



PM-281138B

2024-01

Processes



MIG (GMAW) Welding

Flux Cored (FCAW) Welding

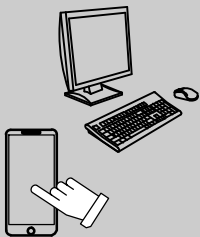
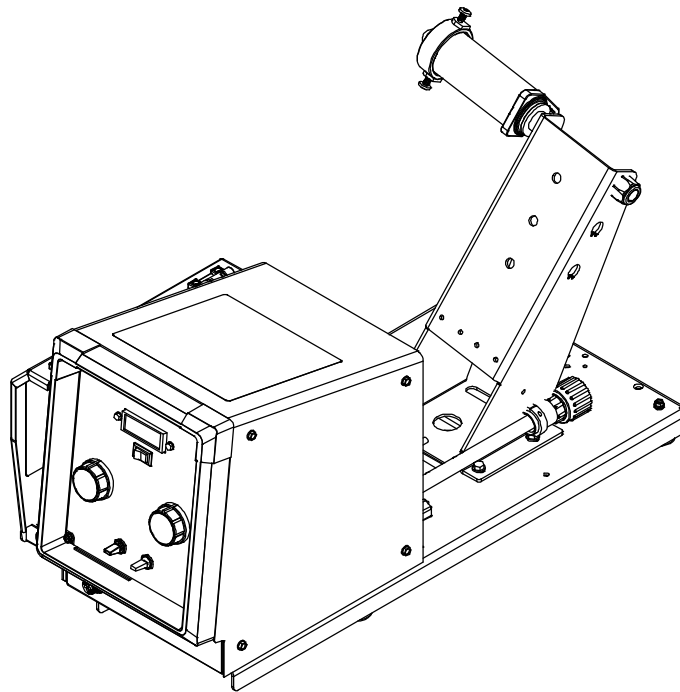
Description



