DTC P0868-866 Transmission Fluid Pressure Low

DTC P0868-894 Transmission Fluid Pressure Low

for Preparation Click here

DESCRIPTION

For a description of the hybrid vehicle transmission assembly, (Click here).

DTC No.	INF Code	DTC Detection Condition	Trouble Area
P0868	866	Difference between the value of SP2 rotation speed multiplied by the gear ratio of the 2-stage motor speed reduction planetary gear unit and the MG2 rotation speed exceeds a specified value continuously for a specified time (at a vehicle speed of 35 km/h (22 mph) or more).	• Wire harness and connector • Hybrid vehicle transmission assembly • Hybrid vehicle control ECU
P0868	894	Difference between the value of SP2 rotation speed multiplied by the gear ratio of the 2-stage motor speed reduction planetary gear unit and the MG2 rotation speed exceeds a specified value continuously for a specified time (at a vehicle speed of 35 km/h (22 mph) or more).	• Wire harness or connector • Hybrid vehicle transmission assembly • Hybrid vehicle control ECU

WIRING DIAGRAM

Refer to wiring diagram (Click here for P0732-867, Click here for P0731-871, Click here for P0867-876, Click here for P722-854, Click here for P0A1B-168, Click here for P2797-865).

INSPECTION PROCEDURE

CAUTION:

- **Before inspecting the high-voltage system or disconnecting the low voltage connector of the inverter with converter assembly, take safety precautions such as wearing insulated gloves and removing the service plug grip to prevent electrical shocks. After removing the service plug grip, put it in your pocket to prevent other technicians from accidentally reconnecting it while you are working on the high-voltage system.**
- **After disconnecting the service plug grip, wait for at least 10 minutes before touching any of the high-voltage connectors or terminals. After waiting, check the voltage at the inspection point in the inverter with converter assembly. The voltage should be 0 V before beginning work.**

HINT:

Waiting for at least 10 minutes is required to discharge the high-voltage capacitor inside the inverter with converter assembly.

1.CHECK DTC OUTPUT (HV)

a. Connect the intelligent tester to the DLC3.

b. Turn the power switch on (IG).

c. Select the following menu items: Powertrain / Hybrid Control / DTC.

d. Check if DTCs are output.

Result:

DTC No.	Relevant Diagnosis
P0731-873	B2 circuit
P0732-869	B1 circuit
P0867-876, 878, 880, 882	Line pressure circuit
P0722-854	SP2 circuit
P0A3F-243, P0A40-500, P0A4B-253	Motor resolver circuit
P0748-850	SL1 circuit
P0778-851	SL2 circuit

YES → **GO TO DTC CHART**

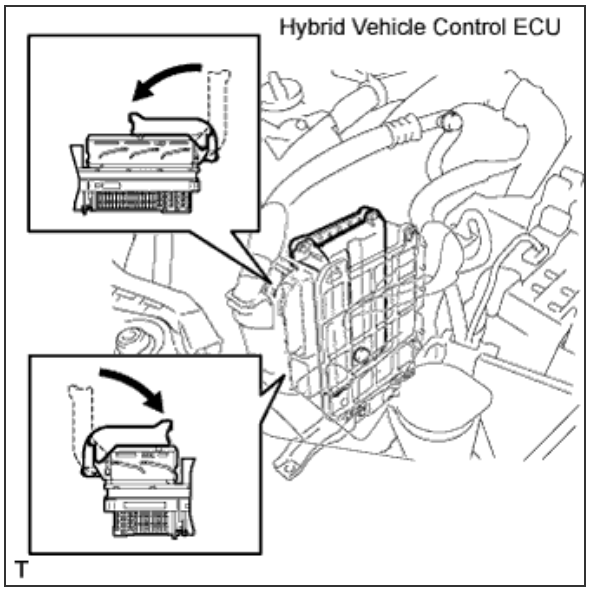
NO

2.CHECK CONNECTOR CONNECTION CONDITION (HYBRID VEHICLE CONTROL ECU CONNECTOR)

a. Turn the power switch off.

b. Check the connections of the hybrid vehicle control ECU connectors.

Result:
The connectors are connected securely and there are no contact problems.



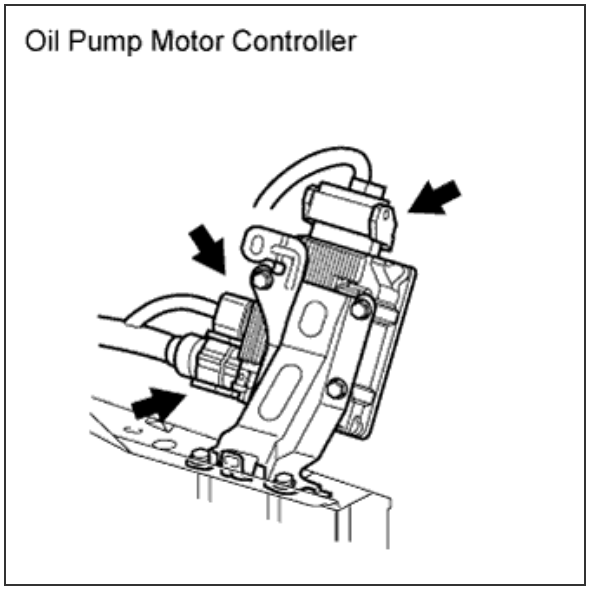
NG → **CONNECT SECURELY**

OK

3.CHECK CONNECTOR CONNECTION CONDITION (OIL PUMP MOTOR CONTROLLER CONNECTOR)

a. Check the connections of the oil pump motor controller connectors.

Result:
The connectors are connected securely and there are no contact problems.



NG → **CONNECT SECURELY**

OK

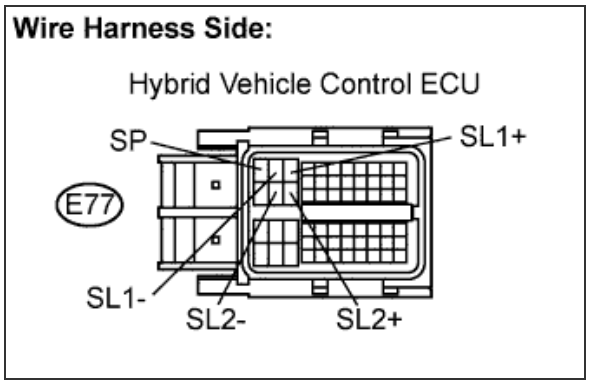
4.CHECK HYBRID VEHICLE TRANSMISSION ASSEMBLY (SL1 SOLENOID VALVE, SL2 SOLENOID VALVE AND SOLENOID VALVE)

a. Disconnect connector E77 from the hybrid vehicle control ECU.

