

RIVERWELD CV0022

RIVERWELD CV0022 Circle Cutting Attachment Instruction Manual

For A101, A141, A151, CB100, CB150 Plasma Cutter Torches

INTRODUCTION

This manual provides instructions for the proper installation, operation, and maintenance of the RIVERWELD CV0022 Circle Cutting Attachment. This attachment is designed to facilitate precise circular cuts when used with compatible plasma cutter torches, enhancing the versatility and accuracy of your plasma cutting operations.

SAFETY INFORMATION

WARNING: Failure to follow these safety instructions may result in serious injury or property damage.

- Always wear appropriate personal protective equipment (PPE) including eye protection, gloves, and protective clothing when operating plasma cutting equipment.
- Ensure the plasma cutter is disconnected from the power source before installing, adjusting, or removing the attachment.
- Read and understand the plasma cutter's manual before using this attachment.
- Keep hands and body clear of the cutting path during operation.
- Use in a well-ventilated area to avoid inhaling fumes and ensure proper air circulation.

PACKAGE CONTENTS

Verify that all components are present and undamaged before proceeding with installation.

- 1 x CV0022 Circle Cutting Attachment (main body with rollers)
- 2 x Guide Rods
- 1 x Magnetic Base
- 1 x Center Pin (for non-magnetic surfaces)
- 1 x Allen Wrench (for adjustments)



An overview of the RIVERWELD CV0022 Circle Cutting Attachment components, including the main attachment body, guide rods, magnetic base, center pin, and Allen wrench.

COMPATIBILITY

This circle cutting attachment is specifically designed for use with the following plasma cutter torch models:

- A101
- A141
- A151
- CB100
- CB150

SETUP INSTRUCTIONS

1. **Attach Guide Rods:** Insert the two guide rods into the designated holes on the main circle cutting attachment body. Ensure they are fully seated and secure.
2. **Select Center Point:** Choose either the magnetic base or the center pin depending on your workpiece material. The magnetic base is suitable for ferrous metals, while the center pin is for non-magnetic materials or when a pilot hole is acceptable.
3. **Install Center Point:** Attach the selected center point (magnetic base or center pin) to the end of one of the guide rods.
4. **Mount to Torch:** Securely attach the main circle cutting attachment body to your compatible plasma cutter torch. Ensure it is stable and does not wobble. Refer to your torch manual for specific mounting points if necessary.
5. **Adjust Radius:** Slide the guide rod with the center point in or out to achieve the desired cutting radius. Use the locking mechanism on the attachment body to fix the radius firmly in place.



Close-up view of the magnetic base and center pin components, which are used to establish the center point for circular cuts.



The main body of the circle cutting attachment, showing the rollers and the mounting points for the guide rods and torch.

OPERATING INSTRUCTIONS

1. **Prepare Workpiece:** Ensure your workpiece is clean, dry, and free of obstructions. Mark the precise center point of your desired circle on the material.
2. **Position Attachment:** Place the magnetic base or center pin precisely on the marked center point of your workpiece. Ensure it is firmly seated and will not shift during the cut.
3. **Set Cutting Radius:** Adjust the guide rod to achieve the desired radius for your circular cut. Tighten any

locking screws or mechanisms to secure the radius, preventing any movement during operation.

- 4. Plasma Cutter Settings:** Set your plasma cutter to the appropriate amperage and air pressure for the material thickness and type you are cutting. Refer to your plasma cutter's manual for specific settings and recommended consumables.
- 5. Initiate Cut:** With the torch nozzle positioned correctly at the starting point of your cut, initiate the plasma arc. Slowly and steadily rotate the entire attachment around the center point, allowing the rollers to guide the torch along the circular path.
- 6. Maintain Consistent Speed:** A consistent rotation speed is crucial for a clean, even cut. Avoid stopping or pausing during the cut, as this can lead to irregularities or excessive material removal.
- 7. Complete Cut:** Continue rotating until the circle is fully cut. Turn off the plasma arc and allow the workpiece and attachment to cool before handling or making further adjustments.

MAINTENANCE

- **Cleaning:** After each use, clean the attachment thoroughly to remove any slag, dust, or debris. A dry cloth or compressed air is recommended. Avoid using harsh chemicals that may damage the finish.
- **Lubrication:** Periodically check the rollers for smooth operation. If they appear stiff or noisy, apply a small amount of light machine lubricant to their axles.
- **Inspection:** Regularly inspect all components for signs of wear, damage, or loose fasteners. Pay close attention to the guide rods, rollers, and mounting points. Replace any worn or damaged parts immediately to ensure safe and accurate operation.
- **Storage:** Store the attachment in a clean, dry place, away from corrosive materials and extreme temperatures, to prevent corrosion and damage.

TROUBLESHOOTING

Uneven or Jagged Cuts

Possible Cause: Inconsistent rotation speed, incorrect torch height, or workpiece movement.

Solution: Maintain a steady, even rotation speed throughout the cut. Ensure the torch height is consistent and appropriate for the material. Secure the workpiece firmly to prevent shifting.

Attachment Not Rotating Smoothly

Possible Cause: Rollers are dirty, damaged, or guide rods are bent.

Solution: Clean the rollers and apply lubricant if needed. Inspect guide rods for damage and replace if bent. Ensure the center point is securely fixed and not causing drag.

Difficulty Securing to Torch

Possible Cause: Attachment not compatible with the torch model or improper installation.

Solution: Verify torch compatibility with the list provided in this manual (A101, A141, A151, CB100, CB150). Ensure the attachment is correctly aligned and tightened onto the torch body according to the setup instructions.

SPECIFICATIONS

| Feature | Detail |
|---------------|--|
| Model Number | CV0022 |
| Compatibility | A101, A141, A151, CB100, CB150 Plasma Cutter Torches |

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|--------------------|---|
| Item Weight | 830 g |
| Product Dimensions | 43 x 17 x 6 cm |
| Country of Origin | China |
| Material | Tungsten; Thoriated (Note: This material is typically for plasma torch electrodes, not the attachment itself. Please refer to product packaging for exact attachment material.) |

WARRANTY AND SUPPORT

For warranty information or technical support regarding your RIVERWELD CV0022 Circle Cutting Attachment, please contact your retailer or the manufacturer directly. Refer to your purchase documentation for specific warranty terms and contact details.

Manufacturer: RIVERWELDstore

For further assistance, visit the [RIVERWELD Store](#).