



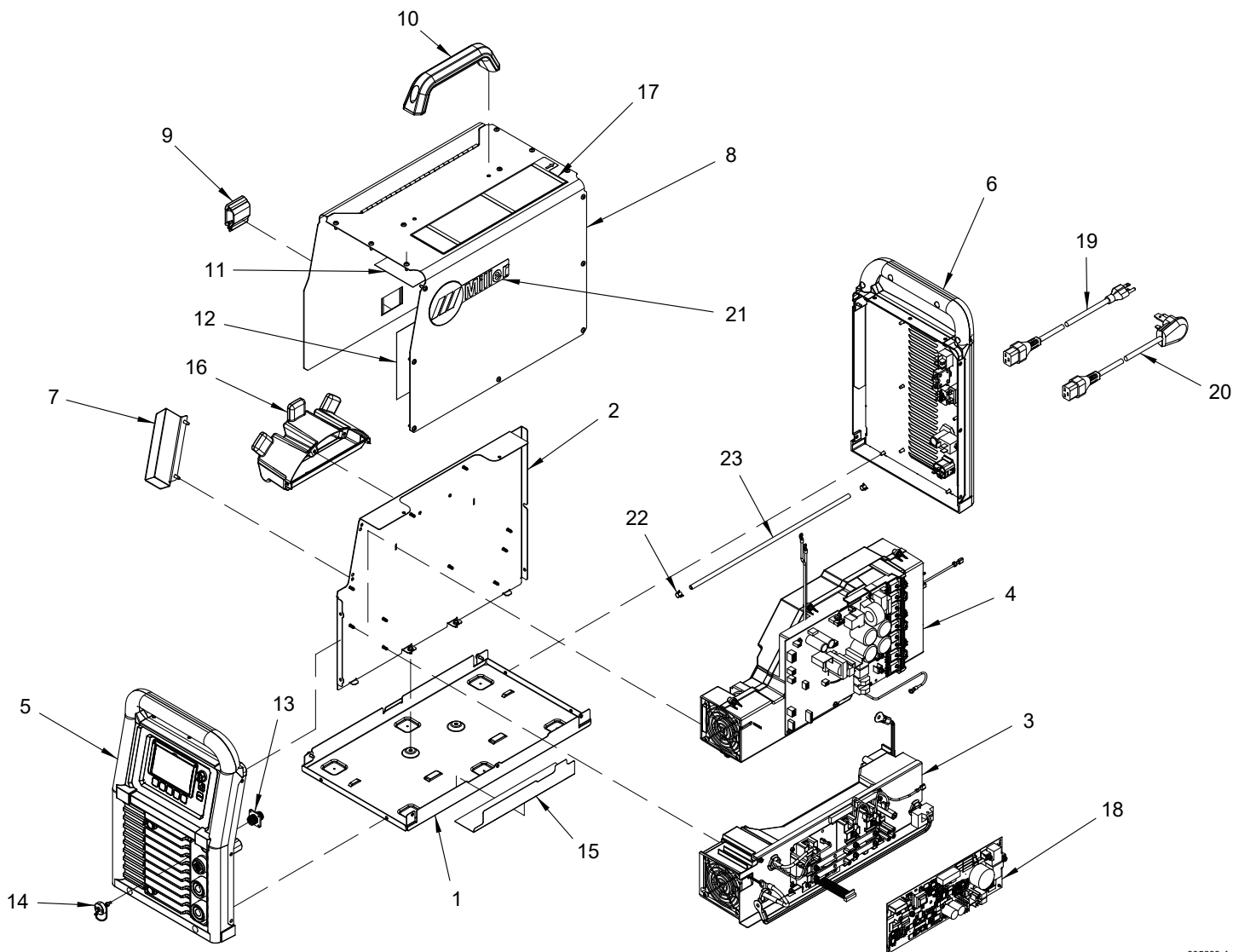
PM- 298616 A

Syncrowave 212

Effective with Serial Number
NF150710L - ZZ222222R



PARTS MANUAL



805689-A

Main Assembly

Main Assembly

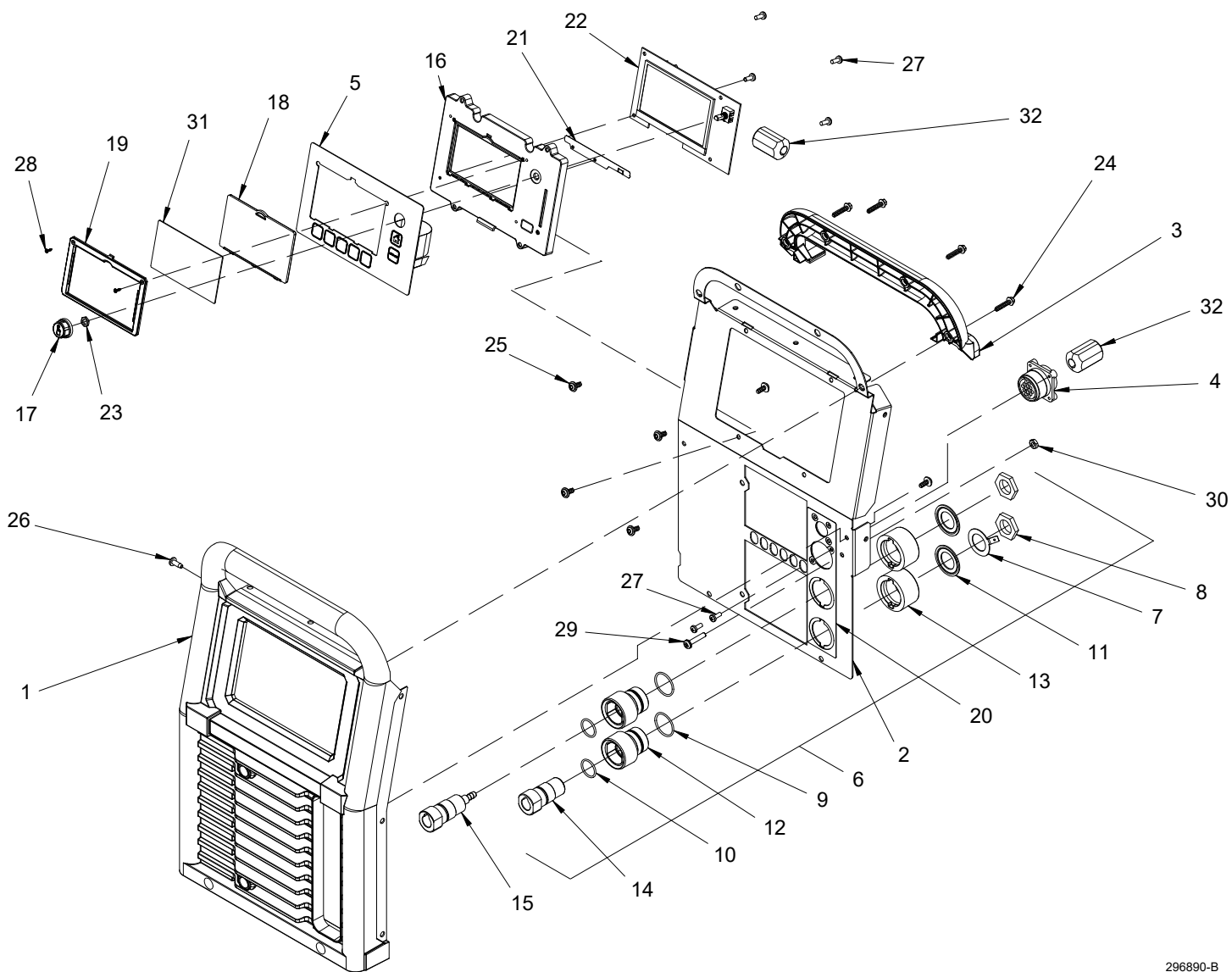
Item No.	Dia. Mkgs.	Part No.	Description	Qty
1		281390	Base, Multimatic 220 AC/DC	1
2		296874	Baffle, Center	1
3		Wind Tunnel Assy, Secondary	(See following for subassembly information)	1
4		Wind Tunnel Assy, Primary	(See following for subassembly information)	1
5		Panel, Front w/Components	(See following for subassembly information)	1
6		Panel, Rear w/Components	(See following for subassembly information)	1
7		297570	Cover, UI	1
8		+ 281401	Wrapper Assy	1
9		230363	Latch, Slide Flush Mtg Hole 1.750 Wide x 1.500 Lg	1
10		292307	Handle Assy, Center	1
11		282820	Insulator, Wrapper 4.000 x 8.000	1
12		282821	Insulator, Wrapper 6.000 x 15.000	1
13		297751	Harness, Wrg Unit Main	1
14		298425	Cover, Dust Cpc Size 11 w/Tether	1
15		284858	Insulator, Inductor	1
16		297363	Hanger, Cable w/Tray	1
17		282298	Label, Warning Gnrl Precaut W O/I and AC Out	1
18	PC3	281065	Circuit Card Assy, Commutator Cntrl	1
19		297757	Cable, Power 2.0M 14Ga 3C C19 To 5-15P	1
20		298527	Cable, Power 2.0M 14Ga 3C C19 To 6-50P	1
21		115496	Label, Miller 8.250 x 3.500 Horizontal (Blu/Wht)	2
22		283188	Clamp, Hose .335-.410 Clp Dia Slfting Steel	2
23		282689	Hose, Poly Clear .170 Id x .250 Od x 17.000 In	1

