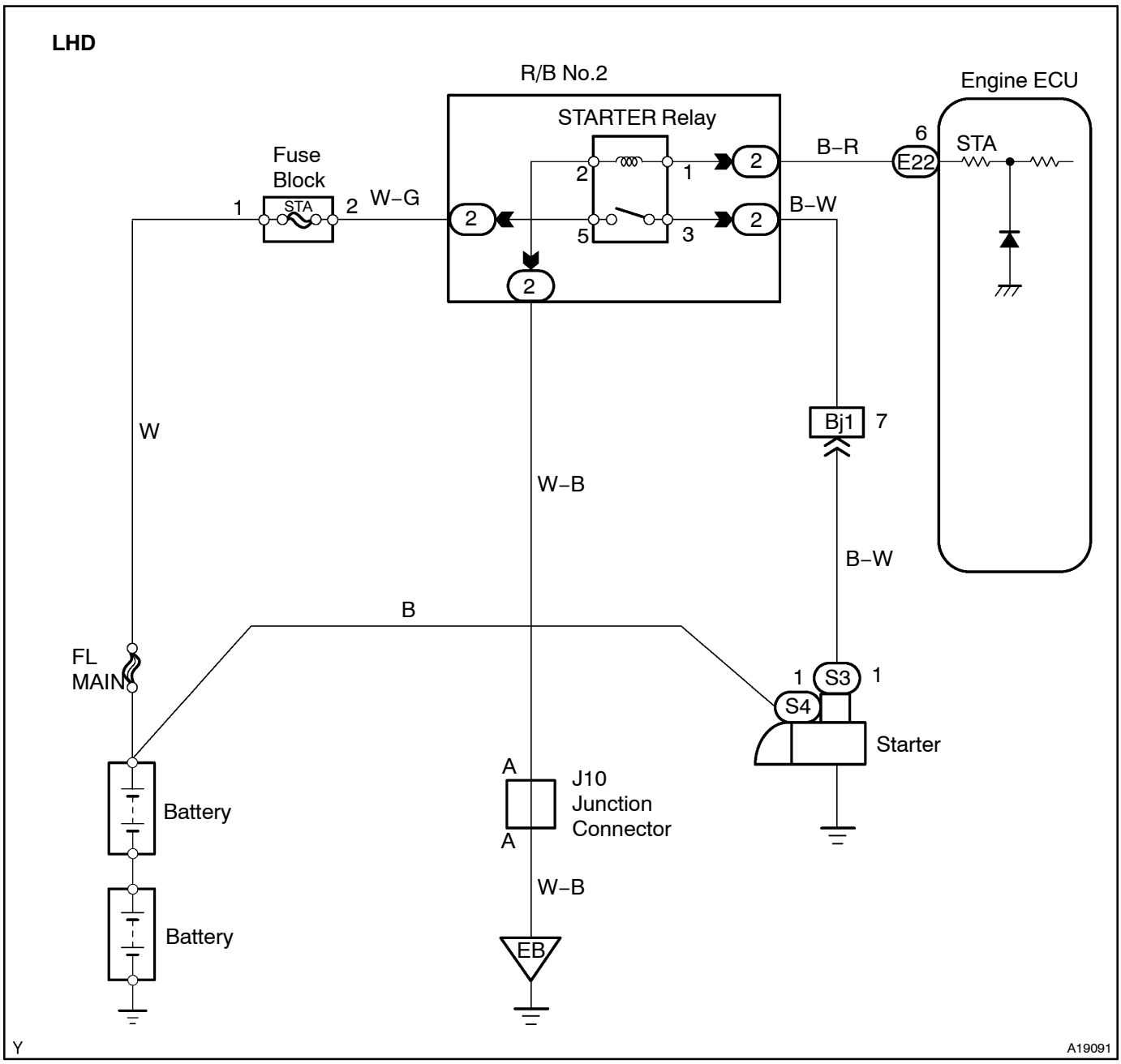
DI9ZT–01

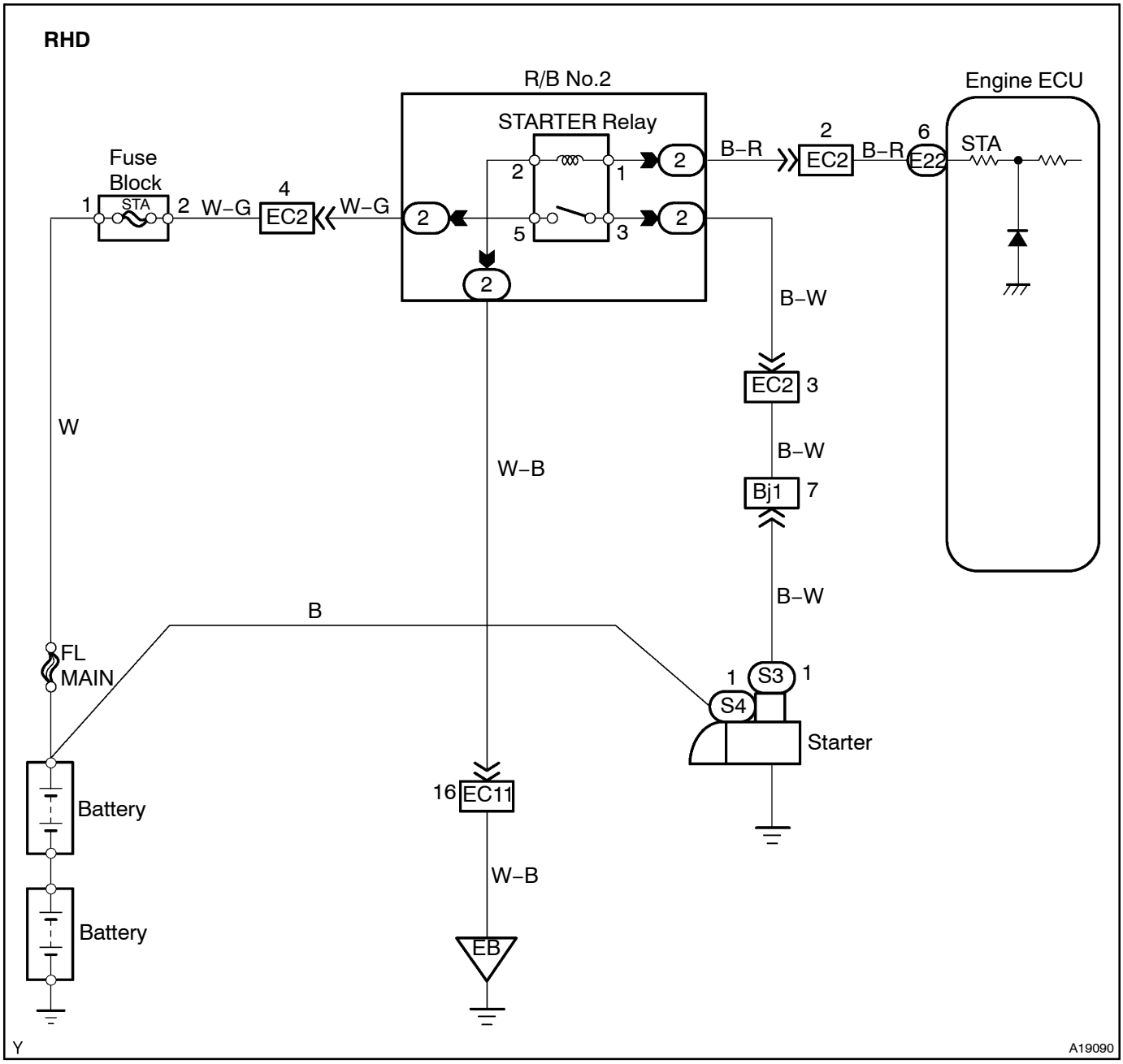
Starter Signal Circuit

CIRCUIT DESCRIPTION

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

WIRING DIAGRAM




RHD
R/B No.2
STARTER Relay
Engine ECU
Fuse Block
STA
1
2
W–G
4
EC2
W–G
2
2
1
5
3
2
2
B–R
2
EC2
B–R
6
E22
STA
B–W
EC2
3
W
B–W
W–B
Bj1
7
B–W
B
FL MAIN
1
S3
1
S4
Starter
Battery
Battery
16
EC11
W–B
EB
Y
A19090

INSPECTION PROCEDURE

HINT:
This diagnostic chart is based on the premise that the engine is being cranked under normal conditions. If the engine does not crank, 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 the STA signal on the hand–held tester while the starter operates.

OK:

Ignition Switch Position	ON	STA
STA Signal	OFF	ON

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

NG

2	**Check for open in harness and connector between engine ECU and starter relay (See page IN–20).**

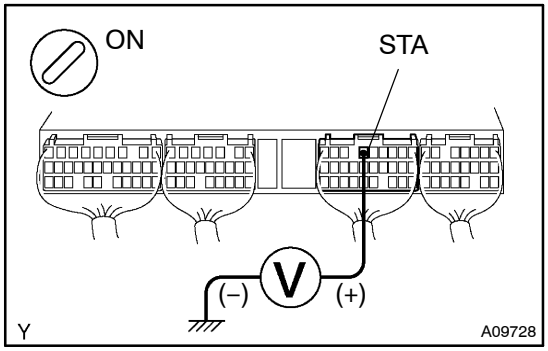
NG → **Repair or replace harness or connector.**

OK

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

When not using hand–held tester:

1	**Check starter signal.**



PREPARATION:

(a) Disconnect the engine ECU from the body bracket (See page ED–30).

(b) Turn the ignition switch ON.

CHECK:

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

OK:

Voltage: 12.0 V or more

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

NG

2	**Check for open in harness and connector between engine ECU and starter relay (See page IN–20).**

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

OK

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