

INSTRUCTIONS

Mask, Oxygen, Pressure-Demand—Type A-13-A/2

This mask is provided for use with Pressure Demand Oxygen Regulators (Mk. 17 Series).

1. HOW TO FIT THE MASK

(a) **SELECT PROPER SIZE**—The proper size of the mask depends as much on the size of chin and nose as on the size of the head. A blunt chin or small nose often takes a size smaller (larger chin or nose a size larger) than otherwise indicated. When properly fitted, the inside flap should be tight all round.

Have your Safety Equipment Officer check the fitting of the mask to make sure that you have the correct size. If you have to determine the sizing yourself, see that the mask fits comfortably and does not ride too high on the nose.

(b) **TRIM CHEEK FLAPS**—Trim the cheek flaps so that they extend about one-quarter of an inch under the forward edge of the helmet. The cheek flaps need not fit tightly, since they are intended only for protection against extreme cold or flash burns. The chin cup may be worn as much as one-half inch below the chin without affecting the fit of the mask. In some cases the collection of sweat between skin and cheek or chin flaps has resulted in marked skin irritation. If this occurs, the flaps may be cut back to the edge of the mask without endangering the fit. A better method is to line the flaps with light chamois or kid.

(c) **FITTING MASK AND TOGGLE ASSEMBLY TO HELMET**—Attach the two triangular plates to one of the two available positions on the helmet. It is better to start by using the lower position. The higher position should only be used if there is a tendency for the mask to slip off the face in the low pressure position or when high G loads are to be applied as a routine. The top press stud at the apex of the plates must be locked to the helmet by the screws and washers provided.

2. PRE-FLIGHT INSPECTION AND TEST

(a) **GENERAL**—See that all parts of the mask are securely in place. Make sure that the inlet valves are covered by the plastic shields. It is very important that the arrows on the shields point downward. (The shields are designed to keep moisture away from the inlet check valves, and if the arrows do not point downward, more moisture will get into the valves than if the covers were not used at all).

(b) **INLET VALVE TEST**—The following test should be carried out on A.13A/2 masks fitted with a Disconnect Inlet Warning (Stores Ref. No. 6D/2003). Snap the pre-flight test fixture (Stores Ref. No. 6D/2226) firmly in place on the nose of the disconnect and axially compress the convolutions of the mask tube. Support the mask assembly by the Disconnect, allowing the facepiece, etc., to hang freely. The gradual extension of

the mask tube, due to the ingress of air through either or both inlet valves, should not exceed the rate of 0.5 ins. in 10 seconds.

If the leakage is in excess of this, remove the plastic shields, clean the rubber valves and plastic valve seat with non-fluffy cloth, refit the plastic shields in position and retest.

(c) **PRESSURE TEST**—Connect the mask tube to the regulator flexible hose. Adjust the turnbuckles on the toggle harness so that with the toggle lever in the emergency position and the regulator emergency switch depressed there is no leakage during the respiratory cycle.

(d) **COMPENSATED EXHALATION VALVE**—With the toggle lever in the emergency position, and while operating the mask test control of the regulator, inhale deeply and hold breath. If oxygen continues to flow (and provided the mask is properly fitted), the exhalation valve is suspect or the mask punctured and the mask must be considered unserviceable.

(e) **HINTS ON REDUCING MASK DISCOMFORT**—To hold the higher pressures, the mask must be held very firmly against the face. This tension may result in painful pressure against some parts of the face, especially on the bridge of the nose. There are several ways to reduce this discomfort.

(i) Do not try to maintain more tension on the mask than is necessary to hold pressure. The pressure in the mask and tension on the bows should nearly equalise. In other words, adjust the bow tension just enough to balance the pressure requirements.

(ii) Do not let the cheek flaps jam against the edges of the helmet. This tends to counteract the bow tension and makes it necessary to draw the mask up more tightly against the nose. Trim flaps properly.

NOTES ON SEALING

Failure to secure a good seal between the oxygen mask and the face is often caused by either:—

- Wearing the wrong size helmet,
- Wearing the wrong size oxygen mask,
- Incorrect adjustment of helmet webbing neckband and/or turnbuckle on toggle frame.

The main problem here would appear to be the difficulty found by a certain percentage of people in deciding between a medium and small size mask. If one of these two sizes gives a doubtful seal, then it is advisable to try the other, remembering that the fit of either size may be vastly improved by adjusting the helmet as may be necessary.

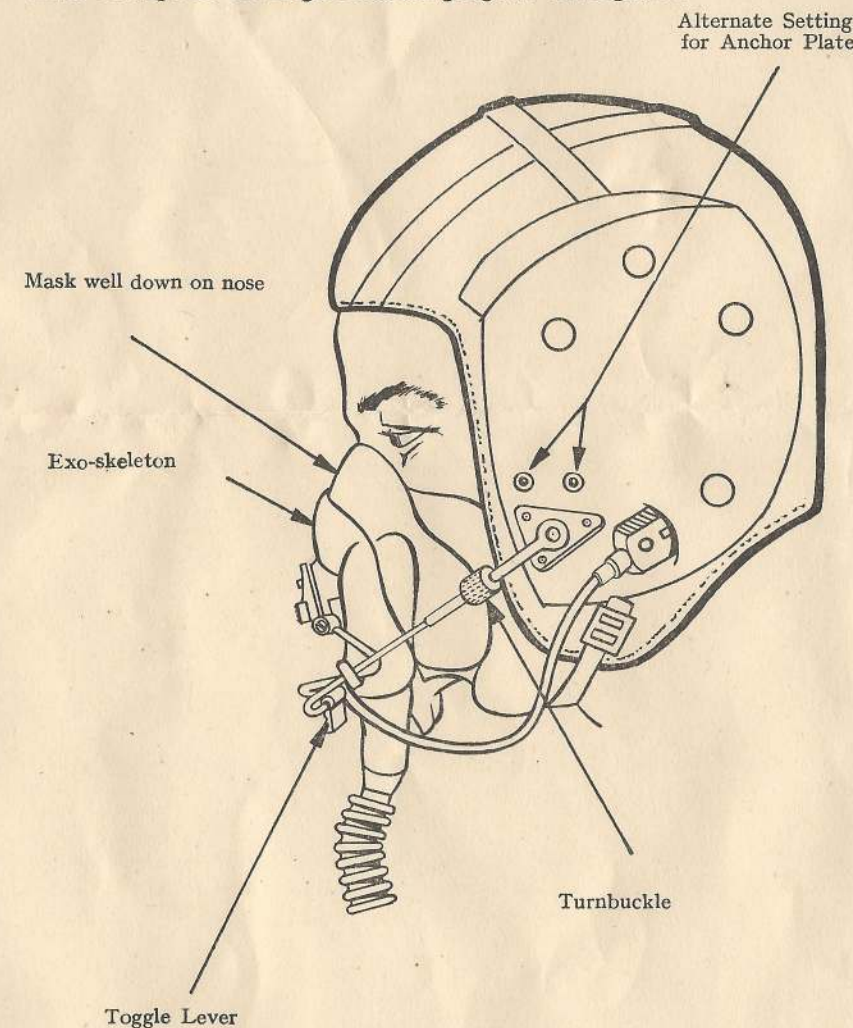
NOTE

Some discomfort may arise from the strap on the A-13-A/2 mask which lies across the upper lip. It is common experience that this discomfort is soon forgotten after a small amount of use. For the optimum efficiency of the pressure holding properties of the mask, the lip strap must not be removed.

Clean the mask periodically. Wash with a moist, clean cloth to remove dirt and perspiration. While the mask is not in use, keep it clean, dry, and away from heat and sunlight.

EMERGENCY PROCEDURE

Should the inlet valves get any particles of dirt lodged underneath the flap of the valve, the expired breath will pass through the inlet valve and hence build up excessive pressure on the underside of the expiratory valve. This will make it hard to breath out and may cause considerable discomfort to the wearer. The mask should be raised from the face and the emergency toggle on the regulator depressed for a moment to blow out any obstruction; this should be repeated if necessary. Should this fail, slacken the Turnbuckle harness until the mask is just loose enough for exhaling in comfort, and set the Emergency toggle to left or right. Care should be taken that the mask is kept as tight as is consistent with comfort, to reduce wastage of oxygen. The rate of flow under these conditions will be very much greater than normal and a careful watch must be kept on the High Pressure gauge in consequence.



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pressure breathing
mask

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