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

Standard resistance:

Tester Connection	Specified Condition
SP (E77-1) - Body ground	11 to 15 Ω at 20°C (68°F)
SL1+ (E77-3) - SL1- (E77-2)	5.0 to 5.6 Ω at 20°C (68°F)
SL2+ (E77-22) - SL2- (E77-21)	5.0 to 5.6 Ω at 20°C (68°F)



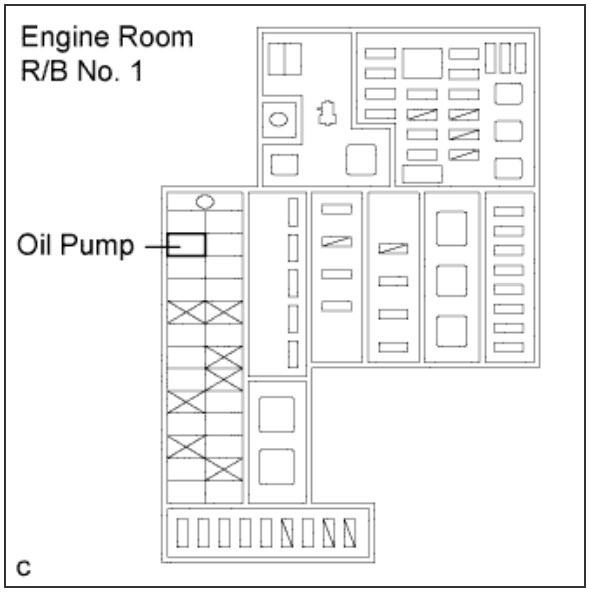
NG → **Go to step 13**

OK

5.CHECK FUSIBLE LINK (OIL PUMP)

a. Check that there is no open circuit in the fusible link (OIL PUMP) in the engine room R/B No. 1.

OK:
There is no open circuit in the fusible link.



NG → REPLACE FUSIBLE LINK

OK

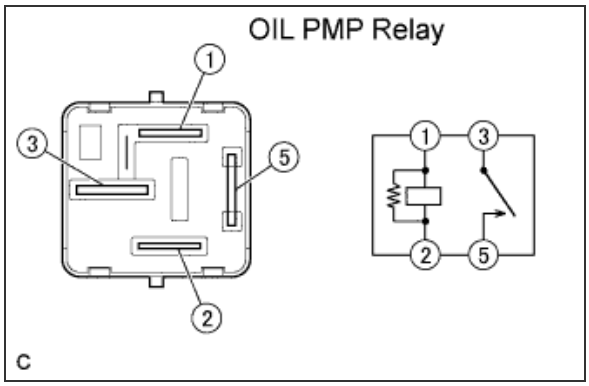
6.CHECK RELAY (OIL PUMP)

a. Remove the OIL PUMP relay from the engine room R/B No. 1.

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

Standard resistance:

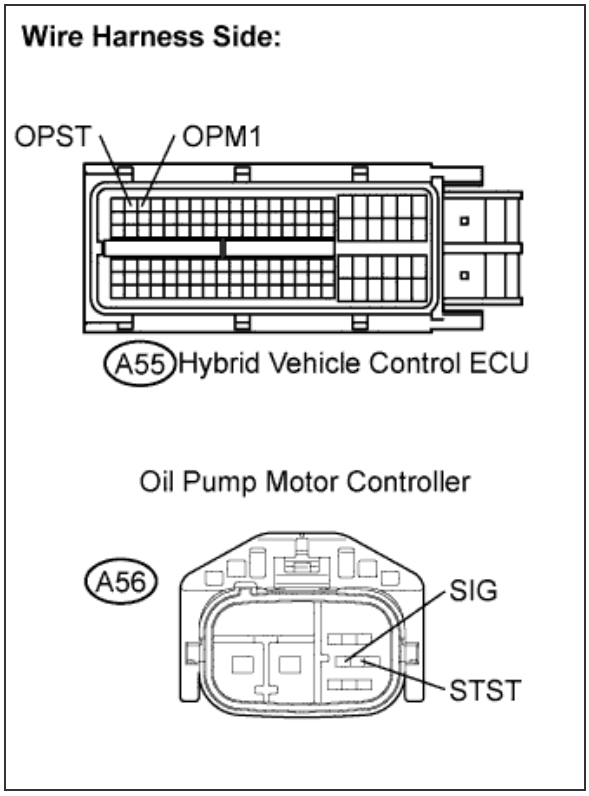
Tester Connection	Specified Condition
1 - 2	151 to 203 Ω
3 - 5	10 kΩ or more
3 - 5	Below 1 Ω (Apply battery voltage between 1 and 2)



NG → REPLACE RELAY (OIL PUMP)

OK

7.CHECK HARNESS AND CONNECTOR (HV CONTROL ECU - OIL PUMP MOTOR CONTROLLER)



a. Turn the power switch off.

b. Disconnect connector A55 from the hybrid vehicle control ECU.

c. Disconnect connector A56 from the oil pump motor controller.

d. Turn the power switch on (IG).

e. Measure the voltage according to the value(s) in the table below.

Standard voltage:

Tester Connection	Specified Condition
OPM1 (A55-3) or SIG (A56-6) - Body ground	Below 1 V
OPST (A55-2) or STST (A56-7) - Body ground	Below 1 V

NOTICE:

Turning the power switch on (IG) with the hybrid vehicle control ECU connector disconnected causes other DTCs to be stored. Clear the DTCs after performing this inspection.

f. Turn the power switch off.

