

Volvo Trucks North America, Inc.

Greensboro, NC USA

Service Bulletin Trucks

This Service Bulletin replaces Service Bulletin 431–012, "Transmission Removal and Installation with Eaton Autoshift TM Gen II, VN" (11.2000), Publication no. PV776–TSP144522.

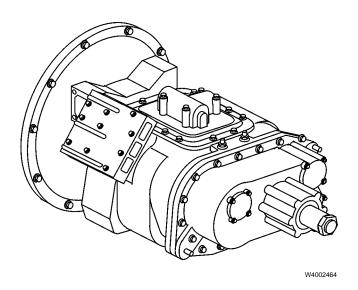
Date	Group	No.	Page
4.2001	431	012	1(6)

Transmission Removal and Installation with Eaton Autoshift ™ Gen II

VN

Transmission Removal and Installation

(Effective from April 2001)



This information covers the removal and installation for the Eaton Autoshift Gen II transmission. No special tools are required for this procedure.

Contents

"Transmission, Removal" page 2

"Transmission, Installation" page 4

PV776-TSP154747 USA09796

4311-01-01-01 Transmission, Removal

See also "Transmission Removal and Installation" page 1.

Eaton Autoshift Gen II

/ DANGER

Before working on a vehicle, set the parking brakes, place the transmission in neutral, and block the wheels. Failure to do so can result in unexpected vehicle movement and can cause serious personal injury or death.

/ DANGER

Never work under or around a vehicle unless it is supported on jack stands of adequate rating. Failure to use adequate jack stands can result in the vehicle falling, which can cause serious injury or death to anyone under the vehicle.

/ WARNING

Always wear appropriate eye protection to prevent the risk of eye injury due to contact with engine debris or fluids.

∕ WARNING

Before beginning any service work on any part of the air system, be certain that the air pressure has been released. Failure to do so may cause a component to violently separate, which can result in serious personal injury.

Disconnect the battery.

2 Remove the driveshaft and move it to the side.

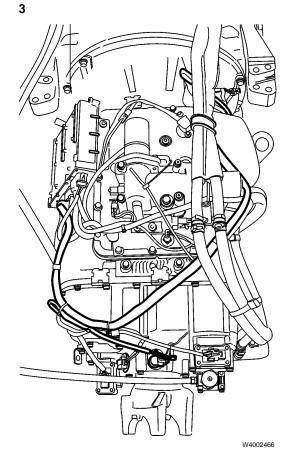


Fig. 1: Transmission cab harness location

Cut the cable ties and remove the cab harness from the transmission.

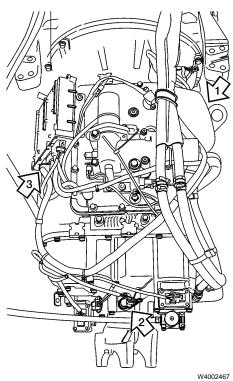


Fig. 2: Cab side harness sensors.

Unplug the temperature sensor (1), the speed sensor (2), and the harness connected to the transmission ECU (3).

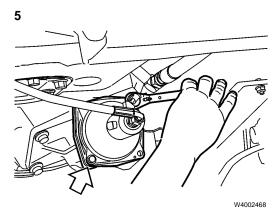


Fig. 3: Clutch slave cylinder

Remove the clutch slave cylinder from the bottom of the bell housing with the fluid line still attached and moved to the side.

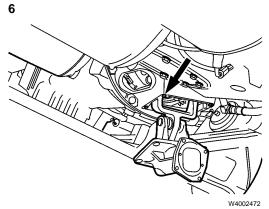


Fig. 4: Clutch fork

Remove the clutch fork from the transmission.

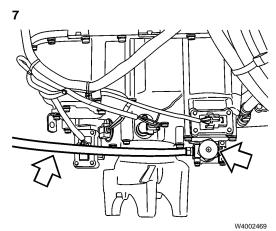
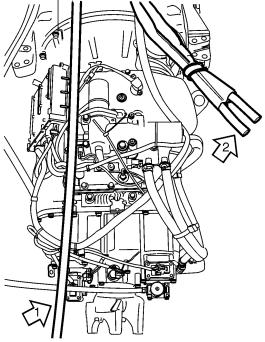


Fig. 5: Transmission air supply line

Remove the transmission air supply

8



W4002470

Fig. 6: Removal of main lines from transmission.

