



TM-266727G

2017-11

Processes



Submerged Arc (SAW) Welding

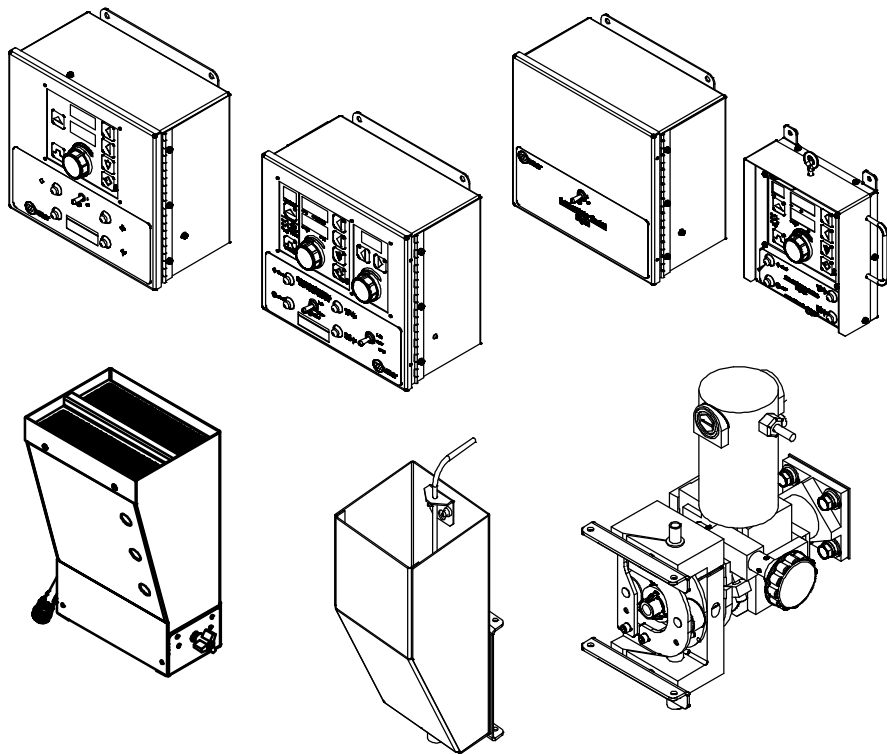
Description

Submerged Arc Controller For Automatic Welding

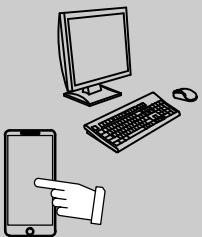
SubArc System Digital Accessories CE

PARTS LIST

Digital Interface Eff w/Serial No. ME160358V And Following
Wire Drives Eff w/Serial No. ME160468V And Following
Flux Hopper Eff w/Serial No. ME180378G And Following
Digital Motor Control Eff w/Serial No. MH070246G And Following
Remote Pendant Digital Eff w/Serial No. MH070248G And Following
Tractor Interface Digital Eff w/Serial No. MH090106G And Following
For OM-267533 Revision A Thru N



TECHNICAL MANUAL




For product information,
Owner's Manual translations,
and more, visit

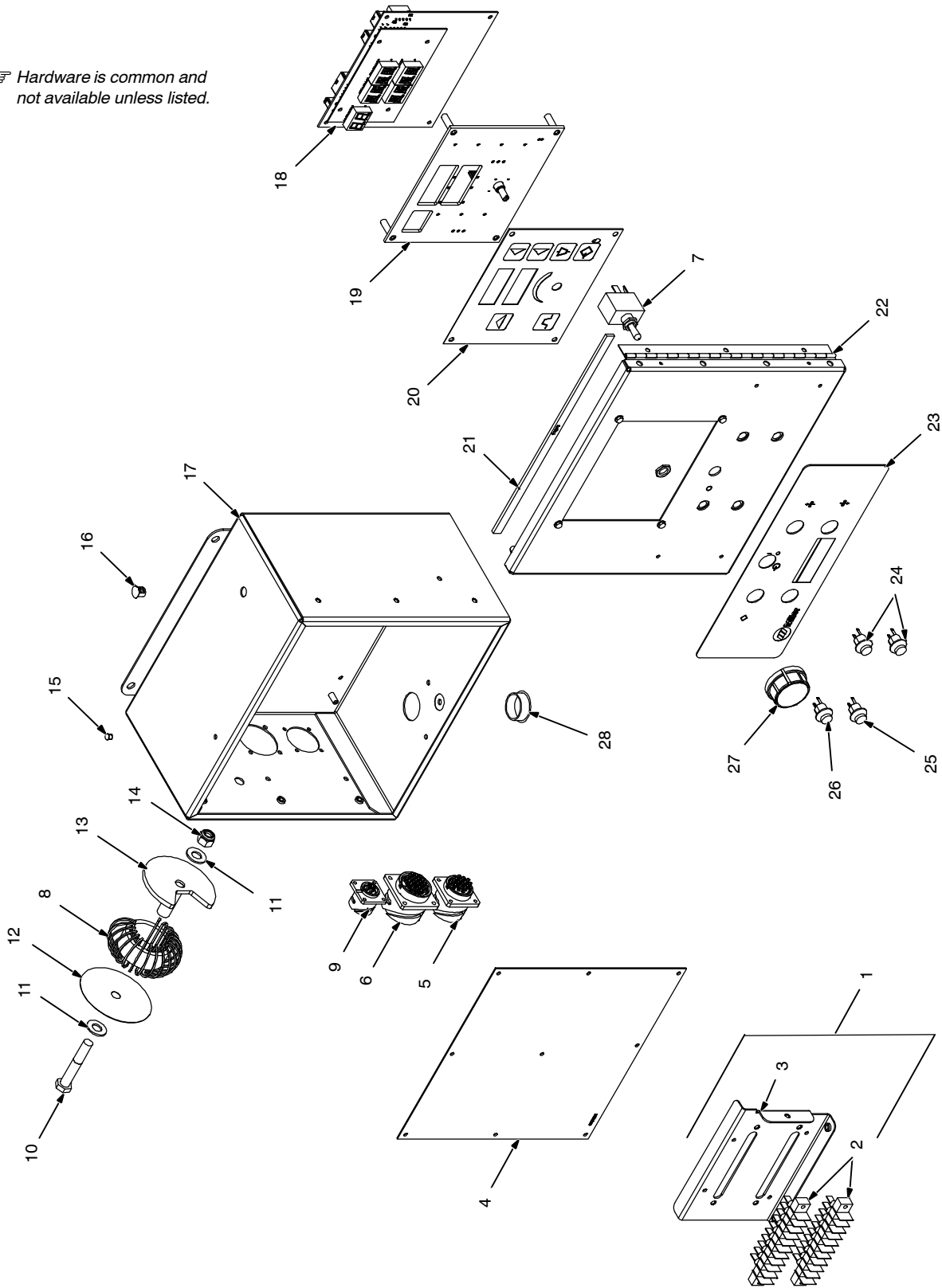
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File: SUBMERGED (SAW)



