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GZ GUOZHI WP17V-10-25

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Model: WP17V-10-25

1. IMPORTANT SAFETY INFORMATION

Always prioritize safety when operating welding equipment. Failure to follow safety guidelines can result in serious injury or death. This section outlines general safety practices; always refer to your welder's manual for specific safety instructions.

- **Eye and Face Protection:** Always wear a welding helmet with appropriate shade lenses to protect against arc flash and sparks.
- **Body Protection:** Wear flame-resistant clothing, heavy-duty gloves, and protective footwear. Avoid synthetic materials that can melt.
- **Ventilation:** Ensure adequate ventilation to remove welding fumes and gases from the work area.
- **Fire Prevention:** Keep a fire extinguisher nearby. Remove flammable materials from the welding area. Sparks and hot slag can travel.
- **Electrical Safety:** Ensure all electrical connections are secure and properly grounded. Never operate equipment with damaged cables or connectors.
- **Gas Cylinder Safety:** Secure gas cylinders to prevent tipping. Handle cylinders with care and ensure regulators are properly attached.
- **Hot Surfaces:** Welding torches and workpieces become extremely hot. Allow them to cool before handling or wear appropriate heat-resistant gloves.

2. PRODUCT OVERVIEW

The GZ GUOZHI WP17V TIG Welding Torch is an air-cooled lift TIG torch designed for precision welding applications. It features a 13-foot hose and a 10-25mm quick connector, making it compatible with GZ GUOZHI MIG-140 and MIG-145LCD welders. The extended hose length provides convenience for welding at a distance from the power source.



Image 2.1: The GZ GUOZHI WP17V TIG Welding Torch with its 13-foot hose and connectors.

3. TORCH COMPONENTS

Understanding the individual components of the TIG torch is essential for proper assembly, operation, and maintenance. The WP17V torch consists of several key parts that work together to deliver a stable welding arc.

