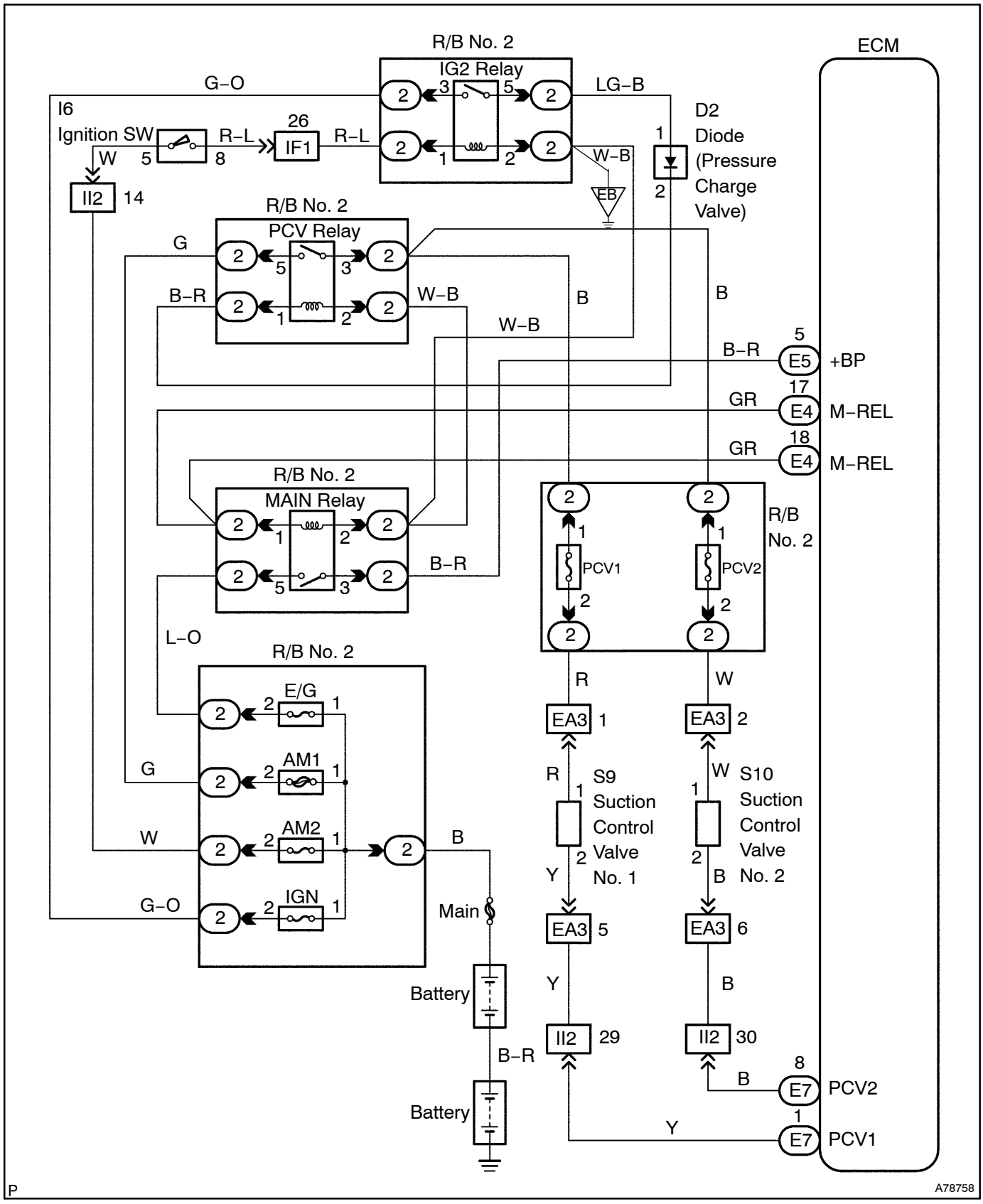
| DTC | 78 (2) | FUEL PUMP SYSTEM MALFUNCTION (SHORT) |
|---|---|---|

## CIRCUIT DESCRIPTION

DTC 78 (2) is output when the PCV2 has a malfunction. The PCV2 on the left side of the supply pump controls the supply pump so that it feeds fuel to the common rail.

