

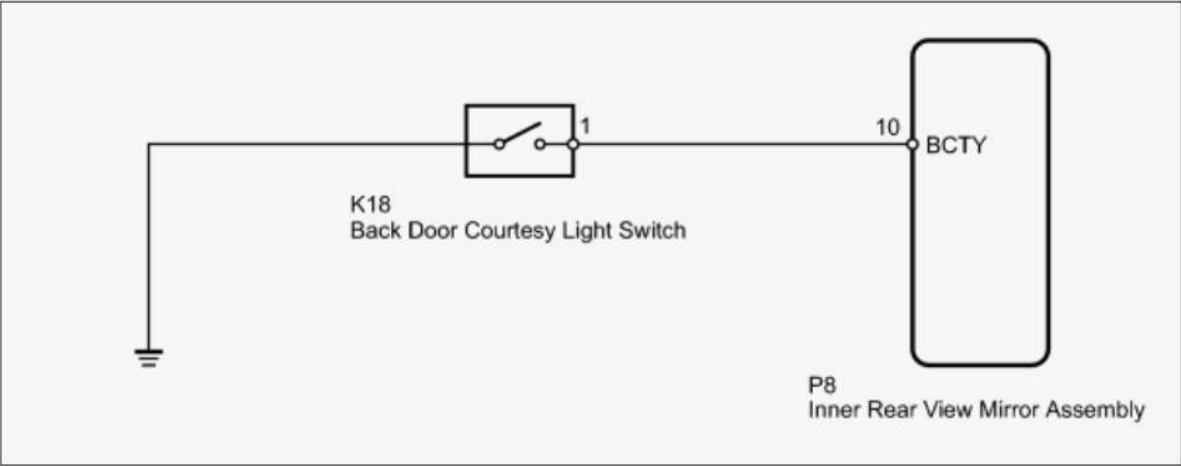
|                                                                                                          |             |                         |
|----------------------------------------------------------------------------------------------------------|-------------|-------------------------|
| Last Modified: 9-7-2011                                                                                  | 6.4 J       | From: 201008            |
| Model Year: 2011                                                                                         | Model: RAV4 | Doc ID: RM000003PCF002X |
| Title: PARK ASSIST / MONITORING: REAR VIEW MONITOR SYSTEM: Back Door Courtesy Switch Circuit (2011 RAV4) |             |                         |

Back Door Courtesy Switch Circuit

DESCRIPTION

The inner rear view mirror assembly receives a back door condition signal from the back door courtesy light switch.

WIRING DIAGRAM



INSPECTION PROCEDURE

PROCEDURE

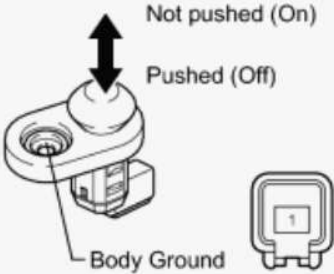
|    |                                         |
|----|-----------------------------------------|
| 1. | INSPECT BACK DOOR COURTESY LIGHT SWITCH |
|----|-----------------------------------------|

- (a) Remove the back door courtesy light switch INFO .
- (b) Measure the resistance according to the value(s) in the table below.

Standard Resistance:

| TESTER CONNECTION | CONDITION | SPECIFIED CONDITION |
|-------------------|-----------|---------------------|
|-------------------|-----------|---------------------|

Component without harness connected:  
(Back Door Courtesy Light Switch)



| TESTER CONNECTION   | CONDITION       | SPECIFIED CONDITION |
|---------------------|-----------------|---------------------|
| K18-1 - Body ground | Not pushed (On) | Below 1 Ω           |
| K18-1 - Body ground | Pushed (Off)    | 10 kΩ or higher     |

**NG** **▶** REPLACE  
BACK DOOR  
COURTESY  
LIGHT  
SWITCH

**OK**  
**▼**

2.

**CHECK HARNESS AND CONNECTOR (INNER REAR VIEW MIRROR ASSEMBLY - BACK DOOR COURTESY LIGHT SWITCH)**

- (a) Disconnect the P8 inner rear view mirror assembly connector.
- (b) Disconnect the K18 back door courtesy light switch connector.
- (c) Measure the resistance according to the value(s) in the table below.

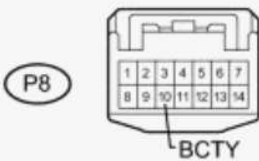
Standard Resistance:

| TESTER CONNECTION          | CONDITION | SPECIFIED CONDITION |
|----------------------------|-----------|---------------------|
| P8-10 (BCTY) - K18-1       | Always    | Below 1 Ω           |
| P8-10 (BCTY) - Body ground | Always    | 10 kΩ higher        |

**NG** **▶** REPAIR OR  
REPLACE  
HARNESS  
OR  
CONNECTOR

**OK** **▶** PROCEED TO  
NEXT  
SUSPECTED  
AREA  
SHOWN IN

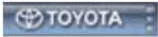
Front view of wire harness connector:  
(to Inner Rear View Mirror Assembly)



Front view of wire harness connector:  
(to Back Door Courtesy Light Switch)



**PROBLEM  
SYMPTOMS  
TABLE**



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|                                                                                                            |             |                         |
|------------------------------------------------------------------------------------------------------------|-------------|-------------------------|
| Last Modified: 9-7-2011                                                                                    | 6.4 D       | From: 201008            |
| Model Year: 2011                                                                                           | Model: RAV4 | Doc ID: RM000003PC8002X |
| Title: PARK ASSIST / MONITORING: REAR VIEW MONITOR SYSTEM: HOW TO PROCEED WITH TROUBLESHOOTING (2011 RAV4) |             |                         |

HOW TO PROCEED WITH TROUBLESHOOTING

HINT:

Use these procedures to troubleshoot the rear view monitor system.

1. VEHICLE BROUGHT TO WORKSHOP

NEXT



2. INSPECT BATTERY VOLTAGE

Standard voltage:  
11 to 14 V

If the voltage is below 11 V, replace or recharge the battery before proceeding.

NEXT



3. CUSTOMER PROBLEM ANALYSIS

NEXT



4. PROBLEM SYMPTOM CONFIRMATION

NEXT

▼

5.

PROBLEM SYMPTOMS TABLE

(a) Refer to Problem Symptoms Table [INFO](#) .

Result

| RESULT                                        | PROCEED TO |
|-----------------------------------------------|------------|
| Fault is not listed in Problem Symptoms Table | A          |
| Fault is listed in Problem Symptoms Table     | B          |

**B** ▶ Go to step 7

A

▼

6.

OVERALL ANALYSIS AND TROUBLESHOOTING

(a) Terminals of ECU [INFO](#) .

NEXT

▼

7.

ADJUST, REPAIR OR REPLACE

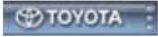
NEXT

▼

|  |  |
|--|--|
|  |  |
|--|--|

8. CONFIRMATION TEST

NEXT  END



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|                                                                                                                    |             |                         |
|--------------------------------------------------------------------------------------------------------------------|-------------|-------------------------|
| Last Modified: 9-7-2011                                                                                            | 6.4 J       | From: 201008            |
| Model Year: 2011                                                                                                   | Model: RAV4 | Doc ID: RM000003PCH002X |
| Title: PARK ASSIST / MONITORING: REAR VIEW MONITOR SYSTEM: Inner Rear View Mirror Power Source Circuit (2011 RAV4) |             |                         |

Inner Rear View Mirror Power Source Circuit

DESCRIPTION

This is the power source circuit of the inner rear view mirror assembly.

WIRING DIAGRAM



INSPECTION PROCEDURE

**NOTICE:**  
Inspect the fuses for circuits related to this system before performing the following inspection procedure.

