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Service Information Bulletin

SUBJECT	DATE
Symptom Diagnostics - Noisy One-Box Aftertreatment	November 2017

Additions, Revisions, or Updates

Publication Number / Title	Platform	Section Title	Change
DDC-SVC-MAN-0191	GHG17 HD DD	Noisy 1-Box™ Aftertreatment	Removed statement pertaining to removal of DOC/SCR.



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2 Noisy 1-Box™ Aftertreatment

This diagnostic is used to identify the cause of a loud 1-Box Aftertreatment.

Check as follows:

1. Visually inspect the entire exhaust system for signs of leaks or damage. Is any damage found?
 - a. Yes; repair as necessary.
 - b. No; Go to step 2.
2. Inspect that the aftertreatment inlet heat shields are not broken loose and rattling. Is there a loose or damaged heat shield?
 - a. Yes; repair the heat shield. If the inlet heat shield has tabs, refer to **11 TS-6** (<http://ddcsn-ddc.freightliner.com/cps/rde/xbcr/ddcsn/11TS6.pdf>).
 - b. No; Go to step 3.
3. Inspect the inboard and outboard Diesel Particulate Filter (DPF) covers and verify nothing is loose or rattling. Is there a loose DPF cover?
 - a. Yes; repair the loose cover.
 - b. No; Go to step 4.



WARNING: ENGINE EXHAUST

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



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.

4. Disconnect the aftertreatment inlet pipe and start the engine to verify the noise is coming from the aftertreatment. Did the noise go away once the aftertreatment inlet was disconnected?
 - a. Yes; reconnect the aftertreatment inlet and Go to step 5.
 - b. No; inspect other truck components to identify the noise.
5. Connect DiagnosticLink®.



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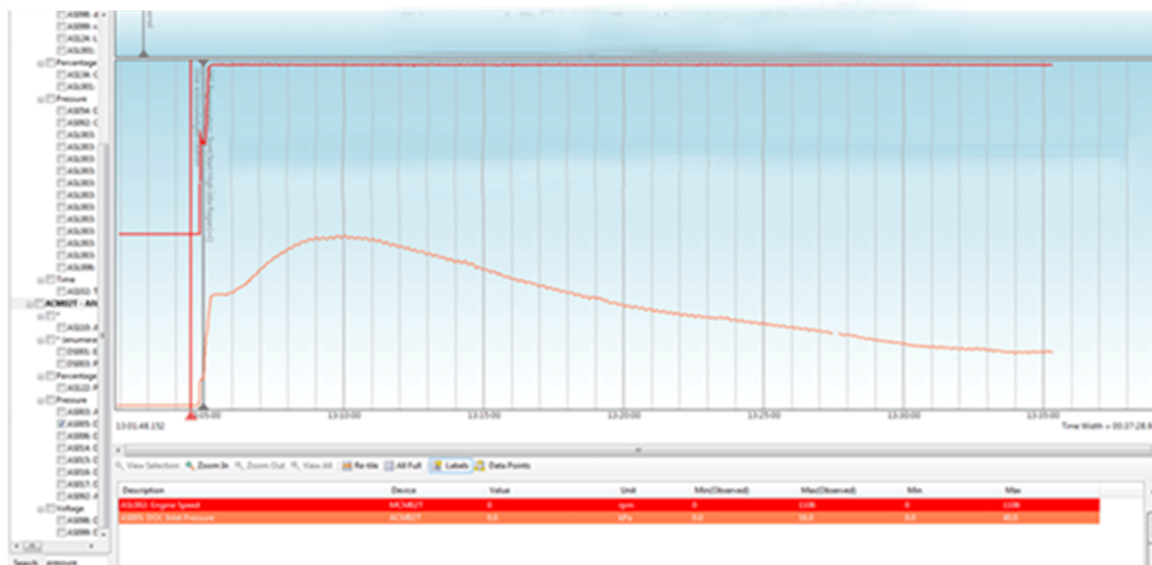
WARNING: HOT EXHAUST

During parked regeneration the exhaust gases will be extremely HOT and could cause a fire if directed at combustible materials. The vehicle must be parked outside.

