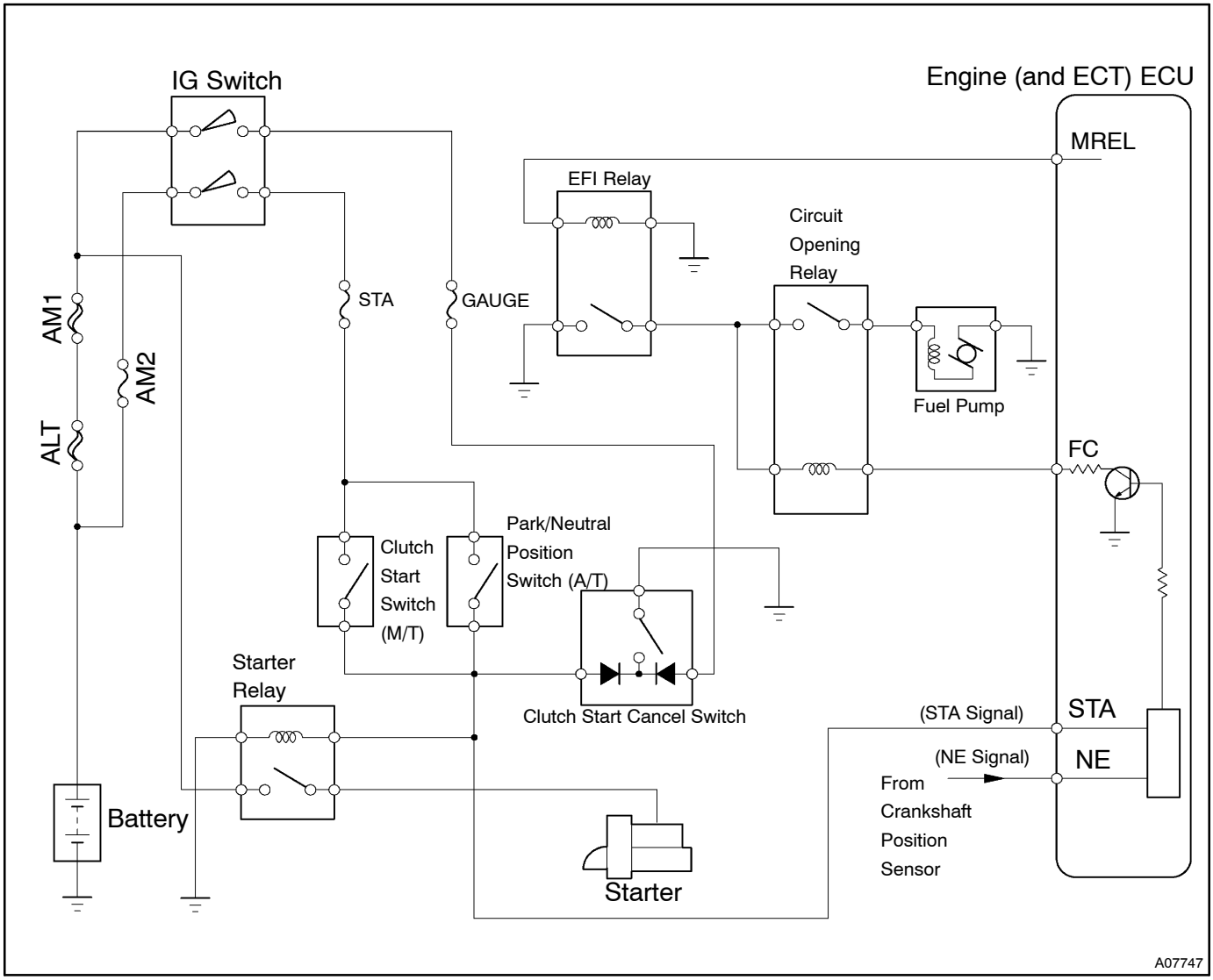
Fuel Pump Control Circuit

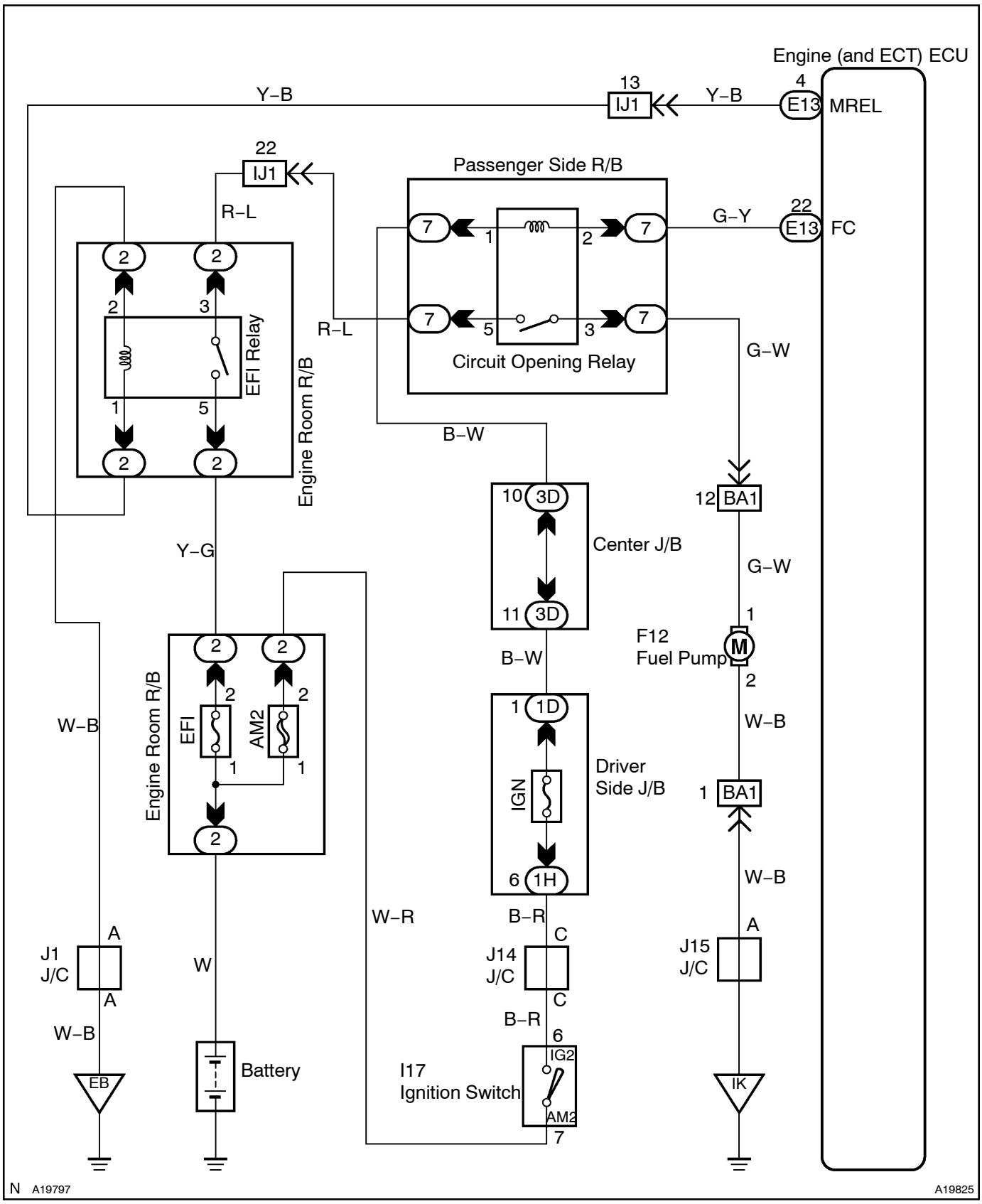
CIRCUIT DESCRIPTION

In the diagram below, when the engine is cranked, current flows from terminal ST of the ignition switch to the starter relay coil, and then the starter relay switches on and current flows to coil L1 of the circuit opening relay. Then the circuit opening relay switches on, supplying the power is supplied to the fuel pump to operates.

When the STA signal and NE signal are input to the engine (and ECT) ECU, Tr is turned ON and current flows to coil L2 of the circuit opening relay to switches on, and the fuel pump operates. While the NE signal is generated (engine running), the engine (and ECT) ECU keeps Tr ON (circuit opening relay ON) and the fuel pump also keeps operating.



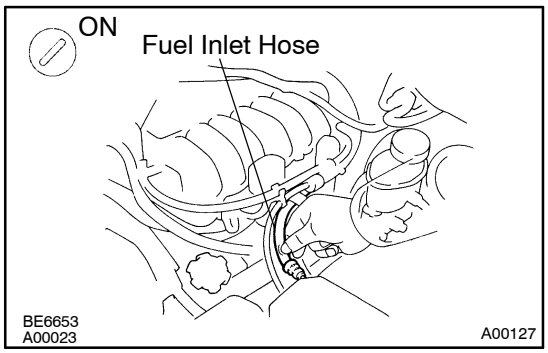
WIRING DIAGRAM



INSPECTION PROCEDURE

When using hand–held tester

1	**Check fuel pump operation.**



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.

(c) Use ACTIVE TEST mode to operate the fuel pump.

