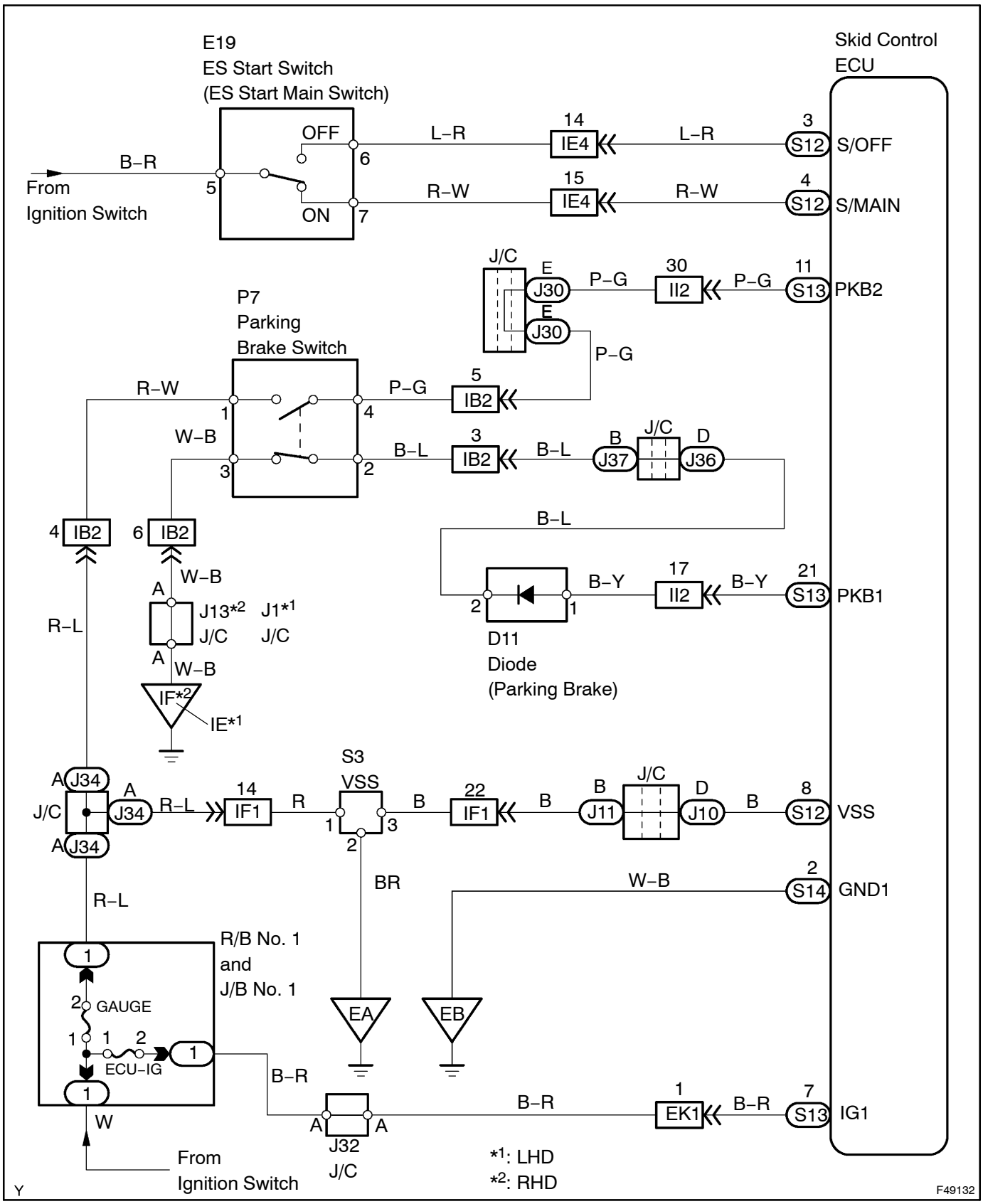
ES STARTING SYSTEM DOES NOT OPERATE

CIRCUIT DESCRIPTION

The skid control ECU controls the ES starting system. When the ABS & BA system has a malfunction, the ES starting system does not operate.

WIRING DIAGRAM



INSPECTION PROCEDURE

1 CHECK FOR DTCS

(a) Check for DTCs.
Result:

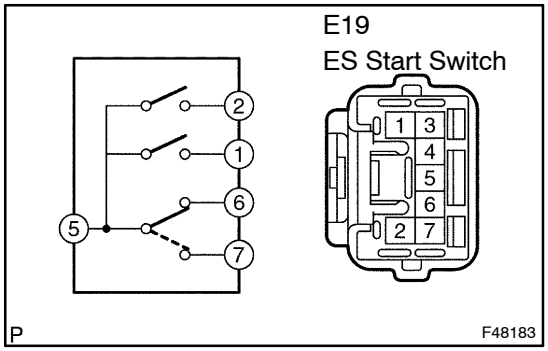
Result	Proceed to
No DTC is output	A
ABS & BA system DTC is output	B
ES starting system DTC is output	C

