

Service Manual

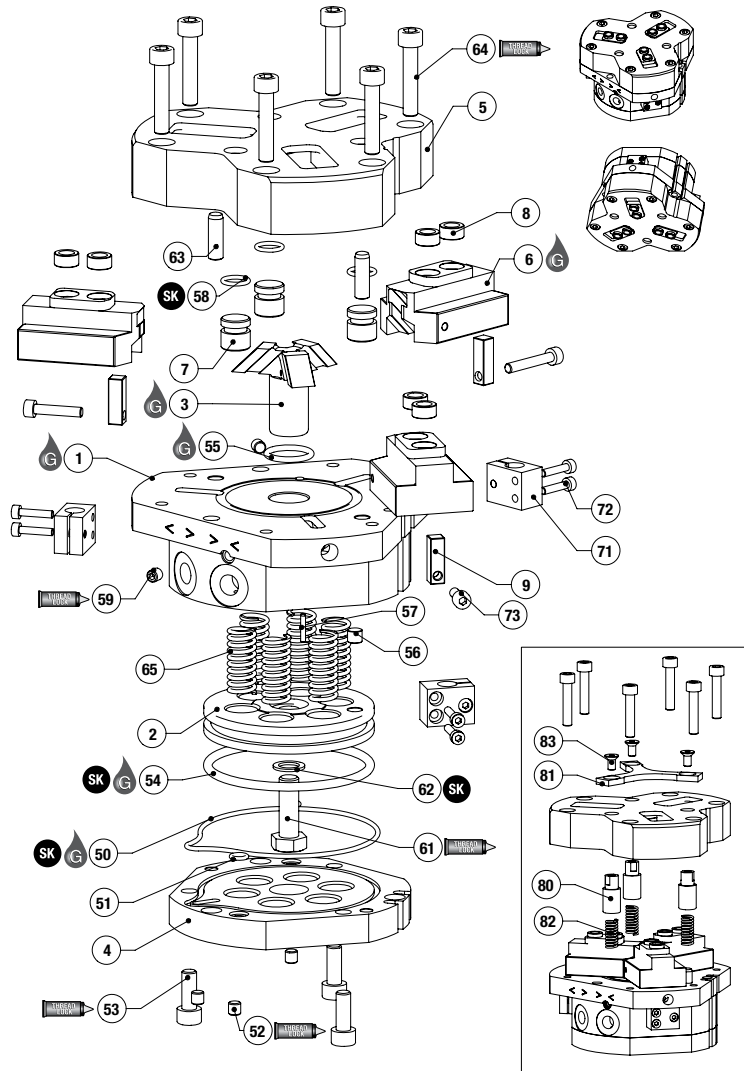
ROBOHAND | RTH Series



WARNING: This is a controlled document. It is your responsibility to deliver this information to the end user of the Destaco Robohand product. Failure to deliver this could result in your liability for injury to the user or damage to the machine. For copies of this manual, call your Customer Service Representative at 1.248.836.6700

RTH SERIES

Parallel Grippers | Maintenance and Assembly Procedure



Item Qty Name

01	1	Body
02	1	Piston
03	1	Triple wedge
04	1	Cap
05	1	Bottom Case
06	3	Jaws
07	3	Plug
08	6	Locating sleeve
09	3	Sensing nut
50	1	Cap, O-ring
51	2	Cap, O-ring
52	3	Cap, SS screw
53	3	Cap, SHC screw
54	1	Piston, O-ring
55	1	Body, O-ring
56	1	Piston, Magnet
57	1	Piston, Pin
58	3	Plug, O-Ring
59	2	Body, SS screw
61	1	Triple wedge, HH screw
62	1	Triple wedge, Seal
63	2	Slide, Pin
64	6	Slide, SHC Screw
65	6	Spring
71	3	Sensor holder
72	6	Sensor holder, SHC screw
73	3	Sensing nut, SHC screw
80	3	Stud
81	1	Pressure plate
82	3	Springs
83	3	Stud, screw

NOTE: Contact the Robohand Sales Department for a complete spare parts list with order numbers and prices.

**SK Seal Repair Kit Order #'s
See Product Data Sheets**

Assembly Procedure

- 1) Lubricate and install seals #55 into the body #1
- 2) Install #59 SS screws with thread locker into the body #1
- 3) Sub assemble the sensing nuts #9 into the jaws #6
- 4) Sub assemble the jaws #6 on either side of the triple wedge #3 with lubrication
- 5) Insert the jaws and triple wedge sub assembly into the body. To ensure a good positioning of the magnet, the dowel hole of the triple wedge (on tapped hole side) has to be positioned on the opposite side of the air ports (except size 1). For size 1, it has to be positioned between the sensor slots of the body.
- 6) Install seals #58 into the plugs #7
- 7) Insert the plugs #7 into the bottom case #5
- 8) Install bottom case #5 with pressed-in pins

- #63 onto the body and fasten with #64 screws with thread locker
- 9) Lubricate and install seals #54 into the piston #2
- 10) Mount magnet #56 to piston #2 with thread locker
- 11) For **-C** option, insert the spring #65 into the body counterbore holes
- 12) Insert the piston #2 with pressed-in pin #57 onto the triple wedge #3 and fasten with screw #61 and washer #62. Face mount the piston counterbore holes to the body counterbore holes for **-C** option. Opposite mount for **-O** option. For **-O** option, insert the spring #65 into the piston counterbore holes
- 14) Install #52 air ports plugs with thread locker onto the cap #4
- 15) Install seals #50 and #51 into the cap #4
- 16) Insert the cap into the body and locate it using cap dowel pin holes.