PROCEDURE

|    |                                                                                         |
|----|-----------------------------------------------------------------------------------------|
| 1. | CHECK HARNESS AND CONNECTOR (INNER REAR VIEW MIRROR ASSEMBLY - BATTERY AND BODY GROUND) |
|----|-----------------------------------------------------------------------------------------|

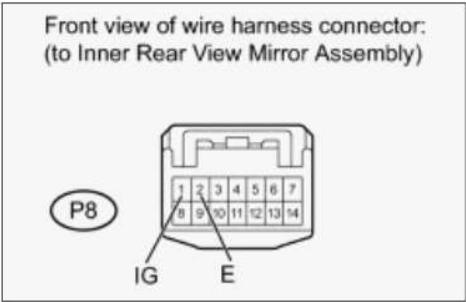
- (a) Disconnect the P8 inner rear view mirror assembly connector.
- (b) Measure the voltage according to the value(s) in the table below.

Standard Voltage:

| TESTER CONNECTION       | SWITCH CONDITION   | SPECIFIED CONDITION |
|-------------------------|--------------------|---------------------|
| P8-1 (IG) - Body ground | Ignition switch ON | 11 to 14 V          |

(c) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



| TESTER CONNECTION      | CONDITION | SPECIFIED CONDITION |
|------------------------|-----------|---------------------|
| P8-2 (E) - Body ground | Always    | Below 1 Ω           |

**NG** ► **REPAIR OR REPLACE HARNESS OR CONNECTOR**

**OK** ► **PROCEED TO NEXT SUSPECTED AREA SHOWN IN PROBLEM SYMPTOMS TABLE**



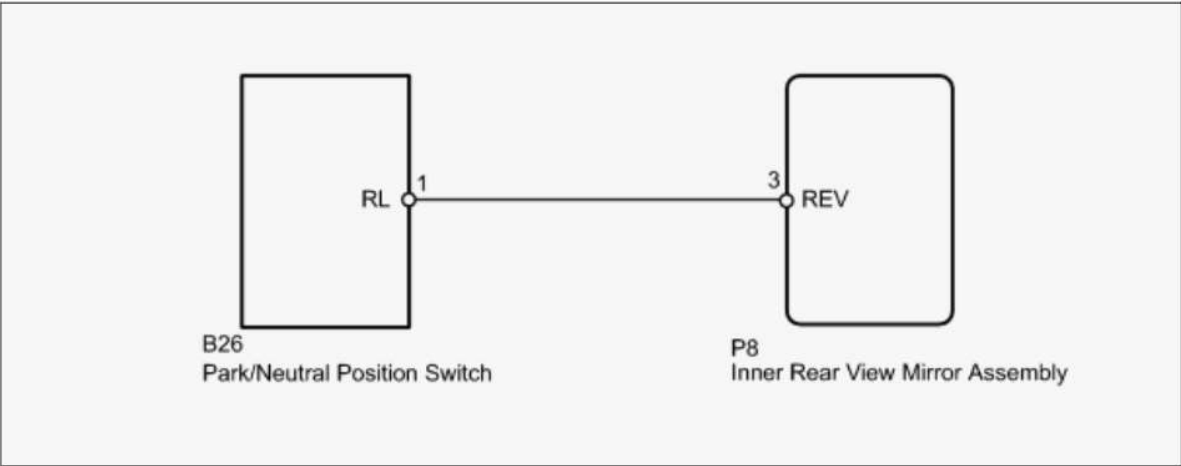
|                                                                                                               |             |                         |
|---------------------------------------------------------------------------------------------------------------|-------------|-------------------------|
| Last Modified: 9-7-2011                                                                                       | 6.4 J       | From: 201008            |
| Model Year: 2011                                                                                              | Model: RAV4 | Doc ID: RM000003PCC002X |
| Title: PARK ASSIST / MONITORING: REAR VIEW MONITOR SYSTEM: Park / Neutral Position Switch Circuit (2011 RAV4) |             |                         |

Park / Neutral Position Switch Circuit

DESCRIPTION

The inner rear view mirror assembly receives a reverse signal from the park/neutral position switch.

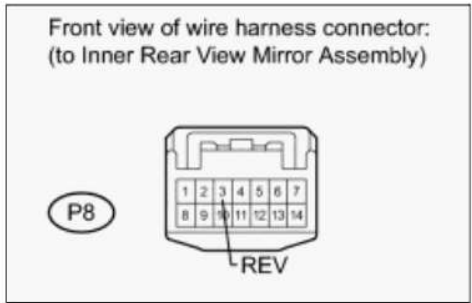
WIRING DIAGRAM



INSPECTION PROCEDURE

PROCEDURE

|    |                                    |
|----|------------------------------------|
| 1. | CHECK PARK/NEUTRAL POSITION SWITCH |
|----|------------------------------------|



- (a) Disconnect the P8 inner rear view mirror assembly connector.
- (b) Measure the voltage according to the value(s) in the table below.
- Standard Voltage:

| TESTER CONNECTION | CONDITION | SPECIFIED CONDITION |
|-------------------|-----------|---------------------|
|-------------------|-----------|---------------------|

| TESTER CONNECTION        | CONDITION                                | SPECIFIED CONDITION |
|--------------------------|------------------------------------------|---------------------|
| P8-3 (REV) - Body ground | Ignition switch ON, shift lever in R     | 11 to 14 V          |
| P8-3 (REV) - Body ground | Ignition switch ON, shift lever not in R | Below 1 V           |

**NG**  **CHECK HARNESS AND CONNECTOR (INNER REAR VIEW MIRROR ASSEMBLY - PARK/NEUTRAL POSITION SWITCH)**

**OK**  **PROCEED TO NEXT SUSPECTED AREA SHOWN IN PROBLEM SYMPTOMS TABLE**

|           |                                                                                                     |
|-----------|-----------------------------------------------------------------------------------------------------|
| <b>2.</b> | <b>CHECK HARNESS AND CONNECTOR (INNER REAR VIEW MIRROR ASSEMBLY - PARK/NEUTRAL POSITION SWITCH)</b> |
|-----------|-----------------------------------------------------------------------------------------------------|

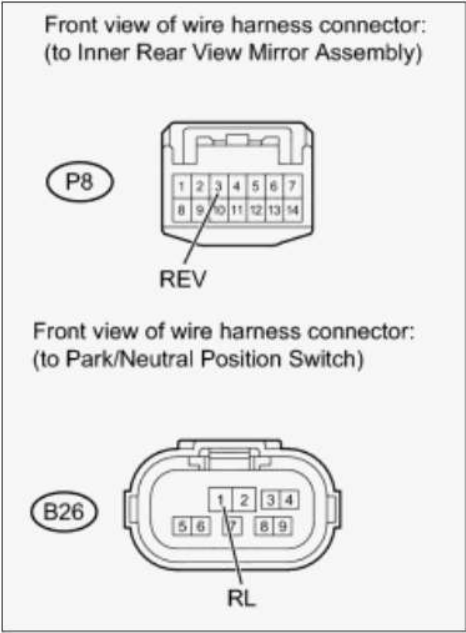
- (a) Disconnect the P8 inner rear view mirror assembly connector.
- (b) Disconnect the B26 park/neutral position switch connector.
- (c) Measure the resistance the according to the value(s) in the table below.

