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Service Information Bulletin

| SUBJECT | DATE |
|---|-----------|
| Diagnostic tests - Two Filter System - FSIC Leak Test | June 2017 |

Additions, Revisions, or Updates

| Publication Number / Title | Platform | Section Title | Change |
|----------------------------|-------------------|----------------|-------------------|
| DDC-SVC-MAN-0191 | GHG17 DD Platform | FSIC Leak Test | New test section. |



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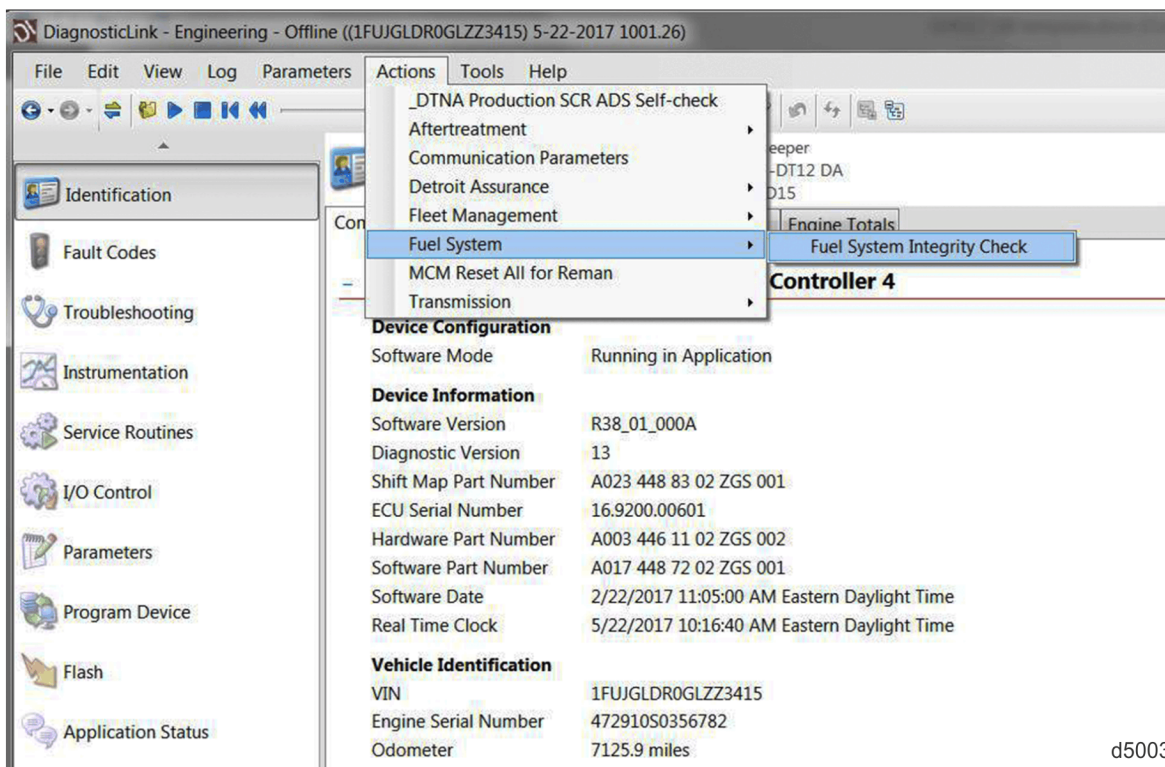
2 FSIC Leak Test

The FSIC Leak Test will allow a technician to identify a leak in the high pressure fuel system. The panel will calculate if there is an acceptable pressure bleed-down rate. A leak in one of the following locations will show a fast bleed-down rate over time:

- High pressure fuel pump (pumping elements)
- High pressure fuel rail feed lines
- High pressure fuel injector lines
- Fuel rail pressure sensor
- Pressure limiting valve
- Internal injector amplifier or needle leakage to the return
- Internal injector amplifier or needle leakage into the cylinder

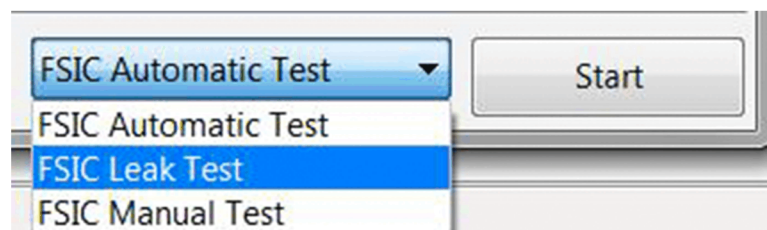
Test as follows:

1. Using DiagnosticLink[®], go to the "Actions" menu and click on the "Fuel System" menu option and then the "Fuel System Integrity Check" option.



