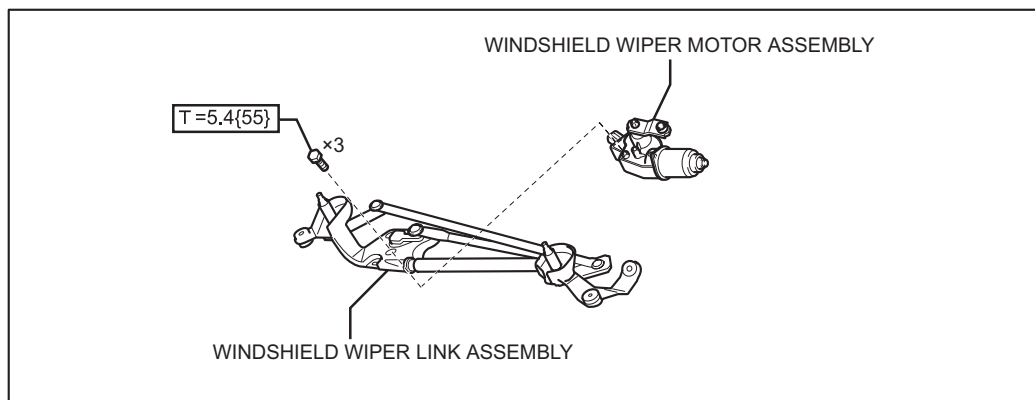
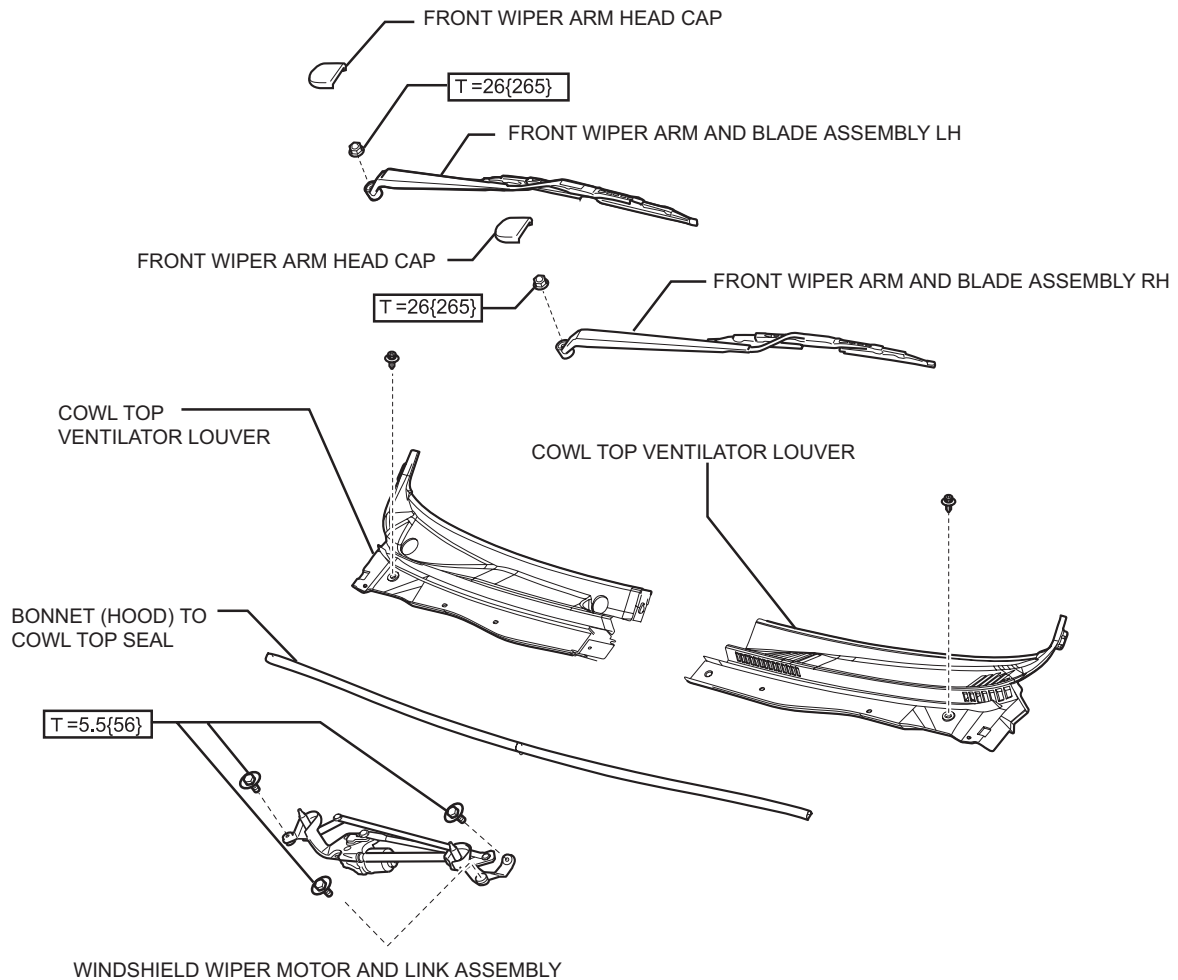


WINDSHIELD WIPER MOTOR ASSEMBLY

COMPONENTS

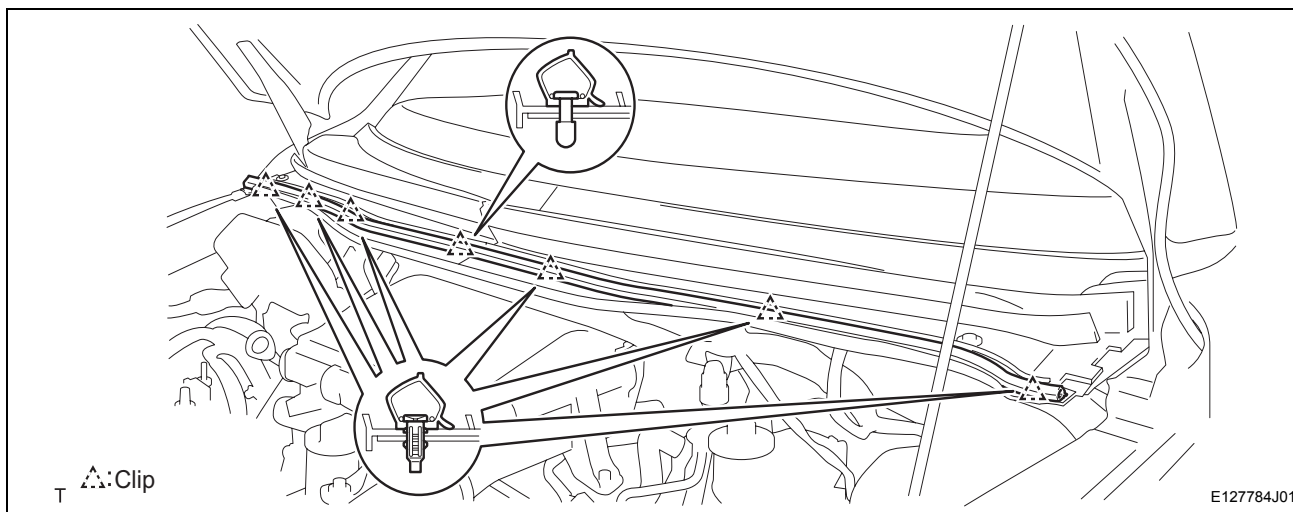
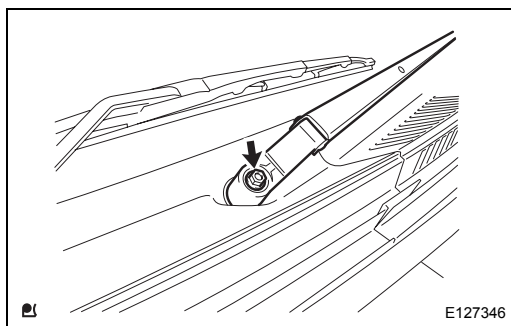
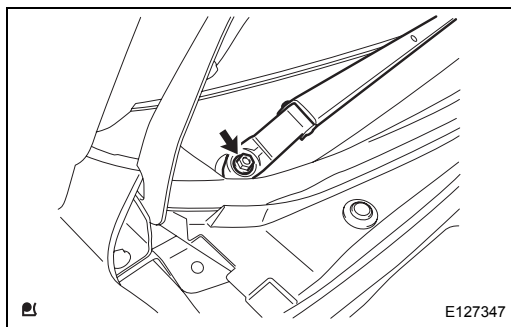


..... TIGHTENING TORQUE [N*m{kgf*cm}]

