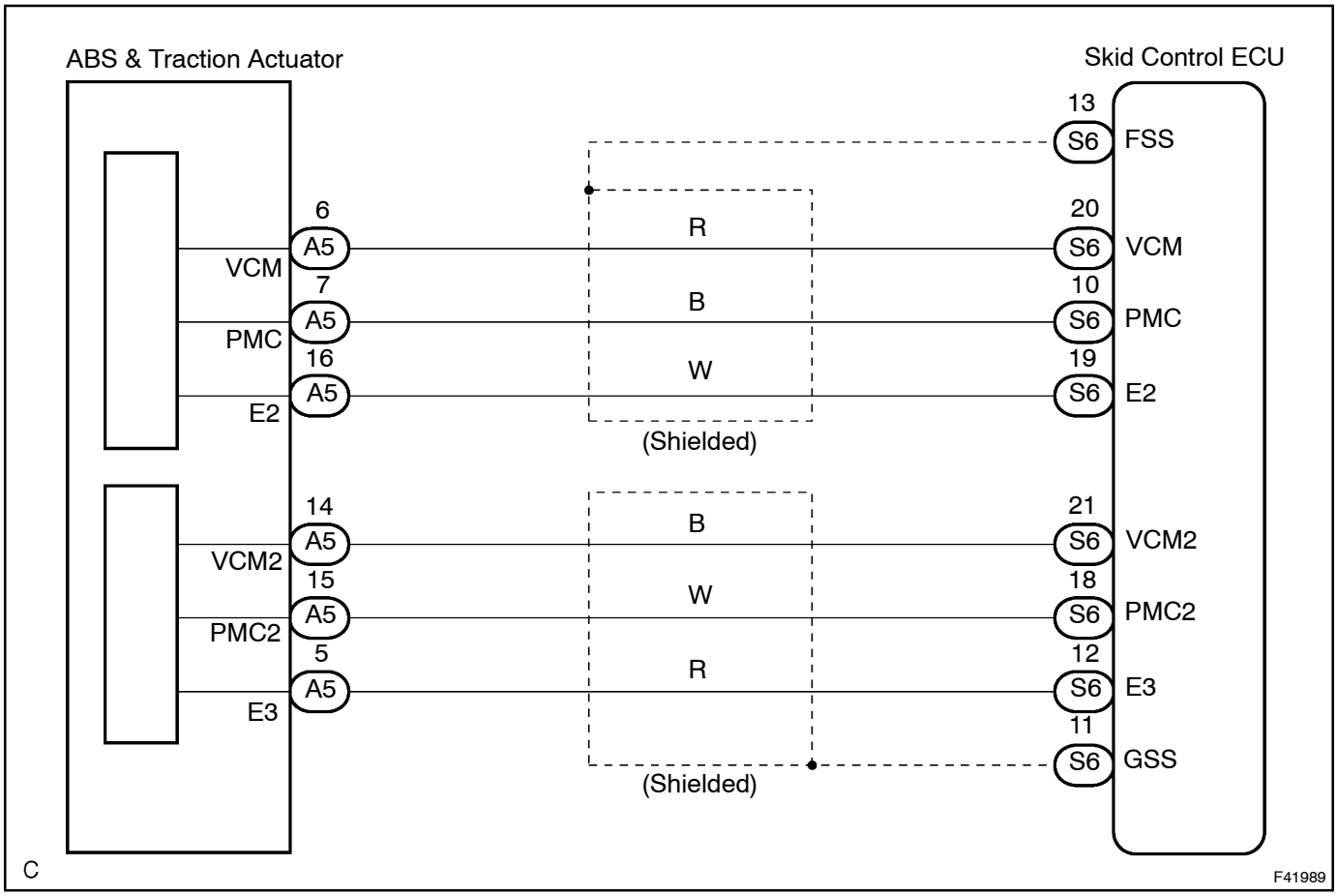
DTC	C1246/46	MALFUNCTION IN MASTER CYLINDER PRESSURE SENSOR

DTC	C1360/61	MALFUNCTION IN COMPARATIVE MASTER CYLINDER PRESSRRE SENSOR

CIRCUIT DESCRIPTION

DTC No.	DTC Detecting Condition	Trouble Area
C1246/46 C1360/61	Either of the following 1., 2., 3., or 4. is detected: 1. At the vehicle speed of 7 km/h (4 mph) or more, master cylinder pressure sensor does not change continues for 30 sec. 2. Interference occurs 7 times or more for 5 sec. 3. ECU terminal STP is OFF, and the condition that master cylinder pressure sensor voltage becomes more than 0.86 V or less than 0.3 V continues for 5 sec. or more. 4. Master cylinder pressure sensor circuit is open or short for 1.2 sec. or more.	• Master cylinder pressure sensor • Master cylinder pressure sensor circuit

