



October 2015

Dealer Service Instructions for:

# Safety Recall R27 / NHTSA 15V-393 Power Liftgate Module

#### Models

## 2014 – 2015 (KL) Jeep<sub>®</sub> Cherokee

*NOTE:* This recall applies only to the above vehicles built from January 04, 2013 through February 18, 2015 (*MDH 010405 through 021810*).

**IMPORTANT:** Some of the involved vehicles may be in dealer new vehicle inventory. Federal law requires you to complete this recall service on these vehicles before retail delivery. Dealers should also consider this requirement to apply to used vehicle inventory and should perform this recall on vehicles in for service. Involved vehicles can be determined by using the VIP inquiry process.

## Subject

The power liftgate control module on about 99,400 of the above vehicles may experience a corrosion induced high resistance short circuit in the power liftgate module electrical connector(s). The power liftgate module electrical connector(s) could allow water intrusion and cause the module to become inoperative and/or cause a fire.

#### Repair

The power liftgate module must be inspected for evidence of water intrusion and electrical connector corrosion. The vehicle will be repaired to eliminate the water intrusion. On vehicles found with corrosion in the power liftgate module electrical connectors, the module and electrical connectors will also be replaced.

All involved vehicles will then receive a power liftgate module water shield after repairs are complete.

#### **Alternate Transportation**

Dealers should attempt to minimize customer inconvenience by placing the owner in a loaner vehicle if inspection determines that a power liftgate module is required and the vehicle must be held overnight.

#### **Parts Information**

#### Part Number

#### **Description**

## CBNAR271AA Power Liftgate Module Cover Package

Each package contains the following components:

- Quantity Description
  - 1 Cover, Power Lift Gate
  - 1 Bolt

**Each dealer** to whom vehicles in the recall were assigned will receive enough foam covers to service about 20% of those vehicles.

## CBNAR273AA Module, Power Liftgate

## CBNAR272AA Power Liftgate Module Connector Package

Each package contains the following components:

| <u>Quantity</u> | Description   |  |
|-----------------|---|--|
| 1               | Connector Kit (13 Pin)  |  |
| 1               | Connector Kit (21 Pin)  |  |
| 15              | Bands, Splice   |  |
| 15              | Tube, Shrink  |  |
| 04318031        | Threadlocker, Lock & Seal (MS-CC75)<br>NOTE: One tube of threadlocker can repair 10 vehicles. |  |
| 04778138        | Tape, Wire Harness  |  |
| 68271635AA      | A Retainer, Wire Harness  |  |
| 04883971AI      | B RTV Sealant (MS-GF-44B)   |  |

## Parts Return

No parts return required for this campaign.

## **Special Tools**

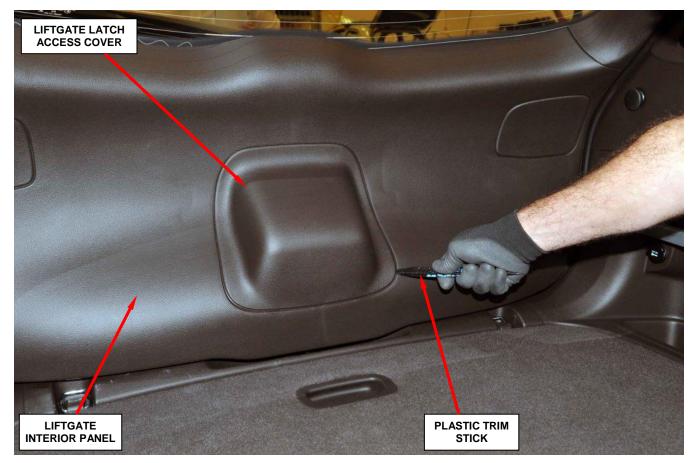
The following special tools are required to perform this repair:

| > NPN   | wiTECH VCI Pod Kit |
|---------|--------------------|
| > NPN   | Laptop Computer    |
| > NPN   | wiTECH Software    |
| ≻ 10042 | Crimp Tool         |

### **Service Procedure**

## A. Power Liftgate (PLG) Module

- 1. Determine the following:
  - ▶ If the power liftgate is inoperative, continue with **Step 2** of this procedure.
  - If the power liftgate functions, continue with Section B. Inspect power liftgate module.
- 2. Move the rear seatbacks to the down position to gain access to the rear storage compartment.
- 3. Remove and save the retractable rear shelf curtain.
- 4. Using a plastic trim stick, remove and save the liftgate latch access cover (Figure 1).