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2. In the dropdown menu, select "FSIC Leak Test."



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**WARNING: PERSONAL INJURY**

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

- Always start and operate an engine in a well ventilated area.
- If operating an engine in an enclosed area, vent the exhaust to the outside.
- Do not modify or tamper with the exhaust system or emission control system.

**WARNING: PERSONAL INJURY**

To avoid injury before starting and running the engine, ensure the vehicle is parked on a level surface, parking brake is set, and the wheels are blocked.

**WARNING: ENGINE EXHAUST**

To avoid injury from inhaling engine exhaust, always operate the engine in a well-ventilated area. Engine exhaust is toxic.

3. Start engine and allow Fuel System Integrity Check (FSIC) Leak Test routine to run. The test will instruct when to cycle the ignition to complete the test

| HP Leak Counter | | 0 |
|-------------------------|------------------------|-------------|
| HP Leak Learned Counter | | 0 |
| HP Leak Learned Value | | 0.0 |
| Parking Brake | Coolant Temperat... °F | 111 |
| signal not available | Engine State | Engine Stop |
| Vehicle Check Status | Engine State | Engine Stop |

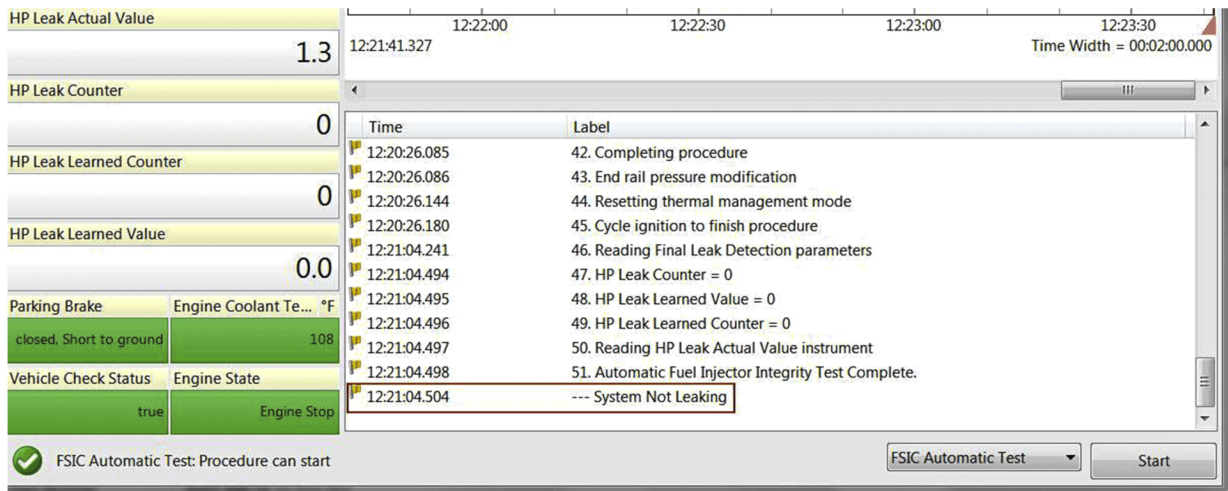
| Time | Label |
|--------------|---|
| 12:42:32.701 | 12. Request rail pressure to 400 bar |
| 12:42:37.968 | 14. Request rail pressure to 500 bar |
| 12:42:43.071 | 16. Request rail pressure to 600 bar |
| 12:42:48.172 | 18. Request rail pressure to 700 bar |
| 12:42:53.305 | 20. Request rail pressure to 800 bar |
| 12:42:58.390 | 22. Holding rail pressure and engine speed for one minute |
| 12:43:59.233 | 23. Checking rail pressure |
| 12:43:59.234 | 29. Completing procedure |
| 12:43:59.235 | 30. End rail pressure modification |
| 12:43:59.266 | 31. Resetting thermal management mode |
| 12:44:04.397 | 33. Cycle ignition to finish procedure |

FSIC Leak Test: Waiting for devices to disconnect

FSIC Leak Test Stop

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4. Once the FSIC Leak Test routine has completed, review the results of the test in the dialog box of the test panel.



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5. Did the panel result in a "System Leaking" message?
 - a. Yes; Refer to section "High Pressure Fuel System - Leak Test - Two-Filter System".
 - b. No; return to original troubleshooting.