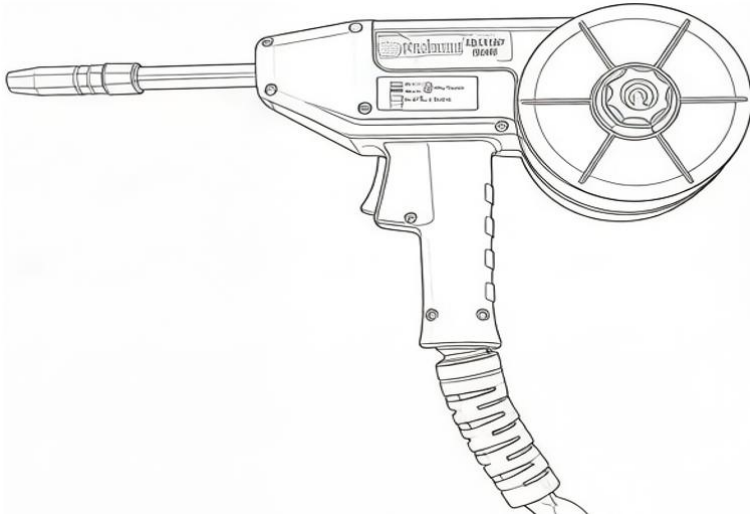




Spool Gun User Guide

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User Manual

Manuel utilisateur

Руководство пользователя



取扱説明書



Manuale utente



Manual de usuario

Benutzerhandbuch

Content

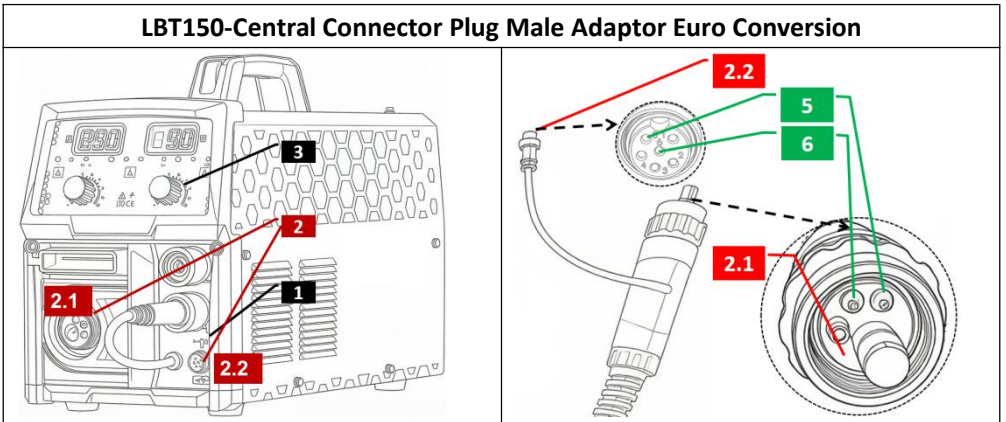
- 1. PRODUCT OVERVIEW2
 - 1.1 Integrated Connection2
 - 1.2 Discrete Connection 2
 - 1.3 Three Essential Prerequisites for Spool Gun Compatibility 3
- 2. Installation for Spool Gun3
- 3. Connection method/interface for spool gun 5
- 4. Spool gun welding for aluminum 6
 - 4.1 Welding aluminum with a welder not designed for aluminum6
 - 4.2 Using a welder with dedicated aluminum welding functionality 7
 - 4.3 Effect of Wire Material on Welding8
- 5. Troubleshooting and Adaptation9
- 5. Warranty Registration10

1. PRODUCT OVERVIEW

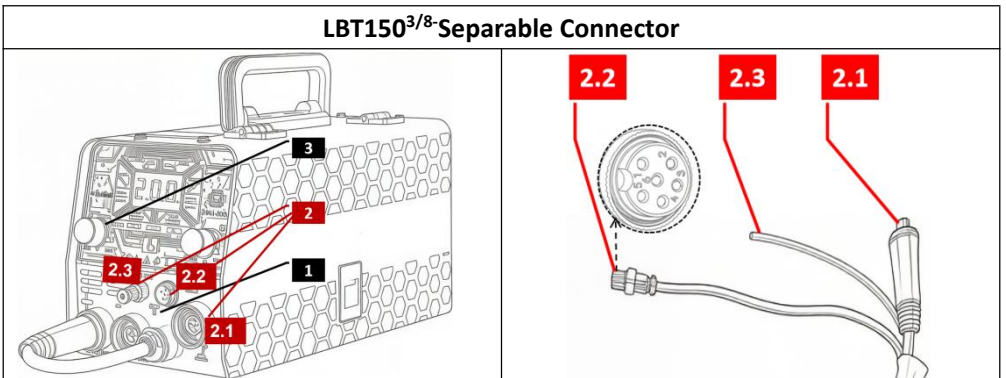
The spool gun features an independent wire feed mechanism with an extremely short wire feed path. This design effectively addresses common issues such as poor wire feeding, jerky feeding, and wire jamming caused by long feed distances, making it a favorite among many welders. Many users rely on the spool gun for aluminum welding.

