



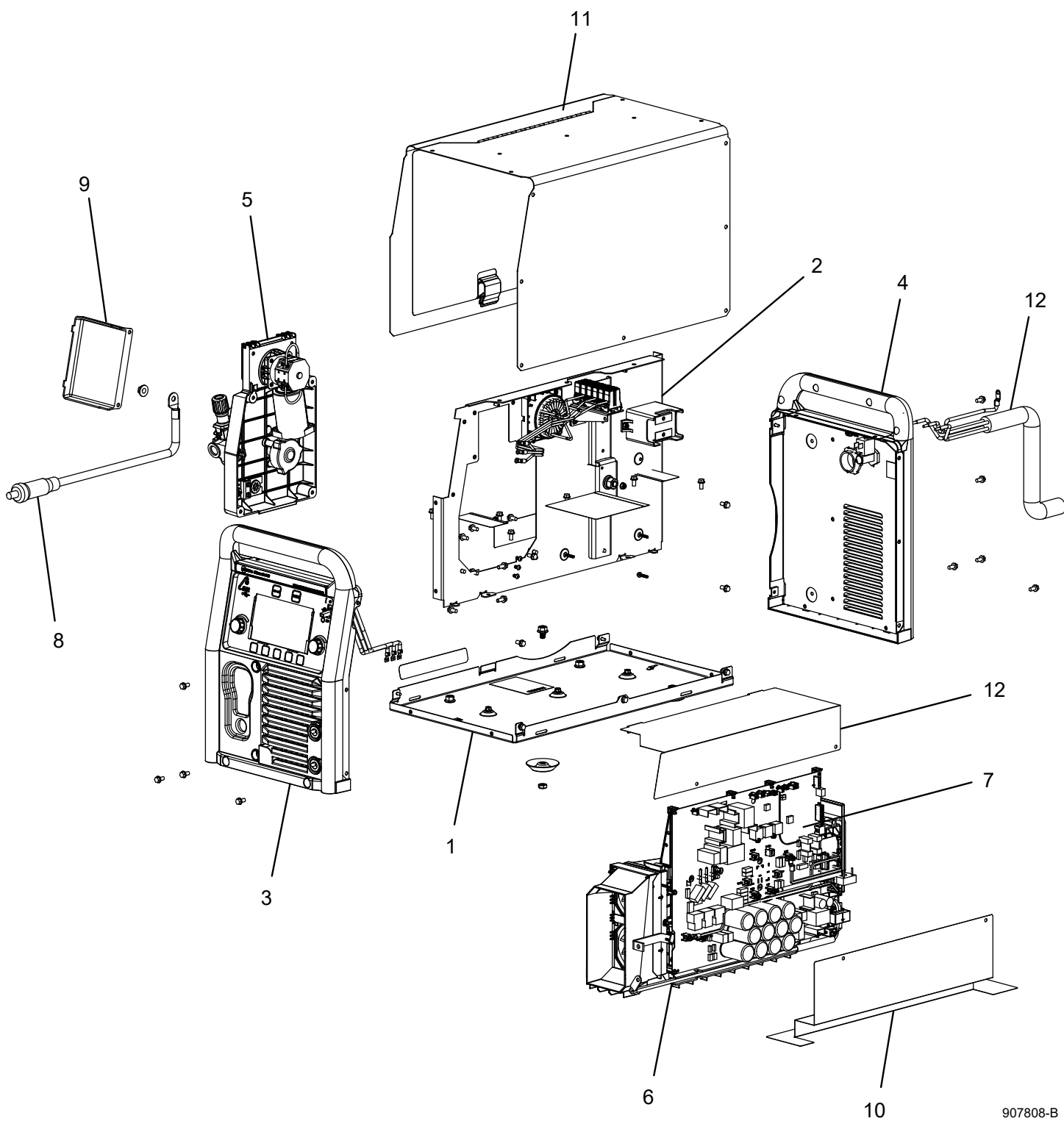
PM- 288360 D

Millermatic 355

Effective with Serial Number
NC073001N - ZZ222222N



PARTS MANUAL



907808-B

Main Assembly

Main Assembly

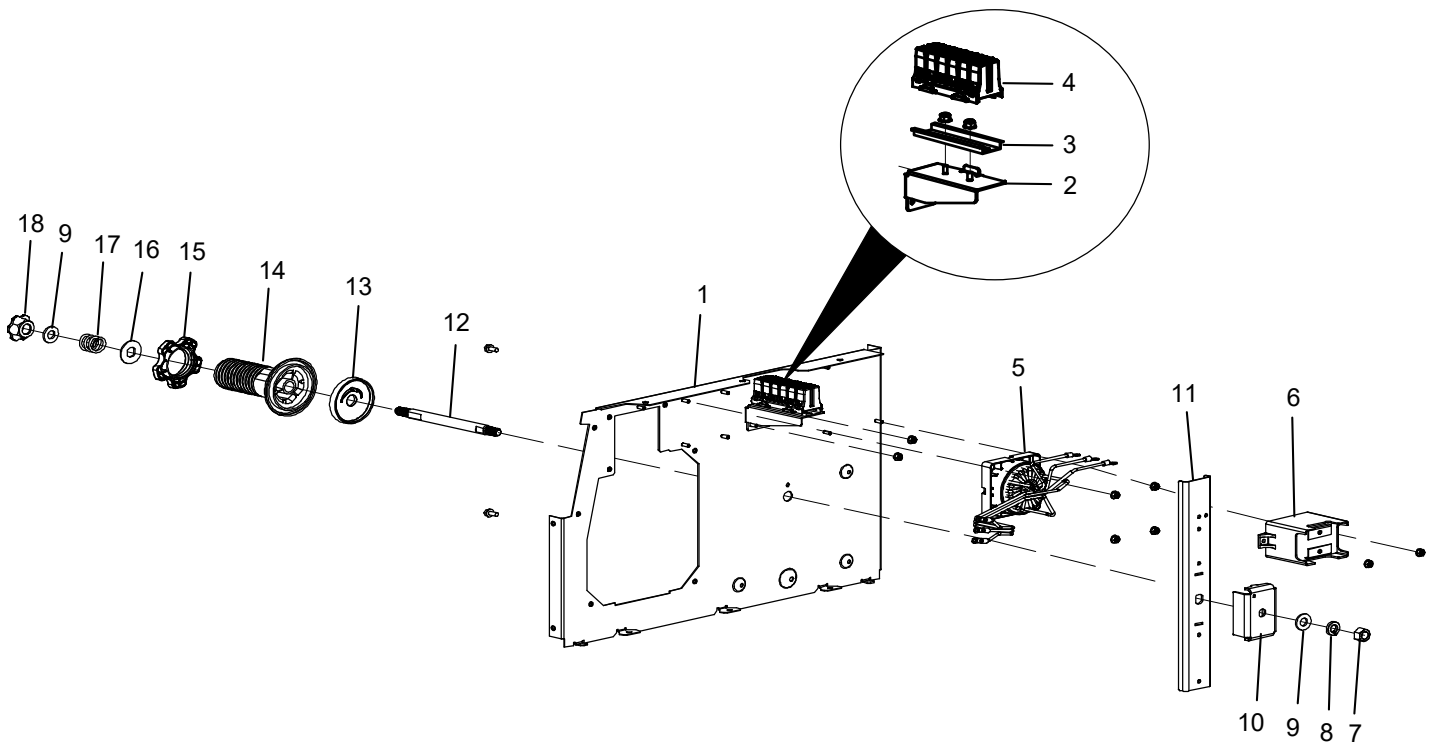
Item No.	Dia. Mkgs.	Part No.	Description	Qty
1		287839	Base	1
/		229325	Foot, Mtg Unit	4
2			Center Baffle Assembly	1
3			Front Panel Assembly	1
4			Rear Panel Assembly	1
5			Wire Feed Drive Assembly	1
6			Windtunnel Assembly	1
7	PC1	288310	Circuit Card Assy, Control w/IGBT Modules MM 355	1
8		289394	Lead Assy, MM355 Drive Polarity	1
9		277905	Enclosure, Electronics	1
10		290982	Insulator, MM355 Output Mylar	1
11		289550	Kit, Wrapper w/Labels (Includes)	1
/		288305	Wrapper Assy, Millermatic 355	1
/		230363	Latch, Slide Flush Mtg Hole 1.750 Wide x 1.500 Lg	1
/		275316	Label, Warning Falling Equipment (EN/FR/SP)	2
/		291186	Label, Quick Reference Guide	1
/		231983	Label, Warning General Precautionary (En/Sp)	1
/		281222	Harness, Wrg Unit Main	1
12		289596	Insulator, Mylar Terminal Block	1
13		288963	Cable, Power 10Ft 6 In 6Ga 4/C	1
/		288336	Cable, Work 10 Ft No 1/0 w/Clamp & Tw Lk	1
/		31-50-580	Flowgauge Reg, 1-Stage, AR/CO2/Mix, 0-50 Cfh, CGA580	1
/		269816	Hose, Gas 5 Ft (For Use With Regulator 212492)	1
/		Q3015AE4VMA	Q300 Amp Gun, 15 Ft .035 Stl (Acculock)	1
/		229895	Guage, Wire & Metal Sizes	1

