



PREVOST

MAINTENANCE INFORMATION

MI23-12B

| | | |
|-----------|---|-------------------------|
| DATE : | April 2023 | SECTION : 06 ELECTRICAL |
| SUBJECT : | WIPER DRIVE MOTOR, LINKAGE AND PIVOT REPLACEMENT | |

Revision : B

Part 2 step 25, torque changed, was 22 lbs-ft becomes 29 lbs-ft

05-24-2023

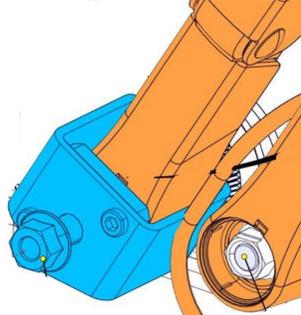
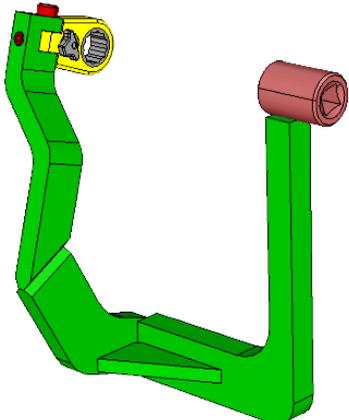
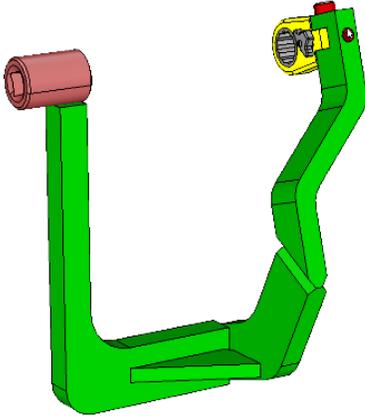
APPLICATION

| Model | VIN |  |
|---|--------------------------------|--|
| H3-45 coaches Model Year: 2024, ... | From 2PCH3349X <u>RC721453</u> | |
| H3-45 VIP motorhomes Model Year: 2023, ... | From 2PCVS3499 <u>PC721348</u> | |

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REQUIRED TOOLS

| | |
|---|--|
| <p>RULER</p>  | <p>SMALL PRY BAR</p>  |
| <p>TORQUE WRENCH AND METRIC SOCKET SET</p>  | <p>RATCHET AND SOCKET SET – METRIC SET</p>  |
| <p>CAULKING GUN</p>  | <p>SMALL FLAT SCREWDRIVER</p>  |
| <p>MASKING TAPE</p>  | <p>WIPER ARM PULLER P/N G37807</p>  |
| <p>CURB SIDE MOTOR TORQUE TOOL P/N G37274</p>  | <p>STREET SIDE MOTOR TORQUE TOOL P/N G37605</p>  |

SAFETY MEASURES



DANGER

The wiper linkage can cut your fingers. Cut off the power supply before working on this system.

SAFETY PRECAUTIONS

- Eye protection should always be worn when working in a shop.
- Rules for Personal Protection Equipment should always be respected. Wear your PPE including but not limited to the following:



**Safety
First!**



PART 1 - DRIVE MOTOR REPLACEMENT



DANGER

Park vehicle safely, apply parking brake, stop engine. **Prior to working on the vehicle, set the ignition switch to the OFF position, set the battery master switch to the OFF position and trip the main circuit breakers equipped with a trip button.**

Lock out & Tag out (LOTO) must be performed during set-up, maintenance or repair activities. Refer to your local procedure for detailed information regarding the control of hazardous energy.



DANGER

The wiper linkage can cut your fingers. Cut off the power supply before working on this system.

Drive Motor Bracket Removal

1. Open the wiper mechanism access hatch.

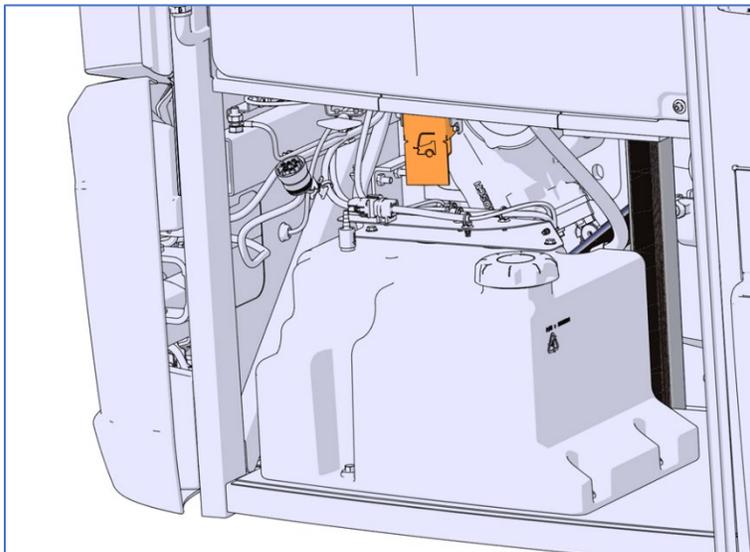


Figure 1

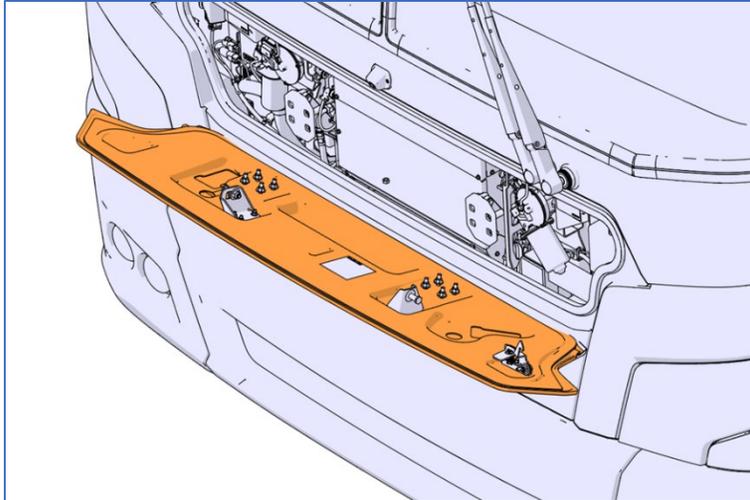


Figure 2

2. Cut the nylon tie securing the drive motor connector. Pry the yellow lock on the connector socket housing and then unplug the connector.