B → **Go to ABS & BA SYSTEM (See page 05–191)**

C → **Go to DTC CHART (See page 05–276)**

A

2 INSPECT ES START SWITCH (ES START MAIN SWITCH)



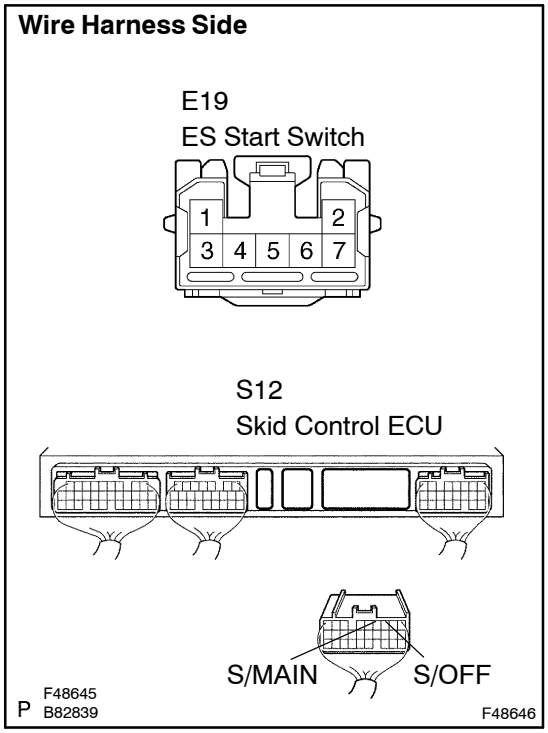
(a) Remove the ES start switch.
(b) Measure the resistance of the switch.
Standard:

Tester Connection	ES Start Main Switch Condition	Specified Condition
E19–5 – E19–6	OFF → ON	Below 1 Ω → 10 kΩ or higher
E19–5 – E19–7	ON → OFF	Below 1 Ω → 10 kΩ or higher

NG → **REPLACE ES START SWITCH**

OK

3 CHECK WIRE HARNESS (ES START SWITCH – SKID CONTROL ECU AND BATTERY)



(a) Disconnect the S12 ECU connector.
(b) Disconnect the E19 switch connector.
(c) Measure the voltage and resistance of the wire harness side connectors.
Standard:

Terminal Connection	Condition	Specified Condition
E19–6 – S12–3 (S/OFF)	Always	Below 1 Ω
E19–7 – S12–4 (S/MAIN)	Always	Below 1 Ω
E19–5 – Body ground	Ignition switch ON	20 to 28 V

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

OK

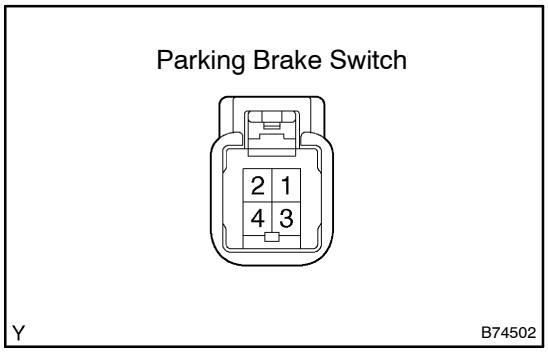
4 INSPECT FUSE (GAUGE, ECU–IG)

(a) Remove the GAUGE and ECU–IG fuse from the R/B No. 1 and J/B No. 1.
(b) Measure the resistance.
Standard: Below 1 Ω

NG → **REPLACE FUSE**

OK

5 INSPECT PARKING BRAKE SWITCH



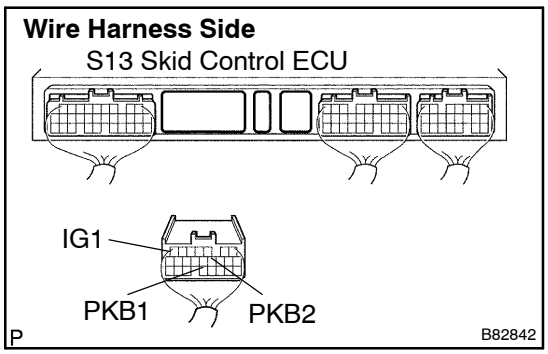
(a) Remove the parking brake switch.
(b) Measure the resistance of the switch.
Standard:

Tester Connection	Parking Brake Switch Condition	Specified Condition
4 – 1	Not pushed → Pushed	10 kΩ or higher → Below 1 Ω
2 – 3	Pushed → Not pushed	10 kΩ or higher → Below 1 Ω

NG → **REPLACE PARKING BRAKE SWITCH**

OK

6 CHECK WIRE HARNESS (SKID CONTROL ECU – BATTERY AND BODY GROUND)



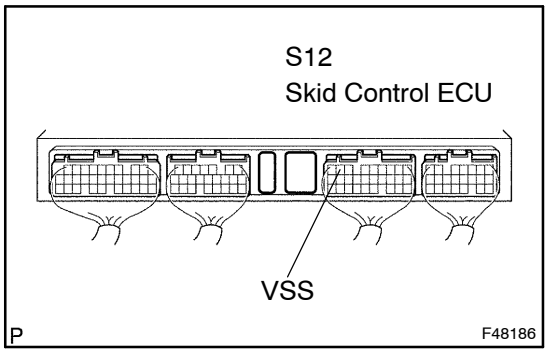
(a) Disconnect the S13 ECU connector.
(b) Measure the voltage and resistance of the wire harness side connector.
Standard:

Tester Connection	Condition	Specified Condition
S13–11 (PKB2) – Body ground	Ignition switch ON and parking brake lever not pulled → Pulled	0 V → 20 to 28 V
S13–21 (PKB1) – Body ground	Parking brake lever pulled → Not Pulled	10 kΩ or higher → Below 1 Ω
S13–7 (IG1) – Body ground	Ignition switch OFF → ON	0 V → 20 to 28 V

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

OK

7 CHECK WIRE HARNESS (SKID CONTROL ECU – BODY GROUND)



(a) Measure the voltage of the wire harness side connector.
Standard:

Tester Connection	Condition	Specified Condition
S12–8 (VSS) – Body ground	Ignition switch ON	Less than 2 V

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

OK

REPLACE SKID CONTROL ECU