

## 6. Washer Tank and Motor

### A: REMOVAL

#### 1. WASHER TANK

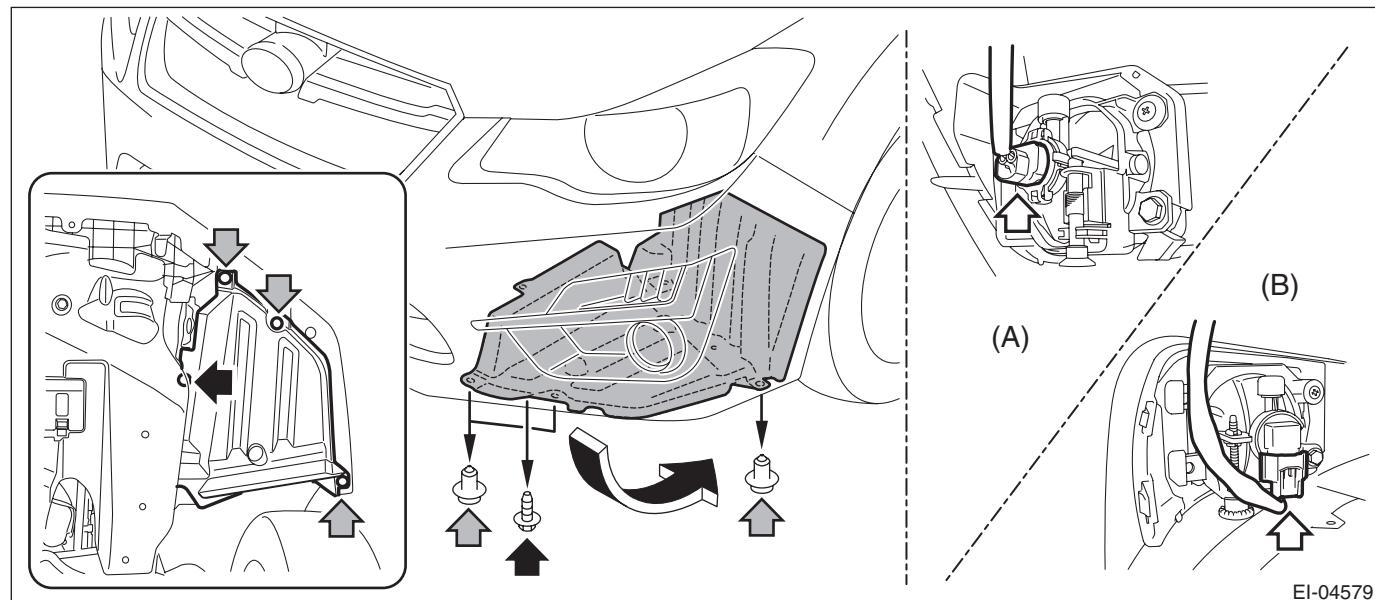
- 1) Open the hood COMPL - front.
- 2) Disconnect the ground cable from battery. <Ref. to NT-5, BATTERY, NOTE, Note.>

##### NOTE:

For the 12 volt engine restart battery of HEV model, disconnect the ground terminal from 12V engine restart battery sensor.

- 3) Remove the bumper face - front.

(1) Remove the clips and screws, and turn over the mud guard - front, and then disconnect the connectors of the fog light assembly - front on the LH and RH sides. (Model with fog light)



