

# **TYPE 3 PBE USER MANUAL FOR P/N: 6444-105**

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## 1. EQUIPMENT OVERVIEW

### 1.1. Product Description

The Type 3 protective breathing equipment (PBE) is designed to feel and operate like the real device in order to train for emergencies in a safe, controlled environment. The training PBE includes a rear actuation pin, head band, and weighted simulated O<sub>2</sub> generator for realism. The hood is similar in shape, colour, and weight to the OEM PBE.

This PBE is designed with durable materials in order to withstand the wear and tear it will experience during repeated use in a training environment. The actuation pin can be reset without the need for tools, and the device can be completely dismantled for easy cleaning between uses. Tulmar Safety Systems is also able to provide repairs to the textile portion of the PBE and replace parts that experience wear through repeated use.

The neck seal for this unit is available in latex free EPDM material or latex based variants.

### 1.2. Parts and Features



Figure 1: Type 2 PBE front and back views

## 2. SAFETY PRECAUTIONS

This device is intended for training and simulation purposes under the supervision of a trainer knowledgeable in its use only, and will not provide protection from smoke inhalation or toxic gases in the event of a real emergency. Do not block or cover ventilation holes during training exercises.

### 3. OPERATION

#### 3.1. Removal from Storage and Donning

1. If the PBE is stored in the box assembly, open the box by pulling on the black tab marked 'LIFT' and remove the PBE from the box (Figure 2).



Figure 2: Opening box assembly

2. If the PBE is in the re-useable pouch, open the pouch by pulling the white 'PULL' label on the Velcro strip along the top of the pouch, then remove the hood (Figure 3).



Figure 3: Re-useable pouch

3. Hold the smoke hood in front of you, stretching the neck seal open with both hands (Figure 4).



Figure 4: Neck seal stretched open

4. Pull the hood over your head. Adjust the head piece into place for comfort.
5. The actuation pin at the rear of the hood can be removed by pulling sharply on the red label marked 'PULL' to simulate activation of a functional PBE.

### 3.2. Operation

1. Once the user is wearing the hood, you can follow your standard training procedure.
2. After your training exercise is complete, bend down and remove the device by grabbing the back of the hood and pulling forwards off your head.

## 4. CARE AND BASIC MAINTENANCE

### 4.1. Care after Use

#### 4.1.1. Disinfection

The neck seal and facial contact area in the front of the hood should be disinfected with alcohol between uses to ensure the health of the trainees.

### 4.1.2. Storage

The PBE should be stored in a protective container to prevent damage when not in use. If you have the re-useable pouch and/or the box assembly, the device can be stored within by following the instructions below. If your kit does not include the re-useable packaging, the PBE can be folded in half and stored in a 16" by 20" re-sealable plastic bag. The activation mechanism should be reset by pressing in on the plunger and reinserting the actuation pin in order to store the device in a ready to use configuration (Figure 5).



Figure 5: Activation mechanism plunger depressed to reveal hole for actuation pin reset

1. Place the device face down on a flat surface.
2. Fold the sides of the PBE inwards around the simulated O<sub>2</sub> generator (Figure 6).



Figure 6: Folding sides of PBE inwards

3. Fold the top and bottom of the device inwards around the simulated O<sub>2</sub> generator in order to match the size of the pouch (Figure 7).



**Figure 7: Folding top and bottom of PBE around simulated O<sub>2</sub> generator**

4. Place the unit in the re-useable pouch and seal the Velcro strip (Figure 8).



**Figure 8: Placing fully folded PBE into re-useable pouch**

5. Insert the hood and pouch into the box assembly and close the lid. Fasten the lid by closing the snap on the black flap marked 'LIFT' (Figure 9).



Figure 9: Closing clasp of box assembly

## 4.2. Cleaning

### 4.2.1. Disassembly

1. Remove the simulated O<sub>2</sub> generator by unfastening the two large Velcro straps at the rear of the hood.
2. Remove the neck seal by undoing the Velcro strip used to fasten it in place.
3. To remove the elastic head band, undo each of the 4 snaps around its perimeter by pulling downwards on the side of the snap attached to the headband.

### 4.2.2. Cleaning and Drying

1. If any stains, oil, or grease are present, treat the affected area with a concentrated solution of wash detergent to remove the stain. Thoroughly rinse with water before cleaning the entire unit.
2. All components can be cleaned by hand with a solution of mild soap and water, rinsing thoroughly with water. If necessary, the main body of the hood can be washed in a standard washing machine on delicate cycle.
3. Allow components to air dry fully. The main body of the hood can be dried in a dryer on delicate cycle.

### 4.2.3. Reassembly

Once completely dry, the unit can be reassembled.

1. Attach the elastic head band inside the PBE using the 4 snaps, making sure to align the 'BACK' label with the rear of the smoke hood.

2. Insert the neck seal into the opening and fasten with the Velcro strip along its perimeter. Be sure that the hole in the neck seal is closest to the rear of the hood. Also ensure that the neck seal is positioned with the rubber or latex seal facing upwards and the Velcro strip downwards when installed. Installing the neck seal in the wrong direction may cause it to detach during operation (Figure 10).