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

Standard resistance:

Tester Connection	Specified Condition
OPM1 (A55-3) - SIG (A56-6)	Below 1 Ω
OPST (A55-2) - STST (A56-7)	Below 1 Ω

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

Standard resistance:

Tester Connection	Specified Condition
OPM1 (A55-3) - Body ground and other terminals	10 kΩ or more
OPST (A55-2) - Body ground and other terminals	10 kΩ or more

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

8.CHECK HYBRID VEHICLE TRANSMISSION ASSEMBLY (OIL PUMP MOTOR CONTROLLER)

a. Disconnect connectors from the oil pump motor controller.

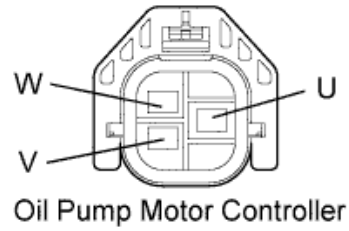
b. Turn the power switch on (IG).

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

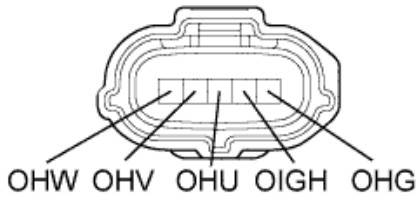
Standard voltage:

Tester Connection	Specified Condition
W - Body ground	Below 1 V
U - Body ground	Below 1 V
V - Body ground	Below 1 V
OHW - Body ground	Below 1 V
OHV - Body ground	Below 1 V
OHU - Body ground	Below 1 V
OIGH - Body ground	Below 1 V
OHG - Body ground	Below 1 V

Wire Harness Side:



Oil Pump Motor Controller



c

NOTICE:

Turning the power switch on (IG) with the oil pump motor controller connectors disconnected causes other DTCs to be stored. Clear the DTCs after performing this inspection.

d. Turn the power switch off.

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

Standard resistance:

Tester Connection	Specified Condition
W - U	Below 1 Ω
W - V	Below 1 Ω

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

Standard resistance:

Tester Connection	Specified Condition
W - Body ground	10 kΩ or more
	10 kΩ or

U - Body ground	more
V - Body ground	10 kΩ or more
OHW - Body ground	10 kΩ or more
OHV - Body ground	10 kΩ or more
OHU - Body ground	10 kΩ or more
OIGH - Body ground	10 kΩ or more
OHG - Body ground	10 kΩ or more

NG → REPLACE HYBRID VEHICLE TRANSMISSION ASSEMBLY (Click here)

OK

9.CHECK OIL PUMP MOTOR CONTROLLER (POWER SOURCE CIRCUIT)

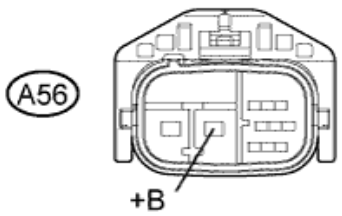
a. Turn the power switch off.

b. Disconnect connector A56 from the oil pump motor controller.

c. Turn the power switch on (IG).

d. Measure the voltage according to the value(s) in the table below.

Wire Harness Side:



Standard voltage:

Tester Connection	Specified Condition
+B (A56-5) - Body ground	11 to 14 V

NOTICE:

Turning the power switch on (IG) with the oil pump motor controller disconnected causes other DTCs to be stored. Clear the DTCs after performing this inspection.

e. Turn the power switch off.

f. Remove the OIL PUMP relay from the engine room R/B No. 1.

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

Standard resistance:

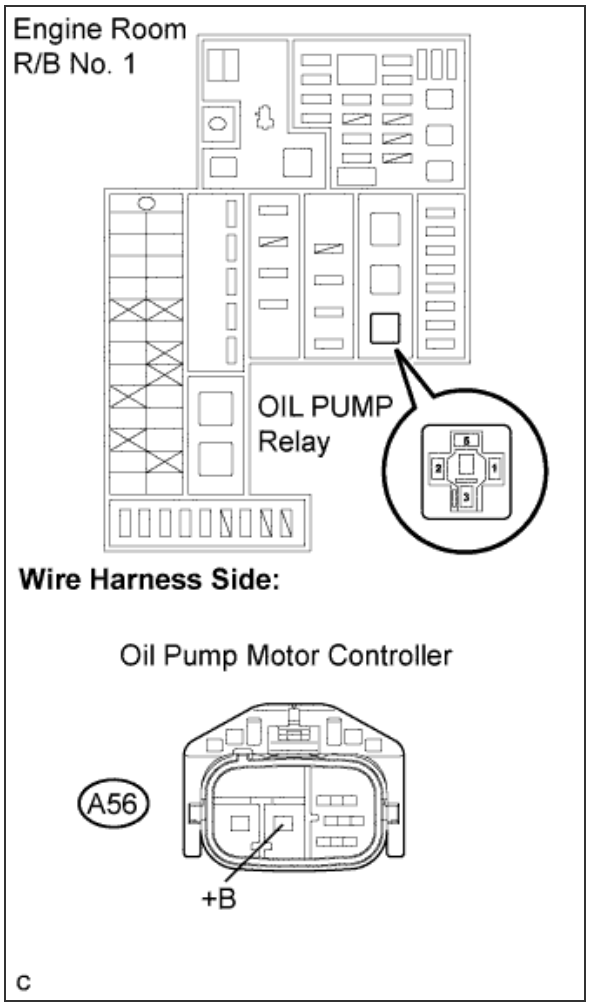
Tester Connection	Specified Condition
Engine room R/B No. 1 OIL PUMP relay terminal 3 - +B (A56-5)	Below 1 Ω

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

Standard resistance:

Tester Connection	Specified Condition
Engine room R/B No. 1 OIL PUMP relay terminal 2 - Body ground	Below 1 Ω

i. Disconnect connector A55 from the hybrid vehicle control ECU.



j. Turn the power switch off.