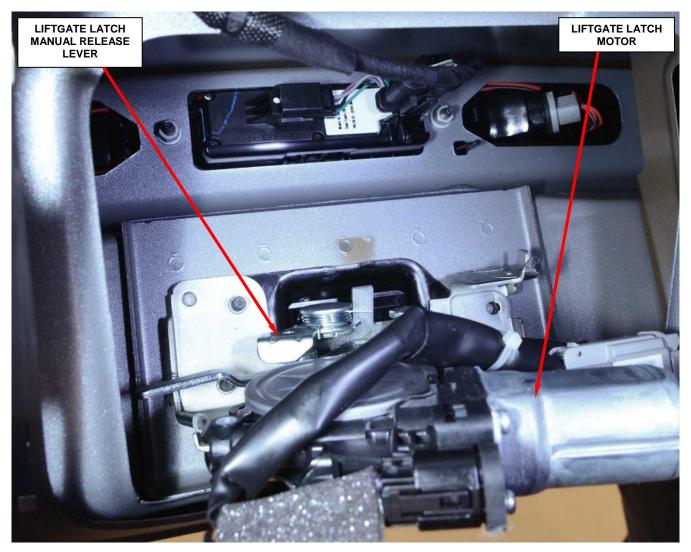


Figure 2 – Latch Release Lever (Looking into Liftgate Opening)

- 5. Pull on the short latch release lever to disengage the liftgate latch and manually open the liftgate (Figure 2).
- 6. Install the original liftgate latch access cover (Figure 1).
- 7. Continue with Section B. Inspect Power Liftgate Module.

## **B. Inspect Power Liftgate Module**

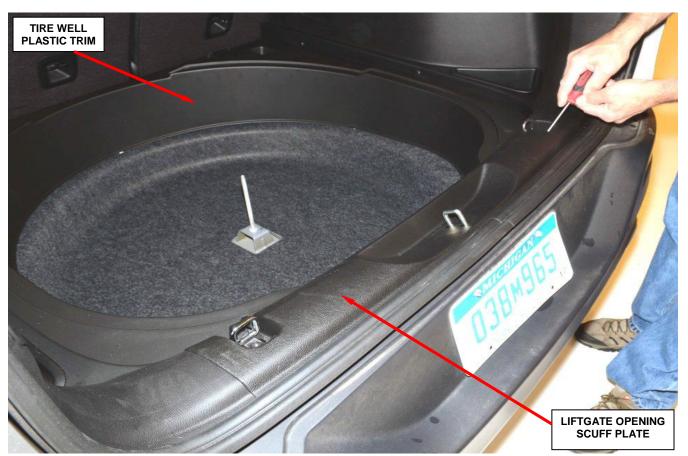


Figure 3 – Scuff Plate and Tire Well Plastic Trim

- 1. Disconnect the negative battery cable.
- 2. If not already performed, remove and save the rear shelf curtain.
- 3. <u>If not already performed</u>, lower the rear seatbacks.
- 4. <u>If equipped</u>, remove and save the load floor mat.
- 5. Remove and the save spare tire/compressor load floor.
- 6. <u>For vehicles with an air compressor</u>, remove and save the air compressor.
- 7. For vehicles with a spare tire, remove and save the spare tire.
- 8. Remove and save the liftgate opening scuff plate (Figure 3).
- 9. Remove and save the tire well plastic trim (Figure 3).

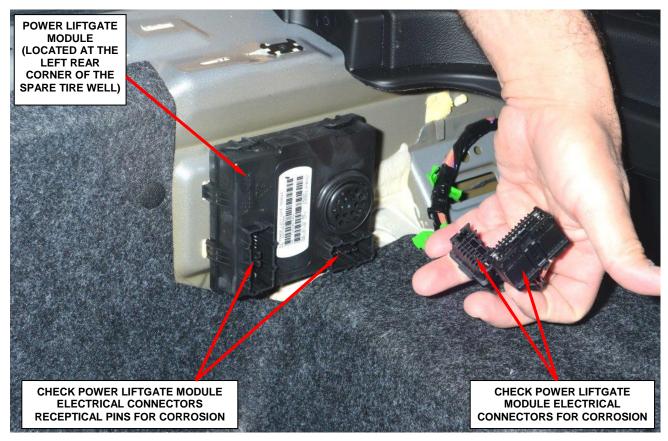


Figure 4 – Inspect Power Liftgate (PLG) Module Electrical Connectors for Corrosion

- 10. Disconnect both PLG module electrical connectors (Figure 4).
- 11. Inspect the PLG module electrical connectors for corrosion (Figure 4):
  - If there is <u>no corrosion</u> in the PLG module electrical connectors, continue with Section D. Install Power Liftgate Module Water Shield.
  - If there is <u>corrosion</u> in the PLG module electrical connectors, continue with Section C. - Replace Power Liftgate Module and Electrical Connectors.