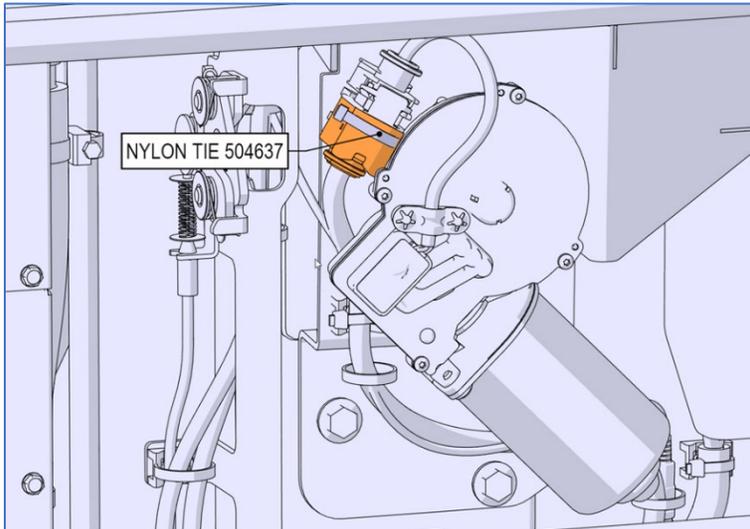


Figure 3: SREET SIDE DRIVE MOTOR SHOWN



Figure 4

3. Remove the four bolts that secure the drive motor bracket (use 13 mm socket).

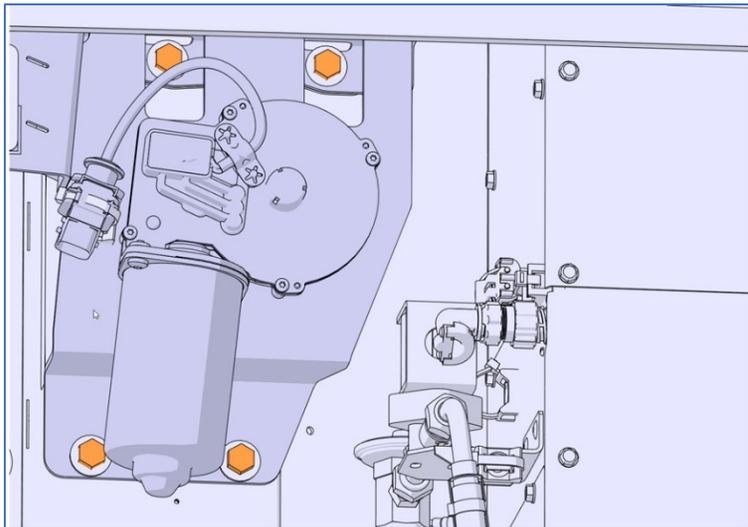


Figure 5: CURB SIDE DRIVE MOTOR

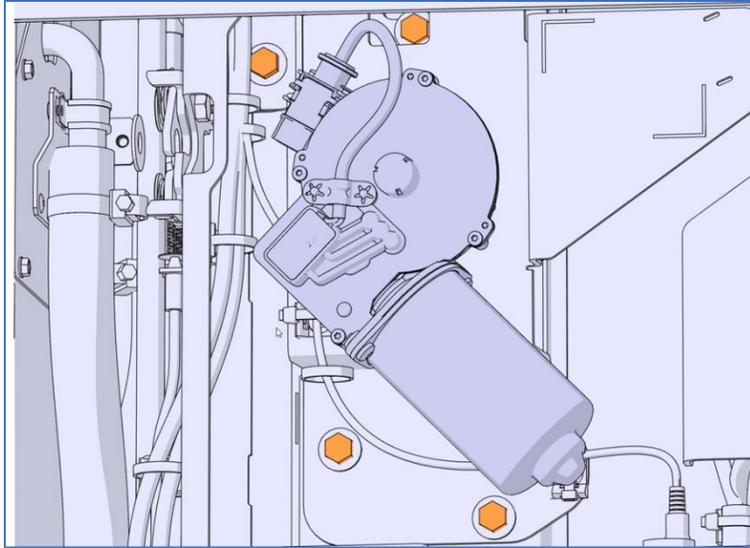


Figure 6 : STREET SIDE DRIVE MOTOR

4. At the back of the drive motor bracket, unscrew the drive motor shaft nut and remove the washer (use 17 mm socket).

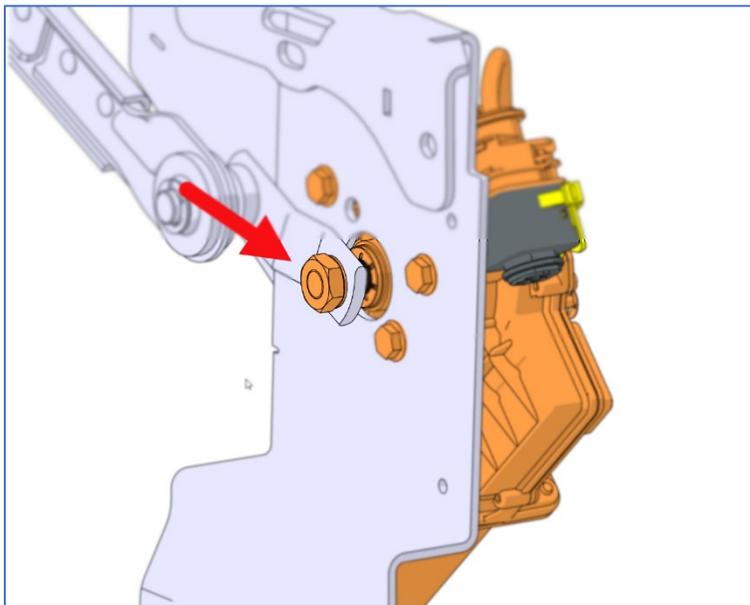


Figure 7

Linkage Disconnection from The Drive Motor Shaft

5. Using a small pry bar, disconnect the linkage from the drive motor shaft.

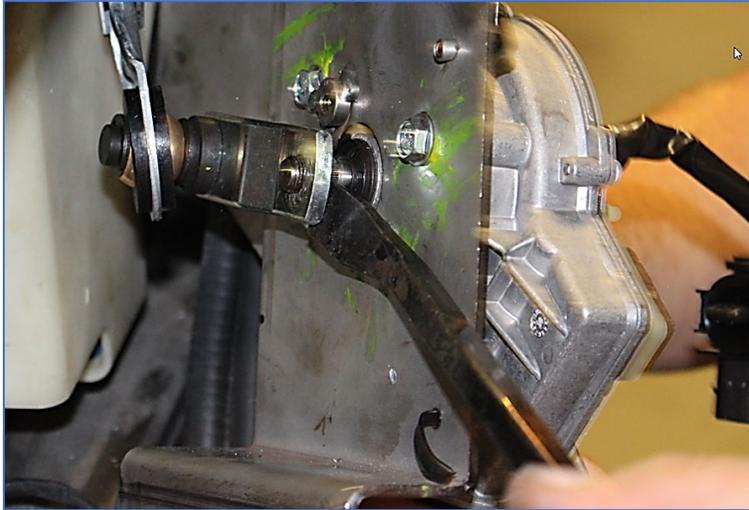


Figure 8

Drive Motor Removal and Replacement

6. Dismount the drive motor from the bracket. To do so, unscrew the four mounting bolts.

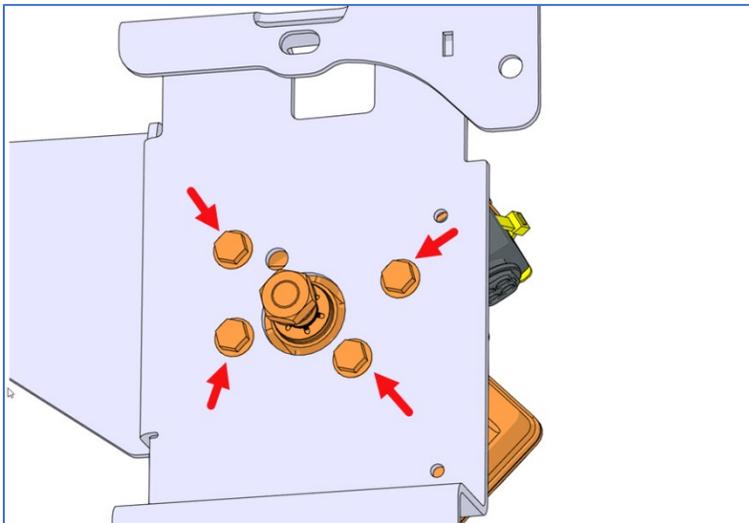


Figure 9

7. Install the new drive motor on the bracket oriented in relation with the bracket (8.5 Nm / 75 lb-in).

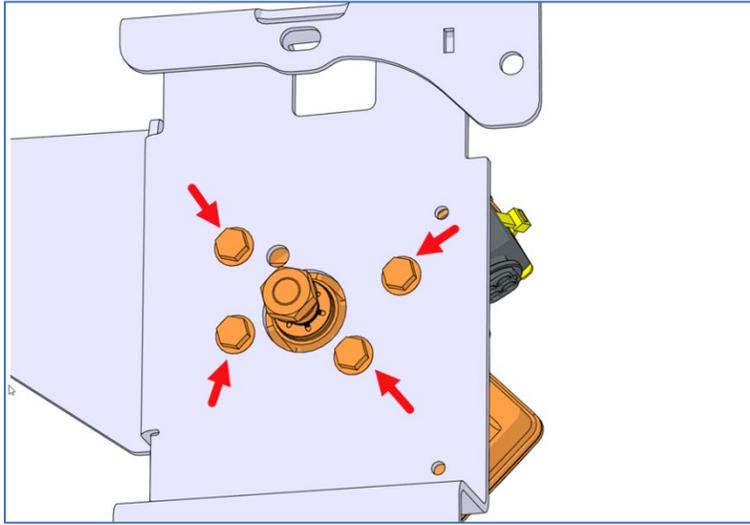


Figure 10

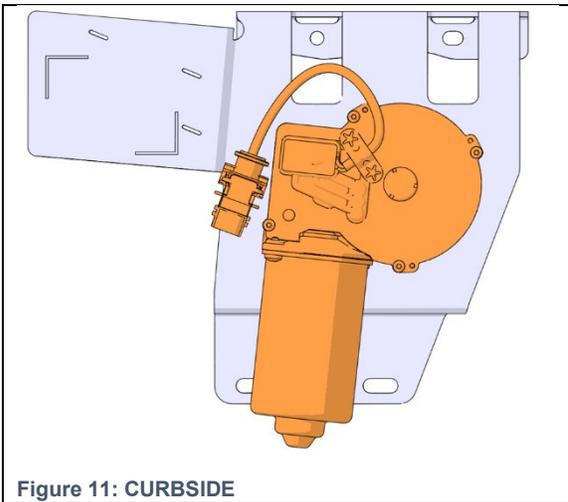


Figure 11: CURBSIDE