SECTION 12 – PARTS LIST

 Hardware is common and not available unless listed.



Ref. 266391-B


Figure 12-1. SubArc Interface Digital Main Assembly

Item No.	Dia. Mkgs.	Part No.	Description	Quantity
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Figure 12-1 SubArc Interface Digital Main Assembly

.. 1		261083	Assy, Terminal Blocks, Plugs & Bracket Subrc Intrfc (Includes)	1
.. 2		261089	Block, Term 20 Amp 10 Pole Screw Term	2
.. 3		261717	Bracket, Terminal Strip	1
.. 4	PC1	253778	Circuit Card Assy, Display/Micro w/Program	1
.. 5	RC2	260834	Plug Assy, Motor	1
.. 6	RC1	260832	Plugs & Receptacle Assy (Includes)	1
.. 7	S1	028111	Switch,Tgl Dpst 20A 250V Spd Term	1
.. 8			Choke, Common Mode Subarc Interface Digital	1
.. 9	RC3	260870	Receptacle, w/Leads Flux Hopper	1
.. 10		208794	Screw, 375-16 x 2.25 Hex Hd-pln Gr5 Pld	1
.. 11		010910	Washer, Flat .406 Id x 0.812 Od x .065t Stl Pld Ansi .375	2
.. 12		267778	Insulator, Mylar .014 x 3.000 Od x .375 Id	1
.. 13		262545	Bracket, Mtg Common Mode Choke	1
.. 14		010909	Nut, 375-16 .56 Hex .46h Stl Pld Elastic Stop Nut	1
.. 15		117860	Blank, Snap-In Nyl .187 Mtg Hole Black	5
.. 16		057359	Blank, Snap-In Nyl .375 Mtg Hole Black	1
.. 17		253833	Box Assy, Enclosure Subarc Controller	1
.. 18	PC20	263963	Circuit Card Assy, Display/Micro w/Program	1
.. 19	PC21	238273	Circuit Card Assy, Switches	1
.. 20		236564	Overlay, Front Panel HDC 1500DX	1
.. 21		228274	Weatherstripping, Adh .125 x .375 x 10.750	1
.. 22		265935	Cover Assy, Box Enclosure Subarc System Interface D	1
.. 23			Nameplate, (Order By Model And Serial Number)	1
.. 24	PB3, 4	202944	Switch, Pb Mc No Spst 5A 115 VAC (Gray)	2
.. 25	PB2	202945	Switch, Pb Mc No Spst 5A 115 VAC (Red)	1
.. 26	PB1	202946	Switch, Pb Mc No Spst 5A 115 VAC (Green)	1
.. 27		179851	Knob, Pointer 1.670 Dia x .250 Id Push On w/Spring	1
.. 28		070371	Blank, Snap-In Nyl 1.093/1.125 Mtg Hole Black	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.

 Hardware is common and not available unless listed.

