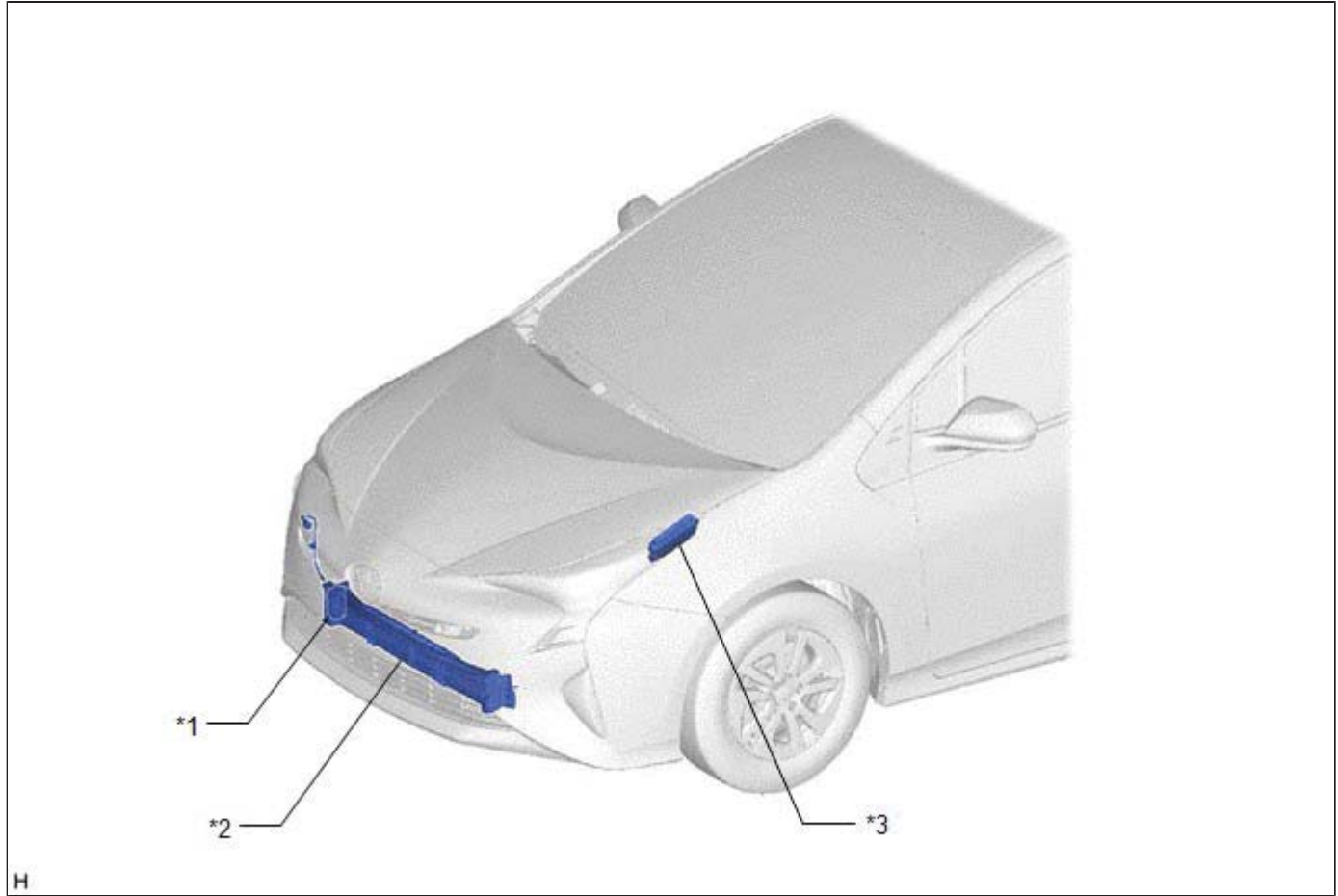


Last Modified: 01-14-2019	6.8:8.0.48	Doc ID: RM100000000STDW
Model Year Start: 2016	Model: Prius	Prod Date Range: [11/2015 - ]
Title: EXTERIOR PANELS / TRIM: GRILLE SHUTTER SYSTEM: PARTS LOCATION; 2016 - 2019 MY Prius [11/2015 - ]		

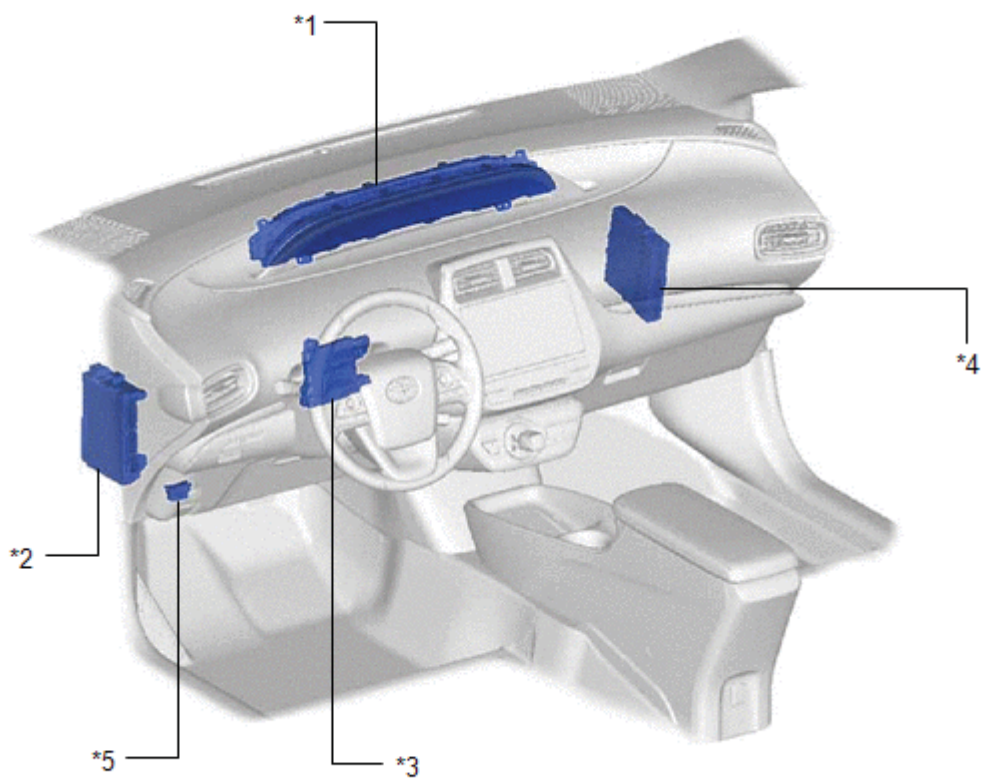
## PARTS LOCATION

## ILLUSTRATION



*1	SWING GRILL ACTUATOR ASSEMBLY	*2	RADIATOR SHUTTER SUB-ASSEMBLY
*3	ECM	-	-

## ILLUSTRATION



H

*1	COMBINATION METER ASSEMBLY	*2	INSTRUMENT PANEL JUNCTION BLOCK ASSEMBLY - ECU-B NO. 2 FUSE
*3	AIR CONDITIONING AMPLIFIER ASSEMBLY	*4	HYBRID VEHICLE CONTROL ECU
*5	DLC3	-	-




<b>Last Modified:</b> 01-14-2019	6.8:8.0.48	<b>Doc ID:</b> RM100000000STE7
<b>Model Year Start:</b> 2016	<b>Model:</b> Prius	<b>Prod Date Range:</b> [11/2015 - 12/2018]
<b>Title:</b> EXTERIOR PANELS / TRIM: GRILLE SHUTTER SYSTEM: PRECAUTION; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

## **PRECAUTION**

### **PRECAUTION FOR DISCONNECTING CABLE FROM NEGATIVE AUXILIARY BATTERY TERMINAL**

**NOTICE:**

When disconnecting the cable from the negative (-) auxiliary battery terminal, initialize the following systems after the cable is reconnected.

SYSTEM NAME	SEE PROCEDURE
Lane Departure Alert System (w/ Steering Control)	
Intelligent Clearance Sonar System	
Simple Advanced Parking Guidance System	
Pre-collision System	
Power Door Lock Control System	



<b>Last Modified:</b> 01-14-2019	6.8:8.0.48	<b>Doc ID:</b> RM100000000STDY
<b>Model Year Start:</b> 2016	<b>Model:</b> Prius	<b>Prod Date Range:</b> [11/2015 - ]
<b>Title:</b> EXTERIOR PANELS / TRIM: GRILLE SHUTTER SYSTEM: PROBLEM SYMPTOMS TABLE; 2016 - 2019 MY Prius [11/2015 - ]		

## PROBLEM SYMPTOMS TABLE

### NOTICE:

- Before performing troubleshooting, change the grille shutter control mode to maintenance mode.

Click here [INFO](#)

- If the swing grille actuator assembly has been replaced with a new one, perform initialization and change the grille shutter control mode.

Click here [INFO](#)

### HINT:

- Use the table below to help determine the cause of problem symptoms. If multiple suspected areas are listed, the potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.
- Inspect the fuses and relays related to this system before inspecting the suspected areas below.

SYMPTOM	SUSPECTED AREA	LINK
Grille shutter does not operate	Proceed to "Grille Shutter does not Operate"	<a href="#">INFO</a> <a href="#">INFO</a>
Abnormal noise occurs during grille shutter operation	Check for ice, etc. around the shutters and links	-
	Swing grill actuator assembly	<a href="#">INFO</a> <a href="#">INFO</a>
	Radiator shutter sub-assembly	<a href="#">INFO</a> <a href="#">INFO</a>



<b>Last Modified:</b> 01-14-2019	6.8:8.0.48	<b>Doc ID:</b> RM100000000STDZ
<b>Model Year Start:</b> 2016	<b>Model:</b> Prius	<b>Prod Date Range:</b> [11/2015 - ]
<b>Title:</b> EXTERIOR PANELS / TRIM: GRILLE SHUTTER SYSTEM: SYSTEM DESCRIPTION; 2016 - 2019 MY Prius [11/2015 - ]		

## SYSTEM DESCRIPTION

### GRILLE SHUTTER SYSTEM

#### (a) General description

The swing grill actuator assembly receives signals from the ECM, hybrid vehicle control ECU and air conditioning amplifier assembly via CAN communication. Based on these signals, the swing grill actuator assembly operates the radiator shutter sub-assembly.

If a malfunction occurs in the grille shutter system, a warning will be displayed on the multi-information display and grille shutter system operation will be disabled.

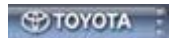
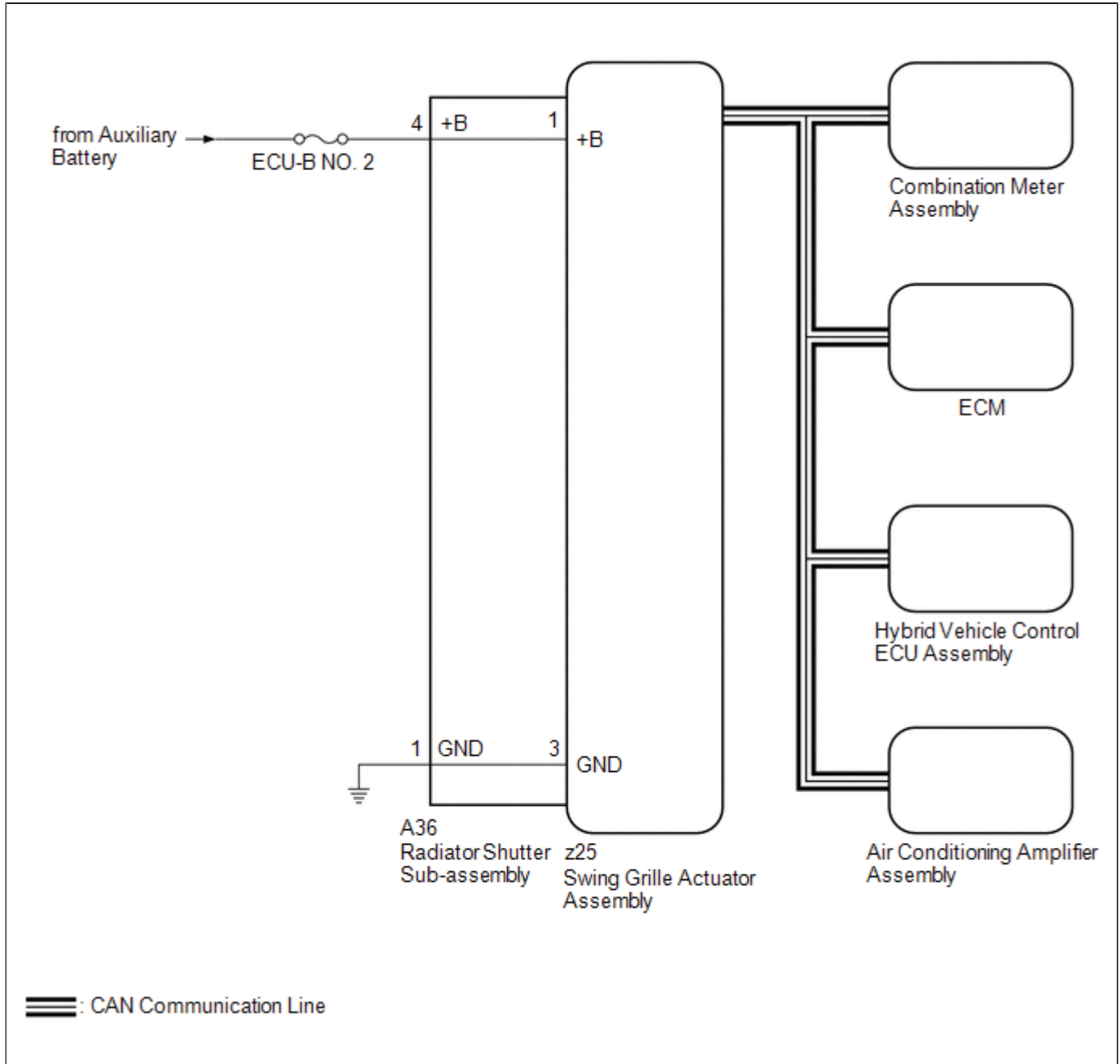
#### (b) Control List

CONTROL	DESCRIPTION
Closing Operation Control	The grille shutter closes when certain conditions related to the vehicle speed, engine coolant temperature, inverter coolant temperature, ambient temperature and refrigerant pressure are met.
Opening Operation Control	The grille shutter opens when certain conditions related to the vehicle speed, engine coolant temperature, inverter coolant temperature, ambient temperature and refrigerant pressure are met.
Power Switch Off-linked Opening Operation Control	Opens the grille shutter when the power switch is turned off in order to prevent the grille shutter from becoming stuck closed while the vehicle is stopped.
Brake (B) Shift State-linked Opening Control	Opens the grille shutter to assist braking when brake (B) is selected. This control is prohibited when the grille shutter is in winter control mode.
Winter Control Mode	Stops the grille shutter at a position other than the fully closed position and suspends grille shutter operation in order to prevent it from becoming stuck closed when the ambient temperature is 5°C (41°F) or lower. Winter control mode is canceled when the ambient temperature becomes 10°C (50°F) or higher.



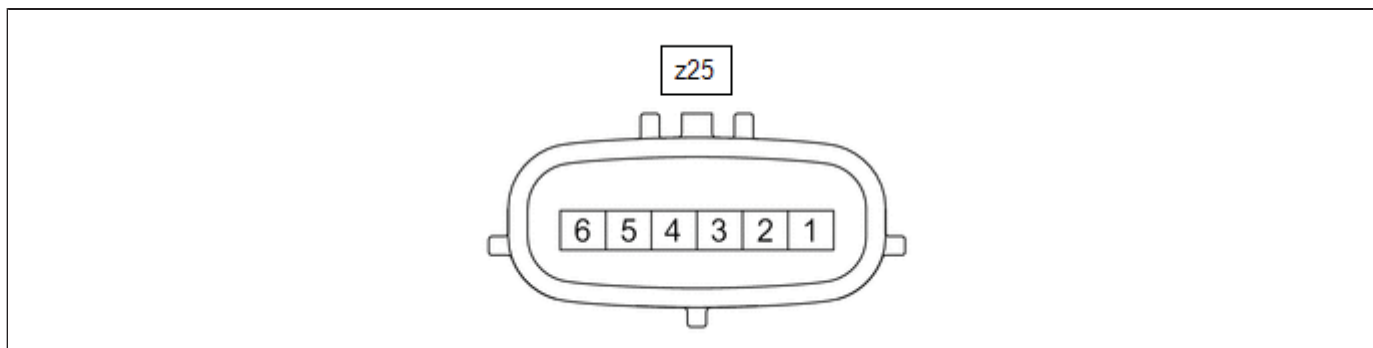
<b>Last Modified:</b> 01-14-2019	6.8:8.0.48	<b>Doc ID:</b> RM100000000STE1
<b>Model Year Start:</b> 2016	<b>Model:</b> Prius	<b>Prod Date Range:</b> [11/2015 - 12/2018]
<b>Title:</b> EXTERIOR PANELS / TRIM: GRILLE SHUTTER SYSTEM: SYSTEM DIAGRAM; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

## SYSTEM DIAGRAM



<b>Last Modified:</b> 01-14-2019	6.8:8.0.48	<b>Doc ID:</b> RM100000000STDx
<b>Model Year Start:</b> 2016	<b>Model:</b> Prius	<b>Prod Date Range:</b> [11/2015 - ]
<b>Title:</b> EXTERIOR PANELS / TRIM: GRILLE SHUTTER SYSTEM: TERMINALS OF ECU; 2016 - 2019 MY Prius [11/2015 - ]		

## TERMINALS OF ECU



### CHECK SWING GRILLE ACTUATOR ASSEMBLY

- Disconnect the z25 swing grille actuator assembly connector.
- Measure the voltage and resistance according to the value(s) in the table below.

#### HINT:

Measure the values on the wire harness side with the connector disconnected.

TESTER CONNECTION	WIRING COLOR	TERMINAL DESCRIPTION	CONDITION	SPECIFIED CONDITION
z25-1 (+B) - Body ground	-	Auxiliary battery power supply	Power switch off	11 to 14 V
z25-3 (GND) - Body ground	-	Ground	Always	Below 1 $\Omega$



<b>Last Modified:</b> 01-14-2019	6.8:8.0.48	<b>Doc ID:</b> RM100000000TCGN
<b>Model Year Start:</b> 2016	<b>Model:</b> Prius	<b>Prod Date Range:</b> [11/2015 - ]
<b>Title:</b> EXTERIOR PANELS / TRIM: GRILLE SHUTTER SYSTEM: U129387; Lost Communication between Hybrid Powertrain Control Module and Active Grille Air Shutter Missing Message; 2016 - 2019 MY Prius [11/2015 - ]		

<b>DTC</b>	<b>U129387</b>	<b>Lost Communication between Hybrid Powertrain Control Module and Active Grille Air Shutter Missing Message</b>
------------	----------------	--

## DESCRIPTION

This DTC is stored if a communication malfunction occurs between the hybrid vehicle control ECU and swing grille actuator assembly.

