

## Remote Battery Disconnect Switch Module Relocation

VN

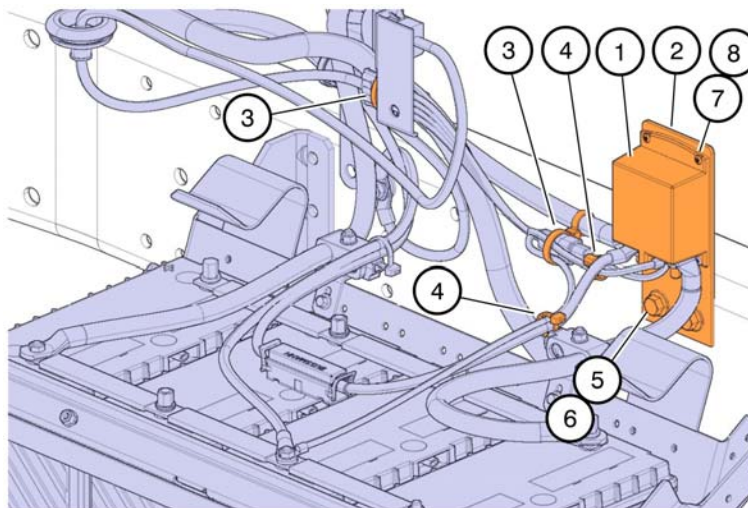
### RVXX1301, Remote Battery Disconnect Switch Module Relocation

(April 2013)

Volvo Trucks North America, has decided that a defect relating to motor vehicle safety may exist in certain Volvo VN vehicles manufactured between April 18, 2011 and March 14, 2013.

The remote battery disconnect switch module has been relocated to prevent an electrical shortage and fire.

There are five thousand six hundred seventy (5670; 5206, USA, 464 Canadian and 0 export) vehicles affected by this recall.



#### Parts:

Remote Battery Disconnect Switch Module Relocation Parts, (Note: Switch ordered separately)			
Item #	Description	Part Number	Qty
1	Switch, Battery Disconnect	21550486	1
<b>Bracket, Disconnect Switch Kit 85137339, (NOTE: Order kit only, not the contents listed below)</b>			
2	Bracket, Disconnect Switch	21550492	1
3	Cable Tie, Double Head	20395795	6
4	Cable Tie, 105	980464	3
5	Flange Screw, M14*4	992336	2
6	Nut, M14* 22, 9	994522	2
7	Screw, M5	994780	4
8	Nut, M5	990948	4

**Repair Procedure:**

1. Secure the vehicle for service by parking it on a flat level surface, applying the parking brake, placing the transmission in neutral, and chocking the rear wheel.
2. Remove side fairing/battery box lid.
3. Remove ground and positive cables from the batteries to render the vehicle inoperable and safe to work on the remote battery disconnect switch module.

**NOTE**

Truck battery cable layouts may vary, pay close attention to location, routing, and clipping of cables before removal.

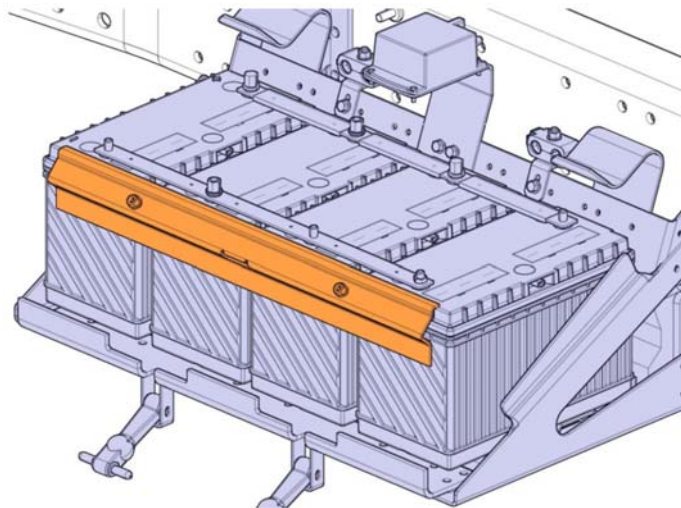
4. Remove battery hold down bar.

**NOTE**

Use hand tools only.

