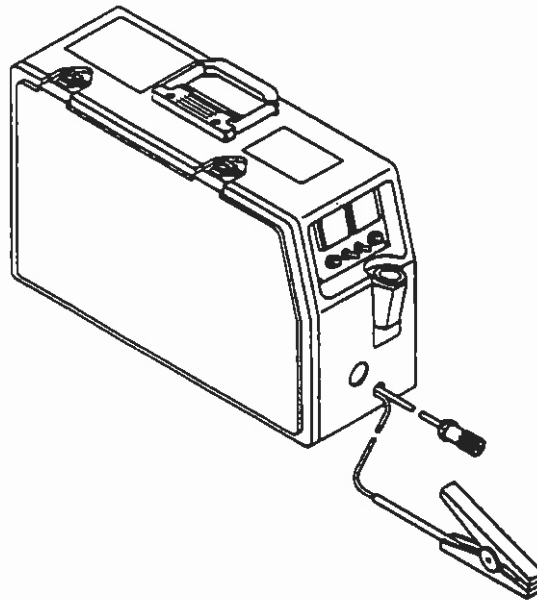




**! IMPORTANT !**  
- FOR YOUR SAFETY -  
READ THIS MANUAL BEFORE  
INSTALLING OR USING EQUIPMENT

# OPERATION MANUAL



## PDVS-II

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# SECTION 6 – ELECTRICAL DIAGRAM

