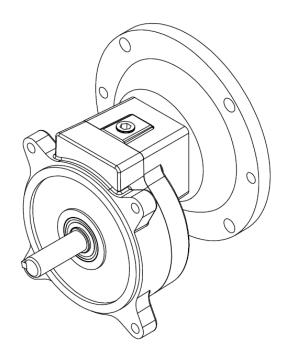


# HELICAL GEAR REDUCER



# INSTALLATION AND MAINTENANCE MANUAL July 17, 2023

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#### HELICAL GEAR REDUCER INSTRUCTION MANUAL

#### **SELECTION INFORMATION**

Read ALL instructions prior to operating unit. Improper maintenance or operation may cause injury to personnel or reducer failure.

Do not operate or use this unit in man lift or people moving devices.

Buyer shall be solely responsible for determining the adequacy of the product for all uses to which buyer shall apply the product. The application by buyer shall not be subject to any implied warranty of fitness for a particular purpose. Information contained in this manual is considered correct at the time of publication and is subject to change without notice.

#### **SAFETY ALERT**

**WARNING:** 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.

Failure to do so may result in bodily injury and/or damage to equipment.

WARNING: Hot oil or gear units can cause severe burns. Use extreme care when removing

lubrication plugs.

**WARNING:** Make certain that the power supply is disconnected before attempting to service

or remove any components. Lock out the power supply and tag it to prevent

unexpected application of power.

**CAUTION:** Test run unit to verify operation. If the unit tested is a prototype, that unit must be

of current production.

#### IMPORTANT INFORMATION

In the event of the resale of any of the goods, in whatever form, Resellers/Buyers will include the following language in a conspicuous place and in a conspicuous manner in a written agreement covering such sale:

The manufacturer makes no warranty or representations, expressed or implied, by operation of law or otherwise, as to the merchantability or fitness for a particular purpose of the good sold hereunder. Buyer acknowledges that it alone has determined that the goods purchased hereunder will suitably meet the requirements of their intended use. In no event will manufacturer be liable for consequential, incidental, or other damages.

Resellers/Buyers agree to also include this entire document including the warnings above in a conspicuous place and in a conspicuous manner in writing to instruct users on the safe usage of the product.

This instruction manual should be read together with all other printed information such as catalogs, supplied by Genesys.

#### **GENERAL OPERATION**

1. Run the motor, which drives the unit, and check the direction of unit output rotation. Consult motor nameplates for instructions to reverse the direction of rotation.

#### **INSTALLATION**

1. Mount the unit using grade 5 or higher fasteners.

2. Check for correct oil level. An oil level sight glass is installed to provide visual confirmation of the unit oil level.

**CAUTION:** Do not operate the unit without making sure it contains the correct

amount of oil. Do not overfill or underfill with oil, or injury to personnel,

reducer or other equipment may result.

**CAUTION:** A unit cannot be used as an integral part of a machine superstructure

which would impose additional loads on the unit other than those imposed

by the torque being transmitted either through a shaft-mounted

arrangement, and any shaft mounted power transmitting device. (e.g.

sprockets, pulleys, couplings)

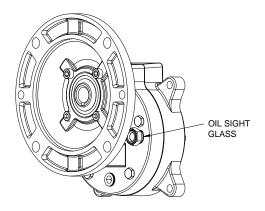
**CAUTION:** For safe operation and to maintain the unit warranty, when changing a

factory installed fastener for any reason, it becomes the responsibility of the person making the change to properly account for fastener grade, thread engagement, load, tightening torque and the means of torque

retention.

#### **LUBRICATION**

All reducers ordered from the factory are shipped with Royal Purple Synergy® synthetic industrial gear lubricant and are good for ambient temperature ranges of -20° F to 140° F. **Prior to startup, verify that the oil is at the proper level.** An oil level sight glass is installed to provide visual confirmation of the unit oil level.



