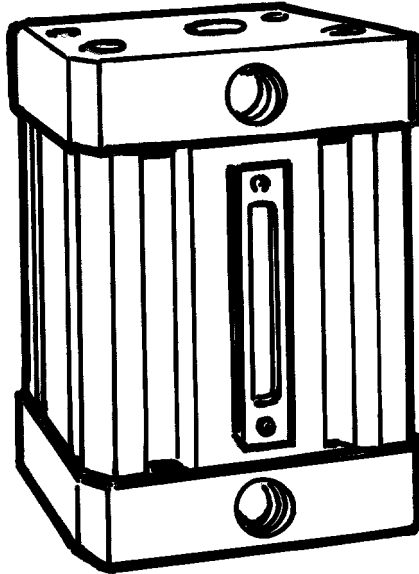


# Provenair<sup>®</sup> HT Series N Air / Oil Assemblies Parts List / Service Instructions



**TYPE:** Repairable, square head, medium bore sizes, light to medium duty.

**BORE SIZES:** 1-1/2", 2", 2-1/2", 3-1/4", 4".

**MAXIMUM AIR INLET PRESSURE:** 250 p.s.i.g.

**OPERATING PRESSURES:** 250 p.s.i.g. – pneumatic.

**STROKE:** Up to 99-7/8".

**OPTIONS:** 4 mounting styles.

**OPERATING TEMPERATURE:** 0° to 185° F (-18° to 85° C).

## AIR SUPPLY REQUIREMENTS

ARO air over oil tanks use shop air to provide smooth control over hydraulic systems. The product offering ranges from light to heavy duty industrial applications operating on air pressures up to 250 p.s.i.g.

## WARNINGS AND PRECAUTIONS

### **WARNING** EXCESSIVE AIR PRESSURE.

Do not exceed maximum working pressure which can result in serious injury or property damage. Use an air regulator to limit pressure to the cylinder.

### **WARNING** PRESSURIZED TANKS CAN CAUSE INJURY.

De-pressurize the system before cleaning, inspection, re-lubrication, servicing or disassembly to prevent injury.

## AIR AND LUBE REQUIREMENTS

### AIR PRESSURE – Limited to 250 psig (17.2 bar).

Proper moisture removal and filtration of contaminants will promote good service life and operation. Install an air regulator to control the operating pressure, insure smooth operation and conserve energy.

## INSTALLATION

Air / oil assemblies must only be installed by a competent technician who understands the system requirements, mechanical principles and equipment involved.

- Keep ports plugged or covered prior to assembly to prevent contamination which can contribute to premature failure.
- Use Teflon tape on the air fittings to prevent leakage.

## OPERATION

Oil level should not exceed the 3/4 point in the tank. A sight glass is provided on tanks greater than 5 inches internal length to see the oil level.

Improper application, installation, service or maintenance of ARO air / oil assemblies can cause bodily injury or shortened product life. Contact the ARO Corporation for questions concerning special applications.

## MAINTENANCE

Periodic maintenance should be performed to insure maximum service life.

- Clean the air filter / regulator bowl regularly. Relieve system pressure, empty the contents of the bowl and clean or replace the filter element.
- Check the fluid level in the lubricator regularly, replenish with the appropriate air line lubricant.

## SERVICE

Disassembly and reassembly should be done in accordance with instructions provided in the service instructions.

- Metallic parts should be cleaned with a non-flammable solvent.
- Rubber parts should be cleaned with soap and water.
- Cleaned parts should be rinsed and dried using low pressure air.
- Replace any parts which are worn or damaged. Selected parts and seals are available in repair kit form.

