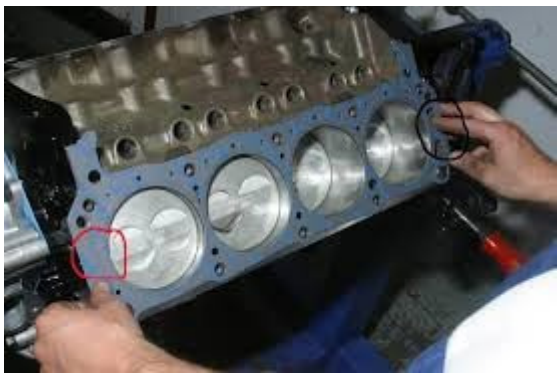
Useful Terms to Know

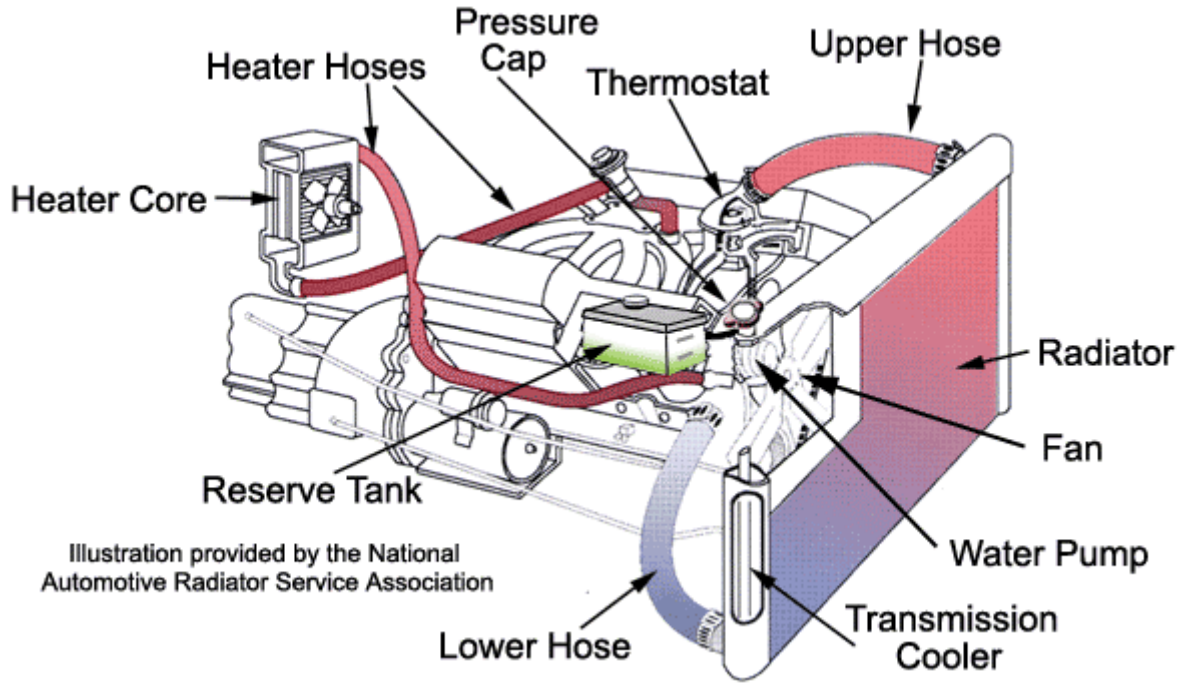
Cooling System

- **Radiator**: The component coolant flows through to be cooled. Usually located in the front area of the vehicle.
- **Radiator Cap**: Found on or very near the radiator, will need to be turned to remove or replace. Never remove when engine is warm or hot.
- **Reservoir**: Plastic tank or container usually found to the side of the motor near passenger wheel well. Some are pressurized and the cap should not be opened when engine is warm or hot. May have different names like Surge Tank, Expansion Tank, Overflow Tank, Degas Bottle.
- **Reservoir Cap**: Cap found on top of the reservoir. Will either turn off or snap off.
- **Coolant**: Antifreeze, (Distilled or Deionized water) or combination of both usually at a 50 /50 mix. Primarily used to protect engine from overheating, also provides corrosion protection to engine components, freeze protection when subject to sub zero temperature, boil protection, heat transfer to the passenger compartment of vehicles, lubrication to the water pump.
- **Distilled or Deionized Water**: Is preferable to tap water for use in automotive cooling systems. The minerals and ions typically found in tap & well water can be corrosive to internal engine components, and can cause a more rapid depletion of the anti-corrosion additives found in most antifreeze formulations. Tap & well water minerals can also cause scale buildup in the tubes of radiator & heater cores.
- **Top Off Radiator**: Filling the cooling system to proper level in radiator & reservoir.
- **Heater Core**: Produces heat for the passenger compartment.
- **Thermostat**: An internal part that opens and closes based on heat and allows coolant to flow from the engine block to the radiator to be cooled.
- **Radiator Drain Valve**: Usually found on the bottom of the radiator. Used for draining coolant and flushing the cooling system.

