

David J. Johnson Director Service Engineering Operations Ford Customer Service Division Ford Motor Company P. O. Box 1904 Dearborn, Michigan 48121

December 19, 2018

**TO:** All U.S. Ford and Lincoln Dealers

SUBJECT: Customer Satisfaction Program 18N03 - Supplement #2

Certain 2015-2018 Model Year F-150 and 2017-2018 Model Year F-250-F-550

Vehicles - Door Latch Freezing Concerns

REF: Customer Satisfaction Program 18N03 - Supplement #1

Dated October 19, 2018

REF: NEW VEHICLE DEMONSTRATION / DELIVERY HOLD - Safety Recall 17S33

Supplement #2

Dated: October 10, 2018

# New! REASON FOR THIS SUPPLEMENT

**Technical Information:** Updated to include a part verification procedure. Some of the door foam kits were packaged with incorrect size door glass run funnels. Prior to starting the repair, please refer to ATTACHMENT V - Door Glass Run Funnel Measurement Guide, to ensure the correct funnels are being installed.

#### **PROGRAM TERMS**

This is a one-time repair program for vehicles that exhibit a door latch freezing symptom. Affected vehicles are eligible for this repair through October 31, 2028, regardless of vehicle mileage or warranty start date. Coverage is automatically transferred to subsequent owners. This program will expire October 31, 2028.

#### **VEHICLES COVERED BY THIS PROGRAM**

Vehicle	Model Year	Assembly Plant	Build Dates
F-150	2015-2018	Dearborn	March 12, 2014 through April 12, 2018
		Kansas City	August 11, 2014 through April 3, 2018
F-250 - F-550	2017-2018	Kentucky	October 8, 2015 through April 21, 2018
		OHAP	February 5, 2016 through April 17, 2018

Affected vehicles are identified in OASIS.

# REASON FOR PROVIDING EXTENDED WARRANTY COVERAGE

In the affected vehicles, water entering the doors in cold temperatures can cause door latching components to freeze. Ford is offering this no charge service to customers that have experienced a frozen door latch to install additional sealing to the front doors and crew cab rear doors, which will prevent water intrusion and door latch freezing.

#### **SERVICE ACTION**

If an affected vehicle has exhibited a frozen latch, dealers are to install additional sealing to the front doors and crew cab rear doors, and lubricate certain door latch, door handle and cable components. This service must be performed at no charge to the vehicle owner.

Note: The technical instructions for this program include all additional steps required to also complete safety recall 17S33, if 17S33 is open.

### OWNER NOTIFICATION MAILING SCHEDULE

Due to the large volume of vehicles affected by this program, owners of affected vehicles will be notified in six separate mailings. Mailing will begin the week of October 1, 2018, and is expected to complete by December 31, 2018. Dealers should repair any affected vehicles that experience a frozen door latch whether or not the customer has received a letter.

# New! ATTACHMENTS

Attachment I: Administrative Information

Attachment II: Labor Allowances and Parts Ordering Information

Attachment III: Technical Information
Attachment IV: Instructional Video Links

Attachment V: Door Glass Run Funnel Measurement Guide

**Owner Notification Letters** 

# **QUESTIONS & ASSISTANCE**

For questions and assistance, contact the Special Service Support Center (SSSC) via the SSSC Web Contact Site. The SSSC Web Contact Site can be accessed through the Professional Technician Society (PTS) website using the SSSC link listed at the bottom of the OASIS VIN report screen or listed under the SSSC tab.

Sincerely,

David J. Johnson

Certain 2015-2018 Model Year F-150 and 2017-2018 Model Year F-250-F-550 Vehicles

Door Latch Freezing Concerns

## **OASIS ACTIVATION**

OASIS will be activated on September 26, 2018.

## **FSA VIN LISTS ACTIVATION**

FSA VIN Lists will not be activated for this service action.

# **SOLD VEHICLES**

- Only owners with affected vehicles that exhibit the covered condition will be directed to dealers for repairs.
- Dealers are to prioritize repairs of customer vehicles over repairs of new and used vehicle inventory.

#### **STOCK VEHICLES**

Do not perform this program unless the affected vehicle exhibits the covered condition.

## TITLE BRANDED / SALVAGED VEHICLES

Affected title branded and salvaged vehicles are eligible for this service action.

# **OWNER REFUNDS**

Refunds are not approved for this program.

#### RENTAL VEHICLES

The use of rental vehicles is not approved for this program.

# ADDITIONAL REPAIR (LABOR TIME AND/OR PARTS)

Additional repairs identified as necessary to complete the FSA should be managed as follows:

- For related damage and access time requirements, refer to the Warranty and Policy Manual Section 6 – Ford & Lincoln Program Policies / General Information & Special Circumstances for FSA's / Related Damage.
- For vehicles within new vehicle bumper-to-bumper warranty coverage, no SSSC approval is required.
  - o Ford vehicles 3 years or 36,000 miles
- For vehicles outside new vehicle bumper-to-bumper warranty coverage, submit an Approval Request to the SSSC Web Contact Site prior to completing the repair.

Certain 2015-2018 Model Year F-150 and 2017-2018 Model Year F-250-F-550 Vehicles

Door Latch Freezing Concerns

#### CLAIMS PREPARATION AND SUBMISSION

- Claim Entry: Enter claims using Dealer Management System (DMS) or One Warranty Solution (OWS) online.
  - When entering claims, select claim type 31: Field Service Action. The FSA number 18N03 is the sub code.
  - For additional claims preparation and submission information, refer to the Recall and Customer Satisfaction Program (CSP) Repairs in the OWS User Guide.
- Related Damage/Additional labor and/or parts: Must be claimed as Related Damage on a separate repair line from the FSA with same claim type and sub code as described in Claim Entry above.

**IMPORTANT:** Click the Related Damage Indicator radio button.

• Provision for Locally Obtained Supplies: Includes XG-11, XG-13, XL-6, TA-30, Cotton Swabs/Q-Tips®, Isopropyl Alcohol, and brushes.

**NOTE:** The listed chemicals and locally obtained supplies can be used on multiple vehicles.

Program Code: 18N03 Misc Expense: OTHER

Amount: Actual cost up to \$8.00

• PROGRAM TERMS: This program will be in effect through October 31, 2028. There is no mileage limit for this program.

Certain 2015-2018 Model Year F-150 and 2017-2018 Model Year F-250-F-550 Vehicles

Door Latch Freezing Concerns

# New! LABOR ALLOWANCES

# Only 18N03 open:

Description	Labor Operation	Labor Time
Install Front Door Latch Sealing (All Regular Cab)	18N03B	1.7 Hours
Install Front Door Latch Sealing (All Super Cab)	18N03C	1.7 Hours
Install Front and Rear Door Latch Sealing (All Crew Cab)	18N03D	3.2 Hours
Additional time to allow for obtaining the correct door glass run funnels, if a kit is found to be packaged with incorrect funnels.  This labor operation can be used in combination with any 18N03 operations.	18N03Z	0.1 Hours

# Both 18N03 and Safety Recall 17S33 open:

**NOTE:** The following labor operations include incremental time for performing 18N03 when performing safety recall 17S33 is also required. Both 18N03 and 17S33 labor operations must be claimed on the same repair order, but separate repair order lines.

**NOTE:** The 17S33 labor operation must be claimed using 17S33 as the sub code. Refer to the 17S33 dealer bulletin for complete 17S33 claiming instructions and part requirements.

Description	Labor Operation	Labor Time
Install Front Door Latch Shields (F-150 Regular Cab)*	17S33F	1.0 Hours
Install Front Door Latch Sealing (F-150 Regular Cab)  Claim both labor operations on separate repair lines	18N03E	1.3 Hours
Install Front and Rear Door Latch Shields (F-150 Super Cab)*	17S33H	1.7 Hours
Install Front Door Latch Sealing (F-150 Super Cab)  Claim both labor operations on separate repair lines	18N03F	1.3 Hours
Install Front and Rear Door Latch Shields (F-150 Crew Cab)*	17S33G	1.6 Hours
Install Front and Rear Door Latch Sealing (F-150 Crew Cab)  Claim both labor operations on separate repair lines	18N03G	2.5 Hours
Install Rear Door Latch Shields (F-250-F-550 Crew Cab)*	17S33J	0.8 Hours
Install Front and Rear Door Latch Sealing (F-250-F-550 Crew Cab)  Claim both labor operations on separate repair lines	18N03H	3.0 Hours

<sup>\*</sup> Includes time to replace lock rods and transfer buttons and grommets as needed.

Certain 2015-2018 Model Year F-150 and 2017-2018 Model Year F-250-F-550 Vehicles

Door Latch Freezing Concerns

# New! PARTS REQUIREMENTS / ORDERING INFORMATION

Part Number	Description	Order Quantity	Claim Quantity	
FL3Z-16308-L	Front Doors Foam Kit (F-150 Built Prior to December 2016*)	As required		
FL3Z-16308-M	Front Doors Foam Kit (F-150 Built December 2016 or later and All F-Super Duty*)	As required		
FL3Z-16308-N	Rear Doors Foam Kit (crew cab only)	it (crew cab only)  As required		
XG-13	Motorcraft® Door Latch Grease**			
XG-11	Motorcraft® High Temperature Grease**			
XL-6	Motorcraft® Silicone Spray**			
TA-30	Motorcraft® Silicone Sealant**  MISC. OTHE		OTHER	
Obtain Locally	Cotton Swabs/Q-Tips®**			
	Isopropyl Alcohol**			
	Brushes**			

<sup>\*</sup> Front door foam kit build date usages are approximations.

**NOTE:** Up to one of each of the door foam kits can be claimed with each 18N03 repair, regardless of cab style and vehicle build date. If a door foam kit is found to have incorrect size door glass run funnels the correct size door glass run funnels can be removed from another kit, and that additional kit the door glass run funnels were removed from can be claimed with this repair. All unused parts of the additional kit can be scrapped.

**NOTE:** Additional parts required to complete safety recall 17S33, if required, are listed in the 17S33 dealer bulletin.

#### PARTS REQUIREMENTS / ORDERING INFORMATION (continued)

Order your parts requirements through normal order processing channels. To guarantee the shortest delivery time, an emergency order for parts must be placed.

#### **DEALER PRICE**

For latest prices, refer to DOES II.

#### PARTS RETENTION AND RETURN

Follow the provisions of the Warranty and Policy Manual, Section 1 - WARRANTY PARTS RETENTION AND RETURN POLICIES.

# **EXCESS STOCK RETURN**

Excess stock returned for credit must have been purchased from Ford Customer Service Division in accordance with Policy Procedure Bulletin 4000.

<sup>\*\*</sup> The listed chemicals and locally obtained supplies can be used on multiple vehicles.

# CERTAIN 2015-2018 MODEL YEAR F-150 AND 2017-2018 MODEL YEAR F-250 - F-550 VEHICLES — DOOR LATCH FREEZING CONCERNS

#### **OVERVIEW**

In the affected vehicles, water entering the doors in cold temperatures can cause door latching components to freeze. Ford is offering this no charge service to customers that have experienced a frozen door latch to install additional sealing to the front doors and crew cab rear doors, which will prevent water intrusion and door latch freezing. If an affected vehicle has exhibited a frozen latch, dealers are to install additional sealing to the front doors and crew cab rear doors, and lubricate certain door latch, door handle and cable components. This service must be performed at no charge to the vehicle owner.

**NOTE:** The technical instructions for this program include all additional steps required to also complete safety recall 17S33, if 17S33 is open.

**NOTE:** Please read this procedure in its entirety, prior to performing repairs. Additionally, instructional videos have been developed to assist with the repair. Please refer to Attachment IV: Instructional Video Links to view the videos.

