DESCRIPTION AND OPERATION (Continued)

Fuel Gauge (9280): The fuel gauge identifier, in addition to the fuel level graduations are illuminated when the cluster is powered. Increasing fuel level will cause the display bars to illuminate from the E (No. 1) to F (No. 12). Specific fuel tank sending unit and pump (9H307) resistances correspond to a specific number of illuminated segments. When the fuel level falls below 8.7L (2.3 gal) the ISO will begin to flash at a one Hz rate to provide a low fuel warning. Two fuel sender diagnostics are included in the Fuel Computer display. They are indicated by alphabetic displays as follows:

Fuel Tank Sending Unit and Pump Shorted: FUEL REMAINING is displayed on power up with a value of "CS" indicating circuit shorted (DTE will also display "CS" if selected).

Fuel Tank Sending Unit and Pump Open: FUEL REMAINING on power up with a value of "CO" indicating circuit open (DTE will also display "CO" if selected).

In addition, the two top and bottom bars in the fuel gaugewill illuminate when the fuel diagnostic codes are displayed.

Fuel Computer

The fuel computer takes in signals from the vehicle speed sensor, fuel sender and the Powertrain Control Module (PCM) 12B529. Speed information comes from the transmission-mounted vehicle speed sensor to the speedometer module, which in turn feeds the fuel computer. Fuel level information comes from the fuel tank sending unit and pump which is located in the fuel tank (9002), and the fuel flow information comes from the powertrain control module.

The fuel computer calculates and displays trip distance, fuel remaining, instantaneous economy, average economy, and distance to empty.

The fuel computer display consists of the fuel gauge, three digits with a decimal point, the legends LITERS/100km and MILES/GAL, and the menu functions TRIP DISTANCE, FUEL REMAINING, INSTANT ECONOMY, AVERAGE ECONOMY, and DISTANCE TO EMPTY.

The fuel computer goes through prove out when powered up and then goes into normal mode by displaying the function selected before the last ignition switch turn off. All menu functions remain illuminated for three seconds following prove out, and the pointer preceding the selected function is also illuminated. After three seconds, the pointer and the nonselected functions will not be displayed. If the cluster memory has been reset by interrupting battery power to the cluster, the default display is TRIP DISTANCE.

Three of the four buttons on the switch module are used to operate the fuel computer functions. They are as follows:

● SELECT: Will move the menu cursor from top to bottom. The selected function is indicated by the position of the pointer.

● E/M: Will alternately cause the fuel computer information to be displayed in English or Metric units with successive depressions.

● RESET: Will reset the TRIP DISTANCE and AVERAGE ECONOMY functions when they are selected. Two successive depressions of the RESET button within two seconds will reset both of these functions regardless of the function currently selected. No other function can be reset.

Fuel Computer Functions

Each of the following functions may be selected by pressing the SELECT button on the switch module until the pointer preceding the desired function is illuminated. The appropriate numeric information is displayed with units in the three digit display above the menu.

Trip Distance

Trip distance is the distance travelled in tenths of kilometers or (miles) up to 99.0 (whole numbers above 99.9) since the Trip Distance was last reset. The value is displayed with leading zeros suppressed. The value rolls over to 0.0 after 999 kilometers or miles. The appropriate Km or MILES logo is displayed when Trip Distance is selected.

Trip Distance can be reset to 0.0 by pressing the RESET button while Trip Distance is selected.

Fuel Remaining

Fuel Remaining is the amount of fuel remaining in the fuel tank. The fuel remaining value will be consistent with the display of the FUEL bargraph segments. It is displayed in whole liters or gallons along with the LITERS or GAL logo. The numeric range of the fuel remaining display is from 54L (14 gal) down to 3L (1 gal). The value "F" (Full) is displayed above 54L (14 gal) and "E" (Empty) is displayed below 2L (1 gal).

Fuel remaining cannot be reset.

Instantaneous Fuel Economy

Instant economy is the fuel economy calculated at that instant. The instantaneous fuel economy value is displayed along with the LITERS/100km or MILES/GAL logo. The range of Instant Economy which can be displayed is from 99 to 0 LITERS/100km or from 0 to 99 MILES/GAL.

When the vehicle is not moving, Instant Economy is displayed as 99.9 to 0.0 LITERS/100km or 0.0 to 99.9 MILES/GAL.

Instantaneous Fuel Economy cannot be reset.

Average Fuel Economy

Average economy is the fuel economy obtained since the Average Economy function was last reset. The average fuel economy value is displayed along with the LITERS/100km or MILES/GAL logo. The range of average economy which can be displayed is from 99.9 to 0.0 LITERS/100km (0.0 to 99.9 MILES/GAL).