



SERVICE LINE

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Prepare for Fall Storage with AMSOIL Products



Fall is right around the corner, which means it's time to start preparing summer equipment for offseason storage. AMSOIL products keep your equipment protected during the winter and primed and ready for action next spring.

Gasoline can break down in as little as 30 days. Oxygen, humidity, heat and other factors cause gas to change over time. Varnish, gums and other debris can form, which can clog the tiny fuel passages in the carburetor of your small engine and stick the float, preventing it from starting in the spring.

Gasoline Stabilizer

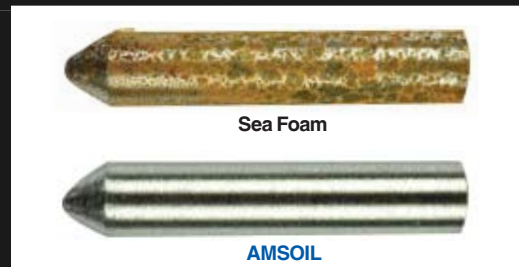
- Disrupts the chemical chain reaction that causes gas to oxidize and form varnish and gums
- Fights ethanol corrosion
- Keeps fuel fresh up to 12 months



Two- and four-stroke recreational vehicles, hand-held power equipment, small engines, construction equipment and farm equipment can form water vapor condensate within their engines during long periods of storage. When this condensate comes into direct contact with steel and iron components, it forms surface corrosion on cylinder liners, piston rings, anti-friction bearings and steel/iron contact surfaces on rotational seals.

AMSOIL Fights Corrosion

AMSOIL Gasoline Stabilizer provides corrosion protection Sea Foam* Motor Treatment can't match, helping maintain power and performance and keeping metal looking like new, even when subjected to salt water.^x



^xBased upon independent testing of AMSOIL Gasoline Stabilizer obtained Nov. 8, 2018 and Sea Foam Motor Treatment purchased Oct. 25, 2018 in a modified NACE TM0172 using synthetic sea water per ASTM D665 part B. *All trademarked names and images are the property of their respective owners and may be registered marks in some countries. No affiliation or endorsement claim, express or implied, is made by their use.

Long periods of storage can also dry out cylinders, often resulting in permanent damage when the equipment is taken out of storage and dry-started.

Engine Fogging Oil

- Protects internal engine components during storage or long periods of inactivity
- Provides long-term protection against corrosion and dry starts, extending engine life and reducing operating expenses



NOTES

Price and Shipping-Rate Adjustment

We are implementing a minimal price and shipping-rate adjustment in the U.S. and Canada effective Oct. 1. Our competitors have all issued up to six price increases to their distributors since the beginning of the year due to the rising costs of additives, base oils, steel, plastics and freight. While we are working hard to keep pricing down, we are forced to implement our third price adjustment of the year to keep up with rising costs. As always, these adjustments are made as minimal as possible. Products will increase by an average of 1.5 percent, with some products increasing slightly less and others increasing slightly more.

Accessing Updated Pricing

Updated pricing information is available in the Pricing Lookup in the Account Zone. An updated Wholesale Price List is enclosed.

Shipping Rates

Effective Oct. 1, the minimum purchase threshold for U.S. accounts to receive free shipping has increased to \$400. The Canadian minimum purchase threshold remains at \$450. Flat-rate shipping for orders under \$400 U.S./\$450 Can. has increased to \$13.99 U.S./\$14.99 Can.

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What Does Transmission Fluid Do?

Transmission fluid is a lubricant formulated to protect a vehicle's gears and clutch packs while enabling smooth, crisp shifts. It plays a vital role in keeping vehicles working. Without it, transmission gears would rapidly wear out or overheat, resulting in a short life for the transmission and a big repair expense for the owner.

