

ED: Preliminary Manual



**Operating
and
Service
Instructions
FORNEY
MODEL F260
AC
BT
AC/DC
& FT225**

Forney
Industries, Inc. U.S.A.
Box 343, Fort Collins, Colorado 80522 U.S.A. •

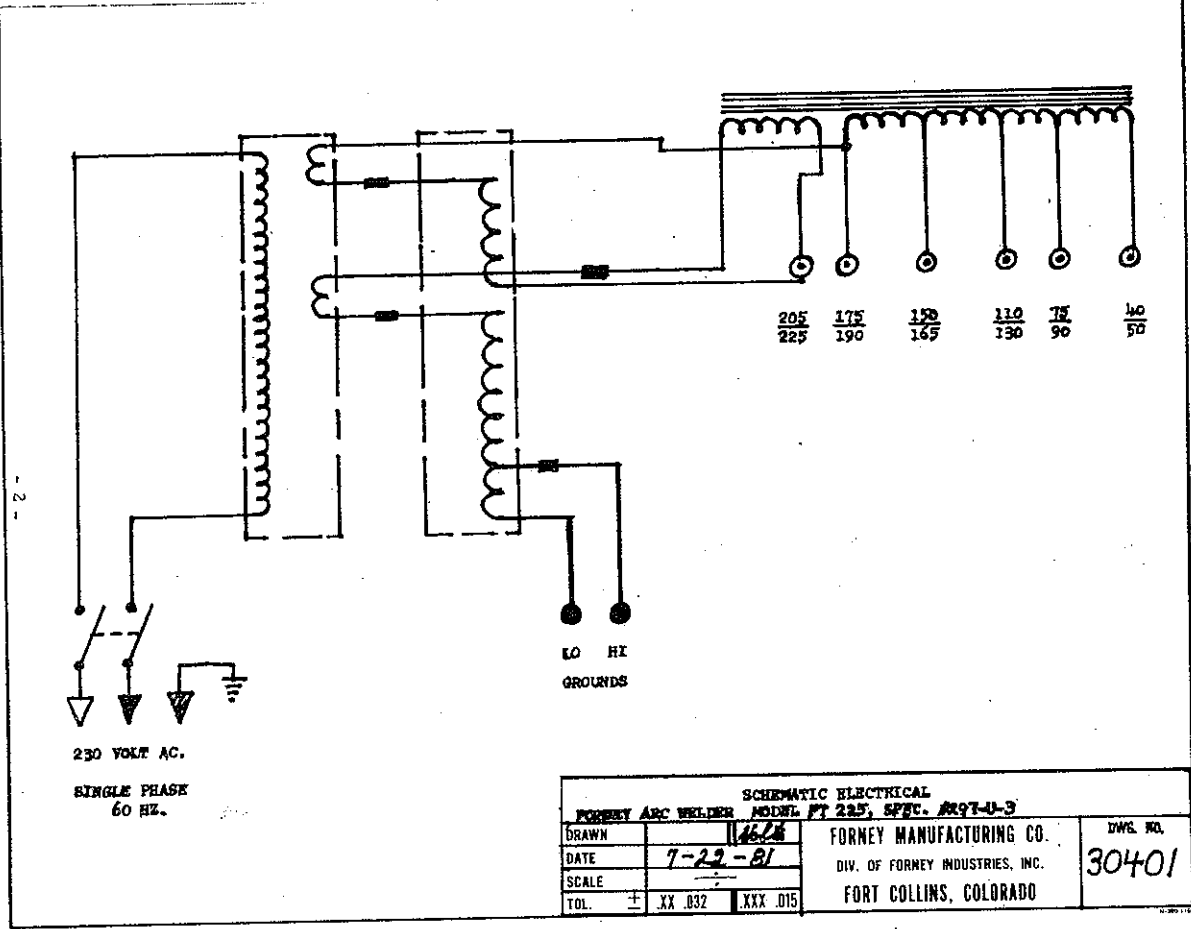
Arc Welders Ltd. CANADA
Box 1040, Regina, Sask., Canada •



FIELD REPLACEABLE
PARTS LIST
FORNEY PLUG WELDER
MODEL FT-225 (30400)

