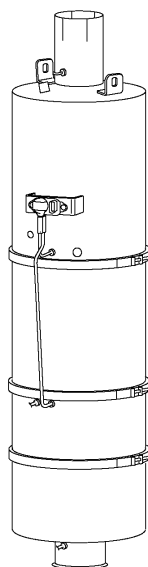


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Vertical Diesel Particulate Filter Replacement D16F

Vertical Diesel Particulate Filter, Replacement



W2005978

This information covers the proper replacement procedure for the vertical diesel particulate filter assembly used in a Volvo chassis with a D16F engine.

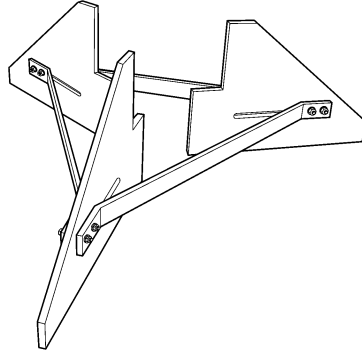
Contents

- "Particulate Filter, Complete, Replacement (One)" page 3
- "Special Tools" page 2

Note: Information is subject to change without notice. Illustrations are used for reference only and can differ slightly from the actual vehicle being serviced. However, key components addressed in this information are represented as accurately as possible.

Special Tools

For special tools ordering instructions, refer to Tools Information, group 08.



W0002398

85111327

DPF Support Stand

2545-03-02-02 Particulate Filter, Complete, Replacement (One)

You must read and understand the precautions and guidelines in Service Information, group 20, "General Safety Practices, Engine" before performing this procedure. If you are not properly trained and certified in this procedure, ask your supervisor for training before you perform it.

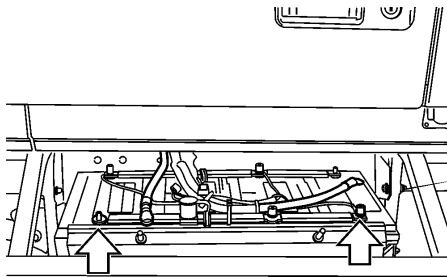
Removal

1

Apply the parking brake and place the shift lever in neutral.

2

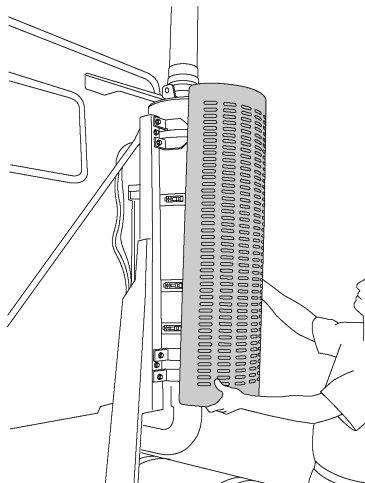
Remove all cables from ground (negative) battery terminals to prevent personal injury from electrical shock.



W2003815

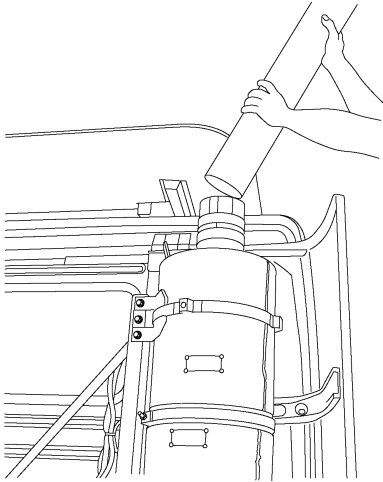
3

Remove the heat shield from the diesel particulate filter (DPF) muffler.



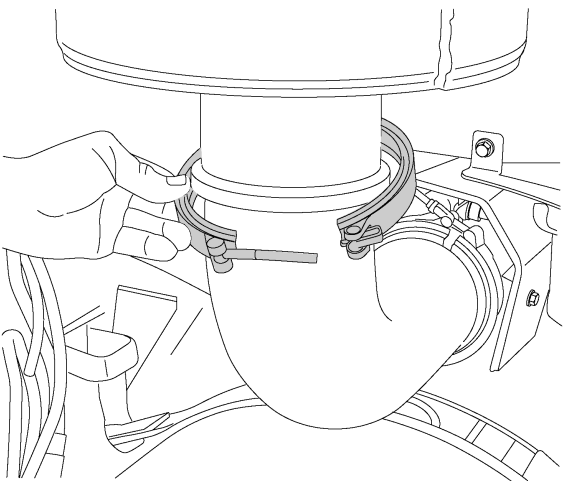
W2005986

- 4**
Loosen the clamps and remove the exhaust stack from the DPF muffler outlet.



