



# SERVICE LINE

NEWS AND IDEAS FROM AMSOIL

## New AMSOIL Engine and Transmission Flush Prepares Both Engines and Transmissions for New Oil

### NOTES

#### AMSOIL Price Adjustment

The rapidly increasing costs of lubricant base stocks and additives have been well-documented over the past few months. Although virtually all lubricant manufacturers implemented price increases in January and February, AMSOIL held off. More recently, lubricant manufacturers have implemented 6 to 10 percent price increases on finished products effective June and July. AMSOIL makes every effort to maintain the lowest prices possible and has delayed raising prices for as long as possible. Due to the ever-increasing costs of raw materials, however, AMSOIL is forced to implement a 3 to 6 percent price adjustment in the U.S. effective August 1. Due to fluctuations in the exchange rate, Canadian prices will remain unchanged at this time. Even with a minimal price adjustment, AMSOIL synthetic lubricants remain the best and most cost-effective choice on the market, saving customers money through extended drain intervals, reduced wear and maintenance and increased fuel efficiency.

Engineered for both gasoline and diesel engines and automatic transmissions, new AMSOIL Engine and Transmission Flush (FLSH) helps restore operating efficiency, increase fuel economy and reduce emissions. Its potent formula cleans sludge and deposit build-up, promoting lower operating temperatures and reduced oil consumption. Detergent-based AMSOIL Engine and Transmission Flush is safe on parts and can be easily disposed of with waste oil.

#### Helps Restore Efficiency

New engines and transmissions run more efficiently, but gather harmful deposits over time that cause power and performance loss. Stop-and-go driving, prolonged idling, short trips that do not allow the engine to reach full operating temperature, towing, ingestion of airborne dirt, fuel dilution, water condensation and oxidized oil all can promote sludge build-up. As it settles, sludge clogs narrow oil passages, restricting oil flow to vital parts, especially in an engine's upper valve-train area.

In transmissions, deposits can form on clutch plates, causing hesitation and erratic shifting. Ultimately clutch glazing can set in, reducing the life of the transmission.

Installing new oil or transmission fluid into dirty equipment may not be enough to remove deposits and increase efficiency. The detergents and dispersants in some lubricants may not be able to handle leftover sludge and deposits, and the new lubricant soon becomes unfit for service, accelerating the formation of even more harmful deposits.

#### AMSOIL Engine and Transmission Flush Benefits

Unlike many flush products, AMSOIL Engine and Transmission Flush features a multi-use



formulation that dissolves and disperses sludge, varnish and deposits in both engines and automatic transmissions. Its advanced detergent-based formula provides safe cleaning action, and can be disposed of with waste oil. AMSOIL Engine and Transmission Flush is compatible with both petroleum and synthetic oils and it prepares vehicles for installation of AMSOIL synthetic lubricants. It represents the first step toward restoring equipment to top-notch performance, providing the following benefits in only one treatment:

#### Gasoline and Diesel Engines

- Helps loosen sticky valves and rings, minimizing blow-by and reducing emissions
- Promotes lower operating temperatures through deposit removal
- Easy disposal
- Helps quiet lifter noise

#### Automatic Transmissions

- Cleans deposits in oil cooler and ports
- Clears fluid passages
- Cleans deposits from clutch plates, helping improve erratic shifts
- Promotes smoother operation and transmission life through reduced shift delay

#### Applications

AMSOIL Engine and Transmission Flush is recommended for diesel and gasoline engines and automatic transmissions. It is not recommended for CVT transmissions or differentials.

#### Suggested Uses

- After an antifreeze leak
- After running conventional lubricants

# AMSOIL Adds to Synthetic Polymeric Grease Line

**New AMSOIL grease brings synthetic polymeric technology to the heavy-duty on-road market.**



New AMSOIL Synthetic Polymeric Truck, Chassis and Equipment Grease (GPTR1, GPTR2) delivers excellent wear protection and extreme-pressure performance over extended service intervals in medium- and heavy-duty applications. It combines select base oils, proprietary synthetic polymeric chemistry, an advanced additive package and a lithium-complex thickener for excellent impact resistance, reliable contaminant control and maximum longevity.

## **Extreme Impact Resistance**

Greasable components on heavy-duty trucks and equipment regularly operate in severe-service, extreme-pressure environments. Frequent high-load operation increases the potential for grease to pound out, which can leave greased components vulnerable to increased wear and corrosion. AMSOIL Truck, Chassis and Equipment Grease is formulated to deliver maximum pound-out resistance. Its exceptional adhesion and cohesion properties help it stay in place to seal out water and contaminants and provide a protective barrier between metal components.

## **Long Service Life**

Most trucking companies work to maximize the length of time tractors are on the road. Inferior greases are not engineered to perform over extended service intervals, squeezing out of place and leaving components unprotected. AMSOIL Truck, Chassis and Equipment Grease is engineered to remain intact for maximum protection over extended service intervals. Owners/operators can be assured their equipment is protected when the job demands additional time on the road between maintenance checks.