**NOTE:** Some of the door foam kits were packaged with incorrect size door glass run funnels. Prior to starting the repair, please refer to ATTACHMENT V - Door Glass Run Funnel Measurement Guide, to ensure the correct funnels are being installed.

#### SERVICE PROCEDURE

#### **Recommended Tool List:**

General Tools	General Equipment	
1/4" Drive Impact Driver	Flashlight	
1/4" Drive Ratchet	Industrial Grade Heavy Duty Scissors	
1/4" Drive Torque Wrench	Bungee Cord	
1/4" Drive Extension - 6" (152mm)	Body Tape	
1/4" Drive Socket - 7mm, 8mm and 10mm	Q-Tips®	
1/4" Driver Bit - T-20 and T-25 Torx®	Brushes	
1/4" Driver Bit - T-27 Torx®	Caulk Gun	
Small Pick	Ruler	
Trim Removal Tools	Paint Pen	
Pocket Screwdriver		
Blowgun		
Long Needle Nose Pliers		
Utility Knife		
10mm Wrench		
Tape Measure		

#### Front Door Service Procedure

1. Is this a F-150 vehicle with safety recall 17S33 open?

Yes - Proceed to the Front Door Latch Water Shield Kit installation Procedure (Page 2).

No - Proceed to the Front Door and Front Door Latch Sealing Procedure (Page 9).

## Front Door Latch Water Shield Kit Installation (Safety Recall 17S33 Open)

**NOTE:** Front door latch water shields were phased into F-150 production in December 2016. For vehicles already equipped with water shields, it is not necessary to remove and replace the water shields on the front doors.

**NOTE:** This procedure uses a different door latch water shield attachment procedure than what was previously used in TSB 16-0155. Do not attempt to use TSB parts to perform this procedure.

**NOTE:** Procedure to be performed on both front doors.

**NOTE:** The window must be in the closed (up) position when performing this procedure.

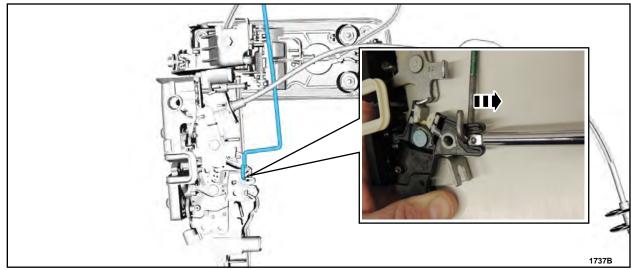
NOTICE: <u>Do not</u> allow the door trim panel or exterior door handle to hang by the door handle cables or damage to the cable and door may occur.

1. Remove the exterior front door handles. Please follow the Workshop Manual (WSM) procedures in Section 501-14.

NOTE: The interior grab handle cover clips can be reused for this repair. Only replace if damaged.

- 2. Remove the front door weather shields for access.
- 3. Remove the lock rod assemblies. See Figure 1.
  - Use the male end of a 1/4" extension to spread apart the lock rod retainer and remove the rod from the door latch.

**NOTE:** Driver door latch shown, passenger door latch similar.



- 4. Through the exterior front door handle opening, inspect for a rubber water shield installed on top of the door latch. See Figure 2.
- 5. If a rubber water shield is present, remove and discard the two attaching clips and the rubber water shield.
- 6. Clean the surface area where the water shield covered with isopropyl alcohol and a clean shop cloth. Use part of the center portion of Foam E (refer to Figure 11) or some locally acquired body tape to seal the holes the attaching clips were previously installed in. See Figure 3.

NOTE: Driver door latch shown, passenger door latch similar.

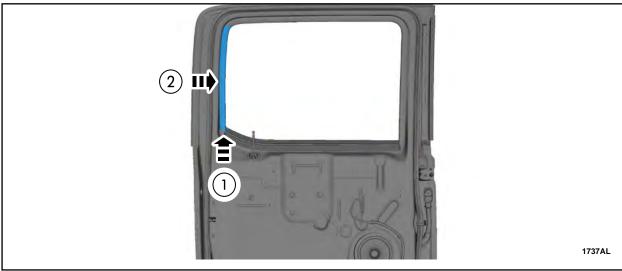


FIGURE 2



FIGURE 3

7. Using compressed air, blow out any debris or residual water from the door latch assembly, exterior door handle mechanism, and cables. See Figure 4.

NOTE: Driver rear door latch shown, all door latches similar.



FIGURE 4

8. Loosen but do not remove the two door glass run bolts. See Figure 5.

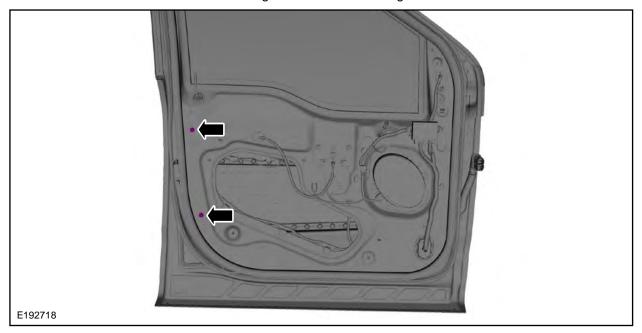


FIGURE 5

9. Loosen but do not remove the 3 door latch bolts. See Figure 6.

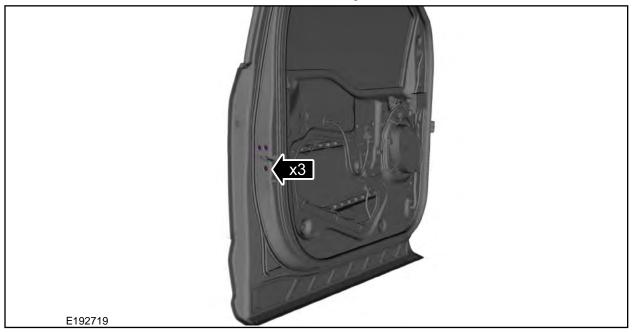


FIGURE 6

10. Apply supplied Foam Tape to the *new* water shield in the highlighted area. See Figure 7.



FIGURE 7

11. With the latch and door glass run assembly loose inside the door panel, install the door latch water shield into position. See Figure 8.

**NOTE**: The water shield is properly installed when the locating tabs align with the door glass run, the latch cable is fitted in the notch of the water shield, and the fastener holes align.

12. Install the *new* screw into the top hole of the shield. See Figure 8.

NOTE: The lower fastener hole of the shield is not used on the front water shields.

NOTE: Driver door latch shown, passenger door latch similar.

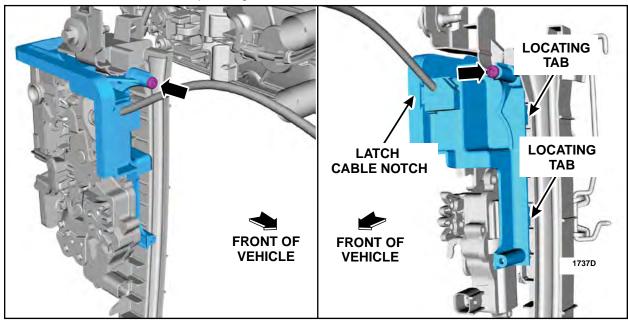


FIGURE 8

- 13. Tighten the two door glass run bolts. See Figure 5.
  - 8 Nm (71 lb.in).
- 14. Tighten the three door latch bolts. See Figure 6.
  - 8 Nm (71 lb.in).
- 15. Refer to Figure 9 to determine if the door latch is equipped with the *new* style lock rod.

**NOTE:** The *new* style lock rod is required to accommodate the water shield.

- 16. Is the door latch equipped with the *new* style lock rod?
  - Yes Reinstall the lock rod and proceed to the Front Door and Front Door Latch Sealing Procedure (Page 9).
  - No Proceed to Step 17.

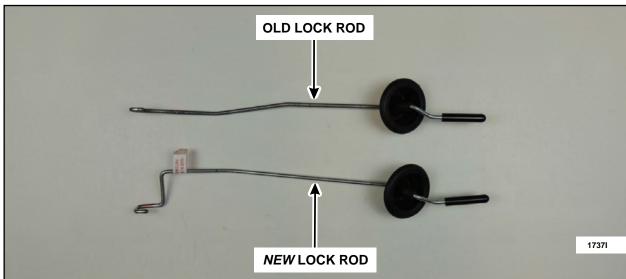


FIGURE 9

**NOTE:** If a replacement lock rod already has a button and grommet installed, transfer of the components is not required.

- 17. Replace the lock rod and transfer the necessary components. See Figure 10.
  - a. Transfer the grommet and button from the original lock rod to the *new* lock rod.
  - b. Apply a bead of Motorcraft® Instant Gel Adhesive TA-19-C or equivalent to the lock rod prior to threading the button onto the *new* lock rod.
  - c. When threading the button onto the *new* lock rod, stop threading when some resistance is met.
  - d. Ensure both front lock rod buttons are installed at similar heights.
  - e. Reinstall the lock rod.

**NOTE**: Driver door latch shown, passenger door latch similar.

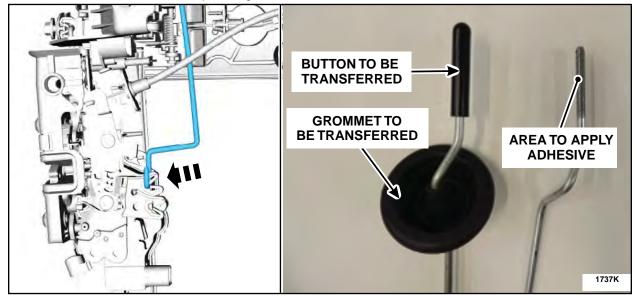


FIGURE 10

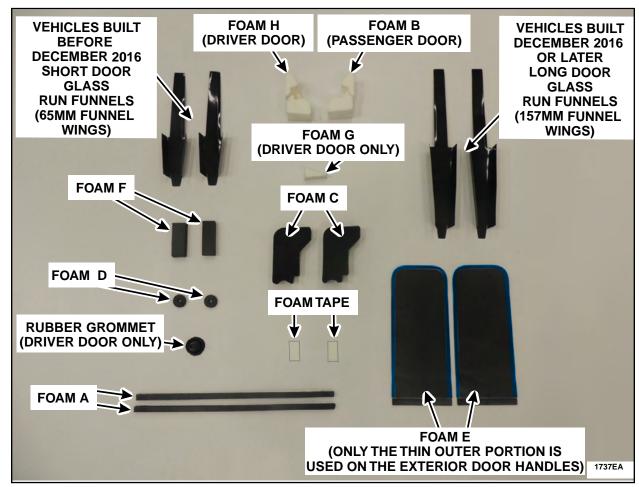
18. Proceed to the Front Door and Front Door Latch Sealing Procedure.

# Front Door and Front Door Latch Sealing Procedure

**IMPORTANT!** There are two different front door foam kits available for the F-150 vehicles. One kit comes with short (65mm funnel wings) door glass funnels (built before December 2016), and the other kit comes with long (157mm funnel wings) door glass funnels (built December 2016 or later). Funnel usage is based on vehicle build date and the length of the door glass run installed. Only one front door foam kit is available for the F-250-F-550 vehicles and the kit contains long (157mm funnel wings) door glass funnels. Refer to Attachment V for additional information.

**NOTE:** Procedure to be performed on both front doors.

Complete Front Door Part Kit - Each Kit Will Include Either Long Door Glass Run Funnels Or Short **Door Glass Run Funnels** 



#### FIGURE 11

NOTE: The parts being installed in this procedure are not labeled. Refer to Figure 11 for component identification.

