

Vehicle Inspection – Glossary of terms

*ABS Antilock braking system, - A computer-controlled system that prevents brakes from locking up and tyres from skidding during hard braking.

*Adaptive cruise control, - A laser- or radar-sensing cruise control system that causes a vehicle to automatically slow or stop in order to avoid front-end collisions.

*Adaptive headlights, - Headlights that turn as the driver turns the steering wheel, for the purpose of improving illumination in the direction of the turn.

*Air conditioning, - The cooling and dehumidification of a vehicles cabin air.

*Air filter, - A device that filters incoming air fed to the engine.

*Airbags, - A cushion that deploys and fills with air when a major impact occurs to reduce vehicle occupants chances of coming in contact with the vehicles interior surfaces.

*Antifreeze, - See "Coolant."

*Auto-levelling suspension, - A suspension that adjusts the height of the vehicle so that its rear stays even with the front when cargo is carried; some systems offer multiple height settings for off-road, normal and high-speed operation.

*Automated manual transmission, - Also referred to as "DSG," "direct shift gearbox," "SMG" and "sequential manual gearbox." A conventional clutch-type manual transmission that employs electronic, pneumatic and/or hydraulic actuators in place of a conventional clutch pedal, and a purely mechanical shift lever. The driver may select either fully automatic shift mode or driver-controlled shift mode

*Automatic transmission, - A transmission that uses a torque converter, planetary gearset and clutches or bands to automatically change gears.

*Automatic transmission cooler hoses, - Flexible tubes that carry transmission fluid to and from a heat exchanger or oil cooler.

*Automatic transmission fluid, - The fluid used for lubricating and cooling an automatic transmission.

*AWD, - All-wheel drive. A drivetrain that employs a front, rear and center differential to provide power to all four wheels of a vehicle.

*Ball joints, - Movable joints in the steering linkage and suspension system of a vehicle that permit rotating movement in any direction between the parts that are joined.

*Brake booster, - A vacuum-based device that amplifies the foot pressure applied to power brakes.

*Brake fluid, - The fluid used in the hydraulic brake system.

*Brake lines, hoses & connections, - Tubes and their connections that carry brake fluid between the various components in a vehicles brake system.

- *Brake linings, - High friction, heat-resistant material that is attached to the brake shoes in a rear drum brake system.
- *Brake master cylinder, - A device that stores brake fluid and hydraulically forces it through the brake lines to the brakes when the brake pedal is depressed.
- *Brake pads, - High friction material attached to a metal backing plate.
- *Braking assist, - A system that monitors the swiftness of a driver's brake pedal application and applies additional braking force if it determines that a panic stop is occurring.
- *Carburettor, - A device used on older internal combustion gasoline engines that is mounted on the engines intake manifold and supplies fuel to the engine.
- *Catalytic converter, - A canister in the exhaust system, usually situated before the muffler, containing a substance that reacts chemically with the exhaust in order to reduce harmful emissions.
- *Climate control, - The computer-controlled regulation of heating and air conditioning systems to accommodate a user-specified temperature setting.
- *Clutch fluid, - The liquid used in a hydraulic clutch system that helps disengage the clutch from the flywheel.
- *Clutch master cylinder, - In a manual-transmission vehicle with a hydraulically actuated clutch, a small-bore hydraulic cylinder mechanically connected to the clutch pedal that actuates a slave cylinder, which in turn actuates the clutch fork that disengages the clutch when the clutch pedal is depressed.
- *Coolant, - Also known as "antifreeze." A mixture of water and ethylene glycol that has both a higher boiling point and a lower freezing point than plain water.
- *Cruise control, - A device that, when engaged by the driver, automatically controls a vehicles speed.
- *Crumple zone, - A section of a vehicles structure that collapses during impact to absorb energy.
- *CV joints, - Constant velocity joints, which are located on either end of the drive axles and transmit engine power while enabling full steering and suspension movement. Black accordion boots cover and protect these joints and hold lubricant.
- *CVT, - A transmission with a continuously variable drive ratio (as opposed to conventionally stepped gear ratios) that maintains a steady acceleration curve with no pauses for gear changes.
- *Differential fluid, - The liquid used for lubricating gears inside the differential.
- *Direct injection system, - A fuel injection system in which the injection nozzles are located inside the combustion chamber of each piston.
- *Direct shift gearbox, - Also referred to as "DSG," "SMG," "sequential manual gearbox" and "automated manual transmission." See "Automated Manual Transmission."
- *Disc brake type, - The type of brake rotors: solid, vented, slotted, cross-drilled, ceramic or carbon.