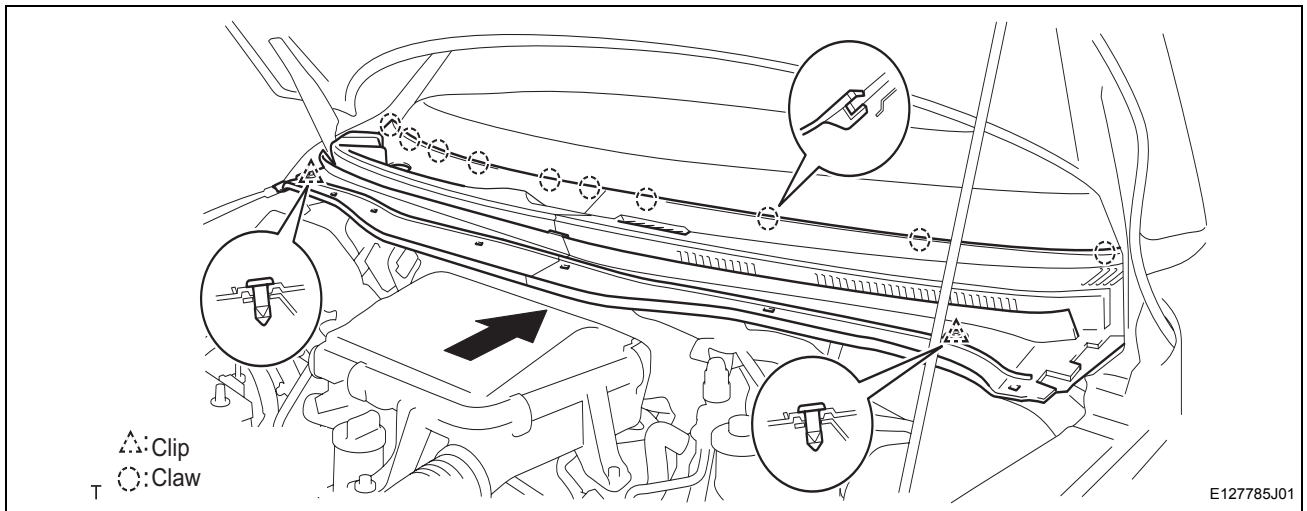


REMOVAL

1. **DISCONNECT NEGATIVE BATTERY TERMINAL**
2. **REMOVE FRONT WIPER ARM AND BLADE ASSEMBLY RH**
 - (a) Remove the front wiper arm nut. Then remove the front wiper arm and blade assembly RH.
3. **REMOVE FRONT WIPER ARM AND BLADE ASSEMBLY LH**
 - (a) Remove the front wiper arm nut. Then remove the front wiper arm and blade assembly LH.
4. **REMOVE COWL TOP VENTILATOR LOUVER**
 - (a) Disengage the 7 clips and remove the cowl top ventilator louver.

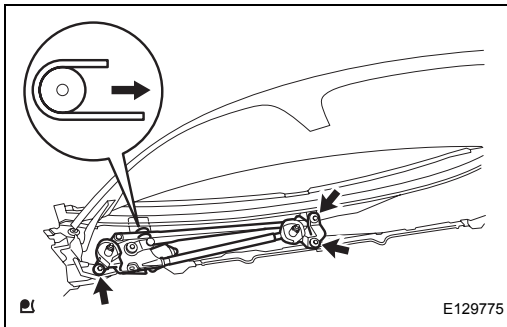


- (b) Detach the 2 clips and 10 claws, and remove the cowl top ventilator louver as shown in the illustration.



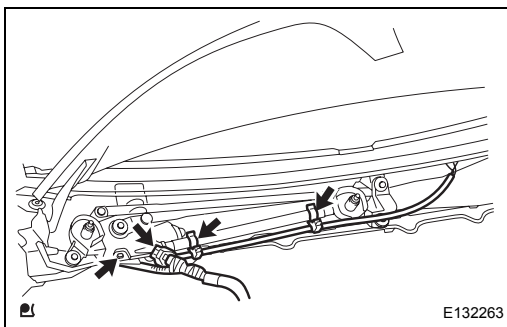
5. REMOVE WINDSHIELD WIPER MOTOR AND LINK ASSEMBLY (FOR VEHICLES WITHOUT COLD WEATHER SPECIFICATIONS)

- (a) Remove the 3 bolts.
- (b) Remove the clamp and connector. Then remove the windshield wiper motor and link assembly.

