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<b>Model Year Start:</b> 2023	<b>Model:</b> Prius Prime	<b>Prod Date Range:</b> [12/2022 - ]
<b>Title:</b> WIPER / WASHER: FRONT WIPER MOTOR: INSTALLATION; 2023 - 2024 MY Prius Prius Prime [12/2022 - ]		

## INSTALLATION

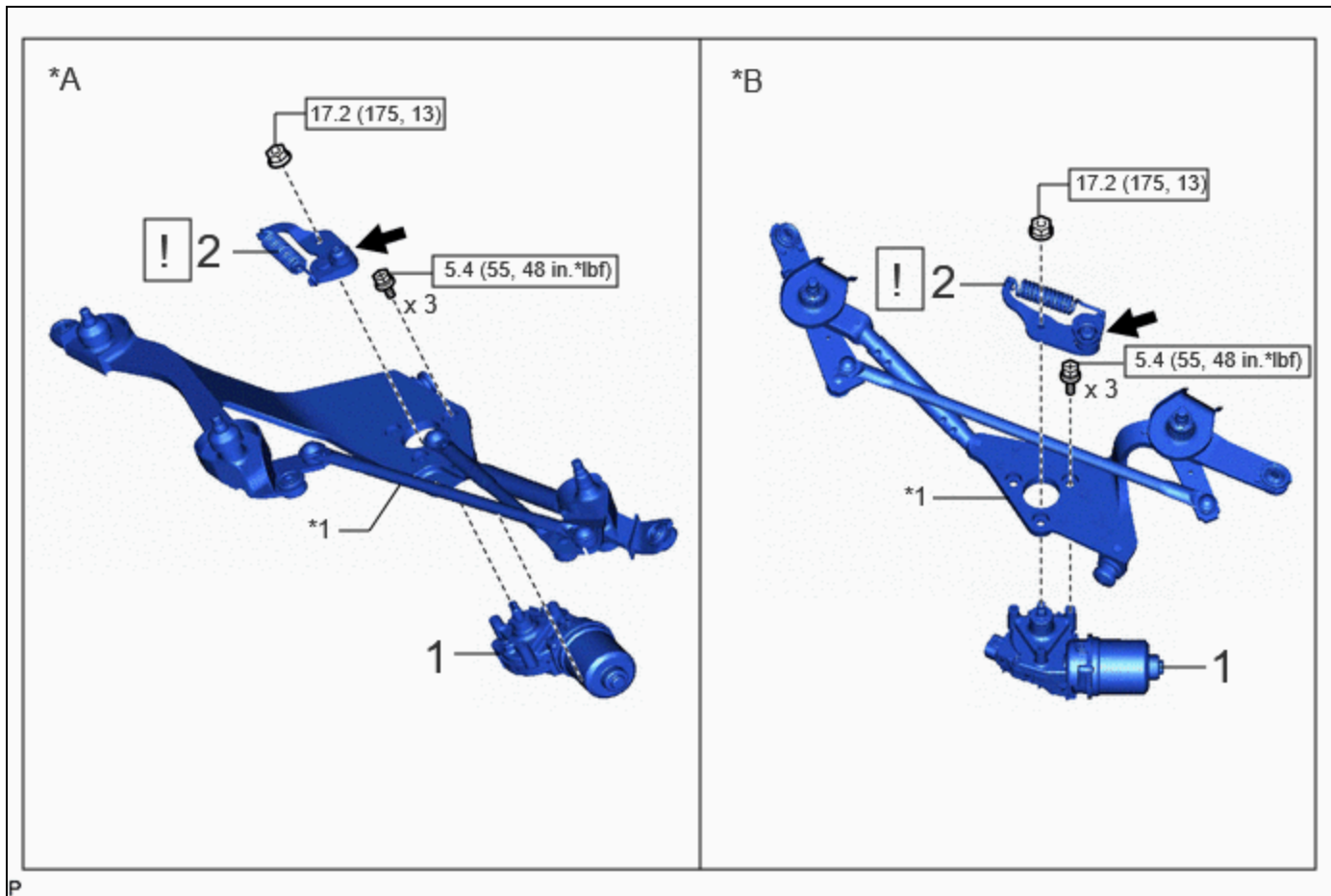
### CAUTION / NOTICE / HINT

**NOTICE:**



Make sure to hold the front wiper arm while lifting it, as lifting the front wiper arm by the front wiper blade may damage or deform the front wiper blade.

