

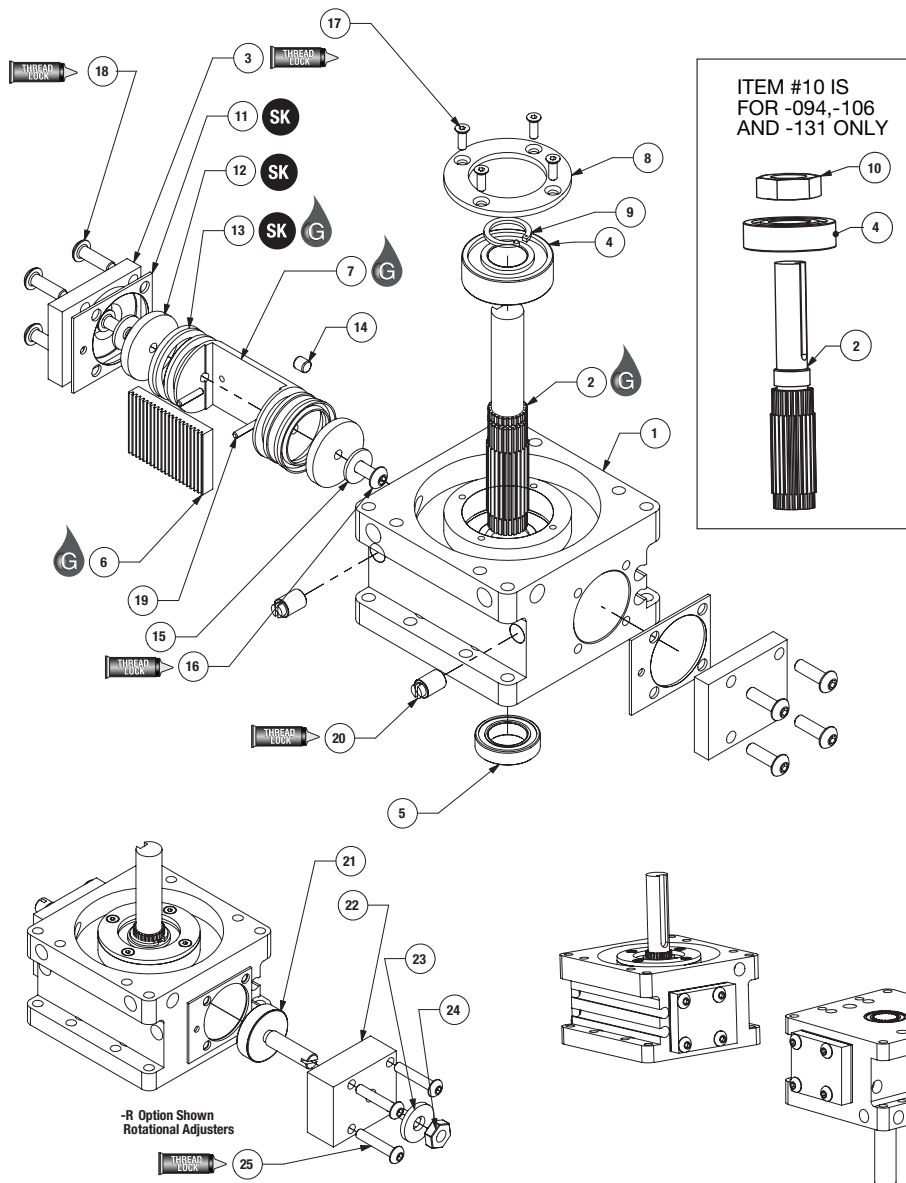


Robohand

DRG SERIES EXPLODED VIEW

DRG SERIES
MAINTENANCE

3.12



Item	Qty	Name
01	1	Body
02	1	Pinion Shaft
03	2	End Plate
04	1	Upper Bearing
05	1	Lower Bearing
06	1	Rack
07	1	Piston
08*	1	Bearing Retainer
09*	1	Retaining Ring
10	1	Hex Nut
11	2	Gasket
12	2	Bumper
13	2	U-cup
14	1	Magnet
15	2	Bumper Washer
16	2	Bumper Screw
17	4	Retainer Screw
18	8	End Plate Screw
19	2	Roll Pin
20*	2	Fixed Orifice
21	2	Angle Adjuster
22	2	End Plate Rotational Adjuster
23	2	Seal Washer
24	2	Hex Nut
25	8	End Plate Rotational Adj. Screw

*NOTES:

- 1) Contact the Robohand Sales Department for a complete spare parts list with order numbers and prices.
- 2) Item #09 is for size -075 only.
- 3) Item #10 is for size -094, -106 and -131 respectively.
- 4) Item #20 not in size -131

Assembly Procedure

- 1) Press the Upper Bearing #4 onto the Pinion #2.
- 2) Install the Retaining Ring#9 or Hex Nut #10 onto the Pinion #2.
- 3) Assemble the Rack #6 to the Piston #7 with Roll Pins #19.
- 4) Grease the U-Cups #13 and install them onto the Piston #7.
- 5) Press the Magnet #14 into the Piston #7.
- 6) Assemble the Bumper #12, Washers #15 and Bumper Screw #16 onto the Piston #7.
- 7) Lubricate the Body #1 bore and install the Piston Assembly into the body.
- 8) Press the Lower Bearing #5 into the Body #1.
- 9) Locate the Piston assembly so it is aligned with an outer edge of the body.
- 10) Lubricate the Pinion assembly and align the key with the same edge of the Body as the Piston and Press the Pinion into the Body.