**NOTE**

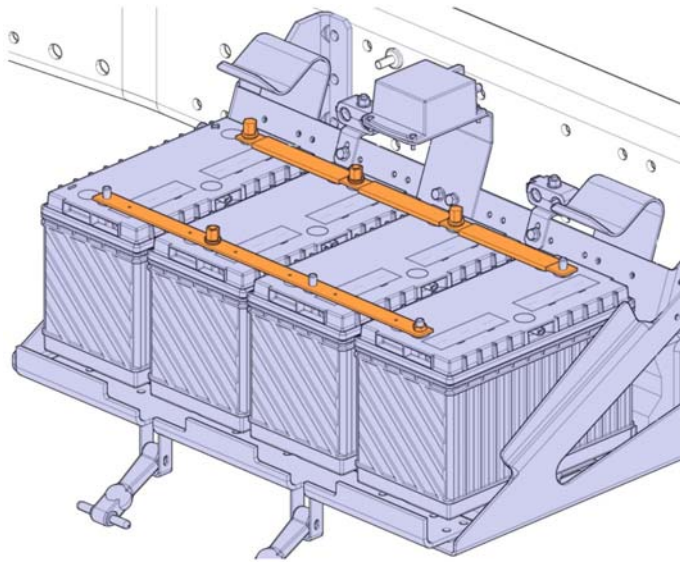
For clarity, battery cables are not shown in steps 4-6.



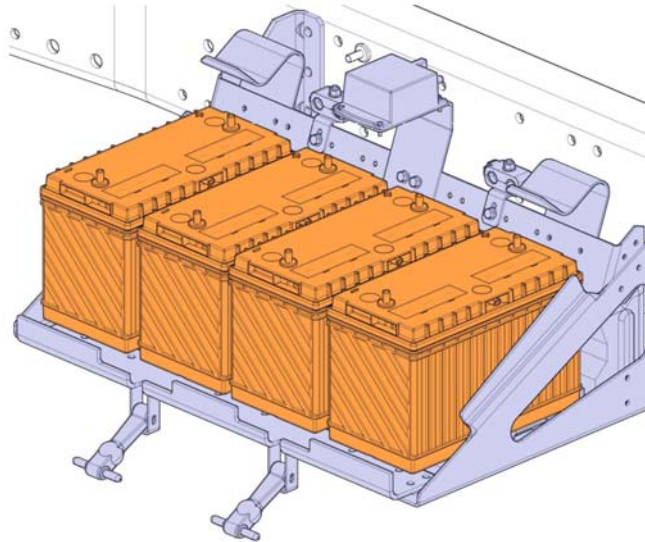
5. Remove cable/buss bars from batteries.

**NOTE**

Position cables out of the way to make room for removing washer reservoir in later steps.



6. Remove batteries.



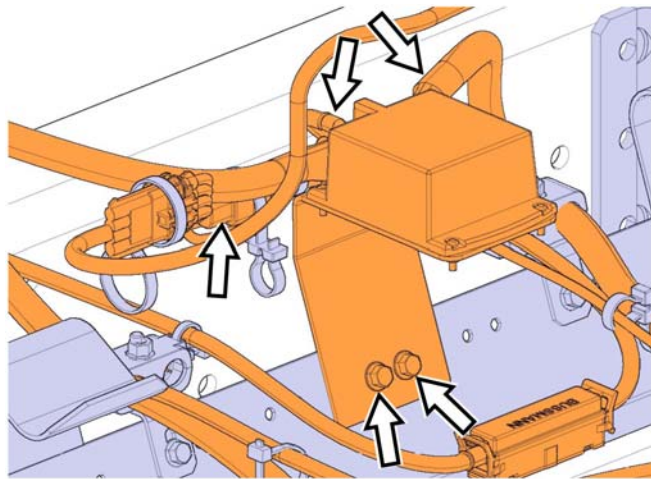
7. Remove fasteners securing switch module bracket. Remove the switch module from the battery box and remove cables.

