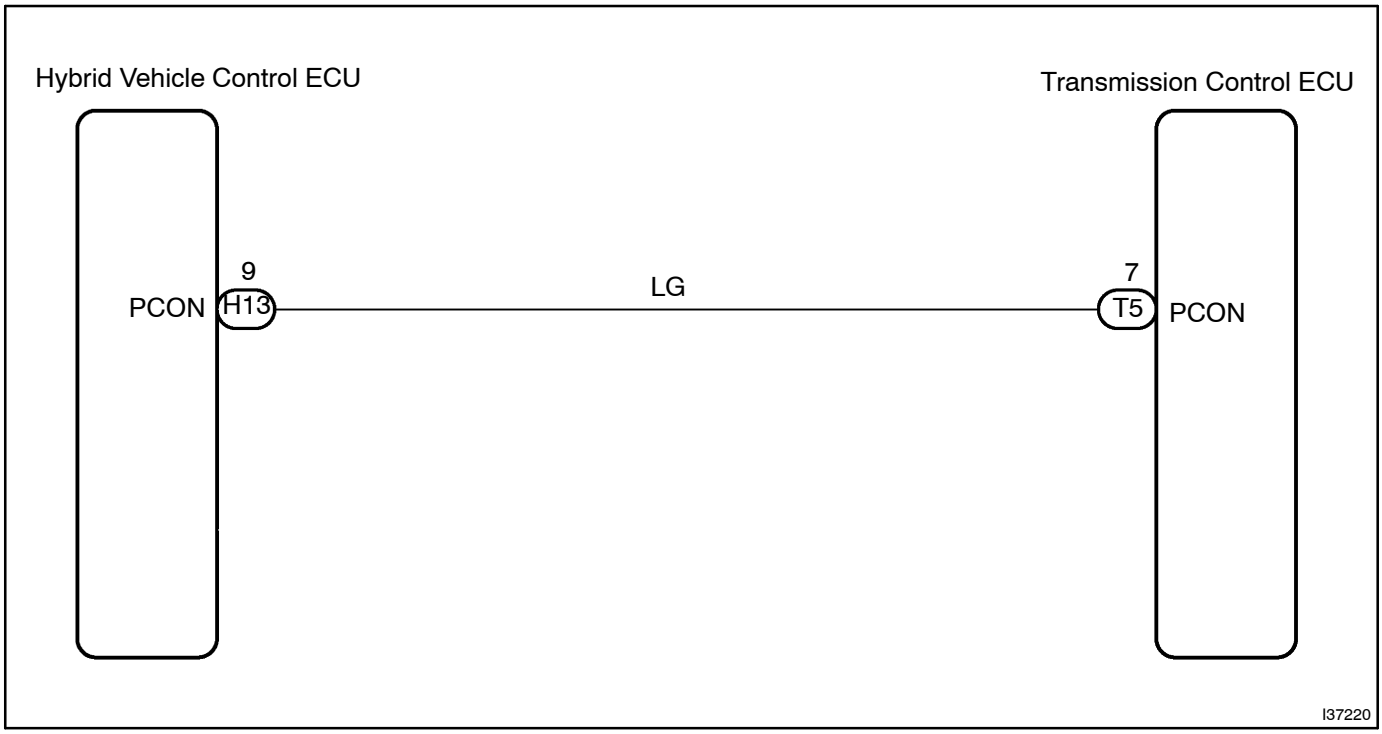
# DTC C2311 HV COMMUNICATION LINE MALFUNCTION

## CIRCUIT DESCRIPTION

The transmission control ECU receives a P position switch signal from the hybrid vehicle control ECU and activates the parking lock motor by controlling current, causing the parking lock mechanism to switch. The transmission control ECU outputs this DTC when it detects a communication error between the hybrid vehicle control ECU and the transmission control ECU.

