# 1 06 09-19

# Service Information Bulletin

| SUBJECT | DATE |
|---|---|
| Diagnostic Tests - ATD Desaturation | June 2019 |
| Symptom Diagnostics - Fluid in the Aftertreatment - Diesel Fuel Contamination | |

### Additions, Revisions, or Updates

| Publication Number / Title | Platform | Section Title | Change |
|---|---|---|---|
| DDC-SVC-MAN-0084<br>DDC-SVC-MAN-0191 | EPA07/10/ GHG14 DD Platform | Diagnostic Tests -ATD Desaturation | New procedure for Diagnostic Tests section. |
| DDC-SVC-MAN-0084<br>DDC-SVC-MAN-0191 | GHG17 DD Platform | Symptom Diagnostics - Fluid in the Aftertreatment - Diesel Fuel Contamination | Diesel Fuel Contamination section has been updated. |

DiagnosticLink users: Please update the troubleshooting guides in DiagnosticLink with this newest version. To update the tool troubleshooting guide, open DiagnosticLink and from the Help – Troubleshooting Guides menu, select the appropriate troubleshooting manual, then click Update.

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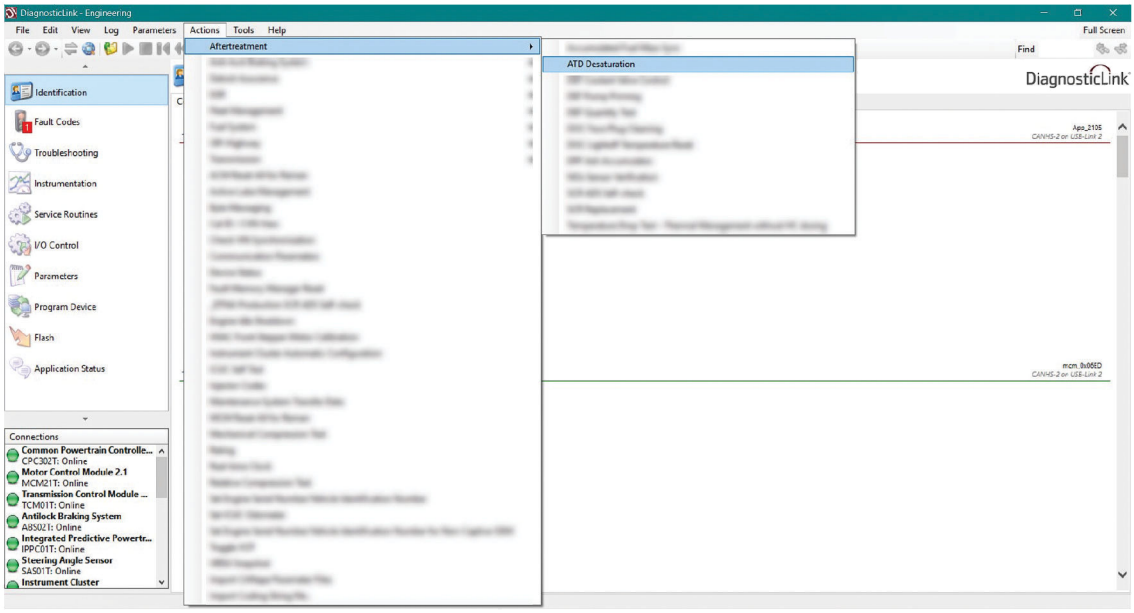
# 2 ATD Desaturation Test

This procedure should only be used after following the steps in Refer to section "Diesel Fuel Contamination - Vehicles equipped with the 1-BOX™ATS".

The ATD Desaturation procedure assists the technician with the removal of fuel from the aftertreatment system after an upstream failure has caused raw fuel to enter the aftertreatment system. This test usually runs 45 minutes to an hour if high aftertreatment temperatures are not reached.

**NOTE:** When running this procedure, the technician needs to remain in the vehicle in case the aftertreatment temperatures exceed a predetermined threshold.

1. The ATD Desaturation test can be found under the Actions menu in DiagnosticLink ®.

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2. Click the start button to begin.

