

Micro Brake Switch

2007-2014 VN, VAH, VHD, VT

RVXX1303, Micro Brake Switch

(August 2013)

Volvo has determined that a safety-related defect exists on certain vehicles manufactured with the Volvo automated manual transmission from December 20, 2006 through May 22, 2013. The safety-related defect is a micro switch was not installed in manufacturing or removed under a service program. Prior to removal of the redundant switch, if the primary brake switch (an air pressure switch) were to fail to send the signal, the micro switch would signal the automated manual transmission's clutch to disengage. In the absence of the redundant switch, a loss of signal from the air pressure switch can prevent the clutch from disengaging when the brake is applied. This condition does not affect the brake system.

The number of vehicle affected by the recall is 31,007 (23,056 U.S., 7911 Canada, and 40 Mexico).

The repair will involve adding a micro switch and programming to all affected vehicles. In some cases, a wiring overlay harness will need to be added (see Repair B).

A new switch adjustment tool, part number (88800461) **must** be used to correctly locate the switch.

Order Information:

If the vehicle is eligible, call 1-877-377-0411 and provide the following:

- 17 digit vehicle identification number (VIN)
- Recall Number (RVXX1303)
- Dealer Code
- Purchase order information (PO number)

Parts:

- 1 - Kit, 85137958

Parts included in the kit:

- 1 - Micro Switch, 82274560
- 2 - Screw, 25160047
- 2 - Nut, 25154798
- 2 - Washer, 25106704
- 1 - Overlay Harness, 22217679

Required Tools:

- Switch Adjustment Tool, 88800461

Recommended Tools:

- Terminal Removal Tool, 9808649 or equivalent

Repair Procedures:

Inspection:

1. Inspect the harness area for the leg extension which connects to the brake micro switch:
 - A. If the harness is present in the vehicle complete Repair A.
 - B. If the harness is NOT present in the vehicle complete Repair B.

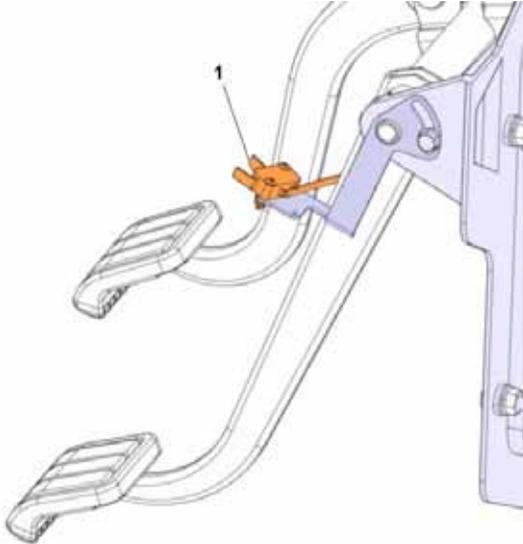
Repair A

NOTE

For Trucks Built Between December 26, 2006 and July 5, 2009 with a Micro Switch connection.

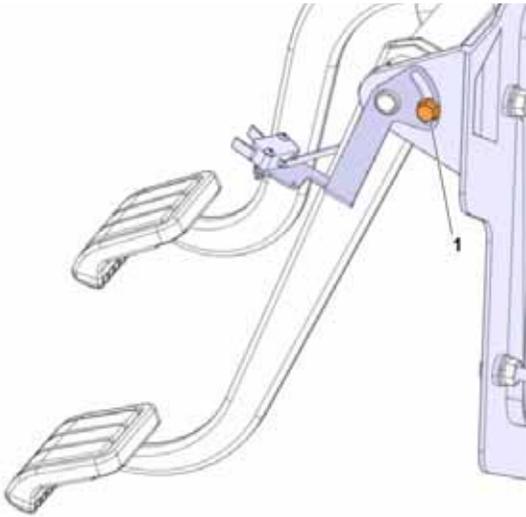
1. Secure the vehicle for service by parking it on a flat level surface, applying the parking brake, chocking the rear wheel, and placing the transmission in neutral.
2. Disconnect cables from the negative (ground) battery terminals to prevent personal injury from electrical shock and prevent damage to electrical components. Next, disconnect the positive cables from the batteries.

3. Install the micro switch onto the bracket and secure (1) (Part numbers 82274560, 25154798, 25106704 and 25160047). Torque the fasteners to 3 +/- 0.3 Nm (26 +/- 3 in-lb).
NOTE: Install the switch onto the hole group located closest to the driver's seat.



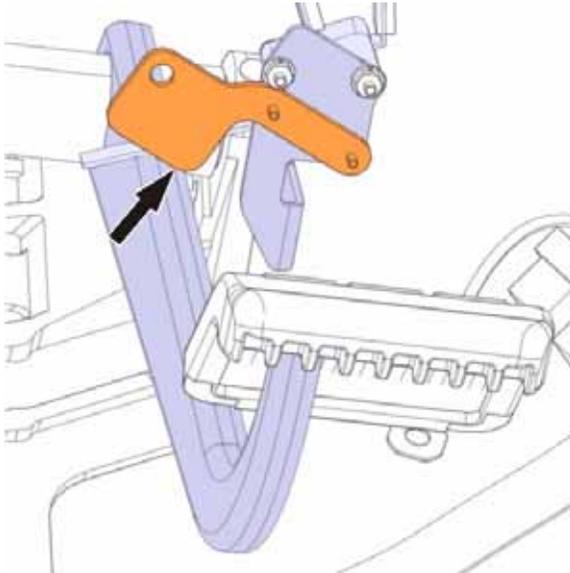
4. Locate the harness for the micro switch. Loosen the harness attached to the micro switch. Remove the jumper from between the harness and the micro switch.
NOTE: Discard the removed jumper.
5. Reconnect the harness and the micro switch.