**NOTE**

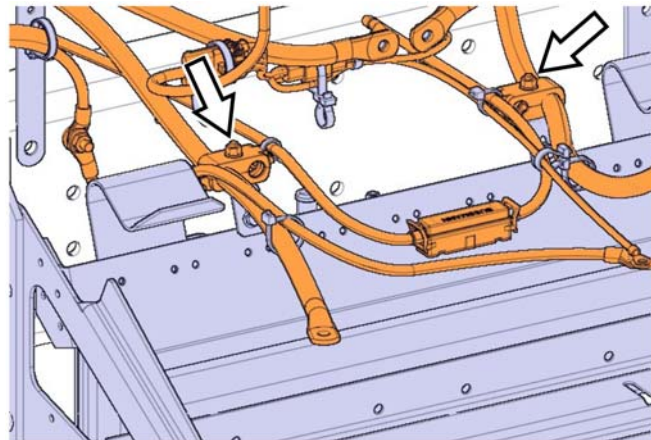
Dispose of the switch bracket. Do not reuse bracket.

**NOTE**

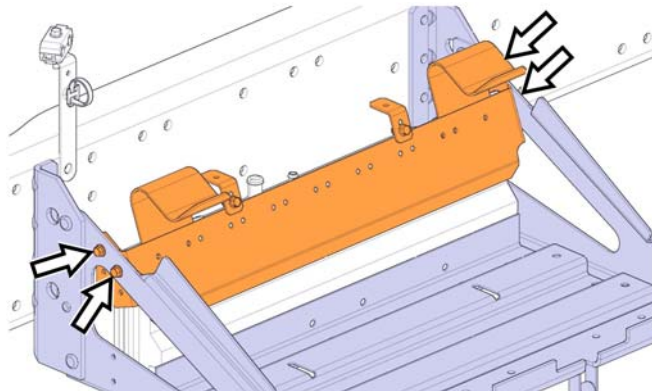
Dispose of battery disconnect switch. Do not reuse switch.



8. Loosen and remove both Berringer clamps from rear of battery box.



9. Remove the (4) end bolts from rear of battery box support.



10. If applicable, remove plastic guard underneath airline tubing.
11. Cut necessary cable ties. Lift and rotate windshield washer reservoir out and position towards the front of truck within the battery box.

**NOTE**

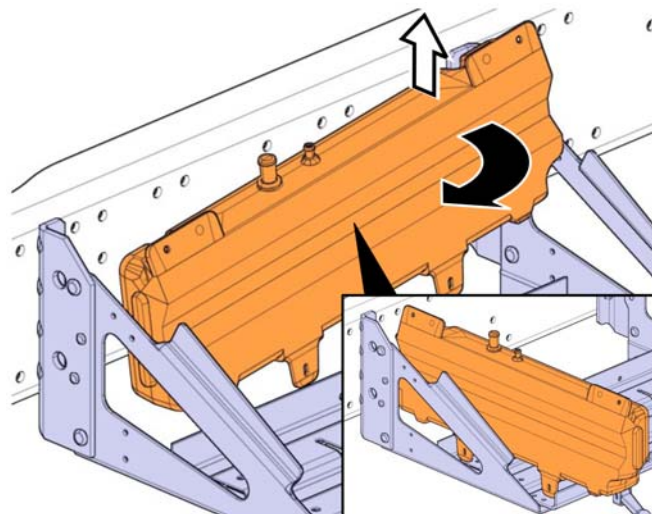
When removing the windshield washer reservoir, it may be necessary to temporarily remove the airline shielding.

**NOTE**

Removal of additional cable ties sharing the same route as the windshield washer reservoir lines and the air line tubing is required.

**NOTE**

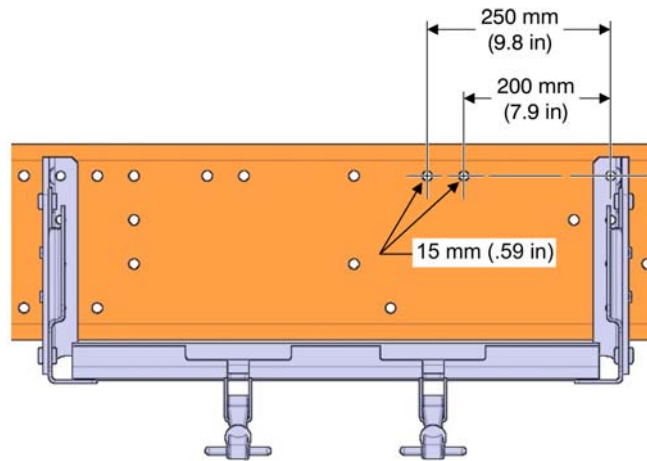
Keep the windshield washer reservoir in an upright position during this procedure.