## **C. Replace Power Liftgate Module and Electrical Connectors**

- 1. Remove and discard the Power Liftgate (PLG) module.
- 2. Remove and save the tire well carpet.
- 3. Disengage the wire harness retaining clips and pull the harness out as shown in Figure 5.

**NOTE:** Relocating the wire harness as shown will make splicing in the new electrical connectors more accessible.

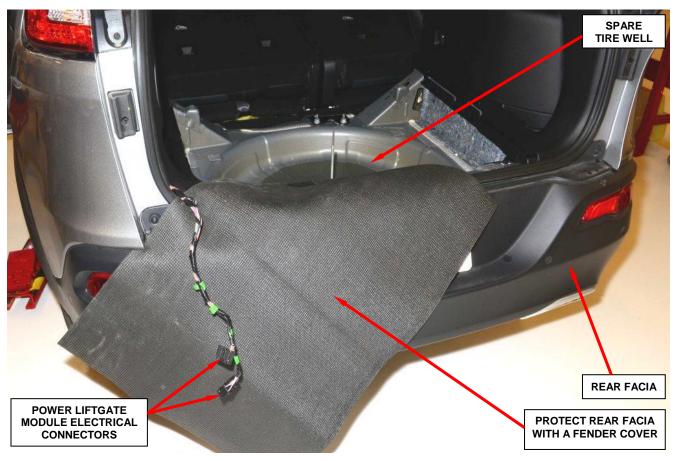


Figure 5 – Wire Harness Access

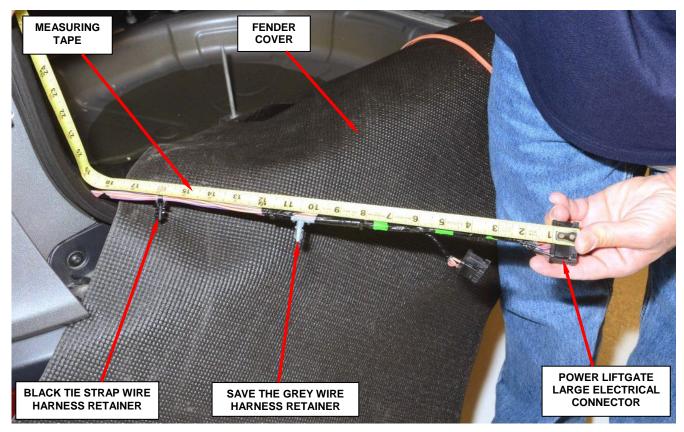


Figure 6 – Wire Harness Retainer Locations

- Measure the wire harness retainer locations on the wire harness (Figure 6). Write down the measurements for future reference.
- 5. Remove and discard the wire harness electrical tape (Figure 7).
- 6. Remove and save the grey wire harness retainer (Figures 6 and 7).



Figure 7 – Remove Electrical Tape

7. Use the following procedure to splice the new connectors to the body wire harness:

NOTE: Stagger the wire splices to prevent having a large "ball" of wire splices in one location on the wire harness.

a. Cut the old wire on the electrical connector (Figure 8).

CAUTION: Cut one wire at a time and match the color of the wire cut on the body wire harness to the same color wire on the new connector pigtail.

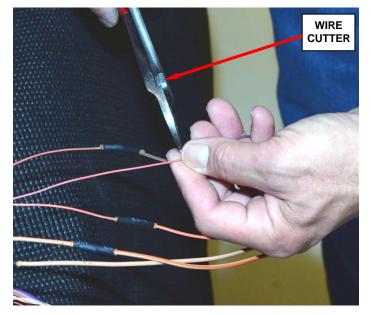


Figure 8 – Cut Wire (Staggering Cuts)

b. Strip approximately 10 - 15mm of insulation from the end of the wires (Figure 9).

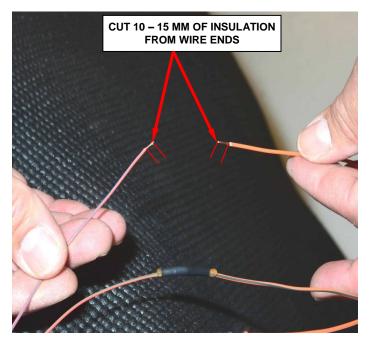


Figure 9 – Strip 10 – 15 mm of Insulation from the End of the Wires

c. Place the black shrink tube provided in the repair kit over the cut wires (Figure 10).