(A) Type without SRF

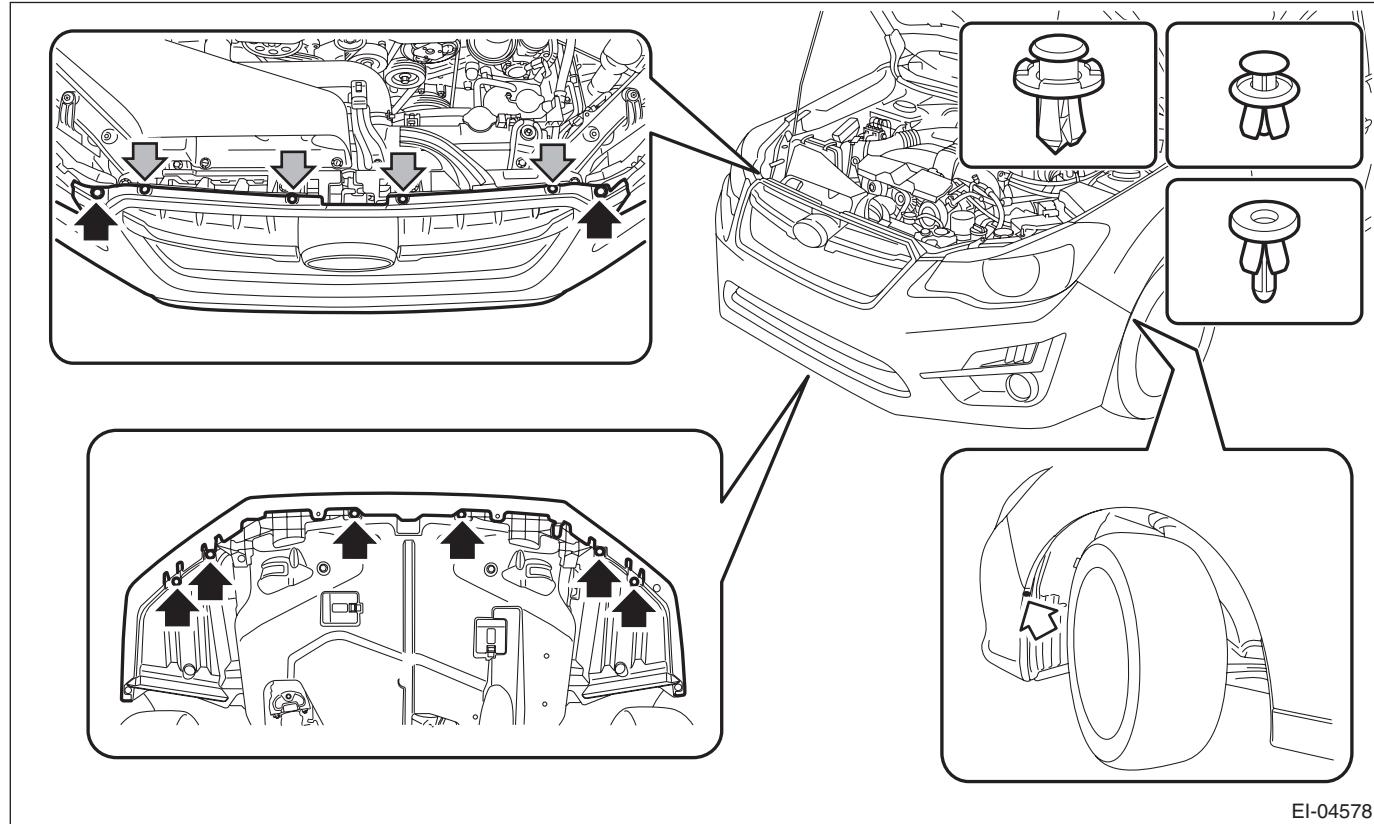
(B) Type with SRF

- (2) Remove the clips at the upper side of the bumper.
- (3) Remove the clips from the fender.

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(4) Remove the clips at the lower side of the bumper face - front.



(5) Apply protective tape (A) to the light assembly - head.