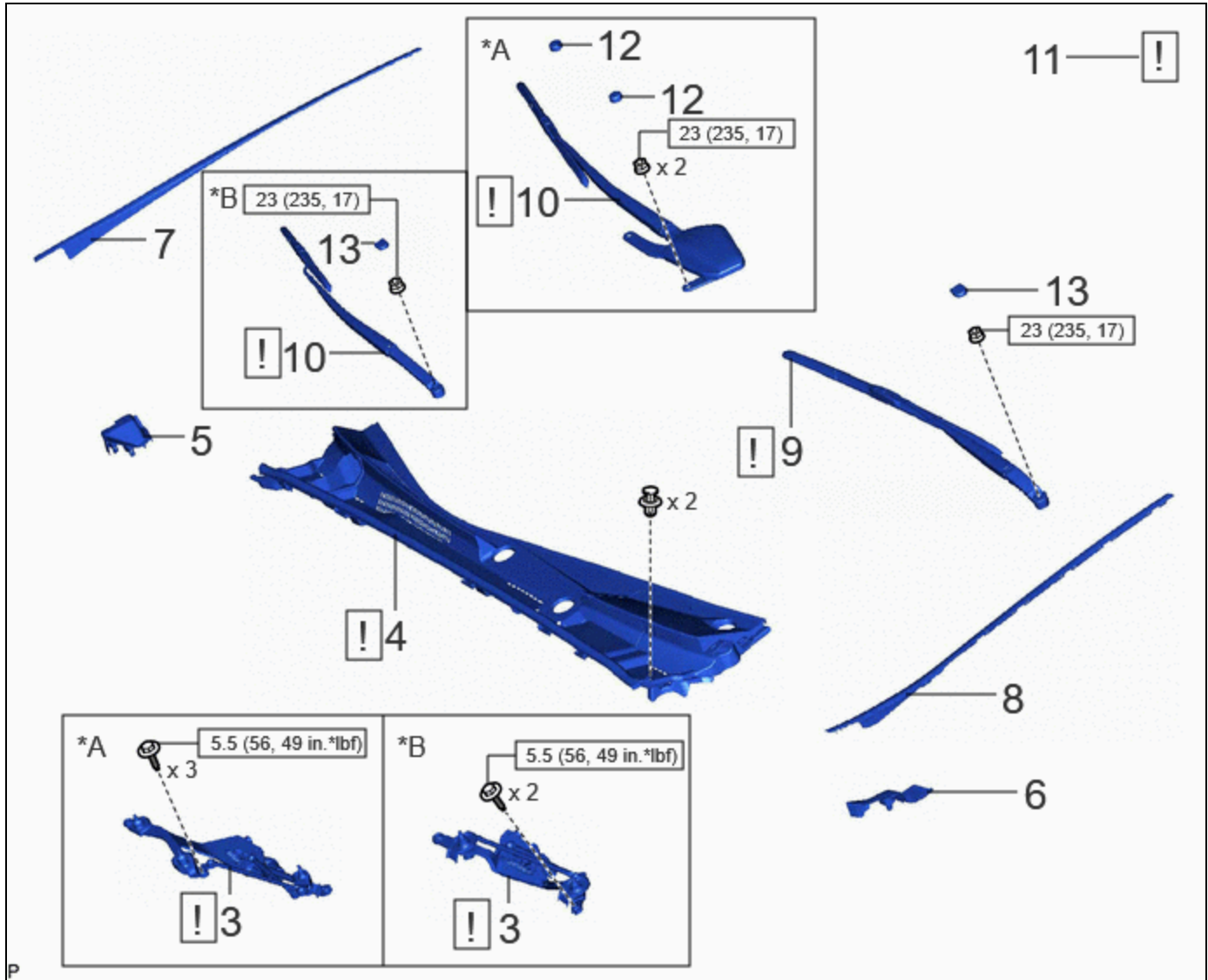
### CAUTION / NOTICE / HINT




#### COMPONENTS (INSTALLATION)







PROCEDURE		PART NAME CODE	!	📄	⚙️
1	WINDSHIELD WIPER MOTOR ASSEMBLY	85110	-	-	-
2	FRONT WIPER CRANK SUB-ASSEMBLY	85012A	INFO	-	-

*A	for M20A-FXS	*B	for 2ZR-FXE
*1	WINDSHIELD WIPER LINK ASSEMBLY	-	-
	N*m (kgf*cm, ft.*lbf): Specified torque		MP grease



PROCEDURE		PART NAME CODE			
3	WINDSHIELD WIPER MOTOR AND LINK ASSEMBLY	-	<span style="background-color: #0070C0; color: white; padding: 2px;">INFO</span>	-	-
4	COWL TOP VENTILATOR LOUVER SUB-ASSEMBLY	55708	-	-	-
5	COWL WATER EXTRACT SHIELD RH	55753D	-	-	-
6	COWL WATER EXTRACT SHIELD LH	55754F	-	-	-
7	WINDSHIELD LOWER OUTSIDE MOULDING RH	75535F	-	-	-
8	WINDSHIELD LOWER OUTSIDE MOULDING LH	75536D	-	-	-

PROCEDURE		PART NAME CODE			
9	FRONT WIPER ARM AND BLADE ASSEMBLY LH	-	<a href="#">INFO</a>	-	-
10	FRONT WIPER ARM AND BLADE ASSEMBLY RH	-	<a href="#">INFO</a>	-	-
11	INSPECT FRONT WIPER ARM AND BLADE ASSEMBLY	-	<a href="#">INFO</a>	-	-
12	SHIELD CAP	85247	-	-	-
13	FRONT WIPER ARM HEAD CAP	85292B	-	-	-