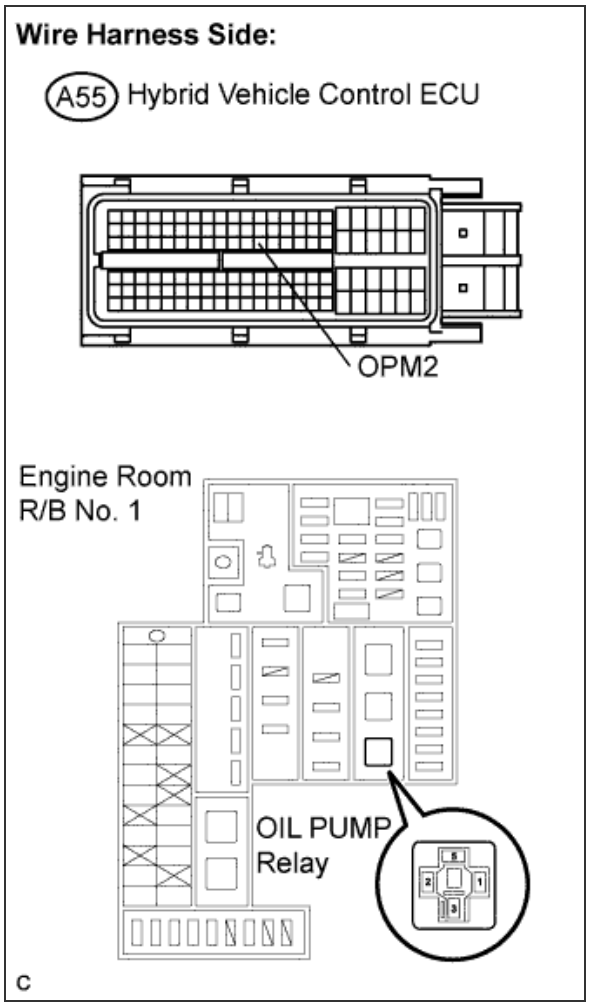
k. Measure the resistance according to the value(s) in the table below.

Standard resistance (Check for open):

Tester Connection	Specified Condition
OPM2 (A55-58) - Engine room R/B No. 1 OIL PUMP relay terminal 1	Below 1 Ω

Standard resistance (Check for short):

Tester Connection	Specified Condition
OPM2 (A55-58) or Engine room R/B No. 1 OIL PUMP relay terminal 1 - Body ground	10 kΩ or more



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

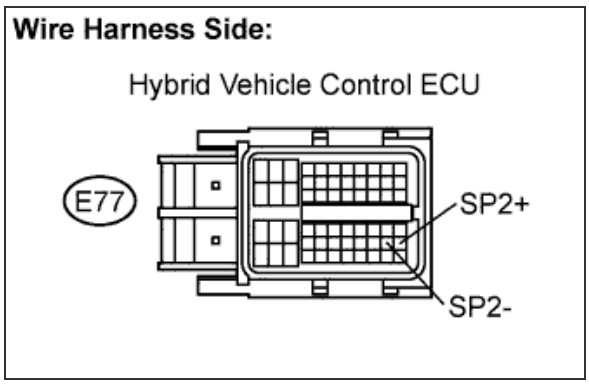
10.CHECK TRANSMISSION REVOLUTION SENSOR (SP2)

a. Disconnect connector E77 from the hybrid vehicle control ECU.

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

Standard resistance:

Tester Connection	Specified Condition
SP2+ (E77-49) - SP2- (E77-48)	560 to 680 Ω at 20°C (68°F)



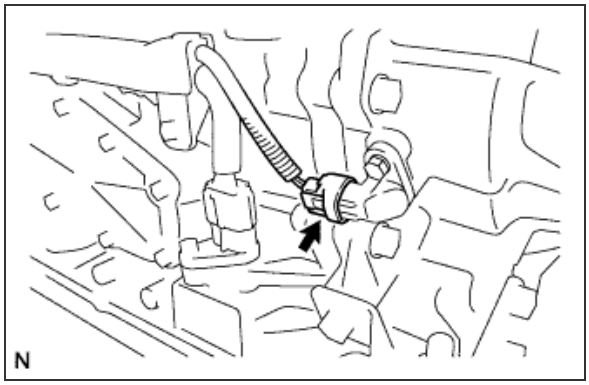
OK → Go to step 15

NG

11.CHECK CONNECTOR CONNECTION CONDITION (TRANSMISSION REVOLUTION SENSOR (SP2) CONNECTOR)

a. Check the connection of the transmission revolution sensor (SP2) connector.

Result:
The connector is connected securely and there are no contact problems.



NG → CONNECT SECURELY

OK

12.CHECK HARNESS AND CONNECTOR (TRANSMISSION REVOLUTION SENSOR (SP2) - HV CONTROL ECU)

a. Disconnect connector E24 from the transmission revolution sensor (SP2).

b. Turn the power switch on (IG).

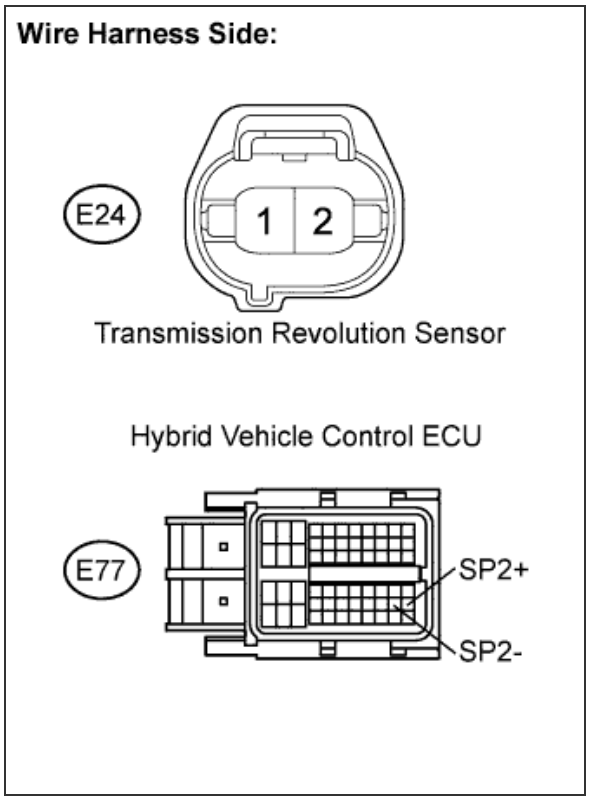
c. Measure the voltage according to the value(s) in the table below.

Standard voltage:

Tester Connection	Specified Condition
SP2- (E77-48) - Body ground	Below 1 V
SP2+ (E77-49) - Body ground	Below 1 V

NOTICE:

Turning the power switch on (IG) with the hybrid vehicle control ECU connectors disconnected causes other DTCs to be stored. Clear the DTCs after performing this inspection.



d. Turn the power switch off.