Remove the main air line supply on top of the transmission (1). Remove the coolant line from the front side of the coolant brackets (2).

9

Remove the release bearing grease tube.

10

Remove all of the bell housing bolts except for the two top bolts.

11

Slide the transmission jack under the transmission making sure to align the jack to the right and then jack up the transmission.

12

Remove the two top bolts allowing the transmission to rest on the transmission jack. Use a pry bar, if needed, to slide the transmission back.

4311-02-01-01 Transmission, Installation

See also "Transmission Removal and Installation" page 1.

TM

Eaton Autoshift Gen II



Before working on a vehicle, set the parking brakes, place the transmission in neutral, and block the wheels. Failure to do so can result in unexpected vehicle movement and can cause serious personal injury or death.

/ DANGER

Never work under or around a vehicle unless it is supported on jack stands of adequate rating. Failure to use adequate jack stands can result in the vehicle falling, which can cause serious injury or death to anyone under the vehicle.

/ WARNING

Always wear appropriate eye protection to prevent the risk of eye injury due to contact with engine debris or fluids.

/ WARNING

Before beginning any service work on any part of the air system, be certain that the air pressure has been released. Failure to do so may cause a component to violently separate, which can result in serious personal injury.

1

With transmission still on the jack, move the transmission back into position under the vehicle.

Install the transmission bell housing bolts into the bell housing. Tighten to a torque of 93 ± 7 Nm (68 ± 5 ft-lb).

 $93 \pm 7 \text{ Nm } (68 \pm 5 \text{ ft-lb})$

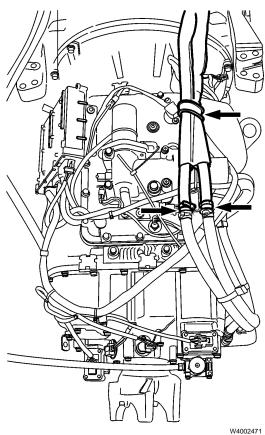


Fig. 7: Coolant line pass-through

Install the coolant line back into the passthrough.

4 Secure the coolant lines back to the top of the transmission.

5

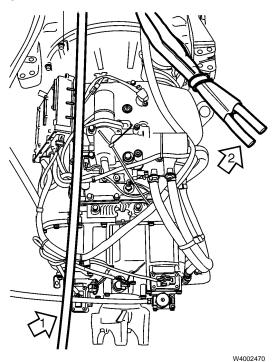


Fig. 8: Main air line

Secure the main air line (1) back to the top of the transmission.

6Using ties, connect the wire harness to the transmission.

7

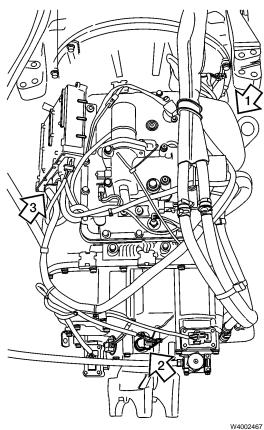


Fig. 9: Transmission cab harness location

Connect the transmission temperature sensor (1), the speed sensors (2), and the harness to the transmission ECU (3).

8

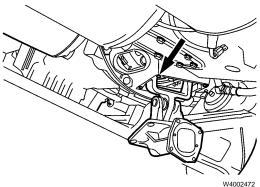


Fig. 10: Install clutch forks

Install the clutch forks back into the bell housing.

9

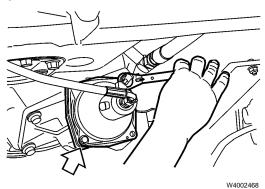


Fig. 11: Install slave line

Secure the fluid line to the transmission.

10

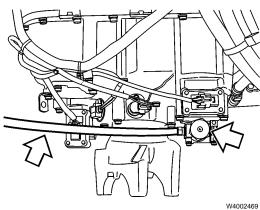


Fig. 12: Air supply line

Connect the air supply line to the transmission.

11

Install the driveshaft.

12

Connect the battery cables.

13

Check the transmission clutch for correct adjustments and then road test.