ANDELI WP-17V

ANDELI WP-17V Lift TIG Welding Torch Instruction Manual

Model: WP-17V | Brand: ANDELI

Important Safety Information

Always prioritize safety when operating welding equipment. Failure to follow safety guidelines can result in serious injury or death.

- Wear appropriate personal protective equipment (PPE), including welding helmet, gloves, and protective clothing.
- Ensure adequate ventilation to avoid inhaling welding fumes.
- Protect bystanders from arc rays and hot metal.
- Disconnect power before performing any maintenance or changing parts.
- Do not operate the torch in wet conditions or near flammable materials.
- Always follow the safety instructions provided with your welding machine.

Product Overview

The ANDELI WP-17V Lift TIG Welding Torch is designed for precise and controlled TIG welding applications. This 13-foot, 140Amp torch is compatible with ANDELI MIG-250ME and MCT-416LED Lift TIG welders, featuring a 10-25 panel connector for reliable attachment.

Torch Components

Figure 1: The ANDELI WP-17V Lift TIG Welding Torch, including the torch head, 13-foot cable, and various consumables such as nozzles and collets.

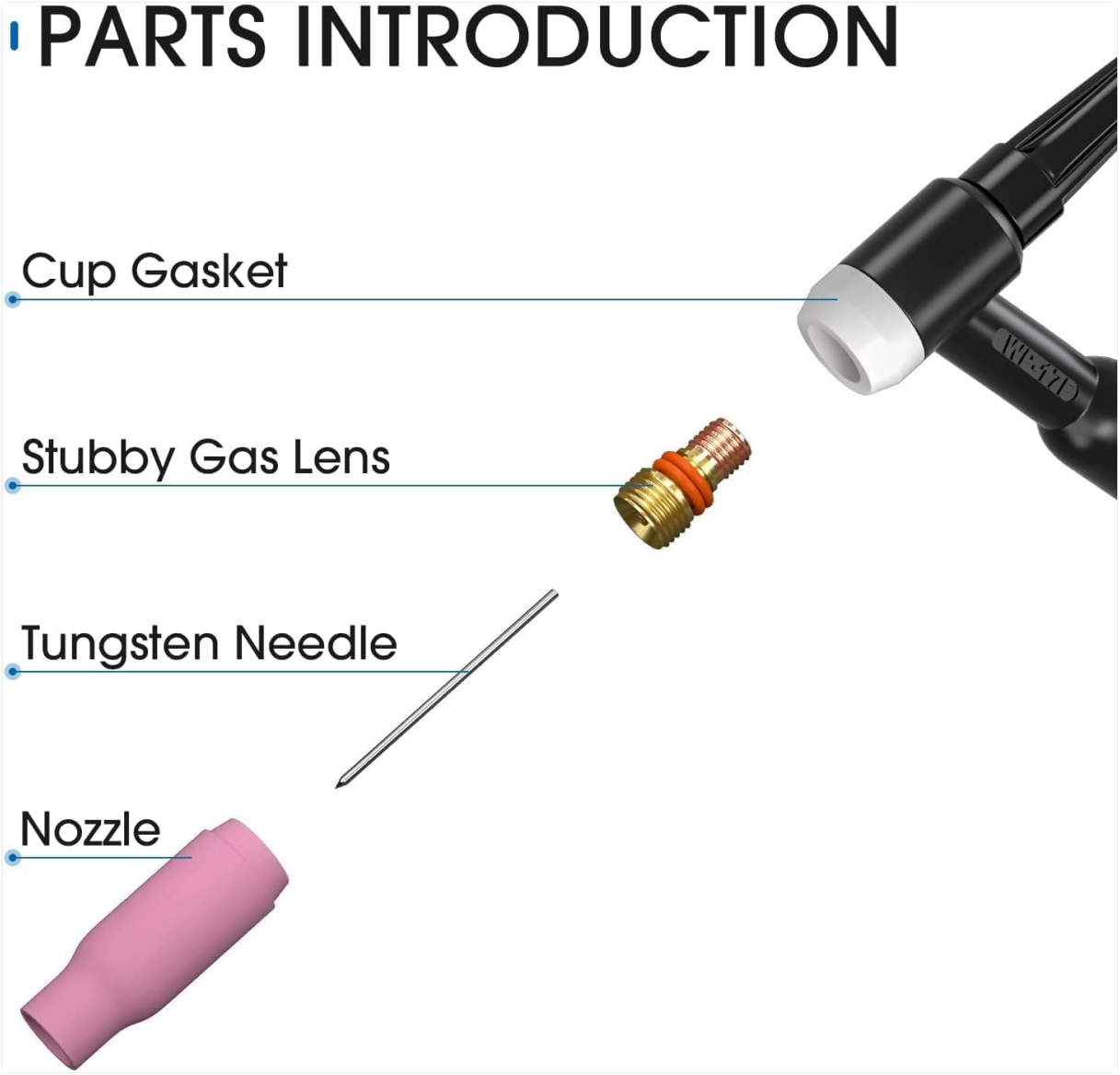

Figure 2: Detailed view of the torch consumables, including the cup gasket, stubby gas lens, tungsten needle, and nozzle, which are essential for proper TIG welding operation.