NOTE: The shrink tube for this application is too long. Cut the shrink tube length in half before installing it onto the wire.

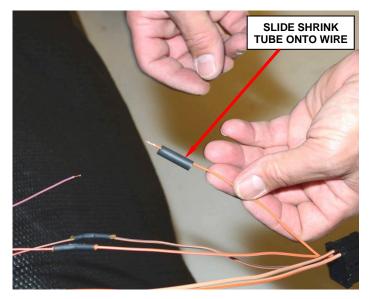


Figure 10 – Place Shrink Tube on Wire

d. Using a brass splice band and crimp tool 10042, crimp the wire harness side wire to the matching color wire on the new connector pigtail (Figure 11).

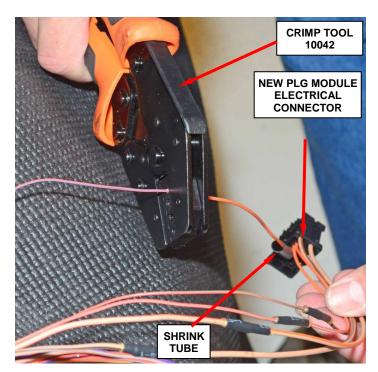


Figure 11 – Install Brass Crimp

e. Solder the brass crimps with rosin core solder (Figure 12).

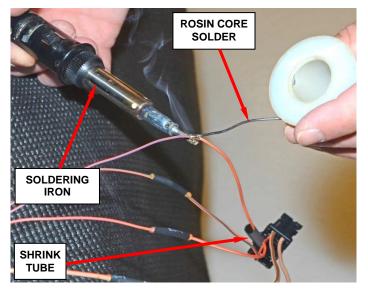


Figure 12 – Solder the Brass Crimp

f. Slide the shrink tube over the brass splice band and apply heat until glue comes out of both ends of the shrink tube (Figure 13).

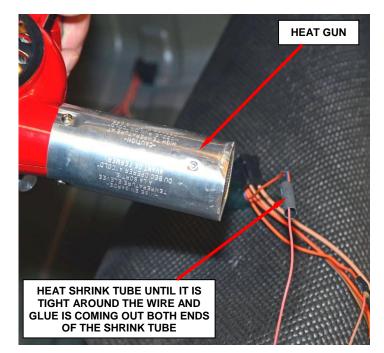


Figure 13 – Apply Heat to Shrink Tube

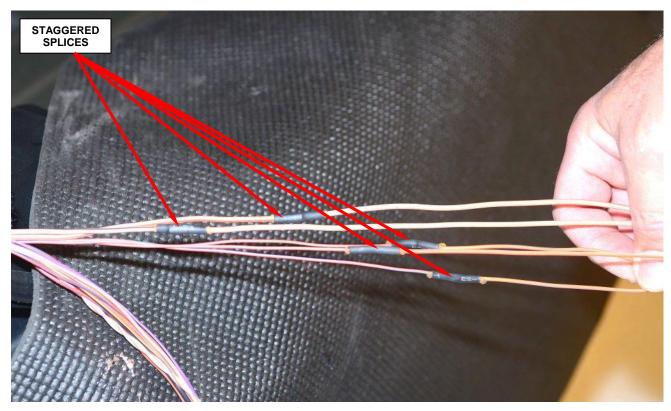


Figure 14 – Correctly Spliced Wires (Staggered/Crimped/Soldered/Heat Shrink)

g. Repeat Step 7a through 7f on each wire that requires splicing.

CAUTION: Be sure to stagger the splice joints to prevent a large "ball" of wire splices in one location on the wire harness (Figure 14).

8. Tape the grey wire harness retainer to the wire harness in the location measured in Step 4 of this procedure (Figure 15).