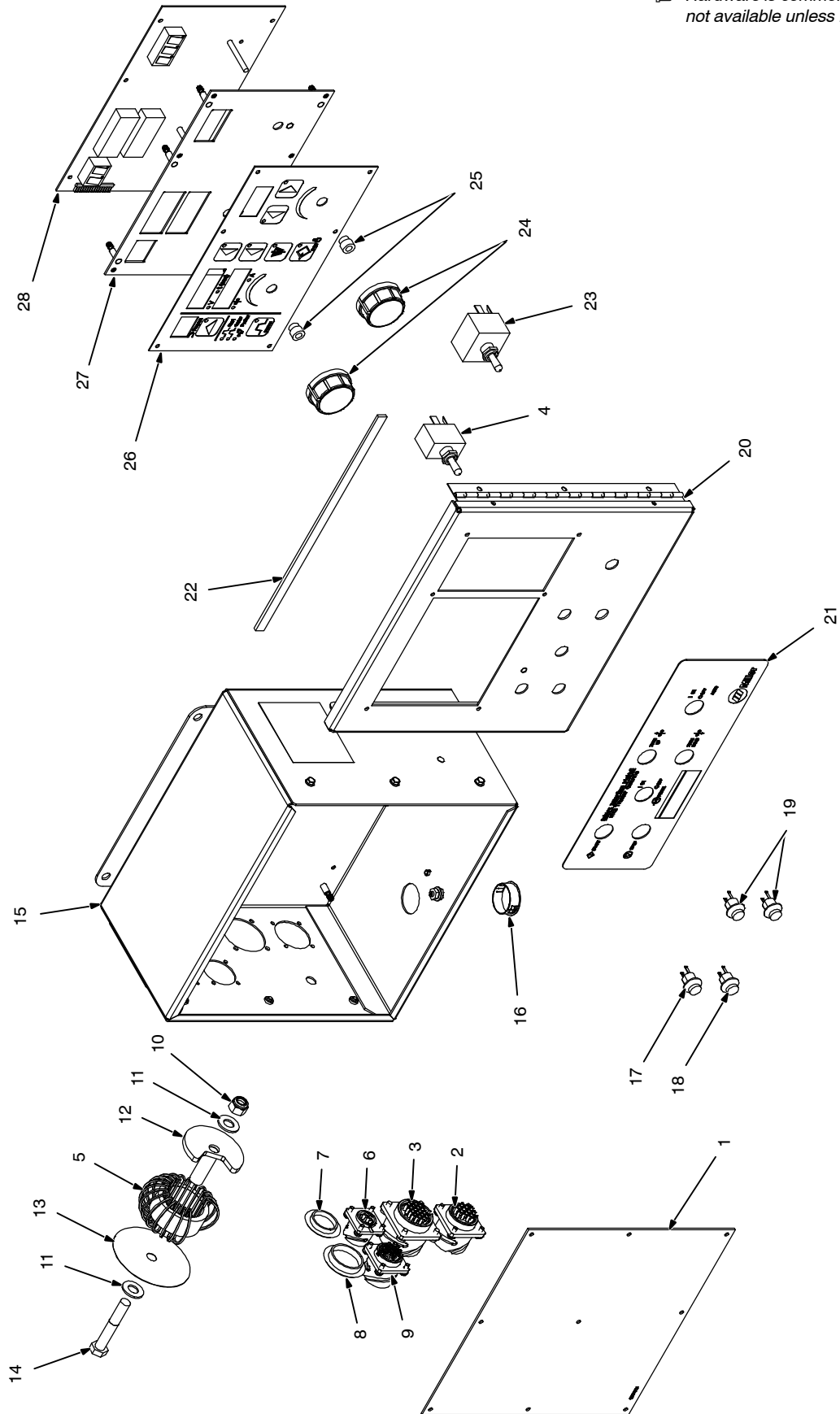


Figure 12-2. SubArc Tractor Interface Digital Main Assembly

Item No.	Dia. Mkgs.	Part No.	Description	Quantity
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Figure 12-2. SubArc Tractor Interface Digital Main Assembly

.. 1	PC1	253778	Circuit Card Assy, Motor Control w/Prgm SubArc Inte	1
.. 2	RC2	260834	Plug Assy, Motor	1
.. 3	RC1	260832	Plugs & Receptacle Assy, SID (Includes)	1
.. 4		028111	Switch,Tgl Dpst 20A 250V Spd Term	1
.. 5		267007	Choke, Common Mode	1
.. 6	RC3	260870	Receptacle, w/Leads Flux Hopper	1
.. 7		278356	Blank, Snap-In Nyl 1.000 Mtg Hole Black	1
.. 8		277339	Blank, Snap-In Nyl 1.125 Mtg Hole Black	1
.. 9		278201	Plug Assy, Tractor	1
.. 10		010909	Nut, 375-16 .56 Hex .46 H Stl Pld Elastic Stop Nut	1
.. 11		010910	Washer, Flat .406 Id x 0.812 Od x .065 T Stl Pld Ansi .375	2
.. 12		275199	Bracket, Mtg Common Mode Choke	1
.. 13		267778	Insulator, Mylar .014 x 3.00 Od x .375 Id	1
.. 14		208794	Screw, 375-16 x 2.25 Hex Hd-pln Gr5 Pld	1
.. 15		277767	Box Assy, Enclosure Subarc Controller	1
.. 16		070371	Blank, Snap-In Nyl 1.093/1.125 Mtg Hole Black	1
.. 17	PB1	202946	Switch, Pb Mc No Spst 5A 115 VAC (Green)	1
.. 18	PB2	202945	Switch, Pb Mc No Spst 5A 115 VAC (Red)	1
.. 19	PB3-PB4	202944	Switch, Pb Mc No Spst 5A 115 VAC (Gray)	2
.. 20		265935	Cover Assy, Box Enclosure Subarc Tractor Interface	1
.. 21			Nameplate, (Order By Model And Serial Number)	1
.. 22		228274	Weatherstripping, Adh .125 x .375 x 10.750	1
.. 23		011610	Switch, Tgl Spdt 15A 125 VAC On-Off-On Spd Term Chro	1
.. 24		179851	Knob, Pointer 1.670 Dia x .250 Id Push On w/Spring	2
.. 25		277995	Washer, Shldr .253 Id .370 Od x .2 T .469 Od x .250 T	2
.. 26		275233	Overlay, Front Panel Tractor	1
.. 27		277724	Backing Plate Assy, Membrane Panel SubArc Tractor	1
.. 28		275111	Circuit Card Assy, Tractor Control w/Program	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.

