

## Wire Straighteners

088109 Duo For .045 Thru 3/32 In (1.1 Thru 2.4 mm) Wire

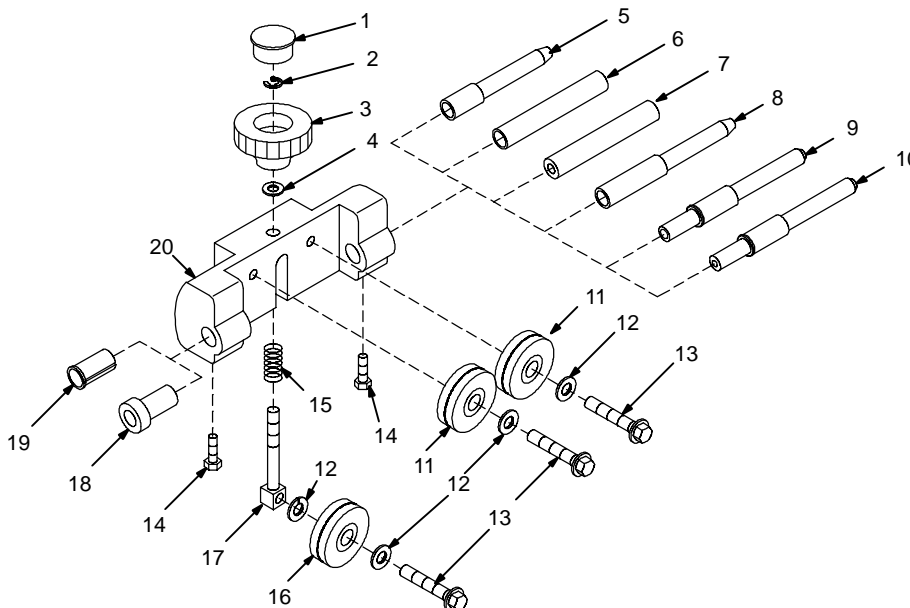
141580 Single For .045 Thru 3/32 In (1.1 Thru 2.4 mm) Wire

141581 Single For 1/16 Thru 1/8 In (1.6 Thru 3.2 mm) Wire

199 733 Single For 1/16 Thru 7/32 in (1.6 Thru 5.5 mm) Wire

# SECTION 1 – PARTS LIST

Item No.	Part No.	Description	Quantity			
			Model	60 Series	Duo	Subarc
<b>Figure 1. Wire Straightener</b>			141 580	141 581	088 109	199 733
...	1 ... 000 527 ..	BLANK, snap-in nyl .875mtg hole	1	1	1	1
...	2 ... 000 366 ..	RING, retainer E .250 shaft grv .025thk	1	1	1	1
...	3 ... 044 279 ..	KNOB, adjusting tension	1	1	1	1
...	4 ... 604 538 ..	WASHER, flat stl SAE .312	1	1	1	1
...	5 ... 044 275 ..	GUIDE, wire outlet 1/16-1/8	1	1		
...	5 ... 088 192 ..	GUIDE, wire duo outlet			1	
...	6 ... 044 274 ..	GUIDE, wire outlet 1/16-1/8	1			
...	7 ... 044 276 ..	GUIDE, wire outlet 5/32-1/4	1			
...	8 ... 143 851 ..	GUIDE, wire outlet 1/16-1/8	1	1		
...	9 ... 199 430 ..	GUIDE, wire outlet 1/16-1/8				1
...	10 ... 199 586 ..	GUIDE, wire outlet 5/32-7/32				1
...	11 ... 044 282 ..	ROLL, pressure w/bearings (1/16 thru 1/4 wire)	2	2		2
...	11 ... 088 189 ..	ROLL, pressure w/bearings				3
...	12 ... 602 207 ..	WASHER, lock stl split .250	4	4	4	4
...	13 ... 605 518 ..	SCREW, cap stl hexhd .250-20 x 1.250	3	3	3	3
...	14 ... 602 154 ..	SCREW, hexhd stl slffmg .250-20 x .500	2	2	2	2
...	15 ... 044 357 ..	SPRING, cprsn .360 OD x .026 wire x 1.500	1	1	1	1
...	16 ... 044 282 ..	ROLL, pressure w/bearings (1/16 thru 1/4 wire)		1		1
...	16 ... 092 290 ..	ROLL, pressure w/bearings (.035 & .045 wire)	1			
...	17 ... 044 280 ..	SLIDE, tension	1	1	1	1
...	18 ... 044 277 ..	GUIDE, wire inlet	1	1		1
...	18 ... 088 191 ..	GUIDE, wire duo inlet			1	
...	19 ... 044 278 ..	BUSHING, reducer inlet guide	1	1		1
...	20 ... 044 283 ..	HOUSING, wire straightener	1	1	1	1







ST-044 417-D

Figure 1-1. Wire Straightener


BE SURE TO PROVIDE MODEL WHEN ORDERING REPLACEMENT PARTS.

