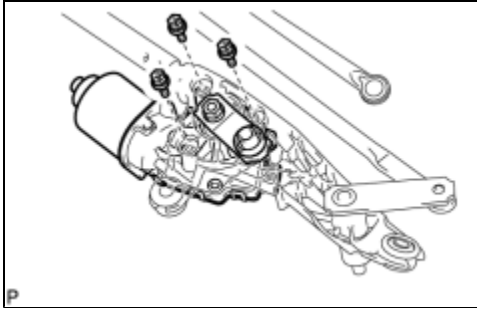


Last Modified: 7-13-2007		1.6 A
Service Category: Vehicle Exterior	Section: Wiper/Washer	
Model Year: 2008	Model: ES350	Doc ID: RM0000023QU00DX
Title: WIPER AND WASHER: FRONT WIPER MOTOR: INSTALLATION (2008 ES350)		

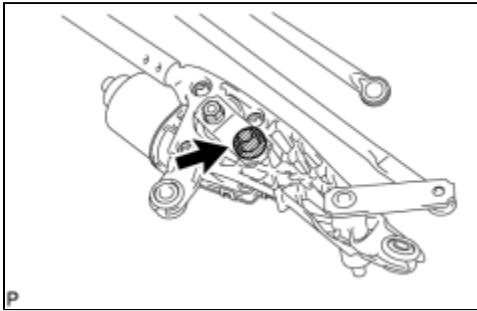
INSTALLATION

1. INSTALL WINDSHIELD WIPER MOTOR ASSEMBLY

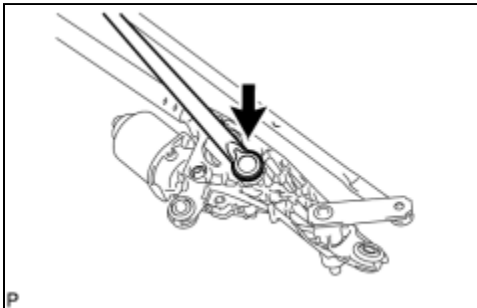


(a) Install the windshield wiper motor assembly with the 3 bolts.

Torque: 5.4 N·m (55 kgf·cm, 48 in·lbf)



(b) Apply MP grease to the crank arm pivot of the windshield wiper motor assembly.

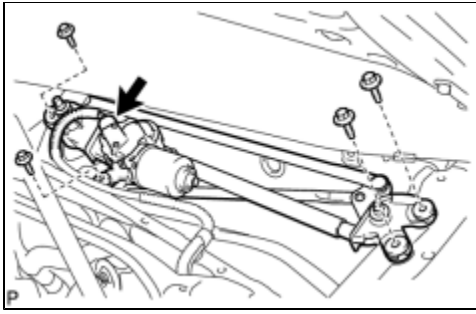


(c) Install the No. 2 windshield wiper link rod to the pivot of the windshield wiper motor assembly.

2. INSTALL WINDSHIELD WIPER MOTOR AND LINK ASSEMBLY

(a) Install the windshield wiper motor and link assembly with the 4 bolts.

Torque: 5.5 N·m (56 kgf·cm, 49 in·lbf)

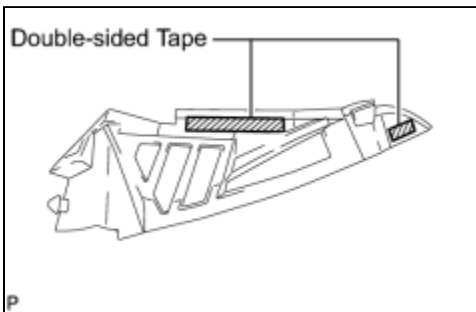


(b) Connect the connector.

3. INSTALL FRONT FENDER TO COWL SIDE SEAL RH

HINT:

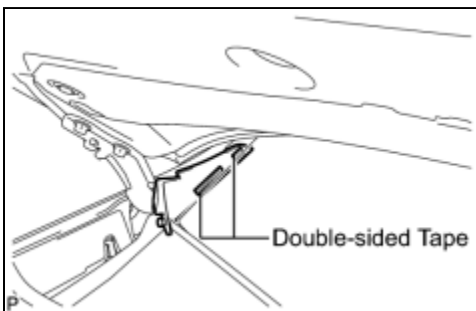
In cases where double-sided tape cannot be reused.



