



Tech Bulletin #: TB-H60	Part Number: H60, H60-1, H60-5, H60-55
Date Issued: December 28, 2018	Date Revised: n/a
Bar's Leaks® Hydraulic Seal™ Stop Leak & Conditioner	Size: 32 oz, 1-gallon, 5-gallon, 55-gallon

## Hydraulic Seal Stop Leak & Conditioner

Modern hydraulic systems work under extreme conditions and this can be compounded from leaks requiring continual topping-off of fluid, not to mention running the system low, which can also increase the fluid temperature, causing system damage. Unscheduled maintenance from leaks, including checking fluid level, adding fluids, or repairing leaks costs time and money. Also, you have the environmental impact of all that fluid leaking on the ground, or into the water.

Hydraulic Seal contains a premium high quality durable field proven zinc based additive package along with viscosity modifiers to restore thermal stability and anti-wear additives in the hydraulic system. This additive package has been tested to provide excellent results in Group I, II and III OEM & aftermarket hydraulic petroleum and synthetic fluids. Reduced wear also reduces contamination, heat and downtime, while also improving equipment and fluid life. Additional rust and oxidation inhibitors provide stability improvements which reduces the formation of sludge, varnish and acids keeping the system clean extending service life. Can be used in tractor or equipment with wet brake systems. CAUTION: Do not use in DOT 3, 4, 5 hydraulic brake systems.



Multi-grade, multi-viscosity, multi-functional formulation is designed and approved to work in a wide range of climates with multiple hydraulic oil grades including ISO22, ISO32, ISO46, ISO68, ISO100 and others. Special concentrated formulation does not thicken hydraulic fluid so current oil stays in grade, optimizing all-weather performance. Maintains fluid viscosity even at higher temperatures stabilizing hydraulic pressure.

Shear Stable Polymer additive and viscosity modifiers help keep higher hour and worn systems lubricated during operation and extended shut down times.

High flash point non-silicone type foam inhibitor provides superior foam inhibition to ensure smooth efficient operation and proper system lubrication. Good solubility characteristics will not negatively impact air entrainment.

Pour point depressant is designed to allow proper fluid flow in all temperature ranges.

Seal conditioners recondition and restore hard, brittle, shrunken and worn out seals, o-rings and gaskets reducing fluid leaks during operation. These additives work on both internal and external leaks. This same additive works to protect seals and prevent seals that contact the hydraulic fluid from shrinking and hardening. Chemical polymers work where other stop leaks fail to seal leaks that are caused by normal usage. This includes small wear grooves and pits in the shafts. The polymer forms a film between the seal and the shaft, helping to preventing leaks. Hydraulic Seal works on many elastomer types including polyacrylate elastomers like n-butyl acrylate and Nitrile Rubber (NBR Nitrile Butadiene Rubber, Buna-N).

Developed for both low and high pressure hydraulic systems in industrial and mobile applications.

# BAR'S LEAKS® TECHNICAL BULLETIN (CONTINUED)

## Hydraulic Seal Stop Leak & Conditioner

### **Safe To Use On:**

Agricultural and Farm  
Construction Equipment  
Factories  
Forestry  
Industrial Systems  
Machine Tools and Presses  
Marine  
Mining  
Waste Management  
Leaks

### **Works On:**

Dump Trucks  
Earth Movers and Excavators  
Loaders  
Forklifts  
Refuse  
Tractors  
Hydraulic Elevators, Hoists and Lifts  
Jacks  
Snow Plows

### **Repairs:**

Pump Seals  
Control Valve Seals  
Actuators  
Rams  
Cylinders  
O-ring Boss Hose Fittings  
Hydrostatic Transmissions  
Seals and O-rings  
Other Hydraulic Fluid

### **Features:**

Demulsifiable Detergents  
High Dielectric Strength

### **Benefits:**

Superior Rust and Yellow Metal Corrosion Protection  
Anti-foam Protection  
Good Low Temperature Flow Properties  
Provides maximum antiwear protection for pumps, motors, valves and other critical hydraulic components  
Outstanding hydrolytic, oxidative and thermal stability  
Exceptional Wet and Dry Filterability  
Excellent shear stability and stay-in-grade performance  
Multi-viscosity characteristics allow use in wide range of ambient temperatures and operating conditions.

### **Instructions For Use**

- 1) Check level of hydraulic fluid when system is at normal operating temperature.
- 2) Add the correct amount of product per dosage chart. Do not overfill.
- 3) Run equipment for at least 15 minutes to mix thoroughly with fluid and activate product to start working.
- 4) Check hydraulic fluid level to see if leak has stopped. Old accumulation of fluid on outside of system may drip for a few days after leak has stopped.
- 5) Most leaks are sealed within a few hours of application and usage. If leak continues, mechanical attention is needed and replacement of seals may be required.

### **Dosage**

Normal—Add one ounce of Bar's Leaks Hydraulic Seal for every quart of hydraulic fluid capacity.  
Worn—In extremely worn systems use up to 2 ounces per quart of fluid capacity.  
Preventative—For preventative maintenance, use 1/2 ounce per quart of fluid capacity.

# BAR'S LEAKS® TECHNICAL BULLETIN (CONTINUED)



## Hydraulic Seal Stop Leak & Conditioner

### Part Numbers / Sizes / Package / Treat Amounts

H60	32 oz	Bottle	Treats 8 gallons
H60-1	1-gallon	Jug	Treats 32 gallons
H60-5	5-gallon	Pail	Treats 160 gallons
H60-55	55-gallon	Drum	Treats 1760 gallons



TEST	TEST METHOD	TYPICAL PROPERTIES
Viscosity, cSt. @ 40°C	ASTM D445	45 cSt
Viscosity, cSt. @ 100°C	ASTM D445	7.2 cSt
Viscosity Index	ASTM D445	119
Flash Point COC	ASTM D92	221 °C (430°F)
Pour Point	ASTM D97	-33 °C (-27.4°F)
Dielectric Strength	ASTM D877	36.08 kV
Water Emulsion Characteristics	ASTM D1401	42-38-0 (10) Pass
Color	ASTM D1500	1.3
Total Acid Number TAN	ASTM D664	0.44
Rust Test A & B	ASTM D665 A/B	Pass
Foaming Tendency	ASTM D892	Pass
Filterability with Water	TP-02100	Pass
Filterability without Water	TP-02100	Pass
Parker Dennison	HF-0, HF-1, HF-2	Pass
Eaton	03-401-201	Meets
Stay in Grade Viscosity	D445	ISO 22, 32, 46, 68, 100