*Drain plug washer, - A composition, copper or plastic sealing washer used on a bolt-type drain plug.

*Drive belt tensioner, - A self-adjusting device used for maintaining proper tension on the drive belt.

*Drive belt(s), - A belt that transfers the rotation of the engine through the crankshaft pulley to drive various devices, such as the alternator, water pump, air conditioning compressor or power steering pump.

*Drive shaft, - A sturdy metal tube with universal joints on either end that connects the engine to a differential on a rear-wheel or four-wheel drive vehicle.

*Drivetrain, - The system of components that generates power and transmits it to a vehicles wheels.

*DSG, - Direct shift gearbox. Also referred to as "SMG," "sequential manual gearbox" and "automated manual transmission." See "Automated Manual Transmission."

*EGR system, - Exhaust Gas Recirculation system. A device that redirects a small amount of exhaust to the engine intake in an effort to lower combustion temperature and reduce the emission of nitrogen oxide.

*Electronic stability control, - See "Stability control."

*Emergency brake assist, - An electronically controlled system that maximizes brake efficiency during panic stops.

*Emergency braking preparation, - A system that uses the adaptive cruise control sensors to monitor the following distance to the car ahead; if the gap is closing sufficiently quickly, in anticipation of a panic stop the system will cause the ABS pump to pre-fill the brakes and will bring the brake pads close to the rotors.

*Engine Auto Stop/Start, - A system that automatically shuts the engine off when a vehicle comes to rest for a period, and then restarts it automatically when the brake is released and the throttle is depressed.

*Engine oil, - A fluid designed to lubricate and cool the moving parts of an engine which reduces wear, corrosion and the formation of rust.

*Engine oil level warning system, - A device that automatically brings a low engine oil level to the attention of a driver.

*Engine thermostat, - A device that senses the temperature of the engine coolant for the purpose of regulating the engine cooling system.

*ESC, - See "Stability control."

*EV, - Electric vehicle.

*Evaporative control system, - An emission control system that prevents raw fuel vapors from entering the atmosphere.

*External temperature display, - The digital display of the ambient air temperature around a vehicle.

- *Fan hub, - The mechanical connection between the radiator fan and its point of attachment.
- *Fog lights, - A pair of driving lights that provides a wide, low beam in an attempt to undercut fog.
- *Forced induction, - The forced compression of air into an engines cylinders by means of a supercharger or turbocharger.
- *4WD, - A drivetrain that employs two differentials and a transfer case and when selected will provide power to all four wheels of a vehicle.
- *Four-wheel steering, - A feature of some vehicles that allows the rear wheels to be steered (by a computer and actuators), for the purpose of increasing high-speed cornering stability.
- *Fuel capacity, - The amount of fuel that a vehicles fuel tank can hold.
- *Fuel economy, - A measure of the amount of fuel used by a vehicle over a certain distance, or the distance travelled per volume of fuel used.
- *Fuel filler cap, - A cap used to seal a vehicles fuel filler neck.
- *Fuel filter, - A replaceable metal or plastic canister that prevents particulate matter and most contaminants in the fuel from reaching the engine.
- *Fuel injection system, - A device that atomizes fuel by forcibly pumping it through a small nozzle under high pressure and delivers it to the vehicles engine.
- *Fuel lines & connections, - The tubing and connections that carry fuel through a vehicle
- *Fuel system, - The assemblage of parts that stores and delivers fuel for the engine, including the fuel cap, fuel tank, fuel lines and hoses, fuel pump, fuel filter and fuel injectors or carburettor.
- *Gauges, - See "instrumentation."
- *Haldex clutch, - Limited slip coupling used in vehicles with automatic all-wheel drive systems to engage and disengage a secondary axle when needed.
- *Headlight washers, - A set of washer nozzles and/or wipers that clean a vehicles headlights.
- *Headlights, - A pair of bright lamps that provide visibility during darkness.
- *Heads-up display, - A digital display projected from a vehicles dashboard onto its windshield to provide information within the drivers direct line of sight.
- *Heater, - A heat exchanger placed in the ventilation system that diffuses heat from the engines cooling system into an airstream generated by an inline fan.
- *Heater hoses, - Tubing that carries engine coolant between a vehicles cooling system and heater core.
- *HVAC, - Heating, ventilation and air conditioning.