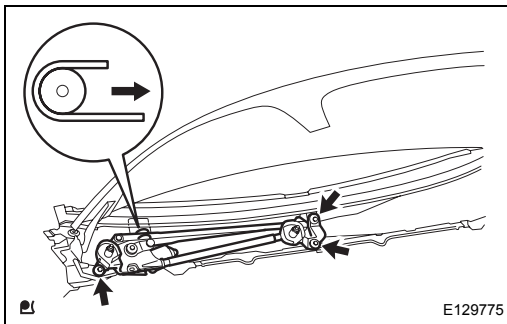


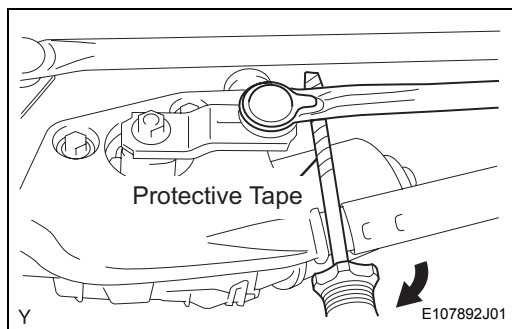
6. REMOVE WINDSHIELD WIPER MOTOR AND LINK ASSEMBLY (FOR VEHICLES WITH COLD WEATHER SPECIFICATIONS)

- (a) Disconnect the connector and clamp.



- (b) Remove the 3 bolts.
- (c) Remove the clamp and connector. Then remove the windshield wiper motor and link assembly.





7. REMOVE WINDSHIELD WIPER MOTOR ASSEMBLY

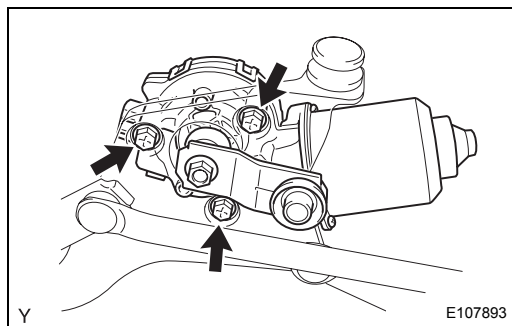
- (a) Using a screwdriver covered with protective tape, remove the arm of the windshield wiper link assembly from the crank arm pivot of the windshield wiper motor assembly, as shown in the illustration.

- (b) Remove the 3 bolts. Then remove the windshield wiper motor assembly.

HINT:

If the windshield wiper motor assembly cannot easily be removed from the windshield wiper link assembly, it can be removed by turning the crank arm until the windshield wiper motor assembly is in a position where it can be detached.

INSTALLATION

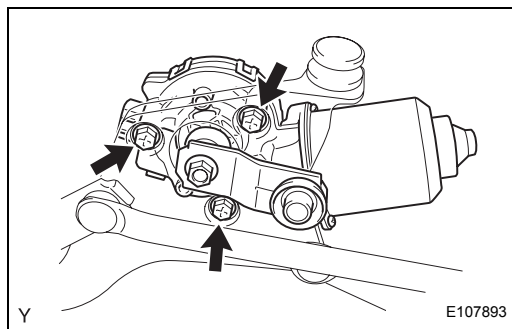


8. INSTALL WINDSHIELD WIPER SWITCH ASSEMBLY

- (a) Install the windshield wiper motor assembly to the windshield wiper link assembly with the 3 bolts.

Torque: 5.4 N*m (55 kgf*cm)

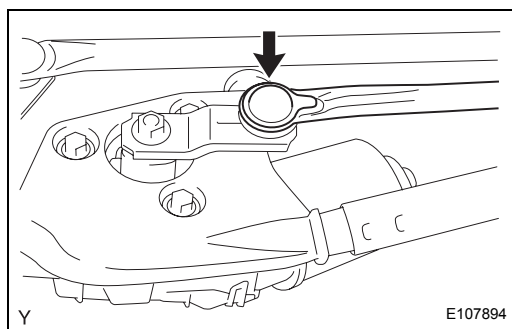
- (b) Coat the pivoting part of the crank arm of the windshield wiper motor assembly with Denso No. 50 grease.

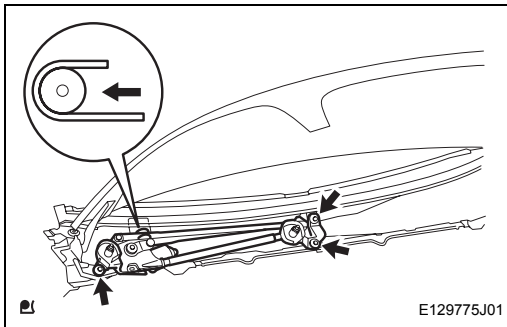


- (c) Connect the arm of the windshield wiper link assembly to the pivoting part of the crank arm of the windshield wiper motor assembly.

9. INSTALL WINDSHIELD WIPER MOTOR AND LINK ASSEMBLY (FOR VEHICLES WITHOUT COLD WEATHER SPECIFICATIONS)

- (a) Connect the connector.
- (b) Engage the rubber pin.





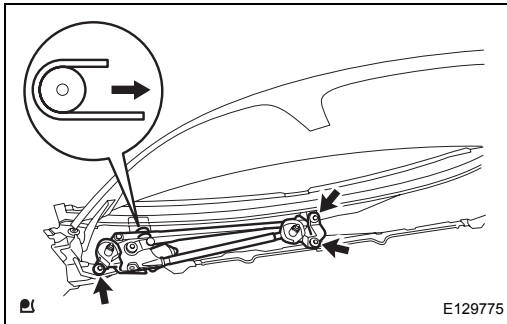
- (c) Install the windshield wiper motor and link assembly with the 3 bolts.

Torque: 5.5 N*m (56 kgf*cm)

- (d) Connect the connector.

10. INSTALL WINDSHIELD WIPER MOTOR AND LINK ASSEMBLY (FOR VEHICLES WITH FOR COLD WEATHER SPECIFICATIONS)

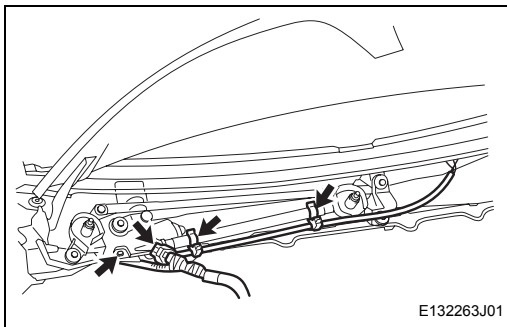
- (a) Connect the connector to the wiper motor assembly.



- (b) Engage the rubber pin.

- (c) Install the windshield wiper motor and link assembly with the 3 bolts.

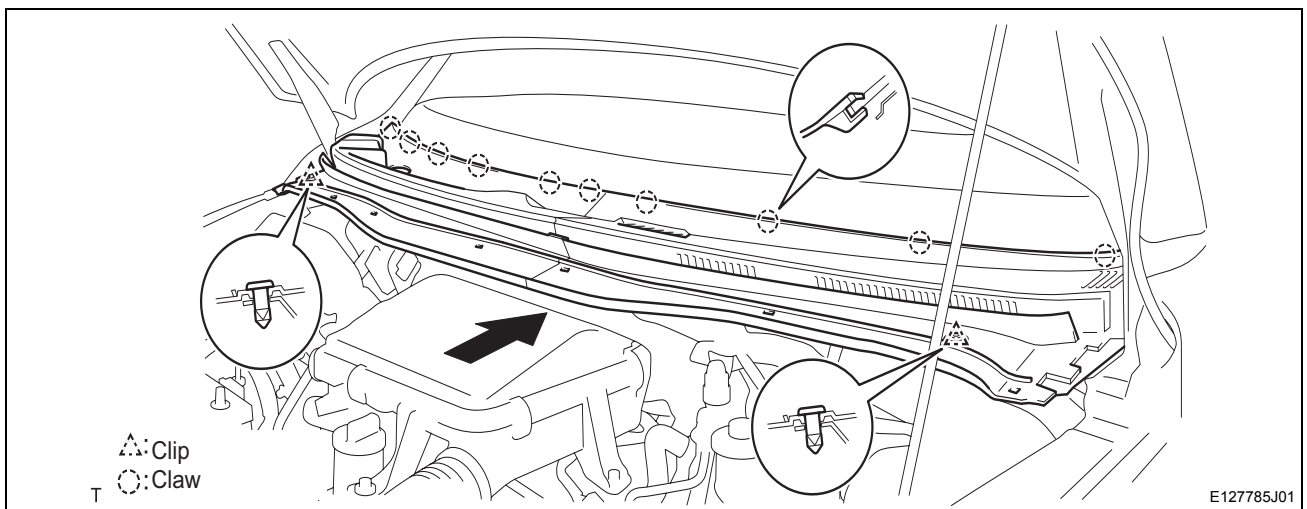
Torque: 5.5 N*m (56 kgf*cm)



- (d) Connect the connector and clamp.

