



EMISSIONS RECALL

ID No, AB5S0*
Release Date 11-11-2025

AB5S0* EMISSIONS RECALL

SUBJECT VEHICLES

All 2018-2020 model year Hino COE trucks.

IMPORTANT NOTE

This Recall Repair Procedure applies to Campaigns **AB5S01**, **AB5S02**, **AB5S03**, **AB5S04**, **AB5S05**, **AB5S06** and **AB5S07**. This emissions recall repair involves kits applicable to seven different vehicle specifications, each controlled by a campaign number. Also, campaign numbers are assigned based on the Vehicle Identification Number (VIN). To ensure the correct procedure is followed, please verify the correct campaign number using the Hinet/Warranty Inquiry system and refer to the table on page 3 to confirm that the correct parts kit has been received.

Warranty Enquiry

VIN: JHHSDM2H8LK010899



OUTSTANDING CAMPAIGNS

Printer Friendly Version

Vehicle Warranty Claims HinoCare Claims **Campaigns** Alerts Terms HinoCare WEP

Campaign #	Campaign Type Description	Multiple Claims Allowed	Campaign Status	Campaign Description
AB5S01	RECALL/EMISSIONS	No	Outstanding	EM.MOD J05 REG.CAB

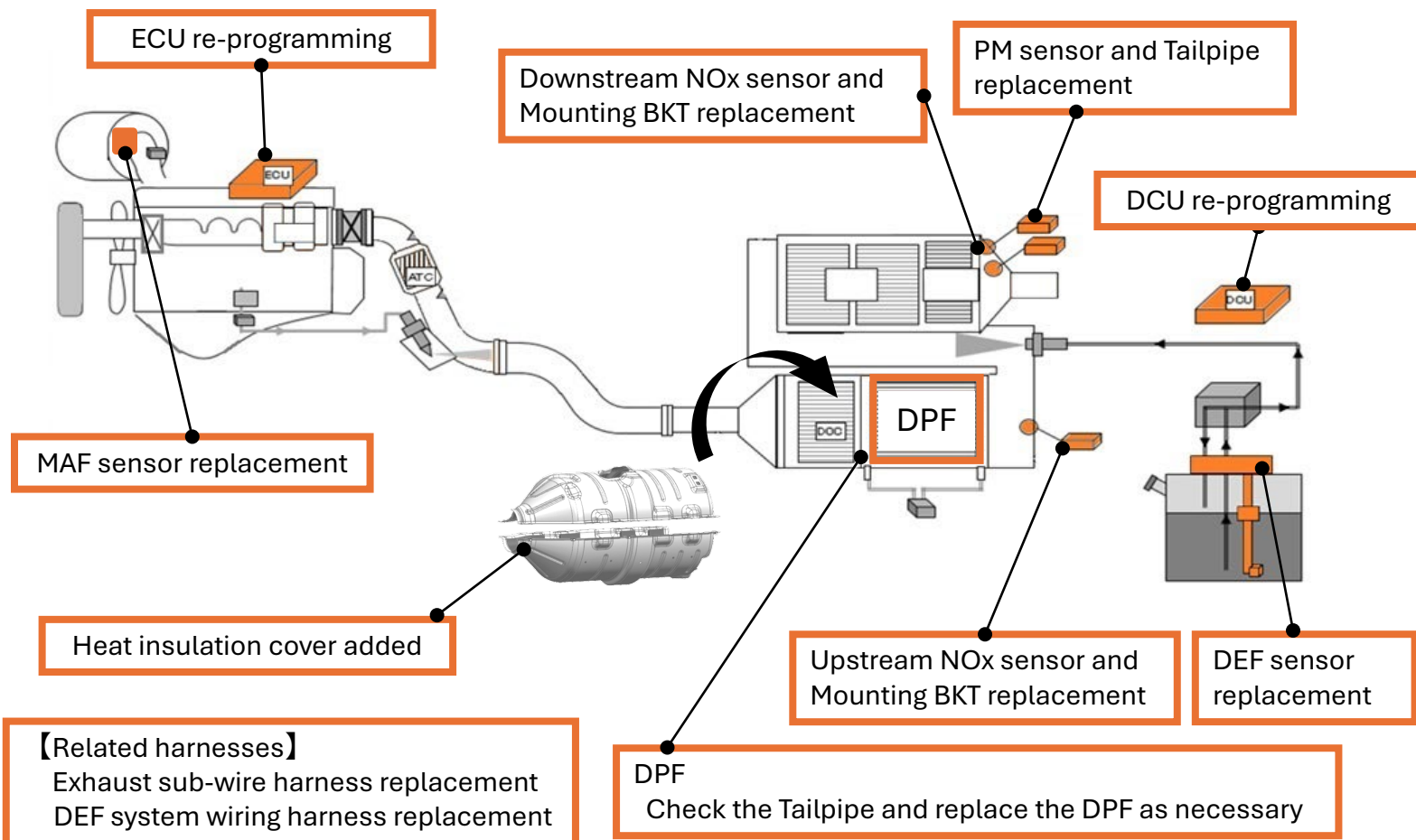
1 - 1 of 1 items

OVERVIEW

To improve the Emission Control System and On-Board Diagnostic (OBD) System, Hino will perform the modifications below:

- Re-programming software for Engine Control Unit (ECU) and Dosing Control Unit (DCU)
- Replacing NOx sensors, PM sensor, Diesel Exhaust Fluid (DEF) sensor and Mass Air Flow (MAF) sensor
- Replacing related harnesses
- Adding heat insulation cover on the aftertreatment device, and others.
- Check the Tailpipe and replace the DPF as necessary.

SYSTEM OVERVIEW





AB5S0* EMISSIONS RECALL

BEFORE YOU BEGIN

- Read and understand all instructions and procedures before you begin the work.
- Read and follow all **WARNINGS** and **NOTICES** set forth in this publication. These alerts help to avoid damage to components, serious personal injury, or both.
- Park the vehicle on a flat, level and solid surface.
- Place the gear shift lever in "Park" position.
- Apply the parking brake firmly and confirm parking brake activation.
- Turn off the engine and remove the key from the ignition switch.
- Always wear safety glasses or goggles to protect your eyes.
- Place wheel chocks in front of and behind all the wheels to prevent the vehicle from moving.

PARTS

CAMPAIGN NUMBER	KIT PART NUMBER	APPLICATION
AB5S01	HN001234335	2019-2020 MY SINGLE CAB DIESEL
AB5S02	HN001234333	2018 MY SINGLE CAB DIESEL
AB5S03	HN001234336	2019-2020 MY CREW CAB DIESEL
AB5S04	HN001234334	2018 MY CREW CAB DIESEL
AB5S05	HN001234338	2019-2020 MY SINGLE CAB HYBRID
AB5S06	HN001234339	2019-2020MY CREW CAB HYBRID
AB5S07	HN001234337	2018 SINGLE CAB HYBRID

VEHICLE PREPERATION

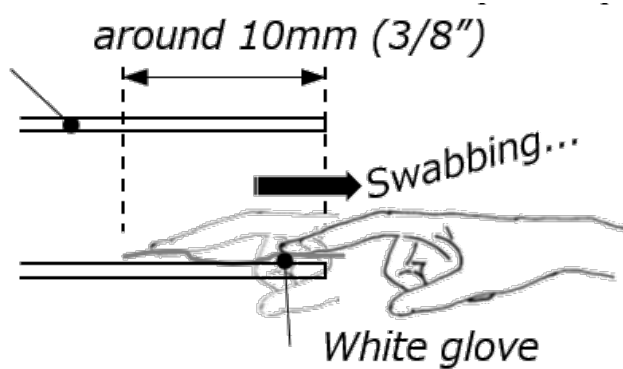
1. Swab the tail pipe with a white glove. Compare the residue with the pictures shown to determine if DPF replacement is required.

How to check the DPF

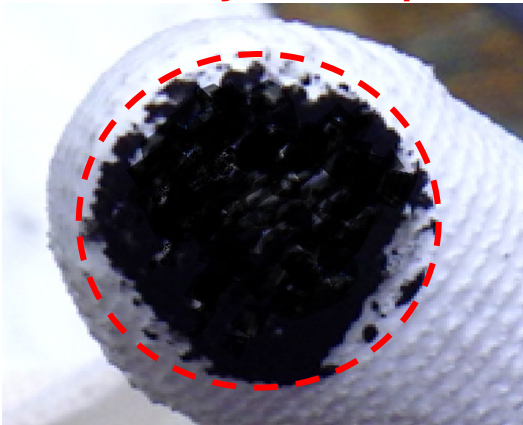
- Swab like a swiping the touch screen of your cellular phone.



Tailpipe



DPF Replacement Required **Heavy Soot Deposit**



DPF Replacement not Required



If the area where the finger was pressed against the tailpipe is completely black, DPF replacement is required.

Use DPF Kit P/N 04005121E0 for DPF replacement.

Required – Create a “Tech Assist case” and upload images of the swab result of the glove to request DPF replacement approval.

NOT required – Proceed to REPAIR PROCEDURE without DPF replacement.

REPAIR PROCEDURE

1. Remove and retain the four bolts securing the SCR cover. Remove and retain the SCR cover.

View photo 1

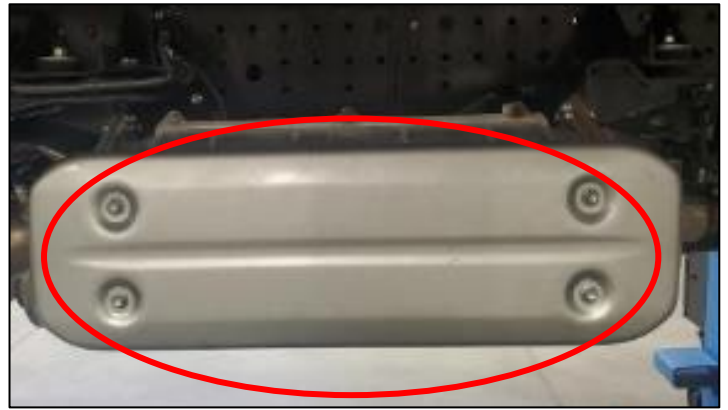
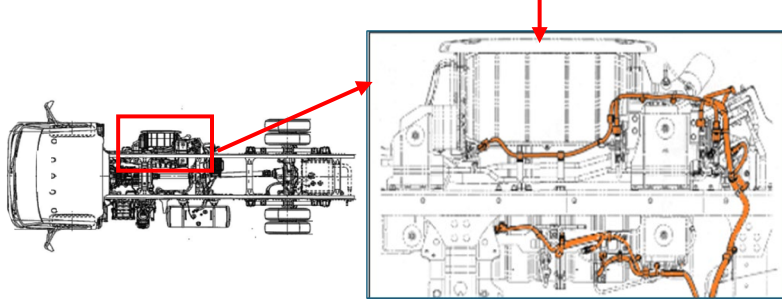


Photo 1

2. Remove and discard the two nuts securing the downstream NOx sensor. Disconnect the wiring harness connector, remove the five wiring harness clamps and the sensor probe from the tail pipe by loosening nut. Discard the downstream NOx sensor.