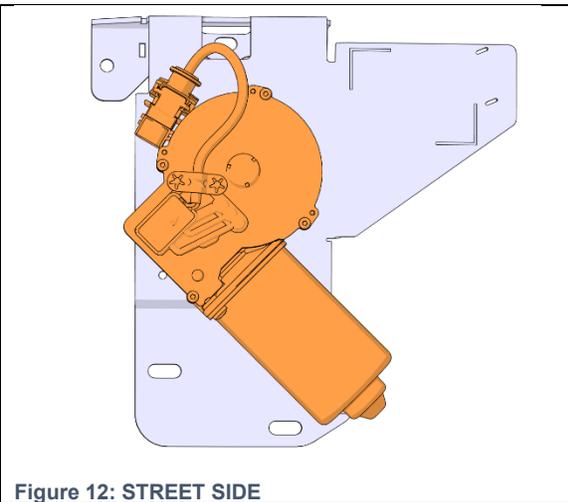


Figure 12: STREET SIDE

Park Position Setting

NOTE: when setting the park position for the curb side drive motor, the street side drive motor connector must absolutely be connected.

8. **Momentarily**, plug the drive motor connector.
9. **Momentarily**, restore the power supply. Turn the wiper switch to ON then OFF so the new drive motor will be set to park position.



DANGER

The wiper linkage can cut your fingers. Cut off the power supply before working on this system.

10. Unplug the drive motor connector. Cut off the power supply.
11. Screw a M6-1.0x30 mm screw in the park position weldnut.
12. Connect the linkage to the drive motor shaft. **Make sure the link rests against the park position screw as shown.**

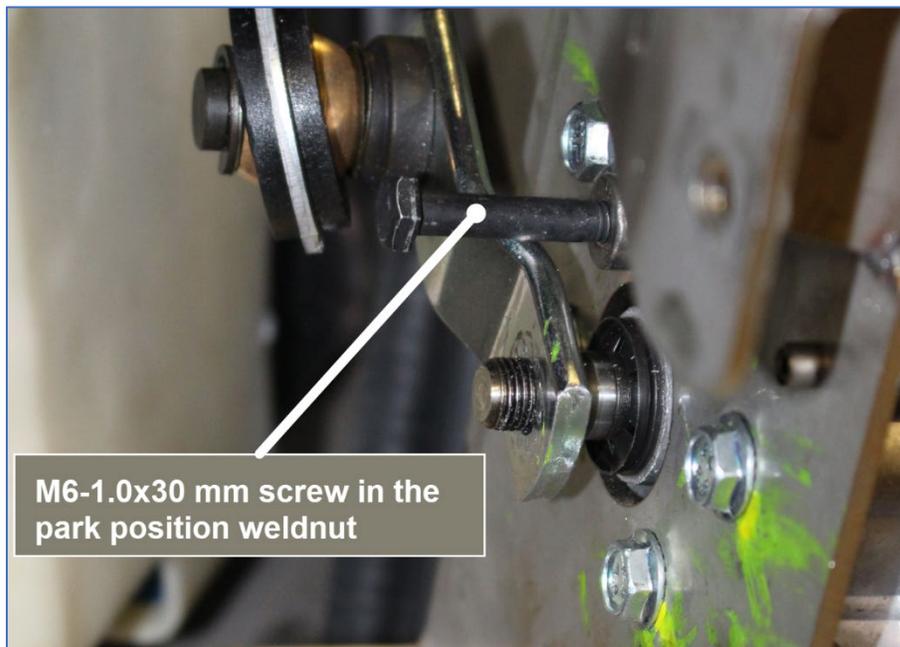


Figure 13

Linkage Connection to The Drive Motor Shaft

13. Reinstall the washer then the shaft nut. Tighten to a torque of **35 Nm / 26 lb-ft**. Prescribed torque is mandatory. **Make sure the link rests against the park position screw during this operation.**