*Recommended Spare Parts ~ Optional ↓ Item includes other parts. → Item is part of a subassembly.

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296890-B

Panel, Front with Components

Panel, Front with Components

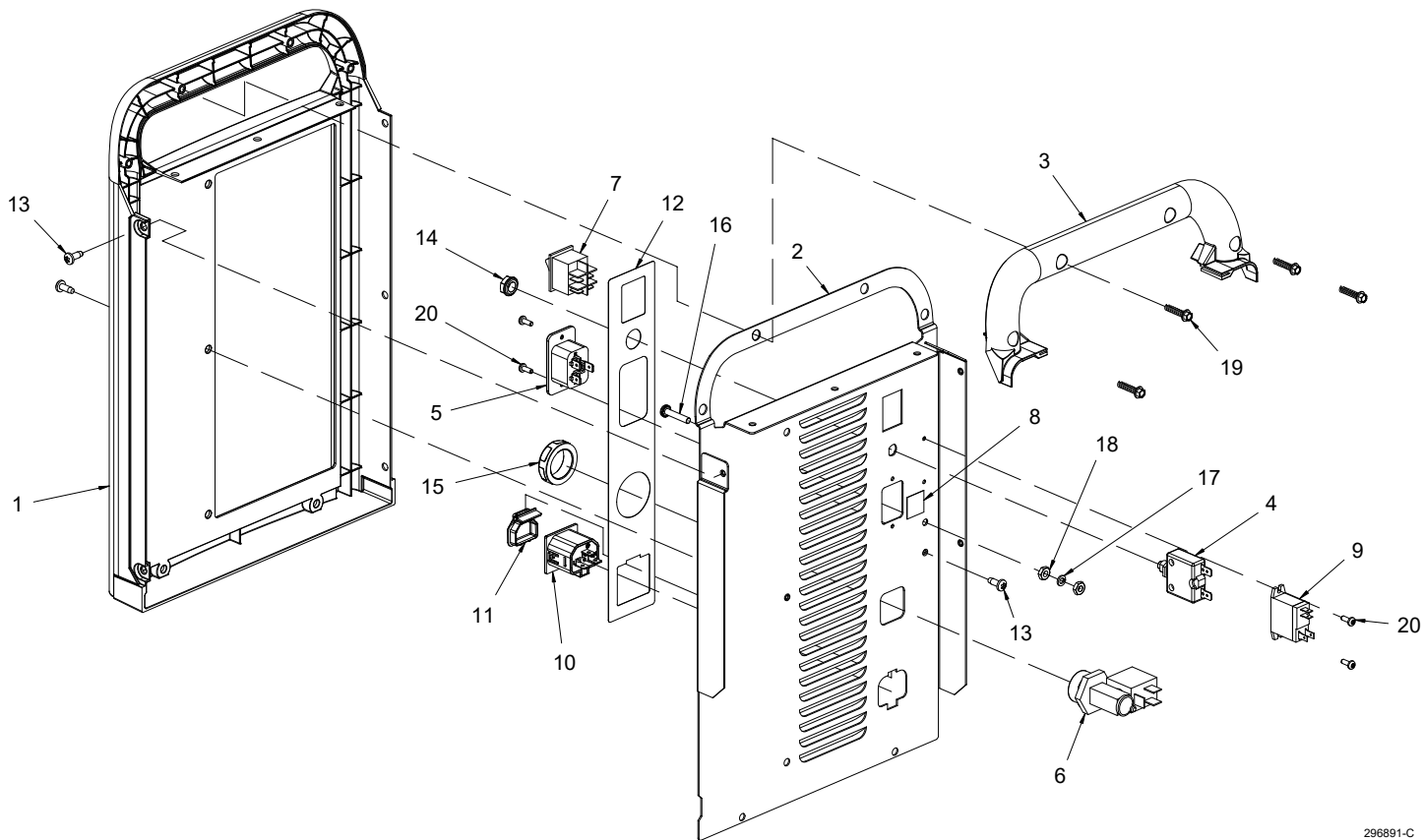
Item No.	Dia. Mkgs.	Part No.	Description	Qty
1		296892	Bezel, Front	1
2		296893	Panel, Front	1
3		263752	Bezel, Handle	1
4	RC1	298280	Lead Assy, Process Control To 14 Pin Receptacle	1
5		296995	Membrane, Switch	1
6		279661	↓ Rcpt Assy, Tw Lk Insul Fem (Dinse Type)	1
7		178548	→ Terminal, Connector Friction	1
8		185717	→ Nut, M20-1.5 1.00Hex .19H Brs Locking	2
9		185718	→ O-Ring, 0.989 Id x 0.070H	2
10		186228	→ O-Ring, 0.739 Id x 0.070 H	2
11		229338	→ Washer, Domed Load .812 Id x 1.450 Od x .070 Thk	2
12		274934	→ Insulator, Bulkhead Front	2
13		274935	→ Insulator, Bulkhead Rear	2