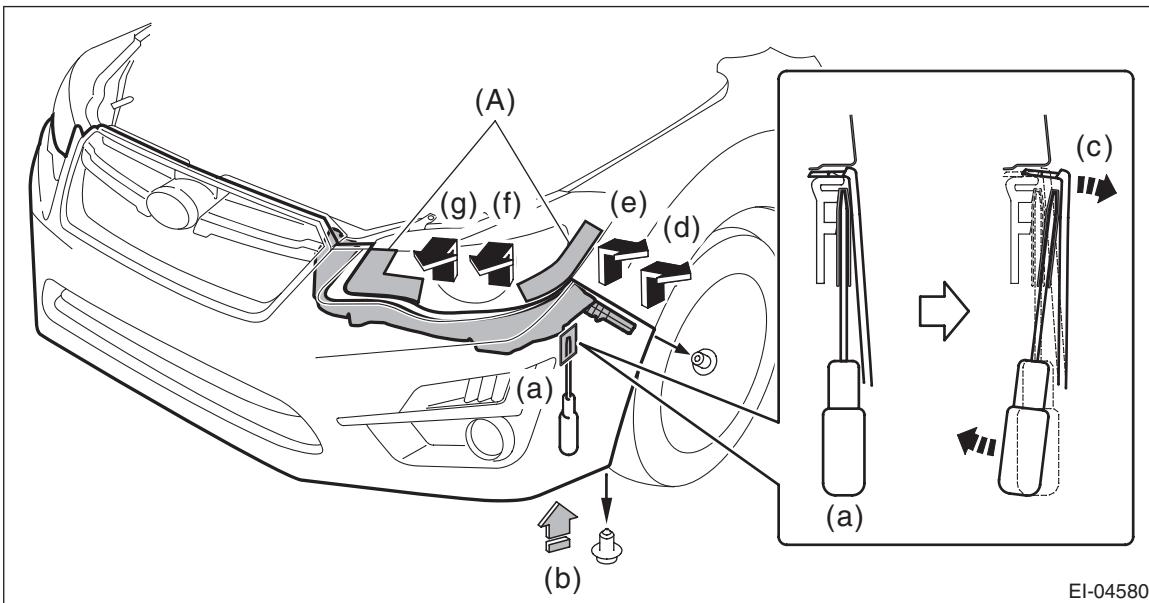
(6) Detach the flange section on the bumper face side from the bracket - front bumper side.

### CAUTION:

**Do not pull forcibly. It may damage the flange section on the bumper face - front side when it comes off from the claws of the bracket - front bumper.**

### NOTE:

Remove the bumper face - front according to the following procedures.

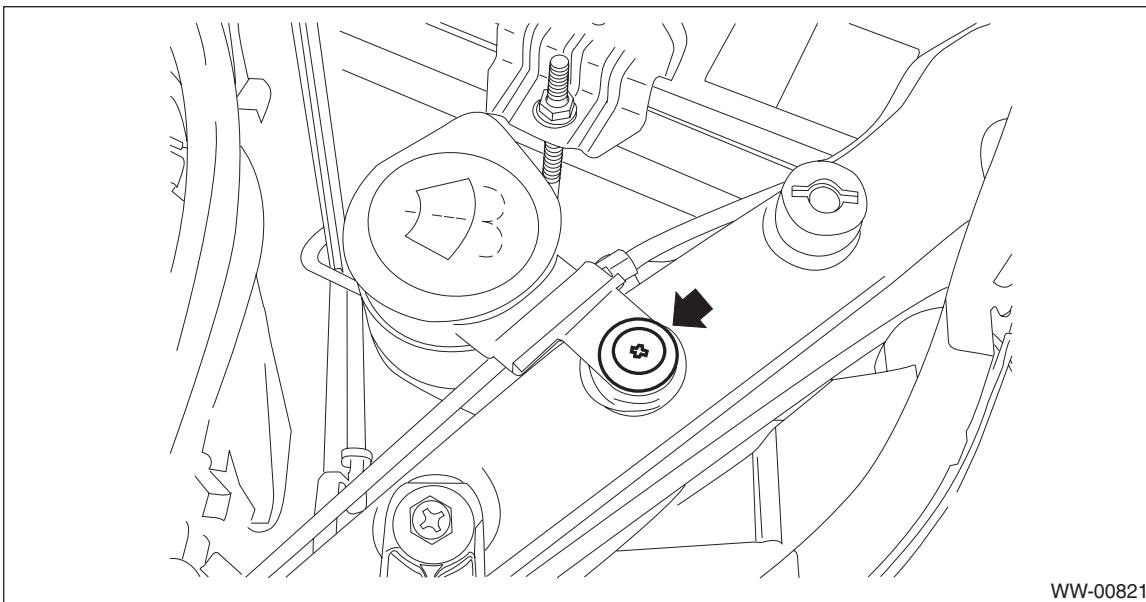


1. Remove the clips, turn over the mud guard, and insert a flat tip screwdriver with protection for damage prevention into the clearance between bumper and bracket. (a)