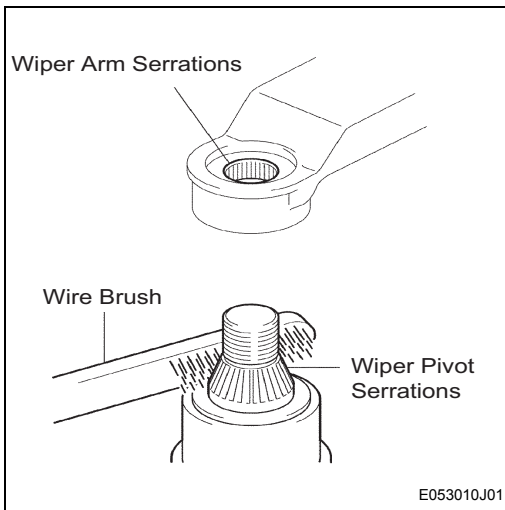
11. INSTALL COWL TOP VENTILATOR LOUVER

- (a) Attach the 10 claws.



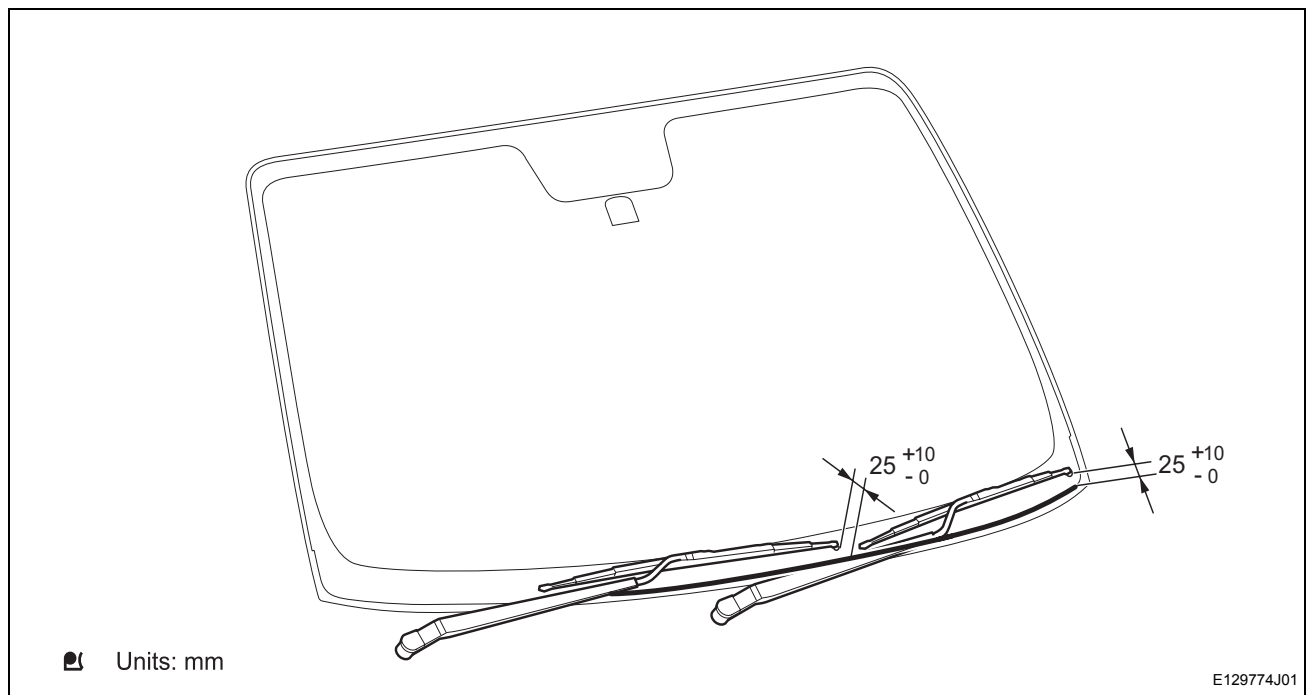
- (b) Engage the 5 claws and the 2 clips, and install the cowl top ventilator louver.

