



## Technical Data Sheet

Revised: 5/26/2020

### **HOT SHOT'S SECRET SHIFT RESTORE (formerly TRANSMISSION STICTION ELIMINATOR) Automatic Transmission Restorative**

#### **Product Overview**

The requirement for higher performance gear and transmissions lubricants has increased considerably in recent years due to the introduction of new and sophisticated transmission systems. The transmission fluid serves as a hydraulic fluid, a heat transfer fluid and lubricating fluid. As the transmission is used, varnish and sticky residue can form inhibiting the performance of the fluid. The Shift Restore is a low viscosity ester which has been shown to dissolve additives that have deposited on the metal surfaces in the valve body. This feature helps your transmission fluid to last longer and perform better by keeping the additives in solution. An added benefit is a reduction in temperature due to less friction on the critical moving parts. Our high performance ester formula is a unique lubricity and cleaning agent, featuring a negatively charged synthetic esters that tenaciously attaches itself to all metal parts that it comes in contact with inside the transmission. The strong polarity pulls deposits off the metal surfaces and puts them back into solution. The metal in a transmission is nearly always positively charged while Shift Restore is negatively charged. Attachment of a thin layer of Shift Restore to all metals is natural and not dependent upon temperature, pressure or anything else.

It can be said that esters slide upon themselves much more freely than what oil does. When a sufficient amount of esters are added to oil, the result is that the oil becomes as slippery as esters themselves.

#### **Applications and Uses**

Studies have shown that a 5% concentration of the Shift Restore (1.6 oz per quart) is needed to reach maximum friction reduction. An additional benefit of seal and ring protection is achieved when the amount of Shift Restore is raised to 7.5% (2.4 oz per quart).



- Dissolves varnish and additive residue
- Reduces coefficient of friction
- Improves fuel economy (guaranteed in truck fleets)
- Wear protection
- Reduces operating temperature
- Extends oil drain intervals
- Prevents rust and corrosion
- Reduces emissions
- Reduces wear
- Smoother gear changes
- Reduces noise and vibration
- Protects rubber seals
- Swells seals 1 1/2 % to 3% and then lubricates them to prevent wear
- Reduces oil leakage
- Fixes automatic transmission shift cycle

**Directions for Use**

Using the chart below, add the correct dosage of Shift Restore at every fluid change to maintain optimal benefits

TRANSMISSION FLUID CAPACITY QTS.	TRANSMISSION FLUID CAPACITY OZ.	SHIFT RESTORE (FRICTION REDUCTION)	SHIFT RESTORE (SEAL PROTECTION)
1/2	16 oz.	.8 oz.	1.2 oz.
1	32 oz.	1.6 oz.	2.4 oz.
2	64 oz.	3.2 oz.	4.8 oz.
3	96 oz.	4.8 oz.	7.2 oz.
4	128 oz.	6.4 oz.	9.6 oz.
5	160 oz.	8.0 oz.	12.0 oz.
6	192 oz.	9.6 oz.	14.4 oz.
8	256 oz.	12.8 oz.	19.2 oz.
10	320 oz.	16.0 oz.	24.0 oz.
12	384 oz.	19.2 oz.	29.0 oz.
14	448 oz.	22.4 oz.	33.6 oz.
16	512 oz.	25.6 oz.	38.0 oz.
20	640 oz.	32 oz.	48.0 oz.



Shift Restore is available in:

- 1 quart (32oz) bottle
- 1 quart 12-pack
- 1 gallon jug
- 1 gallon 4-pack

#### Typical Properties

Property or Test	Result
Density @ 20°C (68°F)	.94
Viscosity @ 100° C (212°F)	4.5 cSt
Flash point (open cup), °F	253°C (487°F)
Pour point, °C (°F)	-50°C (-58°F)
Cloud point, °C (°F)	-39°C (-38°F)
Appearance	Light Red Liquid

The Safety Data Sheet is available at  
<http://www.hotshotsecret.com/print-documents/>.