INSTRUMENT PANEL AND SYSTEMS

TABLE OF CONTENTS

DIAGNOSIS AND TESTING

HEADLAMP LEVELING SWITCH

(1) Remove the headlamp leveling switch from the instrument panel and disconnect the wire harness connector from the switch. Refer to Wiring Diagrams for the proper wire circuits and the wire connector connections.

(2) If the L. E. D. is not illuminated, using a voltmeter, connect B+ lead to Pin 4 of the Wire harness connector. Connect the negative lead to Pin 3. Turn ON the headlamp switch to the low beam position and ensure the instrument panel dimmer switch is on day light driving position. If voltage is present, replace switch. If no voltage, connect the ground lead to a good ground, if voltage, repair Pin 3 ground circuit as necessary, and if no voltage, refer to Wiring Diagrams and test circuit back to headlamp switch.

(3) Using a voltmeter, connect B+ lead to Pin 2 of the Wire harness connector. Connect the negative lead to Pin 3. Turn ON the headlamp switch to the low beam position. If battery voltage, go to Step 5. If not OK, go to Step 4.

(4) Connect the ground lead to a good ground, if no voltage, refer to Wiring Diagrams and test circuit back to headlamp switch. If battery voltage, repair Pin 3 ground circuit as necessary.

(5) Turn headlamps OFF. Connect the wire harness connector to the headlamp leveling switch. Turn ON the headlamp switch to the low beam position. Check voltage at Pin 5, while rotating the headlamp leveling switch knob through the four positions. The voltage reading should change as the switch is rotated to each position. If the voltage does not vary replace switch. If OK, test the headlamp leveling motors and/or circuit to the motors.

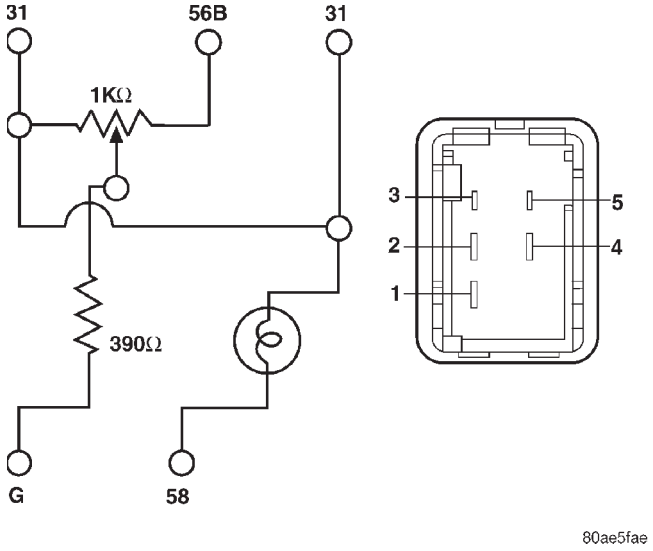

Fig. 1 Headlamp Leveling Switch Circuit Diagram

INSTRUMENT PANEL AND COMPONENTS

CAUTION: Disconnect the battery negative cable before servicing the instrument panel or components. When power is required for test purposes, connect battery cable for test only. Disconnect the battery negative cable after test and before continuing service procedures.

REMOVAL AND INSTALLATION

HEADLAMP LEVELING SWITCH

REMOVAL

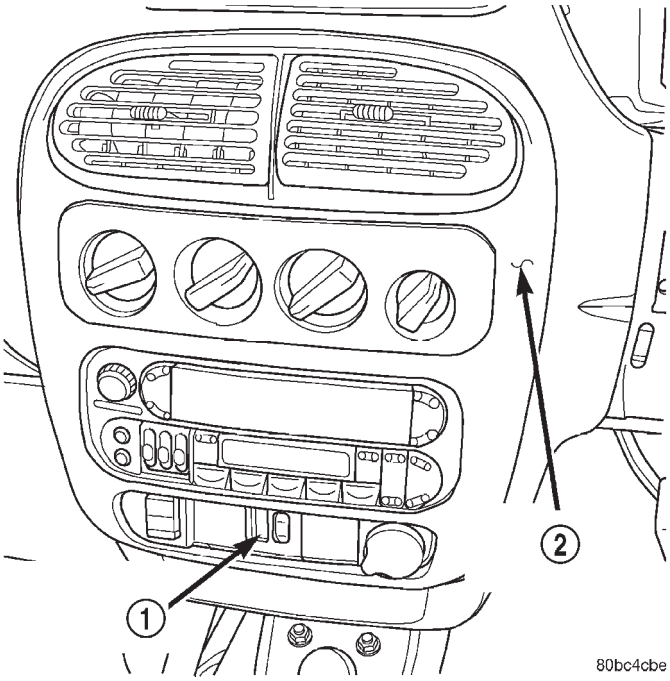

Fig. 2 Headlamp Leveling Switch Position

1 – HEAD LAMP LEVELING SWITCH
2 – CENTER INSTRUMENT BEZEL

(1) Rotate the A/C outlet registers to the full down position. Grip each outlet at its outboard end and gently over-rotate to release from its pivot point. Swing outlet straight out and remove by hand (Fig. 2).

(2) Remove the (4) HVAC control knobs by pulling straight off the switch shaft.

(3) Remove the (2) screws from the center instrument bezel (Fig. 3).

(4) Remove the center instrument bezel (Fig. 3). Pull it straight out to unsnap the (4) retaining clips.

(5) Remove the (2) screws from the accessory switch bank.

(6) Pull the accessory switch bank out and disconnect the electrical connector from the headlamp leveling switch (Fig. 4).

(7) Gently pry the headlamp leveling switch out of its mounting clips (Fig. 4).