14		250043	→ Receptacle, Twist Lock Dinse .890 Od	1
15		287143	Receptacle, Twist Lock Assy (Not included with 279661)	1
16		297177	Panel, UI	1
17		269555	Knob, .840 Dia x 6mm Id w/Spring Clip-4.5 w/Print	1
18		289224	Lens, LCD	1
19		289222	Bezel, LCD	1
20		298359	Label, Front Conn	1
21		291422	Shield, Hf	1
22	PC2	297709	Circuit Card Assembly, Interface	1
23		254151	Nut, M07-.75 10mm Hex 2mm H Stl Pld	1
24		264866	Screw, K50 x 22	4
25		208535	Screw, K50 x 12 Rnd Wshr HdTr	6
26		195666	Screw, 010-32 x 50 Pan Hd-Torx w/Gndrng Stl Pld	1
27		242579	Screw, K40 x 10 Pan Hd-Phl Stl Pld Pt	6
28		289571	Screw, 002-56 x .25 Pan Hd-Phl Stl Pld Blk	2
29		132729	Screw, 010-24 x .100 Pan Hd-Phl Stl Pld Sems Ext T	1
30		601834	Nut, 010-24 .38 Hex .13H Brs	3
31		290084	Lens Cover, Replaceable	1
32	L33, L34	265451	Core, Ferrite Round Cable .400 Id Clamp-On Emi Supp	2

