

G

Automobile Dictionary

g

A unit of measurement for **lateral acceleration**, or **road-holding**. One **g** is equivalent to 981 cm (32.2 feet) per second every second, the rate at which any object **accelerates** when dropped at sea level. If a car were cornering at 1.0 g -- a figure that very few production cars are able to approach -- the driver's body would be pushing equally hard against the side of the seat as against the bottom of it. Most fast sedans **accelerate** about 0.8 g.

G7

Seven industrial countries consisting of the United States, Japan, Germany, France, the United Kingdom, Italy and Canada, whose leaders have met at annual economic summits since 1975 to coordinate economic policies.

G20 Van

See

- **G-series van**

GA

Abbreviation for **Gage** or **Gauge**

Gage

A standard SAE designation of wire sizes, expressed in AWG (American Wire Gage). The larger the gage number, the smaller the wire. Metric wire sizes are expressed in cross-sectional area, which is expressed in square millimetres. Sometimes the spelling **gauge** is also used to designate wire size. However, it is becoming standard to use **gage** for wire size and **gauge** for instruments. Americans often use **gage** for instruments.

Gage tubing

See

- [Plain gauge tubing](#)

Gain

See

- [Available Power Gain](#)
- [Processing Gain](#)
- [Steering gain](#)

Gain Control

See

- [Automatic Gain Control](#)
- [Automatic Quiet Gain Control](#)

Gaiter

A dust boot

Gal.

Abbreviation for **gallon**. A US gallon (3.78543 litres) (231 cubic inches) is 20% smaller than an Imperial gallon (4.54609 litres).

Galaxie



**Click image for books on
Ford Galaxie**

GALFAN®

A trademark for a special type of hot-dip galvanized steel sheet with a coating consisting of a zinc alloy containing 5% aluminum and rare earths

Gallery

A **channel** or tube usually found within the engine block for the transfer of fluid or gas.

See

- **Engine Oil Gallery**
- **Oil Gallery**

Galley

A cook room or kitchen.

Galley Dresser

A cook's work table.

Galling

1. A condition that takes place when two metals or fasteners stick together and cannot be easily loosened. In tightening fasteners, for example, pressure builds on threads as metals rub against each other, and the passive film preventing corrosion on stainless may not form due to lack of oxygen. Also called **seizing**
2. Developing a condition on the live bearing surface of a pin or bushing of a chain where excessive friction between high spots results in localized welding with subsequent tearing and a further roughening of the contact surfaces.

Gallon

A US gallon (3.785 litres) is 20% smaller than an **Imperial gallon** (4.546 litres).

See

- **Imperial Gallon**
- **Miles Per Gallon**
- **Standard U.S. Gallon**
- **U.S. Petroleum Gallon**

Galvalume®

Trademark for a special type of hot-dip galvanized steel sheet with a coating consisting of 55% aluminum, 43.4% zinc and 1.6% silicon

Galvanic

Concerned with an electrical current

Galvanic action

Wasting away of two unlike metals due to electrical current passing between them. The action is increased in the presence of moisture.

Galvanic cell

Cell which converts chemical energy into electrical energy by irreversible chemical reactions

Galvanic corrosion

1. Corrosion due to the action of a galvanic cell.
2. An **accelerated** degree of corrosion occurring when two different metals are in contact with moisture, particularly sea water. All metals have what is termed a specific electric potential, so that low level electric current flows from one metal to another. A metal with a higher position in the galvanic series will corrode sacrificially rather than one with a lower position, meaning stainless, for example, will corrode before gold. The further apart the metals on the chart, the more electric current will flow and the more corrosion will occur. No serious galvanic action will occur by combining the same metals, only dissimilar ones. To prevent galvanic corrosion, use insulation, paint, or coatings when separating dissimilar metals; or put the metal to be protected next to a metal which is not important in the assembly, so it can corrode sacrificially. Metals listed first will corrode due to galvanic reaction before those at end of paragraph: magnesium, zinc, aluminum 1100, cadmium, aluminum 2024, steel and iron, lead, tin brass, copper, bronze, monel, 304 and 316 stainless (passive), silver, titanium, graphite, gold.

See

- **Bimetallic corrosion**

Galvanize

The action of plating with zinc and/or lead by hot dipping or **electrodeposition** to protect from rust.

See

- **Hot-dip galvanize**

Galvanized body

See

- **Fully galvanized body**

Galvanized coating

Zinc or zinc based coating applied by galvanizing

Galvanize differentially

The action of obtaining different coating thicknesses on the two sides of the sheet of iron.

Galvanizing

The application of zinc coatings on the surface of a metal, by hot dipping or **electrodeposition** to protect from rust.

See

- **Cold galvanizing**
- **Dry galvanizing**
- **Electrolytic galvanizing**
- **High-build galvanizing**
- **Mechanical plating**
- **Rack galvanizing**
- **Spin galvanizing**
- **Wet galvanizing**

Galvanizing bath

A bath for hot-dip galvanizing or **Electrogalvanizing**

Galvannealing

A thermal process which gives improved adhesion to hot-dip galvanized steel sheets

Galvanometer

An instrument used to measure the pressure, amount of, and direction of an **electric current**.

See

- **Ballistic Galvanometer**

Gamma layer

Part of the zinc-iron alloy layer on hot-dip galvanized iron and steel containing 21-28% iron

Gangway

A narrow hanging staircase or ladder used by persons entering or leaving a vessel from the pier or boat. Also see **Fore And Aft Gangway**

Gantry



Gantry

1. A structure with an overhead beam, used for lifting out an engine. Compare **Engine hoist**.
2. Overhead steel structures across the highway to hold up a traffic sign

Gap

1. The distance between the center terminal (**electrode**) and the outer terminal (electrode) through which the **spark** must travel in a **spark plug**.

See

- **Spark plug gap**
- **Air gap.**

2. The distance between the points in contact **breaker points**.

See

- **Point gap.**
3. The distance between two vehicles traveling down the road as they go in the same direction. Generally a safe distance is a minimum of two seconds behind the vehicle in front.
 4. The distance between the two ends of **piston rings**.

See

- **Air gap**
- **Alignment Gap**
- **Annular gap**
- **Band Gap**
- **Buncher Gap**
- **Contact breaker gap**
- **Door gap**
- **Electrode gap**
- **Piston ring end gap**
- **Point gap**
- **Points gap**
- **Ring gap**
- **Spark air gap**
- **spark gap**
- **Spark plug gap**
- **Surface gap**

Gap bridging

A formation of carbon or other deposits across the **Spark plug gap** which shorts out the plug

Gap coil tester

See

- **Spark gap coil tester**

Gap insurance

This covers you against additional losses not covered by your auto insurance in the case of an accident in which the vehicle is totaled. Most auto insurance will cover the actual cash value of the vehicle and what is owed on the lease contract, including early termination fees. Gap insurance is most important in the early years of a lease when the difference between the value of the car and what is owed are greatest. Some manufacturers now include Gap insurance in their leases.

Gapper

A device for determining the distance between two metal contacts.

See

- [Feeler gauge.](#)

Gapping

Adjusting the distance between the **electrodes** of a **spark plug** or the points of contact **breaker points**.

See

- [Plug gapping.](#)

Gap spark plug

See

- [Surface gap spark plug](#)

Gap style

The arrangement or shape of the spark plug electrodes

Gap Tooth Sprocket

An even number tooth sprocket designed with clearance for a through rod or saddle. D-5 or GK1 attachment chains are used on this style sprocket.

Garage

1. A building in which a motor vehicle is kept.
2. The premises on which motor vehicles are repaired or serviced and/or where fuel is sold.
3. To keep in a garage

Garaged

A reference to a vehicle which is kept in a garage, as in ***My car is always garaged.*** The abbreviation in advertisements is gar'd.

Garage jack

A powerful hydraulic jack used in garages

Garages

See

- [Morris Garages](#)

Garbage

1. Trucker slang for **produce** (bananas, lettuce etc.) as in 'I sure am glad I'm not takin' this load of garbage to Hunt's Point.'
2. A cargo body style typified by garbage trucks that often have hydraulic packing mechanisms or hydraulic arms for lifting dumpsters. Included are roll-offs, vehicles used for transporting refuse containers. Roll-offs have rails or a flat bed and a hoist for loading and unloading the refuse container.

Garbage Cargo

A cargo body style typified by Garbage trucks that often have hydraulic packing mechanisms or hydraulic arms for lifting dumpsters. Included are roll-offs, vehicles used for transporting refuse containers. Roll-offs have rails or a flat bed and a hoist for loading and unloading the refuse container.

Garbage truck

A cargo body style often with hydraulic packing mechanisms or hydraulic arms for lifting dumpsters. Included are roll-offs, vehicles used for transporting refuse containers. Roll-offs have rails or a flat bed and a hoist for loading and unloading the refuse container. Also called **refuse truck**

Garbage wagon

A scornful term used by some outlaw bikers to describe a **Touring motorcycle**

Garboard strake

The strake of bottom shell plating adjacent to the keel plate. The course of plates next to the keel of a ship.

Gar'd

An abbreviation used in classified advertisements for **garaged**

Garden gate

A nickname for the plunger-sprung frames used on Norton motorcycles from the late 1930s

Garnish molding

The upper molding or trim on a door panel used to retain the door trim panel to the door assembly or to ornament the interior window frames.

See

- **Door Garnish Molding**

Garnish rail

Trim moldings on doors, usually to ornament interior window frames.
Also called ***garnish trim***.

Garnish trim

See **Garnish rail**

Garter spring

A long, thin coil spring with ends joined to form a ring.

Gas

1. A vapor having no particles or droplets of liquid. In physics, a gas is a substance which possesses perfect molecular mobility and, unlike a liquid or a solid, the ability to expand indefinitely
2. A non-solid material. It can be compressed. When heated, it will expand; and when cooled, it will contract (such as air.)

See

- **Hot gas welding**
- **Inert gas system**

3. A common term for **gasoline**. The British term is ***petrol***.

See

- **Unleaded gas**

4. A term for LPG or **Propane**.

See

- **Bottled gas**
- **Compressed natural gas**
- **Oxygen-LP gas flame**
- **Oxyhydrogen gas**

5. A term referring to the **exhaust gases**.

See

- **Exhaust emissions.**
- **end gas**
- **Exhaust gas recirculation**
- **Exhaust gas analyzer**
- **Exhaust gas purification system**
- **Exhaust gas**
- **Raw exhaust gas**
- **Spent gas**

6. A non-solid, non-liquid combustible energy source that includes natural gas, coke-oven gas, blast-furnace gas, and refinery gas.
7. Fuel gas, such as natural gas, undiluted liquefied petroleum gases (vapor phase only), liquefied petroleum gas-air mixtures, or mixtures of these gases.
8. To apply the throttle.

See

- **Depress the gas pedal**
- **Ease up on the gas pedal**
- **Pumping the gas pedal**

See

- **Associated-Dissolved Natural Gas**
- **Biomass Gas**
- **Delivered Gas**
- **Dry Natural Gas**
- **exhaust Gases**
- **Flash Gas**
- **Greenhouse Gases**
- **Hot Gas**
- **Landfill Gas**
- **Liquefied Natural Gas**
- **Liquefied Petroleum Gas**
- **Liquefied Refinery Gases**
- **Low BTU Gas**
- **Manufactured Gas**
- **Native Gas**
- **Natural Gas**
- **Nonassociated Natural Gas**
- **Noncondensable Gas**
- **Nonhydrocarbon Gases**
- **Non-Methane Organic Gases**
- **Processed Gas**
- **Radiatively Active Gases**
- **Refinery Gas**
- **Reformate Gas**
- **Residual Exhaust Gases**
- **Residue Gas**
- **Salable Natural Gas**
- **Sour Gas**
- **Still Gas**
- **Sweet Gas**

- [Synthetic Natural Gas](#)
- [Unprocessed Gas](#)
- [Vent Gases](#)
- [Wet Natural Gas](#)

Gas Act

See

- [Natural Gas Act](#)

Gasahol

See

- [Gasohol](#)

Gas-Air Mixture

See

- [Lp Gas-Air Mixture](#)

Gas analyzer

See

- [Exhaust gas analyzer](#)

Gas-arc

See

- [Inert gas-arc welding](#)

Gas-arc welding

See

- [Inert gas-arc welding](#)

Gas Association

See

- [Canadian Gas Association](#)

Gas Baffle

See

- **Load-Bearing Flue Gas Baffle**
- **Non-Load-Bearing Flue Gas Baffle**

Gas burner

Competition vehicle with engine set up to operate on standard pump gasoline instead of an **alcohol**, nitro, etc., mixture. Also called **gasser**.

