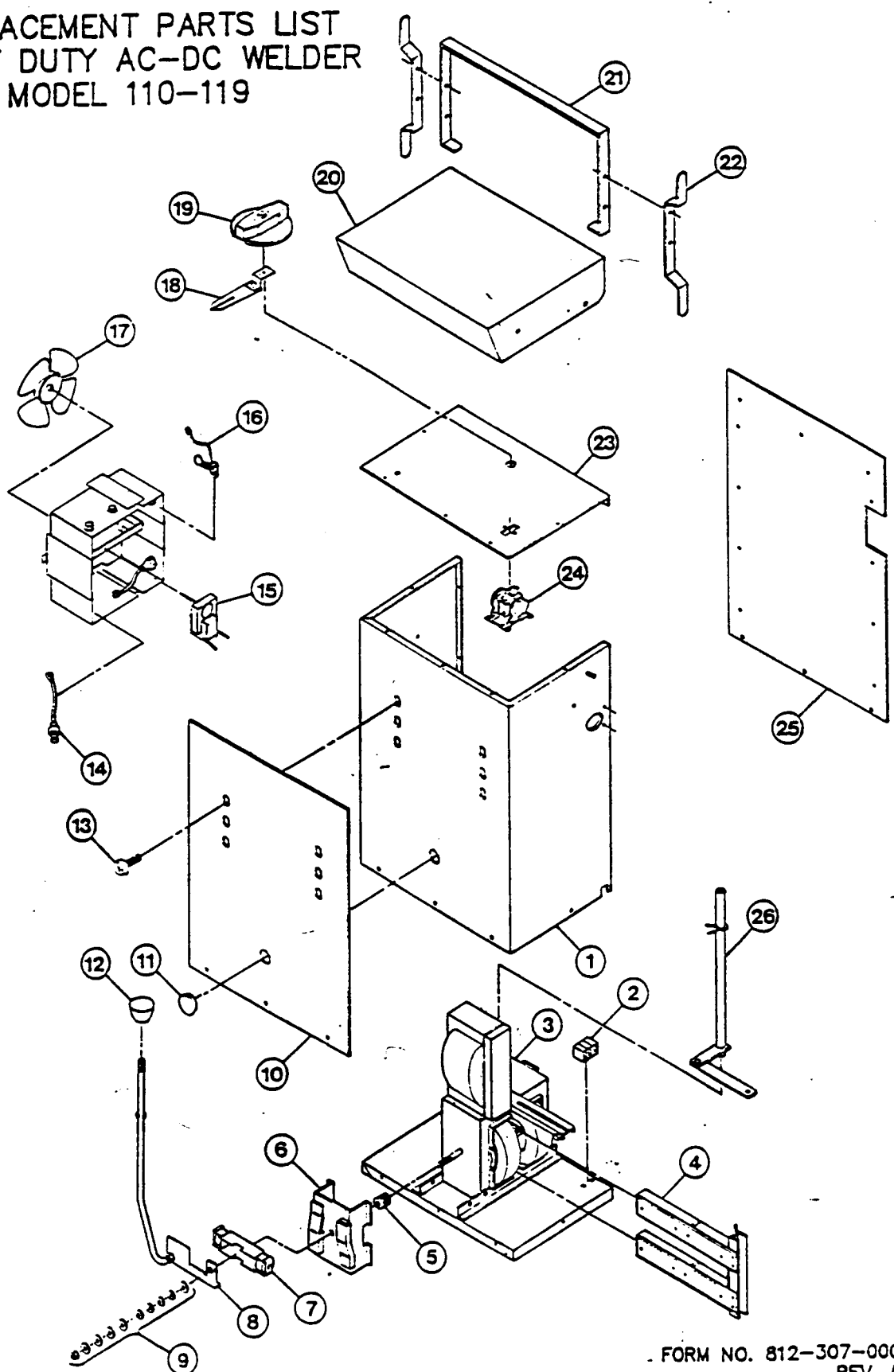


REPLACEMENT PARTS LIST HEAVY DUTY AC-DC WELDER MODEL 110-119



FORM NO. 812-307-000 —
REV. A

110-119, 84295, Five Star

110-119 (84295), 295 amp AC / 250 amp DC Five Star Arc Welder

Item	Lincoln Stock #	Customer #	Description
1	NLA	860-515-100	Case assembly
2		239-057-666	Terminal block
3		N/A	Base & Transformer
4		860-186-666 (use 860-121-000)	Shunt
5		310-101-666	Counter spring
6		860-184-666	Shunt clamp assy.
7		860-119-666	Clamp roller assy.
8		860-518-666	Clamp rod kit
9		330-017-666	Washer kit
10		711-158-026	Faceplate
11		078-008-100	Snap plug
12		312-031-666	Clamp knob
13	312-028-100	312-028-666	Receptacle
14	214-004-666	214-004-666	Diode assy.

Manufactured from 6-24-86 to 3-2-93 (3160)

Model	Primary Input	Input Plug	Duty Cycle at Rated Output
110-119	230V	NEMA 50-P	20%

Item	Lincoln Stock #	Customer #	Description
15	216-099-666	216-056-666	Fan motor assy.
16		860-514-666	Transient voltage protector
17	316-010-000	316-010-666	Fan Blade
18		081-044-000	Tension bolt
19		860-921-666	Dial Indicator
20		860-920-000	Cover assy.
21		412-095-200	Handle
22		412-309-010	Cable wrap
23		410-187-036	Dial plate
24	216-010-666	216-010-666	Power switch
25		860-295-666	Dial linkage assy.