**NOTE:** These components will be used for the following procedures:

- Front Door Glass Run and Belt Moulding Sealing Procedure (All Vehicles)
- Front Door Latch and Handle Service Procedure (All Vehicles)



# Front Door Glass Run and Belt Moulding Sealing Procedure (All Vehicles)

1. Position the front door window glass down.

# Front Door Glass Run and Belt Moulding Sealing Components

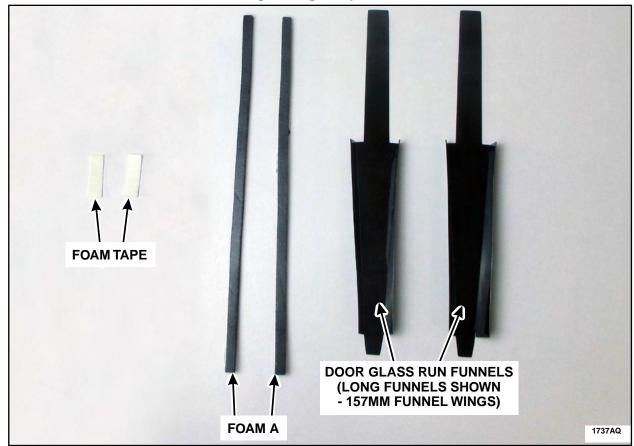


FIGURE 12

2. Remove the inner belt moulding and position aside the latch side of the door glass top run. See Figure 13.



# FIGURE 13

3. If present, remove and discard existing foam on the driver and passenger side outer belt moulding (also known as upper belt moulding) at this location. See Figure 14.

NOTE: Passenger door shown, driver door similar.

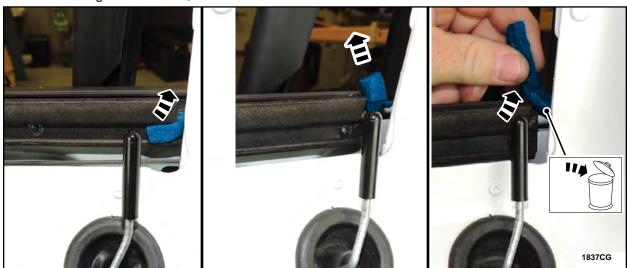


FIGURE 14

4. Clean the highlighted area of the outer belt moulding with isopropyl alcohol and a clean shop cloth. See Figure 15.



FIGURE 15

5. Apply a small bead of Motorcraft® TA-30 Silicone sealant onto the highlighted area of the outer belt moulding, ensuring the two belt moulding clips shown in Figures 15 and 16 are completely covered. Using your finger, smooth out the sealer to establish an even surface. See Figure 16.

**NOTE:** A proper seal around the belt moulding metal clips is necessary to prevent water from entering the door.

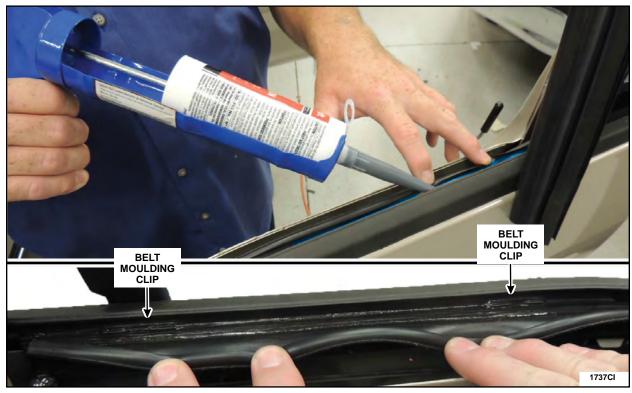


FIGURE 16

Using a small trim removal tool, install Foam A to the outer belt moulding on top of the bead of silicone that was previously applied. Both of the outer belt moulding clips need to be covered by the Foam A. See Figures 17 and 18.

**NOTE:** It is crucial that both outer belt moulding clips are covered by Foam A and that the end of Foam A wraps around the outer belt moulding as shown.

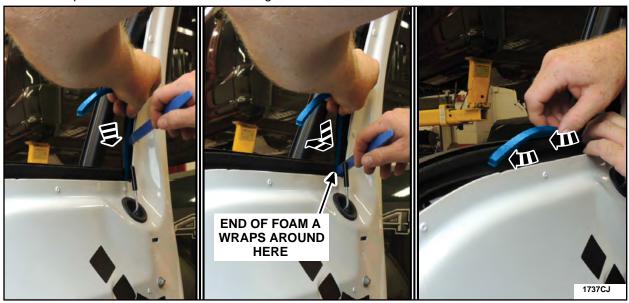


FIGURE 17

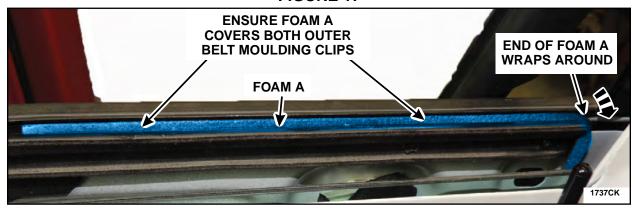


FIGURE 18

7. Remove any excessive silicone in visible areas on the outer belt moulding with isopropyl alcohol and a clean shop cloth.

- 8. Modify the front door glass top run. See Figure 19.
  - a. Measure 15 mm (9/16 in) from the inboard bottom corner of the door glass top run.
  - b. Mark the 15 mm (9/16 in) location.
  - c. Starting at the bottom outboard corner of the door glass top run, cut a 45° notch using the previous measurement as a guide.

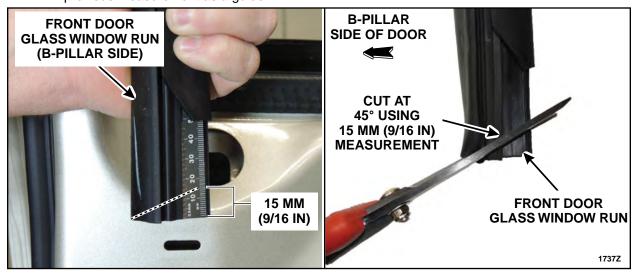


FIGURE 19

- 9. Install one of the appropriate length door glass run funnels ensuring that the lower tab is situated in the door glass run and the funnel sides sit at a 90° angle above the door glass run. See Figure 20. *Refer to Attachment V for additional information.* 
  - F-150 vehicles: Short funnels 65mm funnel wings (built before December 2016), Long funnels 157mm funnel wings (built December 2016 or later)
  - F-250-F-550 vehicles: Long funnels only 157mm funnel wings

**NOTE:** Ensure the funnel sides are at a 90° angle upon installation. It may be necessary to bend the sides of the funnel back to a 90° angle before installation.

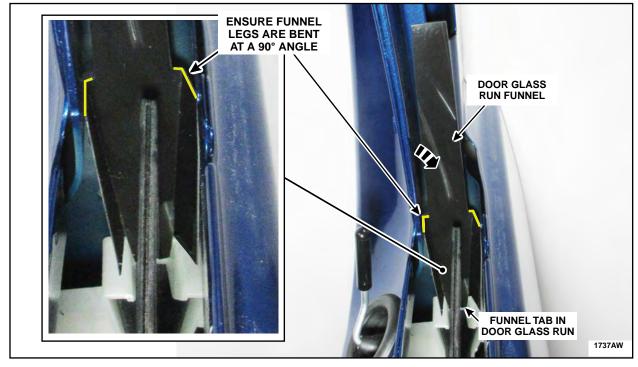


FIGURE 20

10. Reinstall the latch side of the front door glass top run and the inner belt moulding. See Figure 13.

# NOTICE: IT WILL BE NECESSARY TO HOLD THE UPPER PORTION OF THE FUNNEL WHEN INSTALLING THE DOOR GLASS TOP RUN. CARE MUST BE TAKEN TO NOT BEND OR DAMAGE THE DOOR GLASS RUN FUNNEL.

11. Unseat the front door lock rod grommet and visually confirm that the funnel is in the correct position and then reinstall the front door lock rod grommet. See Figure 21.

NOTE: Driver door lock rod grommet shown, passenger door lock rod grommet similar.

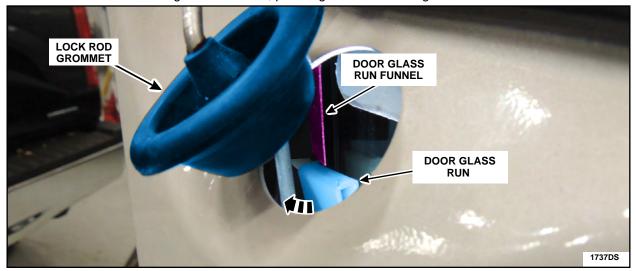


FIGURE 21

- 12. Raise the front door window to the full up position.
- 13. Using your hand install the Foam Tape on the top of the door glass run and on the back of the door glass run funnel in the order shown in Figure 22. Figure 23 shows the Foam Tape installed.

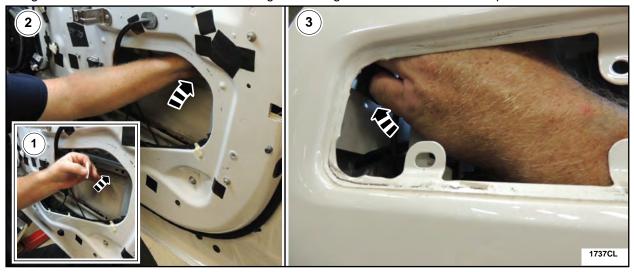


FIGURE 22

NOTE: Rear door shown, front door similar.

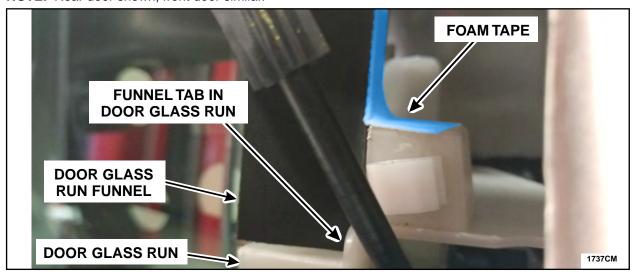


FIGURE 23

- 14. Using isopropyl alcohol clean the top portion of the door and then neatly apply Motorcraft® TA-30 silicone sealant to the indicated/highlighted area in order to completely fill the gap as shown in Figure 24.
  - Do not close the door until the silicone is cured.

**NOTE:** Proper application of the sealant is crucial to properly water seal the door and also avoid appearance concerns.

**NOTE:** Top of driver front door shown, passenger front door similar.

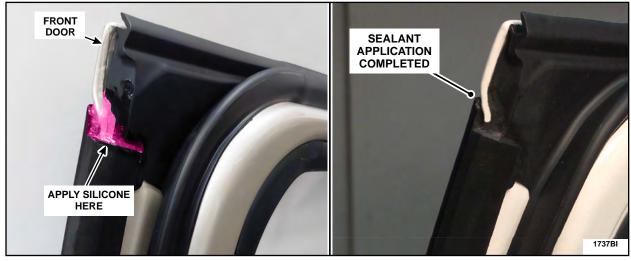


FIGURE 24

- 15. Modify the front door Lock Rod Grommet. See Figure 25.
  - a. Using a utility knife, cut four 6 mm (.25 in) long slits approximately 90° apart into the top of the front door lock rod grommet where the lock rod exits the grommet.
  - b. Cut four additional 13 mm (.5 in) long slits approximately 90° apart on the inner sides of the grommet 45° separated from the previously cut slits.