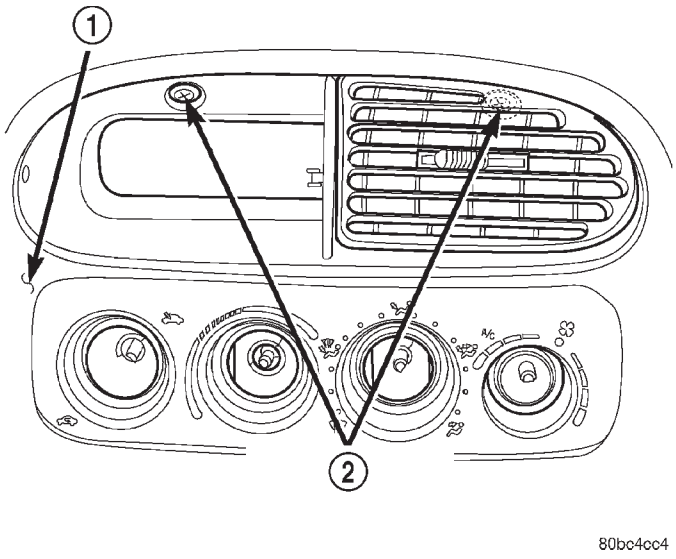

Fig. 3 Center Instrument Bezel Retaining Screws

1 – CENTER BEZEL
2 – CENTER BEZEL RETAINING SCREWS (BEHIND REGISTERS)

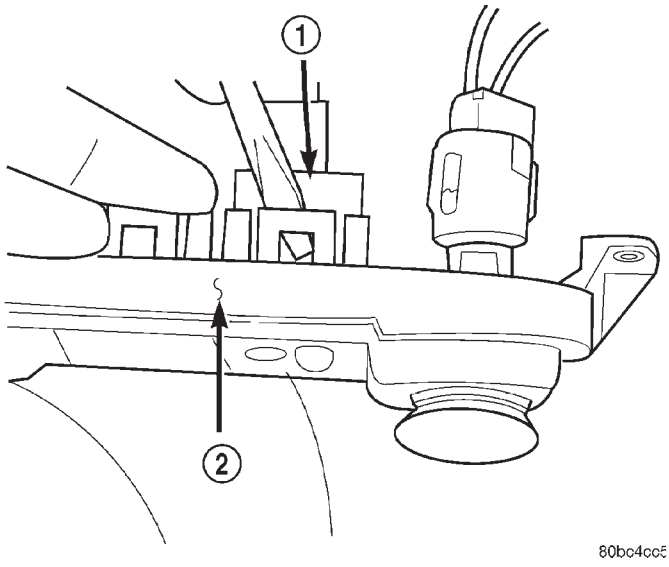

Fig. 4 Removing Headlamp Leveling Switch

1 – HEAD LAMP LEVELING SWITCH
2 – ACCESSORY SWITCH BANK

INSTALLATION

(1) Snap the headlamp leveling switch into the accessory switch bank.

(2) Install the headlamp leveling switch electrical connector.

(3) Verify switch operation.

(4) Position the accessory switch bank and install the (4) retaining screws.

REMOVAL AND INSTALLATION (Continued)

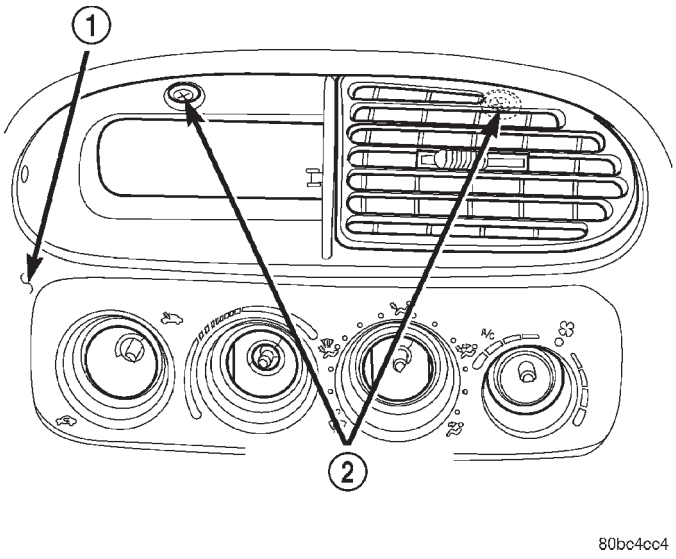

Fig. 5 Center Instrument Bezel Retaining Screws

1 – CENTER BEZEL
2 – CENTER BEZEL RETAINING SCREWS (BEHIND REGISTER)

(5) Snap the center instrument bezel in position and install the retaining screws (Fig. 5).

(6) Install the (4) HVAC control knobs.

(7) Install the A/C outlet registers on the center instrument bezel (Fig. 6).

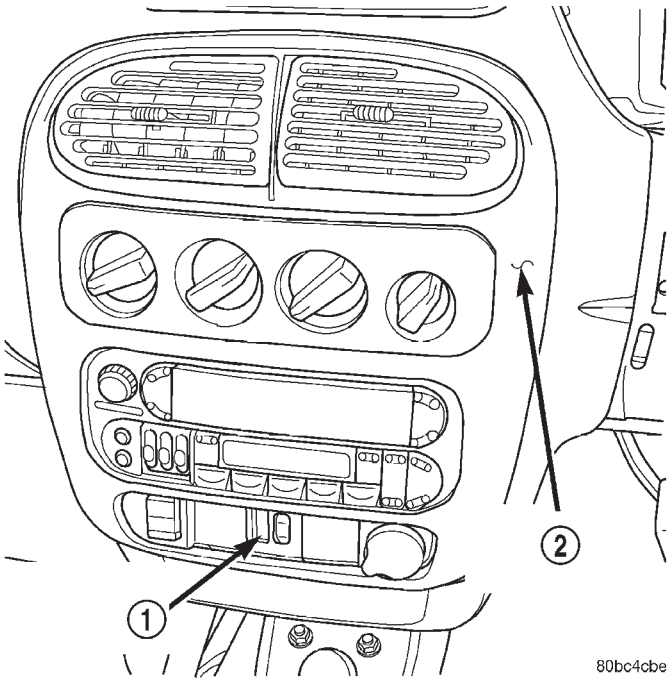

Fig. 6 Center Instrument Bezel

1 – HEAD LAMP LEVELING SWITCH
2 – CENTER INSTRUMENT BEZEL

INSTRUMENT PANEL – R. H. D.