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

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287842-C

Center Baffle Assembly

Center Baffle Assembly

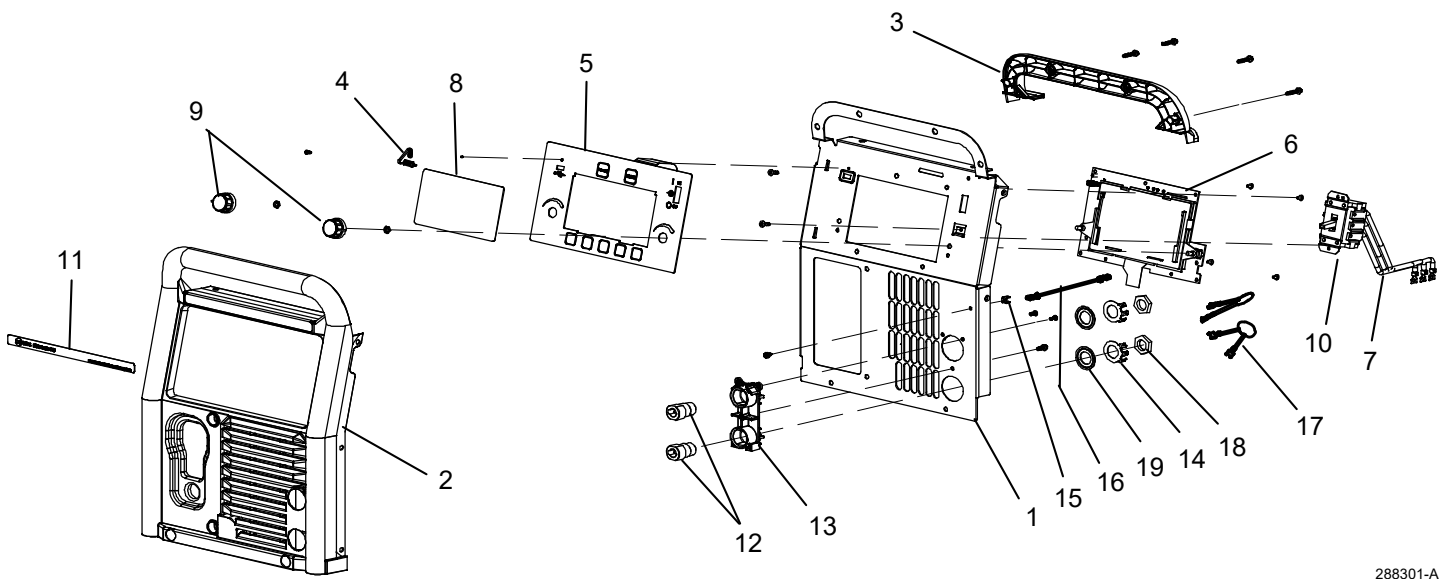
Item No.	Dia. Mkgs.	Part No.	Description	Qty
1		287841	Panel Assy, Center Baffle w/Pems	1
2		290857	Assy, Terminal Block Bracket w/Pems	1
3		250585	Rail, Din Mtg Component	1
4	TE1	291680	Terminal Block, 3 Pole 6 Positions 85A 600V	1
5	L3	288486	Assy, Common Mode Choke 3-Phase 70A Rms Panel Mount	1
6	C3	280863	Capacitor, Polyp Met Film 30. UF 550 VDC 10%	1
7		601879	Nut, .500-12 .75 Hex .44H Stl Pld	1
8		602216	Washer, Lock .502 Id x 0.879 Od x .151T Stl Pld Split .500	1
9		602247	Washer, Flat .531 Id x 1.062 Od x 0.95T Stl Pld Ansi .500	2
10		274305	Brace, Support Spool Shaft	1
11		274304	Channel, Support Spool Hub	1
12		271415	Shaft, Support Spool	1
13		287119	Washer, Brake Plastic	1
14		279587	Hub, Spool 12 Inch	1
15		280091	Nut, Hub	1
16		231211	Washer, Anti-Turn	1
17		172918	Spring	1
18		279504	Knob, Tensioner 1/2-13 Thread	1

