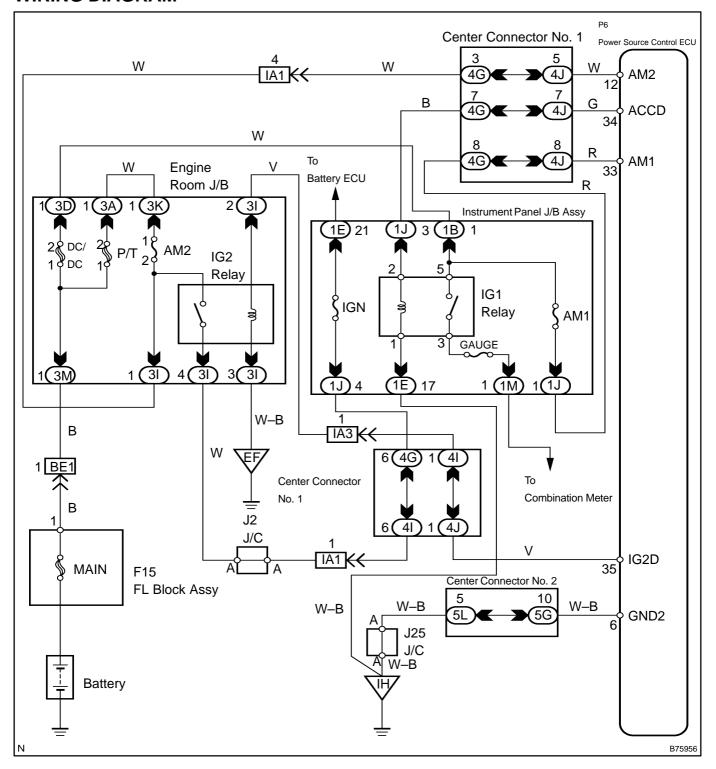
# POWER MODE DOES NOT CHANGE TO ON (IG)

### **CIRCUIT DESCRIPTION**

When the key is inserted into the key slot and the power switch is pressed, signals are input to the power source control ECU and power switch mode changes to OFF, ON (IG) or ON (ACC) according to the inputs.

### WIRING DIAGRAM



### INSPECTION PROCEDURE

# 1 INSPECT FUSE (AM1, AM2)

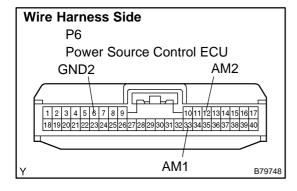
- (a) Remove the the AM1 fuse from the instrument panel J/B assy.
- (b) Remove the the AM2 fuse from the engine room J/B.
- (c) Measure the resistance.

Standard: Below 1  $\Omega$ 

NG REPLACE FUSE

OK

## 2 | CHECK WIRE HARNESS (POWER SOURCE CONTROL ECU – BODY GROUND)



- (a) Disconnect the P6 ECU connector.
- (b) Measure the resistance and voltage of the wire harness side connectors.

### Standard:

Tester Connection	Specified Condition
P6–33 (AM1) – Body ground	10 to 14 V
P6–12 (AM2) – Body ground	10 to 14 V
P6–6 (GND2) – Body ground	Below 1 Ω

NG

REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

# 3 CHECK FOR DTCS

(a) Check for DTCs of the power source control ECU.

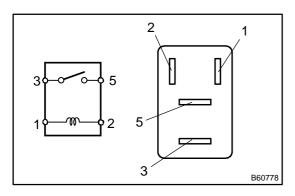
OK: DTCs of the power source control ECU are not output.

NG

Go to DIAGNOSIS TROUBLE CODE CHART (See page 05-2441)

OK

## 4 INSPECT RELAY (IG1)



- (a) Remove the IG1 relay from the instrument panel J/B.
- (b) Measure the resistance.

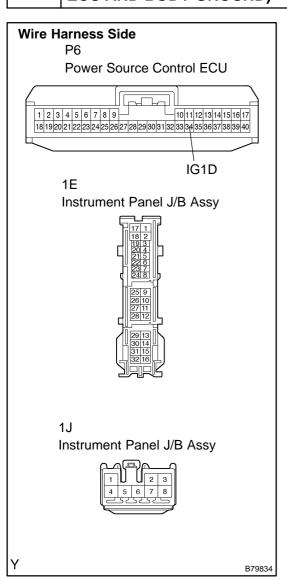
### Standard:

Tester Connection	Specified Condition	
3 – 5	10 kΩ or higher	
3-5	Below 1 Ω	
	(when battery voltage is applied to terminals 1 and 2)	

NG REPLACE RELAY



# 5 CHECK WIRE HARNESS (DRIVER SIDE J/B ASSY – POWER SOURCE CONTROL ECU AND BODY GROUND)



- (a) Disconnect the 1J and 1E J/B connectors.
- (b) Disconnect the P6 ECU connector.
- (c) Measure the resistance of the wire harness side connectors.

### Standard:

Tester Connection	Specified Condition
1J-3 - P6-34 (IG1D)	Below 1 Ω
1E–17 – Body ground	Below 1 Ω
1J–3 or P6–34 (IG1D) – Body ground	10 kΩ or higher

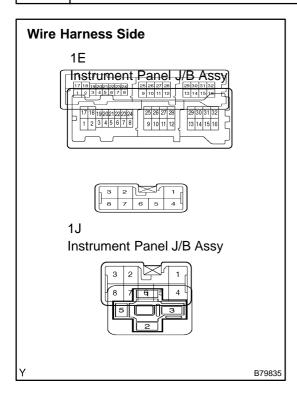
NG \

REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

2004 Prius - Preliminary Release (RM1075U)

## 6 | CHECK DRIVER SIDE J/B



- (a) Disconnect the 1J and 1E instrument panel J/B assy connector.
- (b) Remove IG1 relay from driver side J/B.

### Standard:

Tester Connection	Specified Condition
1J–3 –Instrument panel J/B assy IG1 relay terminal 2	Below 1 Ω
Instrument panel J/B assy IG1 relay terminal 2 – Body ground	10 k $\Omega$ or higher
1E-17 -Instrument panel J/B assy IG1 relay terminal 2	Below 1 Ω

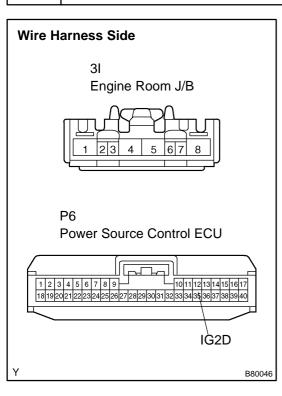
NG )

REPLACE DRIVER SIDE J/B

OK

7

# CHECK WIRE HARNESS (ENGINE ROOM J/B ASSY – POWER SOURCE CONTROL ECU AND BODY GROUND)



- (a) Disconnect the 3I J/B connectors.
- (b) Disconnect the P6 ECU connector.
- (c) Measure the resistance of the wire harness side connectors.

### Standard:

Tester Connection	Specified Condition	
3I-2 - P6-35 (IG2D)	Below 1 Ω	
3I-3 - Body ground	Below 1 Ω	
3I-2 or P6-35 (IG2D)	Below 1 Ω	
<ul> <li>Body ground</li> </ul>		

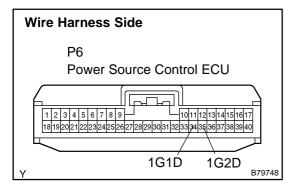
NG \

REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

2004 Prius - Preliminary Release (RM1075U)

#### **CHECK POWER SOURCE CONTROL ECU** 8



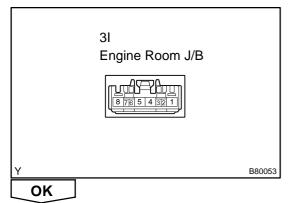
Measure the voltage when the power switch is pushed. (a) Standard:

Tester Connection	Switch Condition	Specified Condition
P6–34 (IG1D) – Body ground	ON (ACC)	0 V
P6–35 (IG2D) – Body ground	ON (ACC)	0 V
P6–34 (IG1D) – Body ground	ON (IG)	10 to 14 V
P6–35 (IG2D) – Body ground	ON (IG)	10 to 14 V

NG REPLACE POWER SOURCE CONTROL ECU

OK

#### 9 **CHECK ENGINE ROOM J/B**



(a) Measure the voltage when the power switch is operated. Standard:

Tester Connection	Condition	Specified Condition
3I-4 - Body ground	ON (IG)	10 to 14 V

**REPLACE ENGINE ROOM J/B** NG

### 10 CHECK OPERATION OF POWER SOURCE CONTROL ECU

After replacing the power source control ECU with a normally functioning ECU, check that the the pow-(a) er switch can be set to ON (IG).

Result	Proceed to
Power switch cannot be set to ON (IG) (w/ smart entry system)	A
Power switch cannot be set to ON (IG) (w/o smart entry system)	В

Go to HYBRID CONTROL SYSTEM (See page 05-385)

Α

### NORMAL (POWER SOURCE CONTROL ECU DEFECTIVE)