

PREVOST

ENREGISTRÉ - REGISTERED
ISO 9001 & ISO 14001




**WARRANTY
BULLETIN**

Wb11-19

DATE : JUNE 2011	SECTION : 04 - Exhaust
EXPIRATION: JUNE 2013	
SUBJECT : RELOCATING THE DIESEL EXHAUST FLUID (DEF) HOSE AND ADDITION OF INSULATION TUBING INSIDE THE ENGINE COMPARTMENT	

APPLICATION

Model affected	Vehicle affected
H3-45 Coaches Model Year : 2010 - 2011	 <p>The following vehicles:</p> <p>2PCH33498AC71<u>1573</u> 2PCH33496AC71<u>1636</u> 2PCH33496AC71<u>1605</u> 2PCH33499BC71<u>1695</u> 2PCH33495AC71<u>1627</u></p>

DESCRIPTION

On the vehicles affected by this bulletin, it is necessary to reroute the diesel exhaust fluid (DEF) in a cooler environment. On the affected vehicles, the DEF hose shares a PVC duct with warm power steering hoses.



Use of overheated diesel exhaust fluid will reduce the SCR injector useful life.

To view this bulletin in color, download the PDF format at the following address:

<http://prevostparts.volvo.com/technicalpublications/pdf/WB11-19.pdf>

MATERIAL

Order the following parts:

Part No.	Description	Qty
500434	SCREW, SELF TAPING PHILLIPS HEAD #8X3/4	1
504013	MOUNT, CABLE TIE 	1
504579	GROMMET, RUBBER 1.625 X 0.125 X 0.437 X 2	1
504637	NYLON CABLE TIE 368mm X 5mm (14 inches long)	25
506267	INSULATING SLEEVE, ARMAFLEX, 1 1/8" X 1/2" X 72"	3
507664	NYLON CABLE TIE, DOUBLE 300mm X 5mm (12 inches long)	25
509815	QUICK MOUNT, CABLE TIE (CHRISTMAS TREE TYPE) 	2

NOTE

Material can be obtained through regular channels.

PROCEDURE



DANGER

Park vehicle safely, apply parking brake, stop engine and set battery master switch(es) to the OFF position prior to working on the vehicle.

NOTE

To perform this corrective measure, you need to draw the DEF hose out. This hose routes between the SCR catalytic converter injector and the DEF pump located on the condenser compartment.

AVOID BENDING THE DEF HOSE

The DEF hose is heated by electrical resistance to melt the frozen DEF during winter. In order not to break the heating element, it is of the utmost importance not to bend the DEF hose to a less than 3 inches (75mm) radius. If the heating element is broken the entire hose must be replaced.

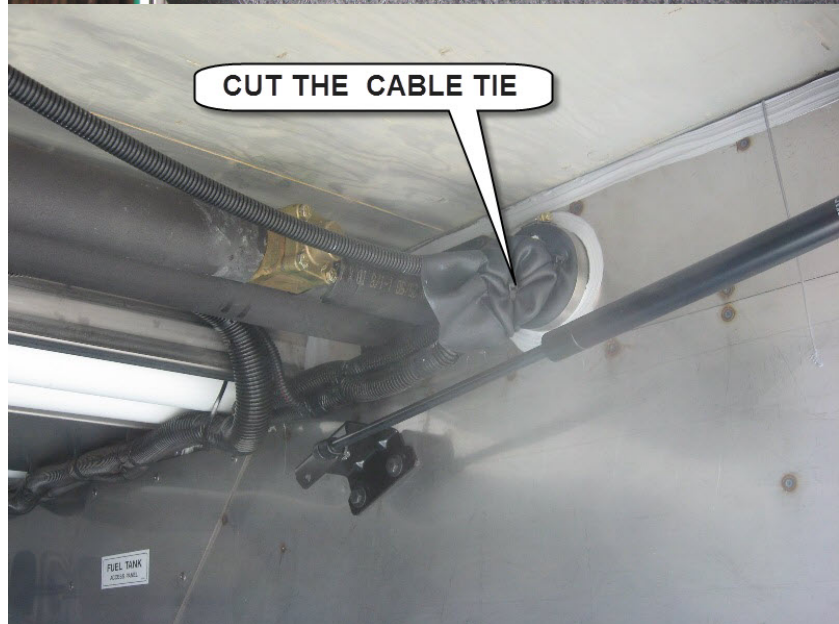
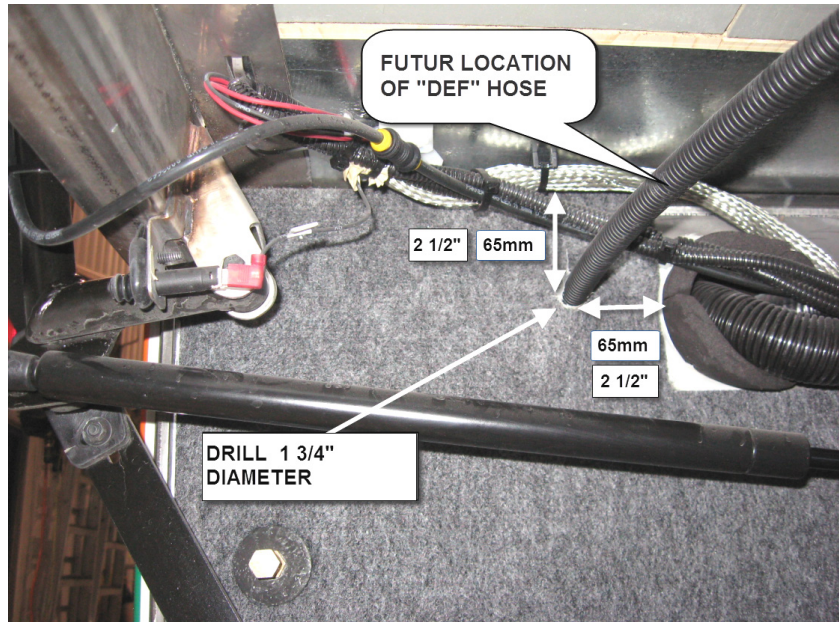
Nylon cable ties must be lightly tighten only. The corrugated sleeve should not be deformed or broken.