The basic work of a transmission sounds simple enough – transferring power from the engine to the wheels – but it might be the most complicated component on a car or truck. It houses a complex assortment of gears, clutches, solenoids and other components that select the proper gear for the operating conditions. For example, when you accelerate or pull a heavy load, the vehicle uses a lower gear that provides more torque. As you pick up speed on the highway, a higher gear is used to reduce engine rpm, increasing fuel efficiency.

Today's transmissions are smaller and must manage higher horsepower and torque, all while delivering smoother shifts with longer fluid-life recommendations. These modern designs also pack in an enormous number of gears, clutch packs and narrow oil passageways that require a steady supply of high-quality fluid to function. Transmissions used for hauling or towing are subjected to massive torque and increased heat, the number-one enemy of any transmission.

But, transmission fluid is not always understood and tends to be overlooked and underappreciated by the average driver.

Types of transmissions

The two primary types of transmissions are manual and automatic. Other transmission designs include continuously variable transmissions (CVT) and dual-clutch transmissions (DCT). AMSOIL has products to maximize performance and protection for each of these transmission types, which we will cover a little later.

Properties of automatic transmission fluid

The main job of any lubricant is to create a fluid film between surfaces to prevent contact and reduce friction.

In so doing, lubricants protect against wear and fight the damaging effects of extreme heat.

Transmission fluid not only lubricates and cools the moving parts of the transmission, a good fluid also excels at the following tasks:

1. Functions as a hydraulic fluid

Automatic transmissions use pressurized transmission fluid to change gears. This stressor can cause the oil to shear and lose viscosity.

2. Delivers the right frictional requirements

Engagement and disengagement of the clutch packs must happen flawlessly for optimum performance.

3. Protects gears from wear

Automatic transmissions contain a system of sun, planetary and ring gears that require a durable lubricant film to prevent metal-to-metal contact.

4. Fights heat

Automatic transmissions generate more heat than manual transmissions. Heat accelerates oxidation, the chemical breakdown of the lubricant. Oxidation leads to sludge and varnish, which can clog narrow oil passages and contribute to clutch glazing. Without the right protection, vehicles can begin to shift hard, jerk or hesitate.

Properties of manual transmission fluid

Manual transmission fluid has fewer jobs to perform than automatic transmission fluid. Some manual transmissions work with or even require ATF. However, there are attributes where quality manual transmission fluids must excel, such as protecting soft metal (brass) synchronizers from corrosion.



Transmission fluid should appear reddish and opaque like the fluid on the top. If ATF appears brown like the fluid on the bottom, it is past time to change it.

Does transmission fluid need to be changed?

Yes. Over time, transmission fluid oxidizes and becomes contaminated with particles and sludge. While transmission fluid doesn't need to be changed as frequently as motor oil, it's important to check it regularly.

If the transmission fluid level is low or the fluid has started to break down, the vehicle may shift poorly. Running low on fluid can damage transmission components and lead to catastrophic failure or expensive repairs.

How often should transmission fluid be changed?

The answer varies depending on the type of transmission and the mechanical stresses it must endure. It is often recommended to change transmission

fluid every 30,000-150,000 miles (48,000-240,000 km). Sometimes it's not recommended at all.

Original equipment manufacturer (OEM) recommendations for how often to change automatic transmission fluid cover a wide mileage range, depending on year, make and model. Plus, if your driving habits fall under the "severe" designation (towing, hauling, daily short trips less than 10 miles [16 km], etc.), many OEMs recommend changing transmission fluid more frequently.

These differences illustrate the importance of checking the recommendations in the owner's manual. It will provide maintenance recommendations, typically in a table in the back. Many OEMs provide digital owner's manuals online, so if you've lost yours, try a quick search.

In reality, many people completely forget about their transmission until it begins to shift hard, jerk or hesitate, especially if they have a filled-for-life transmission. However, so-called "filled-for-life" transmissions have a misleading name. And, not checking or changing transmission fluid is a reckless way to treat a transmission, especially if it's used for towing or hauling.

The truth is, no lubricant will last forever and provide the protection the vehicle requires. Over time, lubricants deteriorate, especially if used under heavy loads, frequent starts and stops or daily short trips.

