

# LEESON Electric Corporation

## 600 Series Worm Gear Speed Reducers

### Installation, Lubrication and Maintenance Instructions

#### ! WARNING !

Read ALL instructions prior to operating reducer, injury to personnel or reducer failure may be caused by improper installation or operation. This reducer is not a fail-safe device or a self-locking device.

**Rotating equipment is potentially dangerous and should be guarded at all times.**

#### INSTALLATION

Your LEESON speed reducer should be accurately aligned and bolted securely to a flat, level surface. Check output shafts to ensure proper tension and alignment of loads. Refer to factory for any non-standard mounting positions.

#### CAUTION

For safety, purchaser or user should provide protective guards over all shaft extensions and any moving apparatus mounted thereon. The user is responsible for checking all applicable safety codes in his area and providing suitable guards.

#### CAUTION

If the reducer is painted, extreme care should be taken to mask the shaft extensions and the rubber seals. Paint on the shaft adjacent to the seal or on the seal lip will cause oil leakage.

#### SHEAVES and SPROCKETS

When mounting sheaves or sprockets, the center of the load should be located as close to the reducer as possible. Excessive overhung loading could result in early failures of bearing or shaft. Refer to general catalog for overhung load ratings.

The system of connected rotating parts must be free from critical speed, torsional, or other type of vibration, regardless of how induced. The responsibility for this system analysis lies with the purchaser of the speed reducer.

#### "C" FLANGE — QUILL INPUT STYLE

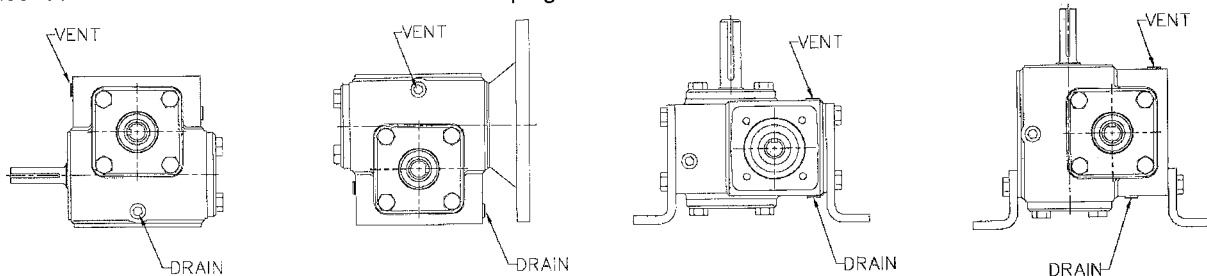
Discard motor key. Use only special key provided with reducer.

**Step #1:** Position key in reducer input worm bore. Apply anti seize compound (packet shipped with reducer) to the motor shaft. Line up the key with the motor key slot and slip the motor shaft into the reducer worm bore.

**Step #2:** Tighten the supplied 4 bolts with lockwashers evenly for a solid fit between motor and "C" flange.

#### STANDARD MOUNTING POSITION and VENT PLUG LOCATION

Before putting unit into operation, substitute the vent plug (shipped with gearbox) for the solid plug at the position desired. Arrows indicate the recommended vent plug locations.



Vertical mounting is not recommended with input shaft (solid or quill) down.



# Lubrication and Maintenance Instructions

## LUBRICATION

The LEESON reducer is properly filled at the factory with sufficient lubricant for all mounting positions. The reducer may be mounted in any catalog approved mounting position without modification or changing oil level.

## CAUTION

**For input speeds under 900 RPM, consult factory for lube requirements.**

**Lubricant:** The lubricant is MOBIL SHC-634, a synthesized hydrocarbon formulated for extremely long life. Do not add or remove any oil at installation or change oil after break-in. Change oil only when performing maintenance that requires gearbox disassembly.

If oil must be replaced, use only MOBIL SHC-634.

Do not confuse MOBIL SHC-634 with MOBILGEAR 634. MOBILGEAR 634 is an EP type gear oil **NOT** suitable for use in the 600 series worm gear reducer.

## CAUTION

In the food and drug industry (including animal food), consult the petroleum supplier for recommendations of lubricants which are acceptable to the Food and Drug Administration and/or the authoritative bodies having jurisdiction.

## MAINTENANCE

Inspect vent plug periodically to insure it is clean and operating.

Your LEESON gear reducer has been tested and adjusted at the factory. Dismantling or replacement of components must be done by LEESON to maintain the warranty.

## CLASS of SERVICE

All capacity ratings are based on American Gear Manufacturers Association (AGMA) standards. Load conditions must be within cataloged ratings published in the LEESON catalog (available upon request).

## WARRANTY

Contact factory or your LEESON sales rep. for warranty questions.



**LEESON ELECTRIC CORPORATION**

BOX 241 GRAFTON, WISCONSIN 53024-0241 U.S.A.