1. Drill a **1 3/4"** diameter hole through the aft right baggage compartment/rear wheelhouse partition positioned **2 1/2"** (65mm) from top (ceiling) and **2 1/2"** (65mm) from the existing PVC duct.

2. Place a rubber grommet #504579 on that hole to protect the DEF hose once rerouted.

Note: The image at right shows the DEF hose after reinstallation. At this present step, the DEF hose cannot be seen as it passes inside the steering hydraulic hoses PVC duct.

3. In the same baggage compartment, cut the nylon cable tie on the PVC duct sealing boot.



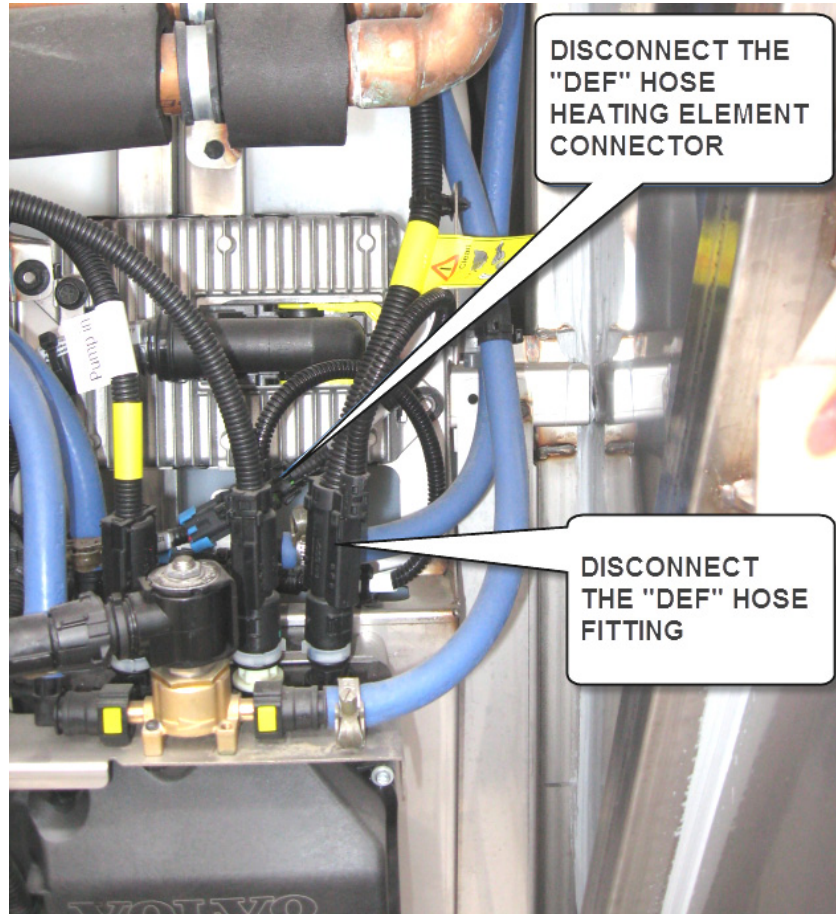
4. In the passengers' area, remove the engine access hatch.
5. Outside the vehicle, remove the rear right fender.

