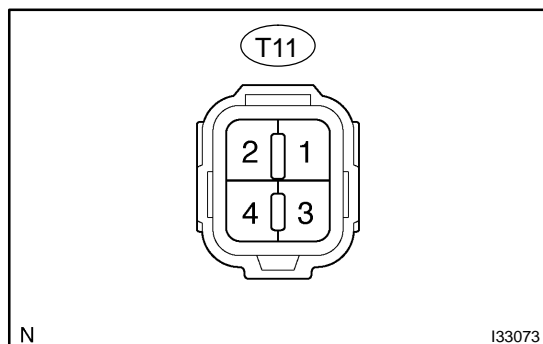


## PRE-CHECK



### 1. INSPECT TELEVISION CAMERA ASSY:

- (a) Standard signal check
- (1) Using the tester, measure the voltage and the continuity between terminals.

#### HINT:

Leave the connector being connected.

- (2) Using the oscilloscope, check wave forms between terminals.

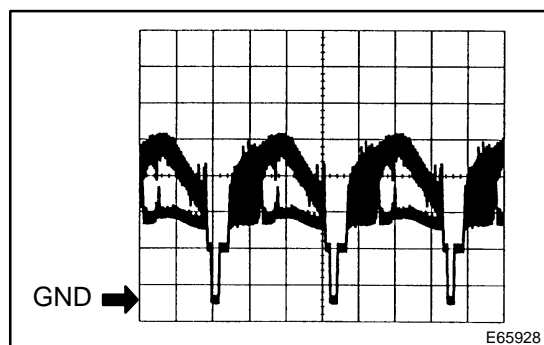
#### HINT:

- Leave the connector being connected.
- The waveform shown is merely an example. Noise waveform and chattering waveform are omitted.

#### Standard:

### Connector T11

Terminal No.	Terminal symbol	Input/Output	Tester connection (Wiring color)	Item	Condition	specified condition	Problem symptom when open circuit is detected. Problem symptom when short circuit is detected.
1	CB+	Input	T11-1 - T11-2 (R - Body ground)	Voltage	IG SW ON, Shift lever R range IG SW ON, Shift lever R range	8 - 9 V	Fuse blow out
2	CGND	Output	T11-2 - Body ground (W - Body ground)	Continuity	Always	Continuity	Back monitor dose not display images
3	CV-	Output	T11-3 - Body ground (BR - Body ground)	Continuity	IG SW ON, Shift lever R range	Continuity	Back monitor dose not display images
4	CV+	Output	T11-4 - T11-3 (B - BR)	Waveform	IG SW ON, Shift lever R range	Approx. 0.65 V (Waveform1)	Back monitor dose not display images



#### <Reference>

- (b) Oscilloscope waveform.
- (1) Waveform 1.

#### Standard:

Item	Content
Terminal	CV+↔ CV-
Tool setting	0.2 V/DIV, 0.2 μs/DIV
Condition	IG SW ON, shift lever R range

## 2. INSPECT RADIO RECEIVER ASSY (BACK MONITOR CONTROLLER)

### (a) Standard signal check.

- (1) Using the tester, measure the voltage and the continuity between terminals.

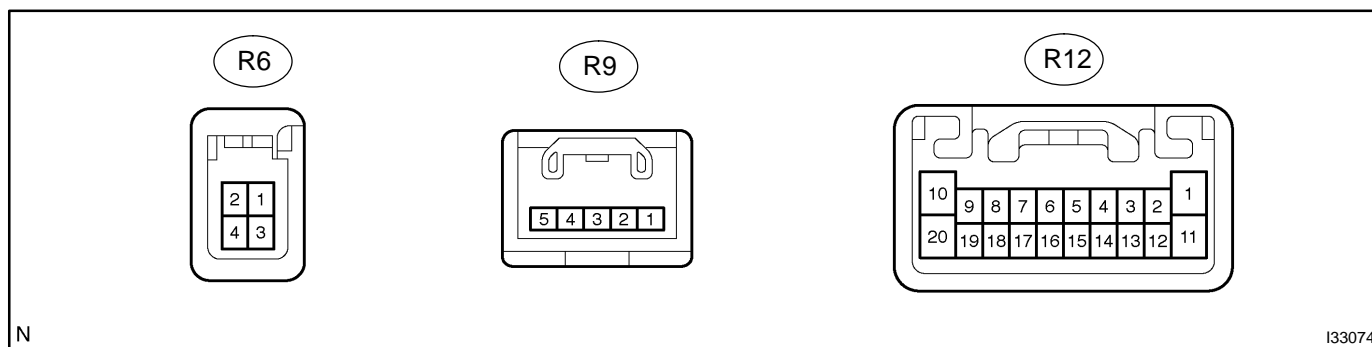
HINT:

Leave the connectors being connected.