FIGURE 25

16. Proceed to the Front Door Latch and Exterior Handle Service Procedure.

# Front Door Latch and Exterior Handle Service Procedure (All Vehicles)

**NOTE:** Procedure to be performed on both front doors.

# Front Door Latch and Exterior Handle Sealing Components

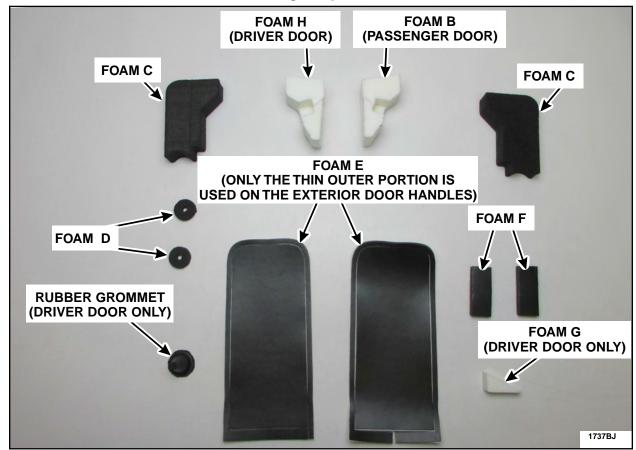


FIGURE 26

1. For driver door latch only, attach Foam G to Foam H. See Figure 27.

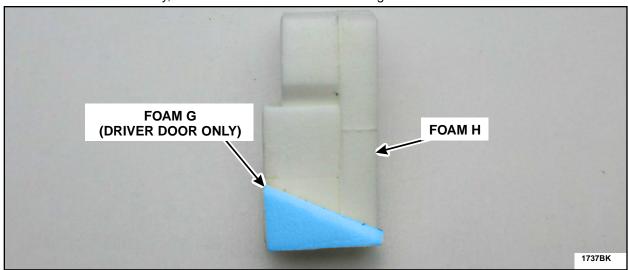


FIGURE 27

2. Install Foam H onto the driver door latch. See Figure 28.

NOTE: Driver door latch shown with Foam G and H, Passenger door latch similar with Foam B.

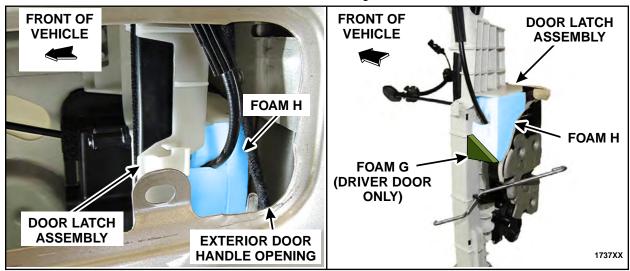


FIGURE 28

- 3. Install Foam D over the door latch cable and onto Foam H (driver door) and Foam B (passenger door) to cover the gap between the cable and Foam H. See Figure 29.
  - The notch of Foam D must point downwards when installed.

NOTE: Driver door latch shown with Foam G and H, Passenger door latch similar with Foam B.

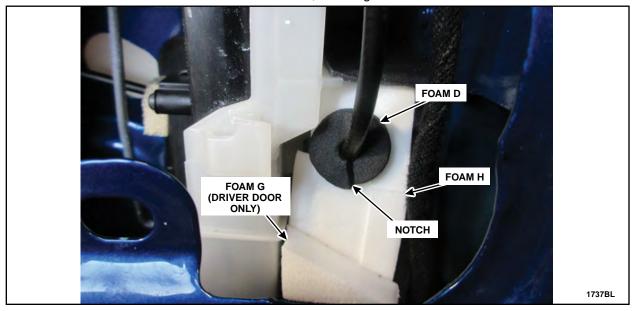


FIGURE 29

4. Using a trim tool, install Foam C onto the top of the front door latch water shield. See Figure 30.

**NOTE:** Driver door latch shown, passenger door latch similar.



FIGURE 30

5. Using a trim tool, install Foam F between the water shield and the door glass run. See Figure 31.

**NOTE:** Do not remove the adhesive backing from Foam F and install Foam F with the adhesive backing facing downward.

NOTE: Driver door shown, passenger door similar.

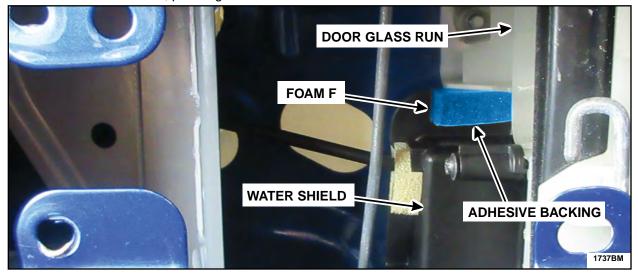
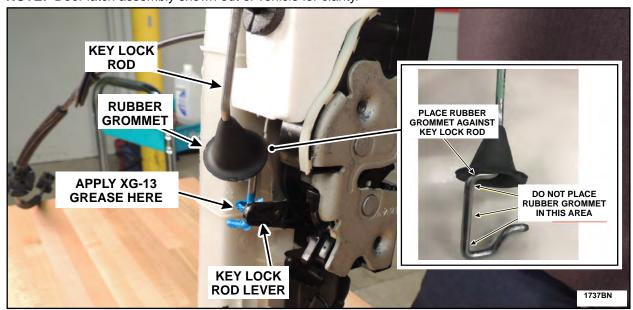


FIGURE 31

- 6. For driver side only, apply Motorcraft® XG-13 grease to the area where the key lock rod attaches to the key lock rod lever. See Figure 32.
- 7. For driver side only, install the rubber grommet onto the key lock rod over the key lock rod lever. The rubber grommet should be positioned as shown. The rubber grommet will sit sideways when installed properly. See Figure 32.

NOTE: Door latch assembly shown out of vehicle for clarity.



- 8. Inspect the interior door handle to latch cable for kinking. See Figure 33.
  - Correct any kinks found in the cable by straightening the cable by hand as required.

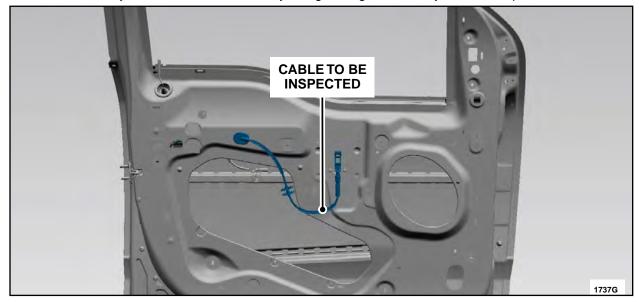
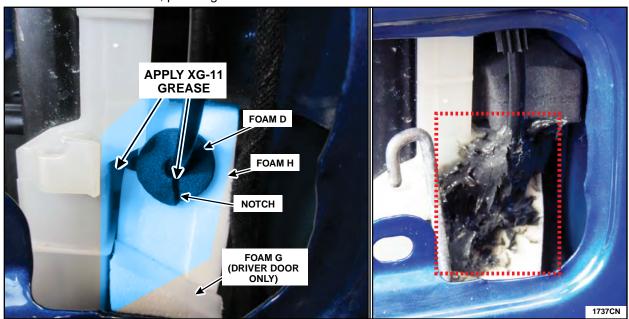


FIGURE 33

9. Apply XG-11 grease on top of and around Foam D after Foam D is installed. The Foam D notch, the gap between the cable and Foam D, and the gap between the door glass run and Foam H must be covered with grease. See Figure 34.

NOTE: Do not allow the XG-11 grease to come into contact with moving components of the latch mechanism.

NOTE: Driver door shown, passenger door similar.



- 10. If equipped, disconnect the interior door handle cable retaining clips from the door sheet metal.
- 11. Using isopropyl alcohol and a clean shop cloth, throughly remove grease from the interior door handle cable mechanism. See Figure 35.

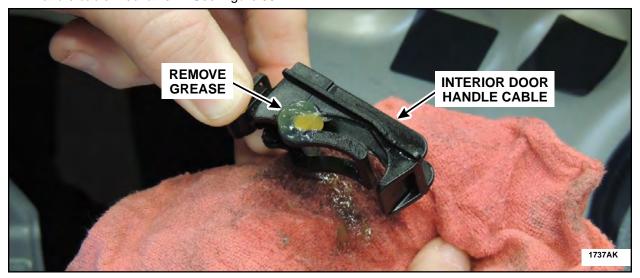


FIGURE 35

12. Unseat the interior door handle cable rubber grommet and while holding the end of the cable in an upward position, spray Motorcraft® XL-6 Lubricant down into the cable for five seconds. See Figure 36.

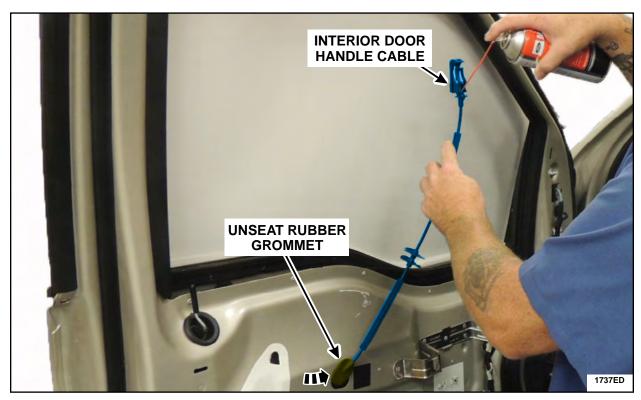


FIGURE 36

13. Using a bungee cord or other similar device, secure the interior door handle cable to the door in an upward position to allow the Motorcraft® XL-6 Lubricant time to run down into the cable, until the interior door handle cable is reinstalled later in this procedure. See Figure 37.

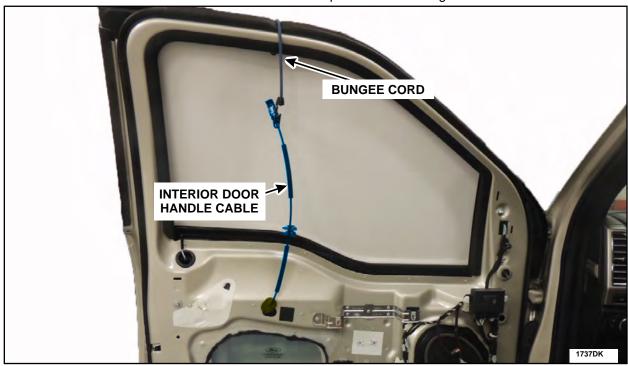


FIGURE 37

14. Using a clean shop cloth and isopropyl alcohol, clean the highlighted mating surface area of the exterior front door handle. See Figure 38.

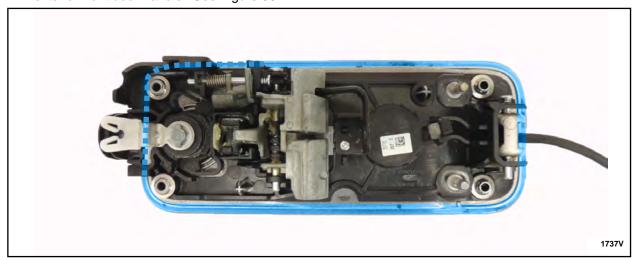


FIGURE 38

1737DL

15. Using a clean shop cloth and isopropyl alcohol clean inside the dotted lines on the mating surface area of the front exterior door handle openings. See Figure 39.