- 17) Fasten the cap with #53 screws with thread locker
- 18) Install the sensor holder #71 onto the body and fasten with screw #72
- 19) Insert screw #73 into the sensing nuts #9 from the body holes
- 20) Insert locating sleeves #8 into the jaws

-SP Assembly Procedure

- 1) Disassemble bottom case #5 unfastening #64 screws
- 2) Sub assemble springs #82 into the stud #70
- 3) Insert the spring and stud sub assembly into the bottom case
- 4) Install bottom case #5 onto the body and fasten with #64 screws with thread locker
- 5) Install pressure plate #8 onto the studs and fasten with #83 screws

SK

Seal Kit Items

THREAD LOCKER

Thread Locker

KRYTOX

Krytox™ Lubricant

Lightweight Machine Oil

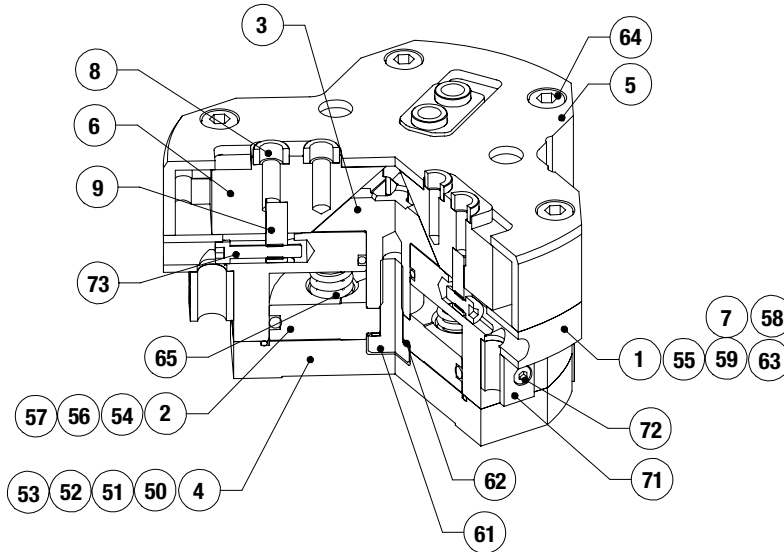
Teflon® Based Grease

GLUE

Super Bonder

Third Angle Projection

Third Angle Projection

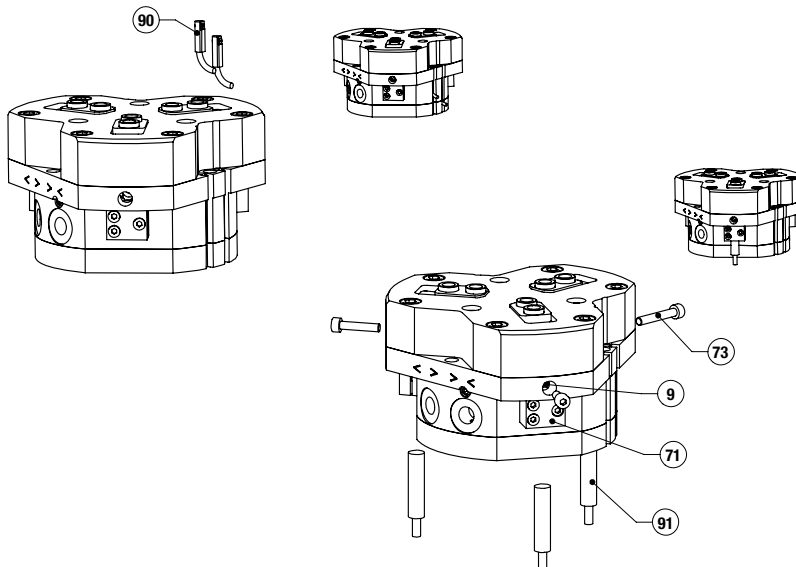


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Accessory Installation & Adjustment Instructions

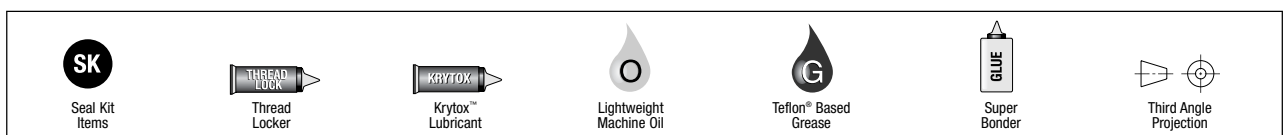


Magneto Resistive Sensor

- 1) Insert sensors #90 from either end of the profile slots
- 2) Set the sensor with the integrated screw

Inductive Sensor

- 1) Insert sensors #91 into the sensor holder #72
- 2) Tighten the sensor using the SHC screw onto the sensor holder #72
- 3) Insert the SHC screw #73 into the sensing nuts #9. The SHC screws are the targets to be adjusted in front of the sensor. Depending on the position to sense, use different length for the SHC screw #73 (shortest screw for open position, longest screw for close position). The sensing nut #9 has a thread insert that prevents the target from loosening. This may make the target harder to tighten into the nut.





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