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288301-A

Front Panel Assembly

Front Panel Assembly

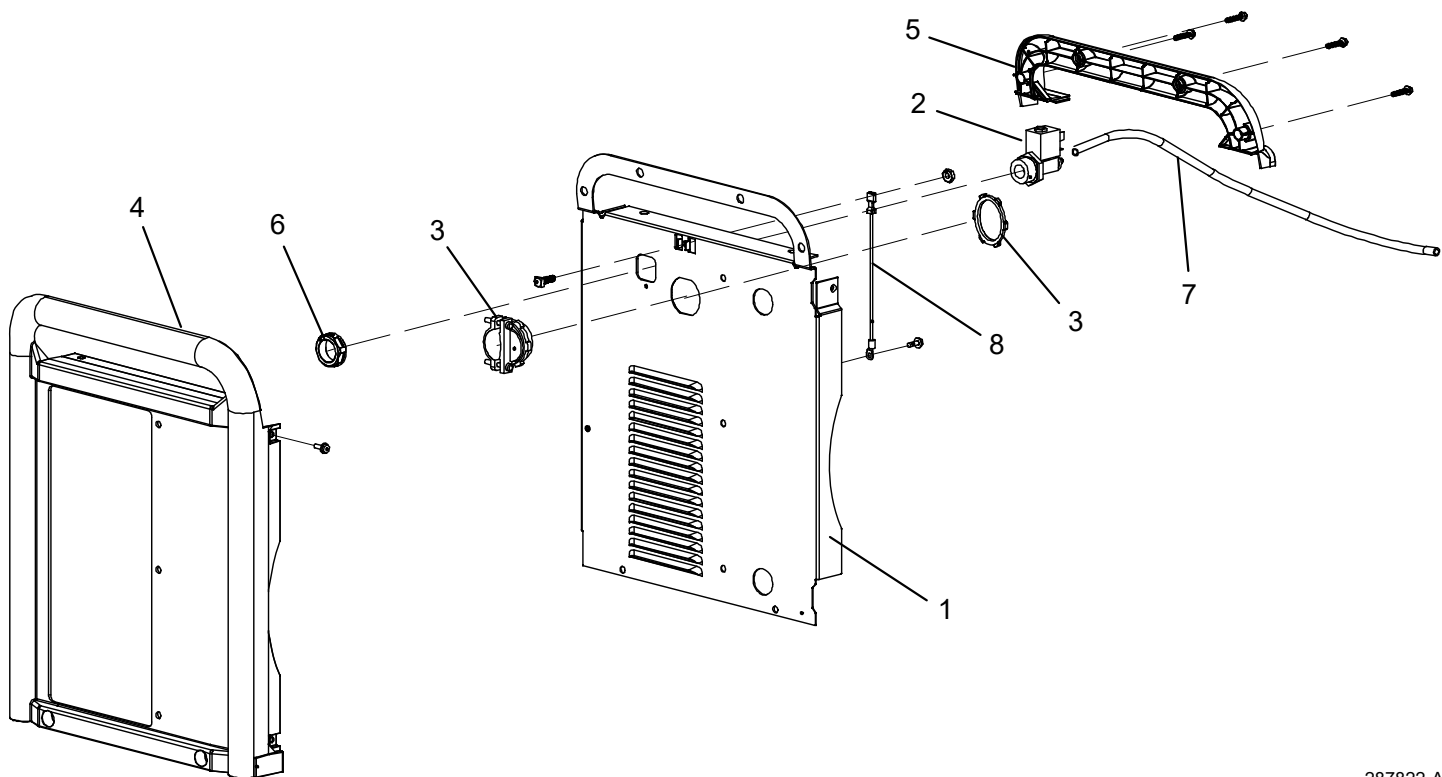
Item No.	Dia. Mkgs.	Part No.	Description	Qty
1		283119	Panel Assy, Front w/Pems	1
2		279060	Bezel, Front	1
3		277653	Handle, Half	1
4		278541	Cover, Dust Usb w/Tether	1
/		600760	Term, Frict .250 x .032 Uninsul Male .130 Stud Mtg 1pr	1
/		236343	Screw, 008-15 x .37 Hexwhd w/Gndrng Stl Pld Slf Tpg	1
5		279061	Membrane, Switch Control	1
6	PC2	288729	Circuit Card Assy, Interface Lcd Display	1
/		291309	Cable Assy, Ethernet w/Ferrite Core	1
/		249747	Core, Ferrite Round Cable .201 Id Clamp-On Emi Supp	1
7		288728	Lead List, Large (Switch)	1
8		277663	Lens Cover, Replaceable	1
9		266591	Knob, Encoder 1.250 Dia x 6mm Id Push On w/Spring	2
10	SW1	288591	Switch, Tgl Dpst 40A 600VAC Scr Term Narrow Tgl	1
11			Label, Nameplate Order by Model and Serial Number	1
12		279111	Receptacle, Twist Lock Brass Fem Panel Mtg (Dinse)	2
13		277690	Insulator, Bulkhead 50mm	1
14		278163	Terminal, Connector Friction Three Position	2
15		287198	Cover, Dinse Plastic	1
16		277973	Lead List, Small (Gnd)	1
17	C1, C2	284861	Capacitor, Cer Disc .01 uF 1000 Vdc	2
18		185717	Nut, M20-1.5 1.00Hex .19H Brs Locking	2
19		229338	Washer, Domed Load .812 Id x 1.450 Od x .070 Thk	2