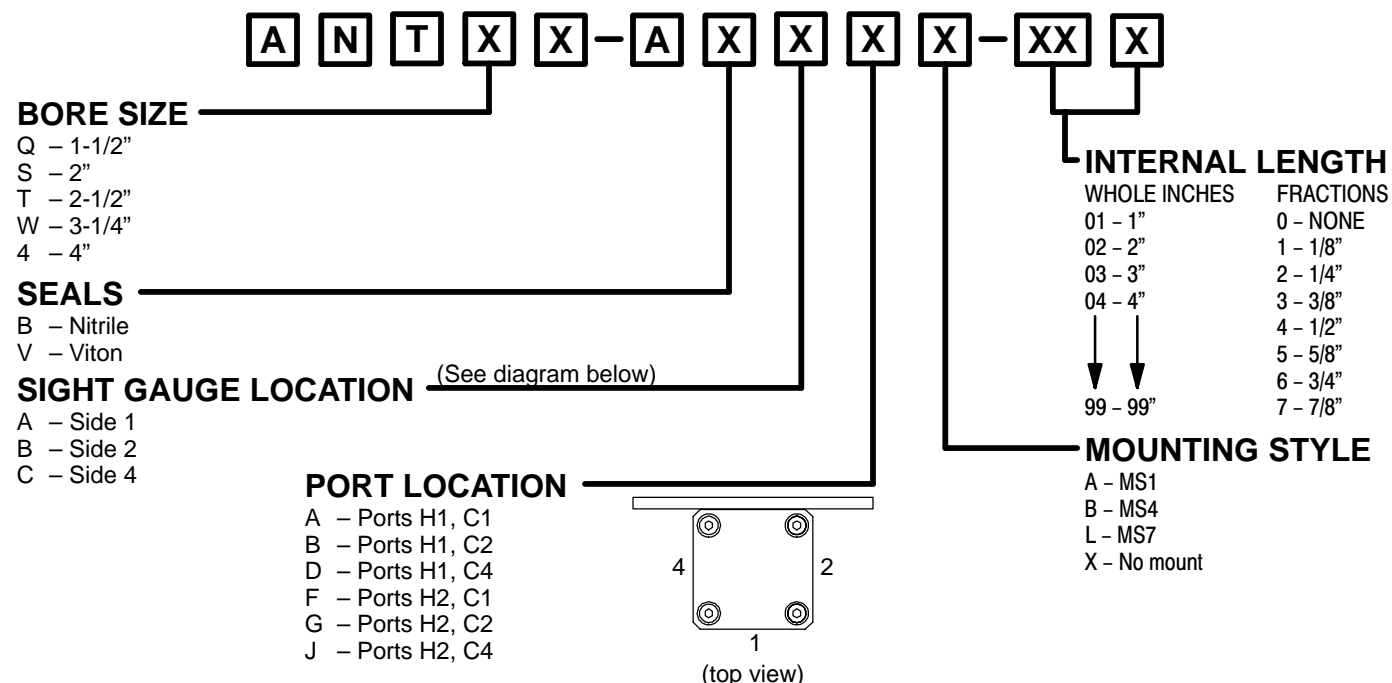
## ASSEMBLY

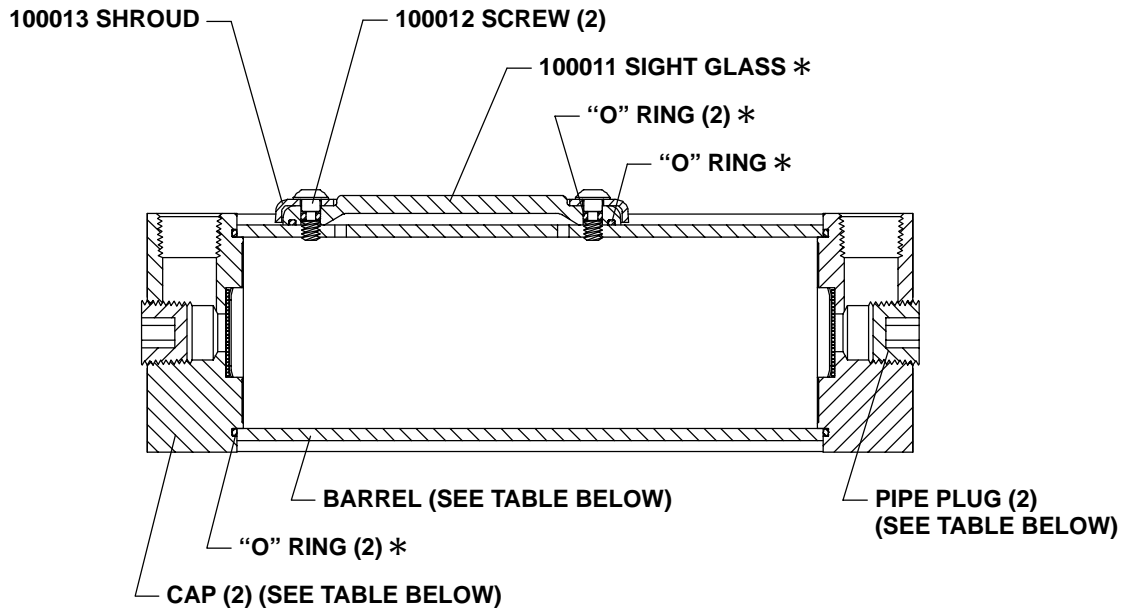
Verify that all seals are in the correct position.

