



Technical Service Bulletin

Reference: ICOM-TSB15-001	Date: 1/26/2015
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3.7L Hard Starting

UNITS AFFECTED:

2012 to 2015 vehicles equipped with the 3.7L Flex Fuel engine.

SERVICE INFORMATION:

This bulletin provides information on what to do if a 'hard start' condition is encountered.

ACTION:

Review Service Procedure - Attachment 'A'

A. Check Fuel Trims

- 1) Hook up a scan tool and verify the fuel trims on gasoline and propane are not too rich / lean; correct as needed

B. Verify Gasoline Alcohol Content

- 1) Hook up a scan tool and verify the alcohol content is at or below 10%. If not, the fuel in the gasoline tank is either E85 or has been mixed with E85.

Note - Page 11 of the ICOM Owners Manual recommends to refrain from the use of E85 fuel when operating the propane system.

C. Inspect OEM EVAP Purge Valve Operation

- 1) Locate & remove EVAP Purge Valve mounted on the intake manifold.
- 2) Disconnect the hoses and wire harness lead attached to the purge valve.
- 3) Attach an air hose nozzle to the inlet port on the purge valve; force air into the valve; if air passes through the valve, the valve is defective and needs to be replaced

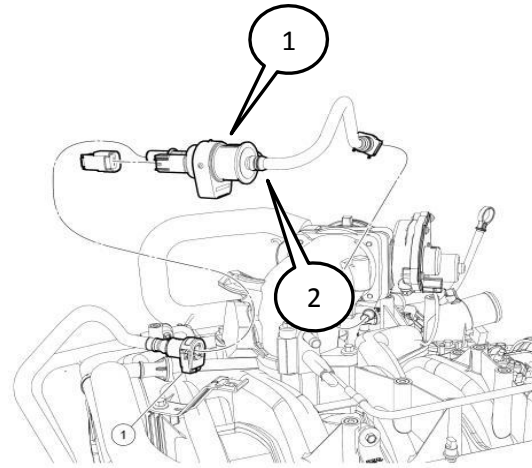


Fig. 1

D. Reference OEM Starting Procedure

1) Refer to the starting procedures (Fig. 2) that can be found on pages 134 & 135 of the OEM Owners Manual.

Before starting the engine check the following:

- Make sure all occupants have fastened their safety belts.
- Make sure the headlamps and electrical accessories are off.
- Make sure the parking brake is on.
- Move the transmission selector lever to position **P**.
- Turn the ignition key to the on position.

Note: Do not touch the accelerator pedal.

1. Fully press the brake pedal.
2. Turn the key to the start position to start the engine. Release the key when the engine starts.

Note: The engine may continue cranking for up to 15 seconds or until it starts.

Note: If you cannot start the engine on the first try, wait for a short period and try again.

Failure to Start

If you cannot start the engine after three attempts, wait 10 seconds and follow this procedure:

1. Fully press the brake pedal.
2. Fully press the accelerator pedal and hold it there.
3. Start the engine.

Fig. 2

Cold Weather Starting (Flexible Fuel Vehicles Only)

The starting characteristics of all grades of E85 ethanol make it unsuitable for use when ambient temperatures fall below 0°F (-18°C). Consult your fuel distributor for the availability of winter grade ethanol. As the outside temperature approaches freezing, ethanol fuel distributors should supply winter grade ethanol (same as with unleaded gasoline). If summer grade ethanol is used in cold weather conditions, 0°F to 32°F (-18°C to 0°C), you may experience increased cranking times, rough idle or hesitation until the engine has warmed up.

You may experience a decrease in peak performance when the engine is cold when operating on E85 ethanol.

Do not crank the engine for more than 10 seconds at a time as starter damage may occur. If the engine fails to start, turn the key to off and wait 30 seconds before trying again.

Do not use starting fluid such as ether in the air intake system. Such fluid could cause immediate explosive damage to the engine and possible personal injury.

If you should experience cold weather starting problems on E85 ethanol, and neither an alternative brand of E85 ethanol nor an engine block heater is available, the addition of unleaded gasoline to your tank improves cold starting performance. Your vehicle is designed to operate on E85 ethanol alone, unleaded gasoline alone, or any mixture of the two.

If the Engine Fails to Start Using the Preceding Instructions (Flexible Fuel Vehicles Only)

1. Press and hold down the accelerator one-third to one-half the way to the floor, then crank the engine.
2. When the engine starts, release the key, then gradually release the accelerator pedal as the engine speeds up. If the engine still fails to start, repeat Step 1.

E. Leaking Propane Fuel Injector

- 1) Normally followed by a Air/Fuel Ratio Imbalance and/or Running Rich error code.