LightWELD Wire Feeder

SETUP GUIDE

Part Number: CFHUGMPS0002ENUS | Rev: A | DCO: D6587

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Preface

Please take time to read this Setup Guide and familiarize yourself with its contents before you use the product.

This guide contains the following:

- Descriptions of the parts included in the Light**WELD** Wire Feeder Kit
- Descriptions of the Hard Wire and Soft Wire configurations
- Instructions for installing the wire into the feeder through the nozzle tip
- Instructions for synching with the Light**WELD** device

This Setup Guide should stay with the product to provide you and all future users and owners of the product with important information about operating the product, product safety, and other topics.

Safety and Support

Please refer to the Light**WELD** user guide, provided with the device, for additional operating instructions and safety information.

For additional safety information, or to view instructional videos, you can reach IPG support by e-mailing SystemsProductSupport@ipgphotonics.com or by calling 1-508-506-2888.

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1 Getting Started

VIDEO: Part 1 - Getting Started

1.1 Configuration Options

Refer to Section 1.1.1 (below) to determine the appropriate components for a Hard Wire configuration.

Refer to Section 1.1.2 on page 13 to determine the appropriate components for a Soft Wire configuration.

The components in your configuration will affect steps later in the setup process.

The Wire Feeder accepts standard 8-inch (203 mm) and 12-inch (305 mm) spools.

1.1.1 Hard Wire Configuration

Use the Hard Wire configuration for welding metals such as Stainless Steel, Steel, Titanium, and Nickel alloys.

The Hard Wire configuration requires V-Drive Rolls, Steel Liners, and the default 0.4'' (10mm) Extension.

To select the proper components, use the size that corresponds with the hard wire's diameter. See the following table for reference.

Table 1: Components for the Hard Wire Configuration

Part Number	Corresponding Wire Diameter
V-Drive Roll	
CMMIXXX0006095PX	0.030" - 0.035" (0.8 - 0.9mm)
CMMIXXX0006096PX	0.045" - 0.063" (1.1 - 1.6mm)
Steel Liner	
CMUS0010363X01XU	0.030" - 0.045" (0.8 - 1.1mm)
CMUS0010363X02XU	0.045" - 0.063" (1.1 - 1.6mm)
Contact Tip	
CMMIXXX0002864PX	0.030" (0.8mm)
CMMIXXX0002648PX	0.035" (0.9mm)
CMMIXXX0002649PX	0.047" (1.2mm)
CMUS0010319XXXXU	0.063" (1.6mm)
Extension	
CMUS0008377XXXXU	The default 0.4" (10mm) extension is used for all hard wire.

For example, to do a Stainless Steel filler weld with 0.045” (1.1mm) hard wire, use

- the 0.045”-0.063” (1.1- 1.6mm) V-Drive Roll,
- the 0.030”-0.045” (0.8-1.1mm) Steel Liner,
- the 0.047” (1.2mm) Contact Tip, and
- the 0.4" (10mm) Extension.

See Figure 1 (below).

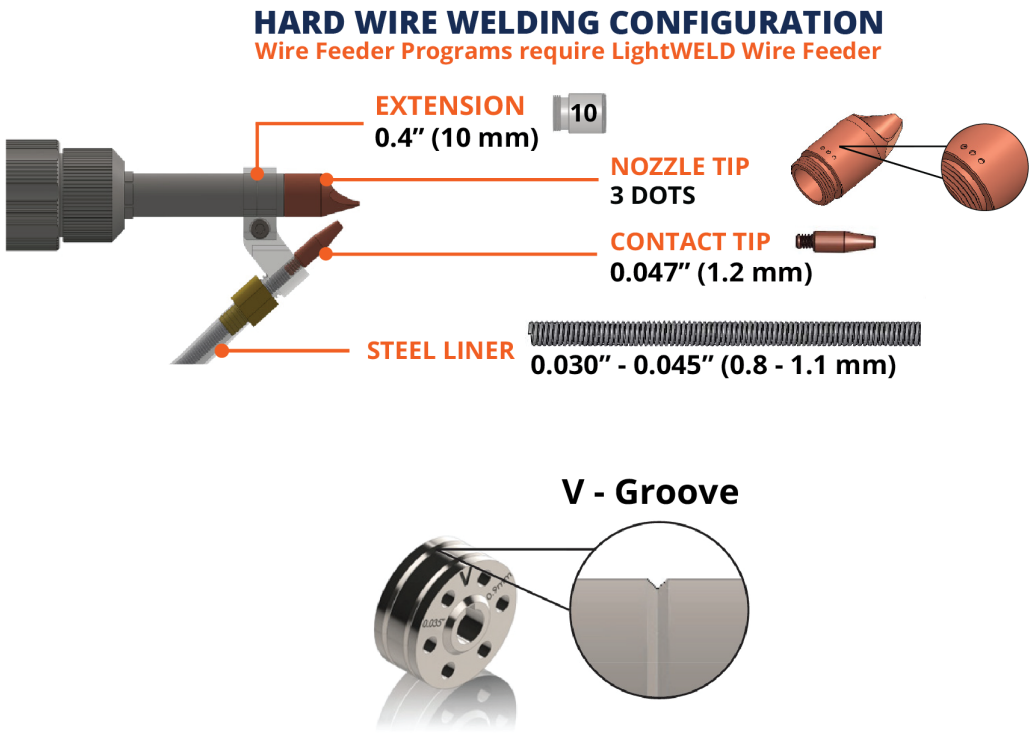


Figure 1: Example of a Stainless Steel Filler Weld with 0.045” (1.1mm) Hard Wire

1.1.2 Soft Wire Configuration

Use the Soft Wire configuration for welding with Aluminum wire or other very soft materials.

The Soft Wire configuration requires U-Drive Rolls, Teflon Liners, and 0.28'' (7mm) Extension.

To select the proper components, use the size that corresponds with the soft wire's diameter. See the following table for reference.

Table 2: Components for the Soft Wire Configuration

Part Number	Corresponding Wire Diameter
U-Drive Roll	
CMMIXXX0006092PX	0.030" - 0.035" (0.8 - 0.9mm)
CMMIXXX0006093PX	0.047" - 0.063" (1.2 - 1.6mm)
Teflon Liner	
CMUS0010362X01XU	0.030" - 0.047" (0.8 - 1.2mm)
CMUS0010362X02XU	0.047" - 0.063" (1.2 - 1.6mm)
Contact Tip	
CMMIXXX0002864PX	0.030" (0.8mm)
CMMIXXX0002648PX	0.035" (0.9mm)
CMMIXXX0002649PX	0.047" (1.2mm)
CMUS0010319XXXXU	0.063" (1.6mm)
Extension	
CMUS0010359XXXXU	The 0.28 (7mm) extension is used for all soft wire.

For example, to do an Aluminum 5XXX filler weld with 0.047" (1.2mm) Soft wire, use

- the 0.047"-0.063" (1.2-1.6mm) U-Drive Roll,
- the orange 0.030"-0.047" (0.8-1.2mm) Liner,
- the 0.047" (1.2mm) Contact Tip, and
- the 0.28" (7mm) Extension.

See Figure 2 on page 14.

