INSTRUMENT PANEL AND GAUGE

CONTENTS

GENERAL INFORMATION

ELECTRO/MECHANICAL INSTRUMENT CLUSTER

The mechanical instrument cluster is an electro-mechanical module which receives most of its information from the Body Control Module (BCM) via the CCD bus.

The cluster (Fig. 1) includes:

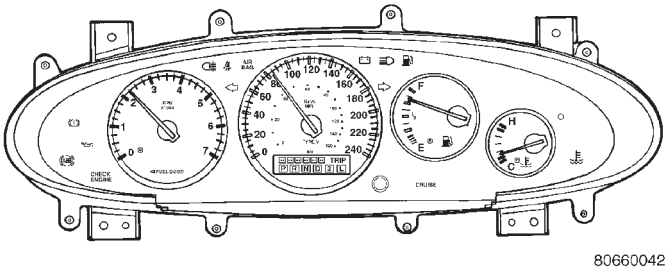

Fig. 1 Cluster

- 240 km/h (180 MPH) speedometer
- Tachometer
- Odometer/trip odometer and transmission range indicator with automatic transmission
- Fuel gauge
- Temperature gauge
- Security alarm indicator (optional)

The warning and information indicators include the following:

- Malfunction indicator lamp (Check Engine)
- Airbag
- Charging system
- Low oil pressure
- High temperature
- Low fuel
- Seat belt
- Cruise
- Brake/park brake
- Anti-lock brake system (optional)
- High beam
- Fog lamps (optional)
- Vehicle Theft Security System alarm LED indicator (optional)
- Turn signals

The gauges are the magnetic air-core type. When the ignition switch is OFF, the gauge pointers should rest at or below the low graduation.

DIAGNOSIS AND TESTING

HEADLAMP LEVELING SWITCH

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

(2) Using a voltmeter, connect B+ lead to Pin 1 of the Wire harness connector. Connect the negative lead to Pin 2. Turn ON the headlamp switch to the low beam position. If battery voltage, OK. If not OK, go to Step 3.

DIAGNOSIS AND TESTING (Continued)

(3) 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 2 ground circuit as necessary.

(4) 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 3, while rotating the headlamp leveling switch knob through it's range. The voltage reading should change as the switch is rotated. If the voltage does not vary replace switch. If OK, test the headlamp leveling motors and/or circuit to the motors.

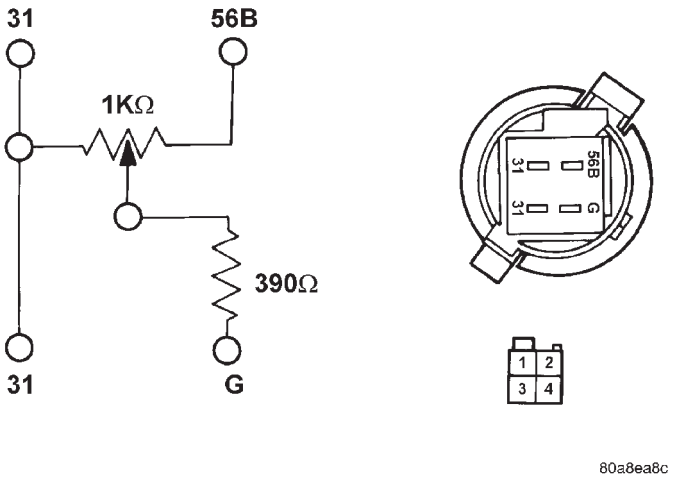

Fig. 2 Headlamp Leveling Switch Circuit Diagram

REMOVAL AND INSTALLATION

FUEL GAUGE AND TEMPERATURE GAUGE

REMOVAL

(1) Remove mask/lens retaining screws and remove mask/lens (Fig. 3).

(2) Disconnect odometer/transmission range indicator connector from the printed circuit board (Fig. 4).

(3) Remove screws attaching speedometer/tachometer to housing and remove (Fig. 5).

(4) Remove the fuel/temperature gauge attaching screws from the housing and remove (Fig. 6).

INSTALLATION

For installation, reverse the above procedures.

HEADLAMP LEVELING SWITCH

REMOVAL

(1) Disconnect and isolate the battery negative cable.

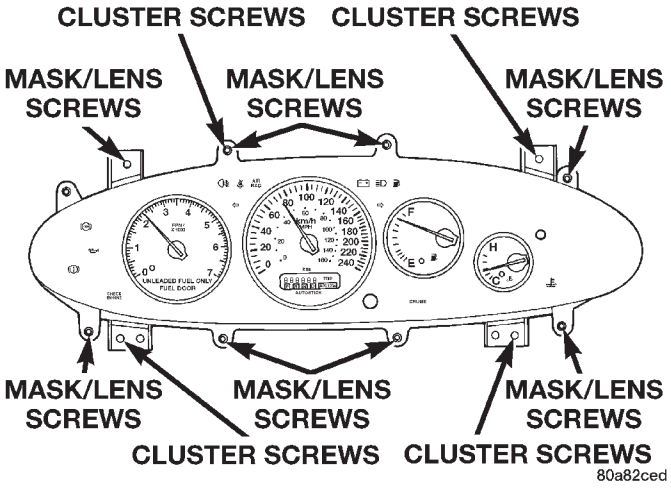

Fig. 3 Mask/Lens Retaining Screws

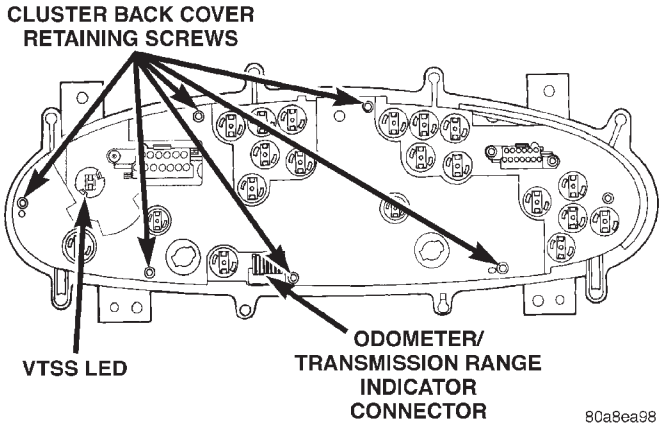

Fig. 4 Back Cover Retaining Screws

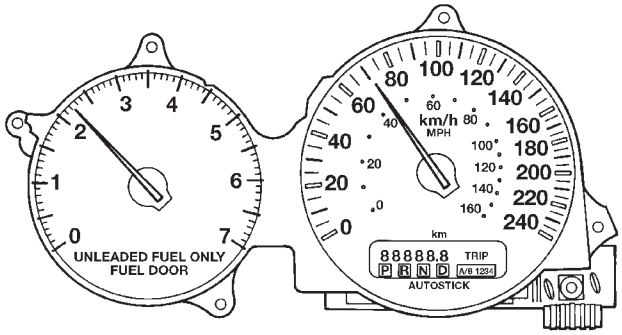

Fig. 5

(2) Using a trim stick or other suitable wide flat bladed tool, pry gently around the edges of the headlamp leveling switch (Fig. 7).

REMOVAL AND INSTALLATION (Continued)

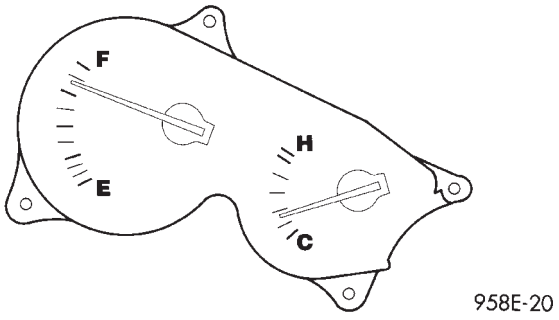

Fig. 6 Fuel Gauge and Temperature Gauge

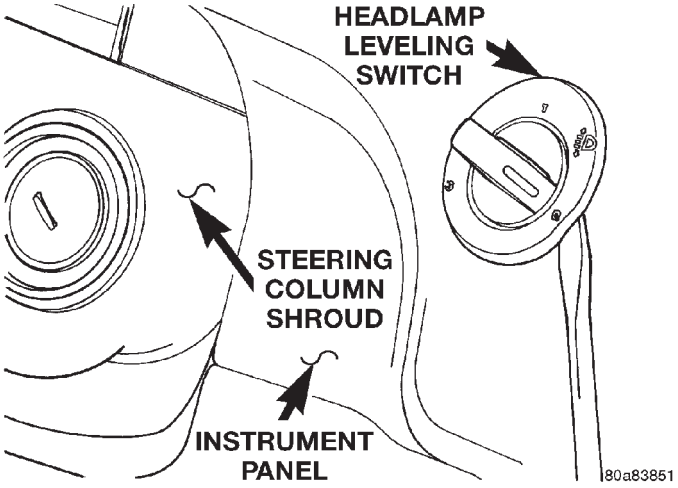

Fig. 7 Headlamp Leveling Switch

(3) Pull the headlamp leveling switch out from the instrument cluster hood far enough to disengage the wiring connector.

(4) Remove the switch from the instrument cluster hood.

INSTALLATION

Reverse the preceding operation.

SPEEDOMETER/TACHOMETER AND ODOMETER TRANSMISSION RANGE INDICATOR

REMOVAL

(1) Remove mask/lens retaining screws and remove mask/lens (Fig. 3).

(2) Disconnect odometer/transmission range indicator connector from the printed circuit board (Fig. 4).

(3) Remove screws attaching speedometer/tachometer to housing.

(4) Remove screws attaching from the back of speedometer and remove the odometer/transmission range indicator display (Fig. 8).

INSTALLATION

For installation, reverse the above procedures.

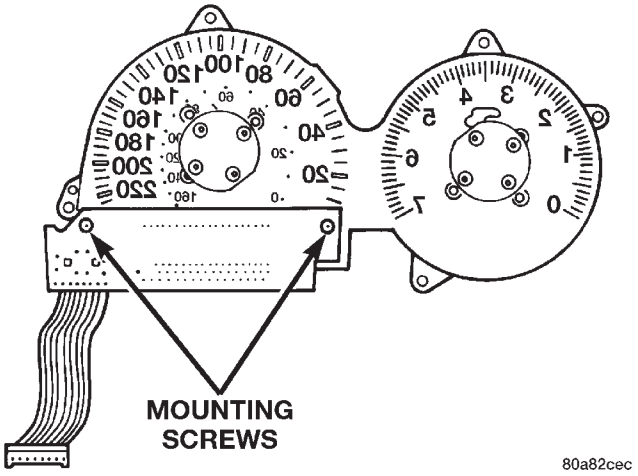

Fig. 8 Odometer/Transmission Range Indicator