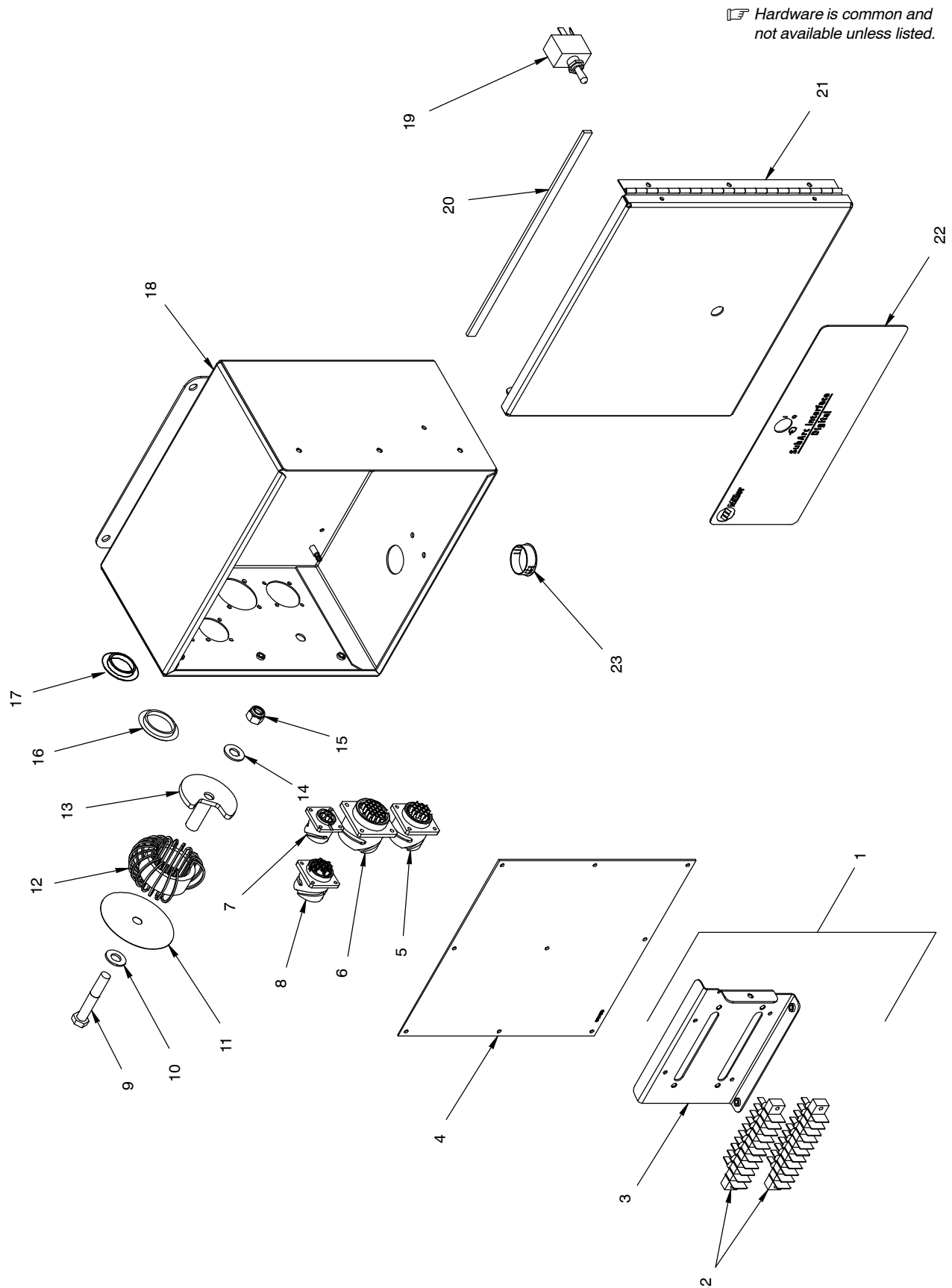


Figure 12-3. SubArc Motor Control Digital Main Assembly


276890-A

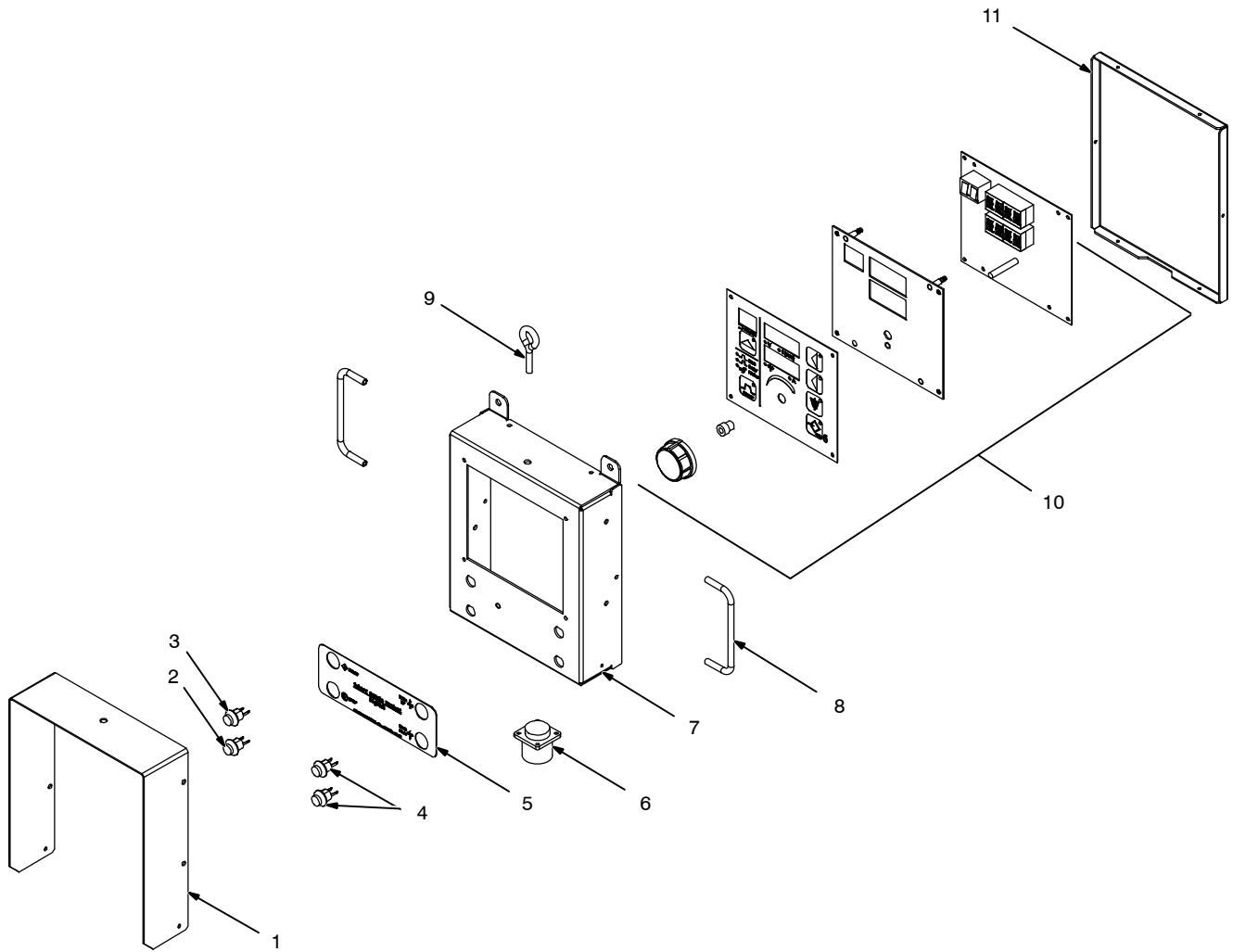
Item No.	Dia. Mkgs.	Part No.	Description	Quantity
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Figure 12-3 SubArc Motor Control Digital Main Assembly

.. 1		261083	Assy, Terminal Blocks, Plugs & Bracket Subrc Intrfc (Includes)	1
.. 2		261089	Block, Term 20 Amp 10 Pole Screw Term	2
.. 3		261717	Bracket, Terminal Strip	1
.. 4	PC1	253778	Circuit Card Assy, Display/Micro w/Program	1
.. 5	RC2	260834	Plug Assy, Motor	1
.. 6	RC1	260832	Plugs & Receptacle Assy (Includes Items 12 And 19)	1
.. 7	RC3	260870	Receptacle, w/Leads Flux Hopper	1
.. 8		277412	Plug Assy, Pendant Connector	1
.. 9		208794	Screw, 375-16x2.25 Hex Hd-pln Gr5 Pld	1
.. 10		010910	Washer, Flat .406 Id x 0.812 Od x .065t Stl Pld Ansi .375	2
.. 11		267778	Insulator, Mylar .014 x 3.000 Od x .375 Id	1
.. 12		267007	Choke, Common Mode Subarc Interface Digital (Included w/No.6)	1
.. 13		275199	Bracket, Mtg Common Mode Choke	1
.. 14		010910	Washer, Flat .406 Id x 0.812 Od x .065t Stl Pld Ansi.375	2
.. 15		010909	Nut, 375-16 .56 Hex .46h Stl Pld Elastic Stop Nut	1
.. 16		277339	Blank, Snap-In Nyl 1.125 Mtg Hole Black	1
.. 17		278356	Blank, Snap-In Nyl 1.000 Mtg Hole Black	1
.. 18		277767	Box Assy, Enclosure Subarc Motor Controller Digital	1
.. 19	S1	028111	Switch,Tgl Dpst 20A 250V Spd Term (Included w/No.6)	1
.. 20		228274	Weatherstripping, Adh .125 x .375 x 10.750	1
.. 21		277341	Cover Assy, w/Label Sbrc Mtr Cntrl Dgtl Ce	1
.. 22			Nameplate, Order By Model And Serial Number	1
.. 23		070371	Blank, Snap-In Nyl 1.093/1.125 Mtg Hole Black	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.

 Hardware is common and not available unless listed.



277886-A

Figure 12-4. SubArc Remote Pendant Digital Main Assembly

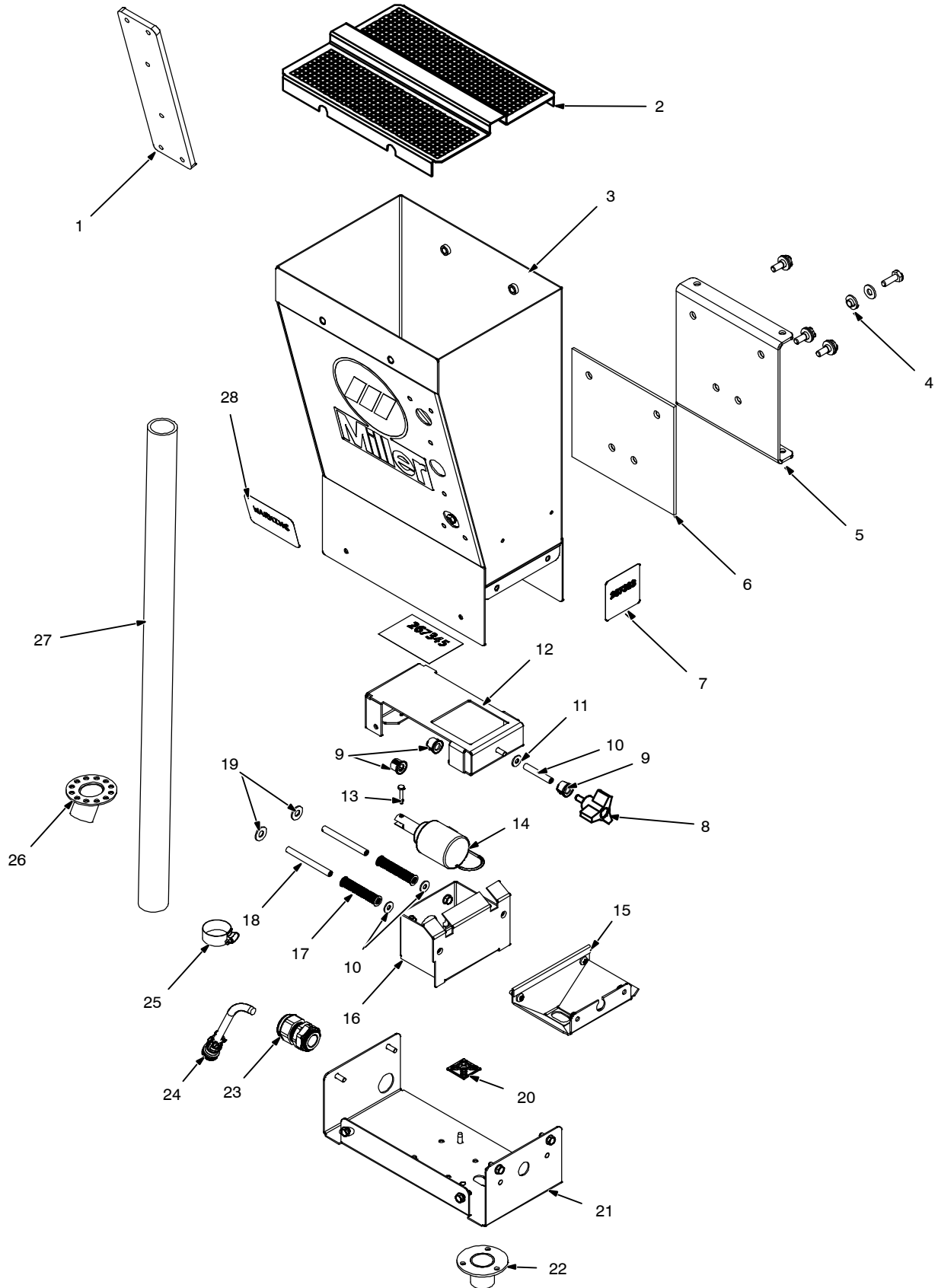
Item No.	Dia. Mkgs.	Part No.	Description	Quantity
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Figure 12-4 SubArc Remote Pendant Digital Main Assembly