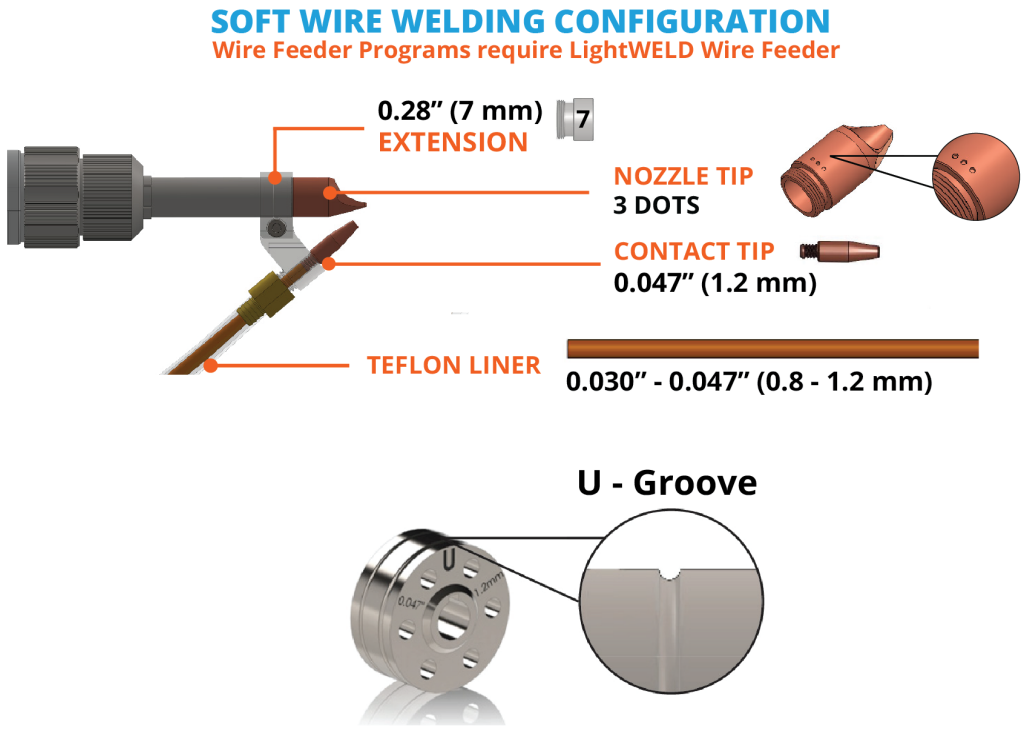


Figure 2: Example of an Aluminum 5XXX filler Weld with 0.047" (1.2mm) Soft Wire

1.1.3 Drive Rolls

Table 3 (below) shows the Drive Rolls for Hard Wire configurations and the Drive Rolls for Soft Wire configurations.

Table 3: Drive Rolls for Hard Wire Configurations and Soft Wire Configurations

		Part Number	Corresponding Wire Diameter
Hard Wire V-Drive Rolls		CMMIXXX0006095PX	0.030" - 0.035" (0.8 - 0.9mm)
		CMMIXXX0006096PX	0.045" - 0.063" (1.1 - 1.6mm)
Soft Wire U-Drive Rolls		CMMIXXX0006092PX	0.030" - 0.035" (0.8 - 0.9mm)
		CMMIXXX0006093PX	0.047" - 0.063" (1.2 - 1.6mm)

Each Drive Roll has two different-sized grooves to accommodate a range of wire diameters. Notice that the drive rolls are labeled on each side. Groove dimensions are indicated on the face opposite of the groove.

When loading the Drive Rolls into the drive mechanism, ensure that the desired groove markings are facing out.

Once installed, the visible markings indicate the groove size that is currently in use. The following figure shows the markings that indicate the groove sizes on a 0.045" V-Drive Roll and a 0.063" V-Drive Roll.

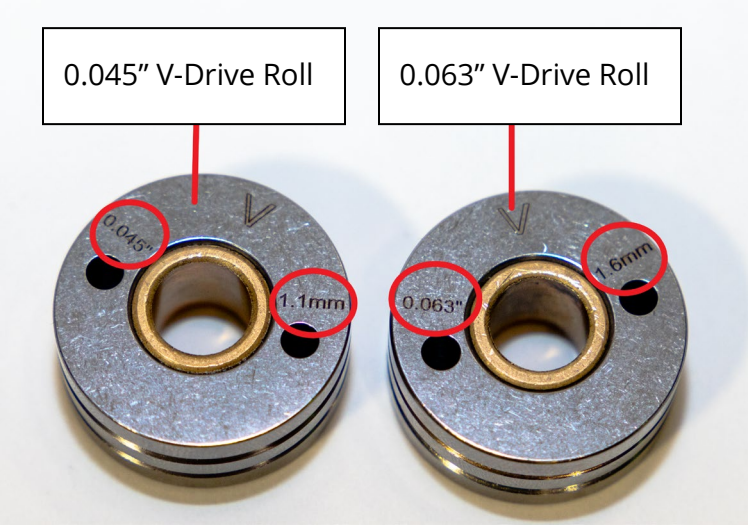


Figure 3: Markings that Indicate the Groove Sizes on 0.045" and 0.063" V-Drive Rolls

1.1.4 Assembling the Wire Feeder Attachment

Once the components (Drive Rolls, Liner, Contact Tip, and Extension) have been selected, the Wire Feeder unit and equipment can be assembled. Figure 4 (below) shows the Conduit for the Wire Feeder Attachment, which comes pre-assembled with two nuts pressed into both ends of the outer white tubing.

The Wire Feeder Attachment can be disassembled and reassembled to weld both ferrous and non-ferrous metals using different wire diameters. Please ensure that the correct configuration is being used for the welding application.

Figure 4: The Conduit

VIDEO: Part 2 - Assembly

Do the following to assemble the Wire Feeder Attachment:

1. **Prepare the Liner and Conduit.**

   Insert the **Liner** into the **Conduit** and feed it through, until about an inch (25.4mm) of the **Liner** extends out from the tube.

Figure 5: Insert the Liner into the Conduit

2. **Connect the Weld Head Adapter and Components.**

   The weld head adapter and components can be assembled from left to right, as shown below.

Figure 6: Connect the Weld Head Adapter and Components

   a. Screw the **Contact Tip** into the **Weld Held Adapter**.

   b. Insert the **Liner** into the **Weld Head Adapter** until it stops.

   c. Manually screw the **Weld Head Adapter** onto the **Conduit**.

   d. Tighten the **Weld Head Adapter** and **Conduit** using a 12mm wrench.

3. **Connect the Wire Feeder Adapter and Components.**

   The wire feeder adapter and components can be assembled from left to right, as shown in Figure 7 (below). Locate the **Wire Feeder Adapter**, second nut, and the other end of the **Liner** and **Conduit**.

Figure 7: Connect the Wire Feeder Adapter and Components

a. Insert the **Wire Feeder Adapter** into the **Conduit**.

b. The **Liner** is designed to be longer than the **Conduit** with the adapters attached. If a Teflon liner is installed, simply cut the liner to be flush with the **Wire Feeder Adapter**. If a steel liner is installed, use pliers to bend the **Liner** and cut it so that the outlet is not obstructed. See Figure 8 (below).

c. Tighten the **Wire Feeder Adapter** on the **Conduit** using 10mm and 12mm wrenches.