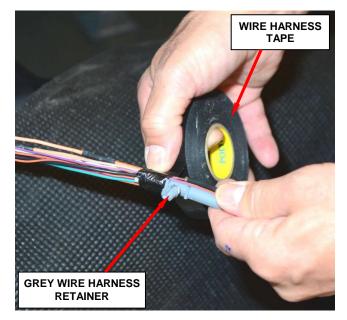


Figure 15 – Tape Wire Harness Retainer to Wire Harness

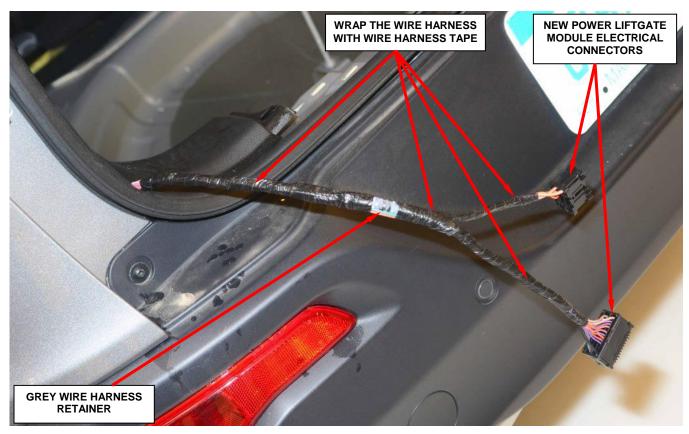


Figure 16 – Wrap Wire Harness with Tape

- 9. Using the supplied wire harness tape, wrap the wire harness (Figure 16).
- 10. Install a black tie strap wire harness retainer to the wire harness in the location measured in Step 4 of this procedure
- 11. Place the wire harness back into position and engage the wire harness retainers in the body panel holes.
- 12. Continue with Section D. Install Power Liftgate Module Water Shield.

## **D. Install Power Liftgate Module Water Shield**

- 1. <u>If equipped</u>, remove and save the tire well carpet.
- 2. If the PLG module was not replaced, remove the PLG module and inspect for water intrusion and/or water stains:
  - If water stains are <u>not present</u> on the PLG module and/or mounting surface, continue with Step 3 of this procedure (Figure 17).
  - If water stains are <u>present</u> on the PLG module and/or mounting surface, discard the original module. The PLG module must be replaced. Then continue with Step 3 of this procedure (Figure 17).

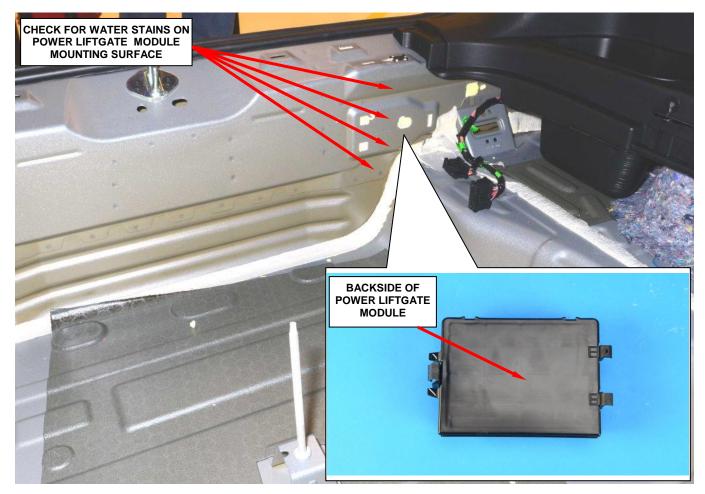


Figure 17 – Check for Water Stains on Backside of PLG Module and/or Mounting Surface

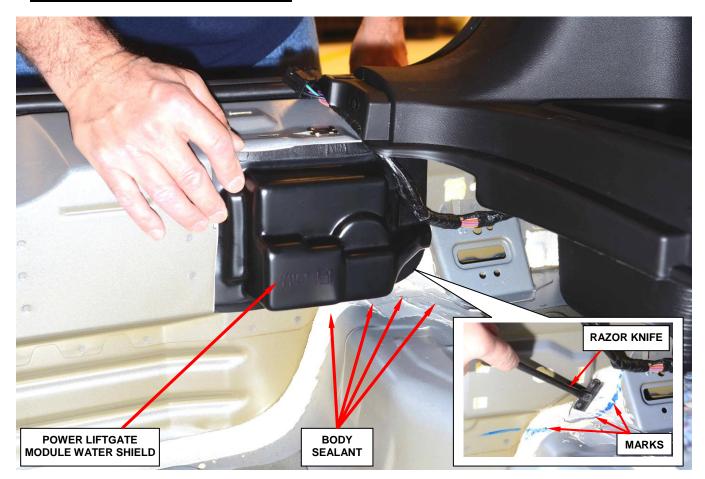


Figure 18 – Test Fit Water Shield and Trim Body Sealer as Required

- 3. Using scissors, trim the glue bead release paper so it is the same size as the water shield (Figure 18).
- 4. Test fit the PLG module water shield. Carefully mark the areas where the body sealer has to be removed (Figure 18).
- 5. Trim the body sealant with a razor knife as required to obtain a flat sealing surface for the water shield glue bead to adhere to on the PLG mounting surface (Figure 18).
- 6. Clean out all body sealant shavings from the tire well.
- 7. Wipe the PLG module mounting panel with an alcohol wipe to ensure that there is no dirt or oil on the panel.