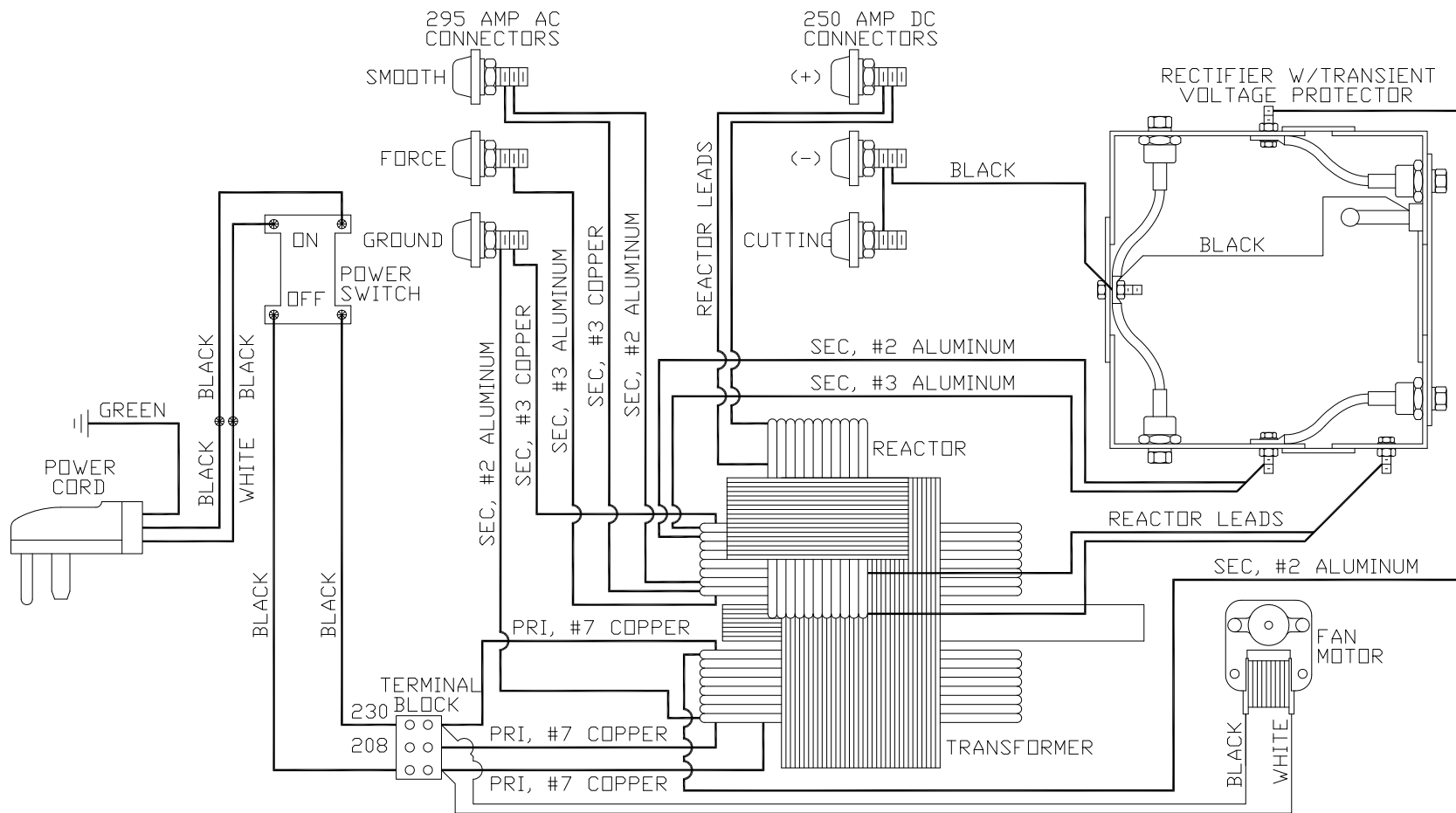
Not Shown

26	238-009-500	4007	12', 3 ga. ground cable w/clamp
27		238-085-500 (4017)	18', 3 ga. Electrode cable w/holder

First Serial # C178400, Last Serial # D704858

8/21/2007

Rated Output	Voltage Settings	Agency Listing	Max Output
295 / 250	Infinite	UL	295 amps



#2 WIRE IS THICKER THAN #3; #3 WIRE IS THICKER THAN #7.