CHECK:

Check for fuel pressure in the fuel inlet hose when it is pinched.

OK:

There is pressure in the fuel inlet hose.

HINT:

At this time, you will hear a fuel flowing noise.

OK	**Check for starter signal circuit (See page DI–87).**

NG

2	**Check for engine (and ECT) ECU power source circuit (See page DI–90).**

NG	**Repair or replace.**

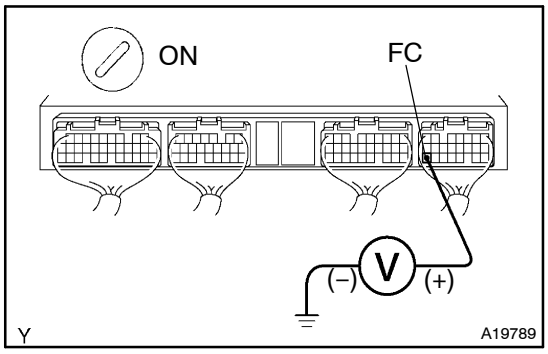
OK

3	**Check circuit opening relay (See Pub. No. RM519E, page EG–154).**

NG	**Replace circuit opening relay.**

OK

4	**Check voltage between terminals FC of engine ECU and body ground.**



PREPARATION:

(a) Remove the glove compartment door.

(b) Turn the ignition switch ON.

CHECK:

Measure the voltage between terminal FC of the engine (and ECT) ECU and the body ground.

OK:

9 – 14 V

NG → **Check for open in harness and connector between EFI relay and circuit opening relay, and circuit opening relay and engine (and ECT) ECU.**

OK

5	**Check fuel pump (See Pub. No. RM519E, page EG–132).**

NG → **Repair or replace fuel pump.**

OK

6	**Check for open in harness and connector between circuit opening relay and fuel pump, and fuel pump and body ground (See page IN–20).**

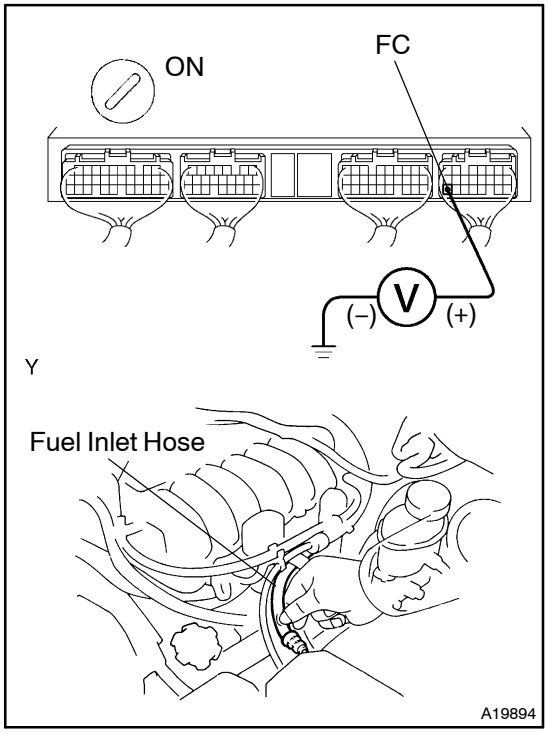
NG → **Repair or replace harness or connector.**

OK

Check and replace engine (and ECT) ECU (See page IN–20).

When not using hand–held tester

1	**Check operation of fuel pump.**



PREPARATION:

(a) Remove the glove compartment door.

(b) Turn the ignition switch ON.

CHECK:

(a) Connect between terminal FC of the engine (and ECT) ECU connector and body ground.

(b) Check for fuel pressure in the inlet hose when it is pinched.

OK:

There is pressure in the fuel inlet hose.

HINT:

At this time, you will hear a fuel flowing noise.

OK	**Check for starter signal circuit (See page DI–87).**

NG

2	**Check for engine (and ECT) ECU power source circuit (See page DI–90).**

NG	**Repair or replace.**

OK

3	**Check circuit opening relay (See Pub. No. RM519E, page EG–154).**

NG	**Replace circuit opening relay.**

OK

4	Check voltage between terminals FC of engine (and ECT) ECU connector and body ground.

NG → Check for open in harness and connector between EFI relay and circuit opening relay, and circuit opening relay and engine (and ECT) ECU.

OK ↓

5	Check fuel pump (See Pub. No. RM519E, page EG–132).

NG → Repair or replace fuel pump.

OK ↓

6	Check for open in harness and connector between circuit opening relay and fuel pump, and fuel pump and body ground (See page IN–20).

NG → Repair or replace harness or connector.

OK ↓

Check and replace engine (and ECT) ECU (See page IN–20).