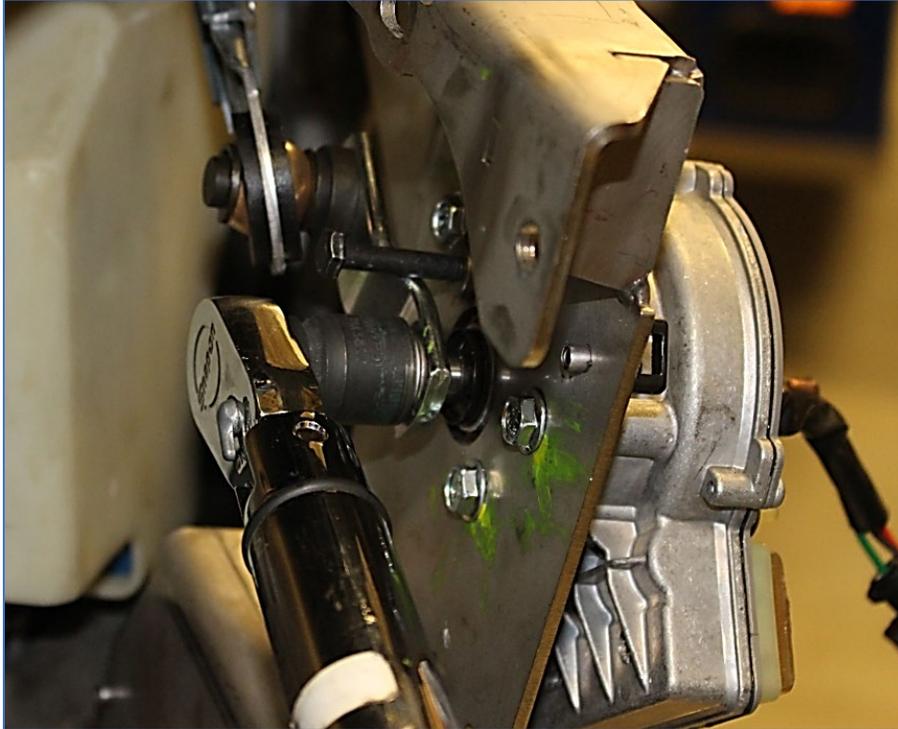


Figure 14

Drive Motor Bracket Installation

14. Reinstall the drive motor bracket. Tighten bolts to **17 Nm / 13 lb-ft**. Prescribed torque is mandatory.

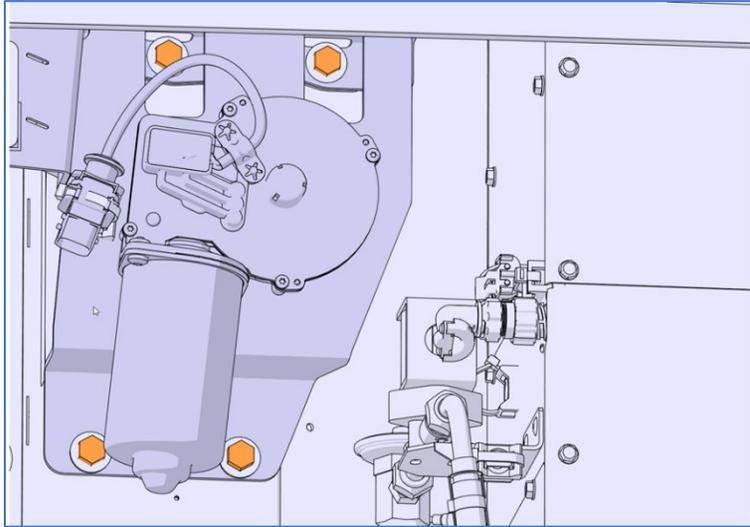


Figure 15: CURBSIDE DRIVE MOTOR

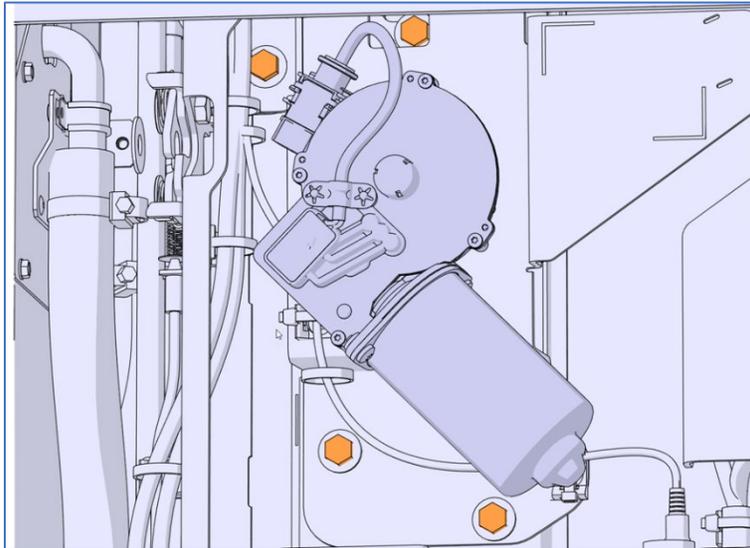


Figure 16 : STREET SIDE DRIVE MOTOR

15. Plug the drive motor connector and secure the connector using nylon tie p/n 504637.

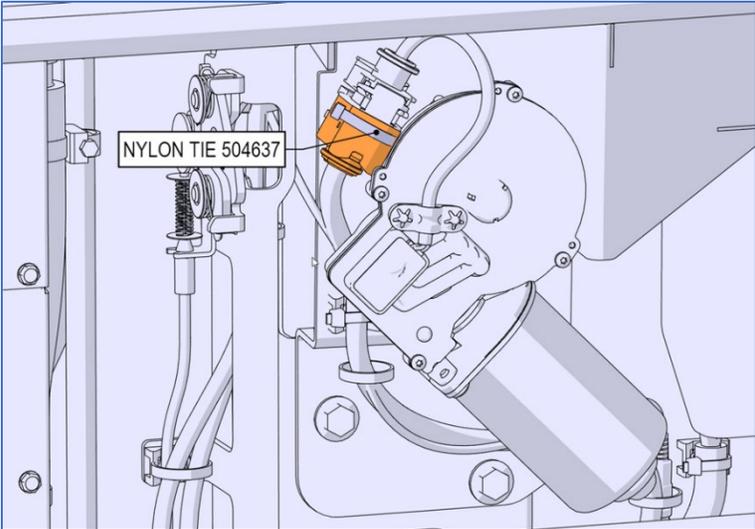


Figure 17

PART 2 - WIPER PIVOT AND LINKAGE REPLACEMENT



DANGER

The wiper linkage can cut your fingers. Cut off the power supply before working on this system.

Preparation

1. Make sure the wipers are in the park position as shown.
2. Mark wiper blades positions on the windshield.
Use masking tape or a pencil or marker that makes temporary markings when used on glass.

