# **User Safety Notice**

# ExtendAire<sup>™</sup> I/II Emergency Breathing Supply Systems and RescueAire<sup>™</sup> II Portable Air-Supply System

March 17, 2014

#### Dear Valued Customer,

In partnership with your local MSA Distributor, we are delivering this *User Safety Notice* to you, and we apologize for any inconvenience that it may cause you. We want to alert you to a safety issue involving the quick connect coupling used on the ExtendAire I/II Emergency Breathing Supply Systems (EBSS) and RescueAire II Portable Air-Supply System. We have received three reports indicating that, during training exercises, the Air Mask user that needed air did not receive air after a secure connection was made to the donor's tee manifold of an ExtendAire I equipped Air Mask. The donor continued to receive air. As such, it is important to follow the procedure below should a no-flow condition occur.

<u>Temporary Use Procedure Until Replacement Male Fittings Are Installed</u> If attempting a rescue using the ExtendAire I/II feature of an air mask or RescueAire II System and the individual needing air does not receive air when the quick connect coupling is connected, disconnect the coupling, rotate the receiver's female fitting approximately one-quarter turn, and reconnect it. This will reorient the coupling plungers and will result in airflow to the receiver.

#### Background

The ExtendAire I/II systems are optional equipment on several MSA Air Mask models and are designed for use in an emergency situation to allow the Air Mask user to share cylinder air with another Air Mask user. The RescueAire II system is a portable air-supply system equipped with an ExtendAire connection, and designed for use by Rapid Intervention Teams (RITs).

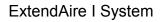


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ExtendAire II System

RescueAire II System

# **Root Cause**

In working with our quick connect supplier, we determined that a previous design change affecting couplings manufactured from January 2007 to January 2014 may allow the plungers within the coupling halves to bypass each other when initially making a connection, preventing the integral valves from opening, and preventing air flow through the coupling when connected.

In evaluating this condition, we confirmed that if the coupling plungers are in a certain orientation when making the connection in addition to other factors, a no-flow condition could occur. Although possible, the likelihood of a noflow condition occurring during an actual rescue is remote.

# **Corrective Action**

Based on these findings and at MSA's request, our supplier redesigned the male fitting of the quick connect coupling, modifying the plunger to prevent this occurrence. Our supplier is currently ramping up production of this male fitting. In the near future, we will initiate a field program to replace the male quick connect fitting on all ExtendAire I/II and RescueAire II Systems manufactured from January 2007 through January 2014 at no cost to you. We will issue a separate User Safety Notice to initiate the replacement program.

This coupling is also used on the 2<sup>nd</sup> stage regulator intermediate pressure hose connection of some MSA Air Mask models with or without the ExtendAire I/II options. We have confirmed that once the coupling is connected and air is flowing, the plungers will <u>not</u> disengage and cause loss of flow during use. Therefore, a no-flow condition involving this quick connect coupling when used on the main intermediate pressure hose connection, would be detected when donning the Air Mask in a safe area, or during routine maintenance checks. Therefore, no field replacement of the male fitting will be required for quick connect couplings used on the main intermediate pressure hose connection. The replacement program will involve only the male quick connect fitting put into use in rescue operations.



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#### **Next Steps**

As indicated above, MSA will issue a separate *User Safety Notice* in the near *The Safety Company* future to initiate the field replacement program. At that time, we will provide additional details.

Again, we apologize for any inconvenience that this situation may cause; however, your safety and continued satisfaction with our products is most important to us.

If you have any questions, please contact MSA Customer Service as follows:

- U.S., Canada, or U.S. Territories 1-877-672-3473, Monday through Friday, between the hours of 8:30 AM and 5:30 PM EDT or by email at: <u>ProductSafetyNotices@MSAsafety.com</u>.
- Mexico 01-800-672-7222, Monday through Friday, between the hours of 8:30 AM and 5:30 PM CST or by email at: atencion.clientes@MSAsafety.com.
- Outside the U.S., Canada, Mexico, or U.S. Territories 724-776-8626, Monday through Friday, between the hours of 8:30 AM and 5:30 PM EDT or by email at: <u>LAMZonecs@MSAnet.com</u>.

Best regards,

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Charles J. Seibel, Jr. Manager of Product Safety

PS14002-30



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# **User Safety Notice**

# Male Quick Connect Fitting Replacement Program for ExtendAire<sup>™</sup> I/II and RescueAire<sup>™</sup> II Systems

April 2, 2014

#### **Dear Valued Customer,**

This *User Safety Notice* is a follow-up to the notice that we issued on March 17, 2014 regarding a safety concern involving the quick connect coupling used on the ExtendAire I/II Emergency Breathing Supply Systems (EBSS) and the RescueAire II Portable Air-Supply System. This notice initiates the replacement program for affected male quick connect fittings on all ExtendAire I/II and RescueAire II Systems manufactured from January 2007 through January 2014.

# Installation of New Male Quick Connect Fittings

If you have any affected Air Masks or RescueAire II Systems as identified below or purchased replacement components containing male quick connect fittings for an ExtendAire I/II or RescueAire II System between January 2007 and January 2014, please contact your local MSA Fire Service Distributor to arrange for installation of replacement affected male quick connect fittings free of charge.

Replacement fittings must be installed by an MSA CARE certified repair technician. If you need assistance locating an MSA Fire Service Distributor, please contact MSA Customer Service using the appropriate contact information provided at the end of this notice.

# **Temporary Use Procedure**

As explained in the earlier notice, during a rescue attempt the intended recipient of air may not receive air after a secure connection is made to the donor's tee manifold of an ExtendAire I equipped Air Mask or RescueAire System. Until replacement male fittings are installed, it is important to follow the procedure below should a no-flow condition occur.

If attempting a rescue using the ExtendAire I/II feature of an Air Mask or RescueAire II System and the intended recipient of the air does not receive air when the quick connect coupling is connected, disconnect the coupling, rotate the receiver's female fitting approximately onequarter turn, and reconnect it. This will reorient the coupling plungers and will result in airflow to the receiver.



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# Background

The ExtendAire I/II systems are optional equipment on several MSA Air Mask The Safety Company models and are designed for use in an emergency situation to allow the Air Mask user to share cylinder air with another Air Mask user. The RescueAire II system is a portable air-supply system equipped with an ExtendAire connection, and designed for use by Rapid Intervention Teams (RITs).

We received three reports indicating that, during training exercises, the intended recipient of air did not receive air after a secure connection was made to the donor's tee manifold of an ExtendAire I equipped Air Mask. The donor continued to receive air.



ExtendAire I System

# Root Cause and Corrective Action

In working with our guick connect supplier, we determined that a previous design change affecting couplings manufactured from January 2007 to January 2014 may allow the plungers within the coupling halves to bypass each other when initially making a connection, preventing the integral valves from opening, and preventing air flow through the coupling when connected.

ExtendAire II System

In evaluating this condition, we confirmed that if the coupling plungers are in a certain orientation when making the connection in addition to other factors, a no-flow condition could occur. Although possible, the likelihood of a no-flow condition occurring during an actual rescue is remote.

Based on these findings and at MSA's request, our supplier redesigned the male fitting of the guick connect coupling, modifying the plunger to prevent this occurrence.

#### Other Coupling Uses

This coupling is also used on the 2<sup>nd</sup> stage regulator intermediate pressure hose connection of some MSA Air Mask models with or without the ExtendAire I/II options. We have confirmed that once the coupling is connected and air is flowing, the plungers will **not** disengage and cause loss of flow during use. Therefore, a no-flow condition involving this guick connect coupling when used on the main intermediate pressure hose connection, would be detected when donning the Air Mask in a safe area, or during routine maintenance checks. Therefore, no field replacement of the male fitting is required for quick connect couplings used on the main intermediate pressure



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RescueAire II System

hose connection. This replacement program involves only the male quick connect fitting put into use in rescue operations.

#### Identifying Affected Air Masks and RescueAire II Systems

Affected air masks are equipped with an ExtendAire I or ExtendAire II System that have the first six digits of the first stage regulator serial number within the ranges listed below. Affected RescueAire II Systems have the first six digits of the first stage regulator serial number within the ranges listed below.

Please note - The first stage regulator serial number provides a guide to identifying affected Air Masks and RescueAire II Systems since it identifies units shipped with affected male quick connect fittings. However, if 2007 to 2014 vintage male quick connect fittings or replacement parts containing these fittings were installed on pre-2007 vintage Air Masks or RescueAire II Systems to provide air to a recipient during a rescue operation, those fittings should be replaced as well. If in doubt, the fitting should be replaced.

GAA001 to GAA366	LAA001 to LAA366	ZAA001 to ZAA366
GAB001 to GAB366	LAB001 to LAB366	ZAB001 to ZAB366
GAC001 to GAC366	LAC001 to LAC366	ZAC001 to ZAC366
GAD001 to GAD366	LAD001 to LAD366	ZAD001 to ZAD366
GAE001 to GAE366	LAE001 to LAE366	ZAE001 to ZAE366
GAF001 to GAF366	LAF001 to LAF366	ZAF001 to ZAF366
GAG001 to GAG366	LAG001 to LAG366	ZAG001 to ZAG366
GAH001 to GAH031	LAH001 to LAH031	ZAH001 to ZAH031

Refer to the photos below to locate the first stage regulator serial number.

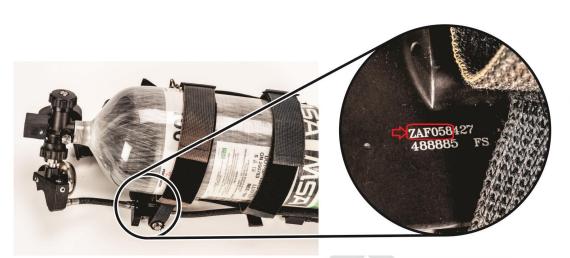


Air Mask Serial Number Location – Refer to First Six Digits



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RescueAire II System Serial Number - Refer to First Six Digits

#### Identifying Units Already Upgraded

The new male quick connect fitting includes a date code on the hex surface as indicated in the photo. It is also gray in color, whereas older fitting is black.

Again, we apologize for any inconvenience that this situation may cause; however, your safety and continued satisfaction with our products is most important to us.



New Male Quick Connect Fitting

If you have any questions, please contact MSA Customer Service as follows:

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- Mexico 01-800-672-7222, Monday through Friday, between the hours of 8:30 AM and 5:30 PM CST or by email at: <u>atencion.clientes@MSAsafety.com</u>.
- Outside the U.S., Canada, Mexico, or U.S. Territories 724-776- 8626, Monday through Friday, between the hours of 8:30 AM and 5:30 PM EDT or by email at: <u>LAMZonecs@MSAnet.com</u>.

Best regards,

Charles J. Seibel, Jr. Manager of Product Safety

PS14002-22