(a) Apply double-sided tape to locations as shown in the illustration.

HINT:

The double-sided tape is not available as a supply part. Use commercial high-heat resistant double-sided tape.



(b) Fix the double-sided tape to install the front fender to cowl side seal RH.

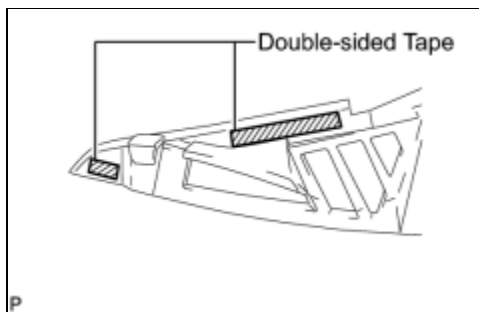
4. INSTALL FRONT FENDER TO COWL SIDE SEAL LH

HINT:

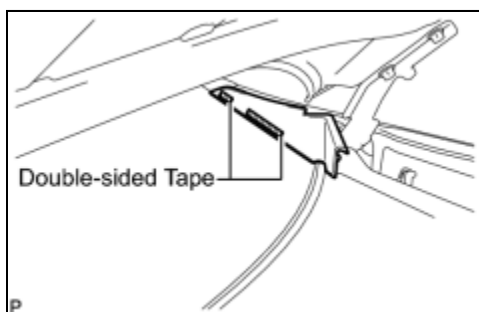
In cases where double-sided tape cannot be reused.

(a) Apply new double-sided tape to locations as shown in the illustration.

HINT:

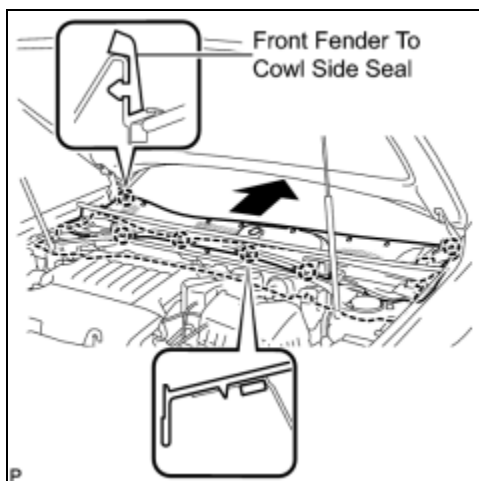


The double-sided tape is not available as a supply part. Use commercial high-heat resistant double-sided tape.



(b) Fix the double-sided tape to install the front fender to cowl side seal LH.

5. INSTALL COWL TOP VENTILATOR LOUVER SUB-ASSEMBLY

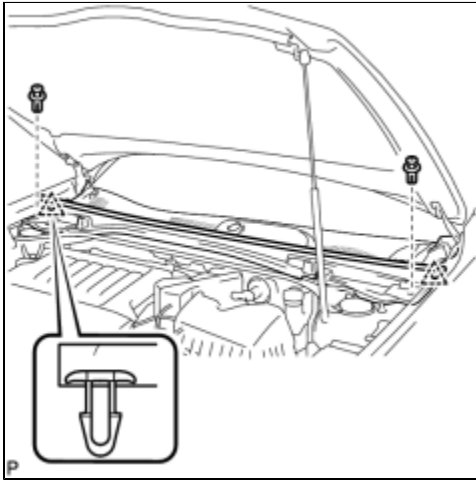


(a) Engage the 6 claws and install the cowl top ventilator louver sub-assembly as shown in the illustration.

NOTICE:

When installing the cowl top ventilator louver sub-assembly, hold the front fender to cowl side seals by hand to prevent them from coming off the windshield. The front fender to cowl side seals are attached to the windshield with double-sided tape. Once the front fender to cowl side seals come off, the adhesion of the tape is reduced. The double-sided tape is not available as a supply part. If the tape loses its adhesion, it is necessary to apply new high-heat resistant double-sided tape and install the front fender to cowl side seals to the windshield.

