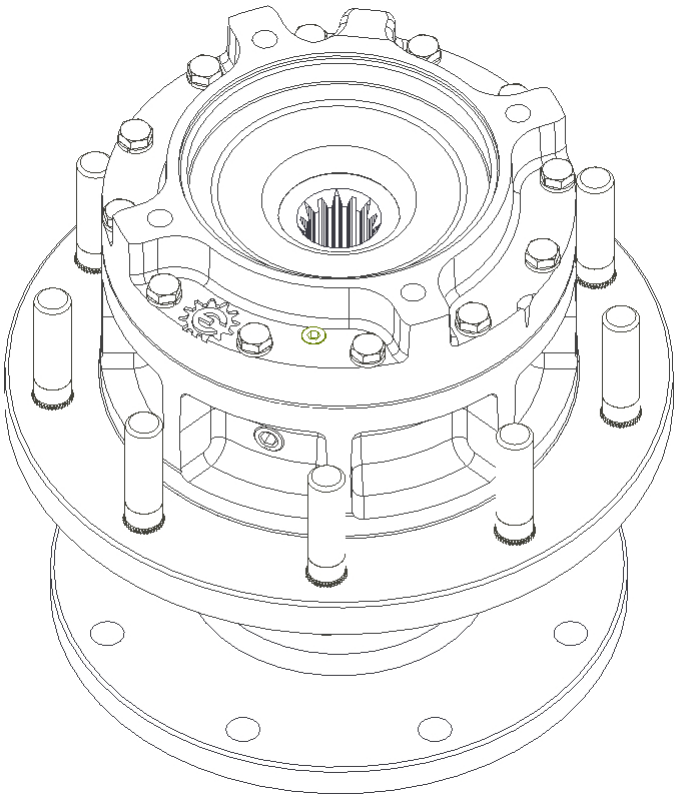
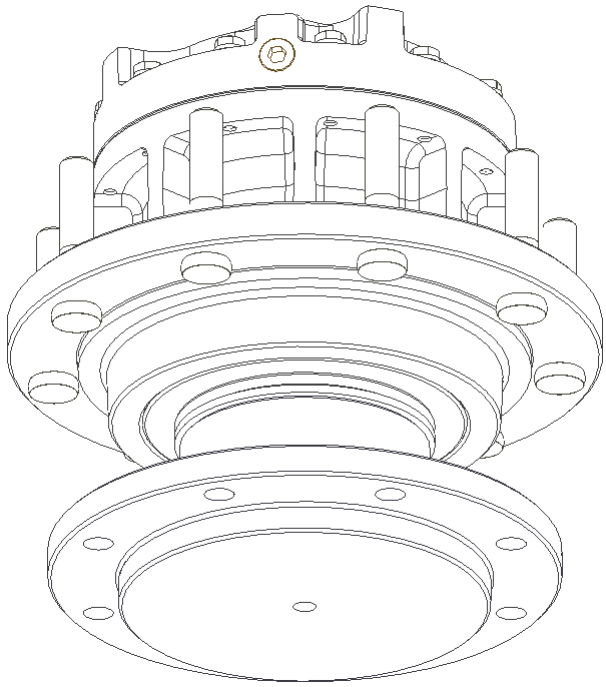
SERVICE MANUAL
132LM2 BEARING ADAPTERS





WARNING: While working on this equipment, use safe lifting procedures, wear adequate clothing and wear hearing, eye and respiratory protection.

THIS SERVICE MANUAL IS EFFECTIVE:
S/N: 250558 TO CURRENT
DATE: 3/7/2022 TO CURRENT
VERSION: SM132LM2-AA

NOTE: Individual customer specifications (mounting case, output shaft, brake assembly, etc.) may vary from exploded drawing and standard part numbers shown. If applicable, refer to customer drawing for details.

MODEL 132 BEARING ADAPTER

132LM2
EFFECTIVE FROM: SN-250558 03-07-2022

Parts List				
GROUP	ITEM	QTY	PART NUMBER	DESCRIPTION
	1	1	A	BASE
	2	1	B	OUTPUT SHAFT
	3	1	28-004-1038	COVER
16	-	(1)	13-016-2110	SEAL KIT
	16A	1	01-405-0690	SEAL
	16B	1	01-406-0109	V-RING SEAL
	16C	1	01-402-0560	O-RING
20	-	-	-	BEARINGS
	20A	1	01-102-0260	BEARING CONE
	20B	1	01-103-0260	BEARING CUP
	20C	1	01-102-0030	BRG CONE
	20D	1	01-103-0030	BRG CUP
25	-	-	-	HARDWARE
	25A	12	01-150-1400	HHCS
	25G	12	01-166-0110	LOCK WASHER; 5/16
30	-	-	-	PLUGS
	30A	1	01-207-0070	PIPE PLUG 3/8
	30B	1	01-207-0020	PIPE PLUG 1/4
	30C	1	01-207-0030	PIPE PLUG 1/8
35	-	-	-	MISCELLANEOUS
	35A	*	80-004-1151	SHIM
	35B	1	81-004-8102	SPLIT RING
	35C	1	81-004-8111	LOCK RING
	35D	1	01-160-0856	RETAINING RING
	35E	9	A	WHEEL STUDS

*QUANTITY DEPENDANT UPON DESIRED BEARING PRELOAD
X132LM2 ECN: - REV: A 09-19-2022 EG

A

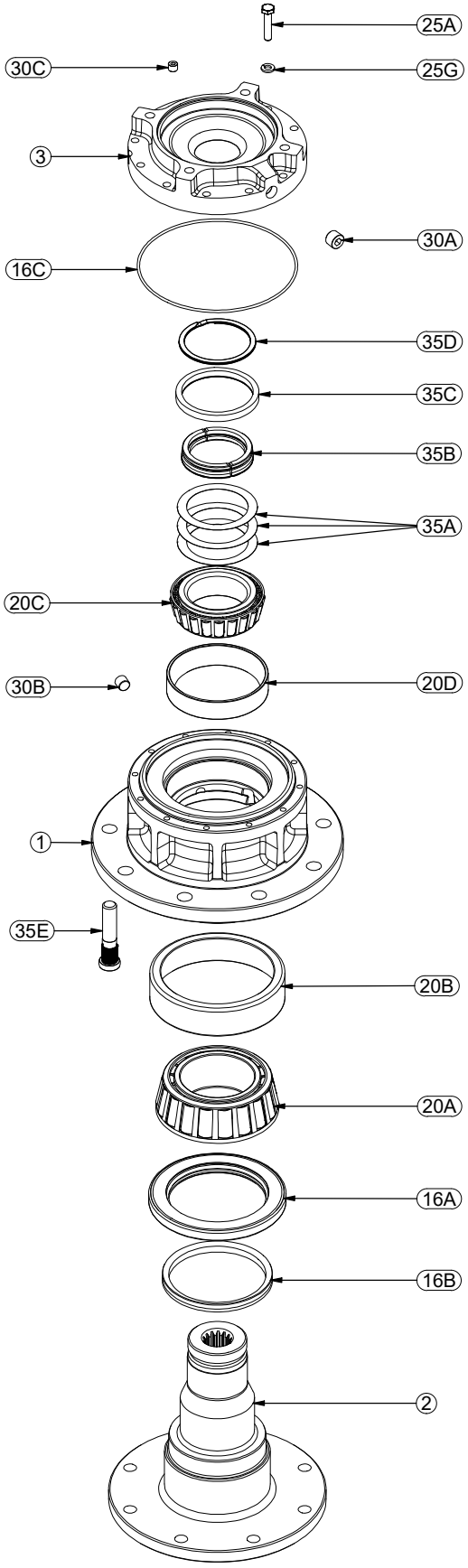
ITEMS 1 (BASE) AND 35E (WHEEL STUDS) OPTIONS	
PART NUMBER	DESCRIPTION
13-004-3245	BASE
01-164-0116	WHEEL STUD (5/8-18 X 3)
13-004-3258	BASE
01-164-0111	WHEEL STUD (9/16-18 X 3)

B

ITEM 2 (OUTPUT SHAFT) OPTIONS	
PART NUMBER	DESCRIPTION
13-004-4630M	14T 12/24 DP INPUT SPLINE
13-004-4651M	17T 12/24 DP INPUT SPLINE

NOTES:

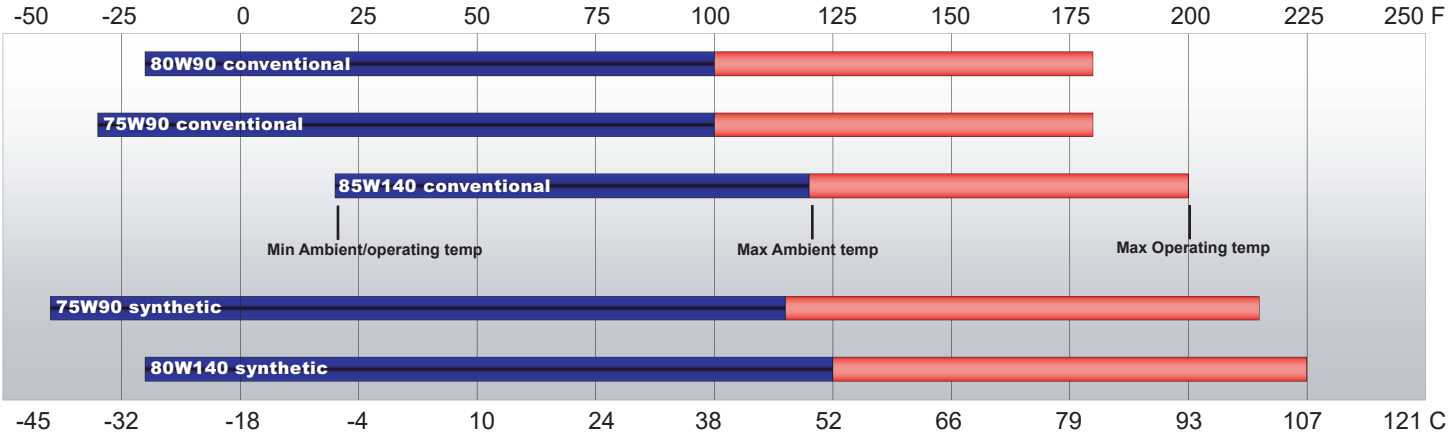
1. THIS BASE AND WHEEL STUD USED TOGETHER FOR "S1" STUD OPTION.
2. THIS BASE AND WHEEL STUD USED TOGETHER FOR "S2" STUD OPTION.



LUBRICATION & MAINTENANCE

Using the chart below, determine an appropriate lubricant viscosity. Use only EP (extreme pressure) or API GL-5 designated lubricants. Change the lubricant after the first 50 hours of operation and at 500 hour intervals thereafter.

Recommended ambient and operating temperatures for conventional and synthetic gear lubricants



Note: Ambient temperature is the air temperature measured in the immediate vicinity of the gearbox. A Gearbox exposed to the direct rays of the sun or other radiant heat sources will operate at higher temperatures and therefore must be given special consideration. The max operating temperature must not be exceeded under any circumstances, regardless of ambient temperature.

If your unit was specified “shaft up” or with a “-Z” option, a grease zerk was provided in the base housing. For shaft-up operation, the output bearing will not run in oil and must be grease lubricated. Use a lithium based or general purpose bearing grease sparingly every 50 operating hours or at regular maintenance intervals. Over-greasing the output bearing should be avoided as it tends to fill the housing with grease and thicken the oil

ESKRIDGE MODEL 132LM2 OIL CAPACITIES

Operating Position	Oil Capacity (Single/Double stage)	Oil Level
Horizontal Shaft	17 oz (0.50 L)	To horizontal centerline
Vertical (Spindle Up)	-	-
Vertical (Spindle Down)	22 oz (0.65 L)	To 3/8 NPT port in cover

ESKRIDGE PART NUMBER INTERPRETATION

Note: All non custom Eskridge Geardrives are issued a descriptive part number which includes information regarding the Model, means of shaft retention, base style, shaft style, input mounting, input shaft size, overall ratio and various available options. For a detailed breakdown of this information, please refer to Eskridge product specification sheets found at: http://www.eskridgeinc.com/geardrives/gearprodspecs.html

Unit Disassembly Procedure

All number references refer to the exploded drawing on Page 2.

1) Scribe a diagonal line across the outside of the unit from the cover **(3)** to the base **(1)** before disassembly to aid in the proper positioning of pieces during reassembly.

2) Remove drain plugs **(30A & 30B)** and drain oil from unit. The oil will drain faster and more completely if warm. Tilt the unit so that the drain port in the base **(1)** points downward to drain as much oil as possible.

3) Remove the twelve hex-head capscrews **(25A)** and lock-washers **(25G)**.

4) Remove cover **(3)**, and inspect o-ring **(16C)**. Discard o-ring if damaged or deformed.

5) Remove retaining ring **(35D)**. Remove the lock ring **(35C)** using a heel bar or puller. Be careful not to pry against the bearing cage **(20C)**. Remove split ring segments **(35B)** and shims **(35A)**.

