Installation and Maintenance Instructions

Retain These Safety Instructions For Future Use

INSPECTION OF UNIT

Thoroughly inspect the equipment for any shipping and handling damage before accepting shipment from the freight company. If any of the goods called for in the bill of lading or express receipt are damaged or the quantity is short, do not accept until the freight or express agent makes an appropriate notation on your freight bill or express receipt. If any concealed loss or damage is discovered later, notify your freight carrier or express agent at once and request him to make an inspection. We will be very happy to assist you in collecting claims for loss or damage during shipment; however, this willingness on our part does not remove the transportation company’s responsibility in reimbursing you for collection of claims or replacement of material. Claims for loss or damage in shipment must not be deducted from the NORD Gear invoice, nor should payment of the NORD Gear invoice be withheld awaiting adjustment of such claims, as the carrier guarantees safe delivery.

If considerable damage has been incurred and the situation is urgent, contact the nearest NORD Gear Sales Office for assistance. Please keep a written record of all communications.

RECORD NAMEPLATE DATA

Locate the gear reducer nameplate and record all nameplate data for future reference.

<table>
<thead>
<tr>
<th>SK</th>
<th>S/N</th>
</tr>
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<tbody>
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<table>
<thead>
<tr>
<th>RATIO</th>
<th>MAX TORQUE</th>
<th>RPM</th>
<th>MTG. POS</th>
</tr>
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</table>

STORAGE

PROPER STORAGE UNTIL INSTALLED

Keep unit in a dry, temperature controlled area. If stored other than said, long-term storage methods must be applied to the unit including complete fill with lubricant. Protect machined surfaces and rotate shafts periodically. Prior to putting unit into service, drain lubricant and refill to proper level as determined by the mounting position.

PROPER HANDLING OF THE UNIT

Exercise care to prevent damage to the unit when moving. Lift only at designed lifting points. Do not attach other machinery and lift by the unit lifting points. The lifting points are to be used to lift the unit only. Insure that adequate safety measures are taken to protect personnel during transportation. Protect the mounting surface from damage.
INSTALLATION OF UNIT

To ensure long service and dependable performance, an enclosed gear drive must be rigidly supported and the shafts accurately aligned. The following describes the minimum precautions required to accomplish this end.

FOUNDATION
The responsibility for the design and construction of the foundation lies with the user. The foundation must be adequate to withstand normal operating loads and possible overloads while maintaining alignment to attached system components under such loads.

MOUNTING POSITION
Unless a unit is specifically ordered for inclined mounting, the foundation must be level and flat. The lubrication system may not operate properly if the unit is not mounted in the position for which it is designed. It may be desirable to elevate the foundation to facilitate oil drainage.

CONCRETE FOUNDATION
If a concrete foundation is used, steel mounting pads and bolts of sufficient size to distribute the stress into the concrete should be grouted into the foundation.

STEEL FOUNDATION
If a structural steel foundation is used (i.e. wide flange beams or channels), a base plate or sole plate of suitable thickness should be used and should extend under the entire unit.

FOOT MOUNTED UNITS
Use shims under the feet of the unit to align the output shaft to the driven equipment. Make sure that all feet are supported so that the housing will not distort when it is bolted down. Improper shimming will reduce the life of the unit and may cause failure. Dowel pins may be installed to prevent misalignment and ensure proper realignment if removed for service.

SHAFT MOUNTED UNITS
Shaft mounted drives should be mounted as close to the driven equipment bearing support as possible to minimize bearing loads due to overhung load. Design of the joint connection between the torque reaction arm and the foundation is the user’s responsibility.

Hollow Shaft Diameter tolerance
Metric (mm)
\[
\begin{align*}
\leq \varnothing & 18 = +0.018/-0.000 \\
\varnothing & 18 \leq \varnothing 30 = +0.021/-0.000 \\
\varnothing & 30 \leq \varnothing 50 = +0.025/-0.000 \\
\varnothing & 50 \leq \varnothing 80 = +0.030/-0.000 \\
\varnothing & 80 \leq \varnothing 120 = +0.035/-0.000 \\
\varnothing & 120 \leq \varnothing 180 = +0.040/-0.000
\end{align*}
\]
Inch
\[
\begin{align*}
\leq \varnothing & 4.375 = +0.0010/ -0.0000 \\
\varnothing & 4.375 = +0.0015/-0.0000
\end{align*}
\]
Customer shaft diameter tolerances with keyed hollow shafts
Metric (mm)
\[
\begin{align*}
\leq \varnothing & 18 = +0.000/-0.011 \\
\varnothing & 18 \leq \varnothing 30 = +0.000/ -0.013 \\
\varnothing & 30 \leq \varnothing 50 = +0.000/ -0.016 \\
\varnothing & 50 \leq \varnothing 80 = +0.000/ -0.019 \\
\varnothing & 80 \leq \varnothing 120 = +0.000/ -0.022 \\
\varnothing & 120 \leq \varnothing 180 = +0.000/ -0.025
\end{align*}
\]
Inch
\[
\begin{align*}
\leq \varnothing & 1.500 = +0.000/-0.002 \\
\varnothing & 1.500 \leq \varnothing 2.500 = +0.000/-0.003 \\
\varnothing & 2.500 \leq \varnothing 7.000 = +0.000/-0.004
\end{align*}
\]
Shaft finish to be 125 micro inches or smoother.

Customer shaft diameter tolerance with Shrink Disc fit h6
Metric (mm)
\[
\begin{align*}
\leq \varnothing & 18 = +0.000/-0.011 \\
\varnothing & 18 \leq \varnothing 30 = +0.000/ -0.013 \\
\varnothing & 30 \leq \varnothing 50 = +0.000/ -0.016
\end{align*}
\]

Customer shaft diameter tolerance with Shrink Disc fit f6
Metric (mm)
\[
\begin{align*}
\leq \varnothing & 18 = +0.016/-0.024 \\
\varnothing & 18 \leq \varnothing 30 = +0.020/-0.029 \\
\varnothing & 30 \leq \varnothing 50 = +0.025/-0.036 \\
\varnothing & 50 \leq \varnothing 80 = +0.030/-0.043 \\
\varnothing & 80 \leq \varnothing 120 = +0.036/-0.051 \\
\varnothing & 120 \leq \varnothing 180 = +0.043/-0.061
\end{align*}
\]

Inch
\[
\begin{align*}
\leq \varnothing 0.750 = +0.0006/ -0.0011 \\
\varnothing 0.750 \leq \varnothing 1.125 = +0.0008/ -0.0013 \\
\varnothing 1.125 \leq \varnothing 2.000 = +0.0010/ -0.0016 \\
\varnothing 2.000 \leq \varnothing 3.000 = +0.0012/ -0.0019 \\
\varnothing 3.000 \leq \varnothing 4.750 = +0.0014/ -0.0023 \\
\varnothing 4.750 \leq \varnothing 7.000 = +0.0017/ -0.0027
\end{align*}
\]
Shaft finish to be 125 micro inches or smoother.

FLANGE MOUNTED UNITS
If a structural steel foundation is used (i.e. wide flange beams or channels), a base plate or sole plate of suitable thickness should be used and should extend under the entire unit. If a bulk head plate is used it should be of proper strength to minimize buckling distortions.

Flange Pilot ‘AK’ or ‘AK1’ tolerance
Metric (mm)
\[
\begin{align*}
\leq \varnothing & 18 = +0.012/-0.007 \\
\varnothing & 18 \leq \varnothing 30 = +0.013/-0.009 \\
\varnothing & 30 \leq \varnothing 120 = +0.014/-0.011 \\
\varnothing & 120 \leq \varnothing 230 = +0.016/-0.013 \\
\varnothing & 230 \leq \varnothing 315 = +0.000/-0.032 \\
\varnothing & 315 \leq \varnothing 400 = +0.000/-0.036 \\
\varnothing & 400 \leq \varnothing 500 = +0.000/-0.040
\end{align*}
\]

Inch
\[
\begin{align*}
\leq \varnothing 4.724 = +0.0000/-0.0005 \\
\varnothing 4.724 \leq \varnothing 7.087 = +0.0006/ -0.0004 \\
\varnothing 7.087 \leq \varnothing 9.055 = +0.0006/ -0.0005 \\
\varnothing 9.055 \leq \varnothing 12.402 = +0.0000/ -0.0013 \\
\varnothing 12.402 \leq \varnothing 15.748 = +0.0000/ -0.0014 \\
\varnothing 15.748 \leq \varnothing 19.685 = +0.0000/ -0.0016
\end{align*}
\]

BOLT STRENGTH
Bolt size, strength and quantity should be verified to insure proper torque reaction capacity whatever the mounting arrangement.