Gas-burner System

See

- **Atmospheric Gas-burner System**

Gas Bypass

See

- **Hot Gas Bypass**

Gas cap



Gas cap

A vented covering on the top of the tube leading to the fuel tank. Also called **fuel cap**.

Gas chamber

A pressure chamber of a single-tube shock absorber

Gas charged shock absorbers

A damper that uses pressurized gas, such as nitrogen, to help prevent changes in damping as the damper heats up.

Gas Check Valve

See

- [Exhaust Gas Check Valve](#)

Gas cleanup

Removal of a contaminant from gaseous feed streams by a mechanical or chemical process.

Gas damper

A gas shock absorber

Gas Defrost

See

- [Hot Gas Defrost](#)

Gas discharge headlight

A motor vehicle [headlight](#) with a gas discharge lamp

Gas discharge lamp

A discharge lamp in which light is generated by gas discharge

Gas discharge light

A discharge light in which light is generated by gas discharge

Gas-driven generator

A generator which turned by a gas engine.

Gaseous

Referring to gas vapor

Gaseous discharge lamp

A gas discharge lamp

Gaseous discharge headlight

A [Gas discharge light](#)

Gases

See

- [CFC gases](#)
- [exhaust gases](#)
- [Greenhouse gases](#)
- [Residual exhaust gases](#)

Gases in Bulk

These are carried in pressurized tankers only, and are not otherwise containerized. Examples: Aerosol propellant, butane, CO₂, LPG, nitrogen, and propane.

Gases in Bulk cargo

These are carried in pressurized tankers only, and are not otherwise containerized. Examples: Aerosol propellant, butane, CO₂, LPG, nitrogen, and propane.

Gas fade

Brake fade caused by hot gases and dust particles that reduce friction between the brake linings and drum or rotor under hard, prolonged braking

Gas filter

A device for screening the **gasoline** to remove the impurities.

See

- **fuel filter.**

Gas flame

See

- **Oxygen-LP gas flame**

Gas flow

The flow of the air/fuel mixture or the exhaust gases in an engine

Gas Forced-air

See

- **Heat Pipe Gas Forced-air**

Gas forced-air heat pipe

High efficiency gas furnace that uses vertical liquid filled pipes. The pipes are heated by a burner at their base, and the liquid boils and vaporizes within the pipe. The furnace blower circulates air over the pipes for heating.

Gas Furnace

See

- **High Efficiency Gas Furnace**

Gas gage

See

- **Gas gauge.**

Gas gauge

An instrument, usually located on the **dashboard** or center console, which indicates the amount of fuel in the **fuel tank**. Most gauges have a **Needle** which fluctuates between **E** (empty) and **F** (full). Others show a digital readout of how many gallons or litres left in the tank. Also called **fuel gauge**.

Gas guzzler

A vehicle which uses a lot of gasoline per distance traveled.

Gas Hydrates

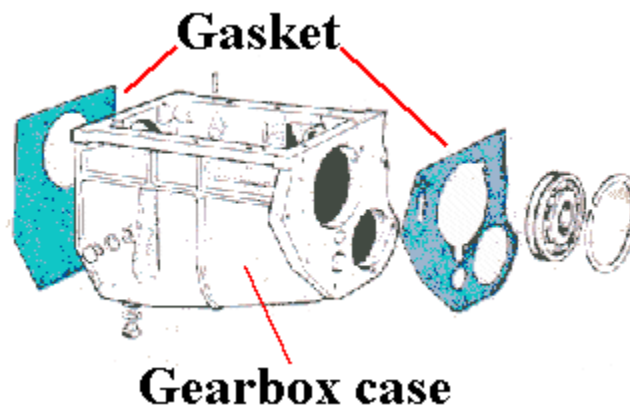
See

- **Natural Gas Hydrates**

Gasification

A method for converting coal, petroleum, biomass, wastes, or other carbon-containing materials into a gas that can be burned to generate power or processed into chemicals and fuels.

Gasket



Gasket

A material made of **asbestos**, cardboard, cork, paper, rubber, treated fiber, or soft metal like aluminum or copper placed between two metal parts to insure proper sealing.

See

- **Base gasket**
- **Blown head gasket**
- **Foam Gasket**
- **Head gasket**
- **Hollow-tube Gasket**
- **Liquid gasket**
- **Magnetic Gasket**

- **Oil pan gasket**
- **Reservoir Diaphragm Gasket**
- **Rocker cover gasket**
- **Shim-type Head Gaskets**
- **Valve cover gasket**

Gasket, foam

Joint sealing material made of rubber or plastic foam strips.

Gasket kit

A collection of gaskets required to overhaul an engine or part of an engine.

See

- **Bottom end gasket kit**
- **Carburetor kit**
- **Top end gasket kit**

Gasket punch

A tool used to cut out holes in a sheet of gasket material to shape a gasket to size.

Gasket scraper



Gasket scraper

A scraper with a sharp chisel edge for removing old gasket material from a surface before installing a new gasket.

Gas Liquids

See

- **Natural Gas Liquids**

Gas metal-arc welding

Welding using a continuously fed consumable electrode and a shielding gas. Also called *sigma welding*.

Gas, noncondensable

Gas which will not form into a liquid under the operating pressure-temperature conditions.

Gasohol

A blend of **gasoline** and ethanol **alcohol** or methanol that usually is 90 to 94.3% **gasoline** and 5.7 to 10% ethanol. This term was used in the late 1970s and early 1980s but has been largely replaced by terms such as E10, Super Unleaded Plus Ethanol or Unleaded Plus Ethanol. Ethanol is the **alcohol** found in intoxicating beverages. It may attack rubber and plastic parts of **fuel systems** not designed to handle alcohol-blended fuels, but it is not poisonous to human beings like wood alcohol or **methanol**.

Gas oil

European and Asian designation for No. 2 heating oil and No. 2 diesel fuel.

See

- **Automotive Gas Oil**
- **Light Gas Oils**

Gasoil

Designation for No.2 heating oils and diesel fuels. A clean distillate fuel oil.

Gasoline

A **Hydrocarbon** fuel used in an **internal combustion engine**. Gasoline is refined from crude oil which is made up of fossilized plant and animal remains. In Britain it is called **petrol**.

See

- **Aviation Gasoline**
- **Casing Head Gasoline**
- **Ethyl gasoline**
- **Lead-free gasoline**
- **Leaded gasoline**
- **Leaded Premium Gasoline**
- **Midgrade Gasoline**
- **Motor Gasoline**
- **Natural Gasoline**
- **Oxygenated gasoline**
- **Premium gasoline**
- **Pump gasoline**
- **Purple Gasoline**
- **Reformulated gasoline**
- **Regular gasoline**
- **Regular Grade Gasoline**
- **Unleaded gasoline**
- **Unleaded Midgrade Gasoline**

- **Unleaded Premium Gasoline**
- **Unleaded Regular Gasoline**

Gasoline And Isopentane

See

- **Natural Gasoline And Isopentane**

Gasoline Blending

See

- **Motor Gasoline Blending**

Gasoline blending components

Naphthas which will be used for blending or compounding into finished aviation or motor gasoline (e.g., straight-run gasoline, **Alkylate**, **Reformate**, **Benzene**, **Toluene**, and **Xylene**). Excludes oxygenates (alcohols, ethers), **Butane**, and **Pentanes plus**

See

- **Motor Gasoline Blending Components**

Gasoline grades

The classification of gasoline by octane ratings. Each type of gasoline (conventional, oxygenated, and reformulated) is classified by three grades - Regular, Midgrade, and Premium. Note: Gasoline sales are reported by grade in accordance with their classification at the time of sale. In general, automotive octane requirements are lower at high altitudes. Therefore, in some areas of the United States, such as the Rocky Mountain States, the octane ratings for the gasoline grades may be 2 or more octane points lower.

1. Regular gasoline: Gasoline having an antiknock index, i.e., octane rating, greater than or equal to 85 and less than 88. Note: Octane requirements may vary by altitude.
2. Midgrade gasoline: Gasoline having an antiknock index, i.e., octane rating, greater than or equal to 88 and less than or equal to 90. Note: Octane requirements may vary by altitude.
3. Premium gasoline: Gasoline having an antiknock index, i.e., octane rating, greater than 90. Note: Octane requirements may vary by altitude.

Gasoline Injection

See

- [Electronic Gasoline Injection](#)

Gasoline Prices

See

- [Retail Motor Gasoline Prices](#)

Gasoline pump

A device which pulls fuel from an underground storage tank into a vehicle's [gas tank](#).

Gas Oxygen Sensor

See

- [Exhaust Gas Oxygen Sensor](#)
- [Heated Exhaust Gas Oxygen Sensor](#)

Gas pedal

The device actuated by the operator's foot for increasing or decreasing the amount of fuel entering the [combustion chamber](#). Also called *throttle pedal* or *accelerator*.

See

- [accelerator](#)
- [Depress the gas pedal](#)
- [Ease up on the gas pedal](#)
- [Pumping the gas pedal](#)
- [Step on the gas pedal](#)
- [Take foot off the gas pedal](#)

Gas pockets

Cavities in weld metal caused by trapped gas.

Gas Policy Act Of 1978

See

- [Natural Gas Policy Act Of 1978](#)

Gas pressure regulator

A device for controlling a selected outlet gas pressure.

Gas prop

A gas-assisted strut like a hatch strut, hood strut, or tailgate strut

Gas pump



Gas pump

A device at a **service station** which pulls gasoline from a storage tank (usually located underground) into the vehicle's **gas tank**. Commercial units also record the amount of fuel dispensed as well as the cost. The British term is **petrol pump**.

Gas purification

See

- [Exhaust gas purification system](#)

Gas Purification System

See

- [Exhaust Gas Purification System](#)

Gas recirculation

See

- [Exhaust gas recirculation](#)

Gas Recirculation System

See

- [Exhaust Gas Recirculation System](#)

Gas Recirculation Valve

See

- [Exhaust Gas Recirculation Valve](#)

Gasser

A vehicle which burns normal [gasoline](#) instead of racing fuel.

See

- [Gas burner.](#)

Gas shock

A gas-assisted shock absorber

Gas shock absorber

A gas-assisted shock absorber

Gassing

The small hydrogen bubbles rising to the top of the [battery electrolyte](#) during [Battery charging](#).

Gas spring

A pressurized, nitrogen-filled sphere, used in Hydragas and hydropneumatic suspension systems

Gas station

A place where gasoline is dispensed. British term is [Petrol station](#).

Gas system

See

- [Inert gas system](#)

Gas tank



Gas tank

The container for holding or storing fuel. Also called [fuel tank](#). Also see [Liquid Gas Tank](#).

Gas-tight

Sealed to prevent the passage of gas

Gas to liquid

(GTL) A process that combines the carbon and hydrogen elements in natural gas molecules to make synthetic liquid petroleum products, such as diesel fuel.

Gas Tube System

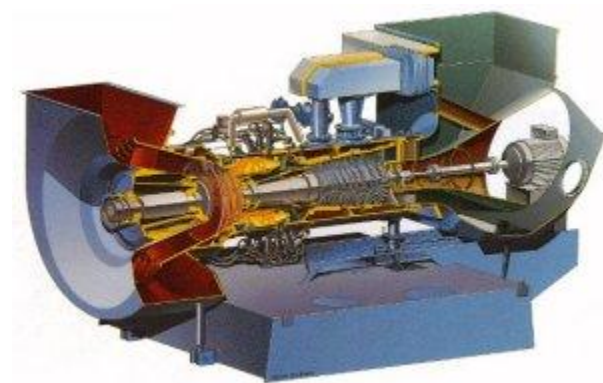
See

- [Perimeter Hot Gas Tube System](#)

Gas tungsten-arc welding

Welding using a tungsten electrode and a shielding gas.

Gas turbine



Gas Turbine

An internal-combustion rotating engine with one main moving part the **rotor** with pinwheel-like blades attached. Air is compressed by the first rows of blades and delivered to the combustion chambers, from which the exhaust is directed to pass the remaining blades and to generate the power. Power is extremely smooth due to the absence of explosions and **Reciprocating** parts.

Gas turbine Engine

See

- [Gas turbine](#)

Gas valve

Device in a pipeline for starting, stopping, or regulating flow of gas.

Gas Vehicle

See

- [Natural Gas Vehicle](#)

Gas vent

A passageway, composed of listed factory-built components assembled in accordance with the terms of listing, for conveying flue gases from gas utilization equipment or their vent connectors to the outside atmosphere.

Gas welding

A welding process widely used in body repair shops (now being gradually replaced by MIG welding). Also called oxyacetylene welding.

See

- [Hot gas welding](#)
- [Metal Inert Gas Welding](#)

Gate

1. The slotted guide for the [Gearshift](#) of an [internal combustion engine](#).
2. The slotted guides in a shift drum.
3. A [tailgate](#).
4. A circuit in which one signal, generally a square-wave, serves to switch another signal on and off.

See

- [Anchor Gate](#)
- [Balance Gate](#)
- [Garden Gate](#)
- [J gate transmission shifter](#)
- [Shift gate](#)
- [Texas gate](#)
- [Waste gate](#)

Gate transmission

See

- [J gate transmission shifter](#)

Gate transmission shifter

See

- [J gate transmission shifter](#)

Gateway

The point at which freight is interchanged/interlined between carriers or at which a carrier joins two operating authorities provision of through service.

Gating

A device that permits a wave to pass another wave in a circuit in specific intervals

GATT

Abbreviation for **General Agreement on Tariffs and Trade**.

Gauge

This is the British and Canadian spelling while in the United States it is sometimes spelled without the *u* (gage). It is becoming standard to use **gage** for wire size and **gauge** for an instrument.

1. An instrument or meter that registers the quantity of a substance

See

- **Ammeter**
- **Auxiliary Gauge**
- **Boost gauge**
- **Bowden Gauge**
- **Fuel gauge**
- **Gas gauge**
- **Hydrostatic Gauge**
- **In-dash gauge**
- **Low-pressure Gauge**
- **Low Side Gauge**
- **Oil gauge**
- **Oil level gauge**
- **Oil pressure gauge**
- **Oil temperature gauge**
- **Outdoor Temperature Gauge**
- **Outside temperature gauge**
- **Pounds Per Square Inch Gauge**
- **Temperature gauge**
- **Turbo gauge**
- **Vacuum gauge**
- **Voltmeter**
- **Water temperature gauge**

2. A tool for measuring **Clearances**, pressures, sizes, etc.

See

- **Adjusting gauge**
- **B & S gauge**
- **Beta Thickness Gauge**
- **Birmingham Gauge**
- **Birmingham Wire Gauge**
- **Bridge Gauge**
- **Standard Wire Gauge**
- **Broad Gauge**
- **Brown and Sharpe Wire Gauge**
- **Buckley Gauge**
- **Caliper gauge**
- **Compression gauge**
- **Compression tester**
- **Depth gauge**
- **Dial gauge**
- **Disc brake gauge**
- **Draft Gauge**
- **Feeler gauge**
- **Frame gauge**
- **High-pressure Gauge**
- **Ignition gauge**
- **Micron Gauge**
- **Pressure Gauge**
- **Screw pitch gauge**
- **Sighting point gauge**
- **Spark plug gauge**
- **Step Feeler Gauge**
- **Throttle gauge**
- **Tire gauge**
- **Tire pressure gauge**
- **Tram gauge**
- **Tread depth gauge**
- **Vernier gauge**
- **Wheel alignment gauge**

3. A measurement of tubing.

See

- **Plain gauge tubing**

Gauge box

A container which measures a known quantity of material such as cement, sand, or rocks for testing or making mixtures

Gauge, compound

Instrument for measuring pressures both above and below atmospheric pressure.

Gauge, high-pressure

Instrument for measuring pressures in range of 0 psia to 500 psia (101.3 kPa to 3600 kPa).

Gauge, low-pressure

Instrument for measuring pressures in range of 0 psia to 50 psia 10 kPa to 350 kPa.

Gauge, manifold

1. Chamber device constructed to hold both compound and high-pressure gauges. Valves control flow of fluids through it.
2. The one essential diagnostic tool required for every air conditioner service procedure. A typical gauge set includes high and low side gauges and valves for checking, measuring and controlling pressure and vacuum, and a third valve for controlling discharging, evacuation and charging procedures. Also called ***gauge set***

Gauge port

Opening or connection provided for a service technician to install a gauge.

Gauge, pressure

Reading in pounds per square inch (psi) above atmospheric pressure.

Gauge set

See

- [Gauge, manifold](#)

Gauge tubing

See

- [Plain gauge tubing](#)

Gauge, vacuum

Instrument used to measure pressures below atmospheric pressure.

Gauntlet

A long-sleeved leather glove used by motorcyclists to prevent wasps from flying up the sleeve, as one did to me.

Gauss

A measure of magnetic flux density. In the centimetre-gram-second electromagnetic system it is one maxwell per square centimetre, where a maxwell (line) is a unit of magnetic flux. The magnetic flux density at the surface of the earth is about one-half gauss. At a magnetic pole of an electric motor the magnetic flux density is about 8000 gauss.

GAWR

Abbreviation for **Gross Axle Weight Rating**-- Maximum weight an axle is rated to carry by the manufacturer. Includes both the weight of the axle and the portion of a vehicle's weight carried by the axle.

Gaylord

1. A vehicle brand of which the 1955-57 models are **milestone cars**.
2. Large corrugated carton that has the same length and width as a pallet. Gaylords are usually used to protect loose parts in bulk and are frequently used in manufacturing.

G-clamp



G-clamp

A screw-activated clamping device in the shape of the letter **G**

GCM

Abbreviation for **Governor Control Module**

GCW

Abbreviation for **Gross combination weight**. Total weight of a loaded combination vehicle, such as a tractor-semitrailer or truck and full trailer(s).

GCWR

Abbreviation for **Gross Combined Weight Rating**

GDC

Abbreviation for **Fuel Data Center**

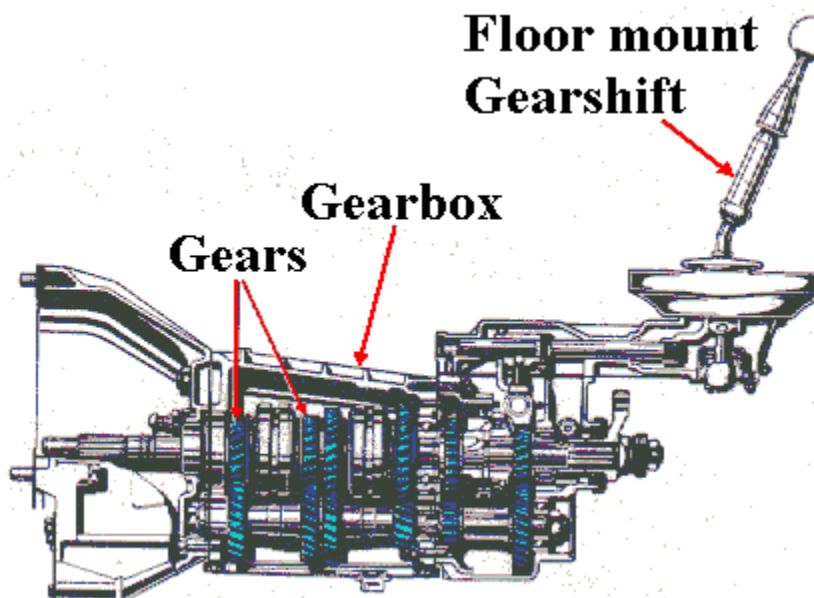
GDI

Abbreviation for **Gasoline Direct Injection**

GDP

Abbreviation for **Gross domestic product**

Gear



Gear

Wheel-like part with teeth cut into the rim. When one gear meshes with another gear, it causes the second gear to drive the other and in this way transmits power. When the gears are different sizes (different number of teeth on each gear) the mechanical advantage is changed.

See

- **Annular Gear**
- **Axle end gears**
- **Back Gear**
- **Barring Gear**

- **Beaching Gear**
- **Bevel gear**
- **Bottom gear**
- **Brush Gear**
- **Camshaft gear**
- **Center gear**
- **Change gear**
- **Cluster gear**
- **Constant mesh gears**
- **Crankshaft gear**
- **Crawler gear**
- **Differential gears**
- **Differential side gear**
- **Distributor Drive Gear**
- **Double helical gear**
- **Drive gear**
- **Driven gear**
- **Driving gear**
- **Economy gear**
- **EP gear oil**
- **Epicyclic Gear**
- **Fifth gear**
- **Final drive gear**
- **First gear**
- **Fixed gear**
- **Flywheel ring gear**
- **Fourth gear**
- **Granny gear**
- **Helical gear**
- **Herringbone gears**
- **High gear**
- **Hypoid gear**
- **Hypoid gear oil**
- **Idler gear**
- **Intermediate gear**
- **Internal gear**
- **Internal gear pump**
- **Landing Gear**
- **Left hand gear lever**
- **Low gear**
- **Mating gears**
- **Member of the gear train**
- **Overall gear ratio**
- **Passing gear**
- **Pinion gear**
- **Planetary gear**

- **Planetary gear differential**
- **Planetary gear set**
- **Planet gears**
- **Reverse gear**
- **Reverse idler gear**
- **Reversible gear puller**
- **Ring gear**
- **Running gear**
- **Second gear**
- **Shift gear**
- **Sliding gear**
- **Spider gear**
- **Spiral bevel gear**
- **Spur gear**
- **Starter ring gear**
- **Steering gear**
- **Stepped planet gear**
- **straight-cut gear**
- **Sun gear**
- **Third gear**
- **Timing gear**
- **Top gear**
- **Valve gear**
- **Wide-step gearing**
- **Worm gear**

Gear arm

See

- **pitman arm**

Gearbox

The device in the **Drivetrain** consisting of an **Input shaft**, a system of gears, and an **Output shaft** that multiplies engine **torque**. A **manual transmission** consists of a **clutch** assembly plus a gearbox; and **automatic transmission** generally consists of a **Torque converter** plus gearbox.

See

- **Accessory Gearbox**
- **automatic gearbox**
- **Auxiliary gearbox**
- **Change-speed gearbox**
- **Close-ratio gearbox**
- **Constant mesh gearbox**

- **Cotal gearbox**
- **Crash gearbox**
- **Dual-range gearbox**
- **Epicyclic gearbox**
- **Four-speed gearbox**
- **manual gearbox**
- **Planetary gearset**
- **Pre-selector gearbox**
- **Rack and pinion gearbox**
- **Reduction gearbox**
- **Sliding-mesh gearbox**
- **Steering gearbox**
- **Wilson gearbox**

Gearbox input shaft

A shaft which transmits power from the clutch to the gearbox

Gearbox output shaft

A shaft which transmits the drive out of the gearbox

Gearchange

A British term for the process of changing gears or shifting gears.