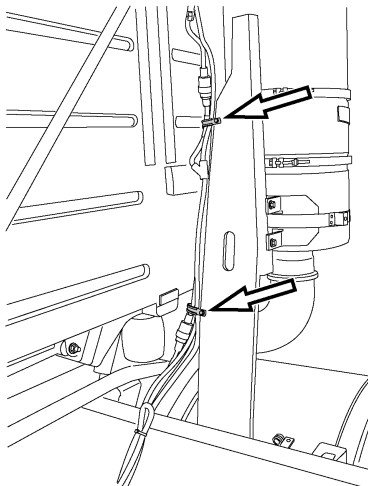
W2005987

- 5**
Remove the lower exhaust V-band clamp at the exhaust elbow.



W2005988

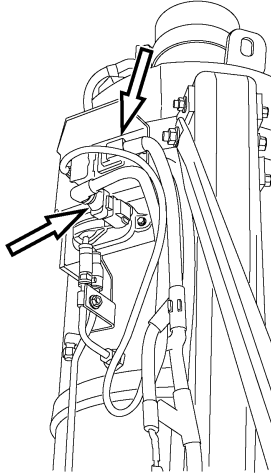
- 6**
Remove the P-clamp fasteners that secure the DPF muffler harness to the muffler stanchion and release the harness from the stanchion.



W2005989

7
Cut all tie straps securing the DPF harness.

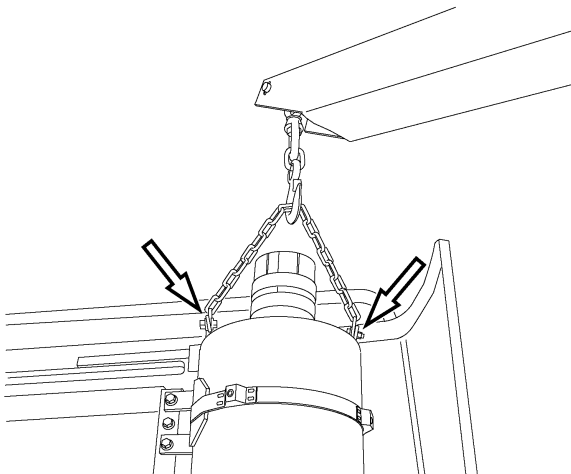
8
Disconnect harness connectors from the pressure differential and NO_x sensors.



W2005990

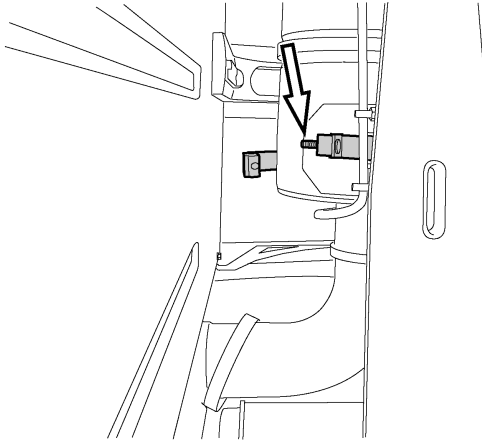
9
Disconnect harness connectors from all temperature sensors on the DPF muffler.

10
Support the weight of the DPF muffler using a mobile floor crane such as OTC 16-1815 or equivalent crane capable of safely lifting the muffler. Position the crane and attach a chain using bolts, nuts and washers to the lifting eyes of the muffler.



W2005991

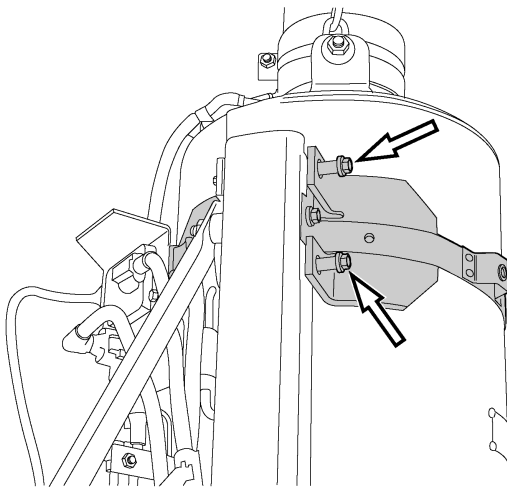
- 11**
Remove the lower support band clamp from the DPF muffler.