12. CONNECT NEGATIVE BATTERY TERMINAL



13. INSTALL FRONT WIPER ARM AND BLADE ASSEMBLY RH

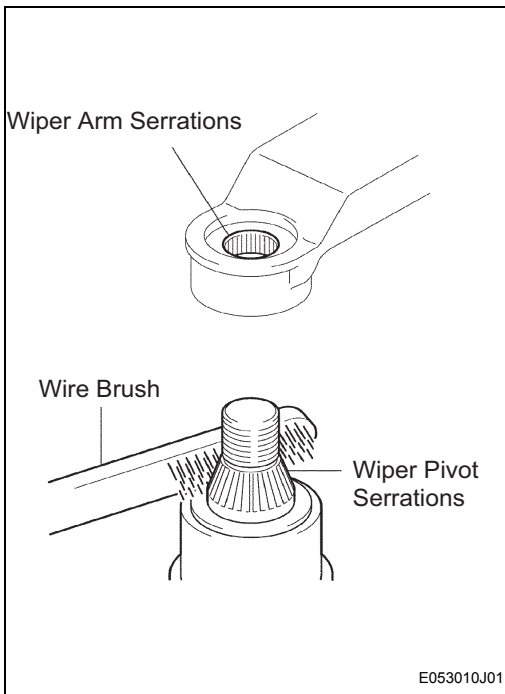
- Stop the windshield wiper motor assembly at the automatic stop position.
- Using a round file or equivalent, clean the wiper arm serration. (when reassembling)
- Using a wire brush, clean the wiper pivot serration part.
- Install the front wiper arm and blade assembly RH with the front wiper arm nut, so that it comes to the position shown in the illustration.



Torque: 20 N*m (204 kgf*cm)

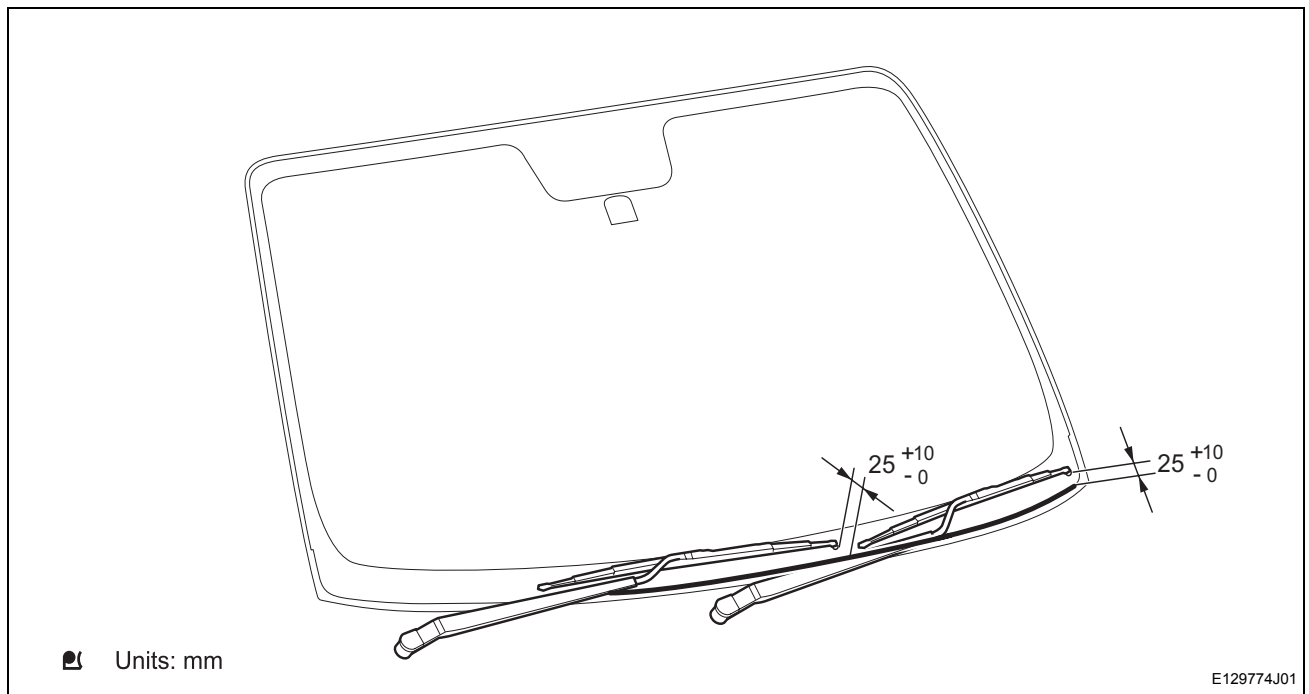
HINT:

While holding down the wiper arm hinge with your hand, tighten the front wiper arm nut.