*Hybrid engine, - A powertrain that combines an electric motor and an alternative means of propulsion and/or power generation (for example, hydrogen). A gas/electric hybrid engine is the most common example of a hybrid engine.

*Idle speed, - The RPM of the engine free from load (all accessories off), at normal operating temperature and in neutral (or, in the case of an automatic transmission, park or neutral).

*Idler pulley, - A guide or tightening pulley for a belt or chain.

*Ignition timing, - The process of setting the time that a spark will occur in the combustion chamber (during the power stroke) relative to piston position and crankshaft angular velocity.

*Instrumentation, - Digital and/or analog displays used to convey to the driver information such as dynamic engine parameters, operating conditions, RPM, speed and water temperature.

*Intelligent alternator, - An alternator that operates primarily when the engine has no need for power, i.e., when coasting or during braking. The alternator remains passive while the vehicle is under power, with needed electrical power provided by the battery, for the purpose of improving the vehicles fuel efficiency.

*Intermittent wipers, - A wiper setting that causes the wipers to pause for a driver-selected period between wipes.

*Keyless ignition, - A system that allows the activation by the driver of a push-button to start a vehicle if proximity sensors detect the electronic key inside the vehicle.

*Lane departure warning system, - A system of electronic components designed to warn a driver when a vehicle strays out of its lane.

*Locks, - A device or system of devices that prevents a vehicle from being entered without a key or an electronic keyless entry remote control.

*Low fuel warning indicator, - An alert, usually in the form of a halogen lamp or LED, warning the driver of a low fuel supply.

*LPG, - Liquefied petroleum gas. Also referred to as "GPL," "LP Gas" or "autogas." A blend primarily of two hydrocarbon gases, propane and butane. Propylene and butylenes can also be present in small concentration. Ethanethiol, a powerful odorant, is also added so that leaks can be detected.

*Manual transmission, - A transmission that uses a clutch and a shift (gear) selector to change gears.

*Manual transmission fluid, - The fluid used for lubricating and cooling a manual transmission.

*Navigation system, - A device that communicates with global positioning satellites to determine a vehicles physical location and plot a course using stored map information.

*Oil filter, - A cartridge-filled canister placed in an engines lubricating system to strain dirt and abrasive materials out of the oil.

*On-board diagnosis system, - A computer-controlled system that identifies malfunctioning or out-of-adjustment components under its control through the display of trouble codes. The presence of trouble codes is usually indicated by an intermittently or constantly lit "check engine " or "service engine soon" light.

*Oxygen sensor, - In a computer-controlled, fuel-injected vehicle, a sensor mounted in the exhaust stream that relays air/fuel ratio information to the fuel control computer that allows the computer to make adjustments.

*Oversteer, - A handling characteristic of a vehicle that causes it to turn more sharply than the driver intends because the rear wheels are sliding to the outside of the turn.

*Parking assist, - An electronic system that employs laser, radar or sonar technology to enable a vehicle to park itself, in some cases without driver input.