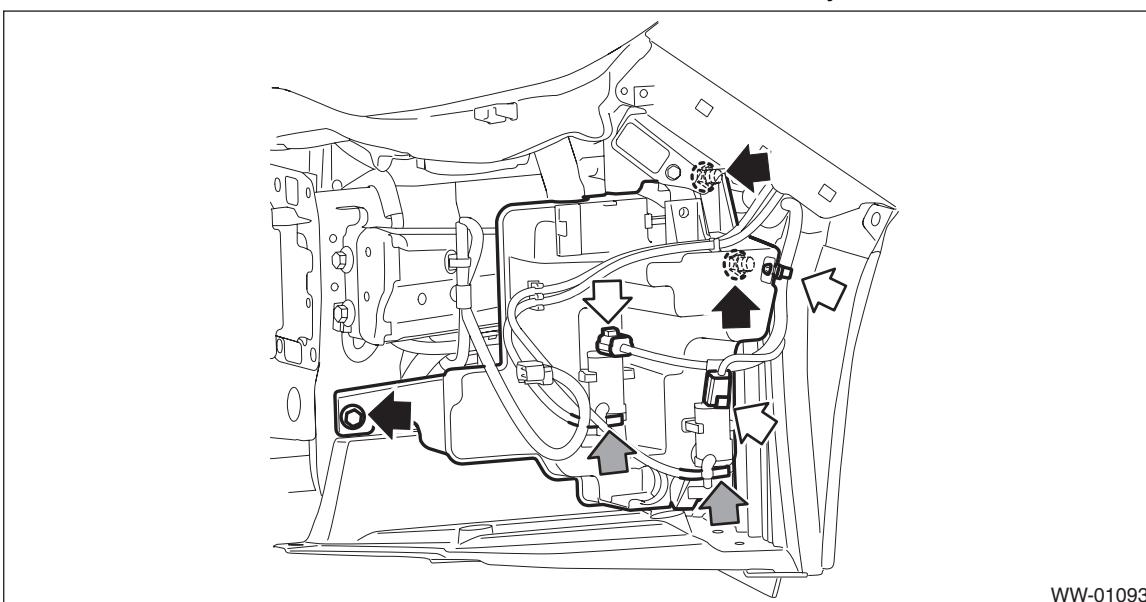
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2. Push out the bumper with the flat tip screwdriver while pushing up the bumper from below. (b), (c)
3. Release the engagement of clips in the order of (d) to (g) while pushing up the bumper from below.
4. Perform the same procedures to remove the opposite side.
- 4) Remove the tank - washer assembly.  
(1) Remove the clip of the holder - windshield washer tank.



- (2) Disconnect the connector from the motor pump assembly - washer and the sensor - washer tank, and then remove the harness clip.
- (3) Prepare a container before disconnecting the hose - washer, and drain all washer fluid in the tank - washer.
- (4) Remove the bolt and nuts and remove the tank - washer assembly.