Figure 8: Tighten the Wire Feeder Adapter on the Conduit

1.1.5 Setting Up the Wire Feeder Unit

Select the appropriate drive rolls based on the material being welded and the wire size. Refer to the following tables to select the appropriate drive roll:

- **Table 1: Components for the Hard Wire** Configuration on page 11
- **Table 2: Components for the Soft Wire** Configuration on page 13

Open the wire feeder unit by pushing the tabbed opening toward the back of the Wire Feeder while swinging the door outward.

Do the following to set up the Wire Feeder Unit:

1. **Insert the Drive Rolls.**
   a. Unscrew the **Drive Roll Caps**.

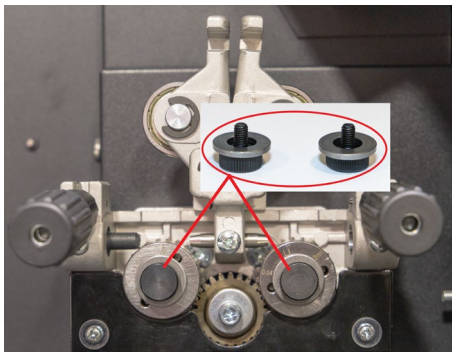


Figure 9: Unscrew the Drive Roll Caps:

   b. Pull down both handles. This releases the drive roll covers.
   c. The groove size corresponds with the wire diameter. The groove sizes are marked on the faces of the drive rolls. Insert the drive rolls into the drive roll mechanism, with the desired groove label facing outward.
   d. Screw on the **Drive Roll Caps** to secure the drive rolls.

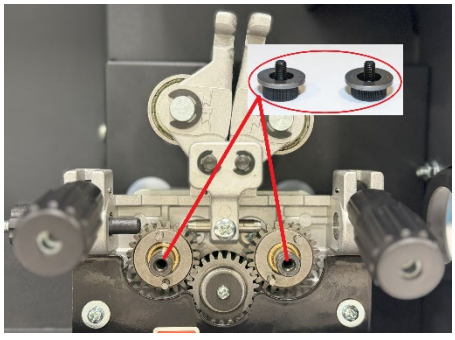


Figure 10: Screw On the Drive Roll Caps

2. **Connect the Wire Feeder Attachment to the Unit.**

   a. Using a Phillips Head screwdriver, loosen the set screw on the Wire Feeder unit.

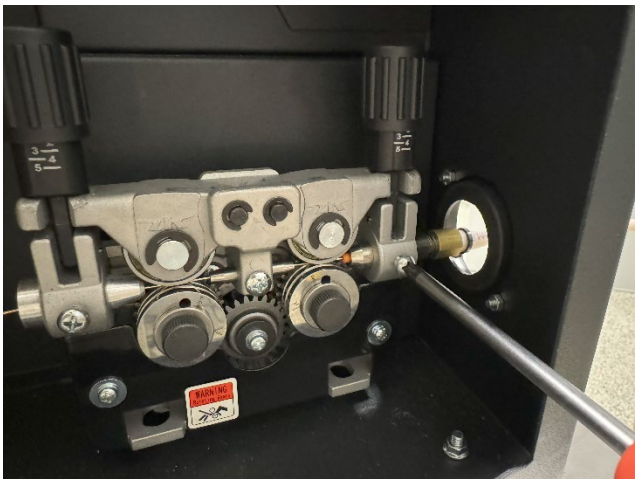


Figure 11: Loosen the Set Screw

   b. Locate the **Wire Feeder Attachment**. Insert the **Wire Feeder Adapter** into the wire feeder unit as far as possible without it touching the drive roll.

Figure 12: Locate the Wire Feeder Attachment

⚠ CAUTION

There should be a slight amount of space between the adapter and drive roll to ensure that it does not get scratched and worn out.

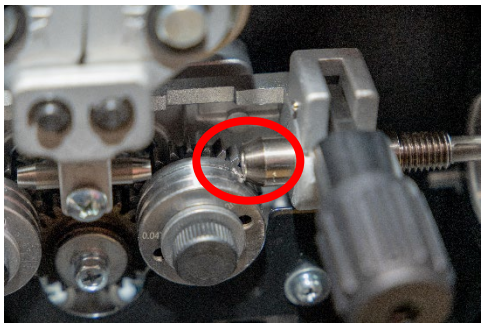


Figure 13: Insufficient Amount of Space

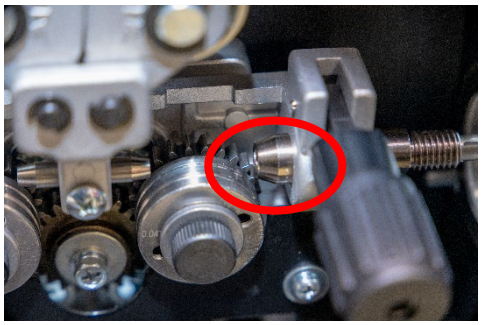


Figure 14: Sufficient Amount of Space

c. Using a Phillips Head screwdriver, tighten the set screw to secure the connection between the wire feeder attachment and Wire Feeder unit.

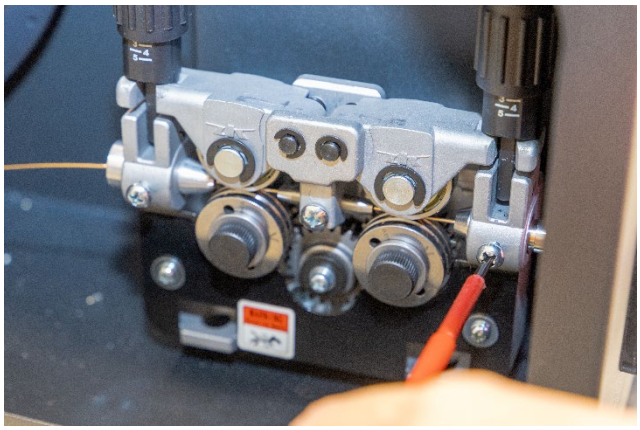
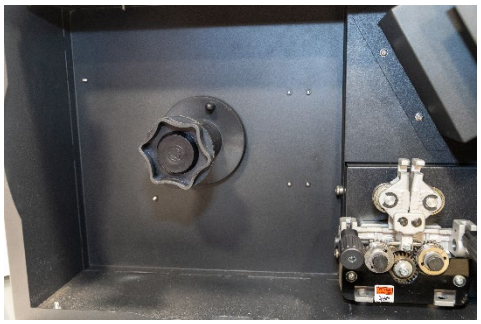


Figure 15: Tighten the Set Screw

3. Install the Wire Spool.

The wire feeder unit accepts standard 8” (203mm) or 12” (305mm) wire spools.

a. Unscrew the plastic **Spool Cap**.



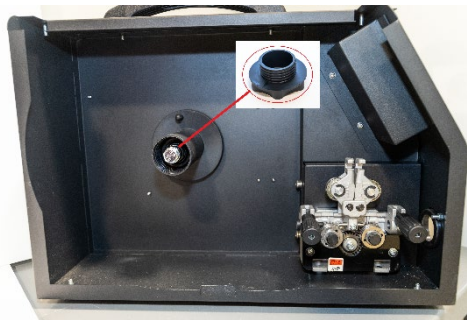


Figure 16: Unscrew the Plastic Spool Cap

b. Insert the corresponding **Wire Spool** for your application. Ensure that the spool is installed so the wire will feed from the bottom.

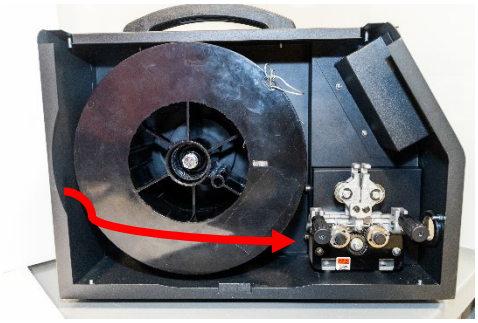
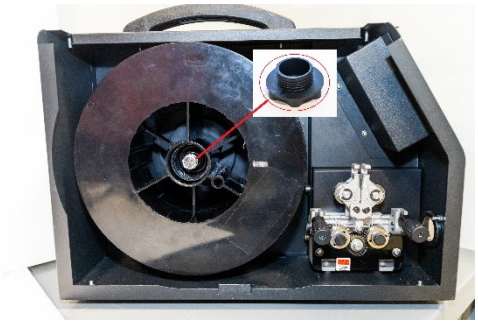


Figure 17: Insert the Corresponding Wire Spool for Your Application

c. Screw the **Spool Cap** back on to secure the wire spool.



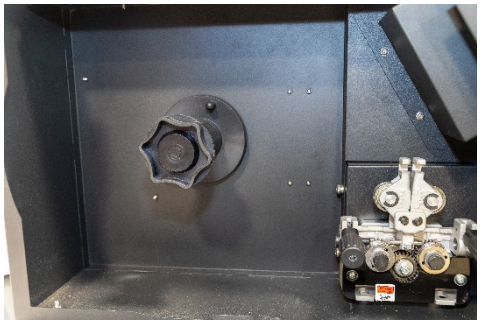


Figure 18: Screw the Spool Cap Back On

4. Adjust the Wire and Secure the Drive Rolls.

a. Locate the start of the wire. The start of the wire is usually tied off on the outer panels of the **Wire Spool**.

Note: Maintain tension on the wire to prevent the spool from unraveling.

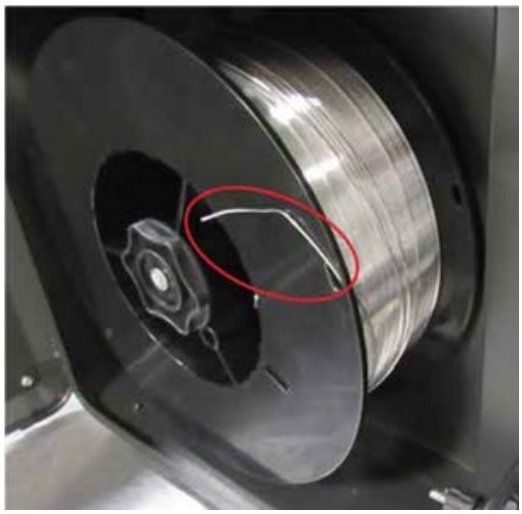


Figure 19: The Start of the Wire

b. Remove the start of the wire from the spool. The start of the wire is likely kinked from being secured to the outer panel of the spool. Use wire cutters to remove any kinks or casting.

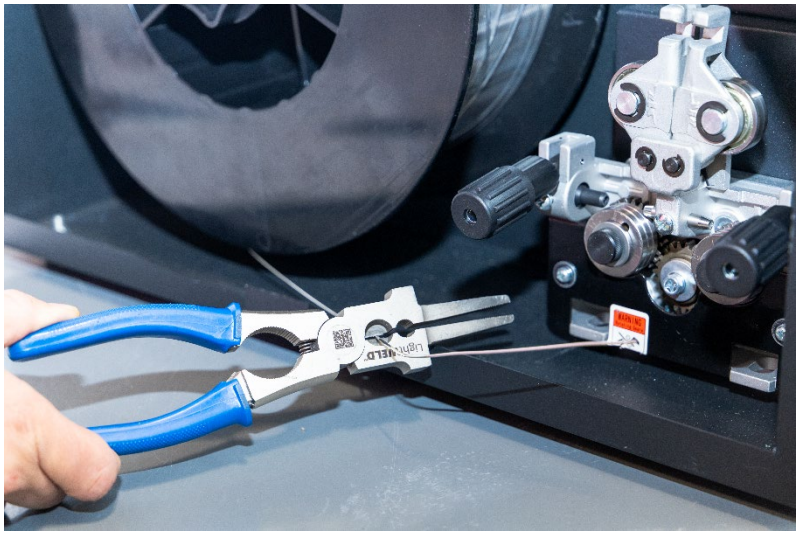


Figure 20: Remove the Start of the Wire from the Spool

c. Manually feed the wire from the bottom of the spool into the drive housing mechanism, through both drive rolls and into the liner for a few inches.

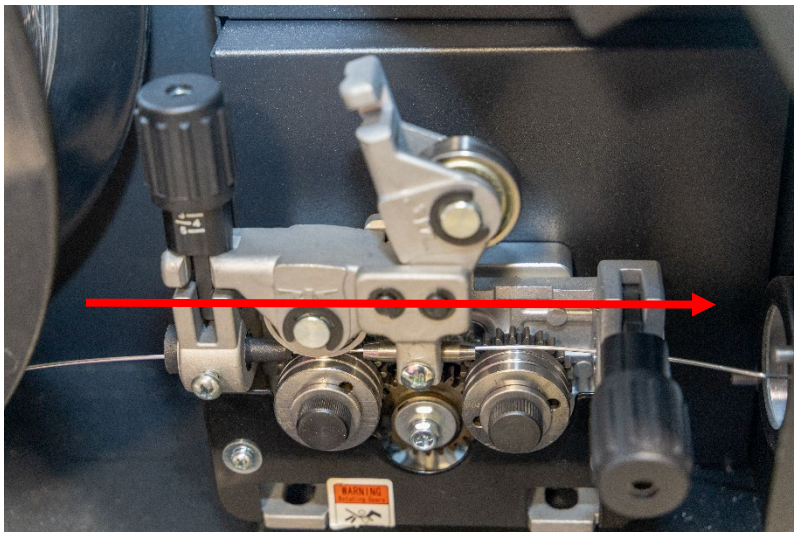


Figure 21: Manually Feed the Wire from the Bottom of the Spool

d. Ensure that the wire is pushed into the correct grooves, which are furthest from you. **The outward face of the Drive Roll will have the size of the groove labeled on it.**

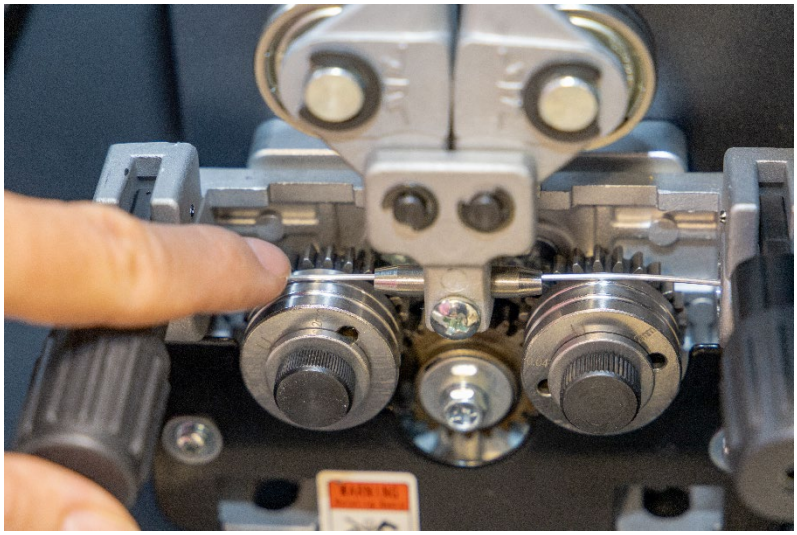


Figure 22: Ensure that the Wire is Pushed into the Correct Grooves

e. Secure the wire by pushing the drive roll covers down and pushing the knobs back up into place.

Note: The tension on the wire can be adjusted by twisting the knobs on the drive roll mechanism. For example, if the wire is slipping you will need to tighten. If the wire kinks, you will need to reinstall the wire and loosen the tension.

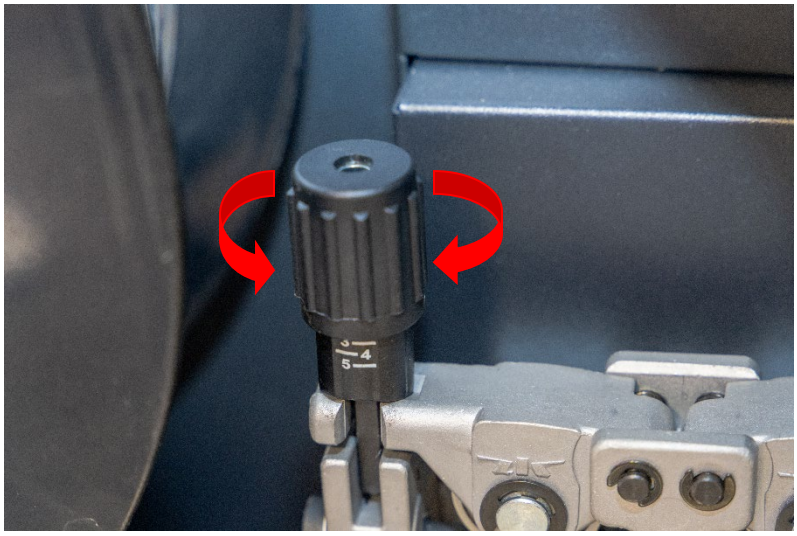


Figure 23: Secure the Wire

5. **Feed the Wire.**

   a. Plug the wire feeder unit into a standard 110V outlet and turn on the power.

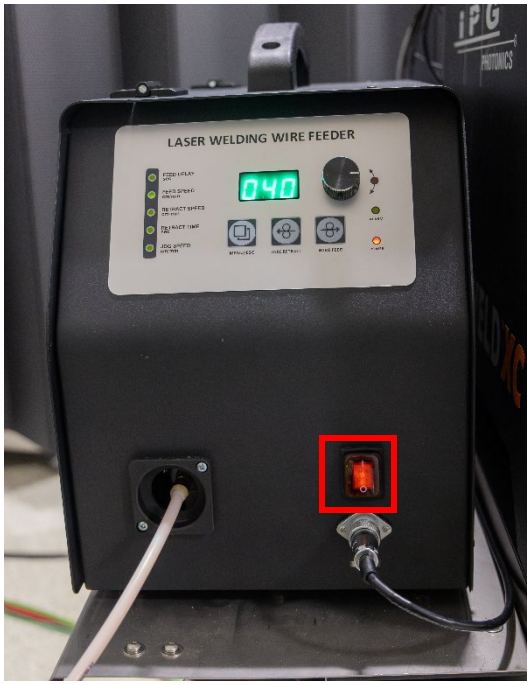


Figure 24: Feed the Wire

   b. Ensure that the **Wire Feeder Attachment** is as straight as possible to prevent the wire from kinking and getting stuck on this initial feed.

Figure 25: Ensure that the Wire Feeder Attachment is as Straight as Possible

⚠ WARNING

Ensure that the Weld Head Adapter's outlet is not directly pointing at yourself or others. Keep your hands and fingers out of the direct line of the wire's path as there is a potential for the wire to puncture skin.

c. Unscrew the **Contact Tip** from the **Weld Head Adapter**. This is to prevent any potential jamming on the initial feed.

Figure 26: Unscrew the Contact Tip from the Weld Head Adapter

d. Press the **Wire Feed** Button to feed the wire through the **Wire Feeder Attachment** until it comes out of the **Weld Head Adapter**.

Figure 27: Press the Wire Feed Button

e. Continue to wire feed until about 2” (50.8 mm) of the wire is exposed. Then screw the **Contact Tip** back into the **Weld Head Adapter**.

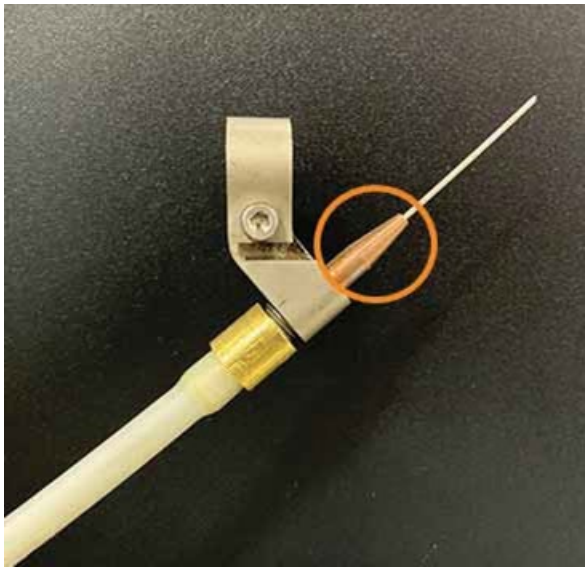


Figure 28: Screw the Contact Tip back into the Weld Head Adapter

6. Synching the Wire Feeder Unit and the LightWELD.

a. Attach the **Synch Cable** to the front of the **Wire Feeder**.

Figure 29: Attach the Synch Cable to the Front of the Wire Feeder

b. Connect the **Synch Cable** wires to the 12-pin I/O connector on the back of the Light**WELD** unit as shown below. Ensure that the wires are attached to **Pins 9 and 10**.

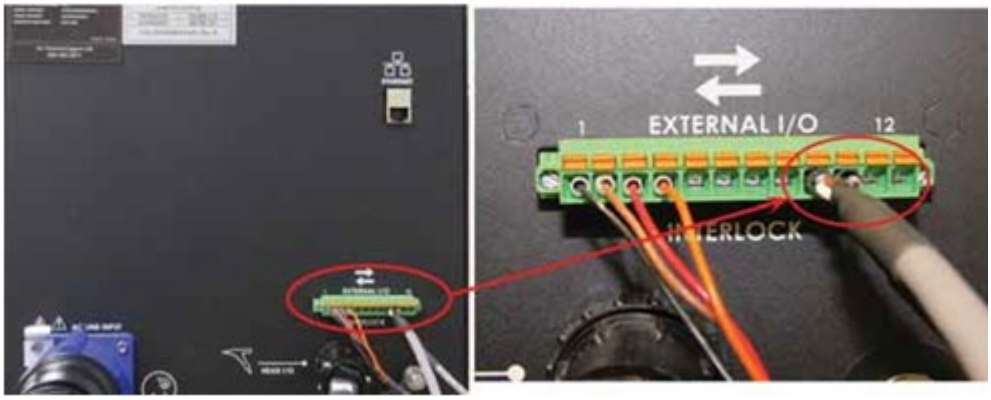


Figure 30: Connect the Synch Cable Wires to the 12-pin I/O Connector

c. Turn on the Light**WELD** unit using the Switch Key.

For more information about understanding and using the Light**WELD** panel, review the video Light**WELD** 1500 Initial Set Up and System Overview.

Figure 31: Turn on the LightWELD Unit Using the Switch Key

7. Attach the Adapter to the Weld Head

After the **Contact Tip** assembly is complete and the **Synch Cable** is attached, the wire tip assembly can be added to the weld head from the Light**WELD**.

a. Connect the **Grooved Nozzle** tip, the proper-size **Extension** for the configuration, and the 2.283" (58mm) Tube.

Figure 32: Connect the Grooved Nozzle Tip, Extension, and 2.283" (58mm) Tube

b. Insert the **Tube** into the head and secure it by tightening the chuck. **Hand tighten only**.

Figure 33: Insert the Tube into the Head and Secure It by Tightening the Chuck

c. Attach the **Weld Head Adapter** by sliding it onto the **tube**. Use a **3 mm Allen Wrench** to begin tightening the screw. Do not tighten completely in order to make adjustments in the next steps.

Note: If you do not have metric allen wrench, the SAE 7/64'' can also be used. However, it is best practice to use a metric allen wrench. Using SAE instead of metric will cause stripping of the screw over time.

Figure 34: Attach the Weld Head Adapter by Sliding it onto the Tube

d. Ensure that the wire rests in the groove of the **Nozzle**. Tighten the **Screw** with a **3 mm Allen Wrench** once the wire is correctly positioned in the nozzle. The wire should maintain consistent contact with the nozzle.

Note: The nozzle tip must touch the wire feed at all times. The wire should feed through the grooved tip in a straight line. Too much tension of the wire against the grooved tip will feed the wire in a curved pattern. To fix this, adjust the Weld Head Adapter's positioning on the 2.283'' (58mm) tube.

Figure 35: The Nozzle Tip Must Touch the Wire Feed at All Times

e. Ensure that the guide beam is centered. Press **Trigger 1** on the Weld Head to activate the guide beam. If the guide beam is off center, it must be adjusted at the Light**WELD** Interface. See **"Centering the Guide Beam" on page 31** for instructions.

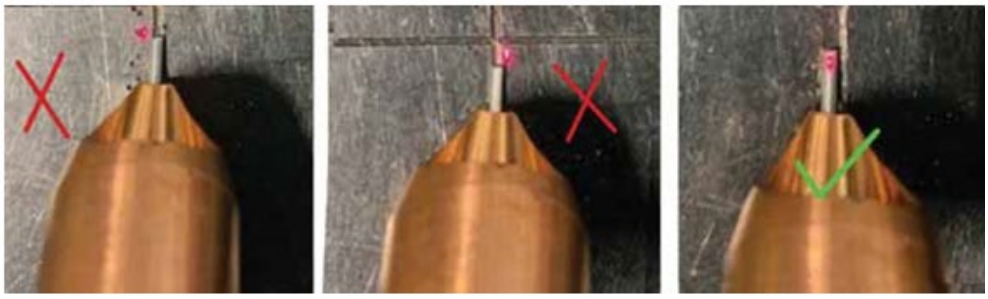


Figure 36: Ensure that the Guide Beam is Centered

f. Using wire cutters, trim the excess wire where it intersects the guide beam.

Figure 37: Trim the Excess Wire where It Intersects the Guide Beam

1.2 Presets

IPG has developed preset programs, and recommended wire feed rates, that depend on material, wire alloy, wire diameter, process gas, and material thickness. Refer to the **Mode Table Chart** attached to the Light**WELD** device for recommended wire feeder presets.

1.2.1 Wire Feeder Interface Overview

Using the **Mode Table Chart** as a guide, set the wire feed speed for the welding job. The wire feed speed is set in the wire feeder interface panel.

Be sure to enter the corresponding program on the Light**WELD** unit before starting a job in order to calibrate the laser.

Note: The wire feed rate units are in centimeters per minute. The default wire feed speed for this wire feeder is 40 cm/minute.

1. To change parameters, press **MENU/ESC**.
2. Continue to press **MENU/ESC** to select parameters.
3. Use the dial to set the desired value for the selected parameter.

Figure 38: Set the Wire Feed Speed for the Welding Job

The following table shows the suggested settings for the wire feed speed parameters.

Table 4: Suggested Settings for the Wire Feed Speed Parameters

Parameter	Suggested Settings
FEED DELAY SEC	0
FEED SPEED cm/min	Refer to the **Mode Table Chart** attached to the Light**WELD** device.
RETRACT SPEED	0
RETRACT TIME	0.01
JOG SPEED	600

1.2.2 LightWELD Interface Overview

The Light**WELD** program/mode should match the **wire feed rate** setting of the Wire Feeder. Refer to the **Mode Table Chart** on the Light**WELD** unit for recommended presets.

You can find IPG-recommended wire welding programs on the **Mode Table Chart** attached to the Light**WELD** device. These programs can be customized to accommodate your preferences.

Note: See the Handheld Laser Welding and Cleaning Systems webpage for additional documentation and videos about LightWELD settings.

LASER POWER

150 – 1500W

Higher power for faster travel speeds and more penetration

TO SAVE A WELDING PROGRAM

1. Press and hold both the UP and DOWN BUTTONS for 3 seconds.
2. When the display stops blinking, it indicates that the program has been saved. This program can be selected as described above.

TO RESET A PROGRAM TO FACTORY SETTINGS

1. Press and hold both the UP and DOWN BUTTONS for 10 seconds.
2. When the display stops blinking, it indicates that the program values have been restored.

TO SELECT A WELDING PROGRAM

Push the selection **Up Button** (right arrow) to increase the Program Number between 0 and 19.

Push the selection **DOWN BUTTON** (left arrow) to decrease the Program Number between 19 and 0.

To select a PROGRAM GROUP, hold the UP or DOWN button (right or left arrow) for 2 seconds. Pressing either button now scrolls through the list of available program groups.

WOBBLE FREQUENCY

0 – 300 Hz

Higher frequency for higher travel speeds

WOBBLE LENGTH

0 – 5 MM

Longer Wobble Length for wider weld beads

1.3 Centering the Guide Beam

1. Select **program Y0** on the Light**WELD** device by pressing and holding down the program model selection buttons on the front panel of the Light**WELD** device.

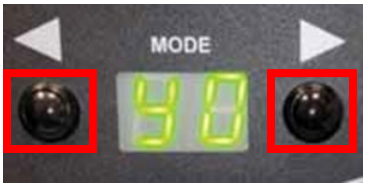


Figure 39: Select program Y0 on the LightWELD device

2. Set the **Wobble Length** to **0**.

Figure 40: Set the Wobble Length to 0

3. Use the **Wobble Frequency Knob** to adjust the beam until it is centered on the wire.

Situation 1: Beam is to the left of the wire	Situation 2: Beam is to the right of the wire
Turn the **Wobble Frequency Knob** clockwise (+) to move the guide beam to the **right**.	Turn the **Wobble Frequency Knob** counterclockwise (-) to move the guide beam left.
	

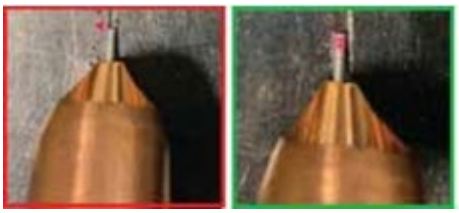
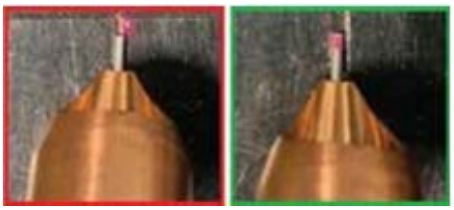

	

Figure 41: Beam is to the Left of the Wire	*Figure 42: Beam is to the Right of the Wire*

4. To save the beam position, press and hold both **program model selection buttons** simultaneously for **3** seconds. Once the display stops blinking, the program is saved.

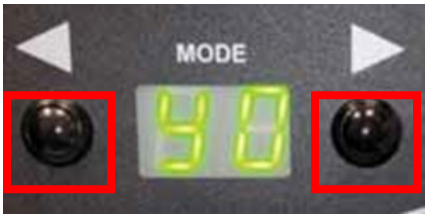


Figure 43: Save the Beam Position

1.4 Ready to Weld

Once the Wire Feeder is set up and the desired settings are entered, the Light**WELD** is ready for use.

1.4.1 Weld Head Overview

Please refer to the Light**WELD** User Guide for more details and safety descriptions.

Figure 44: The Weld Head

Table 5: Features of the Weld Head

Feature	Description
1	**Trigger 1** Press and hold to start gas flow.
2	**Trigger 2** Press and hold to start Laser emission and feed the wire.  **Note:** If the nozzle tip is not touching metal to complete the safety circuit, this will still feed the wire.
3	**Green Status Indicator Light** • **Solid Green –** while Trigger 1 is pressed and no errors are present. • **Blinking Green –** once all the interlocks are fully satisfied. This indicates that the system is ready to fire. The operator can now press Trigger 2 to start the laser emission.
4	**Red Emissions Indicator Light** This will be lit red while laser emission is turned ON. 

1.4.2 Welding Process Overview

Before starting to weld, press and hold **Trigger 1** to activate the gas.

Touch the wire and nozzle to the workpiece to engage the safety interlock. This allows the laser to be activated. Press **Trigger 2** to activate the laser and begin welding.

⚠ WARNING **The red emissions light will be lit to indicate the laser is active.**

Figure 45: Maintain Contact with the Surface

Note: The wire must maintain contact with the surface at all times.

If the tip disengages from the workpiece at any point, **"Error 21 - Nozzle Shutdown"** appears on the Light**WELD** interface, indicating that the laser was deactivated. Reset the error by depressing **Trigger 1**.

Visit us online for more resources about using the Light**WELD** device:

LightWELD 1500 Portal

Download PDF manuals and view videos about how to set up and use your Light**WELD** devices, including the wire feeder and Light**WELD** 1500. This portal requires a registered serial number for your machine.

2 Replacement Parts

	Visit the IPG Web Shop to order parts 24/7: IPG Photonics Shop.

2.1 Wire Feeder Assembly

Table 6: Parts of the Wire Feeder Assembly

Item Number	Part Number	Part Name	Quantity
1	CFHUGMPS0002ENUS	SETUP GUIDE	1
2	CMMIXXX0005805PX	WIRE FEEDER UNIT	1

Figure 46: The Wire Feeder Setup Guide and the Wire Feeder Unit

2.2 Adapter Nozzle Assembly

The following table shows the parts in theAdapter Nozzle Assembly.

Table 7: Parts of the Adapter Nozzle Assembly

Item Number	Part Number	Part Name	Quantity
1	CMUS0010223XXXXU	WELD HEAD ADAPTER	1
2	P40-009401	SCREW	1
3	CMUS0008398002XU	GROOVED NOZZLE TIP	1
4	CMUS0010359XXXXU	0.28'' (7mm) EXTENSION	1
5	CMUS0008377XXXXU	0.4'' (10mm) EXTENSION	1
6	CMUS0008259XXXXU	2.283'' (58mm) TUBE	1
7	CMUS0010224XXXXU	NUT	2
8	CMUS0018261XXXXU	WIRE FEEDER ADAPTER	1
9	CMMIXXX0002848PX	HOUSING TUBE	1

2.3 Contact Tips

The following table shows the part numbers and part names of the Contact Tips.

Table 8: The Contact Tips

Item Number	Part Number	Part Name	Quantity
1	CMMXXX0002864PX	0.030'' (0.8mm) CONTACT TIP	1
2	CMMXXX0002648PX	0.035'' (0.9mm) CONTACT TIP	1
3	CMMXXX0002649PX	0.047'' (1.2mm) CONTACT TIP	1
4	CMUS0010319XXXXU	0.063'' (1.6mm) CONTACT TIP	1

Figure 47: The Contact Tips

2.4 Drive Rolls

The following table shows the part numbers and part names of the Drive Rolls.

Table 9: The Drive Rolls

Item Number	Part Number	Part Name	Quantity
1	CMMIXXX0006092PX	0.030" - 0.035" (0.8 - 0.9mm) U-DRIVE ROLL	2
2	CMMIXXX0006093PX	0.047'' - 0.063'' (1.2 - 1.6mm) U-DRIVE ROLL	2
3	CMMIXXX0006095PX	0.030" - 0.035" (0.8 - 0.9mm) V-DRIVE ROLL	2
4	CMMIXXX0006096PX	0.045'' - 0.063'' (1.1 - 1.6mm) V-DRIVE ROLL	2

Figure 48: The 0.030" - 0.035" U-DRIVE ROLLS

Figure 49: The 0.047''-0.063'' U-DRIVE ROLLS

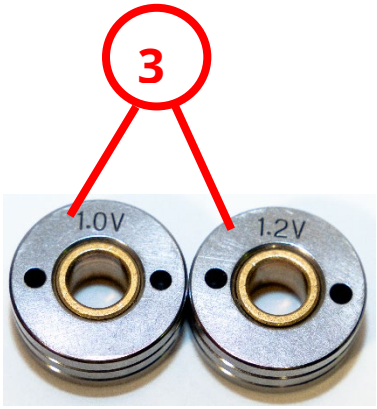


Figure 50: The 0.030" - 0.035" V-DRIVE ROLLS

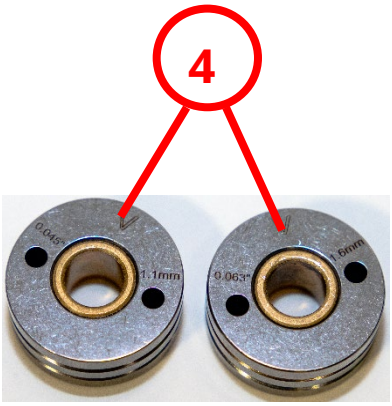


Figure 51: The 0.030" - 0.035" V-DRIVE ROLLS

2.5 Liners

The following table shows the part numbers and part names of the Liners.