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296891-C

Panel, Rear with Components

Panel, Rear with Components

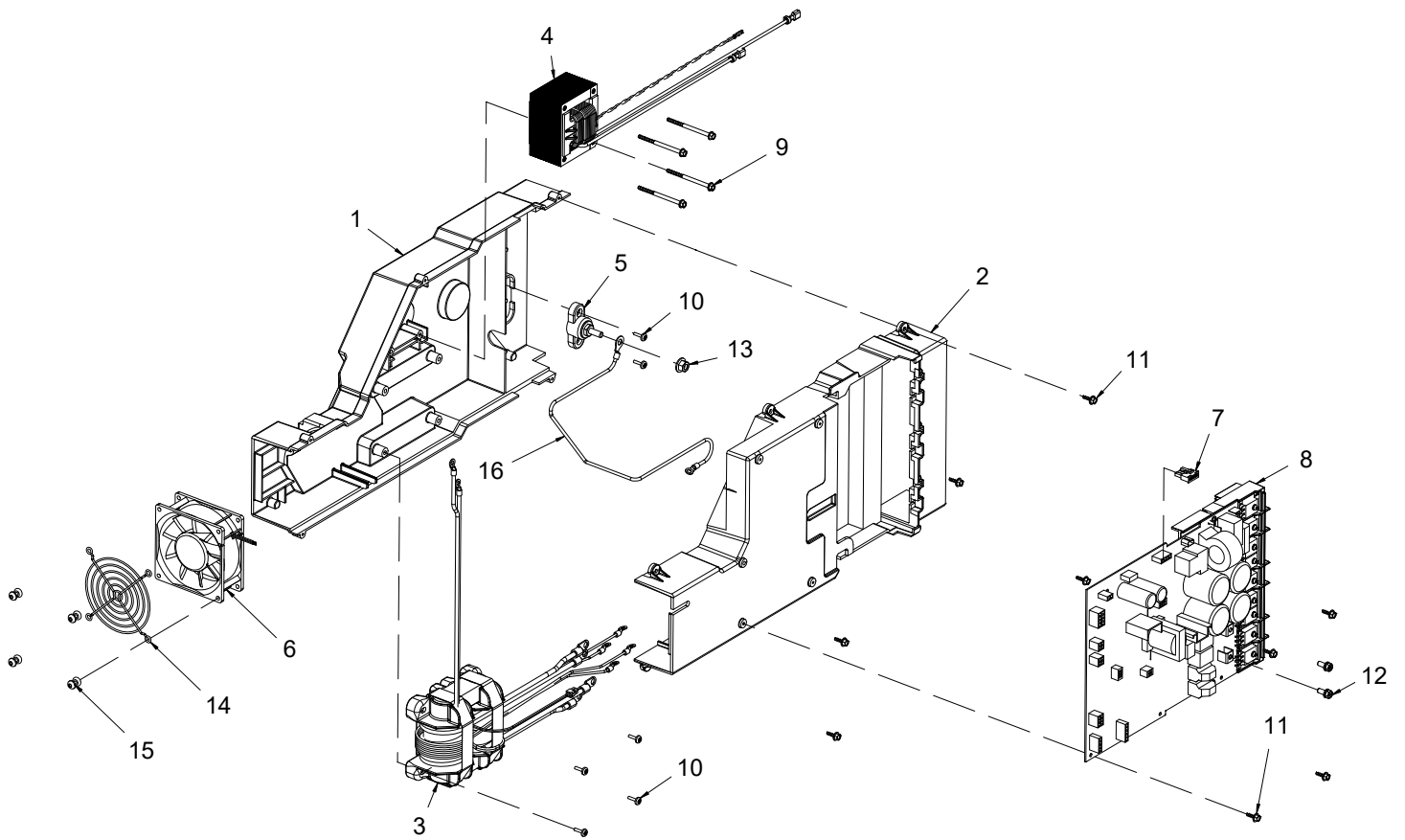
Item No.	Dia. Mkgs.	Part No.	Description	Qty
1		281394	Bezel, Rear	1
2		+ 296894	Panel, Rear	1
3		263752	Bezel, Handle	1
4	SP1	282427	Supplementary Protector, Man Reset 1P 35A 250Vac Fr	1
5	RC3	297700	Rcpt, Str Grd 2P3W 20A 250V (Black) IEC 60320-C20	1
6	GS1	262572	Valve, 24Vdc 1Way 750-14 Thd 2mm Orf 100Psi	1
7	S1	264751	Switch, Rocker DPST 20A 250 Vac On-Off Blk Panel Mtg	1
8		155436	Label, Ground/Protective Earth	1
9	CR1	299599	Relay, Encl 24Vdc Spst 10A/250Vac 4Term Flange Mtg	1
10	RC4	270465	Rcpt, Str Grd 2P3W 10A 250V (Black) IEC 320-C13	1
11		270466	Cover, Outlet	1
12		297846	Label, Rear	1
13		195666	Screw, 010-32 x 50 Pan Hd-Torx w/Gndrng Stl Pld	3
14		147195	Nut, .375-27 .54Hex 25h Nyl Flange 62D	1
15		272186	Nut, .750-14 Nps 1.312Hex .413H Nyl	1
16		132729	Screw, 010-24 x .100 Pan Hd-Phl Stl Pld Sems Ext T	1
17		602203	Washer, Lock .193 Id x 0.334 Od x 0.47T Stl Pld Split #10	1
18		601834	Nut, 010-24 .38 Hex .13H Brs	2
19		264866	Screw, K50 x 22	4
20		224433	Screw, 006-32 x .37 Pan HD-Torx Stl Pld Slf Fmg	4