REMOVAL

WARNING: ON VEHICLES EQUIPPED WITH AIR-BAGS, REFER TO GROUP 8M – PASSIVE RESTRAINT SYSTEMS BEFORE ATTEMPTING ANY STEERING WHEEL, STEERING COLUMN, OR INSTRUMENT PANEL COMPONENT DIAGNOSIS OR SERVICE. FAILURE TO TAKE THE PROPER PRE-CAUTIONS COULD RESULT IN ACCIDENTAL AIR-BAG DEPLOYMENT AND POSSIBLE PERSONAL INJURY.

CAUTION: LOCK THE STEERING WHEEL IN THE STRAIGHT AHEAD POSITION. THIS WILL PREVENT CLOCKSPRING DAMAGE WHEN THE STEERING COLUMN IS REMOVED FROM THE VEHICLE.

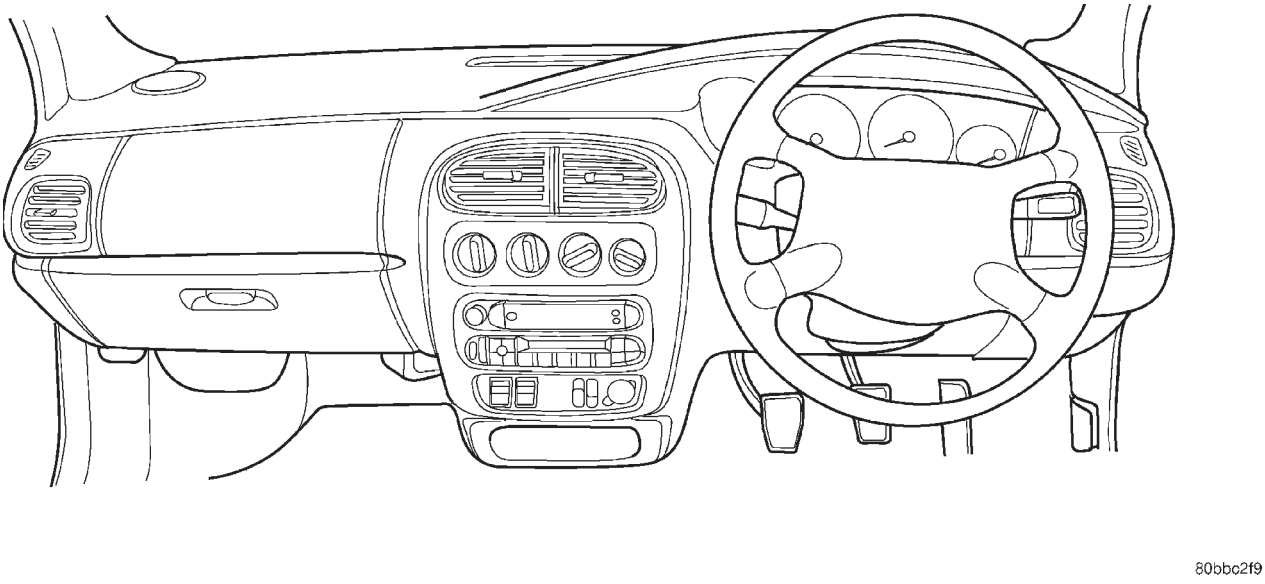

Fig. 7 Instrument Panel - R. H. D.

REMOVAL AND INSTALLATION (Continued)

(1) Disconnect the negative battery cable.
(2) Remove the floor console. Refer to Group 23, Body for the procedure.

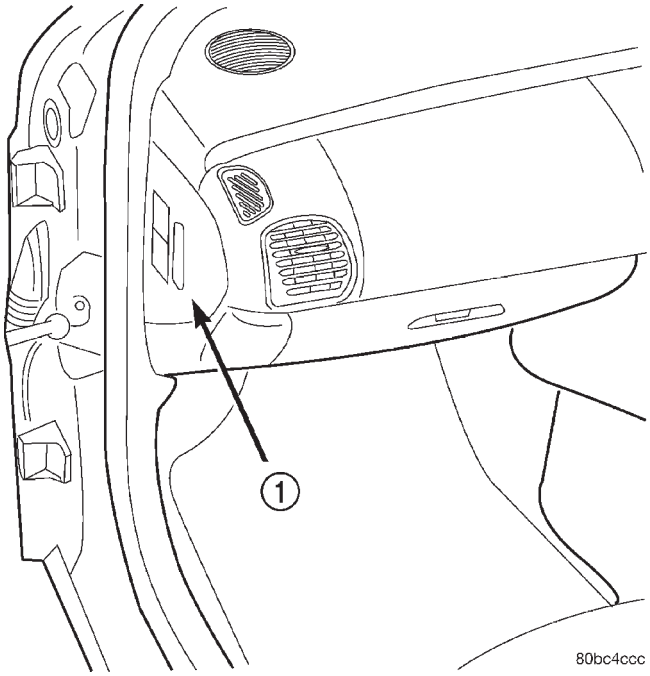

Fig. 8 Left Instrument Panel End Cap
1 – INSTRUMENT PANEL END CAP

(3) Remove the right and left side instrument panel end caps (Fig. 8). Using the finger grip feature, pull straight away from the instrument panel to disengage the (3) retaining clips.
(4) Remove the right and left side A – pillar trims.