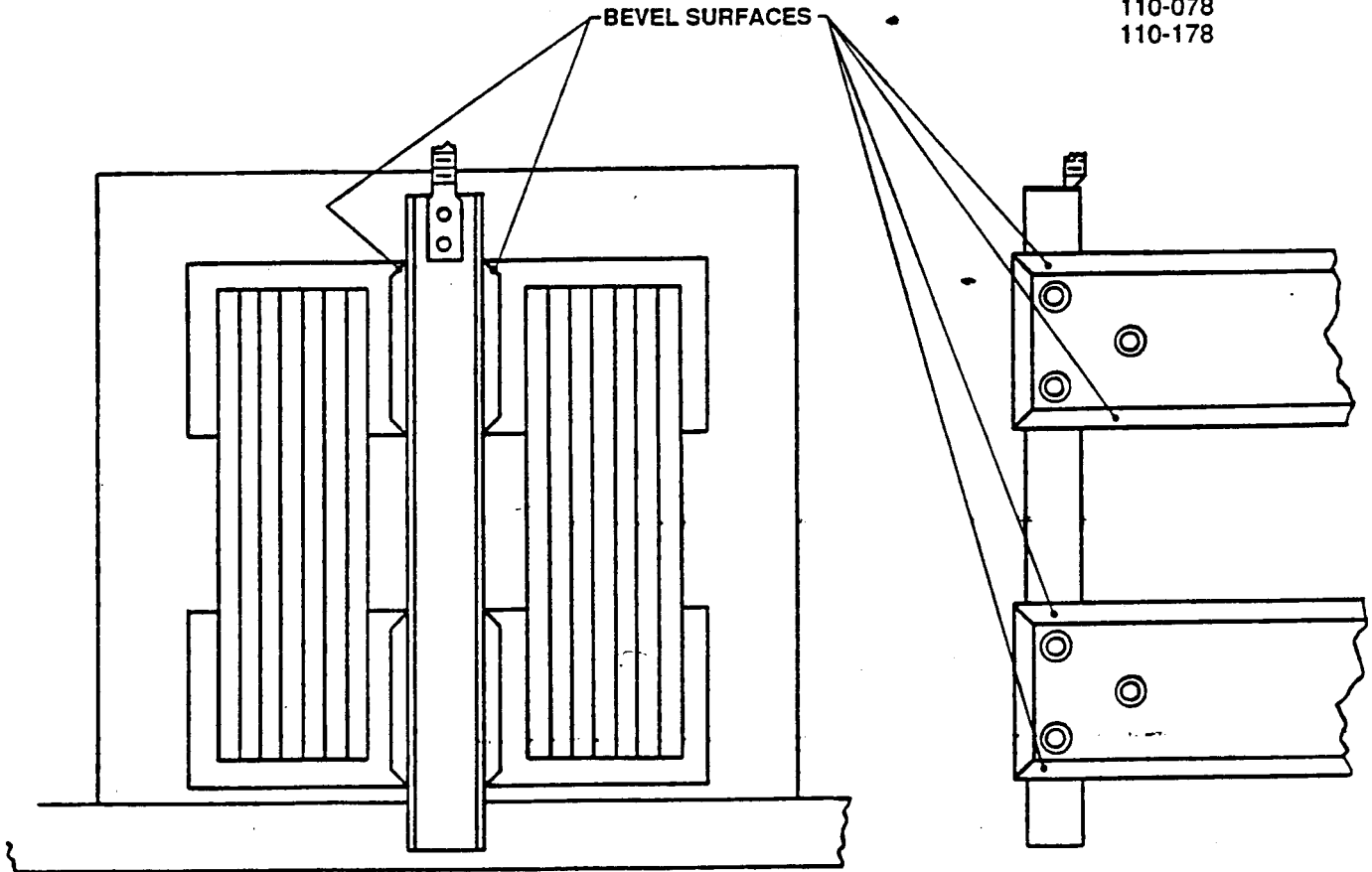
110-119 Five Star

Shunt Lubricating Procedure

1. Unplug Welder!!
2. Remove back of welder.
3. Release shunt lock.
4. Move shunt out of transformer to the end of shunt guide (maximum dial setting).
5. Apply silicone grease (stock # 098-068-000) to the exposed bevel surface (8).
6. Turn dial indicator from maximum position to minimum position a number of times to work in silicone grease. Repeat steps 4 & 5 if shunt does not move freely.
7. In most cases the shunt lock will have to be readjusted. To do this follow maintenance instructions in lower right hand corner of decal on the inside top cover of welder.

NOTE: If shunt still binds, see Shunt Adjusting Procedure for 110-119-000

Also valid for:
110-078
110-178



END VIEW OF TRANSFORMER AND SHUNT

VIEW FROM BACK OF WELDER

Shunt Adjusting Procedure

1. Unplug Welder!!

2. Remove the back of the welder.

3. With shunt in the innermost position (as shown) check tightness of nut so that the washer moves without too much force.

If washer moves freely with no pressure from the nut, tighten more.

If the washer cannot be moved then the nut is too tight and should be loosened up a little.

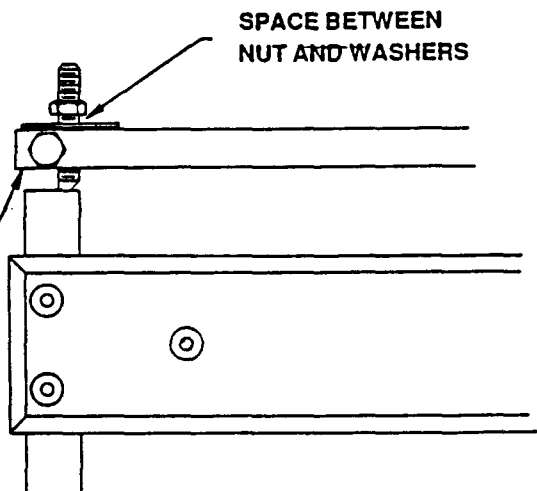
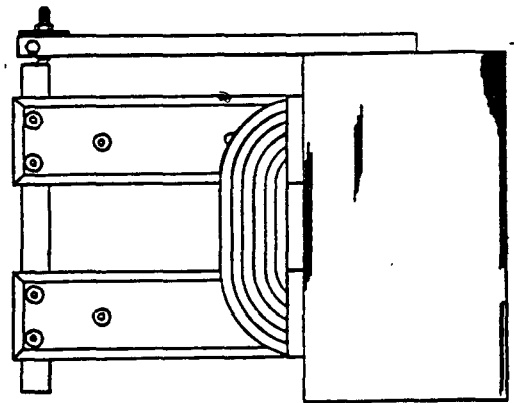
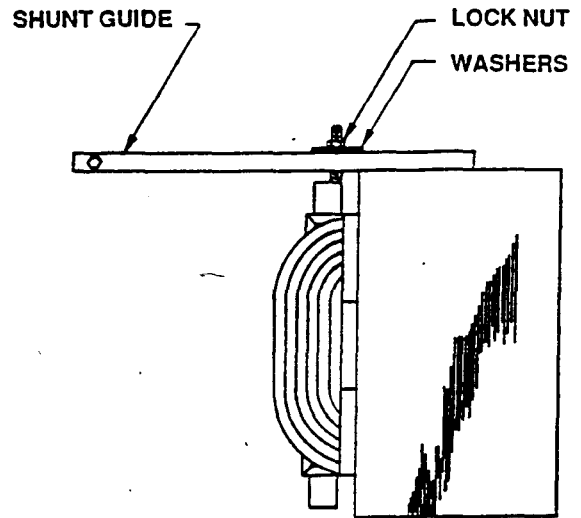
It should be possible to move the washer without too much force.

4. After nut has been tightened, pull shunt out of the transformer to the end of the shunt guide. If shunt moves out and back the full distance of the shunt guide without binding or sticking then no more adjusting is necessary.

5. If shunt binds or sticks at all when moved back and forth along the guide then the guide is bent.

If the washer drops down away from the nut leaving more space between it and the nut then the guide is bent down and must be tapped back up.

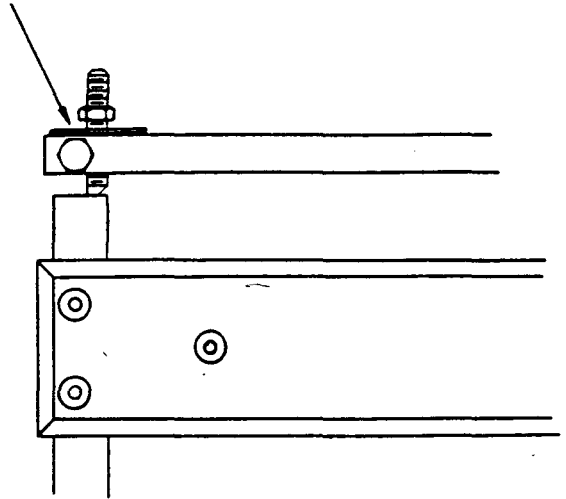
PUSH IN SHUNT AND TAP UP END OF SHUNT GUIDE



110-119, 84295, Five Star

If the washer is so tight in the extended position that it cannot be moved without moving the whole shunt then the shunt guide is bent upward and must be tapped down until shunt moves in and out freely.