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287822-A

Rear Panel Assembly

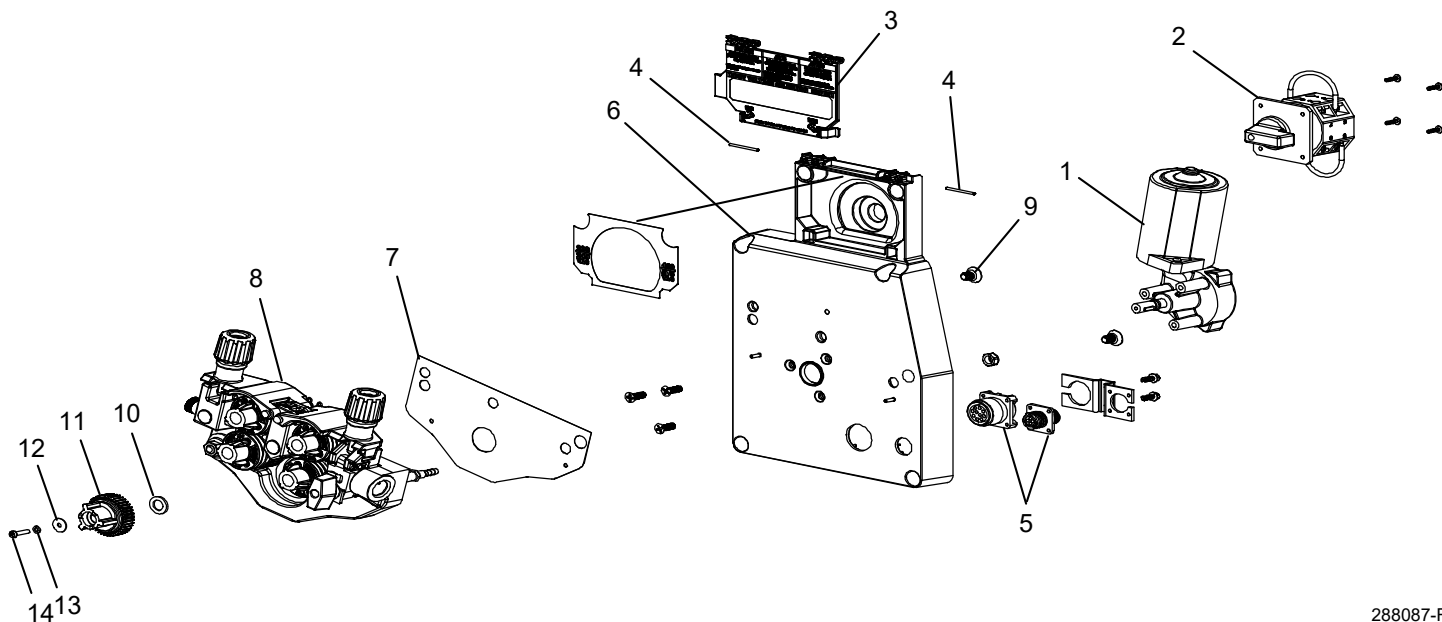
Item No.	Dia. Mkgs.	Part No.	Description	Qty
1		279064	Panel, Rear	1
2	GS1	262572	Valve, 24 Vdc 1Way 750-14 Thd 2mm Orf 100Psi	1
3		247765	Conn, Clamp Cable 1.250	1
4		277950	Bezel, Rear	1
5		277653	Handle, Half	1
6		272186	Nut, .750-14 Nps 1.312Hex .413H Nyl	1
7		250864	Hose, Gas 27 In (MIG)	1
8		285212	Lead List, Small (Rear Panel Gnd)	1