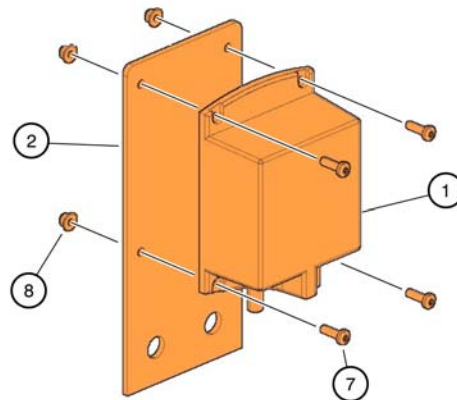
12. Using reference image below, mark the location for two 15 mm (.59 in) holes on the frame.

**NOTE**

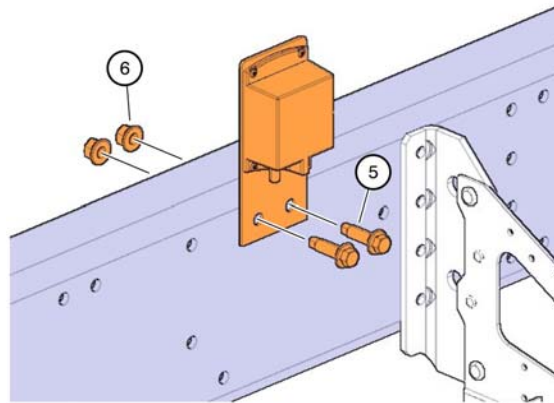
To ensure the correct location and hole spacing for the new battery disconnect switch bracket, use the reference image provided below.



13. Drill two 15mm (.59 in) holes in the frame.
14. Assemble new battery disconnect switch module and bracket.  
Tighten fasteners to 3 +/- 0.3 Nm (28 +/- 3 in-lb).



15. Install the assembled remote battery disconnect switch module and bracket onto chassis as shown. Tighten fasteners to 175 Nm (129 ft-lb).



16. Route windshield washer reservoir, wiring and rear battery box bracket into position.

**NOTE**

Ensure windshield washer reservoir tabs are keyed into position on the bottom of battery box.

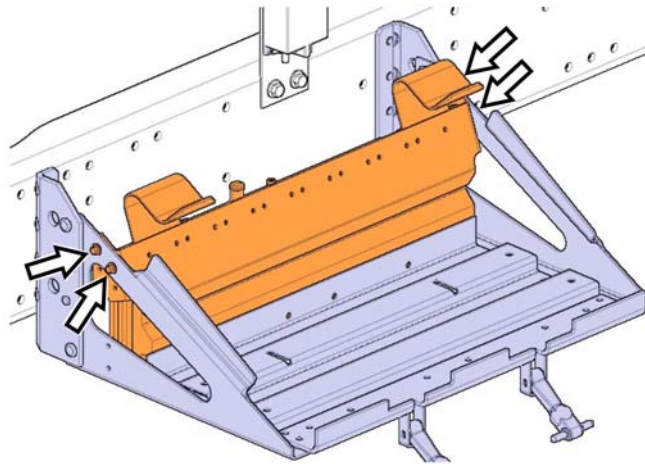
17. Install the 4 end bolts to rear battery box bracket. If battery box lid is not applicable, Skip to step 21.
18. If battery box lid is applicable, re-install battery box lid so that the back of the lid engages with the front of the box frame and follow steps 19 through 20.

**NOTE**

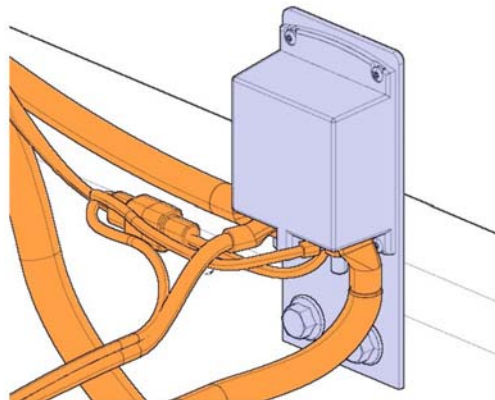
Step 18 enables the rear battery box bracket to rotate rearward, allowing sufficient clearance for easy battery box lid installation.