Wire Feeder

20 Series CE

Eff. w/MJ346110U and Following



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

www.MillerWelds.com

PARTS MANUAL

SECTION 1 – PARTS LIST

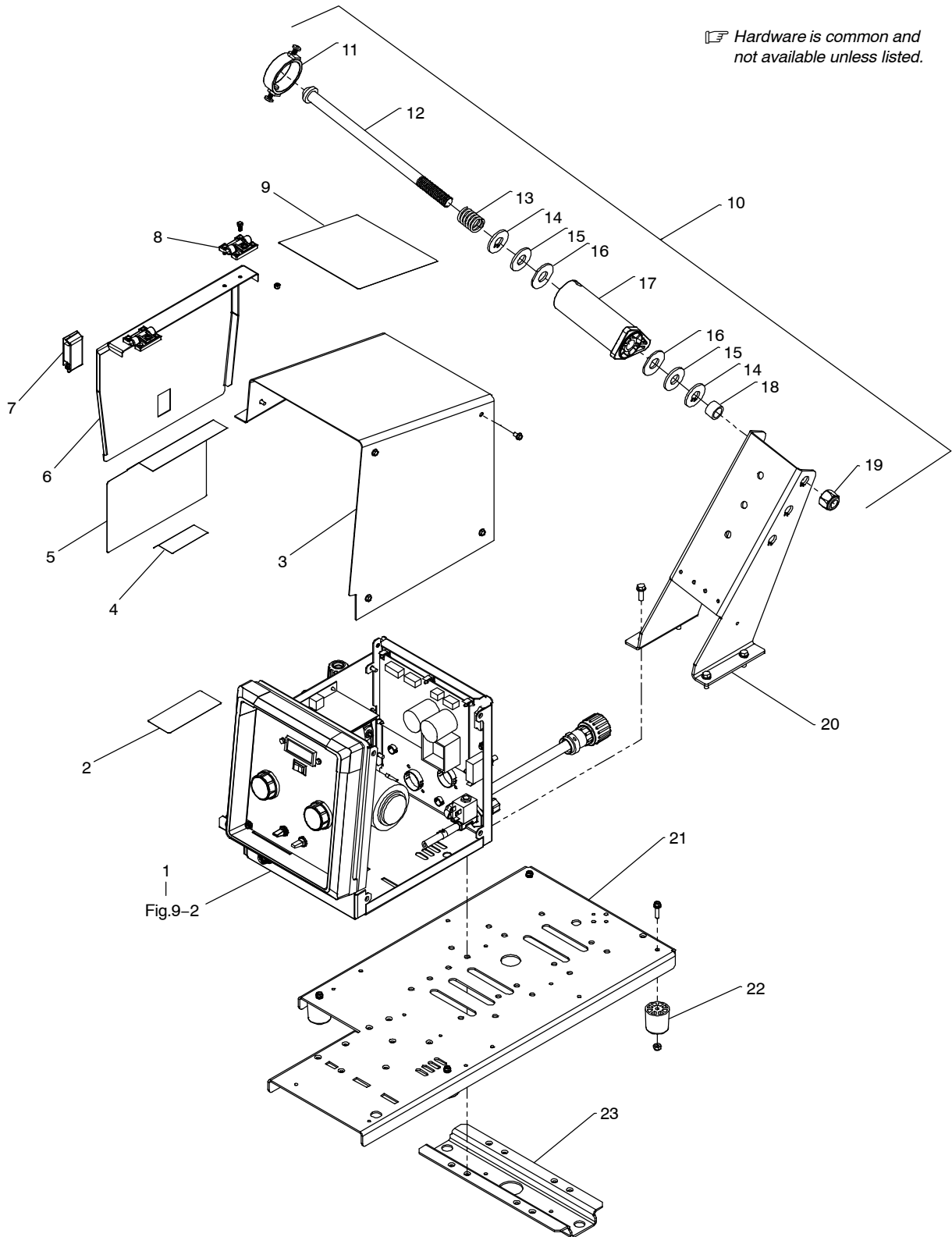


Figure 9-1. Main Assembly

281548-A

Item No.	Part No.	Description	Quantity
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Figure 9-1. Main Assembly

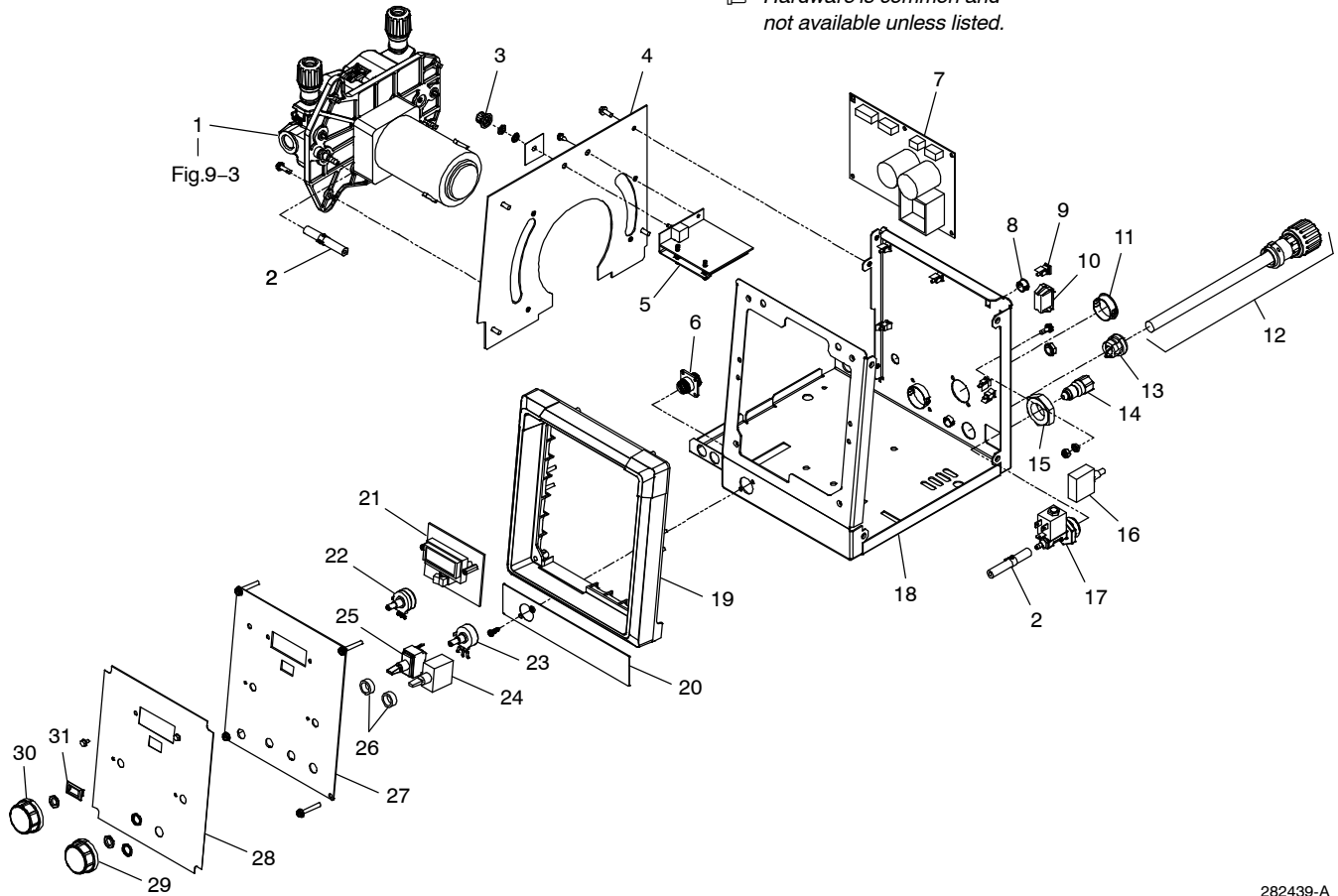
... 1	Figure 9-2	.. Control Box	1
... 2	275806	.. Label, Warning Hot Surfaces And Moving Parts	1
... 3	279265	.. Wrapper Feeder	1
... 4	269889	.. Label, Caution Pinch Point (EN/FR/SP)	1
... 5	279355	.. Insulator, Door	1
... 6	279267	.. Door, Drive	1
... 7	089899	.. Latch, Slide Flush Style Series 40	1
... 8	282105	.. Hinge, Door Friction Adjustable	2
... 9	274964	.. Label, Warning General Precautionary (EN/FR/SP)	1
... 10	141753	.. Hub+Spindle Assembly (Includes)	1
... 11	058427	... Ring, Retaining Spool	1
... 12	180571	... Shaft Assy, Support Spool	1
... 13	010233	... Spring, Cprsn .970 Od X .120 Wire X 1.250Pld	1
... 14	057971	... Washer, Flat Stl Keyed 1.500Dia X .125Thk	2
... 15	010191	... Washer, Fbr .656 Id X 1.500 Od X .125Thk	2
... 16	058628	... Washer, Brake Stl	2
... 17	058428	... Hub, Spool	1
... 18	248974	... Tubing, Stl .875 Od X12Ga Wall X .562	1
... 19	135205	... Nut, Stl Siflkg Hex Reg .625-11 W/Nylon Insert	1
... 20	279240	.. Support, Spool Tilted	1
... 21	281994	.. Base	1
... 22	134306	.. Foot, Rubber 1.250 Dia X 1.375 High No 10 Screw	4
... 23	281535	.. Bracket, Stiffener Rear Feeder	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.

