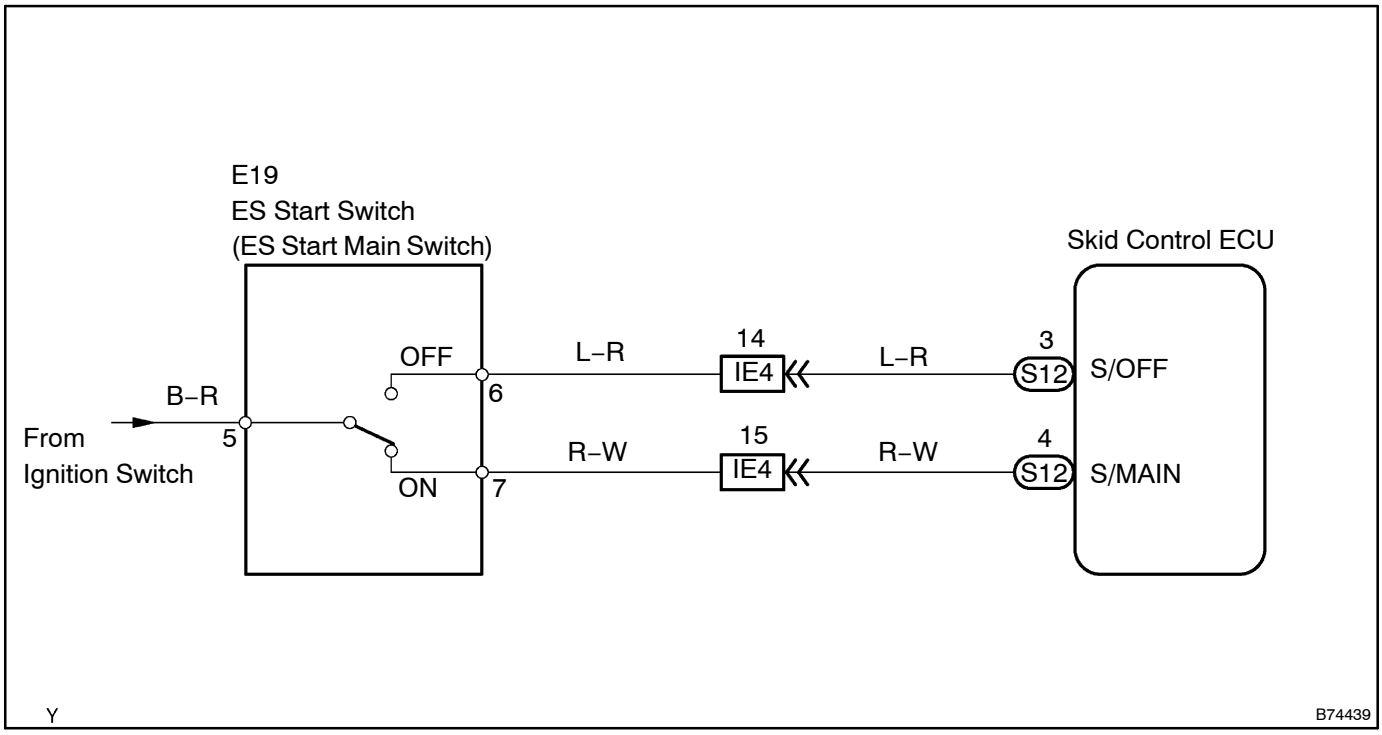
DTC	C1386/116	MALFUNCTION IN ES STARTING OPERATION/RELEASE SWITCH

CIRCUIT DESCRIPTION

The ES start main switch controls the ES starting system. The skid control ECU detects a malfunction in the ES start main switch, based on the conditions of the ON input terminal and the OFF input terminal, which are set from the ES start main switch.

DTC No.	DTC Detection Condition	Trouble Area
C1386/116	Either condition 1 or 2 is detected: 1. S/OFF and S/MAIN terminals are ON for 900 ms 2. S/OFF and S/MAIN terminals are OFF for 5 seconds	• ES start switch • Skid control ECU • Wire harness

WIRING DIAGRAM

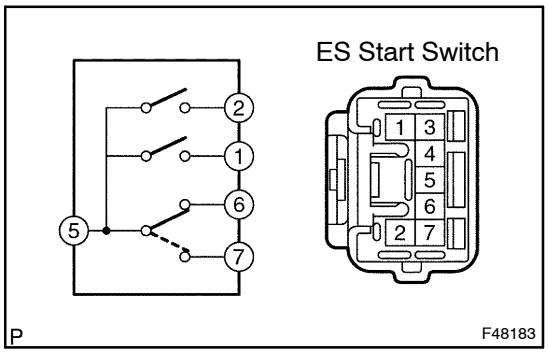


INSPECTION PROCEDURE

HINT:

As the ES starting system is controlled by the skid control ECU, a malfunction in the ABS & BA system may affect ES starting system operation. Before proceeding to the flowchart below, check for ABS & BA system's DTCs. If any of the ABS & BA system's DTCs is present, troubleshoot those DTCs first (see page 05–191).

1 INSPECT ES START SWITCH (ES START MAIN SWITCH)



(a) Remove the ES start switch.

(b) Measure the resistance of the switch.

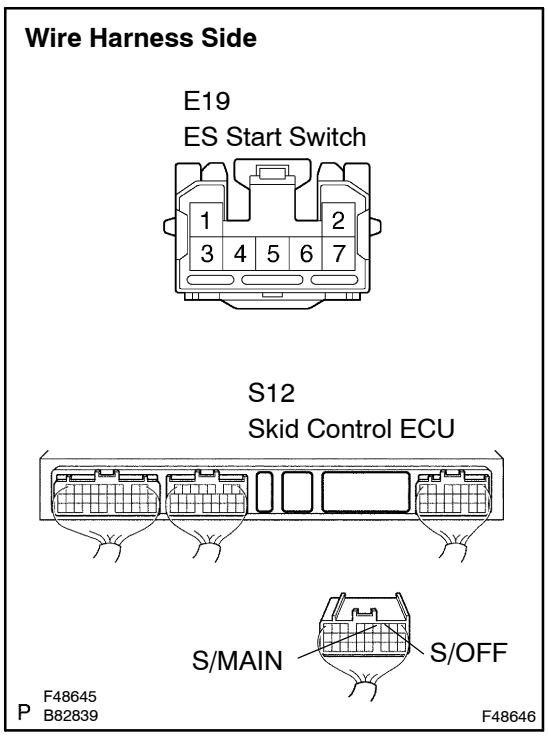
Standard:

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

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



(a) Disconnect the E19 switch connector.

(b) Disconnect the S12 ECU connector.

(c) Measure the voltage and resistance of the wire harness side connectors.

Standard:

Tester 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

3	CHECK FOR DTCS

(a) Clear the DTC (see page 05–268).
(b) Drive the vehicle at the vehicle speed of 7 km/h (4 mph) or more.
(c) Check that no code is output.

NG → REPLACE SKID CONTROL ECU

OK

END