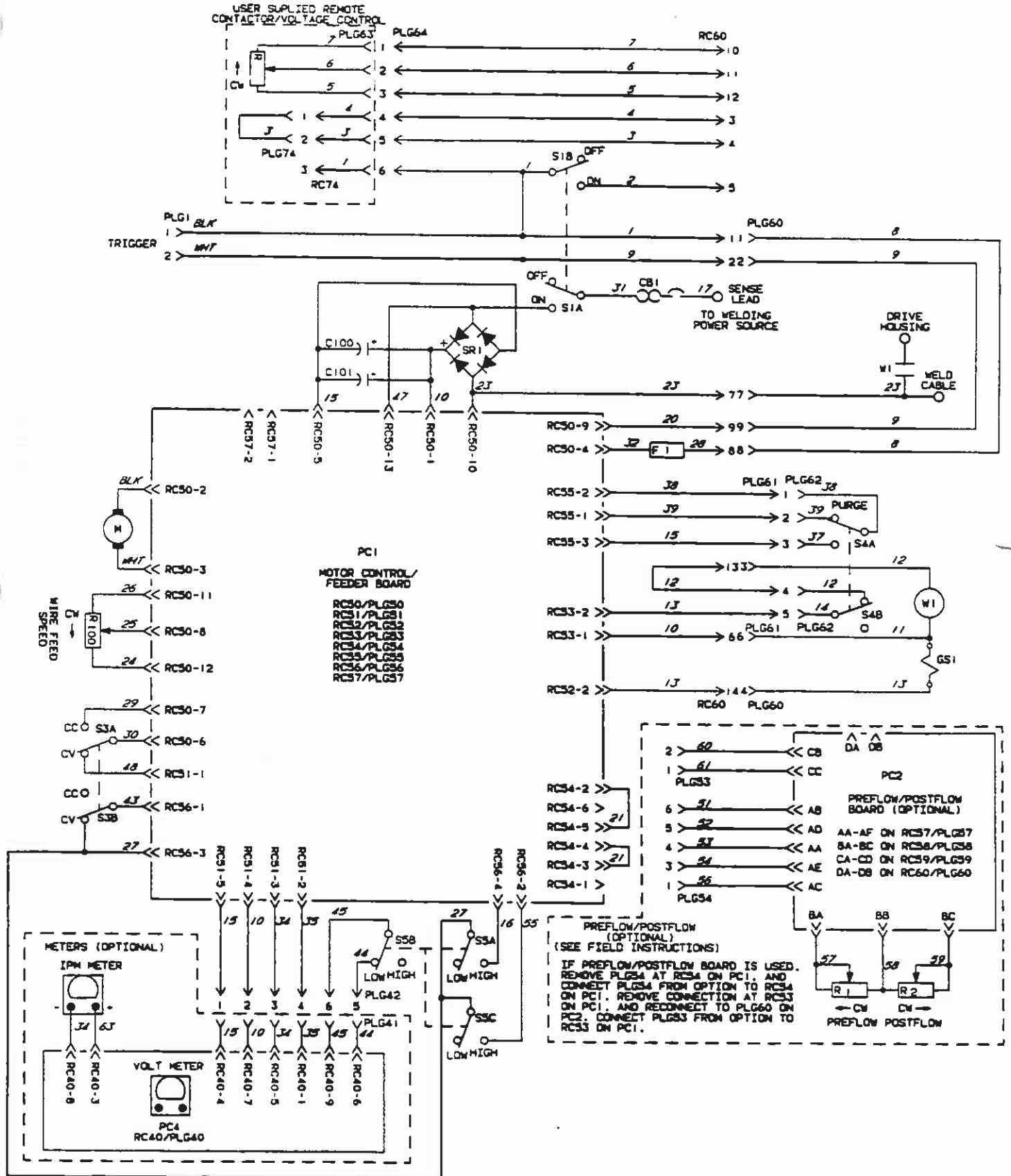


Figure 6-1. Circuit Diagram For Wire Feeder

# SECTION 7 - PARTS LIST

See Table 7-1 For  
Drive Roll & Wire Guide Kits

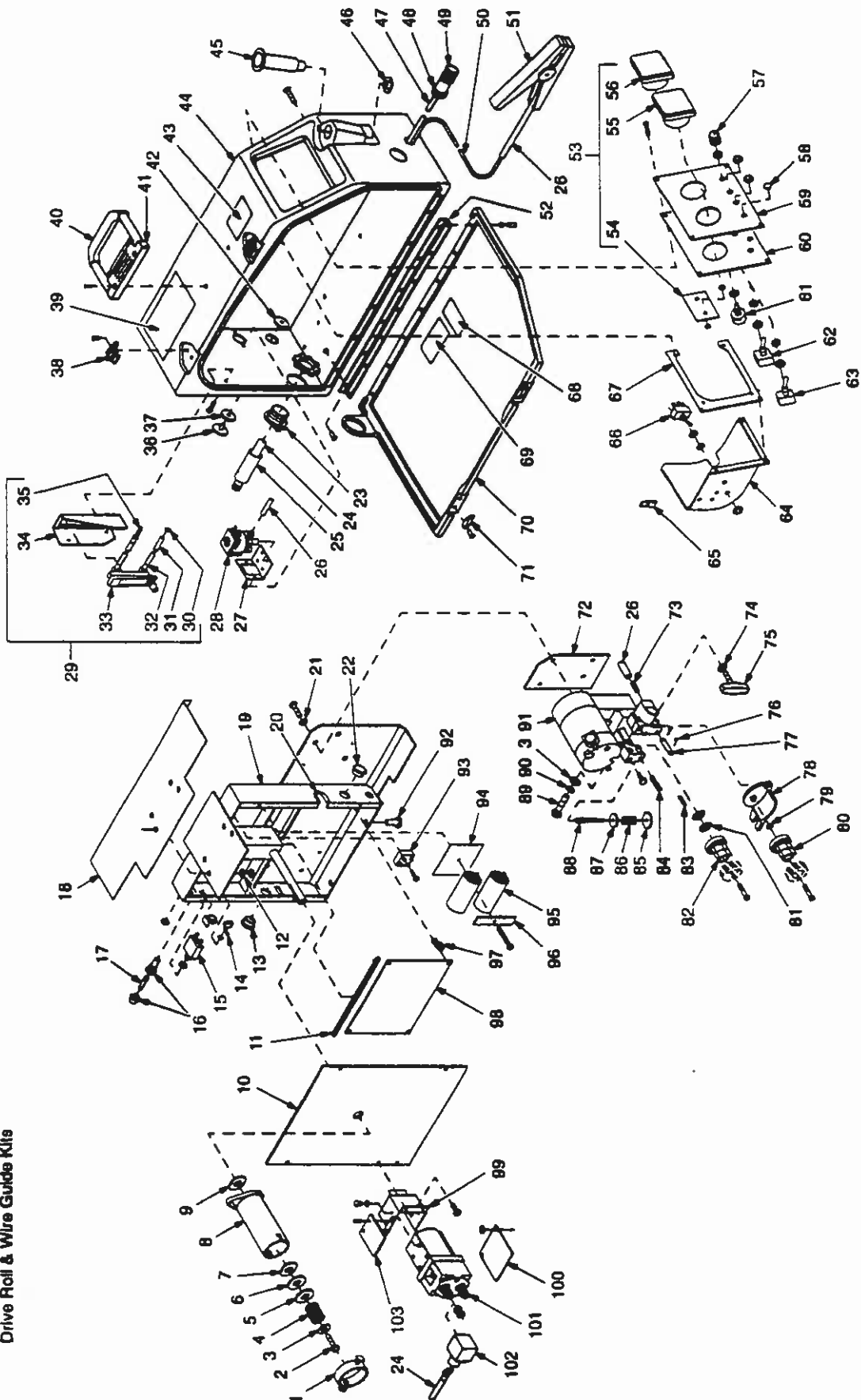


Figure 7-1. Complete Assembly

ST-000 001

Item No.	Dia. Mkgs.	Part No.	Description	Quantity
<b>Figure 7-1. Complete Assembly</b>				
1		058 427	RING, retaining spool	1
2		601 965	SCREW, cap stl hexhd .375-16 x 1.000	1
3		602 243	WASHER, flat stl std .438 ID	2
4		010 233	SPRING, cprsn .970 OD x .120 wire	1
5		057 971	WASHER, flat stl keyed 1.500dia	1
6		010 191	WASHER, fbr .656 ID x 1.500 OD	1
7		058 628	WASHER, brake stl	1
8		058 428	HUB, spool	1
9		058 424	WASHER, fibre (brake)	1
10		134 222	COVER, PC board	1
11		126 738	GUIDE, mtg PC card	1
12		161 077	WASHER, shldr nyl .390 OD x .196 ID x .287dia shldr	4
13		010 493	BUSHING, snap-in nyl .625 ID	1
14	S3	094 026	SWITCH, tgl DPDT 5A 125VAC	1
15	CB1	161 078	CIRCUIT BREAKER, man reset 1P 7A 250VAC	1
16		046 432	HOLDER, fuse mintr	1
17	F1	012 653	FUSE, mintr gl 5A 250V	1
18		161 071	SUPPORT, case	1
19		161 072	CHASSIS, control box	1
		099 037	EDGE TRIM, style 62-1/16 (order by ft)	1ft
20		603 107	HOSE, nprn slit bk .156 ID x .343 OD (order by ft)	1ft
21		128 673	WASHER, shldr nyl .625 OD x .203 ID x .312dia shldr	4
22		030 170	BUSHING, snap-in nyl .750 ID x 1.000mtg hole	1
23		010 467	CONNECTOR, clamp cable 1.250	1
24		600 322	CABLE, weld cop strd No. 2/0 (order by ft)	1ft
25		039 630	CONNECTOR, twlk insul male	1
26		134 834	HOSE, SAE .187 ID x .410 OD (order by ft)	4ft