Standard Resistance:

| TESTER CONNECTION        | CONDITION | SPECIFIED CONDITION     |
|--------------------------|-----------|-------------------------|
| P8-3 (REV) - B26-1 (RL)  | Always    | Below 1 $\Omega$        |
| P8-3 (REV) - Body ground | Always    | 10 k $\Omega$ or higher |

#### Result

| RESULT         | PROCEED TO |
|----------------|------------|
| OK (for U140F) | A          |
| OK (for U241F) | B          |
| OK (for U151F) | C          |
| OK (for U151E) | D          |
| NG             | E          |



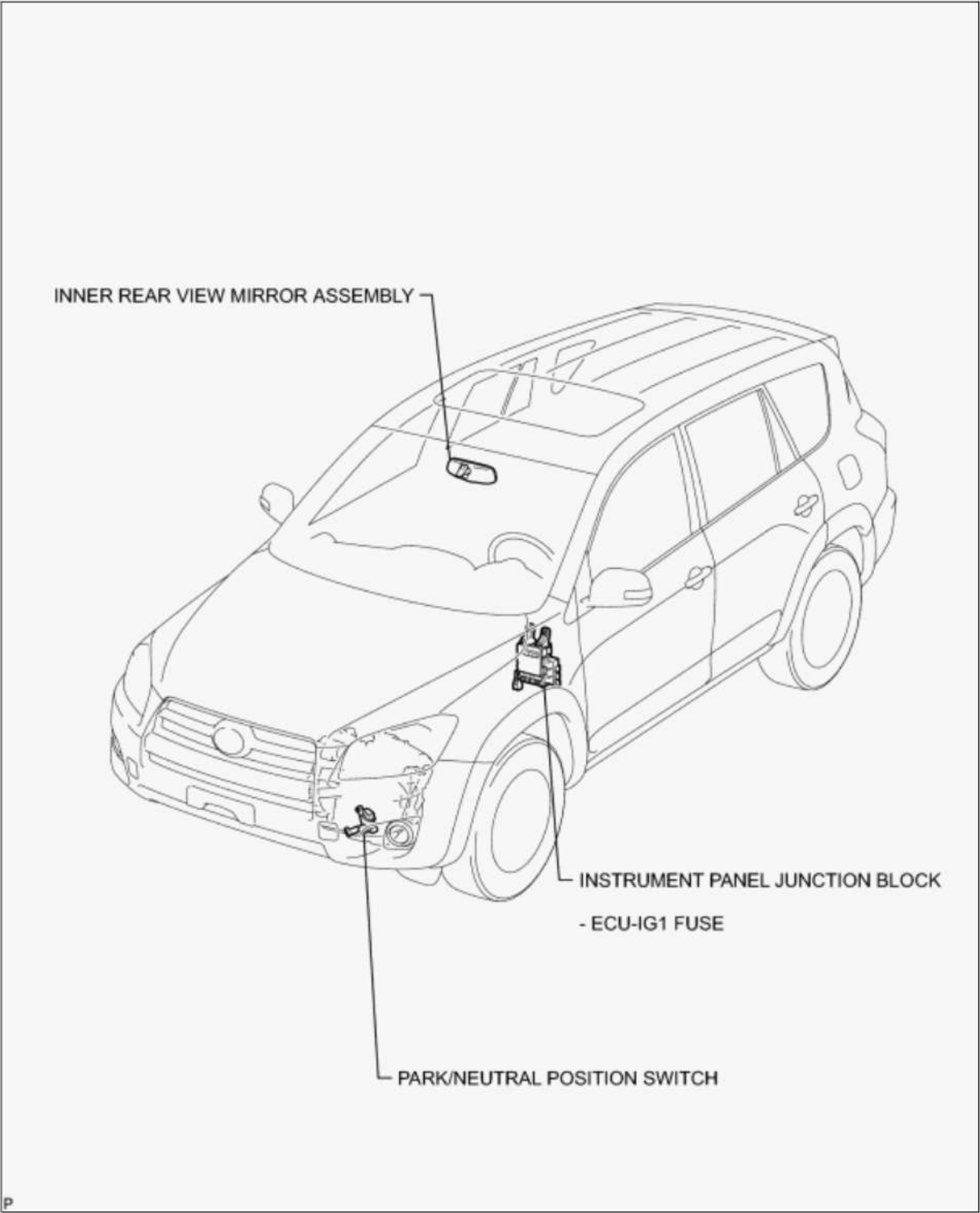
- B**▶ **REPLACE  
PARK/NEUTRAL  
POSITION  
SWITCH**
- C**▶ **REPLACE  
PARK/NEUTRAL  
POSITION  
SWITCH**
- D**▶ **REPLACE  
PARK/NEUTRAL  
POSITION  
SWITCH**
- E**▶ **REPAIR OR  
REPLACE  
HARNESS OR  
CONNECTOR**
- A**▶ **REPLACE  
PARK/NEUTRAL  
POSITION  
SWITCH**



|                                                                                              |                    |                                |
|----------------------------------------------------------------------------------------------|--------------------|--------------------------------|
| <b>Last Modified:</b> 9-7-2011                                                               | <b>6.4 R</b>       | <b>From:</b> 201008            |
| <b>Model Year:</b> 2011                                                                      | <b>Model:</b> RAV4 | <b>Doc ID:</b> RM000003PC9002X |
| <b>Title:</b> PARK ASSIST / MONITORING: REAR VIEW MONITOR SYSTEM: PARTS LOCATION (2011 RAV4) |                    |                                |

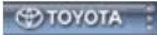
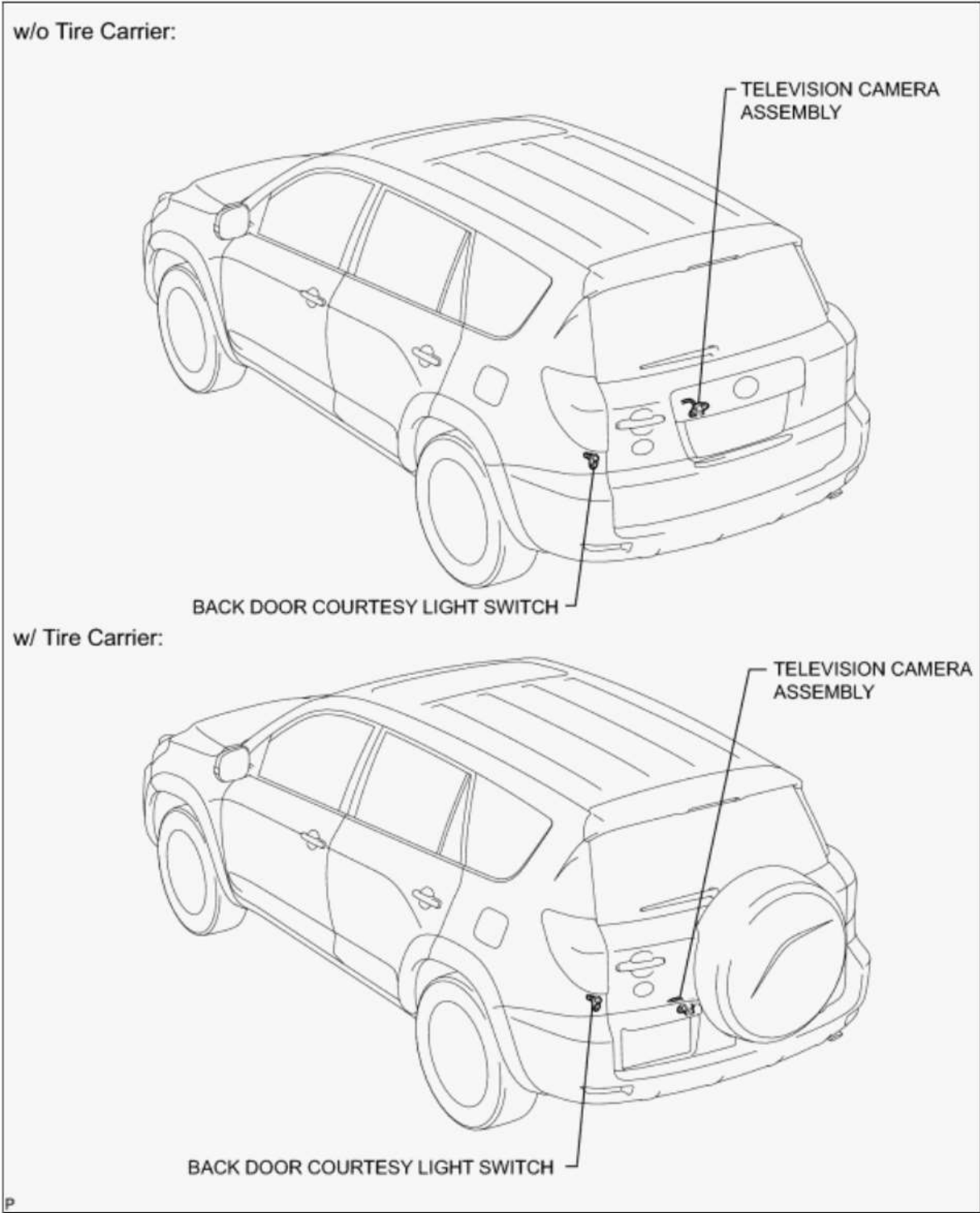
**PARTS LOCATION**

**ILLUSTRATION**



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**ILLUSTRATION**



|                                                                                          |                    |                                |
|------------------------------------------------------------------------------------------|--------------------|--------------------------------|
| <b>Last Modified:</b> 9-7-2011                                                           | 6.4 L              | <b>From:</b> 201008            |
| <b>Model Year:</b> 2011                                                                  | <b>Model:</b> RAV4 | <b>Doc ID:</b> RM000003POC002X |
| <b>Title:</b> PARK ASSIST / MONITORING: REAR VIEW MONITOR SYSTEM: PRECAUTION (2011 RAV4) |                    |                                |

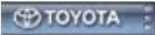
**PRECAUTION**

**1. IGNITION SWITCH EXPRESSION**

**HINT:**

The type of ignition switch used on this model differs according to the specifications of the vehicle. The expressions listed in the table below are used in this section.

| EXPRESSION          | IGNITION SWITCH (POSITION) | ENGINE SWITCH (CONDITION) |
|---------------------|----------------------------|---------------------------|
| Ignition Switch off | Off                        | Off                       |
| Ignition Switch ON  | ON                         | On (IG)                   |
| Ignition Switch ACC | ACC                        | On (ACC)                  |
| Engine Start        | START                      | Start                     |



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|                                                                                                      |                    |                                |
|------------------------------------------------------------------------------------------------------|--------------------|--------------------------------|
| <b>Last Modified:</b> 9-7-2011                                                                       | 6.4 T              | <b>From:</b> 201008            |
| <b>Model Year:</b> 2011                                                                              | <b>Model:</b> RAV4 | <b>Doc ID:</b> RM000003PCB002X |
| <b>Title:</b> PARK ASSIST / MONITORING: REAR VIEW MONITOR SYSTEM: PROBLEM SYMPTOMS TABLE (2011 RAV4) |                    |                                |

## PROBLEM SYMPTOMS TABLE

### 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.

### Rear View Monitor System

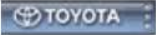
| SYMPTOM                                                                                                              | SUSPECTED AREA                                                                                             | SEE PAGE             |
|----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|----------------------|
| When shift lever is in R, rear view monitor image is not displayed                                                   | Proceed to "Park/Neutral Position Switch Circuit"                                                          | <a href="#">INFO</a> |
|                                                                                                                      | Proceed to "Display Signal Circuit between Inner Rear View Mirror Assembly and Television Camera Assembly" | <a href="#">INFO</a> |
|                                                                                                                      | Proceed to "Back Door Courtesy Switch Circuit"                                                             | <a href="#">INFO</a> |
|                                                                                                                      | Replace inner rear view mirror assembly                                                                    | <a href="#">INFO</a> |
| When shift lever is in R, rear view monitor image is not displayed (screen is blue for 3 seconds and then turns off) | Proceed to "Inner Rear View Mirror Power Source Circuit"                                                   | <a href="#">INFO</a> |
|                                                                                                                      | Proceed to "Display Signal Circuit between Inner Rear View Mirror Assembly and Television Camera Assembly" | <a href="#">INFO</a> |
|                                                                                                                      | Proceed to "Back Door Courtesy Switch Circuit"                                                             | <a href="#">INFO</a> |
|                                                                                                                      | Replace television camera assembly*1                                                                       | <a href="#">INFO</a> |
|                                                                                                                      | Replace television camera assembly*2                                                                       | <a href="#">INFO</a> |
|                                                                                                                      | Replace inner rear view mirror assembly                                                                    | <a href="#">INFO</a> |
| When shift lever is not in R, rear view monitor image is displayed                                                   | Proceed to "Display Signal Circuit between Inner Rear View Mirror Assembly and Television Camera Assembly" | <a href="#">INFO</a> |
|                                                                                                                      | Replace inner rear view mirror assembly                                                                    | <a href="#">INFO</a> |
| Problem with rear view monitor image (color, distortion of picture)                                                  | Proceed to "Display Signal Circuit between Inner Rear View Mirror Assembly and Television Camera Assembly" | <a href="#">INFO</a> |
|                                                                                                                      | Replace television camera assembly*1                                                                       | <a href="#">INFO</a> |
|                                                                                                                      | Replace television camera assembly*2                                                                       | <a href="#">INFO</a> |
|                                                                                                                      | Replace inner rear view mirror assembly                                                                    | <a href="#">INFO</a> |

| SYMPTOM                                                                                                                  | SUSPECTED AREA                                 | SEE PAGE             |
|--------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|----------------------|
| When rear view monitor image is displayed, rear view monitor image continues to be displayed even if back door is opened | Proceed to "Back Door Courtesy Switch Circuit" | <a href="#">INFO</a> |
|                                                                                                                          | Replace inner rear view mirror assembly        | <a href="#">INFO</a> |

**HINT:**

If the amber LED light is illuminated on the inner rear view mirror assembly with the ignition switch ON and the shift lever in R, this indicates that the monitor image has been canceled manually. Check if the image is displayed by pressing the AUTO button.

- \*1: w/ Tire Carrier
- \*2: w/o Tire Carrier



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|                                                                                                  |                    |                                |
|--------------------------------------------------------------------------------------------------|--------------------|--------------------------------|
| <b>Last Modified:</b> 9-7-2011                                                                   | 6.4 D              | <b>From:</b> 201008            |
| <b>Model Year:</b> 2011                                                                          | <b>Model:</b> RAV4 | <b>Doc ID:</b> RM000003PCD002X |
| <b>Title:</b> PARK ASSIST / MONITORING: REAR VIEW MONITOR SYSTEM: SYSTEM DESCRIPTION (2011 RAV4) |                    |                                |

## SYSTEM DESCRIPTION

### 1. GENERAL

- (a) This system has a television camera mounted on the back door to assist the driver in parking the vehicle by displaying an image of the area behind the vehicle. The system displays the image on the inner rear view mirror assembly.
- (b) This system consists of the following components:
- (1) Inner rear view mirror assembly
  - (2) Television camera assembly
  - (3) Park/neutral position switch
  - (4) Back door courtesy light switch

### 2. FUNCTION OF COMPONENTS

- (a) The inner rear view mirror assembly controls the system by using information from the following components:

| COMPONENTS                      | FUNCTION                                                                                                                                                                                                                                                                                                                                                     |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Television camera assembly      | <ul style="list-style-type: none"> <li>Mounted on the back door to transmit an image of the area behind the vehicle to the inner rear view mirror assembly.</li> <li>Has a color video camera that uses a CCD (Charge Coupled Device) and a wide-angle lens.</li> </ul>                                                                                      |
| Inner rear view mirror assembly | <ul style="list-style-type: none"> <li>Receives the video signals which contain an image of the area behind the vehicle taken with the television camera.</li> <li>Performs control of the system by receiving a shift position signal from the park/neutral position switch.</li> <li>Displays the rear view monitor image on the display panel.</li> </ul> |
| Park/neutral position switch    | Transmits a reverse signal to the inner rear view mirror assembly.                                                                                                                                                                                                                                                                                           |
| Back door courtesy light switch | Transmits a back door condition signal to the inner rear view mirror assembly.                                                                                                                                                                                                                                                                               |

### 3. OPERATION EXPLANATION

- (a) The park/neutral position switch outputs the R position signal to the inner rear view mirror assembly when the shift lever is moved to R. After receiving the R position signal, the inner rear view mirror assembly switches to the rear view monitor system.

