

Technicians Skills Assessment

Name: _____

Date: _____

1. Car won't start. It has good spark, good fuel delivery and cranks normally. What should you test next?

2. What is this formula: $E=I \times R$

3. A volt meter reads 12 volts. What does the meter do to cause it to display this reading?

4. What is a parasitic draw?

5. What are the four strokes of an engine?

6. What do the abbreviation "ATDC" and "BTDC" mean:

7. A plug is removed from an engine and is black and sooty. What is the cause?

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8. Name the 6 circuits of a carburetor:

_____	_____
_____	_____
_____	_____

9. If the engine is running rich, the CO will be high, and the O₂ will be?

10. Hydrocarbons (HC) in the exhaust gases, are the result of what?

11. High HC and O₂ readings may be caused by what?

12. What is a dynamic compression test:

13. What is a fully charged battery's voltage? (Battery has set unused for 24 hours)

14. What is the parameters for a laod test on a battery?

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15. An unmetered air leak after the airflow sensor can cause:
- A lean condition and poor engine performance
 - The engine management system to provide additional fuel to compensate for excess air in open loop
 - The needle of the vacuum gauge to fluctuate between 20 to 23 in HG at idle.
 - The electronic control system to remain in the closed loop mode

16. When an OBD I car has codes and a check engine lite on, after checking the basic and scanning the car what is the next step.

17. On A vehicle without ABS, Customer complains of a fading brake pedal, please outline the steps you would take to diagnose the complaint

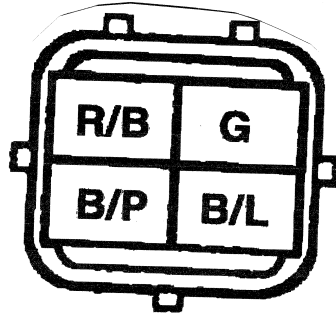
18. The following two symbols represent which two devices?



- Fixed resistor and lamp
- Variable resistor and lamp
- Lamp and Motor
- Switch And relay

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19. The letters inside the connector shows:



- Component wiring, such as Brake Lighting, Brakes.
- Wire color.
- Circuit representation, such as Rear Brakes or Back Pressure
- Which body common connector is attached?

20. This is the electrical symbol for:



- Resistor.
- Diode.
- Transistor.
- Digital clock

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21. If a fuse blows again after it has been replaced, what is the most likely cause?

- Resistance in the circuit is too high.
- The ground point has become disconnected
- Current or "amps" through circuit too high
- Open circuit in component

22. What is the proper air/fuel ratio for a good running engine?

23. A mid to late 90's Ford vehicle won't start (no spark). Remove the spout connector and the vehicle runs. What is the most likely problem?

24. Draw the recommended tire rotation positions for a rear wheel drive vehicle: