|  |  |  |  |
| --- | --- | --- | --- |
| Station | | Task | |
| 7 | | 7 | |
| Running 1503 | | | |
|  |  |  |  |

**

# Dynamic testing

## TASK OBJECTIVE

At the completion of this task the technician will be able to properly diagnose an improperly running engine.

**REPAIR ORDER INFORMATION**

#### The customer complains that it runs very rich and occasionally fouls the spark plugs. Additional information states that there is no check engine light.

**INTRODUCCTION**

This is where the diagnosis begins. You need to apply a logical method of diagnosis.

**For example**, you should think of what the repair order complaint is and possible causes for it. Remember the basics first: Does it start? Does it run on all the cylinders? How is the compression? How about fuel pressure? Are there any fault codes? Does all the monitored data look correct?

If you determine it is an electrical issue, first check the schematic and check the wire colors and locations of the terminals and components.

Visually check for disconnected connectors or backed out terminals. Ensure there is enough grip on the terminal.

Ensure the wires are in the correct positions in the connector.

Check the resistance of the component, first from the MPEM or ECM connector, then at the component. Then verify the continuity of the wires from the component to the ECM.

Use the tools you have at hand, the most important ones being the knowledge that you have and the thought process you use to narrow the problem down to its root cause.

**Remember diagnosis is a process of eliminating what is good to determine what is bad.**

**PROCEDURES**

####  Place the switches on the switch box in the following positions.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| A | X | X | X | X | X | X | X |  |
| B |  |  |  |  |  |  |  | X |

1. What needs to be repaired on the unit? Be specific

List circuit numbers, color codes and any other pertinent information:

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####  Place the switches on the switch box in the following positions.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| A | X | X | X | X | X | X | X | X |
| B |  |  |  |  |  |  |  |  |

**QUESTIONS**

1. What have you learned from this task?

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**Instructor sign off-- Go \_\_\_\_\_\_\_\_\_\_**