



ITEM# 85650

SPOOL GUN QUICK START GUIDE

250 MULTI-MACHINE SPOOL GUN

Forney®

1.



Read user manual

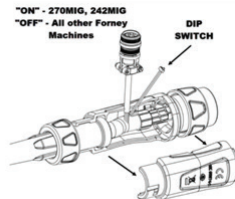
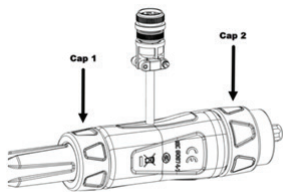
2.

Machine selection

Open the back-end housing on the power cable of the spool gun by turning each of the end caps (cap 1 and cap 2) counterclockwise. This will allow half of the housing to be removed.



2B.



2C.

Inside of the housing, you will find a small DIP switch. If using a Forney 270 MIG or 242 Dual MIG, set the switch to the "On" position. Set the switch to the "Off" position for use with all other Forney machines.

2D.

Re-assemble and close the back-end housing.

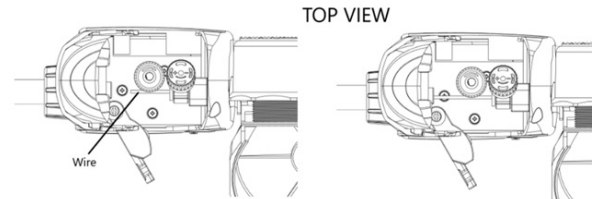
3A.

Install a fresh spool of welding wire into the spool compartment.



3B.

Guide the free end of the welding wire through the wire feed mechanism.



3C.

Close and apply tension to the wire feed mechanism. Ensure that the wire is feeding through the bottom groove of the drive roller.

NOTE: More tension is not better! Apply just enough wire feed tension to keep the wire feeding smoothly and continuously.

4.

Machine setup.

4A.

If using a Forney multi-process (MP) machine, ensure process selector is set to "MIG".

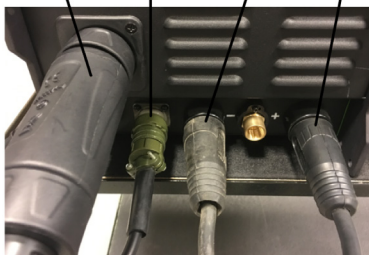
4B.

MIG welding aluminum is a DCEP+ process.

4C.

Forney® 220 MP:

Euro-Connect Amphenol Plug Ground Polarity Jumper



4D.

Forney® 190 MP:

Euro-Connect Ground Amphenol Plug Polarity Change Cable Remote/Local Switch (Set to Remote)

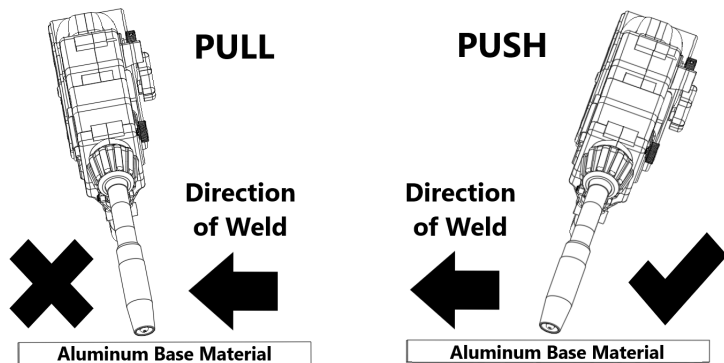


Front of Machine

Inside of Cabinet



SPOOL GUN TROUBLESHOOTING TIPS



TIP #1

To prevent burn-back issues, always use contact tips that are one size larger than the selected welding wire. For example, if using 0.030" wire, use an 0.035" contact tip

TIP #2

When welding aluminum, ALWAYS use 100% pure Argon shielding gas

TIP #3

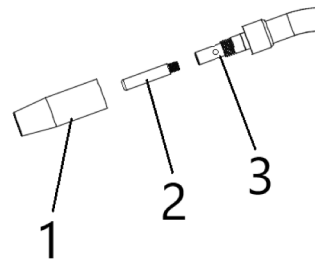
Use a slight push angle when using a spool gun

Basic MIG Settings for 4XXX Series Aluminum

Material Thickness	Wire Diameter	Voltage (V)	Wire Feed Speed (IPM)	Material Thickness	Wire Diameter	Voltage (V)	Wire Feed Speed (IPM)
22 GA	0.030	13.5	200	1/8"	0.030	25	450
	0.035	13.5	150		0.035	25	410
	0.047	N/A	N/A		0.047	20.5	200
20 GA	0.030	13.5	240	3/16"	0.030	25	500
	0.035	13.5	220		0.035	25	450
	0.047	N/A	N/A		0.047	20.5	220
18 GA	0.030	14.5	290	1/4"	0.030	28.5	550
	0.035	14	220		0.035	27	525
	0.047	N/A	N/A		0.047	27.5	250
16 GA	0.030	15.5	340	3/8"	0.030	29	600
	0.035	15	250		0.035	28	550
	0.047	N/A	N/A		0.047	27.5	260
14 GA	0.030	16.5	370	1/2"	0.030	N/A	N/A
	0.035	15	270		0.035	29	600
	0.047	N/A	N/A		0.047	28	280
12 GA	0.030	17.5	425	3/4"	0.030	N/A	N/A
	0.035	17	325		0.035	N/A	N/A
	0.047	N/A	N/A		0.047	30	290

Always use 100% Pure Argon when welding aluminum

ITEM	Description	Industry Standard #
1	Gas Nozzle	TWECO Style 23-50
2	0.030" Contact Tip	TWECO Style 14H-30
2	0.035" Contact Tip	TWECO Style 14H-35
2	0.045" Contact Tip	TWECO Style 14H-45
3	Gas Diffuser	TWECO Style 52FN



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QUESTIONS OR TROUBLE? Contact Forney Industries at 1-800-521-6038 customerservice@forneyind.com forneyind.com