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

Standard resistance (Check for open):

Tester Connection	Specified Condition
SP2- (E77-48) - E24-1	Below 1 Ω
SP2+ (E77-49) - E24-2	Below 1 Ω

Standard resistance (Check for short):

Tester Connection	Specified Condition
SP2- (E77-48) or E24-1 - Body ground and other terminals	10 kΩ or more
SP2+ (E77-49) or E24-2 - Body ground and other terminals	10 kΩ or more

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

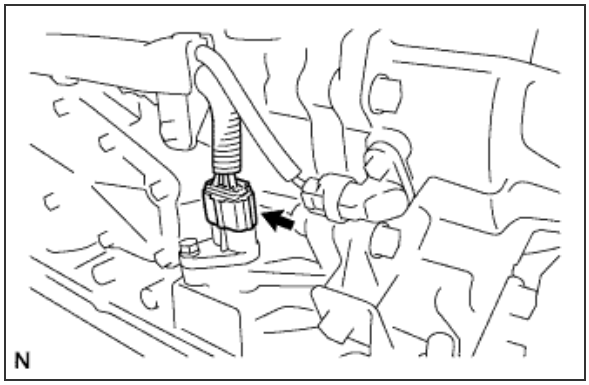
OK

REPLACE HYBRID VEHICLE TRANSMISSION ASSEMBLY (Click here)

13.CHECK CONNECTOR CONNECTION CONDITION (TRANSMISSION WIRE CONNECTOR)

a. Check the connection of the transmission wire connector.

Result:
The connector is connected securely and there are no contact problems.



NG → CONNECT SECURELY

OK

14.CHECK HARNESS AND CONNECTOR (HV CONTROL ECU - TRANSMISSION WIRE)

a. Disconnect connector E83 from the transmission wire.

b. Turn the power switch on (IG).

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

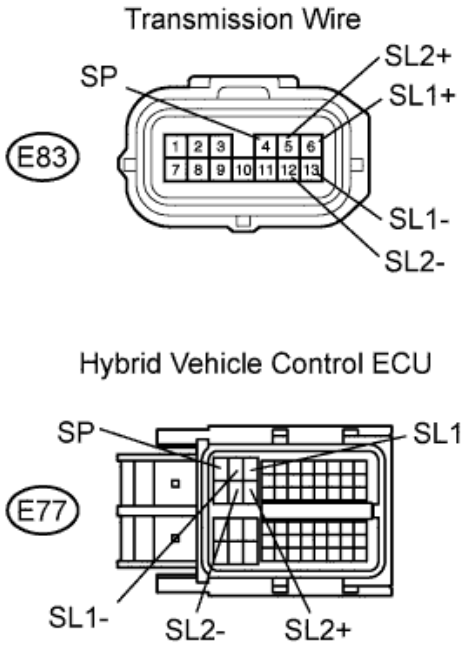
Standard voltage:

Tester Connection	Specified Condition
SP (E77-1) - Body ground	Below 1 V
SL1- (E77-2) - Body ground	Below 1 V
SL1+ (E77-3) - Body ground	Below 1 V
SL2- (E77-21) - Body ground	Below 1 V
SL2+ (E77-22) - Body ground	Below 1 V

NOTICE:

Turning the power switch on (IG) with the hybrid vehicle control ECU connectors disconnected causes other DTCs to be stored. Clear the DTCs after performing this inspection.

Wire Harness Side:



d. Turn the power switch off.

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

Standard resistance (Check for open):

Tester Connection	Specified Condition
SP (E77-1) - SP (E83-4)	Below 1 Ω
SL1- (E77-2) - SL1- (E83-13)	Below 1 Ω
SL1+ (E77-3) - SL1+ (E83-6)	Below 1 Ω
SL2- (E77-21) - SL2- (E83-12)	Below 1 Ω
SL2+ (E77-22) - SL2+ (E83-5)	Below 1 Ω

Standard resistance (Check for short):

Tester Connection	Specified Condition
SP (E77-1) or SP (E83-4) - Body ground and other terminals	10 kΩ or more
SL1- (E77-2) or SL1- (E83-13) - Body ground and other terminals	10 kΩ or more
SL1+ (E77-3) or SL1+ (E83-6) - Body ground and other terminals	10 kΩ or more
SL2- (E77-21) or SL2- (E83-12) - Body ground	10 kΩ or more

and other terminals	
SL2+ (E77-22) or SL2+ (E83-5) - Body ground and other terminals	10 kΩ or more

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

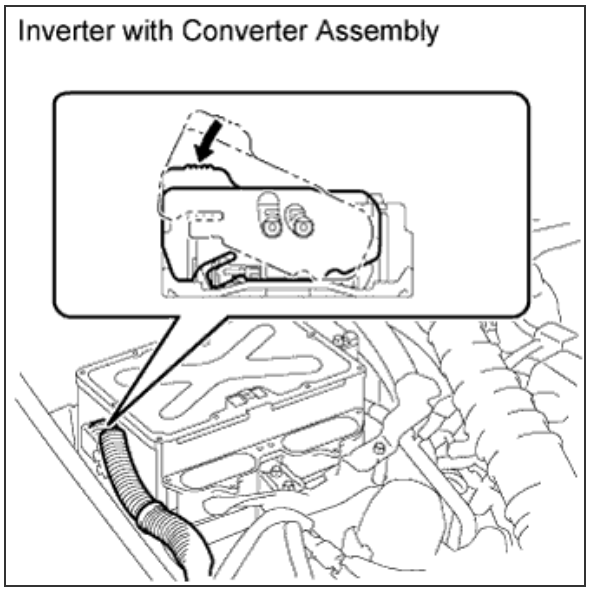
OK

REPLACE HYBRID VEHICLE TRANSMISSION ASSEMBLY (Click here)

15.CHECK CONNECTOR CONNECTION CONDITION (INVERTER WITH CONVERTER ASSEMBLY)

a. Check the connection of the low voltage connector of the inverter with converter assembly.

Result:
The connector is connected securely and there are no contact problems.



NG → CONNECT SECURELY

OK

16.CHECK HARNESS AND CONNECTOR (INVERTER WITH CONVERTER ASSEMBLY - MOTOR RESOLVER)

CAUTION:

Be sure to wear insulated gloves.

a. Turn the power switch off and remove the service plug grip.