**Figure 10: Neck seal orientated with opening closest to rear of hood and Velcro strip facing downwards**

3. Attach the simulated O<sub>2</sub> generator to the two Velcro straps at the rear of the hood with the actuation pin on the upper right hand side (Figure 11).



**Figure 11: Installing simulated O<sub>2</sub> generator with actuation pin at top right corner**



4. Reset the activation mechanism by pressing down on the plunger and reinserting the actuation pin as shown above (Figure 5).

#### 4.2.4. Repairs

More thorough cleaning and/or repairs of the PBE are handled by Tulmar Safety Systems. Please contact our customer service department for more information. See page one for contact information.

## 5. COMPONENTS

The following table lists components available for the Type 3 PBE. If you are looking to replace a part that is not listed below, please contact Tulmar Safety Systems.

Part No.	Description	Image
6412-001	Non-latex neck piece	Figure 12, item 4
6412-NP	Latex neck piece	Not pictured, similar to 6412-001
6444-102	Elastic head band	Figure 12, item 3
6444-104	Re-useable pouch	Figure 12, item 2
6444-106	PBE box assembly	Figure 12, item 1
6444-107	Simulated O <sub>2</sub> generator	Figure 12, item 6

Table provided for reference only, information may change without notice.

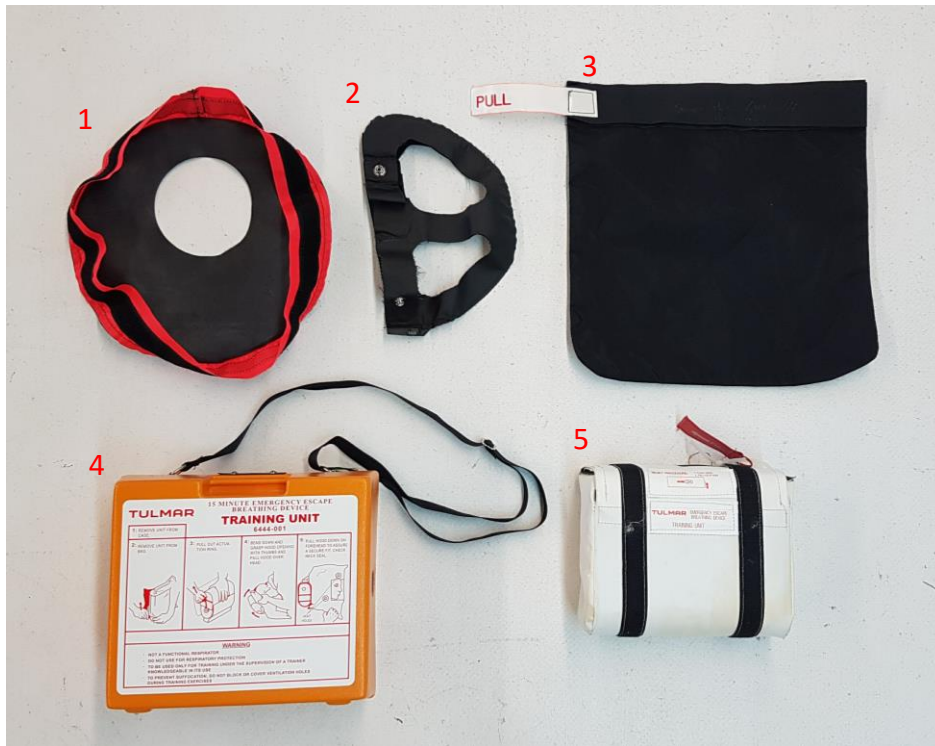


Figure 12: Numbered components

## 6. WARRANTY

### 6.1. Warranty Policy

Tulmar training PBEs are guaranteed for 90 days from the date of shipment to the customer against defects in materials or workmanship. If a product is found to be defective within the warranty period, the product will be repaired or replaced without charge for parts or labour.

### 6.2. Limitations

The warranty is limited to the original purchaser of a new product, and is valid only if the product was purchased from Tulmar or an authorized distributor. This warranty does not cover routine maintenance or damage resulting from the failure to maintain the product in accordance with instructions provided in the User Manual. This warranty also does not cover damage during transport of the product, ordinary wear and tear arising from use of the product, or damage that may arise from accidental or intentional misuse or abuse, alteration or customization, or repair by unauthorized persons.

### 6.3. Remedy

If a defect arises within the warranty period, contact Tulmar customer service at +1 (613) 632-1282 or by email to [inflight@tulmar.com](mailto:inflight@tulmar.com) with the details of the issue and a copy of the original purchase order. Product may only be returned after a Return Material Authorization (RMA) number is issued.

The cost and liability of delivering the damaged product to Tulmar or an authorized Tulmar repair facility are the responsibility of the customer. The documentation, packaging and the enclosed item must be clearly identified with the RMA number. Tulmar, at its sole discretion, will either repair or replace the product with one of functional equivalence. Repaired or replacement products will be returned to the customer's original order destination on a carrier and service of Tulmar's choice.