LUBRICATE SHAFTS
Both the hollow shaft and the driven shaft should be liberally lubricated before assembly. The unit must slide freely onto the driven shaft. Do not hammer or force the unit into place. For shrink disc, follow instructions below.
AXIAL RETENTION
Each drive shaft must be retained in place relative to the gear reducer. Or each gear reducer must be retained in place relative to the drive shaft. Either way NORD must recommends the use of shaft shoulders, locking collars or FIXING ELEMENTS to axially retain the shaft or gear reducer in position.

SET SCREWS
If set screws are used for axial retention, they should be tightened evenly. Flats may be filed on the driven shaft and a thread-locking adhesive used for more position retention.

SNAP RING RETENTION
Placing external snap rings on drive shafts must be performed with caution. The groove, which the snap ring fits into, may weaken the drive shaft causing premature failure. NORD does not recommend this type of shaft retention.

THRUSS PLATE
In applications, which are subject to high vibratory loads, a thrust plate will provide greater resistance to axial movement. Follow the manufacturer’s recommendations for assembly.

SHRINK DISC
If a shrink disc is used to secure a reducer hollow shaft to the driven shaft, follow this assembly procedure. Start with the shrink disc mounted onto the extension of the hollow shaft disc locking bolts loosen.
1. Clean reducer bore and mating solid shaft to be free of any lubricants or dirt.
2. Slide reducer onto the solid shaft until it is about half way through.
3. Lubricate the remaining portion of the solid shaft with a #2 grease or similar lubricant. This part will be located under the bronze bushing. Do not install grease under the shrink disc gripping area. Finish installing the solid shaft into the reducer hollow bore.
4. Finger tighten all shrink disc bolts. Now, moving a circular pattern, tighten each shrink disc locking bolt 1/4 to 1/2 turn. Do not use criss cross pattern. Continue tightening in the same circular direction with 1/4 or 1/2 turn increments until all bolts reach the specified bolt tightening torque. Bolt tightening torque is shown on the shrink disc label for the particular unit.
5. Run unit for 24 hours, then retighten shrink disc locking bolts to the proper bolt torque as indicated above.

TORQUE REACTION ARM
On the shaft mount ‘Clincher’, torque is reacted through the integral torque tab, which is part of the casting. Commonly, NORD’s optional RUBBER BUFFER bushings are installed on each side of the integral torque tab to dampen torque shocks and allow for mis-alignment received from the machinery during operation.

Torque arm connection fabrications should always be mounted perpendicular to a line through the output shaft center and the point at attachment of the torque arm to the unit housing. In this position the minimum load on the attachment structure arm will be experienced. The attachment structure must be rigid and may not deflect under any load. Doing so will place extra loads on the output bearings of the reducer.

PRIME MOVER MOUNTING
Align the prime mover to the reducer-input shaft using shims under the feet. Make sure that the feet are supported. Dowel the prime mover to its foundation.

SHAFT CONNECTIONS
When connecting shafts to either the input or output of the reducer, consider the following instructions.

FITS
Clearance or interference fits for coupling hubs should be in accordance with ANSI/AGMA 9002-A86 or as follows.
COUPLING ALIGNMENT
Shaft couplings should be installed according to the coupling manufacturer’s recommendations for gap, angular and parallel alignment. In many installations, it is necessary to allow for thermal and mechanical shaft movement when determining shaft alignment. The coupling manufacturer’s recommendations should be followed.

AXIAL DISPLACEMENT
The gap between shaft ends should be the same as the specified coupling gap unless overhung mounting of the coupling hub is specified. The coupling gap and shaft gap must be sufficient to accommodate any anticipated thermal or mechanical axial movement.

ANGULAR ALIGNMENT
Insert a spacer or shim stock equal to the required coupling gap between the coupling hub faces and measure the clearance using feeler gauges. Repeat this at the same depth at 90-degree intervals to determine the amount of angular misalignment.