### 4. NOTES FOR REAR VIEW MONITOR

- (a) Notes for the rear view monitor.
- (1) The rear view monitor may not function properly if subjected to a severe blow by any hard object.

- (2) Do not "scrub" the camera because it is made of resin. Scrubbing it may scratch the cover and affect the image. Prevent organic solvents, waxes, bond removing solvents, or glass coating from adhering to the cover. If anything adheres to the cover, clean it off immediately, and wash with water.
- (3) Exposing the camera to a sudden temperature change may affect proper functioning of the camera.
- (4) A clear image may not appear if the camera is dirty with snow, mud, etc. In this case, wash it with water and wipe off the lens. Use a detergent to remove dirt if necessary.
- (b) Images are difficult to discern even in normal conditions if:
  - (1) The camera lens is frosted over (the image immediately after turning the ignition switch to ON may be blurred or darker than normal).
  - (2) A strong beam of light, such as a sunbeam or headlight, hits the camera.

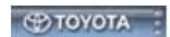
**HINT:**

**When a strong light, such as a sunbeam reflected off the vehicle body, hits the camera, the image may be blurred. This is called the "smear" phenomenon, peculiar to the CCD camera.**

- (3) It is too dark around the camera (at night, etc.).
- (4) The ambient temperature around the camera is either too high or too low.
- (5) A bright object, such as a white wall, is reflected in the inner mirror.

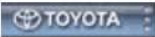
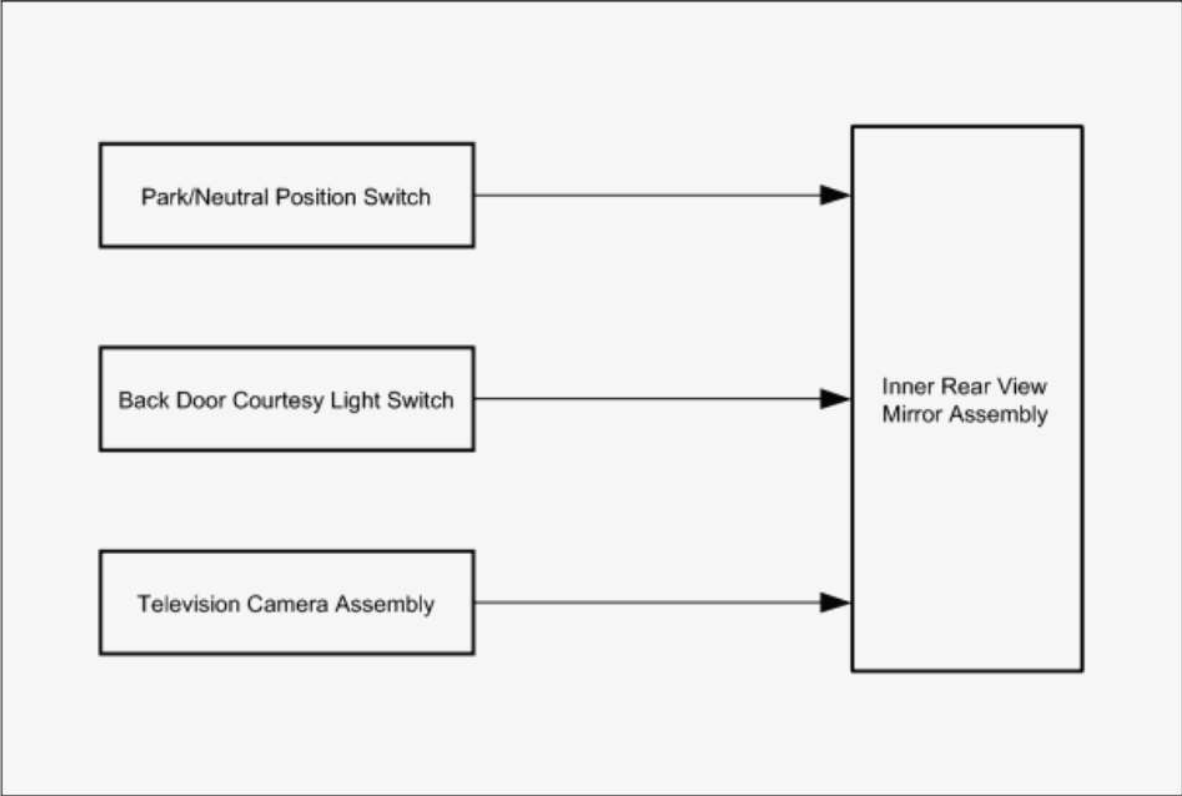
**HINT:**

**The monitor is located in the mirror.**



|                                                                                              |                    |                                |
|----------------------------------------------------------------------------------------------|--------------------|--------------------------------|
| <b>Last Modified:</b> 9-7-2011                                                               | 6.4 U              | <b>From:</b> 201008            |
| <b>Model Year:</b> 2011                                                                      | <b>Model:</b> RAV4 | <b>Doc ID:</b> RM000003PCE002X |
| <b>Title:</b> PARK ASSIST / MONITORING: REAR VIEW MONITOR SYSTEM: SYSTEM DIAGRAM (2011 RAV4) |                    |                                |

**SYSTEM DIAGRAM**

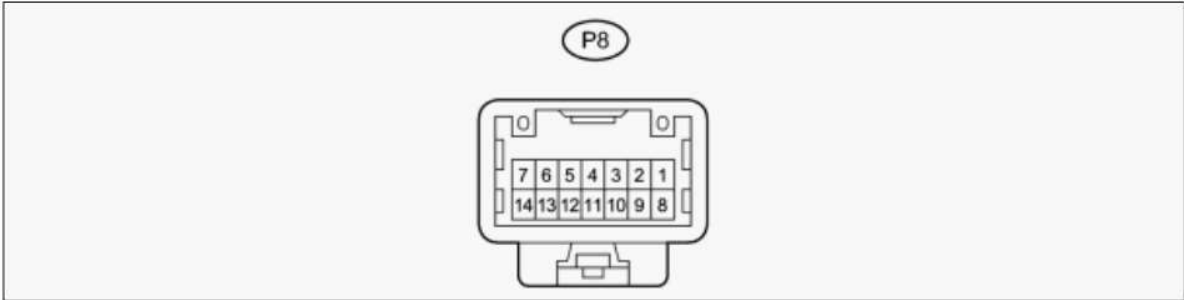


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|                                                                                         |             |                         |
|-----------------------------------------------------------------------------------------|-------------|-------------------------|
| Last Modified: 9-7-2011                                                                 | 6.4 U       | From: 201008            |
| Model Year: 2011                                                                        | Model: RAV4 | Doc ID: RM000003PCA002X |
| Title: PARK ASSIST / MONITORING: REAR VIEW MONITOR SYSTEM: TERMINALS OF ECU (2011 RAV4) |             |                         |

TERMINALS OF ECU

1. CHECK INNER REAR VIEW MIRROR ASSEMBLY



- (a) Disconnect the P8 inner rear view mirror assembly connector.
- (b) Measure the voltage and resistance according to the value(s) in the table below.

| TERMINAL NO.<br>(SYMBOL) | WIRING COLOR         | TERMINAL<br>DESCRIPTION | CONDITION              | SPECIFIED<br>CONDITION |
|--------------------------|----------------------|-------------------------|------------------------|------------------------|
| P8-2 (E) - Body ground   | W-B - Body<br>ground | Ground                  | Always                 | Below 1 Ω              |
| P8-1 (IG) - P8-2 (E)     | L - W-B              | Ignition switch signal  | Ignition switch<br>off | Below 1 V              |
|                          |                      |                         | Ignition switch<br>ON  | 11 to 14 V             |

If the result is not as specified, there may be a malfunction on the wire harness side.