| DTC No. | DTC detecting condition | Trouble area |
|---|---|---|
| C2311 | • Power switch on (IG)<br>• Signals from the hybrid control ECU cannot be received, or there is a problem with a pulse signal from the hybrid vehicle control ECU for 1 sec. or more. | • Transmission control ECU assy<br>• Hybrid vehicle control ECU<br>• Wire harness or connector |

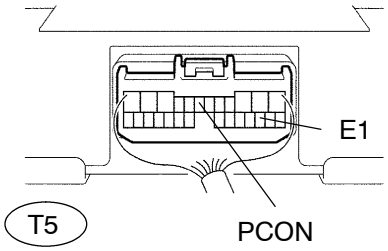
## WIRING DIAGRAM



# INSPECTION PROCEDURE

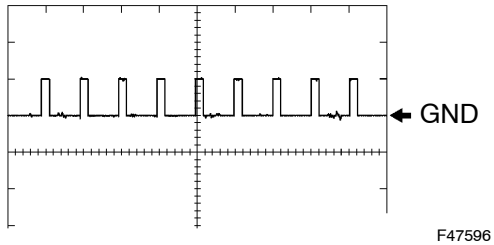
| 1 | INSPECT TRANSMISSION CONTROL ECU ASSY(P CON TERMINAL) |
|---|---|

**Transmission Control ECU Assy:**




F44947

Normal Signal Wave form




F47596

(a) Check output wave form.

(1) Turn the power switch on (IG).

(2) Using an oscilloscope, check the output wave form between terminals PCON (7) and E1 (15) transmission control ECU assy T5 connector.

**OK:**

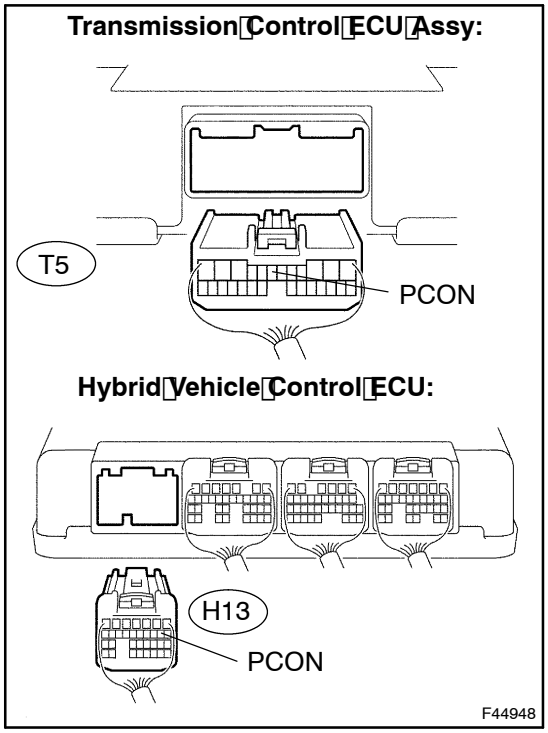
**The output wave form appears as shown in the illustration.**

| Item | Contents |
|---|---|
| Tool setting | 5V / DIV, 20 ms / DIV |
| Vehicle condition | Power switch on (IG) |

**OK** → **REPLACE TRANSMISSION CONTROL ECU ASSY**

**NG**

| 2 | CHECK HARNESS AND CONNECTOR (HYBRID VEHICLE CONTROL ECU – TRANSMISSION CONTROL ECU ASSY) |
|---|---|




(a) Disconnect the T5 connector from the transmission control ECU assy.

(b) Disconnect the H13 connector from the hybrid vehicle control ECU.

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

**Standard:**

| Tester connection (Symbols) | Condition | Specified condition |
|---|---|---|
| T5–7 (PCON) – H13–9 (PCON) | Always | Below 1 Ω |
| T5–7 (PCON) – Body ground | Always | 10 kΩ or higher |

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK →

REPLACE HYBRID VEHICLE CONTROL ECU (SEE PAGE 21–128)