View photo 3

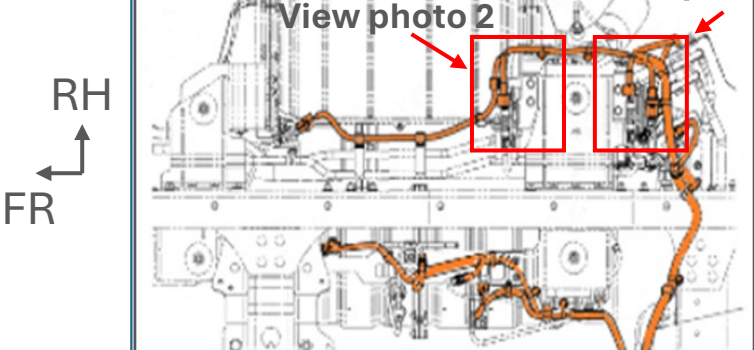


Photo 2

3. Remove and discard the two nuts securing the PM sensor. Disconnect the wiring harness connector, remove the two wiring harness clamps and the sensor probe from the tail pipe by loosening nut. Discard the PM sensor (yellow dots line).

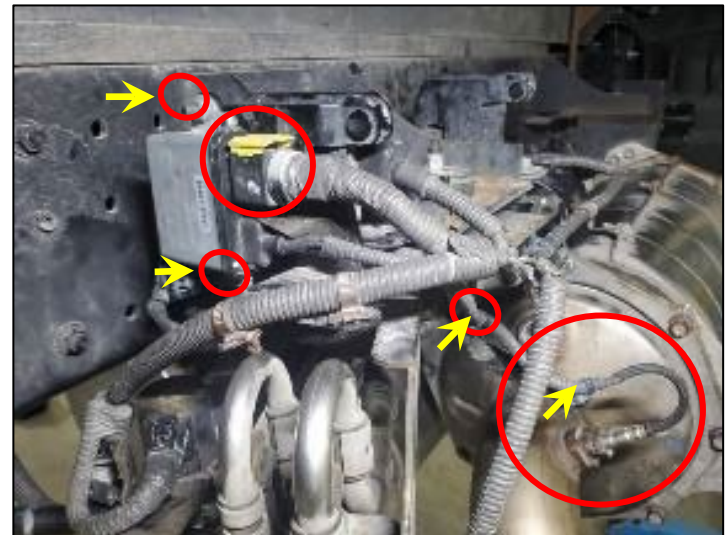


Photo 3

REPAIR PROCEDURE

4. Remove the upstream NOx sensor probe from the DPF by loosening nut. Remove and discard the nut securing the P-clip. Remove the four wiring harness clamps.

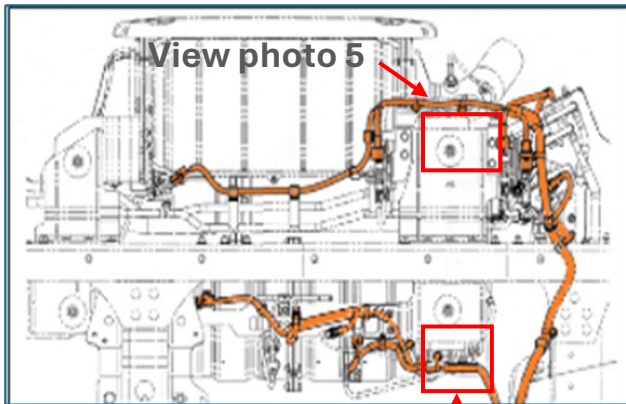


Photo 4

5. Remove and discard the two bolts securing the upstream NOx sensor bracket. Disconnect the wiring harness connector. Remove and discard the NOx sensor (yellow dots line) and bracket.

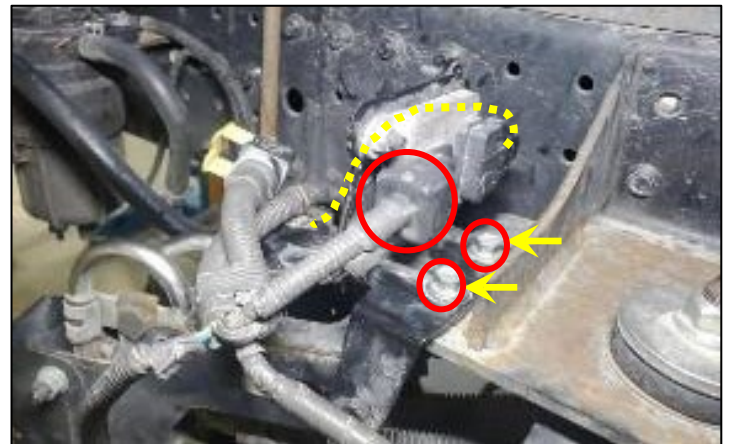


Photo 5

6. Remove and discard the ten bolts and nuts securing the tail pipe. Remove and discard the tailpipe, the gasket, the flange and the SCR cover bracket.

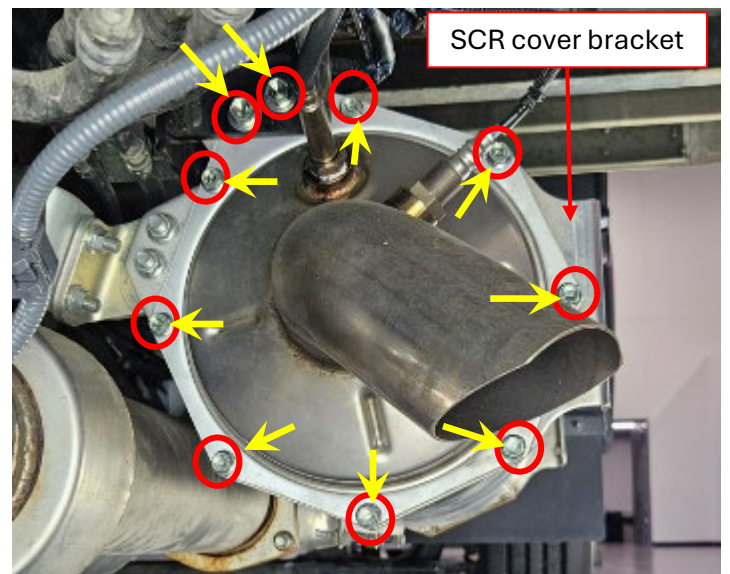
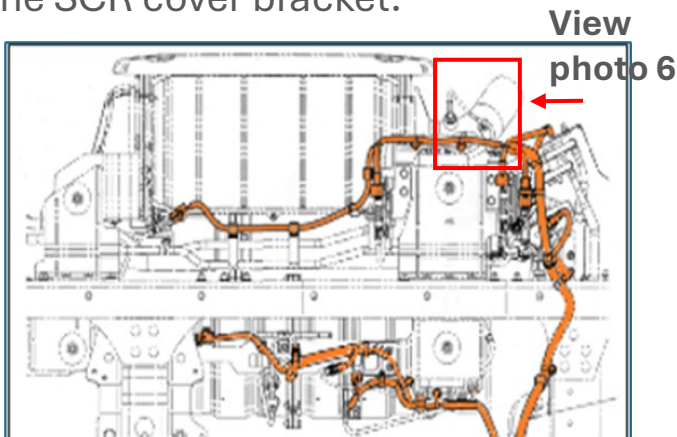
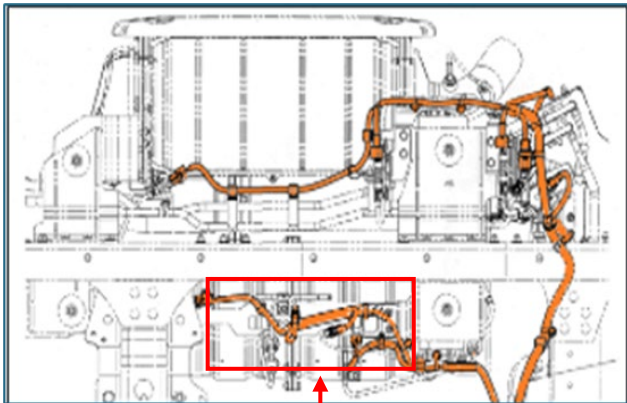


Photo 6

REPAIR PROCEDURE

7. Remove the DPF inlet and outlet temperature sensors by loosening nut and place aside.



View photo 7 & 8

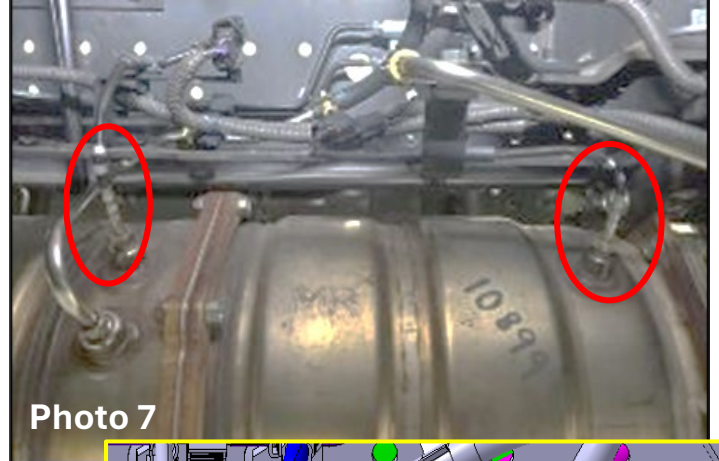


Photo 7

8. Remove the DPF differential pressure pipes by loosening nut. Remove and retain the two nuts securing the P-clips. Place the pipes aside.

