# Bi-Fuel LPG

# Powertrain Control/Emissions Diagnosis

2004 Service Manual



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### **Powertrain Control/Emissions Diagnosis**

# On Board Diagnostics Bi-Fuel LPG Truck

5.4L F-150 LPG

**NOTE:** The descriptions and specifications contained in this manual were in effect at the time this manual was approved for printing. Ford Motor Company reserves the right to discontinue models at any time, or change specifications or design without notice and without incurring any obligation.

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### Fuel System

### ALT/GAS Switch, ALT/GAS Switch Light

The ALT/GAS switch permits the driver to select which fuel the vehicle will operate on. The ALT/GAS switch is located on the instrument panel.

The ALT/GAS switch only operates when the vehicle is at a stop with the ignition in the OFF position. If the switch is moved while the vehicle is running, the gaseous fuel system will NOT automatically change fuel mode and no damage to the vehicle will occur.

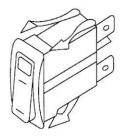
Prior to starting the vehicle (with the ignition in the OFF position), determine which fuel you intend to use and press the ALT/GAS switch.

When the selector switch is placed in the GAS position, the engine will operate in the unleaded gasoline mode.

When the switch is placed in the ALT position the engine will operate in the gaseous fuel mode (if temperature and pressure conditions are correct), running on LPG. A green indicator light will illuminate on the fuel selector switch to indicate that the vehicle is operating in the gaseous fuel mode.

The ALT/GAS switch sends a signal to the compuvalve requesting ALT fuel mode, when placed in the ALT position. If no signal is received by the compuvalve, the system defaults to base gasoline mode. The ALT/GAS switch light is incorporated into the ALT/GAS switch. It is controlled by the compuvalve and is illuminated when operating in ALT/FUEL mode. If an emission-critical diagnostic trouble code (DTC) is recorded, the ALT/GAS switch light will change from a steady on to an irregular flashing condition. If a communication fault arises the indicator will flash with a steady pulse. Once the key is switched to ON, the switch will not change the fuel operating mode. The ALT/GAS switch light has the following status modes:

- OFF
- ON STEADY
- ON THEN OFF (Quickly or Slowly)
- FLASHING (REGULAR OR IRREGULAR)



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