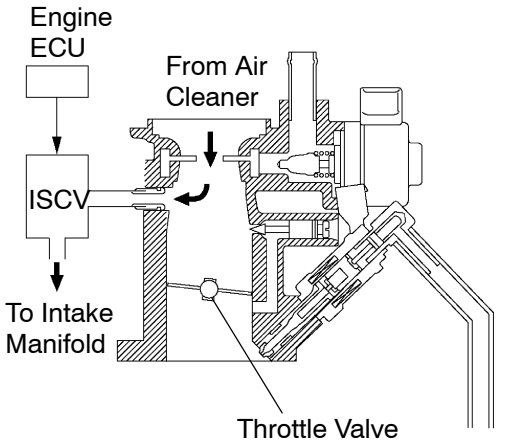
DI32K–03

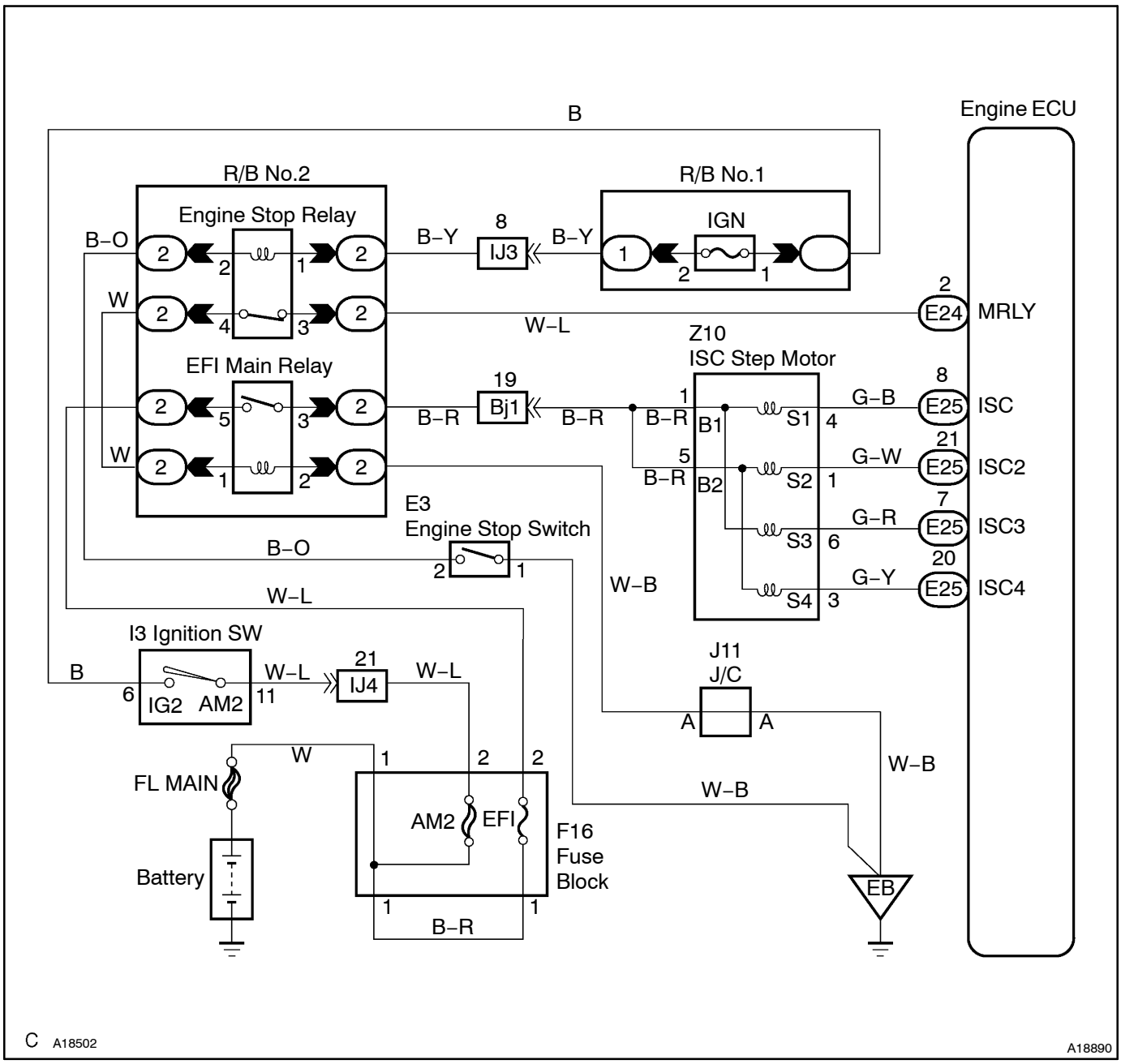
Idle Speed Control Valve System Malfunction

CIRCUIT DESCRIPTION



The idle speed control valve is located on the carburetor and intake air bypassing the throttle valve is directed to the ISCV through a passage.
In this way the intake air volume bypassing the throttle valve is regulated, with the engine speed being controlled.
The engine ECU operates only the idle speed control valve to perform idle–up and provide feedback for the target idling speed.

