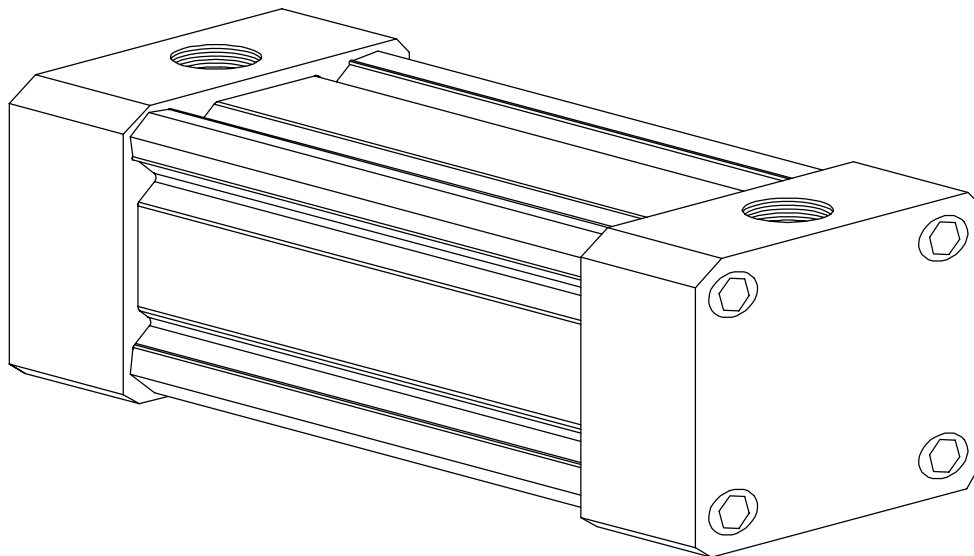


Provenair® HT Series N Dispensing Cylinders Parts List/Service Instructions



TYPE: Repairable, square head, medium bore sizes, double-acting, light to medium duty.

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

MAXIMUM INLET PRESSURE: 250 p.s.i.g. air, 500 p.s.i.g. hydraulic.

OPERATING PRESSURES: 250 p.s.i.g. – pneumatic, 500 p.s.i.g. hydraulic.

STROKE: Up to 99-7/8".

OPTIONS: 4 mounting styles and 2 packing options. NOTE: Double wear strip is standard.

AIR SUPPLY REQUIREMENTS

ARO dispensing cylinders are pneumatic or hydraulic devices which repeatedly distribute a measured volume of fluid. The product offering ranges from light to heavy duty industrial applications operating on air pressure up to 250 p.s.i.g. and hydraulic pressure up to 500 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 DISPENSERS CAN CAUSE INJURY.

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

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.

LUBRICATION

ARO pneumatic cylinders are lubricated at the factory. This lubrication should provide satisfactory operation and cycle life. The use of lubricated air will however help to extend the cycle life.

INSTALLATION

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

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

OPERATION

Improper application, installation, service or maintenance of

ARO Cylinders can cause bodily injury or shortened product life. Contact the ARO Corporation for questions concerning special applications.

MAINTENANCE

Periodic dispenser 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.
- Lubricate moving parts and seals.

