DIB2T–01

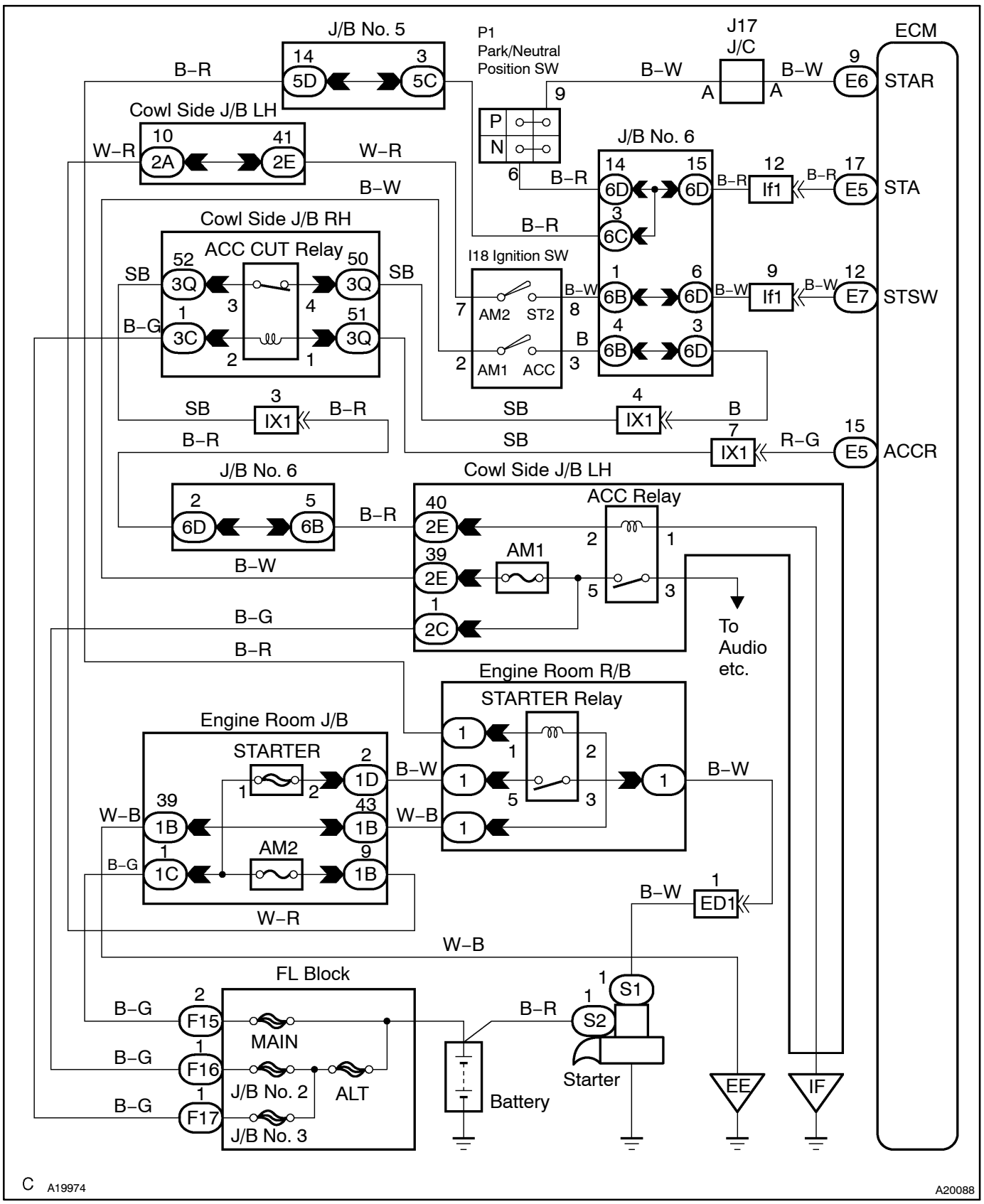
DTC	P0617	Starter Relay Circuit High

CIRCUIT DESCRIPTION

While the engine is being cranked, the battery positive voltage is applied to terminal STA of the ECM.

DTC No.	DTC Detection Condition	Trouble Area
P0617	When all conditions (a), (b) and (c) are satisfied for 20 seconds with battery (+B) voltage 10.5 V or more (a) Vehicle speed ≧ 20 km/h (b) Engine revolution ≧ 1,000 rpm (c) STA signal ON	• Park/neutral position switch • Starter relay circuit • Ignition switch • ECM

WIRING DIAGRAM



INSPECTION PROCEDURE

HINT:

Read freeze frame data using the hand–held tester or the OBD II scan tool, as freeze frame data records the engine conditions when a malfunction is detected. When troubleshooting, this is useful for determining whether the vehicle was running or stopped, the engine was warmed up or not, the air–fuel ratio was lean or rich, etc. at the time of the malfunction.

Hand–held tester:

1	**Connect hand–held tester, and check STA signal.**

PREPARATION:

(a) Connect the hand–held tester to the DLC3.

(b) Turn the ignition switch ON, and push the hand–held tester main switch ON.

CHECK:

Read the STA signal on the hand–held tester while the starter operates.

OK:

Ignition Switch Position	ON	START
STA Signal	OFF	ON

OK → **Check and replace ECM (See page IN–36).**

NG

2	**Check ignition switch (See page BE–29).**

NG → **Replace ignition switch.**

OK

3	**Check park/neutral position switch (See page DI–270).**

NG → **Replace park/neutral position switch.**

OK

4	**Check for open in harness and connector between ECM and park/neutral position switch (See page IN–36).**

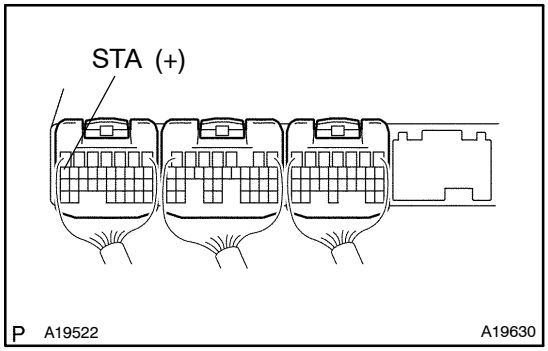
NG → **Repair or replace harness or connector.**

OK

Check and replace ECM (See page IN–36).

OBD II scan tool (excluding hand–held tester):

1	**Check voltage between terminal STA of ECM connector and body ground.**



PREPARATION:

(a) Remove the glove compartment door (See page SF–60).

(b) Turn the ignition switch ON.

CHECK:

Measure the voltage between terminal STA of the ECM connector and the body ground, while cranking the engine (ignition switch START position) and while not engine cranking the engine (ignition switch position ON).

OK:

Voltage:

6 V or more (ignition switch START position)

0 V (ignition switch ON position)

OK → **Check and replace ECM (See page IN–36)**

NG

2	**Check ignition switch (See page BE–29).**

NG → **Replace ignition switch.**

OK

3	Check park/neutral position switch (See page DI–270).

NG → Replace park/neutral position switch.

OK

4	Check for open in harness and connector between ECM and park/neutral position switch (See page IN–36).

NG → Repair or replace harness or connector.

OK

Check and replace ECM (See page IN–36).