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288087-F

Wire Feed Drive Assembly

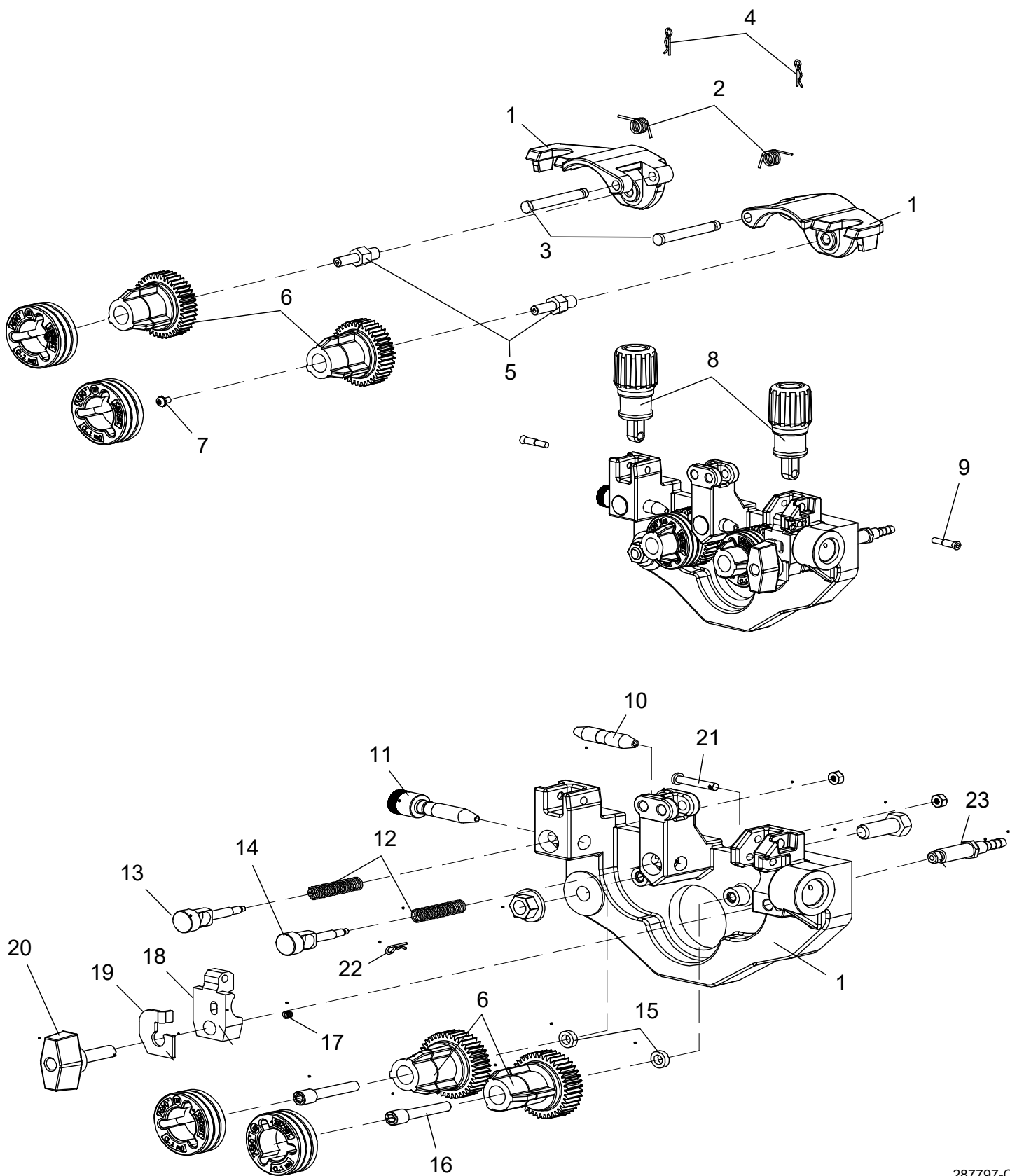
Item No.	Dia. Mkgs.	Part No.	Description	Qty
1		281378	Motor, Wire Drive w/Lead Assemblies	1
2	SW2	289004	Switch, Primary Link	1
3		289603	Cover, Primary Voltage Switch	1
4		274918	Pin, Dowel Sst .094 Dia x 1.250 Lg	2
5		281222	Harness, Wrg Unit Main	1
6		287801	Insulator, Drive Housing Millermatic 355	1
7		287816	Insulator, Mylar Millermatic 355	1
8		287797	Drive Assy, Wire MM355	1
9		281348	Screw, .312-18 x .50 Flatd-Phl Stl Pld w/Lkg Patch	2
10		290995	Washer, Flat .453 Id x 0.750 Od x .062T SSTL	1
11		173618	Carrier, Drive Roll 10mm Shaft	1
12		195802	Washer, Flat .175Id x 0.590Od x .040T Stl Pld	1
13		602200	Washer, Lock .168 Id x 0.293 Od x .040T Stl Pld Split #8	1
14		209079	Screw M4 x 0.7 x 16	1

