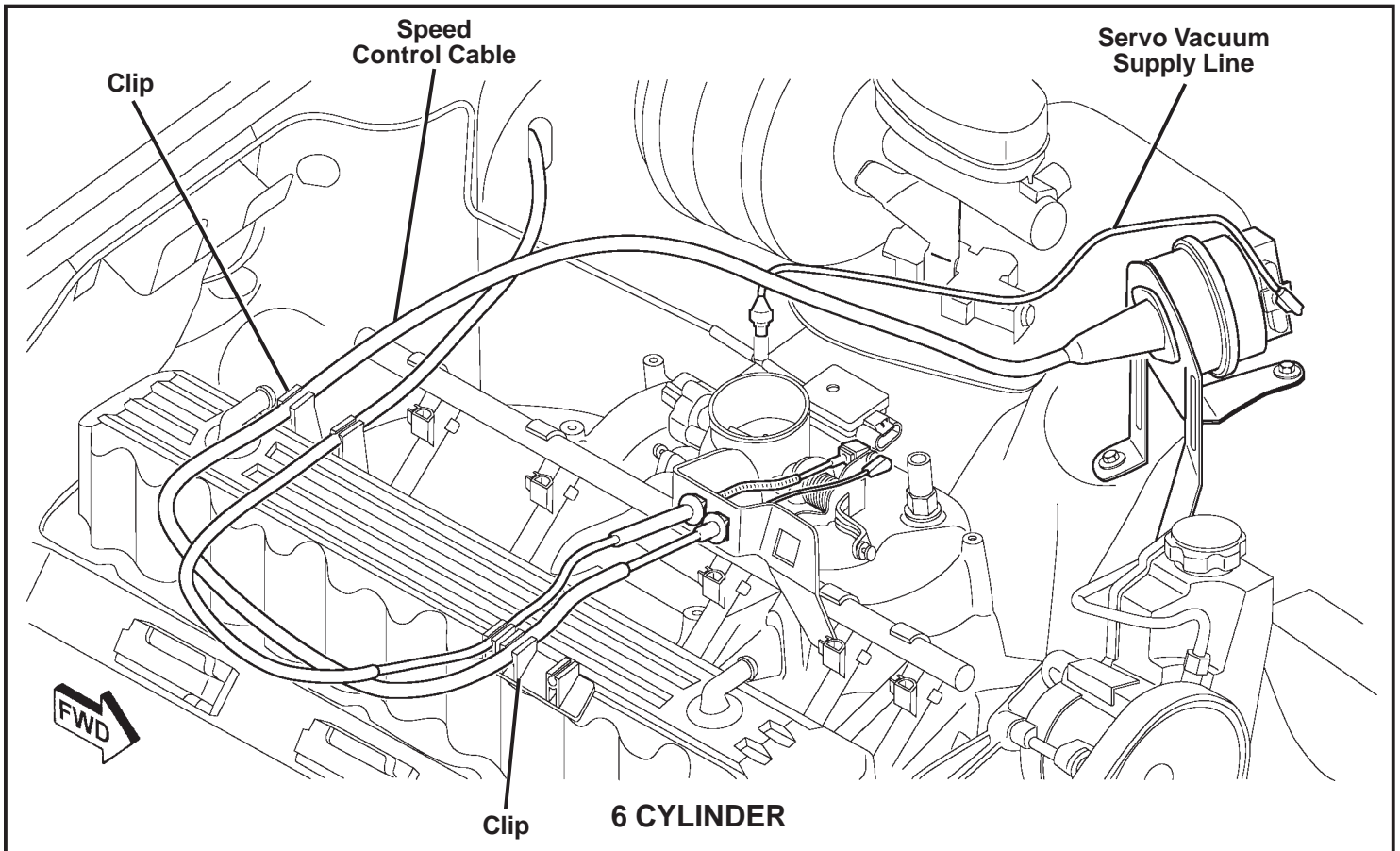


- 3) Remove accelerator cable clip from the throttle body cable mount and detach accelerator cable connector from the throttle cam.
- 4) Snap speed control cable clip and accelerator cable clip into the cable mount and throttle cam as shown.