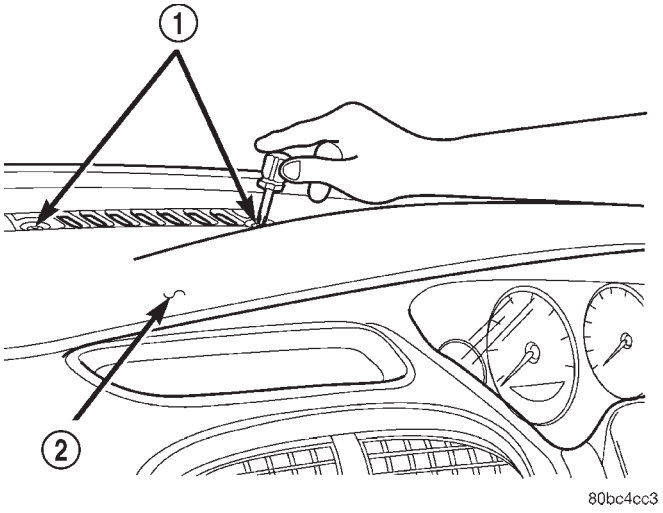

Fig. 9 I. P. Top Cover Center Retaining Screws
1 – I. P. TOP COVER RETAINING SCREWS
2 – I. P. TOP COVER

(5) Loosen the (2) screws retaining the instrument panel top cover. Located in the defroster grille (Fig. 9).

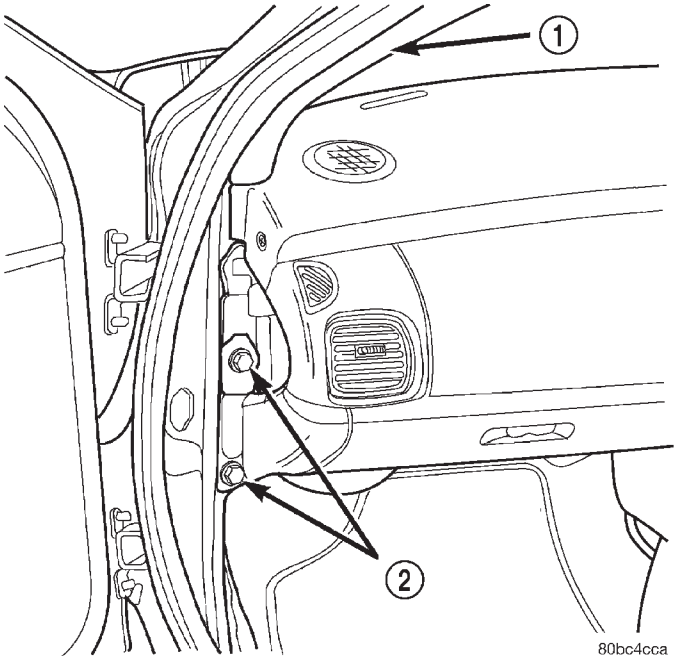

Fig. 10 I. P. Top Cover Left Side Retaining Screw
1 – A-PILLAR TRIM
2 – INSTRUMENT PANEL RETAINING BOLTS

(6) Using the heel of both hands, lift up to unclip and remove the instrument panel top cover.
(7) Unclip and remove the instrument cluster bezel.
(8) Remove the (2) screws retaining the lower steering column cover and remove the cover from the vehicle.
(9) Remove the (2) screws retaining the steering column shroud and remove the shroud from the vehicle.
(10) Disconnect the clockspring, wiper / washer, multi-function, ignition and if equipped, the two skim module connections and the shift interlock cable on automatic transaxle equipped vehicles.
(11) Remove the steering shaft coupler pinch bolt retaining pin (Fig. 11).

CAUTION: Steering wheel must be in the locked position before removing the coupler pinch bolt or clockspring damage can occur.

(12) Remove the steering shaft coupler pinch bolt (Fig. 11) and separate the shafts by pulling them straight apart.
(13) Remove the (4) steering column retaining nuts and remove the column from the vehicle.
(14) Pull back the weather-stripping and remove the right and left side lower kick panels.

REMOVAL AND INSTALLATION (Continued)

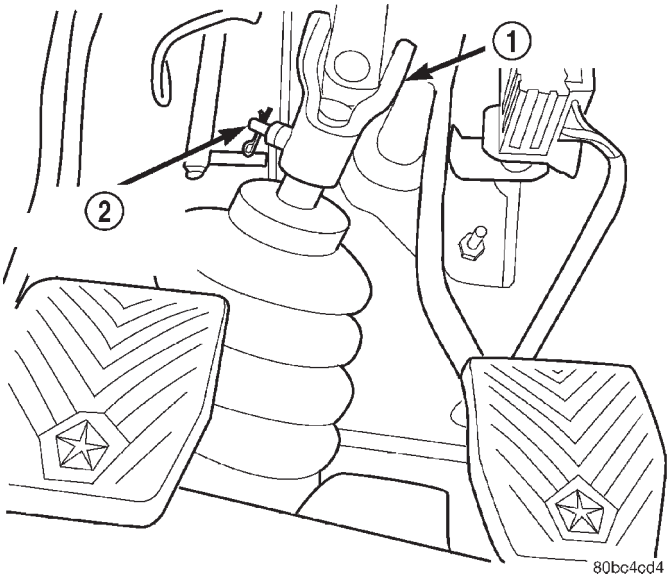

Fig. 11 Steering Shaft Coupler Pinch Bolt

1 – STEERING SHAFT COUPLER
2 – STEERING SHAFT COUPLER PINCH BOLT

(15) Rotate the A/C outlet registers to the full down position. Grip each outlet at its outboard end and gently over-rotate to release from its pivot point. Swing outlet straight out and remove by hand

(16) Remove the (4) HVAC control knobs by pulling them straight off the switch shaft by hand.