# SECTION 2 – INSTALLATION

 <b>WARNING</b>	
 <p><b>ELECTRIC SHOCK can kill.</b></p> <ul style="list-style-type: none"> <li>Do not touch live electrical parts.</li> <li>Turn Off wire feeder and welding power source, and disconnect input power before inspecting or installing.</li> </ul>	 <p><b>MOVING PARTS can cause injury.</b></p> <ul style="list-style-type: none"> <li>Keep away from moving parts.</li> <li>Keep away from pinch points such as drive rolls.</li> </ul>
Installation to be performed only by qualified persons. <small>wfwarn4.1* 2/93</small>	

**NOTE**  Use outlet guide No. 5 in Parts List with Automatic Weld Control Series and 50 Series wire feeders. Use outlet guides Nos. 6 and 7 with drive assemblies with 1/2 in (12.7 mm) guide mounting holes. Use outlet guide No. 8 with 60 Series wire feeders.

Use reducer inlet guide No. 17 when flexible conduit inlet cable is used, and the guide mounting hole must be reduced to 3/8 in (9.5 mm).

 For Duo Model, position wire straightener so that rolls on the wire straightener, the wire feeder drive rolls, and both spools of wire are all on the same plane. Both spools must feed off top, or both off bottom. The Duo wire straightener can be installed in two positions, 180° apart, depending on the cast of the wire as it comes off the spools.

In cases where the cast of the wire is not in the same plane as it feeds off the spool, a second wire straightener can be installed in series with the first and positioned to eliminate remaining cast in the wire.

- 1 Outlet Guide
- 2 Wire Straightener

Install guide (see Parts List and Note for correct size).

- 3 Guide Securing Screws

Secure guide with screw.

- 4 Rollers
- 5 Wire Straightener Pressure Adjustment Knob

Loosen knob.

- 6 Inlet Guide

Install guide (see Parts List and Note for correct size).

Secure guide with guide securing screw.

- 7 Wire Feeder Inlet Guide
- 8 Wire Feeder Drive Assembly
- 9 Drive Assembly Guide Securing Screw (Hidden From View By Cover)

Loosen screw, and remove guide from drive assembly.

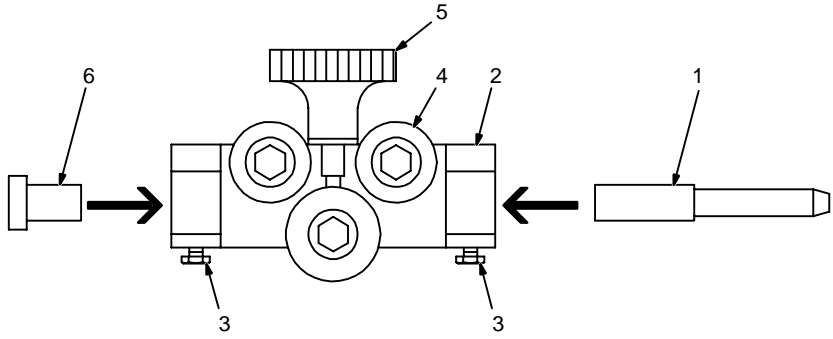
Loosen pressure on drive rolls (see wire feeder Owner's Manual).

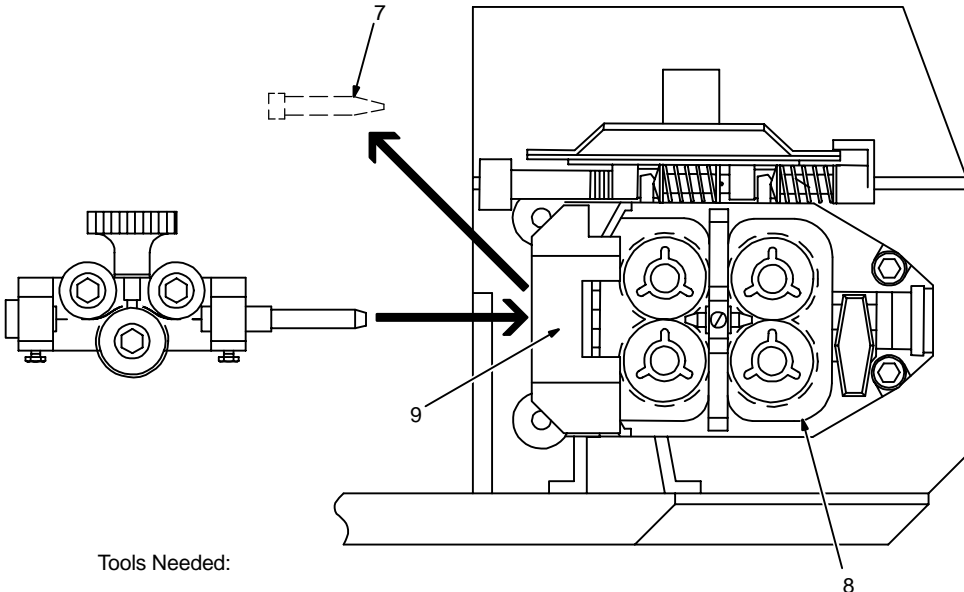
Install wire straightener into drive assembly as shown, and secure with drive assembly guide securing screw.

Thread wire through wire straightener and drive assembly (see wire feeder Owner's Manual)

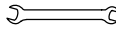
Loosen drive assembly guide securing screw, and turn wire straightener to position rollers against cast of welding wire. Tighten screw.

Tighten wire straightener pressure adjustment knob enough to remove cast from wire. Do not overtighten or wire will bend in opposite direction.





**Tools Needed:**

 5/16, 7/16 in

ST-800 310

**Figure 2-1. Installing The Wire Straightener (60 Series Shown)**