- 8. Using RTV sealant, seal the horizontal panel seam (Figure 19).
- 9. Smooth out the RTV sealant as required.
- 10. Connect the two electrical connectors to the PLG module.
- 11. Partially install the PLG module (rear mounting tabs only) (Figure 20).

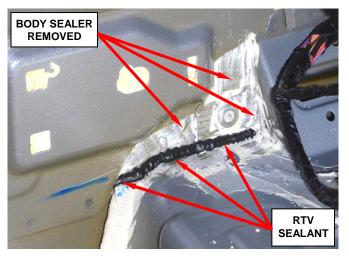


Figure 19 – Apply RTV Sealant

- 12. Remove and discard the PLG module water shield glue bead release paper (Figure 20).
- 13. Engage the PLG module lock tab and install the water shield at the same time.
- 14. Verify that the water shield glue bead is bonded to the PLG module mounting panel and that the PLG module is snapped into place.

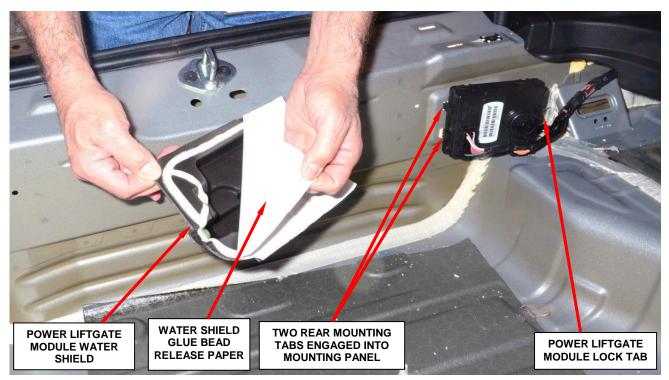


Figure 20 – Engage the PLG Module Lock Tab and Install the Water Shield at the Same Time

- 15. Install the tire well carpet.
- 16. Install the tire well plastic trim.
- 17. Install the liftgate opening scuff plate.
- 18. For vehicles with a spare tire, install the spare tire.
- 19. For vehicles with an air compressor, install the air compressor.
- 20. Install the spare tire/compressor load floor.
- 21. Install the load floor mat.
- 22. Place the rear seatbacks in the upright position.
- 23. Install the rear shelf curtain.
- 24. Continue with Section E. Replace Rubber Body Plug.

## E. Replace Rubber Body Plug

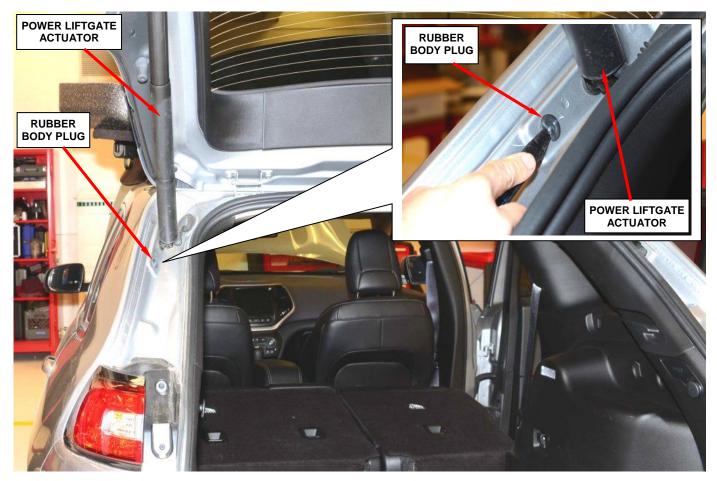


Figure 21 – Remove and Discard Rubber Body Plug

1. Using a plastic trim stick, remove and discard the rubber body plug located near the body side of the power liftgate actuator (Figure 21).