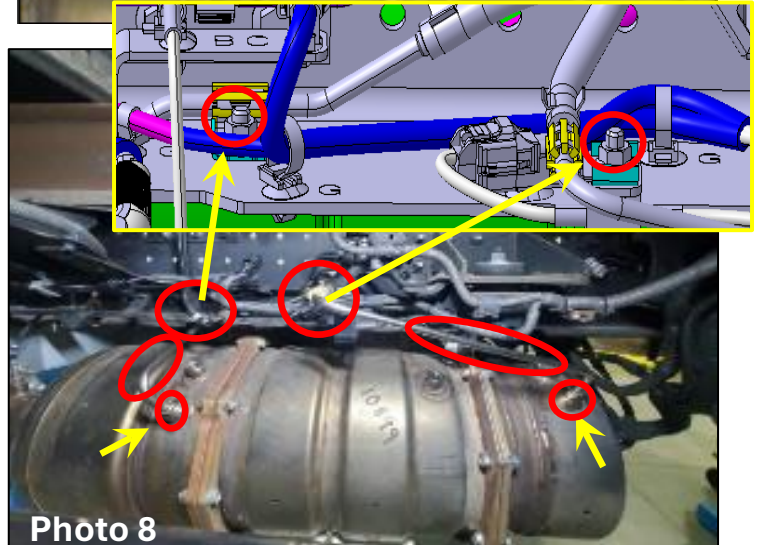
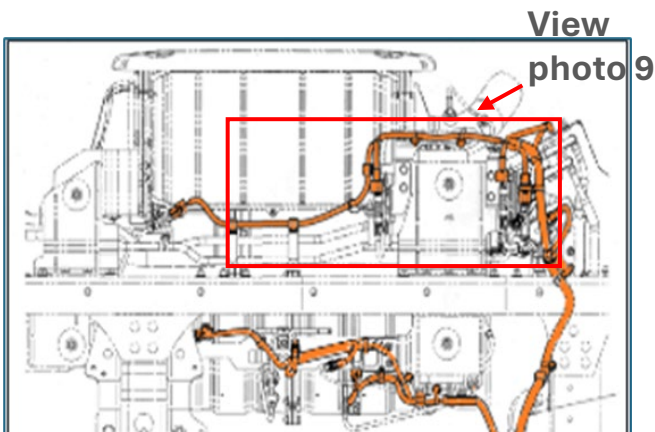


Photo 8

9. Remove the wiring harness clamps securing the exhaust system wiring harness. Disconnect the temperature sensor wiring harness connectors. Remove and discard the exhaust system wiring harness.



View photo 9

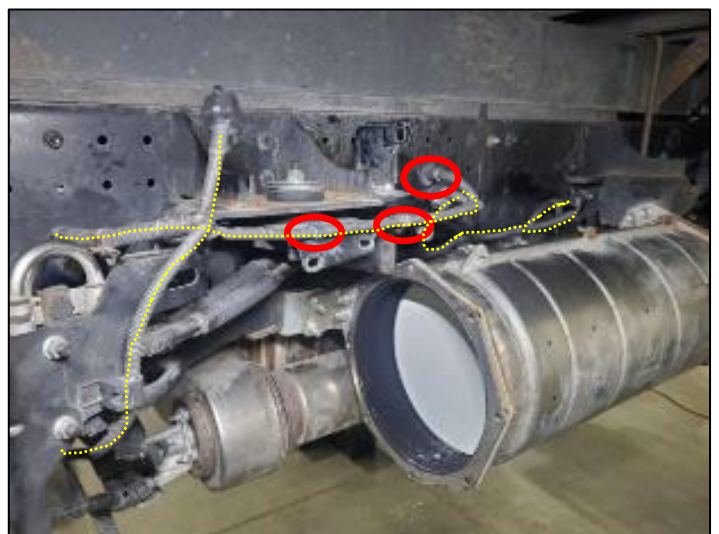
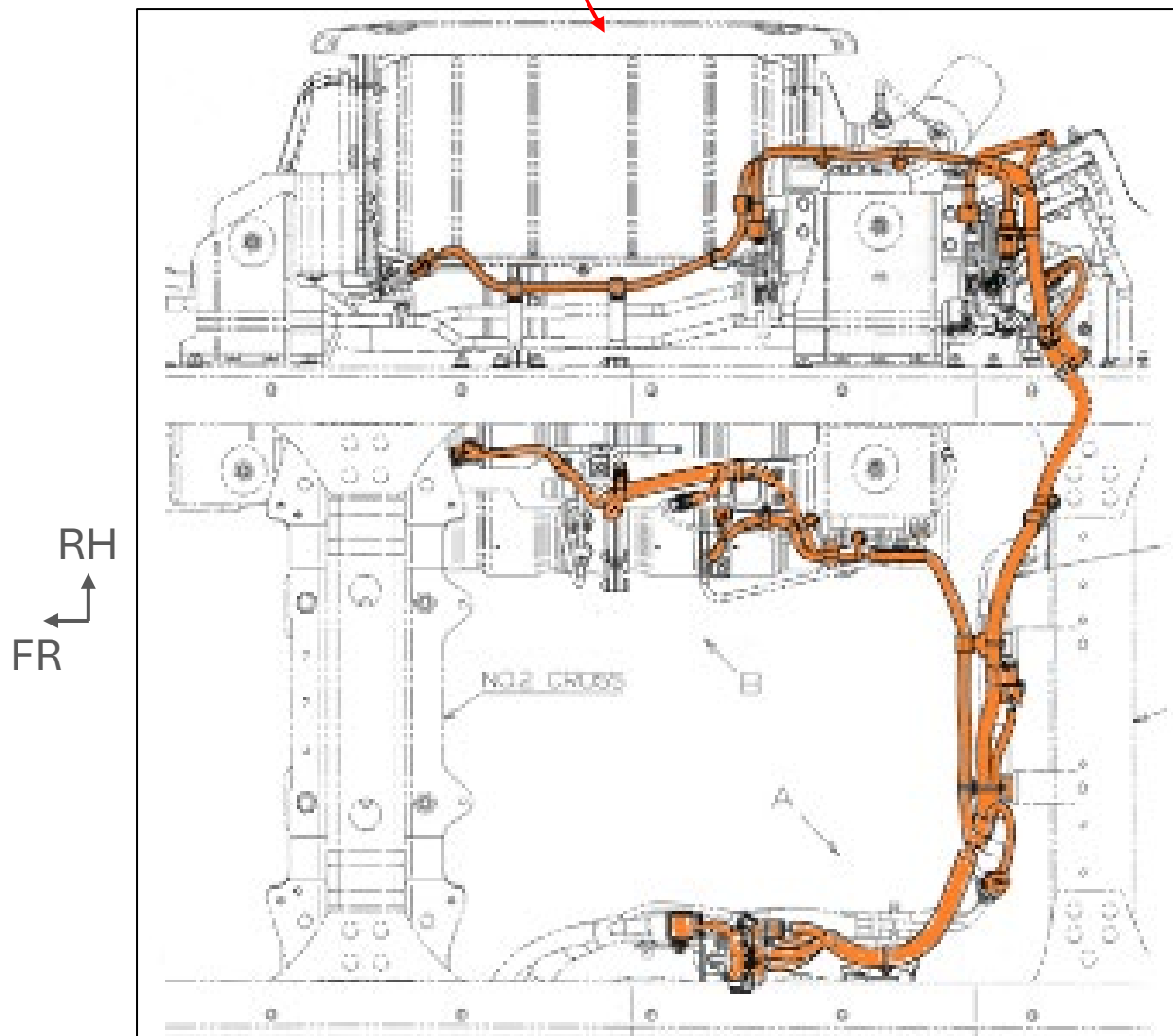
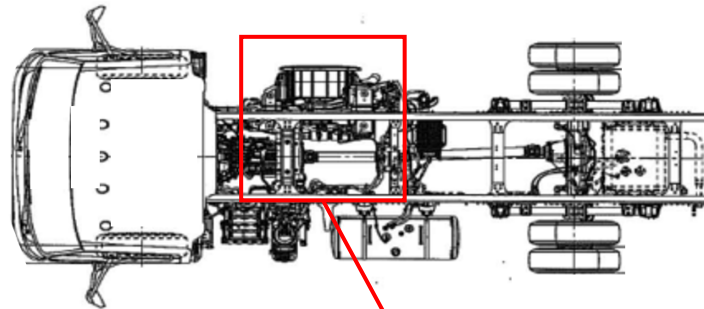


Photo 9

REPAIR PROCEDURE

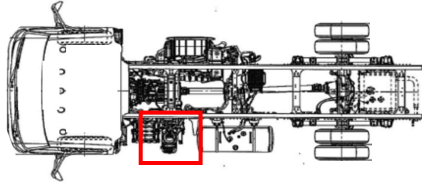
Top view of exhaust system harness shown for reference.

NOTICE: Make note of the harness routing during removal. Recommend marking the frame or other part from which the clamp has been removed. The supplied harness will be routed in the same orientation.



REPAIR PROCEDURE

10. Remove the wiring harness clamps securing the DEF system wiring harness. Disconnect the wiring harness and remove and discard the DEF system wiring harness.



NOTICE: Make note of the harness routing during removal. The supplied harness will be routed in the same orientation.

NOTICE: The ambient air temperature sensor must remain in the vehicle.



11. Remove and discard the three bolts securing the DEF tank cover. Remove and discard the DEF tank cover.



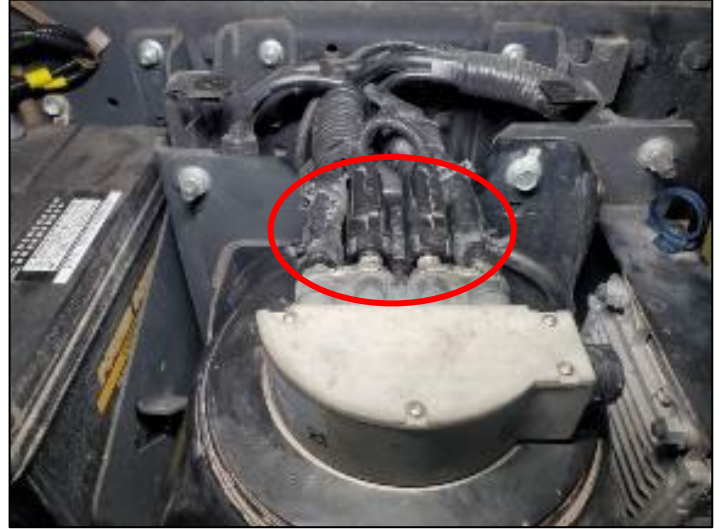
12. Loosen the two nuts securing the DEF tank strap. Remove and retain the two J-bolts and the tank strap for reassembly.



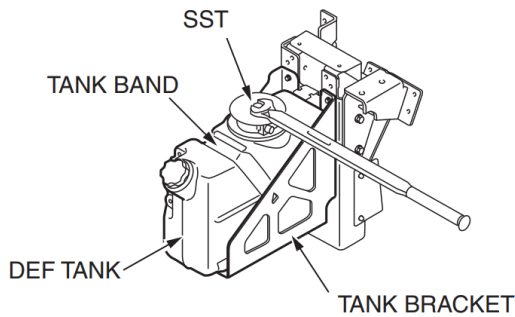
REPAIR PROCEDURE

13. Disconnect the two coolant hoses and the two DEF hoses from the DEF sender. Remove the DEF tank from the vehicle.

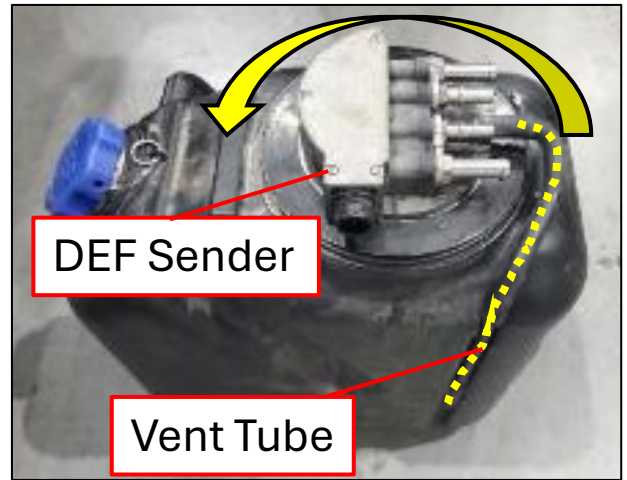
WARNING: Ensure the key has been in the OFF position at least 10 min. to allow the DEF after run cycle to complete before performing this step.