Notes

☞ Hardware is common and not available unless listed.



282439-A

Figure 9-2. Control Box

Item No.	Dia. Mkgs.	Part No.	Description	Quantity
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Figure 9-2. Control Box

...	1	Figure 9-3	Drive Assembly, Wire	1	
...	2	200814	Hose Assy, SAE .187 Id X .410 Od X 17.000 W/Clamps	1	
...	3	◆093551	Knob, Pointer .750 Dia X .126 Id W/Set Screw Plstc	1	
...	4	279742	Panel, Side Drive Mtg	1	
...	5	◆197770	Run-In Control Assy, W/Bracket & Stand-Offs (Includes)	1	
...		PC70	◆240356	Circuit Card Assy, Control	1
...		PLG71,44 RC44	◆282705	Plug Assy, Elect	1
...		PLG79	◆282800	Plug Assy, Elect	1
...	6	*048282	Rcpt W/Skts, (Service Kit) (Includes)	1	
...		079534	Conn, Circ Ms/Cpc Skt Pushin 14-18Ga .080-.100 Insu	4	
...	7	PC1	283206	Circuit Card Assy, Motor	1
...	8	107983	Blank, Snap-In Nyl .500 Mtg Hole Black	2	
...	9	134201	Stand-Off Support, PC Card .312/.375w/Post&lock .43	6	
...	10	S1	111997	Switch, Rocker Spst 10A 250VAC On-Off Visi Red Rock	1
...	11	241416	Blank, Snap-In Nyl 1.187 Mtg Hole Black	2	
...	12	192525	Cable, Power 10 Ft 4 In 18Ga 3C (Includes)	1	
...		141162	Housing Plug+Pins, (Service Kit)	1	
...		134731	Conn, Circ Ms/Amp Pin Pushin 14-18Ga .110-.150 Insu	14	
...		143922	Conn, Circ Cpc Clamp Str Rif Size 17-20 .453 Od	1	
...		182271	Cable, Port No 18 3/C Type So Rb Jkt	10 Ft	
...		139042	Bushing, Strain Relief .270/.470 Id X .804 Mtg Hole	1	
...		115093	Housing Plug+Skts, (Service Kit)	1	
...		113746	Conn, Rect Mini 045 Skt 24-18Ga .1220d Brass-Tin	3	