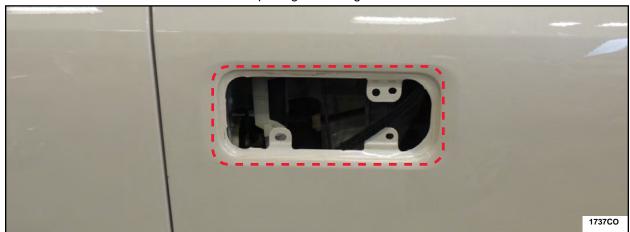


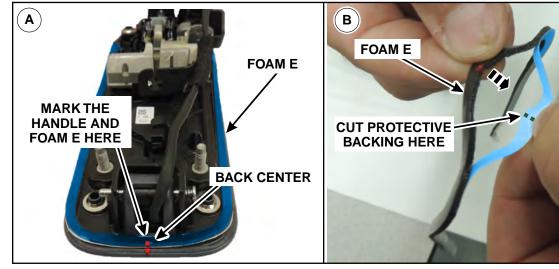
FIGURE 39

16. Install Foam E around the perimeter of the exterior door handle on top of the existing seal.

**NOTE:** Foam E will not wrap around the entire perimeter of the exterior door handle.

**NOTE:** Proper placement of Foam E is crucial for proper sealing and to avoid appearance concerns.

- A. Lay out Foam E on the exterior door handle and mark center as shown in Figure 40.
- B. Remove Foam E from the door handle and remove the back center portion of the adhesive backing then cut the protective backing in half. See Figure 40.
- C. Align the marks made on the Foam E and exterior door handle and adhere the back center portion to the exterior door handle as shown in Figure 41.
- D. Lay one side of Foam E down on the exterior door handle and without stretching the foam pull off the adhesive backing as you adhere Foam E to the exterior door handle as shown in Figure 41.
- E. Remove the protective backing from the other side of Foam E as shown in Figure 41.
- F. Without stretching the foam adhere it to the exterior door handle ensuring that both sides of Foam E are of equal length once secured. See Figure 42.



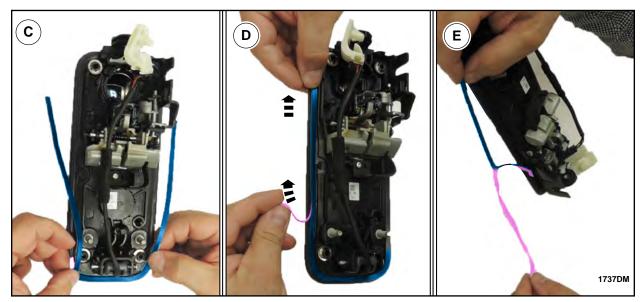


FIGURE 41

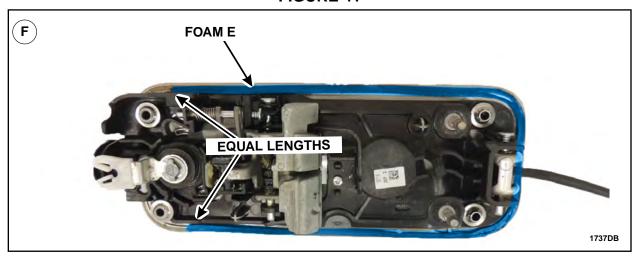


FIGURE 42

17. Using a clean shop cloth and isopropyl alcohol, clean the handle plunger then using a brush apply a light film of Motorcraft® XG-13 grease to all four sides of the exterior door handle plunger and to the mechanisms in the areas shown in Figures 43 and 44.

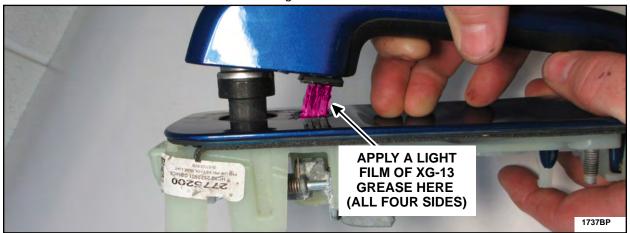


FIGURE 43

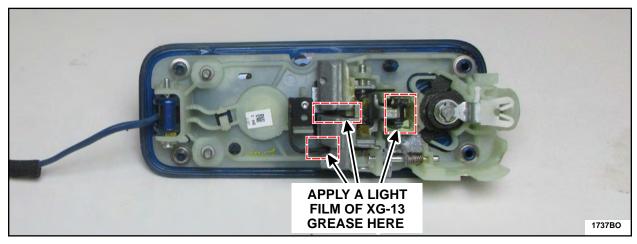


FIGURE 44

18. Apply a bead of Motorcraft® TA-30 silicone sealant to the latch side area of the front door exterior handle opening making sure that the sealant will overlap with the Foam E on the exterior door handle. See Figure 45.

**NOTE:** Proper placement of the Motorcraft® TA-30 silicone sealant is crucial for proper sealing and to avoid appearance concerns.

NOTE: Driver door shown, passenger door similar.

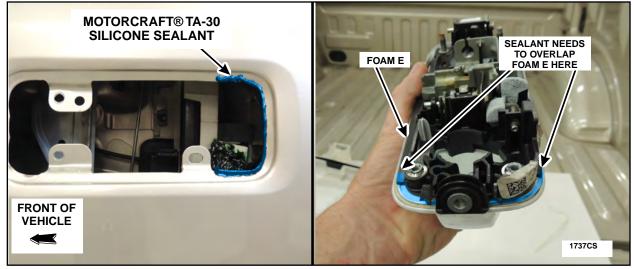


FIGURE 45

- 19. Remove the bungee cord used to hold the interior door handle cable up, seat the rubber grommet and if equipped, reinstall the interior door handle cable retaining clips.
- 20. Reconnect the exterior door handle cable to the door handle, then lubricate the door handle cable end with Motorcraft® XG-13 grease, as shown in Figure 46.
- 21. Reinstall the front exterior door handles. Please follow the WSM procedures in Section 501-14.

NOTICE: Reinstall the exterior door handle cable and retaining clips in the original factory position.



#### FIGURE 46

- 22. Clean any excessive silicone around the exterior door handle perimeter with isopropyl alcohol, Q-tips® and a clean shop cloth to avoid appearance concerns.
- 23. Determine next steps based on vehicle and cab configuration.
  - For all Regular Cab vehicles, F-150 Super Cab vehicles without safety recall 17S33 open, and all F-250-F-550 Super Cab vehicles, the repair is complete.
  - For all Crew Cab vehicles, proceed to the Rear Door Service Procedure (Page 32).
  - For F-150 Super Cab vehicles with safety recall 17S33 open, proceed to the Rear Door Lower Latch Water Shield Kit Installation Procedure (Page 58).

#### Rear Door Service Procedure (Crew Cab Vehicles)

- 1. Is safety recall 17S33 open?
  - Yes Proceed to the Rear Door Latch Water Shield Kit Installation Procedure (Crew Cab Vehicles).
  - No Proceed to the Rear Door Glass Run and Belt Moulding Sealing Procedure (Crew Cab Vehicles). (Page 36)

# Rear Door Latch Water Shield Kit Installation Procedure (Crew Cab Vehicles With Safety Recall 17S33 Open)

**NOTE:** This procedure uses a different door latch water shield attachment procedure than what was previously used in TSB 16-0155. Do not attempt to use TSB parts to perform this procedure.

**NOTE:** Procedure to be performed on both rear doors.

**NOTE:** The window must be in the closed (up) position when performing this procedure.

NOTICE: <u>Do not</u> allow the door trim panel or exterior door handle to hang by the door handle cables or damage to the cable and door may occur.

1. Remove the exterior rear door handles. Please follow the WSM procedures in Section 501-14.

NOTE: The interior grab handle cover clips can be reused for this repair. Only replace if damaged.

- 2. Remove the lock rod assembly from the rear door latch. See Figure 47.
  - Use the male end of a 1/4" extension to spread apart the lock rod retainer and remove the rod from the door latch.

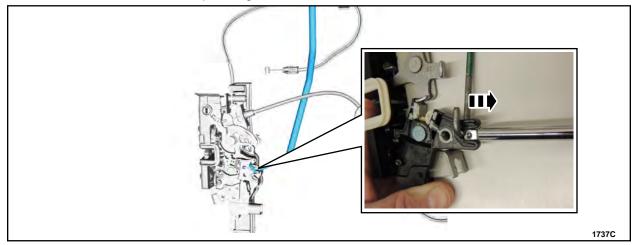


FIGURE 47

3. Using compressed air, blow out any debris or residual water from the door latch assembly, exterior door handle mechanism, and cables. See Figure 48.

NOTE: Driver door latch shown, passenger door latch similar.



FIGURE 48

4. Install the door latch water shield into position. See Figure 49.

**NOTE:** The water shield is properly installed when the latch cable is fitted in the notch of the water shield and the fastener holes align.

5. Install the *new* screws into the top and bottom holes of the shield. See Figure 49.

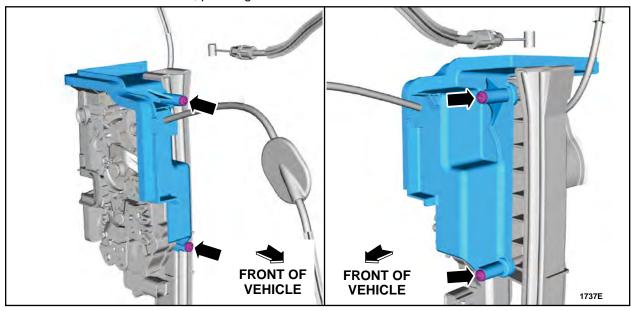


FIGURE 49

6. Refer to Figure 50 to determine if the door latch is equipped with the *new* style lock rod.

Is the door latch equipped with the new style lock rod or manual locks?

- Yes Reinstall the lock rod if equipped and proceed to the Rear Door Glass Run and Belt Moulding Sealing Procedure (Page 36).
- No Proceed to Step 7.

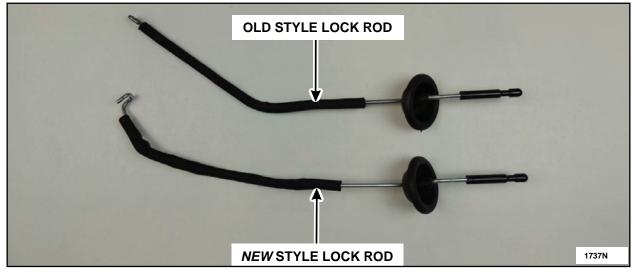


FIGURE 50

7. Lock rod replacement procedure. See Figure 51.

**NOTE:** If a replacement lock rod already has a button and grommet installed, transfer of the components is not required.

- a. Transfer the grommet, sleeve and button from the original lock rod to the *new* lock rod.
- b. Apply a bead of Motorcraft® Instant Gel Adhesive TA-19-C or equivalent to the lock rod prior to threading the button onto the *new* lock rod.
- c. When threading the button onto the *new* lock rod, stop threading when some resistance is met.
- d. Ensure both rear lock rod buttons are installed at similar heights.
- e. Reinstall the lock rod.