PUSH IN SHUNT AND TAP DOWN ON SHUNT GUIDE

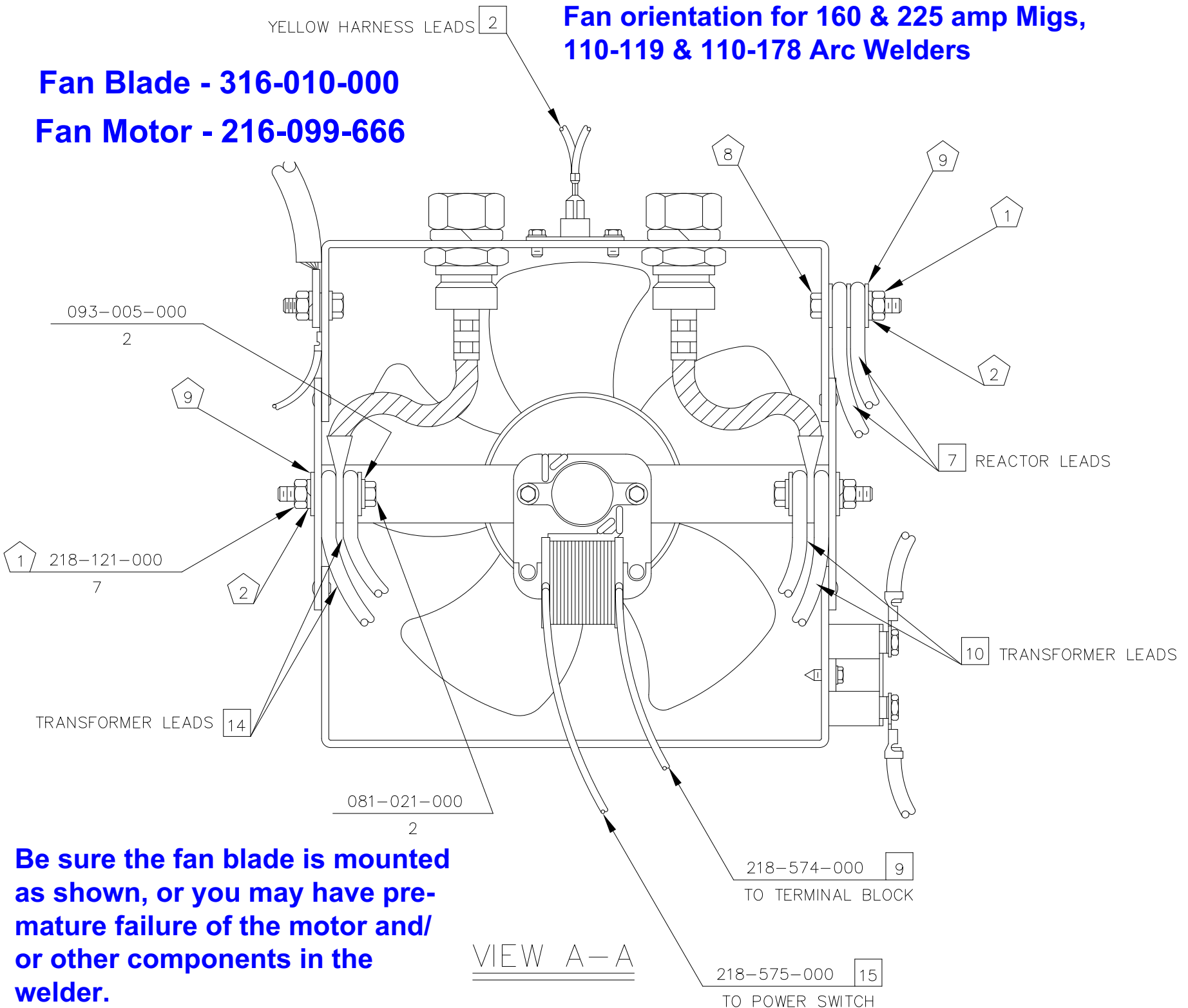


When tapping guide either up or down both sides must be tapped equally so that washer does not become cocked.

**Fan orientation for 160 & 225 amp Migs,
110-119 & 110-178 Arc Welders**

Fan Blade - 316-010-000

Fan Motor - 216-099-666



**Be sure the fan blade is mounted
as shown, or you may have pre-
mature failure of the motor and/
or other components in the
welder.**