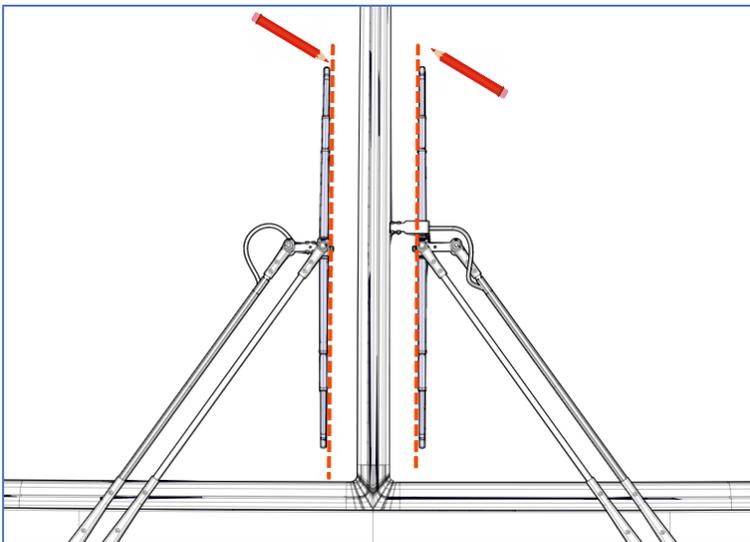


Figure 18

3. Perform Drive Motor Bracket Removal found in PART 1.
4. Perform Linkage Disconnection from The Drive Motor Shaft found in PART 1.