- **Head Gasket** A head gasket is a seal that is fitted between the piston cylinder head and the engine block.
- **Intake Gasket**: It is the sealing parts that seals the intake manifold to the cylinder heads and to the top of the engine block. The intake manifold is the part that distributes the air to the cylinders. It also can house the thermostat, the injectors, the throttle plate. An intake gasket could leak coolant, engine oil, or engine vacuum.

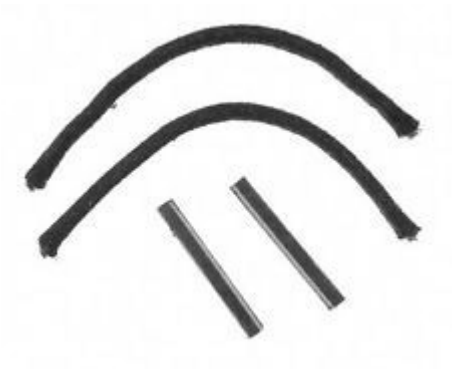


- **Turkey Baster**: Can be used to siphon coolant from a cooling system when getting at the drain cock valve on the radiator is not accessible.



Engine

- **Additive**: a substance added to another in relatively small amounts to impart or improve desirable properties or suppress undesirable properties.
- **Engine Crankcase**: An important function of a crankcase is to hold engine oil. Oil is dispensed through a fill tube or cap into the crankcase, and as the engine runs, is used to lubricate internal parts like the connecting rod bearings, piston, and camshaft assembly. Oil seals are installed in the crankcase where the crankshaft ends protrude through to prevent oil from leaking out during operation. Because the crankcase is used as an oil reservoir, it will sometimes be called a sump (OIL FILL).
- **Engine Oil Filler Cap**: Where you add engine oil. It then goes to the crankcase and oil pan / sump.



- **Rear Main Seal**: Rear main seals come in many shapes and sizes, but all are responsible for sealing the back of an engine's crankshaft. These vital seals must keep oil inside the engine while coping with the crankshaft's rotation and heat expansion. Rope Seal found in older model cars:

Engine Oil Dip Stick – Used to check oil level.

Fuel

- **Additive**: a substance added to another in relatively small amounts to impart or improve desirable properties or suppress undesirable properties.
- **Capless Fuel System**: Diesel & Gas / Fuel Systems below.

- **Misfuelling Device**: As an example, this funnel is specifically designed for installing our fuel products, but other funnels will also work.

Power Steering

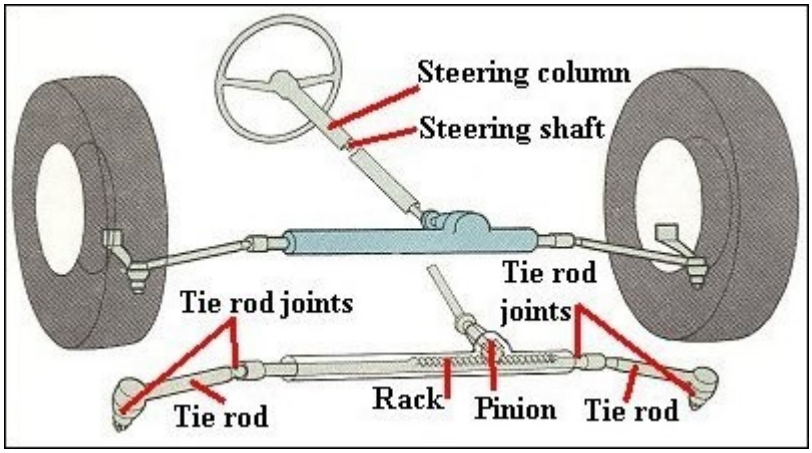
Types and Operations

- The two most common types of steering gearboxes are “rack and pinion” and “worm gear” arrangements. Both operate by using gears to translate the rotation of the steering wheel into the sideways motion of a shaft that connects the two front wheels. While rack-and-pinion systems are very simple, the distinct advantage of worm gears is the strength of their construction.

Gear Box

- The standard gear box uses a worm gear that is rotated by the steering wheel to move the pitman shaft. The worm gear contains spiral cut grooves that mesh with a sector gear at the top of the pitman shaft. The spiral action of the worm gear causes the pitman shaft to move the steering linkage in a linear motion. Power steering is achieved by using hydraulic pressure to assist in the rotation of the worm gear.</li.

