

PARTS LIST FOR

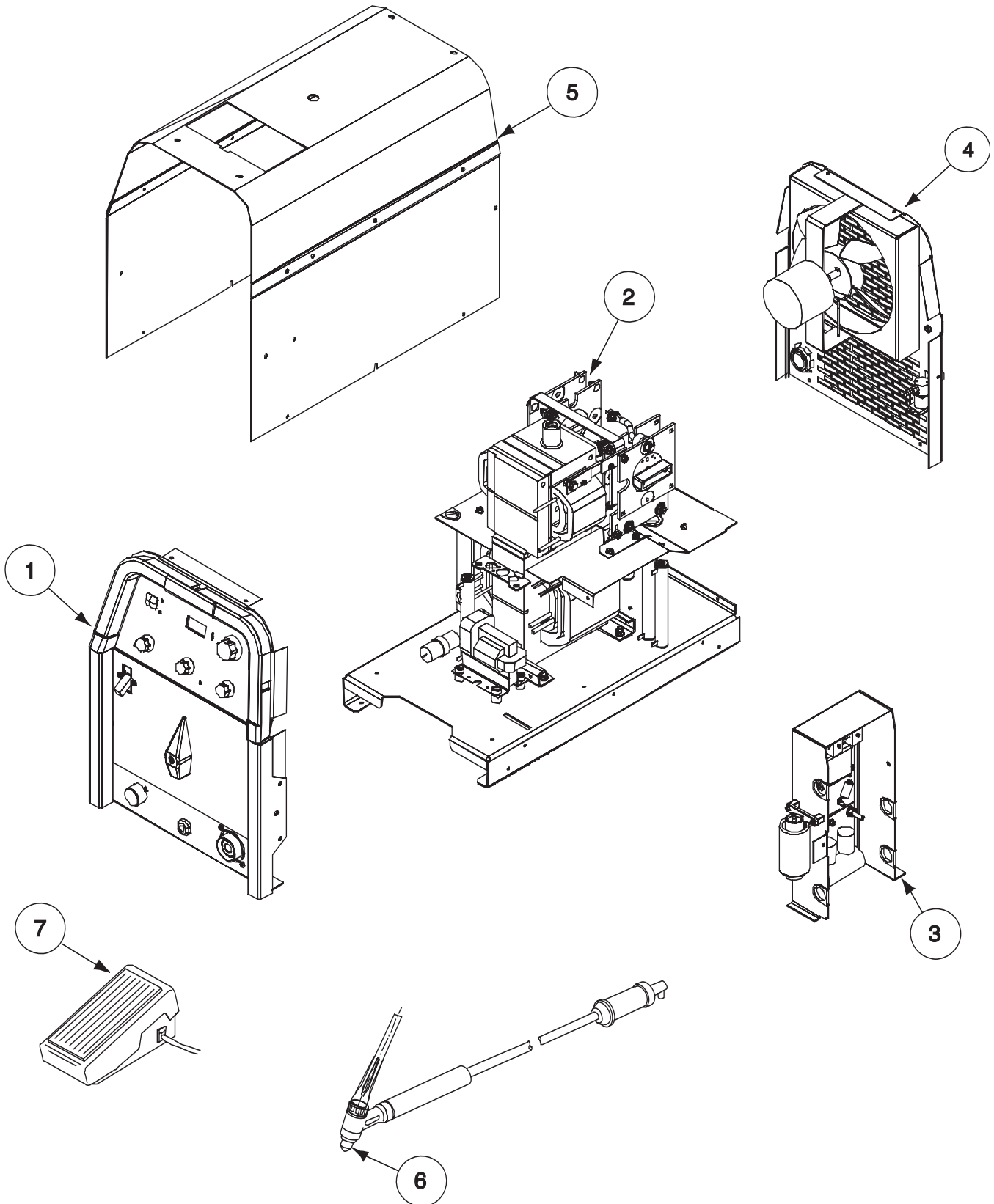
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PRECISION TIG 225



ILLUSTRATION OF SUB-ASSEMBLIES



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For Codes: 11317, 11318 & 11319, 11320 & 11321

Do Not use this Parts List for a machine if its code number is not listed. Contact the Service Department for any code numbers not listed.

Use the Illustration of Sub-Assemblies page and the table below to determine which sub assembly page and column the desired part is located on for your particular code machine.

Sub Assembly Item No.		1	2	3	4	5	6	7	
SUB ASSEMBLY PAGE NAME	Optional Equipment	Case Front Assembly	Center Assembly	Arc Starter & Bypass Assembly	Case Back & Fan Assembly	Cover Assembly	TIG Torch & Cable Assembly	Foot Amptrol Assembly	
PAGE NO.	P-536-B.1	P-536-C	P-536-D	P-536-E	P-536-F	P-536-G	P-210-R	P-66-J.6	
CODE NO.									
11317 (Domestic)		1	1	1	1	1			
11318 (Canadian)		1	2	1	2	1			
11319 (Export)		1	3	1	2	2			
11320 (Ready-Pak)		1	1	1	1	1			
11321 (Ready-Pak w/Cart)		1	1	1	1	1			

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OPTIONAL EQUIPMENT LISTING

Miscellaneous Options Available for your machine are listed below:

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DESCRIPTION	PART NUMBER
Arc Start Switch	Order K814
Foot Amptrol	Order K870
Start Pedal Foot Amptrol	Order K870-1
Hand Amptrol (For PTA-9, PTA-17 & PTW-20 TIG Torches)	Order K963-1
Hand Amptrol (For PTA-26, PTA-18 & TIG Torches)	Order K963-2
Under Storage Cart	Order K2348-1
Twist-Mate Adapter (For PTA-9 & PTA-17 TIG Torches)	Order K1622-1
Twist-Mate Adapter (For PTA-26 TIG Torches)	Order K1622-3
Twist-Mate Adapter (For PTW-18 & PTW-20 TIG Torches)	Order K1622-4
Gas Flowmeter Regulator	Order S24041-32
200 Amp Twist-Mate Stick Electrode Holder & Cable Assembly	Order K2374-1
Cool-Arc 40 (115V) Water Cooler	Order K1813-1
Cool-Arc 40 (230V) Water Cooler	Order K2187-1
TIG-Mate 17 Starter Kit	Order K2266-1
TIG-Mate 20 Starter Kit	Order K2267-1
PTA-9 Ultra Flex TIG Torch	Order K1781-8
PTA-17 Ultra Flex TIG Torch	Order K1782-12



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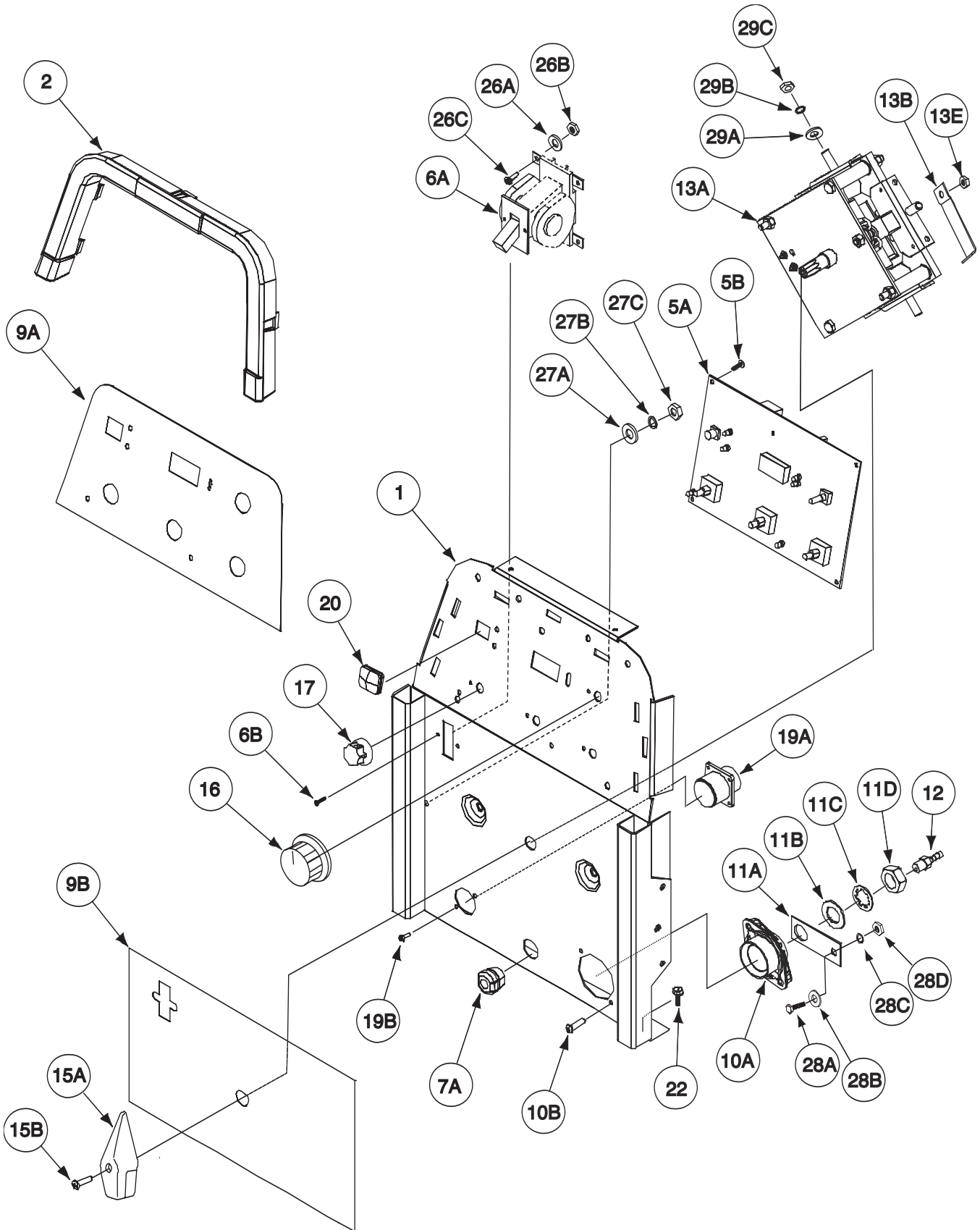
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Case Front Assembly



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Part Numbers

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ITEM	DESCRIPTION	PART NO.	QTY.	1	2	3	4	5	6	7	8	9
1	Case Front Assembly, Includes: Case Front Welded Assembly	G5678	1	X								
2	Bezel	G4522	1	X								
5A	Control P.C. Board Assembly	G4547	1	X								
5B	Sems Screw	G5641-[]	1	X								
6A	Power Switch Assembly	T10082-27	5	X								
6B	Self Tapping Screw	S7670	1	X								
7A	Lead Grommet	S8025-98	2	X								
7B	Work Cable (Not Shown)	T9274-3	1	X								
7C	Ground Clamp Assembly (Not Shown)	S11609-22	1	X								
9A	Nameplate (Top) (G5648-1) (Part of G5648)	M12033	1	X								
9B	Nameplate (Bottom) (G5648-2) (Part of G5648)	NSS	1	X								
10A	Output Terminal Molding	NSS	1	X								
10B	Thread Forming Screw	M13896-7	1	X								
11A	Output Lead	S9225-63	2	X								
11B	Plain Washer	S25795	1	X								
11C	Lock Washer	S9262-41	1	X								
11D	5/8-11 HJN	T9695-16	1	X								
12	Hose Nipple (Male)	CF000140	1	X								
13A	Polarity Switch Assembly	T14557-8	1	X								
13B	Polarity Switch Jumper	L7390	1	X								
13C	1/4-20 HN (Not Shown)	S18234	1	X								
13D	External Tooth Lock Washer (Not Shown)	CF000017	2	X								
13E	5/16-18 HN	T9860-6	2	X								
15A	Molded Handle	CF000029	1	X								
15B	Thread Forming Screw	M15248	1	X								
16	Knob	S9225-63	1	X								
17	Knob	T10491	1	X								
18A	5/16-18X.75 (Not Shown)	T13639-3	3	X								
18B	5/16-18 HN (Not Shown)	CF000040	2	X								
19A	Connector & Lead Assembly	CF000029	2	X								
19B	Self Tapping Screw	L12284	1	X								
20	Button Cover	S8025-96	2	X								
21	Decal (Earth Ground) (G5648-8) (Part of G5648) (Not Shown)	S23055	1	X								
22	Thread Forming Screw	NSS	1	X								
25A	By-Pass Capacitor Assembly (Not Shown)	S9225-68	2	X								
25B	#10-24 HN (Not Shown) (Attaches Ground Lead to Case Front)	S22969	1	X								
	(Item 26 Attaches Leads to Line Switch)	CF000010	2	X								
26A	Plain Washer	S9262-27	4	X								
26B	#10-24 HN	CF000010	4	X								
26C	Sems Screw	T10082-4	4	X								

Note: When ordering new printed circuit boards indicate the dash number [] of the "Old" board that is to be replaced. This will aid Lincoln in supplying the correct and latest board along with any necessary jumpers or adapters. The dash number brackets [] have purposely been left blank so as to eliminate errors, confusion and updates.

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ITEM	DESCRIPTION	PART NO.	QTY.	1	2	3	4	5	6	7	8	9
	(Item 27 Attaches Power Cord Ground Lead to Case Front)											
27A	Plain Washer	S9262-98	2	X								
27B	Lock Washer	E106A-2	1	X								
27C	1/4-20 HJLN	T9187-1	2	X								
	(Item 28 Attaches High Freq Transformer to Output Lead Strap)											
28A	1/4-20X.625 HHCS	CF000013	1	X								
28B	Plain Washer	S9262-98	1	X								
28C	Lock Washer	E106A-2	1	X								
28D	1/4-20 HN	CF000017	1	X								
	(Item 29 Attaches Leads to Polarity Switch)											
29A	Plain Washer	S9262-30	5	X								
29B	Lock Washer	E106A-14	5	X								
29C	5/16-18 HN	CF000029	5	X								



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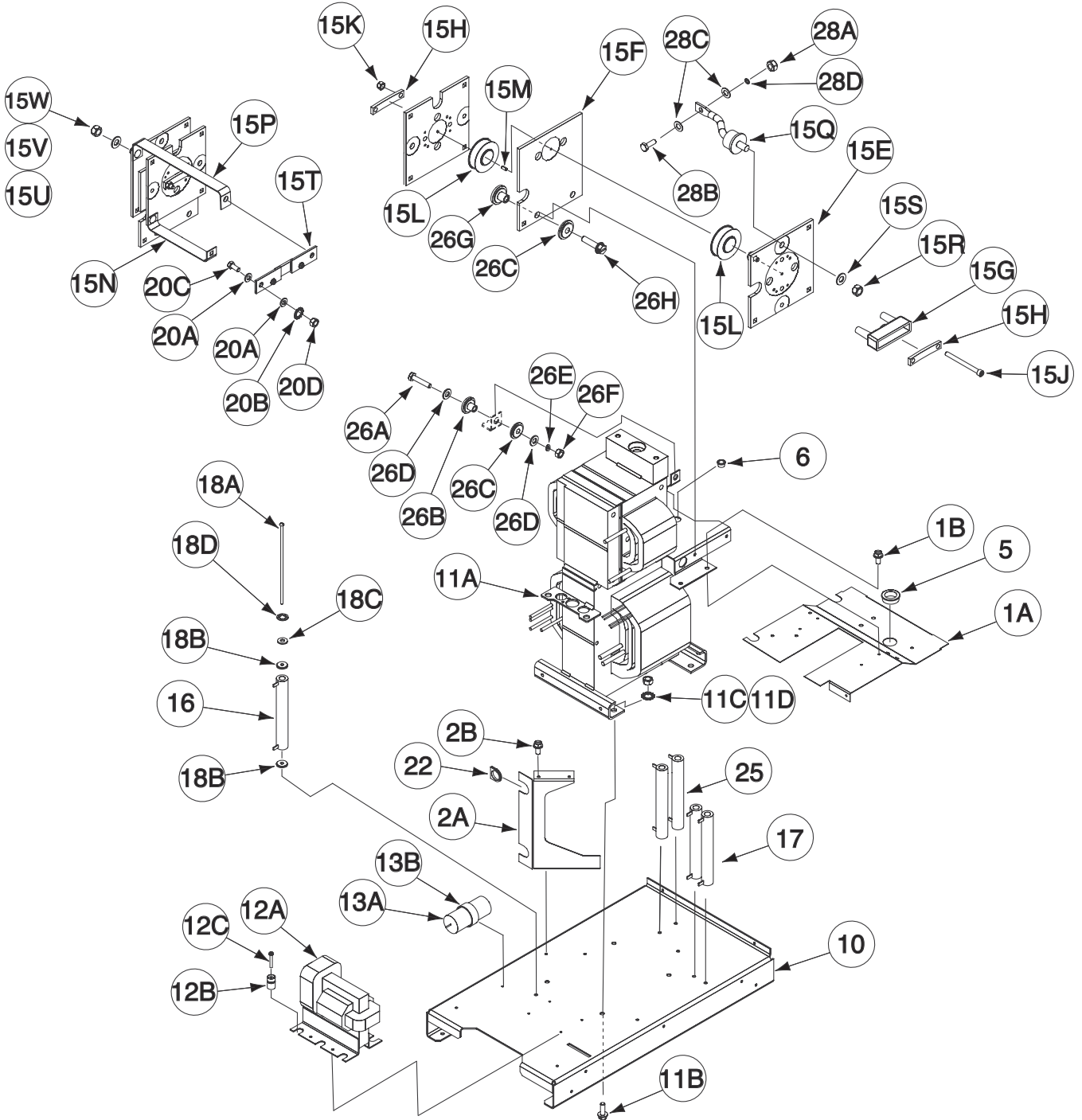
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Center Assembly



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ITEM	DESCRIPTION	PART NO.	QTY.	1	2	3	4	5	6	7	8	9
	Center Assembly, Includes:	NSS										
1A	Horizontal Baffle	L12170	1	X	X	X						
1B	Thread Forming Screw	S9225-68	4	X	X	X						
2A	Left Vertical Baffle	L12255	1	X	X	X						
2B	Thread Forming Screw	S9225-68	4	X	X	X						
5	Bushing	T12380-8	1	X	X	X						
6	Bushing	T12380-3	1	X	X	X						
10	Base Welded Assembly	G4525	1	X	X	X						
11A	Transformer & Choke Welded Assembly	G5680	1	X	•	•						
11A	Transformer & Choke Welded Assembly	G4543-1	1	•	X	•						
11A	Transformer & Choke Welded Assembly	G4543-2	1	•	•	X						
11B	Thread Forming Screw	S9225-22	4	X	X	X						
11C	Lock Washer	T9860-3	4	X	X	X						
11D	5/16-18 HN	CF000029	4	X	X	X						
12A	High Voltage Transformer & Terminal Assembly	S25387-1	1	X	X	X						
12B	Standoff	T14539	4	X	X	X						
12C	Self Tapping Screw	S8025-100	4	X	X	X						
13A	Capacitor & Terminal Assembly	S25856	1	X	X	X						
13B	Lead Clamp	T12563-21	1	X	X	X						
13C	Self Tapping Screw (Not Shown)	S8025-92	1	X	X	X						
15A	SCR Bridge Assembly, Includes:	G4606	1	X	X	X						
15B	Connector, Molex (Not Shown)	S24018-4	1	X	X	X						
15C	Locking Post (Not Shown)	S24019-4	1	X	X	X						
15D	Thread Forming Screw (Not Shown)	S9225-17	4	X	X	X						
15E	Heat Sink	M17264	4	X	X	X						
15F	Heat Sink	M17265	2	X	X	X						
15G	SCR Clamp	S14724-C	2	X	X	X						
15H	SCR Spring	S17424-A	4	X	X	X						
15J	Socket Head Cap Screw	T9447-93	4	X	X	X						
15K	1/4-20 HN	CF000017	4	X	X	X						
15L	SCR & Terminal Assembly	S25855	4	X	X	X						
15M	Roll Pin	T9447-49	2	X	X	X						
15N	Lead (Positive)	S22574-5	1	X	X	X						
15P	Lead (Negative)	S22574-6	1	X	X	X						
15Q	Diode	M9661-32R	1	X	X	X						
15R	3/8-24HN	CF000167	1	X	X	X						
15S	Spring Washer	T12735-3	1	X	X	X						
15T	Shunt & Lead Assembly	S21170-6	1	X	X	X						
15U	Carriage Bolt	T11827-44	8	X	X	X						
15V	Spring Washer	T12735-4	8	X	X	X						
15W	1/4-20HN	CF000017	8	X	X	X						
16	Resistor (200/100W)	S10404-121	1	X	X	X						
17	Resistor (100/100W)	S10404-127	2	X	X	X						
18A	#10-24 x 7.50 RHS	CF000191	5	X	X	X						
18B	Insulating Bushing	S21557	10	X	X	X						
18C	Plain Washer	S9262-27	5	X	X	X						
18D	Lock Washer	T9695-1	5	X	X	X						

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NSS - Not Sold Separately

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ITEM	DESCRIPTION	PART NO.	QTY.	1	2	3	4	5	6	7	8	9
20A	Plain Washer	S9262-30	2	X	X	X						
20B	Lock Washer	T9860-3	1	X	X	X						
20C	5/16-.75 HHCS	CF000040	1	X	X	X						
20D	5/16-18 HN	CF000029	1	X	X	X						
21	Harness Assembly (Not Shown)	G5693-1	1	X	X	X						
22	Grommet	S18543-1	4	X	X	X						
25	Resistor (12/100W)	S10404-126	2	X	X	X						
26A	1/4-20x1.25 HHCS	CF000069	2	X	X	X						
26B	Insulator	T11267-A	2	X	X	X						
26C	Insulator	T11267-B	6	X	X	X						
26D	Plain Washer	S9262-98	4	X	X	X						
26E	Lock Washer	E106A-2	2	X	X	X						
26F	1/4-20 HN	CF000017	2	X	X	X						
26G	Insulator	T14605	4	X	X	X						
26H	Thread Forming Screw	S9225-17	4	X	X	X						
27	Harness Assembly (115V) (Not Shown)	G5693-2	1	X	X	X						
28A	1/4-20 HN	CF000017	1	X	X	X						
28B	1/4-20 x .625 HHCS	CF000013	1	X	X	X						
28C	Plain Washer	S9262-98	2	X	X	X						
28D	Lock Washer	E106A-2	1	X	X	X						



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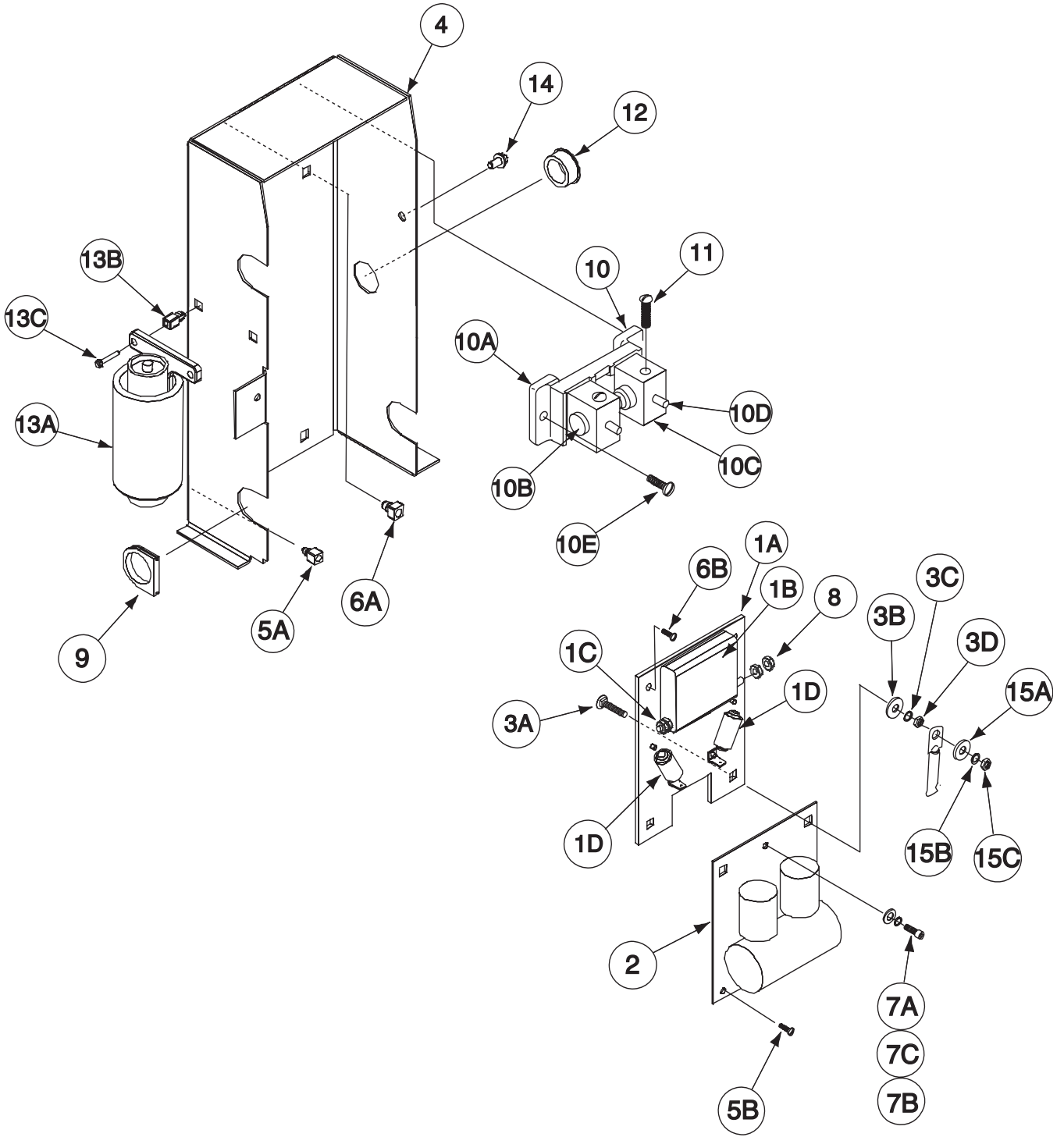
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Arc Starter & Bypass Assembly



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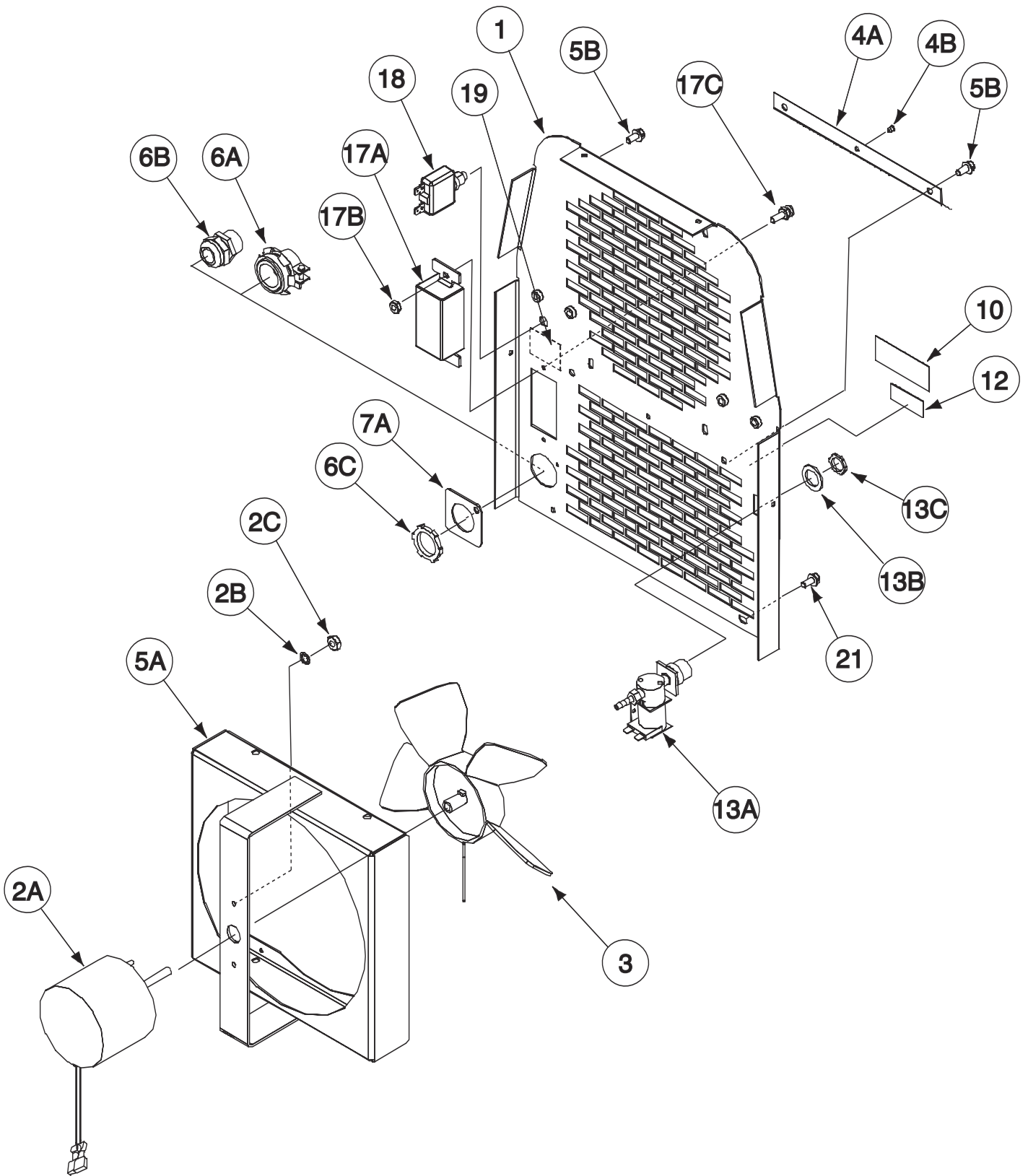
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ITEM	DESCRIPTION	PART NO.	QTY.	1	2	3	4	5	6	7	8	9
1	Arc Starter & Bypass Assembly, Includes: Arc Starter Assembly, Includes:	NSS M19835	1	X								
1A	Mounting Panel Assembly	M19848	1	X								
1B	Capacitor	S11180-1	1	X								
1C	#10-24HN	CF000010	2	X								
1D	R.F. Choke	T12218-8	2	X								
2	Bypass/Stabilizer P.C. Board Assembly	L10121-[]	1	X								
3A	Carriage Bolt	T11827-23	2	X								
3B	Plain Washer	S9262-98	2	X								
3C	Lock Washer	T9695-17	2	X								
3D	1/4-20 Hex Nut	CF000017	2	X								
4	Arc Starter Support	L12179	1	X								
5A	Expansion Nut, Plastic	S14020-3	2	X								
5B	Self Tapping Screw	S8025-97	2	X								
6A	Expansion Nut Plastic	S14020-1	2	X								
6B	Self Tapping Screw	S8025-77	2	X								
7A	Socket Head Cap Screw	T9447-21	1	X								
7B	Plain Washer	S9262-3	1	X								
7C	Lock Washer	T9695-3	1	X								
8	#10-24 Hex Nut	CF000010	2	X								
9	Grommet	S18543-1	3	X								
10	Spark Gap Assembly, Includes:	S16876	1	X								
10A	Spark Gap Base	M13724	2	X								
10B	Electrode	T11236-1	2	X								
10C	Spark Gap Support	T14264	2	X								
10D	Set Screw	S11604-22	2	X								
10E	Thread Forming Screw	S9225-63	2	X								
11	Sems Screw	T10082-12	2	X								
12	Bushing	T12380-4	1	X								
13A	High Freq Transformer Assembly	M20324	1	X								
13B	Expansion Nut, Plastic	S14020-7	3	X								
13C	Thread Forming Screw	S9225-52	3	X								
14	Thread Forming Screw	S9225-68	2	X								
15A	Plain Washer	S9262-98	2	X								
15B	Lock Washer	E106A-2	2	X								
15C	1/4-20 HN	CF000017	2	X								

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Case Back & Fan Assembly



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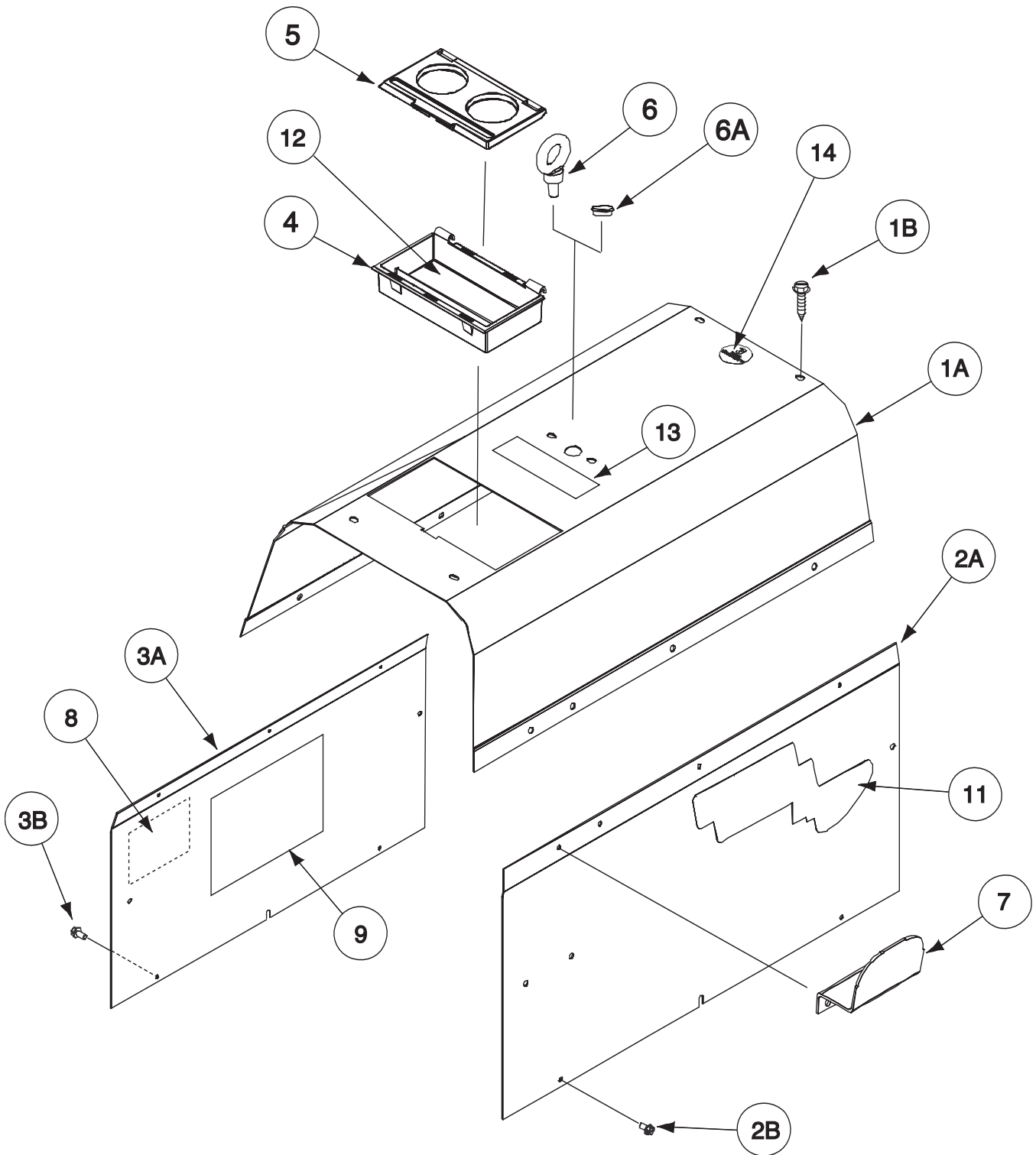
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ITEM	DESCRIPTION	PART NO.	QTY.	1	2	3	4	5	6	7	8	9
1	Case Back Assembly, Includes:	G5643	1	X	•							
	Case Back Assembly, Includes:	G5643-1	1	•	X							
	Case Back	G5642	1	X	X							
2A	Fan & Terminal Assembly	S25857	1	X	X							
2B	Lock Washer	T9695-3	2	X	X							
2C	#8-32 HN	CF000042	2	X	X							
3	Fan Blade	M17508	1	X	X							
4A	Rear Air Baffle	M20310	1	X	X							
4B	Rivet	T12584-6	1	X	X							
5A	Fan Shroud & Bracket Welded Assembly	L12169	1	X	X							
5B	Thread Forming Screw	S9225-68	4	X	X							
6A	Box Connector (Domestic)	T9639-3	1	X	•							
6B	Cord Grip Connector (Canadian & Export)	S19999-1	1	•	X							
6C	Conduit Locknut	T14370-2	1	•	X							
7A	Export Adapter Plate	S26556	1	•	X							
7B	Self Tapping Screw (Not Shown)	S8025-91	1	•	X							
10	Decal (Ground) (G5648-7) (Part of G5648)	NSS	1	X	X							
12	Decal (Gas Input) (G5648-4) (Part of G5648)	NSS	1	X	X							
13A	Solenoid Valve Assembly	M17294-10	1	X	X							#
13B	Plain Washer	S9262-149	1	X	X							
13C	Conduit Locknut	T14370-1	1	X	X							
17A	Duplex Receptacle	S20184	1	X	X							
17B	#10-24 HN	CF000010	2	X	X							
17C	Thread Forming Screw	S9225-36	2	X	X							
18	Circuit Breaker (20 Amp)	T12287-38	1	X	•							
18	Circuit Breaker (6 Amp)	T12287-1	1	•	X							
19	Decal (Receptacle) (G5648-3) (Part of G5648)	NSS	1	X	•							
19	Decal (Receptacle) (G4548-9) (Part of G5648)	NSS	1	•	X							
20	Bypass Assembly (Not Shown)	S19450	1	X	X							
21	Thread Forming Screw	S9225-68	4	X	X							
22	Power Input Cord Assembly (Not Shown)	S26607	1	X	•							
22	Input Lead Assembly (Not Shown)	S18573-14	1	•	X							



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Cover Assembly



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ITEM	DESCRIPTION	PART NO.	QTY.	1	2	3	4	5	6	7	8	9
1A	Roof	G4518	1	X	X							
1B	Thread Forming Screw	S9225-68	14	X	X							
2A	Right Case Side	L12165	1	X	X							
2B	Thread Forming Screw	S9225-68	7	X	X							
3A	Left Case Side	L12166	1	X	X							
3B	Thread Forming Screw	S9225-68	5	X	X							
4	Tool Tray	L12193	1	X	X							
5	Tool Tray Door	L12194	1	X	X							
6	Eyebolt	T4550-5	1	X	X							
6A	Plug Button	T10397-2	1	X	X							
7	Torch Holster	M20303	1	X	X							
8	Warning Decal	M16196	1	X	•							
8	Warning Decal	L8064-1	1	•	X							
9	Wiring Diagram	G5646	1	X	X							
11	Decal, Lincoln Logo w/Nascar	T13086-172	2	X	X							
12	Decal, Torch Parts Tray (G5648-5) (Part of G5648)	NSS	1	X	X							
13	Decal, Eyebolt Warning (G5648-6) (Part of G5648)	NSS	1	X	X							
14	Warning Decal	S22127-1	1	X	X							

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