W2005992

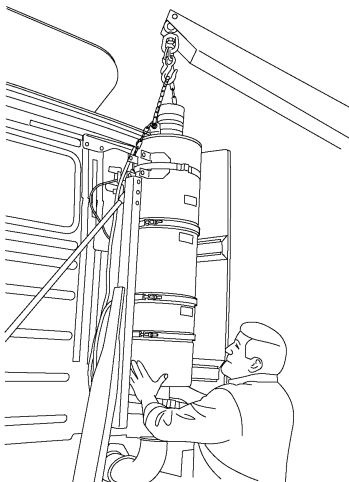
- 12**
Remove the upper band clamp mounting bolts and remove the mounting bracket from the stanchion.

Note: Removing the upper band clamp mounting bracket will release the weight of the DPF muffler. Ensure the floor crane and chain are properly positioned.

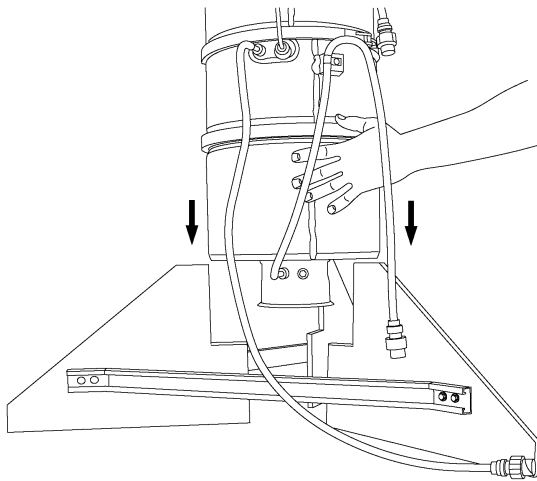


W2005993

- 13**
With assistance, lift and remove DPF muffler assembly away from the truck



W2006002

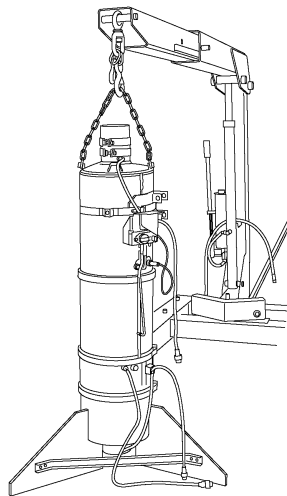


W2006001

14

With assistance, place muffler in the muffler support stand 85111327.

85111327



W2005994

15

Remove the top band clamp and bracket from the original DPF muffler and also, remove the lifting chain with bolts, nuts and washers.

Installation

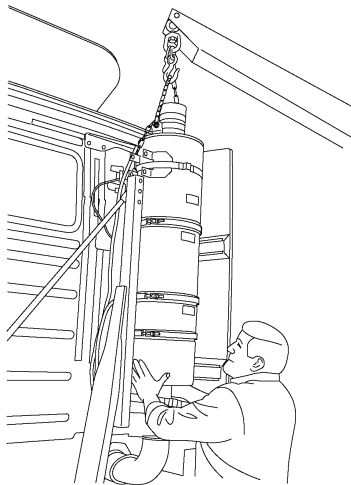
1

With assistance, remove the replacement DPF from packing and position in muffler support stand. Also, attach a chain using bolts, nuts and washers to the lifting eyes of the muffler.

85111327

2

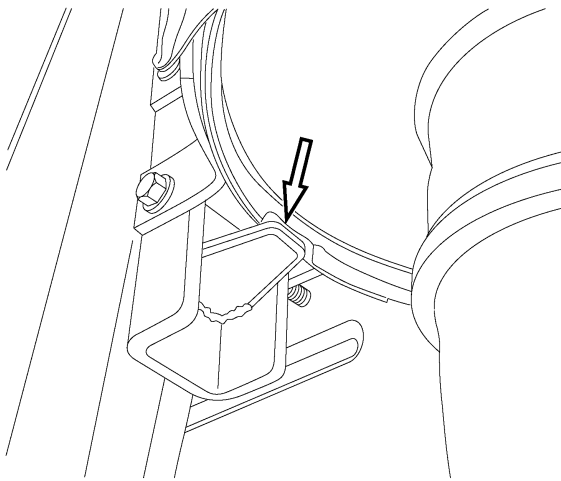
Install top band clamp and bracket onto the replacement DPF muffler (do not tighten band clamp at this time).



W2006002

3

Lift the weight of the DPF muffler using a mobile floor crane and with assistance, position the muffler next to the frame-mounted stanchion, at the back of the cab.