PARALLEL ALIGNMENT
Mount a dial indicator to one coupling hub, and rotate this hub, sweeping the outside diameter of the other hub. The parallel misalignment is equal to one-half of the total indicator reading. Another method is to rest a straight edge squarely on the outside diameter of the hubs at 90-degree intervals and measure any gaps with feeler gauges. The maximum gap measurement is the parallel misalignment.

CHECKING ALIGNMENT
After both angular and parallel alignments are within specified limits, tighten all foundation bolts securely and repeat the above procedure to check alignment. If any of the specified limits for alignment are exceeded, realign the coupling.

SPROCKET OR SHEAVE ALIGNMENT
Align the sheaves or sprockets square and parallel by placing a straight edge across their faces. Alignment of bushed sheaves and sprockets should be checked after bushings have been tightened. Check horizontal shaft alignment by placing a level vertically against the face of the sheave or sprocket. Adjust belt or chain tension per the manufacturer’s specified procedure.

OUTBOARD PINION ALIGNMENT
Align the pinion by adjusting the gear tooth clearance according to the manufacturer’s recommendations and checking for acceptable outboard pinion tooth contact. The foundation bolts may have to be loosened and the unit moved slightly to obtain this contact. When the unit is moved to correct tooth contact, the prime mover should be realigned.

RECHECK ALIGNMENT
After a period of operation, recheck alignment and adjust as required.

1. Properly install unit on a rigid foundation
   • adequately supported
   • securely bolted into place
   • leveled so as not to distort the gear case
2. Properly install couplings suitable for the application and connected equipment.
3. Ensure accurate alignment with other equipment.
4. Furnish and install adequate machinery guards as needed to protect operating personnel and as required by the applicable standards of the Occupational Safety and Health Administration (OSHA), and by other applicable safety regulations;
5. Ensure that driving equipment is running in the correct direction before coupling to reducers with backstops (designed to operate only in a specific direction) or machinery designed to operate only in one direction.

CHANGES IN PERFORMANCE SPECIFICATIONS
Owner has the responsibility to consult with NORD GEAR if such items such as applied loads, operating speeds or other operating conditions have changed.

WARNING:
LOCK OUT POWER before any maintenance is performed. Make absolutely sure that no voltage is applied while work is being done on the gearbox.

START-UP
1. Ensure that switches, alarms, heaters, coolers and other safety and protection devices are installed and operational for their intended purpose.
2. Verify that the installed mounting position is the same as the nametag mounting position. If not, adjust the oil level accordingly and relocate the vent plug, fill plug and drain plug according to the mounting position. See following.

AUTOVENT PLUG
The Autovent plug is brass in color and will be located at the highest point on the gearbox. It operates like a check-valve to allow the reducer to relieve internal pressure while preventing lubricant contamination during cooling. A spring presses a ball or plunger against a machined orifice until pressure exceeds 2 psi. Above 2 psi the air is allowed to escape depressurizing the gearcase. When internal pressure drops below 2 psi, the autovent re-seals closing the unit to the outside environment. After shutdown, the reducer cools along with the air inside the reducer. The unit will temporarily maintain a slight vacuum until normalization occurs. NORD Gear supplies an Autovent as a standard feature.
**FILL LEVEL & DRAIN PLUGS**
The drain plugs are metric socket head cap screws. They will be located at the lowest part of the gearbox for ease of draining. The fill level plug is a hex head cap screw. It will be located between the Autovent and drain plug. Both types of plugs will have gaskets included to prevent oil from leaking.

**LUBRICANT**
All NORD reducers are shipped from the factory properly filled with lubricant and all plugs are installed according to the mounting position given on the reducer nametag. Acceptable oil fill level is within ½ inch of the bottom of the fill plug threads.

**OPERATION AND MAINTENANCE CHECKLIST**
1. Operate the equipment as it was intended to be operated
2. Do not overload.
3. Run at correct speed.
4. Maintain lubricant in good condition and at proper level.
5. Dispose of used lubricant in accordance with applicable laws and regulations.
6. Apply proper maintenance to attached equipment at prescribed intervals recommended by the manufacturer.
7. Perform periodic maintenance of the gear drive as recommended by NORD.

