



PM-294492A

2024-01

Processes



TIG (GTAW) Welding



Stick (SMAW) Welding



Mig (GMAW) Welding



Flux Core (FCAW) Welding

Description

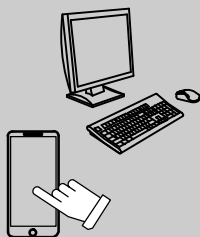
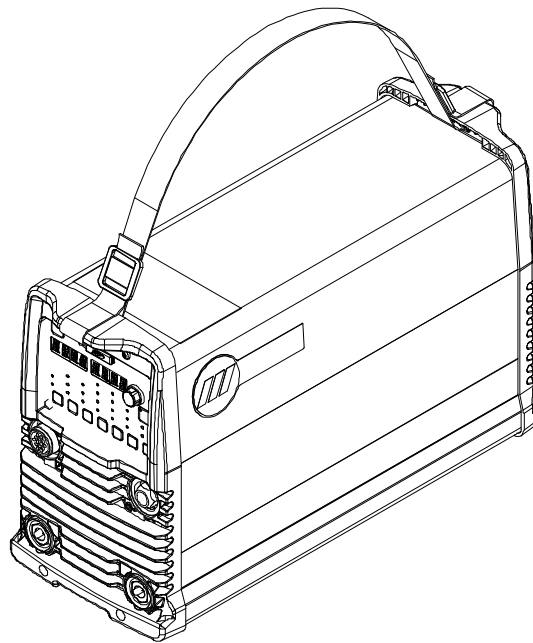


208-575 Volt Models w/Autoline®
Arc Welding Power Source

Maxstar® 280, 280 DX

CE And Non-CE Models

Eff w/Serial No. NE010653L And Following



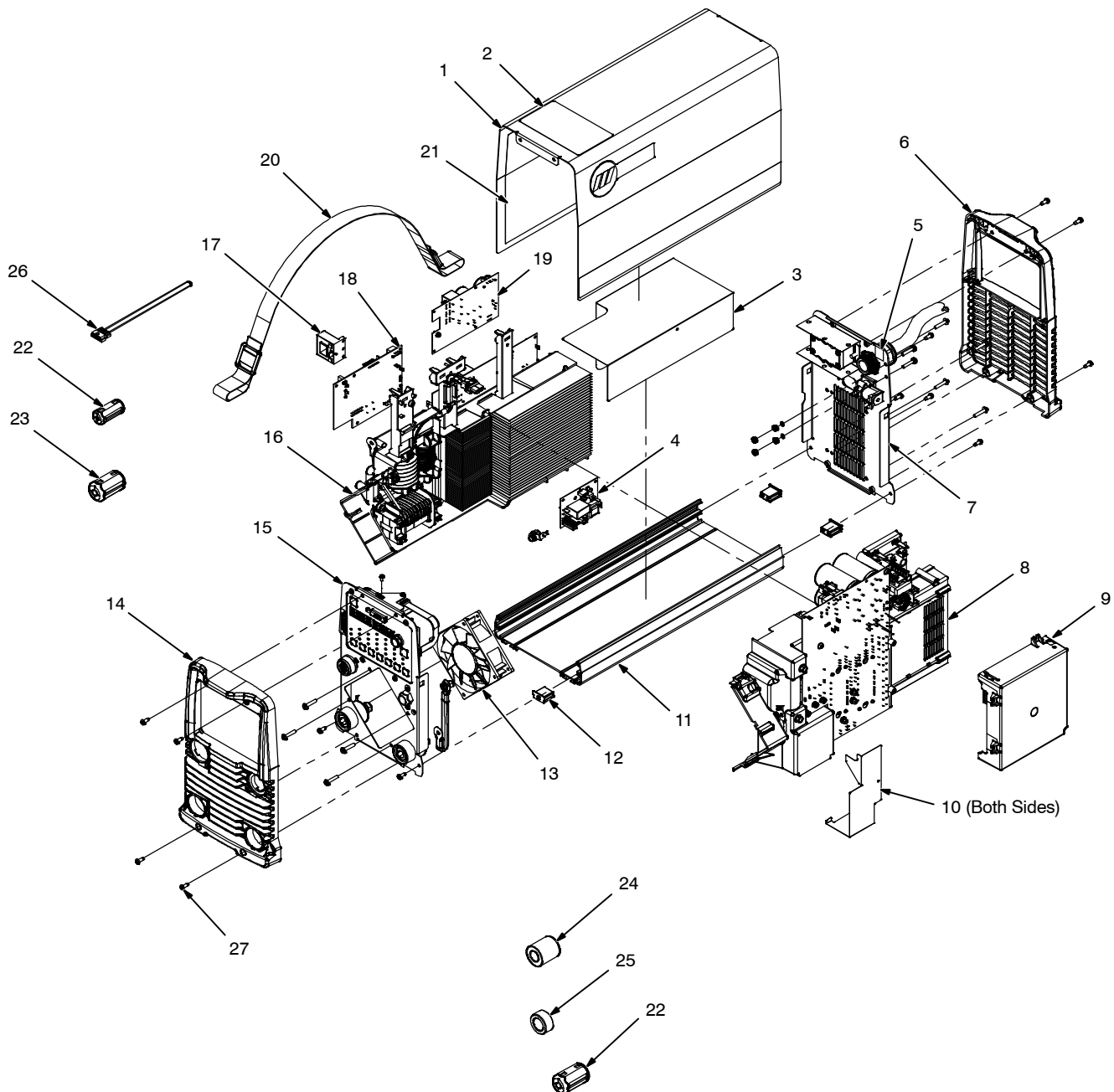
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Owner's Manual translations,
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PARTS MANUAL

SECTION 1 - MAXSTAR PARTS LIST FOR SERIAL NO. NE010653L AND FOLLOWING

 Hardware is common and
not available unless listed.