**CAUTION!** Operate throttle cam by hand to make sure the throttle opens smoothly with no binding and that it returns to idle.

### ***D - Install Servo Vacuum and Cable—6 Cylinder:***

- 1) Install servo vacuum supply line to the capped port on the tee fitting of the engine vacuum line.
- 2) Route speed control cable across to the engine throttle body as shown. Snap the cable into two existing clips.

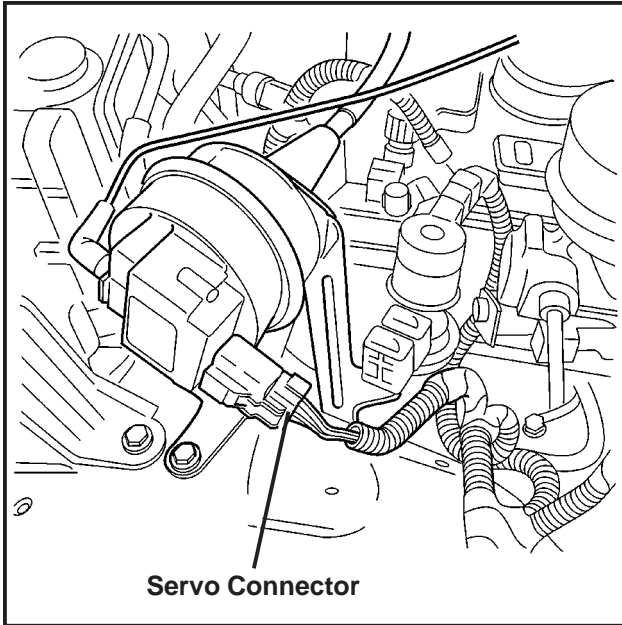


- 3) Route speed control cable through opening in the throttle body cable mount and snap the cable clip in place.
- 4) Snap speed control cable connector to the throttle cam as shown.

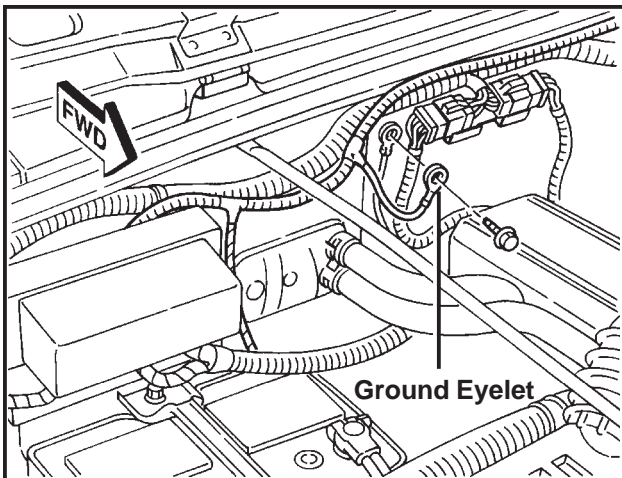
**CAUTION!** Operate throttle cam by hand to make sure the throttle opens smoothly with no binding and that it returns to idle.

**E – Install Servo Overlay Harness (Underhood if Needed):**

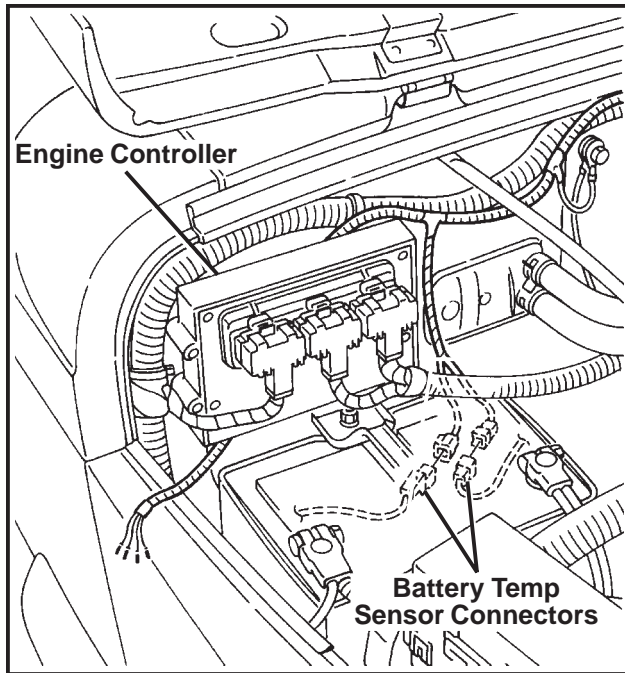
- 1) Look for possible existing servo connector taped back to the main engine harness just below the brake master cylinder.
- 2a) If connector is found, it means the vehicle has been pre-wired and your installation is complete. Plug and lock connector into the servo and proceed to Section G—Step 5.
- 2b) If connector is not found, the servo overlay harness (Item 4) must be installed. Proceed with Step 3.
- 3) Lay the harness across main bulkhead harness in the engine compartment.



