

# TECH TIP #34 SEPTEMBER 16, 2024

# **STEMCO Lubricant Criteria**

#### PPS+ AND PPS WHEEL END SYSTEMS

Lubricants currently approved for use in STEMCO's PPS+ and PPS wheel end systems all meet the following criteria:

- The lubricant must be specified for wheel end or drive applications.
- Lubricant Type/Grades
  - Oil Synthetic/Mineral

Meets the requirements of SAE J2360 (MIL-PRF-2105E) or API GL- 5/MT-1. Example of weights:

- > 75W-90, 80W-90
- > 80W-140, 85W-140
- Semi Fluid Grease
  - ▶ Recommended Minimum Operating Temperature Limits of –20F to 325F [-29C to 162C]\*

**Note:** grease condition needs to be reviewed periodically during storage (i.e. separation and proper mixing) contact your lubricant provider for lubricant audit of quality.

**Note:** grease condition and fill needs to be reviewed following RP631 recommendations.

\*Lubricants on STEMCO's approved list that do no meet these temperature limits have been thoroughly tested by STEMCO to ensure reliable performance.

### TRIFECTA PRE-ADJUSTED WHEEL END SYSTEMS

STEMCO's Trifecta<sup>™</sup> pre-adjusted tractor / truck wheel end systems are designed and approved for oilbath applications only. Use of semi fluid or hard pack grease will result in loss of warranty coverage. Please reference the "Oil Synthetic/Mineral" section above for currently approved oil specifications.

Any premium lubricant exhibiting the above characteristics and is listed by the lubricant manufacturer as a long life lubricant is approved for use. Both product specification information and lubricant compatibility should be obtained from the lubricant manufacturer.

Lubricants used for the STEMCO standard 1-year packages must be typical hard pack grease, gear lube, or semi fluid greases designed for heavy duty wheel ends, such as those listed above.

STEMCO will not approve the use of its seals in wheel ends lubricated with 50 weight transmission lubes or motor oil. Wheel end performance can be compromised when these lubricants are used.

Fleet preference may play a part in the wheel end lubricant selection decision. Ultimately, the choice of wheel end lubrication is a customer decision and responsibility. Please follow all related Technology & Maintenance Council recommended practices for wheel end maintenance such as **RP 622, 624, 631, and 644.** 

Contact your STEMCO sales representative with questions or concerns.

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# **EXAMPLE LUBRICANTS**

# The following lubricants have been tested:

#### OIL

- Castrol Syntec 75W/90
- Chevron Delo Synthetic 75W-90
- Chevron RPM Universal Gear Lubricant 80W-90
- Eaton Roadranger 75W-90
- Kendall SHP 75W-90
- Lucas Synthetic SAE75W-90 Gear Oil
- Mobil Delvac Synthetic Gear Oil 75W-90
- Mobil HD Plus 80W-90
- Shell Spirax ASX 75W-90
- Shell Spirax HD 80W-90

## **SEMI FLUID GREASE**

- AMSOIL Semi-Fluid Synthetic EP Grease NLGI #00
- Castrol Syntec SHL #00
- Chevron Delo EP 00
- Chevron Delo SYN-GREASE SFE EP
- Newton Oil Heartland #0 Syn-Poly Semi-Fluid Grease
- Kendall EBL Semi Fluid Grease
- Phillips 66 Multiplex FS ELL Semi Fluid Grease
- J.O.S. Poly SH 0 (Jackson Oil & Solvents)
- Shell Gadus S5 V460C #00