14. Remove the DEF sender using SST: S0920E1010. Discard the DEF sender and the vent tube.



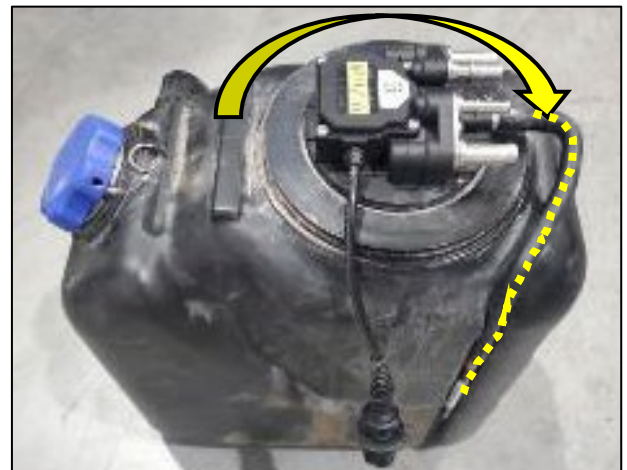
SST: S0920E1010



15. Install the supplied DEF sender (SG400EW110) using SST: 09990E4020. Install the supplied vent tube until the end.



SST: 09990E4020

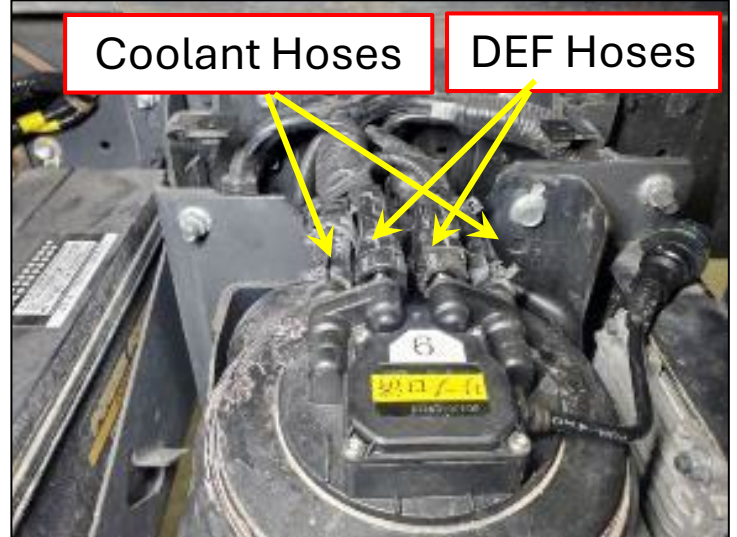




AB5S0* EMISSIONS RECALL

REPAIR PROCEDURE

16. Install the DEF tank on the vehicle. Install the coolant hoses and the DEF hoses removed previously.



17. Install the DEF tank strap and J-bolts. Tighten to the specified torque.

Specified Torque: 22 ft-lb (30 Nm)



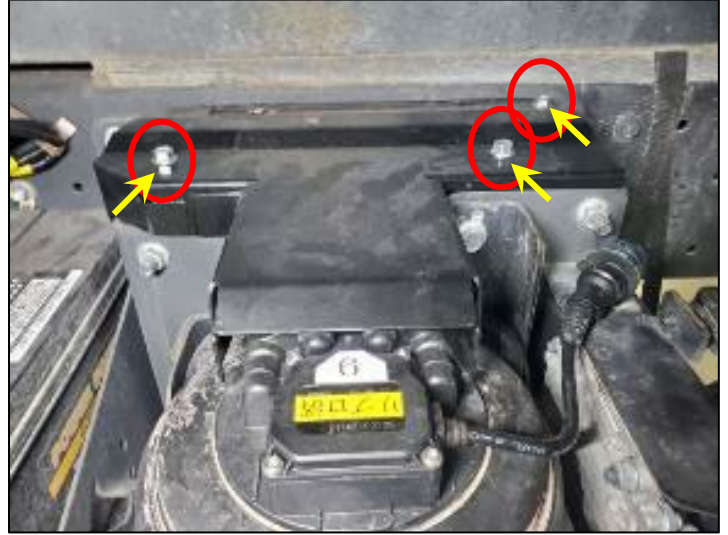
18. Install the supplied wiring harness clamp(8271137340)on the DEF sensor connector. Secure next to the ambient air temperature sensor as shown and trim the wiring harness clamp.



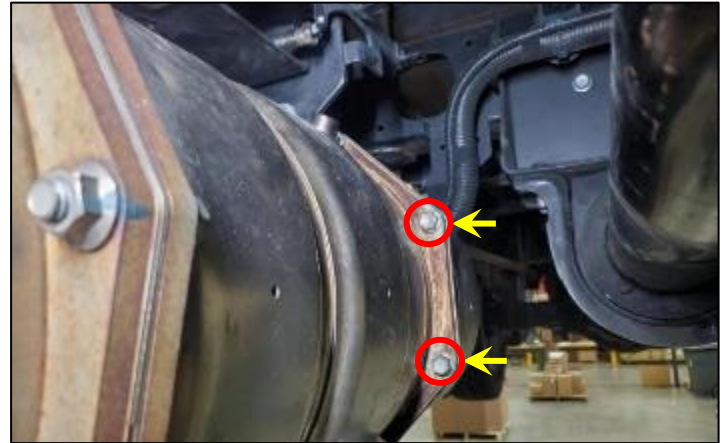
REPAIR PROCEDURE

19. Install the supplied DEF sender cover (4444337570 or 4444337580) with the three supplied bolts (9155180820). Tighten to the specified torque.

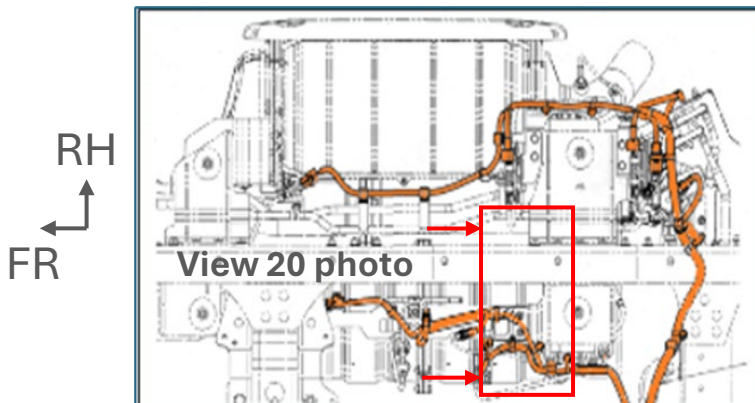
Specified Torque: 23 ft-lb (31 Nm)



20. Remove and discard the four bolts and nuts shown from the DPF outlet housing.



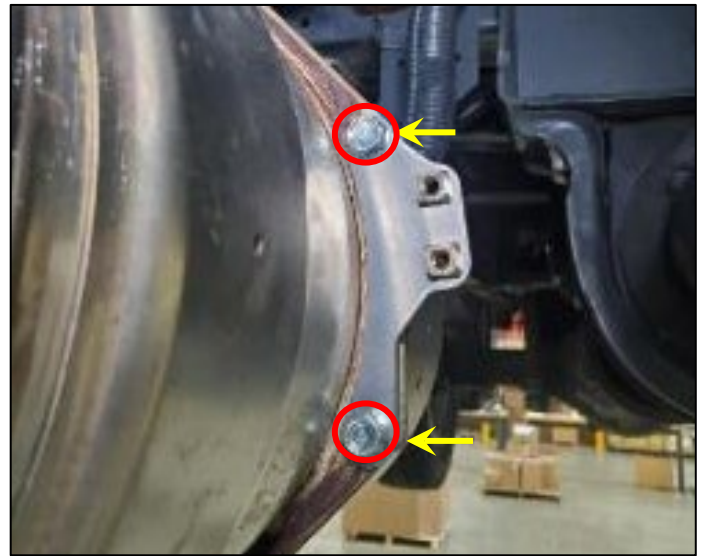
View photo 20



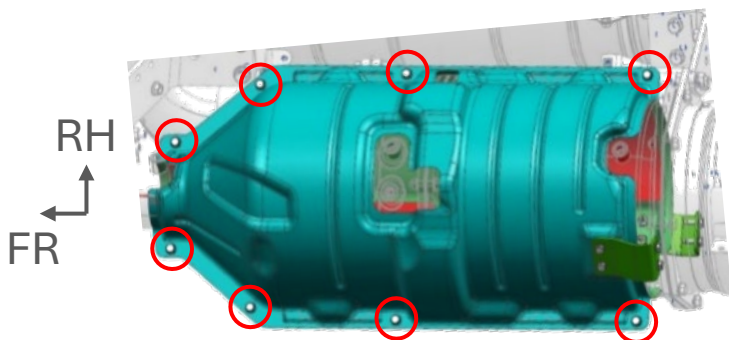
REPAIR PROCEDURE

21. Install the supplied DPF cover mounting brackets (1756278020) with the four supplied bolts (SZ10508083) and nuts (SZ17808015) as shown. Tighten to the specified torque.

Specified Torque: 18 ft-lb (25 Nm)



22. Install the supplied upper (1755278032) and lower (1755278042) insulation covers on the DPF. Install but do not tighten the eight supplied bolts (SZ10506012), one side shown.



Top of view

REPAIR PROCEDURE

23. Install the three supplied rivets (1750478010) and tighten the eight bolts installed in Step 22 to the specified torque.

Specified Torque: 12 ft-lb (17 Nm)

24. Install the two supplied support brackets (1756278010) on the insulation cover installed in Step 22 and on the brackets installed in Step 21 with the eight supplied bolts (SZ10506012). Tighten to the specified torque.