Item No.	Dia. Mkgs.	Part No.	Description	Quantity
Figure 9-2. Control Box (Continued)				
...		12	◆192526 .. Cable, Power 10 Ft 4 In 16Ga 8C (Includes)	1
.....		◆141162	..... Housing Plug+Pins, (Service Kit)	1
.....		◆134731	..... Conn, Circ Ms/Amp Pin Pushin 14-18Ga .110-.150 Insu	14
.....		◆079739	..... Conn, Circ Cpc Clamp Str Rlf Size 17-20 .703 Od	1
.....		◆600797	..... Cable, Port No 16 8/C Type Soow Rb Jkt	10 Ft
.....		◆115093	..... Housing Plug+Skts, (Service Kit)	1
.....		◆113746	..... Conn, Rect Mini 045 Skt 24-18Ga .1220D Brass-Tin	6
.....		◆131204	..... Housing Plug+Skts, (Service Kit)	1
.....		◆113746	..... Conn, Rect Mini 045 Skt 24-18Ga .1220D Brass-Tin	3
...		13	◆139041 .. Bushing, Strain Relief .450/.709 Id X1.115 Mtg Hole	1
.....		◆280203	..... Nut, Pg21 1.406 Hex X .281 Thk Nylon Black	1
.....		◆000527	..... Blank, Snap-In Nyl .875 Mtg Hole Black	1
...		14	211989 .. Fitting, W/Screen	1
...		15	272186 .. Nut, 750-14 Nps 1.312hex .413h Nyl	1
...	CB1	16	*161078 .. Supplementary Protector, Man Reset 1P 7A 250VAC Fr	1
...	GS1	17	228036 .. Valve, 24VAC 1Way .750-14 Thd 2.0mm Orf 100 PSI	1
...		18	279264 .. Enclosure, Feeder	1
...		19	281085 .. Bezel, Feeder (No Door)	1
...		20	..... Nameplate, Lower (Order By Model And Serial Number)	1
...	PC2	21	◆240355 .. Circuit Card Assy, Meter	1
.....	PLG16,42	◆282698	..... Plug Assy, Elect	1
.....	PLG15	◆282696	..... Plug W/Leads	1
...	R50	22	◆208399 .. Pot, Cp Std Slot 1T 2. W 10K Linear W/Frict Tabs	1
...	R1	23	*208399 .. Pot, Cp Std Slot 1T 2. W 10K Linear W/Frict Tabs	1
...	S2	24	*211476 .. Switch, Tgl Sptt 6A 125VAC (On)-On-(On) Spd Term Bl	1
...	S3	25	*134847 .. Switch, Tgl Spdt 15A 125VAC On-None-On Spd Term Blk	1
...		26	189404 .. Spacer, Nylon .718 Od X .526 Id X .281 Lg	2
...		27	281084 .. Panel, Front	1
...		28	..... Nameplate, Upper (Order By Model And Serial Number)	1
...		29	171007 .. Knob, Pointer 1.670 Dia X .250 Id W/Set Screwsplstc	1
...		30	◆171007 .. Knob, Pointer 1.670 Dia X .250 Id W/Set Screwsplstc	1
...		31	◆133644 .. Frame, Snap-In Switch Rocker Panel Mtg	1
.....		++280833	..... Harness, Wrg Unit (Includes)	1
.....	S2	211476	..... Switch, Tgl Sptt 6A 125VAC (On)-On-(On) Spd Term Bl	1
.....	R1	208399	..... Pot, Cp Std Slot 1T 2. W 10K Linear W/Frict Tabs	1
.....	CB1	161078	..... Supplementary Protector, Man Reset 1P 7A 250VAC Fr	1
.....	S3	134847	..... Switch, Tgl Spdt 15A 125VAC On-None-On Spd Term Blk	1
.....	RC9	048282	..... Rcpt W/Skts, (Service Kit)	1
.....		079534	..... Conn, Circ Ms/Cpc Skt Pushin 14-18Ga .080-.100 Insu	4

++If PLG1, 3, 4, 5 or RC7 needs to be replaced, then order 280833 wiring harness.

◆OPTIONAL

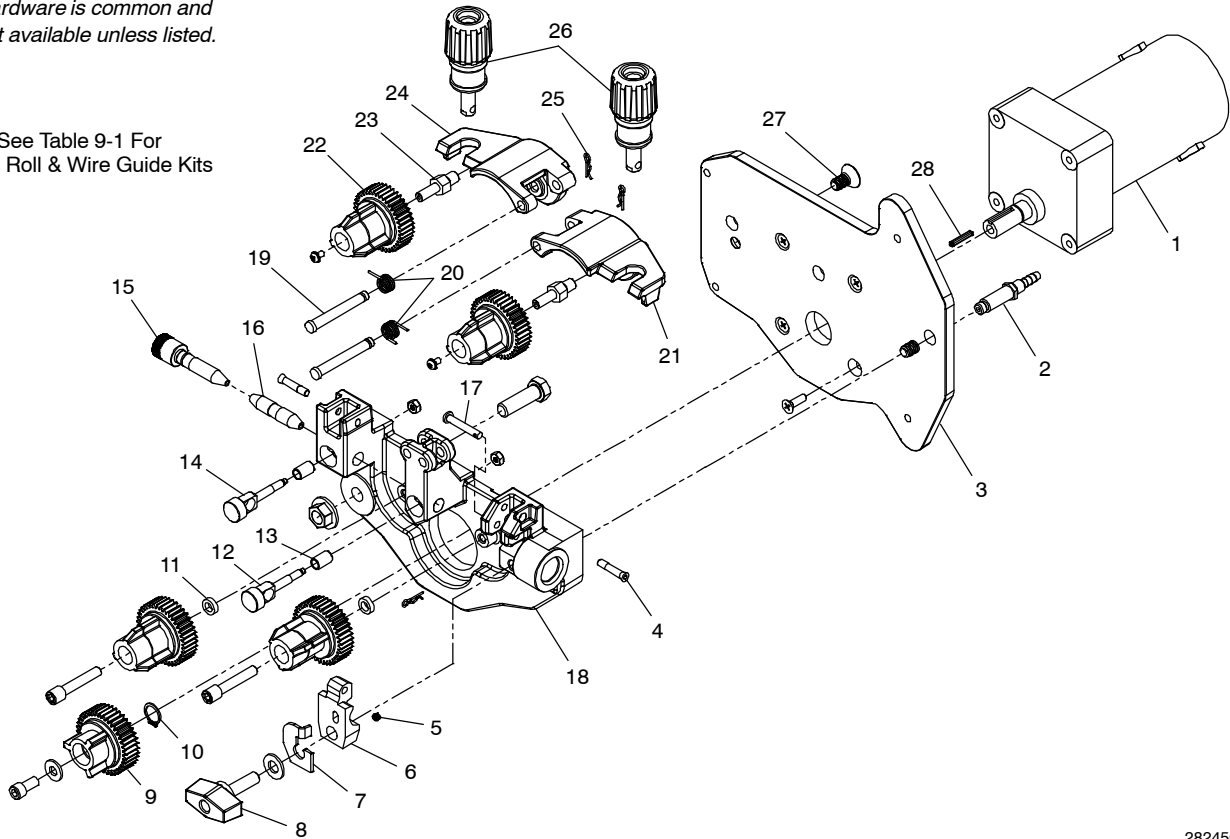
*Recommended Spare Parts.

+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.

☞ Hardware is common and not available unless listed.

See Table 9-1 For Drive Roll & Wire Guide Kits



282450-B

Figure 9-3. Drive Assembly, Wire

Item No.	Dia. Mkgs.	Part No.	Description	Quantity
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Figure 9-3. Drive Assembly, Wire (Figure 9-2 Item 1)

...	1	M1	193188	.. Motor, Gear 24VDC 146RPM 29:1 Ratio Continuous	1
...	2		279256	.. Ftg, Hose Brs Barbed W/Volt Sense Mtg	1
...	3		279252	.. Insulator, Motor Drive (4 Roll)	1
...	4		281870	.. Screw, 010-32x .94 Flatd-Soc Stl Pld (Customized)	2
...	5		281784	.. Spring, Cprsn .180 Od X .018 Wire X .531 Pld	1
...	6		279259	.. Clamp, Power Pin	1
...	7		237188	.. Lock, Pin Power	1
...	8		151437	.. Knob, Plastic T 1.125 Lg X .312-18 X 1.500	1
...	9		172077	.. Carrier, Drive Roll Keyed 24 Pitch	1
...	10		605308	.. Ring, Rtnng Ext .500 Shaft X .035 Thk	1
...	11		166072	.. Spacer, Gear	2
...	12		279262	.. Button, Lock Guide Intermediate	1
...	13		279263	.. Spring, Cprsn .312 Od X .250 Id Rate 5.2 Lbs/In	2
...	14		279261	.. Button, Lock Guide Inlet	1
...	15		221030	.. Guide, Wire Inlet Anti-Wear One Pc (.023 TO 5/64)	1
...	16		056209	.. Guide, Wire Intermediate 1/16-5/64	1
...	17		234073	.. Pin, Hinge	1
...	18		279167	.. Housing, Wire Drive 4 Roll (Push Button)	1
...	19		279255	.. Pin, Hinge	2
...	20		279257	.. Spring, Torsion	2
...	21		279179	.. Lever, Mtg Pressure Gear Front (Single Drive)	1
...	22		172075	.. Carrier, Drive Roll W/Cmpnts 24 Pitch	4
...	23		252238	.. Stand-Off, Drive Roll Carrier	2

Item No.	Dia. Mkgs.	Part No.	Description	Quantity
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Figure 9-3. Drive Assembly, Wire (Continued)

... 24	279181	.. Lever, Mtg Pressure Gear Rear (Single Drive) 1
... 25	.....	151828	.. Pin, Cotter Hair .042 X .750	..... 3
... 26	.....	252217	.. Knob Assy, Tension Adjust	..... 2
... 27	.....	281348	.. Screw, 312-18x .50 Flatd-Phl Stl Pld W/Lkg Patch	..... 2
... 28	.....	092865	.. Key, Stl .1215/.1230 X .750	..... 1

*Recommended Spare Parts.

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.

Table 9-1. Drive Roll & Wire Guide Kits (4 Drive Roll)

☞ Base selection of drive rolls upon the following recommended usages:

1. V-Grooved rolls for hard wire.
2. U-Grooved rolls for soft and soft shelled cored wires.
3. U-Cogged rolls for extremely soft shelled wires (usually hard surfacing types).
4. V-Knurled rolls for hard shelled cored wires.
5. Drive roll types may be mixed to suit particular requirements (example: V-Knurled roll in combination with U-Grooved).

Wire Diameter			Kit No.	Drive Roll		Wire Guide	
Fraction	Decimal	Metric		Part No.	Type	Inlet	Intermediate
.023/.025 in.	.023/.025 in.	0.6 mm	087132	087130	V-Grooved	056192	056206
.030 in.	.030 in.	0.8 mm	046780	053695	V-Grooved	056192	056206
.035 in.	.035 in.	0.9 mm	046781	053700	V-Grooved	056192	056206
.040 in.	.040 in.	1.0 mm	191917	053696	V-Grooved	056192	056206
.045 in.	.045 in.	1.2 mm	046782	053697	V-Grooved	056193	056207
.052 in.	.052 in.	1.3 mm	046783	053698	V-Grooved	056193	056207
1/16 in.	.062 in.	1.6 mm	046784	053699	V-Grooved	056195	056209
.035 in.	.035 in.	0.9 mm	044750	072000	U-Grooved	056192	056206
.045 in.	.045 in.	1.2 mm	046785	053701	U-Grooved	056193	056207
.052 in.	.052 in.	1.3 mm	046786	053702	U-Grooved	056193	056207
1/16 in.	.062 in.	1.6 mm	046787	053706	U-Grooved	056195	056209
5/64 in.	.079 in.	2.0 mm	046788	053704	U-Grooved	056195	056209
.035 in.	.035 in.	0.9 mm	046792	132958	V-Knurled	056192	056206
.045 in.	.045 in.	1.2 mm	046793	132957	V-Knurled	056193	056207
.052 in.	.052 in.	1.3 mm	046794	132956	V-Knurled	056193	056207
1/16 in.	.062 in.	1.6 mm	046795	132955	V-Knurled	056195	056209
5/64 in.	.079 in.	2.0 mm	046796	132960	V-Knurled	056195	056209
.045 in.	.045 in.	1.2 mm	083319	083489	U-Cogged	056193	056207
1/16 in.	.062 in.	1.6 mm	046800	053708	U-Cogged	056195	056209
5/64 in.	.079 in.	2.0 mm	046801	053710	U-Cogged	056195	056209

Ref. S-0025-D

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