

## TOTAL TSP9306

# Total TSP9306 Auto-Darkening Welding Helmet User Manual

Model: TSP9306 | Brand: TOTAL

## INTRODUCTION

This manual provides essential instructions for the safe and effective use, setup, operation, and maintenance of your Total TSP9306 Auto-Darkening Welding Helmet. Please read this manual thoroughly before using the helmet to ensure proper function and personal safety.

## SAFETY INFORMATION

**WARNING:** Welding arcs produce intense ultraviolet and infrared rays that can cause severe eye and skin damage. Always wear appropriate personal protective equipment (PPE) when welding.

- Always inspect the helmet and lens for damage before each use. Do not use if damaged.
- Ensure the auto-darkening lens is functioning correctly by testing it with a light source before welding.
- Do not expose the helmet to extreme temperatures or moisture.
- Use only genuine replacement parts for repairs.
- Keep the helmet clean and free from dust, dirt, and debris to ensure optimal performance.
- This helmet is designed for welding applications. Do not use it for laser welding or overhead welding without additional protection.

## COMPONENTS

The Total TSP9306 Auto-Darkening Welding Helmet consists of several key components designed for protection and comfort.

- **Helmet Shell:** Provides impact and heat protection.
- **Auto-Darkening Filter (ADF) Lens:** Automatically darkens upon arc strike.
- **Headgear:** Adjustable for a secure and comfortable fit.
- **Shade/Sensitivity/Delay Control Knobs:** For adjusting lens settings.

- **Outer and Inner Protective Lenses:** Shield the ADF from spatter and scratches.



**Figure 1:** Front view of the Total TSP9306 Auto-Darkening Welding Helmet, showing the main lens and external adjustment knob.



**Figure 2:** Inside view of the helmet, highlighting the adjustable headgear for a customized fit.



**Figure 3:** Side view of the helmet, illustrating the overall design and headgear attachment points.

## SETUP

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### 1. Headgear Adjustment:

Adjust the top strap and rear headband knob to ensure the helmet fits snugly and comfortably on your head. The helmet should sit low enough to protect your throat and neck, but high enough to allow for clear vision when flipped up.

### 2. Distance from Face:

Adjust the distance between the helmet and your face using the side knobs. This ensures the lens is at an optimal viewing distance and allows for proper airflow.

### 3. Lens Inspection:

Before first use, remove any protective films from the inner and outer protective lenses. Inspect the auto-darkening lens for any cracks or damage. Ensure the solar cells (if present) are clean and unobstructed.

### 4. Function Test:

Before welding, perform a function test. While wearing the helmet, expose the front of the lens to a bright light source (e.g., a flashlight). The lens should darken instantly. If it does not, do not use the helmet for welding.

## OPERATING INSTRUCTIONS

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The Total TSP9306 helmet features adjustable settings to optimize your welding experience.

### 1. Shade Adjustment:

Use the external shade control knob to select the appropriate shade level for your welding process. Refer to welding safety standards for recommended shade levels based on amperage and material. The TSP9306 typically offers shades from DIN 9 to DIN 13.

### 2. Sensitivity Control:

Adjust the sensitivity knob to control how easily the lens reacts to the welding arc. Higher sensitivity is suitable for low-amperage welding or when the arc is partially obscured. Lower sensitivity helps prevent accidental darkening from ambient light.

### 3. Delay Control:

The delay control knob determines how long the lens remains dark after the welding arc stops. A shorter delay is useful for tack welding, while a longer delay is recommended for high-amperage welding to protect eyes from residual glow.

### 4. Grind Mode (if applicable):

Some models include a "Grind" mode. If your helmet has this feature, activate it when grinding to prevent the lens from darkening. Remember to switch back to welding mode before striking an arc.

## MAINTENANCE

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### • Cleaning the Lens:

Clean the outer and inner protective lenses regularly with a soft, clean cloth and a mild soap solution. Do not use abrasive cleaners or solvents. The auto-darkening filter itself should only be wiped gently with a dry, soft cloth.

### • Headgear Cleaning:

Wipe the headgear with a damp cloth. Replace worn or damaged headgear components to maintain comfort and safety.

- **Inspection:**

Periodically inspect the entire helmet for cracks, loose parts, or damage to the lens or shell. Replace any damaged parts immediately.

- **Storage:**

Store the helmet in a dry, clean environment, away from direct sunlight and extreme temperatures. Use the original packaging or a protective bag if available.

## TROUBLESHOOTING

| Problem                                  | Possible Cause   | Solution  |
|--|--|---|
| Lens does not darken when arc is struck. | <ul style="list-style-type: none"><li>• Low sensitivity setting.</li><li>• Sensors obstructed or dirty.</li><li>• Insufficient light from arc.</li><li>• ADF unit malfunction.</li></ul> | <ul style="list-style-type: none"><li>• Increase sensitivity setting.</li><li>• Clean sensors on the front of the ADF.</li><li>• Ensure sensors are not blocked by clothing or helmet position.</li><li>• If problem persists, discontinue use and contact support.</li></ul> |
| Lens remains dark after arc stops.       | <ul style="list-style-type: none"><li>• Delay setting too high.</li><li>• ADF unit malfunction.</li></ul>  | <ul style="list-style-type: none"><li>• Decrease delay setting.</li><li>• If problem persists, discontinue use and contact support.</li></ul>   |
| Poor visibility through the lens.        | <ul style="list-style-type: none"><li>• Protective lenses are dirty or scratched.</li><li>• Incorrect shade setting.</li></ul>   | <ul style="list-style-type: none"><li>• Clean or replace protective lenses.</li><li>• Adjust shade to an appropriate level for the welding process.</li></ul>   |