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA
U129387	Lost Communication between Hybrid Powertrain Control Module and Active Grille Air Shutter Missing Message	CAN communication malfunction between the hybrid vehicle control ECU and swing grill actuator assembly. (1 trip detection logic*)	<ul style="list-style-type: none"> <li>• CAN communication system</li> <li>• Swing grill actuator assembly</li> <li>• Radiator shutter sub-assembly</li> </ul>

\*: This malfunction is only detected when the power switch is on (IG).

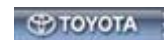
## PROCEDURE

<b>1.</b>	<b>CHECK FOR DTC</b>
-----------	----------------------

(a) Check for DTCs.

**Powertrain > Engine > Trouble Codes**

**NEXT**  **GO TO CAN COMMUNICATION SYSTEM**

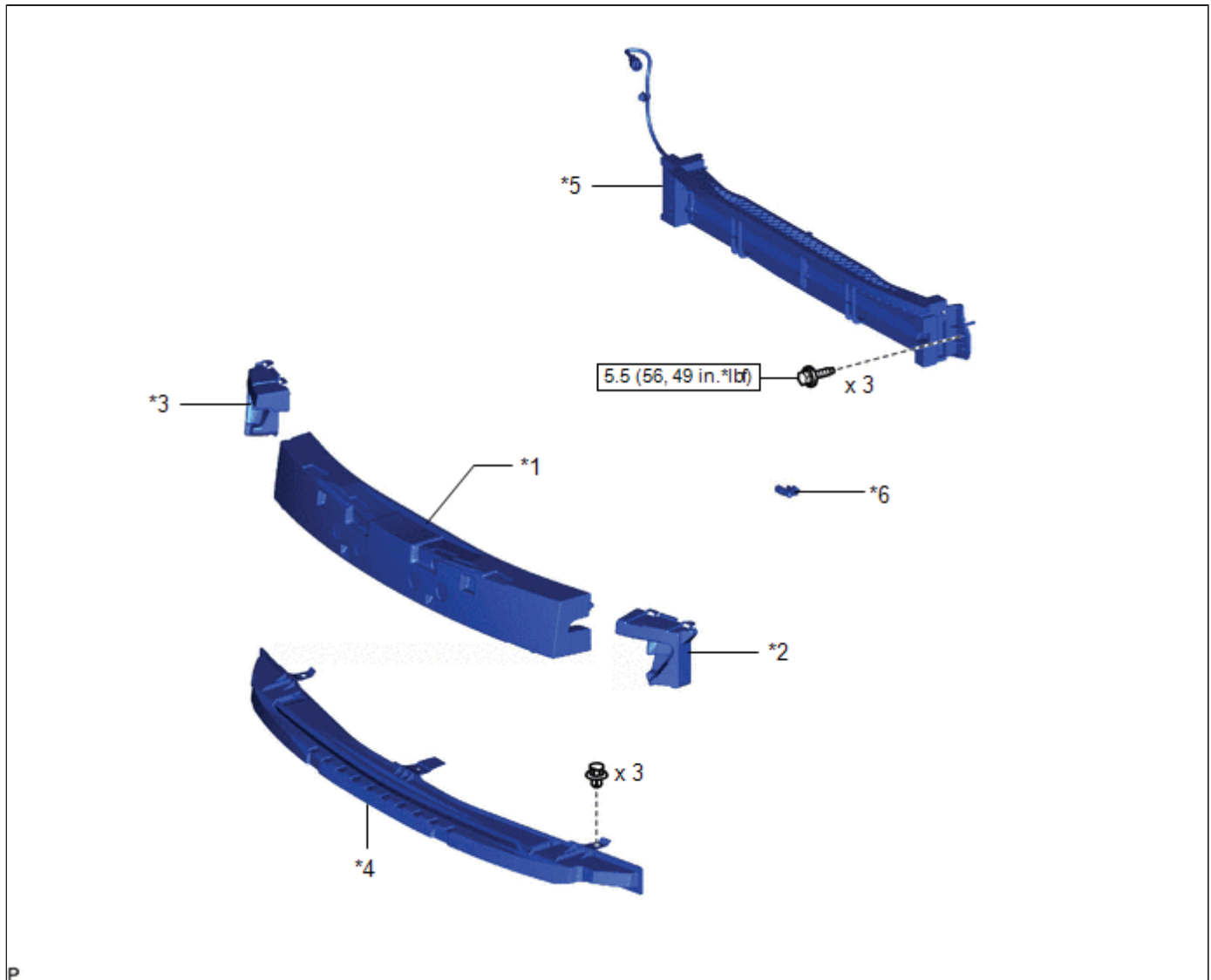




Last Modified: 01-14-2019	6.8:8.0.48	Doc ID: RM100000000S0KR
Model Year Start: 2016	Model: Prius	Prod Date Range: [11/2015 - 12/2018]
Title: EXTERIOR PANELS / TRIM: GRILLE SHUTTER: COMPONENTS; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

## COMPONENTS

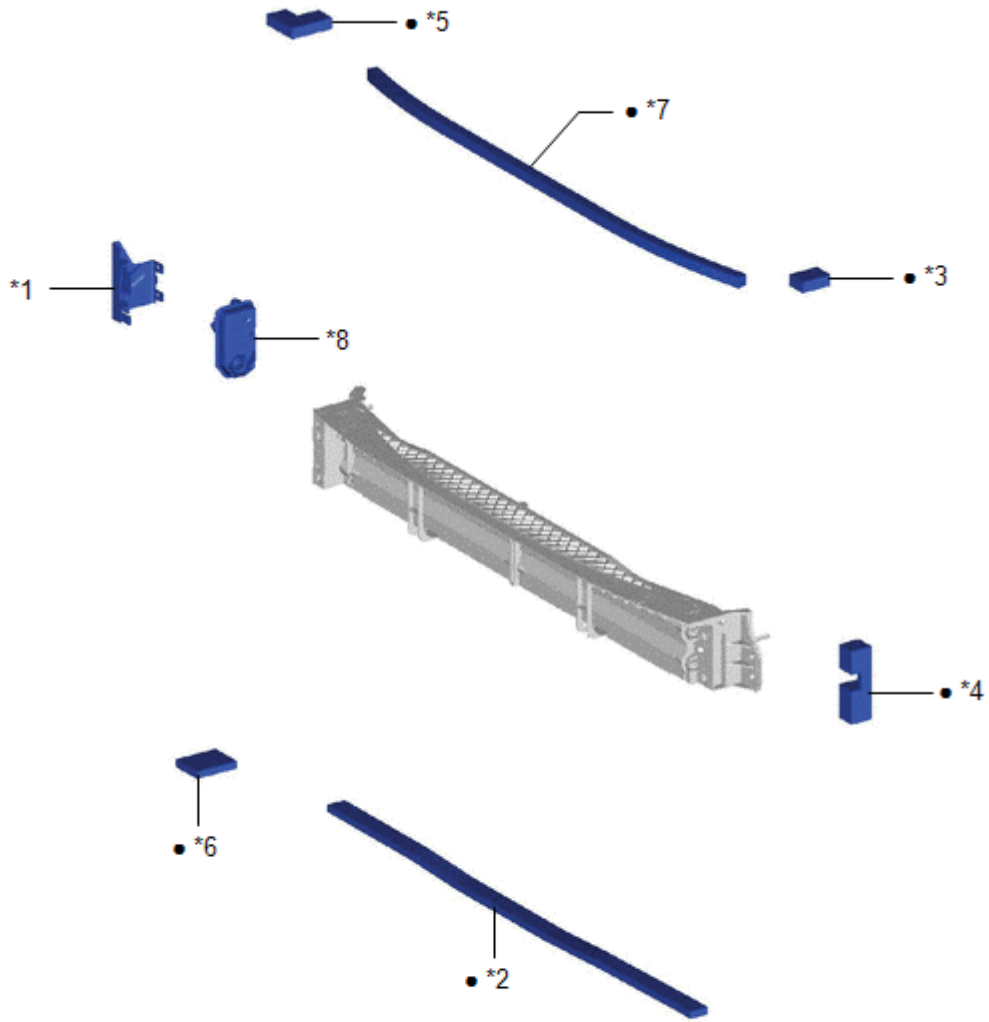
## ILLUSTRATION



*1	FRONT BUMPER ENERGY ABSORBER	*2	FRONT ENERGY ABSORBER MOUNTING REINFORCEMENT LH
*3	FRONT ENERGY ABSORBER MOUNTING REINFORCEMENT RH	*4	LOWER FRONT BUMPER ABSORBER
*5	RADIATOR SHUTTER SUB-ASSEMBLY	*6	THERMISTOR ASSEMBLY
	N*m (kgf*cm, ft.*lbf): Specified torque	-	-



## ILLUSTRATION



P

*1	MOTOR COVER	*2	NO. 2 RADIATOR GRILLE SEAL
*3	NO. 3 RADIATOR GRILLE SEAL	*4	NO. 4 RADIATOR GRILLE SEAL
*5	NO. 5 RADIATOR GRILLE SEAL	*6	NO. 6 RADIATOR GRILLE SEAL
*7	RADIATOR GRILLE SEAL	*8	SWING GRILLE ACTUATOR ASSEMBLY

•	Non-reusable part	-	-
---	-------------------	---	---



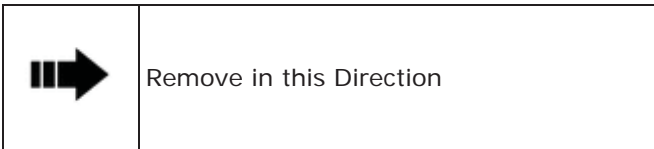
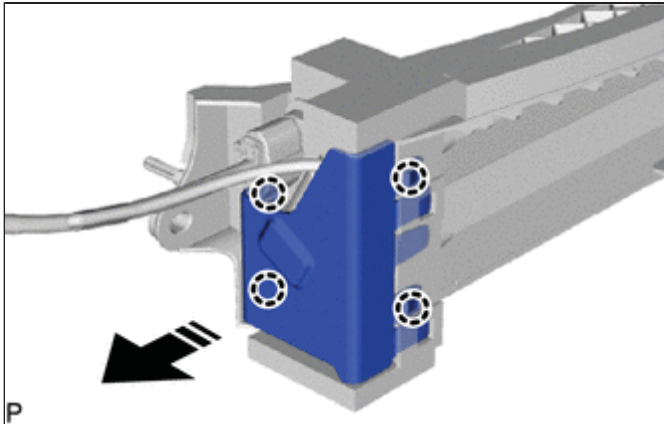
Last Modified: 01-14-2019	6.8:8.0.48	Doc ID: RM100000000SOKT
Model Year Start: 2016	Model: Prius	Prod Date Range: [11/2015 - 12/2018]
Title: EXTERIOR PANELS / TRIM: GRILLE SHUTTER: DISASSEMBLY; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

## DISASSEMBLY

### PROCEDURE

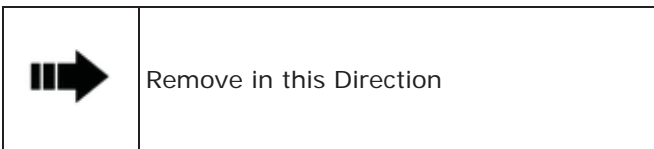
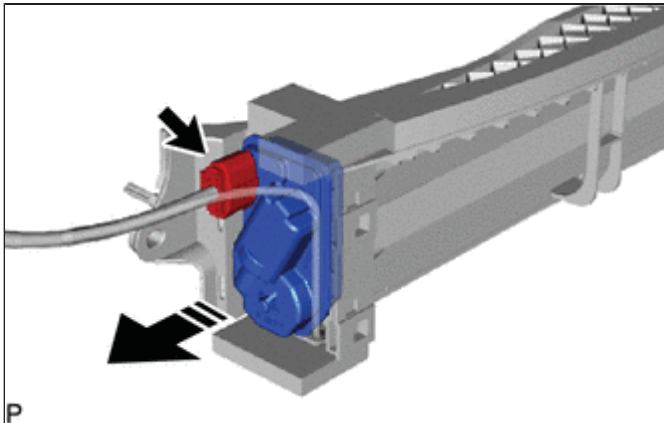
#### 1. REMOVE MOTOR COVER

(a) Disengage the 4 claws as shown in the illustration to remove the motor cover.



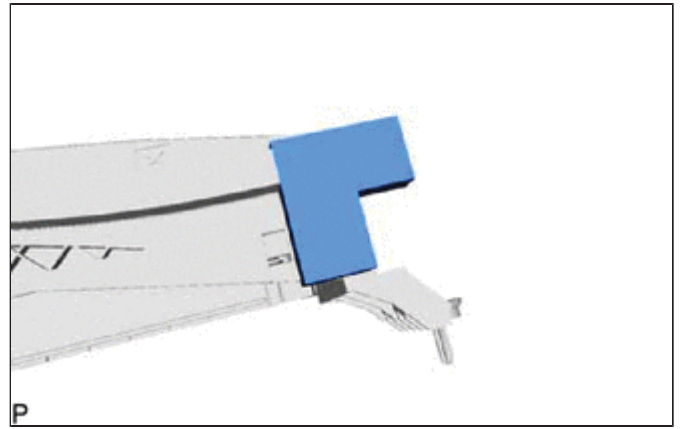
#### 2. REMOVE SWING GRILLE ACTUATOR ASSEMBLY

(a) Disconnect the connector and remove the swing grille actuator assembly as shown in the illustration.



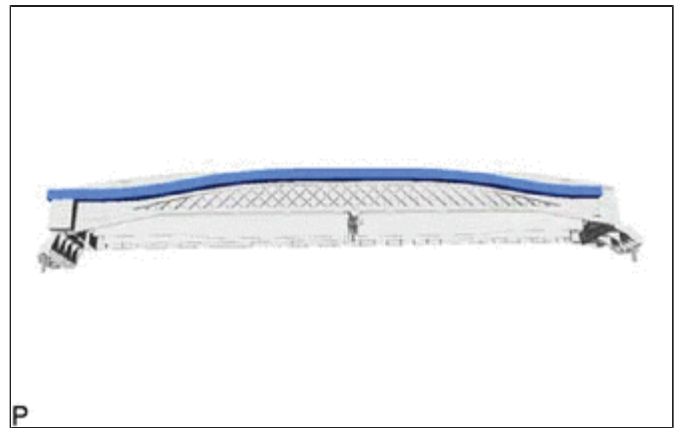
#### 3. REMOVE NO. 5 RADIATOR GRILLE SEAL

(a) Remove the No. 5 radiator grille seal.



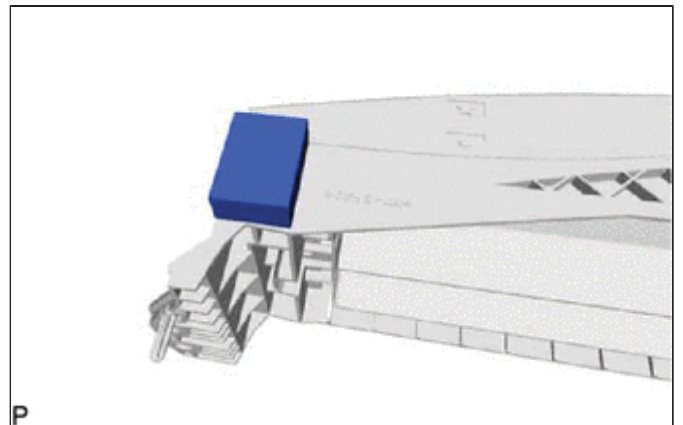
#### 4. REMOVE RADIATOR GRILLE SEAL

(a) Remove the radiator grille seal.



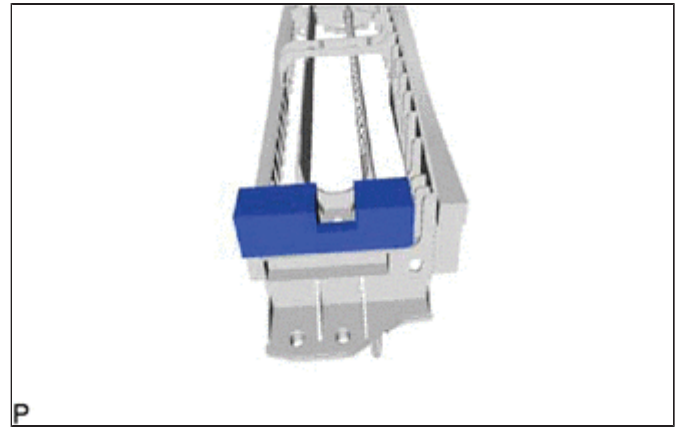
#### 5. REMOVE NO. 3 RADIATOR GRILLE SEAL

(a) Remove the No. 3 radiator grille seal.



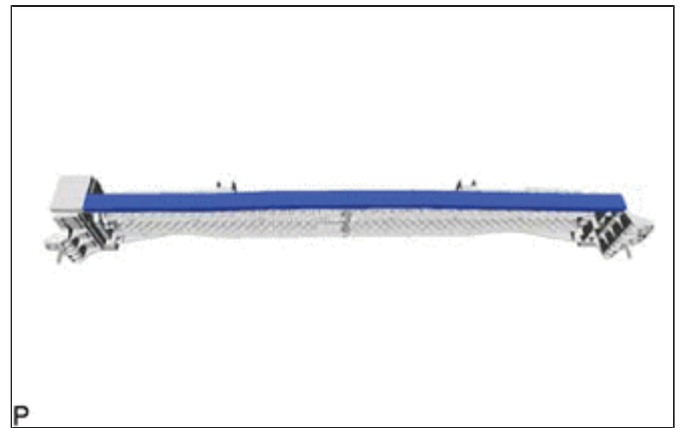
#### 6. REMOVE NO. 4 RADIATOR GRILLE SEAL

(a) Remove the No. 4 radiator grille seal.



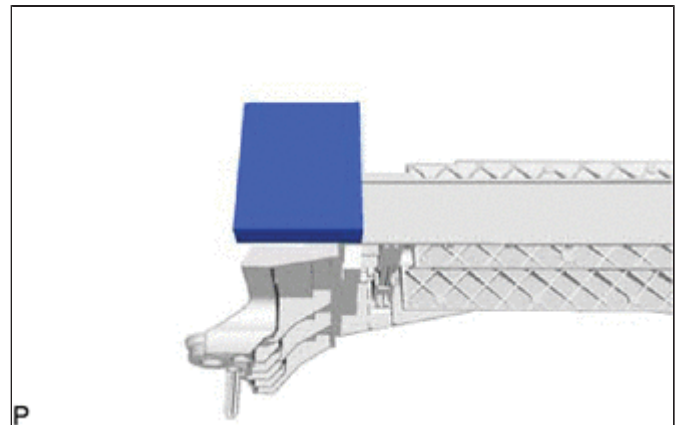
## 7. REMOVE NO. 2 RADIATOR GRILLE SEAL

(a) Remove the No. 2 radiator grille seal.