**NOTES**
MOUNTING POSITIONS

These charts detail the mounting positions for horizontal and vertical mounting. The Autovent, oil fill plug and drain plug are indicated on each mounting position picture. The factory set mounting position and plug locations match that shown on the gearbox nametag. For mounting orientations other than shown consult NORD Gear.

The 92 Series Helical Bevel gearbox sizes SK92072, SK92172 & SK92372 have no vent or drain plugs. They are filled with synthetic oil so the units are “Lubed for Life”.

![Diagram showing mounting positions for SK92072, SK92172, and SK92372 gearboxes.]
MAINTENANCE

Mineral lubricant should be changed every 10,000 service hours or after two years. For synthetic oils, the lube should be changed every 20,000 service hours or after four years. In case of extreme operating (e.g. high humidity, aggressive environment or large temperature variations), shorter intervals between changes are recommended.

OIL SPECIFICATIONS

NORD supplies all reducers filled with oil from the factory. Consult the sticker adjacent to the fill plug to determine the type of lubricant installed at the factory. Standard lubricant is ISO VG220 mineral-based oil. However, some units have special lubricants designed to operate in certain environments or to extend the service life of the lubricant. If in doubt about which lubricant is needed, contact NORD Gear.

The 92 Series Helical Bevel gearbox sizes SK92072, SK92172 & SK92372 have no vent or drain plugs. They are filled with synthetic oil so the units are “Lubed for Life”.

### STANDARD OIL – ISO VG220

<table>
<thead>
<tr>
<th>Ambient Temperature</th>
<th>Formulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 to 104°F (-5 to 40°C)</td>
<td>Mineral</td>
</tr>
</tbody>
</table>

### TYPICAL OILS

<table>
<thead>
<tr>
<th>Viscosity ISO NLGI</th>
<th>Formulation</th>
<th>Service Temperature Range</th>
<th>Mobil</th>
<th>Shell</th>
<th>Castrol</th>
<th>Kühber</th>
<th>Energetic</th>
<th>tribol</th>
</tr>
</thead>
<tbody>
<tr>
<td>VG 460</td>
<td>Conventional Mineral</td>
<td>20°C to +50°C</td>
<td>Mobilgear 634</td>
<td>Omala 460</td>
<td>7EP</td>
<td>Kühberoil GEM 1-460</td>
<td>Energetic GR-XP 460</td>
<td>Tribol 1100/460</td>
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<tr>
<td></td>
<td>Synthetic PAO</td>
<td>-30°C to +86°C</td>
<td>Mobil</td>
<td>Omala 460 HD</td>
<td>Isolube EP 460</td>
<td>Kühberoil GEM 1-320</td>
<td>Energetic GR-XP 320</td>
<td>Tribol 1100/320</td>
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<tr>
<td>VG 320</td>
<td>Conventional Mineral</td>
<td>0°C to +30°C</td>
<td>Mobilgear 632</td>
<td>Omala 320</td>
<td>6EP</td>
<td>Kühberoil GEM 1-320</td>
<td>Energetic GR-XP 460</td>
<td>Tribol 1100/220</td>
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<tr>
<td></td>
<td>Synthetic PAO</td>
<td>-35°C to +80°C</td>
<td>Mobil</td>
<td>Omala 320 HD</td>
<td>Isolube EP 460</td>
<td>Kühberoil GEM 1-320</td>
<td>Energetic GR-XP 220</td>
<td>Tribol 1100/220</td>
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<tr>
<td>VG 220</td>
<td>Conventional Mineral</td>
<td>-5°C to +40°C</td>
<td>Mobilgear 630</td>
<td>Omala 220</td>
<td>5EP</td>
<td>Kühberoil GEM 1-220</td>
<td>Energetic GR-XP 220</td>
<td>Tribol 1100/220</td>
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<tr>
<td></td>
<td>Synthetic PAO</td>
<td>-34°C to +80°C</td>
<td>Mobil</td>
<td>Omala 220 HD</td>
<td>Isolube EP 220</td>
<td>Kühberoil GEM 4-220</td>
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<tr>
<td>VG 150 &amp; VG 100</td>
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<td>-15°C to +25°C</td>
<td>Mobilgear 629</td>
<td>Omala 100</td>
<td>4EP</td>
<td>Kühberoil GEM 1-150</td>
<td>Energetic GR-XP 100</td>
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<tr>
<td></td>
<td>Synthetic PAO</td>
<td>-37°C to +10°C</td>
<td>Mobil</td>
<td>Omala 150 HD</td>
<td>Isolube EP 150</td>
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<tr>
<td>VG 68</td>
<td>Conventional Mineral</td>
<td>-15°C to +25°C</td>
<td>Mobilgear 626</td>
<td>Omala 68</td>
<td>2EP</td>
<td>Kühberoil GEM 1-68</td>
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<tr>
<td></td>
<td>Synthetic PAO</td>
<td>-40°C to +10°C</td>
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<td>Omala 68</td>
<td>Isolube EP 68</td>
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PAO = Poly Alpha Olefin