*Parking sensors, - Button-size sensors in the front and/or rear bumpers that measure the distance to nearby cars and other objects and alert the driver using sounds or lights.

*PCV valve, - Positive crankcase ventilation filter/positive crankcase ventilation valve. Devices that allow the venting of combustion gases from the crankcase to the intake system instead of into the atmosphere.

*Pillar, - A shaft or other structure that supports the roof of a vehicle, with the A-pillars being the structures that frame the windscreen, and each successive set of structures (moving toward the rear of the vehicle) being named after successive letters of the alphabet.

*Power steering, - An electric and/or hydraulic system that multiplies, for ease and comfort, the force a driver exerts on the steering wheel.

*Power steering fluid, - Hydraulic fluid used in a power steering system.

*Power steering hoses, - The flexible hoses carrying hydraulic fluid between the various components of a power steering system.

*Radiator core & AC condenser, - The part of a vehicles radiator and air conditioning systems made up of small-diameter tubes with a series of thin, heat-conducting fins in between.

*Radiator hoses, - The tubes between the radiator and the engine.

*Roll-over protection, - A system of devices that works to prevent or lessen the damage from rollover accidents.

*RPM, - Revolutions per minute.

*Run flat, - A tyre that is capable of being driven on temporarily after losing its pneumatic pressure.

*Seat belts, - Harnesses designed to secure vehicle occupants during a collision.

*Seatbelt pretensioner, - A seatbelt with a mechanism that reels in the belt when the airbag is deployed for the purpose of keeping the occupant in the proper position.

*Self-levelling headlights, - A system that uses suspension height sensors to determine the orientation of a vehicle's body for the purpose of making up-down adjustments to the direction of the headlights, for the protection of oncoming drivers.

*Sequential manual gearbox, - Also referred to as "SMG," "direct shift gearbox," "DSG" and "automated manual transmission." See "Automated Manual Transmission."

*Serpentine belt, - A ribbed drive belt that drives more than one engine accessory.

*Service reminder light, - A light that indicates that general vehicle maintenance is needed or that a specific service is required.

*Side impact beam, - A structural support designed to protect a vehicles occupants from side impacts.

*SMG Sequential manual gearbox, - Also referred to as "DSG," "direct shift gearbox" and "automated manual transmission." See "Automated Manual Transmission."

*Stability control, - Also known as "electronic stability control," or "ESC." A safety feature that improves the safety of a vehicles handling by detecting skids and compensating by adjusting braking pressure to help maintain the intended direction of the vehicle. Some stability control systems also reduce engine power until control is regained.

*Stabilizer bar, - Sometimes called an anti-roll or anti-sway bar. A device that connects the left and right sides of a suspension to limit body roll in turns.

*Start-stop system, - A system typically found in hybrid vehicles that automatically stops and restarts the internal combustion engine to reduce the amount of time the engine spends idling and improve fuel economy.

*Steering damper, - A shock absorber attached to the steering linkage intended to prevent abrupt "kickback" at the steering wheel, usually found on trucks or vehicles that can be used off-road.

*Steering box, - A steering mechanism that converts the rotational motion of a steering wheel to the side-to-side motion of a lever that is connected to the steering linkage.

*Steering linkage, - The arrangement of rods and lubricated joints connecting the steering gearbox to the wheel spindles.

*Steering rack, - The steering component that converts the rotational motion of the steering wheel to the horizontal motion necessary to operate the steering linkage.

*Steering wheel adjustment, - The mechanism that controls the position of a vehicles steering column to suit the needs of the driver.

*Supercharger, - A device powered by a belt, gear, shaft or chain connected to the engines crankshaft that forces air into an internal-combustion engine in order to increase engine power.

*Supercharger drive belt, - A "toothed" belt used to drive a pulley that turns the impeller of a centrifugal-style supercharger.

*TCS, - See "Traction control."

*Tie rod ends, - Ball and socket parts of the steering linkage that connect the wheel spindles to the rack and pinion or center link.