- 4) Plug and lock 4-way connector from the servo overlay harness into the servo.
- 5) Make a 1/4" hole in the grommet located where the main harness passes thru the bulkhead.
- 6) Rig-up a pull tab and taking care not to bend the terminals, feed six terminated wires from the servo overlay harness through the hole and into driver's compartment.



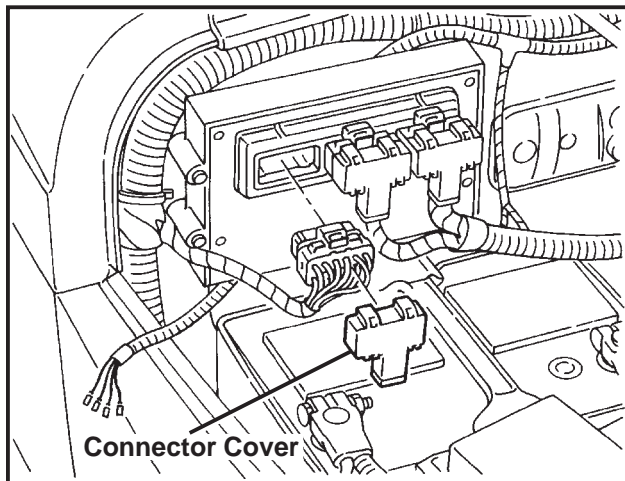
- 7) Locate upper bulkhead ground on the passenger's side of vehicle in the engine compartment.
- 8) Install ground eyelet from the servo overlay harness to this ground.



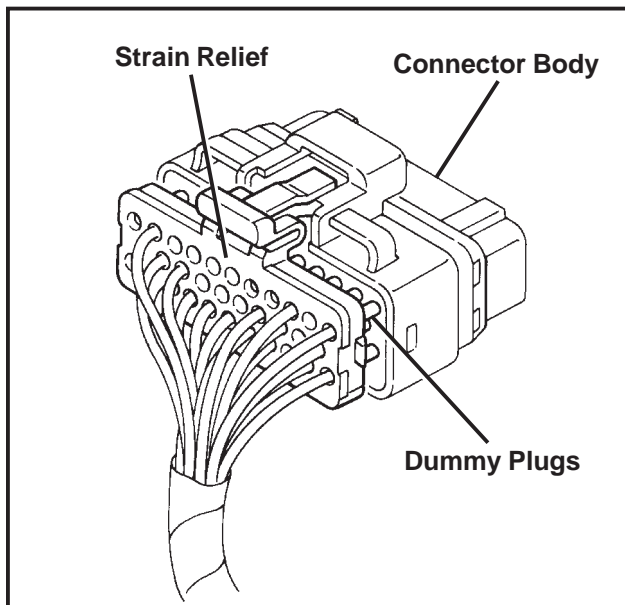
- 9) Disconnect the 2-way battery temp sensor connection located directly behind the battery tray.

**NOTE:** On vehicles with A/C, the battery will have to be removed to gain access to the battery temp sensor connectors.

- 10) Plug two 2-way connectors from the servo overlay harness in-between the battery temperature sensor connectors.