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297280-A

Windtunnel, Primary

Windtunnel, Primary

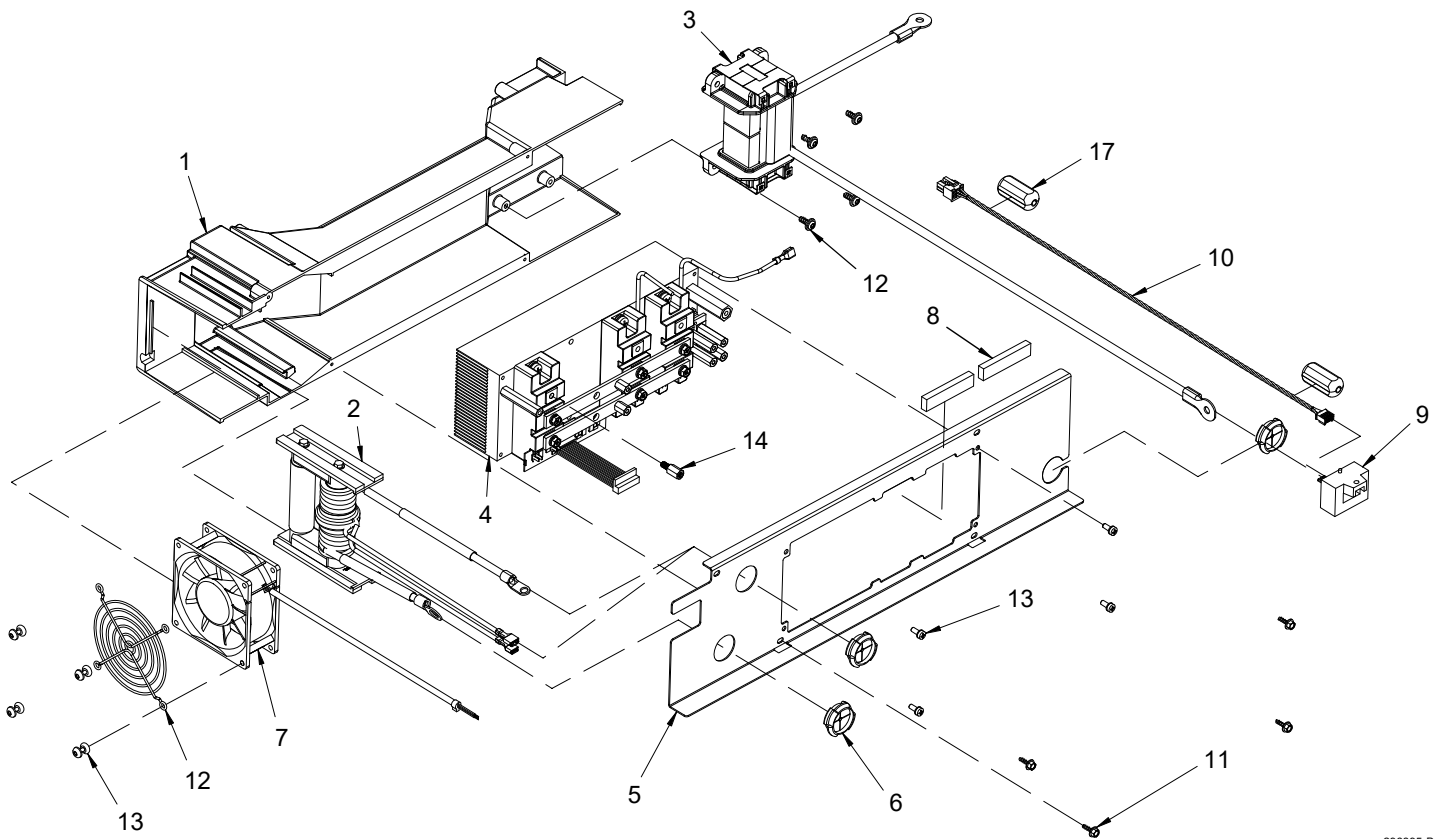
Item No.	Dia. Mkgs.	Part No.	Description	Qty
1		281411	Windtunnel, LH	1
2		281412	Windtunnel, RH	1
3	T1	292280	Xfmr, Main	1
4	L1	265756	Input, Inductor	1
5		263441	Stud, Connection Single	1
6	FM1	237122	Fan, Muffin 24Vdc 8000 RPM 175 Cfm 3.248 Mtg Holes	1
7		201565	Conn, Rect Mini 045 4Skt 1Row Plug Cable Lkg	1
8	PC1	297162	Circuit Card Assy, Primary Control	1
9		269493	Screw, K50 x 60 HexWhd Stl Pld Pt Thread Forming	4
10		260962	Screw, K50 x 12 Pan Hd-Trx Stl Pld Slf Tpg Plastite	6
11		265406	Screw, K35 x 12 Hexwhd Stl Pld Pt Thread Forming Blk	9
12		229327	Screw, M5 - .8 x 12 Hex Hd-Phl 8.8 Pld Sems Clr	2
13		152461	Nut, 250-20 .44Hex .23h Stl Pld Sem Cone Wshr.65d	1
14		282567	Guard, Fan Wire 92mm x 92mm	1
15		282761	Rivet, Plastic .163 Hole x .217-.256 Grip Blk	4
16		298528	Lead List, Small, 13 in Wht 12Ga	1

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296895-B

Windtunnel, Secondary

Windtunnel, Secondary

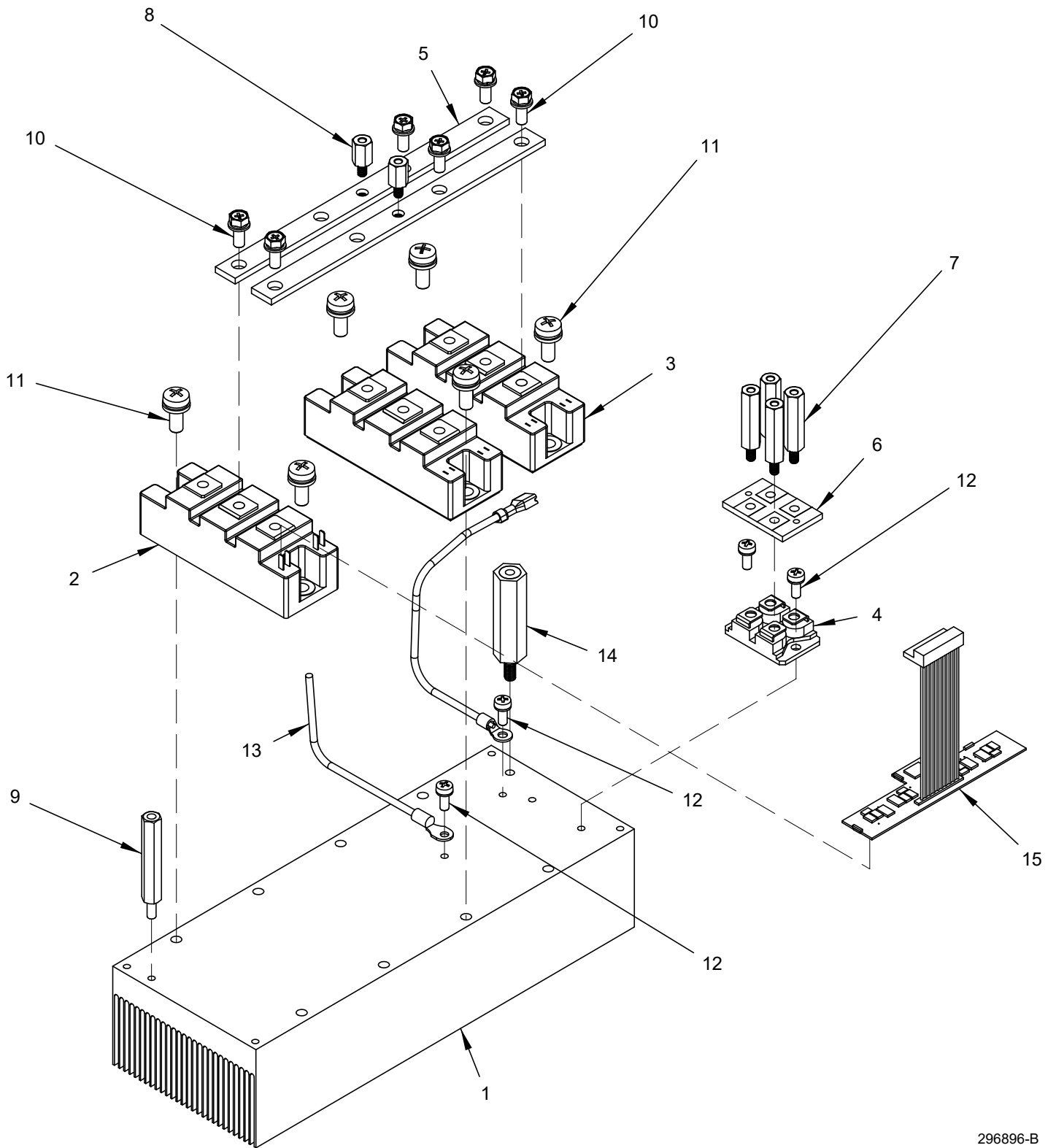
Item No.	Dia. Mkgs.	Part No.	Description	Qty
1		281428	Windtunnel, Secondary	1
2	L3	281415	Xfmr, HF Coupling	1
3	L2	281423	Inductor, Output	1
4		Heatsink, Secondary	(See following for subassembly information)	1
5		281466	Bracket, Mtg Heat Sink	1
6		278885	Grommet, Rubber	3
7	FM2	237122	Fan, Muffin 24Vdc 8000 RPM 175 Cfm 3.248 Mtg Holes	1
8		283180	Foam, Rubber 0.250 x 0.500 x 2.250 in w/ADH	2
9	HD1	191941	Transducer, Current 200A Module Supply V +/- 15V	1
10		282506	Cable Assy, Hall Effect	1
11		265406	Screw, K35 x 12 Hexwhd Stl Pld Pt Thread Forming Blk	4
12		265408	Screw, K50X 12 Hexwhd Stl Pld Blk Pt Thread Forming	4
13		214496	Screw, M4 - 7 x 10 Pan Hd-Phl Stl Pld Lkg Wshr Sems	4
14		281961	Stand-Off, M5 x 0.8 x 14mm Lg 8mm Hex Al M and F	1
15		282567	Guard, Fan Wire 92mm x 92mm	1
16		282761	Rivet, Plastic .163 Hole x .217-.256 Grip Blk	4
17	L31, L32	249747	Core, Ferrite Round Cable .201 Id Clamp-On Emi Supp	2

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296896-B

Heat Sink, Secondary

Heat Sink, Secondary

Item No.	Dia. Mkgs.	Part No.	Description	Qty
1		281417	Heat Sink, Secondary	1
2	PM21	290052	Kit, Transistor, IGBT Mod 225A 600V Low Vcesat	1
3	SR21, SR22	290871	Kit, Diode Ultra Fast Recovery 400A 600V Dual	2
4	D23	259419	Kit, Ultra-fast Diode	1
5		281405	Bus Bar, Output	2
6		250831	Spacer, PWB	1
7		274924	Stand-Off, M4 x 0.7 x 30mm Lg 8mm Hex AL M&F	4
9		281962	Stand-Off, M4 x 0.7 x 45mm Lg 8mm Hex Stl M and F	1
10		229327	Screw, M5 - .8 x 12 Hex Hd-Phl 8.8 Pld Sems Clr	6
11		229331	Screw, M6 - 10 x 16 Pan Hd-phl Stl Pld Sems	6
12		214496	Screw, M4 - 7 x 10 Pan Hd-Phl Stl Pld Lkg Wshr Sems	4
13	RT1	282398	Thermistor, NTC 30K Ohm at 25 Deg C 7.00 Lead	1
15		282562	Circuit Card Assy, Breakaway Board (281065)	1

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