See

- **Central gearchange**
- **Column gearchange**
- **Dashboard gearchange**
- **Floor gearchange**
- **Steering column gearchange**

Gearchange cables

British term for **Shift cables** used to operate gears in some transmissions. In most vehicles rods and joints are used because cables tend to stretch.

Gearchange linkage

A system of rods and joints used to operate the gearbox. British term for **Shifter linkage**

Gearchange mechanism

A system of rods and joints used to operate the gearbox. British term for **Shifter mechanism**

Gear changer

See

- **Column gear changer**

Gear differential

See

- [Planetary gear differential](#)

Gear down

To shift into a lower gear

Gear drive

See

- [Bevel gear drive](#)

Geared

See

- [High-gear](#)
- [Low geared](#)

Geared Speed

The calculated vehicle speed at the engine's governed rpm in each transmission gear, or (commonly) in top gear.

Gear grease

A heavy liquid [Grease](#) that fills the [differential](#) and [manual transmission](#) to lubricate the gears. Also called *differential grease*.

Gearhead

1. A person with a strong interest in all things mechanical
2. The portion of a gearmotor which contains the actual gearing that converts the basic motor speed to the rated output speed

Gear indicator

A display which shows the particular [transmission](#) gear that has been selected.

Gearing

1. The combination or system of gears or sprockets designed to transmit power.
2. The ratio between the drive gear and the driven gear.

See

- **Alpine gearing**
- **Crossover gearing**
- **Double reduction gearing**
- **Half-step gearing**
- **Wide-range Gearing**
- **Wide-step gearing**

Gearjammer

Trucker slang for a speeding trucker as in 'We got us a real gearjammer in that eastbound lane.'

Gear knob

British term for the knob at the end of a lever, i.e., **Shifter knob**

Gear lever

A device which is attached to the side of a steering column or to the center console which will allow the operator to change the gears of the transmission. Also called **shift lever**.

See

- **Left hand gear lever**
- **Transfer Gear Lever**

Gear oil

A heavy oil which is rated at 80 to 100 weight **Viscosity** used in enclosed units containing gears. This oil infrequently or rarely needs changing.

See

- **EP gear oil**

Gear oil pump

An oil pump with gear teeth to move the oil.

Gear puller



Gear puller

A tool with two or more jaws and pressure screw for pulling off gears, bearings, pulleys, etc.

See

- [Reversible gear puller](#)

Gear pulser

A term used by some manufacturers, including Subaru, for the [Tone rings](#)

Gear pump

The simplest oil pump with two gear wheels.

See

- [Internal gear pump](#)
- [Gear-type oil pump](#)

Gear range

Choice of gears in an automatic transmission. The typical gear ranges are P - Park, R - Reverse, N - Neutral, D - Drive, L - Low

Gear ratio

1. The relationship between the number of turns made by a driving gear to complete one full turn of the driven gear. If the driving gear turns four times to turn the driven gear once, the gear ratio would be 4 to 1. In most instances, the gear ratio is not even like 4:1 because the same teeth would be meshing with each other frequently. Thus a ratio of 4.11:1, for instance, means that a particular tooth on one gear would take a much longer time (i.e., more revolutions) to mate with the same tooth on the other gear. Changing the tire size will change the effective gear ratio.
2. A number, usually expressed as a decimal fraction, representing how many turns of the input shaft cause exactly one revolution of the output shaft. Applies to transmissions, power takeoffs, power dividers and rear axles. Example If 2.5 revolutions of an input shaft cause one revolution of the output shaft, the gear ratio is 2.5:1.

See

- [Overall gear ratio](#)

Gear reduction

Setup in which a small gear is used to drive a larger gear. Produces an increase in torque.

Gear selector

The device (e.g., lever or rod or pushbutton) for choosing the desired automatic **transmission** gear. Located on the side of the steering column, in a console, or on the floor between the front seats.

See

- **Gearshift**

Gear selector indicator

An indicator positioned in the instrument cluster or on the center console shift gate indicating which gear has been selected in an automatic transmission

Gearset

A group of two or more gears within a transmission used to transmit power.

See

- **Planetary gearset**
- **Ravigneaux planetary gear set**
- **Simpson gear set**
- **Simpson planetary gear set**

Gear shaft

See

- **Steering gear shaft**

Gearshift



Gearshift

A device which allows the operator to move the **transmission** gears into various configurations. Most often the gearshift is located on a lever on the **Steering column** or on a lever on the floor between the driver and front passenger. Some older Chryslers had **Pushbutton** controls on the **Dash**. On motorcycles, the shift lever is located on the left or right side and operated by the foot.

Gearshifter



Gearshifter

A device which allows the operator to move the **transmission** gears into various configurations. Most often the gearshift is located on a lever on the **Steering column** or on a lever on the floor between the driver and front passenger. Some older Chryslers had **Pushbutton** controls on the **Dash**. On motorcycles, the shift lever is located on the left or right side and operated by the foot.

Gearslammer

Trucker slang for a trucker who's known to **accelerate** and decelerate a lot as in 'Better watch out there's a real gearslammer in the granny lane.'

Gearstick

A British term for the stick used by the driver to change gears. Also called a **shifter** or **shift lever**.

Gear tooth

The indentation on the edge of a gearwheel

Gear train

A system of gears that transmits drive from one shaft to another.

See

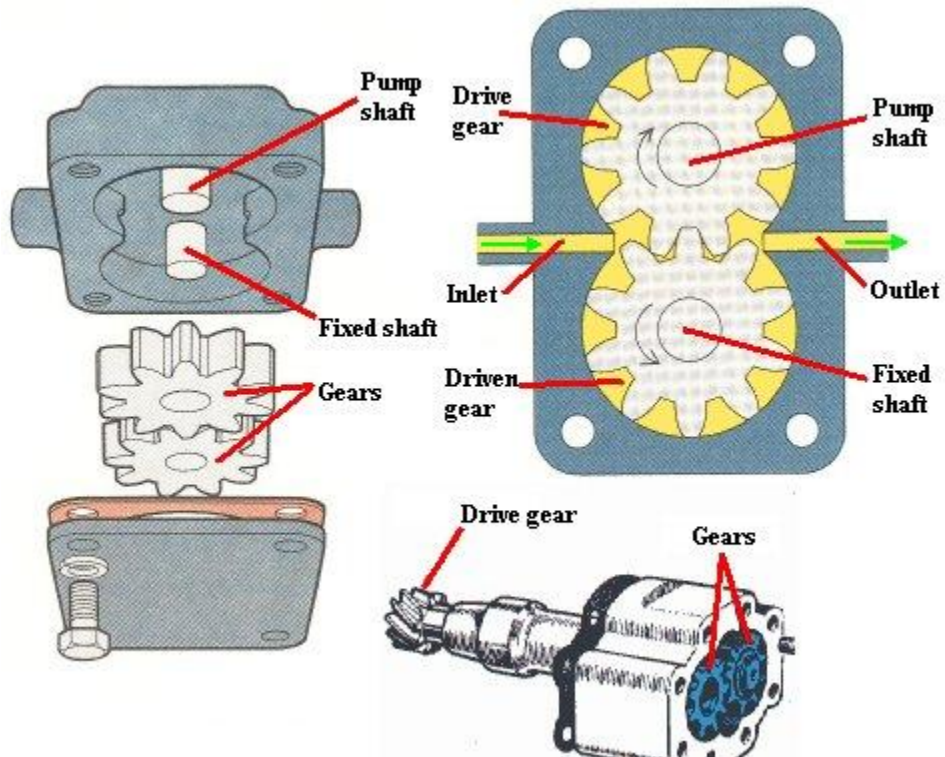
- [Member of the gear train](#)

Gear transmission

See

- [Bevel gear transmission](#)

Gear-type oil pump



Gear-type oil pump

The simplest oil pump with two gear wheels. Compare [Rotor-type oil pump](#).

Gear up

To shift to a higher gear

Gearwheel

A gear

Gel

1. A substance like jelly.

2. To become like jelly

See

- [Saddle Gel](#)
- [Silica gel](#)

Gel cell battery

A battery where the acid is in the form of a gel so that in the event of a spill, acid does not leak out -- especially recommended for electric [mobility scooters](#) and [power wheelchairs](#)

Gel coat

1. A thin layer of plastic [resin](#) covering [fiberglass](#) panels.
2. An outer layer of GRP (glass reinforced plastic) moldings which gives a smooth surface that may be colored

Gel-coat resin

A resin similar to general lay-up resin but with an additive to make it thixotropic, i.e., it does not run down vertical surfaces; used to make the gel coat in moldings

Gelling drier

A drier for PVC sealants

Gel saddle

A bicycle or motorcycle seat that has gel placed in certain areas to increase comfort.

GEM

Abbreviation for ***Generic Electronic Module***

Gemmer steering

A cam-and-roller steering

GEN

Abbreviation for ***Generator (Alternator)***

General Agreement on Tariffs and Trade

(GATT) Signed in 1947, the GATT was a formal multilateral agreement aimed at expanding and liberalizing world trade. The World Trade Organization which is the successor to the GATT came into existence on January 1, 1995.

General cargo

Non-bulk cargo. The cargo may be of various kinds

General corrosion

In contrast to pitting, a type of corrosion which affects the entire surface of a metal

General Freight

processed items, packaged or in some way containerized, and fairly closely packed.

General Freight cargo

Processed items, packaged or in some way containerized, and fairly closely packed.

Generalized Preferential Tariff

(GPT) system of non-reciprocal tariff preferences for the benefit of developing countries. It grants duty-free or preferential entry to imports for eligible developing countries up to a certain dollar value or import percentage limit.

General mess of crap

Trucker slang for GMC trucks by Volvo/White as in 'I used to drive a general mess of crap.'

General Motors



Click image for books on General Motors

(GM) or (GMC) The largest American vehicle manufacturer including:

- **Chevrolet**
- **Buick**
- **Pontiac**
- **Oldsmobile**
- **Saturn**
- **Cadillac**
- GMC trucks
- **HUMMER**

It has subsidiaries and associates in Britain (**Vauxhall**), European continent (**Opel**, **Fiat**, and **Saab**), Australia (Holden), Asia (**Subaru**, Fuji, **Suzuki**)

General purpose lacquer thinner

A type of thinner that may be used for both lacquers and synthetic enamels without causing lifting or other paint faults

General purpose pliers

Any kind of typical multi-purpose pliers.

General repair manual

Service manual that covers many models. Often not published by the specific model manufacturer.

Generate

To produce.

Generating Plant

See

- **Automatic Generating Plant**

Generator

1. A mechanism which generates or produces some substance, i.e., electric generator, acetylene generator.
2. A device which converts mechanical energy into electrical energy, producing direct current (dc).
3. An **Electromagnetic** device for producing **Direct current** electricity. It was replaced by an **Alternator** in the early '60s. Its problem was that a generator **Recharged** the **battery** only at high **speeds**. The British call it a **dynamo**.

See

- **AC generator**
- **Alternator**
- **Bar Generator**
- **Cascade Generator**
- **Flywheel generator**
- **Gas-driven generator**
- **Hall generator**
- **Pulse generator**
- **Solar generator**
- **Third brush**
- **Transistorized Ignition With Hall Generator**

- [Turbo Generator](#)

Generator capacity

The maximum output, commonly expressed in megawatts (MW), that generating equipment can supply to system load, adjusted for ambient conditions.

Generator nameplate capacity

The maximum rated output of a generator under specific conditions designated by the manufacturer. Generator nameplate capacity is usually indicated in units of kilovolt-amperes (kVA) and in kilowatts (kW) on a nameplate physically attached to the generator.

Genset

Abbreviation for **Generator set**, a generating system comprising a combustion engine driving an electrical generator.

Geo



[Click image for books on Geo](#)

A model of automobile manufactured by Suzuki for GM including the following models Metro (1989-97), Prizm (1989-97), Spectrum (1988-89), Storm (1990-93), Tracker (1989-97)

Geographic Information System

(GIS) A system of information, organized in layers that can be applied to a specific geographic location to such things as population density, traffic volume, business development, etc.

Geometry

The design, layout, or arrangement of parts.

See

- [Steering geometry](#)

Georges Irat

A vehicle of which models built between 1925 and 1948 are **classic cars**

Georgia overdrive

Trucker slang for **neutral gear** as in 'You put her in Georgia overdrive on the downstroke.'

Geotextile

Generic term for material used in several different roadway applications.

Gesture

A condition of a vehicle that has implied motion in its styling lines and shapes.

Getting out

Trucker slang for being heard on the CB as in 'Can anyone tell me if my CB is getting out?'

G-Force

Unit of measurement used to describe lateral acceleration generated while the vehicle is driven in a steady state turn on a skid pad circle. An average sedan generates 0.60 G of lateral acceleration. Measured in 'gravities,' one G equals the earth's gravity at sea level.

GHGs

Abbreviation for **Greenhouse Gases**.

Ghia

See

- **Dual Ghia**

Ghost car

A police vehicle which does not have any visible markings which identify it as a police vehicle. The flashing emergency lights are situated in the grill and/or front and back windows instead of being mounted on the roof.

Ghost island

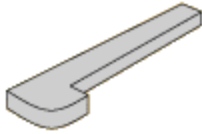
A marked area on the road that shows where a highway and an access road meet.

Gib head key

See

- **Gib-head key.**

Gib-head key



Gib-head key

A special bar of any length like a **Flat key** or **Square key**, but one end is specially shaped to prevent the key from going all the way through the hole or groove into which it is inserted.

Gilsonite®

Trademark name for **Uintaite** (or uintahite), a black, brilliantly lustrous natural variety of asphalt found in parts of Utah and western Colorado.

Gimlet point

A taper-threaded cone point (usually having a point angle of 45-50 degrees); applied to wood screws, Type A tapping screws, lag bolts, etc.

Gin

Cotton, cotton waste, or the engine that separates the cotton from the seed.

Girder

1. A continuous member usually running fore and aft under a deck for the purpose of supporting the deck beams and deck of a ship or bridge.
2. One of several beams made of steel or concrete that are mounted on top of the bridge's foundation and help support the road.

See

- **Center girder**
- **Side member**

Girder forks

Type of forks common on early motorcycles, comprising rigid beams attached to the steering head by parallel links that allowed movement

Girder spanner

A British term for an adjustable wrench with jaws at right angles to the handle.

Girl's bike

A **bicycle** where the horizontal top bar (of a *boy's bike*) is angled down from the steering tube down to the **bottom bracket** and is usually parallel with the **Down tube**.

See

- **Ladies' frame**
- **Mixte frame**

Girth

Any expanded length.

GIS

Abbreviation for **Geographic Information System**. A system of information, organized in layers that can be applied to a specific geographic location to such things as population density, traffic volume, business development, etc.

Giuletta

See

- **Alfa Romeo.**

Giulia



Click image for books on Giulia

GL

1. A term referring to gold line tires marketed in the late '60s and early '70s.
2. (short for) Grand Luxe, meaning more luxurious than a standard model, L (= Luxe); (compare CL)

Glad hands

A separable mechanical connector used to join air line hoses when combination vehicles are coupled together.

Gland

A seal that stops fluid under pressure from leaking past a rotating or reciprocating shaft or rod.

See

- **Carbon Gland**
- **Packed gland**

Glandless

Something without a seal

Glare

1. Strong, bright light (e.g., from oncoming traffic)
2. To shine too brightly; to dazzle

Glass

1. A transparent, hard, amorphous, brittle substance which is made by fusing together one or more of the oxides of silicon, boron, or phosphorus, with certain basic oxides (e.g., sodium, magnesium, calcium, potassium), and cooling the product rapidly to prevent crystallization or devitrification. The melting point varies between 800°C and 950°C but it is worked at higher temperatures. The tensile strength of glass resides almost entirely in the outer skin; if this is scratched or corroded, the glass is much more easily broken.
2. The transparent windows in a vehicle.

See

- **Antisolar Glass**
- **Body glass**
- **Door glass**
- **Electronic Sight Glass**
- **Laminated glass**
- **Laminated windshield glass**
- **Low E Glass**
- **Milled glass fiber**
- **Sight glass**

- **Tinted glass**

Glass area

The window surface area of a vehicle body; may also refer to the whole area of the body above the waistline. Also called the 'greenhouse'.

Glass channel

A U-shape metal guide which holds the bottom edge of a roll-up automobile window and fits inside the door. The British term is 'window channel'.

Glass fiber

A very thin glass thread, used loosely or in woven form as an acoustic, electrical, or thermal insulating material and as a reinforcing material in laminated plastics.

See

- **Milled glass fiber**

Glass fibre

A very thin glass thread, used loosely or in woven form as an acoustic, electrical, or thermal insulating material and as a reinforcing material in laminated plastics

Glass holder

A tool with suction cup(s) to hold and carry a sheet of glass

Glass pack muffler

A straight through (no **Baffles**) muffler using **fiberglass** packing around a perforated pipe to deaden **exhaust** sound.

Glasspaper

An **abrasive** paper coated with particles of glass, used for smoothing and polishing

Glass Rake

The angle or tilt of a windshield or **backlight** (i.e., rear window). The 'faster' the glass, the more nearly horizontal it is. Its 'fastness' is measured between zero degrees (horizontal) and 90° (vertical); e.g., a 57° windshield is faster than one standing more upright at 80°. See **Fast**.

Glass reinforced filler paste

A polyester filler that has strands of fiberglass added into the filler paste to increase the rigidity of the repair

Glass reinforced plastic

(GRP) The basic material for the manufacture of fiberglass body shells and panels; it is made up of several layers of fiberglass mat or cloth and various types of resins

Glass seal

A conducting seal in the middle of some spark plug insulators connecting the top and bottom parts of the central electrode

Glass's Motoring Guide

A monthly publication of second-hand car prices in England.
<http://www.glass.co.uk/index.php>

Glass sphere

Reinforcing filler in the form of particles as opposed to fibers

Glass tampering detector

A part of a vehicle alarm system that detects glass being struck or broken

Glaze

A highly smooth, **GlossyFinish** on the **cylinder walls**. As the **piston rings** rub up and down the **cylinder**, the rings polish the cylinder wall. Cylinder wall **Glazing** reduces sealing **efficiency**. The only cure is to have the cylinder **Deglazed**.

Glaze breaker

An **abrasive** tool used to remove the glaze from **cylinder walls** prior to the installation of new **piston rings**. Also called **Deglazer**.

Glazed

1. Something that is fitted with glass.
2. Something with a smooth, polished surface

Glaze lining

A brake lining that has been overheated and become smooth and glossy. A glazed lining has reduced stopping power and causes noise.

Glazing

1. The use of special **Putty** to fill minor imperfections when doing body repair
2. Glass fitted or about to be fitted in a window.

See

- **Lead glazing**
- **Spot glazing**

Glazing strip

Molded rubber strip for mounting windshields and other fixed glass

Glider Kit

A cab and chassis without an engine or rear axles. Used to rebuild a wrecked tractor or to custom build to buyer specification.

G-loads

Gravitational loads, expressed in multiples of the force of gravity acting on an object. In a car, these can be felt in **acceleration**, braking or cornering. In most passenger cars, these loads seldom exceed 0.3 or 0.4 Gs in any direction, unless in an urgent situation. Race cars can achieve several Gs, due to excellent tires and prepared racing surfaces.

Global climate change

See

- **Climate change.**

Global Positioning Satellite

(GPS) The technology which allows a vehicle to be tracked anywhere in the world with near-perfect accuracy. The Global Positioning Satellite system was first used by the military, but has been adopted by companies such as General Motors for use with their OnStar® communication system. Several after-market communication systems using GPS are also available

Global Positioning System

(GPS) A satellite-based radio navigation system that identifies specific locations on earth relative to longitude and latitude.

Global warming

An increase in the near surface temperature of the Earth. Global warming has occurred in the distant past as the result of natural influences, but the term is today most often used to refer to the warming some scientists predict will occur as a result of increased **Anthropogenic** emissions of **Greenhouse gases**

Global warming potential

(GWP) An index used to compare the relative radiative forcing of different gases without directly calculating the changes in atmospheric concentrations. GWPs are calculated as the ratio of the radiative forcing that would result from the emission of one kilogram of a greenhouse gas to that from the emission of one kilogram of carbon dioxide over a fixed period of time, such as 100 years.

Gloss

The ability of a paint to reflect images when **polished**.

See

- **High gloss**
- **Specular gloss**

Glove

See

- **Barrier cream**

Glovebox

A small compartment (often with a lock) located in the **instrument panel** in front of the passenger (not the driver) into which small items (owner's manual, maps, first aid kit, etc.) are placed.

Glove compartment

British term for **Glovebox**

Glow

To burn without a flame.

See

- **Cathode Glow**

Glow coil

Filament in a **Glow plug**

Glow pencil

A pencil-like heating element of a sheathed-type glow plug

Glow plug

An electrical element located in the **combustion chamber** of a **diesel engine** which helps to heat up the air in the chamber so that the diesel fuel will be ignited more quickly. Often they are connected in series so that when one becomes defective the others are inoperative. Also called a 'heater plug'.

See

- **Flame glow plug**
- **Self-regulating sheathed-type glow plug**
- **Sheathed-type glow plug**
- **Spiral-type glow plug**
- **Wire glow plug**

Glow plug indicator

A monitoring element in a preheater system, which changes the color of its filament in line with the plug and indicating readiness for starting

Glow plug starter switch

The key switch for turning on the preheating system of a diesel engine and starting the car.

Glow time

The preheating time of a diesel engine

Glow tube

See

- [Glow plug](#)

glue

Originally, a hard, sticky gelatin obtained from hides, tendons, cartilage, bones, and other connective tissues of animals. Also an adhesive prepared from these substances by application of water and heat. It is chemically known as [collagen](#).

Glycol

See

- [Ethylene glycol](#)
- [Antifreeze.](#)

Glycote

A polymer used to absorb liquid and found in some paint finish.

See

- [Polyglycote](#)

GM

Abbreviation for *General Motors Corp.*

GMC



Click image for books on GMC

Abbreviation for **General Motors Corporation** and the name of a division of vehicles including the following

- 1500 Pickup (19__-99)
- 2500 Pickup (19__-2000)
- 3500 Pickup (19__-2000)
- Acadia (2007)
- C and K Series pickups (1960-1999)
- Caballero (1978-1987)
- Canyon (2004-Current)
- Envoy (1998-2008)
- Envoy XL (2002-06)
- Envoy XUV (2004-05)
- Handi-Bus (1964-1970)
- Handi-Van (1964-1970)
- Jimmy (1969-2005)
- Rally Wagon (1970-96)
- S15 Jimmy (1983-2005)
- S15 Pickup (1983-90)
- Safari (1985-2005)
- Savana (1996-Current)
- Sierra (1999-Current)
- Sierra 1500 Pickup (1999-2008)
- Sierra 2500 Pickup (1999-2008)
- Sierra 3500 Pickup (2001-08)
- Sonoma (1982-2004)
- Sprint (1971-1977)
- Suburban (1937-1999)

- Syclone (1991)
- Terrain (2009)
- Typhoon (1992-1993)
- Vandura (1970-1996)
- Yukon (1992-2008)
- Yukon XL (2000-08)

GND

1. Abbreviation for **ground** or **negative**. Also abbreviated **GRD**
2. Abbreviation for **Electrical Ground Connection**

See

- **CSE GND**
- **PWR GND**

GNP

Abbreviation for **gross national product**

Go dull

A condition of paint that has lost its luster

Go flat

A condition of paint that has lost its luster.

Goggles

Protective spectacles against dust and glare.

See

- **Safety goggles**

Going horizontal

Trucker slang for going to sleep as in 'At darktime I'm goin' horizontal'.

Gold plating

The electrolytic deposition of gold

Gondola

A coal hopper bottom trailers or large produce bins that are transported on flatbeds.

Goodies

See

- **Bolt-on goodies**

Goods

See

- [Heavy goods vehicle](#)

Goods Inventory

See [Finished Goods Inventory](#).

Goods vehicle

See

- [Heavy goods vehicle](#)

Good will warranty

Normal [Warranty](#) specifies that a product is covered for manufacturer's defects for a period of time or distance of use. If the item has gone beyond the normal warranty, the dealer may offer some warranty in order to keep your business. The dealer may pick up the costs for parts and labor, or just the labor, or 50% of the overall costs, or just a nominal sum.

Go off

A British term for beginning to harden, the initial phase of the hardening process of plastic body fillers. The American term is *kick*

Goose

A colloquial term to describe a brief, rapid opening of the throttle to [accelerate](#) quickly.

Gooseneck

1. Colloquial term for a stem--the component that holds the handlebars of a bicycle and mounts to the steerer tube.
2. A hitch resembling the neck of a goose. Can be 5th wheel or an inverted ball hitch attachment. Both straight trucks and tractor-trailer rigs can use goosenecks.
3. Colloquial term for a road with a series of [switchbacks](#)

Gooseneck hitch

A trailer hitch to mount a [Fifth-wheel travel trailer](#)

Gooseneck map light

A flexible-stemmed map lamp usually plugged into 12-volt socket (cigarette lighter)

Gore-Tex®

A fabric used in sports and outdoor clothing claiming to be waterproof, breathable, windproof, and durable even after being washed many times. It is up to 20 times more waterproof than coated fabrics and almost twice as waterproof as any other fabric/laminate technology. Gore-Tex® is unaffected by laundering while most coated fabrics lose up to half of their ability to prevent water entry after very few launderings.

Go to the Harley

Trucker slang for putting your CB on channel 1 as in 'This channel's too busy, lets take it to the Harley.'

Got your ears on?

Trucker slang for 'in radio reception' when asking for someone on the CB as in 'Hey, J.B. you got your ears on?'

Gouge

A flat, relatively large dent that has no hard contours so it can be reshaped by shrinking using heat or with a hammer and dolly

Gouge on it

Trucker slang for go faster, speed it up as in 'Once I get on the boulevard I'm gonna gouge on it.'

Gouging

Cutting of a groove in the surface of a metal using a gas cutting torch of an arc-air cutting outfit.

Goutte d'eau

A **tear-drop** body style, tapered to the rear.

Governor

1. A device designed to automatically control the **speed** or position of some part (i.e., engine speed or transmission speed). Governors are used to prevent an engine from exceeding its maximum rpms. They are also used on rental vehicles to prevent operators from exceeding the speed limit.
2. A governor on the output shaft of a hydraulically controlled transmission converts line pressure into governor pressure. In electro-hydraulically controlled transmissions, the governor is replaced by a sensor.
3. A device used with the carburetor to restrict the maximum engine speed.

See

- **Centrifugal governor**

- **Injection Pump Governor**
- **Min/max Governor**
- **Transmission governor**
- **Zero Governor**

Governor plate

See

- **Contact breaker plate**

Governor pressure

Pressure in an automatic transmission control that varies in accordance with vehicle speed and acts on the command valves, where it opposes the control pressure

Governor valve

(GV) An automatic transmission control valve which converts line pressure into vehicle-speed dependent governor pressure.

Governor weight

A centrifugal advance mechanism or advance weight

GP

1. Abbreviation for **Grand Prix**.
2. Abbreviation for **Great Prize**.

GPM

1. Abbreviation for **gallons per minute**.
2. Abbreviation for **Grams Per Mile**

GPMR

gallons per mile ratio

GPS

1. Abbreviation for **Global Positioning Satellite**
2. Abbreviation for **Global Positioning System**
3. Abbreviation for **Governor Pressure Sensor**

GPT

Abbreviation for **Generalized Preferential Tariff**.

Grab

1. The action of brakes to seize the drum or disc suddenly when the brake pedal is pressed.
2. The action of a clutch to take up the drive suddenly when the clutch pedal is released. Also called ***snatch***.

See

- **Fierceness**

Grabber

See

- **Webbing grabber**

Grab handle

1. A strap or part of a car door interior used to pull the door shut. Also called ***door handle***.
2. An inside strap located above the door which is used to steady a passenger during sharp cornering. At one time this handle was found only on the passenger side; but in newer cars it is also on the driver's side.
3. A handle on the tongue of a trailer, used to move the trailer manually

Grab Rods

Bent rods welded to bulkheads or ship's side to form a ladder.

Gradation

The size by diameter of sand or salt particles for applying on an icy road surface.

Grade

1. The steepness or slope of the road on a hill expressed as a percentage of change in elevation per unit of distance traveled. Example: A vehicle climbing a 8% grade rises 8 feet for every 100 feet of forward travel. The higher the percentage, the steeper the hill.
2. The composition of gravel and rock, etc. of a road surface (thus the vehicle used to smooth it is a grader).

3. The strength factor of a fastener (i.e., nuts and bolts). In US fasteners, grade 2 has a tensile strength of 60,000 psi; grade 5 = 120,000 psi; grade 7 = 133,000 psi; grade 8 = 150,000 psi; grade ASTM A574 = 170,000 psi. In metric fasteners, grade 4.8 = 60,900 psi; grade 8.8 = 120,350 psi; grade 9.8 = 130,500 psi; grade 10.9 = 150,800 psi; and grade 12.9 = 176,900 psi.
4. The quality of oil.
5. A British term for the degree of sandpaper coarseness. The US term is **Grit**.

See

- **Oil Grade**
- **Traction Limited Grade**

Gradeability

A vehicle's ability to climb a grade at a given speed. Example A truck with a gradeability of 5% at 60 mph can maintain 60 mph on a grade with a rise of 5%.

Grade Crossing

Railroad crossing (level crossing).

Grade markings

Lines placed on the heads of some bolts to indicate tensile strength.

Grader



Grader

A road construction vehicle with a large blade which scrapes gravel to smooth or level a surface. Graders are also used to remove snow from roads.

See

- [Motor Grader](#)

Gradient

1. The slope or inclination of a road
2. A measure of the slope, expressed as the ratio of height (or drop) to horizontal distance; a steep hill might be 1 in 4 (i.e., 25%), while a gradual slope might be 1 in 40 (i.e., 2.5%)

Grading

1. The act of plowing a road to make it smooth or remove obstructions such as rows of gravel or dumps of snow.
2. The act of determining the quality of a product or effect.

See

- [Capacitance Grading](#)
- [Quality grading](#)

Graduated cylinder

A container, calibrated in cubic centimetres or millilitres used for the accurate measurement of fluids, such as fork oil and transmission oil.

Graduated tint

The tinted stripe at the upper edge of a windshield

Graduating

Moving from one stage to the next

Graft copolymer

A copolymer in which polymeric side chains have been attached to the main chain of a polymer of different structure

Graham

A vehicle brand of which the 1929-31 Series 127 and 1930-31 Series 137 are [classic cars](#).

Graham-Paige

A vehicle brand of which the 1929-31 Series 827; 1928-29 Series 835; and 1929-30 Series 837 with required application are **classic cars**.

Grain alcohol

ethanol

Grain coarsening

Roughening of the surface of a material

Grain growth

Roughening of the surface of a material

Grand Am



Click image for books on Pontiac Grand Am

A model of automobile manufactured by **Pontiac division** of **General Motors**

Grand Livre

See

- **Le Grand Livre**

Grand Luxe

(GL) A model that is more luxurious model than a standard model

Grand National



**Click image for books on
Buick Grand National**

A model of automobile manufactured by the **Buick division** of **General Motors**

Grand Prix



**Click image for books on
Pontiac Grand Prix**

1. An international car race from which points are scored towards the World Championship.
2. A model of automobile manufactured by Pontiac division of General Motors

Grand Tourer

(GT) From the Italian *gran turismo* to describe a high-performance luxury car (usually two-door) designed for long journeys.

Grand Touring

(GT) A term used for a sportier car.

See

- **Gran Turismo.**

Grand Touring-injection

(GTi) A GT car with fuel injection.

Grand Touring Prototype

(GTP)

See

- **Camel Grand Touring Prototype**

Granny gear

Colloquial term for the smallest inner **chainring** on a triple **chainringcrankset** of a **bicycle**. Needed for climbing steep hills especially with a loaded **bicycle**.

Gran Sport



Click image for books on Buick Gran Sport

A model of automobile manufactured by **Buick Division** of **General Motors** from 1965-72

Gran Turismo

(GT) A car which combines the features of both the **sedan** and **sports car**. It features excellent engineering and road handling with relative comfort. Made in two-seater and four-seater models with cramped rear seats. Italian for **Grand Touring**.

Graph

A diagram showing the relationship between certain numbers or quantities in the form of a line

Graphic display unit

An **instrument panel** displaying a plan of the car with illuminated parts representing doors left open, lights switched on, etc.

Graphic equalizer

A unit in a car stereo system that adjusts the audio output signal strength separately for individual frequency ranges; individual frequencies can be emphasized to compensate for specific acoustic conditions

Graphics

Paintwork and decals applied to the body of a vehicle beyond the standard paint.

See

- **Splashed graphics**

Graphite

A form of carbon used in making brushes for motors and generators and as a lubricant

Graphite grease

Heavy-duty grease containing graphite, used for brake cables, etc.

Graphitic corrosion

Selective corrosion of grey cast iron, resulting in preferential removal of metallic constituents, leaving graphite

Grass

Trucker slang for the median strip or side of road as in 'We got a four wheeler broke down in the grass at the 211 yardstick'.

Grass heat shield

A metal shield fitted underneath a catalytic converter to reduce the risk of its heat starting an accidental grass fire

Grating

Light platform or walkway built up of metal bars, used for access to machinery or on the floor for draining fluid (i.e., water).

Gravel

A mixture of rocks and sand where the rocks are usually less than 1 inch (25 mm) in diameter.

Gravel gun

Equipment used to hurl crushed stone at objects, such as test panels, to test them for chipping resistance

Gravel road

A road which is covered with a layer of **Gravel**. Also called a secondary road or an improved road.

Gravel Trailer

A dump trailer or a gravel hopper bottom which is used to haul gravel.

Gravel Truck

A dump or a hopper bottom truck which hauls gravel.

Graveyard

A collection of old or damaged vehicles.

See

- **Auto graveyard**

Graving Dock

An arrangement for getting vessels out of the water so that bottom work can be done. Usually a slip is dug in the shore, a vessel is floated in, a

wall is placed across the open end of the slip and the water is pumped out of the **tank**. Often used for very heavy objects.

Gravity

The attractive force exerted by one body on another. All bodies which have mass have this property. The pull of the earth upon objects so that they fall at the rate of 981 cm per second every second.

See

- **API Gravity**
- **Center of gravity**
- **G**
- **Quantum Gravity**
- **Specific gravity**

Gravity bleeding

A method of purging air from a hydraulic system by allowing the fluid to force air out of an opened bleeder valve by its own mass.

Gravity, center

The force which causes a body to fall to the earth.

See

- **Center of gravity.**

Gravity Conveyor

Type of conveyor that uses gravity to move materials. **Skate wheel conveyor** and **roller conveyor** are the most common types of gravity conveyor used, however, even a simple steel chute is essentially a gravity conveyor.

Gravity feed

A fuel supply system where the **gas tank** is mounted higher than the carburetor. This system was used in some older cars where the **gas tank** was located in front of the windshield and in many motorcycles.

Gravity-feed spray gun

A type of paint **Spray gun**, in which paint flows downward from a container mounted on its top, thus reducing the amount of compressed air required. Also called **Top feed gun**

Gray Market Vehicles

Cars that have been imported into the country through unauthorized means. It is likely they won't meet American safety and emission standards. These cars have significantly lower values than vehicle imported through normal channels.

GRD

Abbreviation for **ground** or **negative**. Also abbreviated **GND**

Grease

1. A **Lubricant** (made from oil and metallic soaps) which reduces the **friction** between moving pieces of metal and also prevents moisture from causing metal to rust.
2. A thick lubricating oil that has a paste-like consistency. Used to lubricate the steering linkage, the suspension system, and other moving parts outside the engine.
3. To lubricate or coat with grease.

See

- **Dielectric grease**
- **Gear grease**
- **Graphite grease**
- **Lithium base grease**
- **Lithium grease**
- **Lube grease**
- **White lithium grease**

Grease fitting

A device that seals in and allows the addition of more **Grease**, or some other type of **Lubricant**, to cushion two moving parts, allow them to move freely, and prevent them from wearing each other away. Found on **Ball joints**, **steering knuckles**, tie-rod ends. Also called **Zerk fitting**.

Grease gun



Grease gun

A small, hand-operated **pump** that can be loaded with **Grease** and used for lubricating the **Grease fittings** on a vehicle. **Adapters** can be

attached to the grease gun so that grease can be forced even into **Sealed bearings**.

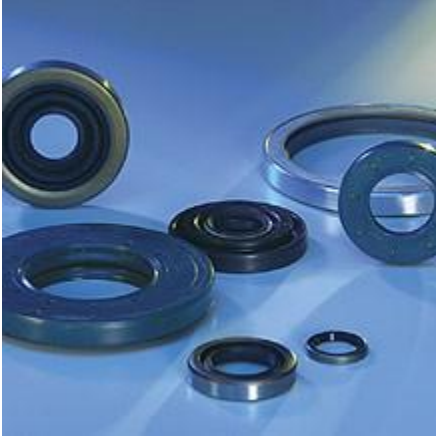
Grease nipple

A small, one-way valve used for injecting grease into a bearing

Grease pencil

A writing device which writes in **Grease** or wax. It is used to mark tires because it can be easily rubbed off.

Grease seal



Grease seal

A circular metal disk covered in rubber or plastic with a center hole, an edge on the outside circumference, and another edge on the center hole with a spring to retain tension on the shaft that fits into the hole. It is used to keep **Grease** and oil from leaking out and protects bearings from dirt and water. Also called **Oil seal**.

Great Lakes ship

Cargo ship used to carry cargo on the Great Lakes. Most carry bulk cargoes of grain, iron ore or coal.

Green

See

- **British Racing Green**

Greenbrier



**Click image for books on
Greenbrier**

A model of small van produced by the **Chevrolet** division of **General Motors** from 1961 to 1970

Green flag

A green flag is used to start or restart the race. The pace car will pull off the track into pit lane and the race resumes. Note the race cars do not come to a stop on the track at anytime, unless a **Red flag** is thrown.

Green flag with yellow diagonal stripe

The green flag with a yellow diagonal stripe signals a slower driver to move over on the track and let the leaders proceed. This usually occurs near the end of a race when the slower car is many laps behind. This flag is to ensure safety for the cars still racing for the win.

Greenhouse

The glass area of a car or truck. Everything above the **beltline** of an automobile, essentially the windows and roof.

Greenhouse Effect

A warming of the earth and its atmosphere as a result of the thermal trapping of incoming solar radiation by CO₂, water vapor, **Methane**, **Nitrous oxide**, **Chlorofluorocarbons**, and other gases, both natural and man-made which trap radiant (infrared) energy, thereby keeping the earth's surface warmer than it would otherwise be. Greenhouse gases within the lower levels of the atmosphere trap this radiation, which would otherwise escape into space, and subsequent re-radiation of some of this energy back to the Earth maintains higher surface temperatures than would occur if the gases were absent.

Greenhouse gases

(GHGs) Group of gases which individually act to trap solar energy near the earth. GHGs for which emission levels have been estimated are CO₂, CH₄, N₂O, SF₆, CF₄, C₂F₆, and HFCs.

Green stage

The initial hardening phase during which the resin or filler has hardened but has not yet set solid; this occurs immediately after the resin or filler has kicked (British gone off).

Green stamp road

Trucker slang for a toll road as in 'Can anyone tell me if 76 is a greenstamp road?'

Green stamps

Trucker slang for money paid in fines (dollars) as in 'Looks like the chicken coops are collecting plenty of green stamps today.'

Green tire

The complete rubber/fabric/steel tire just before being cured.

Gremlin



Click image for books on Gremlin

An automobile manufactured by AMC

Grey iron

Pig iron or cast iron in which nearly all the carbon is graphite carbon.

Grey market

The grey market describes the purchase by intermediaries of product which is not supplied to them by the **authorized** distribution channel of the supplier. Thus, a warehouse club in Canada that sells a stereo bought in the U.S. or elsewhere from other than the manufacturer is supplying grey market goods. While grey market products are frequently the same as would be available from conventional channels in Canada,

the grey market assumes responsibility for service or repair where the manufacturer declines this support.

Grid

The **Lead** screen or plate to which the **battery** plate active material is attached.

See

- **Accumulator Grid**
- **Electric grid**

Grid-controlled ignition system

A microprocessor-controlled ignition system with electronic ignition timing by means of an ignition map stored in the control unit memory

Grid dolly

A special **Shrinking dolly** with a large, flat groove

Grill

Alternate spelling of **Grille**.

Grille

A grating or crosswork of bars usually as an ornamental **cover** of the **radiator** which allows air to cool the engine.

See

- **Eggcrate grille**
- **Radiator grille**
- **Radiator grille surround**
- **Slatted grille**
- **Speaker grille**

Grille face panel

A metallic grating which surrounds the radiator. Also called a **grille panel**.

Grille panel

A metallic grating which surrounds the radiator. Also called a **grille face panel**.

Grille surround

See

- **Radiator grille surround**

Grind

1. To remove metal from an object by means of a revolving **abrasive** wheel, **disc**, or belt.
2. To finish or polish a surface by means of an **abrasive**.

See

- **Cam Grind**
- **Fixed-anchor Grind**
- **Undersize Grind**
- **Valve grinding**
- **Valve seat grinding**

Grinder

A device to remove metal from an object.

See

- **Angle grinder**
- **Bench grinder**
- **Brake shoe grinder**
- **Valve grinder**

Grinding

The process of using a brake lathe and a power-driven **abrasive** stone to remove metal from drums to refinish their friction surfaces.

See

- **Centerless grinding**
- **Valve grinding**
- **Valve seat grinding**

Grinding compound

See

- **Valve grinding compound**

Grinding disc

An **abrasive** disc

Grinding paste

An **abrasive** paste used for reseating valves

Grinding tool

See

- **Valve grinding tool**

Grinding wheel

An **abrasive** wheel used for grinding (usually a composite of hard particles in a resin filler)

Grindstone

A rotating **abrasive** disc for rubbing away metal and for sharpening tools

Grip

1. The adhesion of a tire to the road surface; important for roadholding and safe braking.
2. A rubber or rubber-like tube which fits on the end of a pipe (i.e., handlebars or a tool).
3. The unthreaded portion of a bolt or screw.

See

- **Cable Grip**
- **Hot grip**
- **Lateral grip**
- **Wet grip**
- **Mole grips**

Grip channel

A steel channel spot-welded to a vehicle body to keep rubber seals in place

Grip in the wet

A vehicle's roadholding ability in the rain or on a wet surface

Grip wrench

Locking pliers

Grit

1. A measure indicating the sizes of the **abrasive** particles in a grinding wheel, usually expressed by a figure denoting the number of meshes per linear inch in a sieve through which the particles will pass completely.
2. Siliceous sediment, loose or indurated, the component grains being angular. Sometimes applied to a hard coarse-grained sandstone.
3. Hard particles, usually mineral, or natural or industrial origin, retained on a 200 mesh test sieve (76 μm).

See

- [P grit numbers](#)

Grit blasting

1. A sandblasting process where grit is used to clean the metal surfaces and is available in various grades for coarse or finer blasting on thin steel.
2. A cleaning of the spark plug electrodes by bombarding them with **abrasive** particles

Grit number

A classification of sand paper by fineness of the grit particles.

See

- [P grit numbers](#)

GRND

Abbreviation for *ground*

Grommet



Grommet

1. A rubber or plastic ring (like a donut) with a slot around the circumference. It is placed into a hole in a metal plate so that the edge of the metal fits in the slot. In this way, the grommet protects a cable or pipe that passes through the hole.
2. Ring-shaped parts made of a third material that prevents problems when two other dissimilar materials come into contact. Plastic brake fluid reservoirs attach to metal master cylinders with rubber grommets

3. A soft ring used under a nut or bolt head to maintain water tightness.

Groove

1. A channel or gouge in metal or in the tread of a tire.
2. Another name for a viable racing lane on the race track.
3. The space between the ridges of a bolt thread.

See

- [Blank Groove](#)
- [Cracking groove](#)
- [Oil groove](#)
- [Piston ring groove](#)
- [Piston ring groove cleaner](#)
- [Rain Grooves](#)
- [Tread groove](#)

Groove cleaner

See

- [Piston ring groove cleaner](#)

Groove cracks

Splitting or cracking of the rubber (undertread) at the base of the grooves, between tread ribs. Primarily caused by growth in textile casings.

Grooved compression ring

A scraper-type piston ring

Groove insert

See

- [Top ring groove insert.](#)

Groove weld

A welding rod fused into a joint which has the base metal removed to form a V, U, or J through at the edge of the metals to be joined.

Grooving

The cutting of a tread design into tread rubber where a design does not already exist. Also altering an original design, i.e., cross-grooving to increase traction.

Grooving hammer



Grooving hammer

A wide-nose peen hammer

Gross

See

- [Tonnage gross](#)

Gross axle weight rating

(GAWR) A US maximum weight specified load capacity of an axle specified by the manufacturer. Includes both the weight of the axle and the portion of a vehicle's weight carried by the axle.

Gross bhp

See

- [SAE gross bhp](#)

Gross combination weight

(GCW) The total weight of a truck and trailer combination and its entire contents.

Gross Combination Weight Rating

The vehicle weight plus maximum cargo weight plus [trailer weight](#)

Gross Combined Weight Rating

(GCWR) The maximum load rating -- including passengers, cargo, and trailer -- for a particular vehicle. A vehicle's GCWR will typically be higher than its GVWR, since gross vehicle weight ratings are determined by axle ratings, and a trailer has its own axles.

Gross domestic product

(GDP) The total value of goods and services produced by labor and property located within a particular country.

Gross Heat of Combustion

Total heat evolved during complete combustion of unit weight of a substance, usually expresses in BTU per pound.

See

- [Net heat of combustion](#)

Gross horsepower

See

- [SAE gross horsepower](#)

Gross inputs

The crude oil, unfinished oils, and natural gas plant liquids put into atmospheric crude oil distillation units.

Gross Laboratory Horsepower

Tested horsepower of a **bare** engine without fan, water pump, alternator, exhaust system or any other accessories.

Gross margin

The return an intermediary achieves on the selling price of the article. That is, if the intermediary buys a product for \$1 and sells it for \$1.50, the margin is calculated. For example, .50 divided by \$1.50, or 33%.

Gross national product

(GNP) The total value of goods and services produced by the nation's economy before deduction of depreciation charges and other allowances for capital consumption. It includes the total purchases of goods and services by private consumers and government, gross private domestic capital investment, and net foreign trade.