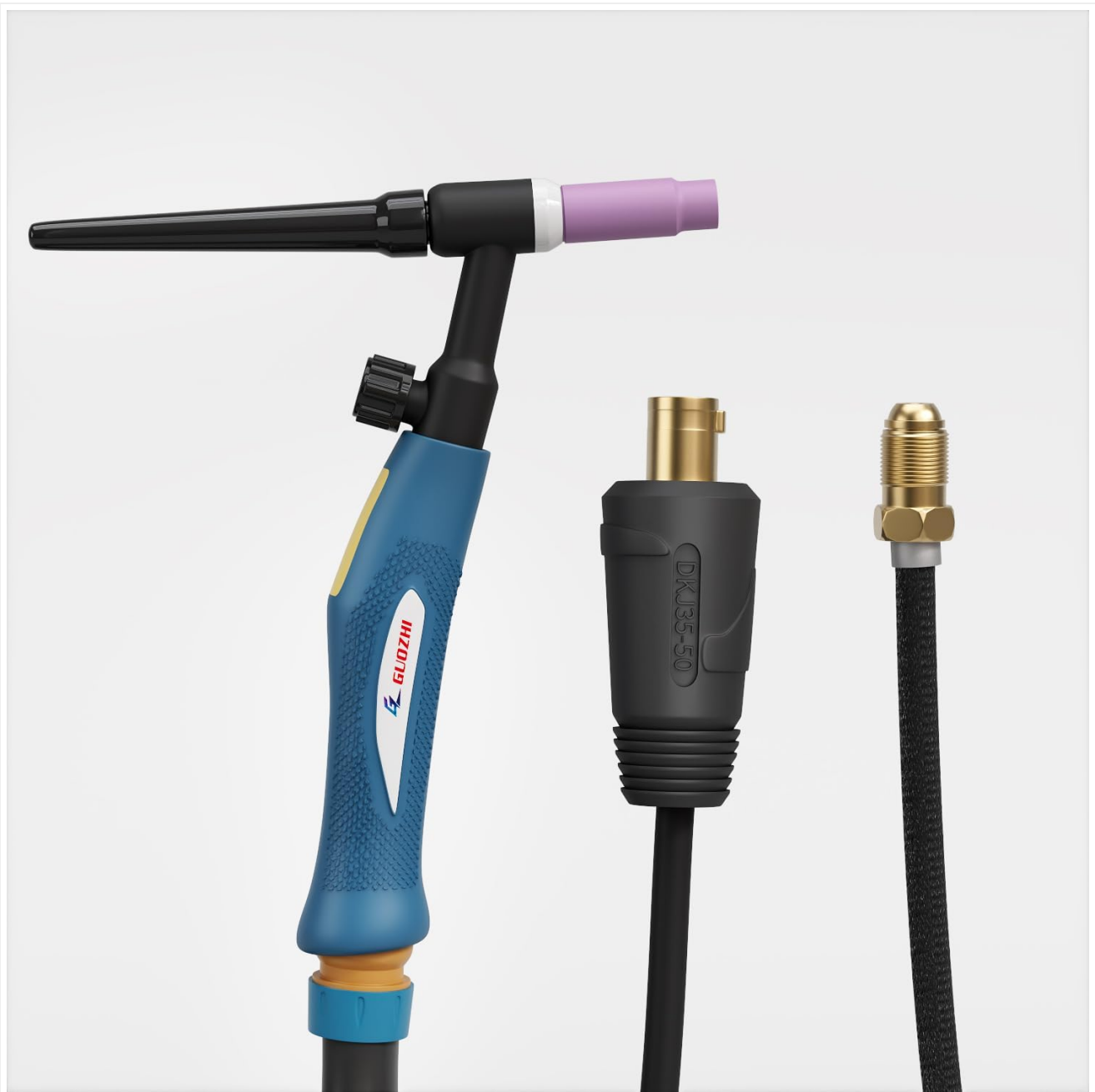


Image 3.1: Exploded view showing the main components of the TIG torch.

- **Long Back Cap:** Secures the tungsten electrode and provides a seal for the shielding gas.
- **Collet Body:** Holds the collet and directs the shielding gas around the tungsten electrode.
- **Collet:** Grips the tungsten electrode firmly within the collet body.
- **Ceramic Cup (Nozzle):** Directs the shielding gas flow to protect the weld puddle and tungsten electrode from atmospheric contamination.
- **Torch Body:** The main handle assembly that houses the gas valve and provides a grip for the operator.

4. SETUP INSTRUCTIONS

Follow these steps to properly connect your GZ GUOZHI WP17V TIG Welding Torch to a compatible welder, such as the GZ GUOZHI MIG-140 or MIG-145LCD.

4.1 Connecting the Quick Connector

1. Ensure the welder is turned off and disconnected from the power source.

2. Locate the 10-25mm quick connector on the torch cable.
3. Insert the quick connector into the corresponding receptacle on your GZ GUOZHI welder. Twist clockwise to secure the connection.

Quick Connector:10-25mm²



External thread: 5/8-18



Image 4.1: Detail of the 10-25mm quick connector, measuring 0.35 inches (9mm).

4.2 Connecting the Gas Line

1. Identify the external thread connection (5/8-18) on the torch hose.
2. Connect this fitting to the gas outlet on your welder or directly to your argon gas regulator, ensuring a tight seal to prevent gas leaks.
3. Once connected, slowly open the gas cylinder valve and check for any leaks using a leak detection solution.

