

## Auto Mechanics Terminology

### **Part I – Vocabulary Terms**

1. ACCELERATION (verb) - def: To increase in speed  
Do you hear the noise when you ACCELERATE?
2. ALIGN (verb) - def: To bring into a straight line.  
The front tires need an ALIGNMENT.
3. ANTENNA - def: receiving wire on the car.  
Someone broke my ANTENNA.
4. AXLE - def: The bar or shaft by which a pair of wheels rotate.  
The AXLE is bent from the accident.
5. BATTERY - def: Cells in which generate or store electricity.  
My BATTERY is dead.
6. BATTERY-charge - def: To jump start a dead battery  
Can you CHARGE UP my BATTERY?
7. BATTERY-“jump-start-battery” - def: The process of starting the engine in one vehicle by connecting it to the battery in another vehicle.  
Can you give me a JUMP START?
8. BRAKE (verb) - def: An energy-conversion device used to slow or stop a vehicle.  
You need to check the BRAKES.
9. BRAKE-drum - def: A metal drum mounted on a vehicle’s wheel to form the outer shell of the brake.  
The BRAKE DRUM needs to be replaced.
10. BRAKE-pads – def: The parts of disc brake systems that supply friction to the brake rotor and convert vehicle motion into heat.  
The BRAKE PADS have worn down 50%.
11. BRAKE-rotor – def: A disc-shaped device with flat friction surfaces machined onto both sides against which the brake pads are pressed.  
The brake pads are pressed against the BRAKE-rotor.
12. BUMPER – def: For protecting the front or rear of the car.

Your back BUMPER has a deep scratch on the right side.

13. CAMSHAFT – def: A shaft having a series of cams for operating the valve mechanisms.

Can you find the CAMSHAFT?

14. CARBURETOR – def: A device for mixing vaporized fuel with air to make energy.

Do all cars today have a CARBURETOR?

15. CLUTCH – def: To operate a clutch in a vehicle.

The CLUTCH needs adjustment.

16. COMPRESSION (noun) def: Two forces act on opposite ends of an object but are directed toward each other, squeezing the object.

You need to test the COMPRESSION.

17. CRANKSHAFT – def: A one-piece steel casting or forging that serves as the main rotating member, or shaft, of the engine.

Does this car have a CRANK-SHAFT?

18. COIL-SPRING – def: A length of steel rod wound into a coil.

What is the COIL-SPRING attached to?

19. DISTRIBUTOR-rotor - def: A device designed to establish base timing and distribute the ignition spark.

Will it be expensive to replace the DISTRIBUTOR?

20. DISTRIBUTOR-cap - def: The top of the devise designed to establish base timing and distribute the ignition spark.

Where did you put the DISTRIBUTOR CAP?

21. DRIVE-SHAFT def: - A rotating shaft that transmits torque, as in some automobiles from the transmission to the rear axle.

The DRIVE SHAFT connects to the transmission of a vehicle.

22. ENGINE/MOTOR - def: - A machine that turns heat energy into mechanical energy.

What size ENGINE is in that car?

21. ENGINE-running – def: - Indicating that the engine has combustion.

The ENGINE is RUNNING smoothly.

22. ENGINE-turn-over – def: - Indicates when the engine moves the number one piston.

Did the ENGINE TURN OVER?

23. ENGINE-VALVE – def: The device in the engine that controls the flow of a fluid or gas, esp. a movable part that can close or constrict a passageway.  
The ENGINE VALVES are rattling.
24. EXHAUST – def: A poisonous gas that is a product of incomplete combustion of hydrocarbon fuel with air.  
That car is emitting too much EXHAUST.
25. FIRING-ORDER – def: The numbered sequence in which the cylinders of a multi-cylinder engine fire.  
The FIRING ORDER is off.
26. FRAME – def: The supporting structure of a vehicle made of parts that are joined together.  
Was your FRAME affected by the accident?
27. FLY-WHEEL – def: A mechanical device that is used to store energy, which helps smooth out the engine power surges from the power strokes.  
Can you identify the FLY WHEEL?
28. FUSE-blown (verb) – A resettable protective device that opens an electric circuit to prevent damage when the circuit is overheated by excess current flow.  
Did you BLOW the FUSE?
29. GASKET-head – def: A thin layer of soft material used to create a tight seal between two flat surfaces in the engine.  
What is the function of the HEAD GASKET?
30. HOOD – def: The metal lid that covers the engine of a vehicle.  
Your HOOD is not closed.
31. IGNITION – def: A device that transforms low voltage from the battery into a high voltage capable of producing an ignition spark.  
When you turn the IGNITION, what happens?
32. LEAF-SPRINGS – def: A spring that consists of single or multiple-spring steel bands.  
The vehicle sagged in the back indicating the LEAF SPRINGS were not flexing.
33. LIGHTS-emergency – def: The lights on a vehicle that flash on and off indicating trouble with your vehicle.  
Did you turn off your EMERGENCY LIGHTS?
34. LIGHTS-head – def: Two powerful lights mounted on each side of the front of a vehicle.