.. 1		277388	Shield, Bezel Subarc Remote Pendant Digital	1
.. 2		202945	Switch, PB MC No SPST 5A 115VAC (Red)	1
.. 3		202946	Switch, PB MC No SPST 5A 115VAC (Green)	1
.. 4		202944	Switch, PB MC No SPST 5A 115VAC (Gray)	2
.. 5			Nameplate (Order By Model And Serial No.)	1
.. 6		277466	Plug Assy, Filter Board To Display Board & PB Switch	1
.. 7		277394	Case Assy, Subarc Remote Pendant Digital	1
.. 8		239978	Handle, Round Wire	2
.. 9		277933	Eye Bolt, .250-20 x 1.00	1
.. 10		277933	Assy, Subarc UI	1
.. 11		277389	Cover, Rear Subarc Remote Pendant Digital	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.

☞ Hardware is common and not available unless listed.



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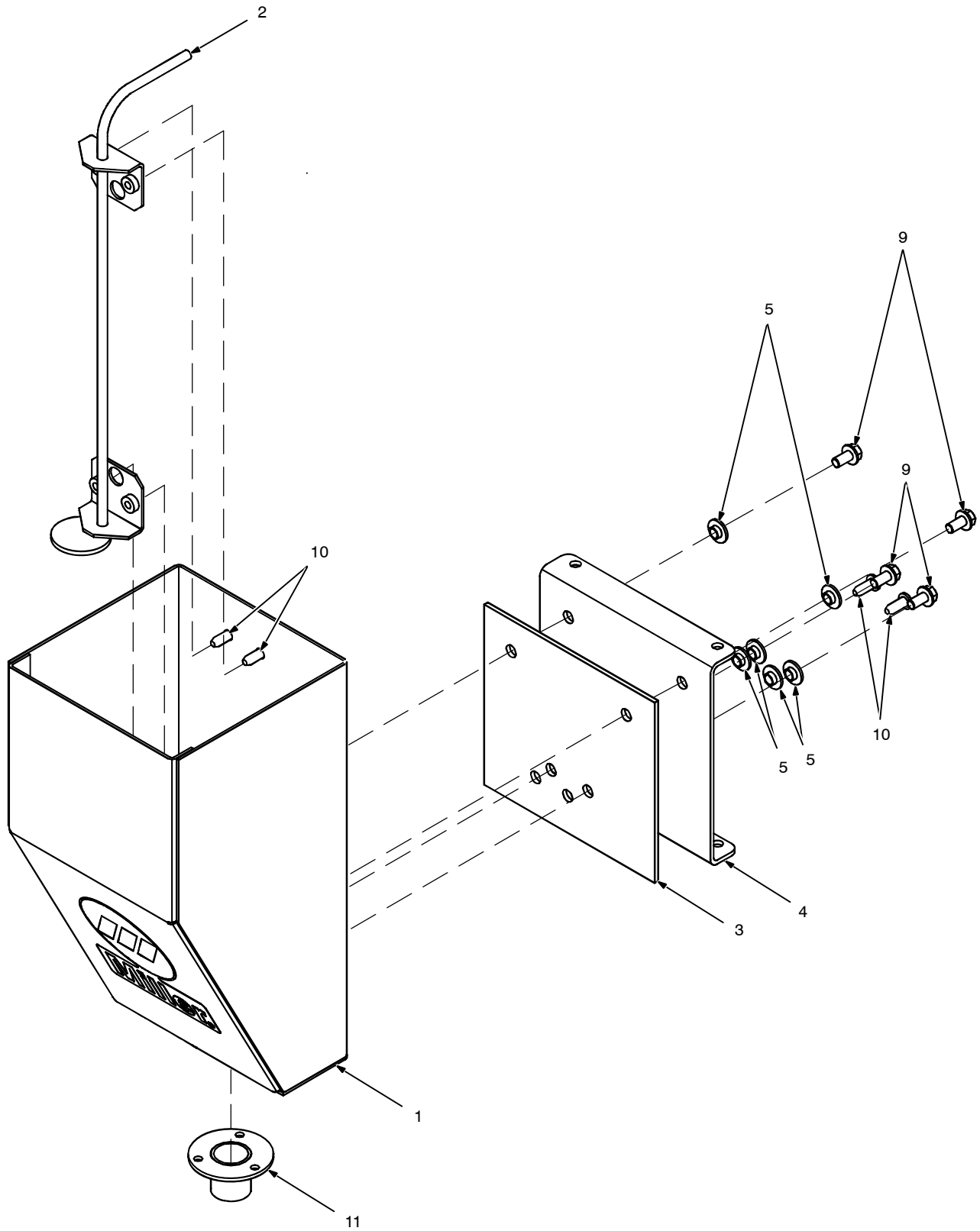
Figure 12-5. Flux Hopper Main Assembly