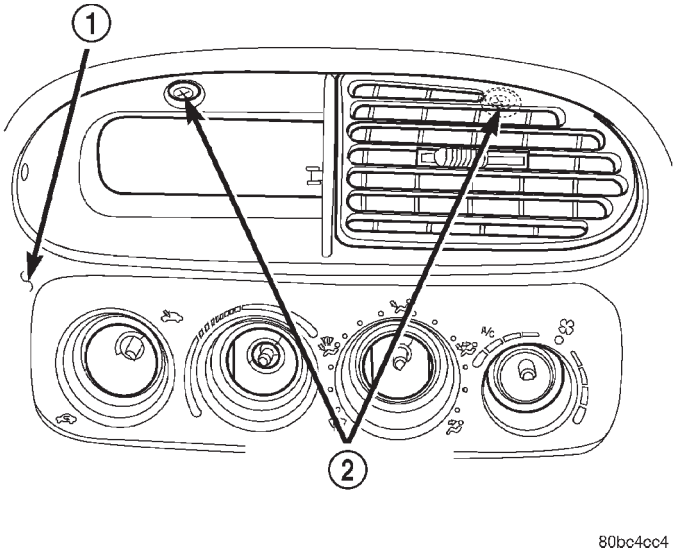

Fig. 12 Center Instrument Bezel Retaining Screws

1 – CENTER BEZEL
2 – CENTER BEZEL RETAINING SCREWS (BEHIND REGISTERS)

(17) Remove the (2) screws from the center instrument bezel (Fig. 12).

(18) Remove the center instrument bezel. Gently pull it straight out to unsnap the (4) retaining clips.

(19) Remove the (2) HVAC control head retaining screws. Pull the control away from the I. P. and rotate the control horizontally to position the assembly through the hole in the instrument panel. This will eliminate the need to disconnect the control cables.

(20) Unclip the Data Link Connector from the right side of the I. P. frame.

(21) Disconnect the instrument panel wire harness from behind the right kick panel. To disconnect the harness remove the (2) screws retaining the I. P. connector to the steering column casting. Remove the plastic clips from the connector retainer. Unclip the bottom retainer and slide the mated I. P. and headlamp connectors out of the holder. Disconnect the I. P. wire harness connector.

(22) Disconnect the (3) wire harnesses from the top of the I. P.

(23) Unclip the wire harness along the center console and disconnect the airbag control module, parking brake and PRNDL lamp if equipped.

(24) Gently pry the right front door wire harness boot away from the A-pillar to access and disconnect the right door wire harness connector.

(25) Gently pry the left front door wire harness boot away from the A-pillar to access and disconnect the left door wire harness connector.

(26) Disconnect the radio antenna. Located below the glove compartment.

(27) Remove the (4) I. P. retaining fasteners from the top of the I. P.

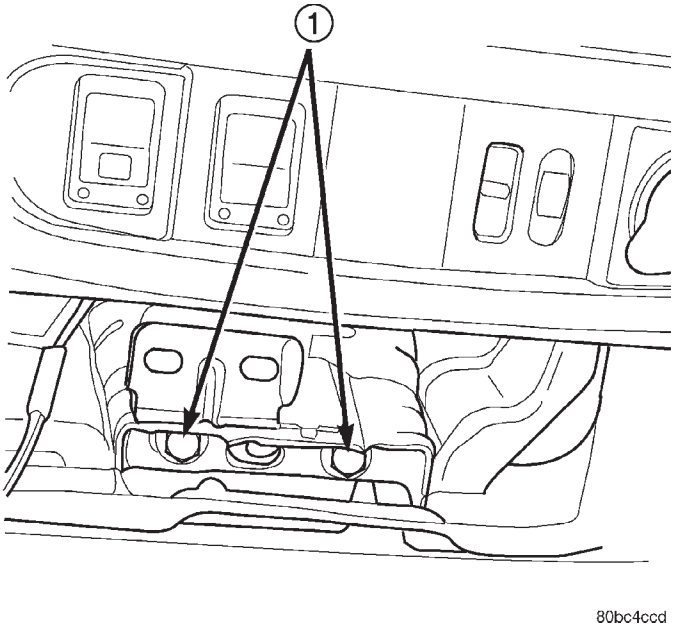

Fig. 13 Center I. P. Retaining Bolts

1 – INSTRUMENT PANEL CENTER RETAINING BOLTS

REMOVAL AND INSTALLATION (Continued)

(28) Remove the (2) I. P. retaining bolts which attach the I. P. to the body at the tunnel bracket (Fig. 13).