6. Loosen the brake micro switch adjustment screw.



7. Install the Switch Adjustment Tool (part number 88800461) into the lower hole group on the brake switch bracket, as shown. If necessary, rotate the micro switch bracket assembly up/down until the tool touches the brake pedal arm.

NOTE: Ensure that the brake pedal is set at the recommended vehicle brake pressure.



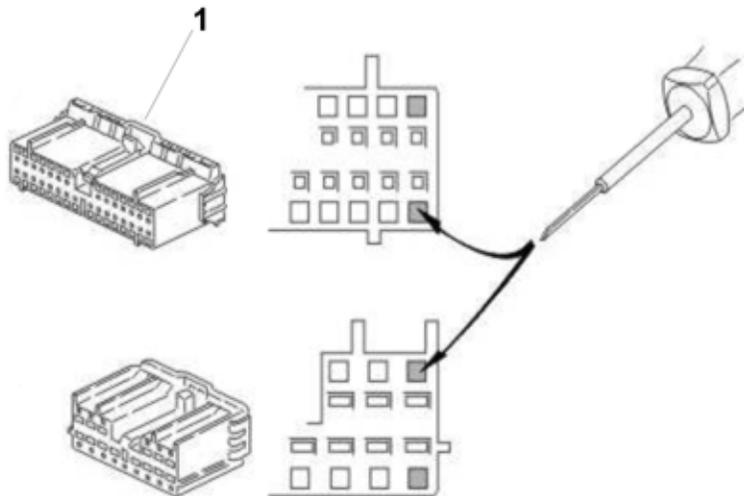
8. Tighten the brake micro switch adjusting screw to 10 +/- 1.5 Nm (88.5 +/- 13 in-lb).
9. Reconnect all previously removed cables to the negative (ground) and positive terminals.
10. Check the operation of the brake pedal.
11. Complete the VECU Programming operation.
12. If applicable, complete transmission programming and calibration.

Repair B

NOTE

For Trucks Built Between July 6, 2009 and May 21, 2013 without a Micro Switch connection.

1. Complete all installation steps in Repair A.
2. Remove the fuse and relay center (FRC) panel. Position the FRC out of the way of the repair site.
3. Place the overlay harness (part number 22217679) into position; routing the harness from the brake pedal micro switch to the VECU (vehicle electronic control unit).
NOTE: Route the overlay harness following the main cab harness. Cable tie the overlay harness into place.
4. Disconnect the PA (Green 30 Pin) connector from the VECU.
5. Using the terminal removal tool (part number 9808649 or equivalent) remove the wire in cavity 5.
NOTE: The strain relief must be first released at the rear of the housing.
NOTE: The release holes for the JAE terminals are located on the outside rows of the connector housing.
NOTE: Do not probe the center rows of the holes or else terminal damage will occur.



6. Insert the JAE terminated wire from the overlay harness into cavity 5.
7. Cut the terminal off of the wire previously removed from the PA connector.
8. Strip the wire to length (8 mm [0.3 in]).
9. Insert the stripped wire into the butt splice.
10. Crimp the butt splice. Heat shrink to seal the connection.
11. Install the fuse and relay center (FRC).
12. Install the center and right side dash panels located under the steering column and above the accelerator pedal.

13. Reconnect all previously removed cables to the negative (ground) and positive terminals.

Programming

14. Complete the following programming steps:

* Perform Accessory Kit 85137882 for vehicles with the 16 pin diagnostic connector in PTT/VCADS Pro for VECU (MID 144).

* Perform Accessory Kit 85139514 for vehicles with the 9 pin diagnostic connector in PTT/VCADS Pro for VECU (MID 144).

15. Program MID 144. Follow the on screen prompts until the programming is complete.

Additional Programming (For Export Vehicles Only)

16. In PTT/VCADS Pro complete Transmission Programming and Calibration (MID 130).

Reimbursement

This repair is covered by an authorized Safety Recall campaign. Reimbursement is obtained through the normal claim handling process.	
Claim Type (used only when uploading from the Dealer Bus. Says.)	R
Recall Status	
Vehicle inspected, no repair required	1- Inspected
Vehicle repaired per instructions	2-Modified per instructions
Labor Code	
Primary Labor Code	Repair A: 36435-0-02 - 0.7 hr. Repair B: 36435-0-03 - 1.1 hr.
Time to take charge of vehicle and determine campaign status	17003-0-01 - 0.3 hr.
Causal Part	20489118
Authorization No.	RVXX1303

Take-charge time is not included in the labor code for this operation. Take charge may be eligible, but can only be used once per vehicle repair visit. If the vehicle is having other warranty repairs performed, take-charge should be charged to the warranty repair, otherwise take-charge can be charged to this Safety Recall.