Item No.	Dia. Mkgs.	Part No.	Description	Quantity
Figure 12-6. Flux Hopper Main Assembly				
.. 1		262464	Window, Flux Hopper	1
.. 2		263002	Filter, Hopper	1
.. 3		+265224	Weldment, Reservoir/Rear w/Front	1
.. 4		208000	Washer, Shldr.260 Id 0.630 Od x .125t .327 Od x .062t Nyl	4
.. 5		267490	Bracket, Mtg Flux Hopper	1
.. 6		261088	Insulator, Phenolic	1
.. 7		267363	Label, Caution Moving Parts	1
.. 8		280232	Knob, Phenolic .875 Dia Fluted 10-32 x.750lg Stl Stud	1
.. 9		262983	Bushing, Snap-In Nyl .313 Id x .500 Mtg Hole	3
.. 10		262231	Stand-off, No 10-32 x 1.500 Lg .250 Id Sst Fem	1
.. 11		602238	Washer, Flat .203 Id x 0.500 Od x .048t Stl Pld Ansi #10	3
.. 12		266603	Valve Plate	1
.. 13		262222	Pin, Clevis .12 Id x .750 Lg Ss	1
.. 14		262223	Pin, Cotter Hair .125 Dia x .047 Wire x .500 lg Sst	1
.. 15		262984	Solenoid, DC w/Receptacle	1
.. 16		262238	Collector, Flux	1
.. 17		265203	Bracket, Flux Hopper Solenoid	1
.. 18		262230	Spring, Cprsn .260 Id X 2.00 lg 2.76 lb/In Sst	2
.. 19		262229	Stand-off, No 10-32 X 2.500 Lg .250 Od Sst Fem	2
.. 20		163174	Washer, Flat .281 Id x 0.625 Od x.050t Sst	2
.. 21		265229	Mount, Wire Adhesive	2
.. 22		265225	Base, Valve Assy w/Pems	1
.. 23		267539	Outlet, Hopper Straight	1
.. 24		257544	Bushing, Strain Relief .230/.530 Id X .886 Mtg Hole D	1
.. 25		267429	Cable, Flux Hopper Low Voltage	1
.. 26		189674	Clamp, Hose .687 - 1.500 Clp Dia Sae #16	1
.. 27		200439	Hose, 1.000 Id x 1/8 In Wall Flux Hopper	1
.. 28		267536	Outlet, Hopper 30 Degrees	1
.. 29		096858	Label, Warning Exposed Rays Can Burn Eyes And Etc	1

+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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Figure 12-6. Manual Flux Hopper Main Assembly

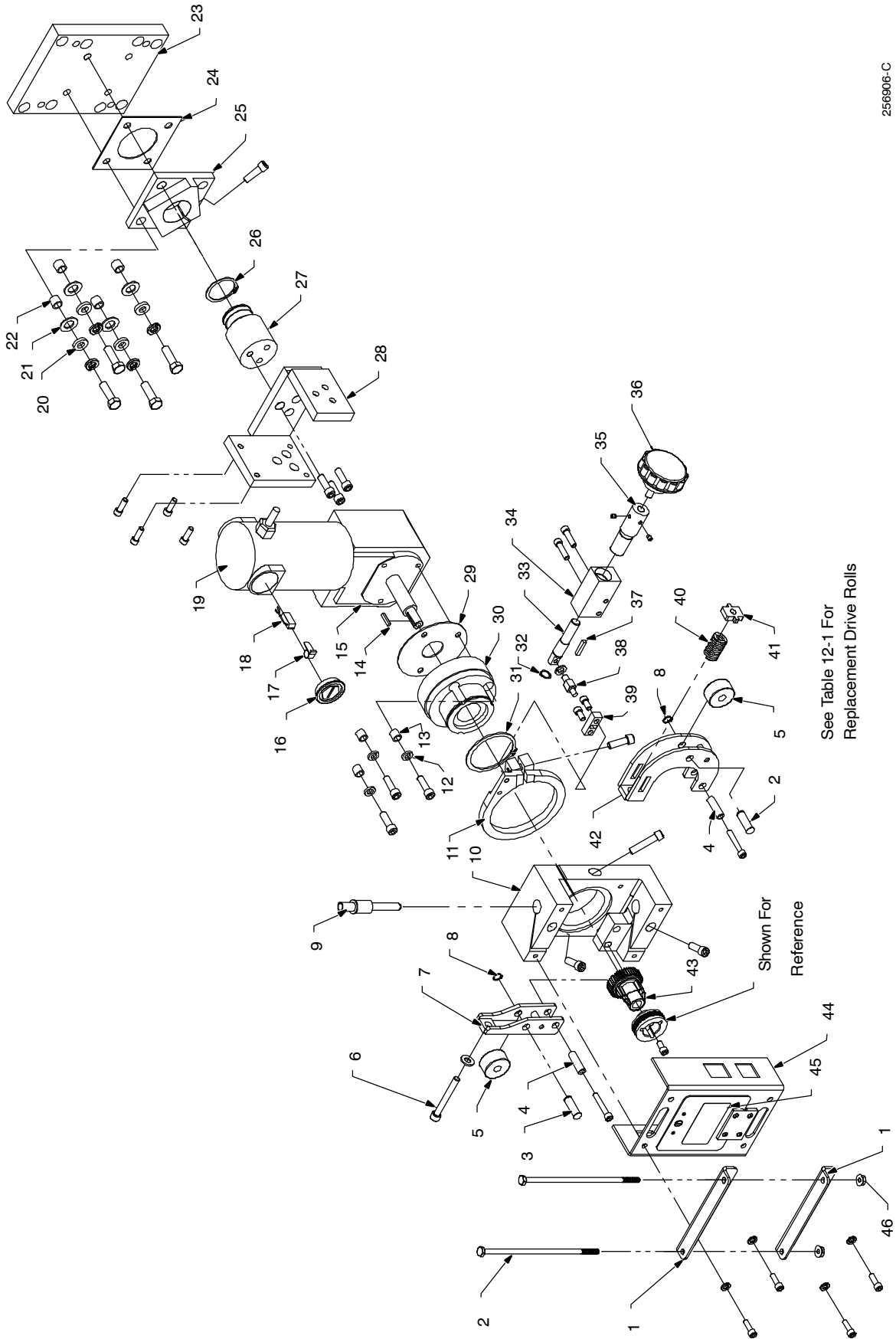
Item No.	Dia. Mkgs.	Part No.	Description	Quantity
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Figure 12-5. Flux Hopper Main Assembly

... 1		278468	.. Weldment, Reservoir/Rear w/Front	1
... 2		278476	.. Handle, Shutoff Assy	1
... 3		261088	.. Insulator, Phenolic	1
... 4		267490	.. Bracket, Mtg Flux Hopper	1
... 5		208000	.. Washer, Shldr .260 Id 0.630 Od x .125T .327 Od x .062T Nyl	6
... 7		601847	.. Nut, 010-32 .38Hex .24H Stl Pld Elastic Stop Nut (Not Shown)	3
... 9		602154	.. Screw, 250-20 x .50 Hexwhd .50D Stl Pld Slfmg Tap-Rw	4
... 10		227147	.. Screw, 250-20 x .62 Pan Hd-Torx Stl Pld Blk Tap-R	4
... 11		267536	.. Outlet, Hopper 30 Degrees	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.

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256906-C

Figure 12-7. Wire Drive Main Assembly

Item No.	Dia. Mkgs.	Part No.	Description	Quantity
300938 Figure 12-7. Wire Drive Main Assembly				
1		253407	Bracket, Mounting Flux Hopper	2
2		198680	Screw, 250-20 x 7.00 Hex Hd-Pln Gr5 Pld	2
3		253194	Pin, Bearing	2
4		253248	Standoff, Pressure Arm	2
5		199416	Ball Bearing, .750 x 1.378 x .394	2
6		253340	Screw, 312-18 x 2.50 Soc Hd-hex Gr8 Pln	1
7		253217	Reaction Arm Assembly	1
8		198504	Ring, Retaining 5100-39	2
9			Inlet Wire Guide (Part Of Wire Straightener Kit 199733)	0
10		253231	Block, SubArc Feed Head	1
11		232126	Assembly, Clamp Hub Rh	1
12		198508	Washer, Flat Nylon	3
13		198509	Spacer, Nylon	3
14		255068	Key, Stl .125 x .125 x .750	1
15		253235	Motor, 1/5HP 38 VDC 85 RPM 30:1 Ratio (Includes)	1
16		208089	Brush Cap, Motor	1
17		208088	Spring, Motor	1
18		255064	Brush, Motor	1
19		254790	End Shield, Motor W/Hall Effect Bd w/Leads	1
20		253258	Washer, Flat .375 Id x 0.750 Od x .156T Stl Pld Clr	4
21		253250	Washer, Insulating .515 Id x .938 Od x .062 Thk	4
22		253254	Insulator, Mtg Motor Hub Bracket	4
23		199414	Plate, Mtg Adapter	0
24		253251	Insulator, Motor Hub SubArc	1
25		253249	Bracket, Motor Hub	1
26		198502	Ring, Retaining 5100-150	1
27		209665	Hub, Mounting Motor	1
28		209498	Assembly, Mounting Motor	1
29		198484	Insulator, Motor SubArc	1
30		198485	Hub, Motor Mount	1
31		198503	Ring, Retaining 5100-250	1
32		605308	Ring, Rtnng Ext .500 Shaft X .035 Thk	1
33		208391	Shaft, Manipulator	1
34		232125	Block, Handle Rh	1
35		198596	Adapter, Handle	1
36		199889	Knob	1
37		198590	Key, Stl .184 x .184 x .875	1
38		208392	Pin, Manipulator	1
39		198656	Insert, Manipulator	1
40		198507	Spring, 750 Od x 1.25	1
41		253192	Retainer, Spring	1
42		253179	Pressure Arm Assembly	1
43		172076	Carrier, Drive Roll w/Components Keyed 24 Pitch	1
44		+253294	Guard Assy, Feed Roller	1
45		196956	Label, Warning Electric Shock And Pinch Wordless	1
46		089800	Nut, 250-20 .44Hex .22H Stl Pld .58D Flange Defor	2
		199733	Wire Straightener Kit (Includes Inlet Wire Guide) (Optional)	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.

Miller Electric Mfg. Co.

An Illinois Tool Works Company
1635 West Spencer Street
Appleton, WI 54914 USA

International Headquarters—USA

USA Phone: 920-735-4505 Auto-Attended
USA & Canada FAX: 920-735-4134
International FAX: 920-735-4125

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