*A	for M20A-FXS	*B	for 2ZR-FXE
	N*m (kgf*cm, ft.*lbf): Specified torque	-	-

## **PROCEDURE**

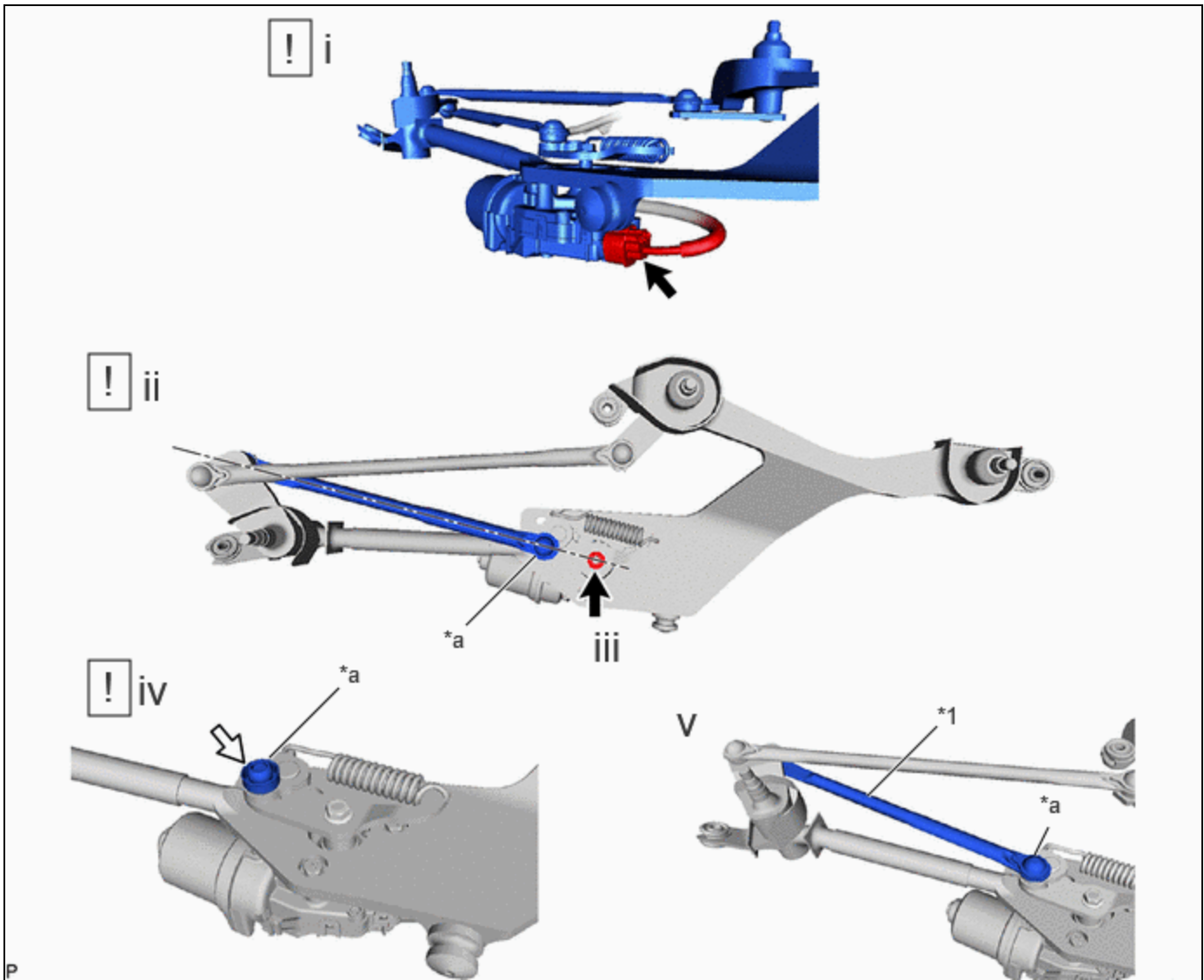
### **1. INSTALL WINDSHIELD WIPER MOTOR ASSEMBLY**

**Torque:**

**5.4 N·m {55 kgf·cm, 48 in·lbf}**

### **2. INSTALL FRONT WIPER CRANK SUB-ASSEMBLY**

(a) for M20A-FXS:



*1	No. 1 Windshield Wiper Link Rod	-	-
*a	Pivot of Front Wiper Crank Sub-assembly	-	-
➔	MP grease	-	-

- (1) Before installing the front wiper crank sub-assembly by the below procedure.
1. Connect the windshield wiper motor assembly connector.
  2. Turn the ignition switch to ON.
  3. Operate the windshield wiper motor assembly and stop the windshield wiper motor assembly at the automatic stop position.
  4. Turn the ignition switch off.
  5. Disconnect the windshield wiper motor assembly connector.
  6. Temporarily install the front wiper crank sub-assembly to the windshield wiper motor assembly with the nut.
  7. Temporarily install the No. 1 windshield wiper link rod to the pivot of the front wiper crank sub-assembly.

