



This well known problem with CSFI systems has been a MAJOR contributor to catalytic converter failure in these vehicles.

Too much fuel in the exhaust is the single biggest reason for a converter substrate to break and rattle due to converter overheating.

Don't overlook this possibility when dealing with a converter failure.

File In Section: 06 - Engine/Propulsion System

Bulletin No.: 00-06-04-003B

Date: February, 2003

TECHNICAL

Subject:

Rough Idle After Start, And/Or A Service Engine Soon (SES) Light
(Unstick And Clean Central Sequential Fuel Injection (CSFI) Poppet
Valves or Convert to MFI)

Models:

1995-2002 Chevrolet and GMC S/T Models

1996-2002 Chevrolet and GMC C/K, M/L, G, P Models

1996-2001 Oldsmobile Bravada

1999-2000 Cadillac Escalade

with 4.3L, 5.0L or 5.7L Engine (VINS W, X, M, R - RPOs L35, LF6, L30, L31)

Except 2002 VIN X - RPO LU3 Models

This bulletin is being revised to update the Warranty Information. Please discard previous copies of Corporate Bulletin Number 00-06-04-003B with warranty chart (Section 06 - Engine).

Condition:

Some customers may comment on rough idle after start-up, especially if the vehicle has sat overnight. These symptoms may be intermittent. The Service Engine Soon (SES) light may also be illuminated. Current misfire or history misfire codes may be detected with the Tech 2 scan tool.

Cause

A deposit build-up on the CSFI poppet valve ball and/or seat may cause the poppet ball to stick open or closed. In either case, the specific cylinder will be mis-fueled, resulting in a cylinder mis-fire condition.

Correction

A new injector unsticking and cleaning process has proven to be effective in restoring poppet valves to an "as new" condition. CSFI injector replacement should NOT be considered as a correction for this customer concern.

Check the vehicle history to determine if the vehicle is returning for a second fuel system repair for this condition. If the fuel system has been repaired for this condition previously, then inform the customer that an alternate fix is available. A new MFI fuel system has been developed that will back service the CSFI fuel system. The MFI fuel system eliminates the CSFI poppet valve ball and seat. The CSFI fuel system will need to be replaced as a unit. Refer to Central SFI to MFI Conversion instructions in this bulletin.

Notice : Individual CSFI injectors can not be replaced with MFI injectors. The entire CSFI fuel meter body will need to be replaced. The bracket used to retain the injectors in the fuel meter body is different between the CSFI and MFI unit. The unit may not seal if you mix injectors. Severe engine damage could result.

Cleaning the CSFI injectors is the preferred repair. The CSFI unit should not be replaced until cleaning has been attempted. If the vehicle should return for the same repair, then the CSFI unit can be replaced with an MFI unit. If the vehicle is out of warranty, the customer should be given the option of which fix to pursue.

Important : "GM of Canada" dealers require District Service Manager approval prior to replacing the CSFI unit with a MFI unit under warranty.

The first step of this process is to use the J 41413 Evap Pressure/Purge Station, in conjunction with the J

44466-10 pressure regulator/hose assembly, to provide the required high pressure (150 psi) source to perform the unsticking procedure. The J 39021 fuel injector tester and accessories provide the means to "energize" the injector. Some later model-year vehicles may utilize the Tech 2(R) to "energize" the injectors.

The second step of this process is to run the engine on a solution of 10% Top Engine Cleaner and 90% gasoline. This will effectively clean any deposits from the ball and seats of the poppets. It is very important that the engine fuel system is separated from the vehicle fuel system. Top Engine Cleaner may have detrimental effects on the fuel pump.

Parts Information

Part Number	Description
12345382	Threadlock
1050002	Top Engine Cleaner (U.S.)
992872	Top Engine Cleaner (Canada)
12345104	Port Fuel Injector Cleaner (U.S.)
10953467	Port Fuel Injector Cleaner (Canada)

Cleaning Procedure Parts

Part Number	Description
12568332	V-6 MFI Assembly
88894355	V-6 Bracket
17113215	V-6 Seal Kit
93441235	V-8 MFI Assembly
17113206	V-8 Seal Kit
93442096	V-8 Bracket

CSFI to MFI Conversion Parts

Parts are currently available from GMSPO.

Warranty Information

Important : Some California vehicles may be covered by Special Policy 99066E if built with California Emissions RPO YF5. If the vehicle is covered by the special policy, then that warranty information should be used.

For vehicles repaired under warranty, use information contained in Special Policy 99066E.