27		126 310	BRACKET, mtg valve gas	1
28	GS1	128 074	VALVE, 12VDC 2 way custom port 1/8 orf	1
29		161 811	FLOW METER, gas (consisting of)	1
30		089 120	CLAMP, hose .375-.450clip dia slftng	2
31		134 834	HOSE, SAE .187 ID x .410 OD (order by ft)	2ft
32		112 090	FITTING, pipe brs elbow 1/8NPT x 3/16 hose	1
		056 108	FITTING, hose brs ferrule .450 ID x .718 lg	1
33		111 569	METER, flow 6-60	1
34		162 486	GUARD, flow meter	1
35		162 485	HOSE, gas output (consisting of)	1
		112 090	FITTING, pipe brs elbow 1/8NPT x 3/16 hose	1
		056 108	FITTING, hose brs ferrule .450 ID x .718 lg	2
		134 834	HOSE, SAE .187 ID x .410 OD (order by ft)	1ft
		079 196	FITTING, brs barbed fem 3/16tbg x 1/4NPT	1
		073 433	FITTING, brs barbed M 3/16tbg x 1/4NPT	1
36		134 230	BLANK, snap-in nyl .250mtg hole x 1.250 head	2
37		134 233	WASHER, fbr .281 ID x .781 OD x .125thk	1
		134 232	WASHER, fbr .281 ID x 1.031 OD x .125thk	1
38		089 572	CATCH, link lock	2
39		134 327	LABEL, warning general precautionary	1
40		126 416	HANDLE	1
41		126 415	CLAMP, saddle	1
42		134 231	WASHER, fbr .250 ID x 1.250 OD x .125thk	2
43		097 770	LABEL, warning electric shock can kill	1
44		+138 582	CASE, control feeder	1
45		090 099	INSULATOR, gun holder	1
46		044 800	WASHER, spring grip locking .750sft	1
47		049 455	CABLE, port No. 18 2/c (order by ft)	2ft
48		048 834	CONNECTOR, circ clamp str rif sz 11 Amp 206062-4	1
49	PLG1	080 328	CONNECTOR w/SOCKETS, free hanging (consisting of)	1
		079 534	CONNECTOR, circ skt push-in 14-18ga Amp 66358-6	4