6. In the condenser compartment, disconnect the DEF hose fitting from the DEF pump. Refer to **Voss 241 quick connect** instruction included at the end of this bulletin.

IMPORTANT NOTE – You must plug the DEF hose to prevent DEF from spilling in the PVC ducts and any other compartment during the rerouting procedure.

Do not spill DEF on disconnected or unsealed connectors and electrical wires. If DEF is spilled on a disconnected or unsealed connector, the connector must be removed immediately and replaced.

7. Disconnect the DEF hose heating element connector.
8. In the condenser compartment, cut the nylon ties securing the DEF hose
9. Using electric tape, tape the heating element connector to the DEF hose so it will not catch when being drawn out from the PVC ducts.
10. Lift the vehicle and gain access to the rear wheelhouse.
11. Cut the nylon ties closing the power steering PVC duct sealing boot.
12. From the passengers' area engine access hatch, locate the DEF hose.
13. In order to reinstall the DEF hose as originally installed, draw a reference mark on the DEF hose at the sealing boot position. This mark will serve as a reference at time of reinstallation.
14. Cut the DEF hose cable ties found above the engine and transmission.
15. Pull out the DEF hose. One person must be located in the condenser compartment to guide the DEF hose to the PVC duct and to prevent the DEF hose from bending too much. Pull out the DEF hose until the fitting can be seen at the wheelhouse/engine compartment partition.

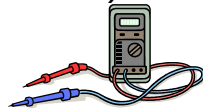


Respect the minimum radius requirement of 3" (75mm). Avoid bending the hose too much.

16. Once the hose drawn out (fitting is up to the engine compartment partition), reroute the DEF hose over the electrical cable PVC duct and then, up to the second electrical cable PVC duct.

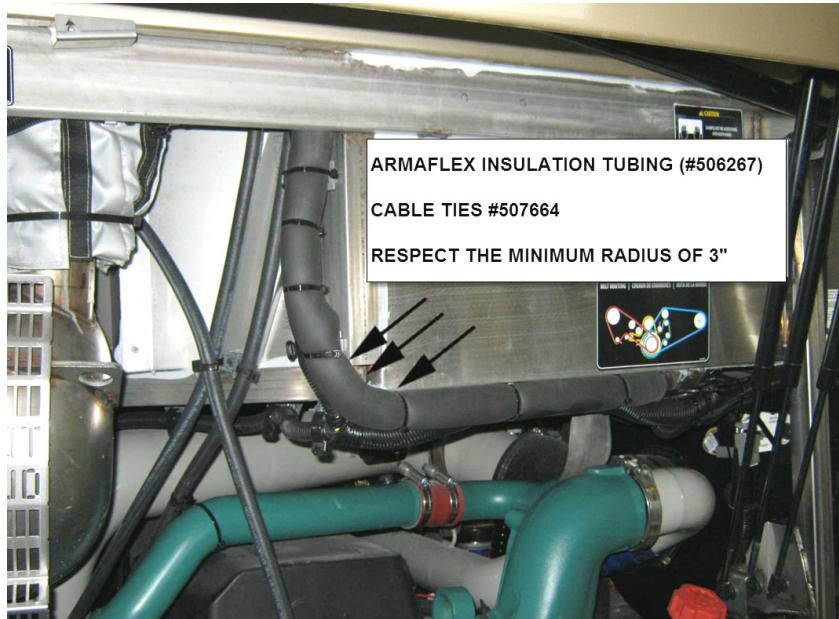


Before reinserting the DEF hose, measure the electrical heater resistance at the electrical connector to make sure the heater is not broken due to manipulations. You should measure a resistance between 4 and 5 ohms. If a higher resistance value is measured, replace the DEF hose (p/n 040909).