Gross power

The fundamental power output of an energy source prior to any conditioning and losses associated with the production of power suitable for the connected load.

Gross registered tons

See

- [Tonnage](#)

Gross ton

2240 pounds. Also called **long ton**.

Gross train weight

Same as [Gross combination weight](#).

Gross vehicle weight

(GVW) or (GVWR) Maximum legal weight at which a vehicle can be operated. The total weight of a fully equipped truck, and payload (cargo) and passengers. Often used as a standard of vehicle size for the purpose of legislation and taxation.

Gross Vehicle Weight Rating

(GVWR) Curb weight plus the payload. The most the loaded vehicle can weigh, generally determined by suspension system, tire size, and brake capacity. A vehicle's GVWR is usually displayed on a label on the door or door-latch pillar.

Ground

(GND or GRND)

1. Terminal of **battery** that is connected to the metal framework of the vehicle so that the **frame** acts as a **conductor** of electricity. In North America, the **negative terminal** is grounded. In British terms, it is called **Earth**.

See

- **Negative ground**
- **Positive ground**
- **Short Circuit Ground**

2. A result of grinding.

See

- **Cam-ground piston.**

3. The surface of a road; the surface of the earth.

Ground and polish

To cut and polish a crankshaft bearing surface to precision specifications.

Ground clearance

The vertical distance between level ground and the lowest fixed item on a vehicle (usually one of the differentials) (excluding the wheels, of course). Compare with **under-axle clearance** and **underbelly clearance**.

Ground clearance control

A small lever near the park brake of cars with hydropneumatic suspension that allows ground clearance to be increased for crossing rough terrain or when changing a wheel

Ground clearance sensor

An instrument that senses the distance between the ground and car (for self-leveling air suspension)

Ground connection

A wire or other metal strip for connecting a component to the vehicle chassis or body

Ground contact area

The contact patch of a tire

Ground effect

1. The phenomenon that occurs when the airflow between a moving object and the ground creates downforce.
2. Air squeezed between the bottom of a moving car and the road can be directed to produce downforce or other useful aerodynamic effects.

Ground electrode

The side electrode of a sparking plug. The opposite is the center electrode **Triangular ground electrode**

Grounding

1. The action of a vehicle when some part of its undercarriage touches the ground (e.g., when going over a curb). In some cases the vehicle can become high-centered so that the vehicle is stationary because the driving wheels are no longer touching the ground.
2. Attaching a wire (such as from a tester) to a ground, a metal part of the engine or car body, or the negative terminal of a battery.
3. Contact of the bottom of a ship with the sea floor.

Ground-oriented sander

A device which processes chemicals and **abrasives** and distributes it on the road surface at a constant rate independent of truck speed

Ground piston

See

- **Cam ground piston**

Ground return

The return path of an electrical circuit, provided by a ground connection. The British term is **earth return**.

Ground strap

A wire cable or braided wire strap to transfer electricity. It can be found between the engine block and the **chassis** because the engine is isolated from the chassis by rubber mounts, yet needs contact with the electrical system. Also called battery strap.

See

- **Ground wire.**

Ground-up restoration

A restoration process of a vehicle where all the components are removed, inspected, and refurbished or replaced in the attempt to bring the vehicle back to original condition. See **frame-off restoration**

Ground Ways

Timbers secured to the ground, under the hull on each side of the keel, on which a ship is launched.

Ground wire

The wire which goes from the negative post of the **battery** to the **frame** on **Negative ground** vehicles. Another ground wire may be a thick wire or braided wire cable which connects the engine to the **frame**. Since many engines are rubber mounted, there may be no metal contact between the engine and the frame apart from the ground wire which may also be called the **Ground strap**. In British terms, it is called **earth wire**.

Group

See

- **Groupo**
- **Plate group**
- **Quotient Group**

Groupo

All the drivetrain components (usually from the same company like Campagnolo or Shimano) needed to turn a bare frame into a complete bicycle (e.g., crank, chain, derailleurs, brakes, etc). Also called **group**.

Group of seven

(G7) seven industrial countries consisting of the United States, Japan, Germany, France, the United Kingdom, Italy and Canada, whose leaders have met at annual economic summits since 1975 to coordinate economic policies.

Group terminal

See **End-of-the-line terminal**.

Growler

An instrument used in testing **starters**, **Generator**, and **Armatures**.

Grown tire

A tire that, with use, has slightly increased in size

Growth

See

- **Tire growth**
- **Grain growth**

GRP

(fiber)glass reinforced plastic

GRRF

Abbreviation for **Groupe de travail en matière de Roulement et de Freinage** (i.e., Working Party on Brakes and Running Gear)

GR-S

A substance used as an adhesive base. It has about the same resistance to solvents and chemicals as natural rubber, but its water resistance is much better

Grub screw

A fully threaded, headless screw.

See

- **Set screw**

Gruppo Bertone

An Italian automobile manufacturer noted for creative design. Includes X1/9 (1988).

G-Series Van



**Click image for books on
G-Series Van**

A model of full-size van produced by the **Chevrolet** and **GMC** divisions of **General Motors** from 1964 to 2008

GST

Abbreviation for **Generic Scan Tool**

GT

Abbreviation for **Gran Turismo** or **Grand Touring**.

GTA



**Click image for books on
GTA**

A model of automobile from **Alfa-Romeo**

GTi

Grand Touring-injection. A GT car model with fuel injection

GTL

Abbreviation for **Gas to liquid**

GTO



Click image for books on Pontiac GTO

1. Abbreviation for ***Gran Turismo Omologato***.
2. A model of automobile manufactured by Pontiac division of General Motors

GTP

Abbreviation for **Grand Touring Prototype**.

See

- **Camel Grand Touring Prototype**

GTS

Abbreviation for ***Global Tire Standard***.

GTW

Abbreviation for **Gross train weight**.

Guarantee

A promise by the manufacturer to fix or replace a specific part if it does not last for a specific time period or distance.

Guard

A protective device

See

- **Chain guard**
- **Dog guard**
- **Edge guard**
- **Oil pan guard**
- **Side radiator guard**
- **Stone guard**
- **Underride Guard**

Gudgeon pin

British term for a **Piston pin** or wrist pin.

Gudgeon pin boss

British term for **Piston boss**

Gudgeon pin circlip

A British term for **Piston pin circlip**

Gudgeon pin end

British term for **Piston pin end**

Gudgeons

British term for the bosses on stern post drilled for pins (pintles) on which the rudder swings.

Guibo coupling

A doughnut-shaped type of flexible coupling

Guide

A device which allows a long shaft to do its job without flexing.

See

- [Cable guide](#)
- [Glass's Guide](#)
- [NADA Used Car Guide](#)
- [Oversize valve guide](#)
- [Valve guide](#)

Guide bolts

Floating calipers slide on these bolts to center over the rotor when braking action occurs.

Guide coat

A thin coat of paint designed to highlight imperfections

Guided bus

Dedicated bus system which uses guide wheels within a fixed track for at least part of its route.

Guide driver

See

- [Valve guide driver](#)

Guided send test

Bending a specimen in a definite way by using a fixture.

Guided vehicle system

See

- [Automated guided vehicle system](#)

Guide pins

A caliper mounting bolt used for fastening a floating caliper to its mounting plate. Floating calipers slide on these pins to center over the rotor when braking action occurs.

Guide pulley

See

- [Jockey pulley](#)

Guide reamer

See

- [Valve guide reamer](#)

Guide remover

See

- [Valve guide remover](#)

Guide rib

A small protruding rubber ring or rib located just above or over the bead area. Serves as a guideline for mounting the tire on a rim.

See

- [Rib](#)

Guide seal

See

- [Valve stem seal](#)

Guide Vanes

See

- [Air-intake Guide Vanes](#)

Guillotine

A bench tool for cutting sheet metal. The sheet is pulled in by two adjustable rollers (one above and the other below) as the tool cuts the metal in either a straight line or a curve as desired.

Gull-wing door



**Click image to supersize
Mercedes Gullwing**

A roof-hinged door that opens upward (vertically rather than horizontally). Examples are seen on the Mercedes-Benz 300 SL in the early 1950s and the DeLorean DMC.

Gullwing door

See [Gull-wing door](#)

Gulp system

See

- [Air gulp system](#)

Gulp valve

A vacuum-controlled valve that admits fresh air to the inlet manifold during deceleration to prevent backfiring in the exhaust system; its vacuum signal is governed by a [Thermovalve](#) and a [Solenoid valve](#) to ensure that the gulp valve action does not interfere with cold start enrichment.

See

- [Air gulp valve](#)
- [Air bypass valve](#)

Gum

The [Oxidized](#) portions of the fuel that form deposits in the [fuel system](#) or engine parts.

See

- **Curing gum**
- **Cushion gum**

Gum deposit

A sticky deposit that occurs when gasoline remains unused in the tank for a period of time. The use of detergent in gasoline (or pouring in some **Fuel stabilizer**) helps prevent its formation.

Gum stock

Rubber compounds containing only the necessary ingredients for vulcanizing. Reinforcing fillers are not present in gum stock.

See

- **Cushion gum.**

Gun

1. To press the accelerator hard to make the engine roar at top rpm.
2. A device for applying paint or grease.

See

- **Air hammer**
- **Airless spray gun**
- **Blow gun**
- **Compressed-air spray gun**
- **Gravel gun**
- **Gravity-feed spray gun**
- **Grease gun**
- **Pressure-feed spray gun**
- **Rivet gun**
- **Spray gun**
- **Suction-feed spray gun**

Gun nozzle cleaning unit

See

- **Spray gun nozzle cleaning unit**

Gunwale

The junction of deck and shell at top of **sheer strake**

Gunwale bar

Angle iron which connects stringer plate and shell plates.

See

- **Stringer bar**

Gusset

1. A triangular plate secured across an angle to reinforce a joint
2. A reinforcing plate or boxed section used to prevent flexing of the frame or swing arm.

Gusset plate

A triangular plate secured across an angle to reinforce a joint

Gut

1. To strip the interior of the vehicle.
2. To remove the internal **Baffles** from a **muffler**.

Gutted muffler

A **muffler** with no silencing **Baffles**. Makes a very loud sound.

Gutter

1. The recessed part on a truck rim base that holds the lock ring in place.
2. A channel at the edge of a road to carry away rainwater.
3. A thin U-shaped channel on the sides of the roof of a car or truck to prevent water on the roof from splashing on you as you get into your vehicle.
4. The molding-like, U-shaped trough at the lower edge of the roof that catches rainwater and carries it away from the windows and doors. See **drip molding**.

Gutter bevel

Truck rims are beveled to provide for the gutter and this bevel matches a 28° taper at the inside of the cast spokes, holding the rim in place.

Gutter system

A roof rack designed to fit older cars and trucks that have external rain gutters.

Guzzler

See

- **Gas guzzler**

- **GV**
- Abbreviation for **Governor valve**

- **GVW**
- Abbreviation for **Gross Vehicle Weight** -- the total weight of a fully equipped truck and its **payload**.
- **GVWR**
- Abbreviation for **Gross Vehicle Weight Rating**-- the standard or rating of a vehicle's carrying capacity. It includes the weight of the vehicle, fuel, fluids, and full payload.
- **GWP**
- Abbreviation for **Global warming potential**
- **Gypsum**
- Calcium sulfate dihydrate ($\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$) a sludge constituent from the conventional lime scrubber process, obtained as a byproduct of the dewatering operation and sold for commercial use.
- **Gyratory**
- Circulatory traffic system, often controlled at least in part by signals.
- **Gyro-Compass**
- A mechanical compass operated by means of a gyroscope. This compass indicated true north rather than magnetic north.
- **Gyro-Repeater**
- An apparatus to show the reading of the gyro compass at a distance from the main gyroscope equipment.

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