## 8. REMOVE NO. 6 RADIATOR GRILLE SEAL

(a) Remove the No. 6 radiator grille seal.



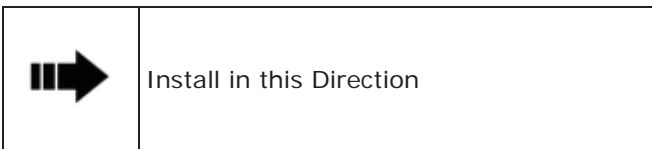
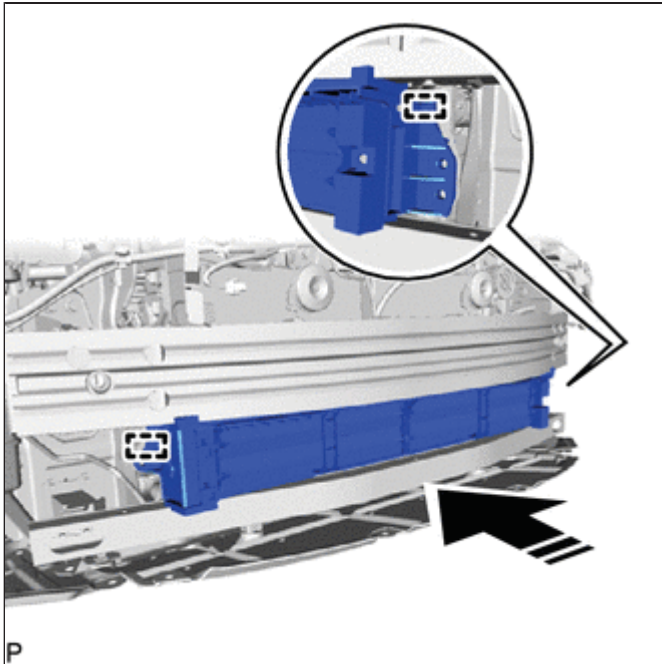
<b>Last Modified:</b> 01-14-2019	6.8:8.0.48	<b>Doc ID:</b> RM100000000SOKV
<b>Model Year Start:</b> 2016	<b>Model:</b> Prius	<b>Prod Date Range:</b> [11/2015 - 12/2018]
<b>Title:</b> EXTERIOR PANELS / TRIM: GRILLE SHUTTER: INSTALLATION; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

## INSTALLATION

### PROCEDURE

#### 1. INSTALL RADIATOR SHUTTER SUB-ASSEMBLY

(a) Engage the 2 guides as shown in the illustration.



(b) Install the radiator shutter sub-assembly with the 3 bolts.

**Torque:**

**5.5 N·m {56 kgf·cm, 49 in·lbf}**

(c) Engage the 2 clamps.

(d) Connect the connector.

#### 2. INSTALL THERMISTOR ASSEMBLY

Click here [INFO](#)

#### 3. INSTALL LOWER FRONT BUMPER ABSORBER

Click here [INFO](#)

#### 4. INSTALL FRONT BUMPER ENERGY ABSORBER

Click here [INFO](#)

#### 5. INSTALL FRONT ENERGY ABSORBER MOUNTING REINFORCEMENT LH

Click here [INFO](#)

## 6. INSTALL FRONT ENERGY ABSORBER MOUNTING REINFORCEMENT RH

### HINT:

Use the same procedure for the LH side.

## 7. INSTALL FRONT BUMPER ASSEMBLY

Click here [INFO](#)





Last Modified: 01-14-2019	6.8:8.0.48	Doc ID: RM100000000SOKU
Model Year Start: 2016	Model: Prius	Prod Date Range: [11/2015 - 12/2018]
Title: EXTERIOR PANELS / TRIM: GRILLE SHUTTER: REASSEMBLY; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

## REASSEMBLY

### PROCEDURE

#### 1. INSTALL NO. 5 RADIATOR GRILLE SEAL

**HINT:**

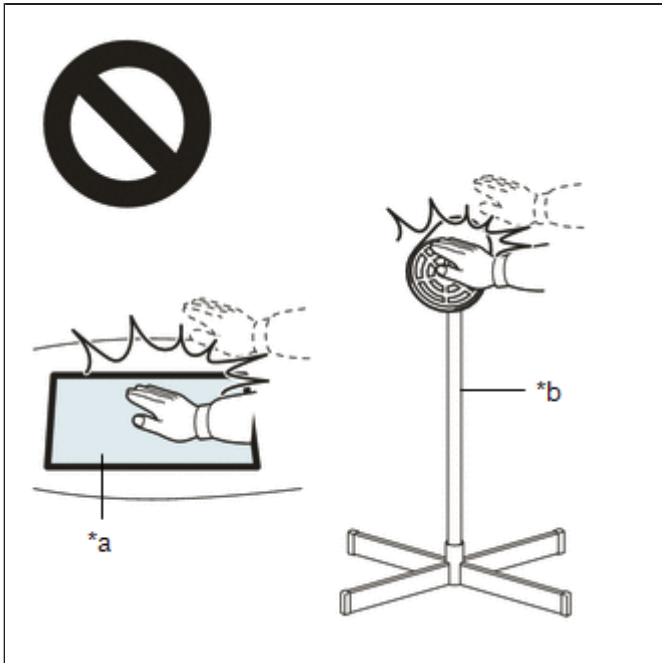
When installing the No. 5 radiator grille seal, heat the radiator shutter using a heat light.

**Heating Temperature**

ITEM	TEMPERATURE
Radiator Shutter	20 to 30°C (68 to 86°F)

**CAUTION:**

- Do not touch the heat light and heated parts, touching the heat light may result in burns.
- Touching heated parts for a long time may result in burns.



*a	Heated Part
*b	Heat Light

**NOTICE:**

Do not heat the radiator shutter excessively.

- Clean the radiator shutter surface.
  - Using a heat light, heat the radiator shutter surface.
  - Remove the double-sided tape from the radiator shutter.
  - Wipe off any tape adhesive residue with cleaner.

- (b) Using a heat light, heat the radiator shutter.
- (c) Remove the release paper from a new No. 5 radiator grille seal.

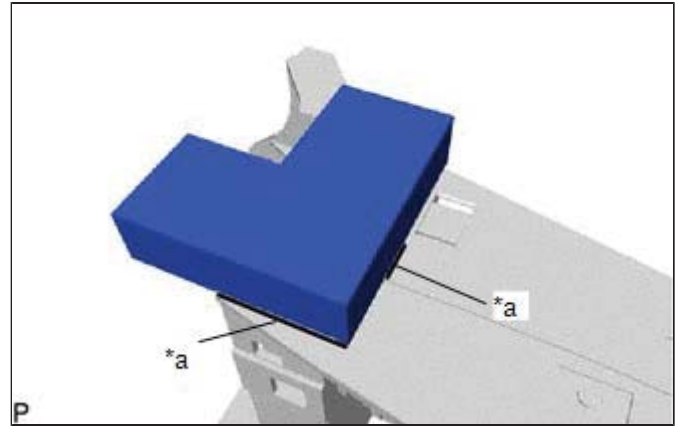
**HINT:**

After removing the release paper, keep the exposed adhesive free from foreign matter.

- (d) Install the No. 5 radiator grille seal as shown in the illustration.

**HINT:**

Install a No. 5 radiator grille seal along the line on the radiator shutter.



*a	Line
----	------

**2. INSTALL RADIATOR GRILLE SEAL**

**HINT:**

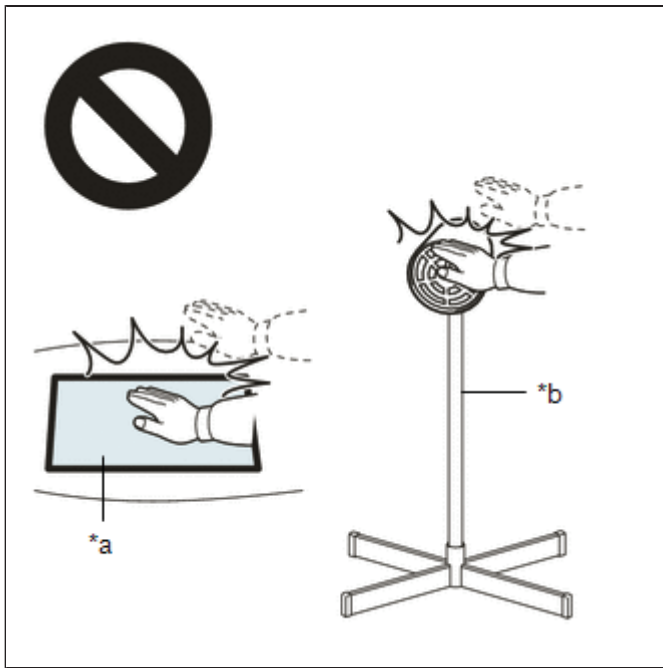
When installing the radiator grille seal, heat the radiator shutter using a heat light.

**Heating Temperature**

ITEM	TEMPERATURE
Radiator Shutter	20 to 30°C (68 to 86°F)

**CAUTION:**

- Do not touch the heat light and heated parts, touching the heat light may result in burns.
- Touching heated parts for a long time may result in burns.



*a	Heated Part
*b	Heat Light

**NOTICE:**

Do not heat the radiator shutter excessively.

- (a) Clean the radiator shutter surface.
  - (1) Using a heat light, heat the radiator shutter surface.
  - (2) Remove the double-sided tape from the radiator shutter.
  - (3) Wipe off any tape adhesive residue with cleaner.
- (b) Using a heat light, heat the radiator shutter.
- (c) Remove the release paper from a new radiator grille seal.