- (2) Check waveforms between terminals.

HINT:

- Leave the connectors being connected.
- The waveform shown is merely or example. Noise waveform and chattering waveform are omitted.



### Standard:

#### Connector R12

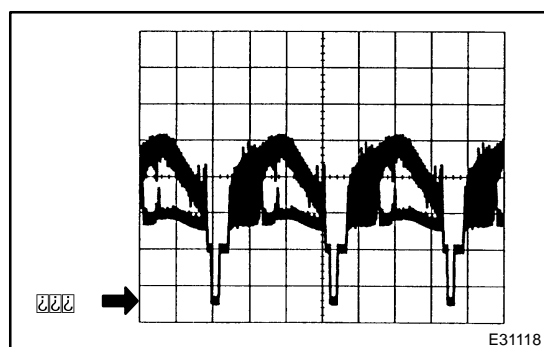
Terminal No.	Terminal symbol	Input/Output	Tester connection	Item	Condition	specified condition	Problem symptom when open circuit is detected.
							Problem symptom when short circuit is detected.
1	+B	Input	R12-1 - R12-20 (L-Y - BR)	Voltage	Always	10 - 14 V	Radio receiver ASSY does not operate. Fuse blow out.
11	ACC	Input	R12-11 - R12-20 (GR - BR)	Voltage	IG SW ACC	10 - 14 V	Radio receiver ASSY does not operate. Fuse blow out.
20	GND	Output	R12-20 - Body ground (BR - Body ground)	Continuity	Always	Continuity	Back monitor dose not display images.

**Connector R9**

Terminal No.	Terminal symbol	Input/Output	Tester connection (Wiring color)	Item	Condition	specified condition	Problem symptom when open circuit is detected.
							Problem symptom when short circuit is detected.
5	REV	Input	R9-5 - R12-20 (R-Y - BR)	Voltage	Except R range → R range	Less than 1 V → 10 - 14 V	Back monitor does not display images.

**Connector R6**

Terminal No.	Terminal symbol	Input/Output	Tester connection (Wiring color)	Item	Condition	specified condition	Problem symptom when open circuit is detected.
							Problem symptom when short circuit is detected.
1	V+	Input	R6-1 - R6-3 (B - Shielded)	Waveform	IG SW ON, shift lever R range	Approx. 0.65 V (Waveform 1)	Back monitor does not display images.
2	CA+	Input	R6-2 - R6-4 (R - W)	Voltage	IG SW ON, shift lever R range	6 V	Back monitor does not display images. Fuse blow out.
3	V-	Input	R6-3 - R6-4 (Shielded - W)	Continuity	IG SW ON, shift lever R range	Continuity	Back monitor does not display images.
4	GND	Input	R6-4 - Body ground (W - Body ground)	Continuity	Always	Continuity	Back monitor does not display images.

**<Reference>**

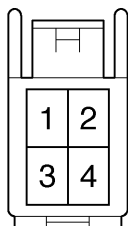
(b) Oscilloscope waveform.

(1) Waveform 1.

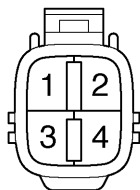
**Standard:**

Item	Content
Terminal	V+ ↔ V-
Tool setting	0.2 V / DIV, 0.2 μS / DIV
Condition	IG SW ON, shift lever R range

Radio receiver ASSY side



Television camera ASSY side



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I33075

**3. INSPECT BACK MONITOR CAMERA WIRE****(a) Continuity check.**

- (1) Using the tester, measure the continuity between terminals.

**Standard:**

Tester Connection	Specified Condition
A-1 (Radio receiver ASSY side) ⇔ B-4 (Television camera ASSY side)	Continuity
A-2 (Radio receiver ASSY side) ⇔ B-1 (Television camera ASSY side)	Continuity
A-3 (Radio receiver ASSY side) ⇔ B-3 (Television camera ASSY side)	Continuity
A-4 (Radio receiver ASSY side) ⇔ B-2 (Television camera ASSY side)	Continuity