19. With the battery box lid in place, tighten the four (4) end bolt fasteners to 27 Nm (239 in-lb).
20. Remove and re-install lid battery box lid to confirm the lid is easy to install and the lid engages with the lid hold down clamps.

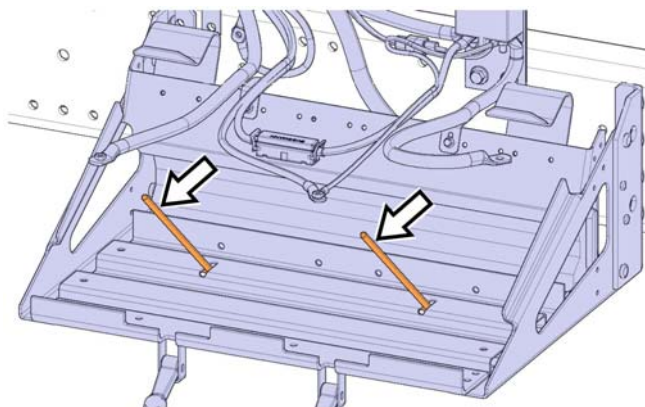
21. Tighten the four (4) end bolt fasteners to 27 Nm (239 in-lb).



22. Install cables onto remote battery disconnect switch module as shown. Tighten fasteners to 16 Nm (142 in-lb).
23. Connect the Deutsch connector to the remote battery disconnect switch module.



24. Loosely position cables into place on the rear of the battery box.
25. If applicable, install plastic guard back into position underneath airline tubing.
26. Install the battery hold down hooks into the box. Position both hold down hooks facing outward.





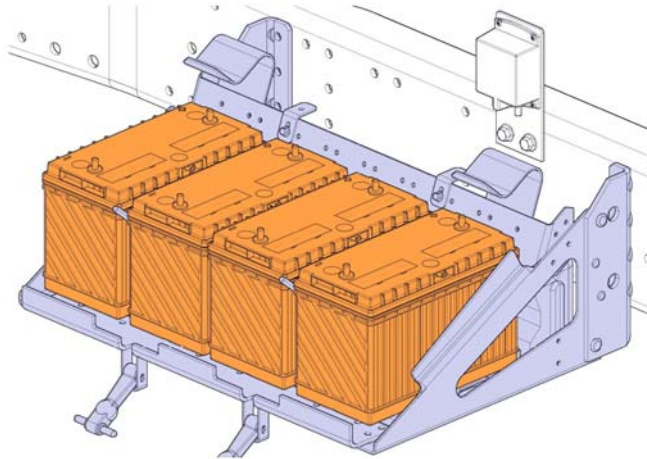
27. Install the batteries back into the box.

**NOTE**

For clarity, battery cables are not shown in steps 27-29.

**NOTE**

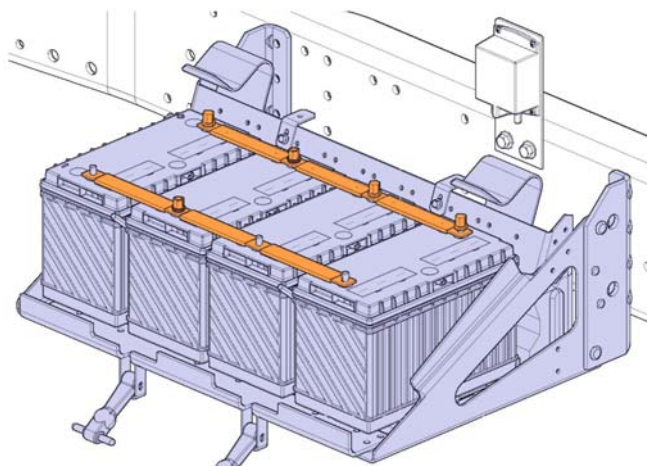
Ensure batteries are installed in the same (+) (-) orientation.



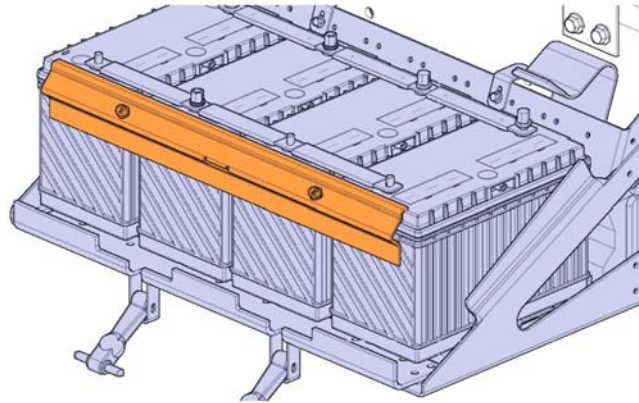
28. To properly align batteries, install buss bars onto batteries.

