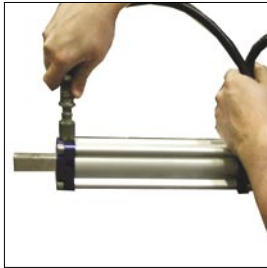


This bulletin is a simple step-by-step maintenance guide for DADCO's Special Non-Rotating Metric Air Cylinder (HP.S.50). Proper repair requires careful examination of all component parts and replacement of any that are worn or damaged. All DADCO replacement parts are available from factory stock. After reviewing this maintenance guide, if you require any additional training or have any questions please contact DADCO for assistance.



**CAUTION:** Always wear safety goggles when performing any maintenance work.

### Seal Kit Repair Instructions



1. Unhook the cylinder from the air supply.



2. Remove the tie rod screws from the front head using a 6 mm socket drive allen wrench. Retain screws for use during reassembly.



3. Remove the front head assembly then remove the rod and piston assembly.



4. Remove the piston seals from the piston being careful not to scratch the surface of the piston. Discard used seals.



5. Install the new piston seals.



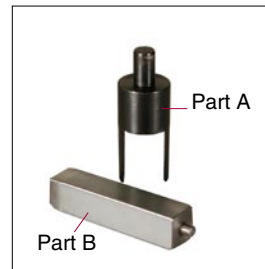
6. Remove the front cushion seal from the front head assembly. Discard used seal.



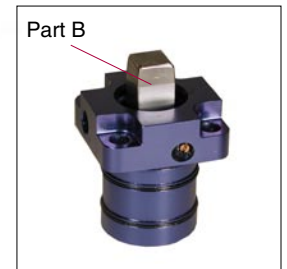
7. Insert the new front cushion seal with the flat side down. **Note:** The front head cushion seal is larger than the rear head cushion seal.



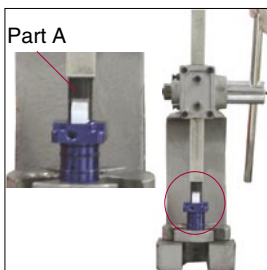
8. Use the notch in the head to remove the rod seal. Be careful not to damage or scratch the inside of the head. Discard used seal.



9. For installation of the new rod seal use DADCO's Rod Seal Installation Tool (HP.S.357).



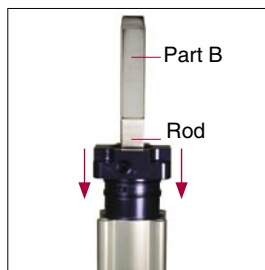
10. Place Part B of the Rod Seal Installation Tool into the front head. Place the new rod seal over the tool and slide down.



11. Insert Part A of the Rod Seal Installation Tool into an arbor press. Position the front head on the base of the arbor press, leaving Part B of the Rod Seal Installation Tool in place. Part A of the tool should impact the rod seal. Press the rod seal into place using the arbor press.



12. For installation of the rod and piston assembly use DADCO's Starter Tool (HP.S.350). Place the starter tool on top of the tube and carefully guide the rod and piston assembly into the tube. Maintain alignment and ensure the piston seals remain in place.



13. Replace the front head with Part B of the Rod Seal Installation Tool still in place. Insert the tab located at the bottom of the tool into the tapped hole located at the end of the rod. Match the square tool to the square rod. Slide the front head down, ensuring the alignment of ports between heads.

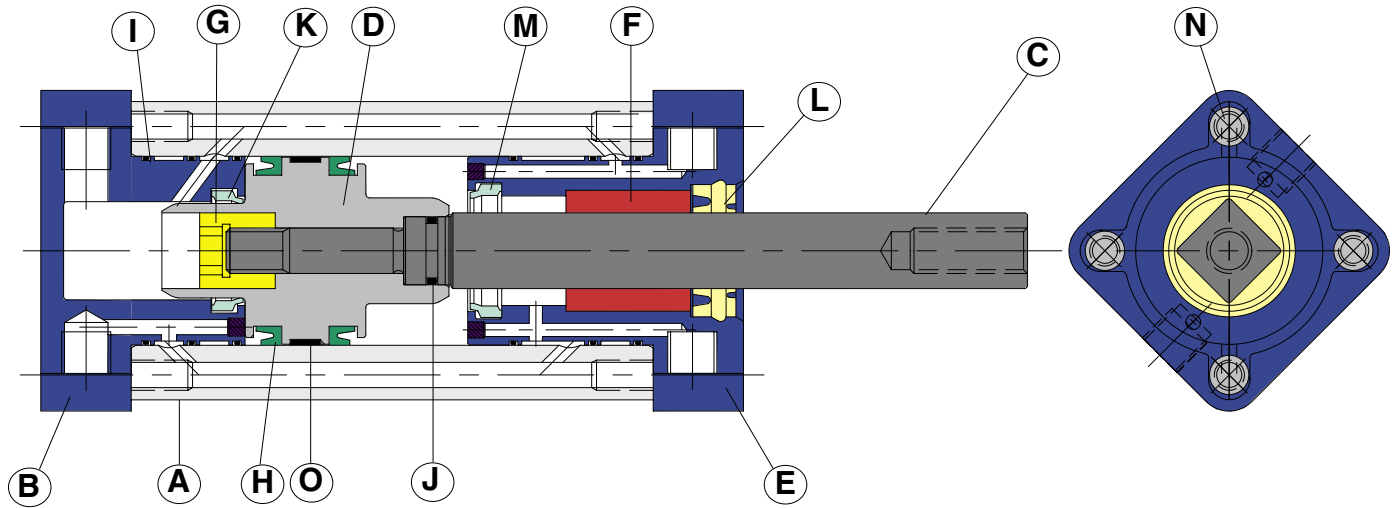


14. Replace the tie rod screws using a medium strength liquid thread locker on the threads before re-installing. Alternate tightening of each tie rod screw a half turn until all screws are secure. Torque value = 120 lb-in (13Nm). This completes the repair of your HP.S.50 Non-Rotating Metric Air Cylinder.

**NOTE:** If necessary, remove the rear head to replace the rear cushion seal (the smaller seal) by following steps 2 and 3 for removing the head and steps 6 and 7 for replacing the cushion seal.

## HP.S.50 Non-Rotating Metric Air Cylinder

### Parts List



Part List	Quantity Required	Part Number ø 50
*A Tube	1	IR05D__
B Rear Head	1	IR107682
*C Piston Rod	1	IR15D__
D Piston	1	IR257682
E Front Head	1	IR307682
F Bearing	1	IR407649
G Piston Nut	1	IR852212
H Piston Seal	2	IR487682
I Head O-Ring	6	IR457682
J Piston O-Ring	1	IR457702
K Rear Cushion Seal	1	IR470951
L Square Rod Seal	1	IT477649
M Front Cushion Seal	1	IR477682
N Tie Rod Screw	8	IR857682
O Guide Tape	.5	IU417467
W Seal Kit <i>Contains H, K, L, &amp; M (See picture below)</i>	1	IR007705

\* When ordering, please note the stroke in addition to the part number.

### Service Tools

#### Rod Seal Installation Tool HP.S.357

Use the Rod Seal Installation Tool to correctly insert the rod seal.



#### Starter Tool HP.S.350

Use the Starter Tool to correctly insert the rod and piston assembly.



#### HP.S.50 Seal Kit IR007705

Includes two piston seals, two cushion seals, a rod seal and a maintenance instruction bulletin.

