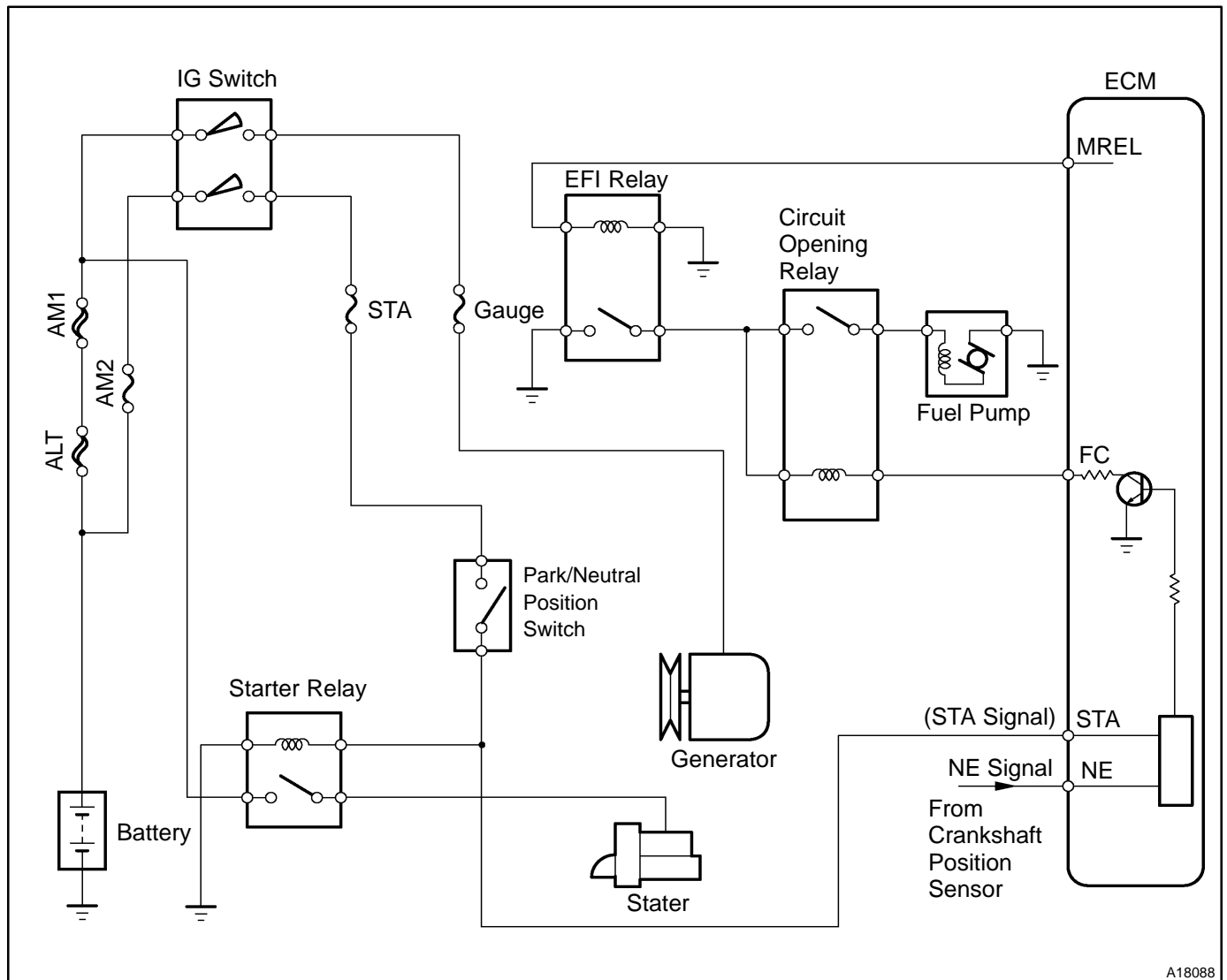


Fuel Pump Control Circuit

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, the starter relay switches on and current flows to coil L1 of the circuit opening relay. Thus the circuit opening relay switches on, power is supplied to the fuel pump and the fuel pump operates. When the STA signal and NE signal are input to the ECM, Tr is turned ON, current flows to coil L2 of the circuit opening relay, the relay switches on, and the fuel pump operates. While the NE signal is generated (engine running), the ECM keeps Tr ON (circuit opening relay ON) and the fuel pump also keeps operating.



