05HVQ-01

| DTC P0617 STARTER RELAY CIRCUIT HIGH | |
|--------------------------------------|--|
|--------------------------------------|--|

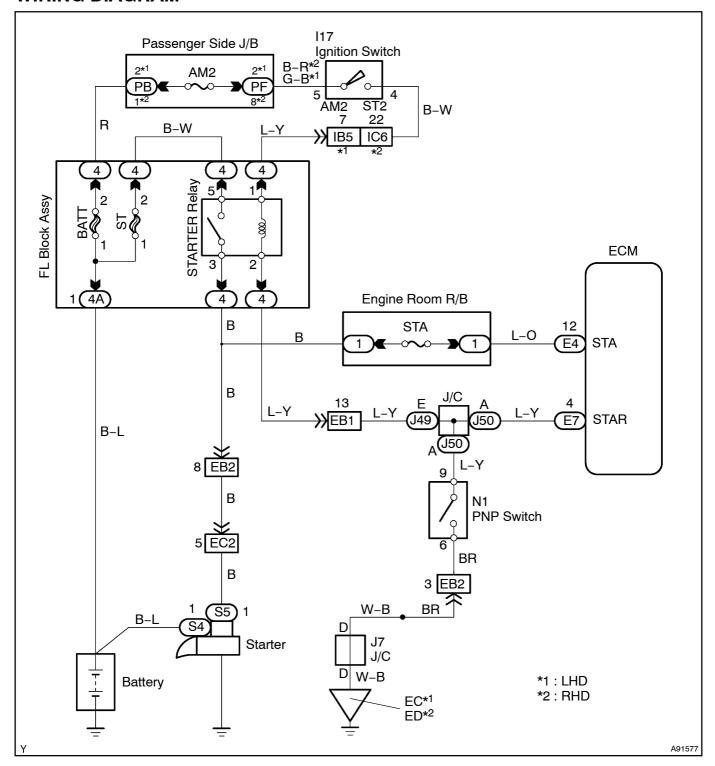
CIRCUIT DESCRIPTION

While the engine is being cranked, the battery positive voltage is applied to terminal STA of the ECM. If the ECM detects the Starter Control Signal (STA) while the vehicle is being driven, it will conclude that there is a fault in the starter control circuit. The ECM will turn on the MIL and set a DTC.

This monitor runs when the vehicle is driven at 20 km/h (12 mph) for over 20 seconds.

| DTC No. | DTC Detecting Condition | Trouble Area |
|---------|--|--|
| | The following conditions are met for 20 seconds: • Vehicle speed is greater than 20 km/h (12 mph) | Short in Park/Neutral Position (PNP) switch circuit PNP switch |
| P0617 | • Engine RPM is greater than 1,000 rpm • ECM detects starter signal (STA) | • Ignition switch • ECM |

WIRING DIAGRAM



INSPECTION PROCEDURE

1 | READ[VALUE[OF[INTELLIGENT[TESTER]]I[[STARTER[SIGNAL]

- (a) Connect the Intelligent Tester I to the IDLC3.
- (b) Turn the ignition switch ON and bush the intelligent Tester I main switch ON.
- (c) Enter[the[following[menus:[Enter/[Diagnosis/[DBD·MOBD/[Power[train/[Engine[and[ECT/[Data[List/All[Data/[Starter[Signal.

Standard:

| Ignition[\$witch[Position | ON | START |
|---------------------------|-----|-------|
| Starter[\$ignal | OFF | ON |

OK REPLACE ECM

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2 INSPECT[PARK/NEUTRAL[POSITION[\$WITCH[ASSY[[See[page[05-563]]]]]

HINT:

Move[the[shift[lever[tot]]]he[p]or[N]position.[ft]]he[]ntelligent[ester[f]][indicates[that[the[Neutral[position[\$witch Signal[s]]]]N,[the[p]]Np[\$witch[s]considered[tot]]ormal.

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REPAIR OR REPLACE PNP SWITCH (See page 40-10) AND GO TO STEP 3

OK

3 READ VALUE OF INTELLIGENT TESTER II (STARTER SIGNAL)

- (a) Connect the Intelligent Tester II to the DLC3.
- (b) Turn the ignition switch ON and push the Intelligent Tester II main switch ON.
- (c) Enter the following menus: Enter/ Diagnosis/ OBD·MOBD/ Power train/ Engine and ECT/ Data List/ All Data/ Starter Signal.

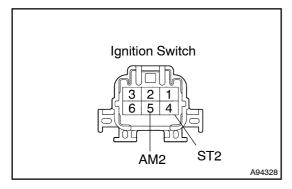
Standard:

| Ignition Switch Position | ON | START |
|--------------------------|-----|-------|
| Starter Signal | OFF | ON |

OK SYSTEM OK

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4 INSPECT IGNITION SWITCH



Measure the resistance of the ignition switch.

Standard:

| Switch Condition | Tester Connection | Specified Condition |
|------------------|-------------------|-------------------------|
| ON | 4 – 5 | Below 1 Ω |
| START | 4 – 5 | 10 k Ω or higher |

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REPLACE IGNITION SWITCH AND GO TO STEP

OK

5 READ VALUE OF INTELLIGENT TESTER II (STARTER SIGNAL)

- (a) Connect the Intelligent Tester II to the DLC3.
- (b) Turn the ignition switch ON and push the Intelligent Tester II main switch ON.
- (c) Enter the following menus: Enter/ Diagnosis/ OBD·MOBD/ Power train/ Engine and ECT/ Data List/ All Data/ Starter Signal.

Standard:

| Ignition Switch Position | ON | START |
|--------------------------|-----|-------|
| Starter Signal | OFF | ON |

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REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

SYSTEM OK