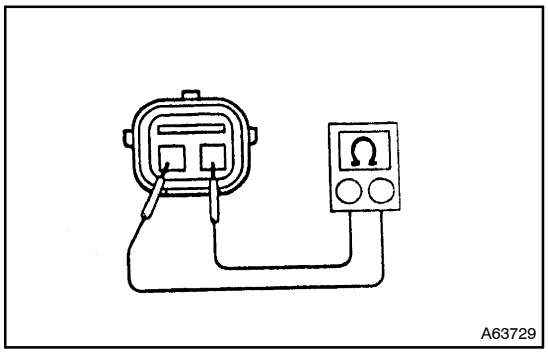
| DTC No. | DTC Detection Condition | Trouble Area |
|---|---|---|
| 78 (2) | Short in PCV2 circuit | • Short in PCV2 circuit<br>• Suction control valve (built in sypply pump)<br>• ECM |

# WIRING DIAGRAM



# INSPECTION PROCEDURE

## 1 CHECK SUCTION CONTROL VALVE NO. 2

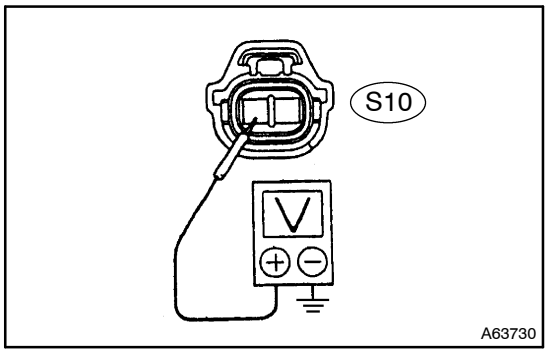



(a) Disconnect the S10 valve connector from the left side of the supply pump.
(b) Measure the resistance between the terminals of the suction control valve No. 2.
**Standard: 2.5 – 3.5 Ω**

**NG** → **REPLACE INJECTION OR SUPPLY PUMP ASSY (See page 11–163)**

**OK**

## 2 CHECK PCV2 POWER SOURCE

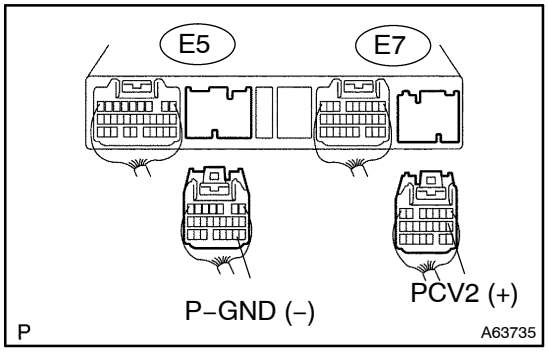



(a) Disconnect the S10 valve connector.
(b) Measure the voltage between terminal 1 of the S10 valve connector and the body ground.
**Standard: 19 V or more**

**NG** → **Go to step 5**

**OK**

## 3 CHECK SHORT FOR PCV2 CIRCUIT

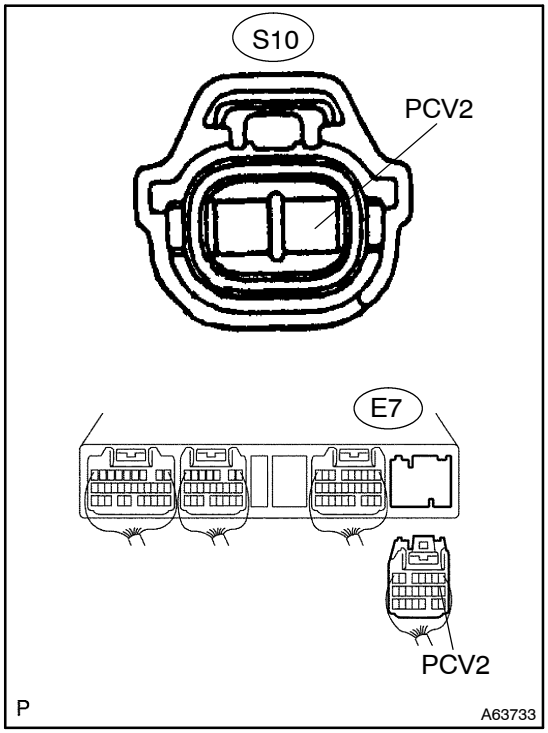



(a) Disconnect the S10 valve connector.
(b) Disconnect the E5 and E7 ECM connectors.
(c) Turn the ignition switch ON.
(d) Measure the voltage between terminals PCV2 and P–GND of the E5 and E7 ECM connectors.
**Standard: Approx. 1 V**

**OK** → **CHECK AND REPLACE ECM**

**NG**

| 4 | CHECK WIRE HARNESS (ECM ⇔ SUCTION CONTROL VALVE NO. 2) |
|---|---|




(a) Disconnect the S10 valve connector.
(b) Disconnect the E7 ECM connector.
(c) Measure the resistance between terminals PCV2 of the E7 ECM connector and terminal 1 of the S10 valve connector.
**Standard: 2 Ω or less**

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

**OK**

| 5 | CHECK PCV RELAY |
|---|---|

**NG** → **REPLACE PCV RELAY**

**OK**

**CHECK AND REPLACE WIRE HARNESS FROM PCV RELAY TO BATTERY**