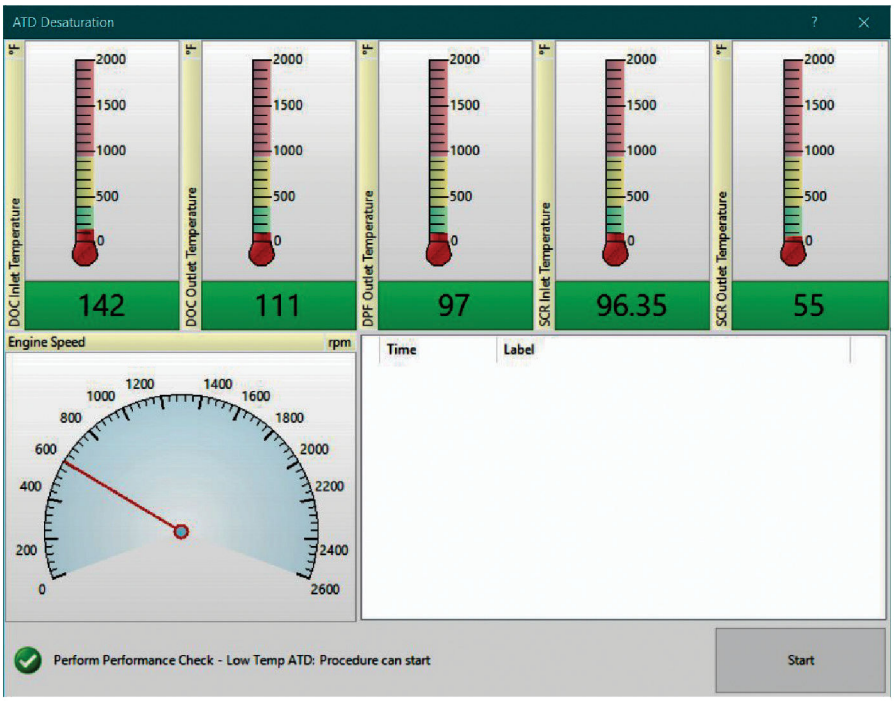


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**Table 1.**

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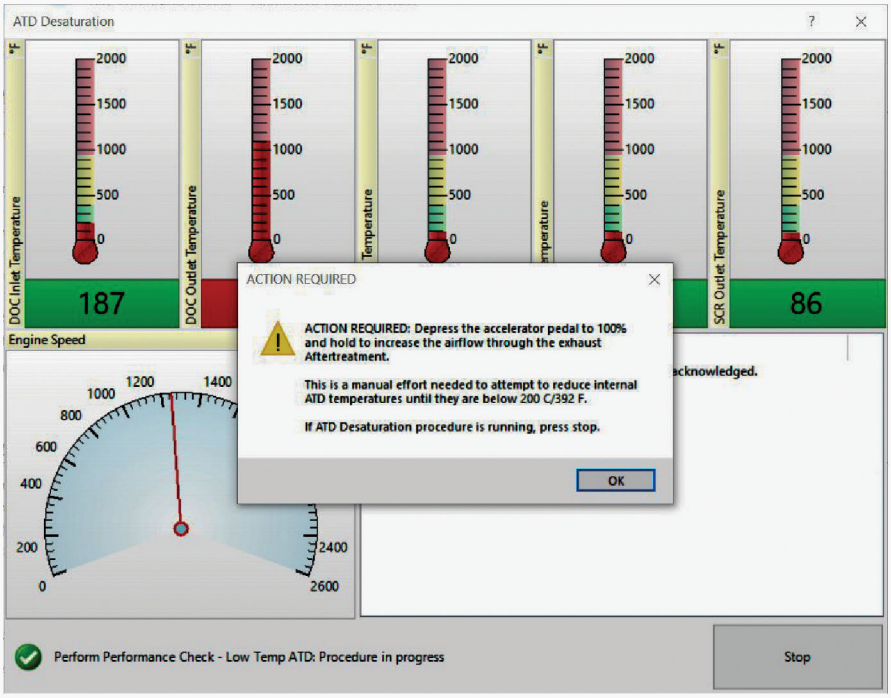
|---|
| **NOTICE:** If any aftertreatment temperature sensors increase above 500ºC (932ºF), a pop-up message will display instructing the user to press the accelerator pedal to 100% and to press the stop button to cancel the test until all ATD temperatures are below 200ºC (392ºF). |
| **NOTE:** The pop-up instructions will re-display until a reduced temperature target has been attained. |
|  <br>d150582 |

3. Once the ATD Desaturation procedure has successfully completed, return to the Refer to section "Diesel Fuel Contamination - Vehicles equipped with the 1-BOX™ATS".