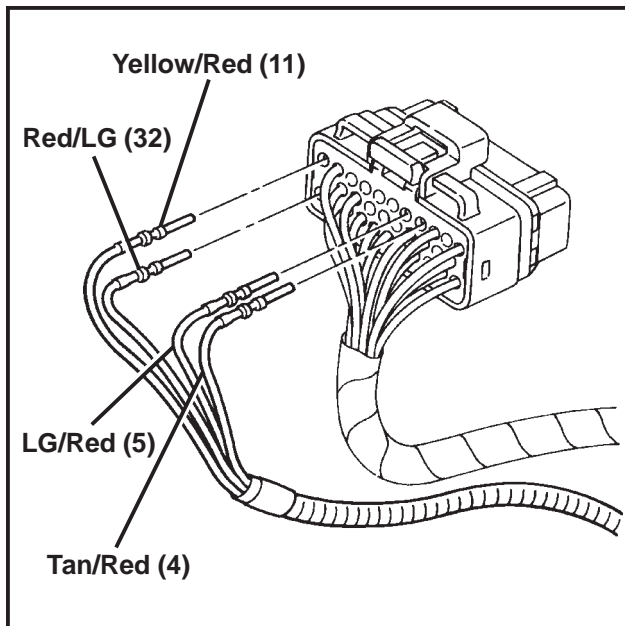
- 11) Disconnect the grey 32-way connector from engine controller and remove the cover from connector.



- 12) Carefully pry up the strain relief on the connector just enough to expose the dummy wire plugs on the underside. These plugs must be removed after drilling. Using spray silicone on the wires will ease this step.

**NOTE:** It is not necessary or desired to pull all of the wires out of the connector.

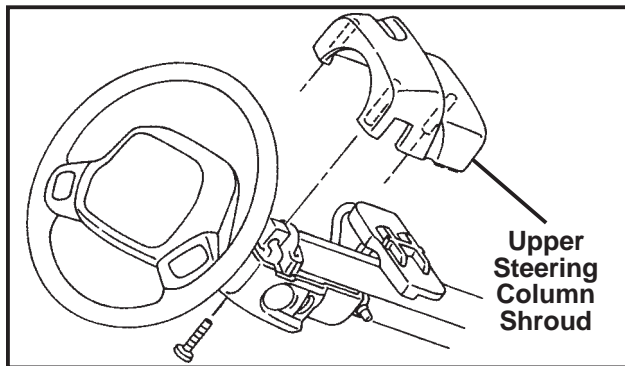
- 13) Using a 3/32" bit, drill out cavities numbered 4, 5, 11, and 32 in the 32-way connector. Drill only thru the strain relief. Press the strain relief back into place after drilling.



- 14) Using a small flat head screwdriver, push in on single lock tab to unlock connector.
- 15) Insert four terminated wires from the servo overlay harness into the grey 32-way connector. Follow the illustration at left for proper installation.

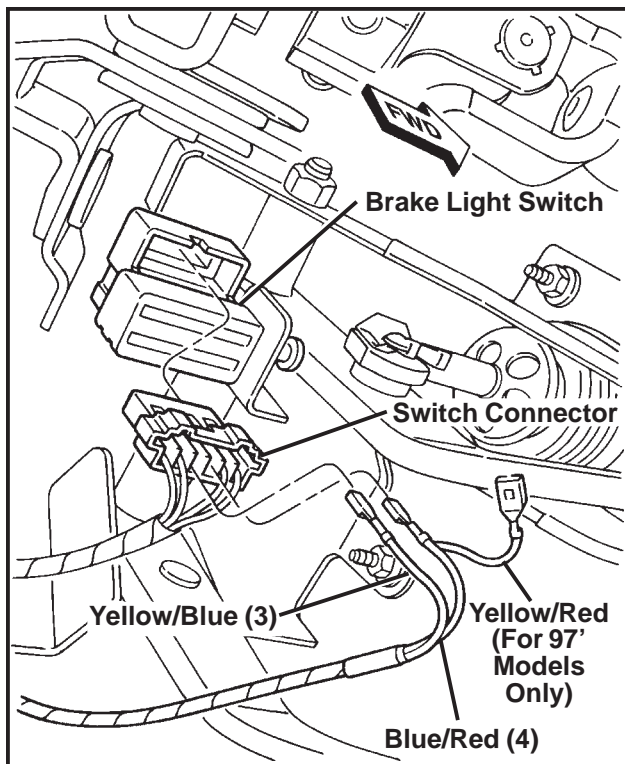
**NOTE: Be sure that terminals go in fully and lock into place. Two extra terminals are included in the parts bag if needed.**

