

NIOSH Respirator User Notice

June 12, 1998

The National Institute for Occupational Safety and Health (NIOSH) wishes to inform users of the Belt-Mounted Regulator (BMR) model self-contained breathing-apparatus (SCBA), manufactured by Mine Safety Appliances Company (MSA) that certain breathing tubes used on BMR SCBA may tear or separate unexpectedly. The Institute has recently received a number of reports indicating that breathing tubes can tear or completely separate, resulting in a loss of respiratory protection to the user. These breathing tubes are used on belt-mounted regulator type SCBA. The corrugated rubber tube connects the belt-mounted regulator to the facepiece and can be identified by the part numbers 801165, 803506, or 470734 stamped in yellow ink on one of the clamps at either end of the breathing tube.

Mine Safety Appliances Company is actively working to determine the cause of these breathing tube failures, along with the extent of the problem. Preliminary indications are that some breathing tubes may have recently been placed in service that are susceptible to premature failure. This could result in a complete loss of respiratory protection, in the event of breathing tube failure.

On May 29, 1998, MSA released a Safety Notice that reinforced the need to properly inspect breathing tubes for cracks, tears, cuts, perforations, and any deterioration or other signs of wear. The MSA Safety Notice is clear and should be followed when inspecting the breathing tube. However, Both NIOSH and MSA are concerned that this inspection procedure, by itself, may not be adequate to identify breathing tubes that are susceptible to tearing.

Therefore NIOSH is recommending that users immediately take the following actions to ensure that breathing tubes in their possession are safe for their intended use:

1. Perform the simple pull test developed by MSA that is described on the following pages.
2. Re-inspect the breathing tube following MSA's recommended procedure, paying particular attention to signs of cracking, ripping, or tearing, and to make certain the coupling/tube connection remains tight.

If the breathing tube passes both of these steps, the breathing tube can be returned to service. Any tube that shows signs of cracking, ripping, or tearing, however small, or the clamp has loosened, must be removed from service.

Mine Safety Appliances Company is actively working to determine the cause and extent of the breathing tube failures. Until a final resolution is reached, all breathing tubes in your possession should be inspected following the procedure outlined above.

Additional information on this subject may be obtained by contacting NIOSH at 1-800-35-NIOSH.

Breathing Tube Inspection Procedure

Gather all tubes to be inspected in an area free of obstructions. Don work gloves and safety glasses with side shields.

Perform the following procedure for each tube:

1. With palms down, firmly grasp the end couplings.
2. Stretch the tube by drawing the end couplings away from each other until the tube is stretched to a distance of greater than 5 feet but not to exceed 6 feet. (Pull the tube straight, keeping the couplings in-line with the tube. See Figure 1.)

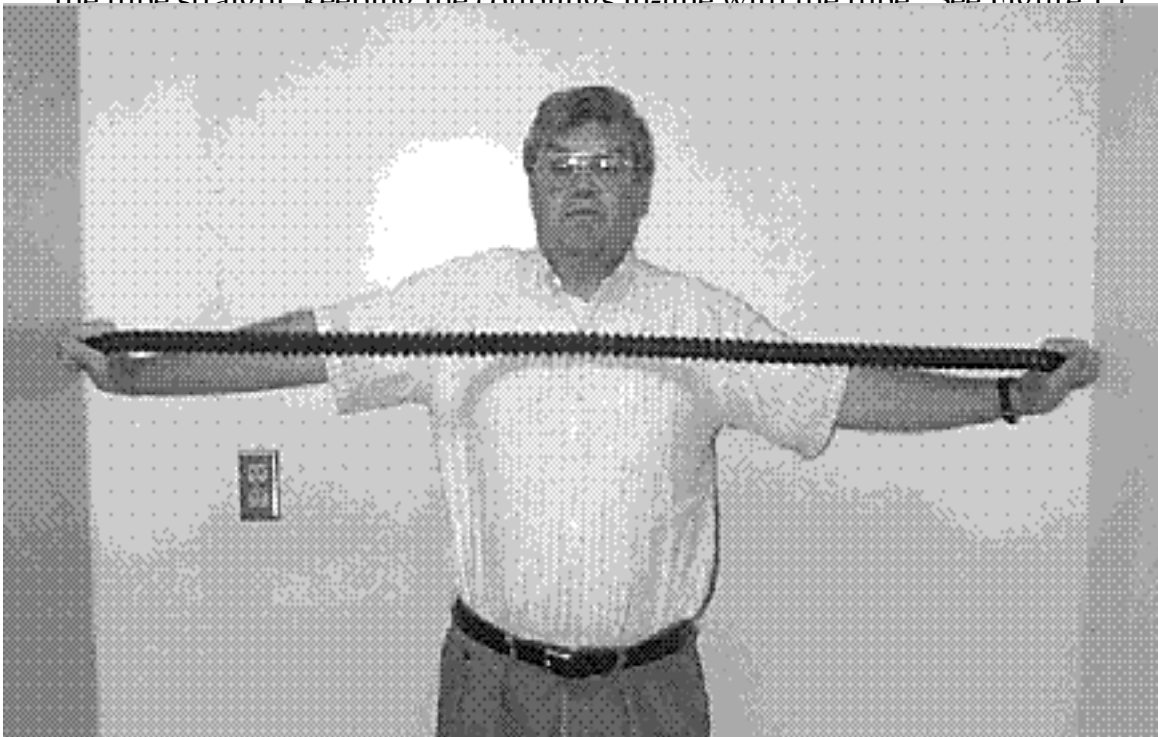


Figure 1: Proper Pull Technique

Do not bend end couplings as shown in Figure 2.

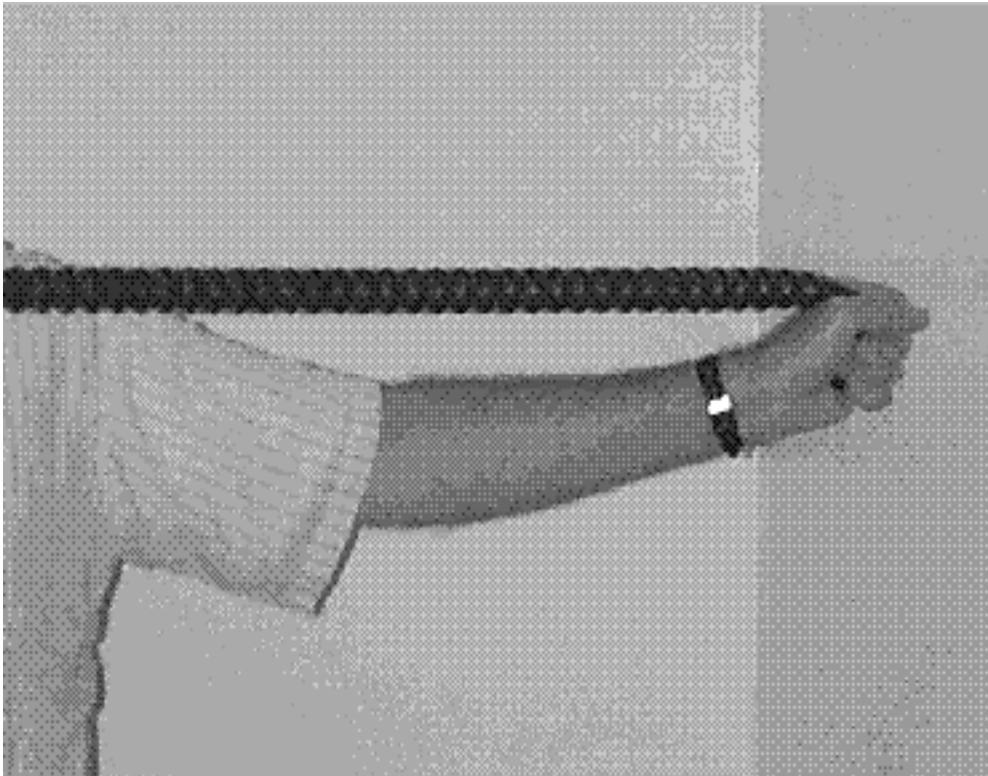


Figure 2: Improper pull technique

Note: The average person with arms straight out at each side will stretch the tube between 5 and 6 feet.

3. Hold for 10 seconds.
4. Release the tube.
5. Inspect the tube per MSA's published instructions.

Caution: Keep other personnel clear of test area.
