

Driver Side Door UNLOCK Detection Switch Circuit

DESCRIPTION

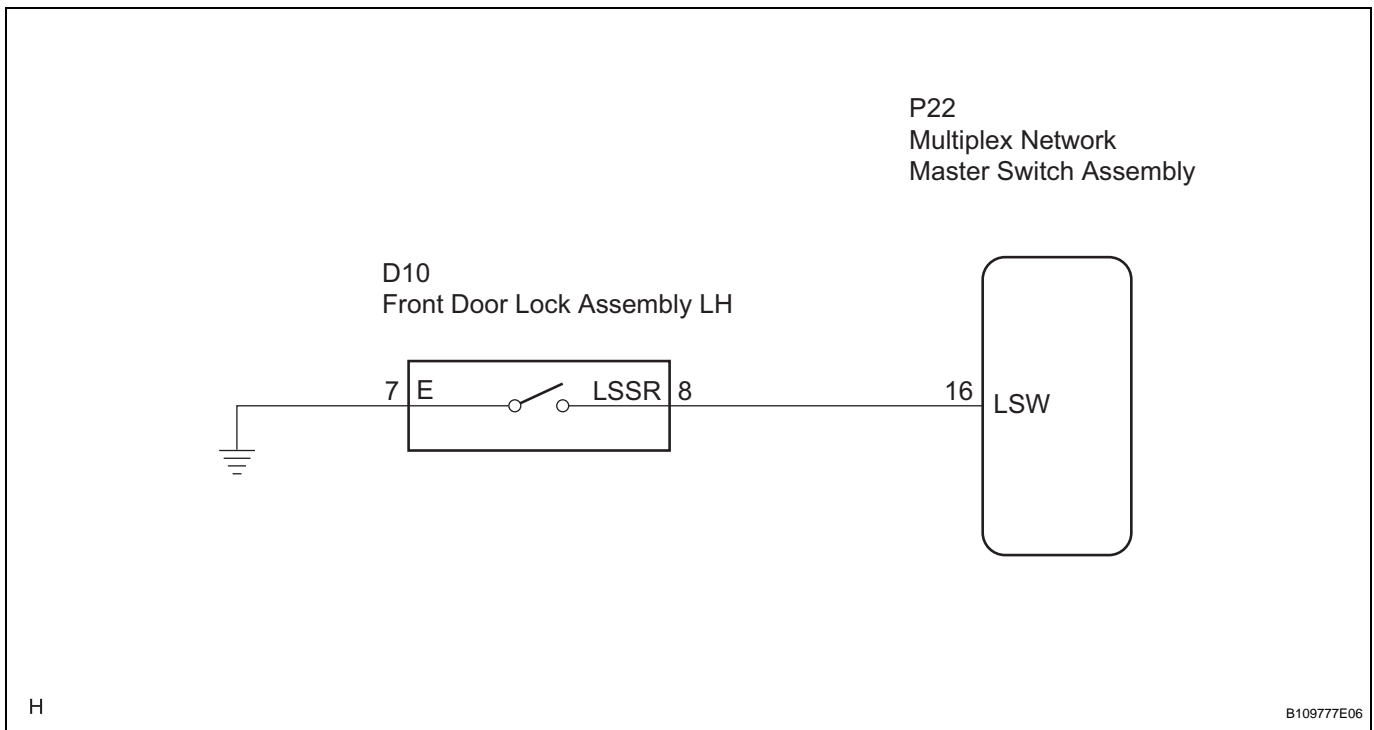
The driver's door unlock detection switch is built into the driver's door lock assembly. The switch turns on when the driver's door is locked and turns off when the door is unlocked.

The multiplex network master switch assembly is connected to the driver's door lock assembly via terminal LSW and driver's door lock/unlock state signals are input to the multiplex network master switch assembly.

The multiplex network master switch assembly applies voltage to the door unlock detection switch via terminal LSW. When the door unlock detection switch is on (there is continuity between the switch terminals), a lock state signal is input to the multiplex network master switch assembly. When the switch is off (there is no continuity between the switch terminals), an unlock state signal is input.