It is important to note that spool guns have specific requirements and are not compatible with every MIG welder. Before purchasing or using a spool gun, please carefully perform the following checks to ensure your machine is fully compatible with the spool gun.

1.1 Integrated Connection



1.2 Discrete Connection

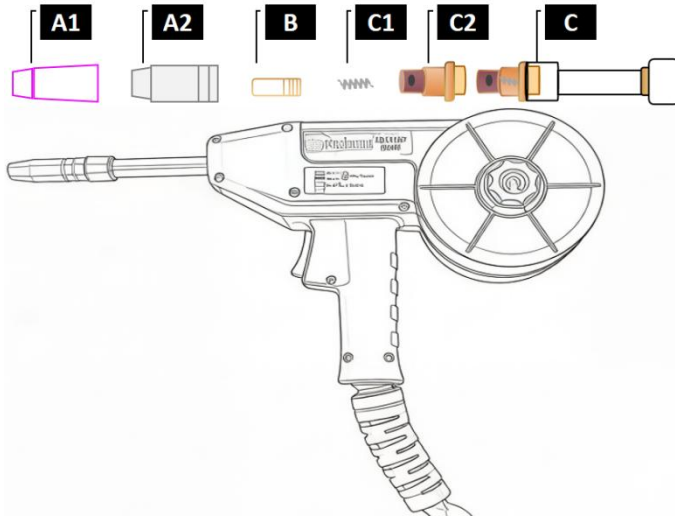


1.3 Three Essential Prerequisites for Spool Gun Compatibility

1	<p>DC 24V Power Supply: The welder must provide an independent and regulated DC 24V output to power the spool gun's wire feed motor.</p>	
	<p>Check if your machine supports the spool gun function. Since the spool gun's wire feed mechanism requires a DC 24V power supply from the welder, ensure the welder is equipped with a corresponding output interface. Machines that support spool guns typically have a clearly marked and dedicated interface on the front panel. This can also be confirmed by checking the welder's manual or consulting the supplier.</p>	
2	<p>Compatible Physical Interface: The welder's front panel must have a matching connector (e.g., a specific aviation or multi-pin receptacle) for the spool gun's integrated power, control, and gas lines.</p>	
	<p>Check if the gas/power/control receptacle on the front panel of the welder matches the connector on the spool gun.</p>	
	2.1	<p>Ensure the gas/power/control receptacle on the welder's front panel is fully compatible with the spool gun's plug.</p>
	2.2	<p>Ensure the DC 24V output interface of the machine is fully compatible with the power input interface of the spool gun.</p>
	2.3	<p>Verify that the quick-connect gas fitting on the welder's front panel is fully compatible with the spool gun's gas hose</p>
3	<p>Adjustable Voltage Control: The welder must support either a Manual (non-Synergic) operating mode or a Synergic mode with voltage fine-tuning capability to properly match the spool gun's unique wire feed characteristics.</p>	
	<p>Verify the machine has adjustable voltage capability. Due to the parameter mismatch between the wire feed motors of the spool gun and the welder itself, the Synergic Mode may cause significant deviation and malfunction when using the spool gun. Ensure your welder is equipped with either a voltage fine-tuning function in Synergic Mode or supports operation in Manual (non-synergic) Mode. Welders with these features typically have a dedicated physical knob for voltage control.</p>	

2. Installation for Spool Gun

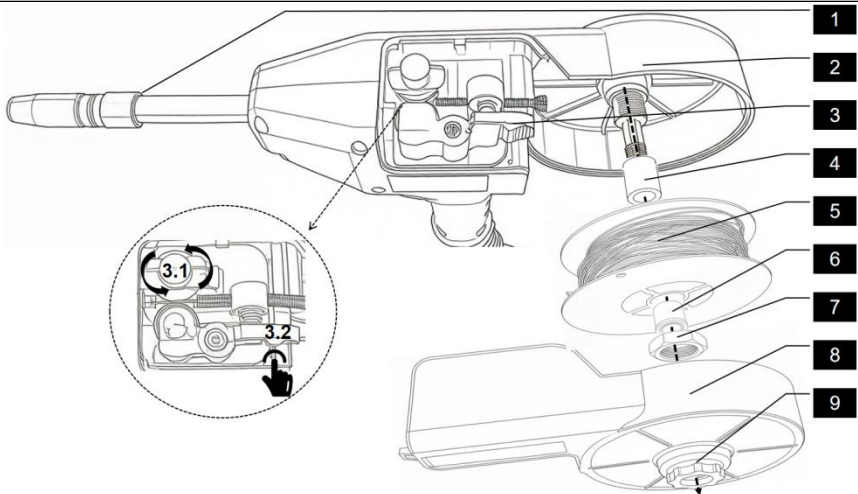
Spool Gun



Replacement Parts:

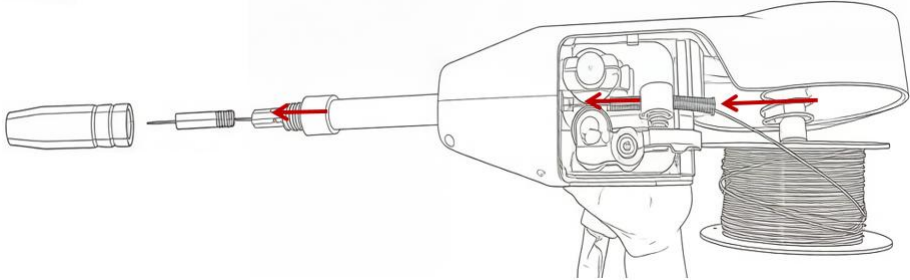
A1	Ceramic nozzle $\phi 12\text{mm}$	A2	Gas nozzle $\phi 12\text{mm}$
B	Contact tip $\phi 0.6, 0.8, 0.9, 1.0 \text{ mm}/\text{M}6*25$	C	Torch head
C1	Gas diffuser	C2	Nozzle spring

Welding Wire Install



- 1 Remove the gas nozzle or ceramic nozzle from the torch head by turning it clockwise. Then, unscrew and remove the contact tip



	from the torch head. For aluminum welding, use a contact tip one size larger.
2	Loosen the protection cover nut and remove the cover.
3	<p>Correct Operation of the Wire Feeder</p> <p>3.1 Check and install the correct drive roll. To change the drive roll, rotate the retaining cover 45° counterclockwise to remove it. Typically, a V-groove drive roll is used for solid wire, a knurled drive roll for flux-cored wire, and a U-groove drive roll for aluminum wire. To enhance the user experience, a universal drive roll compatible with all wire types is supplied as standard equipment.</p> <p>3.2 Pull out a 10-15 cm length of wire from the spool. Thread the wire into the wire inlet guide of the feeder. Press down on the tension lever/arm of the feeder, feed the wire through the drive roll and into the torch liner, then release the tension lever. Ensure the wire is securely seated in the groove of the drive roll.</p>
	
4	Mount the rubber damper bushing onto the spool spindle.
5	Load the wire spool onto the spool spindle.
6	Mount the locking bolt onto the spool spindle.
7	Thread the nut onto the spool spindle. The drag (or resistance) of the wire spool can be adjusted by controlling the tightness of this nut. Adjust the drag tension according to the wire diameter and type. Tighten the locking screw just enough to prevent the wire from spooling loosely when released.
8	Practice a few times to master the process. After the wire is loaded, reinstall the protection cover onto the spool gun.
9	Install the wire spool cover and tighten the nut.

3. Connection method/interface for spool gun

Separable Connector	Central Connector Plug Male Adaptor
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		Euro Conversion	
2.1	Torch Power Plug	10-25 mm ² EURO Fast Lock Connector	
		Welding Torch Central Connector Plug Male Adaptor Euro Conversion	
2.2	6 Pin Aviation Plug	1	This pin is designed to be shorted to pin 2
		2	This pin is designed to be shorted to pin 1
		3	Wire Feed Motor DC (+): Red wire
		4	Wire Feed Motor DC (-): Blue wire
		5	Connect one end of the torch trigger: white wire
		6	Connect the other end of the torch trigger: white wire
This MIG welder automatically detects the spool gun. When the original factory-supplied spool gun is connected, the machine will automatically switch to spool gun mode in MIG mode.			
2.3	Torch Gas Connector	4×2.5mm High-Pressure Air Line	
		Gas Plug	

4. Spool gun welding for aluminum

4.1 Welding aluminum with a welder not designed for aluminum

1	Set the welder to MIG mode and select Argon as the shielding gas. If argon is not a selectable option, choose CO ₂ or Mixed Gas.
2	The gas used must be 100% Argon.