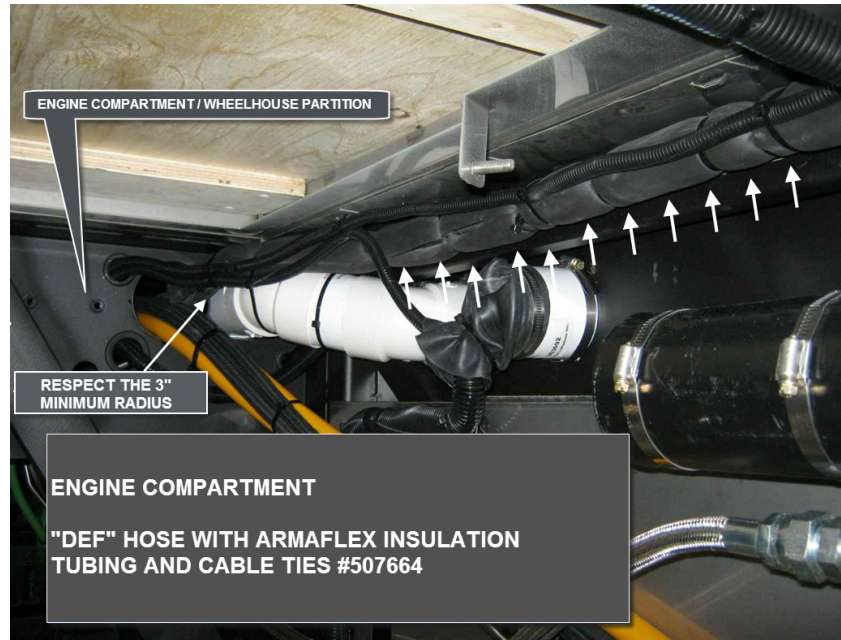


17. In the engine compartment, add Armaflex insulation tubing on the DEF hose from the SCR tank injector up to the mark previously done on the DEF hose, corresponding to the sealing boot location at the engine compartment partition.

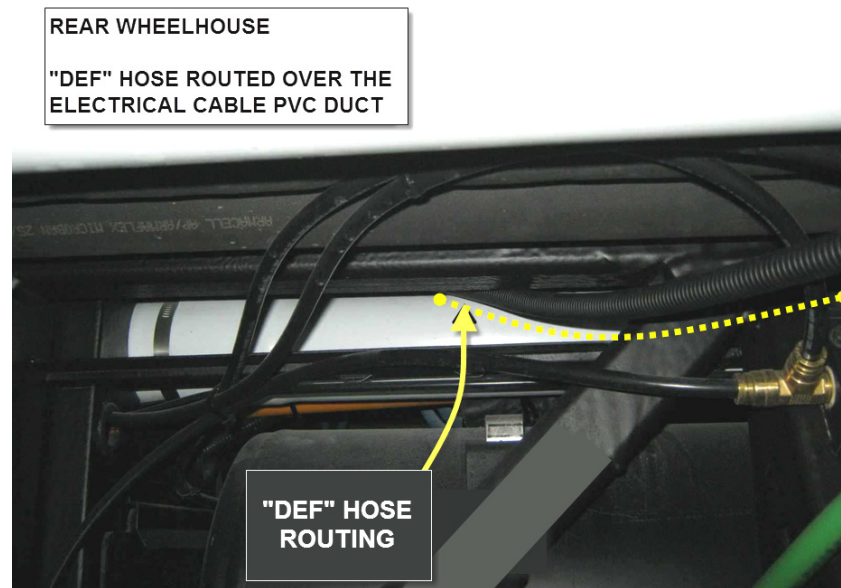
The Armaflex insulation tubing must exceed the sealing boot at the engine compartment partition about 6 inches.



18. The insulation tubing must be split prior installation.
19. Tie each end of the insulation tube in order to keep it closed.
20. Mount the DEF hose in the engine compartment using cable ties.



21. Reroute DEF hose over the electrical cable PVC duct and then up to the second electrical cable PVC duct.



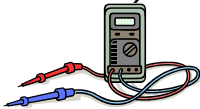
22. Route DEF hose to the aft baggage compartment, passing through the hole previously done.