A18088

The diagram illustrates the electrical system for the 1997-2000 Ford Taurus. It shows the following components and their connections:

- Battery:** Connected to the system via a main power line.
- I14 Ignition Switch:** Controls the ignition system, with terminals for AM2 ST2, AM1 IG1, and B-Y.
- Engine Room R/B:** Contains the EFI Relay, Starter Relay, and alternator (ALT) and generator (G1) connections.
- Driver Side J/B:** Junction box for the driver's side, containing the STA (Starter) and GAAUGE (Gauge) relays.
- Center J/B:** Junction box for the center of the vehicle, containing the J/C (Junction/Connector) and P1 Park/Neutral Position SW.
- Starter:** Controlled by the Starter Relay and the I14 Ignition Switch.
- Generator:** Provides power to the system, connected to the G1 terminal.
- Fuel Pump:** Controlled by the F10 Fuel Pump relay, connected to the W-B wire.
- ECM (ECM):** The Engine Control Module, with pins for MREL, BATT, FC, NSW, STA, and L-O.

The diagram uses standard electrical symbols for relays, switches, fuses, and components. Wire colors and terminal numbers are indicated throughout the diagram.

INSPECTION PROCEDURE

TOYOTA hand-held tester:

1	Connect TOYOTA hand-held tester, and check operation of fuel pump (See page SF-7).
---	---

OK	Check for starter signal circuit (See page DI-145).
----	--

NG

2	Check for ECM power source circuit (See page DI-148).
---	--

NG	Repair or replace.
----	--------------------

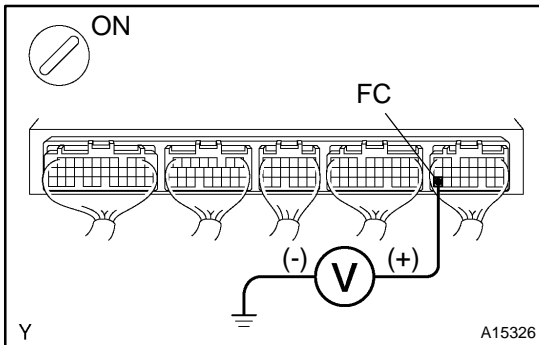
OK

3	Check circuit opening relay (See page SF-37).
---	--

NG	Replace circuit opening relay.
----	--------------------------------

OK

4 Check voltage between terminals FC of ECM and body ground.



PREPARATION:

- (a) Remove the glove compartment (See page [SF-54](#)).
- (b) Turn the ignition switch ON.

CHECK:

Measure the voltage between terminal FC of the ECM and body ground.

OK:

Voltage: 9 - 14 V

OK

Go to step 5.

NG

Check for open in harness and connector between EFI main relay (Marking: EFI) and circuit opening relay, and circuit opening relay and ECM.

5 Check fuel pump (See page [SF-7](#)).

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-28](#)).

NG

Repair or replace harness or connector.

OK

Check and replace ECM (See page [IN-28](#)).

OBD II scan tool (excluding TOYOTA hand-held tester):

1 Check operation of fuel pump (See page [SF-7](#)).

OK

Check for starter signal circuit (See page [DI-145](#)).

NG

2 Check for ECM power source circuit (See page [DI-148](#)).

NG

Repair or replace.

OK

3 Check circuit opening relay (See page [SF-37](#)).

NG

Replace circuit opening relay.

OK

4 Check voltage between terminals FC of ECM connector and body ground (See page [DI-151](#) , step 4).

OK

Go to step 5.

NG

Check for open in harness and connector between EFI main relay (Marking: EFI) and circuit opening relay, and circuit opening relay and ECM.

5	Check fuel pump (See page SF-7).
---	---

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-28).
---	---

NG

Repair or replace harness or connector.

OK

Check and replace ECM (See page [IN-28](#)).