Wiper Arm and Pivot Hardware Removal

5. Disconnect the windshield washer tube.

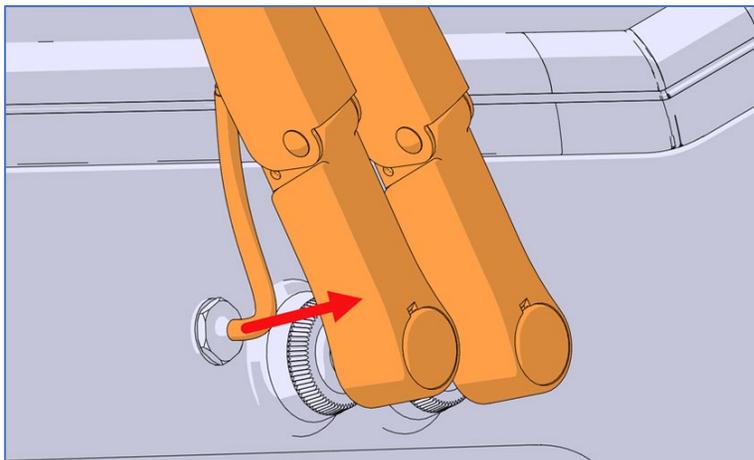


Figure 19

6. Remove the wiper arm nut caps.

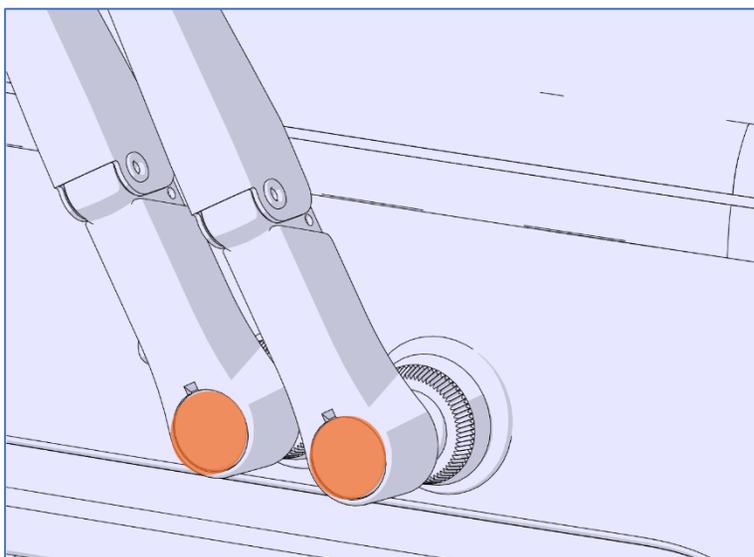


Figure 20

7. Unscrew the wiper arm nuts. Remove the wiper arms. Use of puller no. G37708 is recommended (use 15 mm socket).

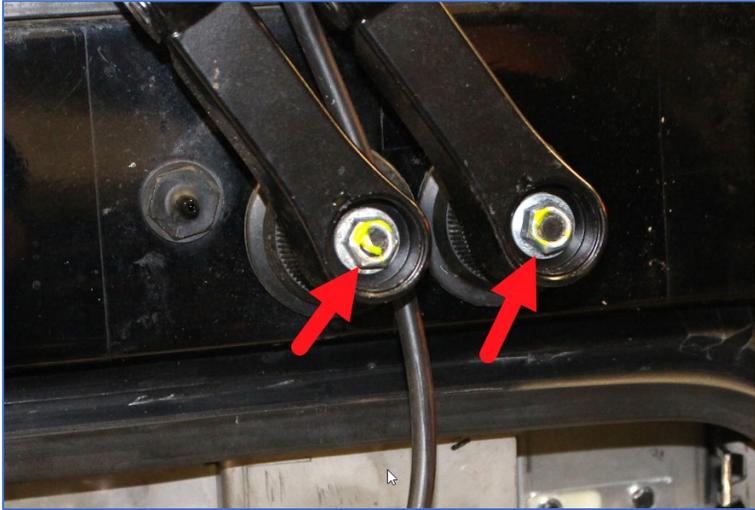


Figure 21

8. Remove the plastic nuts (item 1) and the rubber gaskets (item 2).

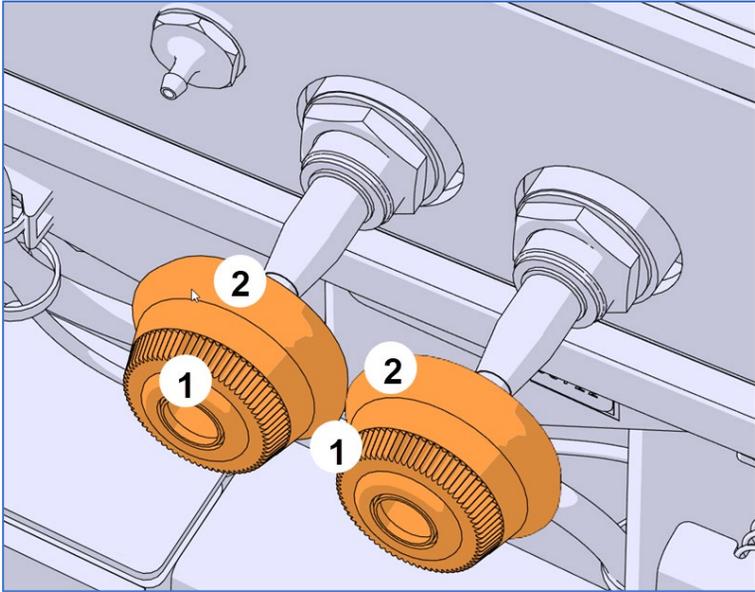


FIGURE 22

9. Remove the butyl sealant applied around the wiper pivots and the fiber panel.



Figure 23

10. Unscrew the two nuts shown on the image below (use 32 mm socket).

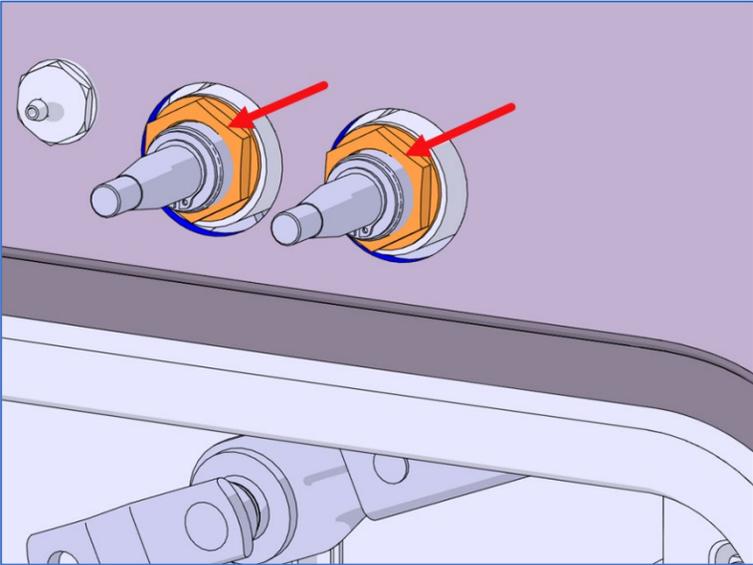


Figure 24

Wiper Pivot and Linkage Assembly Removal

11. Loosen the four bolts identified on the image below.

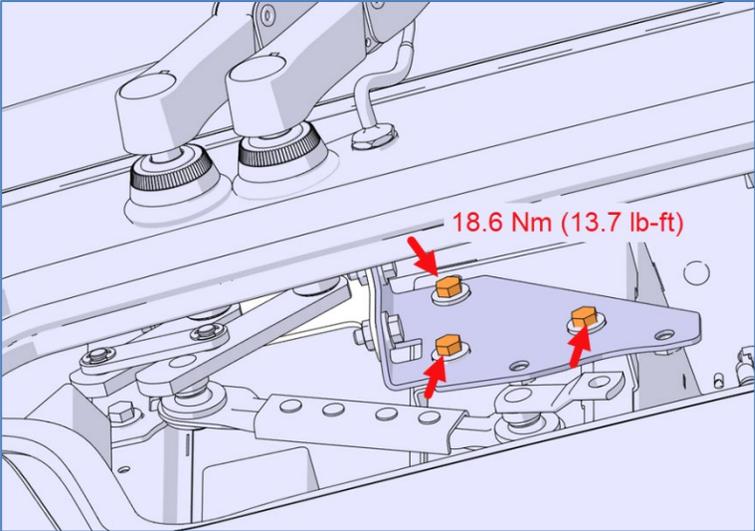


Figure 25: CURB SIDE

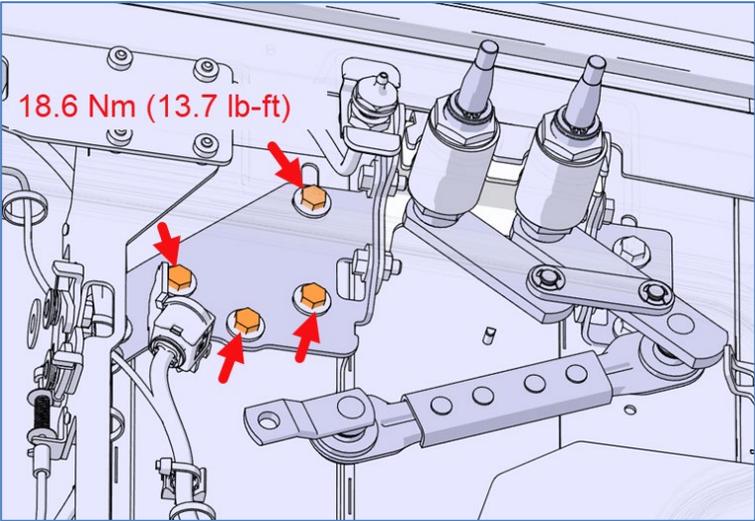


Figure 26 : STREET SIDE

12. Unscrew and remove the two bolts identified on the image below.

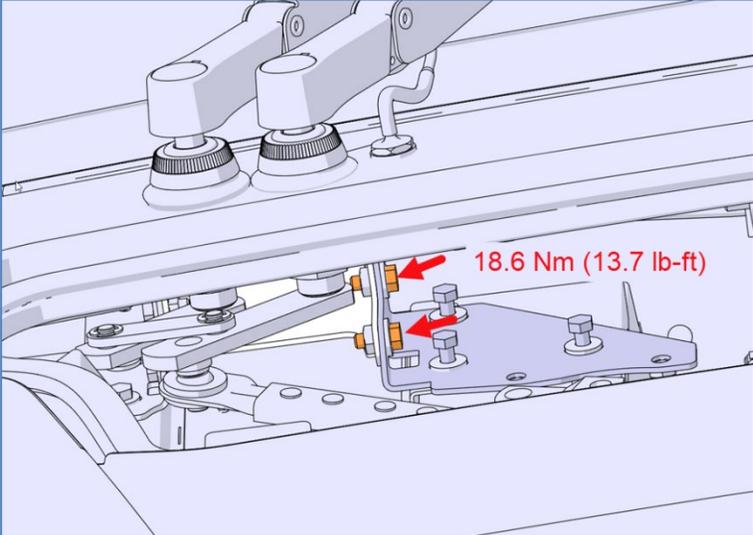


Figure 27: CURBSIDE