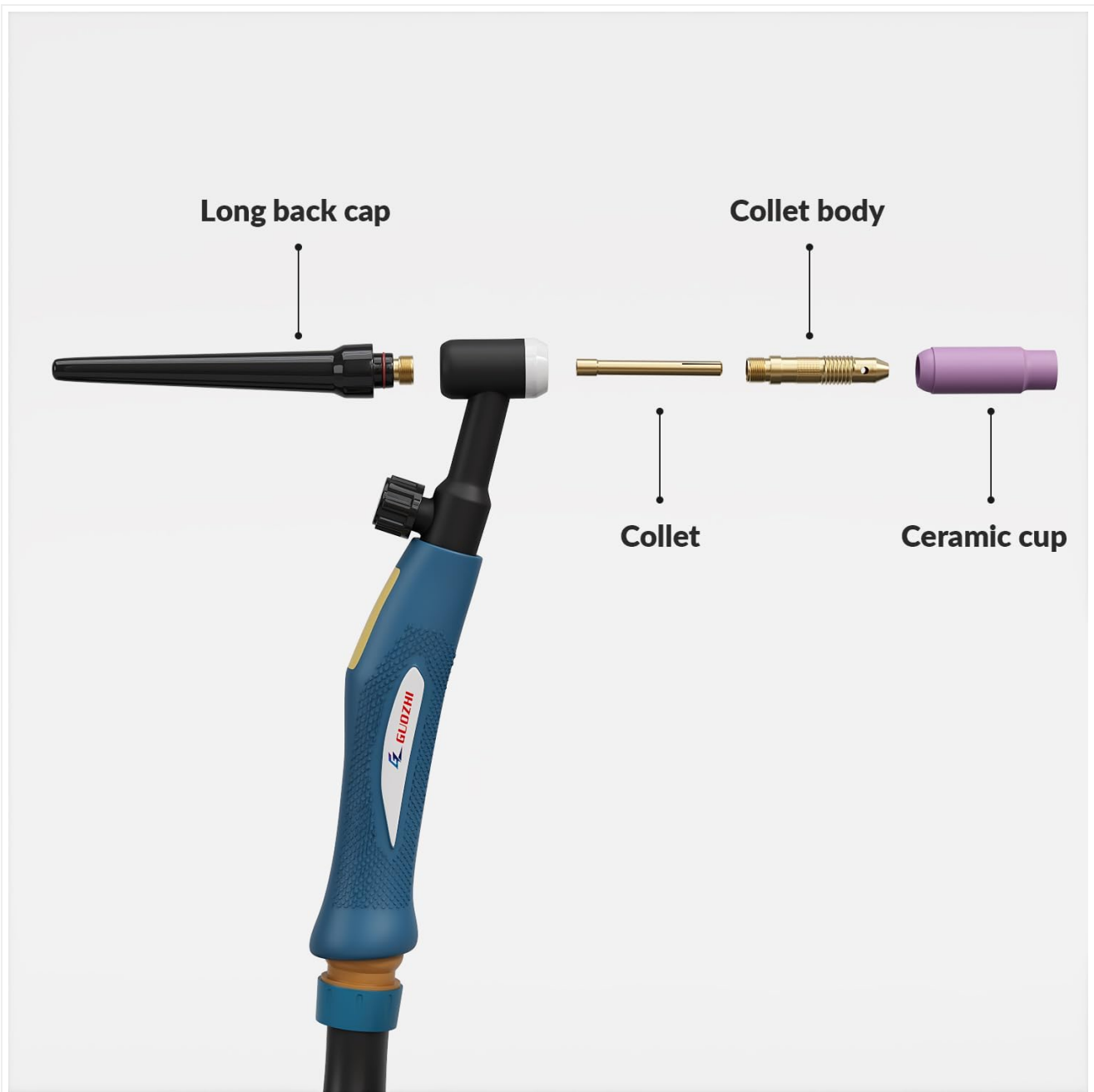


Image 4.2: Detail of the 5/8-18 external thread gas connection, measuring 0.59 inches (15mm).

4.3 Assembling the Torch Head

1. Insert the collet into the collet body.
2. Insert the tungsten electrode through the ceramic cup and into the collet.
3. Screw the collet body assembly into the torch head.
4. Screw the long back cap onto the torch head, tightening it to secure the tungsten electrode. Ensure the tungsten extends approximately 1/8 to 1/4 inch beyond the ceramic cup.



Image 4.3: The complete TIG torch assembly with various ceramic cup sizes and collets.

5. OPERATING INSTRUCTIONS

The GZ GUOZHI WP17V TIG Torch is designed for Lift TIG welding. This method initiates the arc by briefly touching the tungsten electrode to the workpiece and then lifting it slightly.