Your HEAD LIGHTS need adjustment.

35. LIGHTS-high beam – def: The lights for distance that are mounted on each side of the front part of the vehicle.

Turn off your HIGH BEAM LIGHTS.

36. LIGHTS-left/right turn signal – def: The flashing yellow lights located on each side of a vehicle use to indicate the vehicle will make a left or right turn.

Your left TURN SIGNAL LIGHT is not working.

37. LUBRICATION – def: Applying a smooth surface film to a surface to reduce the friction.

What is the average cost of a “LUBE JOB”?

38. PARKING-BRAKE – def: The brakes used to keep a parked vehicle from moving.

Did you set the PARKING BRAKE?

39. PISTON – def: A cylindrical plug that fits inside a cylinder. It receives and transmits motion as a result of pressure changes applied to it.

Attach the piston pin to the PISTON.

40. PISTON-pin – def: The cylindrical plug that fit inside a cylinder. It receives and transmits motion as a result of pressure changes applied to it.

Attach the PISTON PIN to the piston.

41. PISTON-ring – def: Rings fitted into grooves in the piston. It receives and transmits motion as a result of pressure changes applied to it.

Both the PISTON RING and rods need to be replaced.

42. PISTON-rod – def: The cylindrical rod that fits inside a cylinder.

Both the PISTON RING and rods need to be replaced.

43. SHOCK-ABSORBER – def: A device placed at each vehicle wheel to regulate suspension rebound and compression.

You need to replace your SHOCK ABSORBERS.

44. SPARK-PLUGS – def: The assembly which includes an electrode, an insulator, and a shell that provides a spark in the engine cylinder.

What kinds of SPARK PLUGS are best?

45. SPARK-PLUG-CABLES – def: The electrical lines that attach to the spark plugs.

The SPARK PLUG CABLES attach to what?

46. SPEEDOMETER def: The device built into the dashboard that indicates the speed the vehicle is traveling.

How does the SPEEDOMETER work?

47. SPINDLE-front wheel – def: The rotating shafts that serves as axes for the wheel of a vehicle.

The SPINDLE is attached to the axle of a vehicle.

48. STARTER – def: A high-torque electric motor that cranks the engine.

You need a new STARTER.

49. STEERING COLUMN – def: The housing that contains and supports the steering shaft.

The STEERING COLUMN supports the steering wheel.

50. TIMING-LIGHT – def: A bright stroboscopic light that is used to set ignition timing.

Have you already used the TIMING LIGHT?

51. TIRE – def: The casing and tread assembly that is mounted on a vehicle wheel and usually filled with compressed air to transmit braking and motion forces to the road.

What size are your TIRES?

52. TIRE-bald – def: This is the condition when the tire has worn out the tread, the part of the tire that contacts the road providing traction.

Your TIRES are completely BALD.

53. TIRE-flat – def: The condition when the tire has lost compressed air.

How did you get a FLAT TIRE?

54. TIRE-JACK – def: The device used to raise the vehicle in order to replace the tire.

Where did you put the TIRE JACK?

55. TIRE-rotation – def: The relocating of each tires and wheel assembly from one wheel position to another.

We need to ROTATE your TIRES.

56. TRANSMISSION – def: The gears that transmit power from an automobile engine via the driveshaft to the live axle.

What kind of TRANSMISSION is in that car?

57. TRANSMISSION-AUTOMATIC – def: A transmission that automatically changes the gears according to the speed of the car.

Is that car a manual or AUTOMATIC TRANSMISSION?

58. TRANSMISSION-MANUAL – def: A transmission that manually changes the gears according to the speed of the car.

Is that car a MANUAL or automatic TRANSMISSION?

59. TRUNK – def: The compartment in an automobile that carries luggage or shopping or tools.

Did you close the TRUNK?

60. TORQUE WRENCH – def: A tool that employs twisting or turning force, measured in pound feet or Newton-meters.

Where did you put the TORQUE WRENCH?

61. WINDSHIELD def: The transparent screen (as of glass) to protect occupants of a vehicle.

The rock put a crack in your WINDSHIELD.

62. WINDSHIELD WIPERS – def: The device used to wipe off water or other debris from the windshield of a vehicle.

How do you turn on your WINDSHIELD WIPERS?

## **Part II – Descriptions of Automotive Systems (streaming video clips)**

1. Braking System
2. Drive Line System Electrical System
3. Exhaust System Fuel System
4. Ignition System
5. Steering System
6. Suspension System