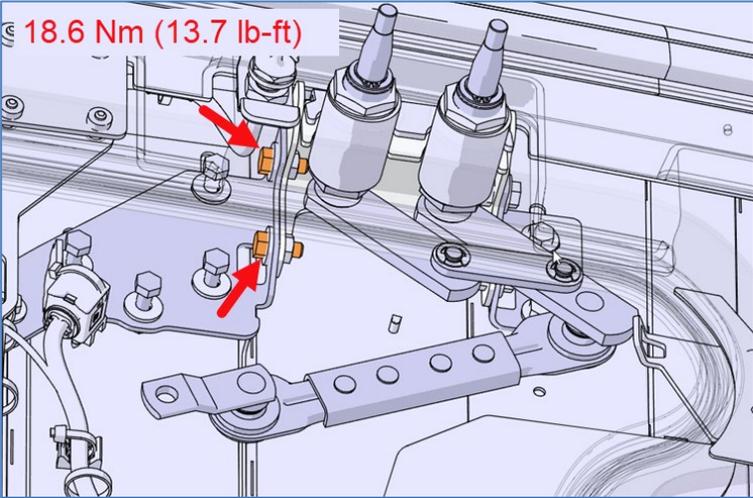


Figure 28 : STREET SIDE

13. Unscrew and remove the two bolts identified on the image below.

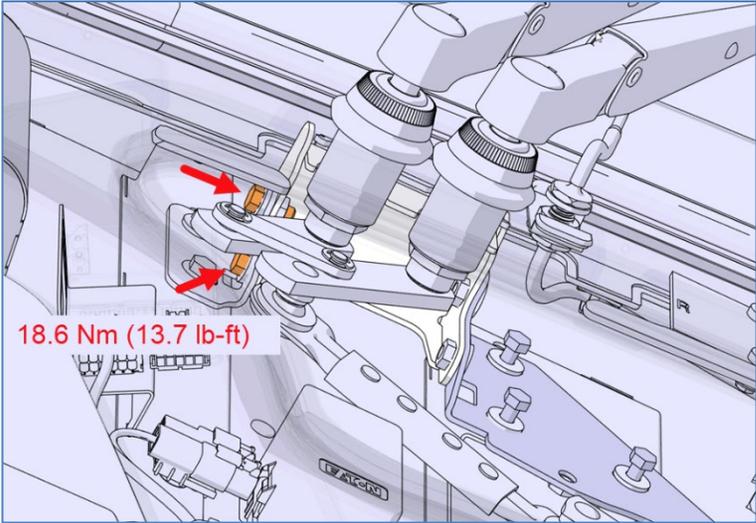
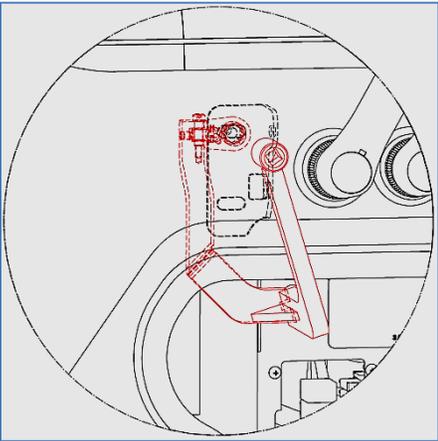


Figure 29: CURB SIDE



USE TORQUE TOOL G37274

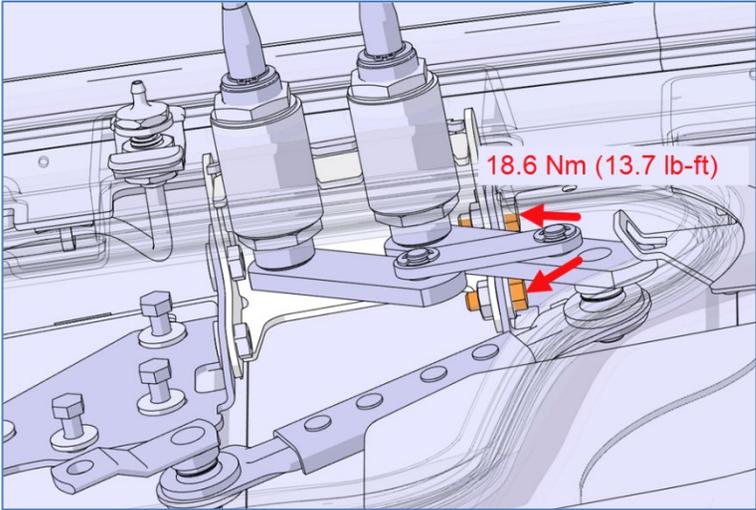
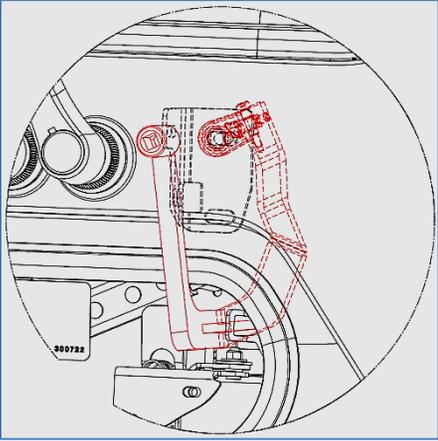


Figure 30 : STREET SIDE



USE TORQUE TOOL G37274

14. Remove the pivot and linkage assembly.

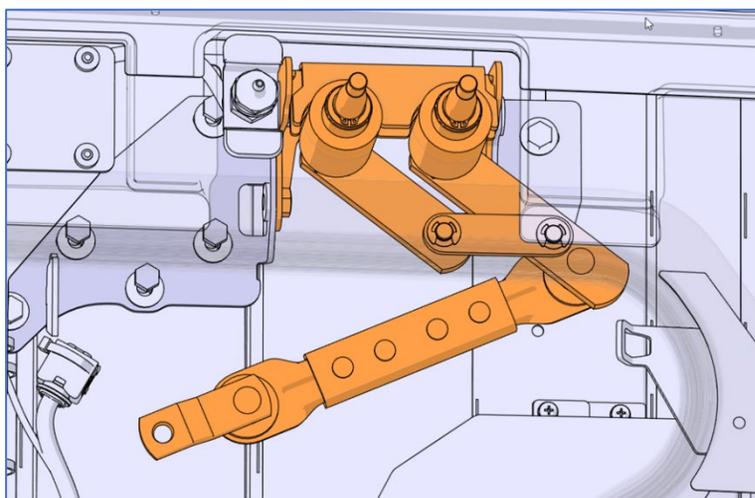


Figure 31

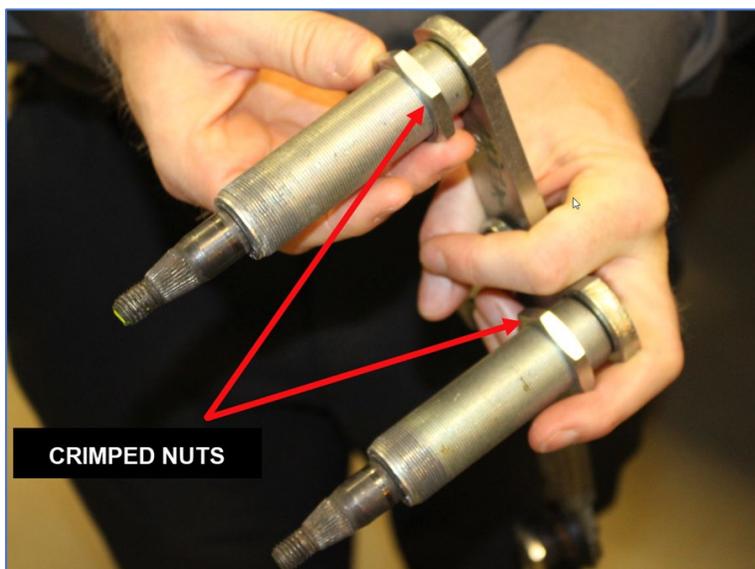


Figure 32

Damaged Components Replacement

15. Replace the damaged components.

Pivot and Linkage Assembly Installation

16. Reinstall the pivot and linkage assembly, reversing Wiper Pivot and Linkage Assembly Removal steps. Prescribed torque is mandatory. DO NOT install the wiper arms at this moment.

17. Tighten the pivot nuts.

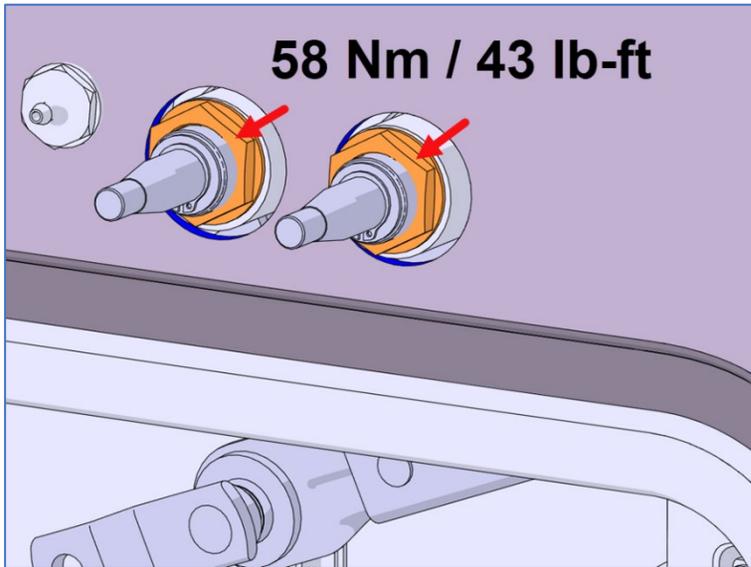


Figure 33

18. Apply butyl or Simson 70-03 sealant between the pivots and the fiber panel and smooth the joint. The sealant joint must be flush with surrounding surface.



Figure 34

Park Position Setting

19. Perform Park Position Setting found in PART 1 DRIVE MOTOR REPLACEMENT.

Linkage Connection to The Drive Motor Shaft

20. Perform Linkage Connection to The Drive Motor Shaft found in PART 1 DRIVE MOTOR REPLACEMENT.

Drive Motor Bracket Installation

21. Perform Drive Motor Bracket Installation found in PART 1 DRIVE MOTOR REPLACEMENT.

Wiper Arm Installation

22. Reinstall the rubber gaskets (item 2) and the plastic nuts (item 1).

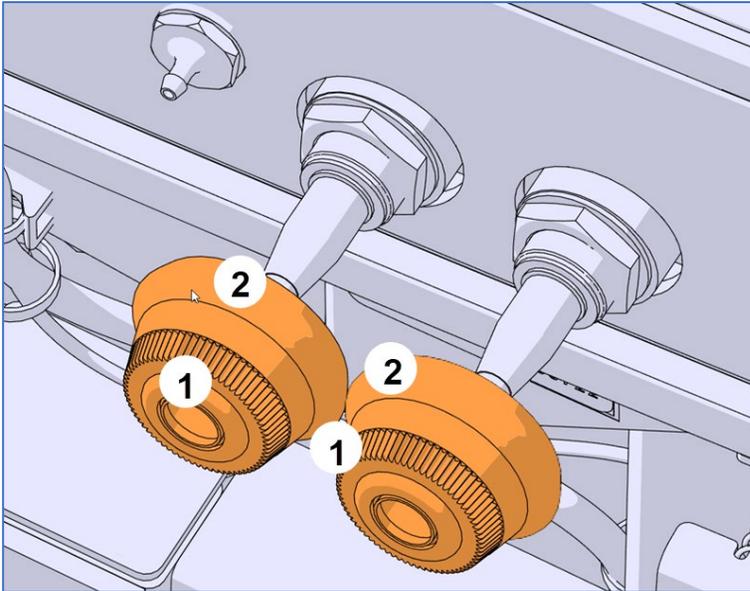


Figure 35

23. Reinstall the wiper arms, making sure the blades align with the marks made previously. Prescribed measurement is $A=100$ mm (4 in) from the wiper blade to the center of the windshield extrusion.

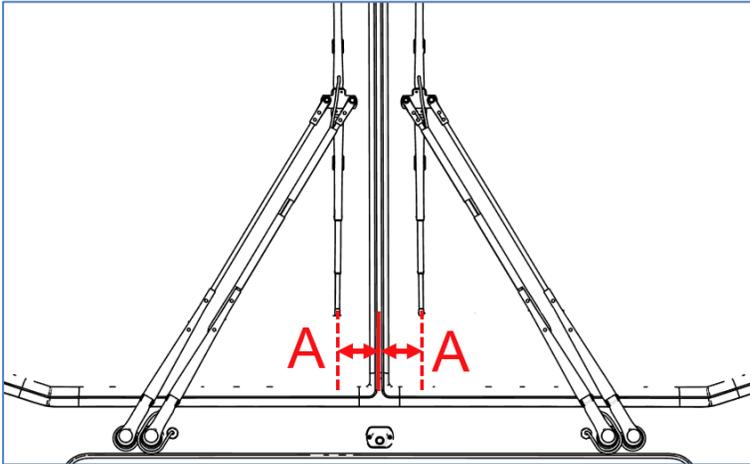


Figure 36

24. Tighten the wiper arms nut to 9 lb-ft. Pull the wiper arm and release. Make sure the blade returns at the proper position. Readjust if necessary.

25. Once proper position is achieved, tighten to 29 lb-ft.

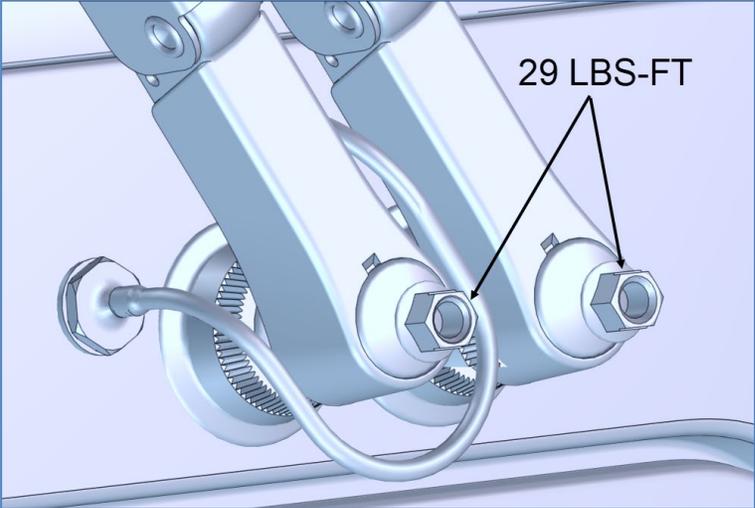


Figure 37

26. Reinstall the wiper arm nuts cap.

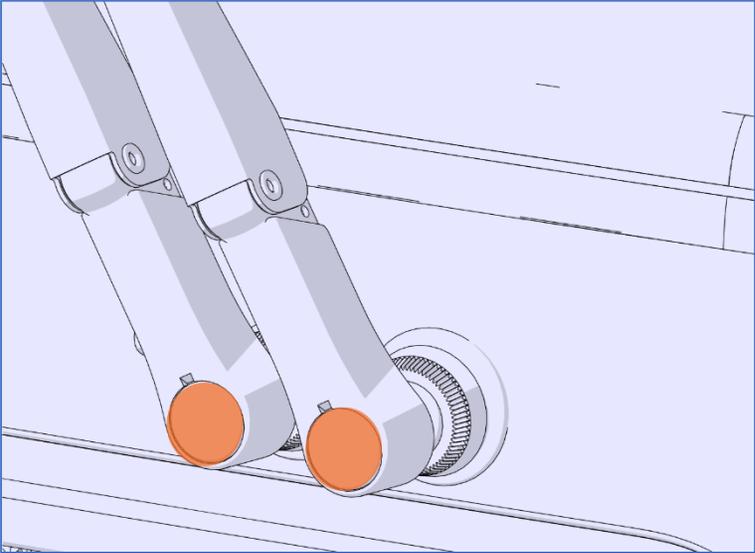


Figure 38

27. Connect the windshield washer tube.

PARTS / WASTE DISPOSAL

Discard according to applicable environmental regulations (Municipal/State[Prov.]/ Federal)

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