Table 10: The Liners

Item Number	Part Number	Part Name	Quantity
1	CMUS0010362X01XU	ORANGE TEFLON LINER	1
2	CMUS0010362X02XU	TURQUOISE TEFLON LINER	1
3	CMUS0010363X01XU	0.030'' - 0.045'' (0.8 - 1.1mm) STEEL LINER	1
4	CMUS0010363X02XU	0.045'' - 0.063'' (1.1 - 1.6mm) STEEL LINER	1

Figure 52: The Liners

2.6 Accessories Kits

	Visit the IPG Web Shop to order parts 24/7: IPG Photonics Shop.

The following table shows all of the items in the CEU00006623XXXXU- Accessories Kit, WF.

Table 11: The CEU00006623XXXXU- Accessories Kit, WF

Item Number	Part Number	Part Name	Quantity
1	CMMIXXX0006092PX	0.030” - 0.035” (0.8 - 0.9mm) U-DRIVE ROLL	2
2	CMMIXXX0006093PX	0.047''-0.063'' (1.2-1.6mm) U-DRIVE ROLL	2

Item Number	Part Number	Part Name	Quantity
3	CMMIXXX0006095PX	0.030”-0.035” (0.8-0.9mm) V-DRIVE ROLL	2
4	CMMIXXX0006096PX	0.045'' - 0.063'' (1.1 - 1.6mm) V-DRIVE ROLL	2
5	CMUS0008377XXXXU	0.4'' (10mm) EXTENSION	1
6	CMUS0010362X01XU	ORANGE TEFLON LINER	1
7	CMUS0010362X02XU	TURQUOISE TEFLON LINER	1
8	CMUS0010363X01XU	0.030'' - 0.045'' (0.8 - 1.1mm) STEEL LINER	1
9	CMUS0010363X02XU	0.045'' - 0.063'' (1.1 - 1.6mm) STEEL LINER	1
10	CEU00004335XXXXU	CONDUIT	1
11	CMUS0008259XXXXU	2.283'' (58mm) TUBE	1
12	CMUS0011276001XU	Nozzle Tip, 1 point, Wire Feed, Ver 2	1
13	CMUS0010223XXXXU	WELD HEAD ADAPTER	1
14	CMUS0018261XXXXU	WIRE FEEDER ADAPTER	1
15	CMMIXXX0003832PX	SCREW, ZINC PLATED	1
16	CMMIXXX0002864PX	0.030'' (0.8mm) CONTACT TIP	1
17	CMMIXXX0002648PX	0.035'' (0.9mm) CONTACT TIP	1
18	CMMIXXX0002649PX	0.047'' (1.2mm) CONTACT TIP	1
19	CMUS0010319XXXXU	0.063' (1.6mm) CONTACT TIP	1

Figure 53: The 0.030” - 0.035” U-DRIVE ROLLS

Figure 54: The 0.047''-0.063'' U-DRIVE ROLLS

Figure 55: The 0.030" - 0.035" V-DRIVE ROLLS

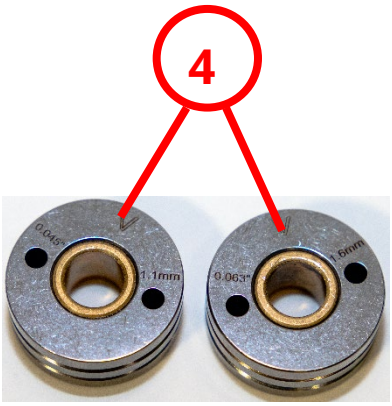


Figure 56: The 0.030" - 0.035" V-DRIVE ROLLS

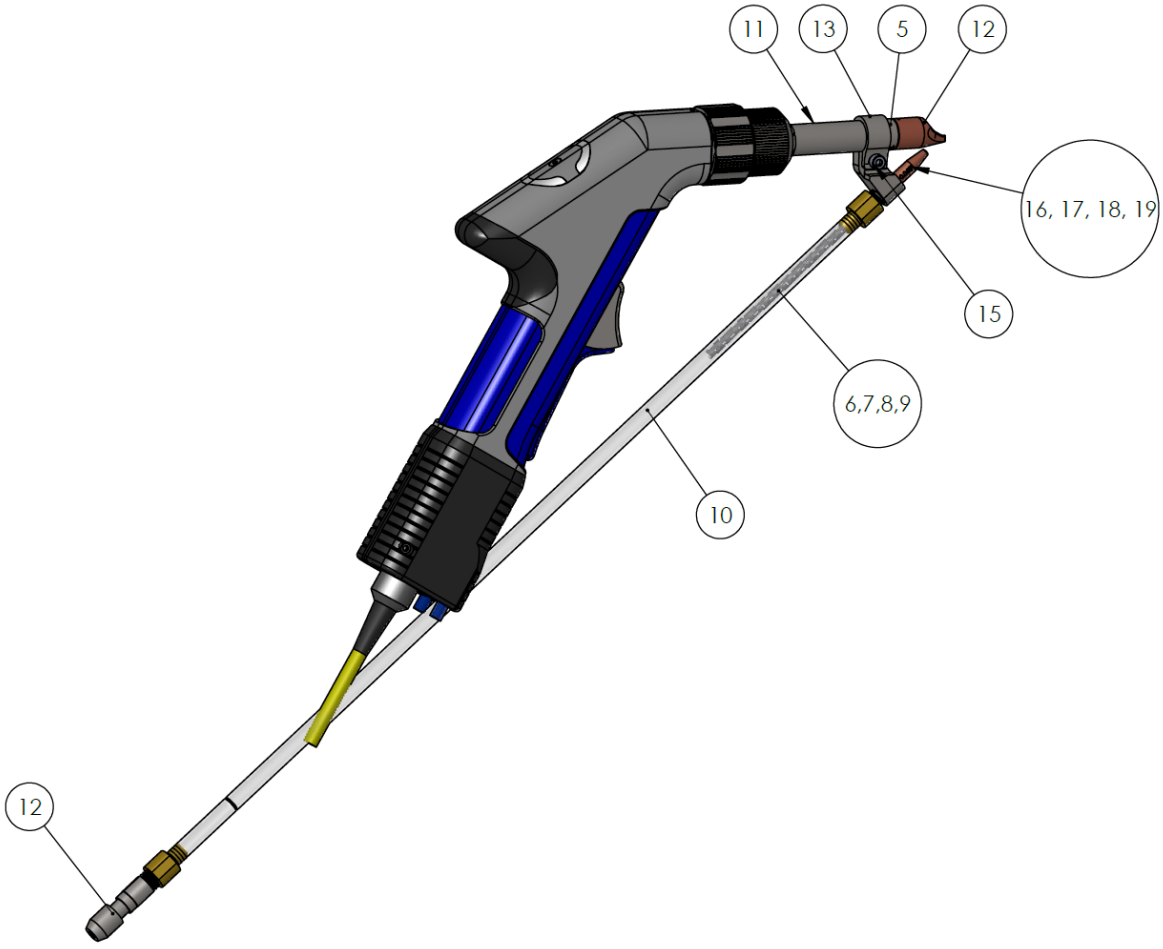


Figure 57: Parts of the Weld Head Assembly, Liner, Extension, Conduit, and Tube

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