DIAGNOSIS AND TESTING (Continued)

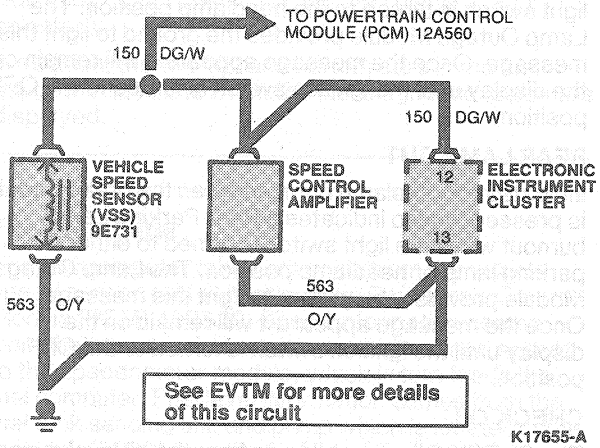
Speedometer

Description

- A vehicle speed sensor (VSS) (9E731) mounted on the transaxle sends pulses to the instrument cluster. The pulses also go to the powertrain control module and variable assist power steering (VAPS) module, if so equipped.

Quick Check

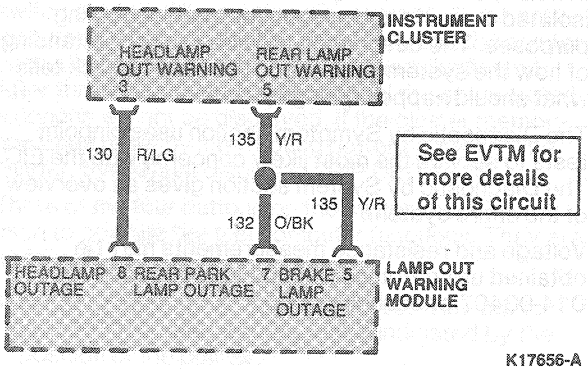
- Verify speedometer by road testing vehicle.
- If speedometer reads zero, high or erratic, then road test speed control. Speed control is performed by the powertrain control module. If speed control does not work properly, concern is not the speedometer.



Lamp Out Warning

Description

- There is a Lamp Outage Module that monitors the brakelamps, rear park lamps and low beam headlamps. If any of these lamps are burned out, the lamp outage module will ground the appropriate circuit when the lamp is turned on. This signals the message center to display a warning message.



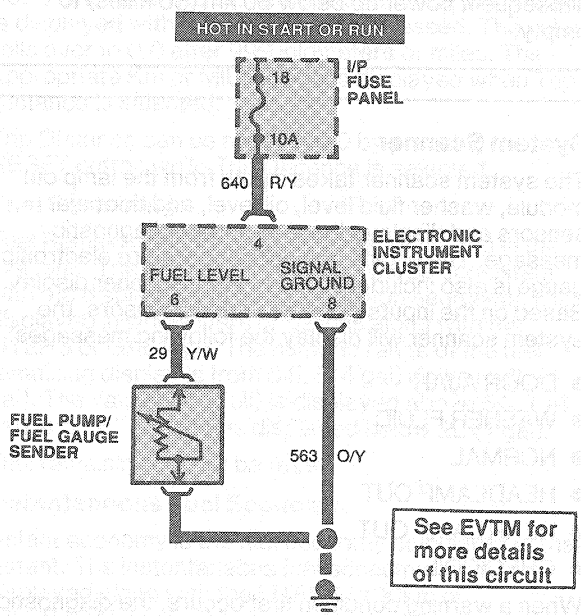
Fuel Gauge

Description

- The cluster looks for resistance values at fuel tank sending unit and pump to be in the range of 11 ohms to 168 ohms.

Quick Check

- Be certain of fuel level.
- Fuel gauge does not display rapid change in fuel level. Turn ignition switch to OFF position, wait 10 seconds, then turn ignition switch to the RUN position.
- Diagnostic bars (top two and bottom two bars lighted) indicate that fuel tank sending unit and pumpcircuit is out-of-range. Also the digital displays either CO or CS. This means:
  - CO: Circuit open or resistance higher than 178 ohms.
  - CS: Circuit short or resistance less than 7 ohms.



Dimmer Circuit

Description

- When the headlamps are turned on, dimming voltage is supplied to Connector A, Pin 13 and Connector B, Pin 6. Dimming voltage varies between 5 volts and battery voltage depending on the rheostat position. The feed to Connector A is used to dim the VF (vacuum fluorescent) displays. The feed to Connector B provides power to the PRNDL bulb only.