

TRANSMISSION CONTROL SWITCH CIRCUIT

CIRCUIT DESCRIPTION

When moving the shift lever into the S position using the transmission control switch, it is possible to switch the shift range position between "1" (first range) and "6" (sixth range).

Shifting up "+" once raises one shift range position, and shifting down "-" lowers one shift range position.

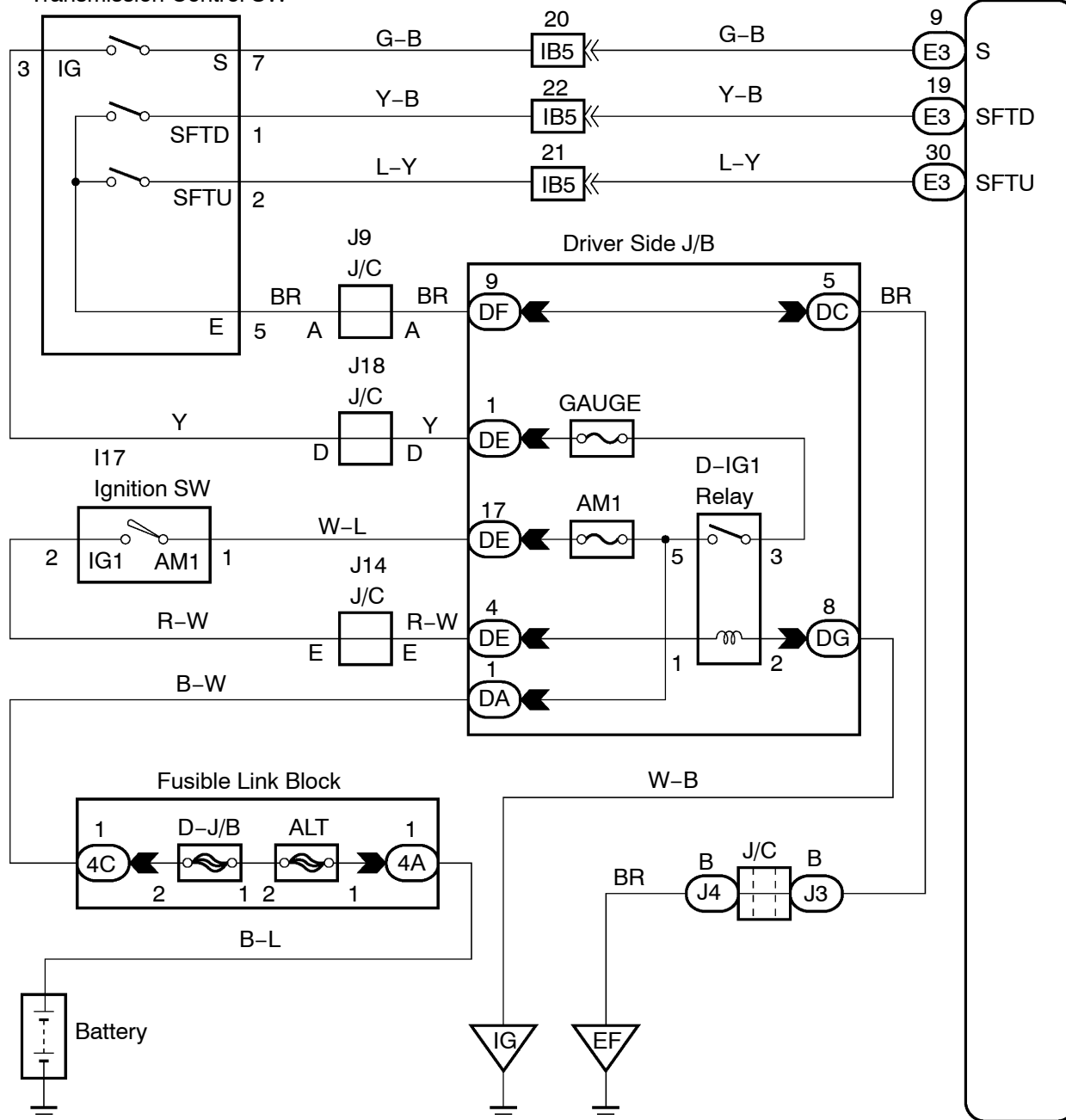
WIRING DIAGRAM

LHD:

T21

Transmission Control SW

ECM

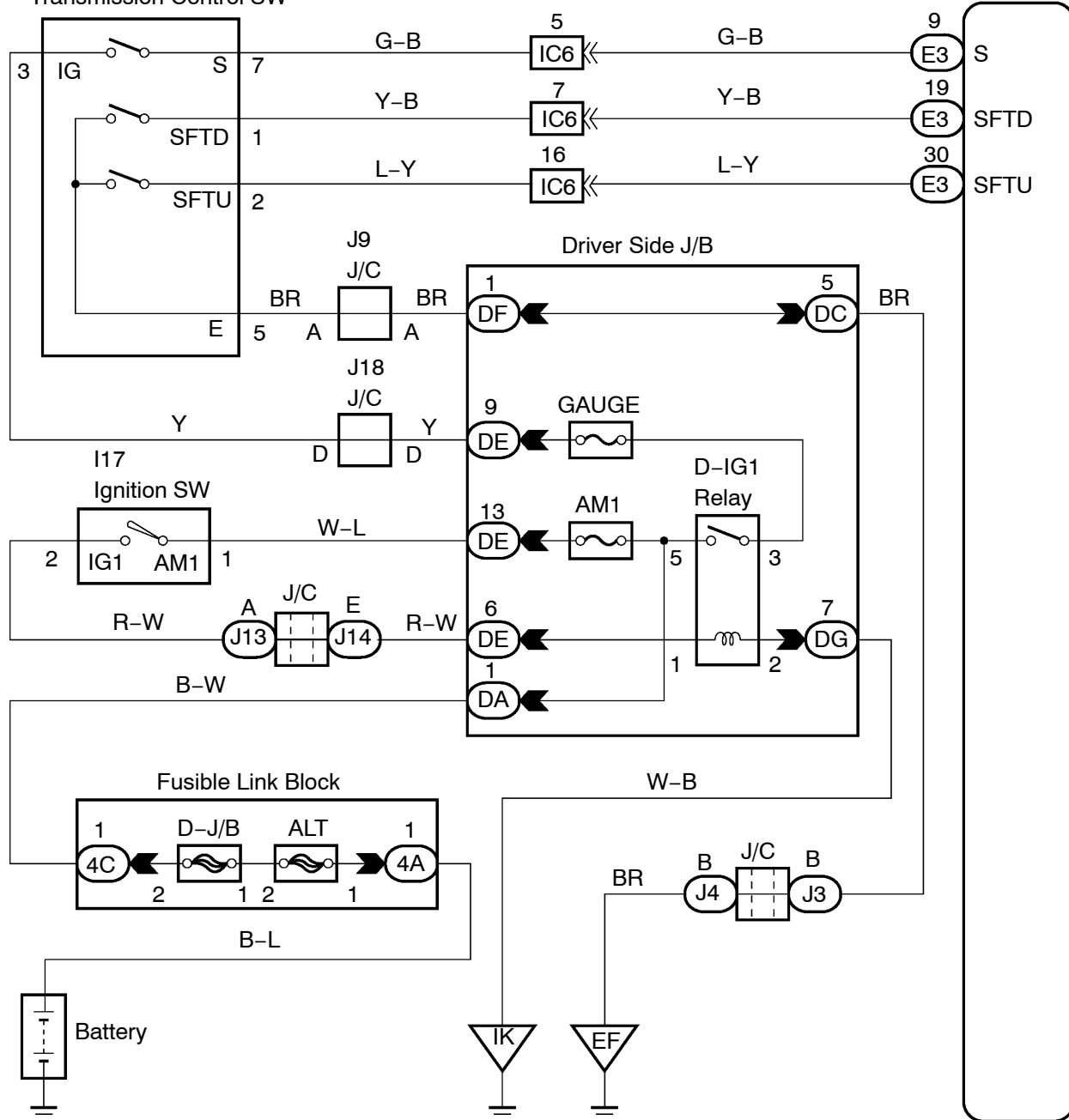


RHD:

T21

Transmission Control SW

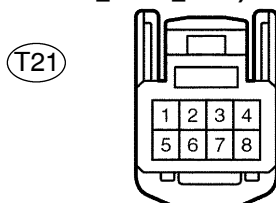
ECM



INSPECTION PROCEDURE

1 CHECK HARNESS AND CONNECTOR (BATTERY – TRANSMISSION CONTROL SWITCH)

Wire Harness Side:
(Connector Front View):



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- Disconnect the transmission control switch connector of shift lock control unit Assy.
- Measure the voltage according to the value(s) in the table below.