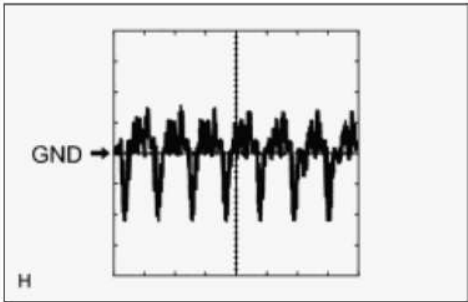
- (c) Reconnect the P8 inner rear view mirror assembly connector.
- (d) Measure the voltage according to the value(s) in the table below.

| TERMINAL NO.<br>(SYMBOL)      | WIRING<br>COLOR           | TERMINAL<br>DESCRIPTION                   | CONDITION                            | SPECIFIED<br>CONDITION |
|-------------------------------|---------------------------|-------------------------------------------|--------------------------------------|------------------------|
| P8-14 (CB+) -<br>P8-13 (CGND) | B - Shielded              | Power source                              | Ignition switch ON, shift lever in R | 5.5 to 7.05 V          |
| P8-13 (CGND) -<br>Body ground | Shielded -<br>Body ground | Shielding                                 | Always                               | Below 1 V              |
| P8-10 (BCTY) -<br>Body ground | LG - Body<br>ground       | Back door courtesy<br>light switch signal | Back door open                       | Below 1 V              |
|                               |                           |                                           | Back door closed                     | 11 to 14 V             |
| P8-3 (REV) -                  | R - W-B                   | Reverse signal                            | Ignition switch ON, shift lever in R | 11 to 14 V             |

| TERMINAL NO.<br>(SYMBOL)   | WIRING<br>COLOR | TERMINAL<br>DESCRIPTION | CONDITION                                                                                 | SPECIFIED<br>CONDITION |
|----------------------------|-----------------|-------------------------|-------------------------------------------------------------------------------------------|------------------------|
| P8-2 (E)                   |                 |                         | Ignition switch ON, shift lever not in R                                                  | Below 1 V              |
| P8-7 (CV+) -<br>P8-6 (CV-) | W - R           | Display signal          | Ignition switch ON, shift lever in R                                                      | Waveform 1             |
|                            |                 |                         | Ignition switch ON, shift lever in R,<br>screen is blacked out by covering<br>camera lens | Waveform 2             |

If the result is not as specified, the inner rear view mirror assembly may have a malfunction.

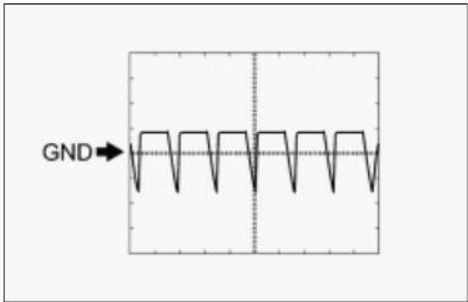
(e) Using an oscilloscope, check waveform 1.



Measurement Condition

| ITEM                  | CONTENT                              |
|-----------------------|--------------------------------------|
| Terminal No. (Symbol) | P8-7 (CV+) - P8-6 (CV-)              |
| Tool Setting          | 0.2 V/DIV., 50 μs/DIV.               |
| Condition             | Ignition switch ON, shift lever in R |

(f) Using an oscilloscope, check waveform 2.



Measurement Condition

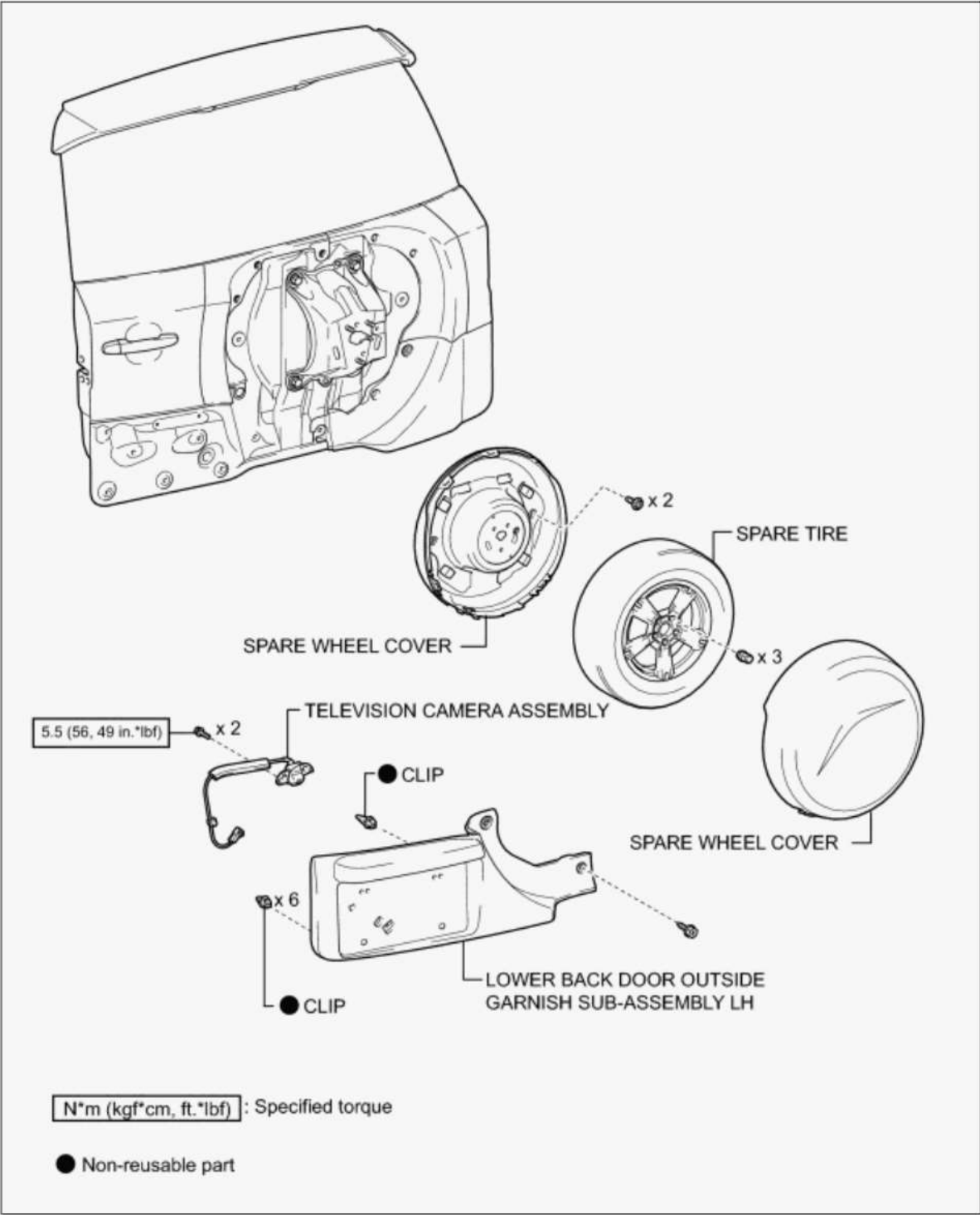
| ITEM                  | CONTENT                                                                                |
|-----------------------|----------------------------------------------------------------------------------------|
| Terminal No. (Symbol) | P8-7 (CV+) - P8-6 (CV-)                                                                |
| Tool Setting          | 0.2 V/DIV., 50 μs/DIV.                                                                 |
| Condition             | Ignition switch ON, shift lever in R, screen is<br>blacked out by covering camera lens |