The multiplex network master switch assembly sends driver's door lock/unlock state information to the body ECU using multiplex communication.

WIRING DIAGRAM



1

READ VALUE OF DATA LIST (DOOR UNLOCK DETECTION SWITCH)

- (a) Check the DATA LIST to ensure proper function of the door unlock detection switch.

MASTER SW:

| Item | Measurement Item / Display (Range) | Normal Condition | Diagnostic Note |
|-------------|------------------------------------------------|---------------------------------------------------------------------|-----------------|
| LOCK POS SW | Door unlock detection switch signal /ON or OFF | ON: Driver side door is unlocked OFF: Driver side door is locked | - |

OK:

The display is as specified in the normal condition.

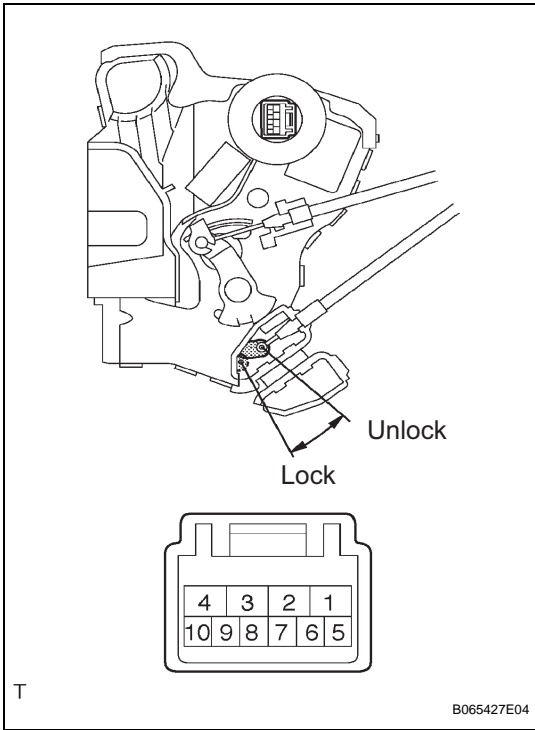
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Go to step 2

OK

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE

2 INSPECT FRONT DOOR LOCK ASSEMBLY (DOOR UNLOCK DETECTION SWITCH)



- (a) Remove the front door lock assembly.
- (b) Measure the resistance according to the value(s) in the table below.

Standard resistance

| Measurement Condition | Door Lock Condition | Specified Condition |
|------------------------------------------------------------------------|---------------------|-------------------------|
| Battery positive (+) → Terminal 4 Battery negative (-) → Terminal 1 | Lock | 7 - 8 (10 kΩ or higher) |
| Battery positive (+) → Terminal 1 Battery negative (-) → Terminal 4 | Unlock | 7 - 8 (Below 1 Ω) |

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REPLACE FRONT DOOR LOCK ASSEMBLY

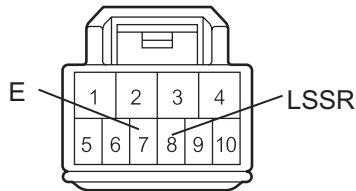
OK

DL

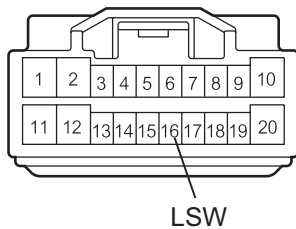
3 CHECK WIRE HARNESS (FRONT DOOR LOCK ASSEMBLY - MULTIPLEX NETWORK MASTER SWITCH)

Wire Harness Side:

D10
Front Door Lock Assembly LH



P22
Multiplex Network Master
Switch Assembly



H

B111707E01

- Disconnect the front door lock assembly connector.
- Disconnect the multiplex network master switch assembly connector.
- Measure the resistance according to the value(s) in the table below.

Standard resistance

| Tester Connection | Condition | Specified Condition |
|-----------------------------|-----------|---------------------|
| D10-8 (LSSR) - P22-16 (LSW) | Always | Below 1 Ω |
| D10-7 (E) - Body ground | Always | Below 1 Ω |

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REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE