Product Information News

November 16, 2012

SHOULDER-MOUNTED AIR PRESSURE GAUGE REPLACEMENT

As indicated in the recent User Notice (copy attached), MSA has become aware that some shoulder-mounted air pressure gauges provided by our gauge supplier and used on certain AirHawk® II, BlackHawk®, and FireHawk® M7 (less PASS version) Air Masks were manufactured incorrectly. This PIN Article provides the procedure for replacing these gauges.

To order free replacement gauges, fax the attached order form to MSA Customer Service. If you have any questions, contact MSA Customer Service at 1-866-672-0005.

REPLACING 2216/3000 & 4500 SHOULDER-MOUNT GAUGES
Procedure, Materials, and Equipment

Section:
A - Air Masks without Quick-Fill System
B - Air Masks with Quick-Fill System
C - Air Masks with HUD Transmitter
D - Air Masks with Whistle Manifold

NOTE: The new gauges have a **blue** safety plug in the back of the gauge and the old gauges have a **black** safety plug.

A - AIR MASKS WITHOUT QUICK-FILL SYSTEM
Required Tools
1- 11/16" Wrench
1- 9/16" Wrench
1- O-ring removal tool (P/N 636060)

1. Use an11/16" wrench to hold the gauge jam nut and a 9/16" wrench to hold the air-line nut. Loosen the jam nut and unscrew the gauge.

2. Use the o-ring removal tool to remove the o-ring and back-up ring from the hose line fitting.

NOTE: Be careful not to scratch the o-ring groove.

3. Discard the o-ring and back-up ring.

Install the New Gauge

Required Tools
1- 9/16" Wrench
1- 11/16" Crowsfoot
1- Inch Pound Torque Wrench (capable of 175 in lbs)
1- Gauge 2216/3000 (P/N 10003611), 4500 (P/N 10003610) w/ Gauge Guard (P/N 10011302)
1- O-Ring (p/n 638167)
1- Back-up Ring (P/N 635277)
1- Christo-Lube (P/N 604070)

1. Prepare the air hose for assembly
   a. Install the new back-up ring (white ring) onto the hose line fitting.
   b. Use finger tips to roll o-ring over end of hose line fitting.
   c. Apply a small amount of Christo Lube lubricant to the o-ring and back-up ring.

NOTE: The o-ring should be the outer most ring.

2. Insert the hose fitting into the standard gauge.

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3. Screw the gauge fully onto the hose assemblies.

4. Back the gauge off about a quarter (1/4) turn.

5. Use the inch pound torque wrench with the 11/16" crowsfoot and 9/16" wrench to tighten the jam nut to 175 ± 25 in.lbs.

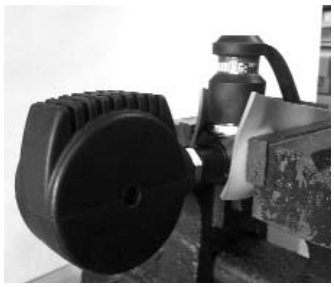
6. Pressurize the system and apply leak test solution to the connections between the hose, adapter, swivel, and jam nut.
   a. If bubbles appear, replace the back-up ring and o-ring as needed. Re-test.

B - AIR MASKS QUICK-FILL SYSTEM

Required Tools and Parts
1- 11/16" Wrench
1- Vise

1. Secure the Quick-Fill adapter in vise.

NOTE: Use protective sleeves on the jaws of the vise.



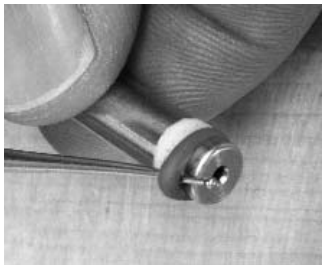
2. Remove the gauge using the 11/16" wrench.

3. Remove the air spool orifice.

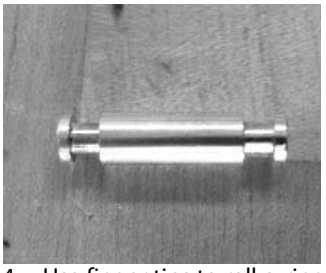
Air Spool Orifice Maintenance

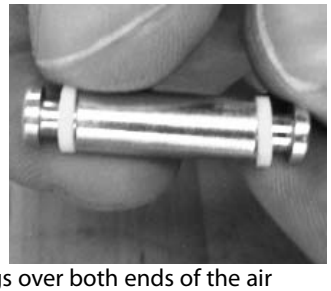
Required Tools and Parts
1- O-ring removal tool (P/N 636060)
1- Air Spool / Oriface (P/N 10003605)
2- O-Ring (P/N 638167)
2- Back-up Ring (P/N 635277)

1. Use the o-ring removal tool to remove the o-rings and back-up rings from the air spool orifice.



2. Discard the o-rings and back-up rings.
3. Install the back-up rings (white rings) to both sides of the air spool.





4. Use finger tips to roll o-rings over both ends of the air spool.

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NOTE: The o-rings should be the outer most rings.