**NOTE:** Driver door latch shown, passenger door latch similar.

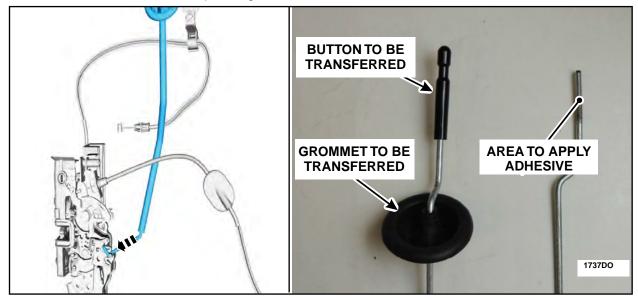
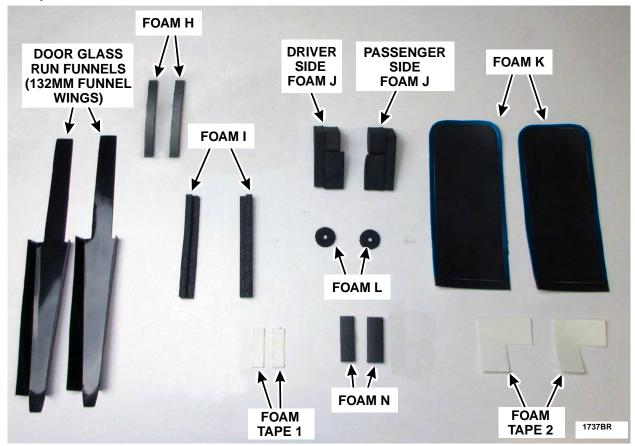


FIGURE 51

8. Proceed to the Rear Door Glass Run and Belt Moulding Sealing Procedure (Page 36).

## Rear Door Glass Run and Belt Moulding Sealing Procedure (Crew Cab Vehicles)

### **Complete Rear Door Part Kit**



### FIGURE 52

**NOTE:** The parts being installed in this procedure are not labeled. Refer to Figure 52 for component identification.

### Rear Door Glass Run and Belt Moulding Sealing Components

**NOTE:** Procedure to be performed on both rear doors.

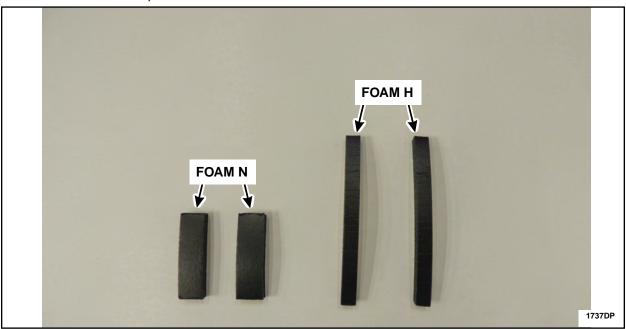


FIGURE 53

- 1. Position the rear door window glass down.
- 2. Remove the rear door inner belt moulding and position aside the latch side of the door glass top run. See Figure 54.

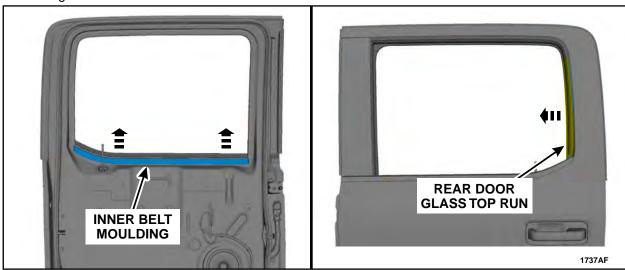


FIGURE 54

3. If present, remove and discard the foam on the door outer belt moulding at the location shown in Figure 55.

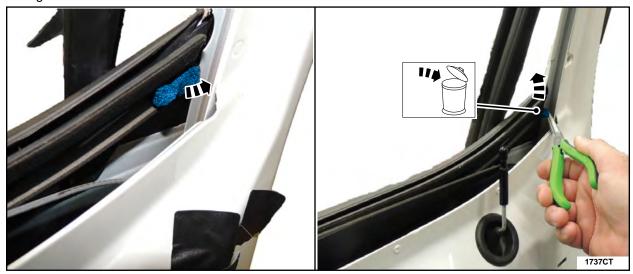


FIGURE 55

4. Clean the highlighted area of the outer belt moulding with isopropyl alcohol and a clean shop cloth. See Figure 56.

**NOTE:** Make sure to clean past the second clip.

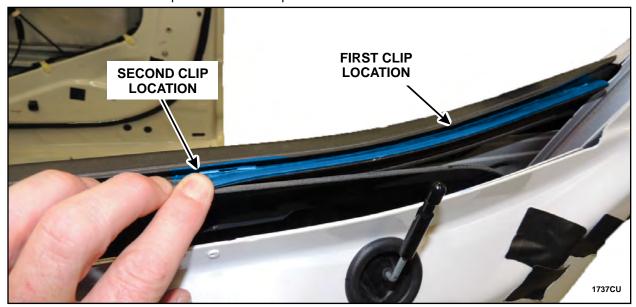


FIGURE 56

5. Apply Motorcraft® TA-30 silicone sealer to the area highlighted on the outer belt moulding. Using your finger, smooth out the sealer to establish an even surface. See Figures 57 and 58.

**NOTE:** Completely covering the belt moulding metal clips is crucial for proper sealing. See Figure 58.



FIGURE 57

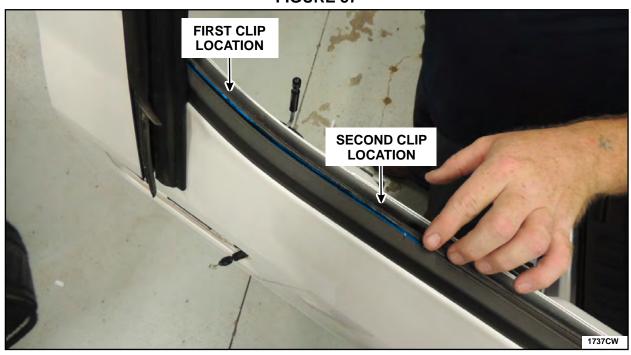


FIGURE 58

6. Install Foam H to the C-pillar end of the outer belt moulding. See Figure 59.

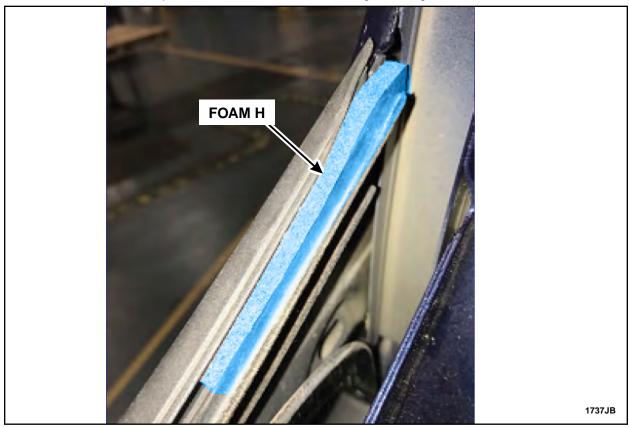


FIGURE 59

- 7. Remove any excessive silicone in visible areas on the outer belt moulding with isopropyl alcohol and a clean shop cloth.
- 8. Modify the rear door glass top run. See Figure 60.
  - a. Measure 15 mm (9/16 in) from the inboard bottom corner of the door glass top run.
  - b. Starting at the bottom outboard corner of the front door glass top run, cut a 45° notch using the previous measurement as a guide.

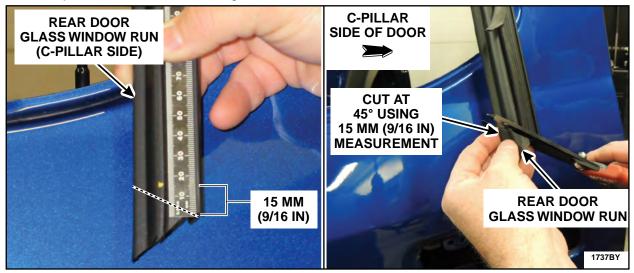
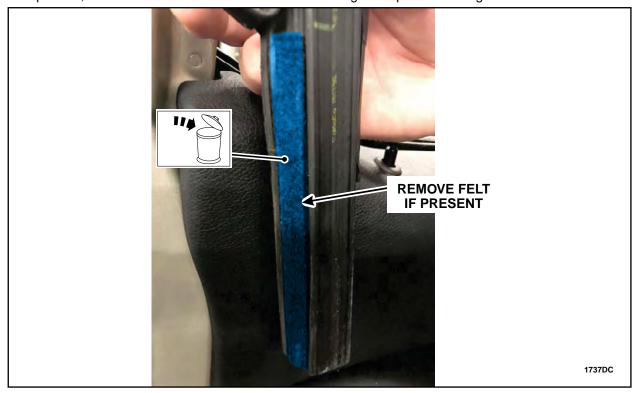


FIGURE 60

9. If present, remove and discard the felt on the rear door glass top run. See Figure 61.



10. Clean the highlighted area of the rear door glass top run with isopropyl alcohol and a clean shop cloth. See Figure 62.

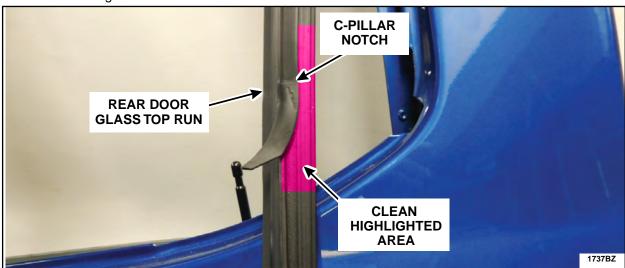


FIGURE 62

11. Install Foam N to the highlighted area of rear door glass top run making sure that the Foam N is under the C-Pillar notch. See Figure 63.

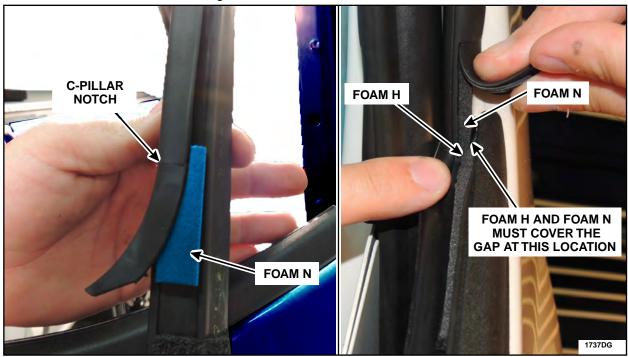


FIGURE 63

12. With the rear door latch side door glass top run still positioned aside raise the rear door window glass three quarters of the way up. See Figure 64.

NOTICE: Use care when raising window glass to not pinch door glass top run or scratch the glass.

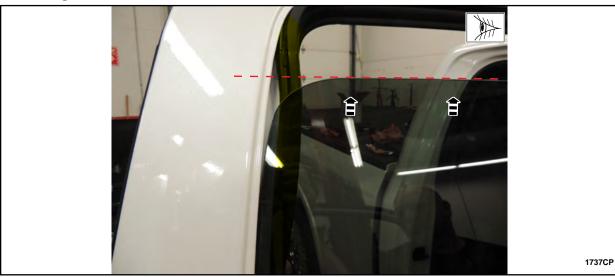


FIGURE 64

- 13. Modify the rear door lock rod grommet. See Figure 65.
  - a. Remove the rear door lock rod grommet from the lock rod.
  - b. Cut approximately 6 mm (0.25 in)off the top of the grommet.
  - c. Install the rear door lock rod grommet back onto the lock rod.
  - d. Using a utility knife, cut four 6 mm (0.25 in) long slits approximately 90° apart into the lower portion of the rear door lock rod grommet.



#### FIGURE 65

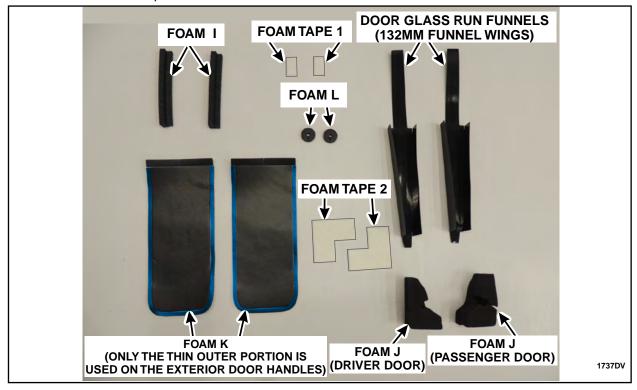
14. Proceed to the Rear Door Latch and Handle Service Procedure.