- 11) Rotate the Pinion through the full travel and insure that the Piston is correctly located in the Body, adjust the travel of the Piston if necessary.
- 12) Grease the Gasket and install the End Plate #3 onto the Body #1.
- 13) Install the 2 Orifice #20 into the Body #1 screw them in until they bottom.
- 14) Install the Bearing Flange #8 with the 4 Flange Screws #17.

-R Option Assembly Procedure:

- 1) Screw the Angle Adjuster into the End Block Angle Adjuster.
- 2) Place the sealing washer over the threaded extension.
- 3) Screw on the Hex Nut over the Sealing Washer.
- 4) Screw the End Block onto the Body with a Gasket.



Seal Kit Items



Thread Locker



Krytox™ Lubricant



Lightweight Machine Oil



Teflon™ Based Grease



Super Bonder

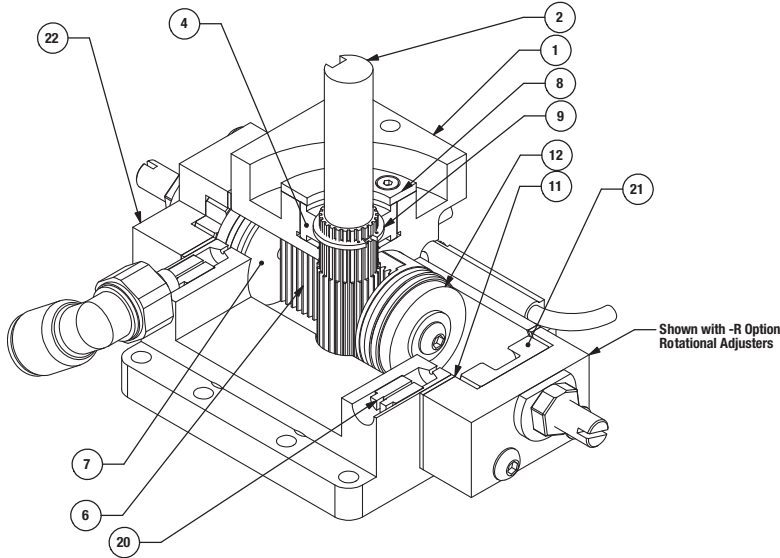


Third Angle Projection



Robohand

DRG SERIES ASSEMBLED VIEW



Item	Qty	Name
01	1	Body
02	1	Pinion Shaft
04	1	Upper Bearing
06	1	Rack
07	1	Piston
08*	1	Bearing Retainer
09*	1	Retaining Ring
11	2	Gasket
12	2	Bumper
20	2	Fixed Orifice
21	2	Angle Adjuster
22	2	End Plate Rotational Adjuster

*NOTES:

- 1) Contact the Robohand Sales Department for a complete spare parts list with order numbers and prices.
- 2) Item #09 is for size -075 only.

Warning: Removal of Orifices will void warranty.

Accessory Installation & Adjustment Instructions

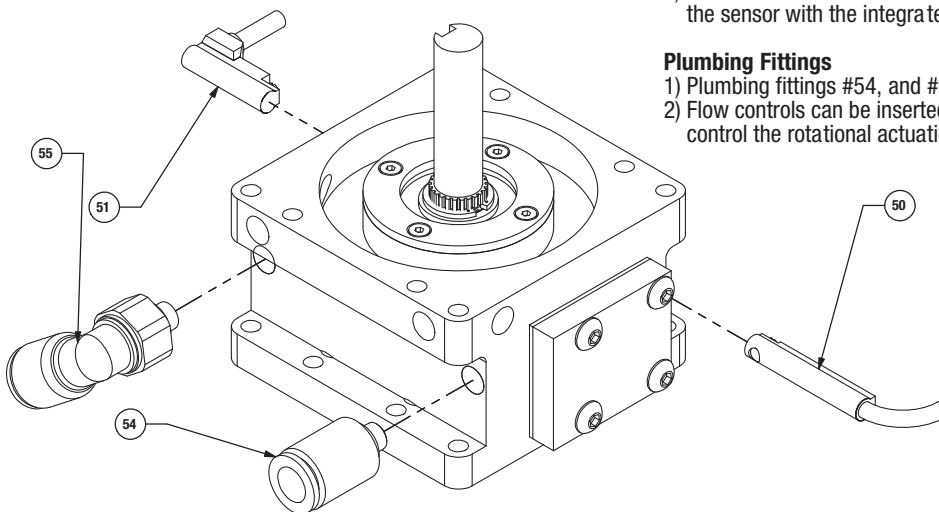
Item	Qty	Name
50	1 or 2	Magneto Resistive Sensor with Quick Disconnect
51	1 or 2	Magneto Resistive Sensor (90° barrel) with Quick Disconnect
54	1 or 2	Fitting Push-in Straight 1/8 NPT, 1/4" O.D. Tube (-131 Only)
55	1 or 2	Fitting Push-in 90° Elbow 1/8 NPT, 1/4" O.D. Tube (-131 Only)

Magneto Resistive Sensors

- 1) Insert sensors #50 or #51 from either end of the profile slots and set the sensor with the integrated slotted screw set.

Plumbing Fittings

- 1) Plumbing fittings #54, and #55 can be used in an y airport
- 2) Flow controls can be inserted and used in an y airport to help control the rotational actuation



Seal Kit Items



Thread Locker



Krytox™ Lubricant



Lightweight Machine Oil



Teflon™ Based Grease



Super Bonder



Third Angle Projection