23. Route DEF hose up to the condenser compartment, passing through the sealing boot and PVC duct.

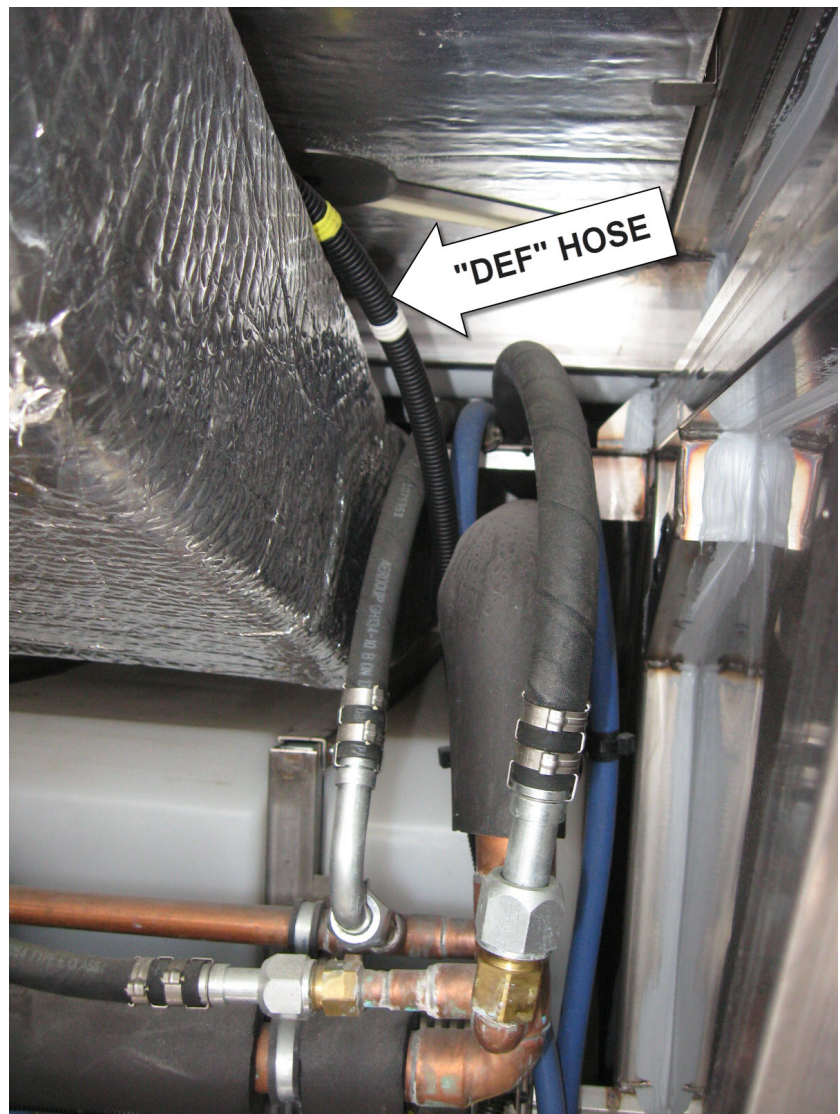


24. In the condenser compartment, route the DEF hose over the air duct and then, up to the pump.
25. Connect the hose fitting to the DEF pump.

Prior connecting the DEF hose, measure the electrical heater resistance at the electrical connector to make sure the heater is not broken due to manipulations. You should measure a resistance between 4 and 5 ohms. If a higher resistance value is measured, replace the DEF hose (p/n 040909).