#### Rear Door Latch and Handle Service Procedure (Crew Cab Vehicles)

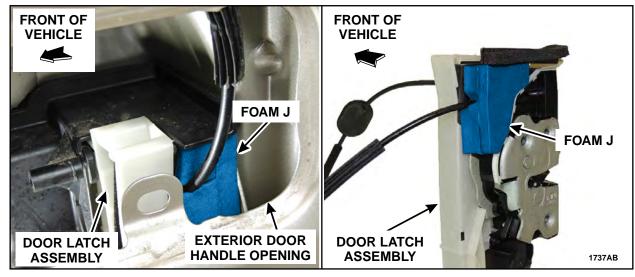
#### **Rear Door Latch and Handle Sealing Components**

**NOTE**: Procedure to be performed on both rear doors.



#### FIGURE 66

1. Install Foam J onto the rear door latch. See Figure 67.



- 2. Install Foam L over the door latch cable and onto Foam J to cover the gap between the exterior door latch cable and Foam J. See Figure 68.
  - The notch of foam L must point downward when installed.

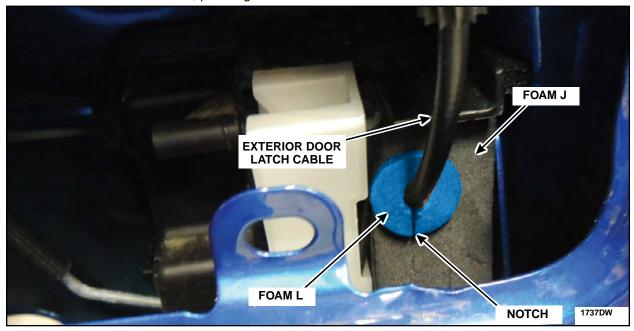
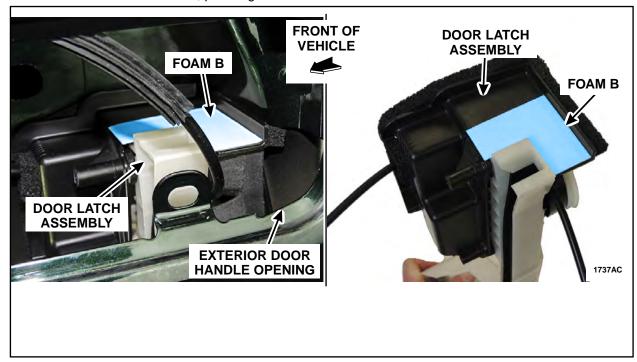


FIGURE 68

3. Clean the highlighted area on top of the door latch water shield with isopropyl alcohol and a clean shop cloth where the Foam Tape 2 will be installed. See Figure 69.

**NOTE:** Driver door latch shown, passenger door latch similar.



#### FIGURE 69

- 4. Install Foam Tape 2 on top of the rear door latch water shield. See Figures 70.
  - Make sure that Foam Tape 2 attaches to the water shield and to the door glass run.



FIGURE 70

5. Install Foam I to cover the gap between the rear door latch assembly water shield and the door glass run. See Figure 71.

**NOTE:** Driver door latch shown, passenger door latch similar.

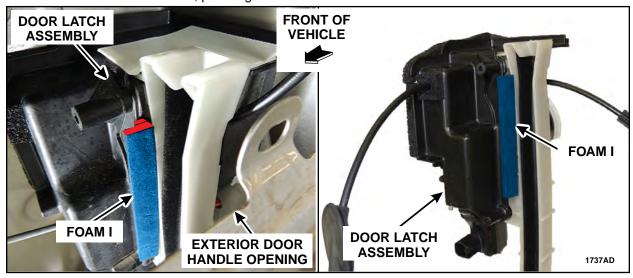


FIGURE 71

6. Apply Motorcraft® TA-30 silicone sealant in and over the mating area of the water shields to the door. Using light finger pressure smooth the bead of silicone. See Figure 72.

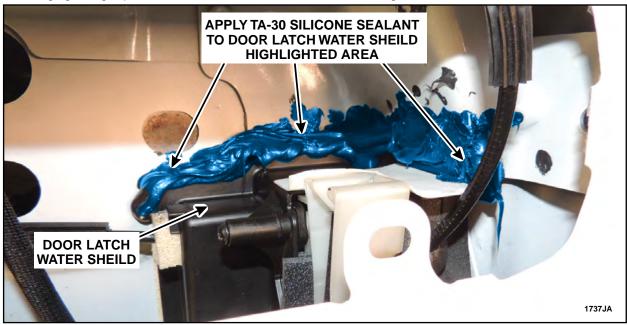


FIGURE 72

- 7. Position the rear door window glass down.
- 8. Install the door glass run funnel (132mm funnel wings), ensuring the lower tab is situated in the door glass run and the funnel sides sit at a 90° angle above the door glass run. Refer to Attachment V for additional information. See Figure 73.

**NOTE:** Verify the sides of the funnel are bent to 90° prior to installation.

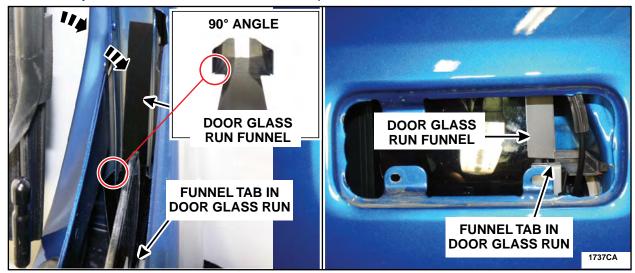


FIGURE 73

9. Install the rear door glass top run and inner belt moulding. See Figure 54.

NOTICE: When installing the rear door glass top run make sure not to bend or damage the door glass run funnel. Check through the exterior door handle opening to verify that the funnel is positioned correctly.

- 10. Position the rear door window glass up.
- 11. Apply supplied Foam Tape 1 in the location shown to hold the funnel in place. See Figure 74.

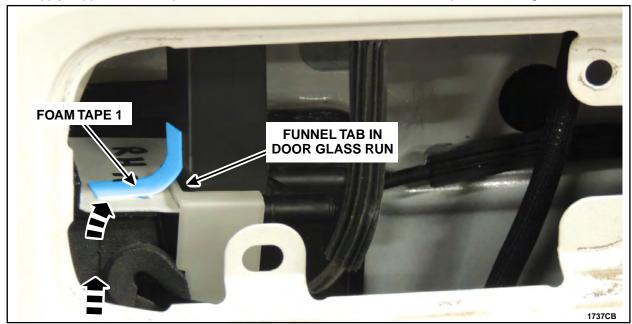


FIGURE 74

- 12. Inspect the interior door handle to latch cable for kinking. See Figure 75.
  - Correct any kinks found in the cable by straightening the cable by hand as required.

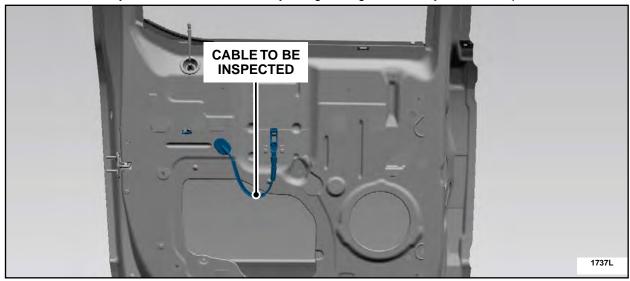


FIGURE 75

13. Apply XG-11 grease on top of and around Foam L. The Foam L notch, the gap around the cable and Foam L, and the gap between the door latch assembly and Foam J must be filled with grease. See Figure 76.

**NOTE:** Do not allow the XG-11 grease to come into contact with moving components of the latch mechanism.

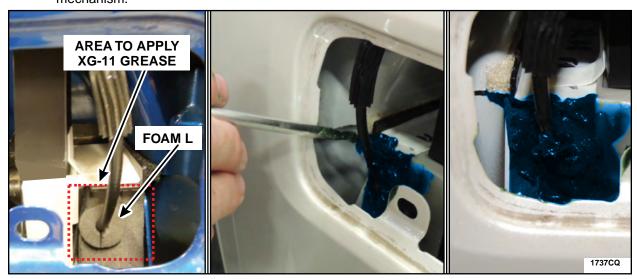
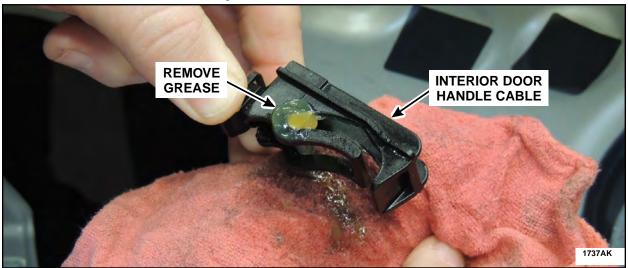


FIGURE 76

14. Using isopropyl alcohol and a clean shop cloth, throughly remove grease from the interior door handle cable mechanism. See Figure 77.



#### FIGURE 77

15. Unseat the interior door handle cable rubber grommet and while holding the end of the interior door handle cable in an upward position, spray Motorcraft® XL-6 Lubricant for five seconds down into the cable. See Figure 78.

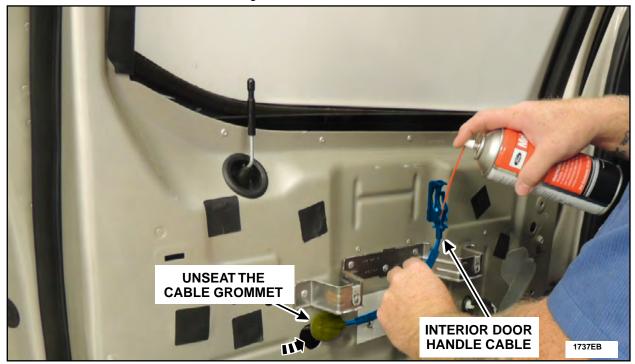


FIGURE 78

16. Using a bungee cord or other similar device, secure the interior door handle cable to the door in an upward position to allow the lubricant time to run down into the cable, until the interior door handle cable is reinstalled later in this procedure. See Figure 79.

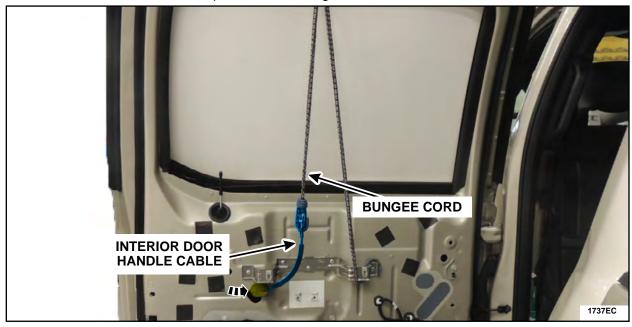


FIGURE 79

17. Using a clean shop cloth and isopropyl alcohol, clean the highlighted mating surface area of the exterior door handle. See Figure 80.

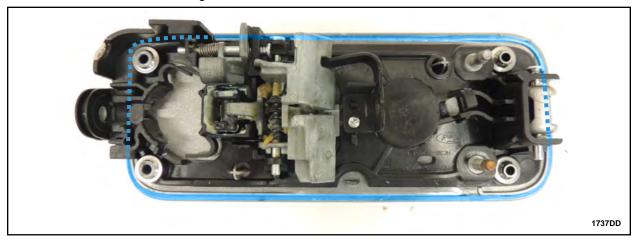
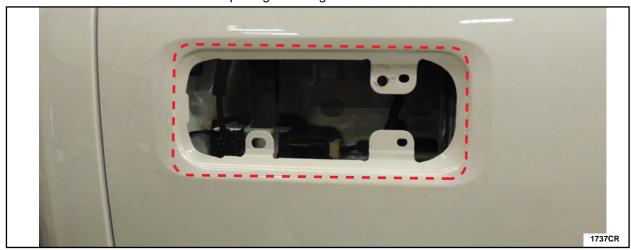


FIGURE 80

18. Using a clean shop cloth and isopropyl alcohol, clean inside the dotted lines on the mating surface area of the exterior door handle opening. See Figures 81.