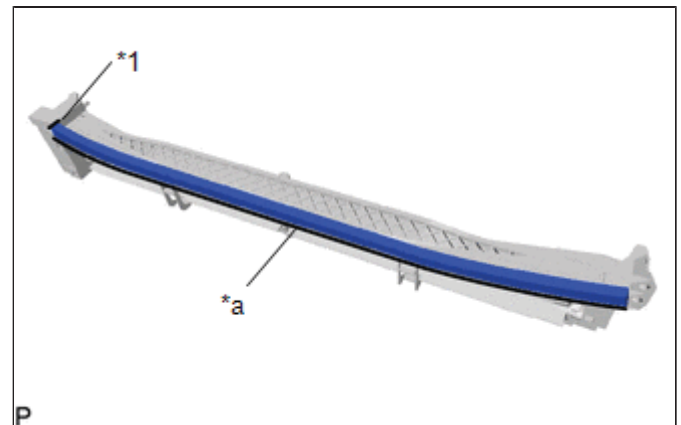
**HINT:**

After removing the release paper, keep the exposed adhesive free from foreign matter.

- (d) Install the radiator grille seal as shown in the illustration.

**HINT:**

Install a radiator grille seal along the line on the radiator shutter.



*1	No. 5 Radiator Grille Seal
*a	Line

### 3. INSTALL NO. 3 RADIATOR GRILLE SEAL

#### HINT:

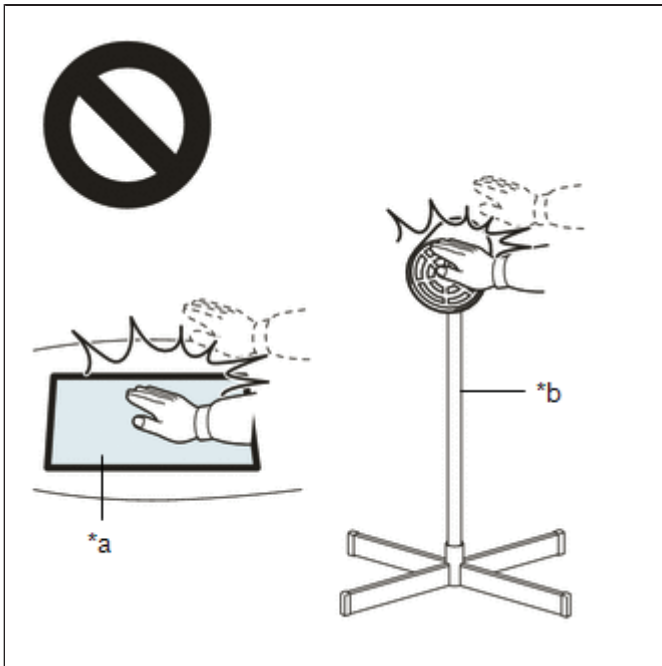
When installing the No. 3 radiator grille seal, heat the radiator shutter using a heat light.

#### Heating Temperature

ITEM	TEMPERATURE
Radiator Shutter	20 to 30°C (68 to 86°F)

#### CAUTION:

- Do not touch the heat light and heated parts, touching the heat light may result in burns.
- Touching heated parts for a long time may result in burns.



*a	Heated Part
*b	Heat Light

#### NOTICE:

Do not heat the radiator shutter excessively.

- (a) Clean the radiator shutter surface.
  - (1) Using a heat light, heat the radiator shutter surface.
  - (2) Remove the double-sided tape from the radiator shutter.
  - (3) Wipe off any tape adhesive residue with cleaner.
- (b) Using a heat light, heat the radiator shutter.
- (c) Remove the release paper from a new No. 3 radiator grille seal.

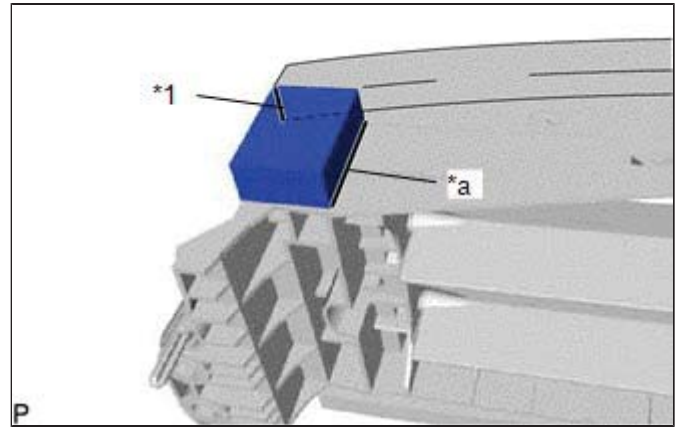
#### HINT:

After removing the release paper, keep the exposed adhesive free from foreign matter.

(d) Install the No. 3 radiator grille seal as shown in the illustration.

**HINT:**

Install a No. 3 radiator grille seal along the line on the radiator shutter.



*1	Radiator Grille Seal
*a	Line

**4. INSTALL NO. 4 RADIATOR GRILLE SEAL**

**HINT:**

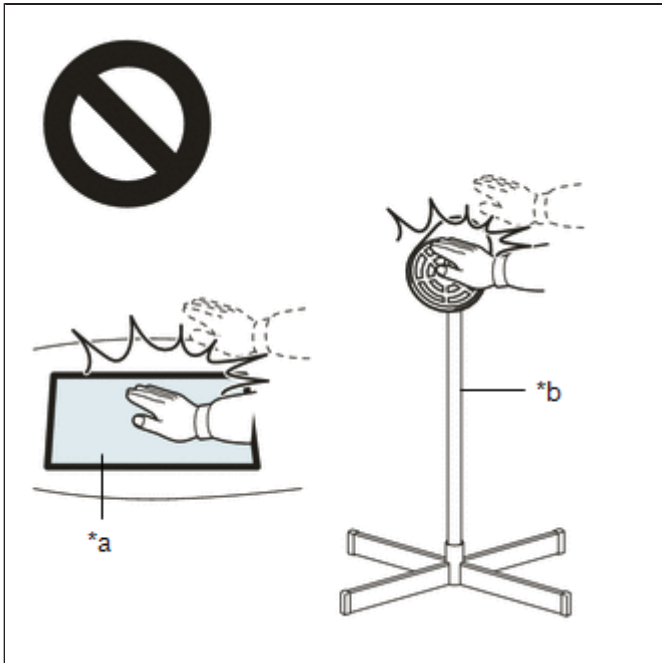
When installing the No. 4 radiator grille seal, heat the radiator shutter using a heat light.

**Heating Temperature**

ITEM	TEMPERATURE
Radiator Shutter	20 to 30°C (68 to 86°F)

**CAUTION:**

- Do not touch the heat light and heated parts, touching the heat light may result in burns.
- Touching heated parts for a long time may result in burns.



*a	Heated Part
*b	Heat Light

**NOTICE:**

Do not heat the radiator shutter excessively.

- (a) Clean the radiator shutter surface.
  - (1) Using a heat light, heat the radiator shutter surface.
  - (2) Remove the double-sided tape from the radiator shutter.
  - (3) Wipe off any tape adhesive residue with cleaner.
- (b) Using a heat light, heat the radiator shutter.
- (c) Remove the release paper from a new No. 4 radiator grille seal.

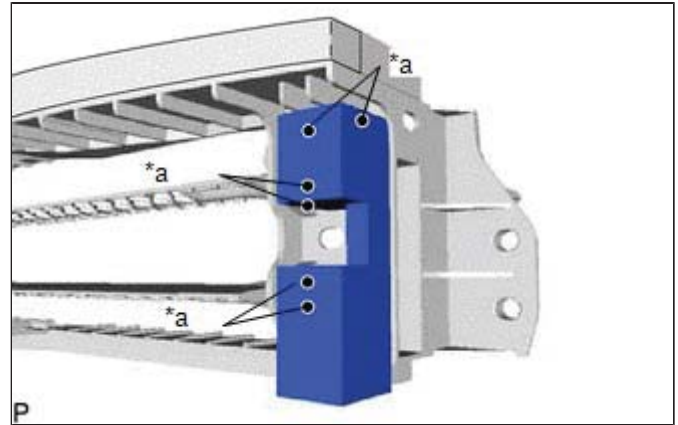
**HINT:**

After removing the release paper, keep the exposed adhesive free from foreign matter.

- (d) Install the No. 4 radiator grille seal as shown in the illustration.

**HINT:**

Install a No. 4 radiator grille seal along the edge of radiator shutter surface.



*a	Edge of Radiator Shutter Surface
----	----------------------------------

**5. INSTALL NO. 6 RADIATOR GRILLE SEAL**

**HINT:**

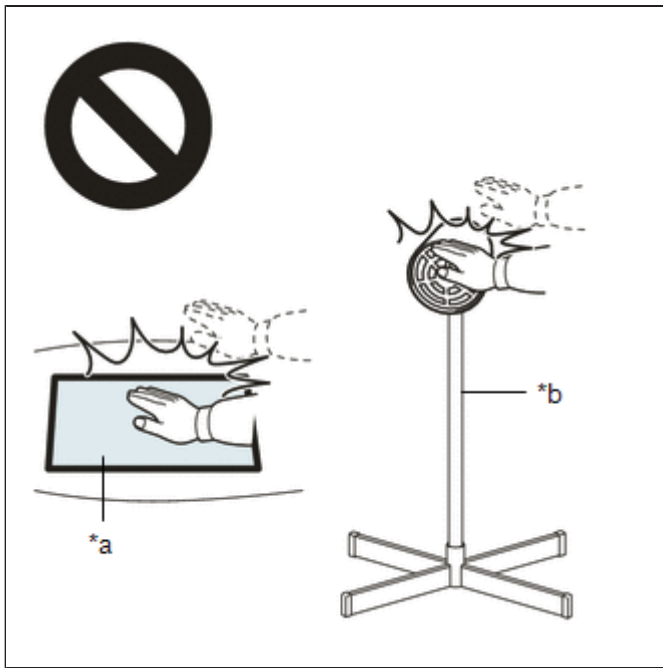
When installing the No. 6 radiator grille seal, heat the radiator shutter using a heat light.