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287797-C

Wire Feed Drive Assembly

Wire Feed Drive Assembly

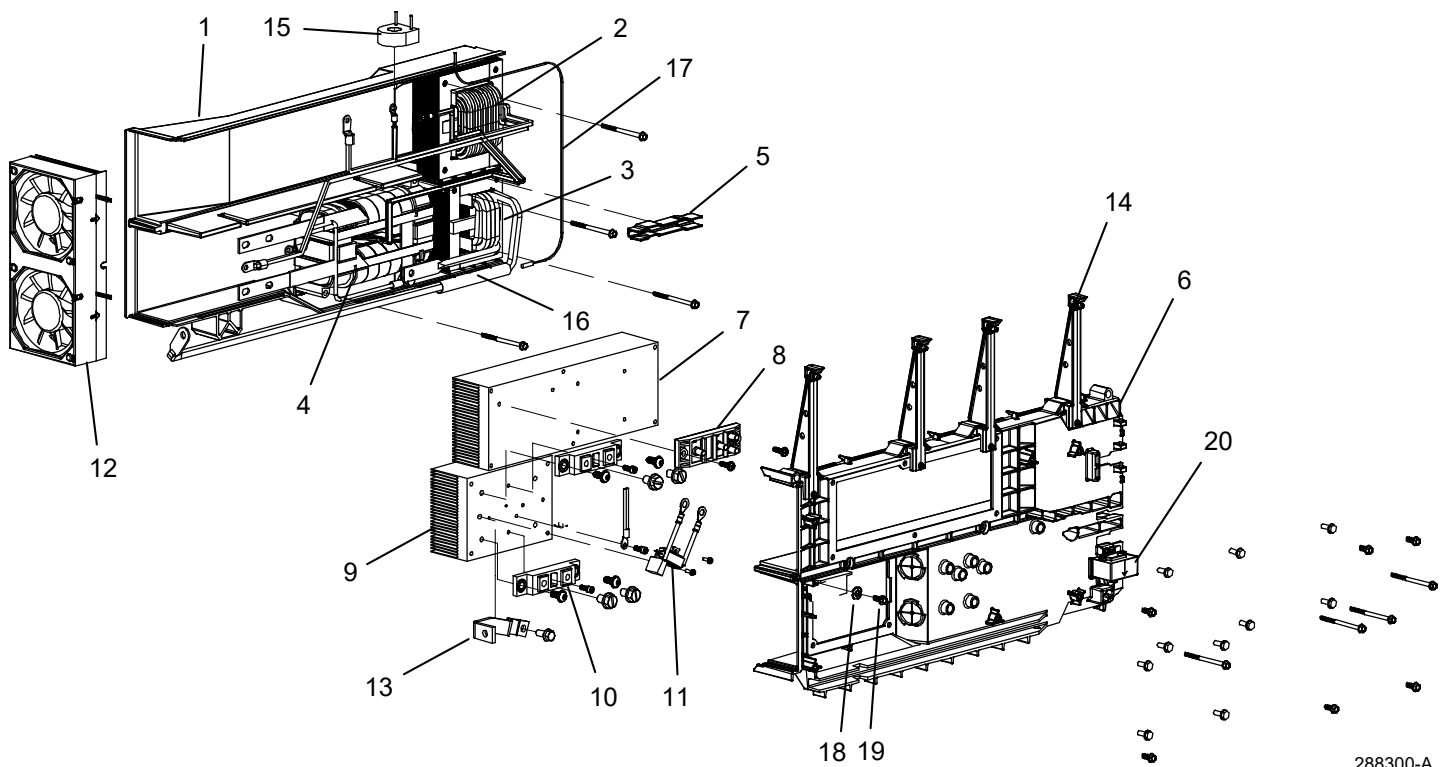
Item No.	Dia. Mkgs.	Part No.	Description	Qty
1		283916	↓ Housing, Wire Drive w/Front & Rear Lever	1
/			→ Housing, Wire Drive 4 Roll (Push Button)	1
/			→ Lever, Mtg Pressure Gear Front (Single Drive)	1
/			→ Lever, Mtg Pressure Gear Rear (Single Drive)	1
2		279257	Spring, Torsion	2
3		279255	Pin, Hinge	2
4		151828	Pin, Cotter Hair .042 x .750	2
5		252238	Stand-Off, Drive Roll Carrier	2
6		172075	Carrier, Drive Roll w/Components 24 Pitch	4
7		228562	Screw, 006-32 x .25 Pan Hd-Phl w/Ext Washer (Sems) Stl	2
8		248631	Knob, Tension Adjust Assy w/Cupped Washer MM350	2
9		281870	Screw, .010-32 x .94 Flatd-Soc Stl Pld (Customized)	2
10		056209	Guide, Wire Intermediate 1/16-5/64	1
11		221030	Guide, Wire Inlet Anti-Wear One Pc (.023 To 5/64)	1
12		279263	Spring, Cprsn .312 Od x .250 Id Rate 5.2 Lbs/In	2
13		279261	Button, Lock Guide Inlet	1
14		279262	Button, Lock Guide Intermediate	1
15		166072	Spacer, Gear	2
16		273794	Screw, 250-20 x 1.38 Soc Hd-Hex Gr8 Pln	2
17		281784	Spring, Cprsn .180 Od x .018 Wire x .531 Pld	1
18		279259	Clamp, Power Pin	1
19		237188	Lock, Pin Power	1
20		151437	Knob, Plstc T 1.125 Lg x .312-18 x 1.500	1
21		234073	Pin, Hinge	1
22		280558	Pin, Cotter Hair .047 x .625 Zinc Pld	1
23		279256	Ftg, Hose Brs Barbed w/Volt Sense Mtg	1