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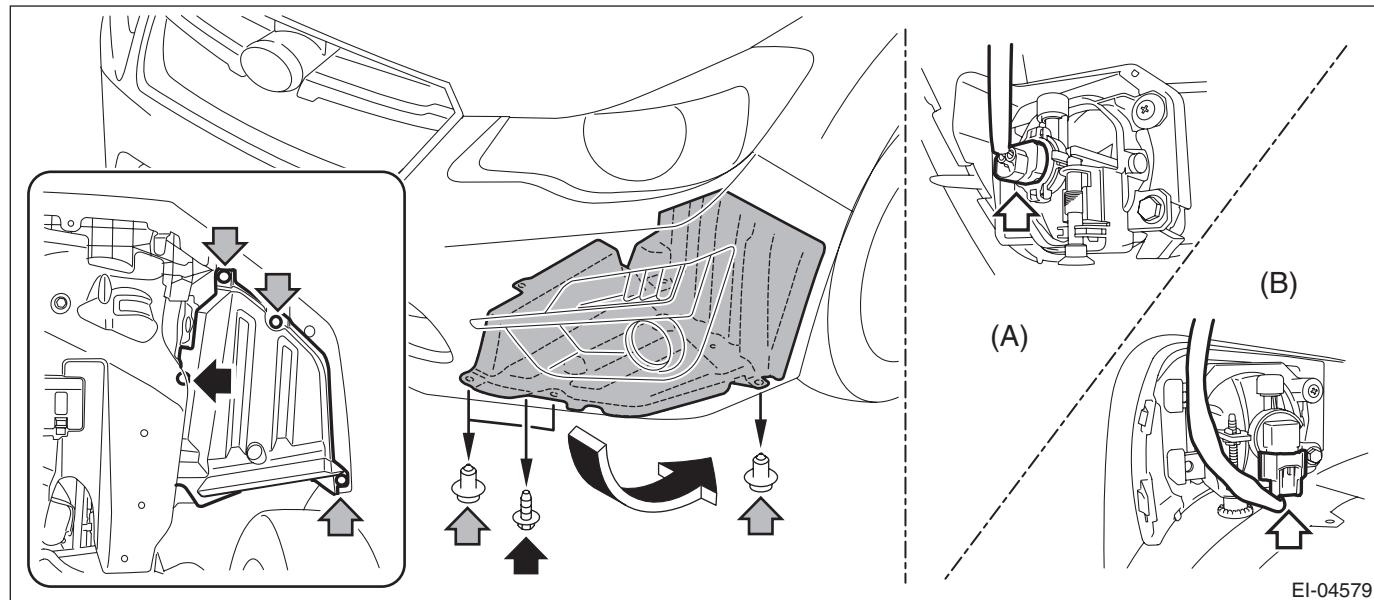
### 2. WASHER MOTOR

- 1) Open the hood COMPL - front.
- 2) Disconnect the ground cable from battery. <Ref. to NT-5, BATTERY, NOTE, Note.>

#### NOTE:

For the 12 volt engine restart battery of HEV model, disconnect the ground terminal from 12V engine restart battery sensor.

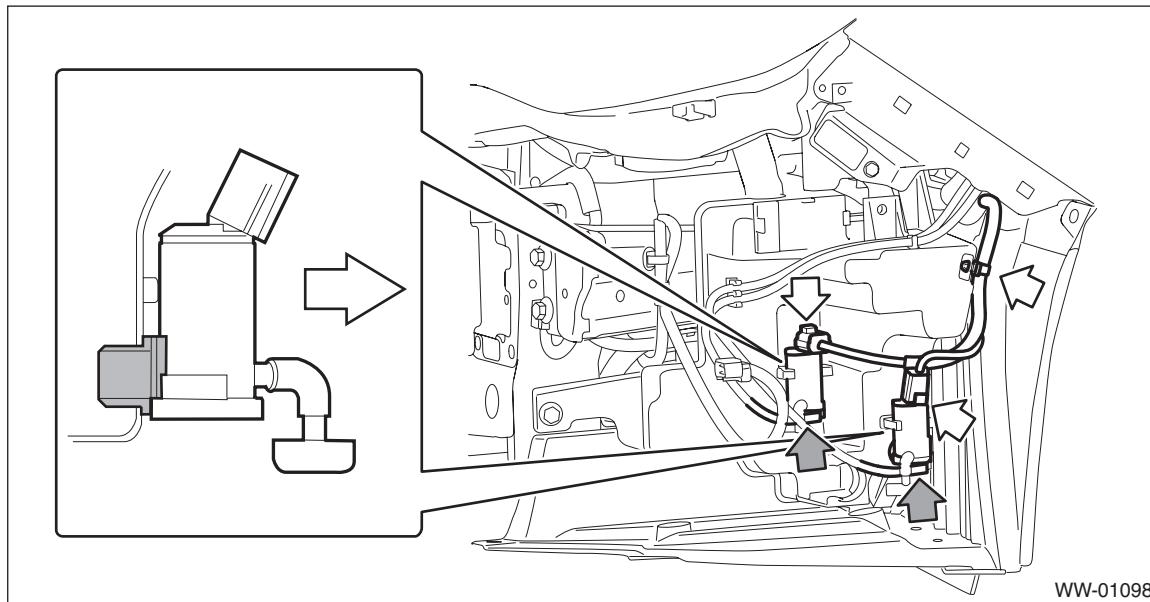
- 3) Remove the clips and screws, turn over the mud guard - front LH, and disconnect the connector of the fog light assembly - front. (Model with fog light)



(A) Type without SRF

(B) Type with SRF

- 4) Disconnect the connector from the motor pump assembly - washer and remove the harness clip.
- 5) Prepare a container before disconnecting the hose - washer, and drain all washer fluid in the tank - washer.
- 6) Remove the motor pump assembly - washer from the tank - washer.