WIRING DIAGRAM



INSPECTION PROCEDURE

HINT:
Start the inspection from step 1 in case of using the hand–held tester and start from step 2 in case of not using the hand–held tester.

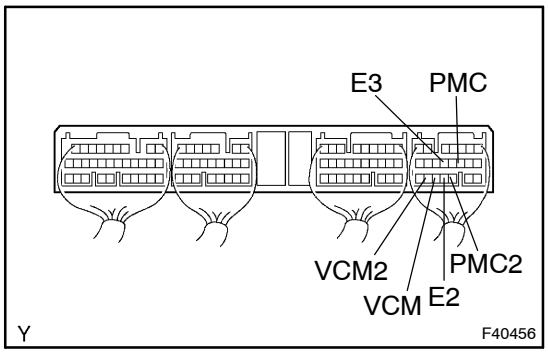
1	READ VALUE OF HAND–HELD TESTER(MASTER CYLINDER PRESSURE SENSOR OUTPUT VALUE)

(a) Select the item "MAS CYL PRESS 1, MAS CYL PRESS 2" in the DATA LIST and read its value displayed on the hand–held tester.
(b) Check that the brake fluid pressure value of the master cylinder pressure sensor displayed on the hand–held tester is changing when depressing the brake pedal.
OK:
Brake fluid pressure value must be changing.

OK → **Go to step 4**

NG

2	INSPECT SKID CONTROL ECU ASSY(PMC, PMC2 TERMINAL VOLTAGE)



(a) Install LSPV gauge to the front brake caliper bleeder plug portion, and bleed air from LSPV gauge.
(b) Start the engine and depress the brake pedal, then check the relation between the fluid pressure and voltage of PMC and E2, PMC2 and E3 terminals of the skid control ECU with connector still connected.
OK:

Front brake caliper fluid pressure	Voltage
0 kPa (0 Kgf/cm^2, 0 psi)	0.37 – 0.63 V
5,883 kPa (60 kgf/cm^2, 853 psi)	1.57 – 1.83 V
11,768 kPa (120 kgf/cm^2, 1,706 psi)	2.77 – 3.03 V

HINT:
Voltage between terminals VCM and E2, VCM2 and E3: 4.7 – 5.3 V

OK → **Go to step 4**

NG

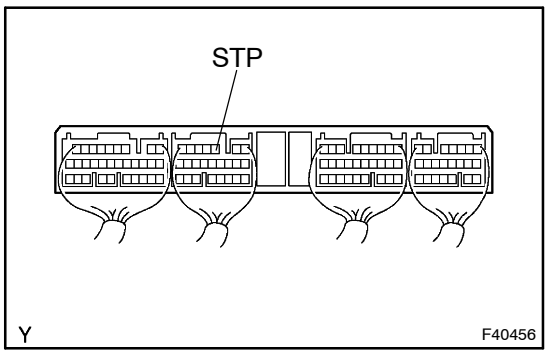
3	CHECK HARNESS AND CONNECTOR(MASTER CYLINDER PRESSURE SENSOR – SKID CONTROL ECU ASSY)(See page 01–31)

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

OK

REPLACE ABS & TRACTION ACTUATOR ASSY

4	CHECK SKID CONTROL ECU TERMINAL VOLTAGE(STP TERMINAL)



(a) Remove the skid control ECU with connectors still connected.

(b) Measure voltage between terminal STP of skid control ECU and body ground when brake pedal is depressed.
OK: 8 – 14 V

(c) Measure voltage between terminal STP of skid control ECU and body ground when brake pedal is released.
OK: Below 1.5 V

NG → **REPAIR OR REPLACE STOP LAMP SWITCH CIRCUIT**

OK

CHECK AND REPLACE SKID CONTROL ECU ASSY