805498-C

Figure 1-1. Main Assembly

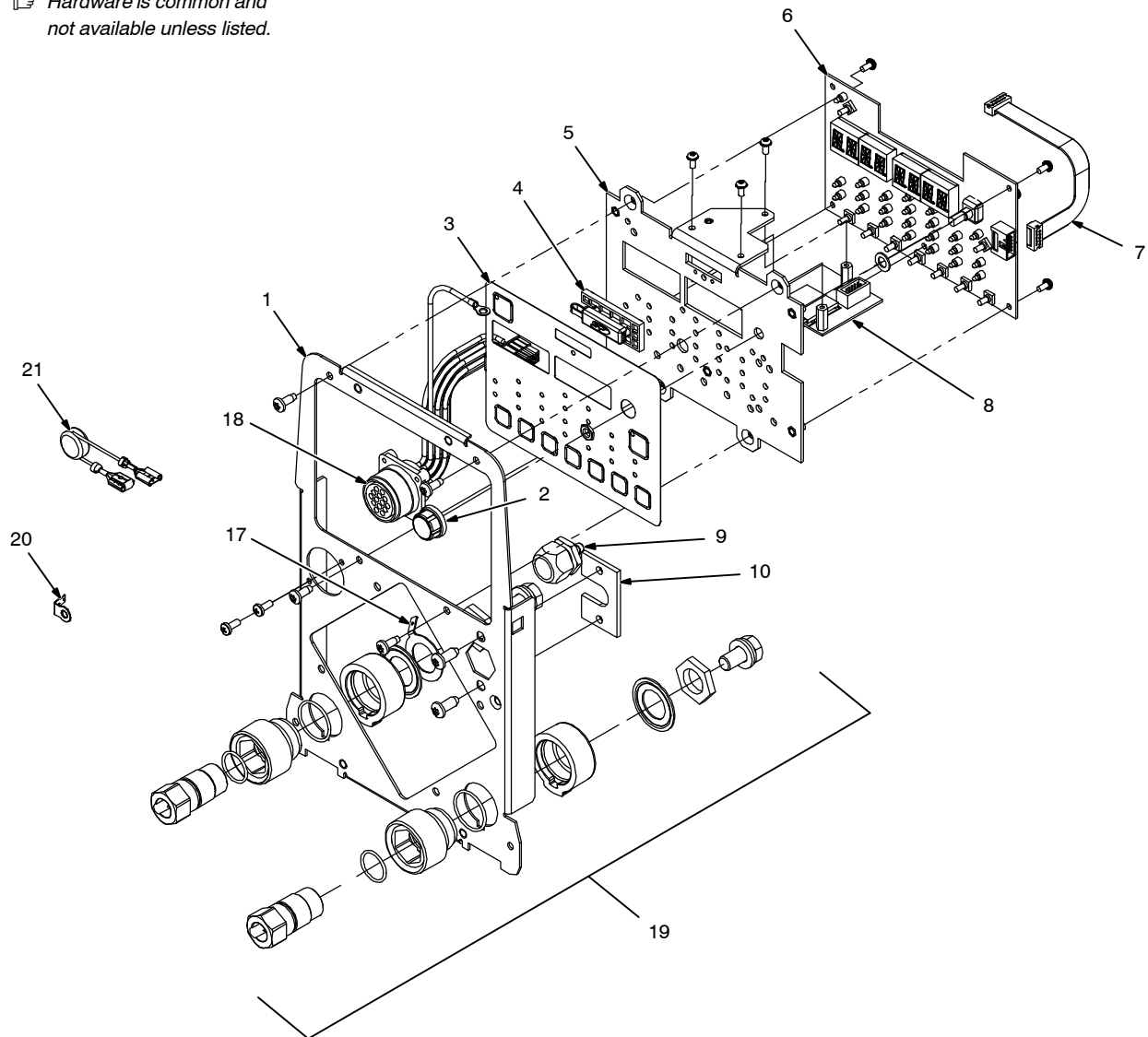
Eff w/ Serial No. NE010653L And Following

Item No.	Dia. Mkgs.	Part No.	Description	Quantity
Figure 1-1. Main Assembly				
.. 1		+246627 ..	Wrapper (Order by Model and Serial Number)	1
.. 2		203990 ..	Label, Warning General Precautionary Static	1
.. 2		179310 ..	Label, Warning General Precautionary Static (CE)	1
.. 3		268859 ..	Insulator, Main	1
.. 4	PC4	247046 ..	Circuit Card Assy, Arc Starter	1
.....	RC70	131204 ..	Housing Plug + Skts	1
.. 5		217553 ..	Label, GND	1
.. 6		246624 ..	Panel, Rear Plastic	1
.. 7		249517 ..	Panel, Rear w/Cmpnts (Figure 1-4)	1
.. 8		249515 ..	Windtunnel, Rh w/Cmpnts (Figure 1-5)	1
.. 9		250110 ..	Shell, Potting Cooler Power Supply (non CPS model)	1
.. 9	PC8	269502 ..	Kit, Power Supply, Cooler (CE)	1
.. 10		254119 ..	Insulator, Stud	2
.. 11		246626 ..	Base	1
.. 12		250946 ..	Foot, Base	4
.. 13	FM	280575 ..	Fan, Muffin 24 VDC 6400 Rpm 4.125 Mtg Holes w/Guard	1
.. 14		246623 ..	Panel, Front Plastic	1
.. 15		249516 ..	Panel, Front w/Cmpnts-DX (Figure 1-2)	1
.. 15		255906 ..	Panel, Front w/Cmpnts (Figure 1-3)	1
.. 16		291024 ..	Windtunnel, Lh w/Cmpnts-Maxstar (Figure 1-6)	1
.. 17	HD1	284620 ..	Transducer, Current 200A Module Supply V +5V	1
.. 18	PC2	293055 ..	Kit, PC Board Process Control	1
.....	RC1, RC8 ..	115094 ..	Housing Plug + Skts	2
.....	RC40, RC80 ..	115093 ..	Housing Plug + Skts	2
.....	RC50	115092 ..	Housing Plug + Skts	1
.....	RC100	131058 ..	Housing Plug + Skts	1
.. 19	PC10	253884 ..	Circuit Card Assy, Input Filter (CE)	1
.. 20		257270 ..	Strap, Shoulder	1
.. 21		210166 ..	Insulator, Wrapper	2
.. 22 L33, L34, L44		265451 ..	Core, Ferrite Round Cable .400 Id Clamp-on EMI Supp	3
.. 23 ..	L31, L32 ..	249747 ..	Core, Ferrite Round Cable .201 Id Clamp-on Emi Supp	2
.. 24 L42, L43, L45		246958 ..	Core, Ferrite 25.90mm Od x 12.80mm Id x 28.60mm LG	3
.. 25 ..	L40, L41 ..	241026 ..	Core, Toroidal 1.332 Id x 1.932 Od x .625 Thk	2
.. 26	J4	269354 ..	Plug Assy (CE)	1
.. 27		235065 ..	Screw, 010-32 x .75 Pan Hd-Torx Stl Zc Pld	8

+When ordering a component originally displaying a precautionary label, the label should also be ordered.

To maintain the factory original performance of your equipment, use only Manufacturer's Suggested Replacement Parts. Model and serial number required when ordering parts from your local distributor.

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Ref. 805508-D

Figure 1-2. Panel, Front w/Components-DX

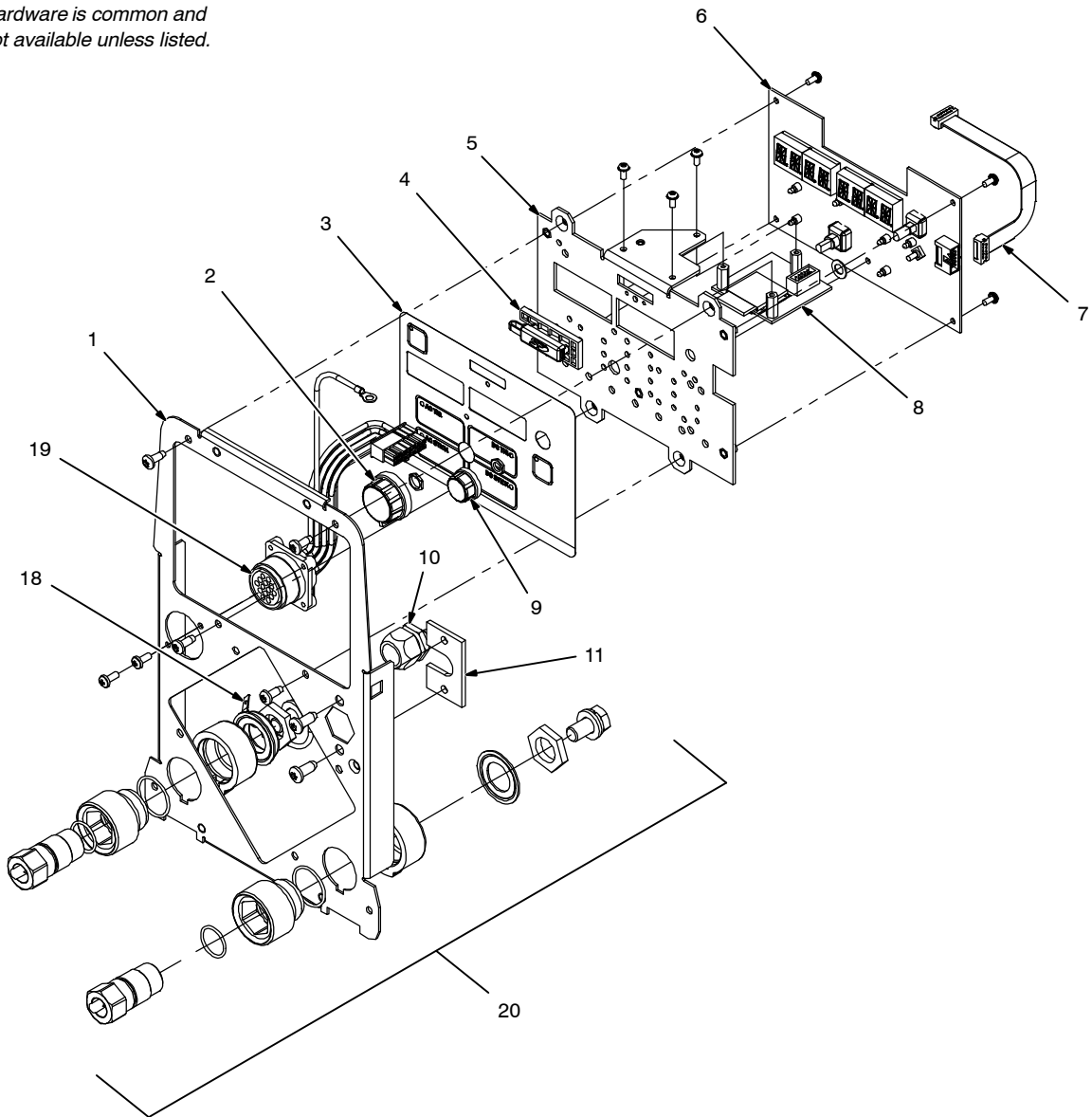
Eff w/ Serial No. NE010653L And Following

Item No.	Dia. Mkgs.	Part No.	Description	Quantity
249516 Figure 1-2. Panel, Front w/Components-DX				
.. 1		246628 ..	Panel, Front	1
.. 2		230052 ..	Knob, .840 Dia x 6mm Id w/Spring Clip-4.5	1
.. 3		247216 ..	Nameplate, Miller Maxstar 280 DX	1
.. 4		254052 ..	Cover, SD Card	1
.. 5		247225 ..	Panel, Mtg Nameplate/Circuit Bd	1
.. 6 PC3		279305 ..	Kit, PC Board User Interface	1
.. 7		254529 ..	Cable, Ribbon 10 Posn 5.000 In Skts To Skts	1
.. 8 PC9		274828 ..	Circuit Card Assy, Sd Card Interface w/Program	1
.. 9		231279 ..	Fitting, Gas-clip Mount	1
.. 10		230155 ..	Bracket, Valve Mtg	1
.. 17		178548 ..	Terminal, Connector Friction	1
.. 18 RC1		250852 ..	Lead Assy, Process Control To 14 Pin	1
..... PLG100 ..		131058	Housing Plug + Skts	1
..... RC1		143976	Rcpt w/Skts	1
.. 19		*279661 ..	Rcpt Assy, Tw Lk Insul Fem (Dinse Type)	2
.....		229333	Screw, M10-1.5 x 20 Hex Hd-pln 8.8 Pld Sems	2
.....		185717	Nut, M20-1.5 1.00 Hex .19h Brs Locking	2
.....		229338	Washer, Domed Load .812 Id x 1.450 Od x .070 Thk	2
.....		274934	Insulator, Bulkhead Rear	2
.....		274935	Insulator, Bulkhead Front	2
.....		250043	Receptacle, Twist Lock Dinse .890 Od	2
.. 19		284865	Recpt Assy, Tw Lk Insul Fem (Camlock Style)	2
.. 19		284866	Recpt Assy, Tw Lk Insul Fem (Tweco Style)	2
.. 20		231208 ..	Connector, Faston 1/4 Ring w/75deg Bend (Maxstar CE Only)	1
.. 21 C21		268643 ..	Capacitor Assy, (Maxstar CE Only)	1

* Prior to MH410412L purchase 279661 only. Individual parts are not interchangeable.