- 16) Push in on the two blue lock tabs to lock the connector. The inserted terminals must be at the same level as the existing terminals for the connector lock to work properly.
- 17) Re-install the connector cover and plug connector back into the engine controller.



***F – Install Servo Overlay Harness (Under I/P):***

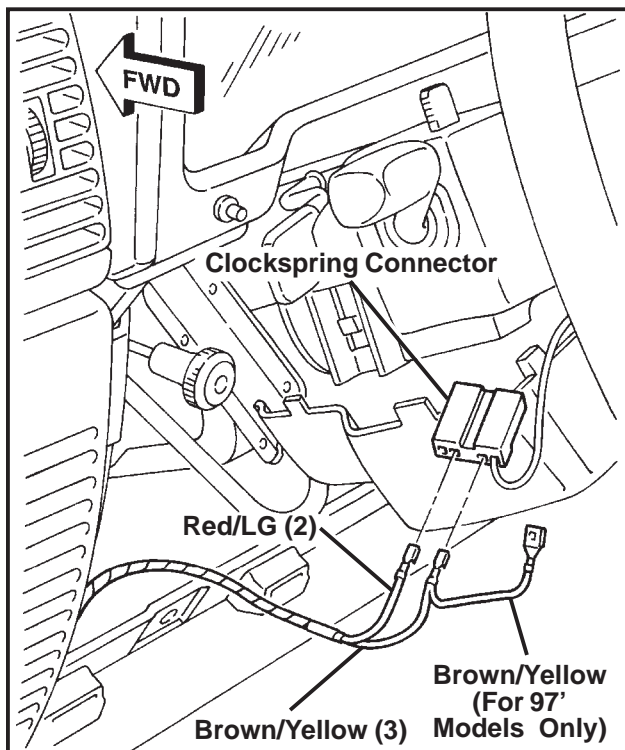
- 1) Using a phillips driver, remove three screws from the upper and lower steering columns shrouds.
- 2) Remove knee blocker trim panel.



- 3) Locate brake light switch under the dash panel, unplug its 6-way connector and remove green locking wedge.
- 4) Clip unused yellow/red blade type terminated wire from the servo overlay harness. Insert terminated wires from the harness into the switch connector. Follow the illustration at left for proper installation.

**NOTE: On some vehicles there will be existing yellow and blue wires in those cavities. They must be removed from the connector and cut from the I/P harness.**

- 5) Re-install green locking wedge and plug connector back into the brake light switch.



- 6) Route three terminated wires from the servo overlay harness up to clockspring connector. Clip unused brown/yellow blade type terminated wire from the harness.
- 7) Insert two terminated wires into the clockspring connector. Follow the illustration at left for proper installation.

**NOTE: On some vehicles there will be existing wires in those cavities. They must be removed from the connector and cut from the I/P harness.**

### ***G - Finalize the Installation:***

- 1) Using two tie straps (Item 5) secure the overlay harness to the I/P harness.

**CAUTION! Keep harness away from any sharp edges, heated or moving parts.**

- 2) Apply silicone sealant to main wire harness bulkhead grommet.
- 3) Re-install upper steering column shroud and the knee blocker.
- 4) Using four tie straps (Item 5) secure the overlay harness to the engine compartment harness at the upper bulkhead.
- 5) Re-install the driver's airbag module.
- 6) With the ignition set to the ON position, re-connect the negative battery cable.
- 7) Test drive your work!
- 8) Refer customer to the Owner's Manual for speed control operation procedures.

### **TROUBLESHOOTING NOTE:**

***Refer to the service manual, diagnostic repair manual, or the MDS system. This system is identical to the factory-installed system.***