It's a good idea to check a vehicle's transmission fluid periodically to monitor fluid level and condition. However, this task has become more difficult in modern vehicles that often lack transmission dipsticks or have them in hard-to-reach locations under the vehicle.

Fluid should be checked immediately if performance begins to suffer.

Choosing the right transmission fluid

Finding out what kind of transmission fluid is needed can be a challenge. It's best to start with your owner's manual or use the AMSOIL Product Guide to find the right transmission fluid. AMSOIL Signature Series Synthetic Automatic Transmission Fluid and OE Synthetic Automatic

Transmission Fluid are both recommended for most of the common ATF specs on the market.

Signature Series Synthetic Automatic Transmission Fluid

Signature Series ATF (ATF, ATL) is our premium transmission fluid. It's designed for hard-working vehicles that operate in severe service. It handles heat so well, you can confidently double your vehicle manufacturer's severe-service drain interval with guaranteed AMSOIL protection. It withstands the rigors of heavy towing, elevated temperatures and challenging terrain, and remains fluid in sub-zero temperatures. Signature Series ATF provides reserve protection for vehicles that endure heavy use and abuse.

OE Synthetic Automatic Transmission Fluid

OE ATF (OTF, OTL) provides passenger-car/light-truck transmissions excellent wear protection, sludge resistance and extreme-temperature performance throughout original equipment manufacturer (OEM)-recommended drain intervals. It provides excellent cold-weather performance, guards against leaks and promotes smooth, shudder-free shifts.

AMSOIL Synthetic CVT Fluid

"CVT" stands for continuously variable transmission. A CVT transmission uses a pair of variable-diameter pulleys and a belt or chain to provide unlimited gear ratios, enabling the vehicle to smoothly adjust to the optimal gear ratio in real time. CVTs require a unique transmission fluid with specialized frictional characteristics designed to ensure the belt or chain remains in contact with the pulleys without slipping. AMSOIL Synthetic CVT Fluid (CVT) provides outstanding metal-to-metal frictional

properties and excellent protection and performance for CVTs throughout vehicle manufacturer-recommended drain intervals. In elevated heat, Synthetic CVT Fluid's thermally stable formulation guards against the harmful effects of thermal breakdown. It resists the formation of varnish that can threaten transmission performance and life.

AMSOIL 100% Synthetic DCT Fluid

Dual-clutch transmissions (DCTs) are automatic transmissions based on the architecture of manual transmissions. The complex system essentially consists of two manual transmissions in the same housing. As one clutch is engaged, the other readies the next appropriate gear, minimizing the interruption of power and improving performance and efficiency. A specially formulated fluid is required to maintain the high-performance output of these advanced transmissions. AMSOIL 100% Synthetic DCT Fluid (DCT) is designed to protect high-tech dual-clutch transmissions during the most intense, high-heat operating conditions. It provides the fast, smooth shifts drivers expect. AMSOIL Synthetic DCT Fluid resists the extreme heat in today's high-temperature DCTs to provide complete protection for gears, bearings and other vital parts. Its high film strength and anti-wear/extreme-pressure additives are specifically designed to protect the metal surfaces of DCTs.

Transmission fluid is a vital part of vehicle performance. It's important to make it a part of your maintenance routine to avoid reduced performance and expensive repair bills.





Referral # 779

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Ordering Tips - Commercial accounts get free freight with orders of \$400 (\$450 Can.) or more. If your order total is less than \$400 (\$450 Can.), a flat shipping rate of \$13.99 (\$14.99 Can.) will apply.

To order: Call 1-800-581-5823 or log into the Commercial Account Zone at AMSOIL.com.

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CLEANER. FASTER. EASIER.

The AMSOIL easy-pack helps you access tough-to-reach fill holes. The flexible packaging makes changing fluid cleaner and faster, and eliminates the need for a pump.

Stay ahead of the curve with this revolutionary solution to challenging installations.