### SPECIAL PURPOSE LUBRICANTS

<table>
<thead>
<tr>
<th>Ambient Temperature</th>
<th>Formulation</th>
<th>Manufacturer</th>
<th>Oil Brand Name</th>
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</thead>
<tbody>
<tr>
<td>20 to 104°F (-5 to 40°C)</td>
<td>Food Grade Oil - Synthetic</td>
<td>Chevron</td>
<td>FM ISO 220</td>
</tr>
<tr>
<td>20 to 104°F (-5 to 40°C)</td>
<td>Food Grade Oil - Synthetic</td>
<td>OILXAX</td>
<td>Magnaplate 85W140-FG</td>
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<tr>
<td>5 to 125°F (-20 to 50°C)</td>
<td>Fluid Grease</td>
<td>Mobil</td>
<td>Mobilux EP023</td>
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<tr>
<td>-30 to 140°F (-35 to 60°C)</td>
<td>Fluid Grease - Synthetic</td>
<td>Mobil</td>
<td>Mobilith SHC 007</td>
</tr>
<tr>
<td>-30 to 140°F (-35 to 60°C)</td>
<td>Fluid Grease - Synthetic</td>
<td>Shell</td>
<td>Albidal LC</td>
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</table>

### STANDARD BEARING GREASE – NLGI 2EP Lithium

<table>
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<th>Ambient Temperature</th>
<th>Formulation</th>
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<td>-20 to 140°F (-30 to 60°C)</td>
<td>Mineral</td>
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### OPTIONAL BEARING GREASES

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<th>Grease Brand Name</th>
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<tbody>
<tr>
<td>-40 to 230°F (-40 to 110°C)</td>
<td>Synthetic</td>
<td>Shell</td>
<td>Aeroshell 6</td>
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<tr>
<td>-40 to 230°F (-40 to 110°C)</td>
<td>Food Grade - Synthetic</td>
<td>Lubriplate</td>
<td>SFL1</td>
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</table>
LUBRICATING CAPACITY

Each reducer has the oil level and oil quantity adjusted according to the mounting position shown in the tables. When replacing the oil, consult the tables below to determine the proper amount of oil to be installed according to the reducer size and mounting position. Note that this is approximate and the final level will be adjusted when the reducer is installed. Acceptable oil fill level is within ½ inch of the bottom of the fill plug threads.

<table>
<thead>
<tr>
<th>LUBRICATION CAPACITY – 90.1 SERIES HELICAL BEVEL GEARBOXES</th>
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<tbody>
<tr>
<td><strong>Mounting position</strong></td>
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Standard lubricant for the gearboxes is mineral oil. Synthetic oil is available at a surcharge.

Note: Filling quantities are approximate figures. Oil level must be checked according to oil level plug.

For mounting angles not shown, consult factory.

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The 92 Series Helical Bevel gearbox sizes SK92072, SK92172 & SK92372 have no vent or drain plugs. They are filled with synthetic oil so the units are “Lubed for Life”.

