

Operating and Maintenance Instructions

WARNINGS



Before using this equipment, read the contents of EN 529 : 2005 and familiarise yourself with the requirements for respiratory protective devices and their potential effects on the wearer.



TORNADO system users must be familiar with workplace hazards prior to using the equipment and must be fully trained in the use of the apparatus.



TORNADO head-tops must be used with a T/POWER blower or T/A/LINE. Read this Manual and the T/A/LINE or T/POWER and T/FILTER User Manuals, prior to using the equipment.



T/POWER must be fitted with filters selected from the TORNADO range of filters which are appropriate for the workplace hazard.



This product must only be used with Protector-branded filters manufactured by Scott Health and Safety Limited. The use of any other filters will negate the approval and will be likely to reduce the level of protection provided.



DO NOT confuse the EN 12941 and EN 12942 TORNADO filter markings with filter markings relating to other EN standards.



DO NOT use T1 in confined spaces, oxygen deficient atmospheres (<19.5%), oxygen enriched atmospheres (>23%) or where there is an immediate hazard to life or health.



DO NOT use if the ambient temperature is outside of the range -10°C to +50°C. Humidity levels up to 95% RH do not present any operational problems.



DO NOT use if the apparatus is damaged. The head-top and air hose must be inspected on every occasion before use to ensure that no damage of any kind is evident, (e.g. chemical damage, splits or broken stitching), which could cause leakage or reduced levels of protection. A monthly inspection of the apparatus is a mandatory requirement in the UK under COSHH regulations and inspection on a monthly basis is strongly recommended for all other countries.



Protection will only be obtained if the unit is fitted correctly.



Protection levels may be reduced if wind speed exceeds 2 metres per second.



In the unlikely event that T/POWER or T/A/LINE fails while in a hazardous area, there may be a depletion of oxygen within the head-top. DO NOT remove the head-top, LEAVE THE AREA IMMEDIATELY.



TORNADO head-tops can be used in certain explosive and flammable atmospheres when used with T/POWER which is marked as intrinsically safe. It is the employer's responsibility to ensure that the intrinsic safety approval is compatible with the particular environment.



At very high work-rates, pressure in the device may become negative at peak inhalation flow.



It is unlikely that the requirements for leakage will be achieved if hair, spectacle side arms or clothing intrude into the face-seal.



Filters must not be fitted directly to the helmet/hood.

TORNADO T1

SPECIFICATION

| | | |
|---|---------------------|--------------------------------------|
| Description: | | Half Hood |
| Classification when used with: | T/POWER T/A/LINE | EN 12941 TH2 EN 1835 LDH2 |
| Minimum Design Flow Rate: | | 140 L/min |
| Assigned* (Nominal) Protection Factor when used with: | T/POWER T/A/LINE | 20 (50) 20 (50) |
| Operating Temperature Limits: | | -10°C to +50°C |
| Material: | Hood Visor | Polyurethane-coated nylon Acetate |
| Weight: | | 210 Grams |

* According to EN 529 : 2005

MARKINGS AND MEANINGS

The **T1** head-top markings are in conformance with EN 12941, as follows:

| Marking | Meaning |
|---------|--------------------------------------|
| SCOTT | Manufacturer - Scott Health & Safety |
| T1/SM | Product name - T1 Small/Medium |
| T1/ML | Product name - T1 Medium/Large |
| CE | CE mark |
| 0086 | Certifying body |
| EN12941 | Standard - powered respirator |
| EN1835 | Standard - air supplied |
| TH2 | Class designation - EN 12941 |
| LDH2 | Class designation - EN 1835 |

WEARING

Note:

Remove the protective transit film from the outside and inside surfaces of the visor before donning.

CAUTION:

Whilst the materials which may come into contact with the wearer's skin are not known to be likely to cause skin irritation or other adverse effects to health, they may cause allergic reactions in particularly susceptible individuals.

1. Pull the face-piece over the head so that the visor is in front of the face and arrange the elastic face-seal under the chin.
2. If necessary adjust the **Velcro™** over-head strap for a comfortable fit with no gap between the chin and the face-seal (see Fig. 1).

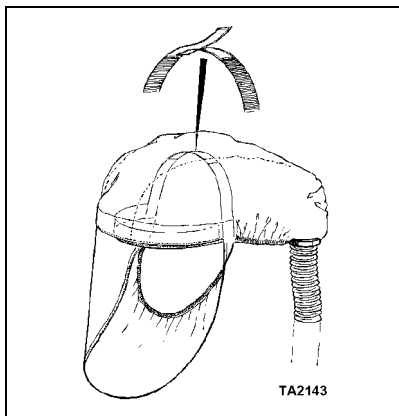


Fig. 1

3. Arrange the breathing hose so that it trails freely down the back and is not kinked or looped.

4. Please refer to the **T/POWER** or **T/A/LINE** User Manual for further information.

AFTER USE

WARNING:

DO NOT remove the face-piece until safely clear of the hazardous area.

1. Remove the hood, disconnect the hose and (if required) use a sponge moistened in warm water to clean and sanitise the face-piece and outer hose.

