

# 11-26 GLOSSARY

**COMBINATION VALVE:** A device used in some fuel systems that routes fuel vapors to a charcoal storage canister instead of venting them into the atmosphere. The valve relieves fuel tank pressure and allows fresh air into the tank as the fuel level drops to prevent a vapor lock situation.

**COMPRESSION RATIO:** The comparison of the total volume of the cylinder and combustion chamber with the piston at BDC and the piston at TDC.

**CONDENSER:** 1. An electrical device which acts to store an electrical charge, preventing voltage surges. 2. A radiator-like device in the air conditioning system in which refrigerant gas condenses into a liquid, giving off heat.

**CONDUCTOR:** Any material through which an electrical current can be transmitted easily.

**CONTINUITY:** Continuous or complete circuit. Can be checked with an ohmmeter.

**COUNTERSHAFT:** An intermediate shaft which is rotated by a mainshaft and transmits, in turn, that rotation to a working part.

**CRANKCASE:** The lower part of an engine in which the crankshaft and related parts operate.

**CRANKSHAFT:** The main driving shaft of an engine which receives reciprocating motion from the pistons and converts it to rotary motion.

**CYLINDER:** In an engine, the round hole in the engine block in which the piston(s) ride.

**CYLINDER BLOCK:** The main structural member of an engine in which is found the cylinders, crankshaft and other principal parts.

**CYLINDER HEAD:** The detachable portion of the engine, usually fastened to the top of the cylinder block and containing all or most of the combustion chambers. On overhead valve engines, it contains the valves and their operating parts. On overhead cam engines, it contains the camshaft as well.

**DEAD CENTER:** The extreme top or bottom of the piston stroke.

**DETONATION:** An unwanted explosion of the air/fuel mixture in the combustion chamber caused by excess heat and compression, advanced timing, or an overly lean mixture. Also referred to as "ping".

**DIAPHRAGM:** A thin, flexible wall separating two cavities, such as in a vacuum advance unit.

**DIESELING:** A condition in which hot spots in the combustion chamber cause the engine to run on after the key is turned off.

**DIFFERENTIAL:** A geared assembly which allows the transmission of motion between drive axles, giving one axle the ability to turn faster than the other.

**DIODE:** An electrical device that will allow current to flow in one direction only.

**DISC BRAKE:** A hydraulic braking assembly consisting of a brake disc, or rotor, mounted on an axle, and a caliper assembly containing, usually two brake pads which are activated by hydraulic pressure. The pads are forced against the sides of the disc, creating friction which slows the vehicle.

**DISTRIBUTOR:** A mechanically driven device on an engine which is responsible for electrically firing the spark plug at a predetermined point of the piston stroke.

**DOWEL PIN:** A pin, inserted in mating holes in two different parts allowing those parts to maintain a fixed relationship.

**DRUM BRAKE:** A braking system which consists of two brake shoes and one or two wheel cylinders, mounted on a fixed backing plate, and a brake drum, mounted on an axle, which revolves around the assembly.

**DWELL:** The rate, measured in degrees of shaft rotation, at which an electrical circuit cycles on and off.

**ELECTRONIC CONTROL UNIT (ECU):** Ignition module, module, amplifier or igniter. See Module for definition.

**ELECTRONIC IGNITION:** A system in which the timing and firing of the spark plugs is controlled by an electronic control unit, usually called a module. These systems have no points or condenser.

**END-PLAY:** The measured amount of axial movement in a shaft.

**ENGINE:** A device that converts heat into mechanical energy.

**EXHAUST MANIFOLD:** A set of cast passages or pipes which conduct exhaust gases from the engine.

**FEELER GAUGE:** A blade, usually metal, of precisely predetermined thickness, used to measure the clearance between two parts.

**FIRING ORDER:** The order in which combustion occurs in the cylinders of an engine. Also the order in which spark is distributed to the plugs by the distributor.

**FLOODING:** The presence of too much fuel in the intake manifold and combustion chamber which prevents the air/fuel mixture from firing, thereby causing a no-start situation.

**FLYWHEEL:** A disc shaped part bolted to the rear end of the crankshaft. Around the outer perimeter is affixed the ring gear. The starter drive engages the ring gear, turning the flywheel, which rotates the crankshaft, imparting the initial starting motion to the engine.

**FOOT POUND (ft. lbs. or sometimes, ft.lb.):** The amount of energy or work needed to raise an item weighing one pound, a distance of one foot.

**FUSE:** A protective device in a circuit which prevents circuit overload by breaking the circuit when a specific amperage is present. The device is constructed around a strip or wire of a lower amperage rating than the circuit it is designed to protect. When an amperage higher than that stamped on the fuse is present in the circuit, the strip or wire melts, opening the circuit.

**GEAR RATIO:** The ratio between the number of teeth on meshing gears.

**GENERATOR:** A device which converts mechanical energy into electrical energy.

**HEAT RANGE:** The measure of a spark plug's ability to dissipate heat from its firing end. The higher the heat range, the hotter the plug fires.