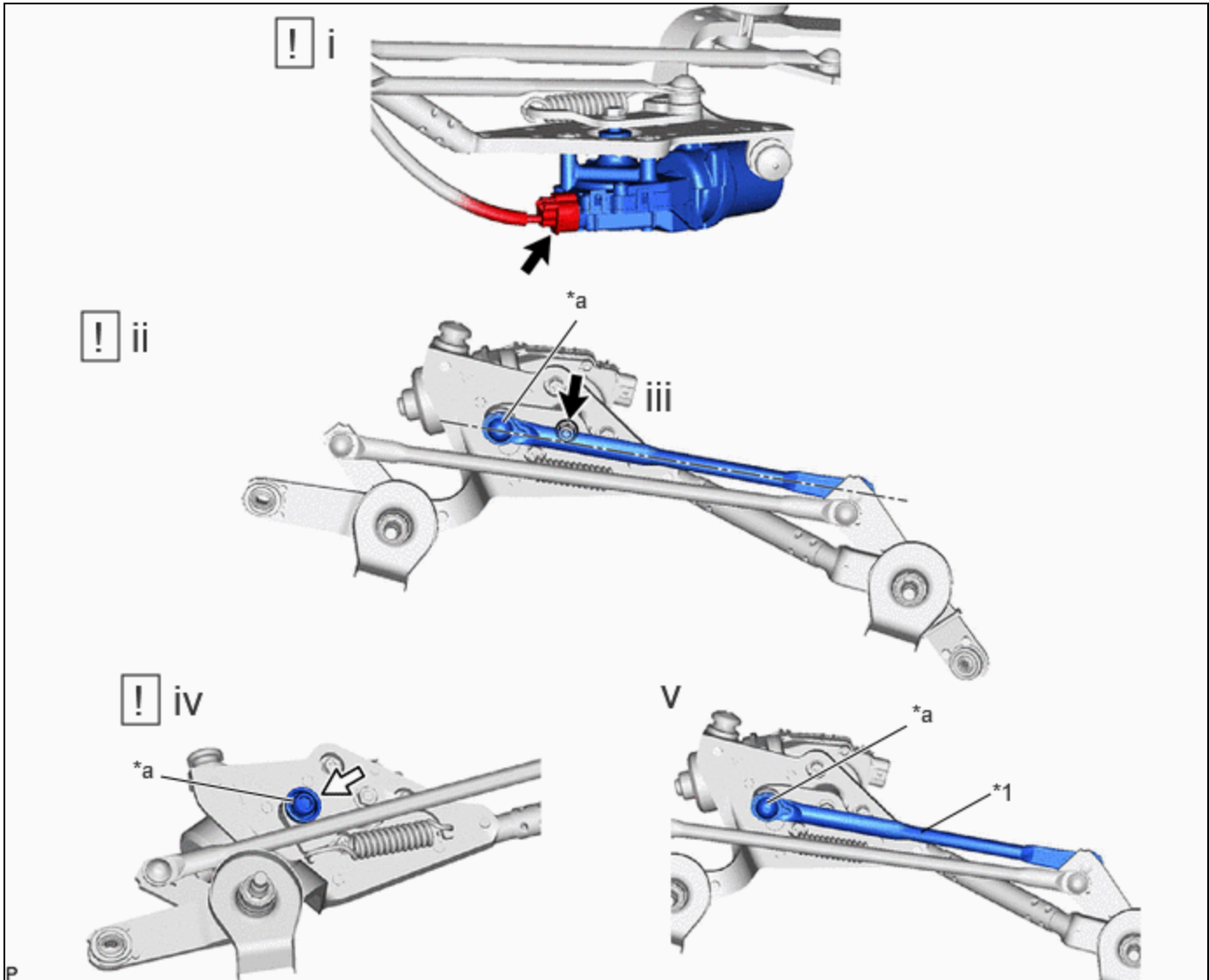
- (2) Align the nut and pivot of the front wiper crank sub-assembly with the No. 1 windshield wiper link rod as shown in the illustration.
- (3) Tighten the nut to install the front wiper crank sub-assembly.

**Torque:**

**17.2 N·m {175 kgf·cm, 13 ft·lbf}**

- (4) Apply MP grease to the pivot of the front wiper crank sub-assembly.
- (5) Connect the No. 1 windshield wiper link rod to the pivot of the front wiper crank sub-assembly.

(b) 2ZR-FXE:



*1	No. 1 Windshield Wiper Link Rod	-	-
*a	Pivot of Front Wiper Crank Sub-assembly	-	-
➔	MP grease	-	-

- (1) Before installing the front wiper crank sub-assembly by the below procedure.
  - 1. Connect the windshield wiper motor assembly connector.
  - 2. Turn the ignition switch to ON.

3. Operate the windshield wiper motor assembly and stop the windshield wiper motor assembly at the automatic stop position.
  4. Turn the ignition switch off.
  5. Disconnect the windshield wiper motor assembly connector.
  6. Temporarily install the front wiper crank sub-assembly to the windshield wiper motor assembly with the nut.
  7. Temporarily install the No. 1 windshield wiper link rod to the pivot of the front wiper crank sub-assembly.
- (2) Align the nut and pivot of the front wiper crank sub-assembly with the No. 1 windshield wiper link rod as shown in the illustration.
  - (3) Tighten the nut to install the front wiper crank sub-assembly.