## NOTE: On some vehicles the rubber plug may be missing.

2. Apply three drops of Mopar Lock & Seal Threadlocker, or equivalent, to the threads of the provided bolt (Figure 22).

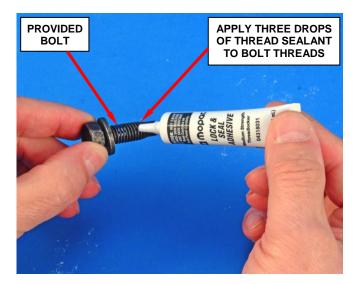


Figure 22 – Apply Thread Sealant

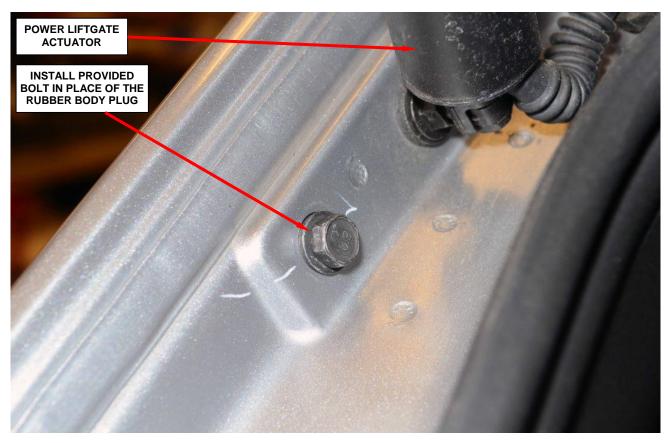


Figure 23 – Install Bolt in Place of Original Rubber Body Plug

- 3. Insert the bolt into the threaded hole that the rubber plug was removed from in Step 1 of this procedure.
- 4. Using a torque wrench, carefully tighten the bolt to 18 ft. lbs. (24 N·m) (Figure 24).
- 5. Connect the negative battery terminal to the negative battery post.
- 6. Continue with Section F. Electronic Power Steering Verification Test.

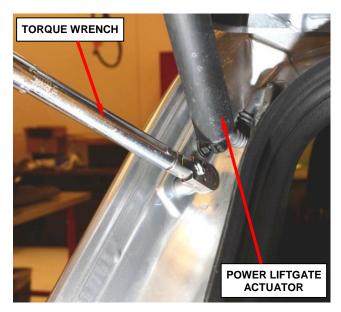


Figure 24 – Tighten Bolt with Torque Wrench

#### **F. Electronic Power Steering Verification Test**

- 1. Verify all accessories are turned off, the battery is fully charged and the charging system has a status of "charged".
- 2. Verify that the ignition is "ON".
- 3. Connect the wiTECH scan tool and start a wiTECH session.
- 4. Using the wiTECH scan tool, record and then erase all Diagnostic Trouble Codes (DTC's) from all modules.
- 5. Start the engine and allow it to run for two minutes.
- 6. Turn the steering wheel from stop-to-stop twice, holding at each stop position for one second. Then return the steering wheel to the straight ahead position.
- 7. Turn the ignition "OFF" and wait five minutes.
- 8. Turn the ignition "ON" and using the wiTECH scan tool, read DTCs from all modules.
- 9. If there are no DTC's present after turning ignition "ON", road test the vehicle for at least five minutes.
- 10. Again, with the wiTECH scan tool, read all DTCs. If there are no DTC's present after the road test, the repair is complete.
- 11. Remove the wiTECH scan tool from the vehicle.
- 12. Return the vehicle to the customer.

#### **Completion Reporting and Reimbursement**

Claims for vehicles that have been serviced must be submitted on the DealerCONNECT Claim Entry Screen located on the Service tab. Claims submitted will be used by FCA to record recall service completions and provide dealer payments.

Use the following labor operation numbers and time allowances:

|  | Labor Operation<br><u>Number</u> | Time<br><u>Allowance</u> |
|--|----------------------------------|--------------------------|
| Inspect power liftgate module<br>electrical connectors for corrosion and/or<br>water intrusion and install module<br>water shield  | 08-R2-71-82                      | 1.0 hours                |
| Inspect power liftgate module<br>electrical connectors for corrosion and/or<br>water intrusion, replace module, module<br>electrical connectors and install<br>module water shield | 08-R2-71-83                      | 2.2 hours                |
| <u>Related Operation</u><br>Open inoperative liftgate  | 08-R2-71-50                      | 0.1 hours                |

Add the cost of the recall parts package plus applicable dealer allowance to your claim.

NOTE: See the Warranty Administration Manual, Recall Claim Processing Section, for complete recall claim processing instructions.

#### **Dealer Notification**

To view this notification on DealerCONNECT, select "Global Recall System" on the Service tab, then click on the description of this notification.