Caution: Since the output shaft is no longer retained, care should be taken to avoid personal injury. Care should also be taken not to damage the shaft while pressing through base.

6) Base **(1)** should be set spindle side down, as shown, on a plate or table. Press output shaft through the bottom of base by applying a load to top end (internal end) of shaft until it passes through inner shaft bearing cone **(20C)**. The shaft seal **(16A)** will be pressed out at the same time.

7) A gear puller or bearing splitter may be used to remove the outer bearing cone **(20A)** from the shaft **(2)**. If reusing old bearing cone, do not pull on or damage roller cage. Remove the shaft seal **(16A)** and v-ring seal **(16B)** for inspection or replacement.

8) Inspect inner and outer bearing cups **(20D & 20B)**. If cups are damaged, drive them out using a brass drift and utilizing the bearing knock-out notches in the base **(1)**

9) Inspect wheel studs **(35E)**. If studs are damaged, drive or press them out of base **(1)**.

Unit Assembly Procedure

1) If wheel studs **(35E)** were removed, drive or press them into the base **(1)**.

2) Clean all foreign material from oil plugs **(30A & 30B)**.

3) Place base **(1)** (output side up, opposite shown) on the table.

4) Apply a layer of lithium or general purpose bearing grease to the roller contact surface of outer bearing cup **(20B)**.

5) Lubricate inner lip of v-ring seal **(16A)** and fit onto the shaft **(2)** seal diameter and against the shoulder.

6) Lubricate inner lip of shaft seal **(16B)** and slide it onto the shaft **(2)** until it fits snugly over the shaft seal diameter with the open side of the seal toward the inside of the unit.

7) Press outer bearing cone **(20A)** (large end down as shown) onto the shaft until it seats against the shoulder.

Note: Press bearing cone onto output shaft by pressing on inner race only. DO NOT press on roller cage, as it may damage bearing.

8) Place the shaft **(2)** with the bearing **(20A)**, shaft seal **(16A)** , and v-ring seal **(16B)** into the base **(1)**.

9) Flip this assembly, resting it on the end of the output shaft **(2)**.

10) Place spacers (approx. 2 1/2 inches) between shaft seal **(16A)** and face of spindle **(2)**. Being careful not to damage v-ring seal **(16B)**, press lightly on base **(1)** until shaft seal is flush with base. Remove spacers.

11) Apply a layer of lithium or general purpose bearing grease to the roller contact surface of the inner cup **(20D)**. Press the inner bearing cone **(20C)** (large end up as shown) onto the shaft **(2)** until it is seated against inner bearing cup **(20D)**.

12) Bearing preload may result in a rolling torque that varies between 55 to 125 in-lb. Adding shims **(35A)** will increase the pre-load on the bearing set. Install shims to obtain the preload that will result in this rolling torque. Install the Load-N-Lock split ring segments **(35B)** over the shims and into the groove in the output shaft. With the Load-N-Lock segments firmly installed, place lock ring **(35C)** over the segments. Install retaining **(35D)** ring into groove in segments.

13) Lubricate o-ring **(16C)** and install on the pilot of the base **(1)**. Noting the scribed line made during disassembly, install the cover.

14) Install the twelve hex-head cap-screws **(25A)** with lockwashers **(25G)**. **Torque the cap-screws to 25 ft-lb dry or 18 ft-lb if the fasteners are lubricated**.

15) Ensure the unit spins freely by using a splined shaft to drive the shaft **(2)**.

16) Fill the unit with GL5 EP 80/90 gear oil to the proper level, as specified, using the oil fill hole in the cover **(3)**.

The unit is now ready to use.

Alternate Assembly Procedure

The following steps may be used in place of Assembly Steps 6 thru 10.

6) Place outer bearing cone **(20A)** in outer bearing cup **(20B)**, large end up.

7) Lubricate inner lip of shaft seal **(16A)** and press seal into base **(1)** until flush, with open side of seal toward inside of unit.

8) Press shaft **(2)**, with v-ring seal **(16B)** installed, through shaft seal **(16A)** and outer bearing cone **(20A)** until bearing cone seats against shaft shoulder.

Note: Use extreme care when assembling in this manner. All pieces must be axially aligned, and more than 35,000 lb of press force will damage bearing.

9) Flip this assembly, resting it on the end of the output shaft **(2)**.

Continue to Assembly Step 11