Item No.	Dia. Mkgs.	Part No.	Description	Quantity
<b>Figure 7-1. Complete Assembly (Continued)</b>				
50		600 399	WIRE, lead mot 14ga (order by ft)	15ft
51		121 593	CLAMP, sensing cable (consisting of)	1
		111 478	CLAMP, sensing cable	1
		111 427	STRAIN RELIEF, cable	1
		114 486	JAW, top	1
		111 425	JAW, bottom	1
52		126 308	HINGE, cover	1
53		161 241	METER, V/WFS (consisting of)	1
54	PC4	162 223	CIRCUIT CARD, meter	1
	PLG40	163 467	CONNECTOR & SOCKETS, (consisting of)	1
		147 995	CONNECTOR, rect skt 22-18ga Amp 770904-3	9
	PLG41	153 501	CONNECTOR & SOCKETS, (consisting of)	1
		147 995	CONNECTOR, rect skt 22-18ga Amp 770904-3	6
55		091 961	METER, volt DC 0-10 scale	1
56		091 962	METER, IPM 0-10MV	1
57		097 922	KNOB, pointer	1
58		057 359	BLANK, snap-in nyl .375mtg hole	1
59			NAMEPLATE, (order by model and serial number)	1
60		161 070	PANEL, front	1
61	R100	162 627	POTENTIOMETER	1
62	S5	011 622	SWITCH, tgl 3PDT 15A 125VAC	1
63	S1	011 611	SWITCH, tgl DPDT 15A 125V	1
64		168 246	COVER, control/feeder	1
65		109 155	NUT, speed U type10-32	1
66	S4	118 681	SWITCH, tgl DPDT 15A 125VAC	1
67		131 604	BRACKET, cover	1
68		071 602	LABEL, caution HF will damage	1
69		090 439	LABEL, warning electric shock can kill	1
70		+138 580	COVER, control/feeder	1
71		089 573	PLATE, keeper link lock	2
72		089 556	INSULATION, motor	1
73		144 172	FITTING, brs barbed M 3/16tbg x .250-20	1
74		604 538	WASHER, flat stl SAE .312	1
75		079 772	KNOB, plstc T 1.500 lg x .312-18 x 2.000 bar	1
76		151 828	PIN, cotter hair .054 x .750	2
77		089 555	PIN, hinge	1
78		166 338	LEVER, mtg pressure gear	1
79		166 072	SPACER, gear	1
80		150 147	CARRIER, drive roll w/components	1
81		079 625	WASHER, spring stl .500 shakeproof	2
82		155 465	CARRIER, drive roll w/components keyed	1
83		092 865	KEY, stl .1215/.1230 x .750	1
84		010 224	PIN, spring CS .187 x 1.000	1
85		092 237	KNOB, adj tension	1
86		089 477	SPRING, cprsn .770 OD x .100 wire x .715	1
87		085 244	WASHER, cupped stl .328 ID x .812 OD x .125 lip	1
88		089 562	FASTENER, pinned	1
89		601 964	SCREW, cap stl hexhd .375-16 x .750	1
90		602 213	WASHER, lock stl split .375	1
91	M	160 816	MOTOR, 24VDC 5.2A 118RPM (consisting of)	1
		095 564	BRUSH, motor carbon	2
		095 565	CAP, brush motor	2
92		081 895	NUT, well 10-32	5
93	SR1	035 704	RECTIFIER, integ 40A 800V	1
94		126 764	INSULATOR, capacitor	1
95	C100,101	111 441	CAPACITOR, elctlt 1200uf 250VDC	2
96		126 312	STRIP, mtg capacitor	1
97		110 375	STAND-OFF SUPPORT, PC card No. 6 screw	2

Item No.	Dia. Mkgs.	Part No.	Description	Quantity
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**Figure 7-1. Complete Assembly (Continued)**