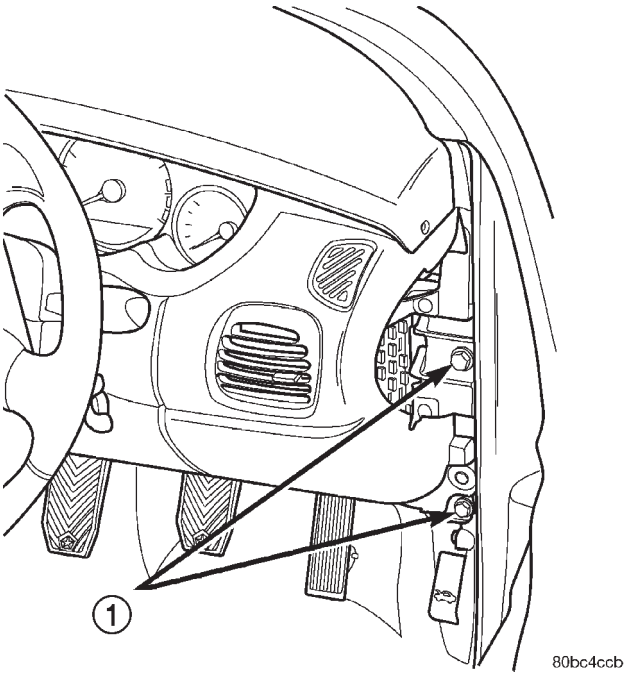

Fig. 14 Right I. P. Retaining Bolts

1 – INSTRUMENT PANEL RETAINING BOLTS

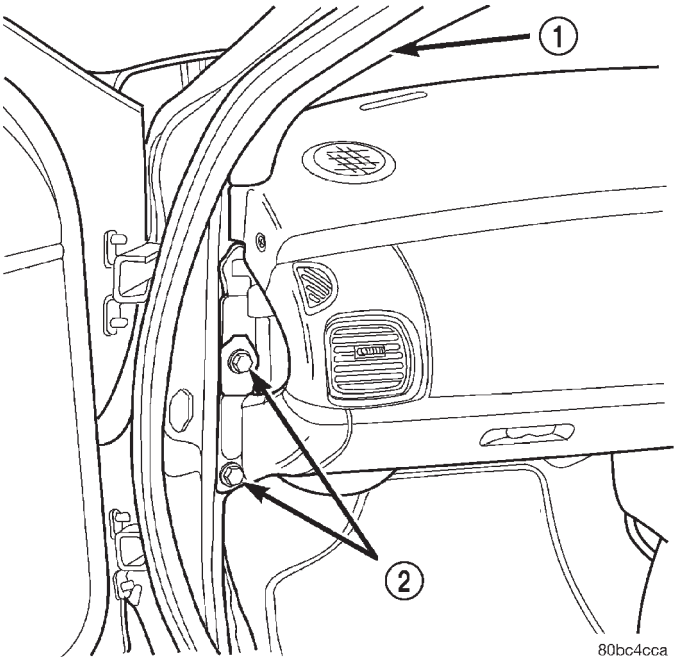

Fig. 15 Left I. P. Retaining Bolts

1 – A-PILLAR TRIM
2 – INSTRUMENT PANEL RETAINING BOLTS

(29) Remove the (4) I. P. retaining bolts from the right and left side body side cowls (Fig. 14) (Fig. 15).

(30) With assistance from another person, guide the HVAC control head through the I. P. opening while removing the instrument panel.

INSTALLATION

(1) Before installing the instrument panel, be certain the (2) I. P. wire harness connector retaining screws have been removed. The wire bundle should hang between the two connector mounting tabs on the I. P. casting (Fig. 16).

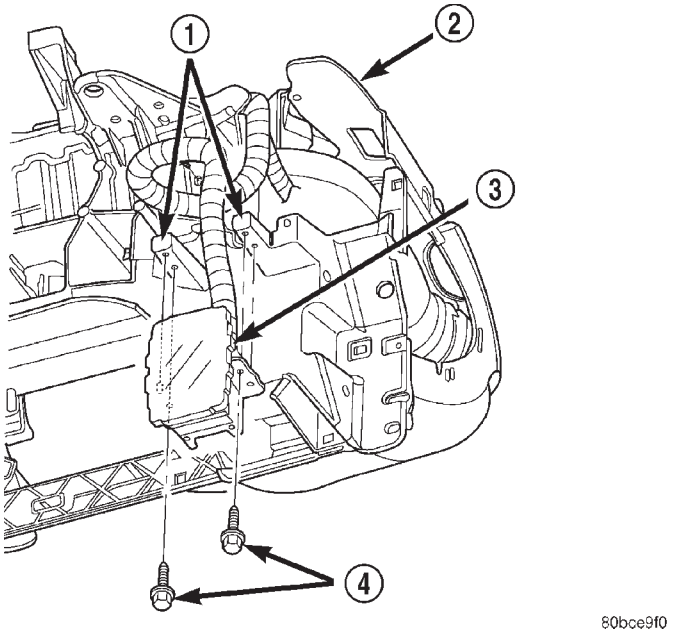

Fig. 16 I. P. Wire Harness Connector

1 – I. P. CONNECTOR MOUNTS
2 – TOP OF PANEL
3 – I/P CONNECTOR
4 – RETAINING SCREWS

(2) With assistance from another person, guide the HVAC control head through the I. P. opening while installing the instrument panel.

(3) Install the (4) I. P. retaining bolts on the right and left side body side cowls (Fig. 17) (Fig. 18). Torque the bolts to 28 N·m (250 in. lbs.).

(4) Install the (2) I. P. retaining bolts which attach the I. P. to the body at the tunnel bracket (Fig. 19). Torque the bolts to 28 N·m (250 in. lbs.).

(5) Install the I. P. retaining fasteners on top of the I. P. Torque the nuts to 12 N·m (105 in. lbs.).

(6) Connect the radio antenna.

(7) Connect the left front door wire harness and reposition the sealing boot in its original position.

(8) Connect the right front door wire harness and reposition the sealing boot in its original position.

(9) Clip the wire harness along the center console and connect the airbag control module, parking brake and the PRNDL lamp if equipped.

REMOVAL AND INSTALLATION (Continued)