Specified Torque: 12 ft-lb (17 Nm)

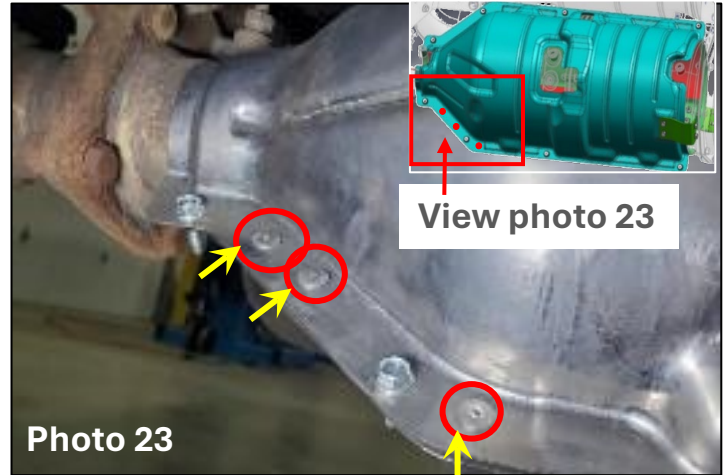
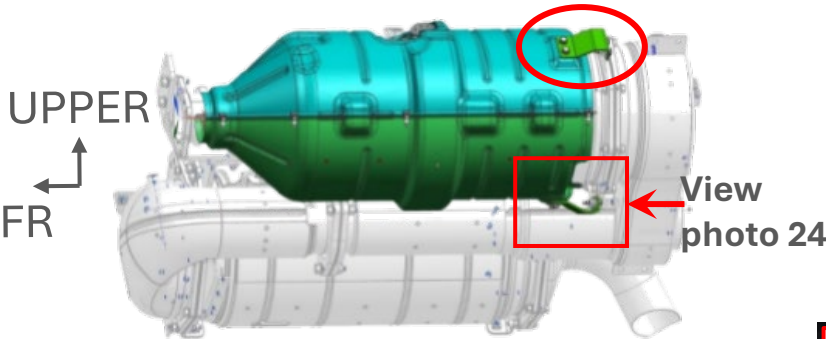


Photo 23



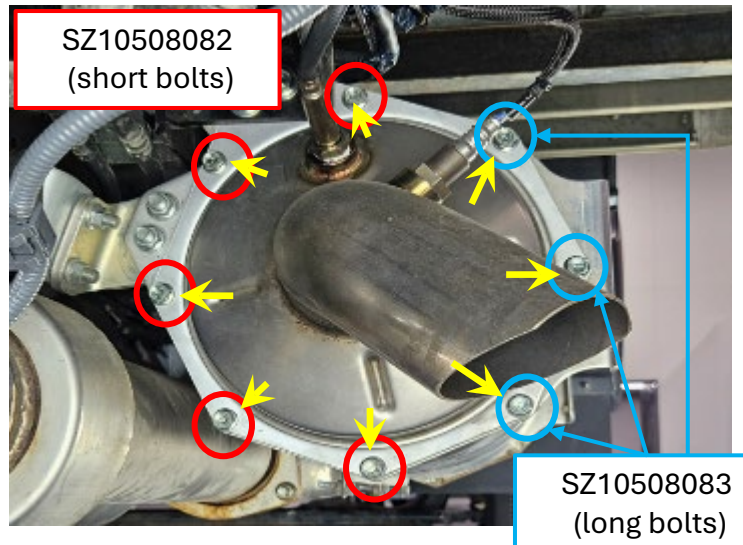
Photo 24



25. Install the supplied tail pipe (1740578J51), gasket (17451E0160), flange (17441E0410), and SCR cover bracket (1754378020) with the eight supplied bolts (SZ10508082 – SZ10508083) and nuts (SZ17808015). Tighten to the specified torque.

Specified Torque: 18 ft-lb (25 Nm)

NOTICE: There are two different length bolts.



REPAIR PROCEDURE

26. Install the two supplied bolts (9167281035) and nuts (9017910070) to the SCR bracket. Tighten to the specified torque.

Specified Torque: 18 ft-lb (25 Nm)

27. Install the supplied downstream NOx sensor(89463E0390) with the two supplied nuts (9415180600) and install the NOx sensor probe in the tail pipe. Tighten the two nuts and the sensor probe to the specified torque.

Specified Torque: Nuts 5.5 ft-lb (7.5 Nm)
Specified Torque: Sensor Probe 37 ft-lb (50 Nm)

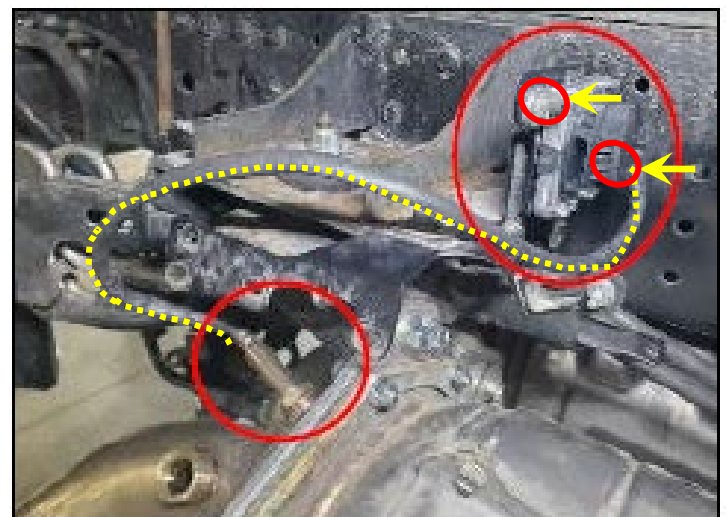
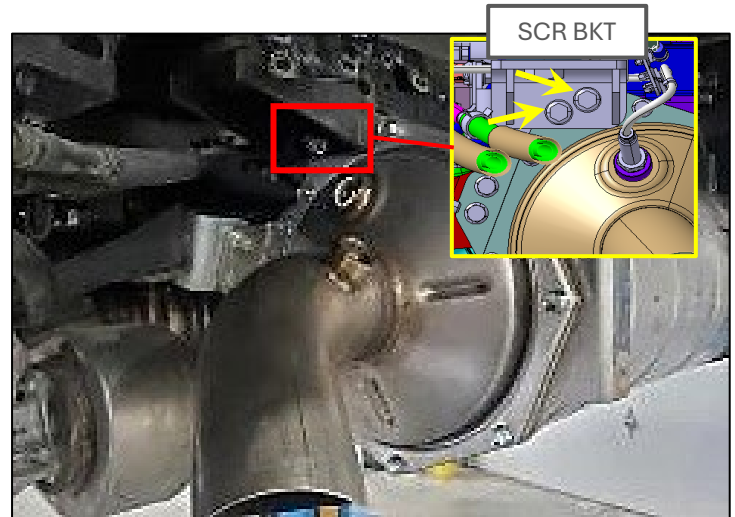
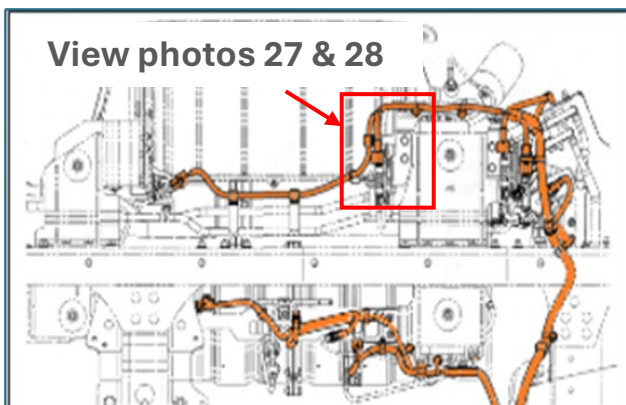


Photo 27



28. Loosely install the five supplied wiring harness clamps band on the NOx sensor wiring harness. Carefully route the downstream NOx sensor wiring to avoid sharp bends and contact with any area as the picture which may cause chaffing. Tighten and trim the wiring harness clamps after routing the harness.

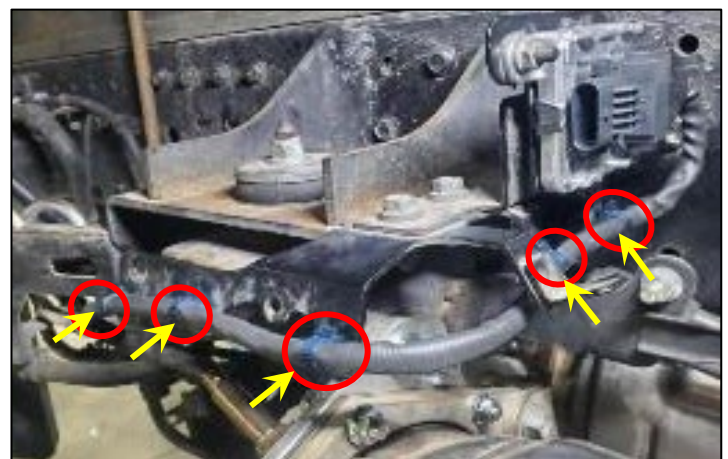


Photo 28

REPAIR PROCEDURE

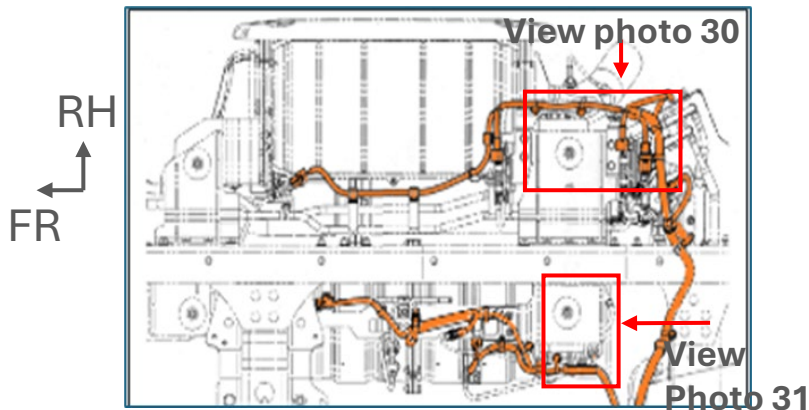
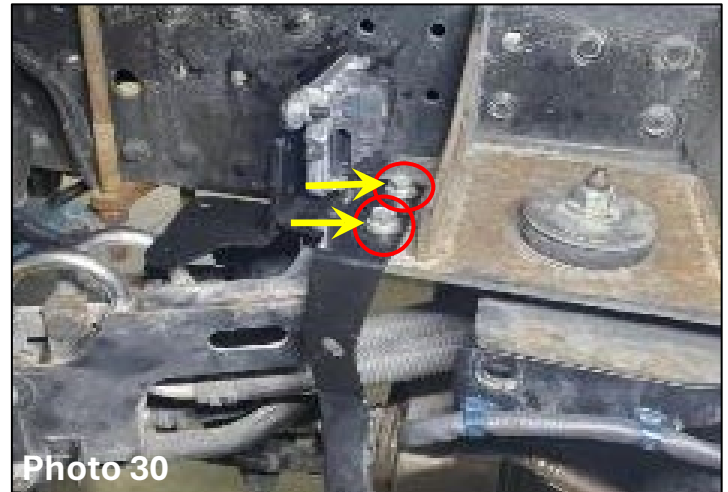
29. Install the supplied upstream NOx sensor (89463E0390) on the supplied sensor bracket (5517337691) with the two supplied nuts (9415180600). Tighten to the specified torque.