26. Plug the heating element connector.

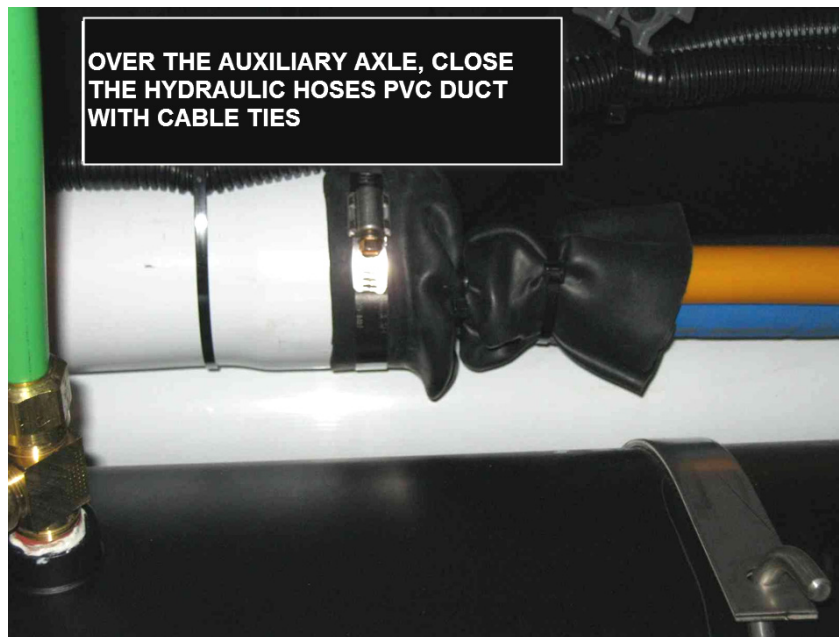


27. Secure the DEF hose at the top of the aft baggage compartment:

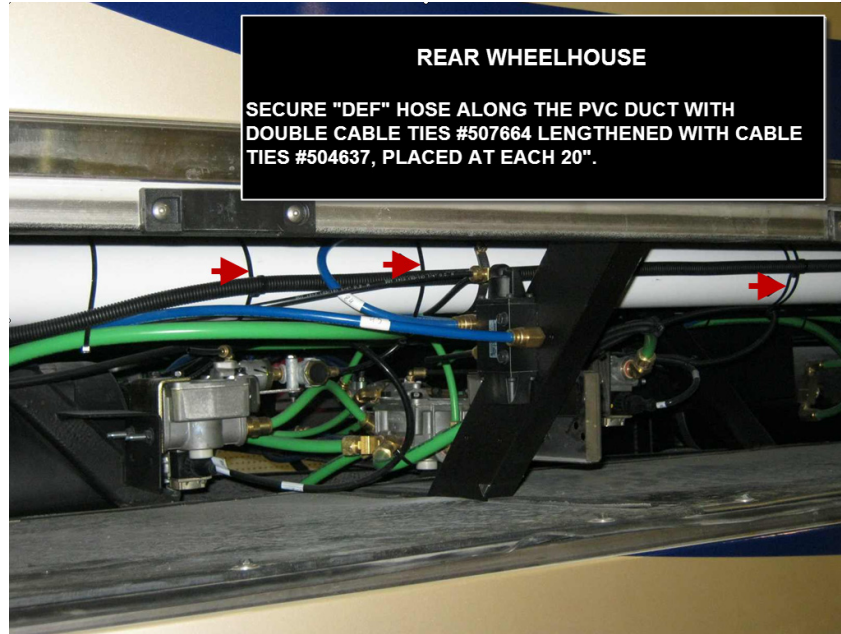
- 1 cable tie mount #504013
- 1 screw #500434
- 1 cable tie #507664



28. Over the auxiliary axle, close the hydraulic PVC duct sealing boot with cable ties.

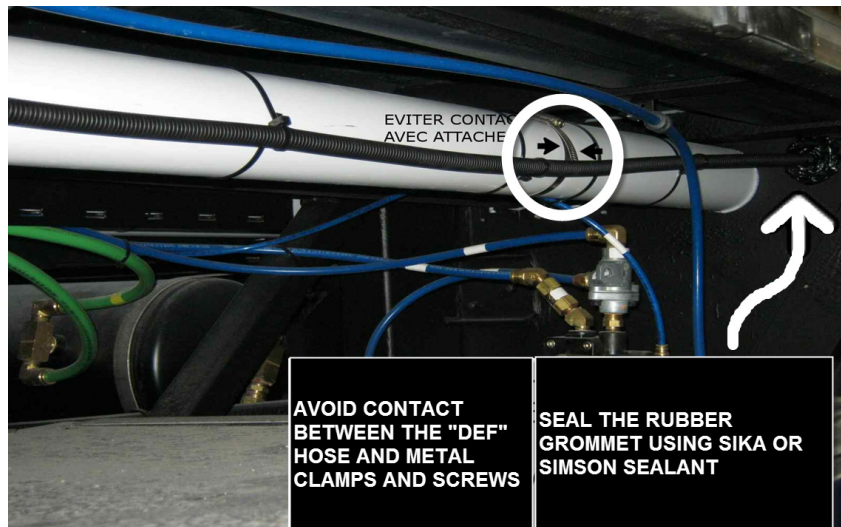


29. In the rear wheelhouse, fix the DEF hose along the PVC duct with double cable ties #507664 lengthened with simple cable ties #504637.

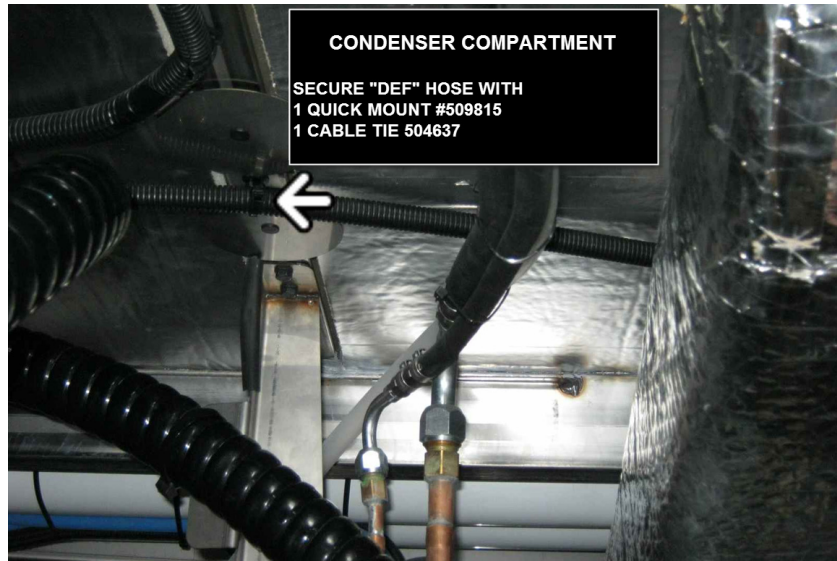


Avoid contact between the DEF hose and metal clamps and screws.