Torque Specifications:	1-1/2"	9 ft lbs (12.2 Nm)
	2"	16 ft lbs (21.7Nm)
	2-1/2"	21 ft lbs (28.5 Nm)
	3-1/4"	35 ft lbs (47.5 Nm)
	4"	49 ft lbs (66.4 Nm)

Apply 90 p.s.i.g. air pressure to each of the air / oil assembly ports and test for external leaks at the barrel seals.

## MODEL NUMBER IDENTIFICATION





\* INCLUDED IN SEAL KIT (SEE BELOW)

BORE SIZE	BARREL NUMBER		CAP		PIPE PLUG
	5" STROKE OR GREATER	LESS THAN 5" STROKE	MS1, MS7	MS4	
1-1/2"	119781-X	119786-X	119801	119806	Y17-52
2"	119782-X	119787-X	119802	119807	Y17-52
2-1/2"	119783-X	119788-X	119803	119808	Y17-52
3-1/4"	119784-X	119789-X	119804	119809	Y17-53
4"	119785-X	119790-X	119805	119810	Y17-53

NOTE: "X" = STROKE LENGTH

## PROVENAIR HT SEAL KITS

**RKNT** **X** **A** - **X**

### BORE SIZE

Q - 1-1/2"  
S - 2"  
T - 2-1/2"  
W - 3-1/4"  
4 - 4"

### SEALS

B - Nitrile  
V - Viton

## **Provenair<sup>™</sup> and Economair<sup>™</sup> Cylinder**

The Aro Corporation ("ARO") warrants to the user purchaser of the ARO Provenair and Economair cylinders ("Cylinder") that the Cylinder be free of defects in material and workmanship for a period of five (5) years from the date of purchase.

ARO will repair or replace, at its election, any Cylinder which is found upon its inspection to be defective during the period prescribed above. The Cylinder must be shipped prepaid to ARO factory or ARO Customer Service Center together with proof of purchase.

This warranty does not apply to failures or defects occurring as a result of abuse, misuse, negligent repairs, corrosion, erosion and normal wear and tear.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES (EXCEPT TITLE), EXPRESSED OR IMPLIED, AND THERE ARE NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR PURPOSE.

THE REMEDIES OF THE USER PURCHASER SET FORTH UNDER THE WARRANTY OUTLINED ABOVE ARE EXCLUSIVE AND THE TOTAL LIABILITY OF ARO WITH RESPECT TO THIS TRANSACTION, WHETHER BASED ON CONTRACT, WARRANTY, NEGLIGENCE, INDEMNITY, STRICT LIABILITY OR OTHERWISE SHALL NOT EXCEED THE PURCHASE PRICE OF THE CYLINDER.

ARO SHALL IN NO EVENT BE LIABLE TO THE USER PURCHASER FOR ANY CONSEQUENTIAL, INCIDENTAL, INDIRECT, SPECIAL OR PUNITIVE DAMAGES ARISING OUT OF THIS TRANSACTION, OR ANY BREACH THEREOF, WHETHER OR NOT SUCH LOSS OR DAMAGE IS BASED ON CONTRACT, WARRANTY, NEGLIGENCE, INDEMNITY, STRICT LIABILITY OR OTHERWISE.