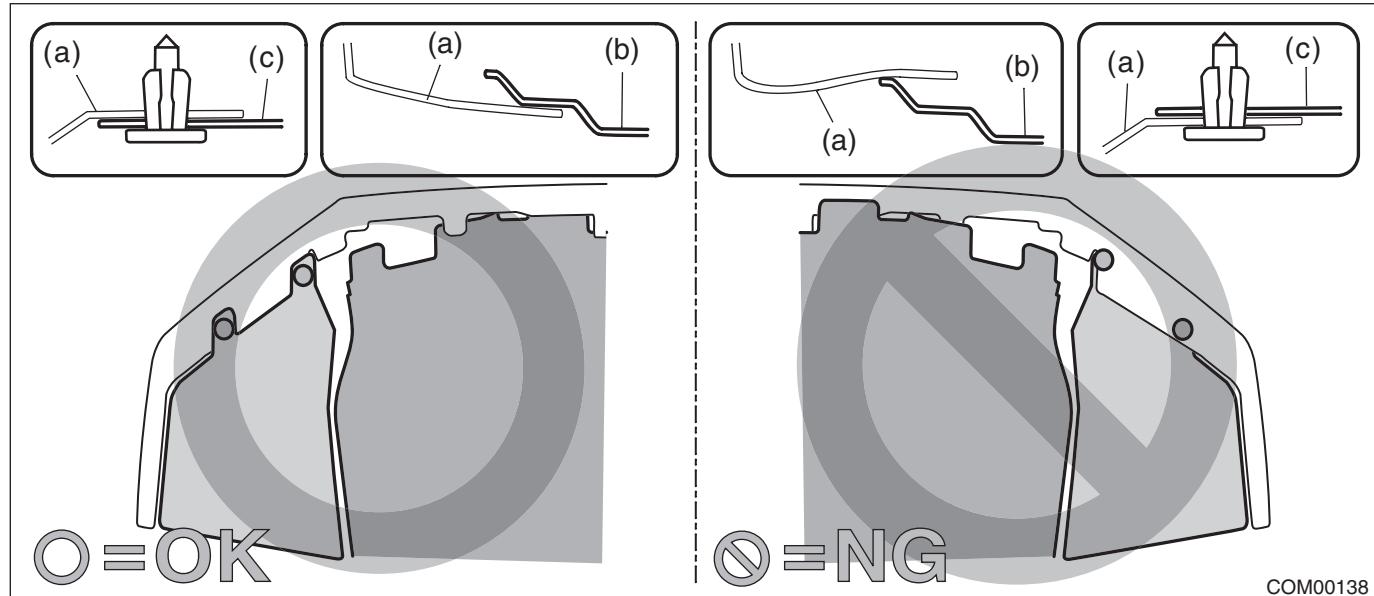


## B: INSTALLATION

1) Install each part in the reverse order of removal.

### CAUTION:

- Install the under cover so that the under cover front end (b) comes inside of the bumper face - front (a).



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- Before installing the bumper face, match the claws on the bracket - front bumper with the engaging position of flange section on the bumper face side. If the engaging position is not correct, the flange section may be broken or the clearance between fender panel and bumper face may not be uniform.