**14. INSTALL FRONT WIPER ARM AND BLADE ASSEMBLY LH**

- Using a round file or equivalent, clean the wiper arm serration. (when reassembling)
- Using a wire brush, clean the wiper pivot serration part.
- Install the front wiper arm and blade assembly LH with the front wiper arm nut, so that it comes to the position shown in the illustration.

WW

**Torque: 20 N*m (204 kgf*cm)****HINT:**

While holding down the wiper arm hinge with your hand, tighten the front wiper arm nut.

- Operate the front wipers while spraying water or washer fluid on the windshield glass. Make sure that the wipers function properly and that there is no interference with the vehicle body.

15. PERFORM INITIALIZATION

(See page SS-10.)

ON-VEHICLE INSPECTION

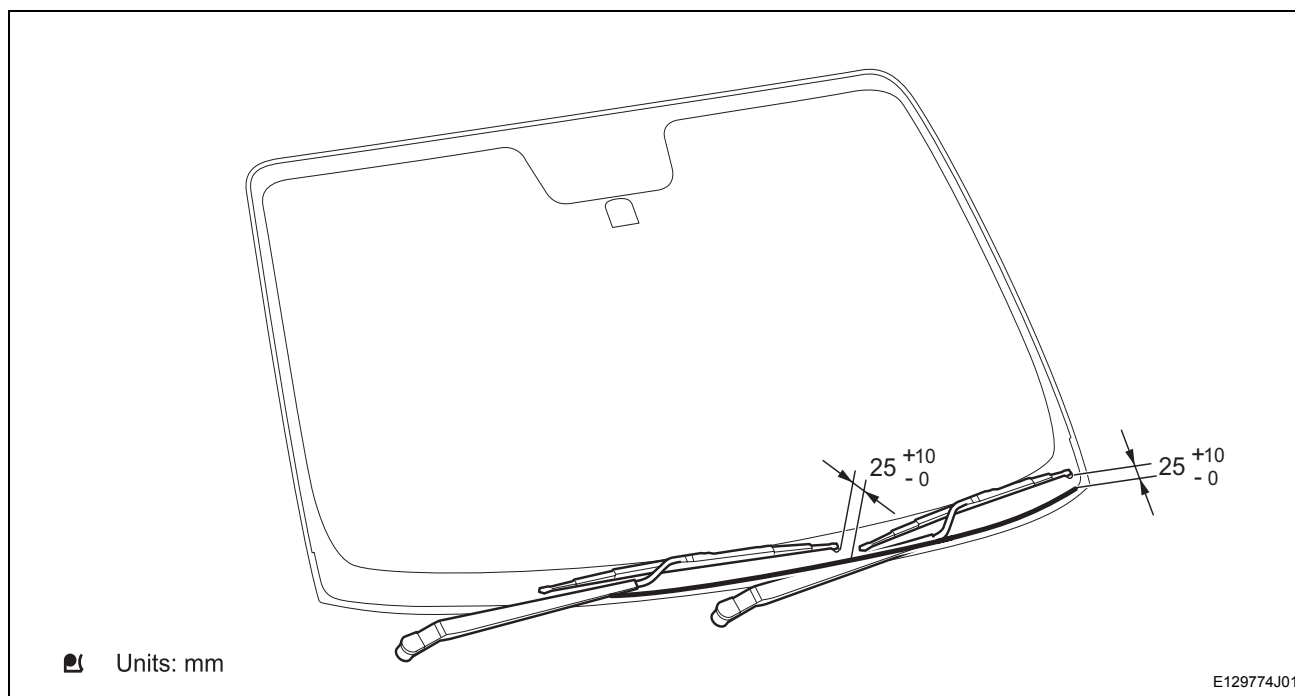
1. CHECK WINDSHIELD WIPER MOTOR ASSEMBLY

(a) CHECK AUTOMATIC STOP POSITION

- (1) Operate the windshield wiper motor assembly. Then stop the wipers and check the automatic stop position of the wiper arm.

Standard:

The wiper arm stops at the position shown in the illustration



INSPECTION

1. CHECK WINDSHIELD WIPER MOTOR ASSEMBLY

(a) Check LO Operation

- (1) Connect the positive battery terminal to terminal 1 (+1) of the connector, and the negative battery terminal to terminal 5 (E). Then check that the windshield wiper motor assembly operates at low speed (LO).

(b) CHECK HI OPERATION

- (1) Connect the positive battery terminal to terminal 4 (+2) of the connector, and the negative battery terminal to terminal 5 (E). Then check that the windshield wiper motor assembly operates at high speed (HI).