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288300-A

Windtunnel Assembly

Windtunnel Assembly

Item No.	Dia. Mkgs.	Part No.	Description	Qty
/		288320	Assembly, Magnetics Windtunnel (Includes)	1
1		277435	Windtunnel, Lh	1
2	L1	288804	Inductor, Input	1
3	L2	287579	Inductor, Output	1
4	T1	288321	Xfmr, Main	1
5		278705	Channel, Wire Plastic	1
/		288318	Assembly, Heat Sink Windtunnel (Includes)	1
6		277436	Windtunnel, Rh	1
7		277439	Heat Sink, Boost Inverter/Input Rectifier	1
8	D131	285624	Rectifier, Integ Bridge 90 Amp 1600V 1ph	1
/		289968	Assembly, Output Rectifier Heat Sink (Includes)	1
9		281797	Heat Sink, Output Rectifier	1
10	D1, D2	290137	Diode, Ultra-Fast 164Ns 400A 600V Dual To-244	2
11		280976	Resistor/Capacitor Assy	1
/		278442	Thermistor, NTC 30K Ohm @ 35 Deg C 30in Lead	1
12		278711	Assembly, Fan	1
/		277505	Holder, Plastic Front Fan	1
/	FM1, FM2	278710	Fan, Muffin 24 Vdc 8000 Rpm 175 Cfm 3.248 Mtg Holes	2
/		278709	Rivet, Plastic .163 Hole x .295-.335 Grip Push	4
13		288502	Bus Bar, MM 355 Positive Output	1
14		279057	Bracket, Mtg Circuit Card Assy	4
15	CT1	277697	Xfmr, Current Sensing 200/1 Encapsulated w/6in Lds	1
/		278885	Grommet, Rubber	2
16		281133	Tubing, Htshnk Clear Mfp .500/.250 Dia x 4.000	1
17	RT	277948	Thermistor, NTC 30k Ohm @ 25 Deg C 22.00in Lead	1
18		282223	Washer, Lock Stl Intl/Ext Tooth No 10 Zc Pld Sftmtl	1
19		265408	Screw, K50 x 12 Hexwhd Stl Pld Blk Pt Thread Forming	1
20	HD2	277506	Transducer, Current 300A Module Supply V +/- 15v	1

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