6. Start the engine and run a Parked Regen. Monitor Diesel Oxidation Catalyst (DOC) inlet pressure and engine speed during the regen.

NOTICE: If DOC inlet pressure is 19.9 kPa (2.9 psi) or higher at any time during the parked regen, immediately stop the regen because turbocharger damage may occur. Go to step 9.

7. Review the parked regen log file. Compare your DOC inlet pressure reading to the screen shots below to identify a possible cause of the aftertreatment noise.
- If the DOC inlet pressure starts out above 10 kPa (1.45 psi) and decreases during a parked regen, this indicates that the DPFs were plugged and the parked regen has cleared them. Go to step 8.

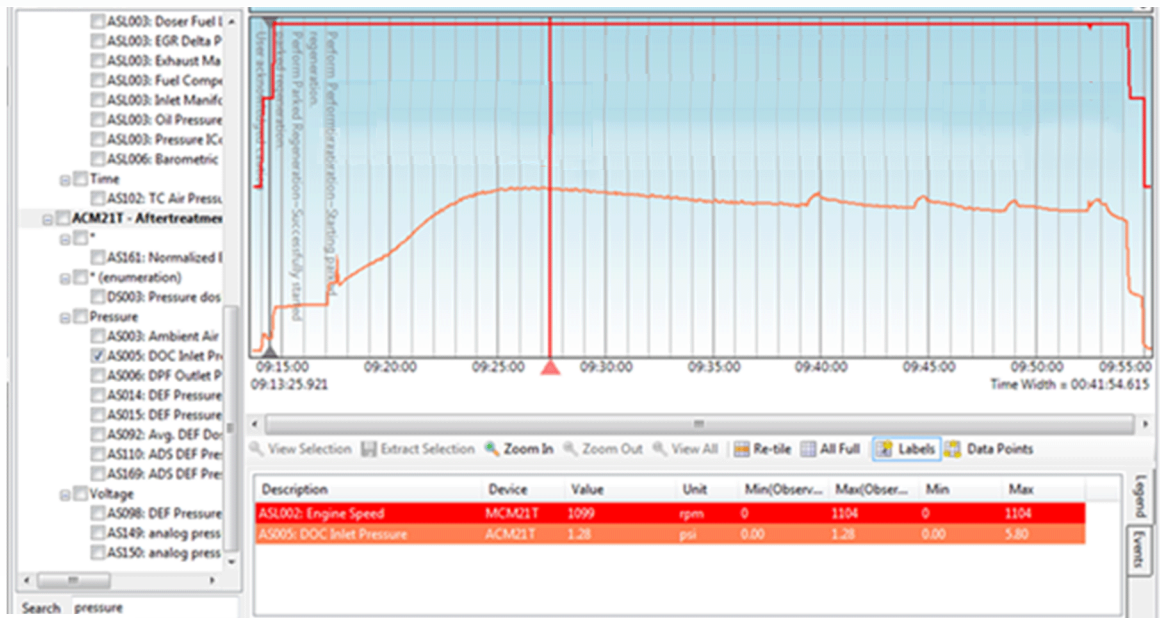


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- If the DOC inlet pressure starts above the pressure specified below and stays high, the DOC is considered plugged. Go to step 9.

Table 1.

Emissions Year	Pressure
GHG17	6 KPa (.89 psi)
GHG17 DD15 AT Only	7 KPa (1.01 psi)



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8. Verify the noise is gone and complete the ATD check list to possibly identify why the unit was plugged. Refer to section "GHG17 Perform Performance Check - Low Temperature ATD".
9. Perform the DOC air cleaning service procedure. After completing the service procedure, verify the noise is gone and release the vehicle. Refer to section "Diesel Oxidation Catalyst Air Cleaning".