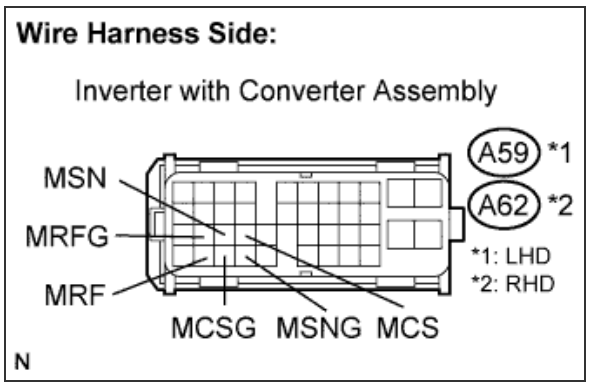
NOTICE:

After removing the service plug grip, do not turn the power switch on (READY), unless instructed by the repair manual because this may cause a malfunction.

b. Disconnect the low voltage connector from the inverter with converter assembly.

c. Turn the power switch on (IG).

d. Measure the voltage according to the value(s) in the table below.



Standard voltage:

LHD:

Tester Connection	Specified Condition
MRF (A59-33) - Body ground	Below 1 V
MRFG (A59-22) - Body ground	Below 1 V
MSN (A59-23) - Body ground	Below 1 V
MSNG (A59-35) - Body ground	Below 1 V
MCS (A59-24) - Body ground	Below 1 V
MCSG (A59-34) - Body ground	Below 1 V

RHD:

Tester Connection	Specified Condition
MRF (A62-33) - Body ground	Below 1 V
MRFG (A62-22) - Body ground	Below 1 V
MSN (A62-23) - Body ground	Below 1 V
MSNG (A62-35) - Body ground	Below 1 V
MCS (A62-24) - Body ground	Below 1 V
MCSG (A62-34) - Body ground	Below 1 V

NOTICE:

Turning the power switch on (IG) with the low voltage connector of the inverter with converter assembly disconnected causes other DTCs to be stored. Clear the DTCs after performing this inspection.

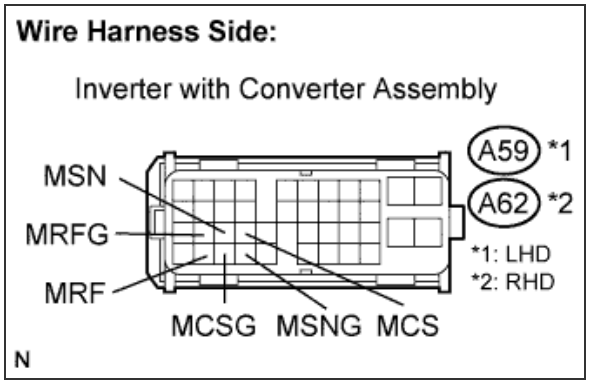
NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

17.CHECK MOTOR RESOLVER

a. Turn the power switch off.

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



Standard resistance (Check for open):

LHD:

Tester Connection	Specified Condition
MRF (A59-33) - MRFG (A59-22)	6.0 to 12.0 Ω
MSN (A59-23) - MSNG (A59-35)	12.5 to 24.5 Ω
MCS (A59-24) - MCSG (A59-34)	12.5 to 24.5 Ω

RHD:

Tester Connection	Specified Condition
MRF (A62-33) - MRFG (A62-22)	6.0 to 12.0 Ω
MSN (A62-23) - MSNG (A62-35)	12.5 to 24.5 Ω
MCS (A62-24) - MCSG (A62-34)	12.5 to 24.5 Ω

Standard resistance (Check for short):

LHD:

Tester Connection	Specified Condition
MRF (A59-33) or MRFG (A59-22) - Body ground	10 kΩ or more
MSN (A59-23) or MSNG (A59-35) - Body ground	10 kΩ or more
MCS (A59-24) or MCSG (A59-34) - Body ground	10 kΩ or more

MRF (A59-33) - MCSG (A59-34)	10 kΩ or more
MRF (A59-33) - MCS (A59-24)	10 kΩ or more
MRF (A59-33) - MSNG (A59-35)	10 kΩ or more
MRF (A59-33) - MSN (A59-23)	10 kΩ or more
MRFG (A59-22) - MCSG (A59-34)	10 kΩ or more
MRFG (A59-22) - MCS (A59-24)	10 kΩ or more
MRFG (A59-22) - MSNG (A59-35)	10 kΩ or more
MRFG (A59-22) - MSN (A59-23)	10 kΩ or more
MCSG (A59-34) - MSNG (A59-35)	10 kΩ or more
MCSG (A59-34) - MSN (A59-23)	10 kΩ or more
MCS (A59-24) - MSNG (A59-35)	10 kΩ or more
MCS (A59-24) - MSN (A59-23)	10 kΩ or more

RHD:

Tester Connection	Specified Condition
MRF (A62-33) or MRFG (A62-22) - Body ground	10 kΩ or more
MSN (A62-23) or MSNG (A62-35) - Body ground	10 kΩ or more
MCS (A62-24) or MCSG (A62-34) - Body ground	10 kΩ or more
MRF (A62-33) - MCSG (A62-34)	10 kΩ or more
MRF (A62-33) - MCS (A62-24)	10 kΩ or more
MRF (A62-33) - MSNG (A62-35)	10 kΩ or more
MRF (A62-33) - MSN (A62-23)	10 kΩ or more
MRFG (A62-22) - MCSG (A62-34)	10 kΩ or more
MRFG (A62-22) - MCS (A62-24)	10 kΩ or more
MRFG (A62-22) - MSNG (A62-35)	10 kΩ or more
MRFG (A62-22) - MSN (A62-23)	10 kΩ or more
MCSG (A62-34) - MSNG (A62-35)	10 kΩ or more

MCSG (A62-34) - MSN (A62-23)	10 kΩ or more
MCS (A62-24) - MSNG (A62-35)	10 kΩ or more
MCS (A62-24) - MSN (A62-23)	10 kΩ or more

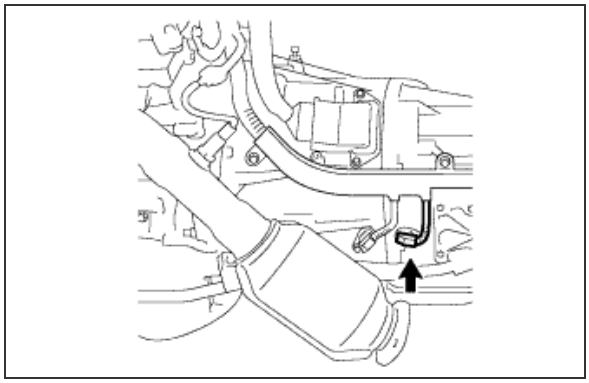
OK → Go to step 20

NG

18.CHECK CONNECTOR CONNECTION CONDITION (MOTOR RESOLVER CONNECTOR)

a. Check the connection of the motor resolver connector.