W2006003

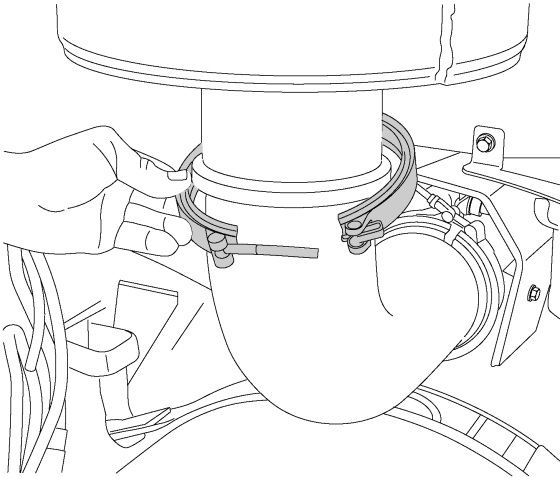
4

Align the slot on the muffler bottom with the tab on the stanchion.

5

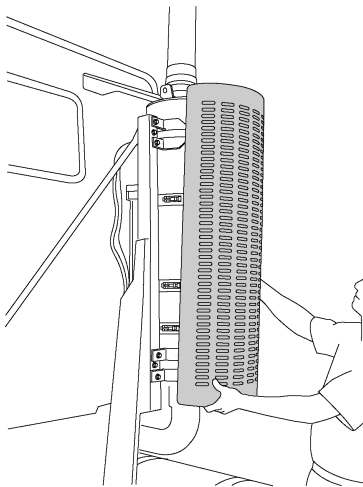
Perform the following steps to align the DPF muffler into final position on the muffler stanchion:

- Align the muffler inlet with the exhaust elbow.
- Align the muffler upper supporting bracket to the stanchion and install bolts loose.
- Loosely install the upper supporting band clamp with attached bracket and install bracket bolts into stanchion.
- Loosely install the lower supporting band clamp.



W2005988

- 6**
With all components aligned, install and secure the lower V-band clamp at the inlet side of the muffler.



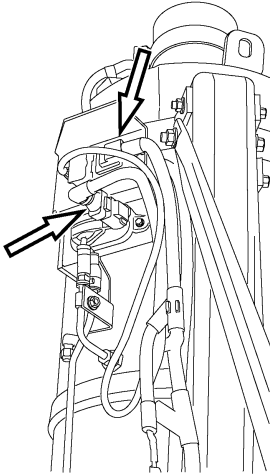
W2005986

- 7**
Install the muffler heat shield onto the DPF muffler.

- 8**
Secure all fasteners and clamps that connect the DPF muffler to the stanchion. Torque-tighten all clamps and muffler fasteners to specifications.

- 9**
Disconnect crane and remove lifting chain from muffler.

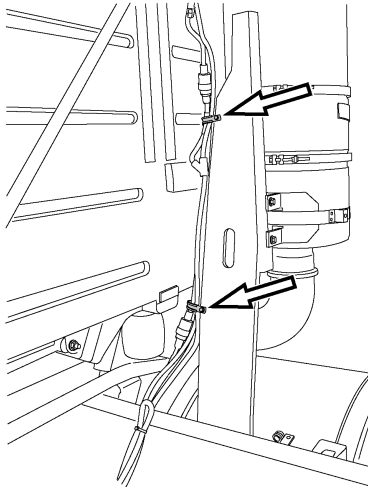
- 10**
Reconnect harness connectors for the pressure differential and NO_x sensors.



W2005990

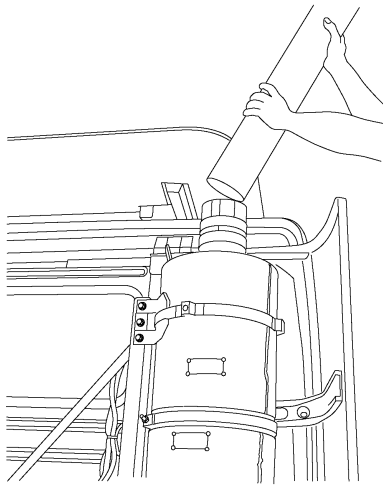
- 11**
Reconnect harness connectors for all temperature sensors on the DPF muffler.

- 12**
Install the P-clamp fasteners that secure the DPF muffler harness to the muffler stanchion.



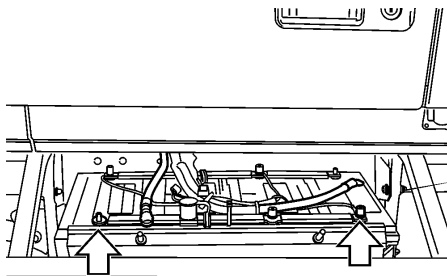
W2005989

- 13**
Secure the harness using tie straps.



W2005987

14
Install exhaust stack onto the DPF muffler and secure using two clamps. Tighten-tighten clamps to specification.



W2003815

15
Install all previously removed cables to the ground (negative) battery terminals.

16
Start the engine, check for exhaust leaks and proper operation.

17
Clear fault codes if necessary