**Torque:**

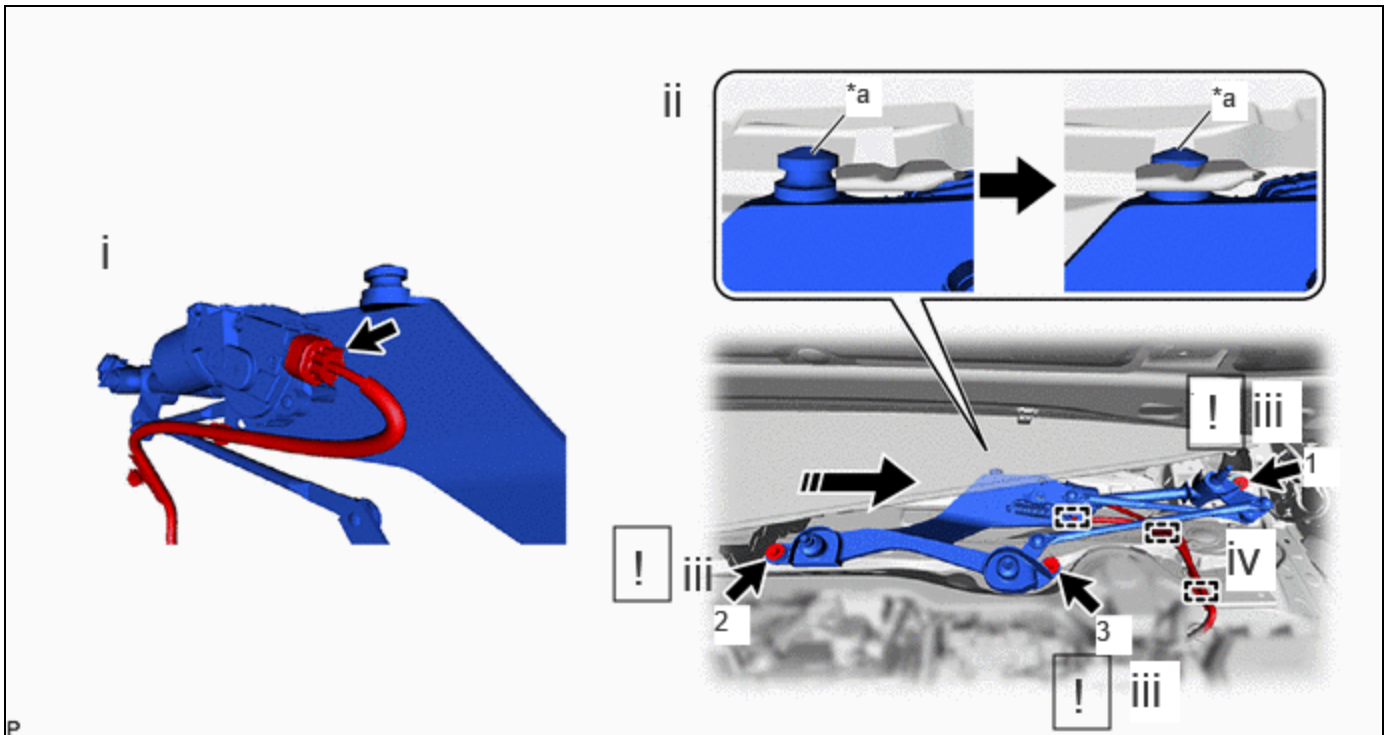
**17.2 N·m {175 kgf·cm, 13 ft·lbf}**


- (4) Apply MP grease to the pivot of the front wiper crank sub-assembly.
- (5) Connect the No. 1 windshield wiper link rod to the pivot of the front wiper crank sub-assembly.

**3. INSTALL WINDSHIELD WIPER MOTOR AND LINK ASSEMBLY**

	<p><b>NOTICE:</b></p> <p style="color: #c08000;">Be careful not to damage the windshield glass when installing the windshield wiper motor and link assembly.</p>
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(a) for M20A-FXS:



*a	Motor Grommet	-	-
	Install in this Direction	-	-

- (1) Connect the connector.
- (2) Engage the motor grommet as shown in the illustration.
- (3) Install the windshield wiper motor and link assembly with the 3 bolts.

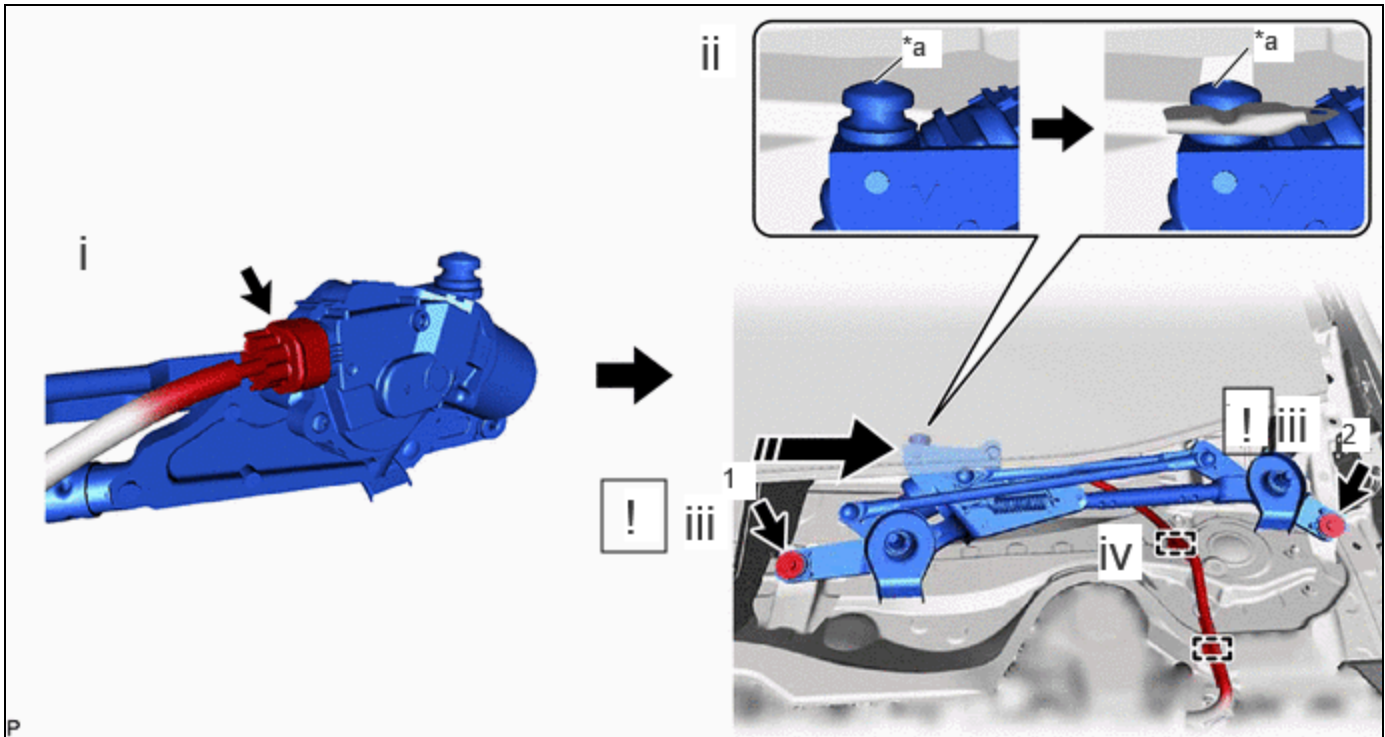
**Torque:**


**5.5 N·m {56 kgf·cm, 49 in·lbf}**

**HINT:**

Tighten the bolts in the order shown in the illustration.