**Heating Temperature**

ITEM	TEMPERATURE
Radiator Shutter	20 to 30°C (68 to 86°F)

**CAUTION:**

- Do not touch the heat light and heated parts, touching the heat light may result in burns.
- Touching heated parts for a long time may result in burns.



*a	Heated Part
*b	Heat Light

**NOTICE:**

Do not heat the radiator shutter excessively.

- (a) Clean the radiator shutter surface.
  - (1) Using a heat light, heat the radiator shutter surface.
  - (2) Remove the double-sided tape from the radiator shutter.
  - (3) Wipe off any tape adhesive residue with cleaner.
- (b) Using a heat light, heat the radiator shutter.
- (c) Remove the release paper from a new No. 6 radiator grille seal.

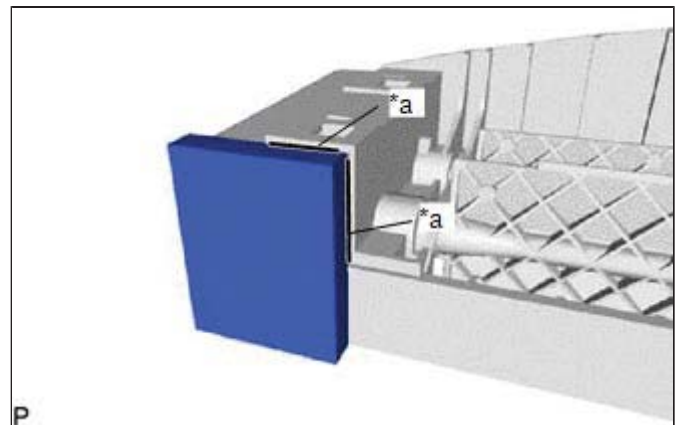
**HINT:**

After removing the release paper, keep the exposed adhesive free from foreign matter.

- (d) Install the No. 6 radiator grille seal as shown in the illustration.

**HINT:**

Install a No. 6 radiator grille seal along the line on the radiator shutter.



*a	Line
----	------

**6. INSTALL NO. 2 RADIATOR GRILLE SEAL**

**HINT:**

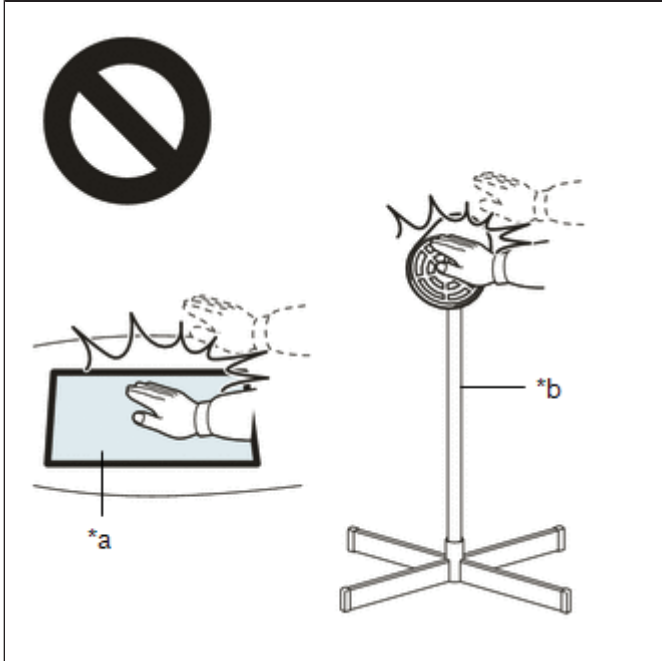
When installing the No. 2 radiator grille seal, heat the radiator shutter using a heat light.

**Heating Temperature**

ITEM	TEMPERATURE
Radiator Shutter	20 to 30°C (68 to 86°F)

**CAUTION:**

- Do not touch the heat light and heated parts, touching the heat light may result in burns.
- Touching heated parts for a long time may result in burns.



*a	Heated Part
*b	Heat Light

**NOTICE:**

Do not heat the radiator shutter excessively.

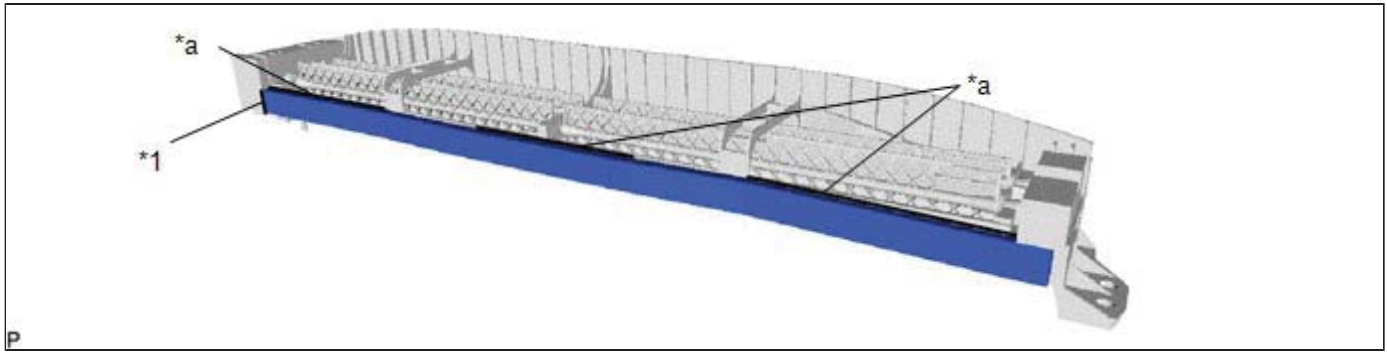
- (a) Clean the radiator shutter surface.
- (1) Using a heat light, heat the radiator shutter surface.
  - (2) Remove the double-sided tape from the radiator shutter.
  - (3) Wipe off any tape adhesive residue with cleaner.
- (b) Using a heat light, heat the radiator shutter.
- (c) Remove the release paper from a new No. 2 radiator grille seal.

**HINT:**

After removing the release paper, keep the exposed adhesive free from foreign matter.

- (d) Install the No. 2 radiator grille seal as shown in the illustration.





*1	No. 6 Radiator Grille Seal	*a	Line
----	----------------------------	----	------

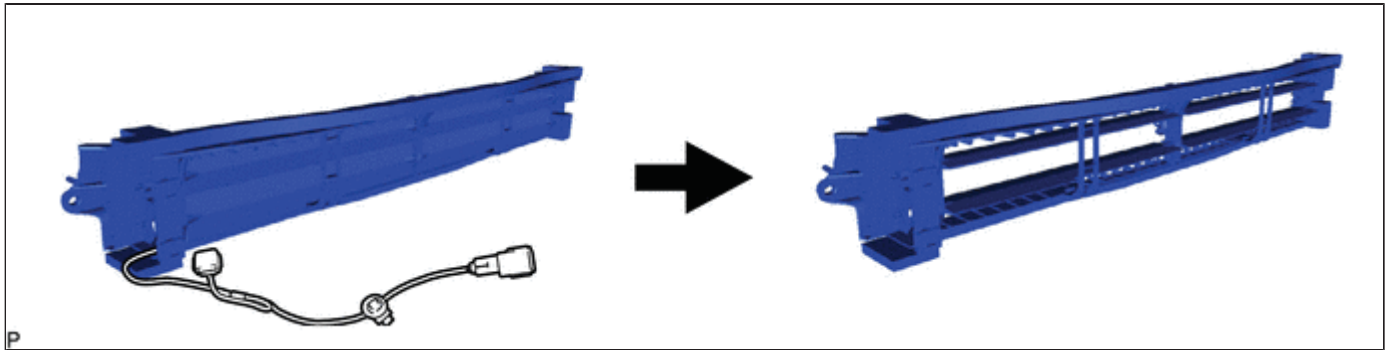
**HINT:**

Install a No. 2 radiator grille seal along the line on the radiator shutter.

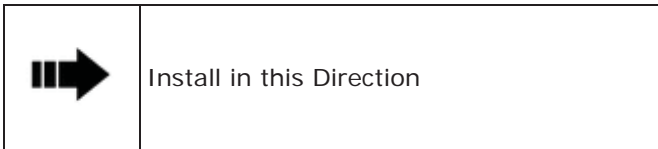
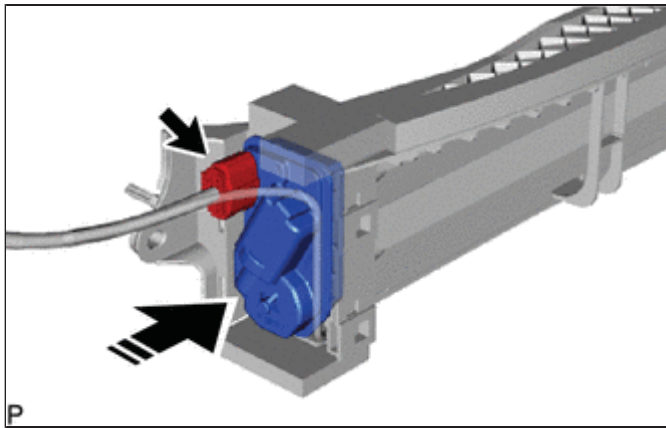
**7. INSTALL SWING GRILLE ACTUATOR ASSEMBLY**

(a) When installing a new swing grille actuator assembly:

(1) Open the grille shutter fin as shown in the illustration.