5.1 Lift TIG Welding Procedure

1. **Prepare Workpiece:** Clean the workpiece thoroughly to remove any contaminants (oil, rust, paint).
2. **Set Welder:** Adjust your welder to the appropriate TIG welding settings (amperage, gas flow) for your material and tungsten size.
3. **Gas Flow:** Ensure argon shielding gas is flowing at the correct rate (typically 10-20 CFH).
4. **Arc Initiation:** Gently touch the tungsten electrode to the workpiece.
5. **Lift and Weld:** Slowly lift the torch approximately 1/16 to 1/8 inch (1.5-3mm) from the workpiece. An arc will ignite. Maintain a consistent arc length and travel speed.

6. **Filler Rod:** If using a filler rod, feed it into the leading edge of the weld puddle.
7. **Arc Termination:** To stop welding, slowly pull the torch away from the workpiece. Maintain gas flow for a few seconds after the arc extinguishes to protect the cooling weld and tungsten.



Image 5.1: An operator performing TIG welding with the torch.

6. MAINTENANCE

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

- **Tungsten Electrode:** Sharpen or replace the tungsten electrode as needed. A dull or contaminated tungsten can lead to unstable arcs and poor weld quality.
- **Ceramic Cup:** Inspect the ceramic cup for cracks or damage. Replace if necessary to ensure proper gas shielding.
- **Collet and Collet Body:** Clean these components regularly to remove spatter and debris. Replace if they show signs of wear or deformation, which can affect tungsten seating and gas flow.
- **Hose and Cables:** Periodically inspect the torch hose and cables for cuts, abrasions, or kinks. Damaged

hoses can lead to gas leaks, and damaged cables can pose electrical hazards.

- **Connectors:** Keep the quick connector and gas line fittings clean and free of debris to ensure good electrical contact and gas seals.
- **Storage:** Store the torch in a clean, dry environment away from extreme temperatures and direct sunlight.

7. TROUBLESHOOTING

This section addresses common issues you might encounter with your TIG welding torch.

Problem	Possible Cause	Solution
Torch gets excessively hot quickly.	Operating at too high amperage for an air-cooled torch; prolonged continuous welding.	Reduce amperage; allow torch to cool between welds; ensure proper duty cycle for your welder. This torch is suitable for short welds or lower amperage applications.
Unstable arc or poor weld quality.	Dull or contaminated tungsten; insufficient gas flow; cracked ceramic cup; improper arc length.	Sharpen or replace tungsten; check gas flow rate and connections; replace ceramic cup; adjust arc length.
Gas leakage from torch or connections.	Loose fittings; damaged hose; cracked torch body or components.	Tighten all gas fittings; inspect hose for damage and replace if necessary; inspect torch components for cracks and replace faulty parts.
No arc initiation.	Welder not powered on; poor ground connection; incorrect welder settings; tungsten not making contact.	Verify welder power; ensure ground clamp is securely attached to clean metal; check welder settings; ensure tungsten touches workpiece during lift-arc initiation.

8. SPECIFICATIONS

Key technical specifications for the GZ GUOZHI WP17V TIG Welding Torch.

Feature	Detail
Model Number	WP17V-10-25
Manufacturer	GZGUOZHI
Connector Type	10-25mm Quick Connector
Hose Length	13 feet
Cooling Type	Air Cooled
External Thread	5/8-18
Item Weight	3.32 pounds
Package Dimensions	14.09 x 11.14 x 2.44 inches

9. WARRANTY AND SUPPORT

GZ GUOZHI provides a warranty for this product and offers customer support for any inquiries or issues.

9.1 Warranty Information

Any machine purchased from the GZ GUOZHI store is eligible for a **12-month warranty** (excluding accessories). If the product is damaged due to non-human factors within 12 months of purchase, a replacement will be provided. This warranty covers replacement only, not repair.

9.2 Customer Support

For any questions, technical assistance, or warranty claims, please contact GZ GUOZHI customer service through the Amazon channel or via email. The GZ GUOZHI after-sales team aims to resolve your problem as quickly as possible.