- (4) Engage the 3 clamps.
- (b) 2ZR-FXE:



*a	Motor Grommet	-	-
	Install in this Direction	-	-

- (1) Connect the connector.
- (2) Engage the motor grommet as shown in the illustration.
- (3) Install the windshield wiper motor and link assembly with the 2 bolts.

**Torque:**


**5.5 N·m {56 kgf·cm, 49 in·lbf}**

**HINT:**

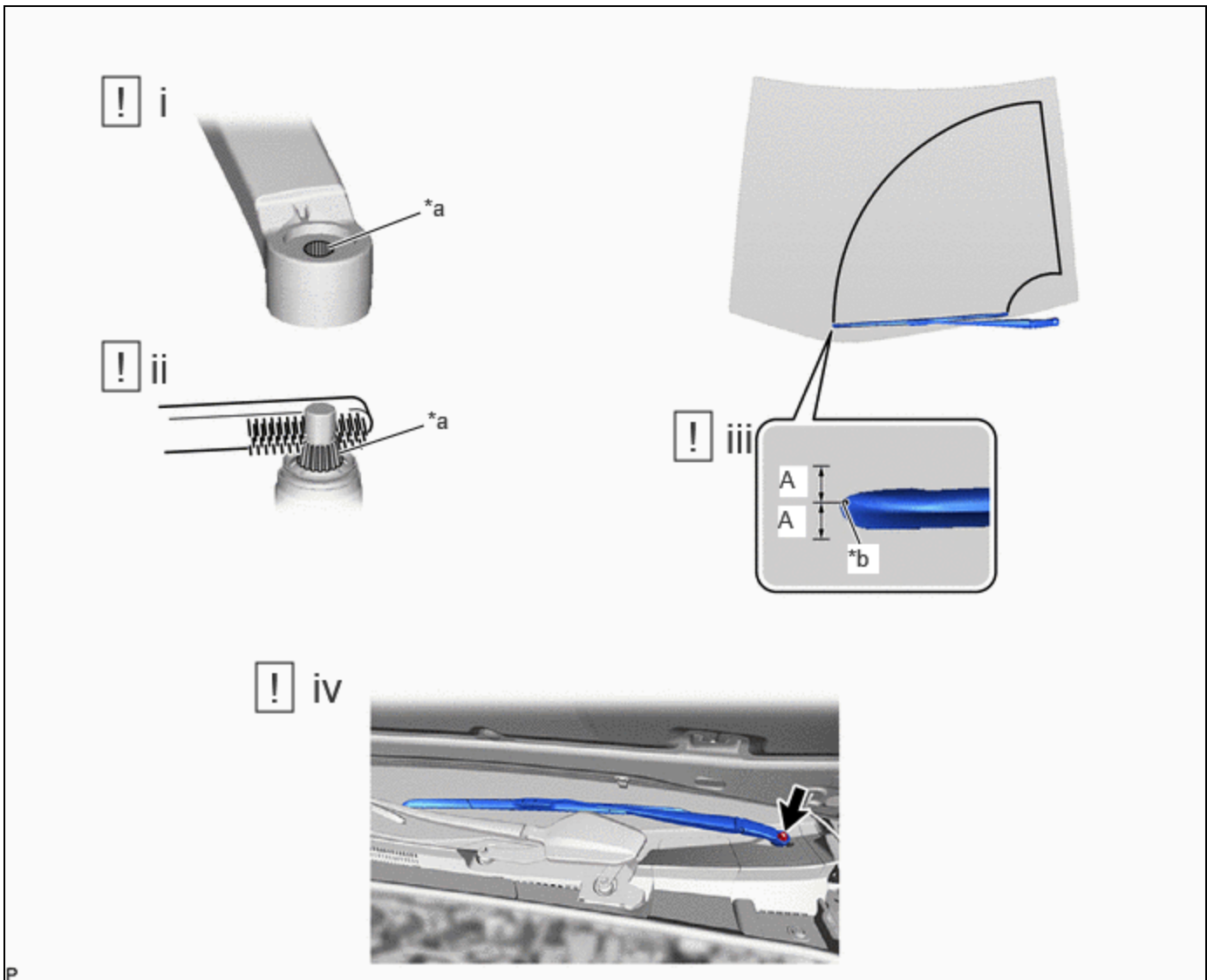
Tighten the bolts in the order shown in the illustration.

- (4) Engage the 2 clamps.