Specified Torque: 5.5 ft-lb (7.5 Nm)



30. Install the NOx sensor bracket with the two supplied bolts (9167180825). Tighten to the specified torque.

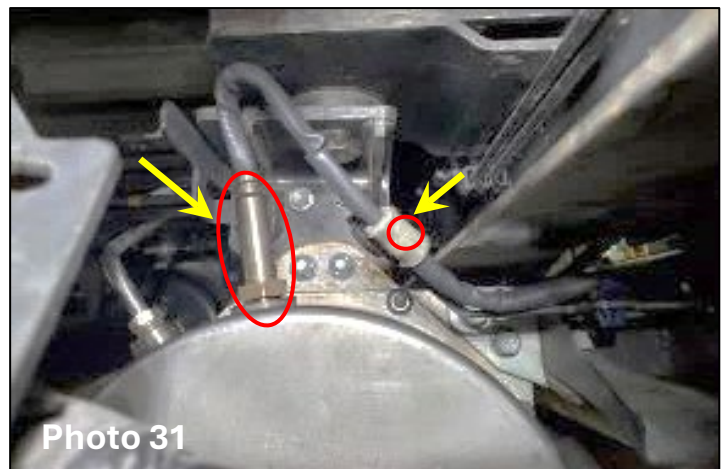
Specified Torque: 18 ft-lb (25 Nm)



31. Install the upstream NOx sensor probe in the DPF outlet housing and install the supplied P-clip(21576E0160) and nut (9415180800) as shown. Tighten the sensor probe and nut to the specified torque.

Specified Torque: Nut 23 ft-lb (31 Nm)

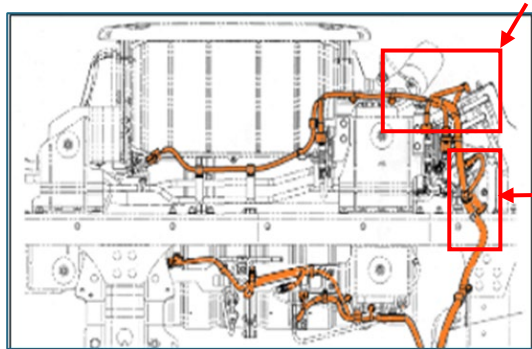
Specified Torque: Sensor Probe 37 ft-lb (50 Nm)



REPAIR PROCEDURE

32. Loosely install the four wiring harness clamps (8271148060) and attach the bracket, carefully route the upstream NOx sensor wiring to avoid sharp bends and contact with any area which may cause chaffing as shown the picture. Tighten and trim the wiring harness clamps after routing the harness.

View photo 33



View photo 32

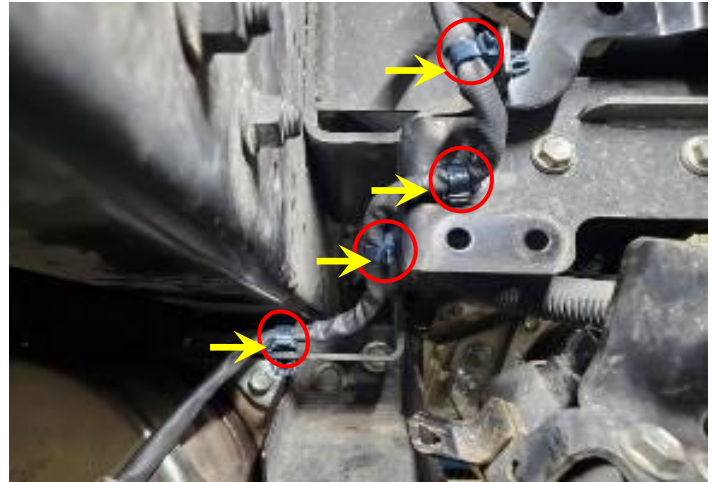


Photo 32

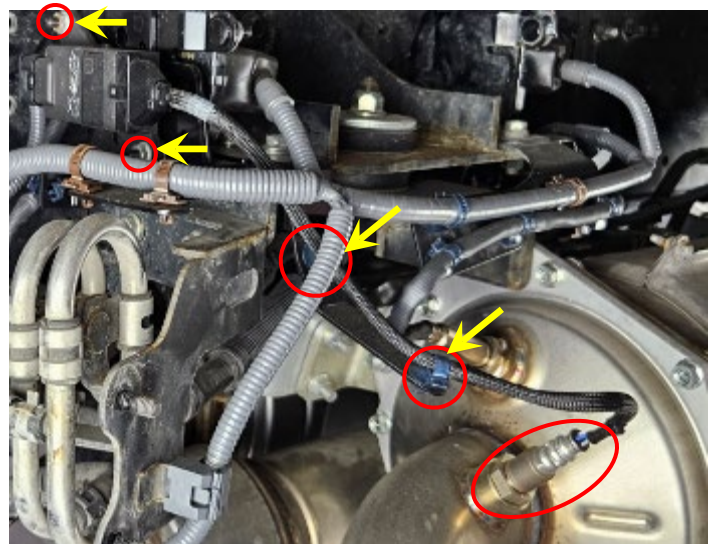


Photo 33

33. Install the supplied PM sensor (894A137081) with the two supplied nuts (9415180600). Tighten the nuts and the probe. Loosely install the two wiring harness clamps and carefully route the PM sensor as shown the picture. Tighten the wiring harness clamps after routing the harness.

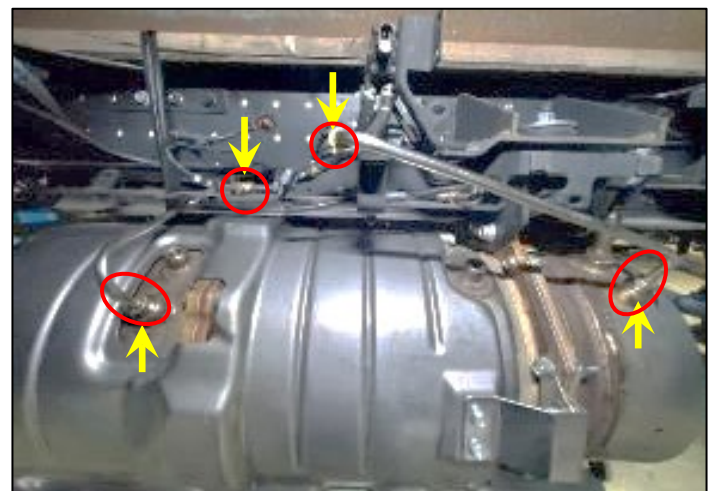
Specified Torque: Nuts 5.5 ft-lb (7.5 Nm)

Specified Torque: Sensor Probe 37 ft-lb (50 Nm)

34. Install the differential pressure pipes, P-clips and nuts previously removed. Tighten the pipes and nuts to the specified torque.

Specified Torque: Pipes 24 ft-lb (33 Nm)

Specified Torque: Nuts 23 ft-lb (31 Nm)





AB5S0* EMISSIONS RECALL

REPAIR PROCEDURE

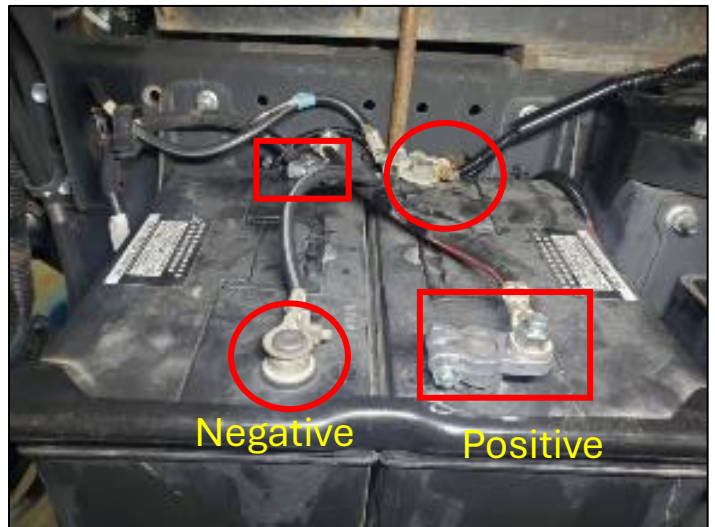
35. Install the DPF inlet and outlet temperature sensors previously removed. Tighten to the specified torque.

Specified Torque: 22 ft-lb (30 Nm)



36. Disconnect the battery cables.

NOTICE: To avoid arcing disconnect and isolate the negative battery cables before disconnecting the positive battery cables.

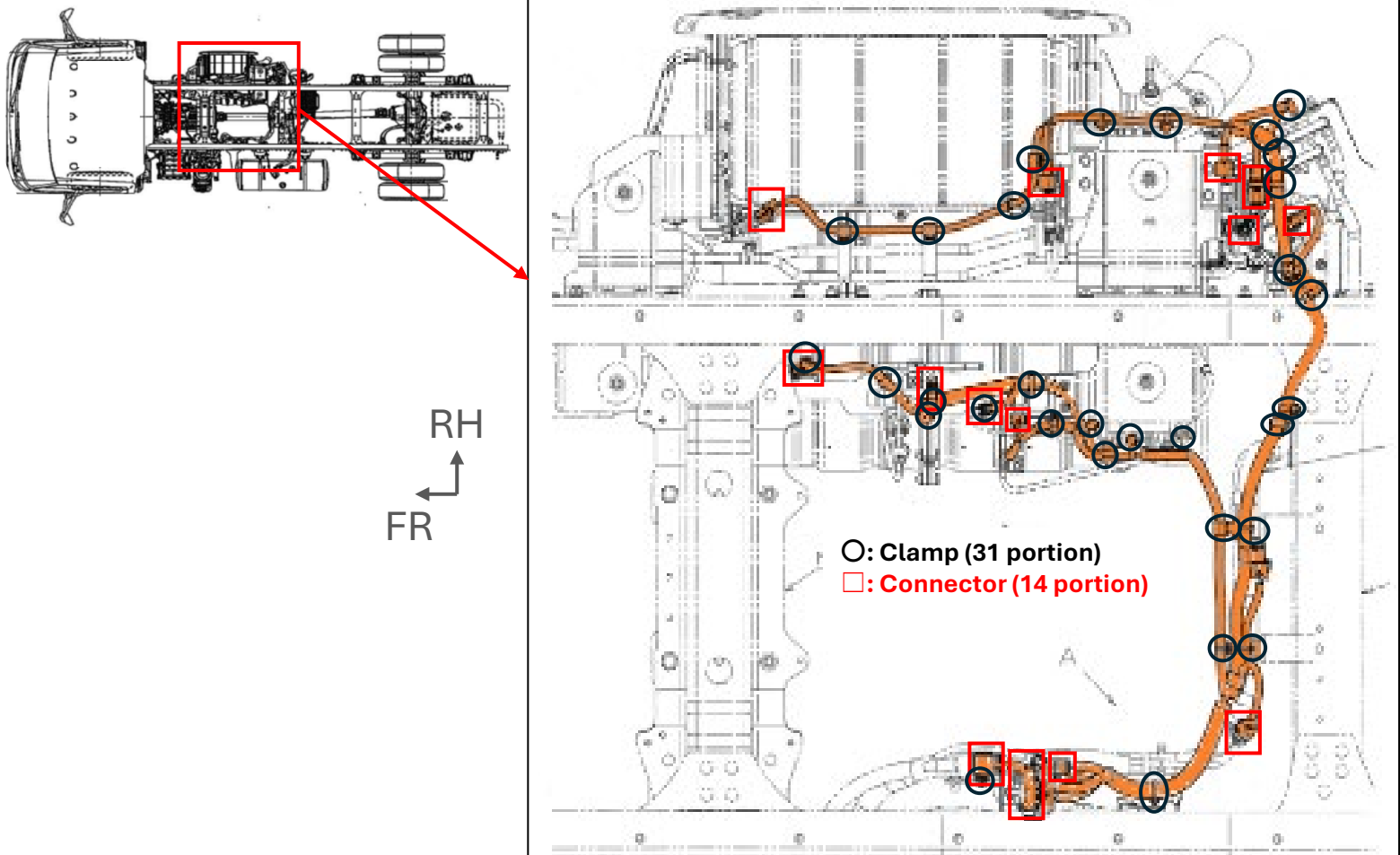


REPAIR PROCEDURE

37. Install the supplied exhaust system wiring harness(8211937180, 8211937190, 8211937230 or 8211937240) as shown below. Ensure all wiring harness 31 clamps are secured and all electrical connections are fully connected. Install the S-clip (8271037010) near the white mark on the coolant hose as shown.



