

82-003 Fixing Unintended Wiper Sweep

TSB-82-003-WST

Creation Date:2024-09-25

Engine or Vehicle Affected:

- ▶ 57X
- ▶ 49X
- ▶ 47X

Warranty applies to this described condition. See the warranty information at the end of this bulletin.

Described Condition

Some Western Star vehicles built prior to January 1, 2023 have a race condition with the wipe function. If the wiper motor receives power before the ASAM, the wiper sweeps once at key-on. This may result in a random unintended wiper swipe. ASAM controllers built after January 1, 2023 (ASAM2021), received new hardware and software that corrected for the unintended wipe. The ASAM21 controllers are not backward compatible and cannot be installed on vehicles built prior to 2023. Replacing the wiper motor will resolve the issue. See Fig. 1. Follow the procedure below to replace the wiper motor.



1. Wiper Motor

Fig. 1, Wiper Motor

Parts Required

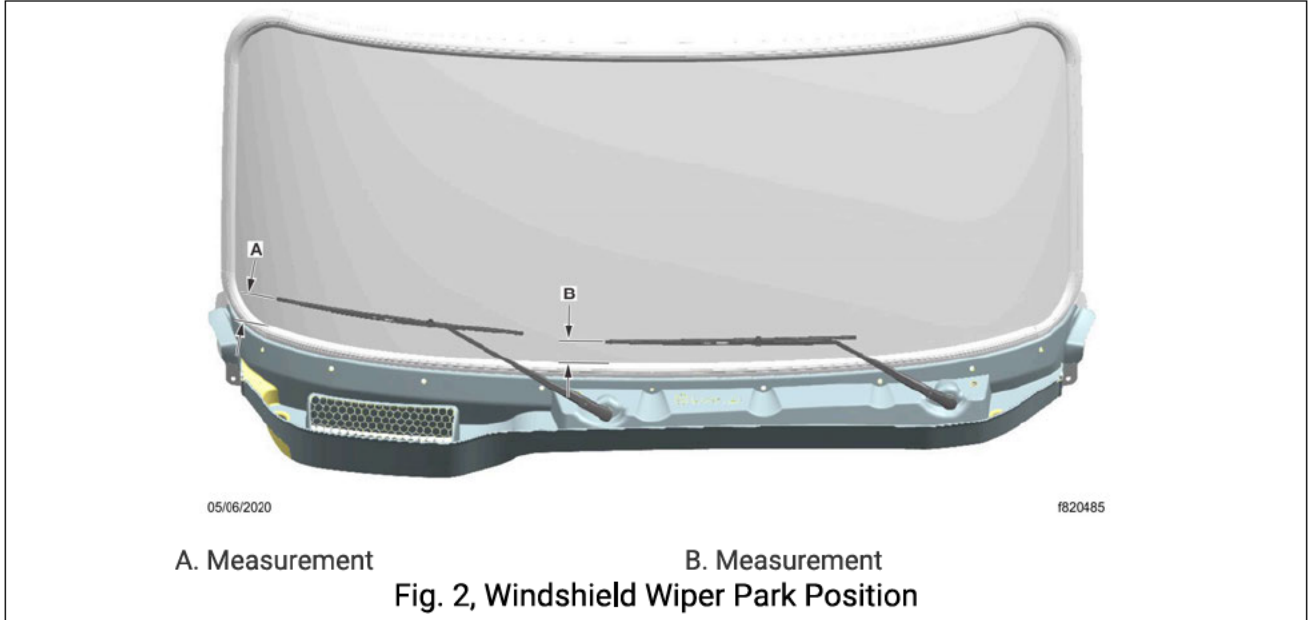
For a list of parts, see Table 1.