Result:
The connector is connected securely and there are no contact problems.



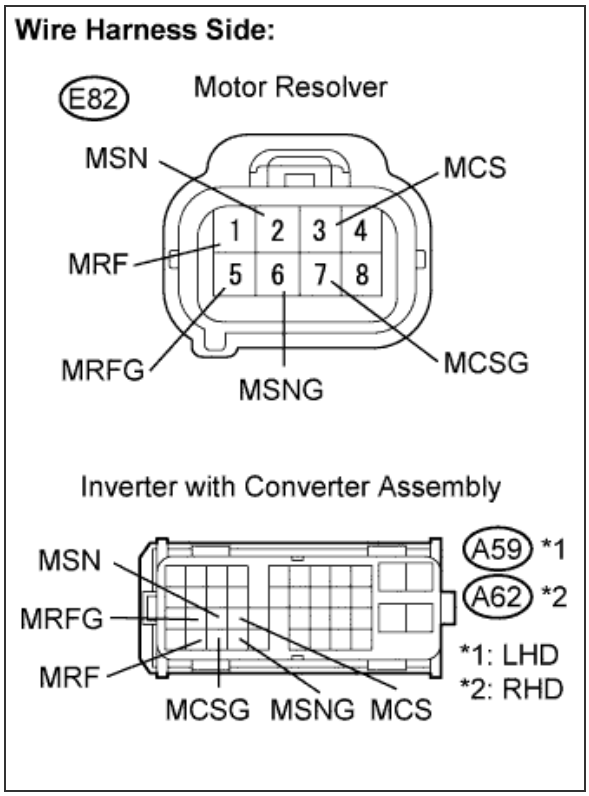
NG → CONNECT SECURELY

OK

19.CHECK HARNESS AND CONNECTOR (INVERTER WITH CONVERTER ASSEMBLY - MOTOR RESOLVER)

a. Disconnect the motor resolver connector.

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



Standard resistance (Check for open):

LHD:

Tester Connection	Specified Condition
MRF (A59-33) - MRF (E82-1)	Below 1 Ω
MRFG (A59-22) - MRFG (E82-5)	Below 1 Ω
MSN (A59-23) - MSN (E82-2)	Below 1 Ω
MSNG (A59-35) - MSNG (E82-6)	Below 1 Ω
MCS (A59-24) - MCS (E82-3)	Below 1 Ω
MCSG (A59-34) - MCSG (E82-7)	Below 1 Ω

RHD:

Tester Connection	Specified Condition
MRF (A62-33) - MRF (E82-1)	Below 1 Ω
MRFG (A62-22) - MRFG (E82-5)	Below 1 Ω
MSN (A62-23) - MSN (E82-2)	Below 1 Ω
MSNG (A62-35) - MSNG (E82-6)	Below 1 Ω
MCS (A62-24) - MCS (E82-3)	Below 1 Ω
MCSG (A62-34) - MCSG	Below 1 Ω

(E82-7)	

Standard resistance (Check for short):

LHD:

Tester Connection	Specified Condition
MRF (A59-33) or MRF (E82-1) - Body ground	10 kΩ or more
MRFG (A59-22) or MRFG (E82-5) - Body ground	10 kΩ or more
MSN (A59-23) or MSN (E82-2) - Body ground	10 kΩ or more
MSNG (A59-35) or MSNG (E82-6) - Body ground	10 kΩ or more
MCS (A59-24) or MCS (E82-3) - Body ground	10 kΩ or more
MCSG (A59-34) or MCSG (E82-7) - Body ground	10 kΩ or more
MRF (A59-33) - MRFG (A59-22)	10 kΩ or more
MRF (A59-33) - MCSG (A59-34)	10 kΩ or more
MRF (A59-33) - MCS (A59-24)	10 kΩ or more
MRF (A59-33) - MSNG (A59-35)	10 kΩ or more
MRF (A59-33) - MSN (A59-23)	10 kΩ or more
MRFG (A59-22) - MCSG (A59-34)	10 kΩ or more
MRFG (A59-22) - MCS (A59-24)	10 kΩ or more
MRFG (A59-22) - MSNG (A59-35)	10 kΩ or more
MRFG (A59-22) - MSN (A59-23)	10 kΩ or more
MCSG (A59-34) - MRFG (A59-22)	10 kΩ or more
MCSG (A59-34) - MSNG (A59-35)	10 kΩ or more
MCSG (A59-34) - MCS (A59-24)	10 kΩ or more
MCS (A59-24) - MSNG (A59-35)	10 kΩ or more
MCS (A59-24) - MSN (A59-23)	10 kΩ or more

RHD:

Tester Connection	Specified Condition
MRF (A62-33) or MRF	10 kΩ or

(E82-1) - Body ground	more
MRFG (A62-22) or MRFG (E82-5) - Body ground	10 kΩ or more
MSN (A62-23) or MSN (E82-2) - Body ground	10 kΩ or more
MSNG (A62-35) or MSNG (E82-6) - Body ground	10 kΩ or more
MCS (A62-24) or MCS (E82-3) - Body ground	10 kΩ or more
MCSG (A62-34) or MCSG (E82-7) - Body ground	10 kΩ or more
MRF (A62-33) - MRFG (A62-22)	10 kΩ or more
MRF (A62-33) - MCSG (A62-34)	10 kΩ or more
MRF (A62-33) - MCS (A62-24)	10 kΩ or more
MRF (A62-33) - MSNG (A62-35)	10 kΩ or more
MRF (A62-33) - MSN (A62-23)	10 kΩ or more
MRFG (A62-22) - MCSG (A62-34)	10 kΩ or more
MRFG (A62-22) - MCS (A62-24)	10 kΩ or more
MRFG (A62-22) - MSNG (A62-35)	10 kΩ or more
MRFG (A62-22) - MSN (A62-23)	10 kΩ or more
MCSG (A62-34) - MRFG (A62-22)	10 kΩ or more
MCSG (A62-34) - MSNG (A62-35)	10 kΩ or more
MCSG (A62-34) - MCS (A62-24)	10 kΩ or more
MCS (A62-24) - MSNG (A62-35)	10 kΩ or more
MCS (A62-24) - MSN (A62-23)	10 kΩ or more

HINT:

The motor resolver is not available separately. If it requires replacement, replace the hybrid vehicle transmission assembly.

