054JB–42

HOW TO PROCEED WITH TROUBLESHOOTING

HINT:

- Use these procedures to troubleshoot the ECD system.
- The intelligent tester II should be used in steps 3, 4, 5, 7 and 10.

When using intelligent tester II:

1	VEHICLE BROUGHT TO WORKSHOP

NEXT

2	CUSTOMER PROBLEM ANALYSIS (See page 05–438)

NEXT

3	CONNECT INTELLIGENT TESTER II TO DLC3

HINT:

If the display indicates a communication fault with the tester, inspect the DLC3.

NEXT

4	CHECK DTC AND FREEZE FRAME DATA (See page 05–466)

HINT:

Record or print DTCs and freeze frame data if necessary.

NEXT

5	CLEAR DTC AND FREEZE FRAME DATA (See page 05–466)

NEXT

6	CONDUCT VISUAL INSPECTION

NEXT

7	SET CHECK MODE DIAGNOSIS (See page 05–468)

NEXT

8	CONFIRM PROBLEM SYMPTOMS

HINT:
If the engine does not start, perform steps 10 and 12 first.

Result:

Result	Proceed to
Malfunction occur	A
Malfunction does not occurs	B

B → SIMULATE SYMPTOMS (See page 05–455)

A

9	CHECK DTC (See page 05–466)

Result:

Result	Proceed to
Malfunction code	A
No code	B

B → Go to step 11

A

10	REFER TO DTC CHART (See page 05–477)

NEXT

Go to step 13

11	CONDUCT BASIC INSPECTION (See page 05–440)

Result:

Result	Proceed to
Malfunctioning parts not confirmed	A
Malfunctioning parts confirmed	B

B → Go to step 16

A

12	REFER TO PROBLEM SYMPTOMS TABLE (See page 05–455)

HINT:

- Engine difficult to start or stalling (see page 05–666).
- Black smoke emitted (see page 05–676).
- Rough idling or excessive engine vibration (see page 05–688).
- Engine knocking or rattling (see page 05–713).
- Lack of power or hesitation (see page 05–699).

Result:

Result	Proceed to
Malfunctioning circuit confirmed	A
Malfunctioning parts confirmed	B

B → **Go to step 16**

A

13	CHECK ECM POWER SOURCE CIRCUIT (See page 05–649)

NEXT

14	CONDUCT CIRCUIT INSPECTION

Result:

Result	Proceed to
Malfunction not confirmed	A
Malfunction confirmed	B

B → **Go to step 17**

A

15	CHECK FOR INTERMITTENT PROBLEMS (See page 05–439)

NEXT

Go to step 17

16	CONDUCT PARTS INSPECTION

NEXT

17	IDENTIFY PROBLEM

NEXT

18	ADJUST AND/OR REPAIR

NEXT

19	CONDUCT CONFIRMATION TEST

NEXT

END

When not using intelligent tester II:

1	VEHICLE BROUGHT TO WORKSHOP

NEXT

2	CUSTOMER PROBLEM ANALYSIS (See page 05–438)

NEXT

3	CHECK AND CLEAR DTC (See page 05–466)

NEXT

4	CONFIRM PROBLEM SYMPTOMS

Result:

Result	Proceed to
Malfunction occurs	A
Malfunction does not occur	B

B → SIMULATE SYMPTOMS (See page 05–455)

A

5	CHECK DTC (See page 05–466)

Result:

Result	Proceed to
Malfunction code	A
No code	B

B → Go to step 7

A

6	REFER TO DTC CHART (See page 05–477)

NEXT

Go to step 9

7	CONDUCT BASIC INSPECTION (See page 05–440)

Result:

Result	Proceed to
Malfunctioning not confirmed	A
Malfunctioning parts confirmed	B

B → Go to step 12

A

8	REFER TO PROBLEM SYMPTOMS TABLE (See page 05–455)

HINT:

- Engine difficult to start or stalling (see page 05–666).
- Black smoke emitted (see page 05–676).
- Rough idling or excessive engine vibration (see page 05–688).
- Engine knocking or rattling (see page 05–713).
- Lack of power or hesitation (see page 05–699).

Result:

Result	Proceed to
Malfunctioning circuit confirmed	A
Malfunctioning parts confirmed	B

B → Go to step 12

A

9	CHECK ECM POWER SOURCE CIRCUIT (See page 05–649)

NEXT

10	CONDUCT CIRCUIT INSPECTION

Result:

Result	Proceed to
Malfunction not confirmed	A
Malfunction confirmed	B

B → Go to step 13

A

11	CHECK FOR INTERMITTENT PROBLEMS (See page 05–439)

NEXT

Go to step 13

12	CONDUCT PARTS INSPECTION

NEXT

13	IDENTIFY PROBLEM

NEXT

14	ADJUST AND/OR REPAIR

NEXT

15	CONDUCT CONFIRMATION TEST

NEXT

END