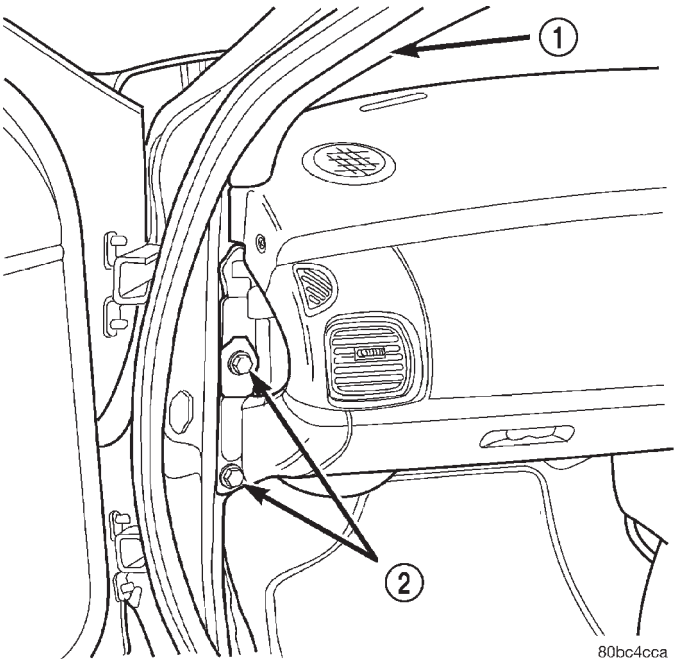

Fig. 17 Left I. P. Retaining Bolts

1 – A-PILLAR TRIM
2 – INSTRUMENT PANEL RETAINING BOLTS

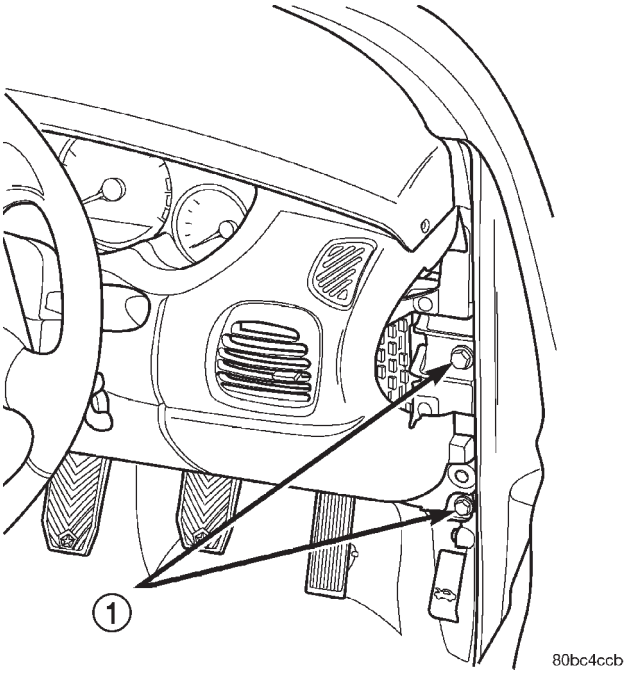

Fig. 18 Right I. P. Retaining Bolts

1 – INSTRUMENT PANEL RETAINING BOLTS

(10) Connect the (3) wire harnesses on the top of the I. P.

(11) Connect the I. P. wire harness and secure in place by attaching the connectors to the steering column casting with (2) retaining screws. Clip the harness retainer at the bottom of the holder and secure with (2) retainer clips.

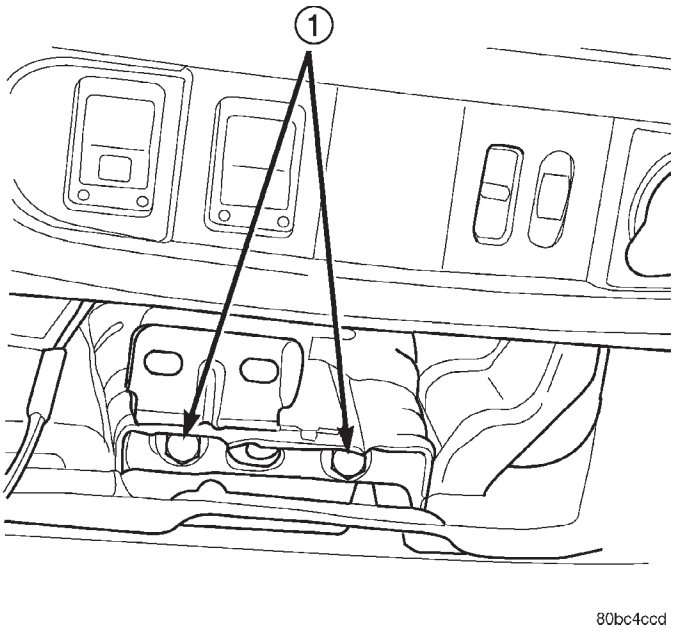

Fig. 19 Center I. P Retaining Bolts

1 – INSTRUMENT PANEL CENTER RETAINING BOLTS

(12) Clip the Data Link Connector on the right side of the I. P. frame.

(13) Install the HVAC control head retaining screws.

(14) Install the center instrument bezel.

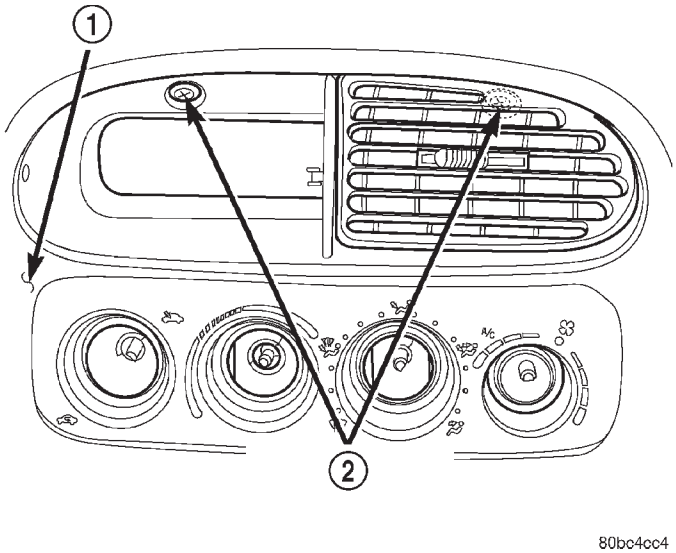

Fig. 20 Center Instrument Bezel Retaining Screws

1 – CENTER BEZEL
2 – CENTER BEZEL RETAINING SCREWS (BEHIND REGISTERS)

(15) Install the (2) screws in the center instrument bezel (Fig. 20).

(16) Install the (4) HVAC control knobs.

REMOVAL AND INSTALLATION (Continued)

(17) Install the A/C outlet registers in the center instrument bezel.

(18) Install the right and left side lower kick panels. Reposition the weather-strip in its original position.

(19) Install the steering column. Torque the retaining nuts to 17 N·m (150 in. lbs.).