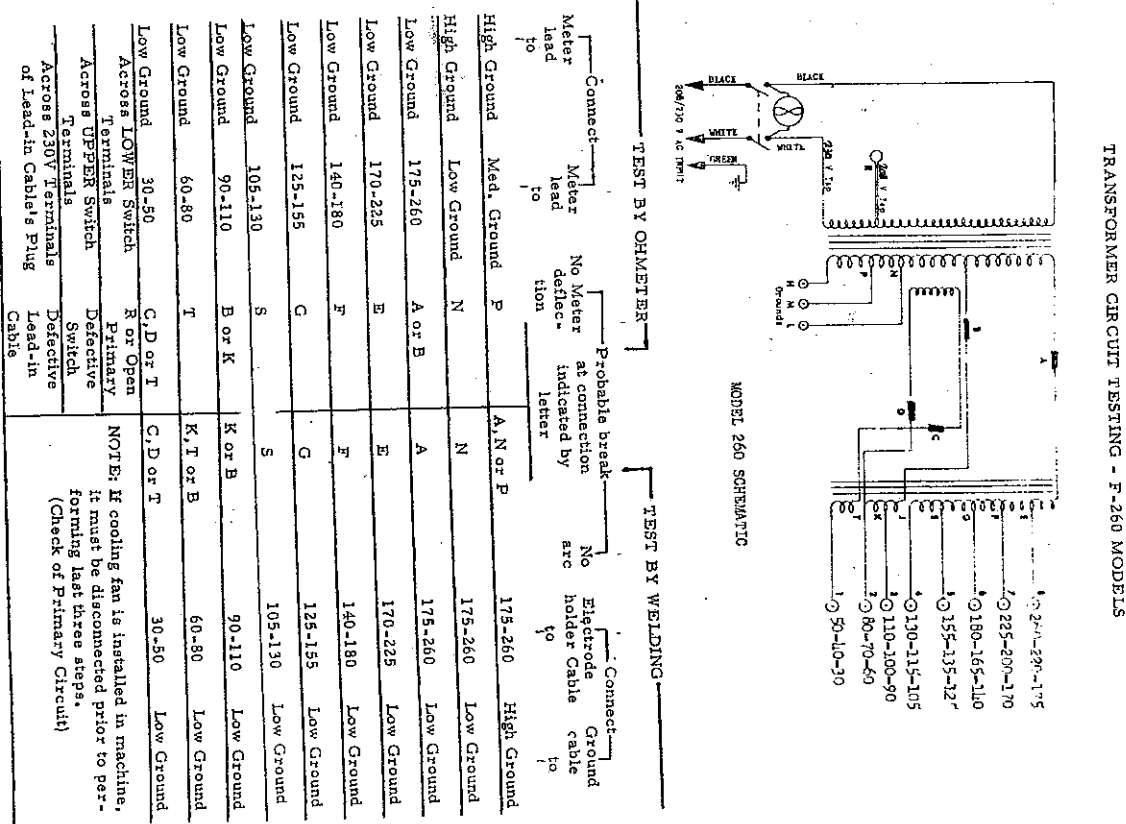
ITEM	NAME	NO. REQ.	PART NO.
50	Transformer, Spec. 297-U-3 w/Bkt	1	A30450
60	Choke, Tapped, Spec. 297-U-3 w/Bkt.	1	A30460
03	Switch, Toggle DPST	1	59302-0
04	Washer, Insulator	8	57404-0
05	Knob, Retaining (Black)	6	57501-0
06	Knob, Retaining (Green)	2	57503-0
07	Jack, Brass	8	57500-0
08	Case, Front	1	30411
09	Case, Rear	1	30412
10	Case, Wrap-Around	1	30413
11	Cordset 8-8-10 6 ft. w/6-50P	1	173-0807
12	Schematic Diagram	1	30401

Note: For parts not listed above, contact Factory Service Department at Ft. Collins,
CO. 80522