Rack & Pinion



- Rack and pinion steering provides a much simpler method of converting the circular motion of the steering wheel to linear motion for steering. The steering column attaches to the top of the rack and pinion unit and rotates the pinion gear. The pinion gear actuates the rack, which is a simple straight shaft with teeth cut in the top. The rack will simply move back and forth, in a linear motion, in response to the pinion gear. The only steering linkage used is tie rods to indirectly link the rack gear to the steering knuckle. Vehicles with power rack and pinion steering use hydraulic pressure to assist in rotating the pinion gear.

Fibers – Material used in our Block / Head & Intake Gasket Products.

Aramid Fiber – This is the generic name of a group of synthetic fibers. The fibers offer a set of properties which makes them particularly useful in armor, clothing and a wide range of other applications. The most commonly known commercial brand is Kevlar.

Refractory Fibers – Used in material like firebrick for extreme heat conditions.

Carbon Fiber – The properties of carbon fibers, such as high stiffness, high tensile strength, low weight, high chemical resistance, high temperature tolerance and low thermal expansion, make them very popular in aerospace, civil engineering, military, and motorsports, along with other competition sports. However, they are relatively expensive when compared to similar fibers, such as glass fibers or plastic fibers.

Transmissions

- Automatic Transmission
- Manual / Standard Transmission
- CVT

Automatic Transmission – Most modern North American and Australian and some European and Japanese cars have an automatic transmission that selects an appropriate gear ratio without any operator intervention. They primarily use hydraulics to select gears, depending on pressure exerted by fluid within the transmission assembly. Rather than using a clutch to engage the transmission, a fluid flywheel, or torque converter is placed in between the engine and transmission. It is possible for the driver to control the number of gears in use or select reverse, though precise control of which gear is in use may or may not be possible.

Manual – Manual transmissions are the most common type outside North America and Australia. They are cheaper, lighter, usually give better performance, but the newest automatic transmissions, and CVTs give better fuel economy.

CVT (Continuously Variable Transmission) – The CVT is a transmission in which the ratio of the rotational speeds of two shafts, as the input shaft and output shaft of a vehicle or other machine, can be varied continuously within a given range, providing an infinite number of possible ratios. The CVT allows the driver or a computer to select the relationship between the speed of the engine and the speed of the wheels within a continuous range. This can provide even better fuel economy if the engine constantly runs at a single speed. The transmission is, in theory, capable of a better user experience, without the rise and fall in speed of an engine, and the jerk felt when changing gears poorly.

What Makes Us Run

We are fueled by the ability to give our customers the power to fix their leaks themselves, safely, affordably and quickly. Award-winning products have been making “three-minute mechanics” out of people for over 65 years, for all types of vehicles, all types of leaks.

We know your busy life can’t stop for a leak — there is never a good time to deal with car troubles. That is why Bar’s Leaks creates safe, effective, easy-to-use products that effortlessly fit into your current lifestyle and budget. Guaranteed. Bar’s Leaks gets you back on the road and back to your life.

Chemical Repair Solutions for a Range of Automotive Needs

There’s nothing more frustrating than walking out to your car in the morning and noticing your car has developed a leak. Car leaks make most drivers think about the inconvenience of visiting a mechanic, not to mention the cost. But, at Bar’s Leaks, we specialize in offering car leak repair solutions that are fast, easy, effective and affordable. We help everyday drivers fix car leaks related to the cooling system, head gasket, engine oil, power steering, transmissions, and more. Our products are proven to alleviate mild to moderate leaks, and many of our solutions also condition the vehicle systems to which they’re applied.

A Track Record of Success

You can find plenty of car leak repair products on the market. But many of these alternative products aren't proven to effectively stop leaks, and some can actually make your issue worse. At Bar's Leaks, we can point to nearly 70 years of helping drivers effectively stop leaks. We're the #1 chemical repair brand and we continue to assist auto owners just like you because our products are effective and simple to use. If you can pop the hood of your car, you can use a car leak repair product from Bar's Leaks. There's no special automotive expertise required.

Offering a Team of Expert Chemists

At Bar's Leaks, our innovative products start with an advanced chemical engineering team. We employ a group of top grade chemists who are always searching for better ways to fix car leaks. We're also improving on our own formulations, developing new products in response to the latest innovations and technologies from auto manufacturers. Our goal is always the same: to help get you back on the road again as quickly, affordably and easily as possible.

Made in the U.S.A.

Our repair products are made right here in the United States, just an hour outside of Detroit. As America's best-known car leak repair brand, we have a reputation and legacy to live up to. That's why we're always pushing to create, and offer to everyday drivers, the most effective, affordable and easy-to-use products to help fix car leaks. As the hundreds of millions of customers we've served can attest, Bar's Leaks is the car leak repair provider that delivers solutions that fit into your lifestyle and budget.

Browse our selection of car leak repair products, to find a fast, easy, effective solution today.