98	PC1	159 342	CIRCUIT CARD, motor control	1
	PLG50	166 656	CONNECTOR & SOCKETS, (consisting of)	1
		079 747	CONNECTOR, rect skt 24-18ga Amp 350980-1	13
	PLG51	166 657	CONNECTOR & SOCKETS, (consisting of)	1
		079 747	CONNECTOR, rect skt 24-18ga Amp 350980-1	5
	PLG52,53	135 557	CONNECTOR & SOCKETS, (consisting of)	2
		079 747	CONNECTOR, rect skt 24-18ga Amp 350980-1	2
	PLG54	135 558	CONNECTOR & SOCKETS, (consisting of)	1
		079 747	CONNECTOR, rect skt 24-18ga Amp 350980-1	7
	PLG55	166 658	CONNECTOR & SOCKETS, (consisting of)	1
		079 747	CONNECTOR, rect skt 24-18ga Amp 350980-1	3
	PLG56	153 501	CONNECTOR & SOCKETS, (consisting of)	1
		147 995	CONNECTOR, rect skt 22-18ga Amp 770904-3	6
99		131 640	BRACKET, mtg contactor	1
100		126 309	INSULATOR, contactor	1
101	W1	138 035	CONTACTOR, 12VDC SPST on-off	1
102		166 483	BOOT, insulator term post black 2/0 cable	1
103		131 655	INSULATOR, contactor	1
	PLG42	166 659	CONNECTOR & PINS, (consisting of)	1
		147 996	CONNECTOR, rect pin 22-18ga Amp 770903-3	6
	PLG60	131 056	CONNECTOR & SOCKETS, (consisting of)	1
		113 746	CONNECTOR, rect skt 24-18ga Molex 39-00-0038	14
	PLG61	131 060	CONNECTOR & PINS, (consisting of)	1
		114 656	CONNECTOR, rect pin 24-18ga Molex 39-00-0040	5
	PLG62	131 055	CONNECTOR & SOCKETS, (consisting of)	1
		113 746	CONNECTOR, rect skt 24-18ga Molex 39-00-0038	5
	PLG64	131 059	CONNECTOR & PINS, (consisting of)	1
		114 656	CONNECTOR, rect pin 24-18ga Molex 39-00-0040	6
	RC60	131 058	CONNECTOR & PINS, (consisting of)	1
		114 656	CONNECTOR, rect pin 24-18ga Molex 39-00-0040	14
		010 143	CLAMP, nyl .375cip dia	1

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

◆OPTIONAL

\*Recommended Spare Parts.

**BE SURE TO PROVIDE MODEL AND SERIAL NUMBER WHEN ORDERING REPLACEMENT PARTS.**



Table 7-1. Drive Roll & Wire Guide Kits (2 Drive Roll)

**NOTE** 

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		Inlet Wire Guide
Fraction	Decimal	Metric		Part No.	Type	
.023/.025 in	.023/.025 in	0.6 mm	087 131	087 130	V-Grooved	056 192
.030 in	.030 in	0.8 mm	079 594	053 695	V-Grooved	056 192
.035 in	.035 in	0.9 mm	079 595	053 700	V-Grooved	056 192
.045 in	.045 in	1.2 mm	079 596	053 697	V-Grooved	056 193
.052 in	.052 in	1.3 mm	079 597	053 698	V-Grooved	056 193
1/16 in	.062 in	1.6 mm	079 598	053 699	V-Grooved	056 195
.035 in	.035 in	0.9 mm	044 749	072 000	U-Grooved	056 192
.045 in	.045 in	1.2 mm	079 599	053 701	U-Grooved	056 193
.052 in	.052 in	1.3 mm	079 600	053 702	U-Grooved	056 193
1/16 in	.062 in	1.6 mm	079 601	053 706	U-Grooved	056 195
5/64 in	.079 in	2.0 mm	079 602	053 704	U-Grooved	056 195
.035 in	.035 in	0.9 mm	079 606	132 958	V-Knurled	056 192
.045 in	.045 in	1.2 mm	079 607	132 957	V-Knurled	056 193
.052 in	.052 in	1.3 mm	079 608	132 956	V-Knurled	056 193
1/16 in	.062 in	1.6 mm	079 609	132 955	V-Knurled	056 195
.068-.072 in	.068-.072	1.8 mm	089 984	132 959	V-Knurled	056 195
5/64 in	.079 in	2.0 mm	079 610	132 960	V-Knurled	056 195
.045 in	.045 in	1.2 mm	083 318	083 489	U-Cogged	056 193
.052 in	.052 in	1.3 mm	083 317	083 490	U-Cogged	056 193
1/16 in	.062 in	1.6 mm	079 614	053 708	U-Cogged	056 195
5/64 in	.079 in	2.0 mm	079 615	053 710	U-Cogged	056 195

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