## **Superior Rust and Corrosion Protection**

Over-the-road trucks and commercial equipment operate in all types of weather. Water, snow and ice are encountered regularly, and they combine with salt and other road-deicing chemicals to promote accelerated rust and corrosion on chassis and fifth-wheel components. AMSOIL Truck, Chassis and Equipment Grease clings tenaciously to metal surfaces, helping to keep rain, snow and other corrosive contaminants from penetrating greasable components. It is formulated with an advanced

additive package designed to combat the harmful effects of roadway contaminants, helping components last longer and saving money.

## **Maximum Extreme-Pressure Protection**

AMSOIL Synthetic Polymeric Truck, Chassis and Equipment Grease is engineered for maximum protection in extreme-pressure applications. It features a sophisticated additive package and exclusive synthetic polymeric technology designed to provide long-term protection for heavily loaded components.

## **Cost-Effective Choice**

AMSOIL Synthetic Polymeric Grease offers enhanced protection for extended component life, reducing replacement costs. In addition, its long service life reduces the need for frequent re-application (or requires less grease at each servicing), reducing maintenance costs.

## **Applications**

AMSOIL Synthetic Polymeric Truck, Chassis and Equipment Grease is recommended for heavy-duty over-the-road tractors and trailers, delivery fleets, dump trucks, refuse haulers, utility fleets, emergency service vehicles, sewer and septic trucks, snow removal vehicles, wreckers, municipal service vehicles, equipment haulers, cement mixer trucks, airport support vehicles and more.

AMSOIL Synthetic Polymeric Grease provides exceptional performance in heavily loaded chassis grease points, wheel bearings, axle assemblies, universal joints, pivot pins, fifth-wheel hitch plates, steering linkages, spring pins, king pins, ball joints, water pump bearings and other greased heavy-duty components.

## **Compatibility**

AMSOIL Synthetic Polymeric Truck, Chassis and Equipment Grease is compatible with many other types of grease. However, for best results, the equipment should be cleaned of the old grease or flushed with a liberal amount of AMSOIL Synthetic Polymeric Grease while the mechanism is in operation. Closely monitor the system for any inconsistencies.

# Restore Peak Performance in Small Engines and Powersports Equipment

Degraded fuel presents a major maintenance issue in small engines and powersports equipment. It can form varnish, gum and insoluble debris that clog carburetors, fuel injectors and fuel filters, and carbon buildup can form on the tops of pistons that leads to pre-ignition, rough idling and poor throttle response. Fuel-related problems are only expected to intensify in the coming years as the ethanol content in pump gasoline continues to increase.



New AMSOIL Quickshot SE (AQS) is a premium fuel additive formulated to thoroughly clean and restore peak performance in small engine and powersports equipment fuel systems. It also stabilizes fuel between uses and during short-term storage periods. Its revolutionary technology focuses on three major fuel-related issues plaguing small engines and powersports equipment: ethanol, water and dirty pump gas.

## Ethanol

Ethanol in fuel has a tendency to absorb water and separate from the gasoline, sinking to the bottom of the gas tank, where it quickly degrades and creates gum, varnish and other insoluble debris that can plug fuel flow passages and negatively affect engine performance. When this ethanol/water mixture is pulled into the engine, it creates a lean burn situation that increases combustion chamber temperatures and can lead to engine damage. AMSOIL Quickshot SE is designed to keep water dispersed throughout the fuel tank, moving it out as a normal part of operation and decreasing the chance of ethanol separating from the gasoline.

Quickshot SE was tested in fuel containing 10 percent ethanol. Controlled plugging of injectors showed a 70 percent flow improvement, while oxidation stability improved 44 percent over untreated fuel.

## Water

Water finds its way into gas tanks through condensation in tanks open to the atmosphere, gas pumps and other environmental conditions, and if left untreated, will cause a myriad of starting, performance and corrosion problems. By keeping water dispersed in tiny molecules and safely moving it out of the tank through the combustion chamber, Quickshot SE helps maintain engine performance and protects against damaging corrosion.

## Dirty Gasoline

Dirty gasoline causes fuel system gumming and varnish, as well as piston and combustion chamber deposits. Although all gasoline sold in the U.S. is formulated with a lowest additive concentration (LAC) level of detergent additives, these low detergent levels are not enough to prevent deposits from building up on critical fuel system components. Quickshot SE contains unique chemistry that quickly detaches and carries away deposits and buildups in fuel systems, injectors and carburetors, while also cleaning hard-to-remove deposits on piston tops, spark plugs and other combustion chamber parts.

## Applications

Quickshot SE is recommended for use in all two- and four-stroke gasoline-powered engines, including motorcycles, snowmobiles, boats, personal watercraft, ATVs, edgers, tillers, mowers, snowblowers, chainsaws, generators and farm and construction equipment. P.i. Performance Improver remains the superior choice for passenger vehicle applications.

## Recommendations

Quickshot SE is designed for an initial clean-up dose of 8 oz. per 6 gallons of gasoline, followed by 8 oz. per 12 gallons thereafter.

