# Product Information News

## REPAIRING MSA DUAL PURPOSE AIR MASKS AND FLOW TESTING MSA SUPPLIED AIR RESPIRATORS

MSA recommends that Air Masks equipped with the Dual-Purpose Accessory as well as any Supplied Air Respirators be flow tested annually and after any service has been performed. MSA recommends using the Biosystems PosiChek<sup>3</sup> Computerized SCBA Performance Tester using the MSA software to conduct flow tests on all Air Masks, including Supplied Air Respirators. The flow test should be performed according to the instructions supplied with the tester.

This PIN (Product Information News) Article includes a new repair procedure designed to remove and inspect the Dual-Purpose Air Mask Air-Line Inlet Housing and Plunger.

For convenience, place a copy of this PIN Article in the C.A.R.E. Certified Maintenance Manual.

The inspection, maintenance and test procedures authorized in this PIN article are classified as Certified Maintenance and must be performed by a MSA C.A.R.E. Certified Air Mask Technician. Refer to the illustrated parts list in figure 1 as an additional reference.

The following warning is also being added to the Functional Checks section of Operation and Instructions manuals.

## 

If the SCBA fails to perform properly when conducting any of the following Functional Checks, do not use it. The condition must be corrected by an MSA C.A.R.E. Certified Air Mask Technician. The SCBA must perform for all functional checks before use. Failure to follow this warning can result in serious personal injury or death.

Be Sure.

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For More Information: Call (1-800-MSA-2222) or Visit Our Website at (www.MSAnet.com)

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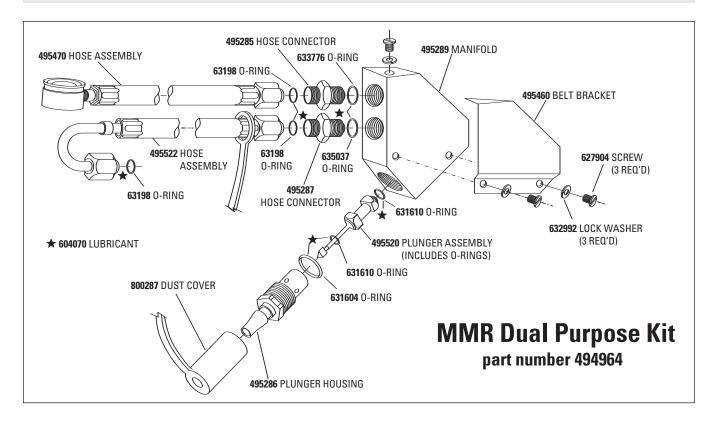
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## **DUAL PURPOSE AIR-LINE INLET ASSEMBLY REPAIR**



### Tools

No special tools are needed.

## Equipment

All work requirements can be completed using an approved dynamic flow tester and a low pressure breathing air source.

Safety glasses must be worn when working with high pressure air equipment.

# Removing the Dual-Purpose Air-Line Inlet Housing and Plunger

- 1. Place a 15/16" deepwell socket on the housing hex and turn it counter-clockwise to loosen.
- 2. Pull the housing out of the regulator body.
- 3. Roll the O-ring off the housing. Discard the O-ring.
- 4. Pull the plunger from the back of the housing.
- 5. Remove the O-rings from the plunger. Discard the O-rings.



**Note:** If the plunger is bent, discard it and install a new one.

# Installing the Dual-Purpose Air-Line Inlet Housing and Plunger

- 1. Apply a thin coat of Christo-Lube lubricant to each Oring. Roll the O-ring over the housing threads.
- Install one O-ring on each end of the plunger. Be careful not to damage the O-ring on the threads.



## DUAL PURPOSE AIR-LINE INLET ASSEMBLY REPAIR



- 4. If the triad does not protrude 1/32" from the housing, remove the plunger from the housing.
- 5. Hold the plunger in one hand and turn the triad in (clockwise) or out (counter-clockwise) until it does protrude from the housing by 1/32".

housing, making sure



Note: Be sure not to bend the plunger stem or damage the triad.

- 6. Apply one small drop of sealant (Loctite 222) to the threads at the base of the triad.
- 7. Allow the sealant to cure for 4 hours.
- 8. Hold the regulator body with the housing inlet port pointed down.
- 9. Insert the housing and plunger into the regulator body. Turn the housing clockwise until it is hand-tight.
- 10. Place a torque wrench with a 15/16" deepwell socket on the housing flats and tighten 12-15 ft.lbs. (144-180 in.lbs).
- 11. Perform the leak test (See the LEAK TESTING section of the C.A.R.E. Maintenance Manual Binder).

Note: MSA requires that a flow test be performed annually on all fire-service and non-fire service SCBA and combination respirators that use a pressure demand regulator.

#### **A** CAUTION

The following Flow Test Procedures must be performed by an MSA CARE Certified Air Mask Technician at an MSA Authorized C.A.R.E. Service Center using MSA approved equipment.

### Flow Testing MSA Dual Purpose Pressure Demand **Breathing Apparatus**

Note: MSA recommends using the Biosystems PosiChek3 Computerized SCBA Performance Tester using the MSA software to conduct flow tests on the complete Dual Purpose Air Mask and the Dual-Purpose Air-Line Inlet Assembly

1. Perform the "Complete SCBA Test" according to the instructions supplied with the tester.

Note: A first stage test adapter and intermediate pressure hose assembly, which are used to monitor the intermediate first stage pressure during the "Complete SCBA Test," are supplied with the PosiChek<sup>3</sup> tester along with the MSA software. The first stage test adapter can be obtained from MSA. Please refer to the instruction sheet (PN 10006004) supplied with the MSA software for the PosiChek3 for the correct adapter part number.

2. Perform the "Airline Apparatus Test" according to the instructions supplied with the tester.

Note: An Airline/Dual Purpose "T" connection test adapter, which is used in conjunction with the intermediate pressure hose assembly to monitor the supplied air pressure during the "Airline Apparatus Test", is supplied with the Posi-Chek<sup>3</sup> tester along with the MSA software. The Airline/Dual Purpose test adapter can be obtained from MSA. Please refer to the instruction sheet (PN 10006004) supplied with the MSA software for the Posi-Chek<sup>3</sup> for the correct Airline/Dual Purpose adapter part number.

3. Contact MSA at 1-800-MSA-2222 if you have any questions regarding this procedure.



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