#### **Owner Notification and Service Scheduling**

All involved vehicle owners known to FCA are being notified of the service requirement by first class mail. They are requested to schedule appointments for this service with their dealers. A generic copy of the owner letter is attached.

Enclosed with each owner letter is an Owner Notification postcard to allow owners to update our records if applicable.

#### Vehicle Lists, Global Recall System, VIP and Dealer Follow Up

All involved vehicles have been entered into the DealerCONNECT Global Recall System (GRS) and Vehicle Information Plus (VIP) for dealer inquiry as needed.

GRS provides involved dealers with an <u>updated</u> VIN list of <u>their incomplete</u> vehicles. The owner's name, address and phone number are listed if known. Completed vehicles are removed from GRS within several days of repair claim submission.

To use this system, click on the "Service" tab and then click on "Global Recall System." Your dealer's VIN list for each recall displayed can be sorted by: those vehicles that were unsold at recall launch, those with a phone number, city, zip code, or VIN sequence.

**Dealers** <u>must</u> perform this repair on all unsold vehicles <u>before</u> retail delivery. Dealers should also use the VIN list to follow up with all owners to schedule appointments for this repair.

Recall VIN lists may contain confidential, restricted owner name and address information that was obtained from the Department of Motor Vehicles of various states. Use of this information is permitted for this recall only and is strictly prohibited from all other use.

#### **Additional Information**

If you have any questions or need assistance in completing this action, please contact your Service and Parts District Manager.



## IMPORTANT SAFETY RECALL

#### R27 / NHTSA 15V-393

This notice applies to your vehicle (VIN: xxxxxxxxxxxxxx).

This notice is sent to you in accordance with the National Traffic and Motor Vehicle Safety Act.

Dear: (Name)

FCA has decided that a defect, which relates to motor vehicle safety, exists in certain 2014 and 2015 model year Jeep<sub>®</sub> Cherokee vehicles.

| The problem is                               | The power liftgate control module on your vehicle may experience a corrosion induced<br>high resistance short circuit in the power liftgate control module electrical connector(s).<br>The power liftgate control module electrical connector(s) could allow water intrusion<br>and cause the module to become inoperative and/or cause a fire.   |
|--|---|
| What your dealer<br>will do                  | <b>FCA will repair your vehicle free of charge.</b> To do this, your dealer will inspect for evidence of water intrusion and the power liftgate module electrical connectors for corrosion. The vehicle will be repaired to eliminate the water intrusion. On vehicles found with corrosion in the power liftgate module electrical connectors, the module and electrical connectors will also be replaced. |
|  | All involved vehicles will then receive a power liftgate module water shield after repairs are complete. The work will take about 2.5 hours to complete. However, additional time may be necessary depending on service schedules.  |
| What you must do<br>to ensure your<br>safety | Simply <b>contact your Chrysler</b> , <b>Jeep</b> , <b>Dodge or RAM dealer</b> right away to schedule a service appointment. <b>Please bring this letter with you to your dealer</b> .  |
| If you need help                             | If you have questions or concerns which your dealer is unable to resolve, please contact the FCA Group Recall Assistance Center at either <b>recalls.mopar.com</b> or 1-800-853-1403.   |

Please help us update our records by filling out the attached prepaid postcard if any of the conditions listed on the card apply to you or your vehicle. If you have further questions go to **recalls.mopar.com**.

If you have already experienced this specific condition and have paid to have it repaired, you may visit **www.fcarecallreimbursement.com** to submit your reimbursement request online or you can mail your original receipts and proof of payment to the following address for reimbursement consideration: FCA Customer Assistance, P.O. Box 21-8004, Auburn Hills, MI 48321-8007, Attention: Recall Reimbursement. Once we receive and verify the required documents, reimbursement will be sent to you within 60 days. If you've had previous repairs and/or reimbursement you may still need to have the recall repair performed on your vehicle.

If your dealer fails or is unable to remedy this defect without charge and within a reasonable time, you may submit a written complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Ave., S.E., Washington, DC 20590, or you can call the toll-free Vehicle Safety Hotline at 1-888-327-4236 (TTY 1-800-424-9153), or go to **safercar.gov**.

We're sorry for any inconvenience, but we are sincerely concerned about your safety. Thank you for your attention to this important matter.

Customer Services / Field Operations FCA US LLC

<u>Note to lessors receiving this recall:</u> Federal regulation requires that you forward this recall notice to the lessee within 10 days.