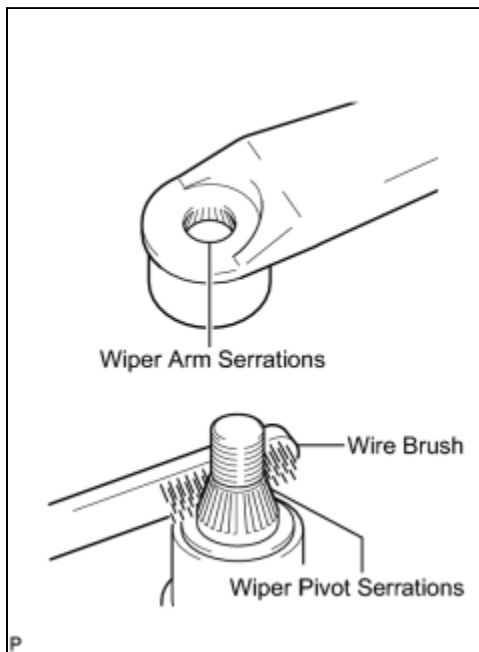
(b) Install the 2 clips.



(c) Engage the 2 clips and install the hood to cowl top seal.

6. INSTALL FRONT WIPER ARM AND BLADE ASSEMBLY LH

(a) Operate the wiper and stop the windshield wiper motor at the automatic stop position.



(b) Clean the wiper arm serrations.

(c) When reinstalling:

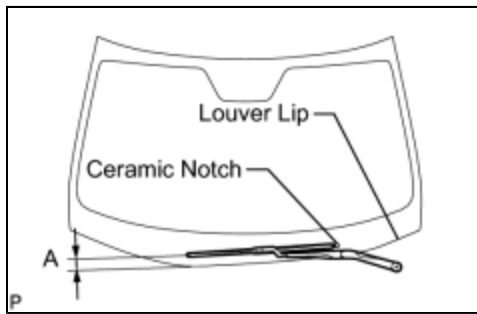
(1) Clean the wiper pivot serrations with a wire brush.

(d) Install the front wiper arm and blade assembly LH with the nut to the position shown in the illustration.

Torque: 22 N·m (224 kgf·cm, 16 ft·lbf)

HINT:

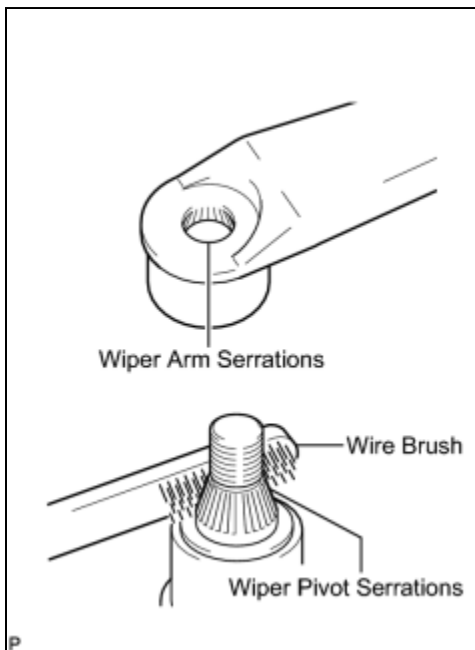
Hold the arm hinge by hand to fasten the nut.



AREA	MEASUREMENT
A	18 to 33 mm (0.71 to 1.30 in.)

7. INSTALL FRONT WIPER ARM AND BLADE ASSEMBLY RH

(a) Operate the wiper and stop the windshield wiper motor at the automatic stop position.



(b) Clean the wiper arm serrations.

(c) When reinstalling:

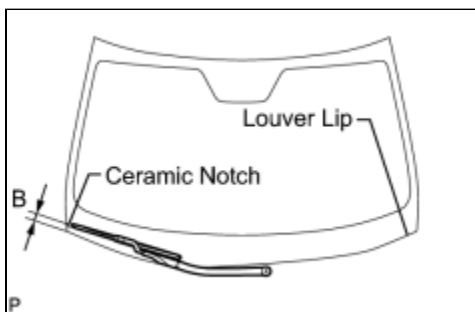
(1) Clean the wiper pivot serrations with a wire brush.