ASSEMBLY

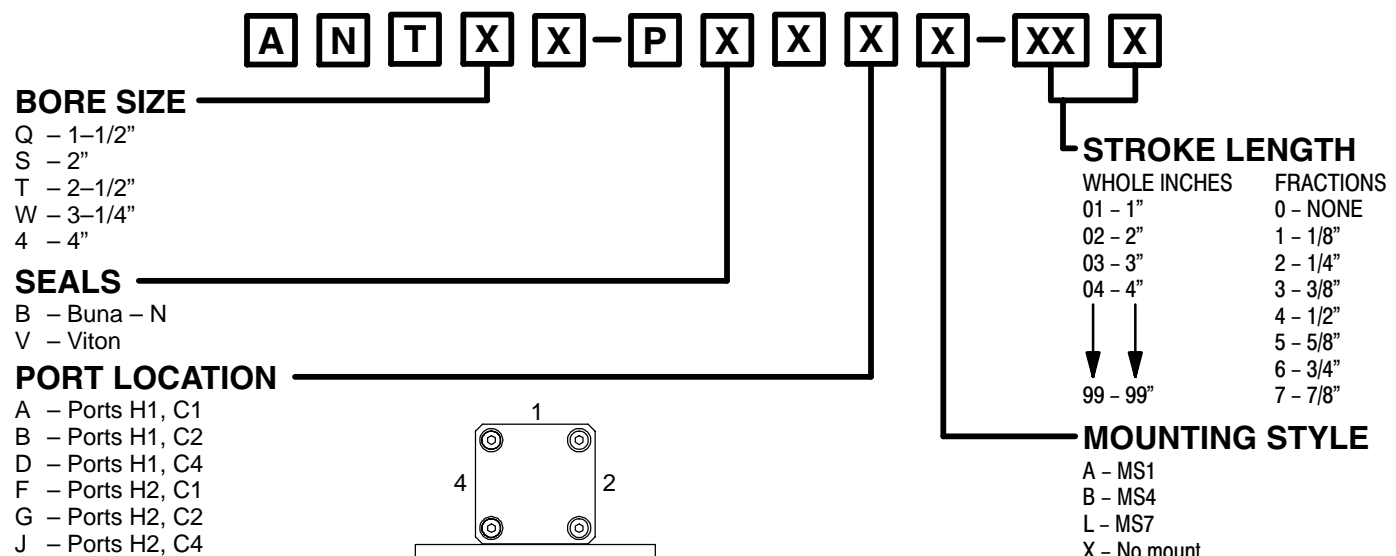
Verify that all seals are in the correct position and that the piston seals have been properly lubricated with Shell Darina, EP grade no. 2 grease.

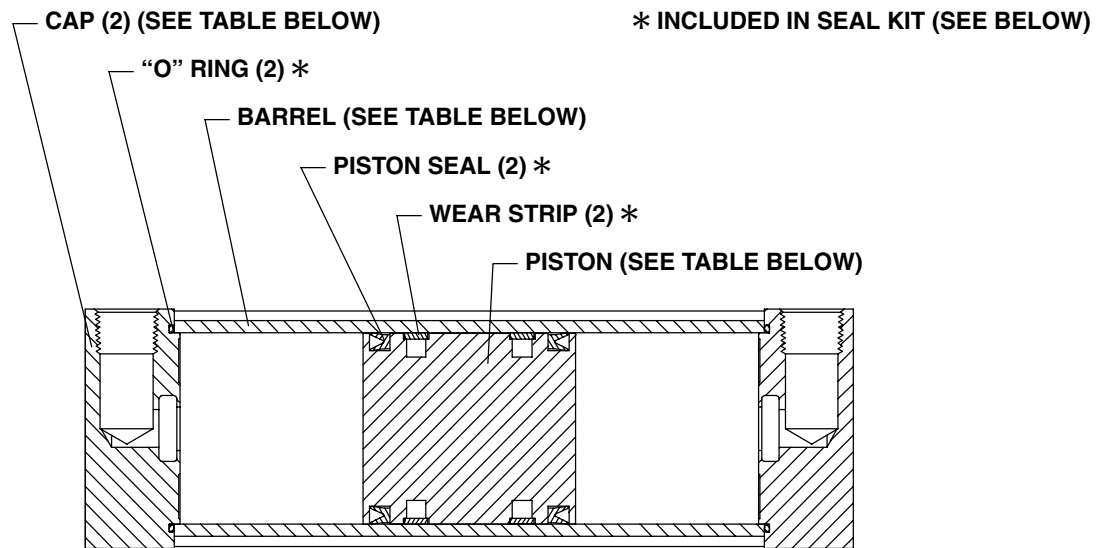
Torque Specifications: 1-1/2" – 9 ft lbs
2" – 16 ft lbs
2-1/2" – 21 ft lbs
3-1/4" – 35 ft lbs
4" – 49 ft lbs

The assembled cylinder can now be tested for leaks and proper operation.

1. Alternately apply 90 p.s.i.g. air pressure to each of the cylinder ports and test for internal leaks across the piston and external leaks at the barrel seals.
2. Test for proper cycling at 20 p.s.i.g. supply.

MODEL NUMBER IDENTIFICATION





BORE SIZE	BARREL NUMBER	CAP		PISTON
		MS1, MS7	MS4	
1-1/2"	119791-X	119471	119473	119746
2"	119792-X	119489	119491	119747
2-1/2"	119793-X	119507	119509	119748
3-1/4"	119794-X	119525	119527	119749-325
4"	119795-X	119543	119545	119749-400

NOTE: "X" = STROKE LENGTH

PROVENAIR HT SEAL KITS

RKNT **X** **P** - **X**

BORE SIZE

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

SEALS

B - Buna - N
V - Viton

Provenair[™] and Economair[™] 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.