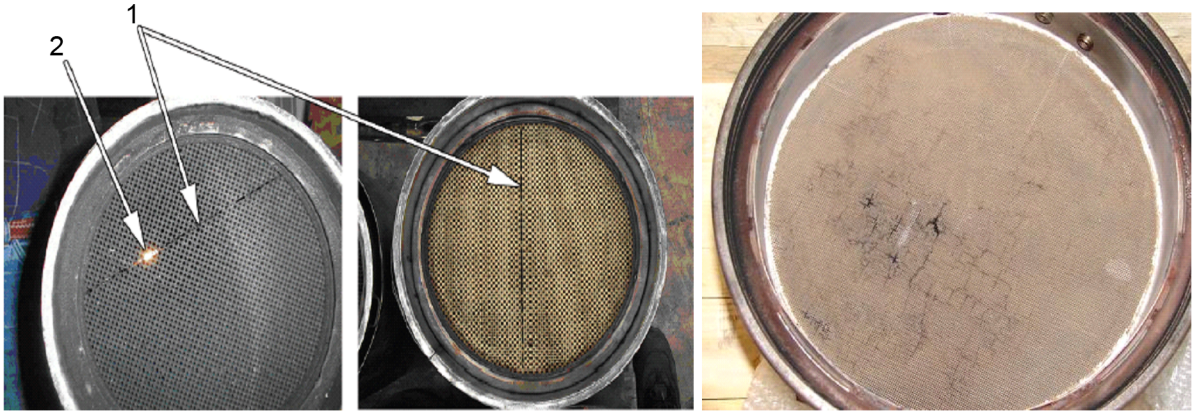
# 3 Diesel Fuel Contamination - Vehicles equipped with the 1-BOX™ATS

When raw fuel is present in the Aftertreatment Device (ATD), the source of the fuel must be diagnosed and repaired before cleaning the aftertreatment.

After repairing the source of the raw fuel, follow the steps below to try to recover the aftertreatment from the fuel contamination.

**NOTICE:** Cracks may be symmetrical along the structure or in a webbed pattern indicating extensive cell damage in the interior of the substrate.

1. Remove the aftertreatment system from the vehicle.
2. Remove and inspect the Diesel Particulate Filters (DPFs). Reference the pictures below; are there any cracks or damage to the DPFs?

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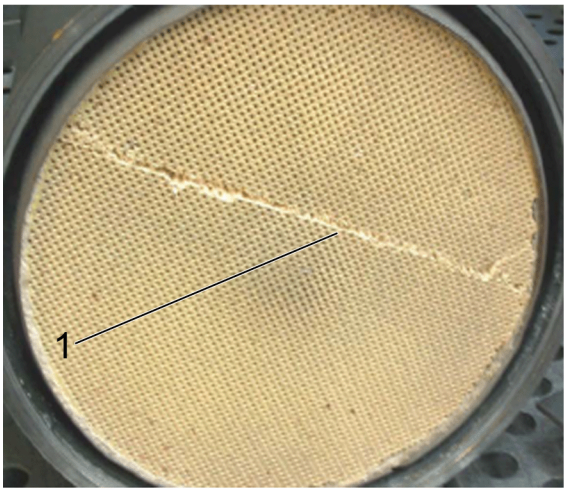


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a. Yes; the DPFs will have to be replaced after the Aftertreatment system has been drained. Go to step 3.
b. No; place the DPFs upside down to allow the fuel to drain. The filters will need to sit for a minimum of ten hours. Go to step 3.

3. Remove the DEF Doser from the aftertreatment system.
4. Position the aftertreatment system with the exhaust outlet/doser side facing down. Let the aftertreatment system sit for ten hours to allow the fuel to drain, then Go to step 5.
5. Tip the aftertreatment system toward the exhaust outlet to allow any raw fuel that has collected to drain. Once the fuel has drained, Go to step 6.
6. Clean any fuel that is in the turbocharger outlet pipe.
7. Install the DPFs and the aftertreatment system on the vehicle.
8. Connect DiagnosticLink ®.
9. Turn the ignition ON (key ON, engine OFF).

**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.

10. Start the engine.
11. Use DiagnosticLink and run the ATD Desaturation routine. Refer to section "ATD Desaturation Test". Once the routine has finished, Go to step 12.


 

12. Use DiagnosticLink to run a parked regeneration. Did the parked regeneration complete without any issues?
    a. Yes; no further diagnostics or repairs are needed for this concern.
    b. No; diagnose the fault codes that set.

# 4 ATD Desaturation Test

This procedure should only be used after following the steps in Refer to section "Diesel Fuel Contamination - Vehicles equipped with the 1-BOX™ATS".