**4. INSTALL COWL TOP VENTILATOR LOUVER SUB-ASSEMBLY**

	<p><b>NOTICE:</b></p> <p>Make sure to engage the guide securely, otherwise the cowl top ventilator louver sub-assembly may pop up when engaging it to the windshield glass.</p>
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- 5. INSTALL COWL WATER EXTRACT SHIELD RH
- 6. INSTALL COWL WATER EXTRACT SHIELD LH
- 7. INSTALL WINDSHIELD LOWER OUTSIDE MOULDING RH
- 8. INSTALL WINDSHIELD LOWER OUTSIDE MOULDING LH
- 9. INSTALL FRONT WIPER ARM AND BLADE ASSEMBLY LH



*a	Serration	*b	Alignment Mark
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- (1) When reusing the front wiper arm and blade assembly LH:
1. Clean the front wiper arm serrations to remove any burrs, dirt, etc.

**NOTICE:**

Do not grind down the wiper arm serrations.

- (2) When reusing the windshield wiper link assembly:



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

**NOTICE:**

Do not grind down the wiper pivot serrations.

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

Reference Measurement:

AREA	MEASUREMENT	-	-
A	7.5 mm (0.295 in.)	-	-

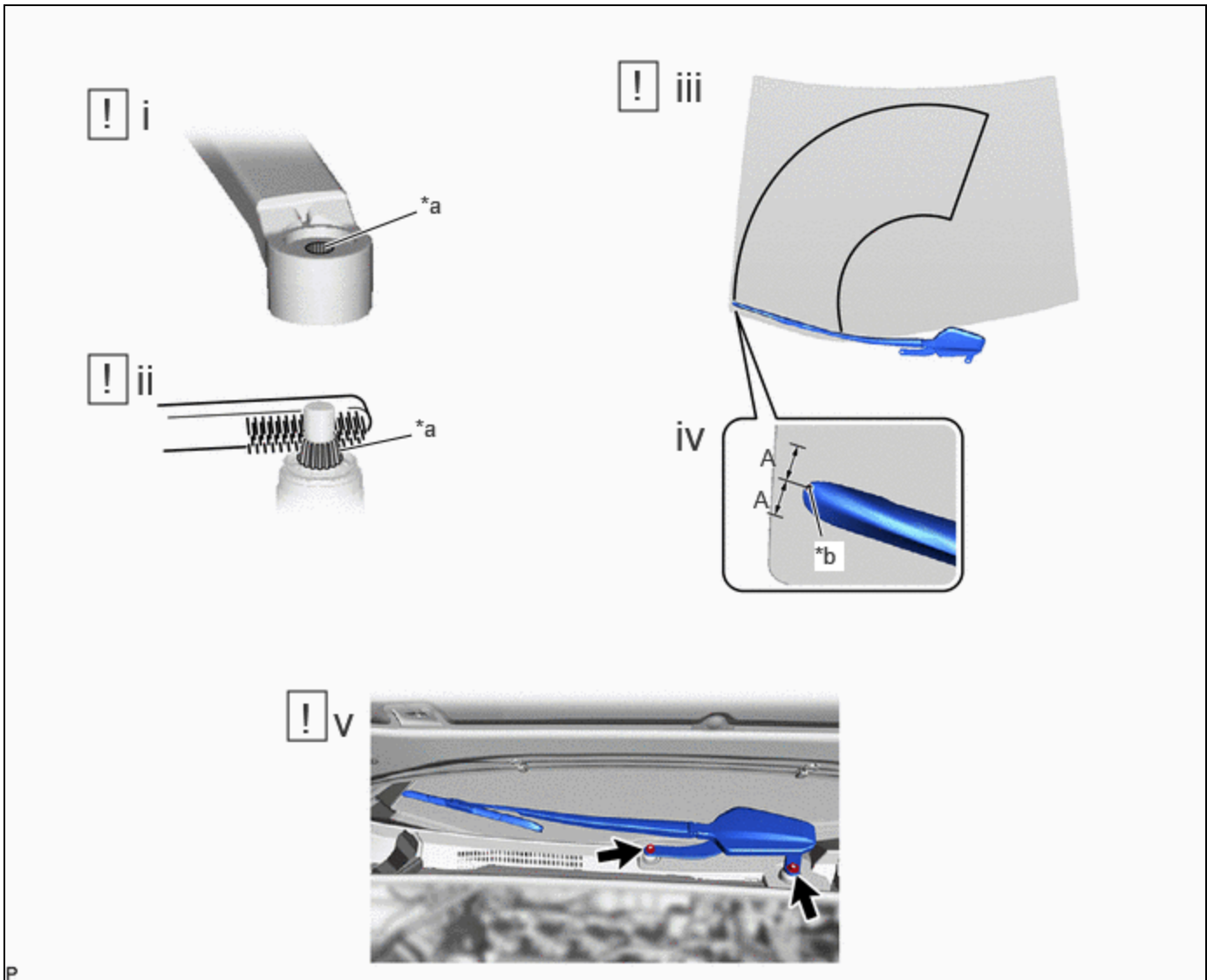
- (4) Hold the wiper arm by hand to install the nut.

**Torque:**

**23 N·m {235 kgf·cm, 17 ft·lbf}**

**10. INSTALL FRONT WIPER ARM AND BLADE ASSEMBLY RH**

(a) for M20A-FXS:



*a	Serration	*b	Alignment Mark
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- (1) When reusing the front wiper arm and blade assembly RH:

1. Clean the wiper arm serrations to remove any burrs, dirt, etc.

**NOTICE:**

Do not grind down the wiper arm serrations.

(2) When reusing the windshield wiper link assembly:

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

**NOTICE:**

Do not grind down the wiper pivot serrations.

(3) Set the automatic stop position by the below procedure.

1. Turn the ignition switch ON.
2. Operate the windshield wiper motor assembly and stop the windshield wiper motor and link assembly at the automatic stop position.
3. Turn the ignition switch off.