## SPECIFICATIONS

**Model:** TSP9306

**Brand:** TOTAL

**Manufacturer:** Total

**Item Weight:** 209 g (0.21 Kilograms)

**Product Dimensions:** 20 x 20 x 20 cm

**Color:** Teal

**Material:** Metal (internal components, helmet shell typically high-impact plastic)

**Batteries Required?:** No (Indicates internal, non-replaceable, or solar-powered ADF)

**Included Components:** TSP9306 (Helmet unit)

**First Available Date:** 26 December 2022



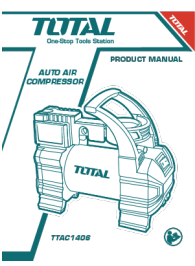
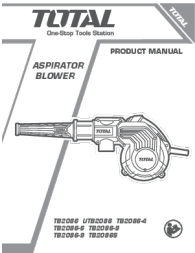
## WARRANTY AND SUPPORT

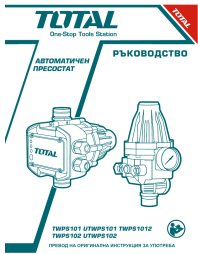

For warranty information, technical support, or to inquire about replacement parts, please contact TOTAL customer service. Refer to the product packaging or the official TOTAL website for the most current contact details and warranty terms.

Always ensure you have your product model number (TSP9306) and purchase date available when contacting support.

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This manual is subject to change without notice.

## Related Documents - TSP9306

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|    | <p><a href="#">TOTAL TSP9103 Auto-Darkening Welding Helmet Product Manual</a></p> <p>Comprehensive product manual for the TOTAL TSP9103 auto-darkening welding helmet. It covers essential safety warnings, intended use, detailed specifications, operation instructions, disassembly guidance, and common troubleshooting remedies. Features include a large viewing area, fast switching time, and adjustable shade control for professional welding applications.</p> |
|   | <p><a href="#">TOTAL MMA Welding Machine TW21605, UTW21605, TW22005 - User Manual and Safety Guide</a></p> <p>This document provides comprehensive information on the TOTAL MMA Welding Machine models TW21605, UTW21605, and TW22005. It includes detailed safety precautions, operating principles, welding techniques, maintenance procedures, technical specifications, accessories, spare parts lists, and wiring diagrams.</p>                                      |
|  | <p><a href="#">TOTAL TTAC1406 Auto Air Compressor Product Manual   Safety, Specifications, Operation</a></p> <p>Comprehensive product manual for the TOTAL TTAC1406 Auto Air Compressor. Includes general and specific safety warnings, symbol explanations, technical specifications, operating instructions, and maintenance troubleshooting.</p>   |
|  | <p><a href="#">TOTAL Aspirator Blower Product Manual - Models TB2086, UTB2086, and more</a></p> <p>Official product manual for the TOTAL Aspirator Blower. Includes detailed safety instructions, operating procedures, technical specifications, and maintenance guidelines for models TB2086, UTB2086, TB2086-4, TB2086-6, TB2086-8, TB2086-9, and TB2086S. Learn how to use your TOTAL power tool safely and effectively.</p>  |

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|  <p>The image shows the cover of the TOTAL Automatic Pressure Switch User Manual. It features the TOTAL logo at the top left, followed by 'One-Stop Tools Station'. Below this, there is a large stylized '7' containing the text 'АВТОМАТИЧЕН ПРЕСОСТАТ' (Automatic Pressure Switch) and 'РЪКОВОДСТВО' (Manual). To the right of the '7' is a technical drawing of a pressure switch. At the bottom, it lists models: TWPS101, UTWPS101, TWPS1012, TWPS102, and UTWPS102. A small circular icon with a plus sign is also present.</p>                | <p><a href="#">TOTAL Automatic Pressure Switch User Manual and Specifications</a></p> <p>Comprehensive user manual and technical specifications for TOTAL automatic pressure switches, including models TWPS101, UTWPS101, TWPS1012, TWPS102, and UTWPS102. Covers safety, installation, operation, maintenance, and troubleshooting.</p> |
|  <p>The image shows the cover of the TOTAL TMT47504 Digital Multimeter manual. It features the TOTAL logo at the top left, followed by 'One-Stop Tools Station'. Below this, there is a large stylized '7' containing the text 'МУЛТИЦЕТ ДИГИТАЛЕН' (Digital Multimeter) and 'РЪКОВОДСТВО ЗА ПОТРЕБИТЕЛЯ' (User Manual). To the right of the '7' is a photograph of the digital multimeter. At the bottom, it lists the model TMT47504 and safety ratings: CAT III 1000V and CAT IV 500V. A small circular icon with a plus sign is also present.</p> | <p><a href="#">TOTAL TMT47504 Цифров Мултицет - Ръководство за Потребителя</a></p> <p>Открийте TOTAL TMT47504 – високопроизводителен цифров мултицет, проектиран за яснота и лесна употреба. Този уред е идеален за професионалисти, ентузиасты и домашни потребители, предлагайки усъвършенствани функции и надеждни измервания.</p>     |