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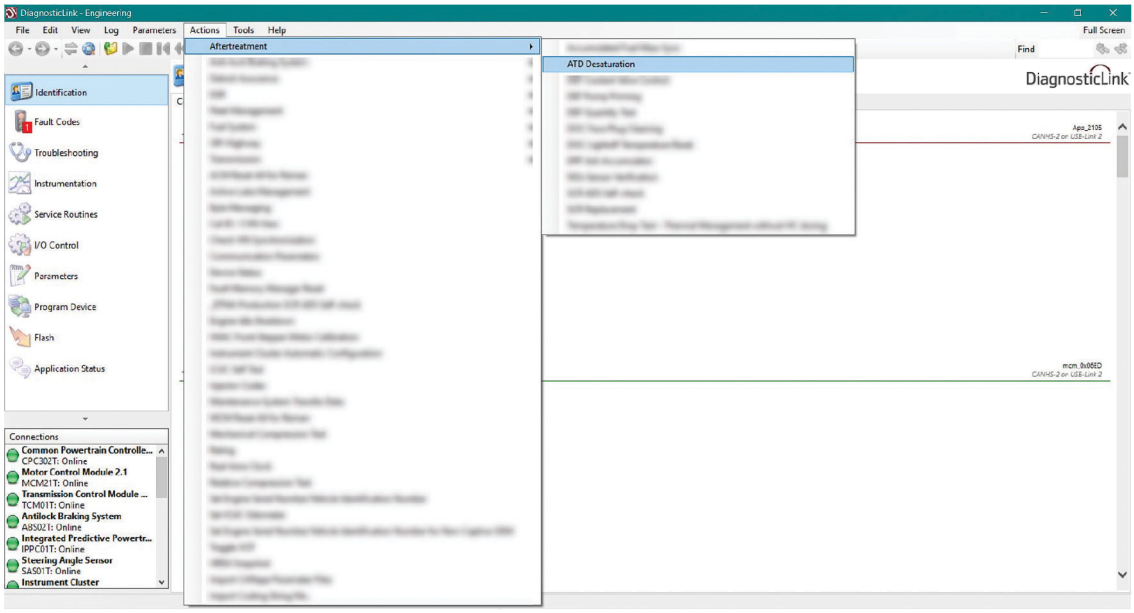


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2. Click the start button to begin.