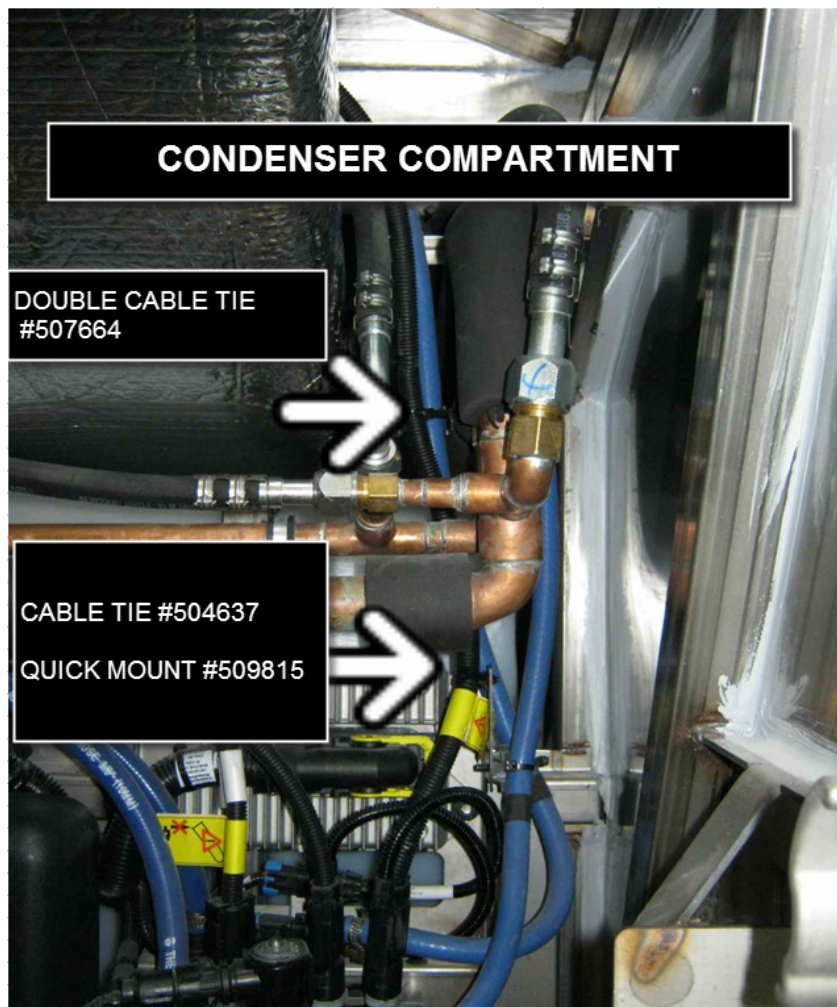
30. Using Sikaflex or Simson, seal the rubber grommet to prevent water or dust from entering inside the aft baggage compartment.



31. In the condenser compartment, secure the DEF hose using a cable tie quick mount #509815 and a cable tie #504637.



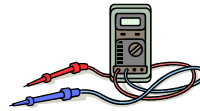
32. Secure the DEF hose as shown using:
1 double cable tie #507664
1 cable tie #504637
1 cable tie quick mount #509815



33. Place a piece of insulation foam around the cables and hoses and close the remaining sealing boots with cable ties.
34. Close the engine access hatch.

35. Reinstall the rear fender.

**Once again, measure the electrical heater resistance.
You should measure a resistance between 4 and 5 ohms. If a higher resistance value is measured, replace the DEF hose (p/n 040909).**



WARRANTY

This modification is covered by Prevost's normal warranty. We will reimburse you the parts and four hours (4.0) of labor upon receipt of a completed A.F.A. form on which **you must specify as per "Warranty Bulletin WB11-19"**.