	<p>Use DCEP (Direct Current Electrode Positive) polarity.</p> <p>For Spool Guns with Separable Connections:</p> <ul style="list-style-type: none"> ● Connect the gas hose from the gun to the quick-connect gas fitting on the machine's front panel. ● Connect the gun's 10-25 Euro quick-connect plug to the positive (+) output terminal on the front panel. ● Connect the gun's aviation connector to the corresponding receptacle on the front panel. ● Connect the work clamp to the negative (-) output terminal on the front panel.
3	<p>For Spool Guns with Integrated (Euro) Connections:</p> <ul style="list-style-type: none"> ● Connect the gun's central Euro plug to the corresponding receptacle on the front panel. ● Connect the machine's polarity change cable/jumper to the positive (+) output terminal (on some models, this jumper is located inside the wire feeder compartment). ● Connect the gun's aviation connector to the corresponding receptacle on the front panel. ● Connect the work clamp to the negative (-) output terminal on the front panel.
4	<p>Parameter Adjustment:</p> <p>If your welder has a parameter chart inside the wire feeder compartment, set the Voltage and Wire Feed Speed (current) accordingly.</p> <p>For welders without a chart, operate in Manual (non-synergic) mode. Manually adjust the Voltage and Wire Feed Speed to establish parameters for aluminum.</p> <p>For welders with Synergic mode only, you can only fine-tune the Voltage to set parameters for aluminum.</p> <p>Multiple test runs are required to find satisfactory parameters for aluminum welding.</p>

4.2 Using a welder with dedicated aluminum welding functionality

1	Set the welder to MIG mode and select Argon as the shielding gas.
2	The gas used must be 100% Argon.

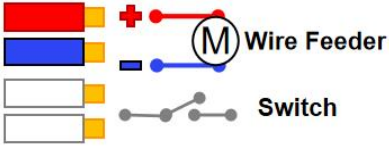
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4	<p>Parameter Adjustment:</p> <p>Adjust and fine-tune the output voltage and wire feed speed according to the welding performance until optimal results are achieved.</p>

4.3 Effect of Wire Material on Welding

Aluminum welding wire comes in different alloys such as pure aluminum, Al-Mg, and Al-Si. Each alloy may require slight adjustments to the welding parameters. Fine-tune the output voltage and wire feed speed accordingly to optimize performance. Discoloration (darkening) of the weld bead is a typical characteristic when welding with aluminum-magnesium (Al-Mg) alloy wire, primarily due to surface oxidation, and does not necessarily indicate a defect in weld quality.

5. Troubleshooting and Adaptation

If the aviation connector on your machine does not match that of the spool gun, the connection can be adapted as follows:

- | | |
|---|---|
| 1 | Purchase a compatible interface kit that matches the aviation receptacle on your machine's front panel. Replace or bridge this interface to the 6-pin aviation plug of the spool gun. |
| 2 | <p>Follow the wiring scheme: connect the red wire to the positive (+) terminal of the spool gun motor, the blue wire to the negative (-) terminal, and the two white wires to the trigger control lines of the spool gun (for Euro-style central plugs, the control lines are connected in parallel with the two white wires).</p>  |

Warning: Incorrect wiring of the aviation connector can lead to equipment damage or cause the wire feed motor to run in reverse.

- | | |
|---|--|
| 1 | The 6-pin aviation connector on the spool gun, pin 3 is connected to the positive terminal (+) of the wire feed motor, and pin 4 is connected to the negative terminal (-). Confirm that the polarity of the DC 24V output from the welder matches this configuration. |
|---|--|

Subpar/Unsatisfactory aluminum welding quality.

- | | |
|---|--|
| 1 | For aluminum welding, use a contact tip one size larger. Welding should be performed using 100% argon shielding gas. |
| 2 | Work in the aluminum welding program. If the welder does not have a dedicated aluminum program, switch to another shielding gas mode. Then, set the wire feed speed (or current) to maximum and the output voltage to minimum for a trial. |

The torch trigger produces no response when pressed.

- | | |
|---|--|
| 1 | Check if the machine requires manual switching to spool gun mode. |
| 2 | This MIG welder automatically detects the spool gun. When the original factory-supplied spool gun is connected, the machine will automatically switch to spool gun mode in MIG mode. |
| 3 | Is the polarity change cable (or jumper) on the welder not connected to either the output positive (+) or negative (-) terminal of the machine? |

Note: Figure for reference only.

5. Warranty Registration

To ensure optimal performance and consistency, we recommend purchasing genuine spare parts exclusively from the official REBOOT website. You may also register your product there to activate your warranty.

Official Website:

<https://www.rebootec.com>

Warranty Registration

REBOOT Warranty Registration

Accurately fill in the following information for warranty registration

* First Name

* Last Name

* Email

* Phone Number

Serial Number of Machine

* Order Number