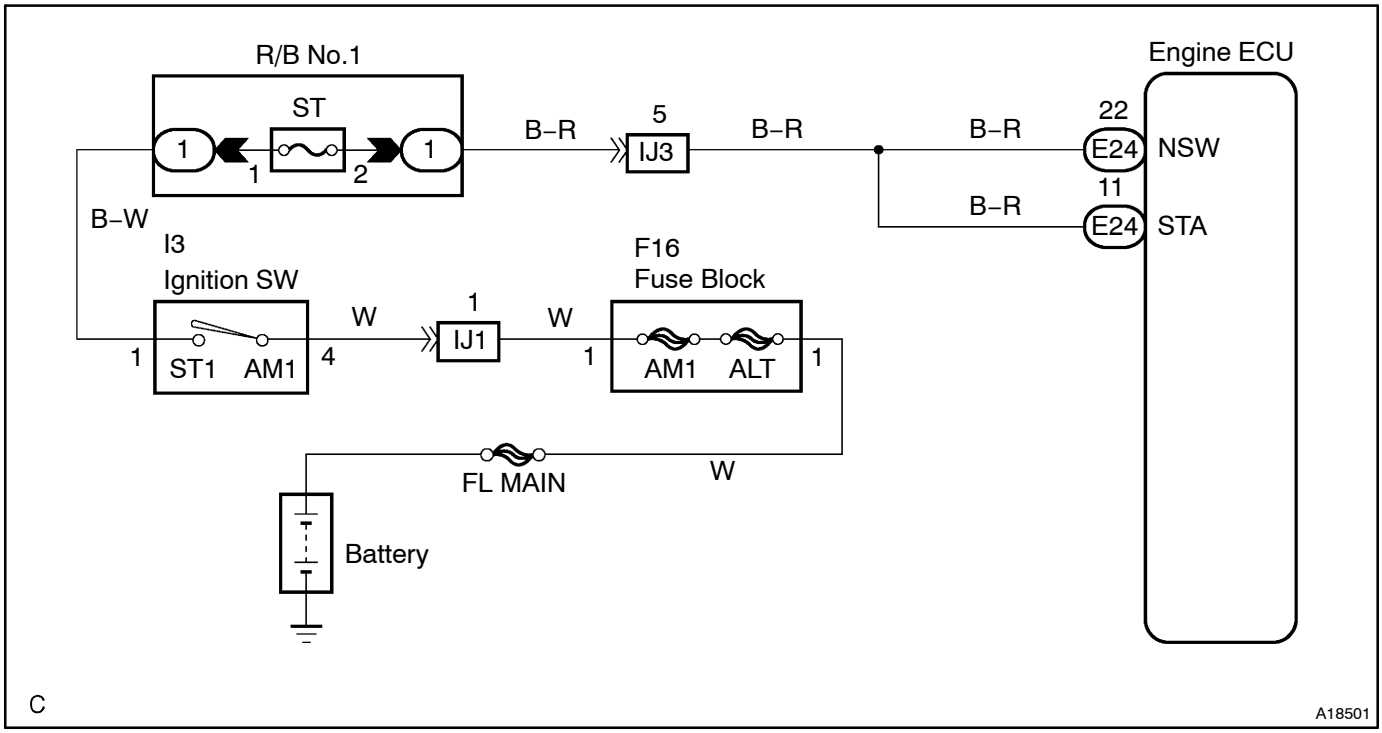
DI9V2–01

Starter Signal Circuit

CIRCUIT DESCRIPTION

When the engine is cranked, the intake air flow is slow, so fuel vaporization is poor. A rich mixture is therefore necessary in order to achieve good startability. While the engine is being cranked, the battery positive voltage is applied to terminal STA of the engine ECU. The starter signal id mainly used to increase the fuel injection volume for the starting injection control and after–start injection control.

WIRING DIAGRAM



INSPECTION PROCEDURE

HINT:

This diagnostic chart is based on the premise that the engine is cranked normally. If the engine is not cranked, proceed to the problem symptoms table on page DI–18.

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

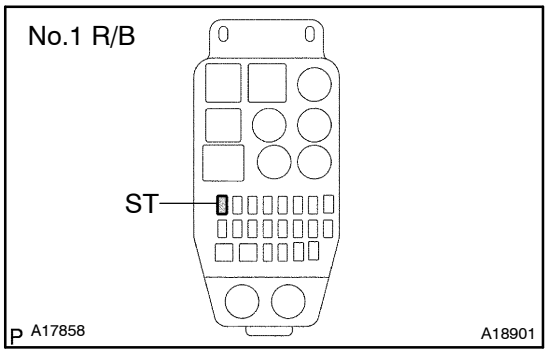
OK:

Ignition Switch Position	ON	START
STA signal	OFF	ON

OK → **Proceed to next circuit inspection shown on problem symptoms table (See page DI–18).**

NG

2	**Check ST fuse.**



PREPARATION:

Remove the ST fuse from the No.1 R/B.

CHECK:

Check the continuity of the ST fuse.

OK:

Continuity

NG → **Check for short in all harness and components connected to ST fuse.**

OK

3	**Check ignition switch (See page DI–67).**

NG → **Replace ignition switch.**

OK

4	**Check for open in harness and connector (See page IN–20).**

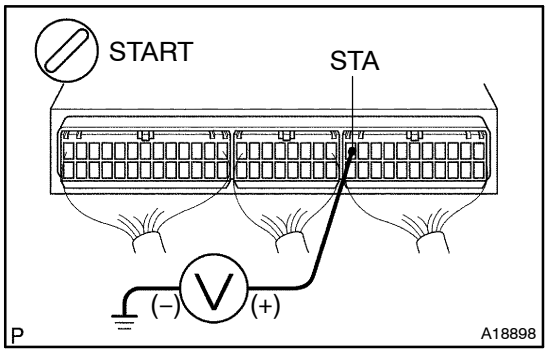
NG → **Repair or replace harness or connector.**

OK

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

When not using hand–held tester

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



PREPARATION:

(a) Remove the side trim bracket (See page FU–48).

(b) Turn the ignition switch ON.

CHECK:

Measure voltage between terminal STA of the engine ECU connector and body ground, during engine cranking.

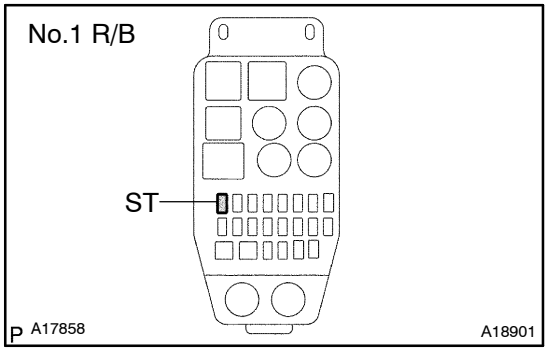
OK:

Voltage: 12 V or more

OK → **Proceed to next circuit inspection shown on problem symptoms table (See page DI–18).**

NG

2	**Check ST fuse.**



PREPARATION:

Remove the ST fuse from the No.1 R/B.

CHECK:

Check the continuity of the ST fuse.

OK:

Continuity

NG → **Check for short in all harness and components connected to ST fuse.**

OK

3	Check ignition switch (See page DI–67).

NG → Replace ignition switch.

OK

4	Check for open in harness and connector (See page IN–20).

NG → Repair or replace harness or connector.

OK

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