(d) Install the front wiper arm and blade assembly RH with the nut to the position shown in the illustration.

Torque: 22 N·m (224 kgf·cm, 16 ft·lbf)

HINT:

Hold the arm hinge by hand to fasten the nut.

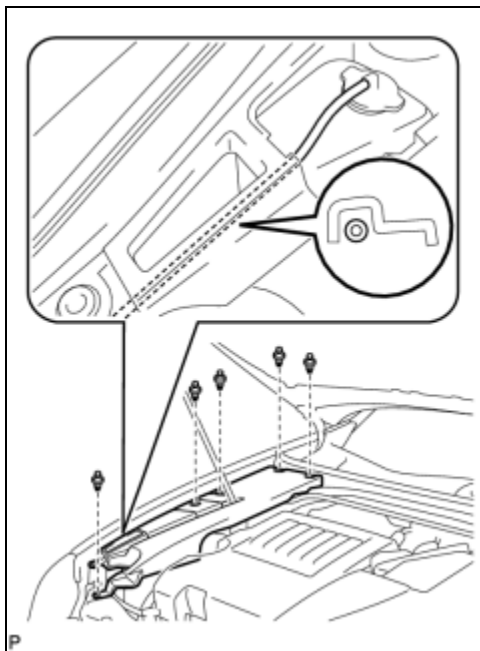


AREA	MEASUREMENT
B	20 to 35 mm (0.79 to 1.38 in.)

(e) Operate the front wipers while spraying washer fluid on the windshield glass. Make sure that the front wipers

function properly and the wipers do not come into contact with the vehicle body.

8. INSTALL ENGINE ROOM SIDE COVER RH

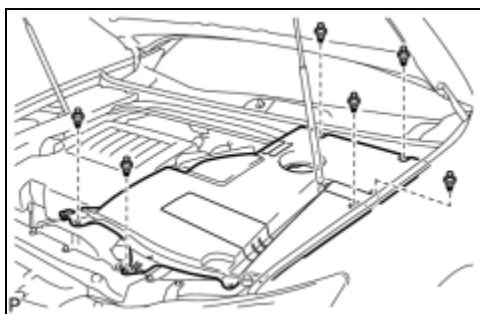


(a) Install the engine room side cover RH with the 5 clips.

NOTICE:

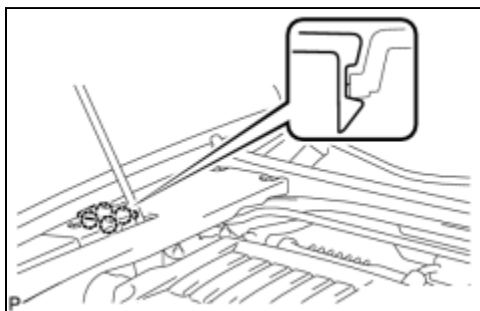
When installing the engine room side cover RH, make sure that the engine coolant reservoir hose is positioned as shown in the illustration.

9. INSTALL ENGINE ROOM SIDE COVER LH



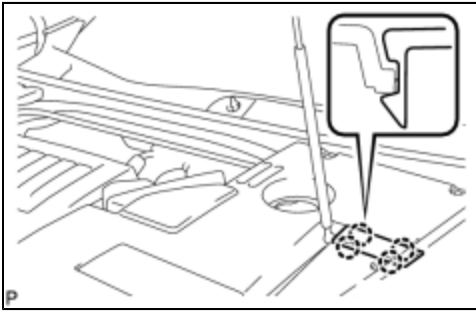
(a) Install the engine room side cover LH with the 6 clips.

10. INSTALL HOOD HINGE COVER (for RH Side)



(a) Engage the 4 claws and install the hood hinge cover.

11. INSTALL HOOD HINGE COVER (for LH Side)



(a) Engage the 4 claws and install the hood hinge cover.

12. INSTALL COOL AIR INTAKE DUCT SEAL

INFO