CAUTION:

- **DO NOT use solvent or detergent cleaners as they may cause damage.**

- **DO NOT** allow water to enter the breathing hose.

2. Care should be taken not to scratch the visor. If the head cover or face-seal is damaged in any way, it should be replaced.

STORAGE

When not in use, the equipment should be stored in a clean, dry environment, away from direct heat sources between +10°C and +30°C, at a humidity of less than 65% RH.

MAINTENANCE

Carry out a thorough inspection of all component parts before and after each occasion of use, paying particular attention to the exhale valve flap. The valve flap must be replaced annually regardless of condition. Valve flaps in storage have a shelf-life of five years, after which time they should be discarded.

Exhalation valve flaps are marked with a code indicating the year of manufacture. The code '**07**' corresponds to 2007 and a dot is added each year thereafter, so '**07.**' would equate to 2008.

RECORD INSPECTION AND MAINTENANCE DETAILS

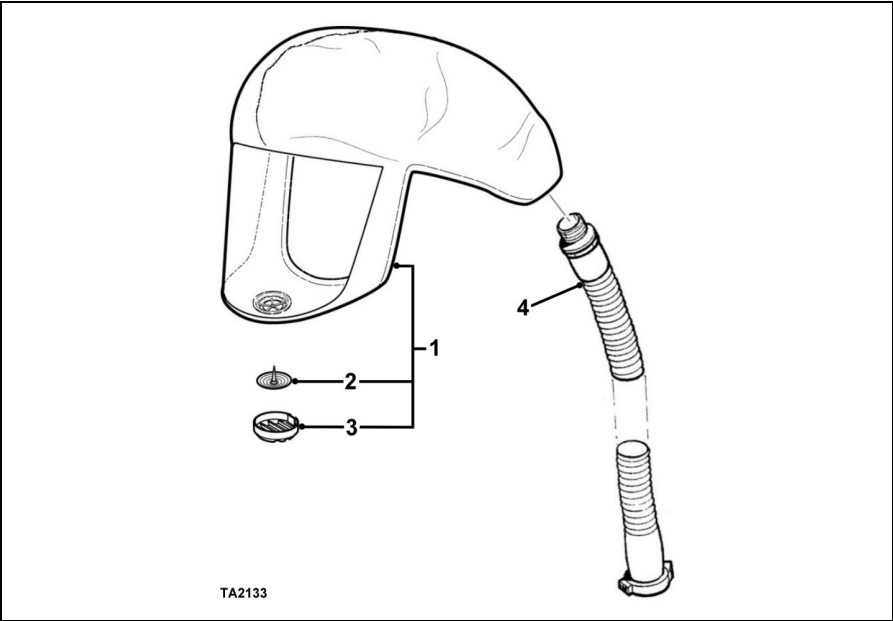
Record test and maintenance details on the Inspection and Maintenance Record Sheet provided at the back of this Manual.

Information recorded usually includes:

- Name of employer responsible for the apparatus.
- Make, model number or identification mark of the apparatus, together with a description of any distinguishing features, sufficient to enable clear identification.
- Date of the inspection/maintenance together with the name, signature or unique authentication mark of the examiner.
- Condition of the apparatus, details of any defects found and any remedial action taken.

TORNADO T1

SPARE PARTS



| Item No. | Description | | Part No. |
|----------|----------------------|--------------|------------|
| 1 | Hood - Small/Medium | (Pack of 5) | T1/HOOD/SM |
| 1 | Hood - Medium/Large | (Pack of 5) | T1/HOOD/ML |
| 2 | Exhale Valve Flap | (Pack of 2) | TOR/VALVE |
| 3 | Exhale Valve Cover | (Pack of 5) | 2017146 |
| 4 | Breathing Hose | (Pack of 3) | T2/HOSE |
| - | Tear-off Visor Cover | (Pack of 10) | KIT96/VP |

FITTING SPARES**To Replace the Hose:**

1. Undo the nut on the rear inner hood and withdraw the hose.
2. Insert the new hose into the hood and secure with the nut. Ensure that both layers of hood fabric are trapped under the nut.

To Replace the Exhale Valve:

1. Pull the valve cover from the valve and pull the exhale valve flap from its housing.
2. Fit the replacement valve and check that the valve flap lies flat on the frame. Align the valve cover with the slots in the valve and snap the cover onto the valve.

WARRANTY

The products manufactured at our factories in Skelmersdale and Vaasa carry a warranty of 12 months (unless stated otherwise) for parts, labour and return to site. The warranty period runs from the date of purchase by the end user.

These products are warranted to be free from defects in materials and workmanship at the time of delivery.

SCOTT will be under no liability for any defect arising from wilful damage, negligence, abnormal working conditions, failure to follow the original manufacturer's instructions, misuse or unauthorised alteration or repair.

Evidence of purchase date will need to be provided for any claims arising during the warranty period. All warranty claims must be directed through **SCOTT Customer Services** and in accordance with our sales return procedure.

NOTIFIED BODIES

Inspec International Limited (0194)
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