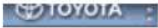
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| Last Modified: 9-7-2011                                                                      | 6.4 K       | From: 201008            |
| Model Year: 2011                                                                             | Model: RAV4 | Doc ID: RM000003PR7002X |
| Title: PARK ASSIST / MONITORING: TELEVISION CAMERA (w/ Tire Carrier): COMPONENTS (2011 RAV4) |             |                         |

COMPONENTS

ILLUSTRATION



PARK ASSIST / MONITORING: TELEVISION CAMERA (w/ Tire Car... <https://techinfo.toyota.com/t3Portal/document/rm/RM16B0U/xhtml/RM...>

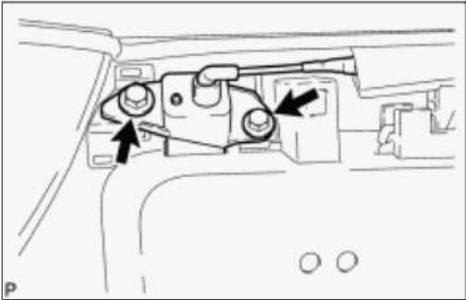


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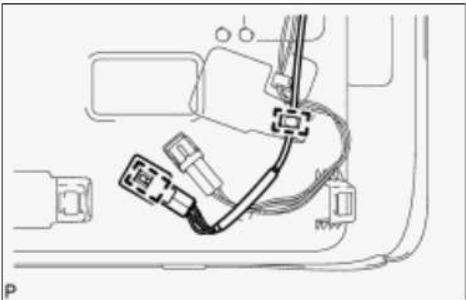
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| Last Modified: 9-7-2011                                                                        | 6.4 A       | From: 201008            |
| Model Year: 2011                                                                               | Model: RAV4 | Doc ID: RM000003PR6002X |
| Title: PARK ASSIST / MONITORING: TELEVISION CAMERA (w/ Tire Carrier): INSTALLATION (2011 RAV4) |             |                         |

INSTALLATION

1. INSTALL TELEVISION CAMERA ASSEMBLY



- (a) Install the television camera with the 2 bolts.  
**Torque: 5.5 N·m (56 kgf·cm, 49in·lbf)**



- (b) Attach the 2 clamps.

2. INSTALL LOWER BACK DOOR OUTSIDE GARNISH SUB-ASSEMBLY LH INFO
3. INSTALL SPARE WHEEL COVER
4. INSTALL SPARE TIRE
5. INSTALL SPARE WHEEL COVER

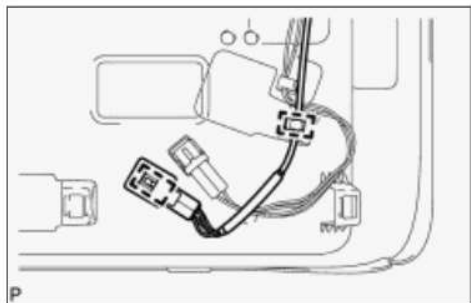


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| Last Modified: 9-7-2011                                                                   | 6.4 A       | From: 201008            |
| Model Year: 2011                                                                          | Model: RAV4 | Doc ID: RM000003PR8002X |
| Title: PARK ASSIST / MONITORING: TELEVISION CAMERA (w/ Tire Carrier): REMOVAL (2011 RAV4) |             |                         |

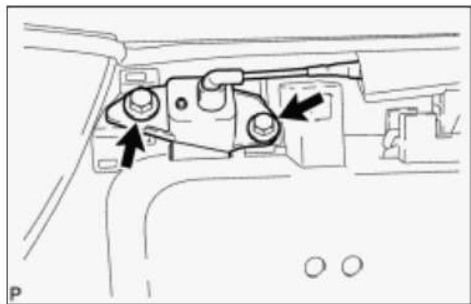
REMOVAL

1. REMOVE SPARE WHEEL COVER
2. REMOVE SPARE TIRE
3. REMOVE SPARE WHEEL COVER
4. REMOVE LOWER BACK DOOR OUTSIDE GARNISH SUB-ASSEMBLY LH 

INFO
5. REMOVE TELEVISION CAMERA ASSEMBLY



(a) Using a clip remover, detach the 2 clamps.



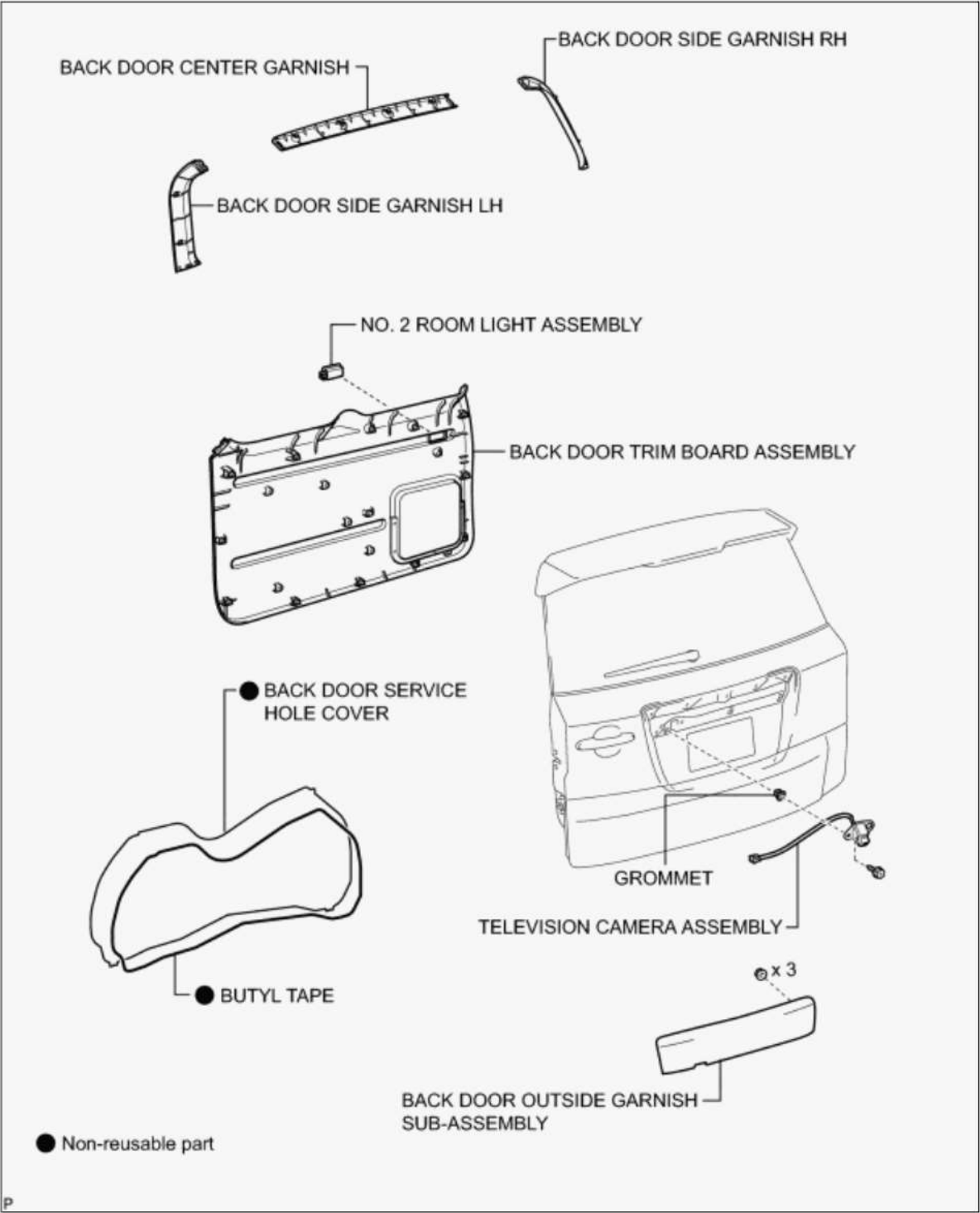
(b) Remove the 2 bolts and television camera.



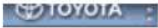
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| Last Modified: 9-7-2011                                                                       | 6.4 K       | From: 201008            |
| Model Year: 2011                                                                              | Model: RAV4 | Doc ID: RM000003PCK002X |
| Title: PARK ASSIST / MONITORING: TELEVISION CAMERA (w/o Tire Carrier): COMPONENTS (2011 RAV4) |             |                         |

COMPONENTS

ILLUSTRATION



PARK ASSIST / MONITORING: TELEVISION CAMERA (w/o Tire Ca... <https://techinfo.toyota.com/t3Portal/document/rm/RM16B0U/xhtml/RM...>

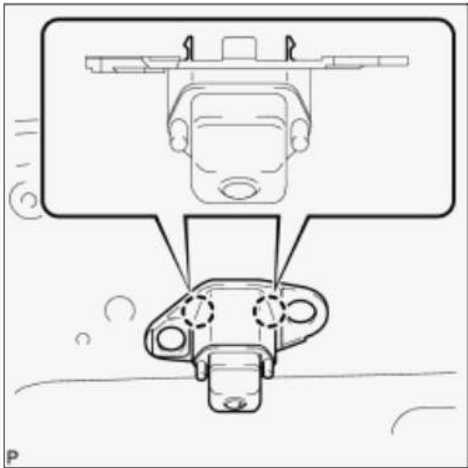


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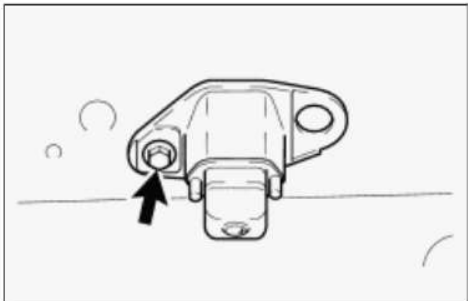
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|--------------------------------------------------------------------------------------------------------|--------------------|--------------------------------|
| <b>Last Modified:</b> 9-7-2011                                                                         | <b>6.4 A</b>       | <b>From:</b> 201008            |
| <b>Model Year:</b> 2011                                                                                | <b>Model:</b> RAV4 | <b>Doc ID:</b> RM000003PCJ002X |
| <b>Title:</b> PARK ASSIST / MONITORING: TELEVISION CAMERA (w/o Tire Carrier): INSTALLATION (2011 RAV4) |                    |                                |

**INSTALLATION**

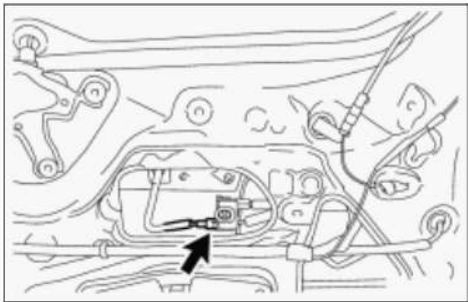
**1. INSTALL TELEVISION CAMERA ASSEMBLY**



(a) Attach the 2 claws to install the television camera.

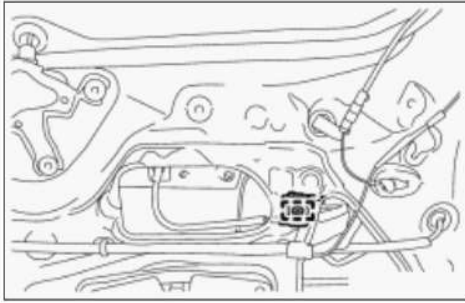


(b) Install the screw.



(c) Connect the connector.

(d) Attach the clamp.



**2. INSTALL BACK DOOR OUTSIDE GARNISH SUB-ASSEMBLY** [INFO](#)

**3. INSTALL BACK DOOR SERVICE HOLE COVER** [INFO](#)

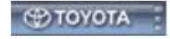
**4. INSTALL NO. 2 ROOM LIGHT ASSEMBLY** [INFO](#)

**5. INSTALL BACK DOOR TRIM BOARD ASSEMBLY** [INFO](#)

**6. INSTALL BACK DOOR SIDE GARNISH LH** [INFO](#)

**7. INSTALL BACK DOOR SIDE GARNISH RH** [INFO](#)

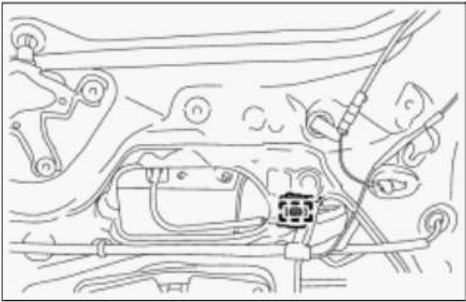
**8. INSTALL BACK DOOR CENTER GARNISH** [INFO](#)



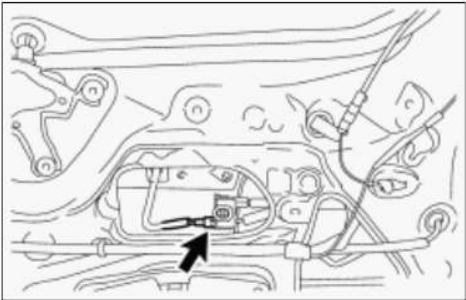
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| Last Modified: 9-7-2011                                                                    | 6.4 A       | From: 201008            |
| Model Year: 2011                                                                           | Model: RAV4 | Doc ID: RM000003PCL002X |
| Title: PARK ASSIST / MONITORING: TELEVISION CAMERA (w/o Tire Carrier): REMOVAL (2011 RAV4) |             |                         |

REMOVAL

1. REMOVE BACK DOOR CENTER GARNISH
2. REMOVE BACK DOOR SIDE GARNISH LH
3. REMOVE BACK DOOR SIDE GARNISH RH
4. REMOVE NO. 2 ROOM LIGHT ASSEMBLY
5. REMOVE BACK DOOR TRIM BOARD ASSEMBLY
6. REMOVE BACK DOOR SERVICE HOLE COVER
7. REMOVE BACK DOOR OUTSIDE GARNISH SUB-ASSEMBLY
8. REMOVE TELEVISION CAMERA ASSEMBLY

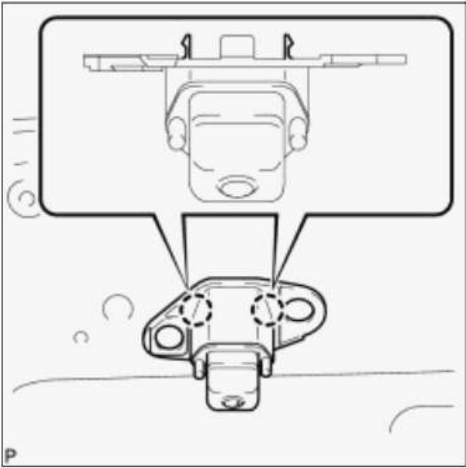
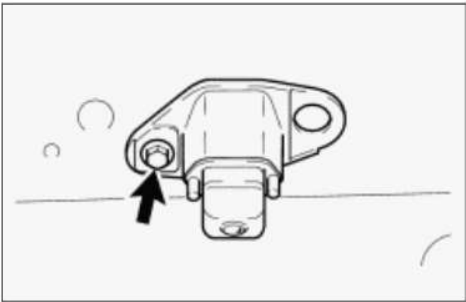


(a) Detach the clamp.



(b) Disconnect the connector.

(c) Remove the screw.



(d) Detach the 2 claws and remove the television camera.