Install the New Gauge

Required Tools and Parts
1- 11/16" Crowsfoot
1- Inch Pound Torque Wrench (capable of 175 in.lbs.)
1- Socket Extension (3 in or longer)
1-Vise
1- Gauge 2216/3000 (P/N 10003611), 4500 (P/N 10003610) w/ Gauge Guard (P/N 10011302)
1- Air Spool Orifice

1. Apply Christo-Lube to the air spool o-rings and insert (end with large hole first) in the gauge.

NOTE: End with small hole should be visible once inserted.

2. Screw the gauge fully onto the hose assemblies. If necessary, back the gauge off about a quarter (1/4) turn.

NOTE: Do not back off more than one turn.

3. Use the inch pound torque wrench with the 11/16" crowsfoot and 9/16" wrench to tighten the jam nut to 175 +/- 25 in.lbs.

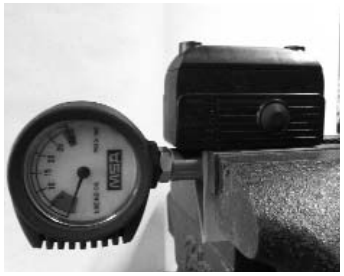
4. Pressurize the system and apply leak test solution to the connections between the hose, adapter, swivel, and jam nut.
   a. If bubbles appear, replacce the back-up ring and o-ring as needed. Re-test.

C - AIR MASKS WITH HUD TRANSMITTER

Required Tools and Parts
1- 11/16" Wrench
1- Vise

1. Secure the HUD transmitter in vise.

NOTE: Use protective sleeves on the jaws of the vise.



2. Remove the gauge using the 11/16" wrench.

3. Remove the air spool orifice.

4. Perform air spool orifice maintenance (see page 2).

Install the New Gauge

Required Tools and Parts
1- 11/16" Crowsfoot
1- Inch Pound Torque Wrench (capable of 175 in lbs)
1- Socket Extension (3 in or longer)
1- Gauge 2216/3000 (P/N 10003611), 4500 (P/N 10003610) w/ Gauge Guard (P/N 10011302)
1- Air Spool Orifice

1. Apply Christo-Lube lubricant to the air spool o-rings and insert (end with large hole first) into the gauge.

NOTE: End with small hole should be visible once inserted.

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2. Screw the gauge into the HUD transmitter adapter. If necessary, back off for proper orientation.

NOTE: Do not back off more than one turn.

3. Use an 11/16" crows foot and inch pound torque wrench (with 3" extension) to tighten the jam nut to 175 ± 25 in.lbs.

4. Pressurize the system and apply leak test solution to the connections between the HUD transmitter adapter, swivel, and jam nut.
   a. If bubbles appear, replace the back-up rings and o-rings as needed. Re-test.

D - AIR MASKS WITH WHISTLE MANIFOLD

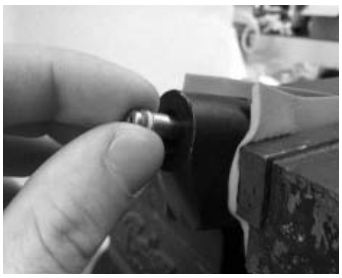
Required Tools and Parts
1- 11/16" Wrench
1- Vise

1. Secure whistle manifold Assembly in vise.

NOTE: Use protective sleeves on the jaws of the vise.

2. Remove the gauge using the 11/16" wrench.

3. Remove the air spool orifice.



4. Perform air spool orifice maintenance (see page 2).

Install New Gauge

Required Tools and Parts
1- 11/16" Crowsfoot
1- Inch Pound Torque Wrench (capable of 175 in.lbs.)
1- Socket Extension (3 in or longer)
1- Gauge 2216/3000 (P/N 10003611), 4500 (P/N 10003610) w/ Gauge Guard (P/N 10011302)
1- Air Spool Orifice

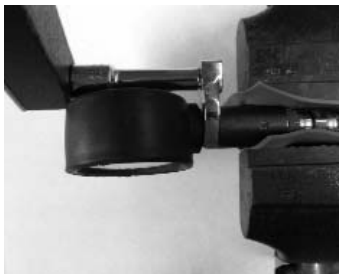
1. Apply Christo-Lube to air spool o-rings and insert (end with large hole first) into the gauge.

NOTE: End with small hole should be visible once inserted.

2. Screw the gauge into the whistle manifold assembly adapter. If necessary, back off for proper orientation.

NOTE: Do not back off more than one turn.

3. Use the 11/16" crows-foot and inch pound torque wrench (with 3" extension) to tighten the jam nut to 175 ± 25 in.lbs.



4. Pressurize the system and apply leak test solution to the connections between the whistle manifold, adapter, swivel, and jam nut.
   a. If bubbles appear, replace the back-up rings and o-rings as needed. Re-test.