

CK Worldwide FL2325SF

CK230 Flex Lock TIG Torch Instruction Manual

Model: FL2325SF | Brand: CK Worldwide

1. INTRODUCTION

This manual provides essential information for the safe and effective use of your CK230 Flex Lock TIG Torch Pack. The patented Flex-Loc™ TIG torch is ergonomically designed and rotates 360 degrees, allowing you to adjust the angle to any position. It features two interchangeable heads, enabling quick and efficient changes for different sizes. This design is ideal for welding jobs requiring unique angles.

2. SAFETY INFORMATION

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

- **Read the entire manual:** Understand all instructions and warnings before use.
- **Personal Protective Equipment (PPE):** Always wear appropriate welding helmet, gloves, protective clothing, and safety footwear.
- **Ventilation:** Ensure adequate ventilation to avoid inhaling welding fumes.
- **Electrical Safety:** Ensure all electrical connections are secure and properly grounded. Do not operate in wet conditions.
- **Fire Hazards:** Keep flammable materials away from the welding area. Have fire extinguishing equipment readily available.
- **Hot Surfaces:** The torch and workpiece will become extremely hot during operation. Allow components to cool before handling.
- **Proposition 65 Warning:** This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

3. PRODUCT OVERVIEW

The CK230 Flex Lock TIG Torch Pack is designed for professional and amateur welding applications, offering flexibility and efficient water cooling for sustained performance.



Figure 1: CK230 Flex Lock TIG Torch Pack showing the torch head, 25 ft water-cooled cables (red, black, blue), and various connectors.

Key Components:

- **Flex-Loc™ Torch Head (FL2 Head):** Ergonomically designed, capable of 360-degree rotation for optimal angle adjustment.
- **FLTBAW Torch Body:** The main body of the torch.
- **7.6m (25 ft) Water Cooled SF Cable:** Provides efficient water cooling to the torch, essential for high-amperage applications.
- **Interchangeable Heads:** Allows for quick changes to accommodate different welding requirements.

4. SETUP

Proper setup is crucial for safe and effective operation of your TIG torch.

1. **Connect Power Cable:** Connect the 25 ft Flex Power Cable to your TIG welding machine's power output terminal. Ensure a secure connection.
2. **Connect Water Cooling Lines:** Attach the water cooling lines (typically blue and red hoses) to the appropriate inlet

and outlet ports on your welding machine's water cooler. Ensure the water cooler is filled with the recommended coolant and is operational. Proper water flow is critical for preventing torch overheating, especially at higher amperages.

3. **Connect Gas Line:** Connect the gas line (typically black hose) from the torch to your inert gas supply (e.g., Argon) via a flowmeter. Ensure the gas cylinder is securely chained and the regulator is set to the appropriate flow rate for your welding application.
4. **Install Tungsten Electrode:** Insert the appropriate size tungsten electrode into the collet and collet body within the torch head. Secure it by tightening the back cap.
5. **Attach Ceramic Cup/Nozzle:** Screw the ceramic cup or gas nozzle onto the torch head.
6. **Adjust Torch Head Angle:** Utilize the Flex-Loc™ mechanism to adjust the torch head to your desired angle for comfortable and effective welding. Ensure it is securely locked in place before beginning work.

5. OPERATING

Operating the CK230 Flex Lock TIG Torch involves standard TIG welding practices, with the added benefit of the flexible torch head.

- **Power On:** Turn on your welding machine and water cooler. Verify proper water flow and gas flow.
- **Amperage Setting:** Set the welding amperage on your machine according to the material thickness and type of weld. Be mindful of the torch's amperage rating, especially when welding at high amperages for extended periods.
- **Arc Initiation:** Initiate the arc using your preferred method (e.g., high-frequency start or lift-arc).
- **Welding Technique:** Maintain a consistent arc length and travel speed. The Flex-Loc™ feature allows for superior access in confined spaces or for maintaining an optimal torch angle throughout complex welds.
- **Cooling:** Ensure the water cooling system is continuously running during welding, particularly during high-amperage or prolonged operations, to prevent overheating of the torch components.
- **Post-Flow:** Allow the inert gas to flow for a few seconds after extinguishing the arc to protect the hot tungsten and weld puddle from atmospheric contamination.

6. MAINTENANCE

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

- **Inspect Cables and Hoses:** Periodically check the power cable, water lines, and gas hose for any signs of wear, cuts, or leaks. Replace damaged components immediately.
- **Clean Torch Head:** Remove spatter and debris from the torch head, collet body, and ceramic cup. A clean torch ensures consistent gas flow and arc stability.
- **Check Collets and Collet Bodies:** Inspect collets and collet bodies for signs of wear or deformation. Replace them if they appear damaged or if the tungsten electrode is not held securely. Overheating can cause these parts to degrade.
- **Tungsten Sharpening:** Sharpen tungsten electrodes as needed to maintain a sharp point for precise arc control.
- **Water Cooler Maintenance:** Follow the manufacturer's guidelines for your water cooler, including checking coolant levels and replacing coolant as recommended.
- **Storage:** Store the torch in a clean, dry environment when not in use to prevent damage and corrosion.

7. TROUBLESHOOTING

This section addresses common issues you might encounter with your CK230 Flex Lock TIG Torch.

Problem	Possible Cause	Solution
Torch Overheating / Melting Components	• Insufficient water cooling flow. • Operating above rated amperage for extended periods. • Damaged or clogged water lines. • Degraded collets/collet bodies.	• Verify water cooler is on and coolant is flowing correctly. • Reduce welding amperage or duty cycle. • Inspect and clear/replace water lines. • Replace collets and collet bodies if they show signs of melting or deformation.
Poor Arc Stability / Contaminated Weld	• Improper gas flow (too low or too high). • Contaminated or improperly sharpened tungsten. • Loose connections in gas line. • Cracked ceramic cup.	• Adjust gas flow rate. • Clean or re-sharpen tungsten; replace if contaminated. • Check all gas line connections for leaks. • Replace ceramic cup.
Water Leakage	• Loose water line connections. • Damaged O-rings or seals. • Punctured water hose.	• Tighten all water line connections. • Inspect and replace any worn or damaged O-rings/seals. • Replace the damaged water hose.

8. SPECIFICATIONS

Attribute	Detail
Model Number	FL2325SF
Item Weight	3.3 pounds (1.5 Kilograms)
Product Dimensions	307.09 x 0.98 x 0.98 inches
Size	7.6m (25 ft) SF Cable
Color	Blue (referring to the torch body/cable color)
Style	CK230 Water Cooled
Installation Method	TIG Welding
Item Package Quantity	1
Usage	Amateur, Professional
Included Components	7.6m Water Cooled SF Cable, FL2 head, FLTBAW torch body
UPC	720340073662

9. WARRANTY AND SUPPORT

For specific warranty information regarding your CK Worldwide product, please refer to the documentation provided with your purchase or visit the official CK Worldwide website. For technical support, parts, or service inquiries, please contact CK Worldwide customer service directly.

Manufacturer: CK Worldwide

Website: www.ckworldwide.com (Note: This is a placeholder URL as the actual official website was not provided in the input. Users should verify the correct website.)

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ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question