WIRING DIAGRAM



INSPECTION PROCEDURE

HINT:

Read freeze frame data using hand–held tester. Because freeze frame records the engine conditions when the malfunction is detected, when troubleshooting it is useful for determining whether the vehicle was running or stopped, the engine warmed up or not, the air–fuel ratio lean or rich, etc. at the time of the malfunction.

When using hand–held tester

1	**Check operation of the ISC valve.**

PREPARATION:

(a) Connect the hand–held tester to the DLC3.
(b) Turn ignition switch ON and hand–held tester main switch ON.
(c) Select the active test mode on the hand–held tester.

CHECK:

Check engine speed when the ISC valve operated by hand–held tester.

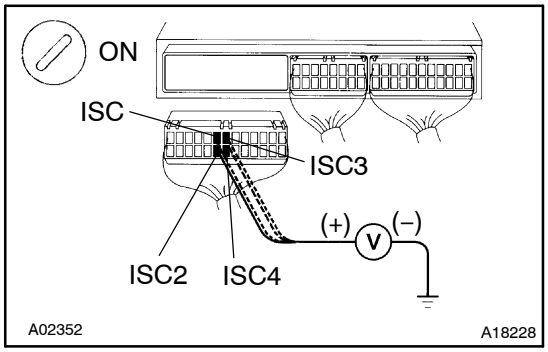
OK:

Engine speed is increased and decreased in response to change of ISC duty ratio.

OK → **Go to step 11.**

NG

2	**Check voltage between terminals ISC, ISC2, ISC3 and ISC4 of engine ECU connector and body ground.**



PREPARATION:

(a) Remove the side trim bracket. (See page FU–48).
(b) Disconnect the E25 connector of engine ECU.
(c) Turn ignition switch ON.

CHECK:

Measure voltage between terminals ISC, ISC2, ISC3 and ISC4 of engine ECU connector and body ground.

OK:

Voltage: 9 – 14 V

OK → **Go to step 11.**

NG

3	Check ISC valve.

NG → Replace ISC valve.

OK

4	Check EFI main relay (Marking: EFI) (See page FU–41).

NG → Replace EFI main relay.

OK

5	Check EFI fuse (See page DI–67).

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

OK

6	Check engine stop switch (See page DI–83).

NG → Repair engine stop switch.

OK

7	Check engine stop relay (See page FU–43).

NG → Repair engine stop relay.

OK

8	Check IGN fuse (See page DI–67).

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

OK

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

NG → Replace ignition switch.

OK

10	Check EFI fuse (See page DI–67).

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

OK

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

11	**Check air induction system.**

NG → **Repair or replace.**

OK

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

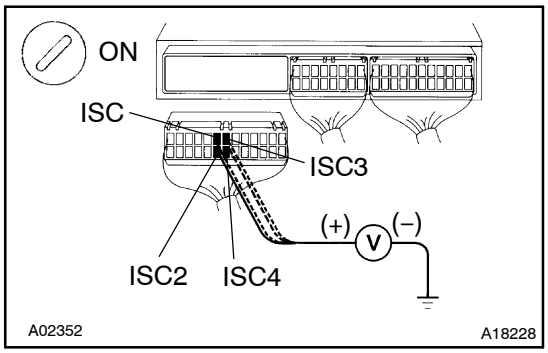
When not using hand–held tester

1	**Check air induction system.**

OK → **Repair or replace.**

OK

2	**Check voltage between terminals ISC, ISC2, ISC3 and ISC4 of engine ECU and body ground.**



PREPARATION:

(a) Remove the side trim bracket (See page FU–48).
(b) Disconnect the E25 connector of engine ECU.
(c) Turn ignition switch ON.

CHECK:

Measure voltage between terminals ISC, ISC2, ISC3 and ISC4 of engine ECU connector and body ground.

OK:

Voltage: 9 – 14 V

OK → **Go to step 11.**

NG

3	Check ISC valve.

NG → Replace ISC valve.

OK ↓

4	Check EFI main relay (Marking: EFI) (See page FU–41).

NG → Replace EFI main relay.

OK ↓

5	Check EFI fuse (See page DI–67).

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

OK ↓

6	Check engine stop switch (See page DI–83).

NG → Repair engine stop switch.

OK ↓

7	Check engine stop relay (See page FU–43).

NG → Repair engine stop relay.

OK ↓

8	Check IGN fuse (See page DI–67).

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

OK

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

NG → Replace ignition switch.

OK

10	Check EFI fuse (See page DI–67).

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

OK

Check for open and short in harness and connecter (See page IN–20).

11	Check operation of the ISC valve.

NG → Replace ISC valve.

OK

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