Specifications

Feature	Detail
Model Number	WP-17V
Amperage Rating	140 Amp
Cable Length	13 feet
Connector Type	10-25 Panel Connector
Gas Connection	5/8-18UNF
Material	TIG Torch (Brass connectors)
Item Weight	2.55 pounds
Package Dimensions	13 x 12.5 x 1.85 inches

Setup

Connecting the Torch to the Welder

To ensure proper function and safety, connect the WP-17V TIG torch to your compatible ANDELI welder (e.g., MIG-250ME, MCT-416LED) as follows:

1. Ensure the welding machine is powered off and disconnected from the main power supply.
2. Locate the 10-25 panel connector on your welding machine.
3. Align the Euro 10-25mm² connector of the TIG torch cable with the corresponding receptacle on the welder. Insert and twist clockwise to secure.
4. Connect the gas hose (5/8-18UNF) from the torch to the gas outlet on your welding machine or gas regulator. Ensure a tight, leak-free connection.

Figure 3: The Euro 10-25mm² power connector and the Gas 5/8-18UNF gas connector, illustrating the connection points for the TIG torch to the welding machine and gas supply.

Figure 4: Detail of the torch wire connection, highlighting the high-quality brass components designed for secure and safe electrical conductivity during welding operations.

Installing Consumables

Refer to Figure 2 for visual guidance on consumable parts. Install the consumables in the following order:

1. Insert the tungsten needle into the collet.
2. Place the collet and tungsten into the collet body (or stubby gas lens).
3. Screw the collet body/gas lens assembly into the torch head.
4. Slide the cup gasket over the collet body.
5. Screw the ceramic nozzle onto the torch head, ensuring it is snug but not overtightened.
6. Adjust the tungsten stick-out as required for your welding application.

Operating Instructions

Lift TIG Welding Process

The WP-17V torch supports Lift TIG functionality. Follow these general steps:

1. Prepare your workpiece and ensure it is clean and properly grounded.

2. Set your welding machine to TIG mode and adjust amperage according to material thickness and type.
3. Ensure your shielding gas (e.g., Argon) is flowing at the correct rate.
4. Position the tungsten electrode gently onto the workpiece.
5. Initiate the arc by slowly lifting the torch straight up from the workpiece. The arc will start once the tungsten is lifted a short distance.
6. Maintain a consistent arc length and travel speed for optimal weld quality.
7. At the end of the weld, slowly withdraw the torch to allow the weld puddle to cool under the shielding gas, preventing contamination.

Ergonomic Design

Figure 5: The ergonomic handle of the WP-17V TIG torch, designed for comfortable grip and reduced operator fatigue during extended welding sessions.

Maintenance

Regular maintenance ensures the longevity and optimal performance of your TIG torch.

- **Clean Consumables:** Regularly inspect and clean the ceramic nozzle, collet, and collet body. Replace them if they show signs of wear, cracking, or excessive spatter buildup.
- **Tungsten Electrode:** Sharpen or replace the tungsten electrode as needed to maintain a sharp point for

stable arc initiation and good weld quality.

- **Cable Inspection:** Periodically check the entire length of the torch cable for cuts, abrasions, or damage to the insulation. Damaged cables should be replaced immediately to prevent electrical hazards.
- **Connector Check:** Ensure all electrical and gas connections remain tight and free of corrosion.
- **Storage:** Store the torch in a clean, dry environment away from dust and moisture when not in use.

Troubleshooting

This section addresses common issues encountered during TIG welding with the WP-17V torch.

Problem	Possible Cause	Solution
Unstable Arc / Difficulty Starting Arc	Dull or contaminated tungsten; improper gas flow; poor ground connection.	Sharpen or replace tungsten; check gas supply and flow rate; ensure secure workpiece ground.
Porous Weld / Contamination	Insufficient shielding gas; gas leaks; dirty workpiece; incorrect gas cup size.	Increase gas flow; check all gas connections for leaks; clean workpiece thoroughly; use appropriate gas cup.
Tungsten Contamination / Melting	Excessive amperage; insufficient post-flow gas; touching the weld puddle.	Reduce amperage; increase post-flow time on welder; avoid dipping tungsten into puddle.
Torch Overheating	Exceeding duty cycle; inadequate cooling (if water-cooled, not applicable for WP-17V).	Allow torch to cool; ensure proper amperage settings for the torch's rating.

Warranty and Support

For warranty information or technical support regarding your ANDELI WP-17V Lift TIG Welding Torch, please contact the ANDELI Official Store US or your authorized dealer. Keep your purchase receipt as proof of purchase. You can typically find contact information on the seller's page or through the official ANDELI website.