310-00B Fuel System - General Information - 2.7L EcoBoost (238kW/324PS)

2021 Bronco

Description and Operation

Procedure revision date: 05/25/2021

Fuel System - Overview

Overview

NOTICE: Repairs of the fuel system are to be achieved only by replacement of the failed component (s). Repair of a fuel system component should not be attempted.

NOTICE: If directed during assembly of fuel system components, lubricate any seal(s) only with specified material. Failure to follow this instruction may result in seal failure and fuel leakage.

The fuel system consists of:

- a closed loop pressure Control (CLPC) fuel system.
- fuel tubes (liquid and vapor) packaged into a single assembly.
- a single longitudinal fuel tank.
- quick connect fuel and vapor tube couplings.
- an Easy Fuel™ (capless) fuel tank filler pipe assembly, that contains a misfuel inhibitor device to permit only unleaded fuel to be pumped into the tank.
- a supplemental refueling adapter located in the rear luggage compartment.
- a carbon canister mounted above the fuel tank on the frame crossmember with canister vent solenoid.
- a Fuel Pump Control Module (FPCM) located on the canister bracket on the frame crossmember above the rear of the Fuel Tank.
 - A Fuel Pump and Sender Unit containing:
- The electric Fuel Pump which provides pressurized fuel to the high pressure Fuel Pump (FP).
- a serviceable fuel level sensor.
- a check valve which maintains system pressure after the pump is shut off.
- a pressure relief for overpressure protection in the event of restricted fluid flow.
- a lifetime fuel filter providing filtration to protect the fuel injectors from foreign material.

Fuel Pump Shut-off Feature

In the event of a moderate to severe collision, the vehicle is equipped with a Fuel Pump and Sender Shut-off Feature that is initiated by the event notification signal.

The event notification feature provides other vehicle subsystems with information pertaining to restraint system deployment or fuel cutoff status. When an impact occurs which exceeds a predetermined threshold, the <u>RCM</u> sends a signal on a dedicated circuit to the <u>BCM</u>. The <u>BCM</u> then sends a signal on a second hardwired circuit to the <u>PCM</u>, which initiates fuel cut-off and disables the fuel system.

Should the vehicle shut off after a collision due to this feature, the vehicle may be restarted by first turning the ignition to the OFF position and then turn the ignition to the ON position. In some instances the vehicle may not start the first time and may take one additional ignition cycle.

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