

# **An Important Word On Grease Compatibility**

## **What Grease Is:**

- Grease is essentially a distilled petroleum product in the form of mineral oil (or a synthetic) which has a thickening agent such as lithium, calcium, barium, sodium, or aluminum.
- Many of the thickeners will work for similar situations, but **when mixing greases with different thickeners, one must review compatibility**. Grease incompatibility will actually decrease the lubrication ability of the grease, and cause premature part failure.
- There may be other additives in the grease that impart special properties. These properties may be “high temperature”, “extreme pressure”, etc.

## **What We Use:**

- Our bearing supplier uses Shell Alvania 2
- Progressive uses Texaco Multifak EP 2
- EP means extreme pressure
- Both greases have:
  - A mineral oil base
  - A lithium thickener
  - The mineral oil has a NLGI Grade 2
  - Both greases are compatible with each other

## **Note:**

- If a thickener other than lithium is used, the existing grease will be contaminated and the lubrication properties may be lost.
  - If a synthetic base oil is used rather than a mineral base oil, the grease will again be contaminated and the lubrication properties may be lost
  - Molybdenum Disulfide (Moly) is an additive used in slow moving, extreme load applications. The particles in the “Moly” will actually increase bearing wear in a mower spindle. Our grease does not contain Moly.
  - The blade spindle temperature should never go above 120°F if properly greased; we do not recommend high temperature grease.
- A grease with these features is considered to be a “General Purpose Grease”. Use on all grease point locations on your Progressive Mower.

## **Our Recommendation for Grease Compatibility:**

The grease you use for the blade spindle assemblies must have these properties:

- NLGI grade 2
- Lithium thickener (NOT LITHIUM COMPLEX OR LITHIUM 12-HYDROXY)
- Kinematic Viscosity at 40°C is no greater than 190 cSt
- Dropping Point Less than 400° F
- General Purpose Grease, Not Heavy Duty
- No MOLY (molybdenum disulphide) additives in the grease
- No synthetic grease
- No High Temperature Grease
- Check the properties of the grease you wish to use with your supplier prior to use.

- Lubricate bearings with greases that are compatible.
- The bearing is filled initially with a NLGI grade 2 mineral oil using a lithium thickener.
- Ensure bearings are lubricated per the requirements in the manual or as shown on the mower.

There are many types of grease available on the market. Recommended brands are Shell, Texaco, Exxon, Mobile, and Chevron. Following the information given in this memo should result in using proper greases that are compatible without the risk of contamination.

There is no need to buy the most expensive grease, the proper grease tends to be inexpensive, and more additives do not necessarily make it better for use in the blade spindle. Since the grease you buy will be a “General Purpose” grease, you may use it on all grease locations on the mower. For your reference, the decals on your mower indicate grease points and the required frequency of service.

## **Other Compatible Greases:**

Castrol Spheerol EPL2

Petro-Canada Precision GP EP2

Progressive suggests printing off this guide and giving it to your grease supplier so they can properly match the grease properties. Simply matching the name of the grease can still give you the incorrect grease.