SCHEMATIC ELECTRICAL
FORNEY ARC WELDER MODEL FT 225, SPEC. MS1-U-3

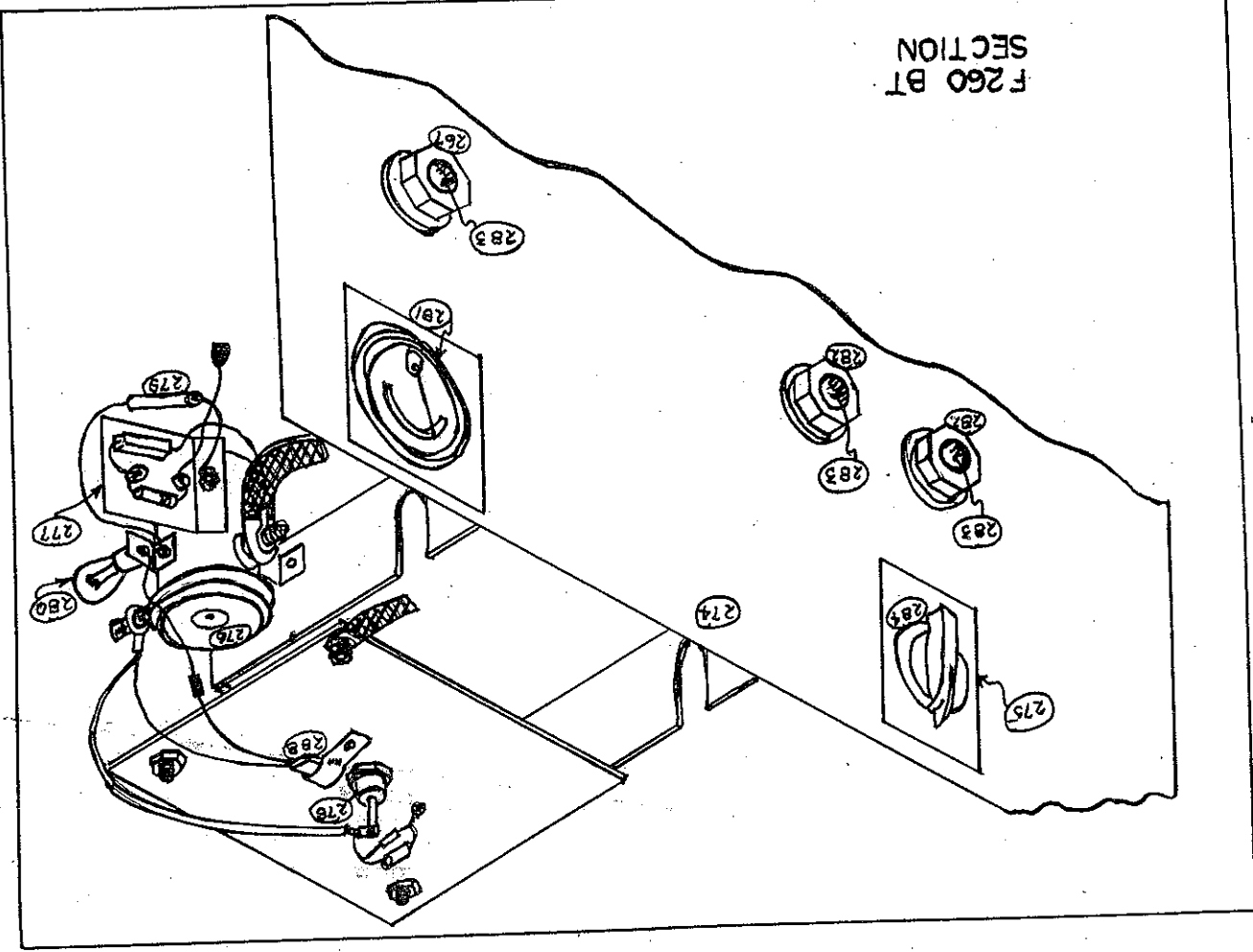
DRAWN	1/6/54	FORNEY MANUFACTURING CO.	DWG. NO.
DATE	7-22-51	DIV. OF FORNEY INDUSTRIES, INC.	30401
SCALE		FORT COLLINS, COLORADO	
TOL.	XX .032 XXX .015		



REPLACABLE PARTS LIST FOR PLUG WELDER
MODEL F 260 BT SECTION # 25602

ITEM NO.	DESCRIPTION	NO. REQ.	PART NO.
274	Front Panel, BT Markings	1	A27311
275	Timer, 3 Hour	1	59402-0
276	Solenoid, 6 Volt	1	59312-0
277	Polarity Protector (Transistor Assy.)	1	59316-0
278	Diode Rectifier, 70 Amp. IR 70 @100 FIV St. Polarity	1	59433-0
279	Capacitor, 100 MFD @ 50 Volts	1	59310-0
280	Ballast Lamp, Type 87, 6 Volt	1	59313-0
281	DC Ammeter, 0-60 Amps.	1	50100-0
266	Insulator Washer (1/8)	3	57404-0
282	Insulator Knob (Red)	2	57502-0
267	Insulator Knob (Black)	1	57501-0
283	Jack w/screw (Small)	3	F06143
284	Timer Knob Only	1	59406-0
285	Male Sure Grip Plug (Small, Black)	1	57925-0
286	Male Sure Grip Plug (Small, Red)	1	57926-0
287	Lamp Socket, Single Contact	1	59314-0
288	Heat Sensor	1	59308-0