Standard:

Switch Condition	Tester Connection	Specified Condition
IG Switch ON	3 – Body Ground	10 to 14 V
IG Switch OFF	↑	Below 1 V

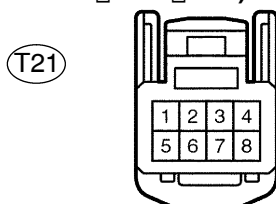
NG

REPAIR OR REPLACE HARNESS OR CONNECTOR (SEE PAGE 01-44)

OK

2 CHECK HARNESS AND CONNECTOR (TRANSMISSION CONTROL SWITCH – BODY GROUND)

Wire Harness Side:
(Connector Front View):



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

Standard:

Tester Connection	Specified Condition
5 – Body Ground	Below 1 Ω

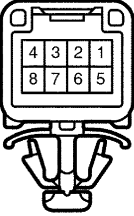
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REPAIR OR REPLACE HARNESS OR CONNECTOR (SEE PAGE 01-44)

OK

3 INSPECT TRANSMISSION CONTROL SWITCH

Switch Side:
(Connector Front View):



(a) Measure resistance between each terminal of shift lock control unit assy when the shift lever is moved to each position.

Standard:

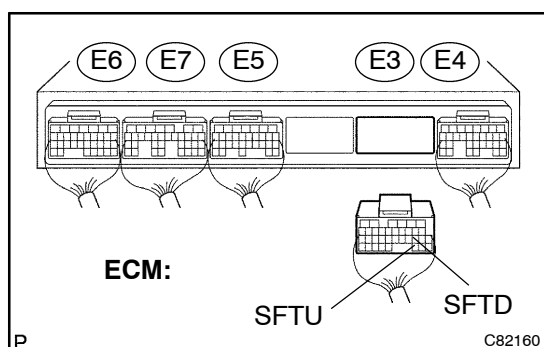
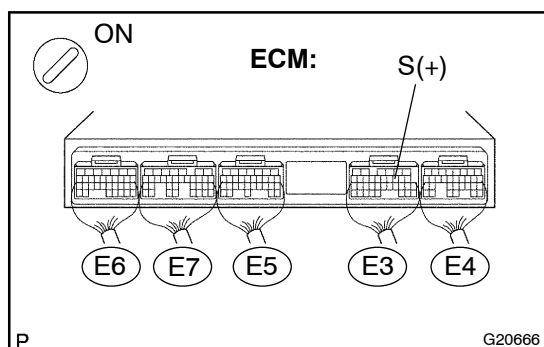
Shift Position	Tester Connection	Specified Condition
S, "+" and "-"	3 - 7	Below 1 Ω
Except S, "+" and "-"	↑	10 kΩ or higher
Press continuously "+" (Up shift)	2 - 5	Below 1 Ω
S	↑	10 kΩ or higher
Press continuously "-" (Down shift)	1 - 5	Below 1 Ω
S	↑	10 kΩ or higher

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REPLACE TRANSMISSION CONTROL SWITCH
(SEE PAGE 40-42)

OK

4 CHECK HARNESS AND CONNECTOR (TRANSMISSION CONTROL SWITCH – ECM)



- Connect the transmission control switch connector of shift lock control unit Assy.
- Turn the ignition switch to the ON position, and measure the voltage according to the value(s) in the table below when the shift lever is moved to each position.

Standard:

Shift Position	Tester Connection	Specified Condition
S, "+" and "-"	E3 - 9 (S) - Body Ground	10 to 14 V
Except S, "+" and "-"	↑	Below 1 V

- Turn the ignition switch to the LOCK position.
- Disconnect the ECM connector.
- Measure the resistance according to the value(s) in the table below when the shift lever is moved to each position.

Standard:

Shift Position	Tester Connection	Specified Condition
Press continuously "+" (Up Shift)	E3 - 30 (SFTU) - Body Ground	Below 1 Ω
S	↑	10 kΩ or higher
Press continuously "-" (Down Shift)	E3 - 19 (SFTD) - Body Ground	Below 1 Ω
S	↑	10 kΩ or higher

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REPAIR OR REPLACE HARNESS OR CONNECTOR (SEE PAGE 01-44)

OK

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE (SEE PAGE 05-539)