Table 1, Parts Table

Part Number	Part Description	Quantity
A22-81900-000	Wiper Motor	1

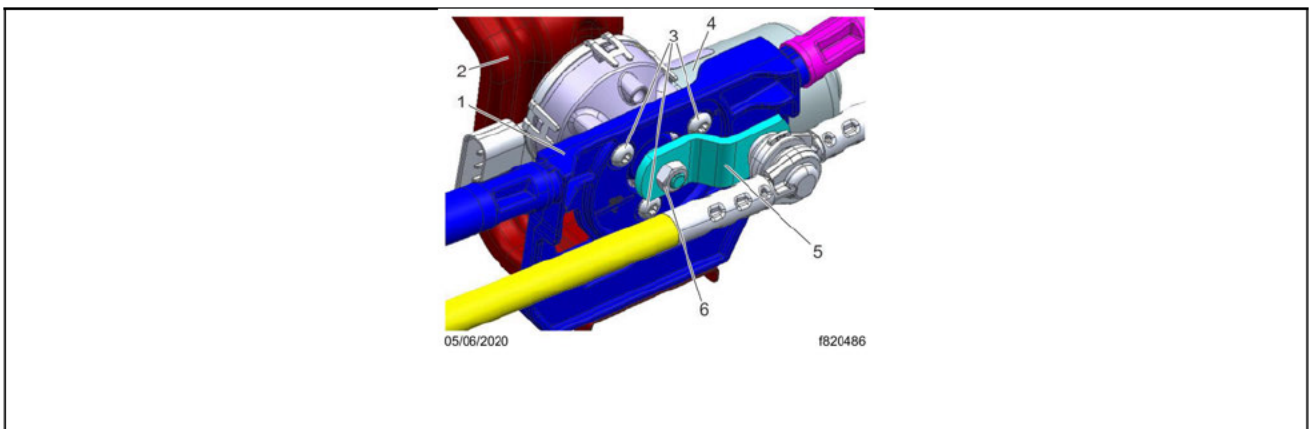
Table 1, Parts Table

1. Park the vehicle on a level surface, shut down the engine, and apply the parking brakes. Chock the tires.
2. Open the hood.
3. Check that the wiper blades are parked. If necessary, park them by turning the wipers on and then off. In the parked position, the blade tips should be aligned with the nominal park position markings, or the end of the right-hand wiper blade should be 2-3/4 in (70 mm) \pm 3/8 in (10 mm) above the bottom edge of the windshield, and the end of the lefthand wiper blade should be 2-1/16 in (53 mm) \pm 3/8 in (10 mm) above the bottom edge of the windshield. See Fig. 2.



⚠ Warning: Disconnect the wiper motor electrical connector before working on the wiper linkage. This will prevent the windshield wiper motor from cycling. The motor could cycle if the wiper linkage drive shaft is forced out of the parked position, which could result in personal injury.

4. Disconnect the wiper motor electrical connector.
5. Remove the nut that attaches the motor crank lever to the motor shaft. See Fig. 3.
6. Using a plastic lever, remove the motor lever.
7. Remove the three screws that attach the motor to the housing. See Fig. 3. Remove the wiper motor. For instructions, see Group 82: Windshield Wipers and Washers, Section 82.1.5: Replacement of the Wiper in the 47X, 48X and 49X Workshop Manual.



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|---------------------------|---------------------------|
| 1. Wiper Motor Housing | 4. Wiper Motor |
| 2. Bracket, Motor Housing | 5. Wiper Motor Crank |
| 3. Screws, Wiper Motor | 6. Nut, Wiper Motor Crank |

Fig. 3, Wiper Motor Installation

8. Attach the new motor to the housing with three screws. Tighten the screws 102 to 120 lbf-in (1152 to 1356 N-cm). See Fig. 3.
9. Connect the wiper motor and run it until it goes to the parked position, then disconnect the wiper motor electrical connector.
10. Set the motor lever and linkage in park position, so they are at the horizontal position (near 0°). See Fig. 3. Install the motor crank lever at the motor output shaft.
11. Install the nut that attaches the motor lever to the motor shaft. Tighten the nut 22 lbf-ft (30 N-m).
12. Connect the wiper motor electrical connector.
13. Operate the wipers at low speed and check that the blades do not slap against the mask around the edge of the windshield, and that the wipers park. See Fig. 2.
14. Close the hood.

Warranty

This procedure is warrantable only if the described condition exists and the repair is performed within the applicable base or extended coverage warranty period. If a failure is not found, this procedure is considered preventive and warranty does not apply.

See Table 2 for OWL VMRS codes and labor allowance information. Enter this service bulletin number in the Service Bulletin # field.

Table 2, OWL VMRS Codes and Labor Allowance

Primary Failed Part	Component Code	Cause Code	Correction Code	SRT Code	Description	Hours
A22-81900-000	002-035-001	38	03	660-5025A	Wiper Motor R/R	0.7

Table 2, OWL VMRS Codes and Labor Allowance

Note:

002-035-001
W14,W17,W12,W16,W15
REPLACE

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