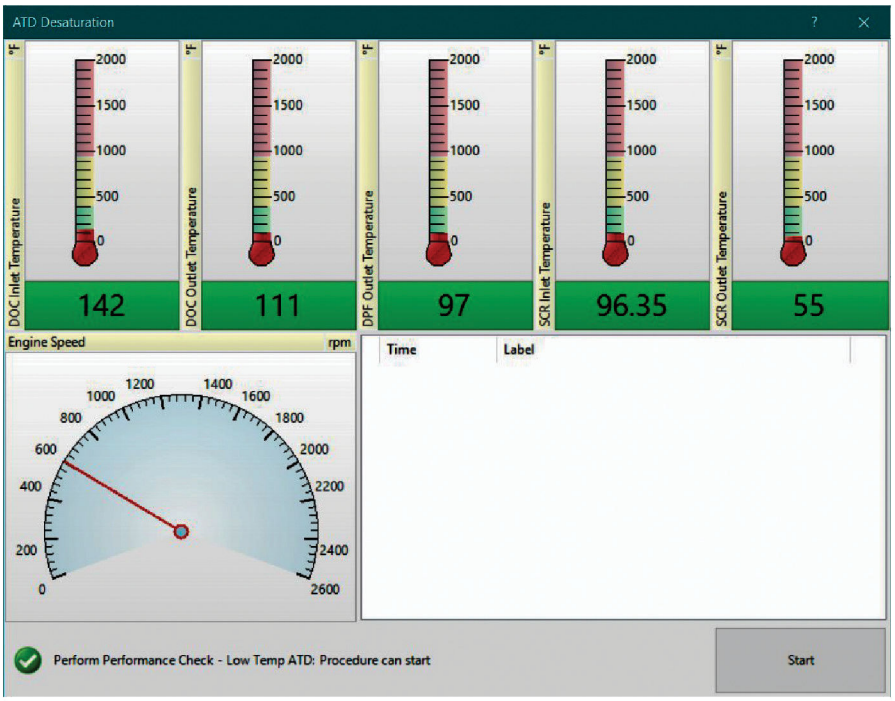


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**Table 2.**

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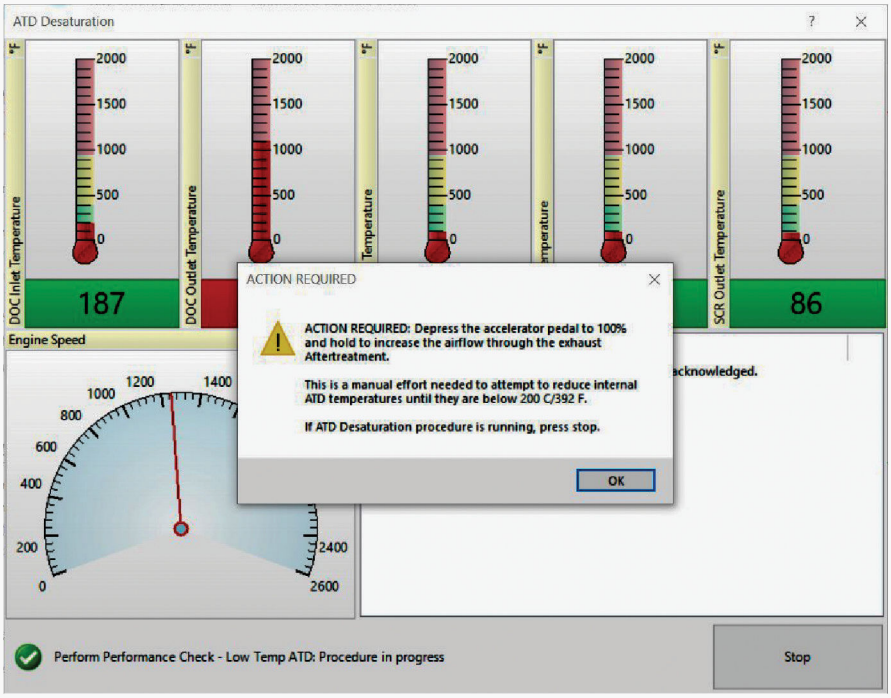
|  <br>d150582 |

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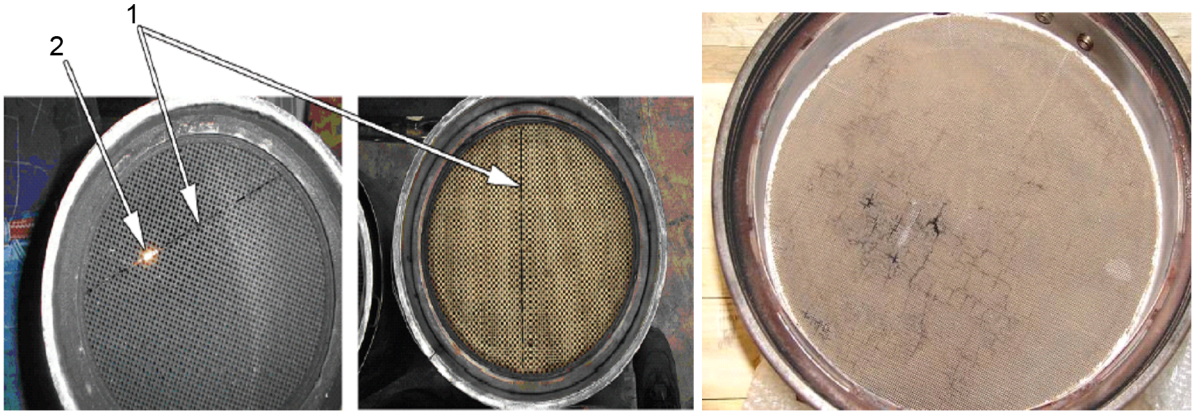


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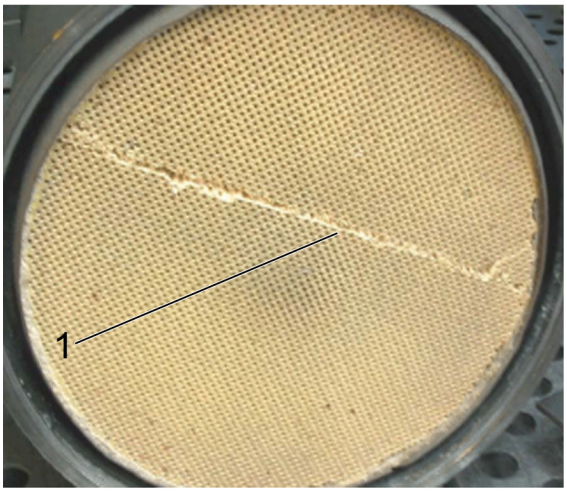


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