**NOTE**

Install buss bars and batteries in the correct positions with positive studs located inboard.



29. Install battery hold down bar. Tighten fasteners to 24 Nm (212 in-lb).



30. Loosely position battery cables into place on the batteries.

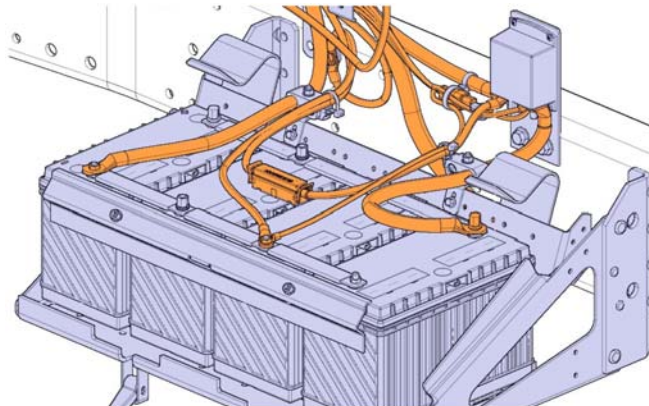
**NOTE**

Use hand tools only.

31. Install Berringer clamps.  
32. Tighten battery cables to 20 Nm (177 in-lb).

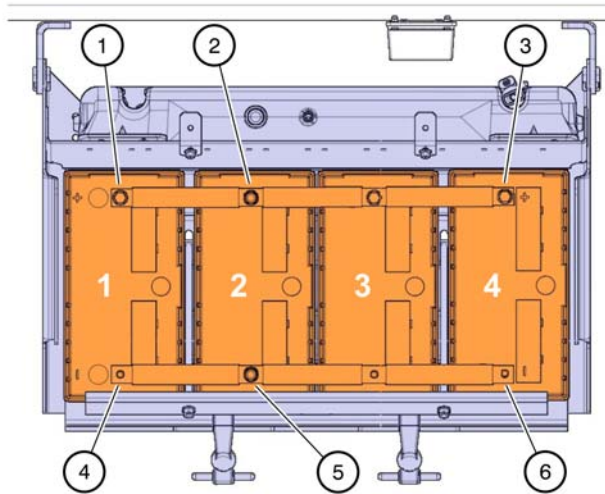
**NOTE**

Truck battery cable layouts may vary. Pay close attention to routing and clipping before installing any cables.



**NOTE**

See diagram below for typical battery layout.



Typical Battery Layout	
Item #	Description
1	ACM Power
2	Lift Gate Positive, if Equipped
3	Positive Battery Cable from the Disconnect Switch
4	Negative Cable to the Starter
5	Fusible Link, Ground Wire from the Disconnect Switch
6	Lift Gate Negative, if Equipped

33. Secure battery cables with cab ties (980464 and 982387) provided in kit 85137339.

**NOTE**

Check for and eliminate rubs of wiring, and other components that were removed.

34. Coat battery terminals/posts with corrosion inhibitor (21735988) or similar product.
35. Coat remote battery disconnect switch module terminal/posts with corrosion protection (21736787) or similar product.
36. Install battery box lid/fairing.
37. Start the truck and check operation.
38. Remove wheel chocks.

**Reimbursement**

<b>This repair is covered by an authorized Safety Recall campaign. Reimbursement is obtained through the normal claim handling process.</b>	
<b>Claim Type (used only when uploading from the Dealer Bus. Says.)</b>	R
<b>Recall Status</b>	
Vehicle repaired per instructions	2-Modified per instructions
<b>Labor Code</b>	
Primary Labor Code for remote battery disconnect switch module relocation	36434-0-02 2.3 hr.
Time to take charge of vehicle and determine campaign status	17003-0-01 0.3 hr.
<b>Causal Part</b>	21550486
<b>Authorization No.</b>	RVXX1301

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.