(4) Install the front wiper arm and blade assembly RH with the 2 nuts to the position shown in the illustration.

Reference Measurement:

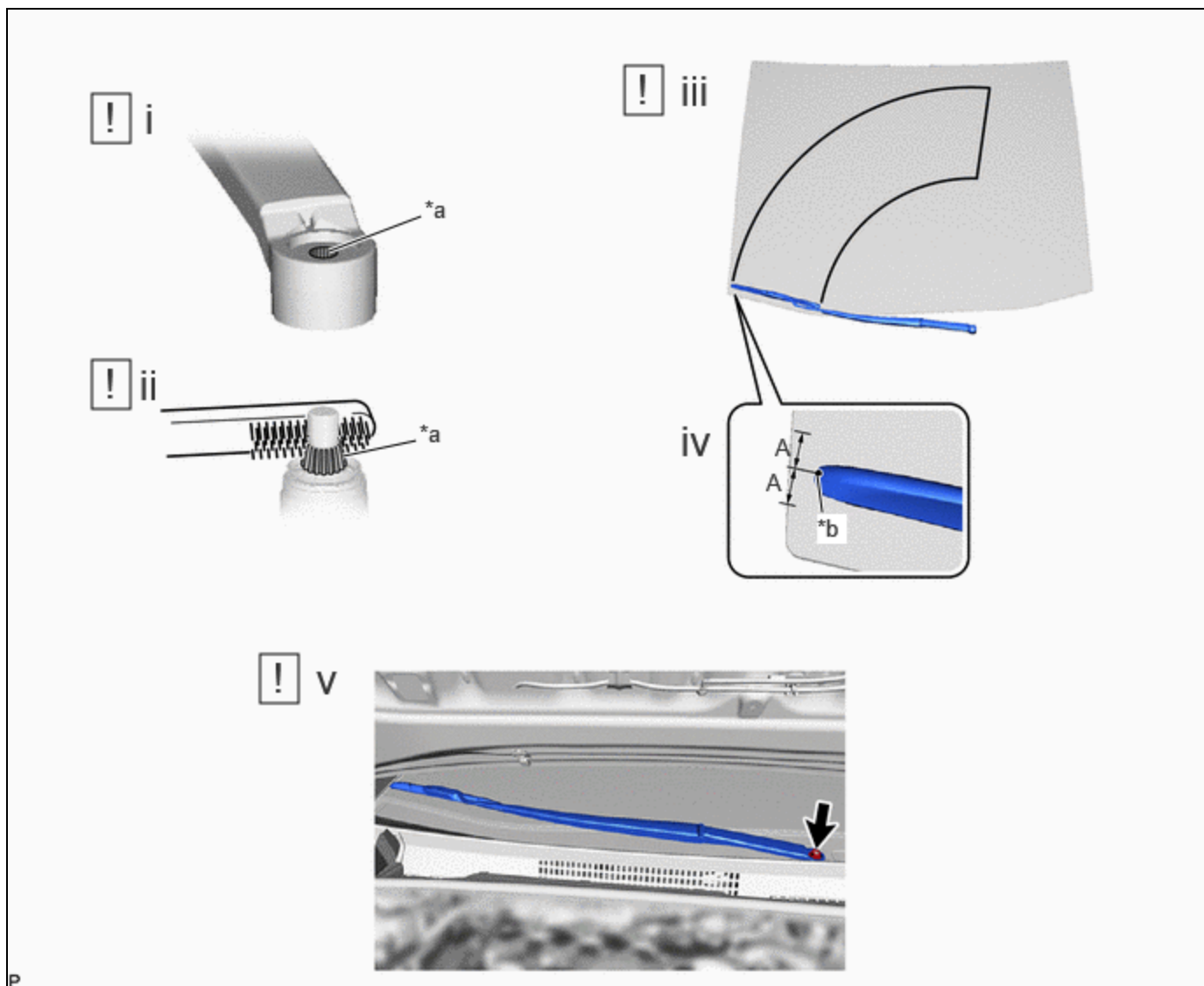
AREA	MEASUREMENT	-	-
A	7.5 mm (0.295 in.)	-	-

(5) Hold the wiper arm by hand to install the 2 nuts.

**Torque:**

**23 N·m {235 kgf·cm, 17 ft·lbf}**

(b) 2ZR-FXE:



*a	Serration	*b	Alignment Mark
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(1) When reusing the front wiper arm and blade assembly RH:

1. Clean the wiper arm serrations to remove any burrs, dirt, etc.

**NOTICE:**

Do not grind down the wiper arm serrations.

(2) When reusing the windshield wiper link assembly:

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

**NOTICE:**

Do not grind down the wiper pivot serrations.

(3) Set the automatic stop position by the below procedure.

1. Turn the ignition switch ON.
2. Operate the windshield wiper motor assembly and stop the windshield wiper motor and link assembly at the automatic stop position.
3. Turn the ignition switch off.

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

Reference Measurement:



AREA	MEASUREMENT	-	-
A	7.5 mm (0.295 in.)	-	-

(5) Hold the wiper arm by hand to install the nut.

**Torque:**

**23 N·m {235 kgf·cm, 17 ft·lbf}**

**11. INSPECT FRONT WIPER ARM AND BLADE ASSEMBLY**

	Click here 
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**12. INSTALL SHIELD CAP (for M20A-FXS)**

**13. INSTALL FRONT WIPER ARM HEAD CAP**