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805515-C

Figure 1-3. Panel, Front w/Components

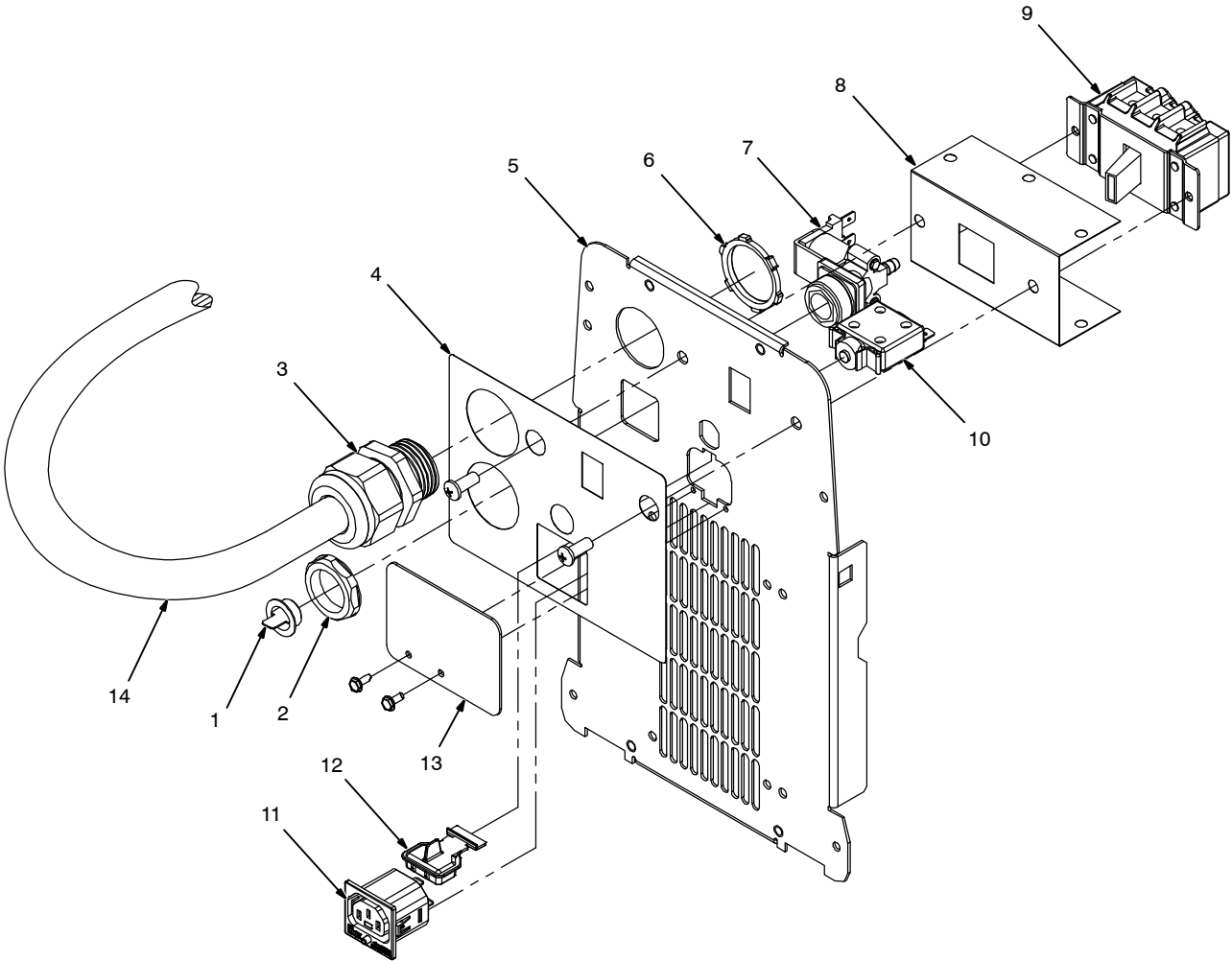
Eff w/ Serial No. NE010653L And Following

Item No.	Dia. Mkgs.	Part No.	Description	Quantity
255906 Figure 1-3. Panel, Front w/Components				
.. 1		246628 ..	Panel, Front	1
.. 2		230052 ..	Knob, Pointer 1.250 Dia x 6 mm Id	1
.. 3		247218 ..	Nameplate, Miller Maxstar 280	1
.. 4		254052 ..	Cover, SD Card	1
.. 5		247225 ..	Panel, Mtg Nameplate/Circuit Bd	1
.. 6 PC3		269500 ..	Kit, PC Board User Interface	1
.. 7		254529 ..	Cable, Ribbon 10 Posn 5.000 In Skts To Skts	1
.. 8 PC9		274828 ..	Circuit Card Assy, Sd Card Interface w/Program	1
.. 9		228546 ..	Knob, .840 Dia x 6mm Id w/Spring Clip-4.5	1
.. 10		231279 ..	Fitting, Gas-clip Mount	1
.. 11		230155 ..	Bracket, Valve Mtg	1
.. 18		178548 ..	Terminal, Connector Friction	1
.. 19 RC1		250852 ..	Lead Assy, Process Control To 14 Pin	1
..... PLG100		131058	Housing Plug + Skts	1
..... RC1		143976	Rcpt w/Skts	1
.. 20		*279661 ..	Rcpt Assy, Tw Lk Insul Fem (Dinse Type)	2
.....		229333	Screw, M10-1.5 x 20 Hex Hd-pln 8.8 Pld Sems	2
.....		185717	Nut, M20-1.5 1.00 Hex .19h Brs Locking	2
.....		229338	Washer, Domed Load .812 Id x 1.450 Od x .070 Thk	2
.....		274935	Insulator, Bulkhead Rear	2
.....		274934	Insulator, Bulkhead Front	2
.....		202043	Receptacle, Twist Lock Dinse .890 Od	2
.. 20		284865	Recpt Assy, Tw Insul Fem (Camlock Style)	2
.. 20		284866	Recpt Assy, Tw Insul Fem (Tweco Style)	2

* Prior to MH410412L purchase 279661 only. Individual parts are not interchangeable.

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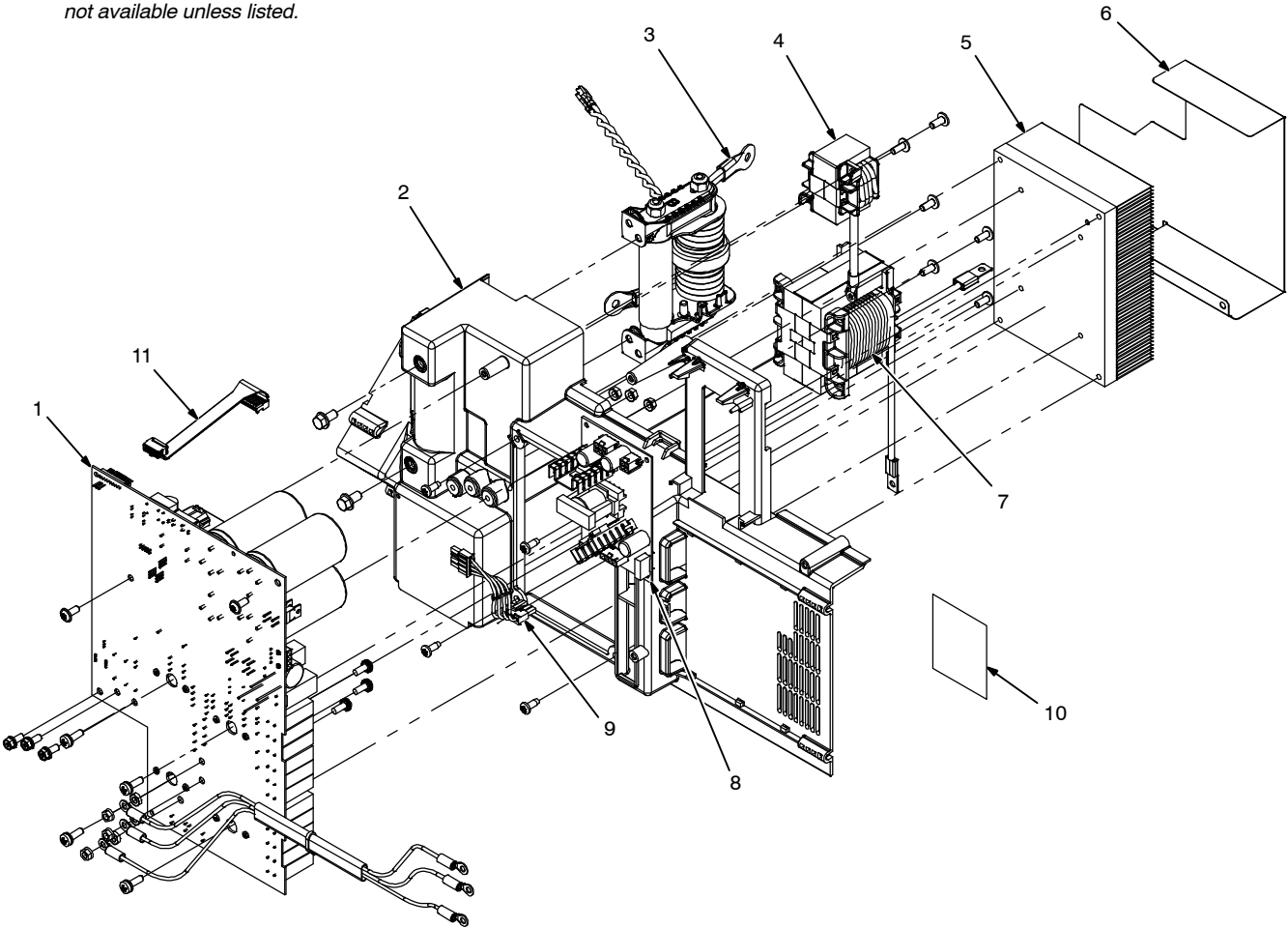
Figure 1-4. Panel, Rear w/Components

Item No.	Dia. Mkgs.	Part No.	Description	Quantity
249517 Figure 1-4. Panel, Rear w/Components				
.. 1		225049 ..	Plug, Protective .598 x .31 Lg Rubber Yellow	2
.. 2		137761 ..	Nut, 750 Npt 1.31 Hex .27h Nyl Blk	1
.. 3		255469 ..	Bushing, Strain Relief .490/.785 D x 1.326 Mtg Hole	1
.. 4			Nameplate, Rear (Order By Model And Serial Number)	1
.. 5		270458 ..	Panel, Rear	1
.. 6		273571 ..	Nut, Conduit 1.000 NPT Pld 1.688 Od x .200 Thk	1
.. 7	GS1	238805 ..	Valve, 24 VDC 2 way,125 PSI Custom Port .054 Orf w/Fr	1
.. 8		176226 ..	Insulator, Switch Power	1
.. 9	S1	244920 ..	Switch,Tgl 3pst 40 A 600 VAC Scr Term Wide Tgl	1
.. 10	SP1	183492 ..	Supplementary Protector, Man Reset 1p 10A 250 VAC (Cooler Power Supply Only)1	1
.. 11	RC2	270463 ..	Receptacle, w/Leads (Cooler Power Supply Only)	1
.. 12		270466 ..	Cover, Outlet (Cooler Power Supply Only)	1
.. 13		255307 ..	Plate, Rear Cover (Not Present With Cooler Power Supply)	1
.. 14		254147 ..	Cable, Power 10 Ft 6 In 10Ga 4c Blk/Red/Wht/Grny	1

+When ordering a component originally displaying a precautionary label, the label should also be ordered.

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249515-H

Figure 1-5. Wind Tunnel, Right Hand w/Components

Item No.	Dia. Mkgs.	Part No.	Description	Quantity
249515 Figure 1-5. Wind Tunnel, Right Hand w/Components				
.. 1	PC1	293804 ..	Kit, PCB Board Primary	1
.....	RC308	201665 ..	Housing Plug + Skts	1
.. 2		246619 ..	Wind Tunnel, Right	1
.. 3	T2	249524 ..	XFMR, HF Coupling	1
.. 4	L2	249522 ..	Inductor, DI-DT	1
.. 5		246630 ..	Heat Sink, Primary	1
.. 6		249984 ..	Insulator, Heat Sink	1
.. 7	L1	249523 ..	Inductor, Input	1
.. 8	PC7	266586 ..	Circuit Card Assy, Flyback 60W 940V In	1
.....	RC30, RC200	201665 ..	Housing Plug + Skts	1
.....	RC40	115093 ..	Housing Plug + Skts	1
.....	RC210	115094 ..	Housing Plug + Skts	1
.. 9		250845 ..	Lead Assy, Primary To Flyback	1
.. 10			Insulator (CE)	1
.. 11		289826 ..	Cable, Ribbon 10 Pos	1

+When ordering a component originally displaying a precautionary label, the label should also be ordered.

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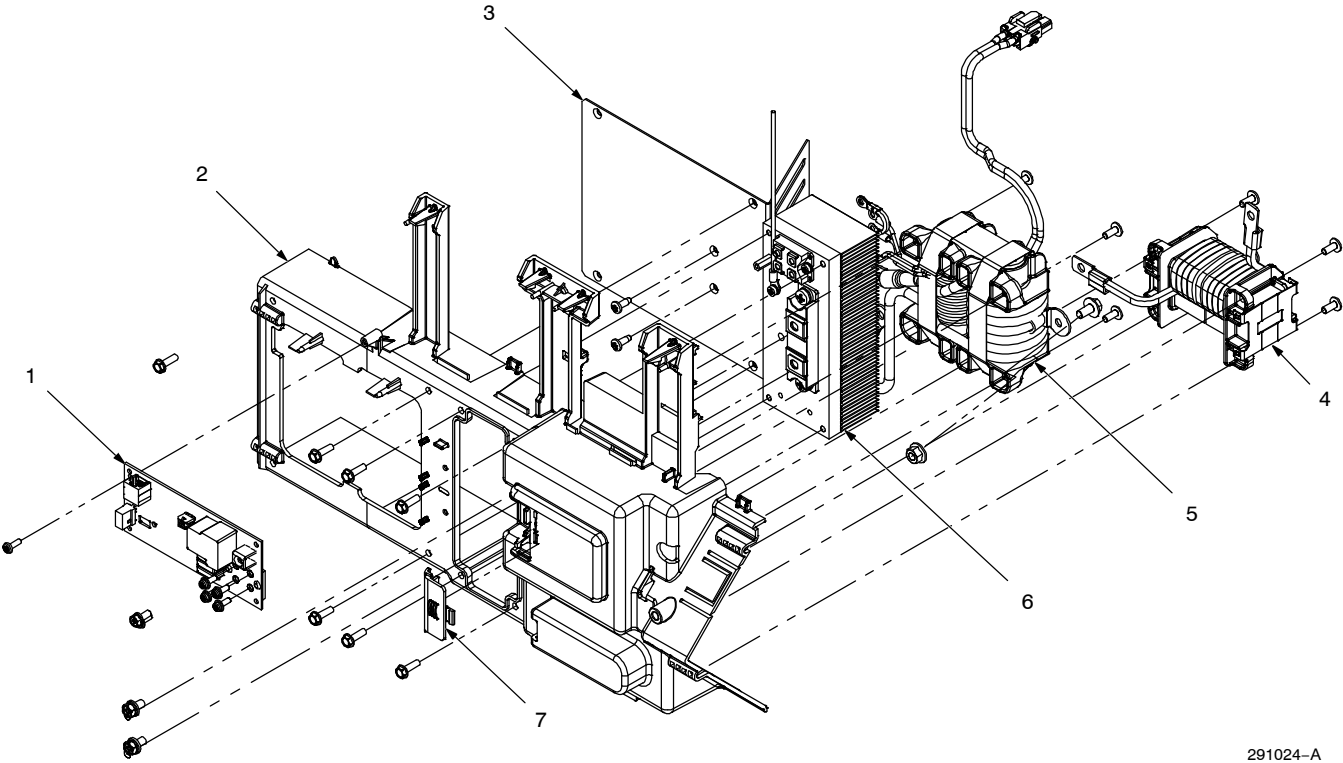


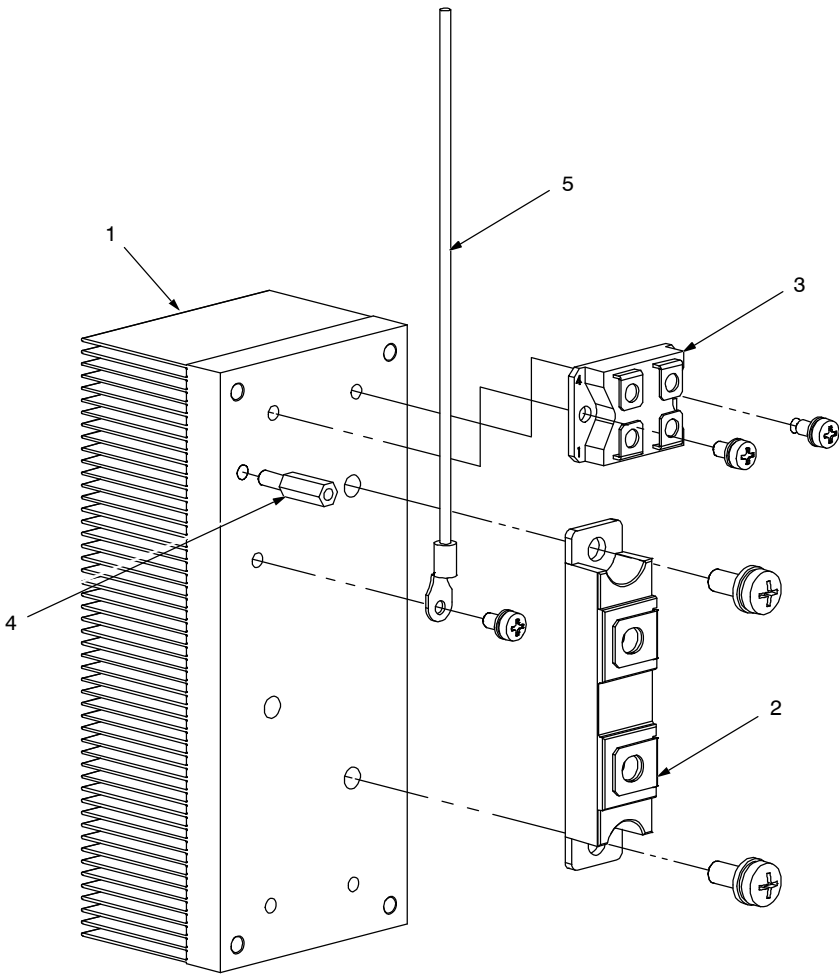
Figure 1-6. Maxstar 280 Wind Tunnel, Left Hand w/Components

Item No.	Dia. Mkgs.	Part No.	Description	Quantity
000000 Figure 1-6. Maxstar 280 Wind Tunnel, Left Hand w/Components				
.. 1	PC5	283682 ..	Circuit Card Assy, Secondary	1
.....	RC50	115092 ..	Housing Plug + Skts	1
.. 2		246620 ..	Wind Tunnel, Lh	1
.. 3		263441 ..	Stud, Connection Single	1
.. 4		263440 ..	Baffle, Air Windtunnel	1
.. 5	Z1	290580 ..	Inductor, Output	1
.. 6	T1	290590 ..	XFMR, HF Litz/Litz w/Boost	1
.. 7		000000 ..	Heat Sink, Diode Assembly (Figure 1-7)	1
.. 8		249529 ..	Cover, Xfmr Leadout	1
.. 9		257268 ..	Bracket, Wind Tunnel	1

+When ordering a component originally displaying a precautionary label, the label should also be ordered.

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Ref. 291026-A

Figure 1-7. Diode Heat Sink Assembly (Maxstar 280)

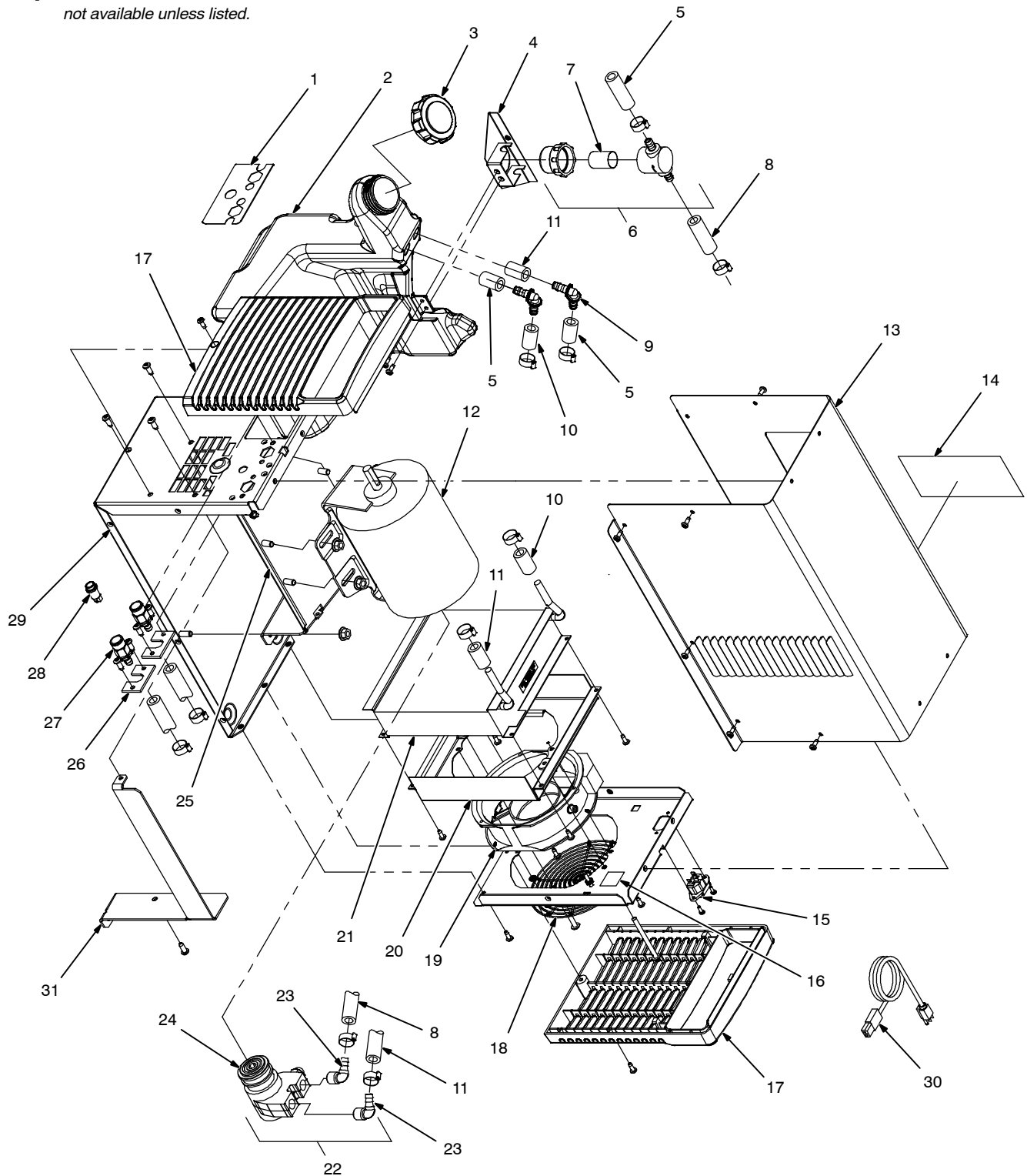
Item No.	Dia. Mkgs.	Part No.	Description	Quantity
000000 Figure 1-7. Diode Heat Sink Assembly (Maxstar 280)				
.. 1		246631 ..	Heat Sink, Diode	1
.. 2	D21	285840 ..	Kit, Ultra-fast Diode - Use supplied terminal mounting screws	1
.. 3	D23	259419 ..	Kit, Ultra-fast Diode	1
.. 4		263443 ..	Stand-off, M4 x 0.7 x 15 Lg 6mm Hex AL M&F	1
.. 5		282398 ..	Thermistor, Ntc 30K Ohm @ 25 Deg C 8.00in Lead	1

To maintain the factory original performance of your equipment, use only Manufacturer's Suggested Replacement Parts. Model and serial number required when ordering parts from your local distributor.

SECTION 2 - COOLER PARTS LIST

EFF W/SERIAL NO. MD370231L AND FOLLOWING

 Hardware is common and not available unless listed.



805505-B

Figure 2-1. Cooler Main Assembly

Eff w/ Serial No. MD370231L And Following

Item No.	Dia. Mkgs.	Part No.	Description	Quantity
Figure 2-1. Cooler Main Assembly				
.. 1			Nameplate, Coolmate 1.3 (Order By Model And Serial Number)	1
.. 2		251119	Tank, Coolant	1
.. 3		166608	Cap, Tank Screw-on w/Vent	1
.. 4		235419	Bracket, Filter	1
.. 5		255188	Hose, Rubber Braided .375 Id x .650 Od x 3.000	2
.. 6		166564	Filter, In-line Low Profile 100 Screen 3/8 Hose Bar (Includes)	1
.. 7		239494	Screen, Filter	1
.. 8		255206	Hose, Rubber Braided .375 Id x .650 Od x 7.000	1
.. 9		231311	Ftg, Hose Nyl Barbed Elbow 3/8 x 3/8 90 Deg	2
.. 10		236084	Hose, Rubber Braided .375 Id x .650 Od x 10.500	1
.. 11		228531	Hose, Rubber Braided .375 Id x .650 Od x 12.000	3
.. 12	MOT	173263	Motor, 1/4 HP 115 VAC 50/60HZ 1425/1725 Rpm Dual	1
.. 13		+251126	Wrapper	1
.. 14		253514	Label, Warning General Precautionary Static (Eng/Fr)	1
.. 15		254162	Rcpt, Str Grd 2P3W 15A 250V (Black) IEC 320-C14	1
.. 16		217553	Label, Gnd	1
.. 17		251125	Bezel, Front/Rear	2
.. 18		196312	Guard, Fan	1
.. 19	FM	213072	Fan, Muffin 115V 60HZ 3400 Rpm 6.378 Mtg Holes	1
.. 20		251121	Plenum	1
.. 21		232424	Radiator, Heat Exchanger	1
.. 22		234310	Pump, Coolant (Includes)	1
.. 23		5523	Ftg, Hose Barbed Elbow	2
.. 24		173999	Pump	1
.. 25		010323	Weldcraft Clamp, Hose .250-.625 Clp Dia	2
.. 26		251120	Bracket, Motor Assy	1
.. 27		230155	Bracket, Valve Mtg	2
.. 28		251122	FTG, Coolant Barbed 3/8 Tbg 5/8-18 Female	2
.. 29	PL1	163562	Light, Ind Wht Lens 125 VAC Snap-in Neon Non-relampa	1
.. 30		251117	Base	1
.. 30	PLG1	251123	Cable, Power	1
.. 30	PLG1	255814	Cable, Power (TIGRunner)	1
.. 31		260035	Bracket, Support	1

+When ordering a component originally displaying a precautionary label, the label should also be ordered.

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SECTION 3 - CART PARTS LIST

EFF W/SERIAL NO. MD370231L AND FOLLOWING

 Hardware is common and not available unless listed.

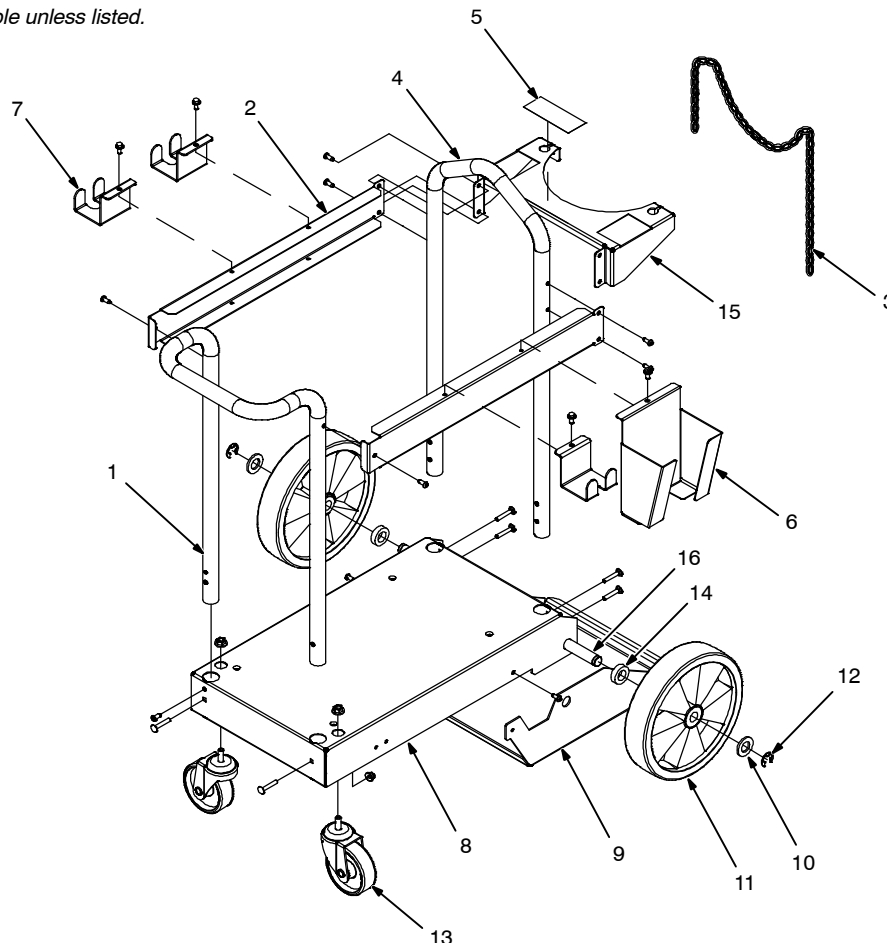


Figure 3-1. Complete Assembly For 254522

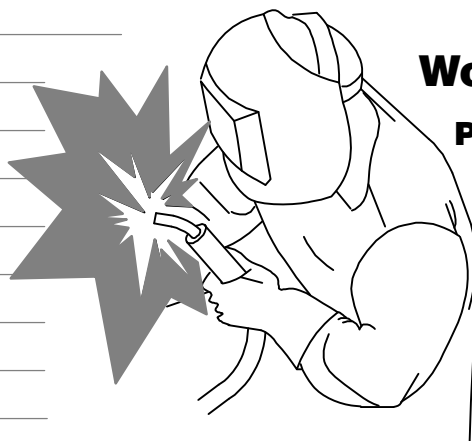
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Item No.	Dia. Mkgs.	Part No.	Description	Quantity
254522 Figure 3-1 Complete Assembly For 254522				
.. 1		251105 ..	Handle, Cart	1
.. 2		251106 ..	Rail, Side	2
.. 3		210224 ..	Chain, Straight Link 1/0 x 27 Bright Zinc Pld	1
.. 4		251104 ..	Handle, Lifting	1
.. 5		200285 ..	Label, Warning Cylinder May Explode If Damaged	1
.. 6		199403 ..	Holder, Foot Control	1
.. 7		191875 ..	Hanger, Cable/Torch	3
.. 8		251101 ..	Base, Cart	1
.. 9		251102 ..	Tray, Bottle	1
.. 10		602250 ..	Washer, Flat .812 Id x 1.469 Od x .134t Stl Pld Ansi .750	2
.. 11		209869 ..	Wheel, Poly-olefin 10 In Dia x 2.000 wide x .750	2
.. 12		121614 ..	Ring, Rtnng Ext .750 Shaft x .085 Thk E Style Pld	2
.. 13		008999 ..	Caster, Swvl 4.00 In Polyolefin	2
.. 14		235506 ..	Spacer	2
.. 15		+251107 ..	Bracket, Bottle	1
.. 16		251103 ..	Axle	1

+When ordering a component originally displaying a precautionary label, the label should also be ordered.

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Notes



Work like a Pro!

Pros weld and cut safely. Read the safety rules at the beginning of this manual.

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