#### **OIL & WEIGHT SPECIFICATIONS**

Oil Type	AGMA	SAE	ISO	Oil Capacity	Size 1	Size 2
(Viscosity)	4 EP	80W90	150		6 fl oz	14 fl oz

**Change Intervals:** Units are supplied with Royal Purple Synergy® synthetic industrial gear lubricant and are considered lubricated for life. Oil type and viscosity information is proved for rebuild purposes only

#### **MAINTENANCE**

Your Genesys unit has been tested and adjusted at the factory and is considered maintenance free. Dismantling or replacement of components must be done by Genesys to maintain the warranty.

**CAUTION:** Mounting bolts should be routinely checked to ensure that the unit is firmly anchored for proper operation.

#### **CLASS OF SERVICE**

All capacity ratings are based on American Gear Manufacturers Association (AGMA) Standards.

#### **WARRANTY (LIMITED)**

The warranty will cover all the parts in the gearmotor or reducer unit for 12 months from the date of shipment.

The warranty is only for parts and labor. In no event shall our liability exceed the original price of the unit, nor does it cover cost of on-site repair, installation, or freight.

Contact the service department for a complete explanation as to the full warranty policies and conditions of sale.

All dimensions, designs, and specifications are subject to change without notice.

### **SEAL AND BEARING SIZES**

Input Bearing

Unit	Bearing Part Number and Size				
Size	Series	OD (mm)	ID (mm)	Width (mm)	
1 (Quill Side)	6005	47	25	12	
1	6200	30	10	9	
2	6204	47	20	14	

**ODE Output Bearing** 

Unit	Bearing Part Number and Size					
Size	Series	OD (mm)	ID (mm)	Width (mm)		
1	6002	32	15	9		
2	6205	52	25	15		

**DE Output Bearings** 

Unit	Bearing Part Number and Size					
Size	Series	OD (mm)	ID (mm)	Width (mm)		
1	6004	42	20	12		
2	6205	52	25	15		

Input Seal

Unit	Seal Size					
Size	Shaft (mm)	Bore (mm)	Width (mm)			
1	25	45	7			
2	35	45	7			

**Output Seal** 

Unit	Seal Size				
Size	Shaft (mm)	Bore (mm)	Width (mm)		
1	20	35	7		
2	25	40	7		

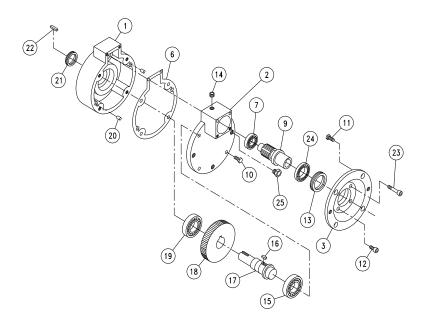
**Parts List** 

Faits List							
Item No.	Description	Qty	Item No.	Description	Qty		
1	Gear Case Housing	1	14	NPT Plug	4		
2	Gear Case Cover	1	15	ODE Output Bearing	1		
3	Quill Style Input Flange	1	16	Key	1		
4	Seal End Plug	1	17	Output Shaft	1		
5	Retaining Ring (Shaft)	1	18	Gear	1		
6	Gasket	1	19	DE Output Bearing	1		
7	Input Bearing	1	20	Dowel Pin	2		
8	Retaining Ring (Housing)	1	21	Output Oil Seal	1		
9	Quill Input Shaft with Pinion	1	22	Output Key	1		
10	Hex Head Bolt	5	23	Long Socket Head Cap Screw	2		
11	Hex Head Bolt (Motor Mounting)	4	24	Quill Side Input Bearing	1		
12	Socket Head Cap Screw	4	25	Oil Level Sight Glass	1		
13	Input Oil Seal	1					

Notes:

<sup>1.</sup> Item #23 and #24 required on Size 1 only.

## **GES-1RED PARTS**



# **GES-2RED PARTS**