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PARTS LIST

SK9012 - SK9092
Foot mounted

701 Output gear
702 Output pinion shaft
703 Bevel gearset
705 Input gear
706 Input pinion
707 Output shaft
708 Key
709 Shaft seal
710 Shaft seal
711 Circlip
712 Shim
713 Taper roller bearing
714 Gasket
715 Gear case cover
716 Spacer
717 Vent screw
718 Seal
719 Socket head screw
720 Key
721 Circlip
722 Taper roller bearing
723 Sealing plug
729 Supporting disc
731 Circlip
732 Gasket
733 Key
734 Drain plug
735 Seal
736 Taper roller bearing
737 Taper roller bearing
738 Taper roller bearing
739 Gasket
740 Sealing plug
741 Shim
742 Supporting disc
743 Gear case
745 Taper roller bearing
746 Key
747 Shim
748 Taper roller bearing
750 Sealing plug
756 Flanged eye bolt
765 Slotted round nut
766 Tab washer
770 Backstop
772 Key
774 Circlip
775 Supporting disc

RECOMMENDED SPARE PARTS
Bearings – all  Gaskets – all  Shims – all
Seals – all  Seal Plugs – all

IMPORTANT!
When ordering parts, it is necessary to have the NORD SERIAL NUMBER from the unit the parts are for. The serial number will dictate the correct parts for that particular unit. The gearbox nameplate will have the serial number on it.
PARTS LIST

SK 9012 - SK 9092 VF
Flange mounted

701 Output gear
702 Output pinion shaft
703 Bevel gearset
705 Input gear
706 Input pinion
707 Output shaft
708 Key
709 Shaft seal
710 Shaft seal
711 Gaskets
712 Shim
713 Taper roller bearing
714 Gasket
715 Gear case cover
716 Spacer
717 Vent screw
718 Seal
719 Socket head screw
720 Key
721 Gaskets
722 Taper roller bearing
723 Sealing plug
729 Supporting disc
731 Gaskets
732 Gasket
733 Key
734 Drain plug
735 Seal
737 Taper roller bearing
738 Taper roller bearing
739 Gaskets
740 Sealing plug
741 Shim
742 Supporting disc
743 Gear case
744 Flange
745 Taper roller bearing
746 Key
747 Shim
748 Taper roller bearing
750 Sealing plug
753 Socket head screw
756 Flanged eye bolt
765 Slotted round nut
766 Tab washer
770 Backstop
773 Key
774 Gaskets
775 Supporting disc

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PARTS LIST

701 Output gear
702 Output pinion shaft
703 Bevel gearset
705 Driving gear
706 Driving pinion
707 Hollow shaft
709 Shaft seal
710 Shaft seal
711 Circlip
712 Shim
713 Taper roller bearing
714 Gasket
715 Gear case cover
716 Spacer
717 Vent screw
718 Seal
719 Socket head screw
720 Key
721 Circlip
722 Taper roller bearing
724 Washer
725 Spring washer
726 Socket head screw
729 Supporting disc
731 Circlip
732 Gasket
733 Key
734 Drain plug
737 Taper roller bearing
738 Taper roller bearing
739 Circlip
740 Sealing plug
741 Shim
742 Supporting disc
743 Gear case
745 Taper roller bearing
746 Key
747 Shim
748 Taper roller bearing
750 Sealing plug
751 Shrink disc connector
752 Torque arm
753 Socket head screw
755 Rubber buffer
756 Flanged eye bolt
765 Slotted round nut
766 Tab washer
770 Backstop

SK9012 - SK902 AZ
Shaft mounted
PARTS LIST

SK 9013 - SK 9053
Foot mounted
Flange mounted VF
Shaft mounted AZ

SK 9062/32 - SK 9092/52
Foot mounted
Flange mounted VF
Shaft mounted AZ

5 Input gear
6 Input pinion
27 Bolt
28 Gasket
29 Supporting disc
30 Third reduction
gearcase
45 Ball bearing
46 Key
48 Ball bearing
52 Circlip
53 Key
54 Circlip
55 Intermediate shaft, plain
56 Intermediate shaft, gearcut
57 Circlip
58 Circlip
59 Shim
60 Circlip
61 Circlip
62 Plug
63 Seal
109 Shaft seal
112 Ball bearing
114 Intermediate flange
115 Spring washer
116 Bolt
117 Spring washer
118 Bolt
119 Intermediate shaft, plain
119 Intermediate shaft, gearcut
121 Bearing sleeve
124 Circlip
125 Circlip
PARTS LIST

RECOMMENDED SPARE PARTS
Bearsings – all  Gaskets – all  Shims – all
Seals – all  Seal Plugs – all

IMPORTANT!
When ordering parts, it is necessary to have the NORD SERIAL NUMBER from the unit the parts are for. The serial number will dictate the correct parts for that particular unit. The gearbox nameplate will have the serial number on it.