

HYDRAULICS

Operation Conditions

⚠ CAUTION

DO NOT use ATF Type F fluid. Type F ATF is not compatible with Lippert hydraulic system seals. Seals will not work properly.

The following automatic transmission fluid (ATF) recommendations for use in Lippert hydraulic systems are based upon hydraulic system operation in various environmental air temperatures.

Hydraulic system operation in climates at or below 40 degrees F (4 degrees C) may result in the following:

- Slow operation during extension/retraction
- Incomplete retraction of jacks during Auto Retract procedure

NOTE: A visual inspection of the jacks in the retract position is recommended after completing Auto Retract.

1. **Above Freezing** - Operation at air temperatures routinely above 0 °C (32 °F)—above freezing—which also covers most initial OEM fills.
 - A. Dexron® III/Mercon® ATF
 - B. Super ATF from Phillips 66
 - C. Mercon® V ATF
 - D. Dexron® VI ATF
 - E. PetroBlend (Mason City, IA) PHO 0022S (synthetic group 3 base blend)
 - F. Bellman all temp 22 (Bremen, IN)
 - G. Or any ATF or hydraulic fluid with a pour point lower than -42 °C (-44 °F).
2. **Below Freezing** - Operation at air temperatures routinely below 0 °C (32 °F)—below freezing.
 - A. Mobil 1™ full synthetic ATF
 - B. Royal Purple® full synthetic ATF
 - C. Valvoline™ full synthetic ATF
 - D. Amsoil® full synthetic ATF
 - E. PetroBlend (Mason City, IA) PHO 0022S (synthetic group 3 base blend)
 - F. Bellman all temp 22 (Bremen, IN)
 - G. Multivis (all temperature) ISO 22 hydraulic fluid
 - H. Mobil 1™ 0W-16 synthetic motor oil
 - I. Or any ATF or hydraulic fluid with a pour point lower than -45 °C (-49 °F).
 - J. Or any ATF or hydraulic fluid (conventional or synthetic) with a pour point lower than -46 °C (-51 °F).

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3. **Extreme Cold** - Operation at air temperatures routinely below -18 °C (0 °F)—extreme cold.
- A. Kendall® Hyken Glacial Blu
 - B. Benz oil (Milwaukee, WI) Flomite 530
 - C. Mobil 1™ 0W-16 synthetic motor oil
 - D. Or any conventional or synthetic ATF or hydraulic fluid with a pour point less than -57 °C (-71 °F) and viscosity less than 2850 cP (3282 cSt) @ -40 °C (-40 °F).