For parts not listed, contact service Department at Ft. Collins, CO 80522



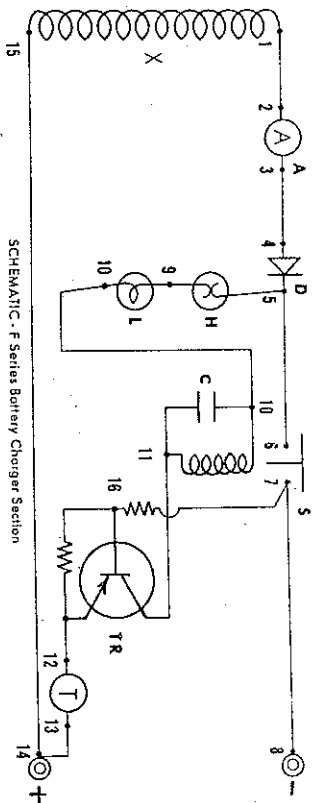
F 260 BT
SECTION

REPLACEABLE PARTS LIST FOR PLUG WELDER
MODEL F260 AC # 25600

OPERATION AND CIRCUIT TRACING - F SERIES

ITEM NO.	DESCRIPTION	NO. REQ.	PART NO.
260	X-Former Assy. for 208-230 Volts Spec. # 259-U-23	1	73259-0
261	Main Case, Wrap-Around	1	A27110
262	Front Panel	1	27111
263	Top	1	A27115
264	Handle	1	75031-0
265	Switch, DPST 60 Amps.	1	59300-0
266	Insulator Washer (1/8")	11	57404-0
267	Insulator Knob (Black)	11	57501-0
268	Jack w/screw	11	57500-0
269	Fan Blade 6-5/8" Nylon	1	50416-0
270	Fan Motor Assy. w/bkt. 230 Volt	1	50410-0
271	Cordset 8-3 x 7 ft. 6 in. Pin Type Plug	1	173-0810
272	Wheels 6 in. x 1-1/2"	2	59905-0
273	Axle 1/2" x 2-1/2" w/collar & key	2	50205-0
274	Male Sure Grip Plug (Cable Plug)	2	57901-0

Note: For parts not listed, contact the factory service department.



With a battery connected properly to the output (charge) jacks of the charger, the battery causes a small current to flow from emitter to base (14) of the transistor when the timer (T) is turned on.

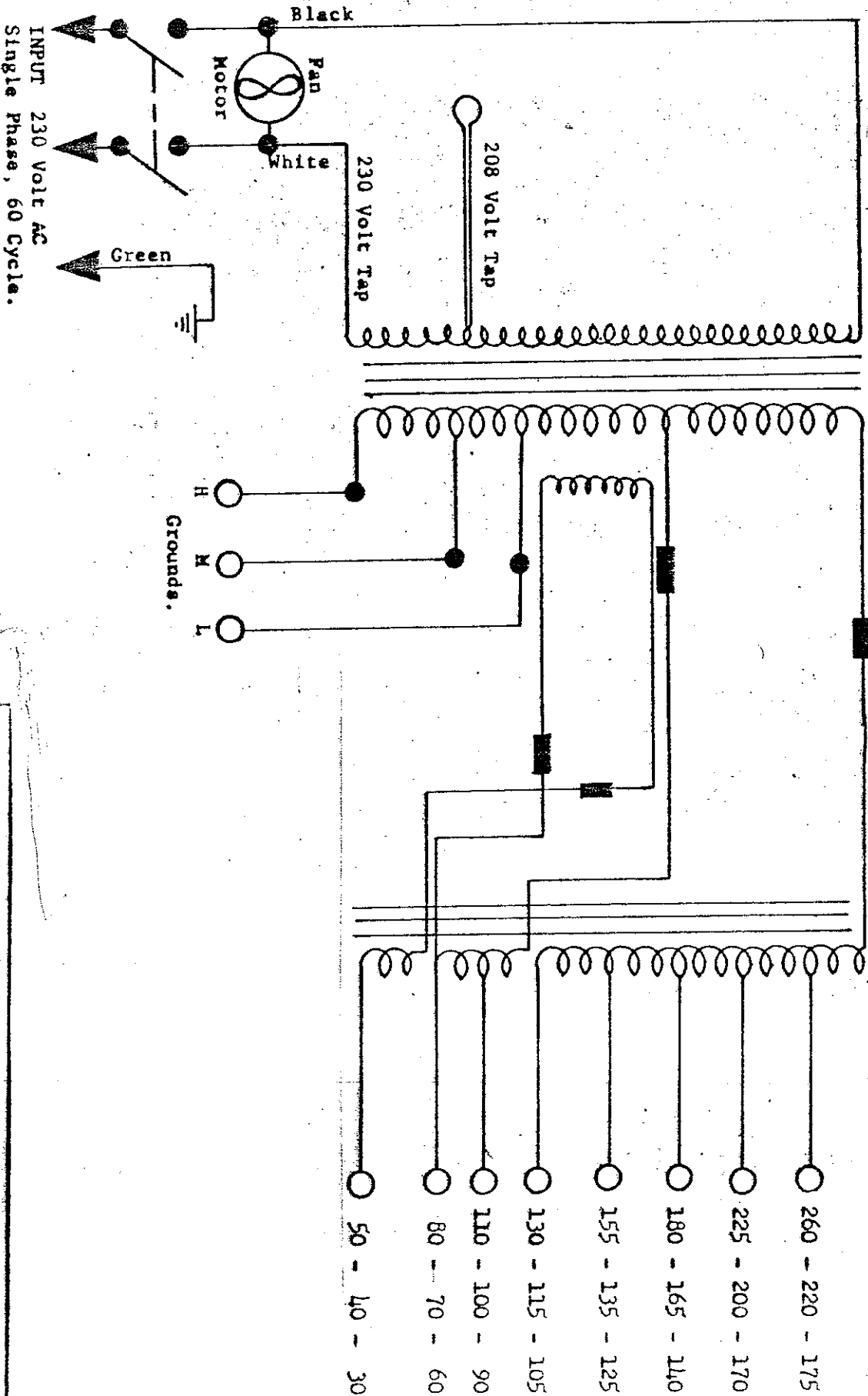
The current path is as follows: 8-7-16-12-13-14. When the welder switch is turned "on", the transformer is energized. This causes a current to flow through the path: 1-2-3-4-5-9-10-11-12-13-14-15.

Current flows through the transistor collector-to-emitter because current is already flowing through the transistor base-to-emitter due to the battery being connected.

Since current is flowing through the solenoid coil 10-11, the solenoid is energized and closes its internal switch contacts which allow the heavy charging current to flow through the solenoid contacts (6-7) to the negative jack and to the battery.

The control current is now flowing through path 1-2-3-4-5-9-10-11-12-13-14.

The charging current is now flowing through path 1-2-3-4-5-6-7-8.



Schematic Electrical

Model upm 260 AC Arc Welder, Spec. 262-U-23

DRAWN	SJS
DATE	5-24-78
SCALE	NONE

FORNEY MANUFACTURING CO.
DIV OF FORNEY INDUSTRIES INC.
SNDT PULLING PLINDDINA

25603

REPLACEABLE PARTS LIST FOR PLUG WELDER
MODEL F 260 AC/DC # 28503

ITEM NO.	DESCRIPTION	NO. REQ.	PART NO.
260-2	X-Former Assy. for 208/230 V. Spec. # 262-U-23	1	73260-0
261	Main Case, Wrap-Around	1	A27110
262-2	Front Panel (DC Markings)	1	A27211
263	Top	1	A27115
264	Handle	1	75031-0
265	Switch, DPST 60 Amp.	1	59300 -0
266	Insulator (1/8)	11	57404-0
267	Insulator Knob (Black)	11	57501-0
268	Jack w/screw	11	57500-0
269	Fan Blade, 6-5/8" Nylon	1	50415-0
270	Fan Motor Assy. w/bkt 230 Volt	1	50410-0
271	Coilset 8-3 x 7 ft. 6 in. Pin Type Plug	1	173-0810
272	Wheels 6 in. x 1-1/2"	2	59905-0
273	Axle 1/2" x 2-1/2" w/collar & key	2	50205-0
274	Male Sure Grip Plug (Cable Plug)	2	57901-0
<u>DC SECTION</u>			
275	Reactor Assy. (Choke) Spec. # 262-3 Up To Serial # 8AB799	1	A27230
276	Reactor Assy. (Choke) Spec. # 262-4 Start Serial # 8AB800 & UP	1	A27240
277	Diodes (Pos.) 250/275 Amp. 300 PIV	2	58543-0
278	Diodes (Neg.) 250/275 Amp. 300 PIV	2	58544-0
266	Insulator (1/8)	2	57404-0
267	Insulator Knob (Black)	1	57501-0
279	Insulator Knob (Red)	1	57502-0
268	Jack w/screw	2	57500-0
280	Strain Relief (DC Cord)	2	148-7473
274	Male Sure Grip Plugs (DC Cords)	2	57901-0
281	Surge Capacitor w/Resistor	1	153-1000

WARNING - BE SURE BOTH THE ELECTRODE HOLDER AND GROUND CLAMP LEADS ARE PLUGGED INTO THE DC SECTION FOR DC WELDING OR INTO THE AC SECTION FOR ONE IN AC. DO NOT OPERATE WITH ONE IN DC AND