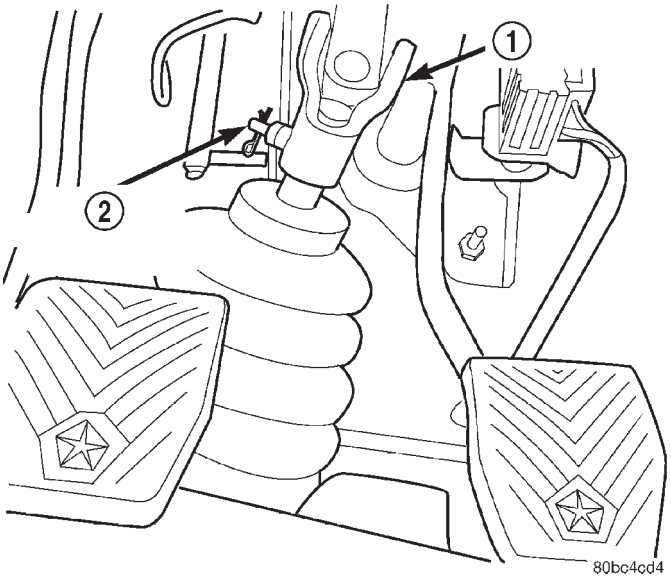

Fig. 21 Steering Shaft Coupler Pinch Bolt

1 – STEERING SHAFT COUPLER
2 – STEERING SHAFT COUPLER PINCH BOLT

(20) Install the steering shaft coupler pinch bolt (Fig. 21). Torque the bolt to 28 N·m (250 in. lbs.).

(21) Install the steering shaft coupler pinch bolt retaining pin (Fig. 21).

(22) Connect the clockspring, wiper / washer, multi-function, ignition and if equipped, the two skim module connections and the shift interlock cable on automatic transaxle equipped vehicles.

(23) Install the steering column shrouds. Torque the retaining screws to 1.4 N·m (12in. lbs.)

(24) Install the lower steering column cover.

(25) Install the instrument cluster bezel.

(26) Clip the instrument panel top cover in position.

(27) Install the (2) screws retaining the instrument panel top cover (Fig. 22) (Fig. 23).

(28) Install the right and left side A-pillar trims

(29) Install the right and left side instrument panel end caps.

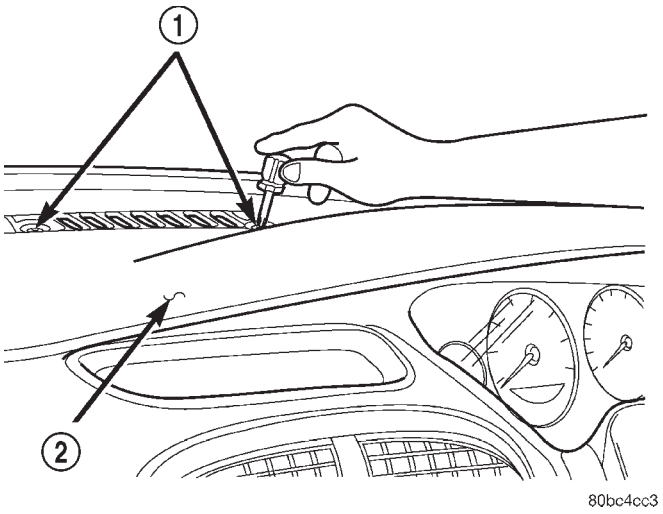

Fig. 22 I. P. Top Cover Center Retaining Screws

1 – I. P. TOP COVER RETAINING SCREWS
2 – I. P. TOP COVER

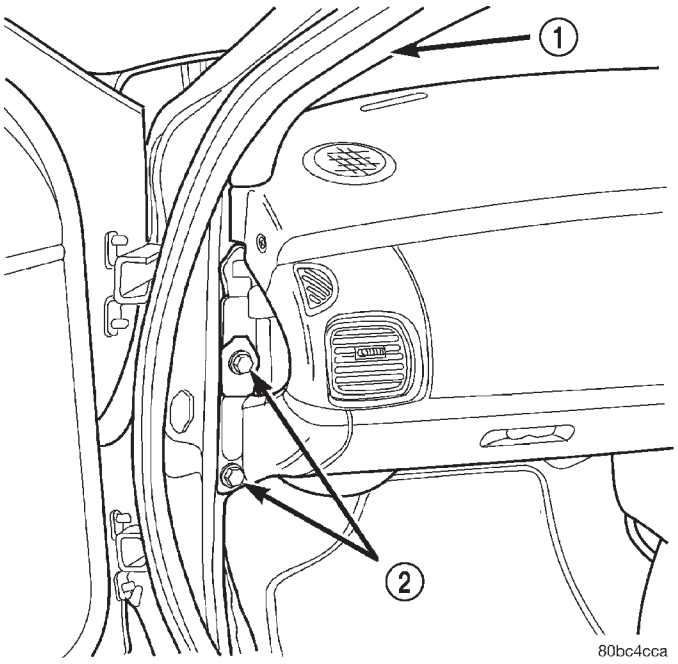

Fig. 23 I. P. Top Cover Left Side Retaining Screw

1 – A-PILLAR TRIM
2 – INSTRUMENT PANEL RETAINING BOLTS

(30) Install the floor console. Refer to Group 23, Body for the procedure.

(31) Connect the negative battery cable.

SPECIFICATIONS

TORQUE SPECIFICATIONS

DESCRIPTION	TORQUE
Instrument Panel to Body Side Cowl	
Bolts	28 N·m (250 in. lbs.)
Instrument Panel to Dash Panel	
Bolts	28 N·m (250 in. lbs.)
Instrument Panel Fasteners at Top of Instrument Panel	
Nuts	12 N·m (105 in. lbs.)
Steering Column to Bracket	
Nuts	17 N·m (150 in. lbs.)
Steering Column Pinch Bolt	
Bolt	28 N·m (250 in. lbs.)