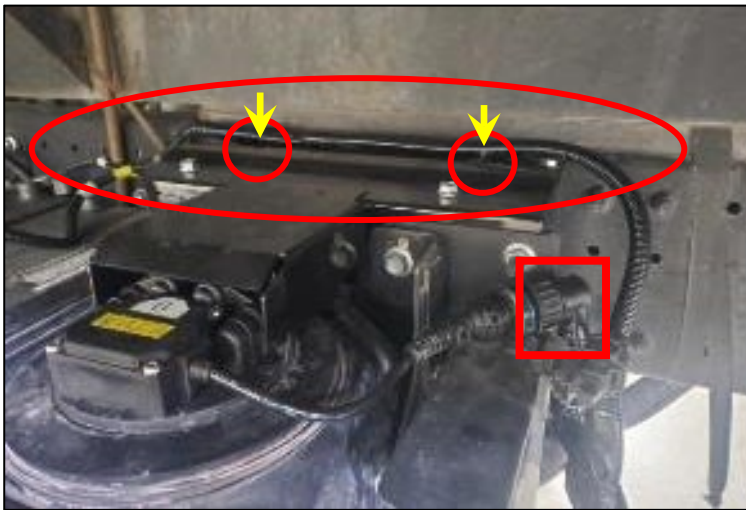
Top view of exhaust system harness shown for reference.



NOTICE: Route the wiring harness exactly as it was before removal in Step 9.

REPAIR PROCEDURE

38. Install the supplied DEF system wiring harness(8211A37090 or 8211A37100). Route the new portion of the harness over the DEF sender cover installed in Step 19 as shown below picture. Ensure all wiring harness eight clamps are secured and all electrical connections are fully connected.



39. Install the supplied bracket(8272937G50) on the DCU cover with the supplied bolt (9155180825). Tighten to the specified torque.

Specified Torque: 20 ft-lb (27 Nm)



REPAIR PROCEDURE

40. Install the relay box with the supplied bolt (9155180825) and two supplied nuts (9415180800) to the bracket installed in Step 39. Tighten to the specified torque. Install the supplied relay and cover.

Specified Torque: 20 ft-lb (27 Nm)



41. Loosen the two nuts securing the battery hold down. Remove and retain the battery hold down and J-bolts. Remove both batteries.



42. Clean all paint and corrosion from the frame rail in the area shown.



REPAIR PROCEDURE

43. Install the negative lead of the DEF harness to the frame rail with the supplied bolt (9155281025) and nut (9415181000). Tighten to the specified torque. Apply paint to protect from corrosion.

Specified Torque: 28 ft-lb (38 Nm)



44. Install the battery, the battery hold down and J-bolts previously removed. Tighten the nuts to the specified torque.

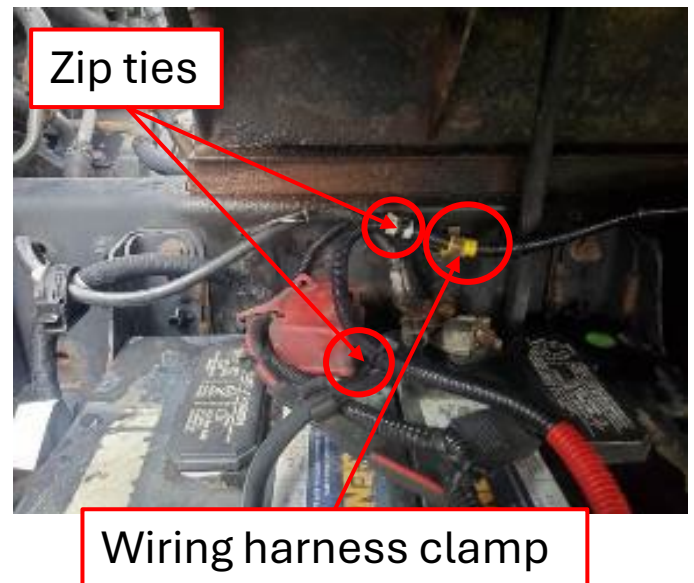
Specified Torque: 2.5 Ft-lb (3 Nm)



45. Install the battery cables. Install the positive lead of the DEF harness to the rear battery positive post. Tighten to the specified torque. Carefully route the harness to avoid sharp edges which could cause chaffing and install the supplied zip ties and wiring harness clamp (8271137340).

Specified Torque: 9.5 Ft-lb (13 Nm)

NOTICE: The location of the zip ties and wiring harness clamp may vary based on vehicle options.



REPAIR PROCEDURE

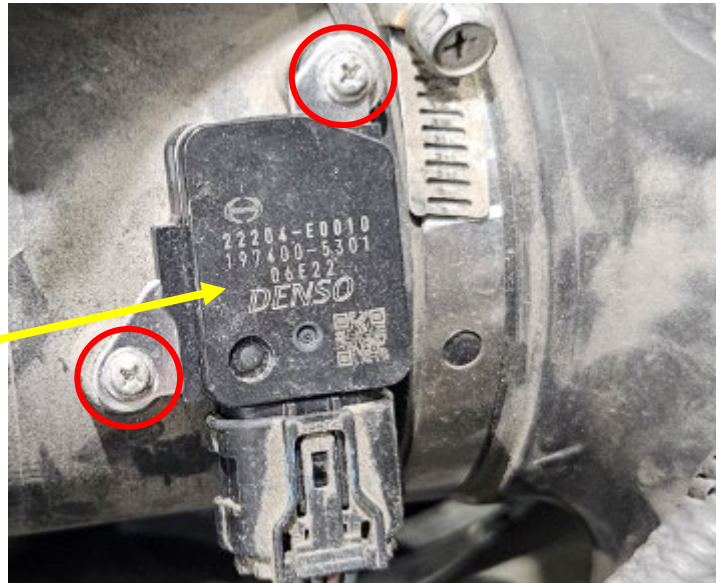
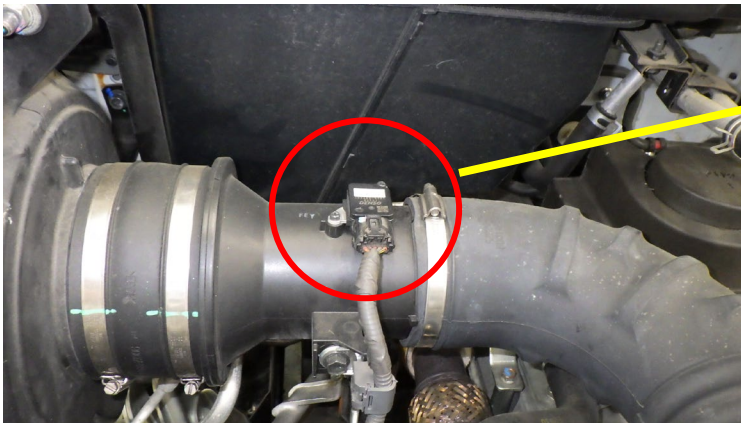
46. Install the SCR cover and the four bolts previously removed in Step 1. Tighten to the specified torque.

Specified Torque: 23 ft-lb (31 Nm)



47. Replace the MAF sensor(22204E0010). Tighten the two screws to the specified torque.

Specified Torque: 0.5 ft-lb (0.6 Nm)



48. Connect DX-III to the vehicle. Turn the ignition to the ON position.

NOTICE: Ensure DX-III is updated to the latest software version available.





AB5S0* EMISSIONS RECALL

REPAIR PROCEDURE

49. Connect to all modules and note any DTCs that are present.

Select **DCU/ System Protection Data**

+	System
+	Engine
	DCU(Doser)(500K)
	Meter (7 inch)
	VCS (Vehicle Control System)
	Differential lock
	Brake (WABCO ABS-E8)
	Body Control Module



50. Select **HC Poison Quantity** and select **Reset**. Select OK to reset and OK to confirm reset was complete. Turn the ignition to the OFF position.

System protection data

System: 02 DCU(Doser)(500K) CAN

No.	Items	Value	Unit	Write to ECU
<input type="checkbox"/>	8504 Ammonia absorption	7.600	g	
<input checked="" type="checkbox"/>	8505 HC poison quantity	0.148	g	
<input type="checkbox"/>	8507 Ammonia wall face absorption	0.00	g	
<input type="checkbox"/>	8529 DEF dose feedback volume	1.000		

Confirmation

Reset the selected item to its initial value.
Is it OK?

Caution

After writing is complete, turn the key switch OFF for a minimum of 60 seconds. Turn the key ON. Confirm if the value is written correctly or not.



AB5S0* EMISSIONS RECALL

REPAIR PROCEDURE

51. Turn the ignition to the ON position. Confirm the HC poison quantity is set to zero.

System: 02 DCU(Doser)(500K) CAN

No.	Items	Value	Unit	Write to ECU
<input type="checkbox"/> 8504	Ammonia absorption	7.600	g	
<input checked="" type="checkbox"/> 8505	HC poison quantity	0.000	g	Success
<input type="checkbox"/> 8507	Ammonia wall face absorption	0.00	g	
<input type="checkbox"/> 8529	DEF dose feedback volume	1.000		

52. Return to the main DX III system page to reprogram the Engine ECU and DCU modules with the latest software

To prevent re-programming errors, Engine ECU **must** be reprogrammed first.