*Timing belt, - A "toothed" belt that drives an overhead camshaft or camshafts (and in some vehicles a water pump).

*Timing belt tensioner, - A spring-loaded idler wheel that automatically keeps the timing belt under enough tension to prevent the timing belt from allowing the camshaft(s) it controls to go out of sync.

*Tyre inflator, - A device used to inflate, or inflate and seal, a collapsible spare or flat tyre.

*Tyre load index, - Also referred to as "load rating." A numerical value assigned to a tyre by its manufacturer to indicate the tyre's capability to carry a load, the higher the index number, the greater its load capability.

*Tyre pressure monitoring system, - An electronic system that measures and displays the amount of pressure in the vehicle's tyres to the driver.

*Tyre profile, - A numeric value assigned to a tyre by its manufacturer to indicate the relationship between the tyre's sidewall height and its tread width.

*Tyre size, - Information displayed on the sidewall of a tyre that includes its prefix and information about its dimensions, load capacity and speed rating.

*Tyre speed rating, - An alphanumeric value assigned to a tyre by its manufacturer that indicates the maximum speed the tyre can safely sustain for a ten-minute period.

*Traction control, - Also known as "traction control system," or "TCS." A safety feature that regulates wheel spin and prevents loss of control under acceleration by ensuring maximum traction and contact between the tyres and the road (by adjusting brake pressure to one or more wheels, closing the throttle, or reducing the fuel supply to at least one or more cylinders).

*Traction control system, - See "Traction control."

*Transaxle, - A combination transmission and differential/drive axle assembly.

*Transfer case fluid, - Lubricant used in the transfer case.

*Transmission overdrive, - A final gear ratio for an automatic transmission that has an output speed greater than its input speed, which increases highway fuel economy.

*Turbocharger, - A device that uses an exhaust-driven turbine to force air into an internal-combustion engine in order to increase engine power.

*Turning circle, - Also referred to as "turning diameter." The diameter of the circle made by a vehicle in a full-lock 360 degree turn.

*Universal joints, - Flexible joints used on drive shafts that are composed of two U-shaped yokes that share a common cross-shaped member

*Underbody, - The area of a vehicle that is typically not visible from above and that is exposed to the road.

*Understeer, - A handling characteristic of a vehicle that causes it to turn less sharply than the driver intends because the front wheels are sliding to the outside of the turn.

*Upholstery, - Cloth, leather or synthetic material used to cover a vehicles seats, door panels, arm rests and headrests.

*Vacuum lines & hoses, - Flexible tubing used to carry air, fluids, vapours or pressurized gas.

*Valve clearance, - The maximum amount of space between a rocker arm or cam and the part it contacts to actuate a valve.

*Variable valve timing, - An engine feature that allows the lift, timing or duration of the engines valve-train to be changed dynamically while it is in operation.

*Vehicle Identification Number, - A Vehicle Identification Number, or "VIN," is the unique code that is assigned to an individual vehicle by its manufacturer and that distinguishes it from all other vehicles. No two vehicles can have the same VIN. Typically, the VIN is stamped into a plate or printed on a sticker and affixed to the vehicle in several different places, including inside the engine bay and on the driver's side door jamb.

*Water pump, - A device that circulates coolant through a vehicles cooling system.

*Wheel alignment, - The adjustment of various components to meet predetermined specifications for camber, caster, toe and ride height.

*Wheel bearings, - The assemblies that permit smooth rotation between the wheel hub and spindle.

*Wheel cylinders, - Small-bore hydraulic cylinders that are fitted between the brake shoes and are actuated when the brakes are applied.

*Wheel nuts/bolts, - The nuts that hold a wheel onto its hub.

*Wheel speed sensor wiring, - Electrical connections of the system that relay the speed of each wheel to a computer that makes adjustments in brake application to prevent wheels from locking up.

*Wheelbase, - The distance between the center of a vehicles front axle and the center of its rear axle.

*Wiring harness/loom, - The groups of wires and connectors that carry electric current through the vehicle.