### Tightening torque:

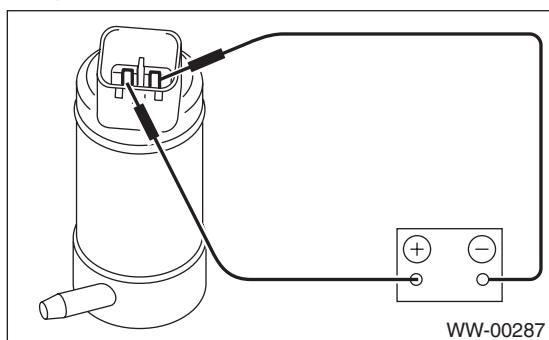
6.0 N·m (0.61 kgf·m, 4.4 ft-lb)

- 2) Add new washer fluid.
- 3) Adjust the fog light beam. (Model with fog light) <Ref. to LI-55, FOG LIGHT AIMING, ADJUSTMENT, Front Fog Light Assembly.>

## C: INSPECTION

### 1. WASHER PUMP

Apply battery voltage to the connector terminal of the motor pump assembly - washer, and make sure that the motor operates.

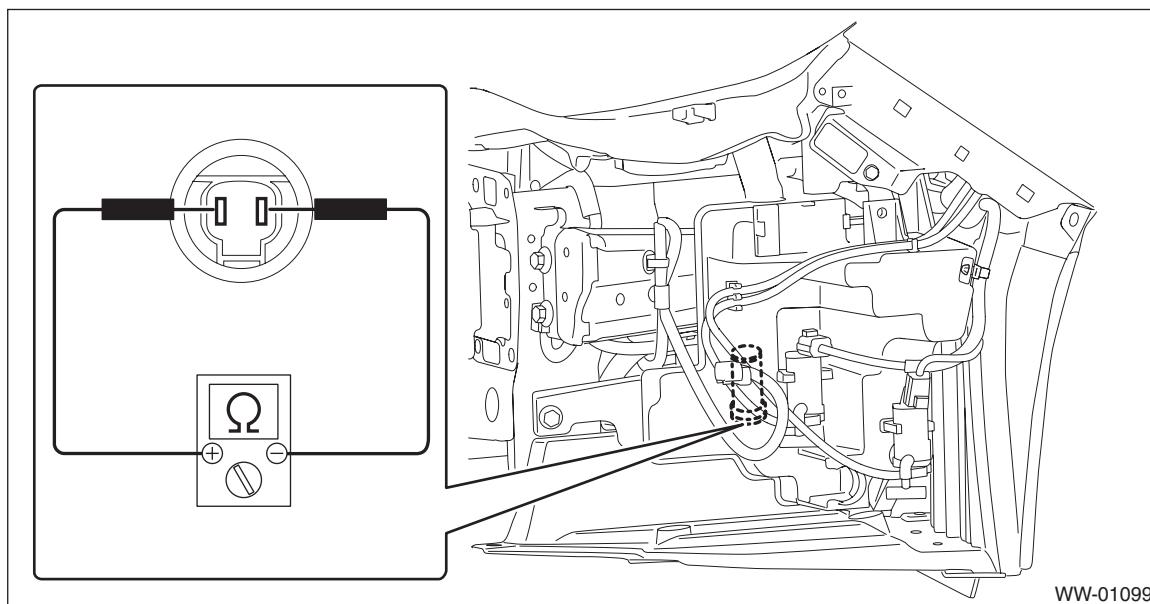


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### 2. WASHER FLUID LEVEL SENSOR

- 1) Check the connection status of washer fluid level sensor connector.
- 2) Does the low washer fluid warning light illuminate after draining the washer fluid? And does the low washer fluid warning light go off after refilling the washer fluid?
  - Yes → **Normal operation.**
  - No → **Perform step 3.**
- 3) Using a tester, measure the voltage of the washer fluid level sensor connector.
  - (1) Is the voltage approx. 8.5 V or more?
    - Yes → **Perform step 4.**
    - No → **Check harness, meter and integrated unit, and replace if necessary.**
- 4) Does the meter indicator illuminate if you short the washer fluid level sensor connector?
  - Yes → **Perform step 5.**
  - No → **Check meter and integrated unit, and replace if necessary.**
- 5) Using a tester, measure the resistance of the washer fluid level sensor.
  - (1) Turn over the mud guard.
  - (2) Measure the resistance of the washer fluid level sensor.



Amount of washer fluid in the tank	Standard
No remaining quantity (ON)	Less than 10 Ω
There is remaining quantity (OFF)	1 MΩ or more

- (3) Is the resistance within the standard?

- Yes → **Normal operation.**
- No → **Replace the washer fluid level sensor along with the washer tank.**