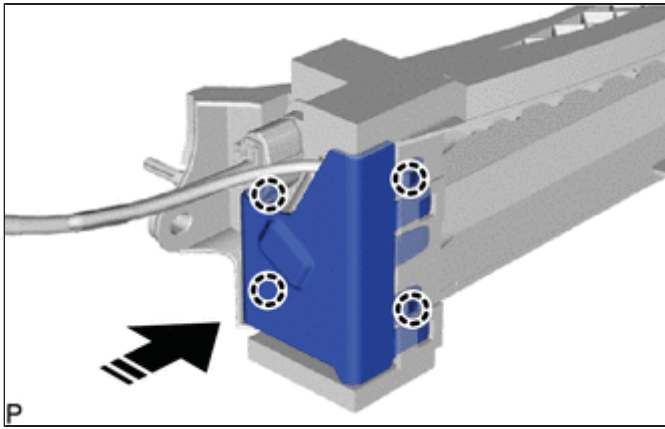
(b) Install the swing grille actuator assembly as shown in the illustration.




(c) Connect the connector.

**8. INSTALL MOTOR COVER**

(a) Engage the 4 claws as shown in the illustration to install the motor cover.



	Install in this Direction
--	---------------------------



<b>Last Modified:</b> 01-14-2019	6.8:8.0.48	<b>Doc ID:</b> RM100000000S0KS
<b>Model Year Start:</b> 2016	<b>Model:</b> Prius	<b>Prod Date Range:</b> [11/2015 - 12/2018]
<b>Title:</b> EXTERIOR PANELS / TRIM: GRILLE SHUTTER: REMOVAL; 2016 - 2018 MY Prius [11/2015 - 12/2018]		

## REMOVAL

### CAUTION / NOTICE / HINT

The necessary procedures (adjustment, calibration, initialization, or registration) that must be performed after parts are removed and installed, or replaced during grille shutter removal/installation are shown below.

#### Necessary Procedure After Parts Removed/Installed/Replaced

REPLACED PART OR PERFORMED PROCEDURE	NECESSARY PROCEDURE	EFFECT/INOPERATIVE FUNCTION WHEN NECESSARY PROCEDURE NOT PERFORMED	LINK
Front bumper assembly	<ul style="list-style-type: none"> <li>Ultrasonic sensor detection angle (w/ Intuitive Parking Assist System)</li> <li>Ultrasonic sensor detection angle registration (w/ Intuitive Parking Assist System)</li> </ul>	<ul style="list-style-type: none"> <li>Intelligent clearance sonar system</li> <li>Simple advanced parking guidance system</li> </ul>	<a href="#">INFO</a>
	Change grille shutter control mode and/or perform initialization	Grille Shutter system	<a href="#">INFO</a>
<ul style="list-style-type: none"> <li>Swing grill actuator assembly</li> <li>Radiator shutter sub-assembly</li> </ul>	Change grille shutter control mode and/or perform initialization	Grille Shutter system	<a href="#">INFO</a>

## PROCEDURE

### 1. REMOVE FRONT BUMPER ASSEMBLY

Click here [INFO](#)

### 2. REMOVE FRONT ENERGY ABSORBER MOUNTING REINFORCEMENT LH

Click here [INFO](#)

### 3. REMOVE FRONT ENERGY ABSORBER MOUNTING REINFORCEMENT RH

#### HINT:

Use the same procedure for the LH side.

### 4. REMOVE FRONT BUMPER ENERGY ABSORBER

Click here [INFO](#)

### 5. REMOVE LOWER FRONT BUMPER ABSORBER

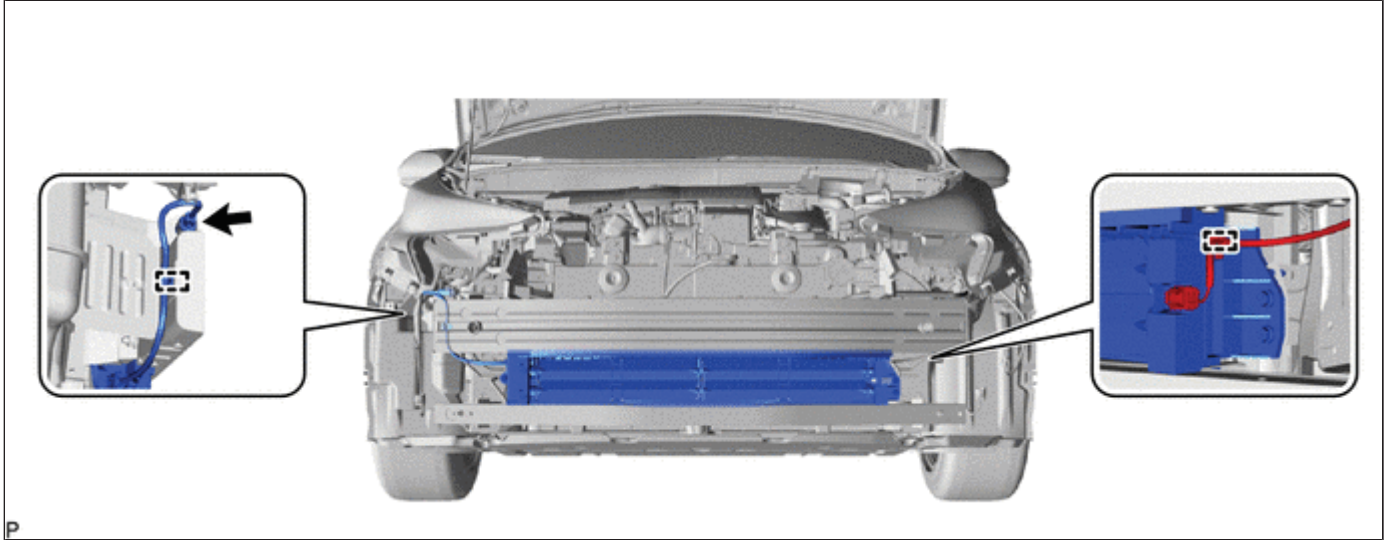
Click here [INFO](#)

## 6. REMOVE THERMISTOR ASSEMBLY

Click here [INFO](#)

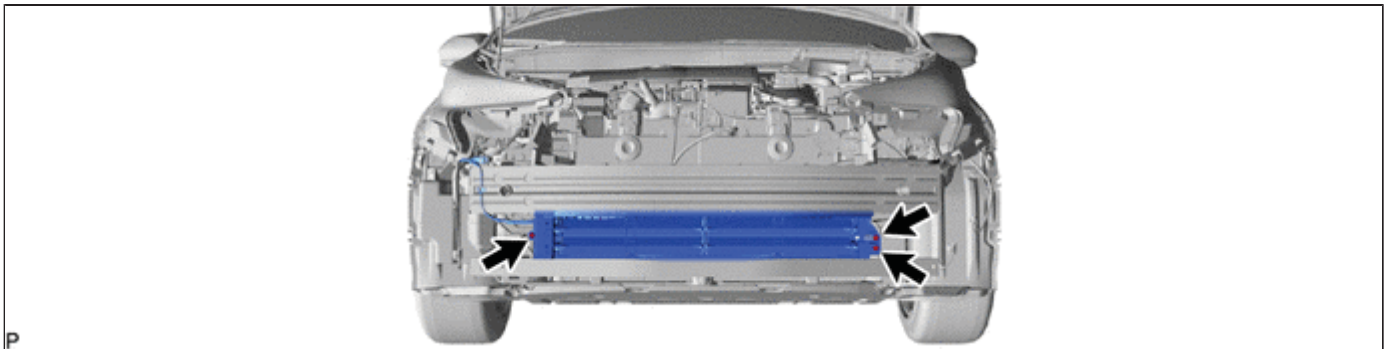
## 7. REMOVE RADIATOR SHUTTER SUB-ASSEMBLY

(a) Disconnect the connector.

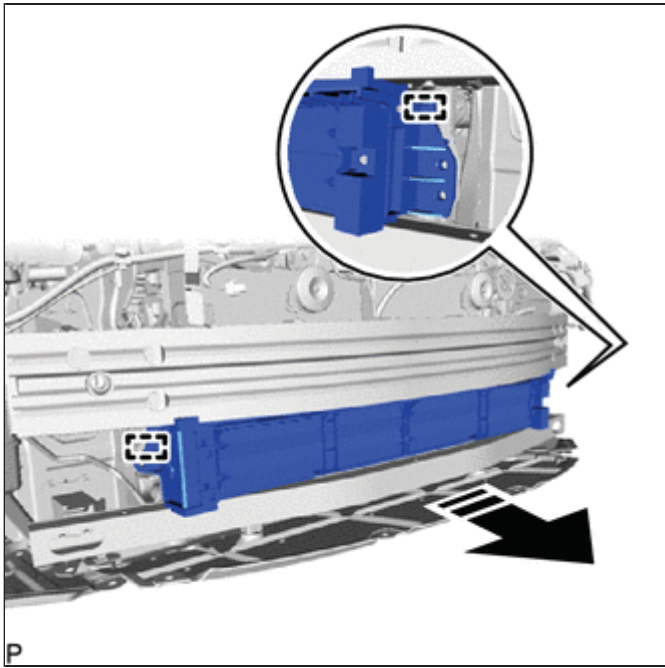



(b) Disengage the 2 clamps.

(c) Remove the 3 bolts.



(d) Disengage the 2 guides as shown in the illustration to remove the radiator shutter sub-assembly.



	Remove in this Direction
--	--------------------------

