

Highly Friction Modified Automatic Transmission Fluid Supplement U.S. Patent: 5,282,989





DESCRIPTION:

LUBEGARD® HIGHLY FRICTION MODIFIED AUTOMATIC TRANSMISSION FLUID (HFM-ATF) SUPPLEMENT enhances DEXRON® II, III / MERCON® ATF with additional friction modifiers. The enhanced DEXRON® II, III / MERCON® ATF is a replacement for Original Equipment Manufacturers fluids such as; Honda Genuine, Toyota Type T, T II, T IV, Mopar ATF +3 (7176), ATF +4 (9602) and all other highly friction modified ATF's.

The LUBEGARD HFM-ATF formulation is based on the same patented technology found in LUBEGARD ATF Protectant which has gained worldwide acceptance in the professional aftermarket transmission repair industry and is also used, endorsed, designated and recommended by multiple Original Equipment Manufacturers (OEM)'s.

BENEFITS:

- Converts DEXRON® II, III / MERCON® ATF into a Highly Friction Modified ATF
- Transmissions perform more efficiently at lower operating temperatures
- Anti-chatter in clutch packs (allow penetration overnight for maximum benefit)
- Anti-shudder with converter clutches (allow penetration overnight for maximum benefit)
- Prevents overheating
- Assists in freeing hung-up governors
- Keeps valves free
- Provides for smoother shifting and reduces drive train power losses

- Helps modify harsh shifts and makes them quicker in duration
- Prevents costly comebacks
- Maintains proper ATF viscosity in torque converters
- Inhibits transmission fluid foaming and oxidation, thereby extending fluid life
- Reduces transmission wear
- Contains same benefits as LUBEGARD Automatic Transmission Fluid Protectant (Red Box - 60902)



Call for free ATF Conversion Chart.
Voted #1 Resource!



Use LUBEGARD HFM-ATF Supplement (Black Box) ONLY for applications that require highly friction modified fluids. Also do not use in CVT applications. Use in transmissions that do not have this requirement may cause excess wear and clutch slippage. Use LUBEGARD Automatic Transmission Fluid Protectant (Red Box - 60902) in all other ATF applications.



LUBEGARD WITH LIQUID WAX ESTERS (LXE)

Liquid Wax Esters (LXE®) are the most important component in our automatic transmission supplement. Liquid wax esters are unique because of their natural lubricity, high viscosity index, high flash and fire points. They have the ability to not be affected by repeated heating to temperatures as high as 570°F. They give automatic transmission fluid the extra lubricity needed because of a transmission's unique frictional requirements. They also improve heat conductivity, suppress foaming and, consequently, reduce transmission operating temperature. The patented technology found in this product is a direct replacement for sperm whale oil used extensively in automatic transmission fluids before the enactment of the Endangered Species Act of 1972.

BASE OILS

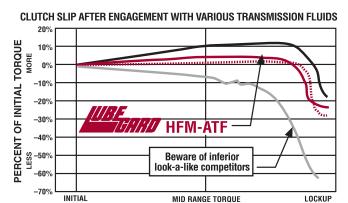
The base oils in ILI's HFM-ATF Supplement consist of high viscosity index petroleum base stocks with excellent heat resistance. Added to this material is polyalphaolefin (PAO) synthetic fluid which also has excellent heat resistance, a high viscosity index, a low pour point, and a high flash point. These base oils give our additive the approximate viscosity of an automatic transmission fluid. No viscosity index improvers are used because we believe that these products are undesirable due to their tendency to shear and lose viscosity when exposed to extended use in an automatic transmission.

SUPERIOR ADDITIVES

The combination of these components provides excellent lubrication, reduced operating temperatures where overheating is a problem, and allows transmissions to operate at their optimum.

Overheating is considered to be the #1 cause of transmission failure. Experts have reported that for each 20°F drop in fluid temperature, the life of the transmission fluid is doubled. Although the optimum temperature range is considered to be 150 to 190°F, it is a well known fact that front-wheel drive transmissions may operate at temperatures as high as 225 to 250°F. LUBEGARD is recommended because it will assist in reducing transmission operating temperature and extend transmission life.

TESTING DATA



The chart above shows: DEXRON® III/ MERCON® ATF alone LUBEGARD® HFM-ATF Supplement with DEXRON® III/ MERCON® ATF Chrysler Mopar® ATF +3™ (7176) Inferior look-a-like competitor

MAKE	MANUFACTURER'S ATF	MAKE	MANUFACTURER'S ATF
Acura	Honda Genuine/ Z-1	Kia, Hyundai, Mitsubishi	SP III ATF
Chrysler	MOPAR® ATF+3™(7176) ATF + 4™ (9602)	Lexus	Toyota Type T, T II & T IV
Chrysler/Dodge	MOPAR® ATF+3™(7176) ATF + 4™ (9602)	Mitsubishi	Mitsubishi Diamond SP/SP III
Eagle	MOPAR ® ATF+3 [™] (7176) ATF + 4 [™] (9602)	Plymouth	MOPAR ®ATF+3™(7176) ATF+4™(9602)
Honda	Honda Genuine/ Z-1	Saturn	Saturn Transaxle Fluid
Hyundai	SP III	Sterling	Sterling ATF
Jeep	MOPAR ® ATF+3 [™] (7176) ATF+4 [™] (9602)	Toyota	Toyota Type T, T II & T IV

TYPICAL PROPERTIES:

Viscosity (40°C)	36-40cST
Viscosity (100°C)	7-10cST
Flash Point	
Pour Point	Below 0°C
Viscosity index	Above 175
API Gravity (60°F)	25-29

AVAILABILITY:

Stock No. Unit Size Case Weight/QNTY 61910 10oz. 9.20 lbs./(12/case)

Also available for bulk shipments.

LUBEGARD RATIO IN AUTOMATIC TRANSMISSIONS

• For normal applications , add 1 oz. (29.6 mL) per qrt. (L) of DEXRON® II/III/ MERCON® ATF to the total transmission capacity (including torque converter) with motor idling in park.

Always check owners manual or dip stick for required volume and fluid type.