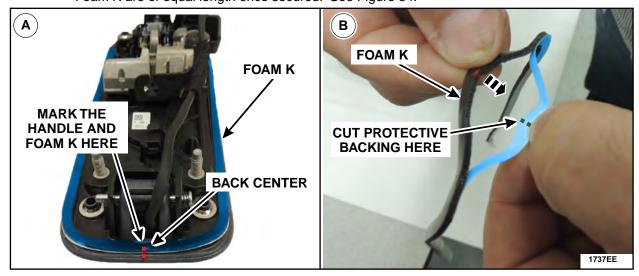
#### FIGURE 81

19. Install Foam K around the perimeter of the exterior door handle on top of the existing seal.

**NOTE:** Foam K will not wrap around the entire perimeter of the exterior door handle.

**NOTE:** Proper placement of Foam K is crucial for proper sealing and to avoid appearance concerns.

- A. Lay out Foam K on the exterior door handle and mark center as shown in Figure 82.
- B. Remove Foam K from the door handle and remove the back center portion of the adhesive backing then cut the protective backing in half. See Figure 82.
- C. Align the marks made on the Foam K and exterior door handle and adhere the back center portion to the exterior door handle as shown in Figure 83.
- D. Lay one side of Foam K down on the exterior door handle and without stretching the foam pull off the adhesive backing as you adhere Foam K to the exterior door handle as shown in Figure 83.
- E. Remove the protective backing from the other side leg of Foam K as shown in Figure 83.
- F. Without stretching the foam adhere it to the exterior door handle ensuring that both sides of Foam K are of equal length once secured. See Figure 84.



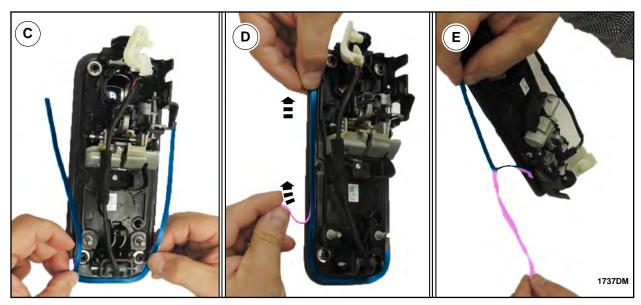


FIGURE 83

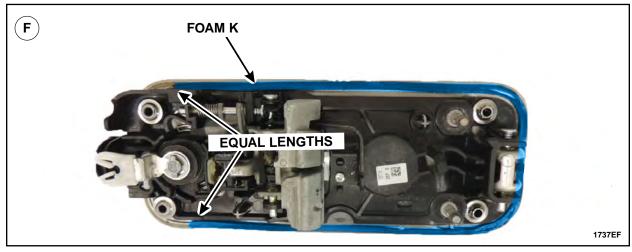


FIGURE 84

20. Using a clean shop cloth and isopropyl alcohol, clean the handle plunger then, using a brush, apply a light film of Motorcraft® XG-13 grease to all four sides of the exterior door handle plunger and to the mechanisms in the areas shown in Figures 85 and 86.



#### FIGURE 85

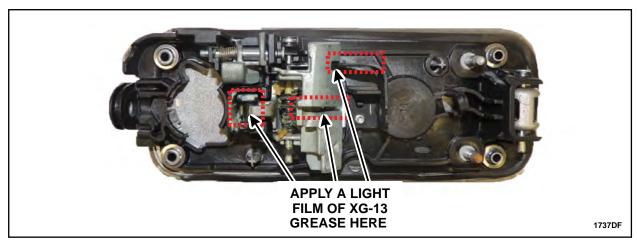


FIGURE 86

21. Apply a bead of Motorcraft® TA-30 silicone sealant to the rear vertical area of the rear door metal surface making sure that the sealant will overlap with the Foam K on the exterior door handle. See Figure 87.

**NOTE:** Proper placement of the Motorcraft® TA-30 silicone sealant is crucial to ensure proper sealing and avoid appearance concerns.

NOTE: Driver door shown, passenger door similar.

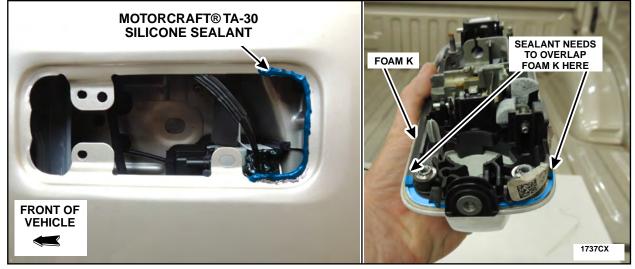


FIGURE 87

22. Remove the bungee cord used to hold the interior door handle cable up, seat the interior door handle cable rubber grommet and reinstall the exterior rear door handle. When connecting the exterior door handle cable to the door handle, lubricate the door handle cable end with XG-13 grease as shown in Figure 88. Please follow the WSM procedures in Section 501-14.

NOTICE: Reinstall the exterior door handle cable and retaining clips in the original factory position.



#### FIGURE 88

23. Clean any excessive silicone around the exterior door handle perimeter with isopropyl alcohol, Q-tips and a clean shop cloth to avoid appearance concerns.

Crew Cab vehicle repair is complete.

# Rear Door Lower Latch Water Shield Kit Installation (F-150 Super Cab Vehicles With Safety Recall 17S33 Open)

**NOTE:** If the vehicle has previously had a rear lower door latch replaced, it may already have the latest level door latch water shield installed. If the Super Cab rear lower door latch has a large water shield installed as shown in Figure 93, then installation of a *new* water shield is not required.

**NOTE:** Procedure to be performed on both rear doors.

- 1. Remove the rear door interior trim panels. Please follow the WSM procedures in Section 501-05.
- 2. Remove the door panel weather shield for access. See Figure 89.



FIGURE 89

- 3. Inspect the interior door handle to latch cable for kinking. See Figure 91.
  - Correct any kinks found in the cable by straightening the cable by hand as required.
- 4. Remove the three lower door latch bolts. See Figure 90.

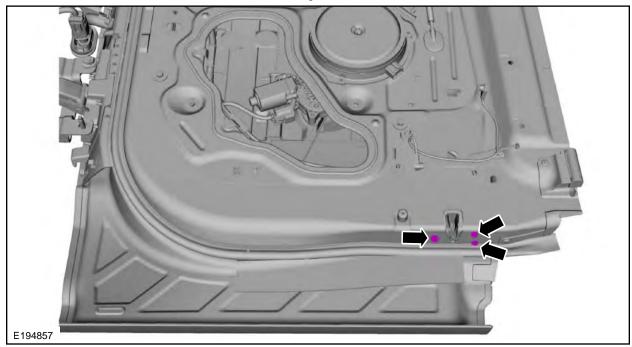
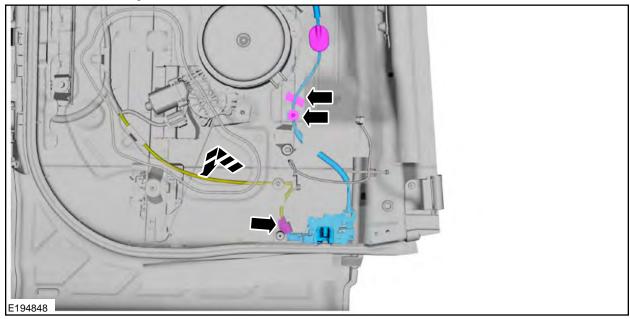


FIGURE 90

5. Detach the cable retainers and disconnect the electrical connector. Position the rear door latch outside of the door. See Figure 91.



# FIGURE 91

**NOTE:** Some F-150 SuperCab vehicles may be equipped with a smaller water shield than what is being installed in this program. The smaller shields must be removed and replaced. See Figure 92.

6. If equipped with small water shields, remove and discard the existing lower door latch water shields. See Figure 92.

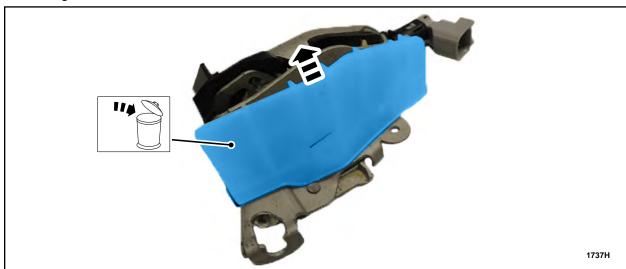
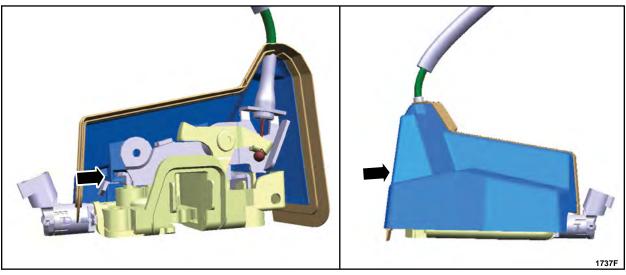


FIGURE 92

- 7. Using compressed air, blow out any debris or residual water from the latch assembly area.
- 8. Install a new door latch water shield onto the lower rear door latch. See Figure 93.



## FIGURE 93

- 9. Position the rear door lower latch back into the door. Attach the cable retainers and connect the electrical connector. See Figure 91.
- 10. Install the three lower door latch bolts. See Figure 90.
  - Torque 12 Nm (106 lb.in).
- 11. Install the door panel weather shields. See Figure 89.
- 12. Install the rear door interior trim panels. Please follow the WSM procedures in Section 501-05.

Super Cab vehicle repair is complete.

# CERTAIN 2015-2018 MODEL YEAR F-150 AND 2017-2018 MODEL YEAR F-250 - F-550 VEHICLES — DOOR LATCH FREEZING CONCERNS

#### **OVERVIEW**

Some of the door foam kits were packaged with incorrect size door glass run funnels. Dealers are to measure the door glass run funnel wings using the measurement guide below. If a door foam kit is found to have incorrect size door glass run funnels the correct size door glass run funnels can be removed from another kit, and that additional kit the door glass run funnels were removed from can also be claimed with this repair. All unused parts from the additional kit can be scrapped.

**NOTE:** This packaging error caused rear doors foam kit FL3Z-16308-N to be incorrectly packaged with door glass run funnels from front doors foam kits FL3Z-16308-M. Conversely, the front doors foam kits FL3Z-16308-M were also incorrectly packaged with door glass run funnels from rear doors foam kit FL3Z-16308-N. If foam kits FL3Z-16308-M or FL3Z-16308-N are found to have incorrect funnels the correct funnels can likely be found in the other kit.

NOTE: This packaging error was corrected in December 2018.

#### SERVICE PROCEDURE - Door Glass Run Funnel Measurement Guide

#### Recommended Tool List:

General Tools Tape Measure

1. Verify the correct door glass funnels are being installed by measuring the funnel wings as shown in Figure 1.

NOTE: Funnel modification is not advised.

FL3Z-16308-M FRONT DOORS FOAM KIT F-150 BUILT DECEMBER 2016 OR LATER AND ALL F-SUPER DUTY (157MM LONG FUNNEL WINGS)~ FL3Z-16308-N REAR DOORS FOAM KIT CREW CAB VEHICLES ONLY (132MM LONG FUNNEL WINGS) FL3Z-16308-L FRONT DOORS FOAM KIT F-150 BUILT PRIOR TO **DECEMBER 2016** (65MM LONG FUNNEL WINGS) **FUNNEL WING** 1737ER

FIGURE 1