NG → **REPAIR OR REPLACE HARNESS OR CONNECTOR**

OK

REPLACE HYBRID VEHICLE TRANSMISSION ASSEMBLY (Click here)

20.CLEAR DTC

a. Connect the intelligent tester to the DLC3.

b. Turn the power switch on (IG).

c. Read and record the DTCs and freeze frame data.

d. Select the following menu items: Powertrain / Hybrid Control / DTC / Clear.

e. Clear the DTCs.

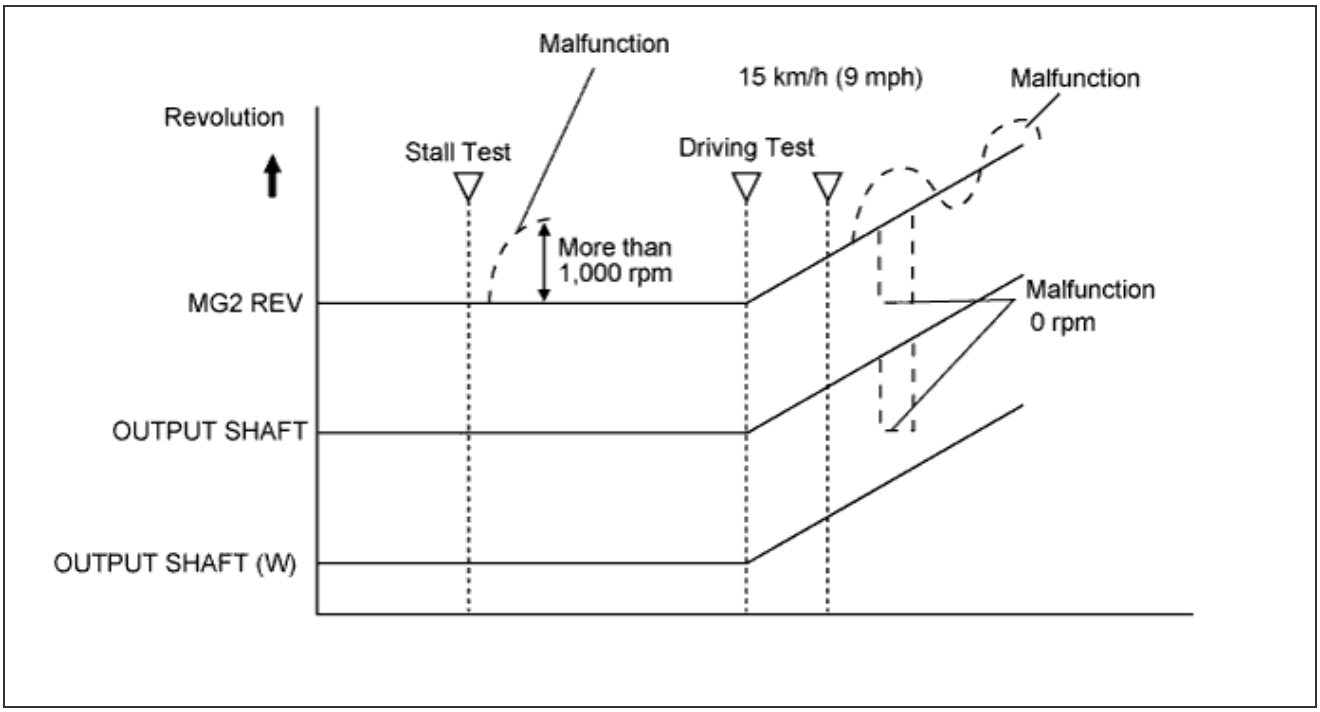
NEXT

21.SIMULATION TEST

a. Turn the power switch on (READY).

b. Select the following menu items: Powertrain / Hybrid Control / Data List / Motor(MG2) Revolution, Output Shaft Speed, Output Shaft Speed Calculated by Wheel Speed.

c. Perform a stall test and road test, and read the data list.



NOTICE:

- **Before inspection, sufficiently warm up the engine.**
- **Make sure to perform this procedure after the engine has been inspected and adjusted.**
- **Do not perform a stall test for 5 or more seconds.**
- **Perform a stall test on an asphalt surface or other place with a high**

friction coefficient (μ) in order to prevent wheelspin.

HINT:

- **When performing a road test, the vehicle speed should be 35 km/h (22 mph) or more.**
- **Avoid sudden acceleration and deceleration during a road test.**

Result:
The "Motor(MG2) Revolution" value in the data list changes normally, and the "Output Shaft Speed" and "Output Shaft Speed Calculated by Wheel Speed" values should be almost equal with a vehicle speed of 15 km/h (9 mph) or more.

NG → **REPLACE HYBRID VEHICLE TRANSMISSION ASSEMBLY (Click here)**

OK ↓

22.CHECK FOR INTERMITTENT PROBLEMS

a. Check for intermittent problems (Click here).

NG → **REPAIR OR REPLACE MALFUNCTIONING PARTS, COMPONENT AND AREA**

OK ↓

23.CHECK FOR FLUID LEAK

a. Check for fluid leaks from the hybrid vehicle transmission assembly.

OK:
There are no fluid leaks.

NG → **REPAIR OR REPLACE HYBRID VEHICLE TRANSMISSION ASSEMBLY (Click here)**

OK ↓

REPLACE HYBRID VEHICLE CONTROL ECU (Click here)