OTHER

Fail Code	04-04
Defect Code	61
System Condition	B
Causal Part	040909

Assembly instructions VOSS quick connect system 241 Part 2: Applications in electrically heated SCR systems

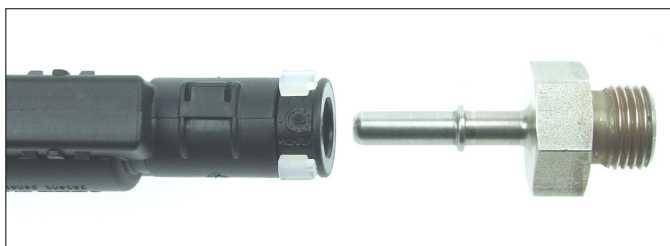


Fig. 3: Coupling and male connection before assembly

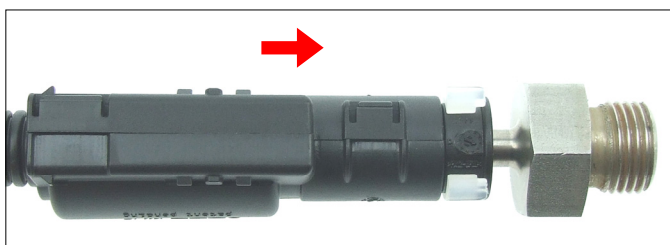


Fig. 5: Pushing the coupling as far as it will go onto the male connector; in the process the holding clip engages

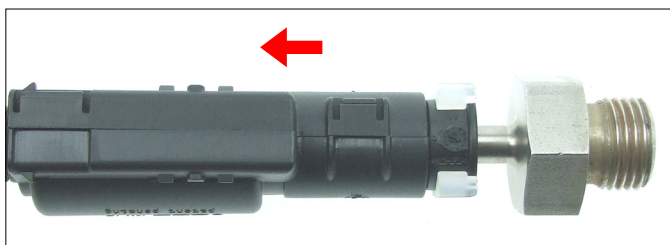


Fig. 6: Pulling back the coupling to the locked position

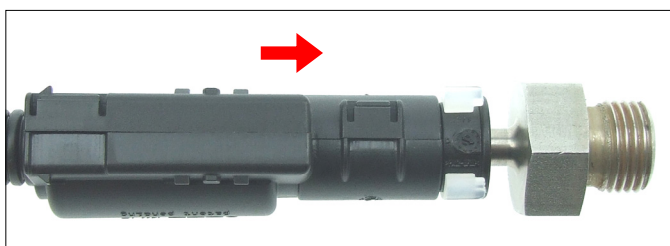


Fig. 7: Pushing the coupling out of the locked position for disconnecting

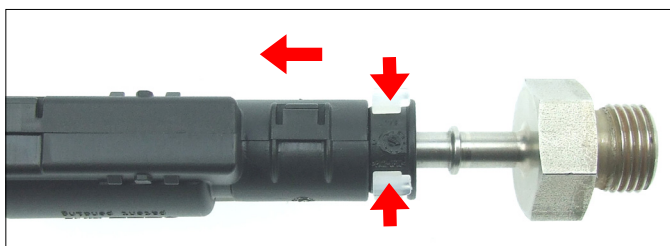


Fig. 8: Compressing the lugs of the holding clip and pulling the coupling off

4. Assembly instructions

4.1. Assembly

Before assembly the components have to be checked. They must be clean and should not show any signs of damage.

During the assembly process the holding clip has to be in a centered position (fig. 4).

The coupling is pushed onto the male connector to the limit stop. The holding clip of the coupling engages behind the bead of the male connector.

By pulling back the coupling manually against the pushing direction, the holding clip reaches the locking position. In this position the system cannot be opened.

4.2. Disassembly

Before disconnecting the line must be free of pressure and the area of the holding clip free from dirt.

Moving the coupling in the initial pushing direction causes the holding clip to leave the locked position. The lugs of the holding clip can be compressed and the coupling can be pulled off the male connector.

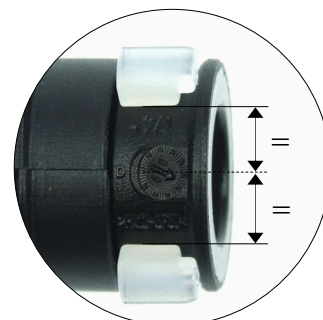


Fig. 4: Holding clip in centered position

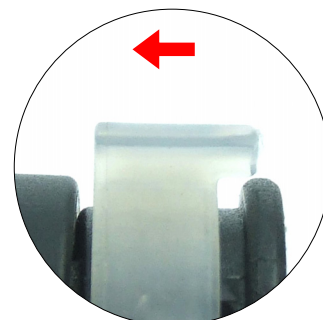


Fig. 9: System not locked (see also figs. 5 and 7); pull the coupling back in the indicated direction for locking the system.

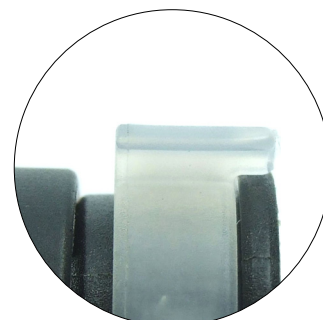


Fig. 10: System locked (see also fig. 6)