Engine ECU Software > 89663-E5G82(Diesel) 89663-E5G92(HV)
DCU (Doser) Software > 89550-37332(both Diesel and HV)

NOTE (For reference): For Module programming instructions see **Tech Tip 23-016** for Engine ECU programming. **This Tech Tip is for programming the Engine ECU, but please follow the same method for the DCU.**

System	Commun...	Software No.
Engine	CAN	89663-E5K61B
DCU(Doser)(500K)	CAN	89550E0621
Meter (7 inch)	CAN	S838C-E0060
VCS (Vehicle Control System)	CAN	S8992-E0A30

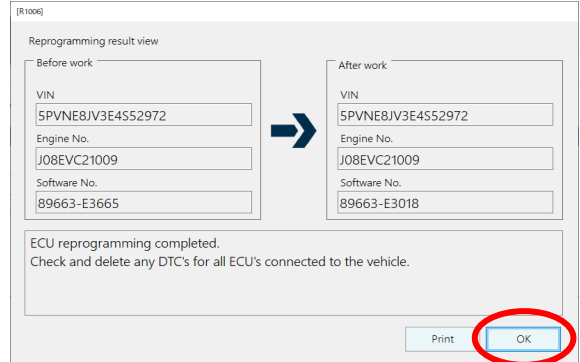
When reprogramming the engine ECU as shown in the screen above, select Engine. When reprogramming the DCU, select DCU.



AB5S0* EMISSIONS RECALL

REPAIR PROCEDURE

53. When reprogramming is complete, then select finish. Confirm the software number has been updated then select OK.



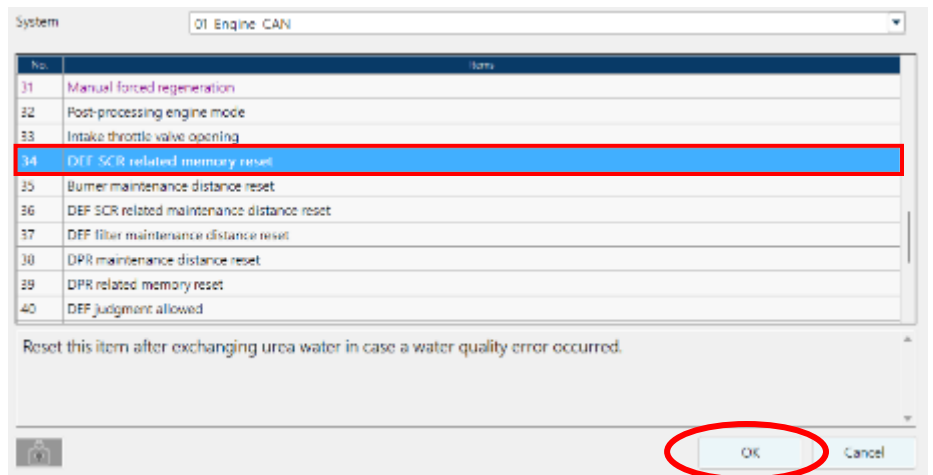
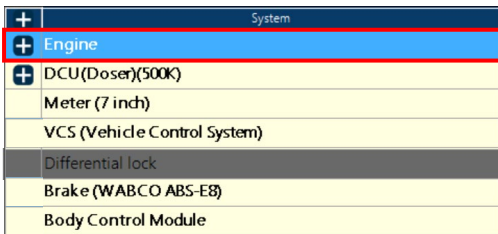
54. If the DPF was replaced as directed by TechAssist, Reset the DPR Memory. If the DPF was NOT replaced, go to Step 55.

NOTE: Tech Tip 25-003 for DPR Memory reset procedure

55. Reset the SCR Related Memory

See **Tech Tip 24-003** for further information

Select **Engine/ Data Monitor Active Test/ Active Test/ No. 34 DEF SCR related Memory Reset/ OK**







AB5S0* EMISSIONS RECALL


REPAIR PROCEDURE

Select 

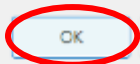

Items	Specified value	Unit
DEF SCR related memory reset	Reset	

Select **OK**, and Turn Key Switch OFF for 10 seconds, Turn Key Switch ON.



 **WARNING**

Stop the engine and turn the Key SW to ON. After conducting the active test, turn the Key SW to OFF.



Select 


Items	Specified value	Unit
DEF SCR related memory reset	Reset	

Select 

Items	Specified value	Unit
DEF SCR related memory reset	Reset	

Select  to return to the system Select Menu.

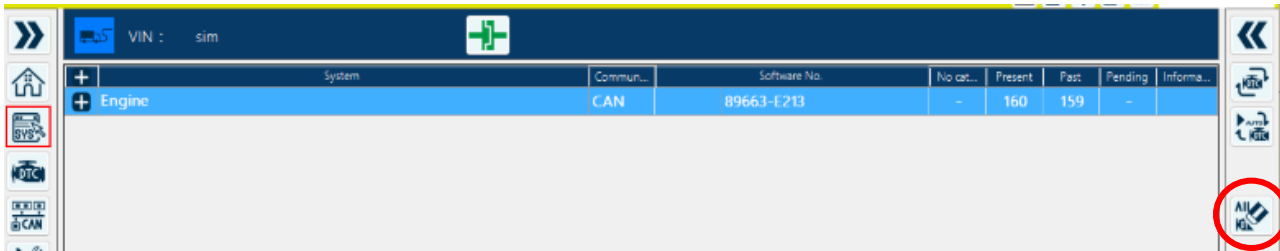
Items	Specified value	Unit
DEF SCR related memory reset	Reset	


REPAIR PROCEDURE

56. Check and Clear all DTCs

Select Erase All DTCs



57. Set Soot level and Perform Manual Regen

Select Customization , No. 534 “DPF Soot Amount Piling Up”, “Set Value to 6.0”

No.	Items	Initial value	Set value	Unit	Write to ECU
<input type="checkbox"/> 453	Setting of actuation time for hill start gear chang...	0.0	0.0	Seconds	
<input type="checkbox"/> 456	Long idling control RPM	0	0	rpm	
<input type="checkbox"/> 474	Customized Backup (data 2 byte 6 digits) 1	0	0		
<input checked="" type="checkbox"/> 534	DPF Soot Amount Piling Up	0.000	6.000	g/L	
<input type="checkbox"/> 543	PM deposit volume 1 (A09C)	0.000	0.000	g/L	
<input type="checkbox"/> 544	PM deposit volume 2 (A09C)	0.000	0.000	g/L	
<input type="checkbox"/> 580	Total idle fuel injection quantity	0.0	0.0	l	
<input type="checkbox"/> 581	Trip idle injection quantity	0.0	0.0	l	
<input type="checkbox"/> 582	Total fuel injection quantity	0.0	0.0	l	
<input type="checkbox"/> 583	Trip total fuel injection quantity	0.0	0.0	l	
<input type="checkbox"/> 584	Total fuel injection quantity in case of PTO opera...	0.0	0.0	l	
<input type="checkbox"/> 585	Trip PTO (driving) injection quantity	0.0	0.0	l	
<input type="checkbox"/> 586	Trip PTO (stoo) fuel injection quantity	0.0	0.0	l	

Select Write , Verify “Success” has displayed.

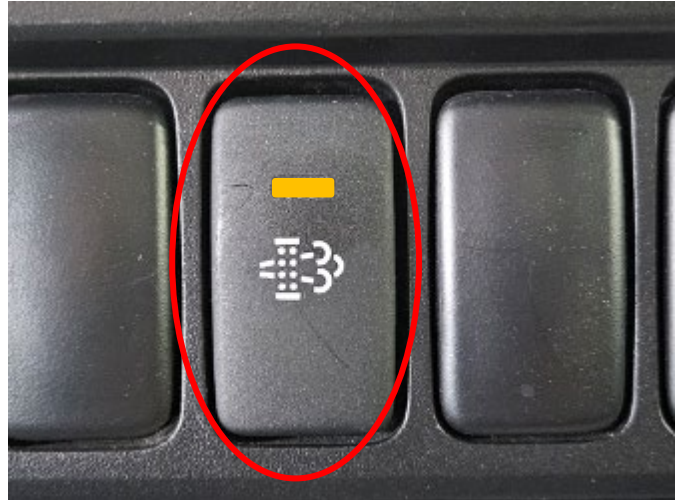
No.	Items	Initial value	Set value	Unit	Write to ECU
<input type="checkbox"/> 453	Setting of actuation time for hill start gear chang...	0.0	0.0	Seconds	
<input type="checkbox"/> 456	Long idling control RPM	0	0	rpm	
<input type="checkbox"/> 474	Customized Backup (data 2 byte 6 digits) 1	0	0		
<input checked="" type="checkbox"/> 534	DPF Soot Amount Piling Up	0.000	6.000	g/L	Success
<input type="checkbox"/> 543	PM deposit volume 1 (A09C)	0.000	0.000	g/L	
<input type="checkbox"/> 544	PM deposit volume 2 (A09C)	0.000	0.000	g/L	
<input type="checkbox"/> 580	Total idle fuel injection quantity	0.0	0.0	l	
<input type="checkbox"/> 581	Trip idle injection quantity	0.0	0.0	l	
<input type="checkbox"/> 582	Total fuel injection quantity	0.0	0.0	l	
<input type="checkbox"/> 583	Trip total fuel injection quantity	0.0	0.0	l	
<input type="checkbox"/> 584	Total fuel injection quantity in case of PTO opera...	0.0	0.0	l	
<input type="checkbox"/> 585	Trip PTO (driving) injection quantity	0.0	0.0	l	



AB5S0* EMISSIONS RECALL

REPAIR PROCEDURE

58. Start the engine and perform Manual Regeneration by pressing the Manual Regen Button (DX Data does not need to be recorded).



59. Once Regen has completed, recheck for any DTCs and disconnect DX III.

+	System
+	Engine
+	DCU(Doser)(500K)
	Meter (7 inch)
	VCS (Vehicle Control System)
	Differential lock
	Brake (WABCO ABS-E8)
	Body Control Module

60. Install a recall label to the driver door jamb above the VIN label. Fill in the Campaign No. listed P3, Dealer code, and Repair date. Proceed to FINAL INSPECTION.



Campaign No.: _____

Dealer code: _____

Repair date: ____/____/____
(MM/DD/YY)

DO NOT REMOVE



AB5S0* EMISSIONS RECALL

FINAL INSPECTION

To complete this procedure review and confirm the following:

- All fasteners have been tightened to the specified torque.
- The ECU and DCU software has been updated to the most current levels.
- There are no current DTCs.
- The engine coolant level is full.
- DPF manual regeneration was performed.
- No coolant, DEF or exhaust leaks are present.

CLAIM APPLICATION

- Reimbursable in accordance within the terms and policies of the Hino limited warranties.
 - a) Claim Type: EM
 - b) Campaign: AB5S01, AB5S02, AB5S03, AB5S04, AB5S05, AB5S06, AB5S07
 - c) Labor Charge: 5.5h

If the DPF replacement is performed during this procedure, add:

- a) Claim Type: EP
- b) Campaign: AB5T0
- c) Labor Charge: 4.0h