



PM-254824A

2023-11

Processes



MIG (GMAW) Welding

Description

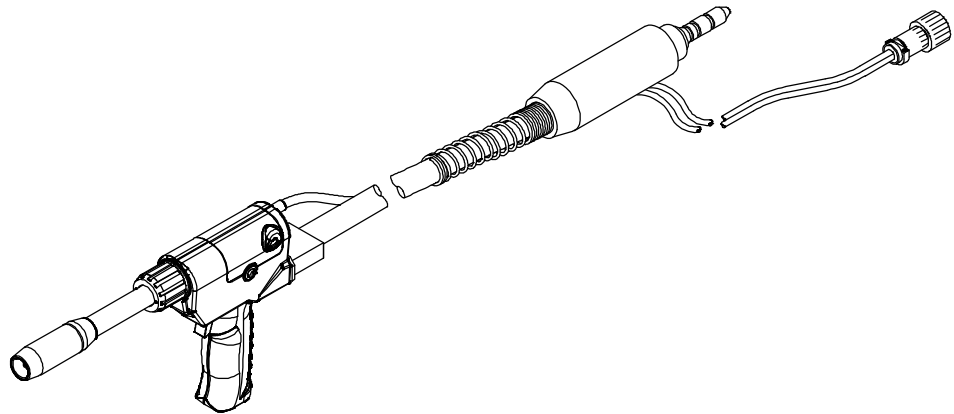


Semi-Automatic, Air/Water-Cooled, MIG (GMAW) Welding Gun

XRTM - Pistol - Pro

(Air And Water-Cooled Guns)

Eff w/Serial No.
MC311405T And Following



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PARTS MANUAL

File: MIG (GMAW)



SECTION 1 – PARTS LIST FOR SERIAL NO. MC311405T AND FOLLOWING



Figure 1-1. Exploded View Of XR - Pistol - Pro Gun

Eff w/Serial No. MC311405T And Following

Item No.	Part No.	Description	Quantity
Figure 1-1. Exploded View Of XR - Pistol - Pro Gun			
1	257353	Kit, Handle XR Pistol Pro/Plus	1
2	000369	Limit Switch 10A	1
3	183884	Spring, Cprsn .300 Od X .026 Wire X 1.250	1
4	184101	Washer, Shldr.140ld 0.250Odx.047T .340Odx.078T Nyl	1
5	217934	Screw, K40x 20 Pan Hd-Trx Stl Pld Pt Thread Forming	3
6	248333	Pistol Plus/Pro Cover	1
7	200096	Potentiometer, C Sltd Sft 1/T .5W 10K Ohm	1
8	175731	Washer, Anti-turn	1
9	135127	Lock, Shaft Pot .250-32 X .125Dia Shaft	1
10	134856	Knob, Speed Control 1-10 .140 Shaft X 1.125 Od	1
11	602169	Screw, Set Stl Sch 8-32 X .187	2
12	135580	Fitting, Gas	1 A/C, 2 W/C
13	149332	Clamp, Hose .405 - .485 Clp Dia	2 A/C, 3 W/C
14	191072	Hose, Water In 15Ft	1
14	248361	Hose, Water In 25Ft	1
14	248376	Hose, Water In 35Ft	1
15	191058	Hose, Gas In 15Ft	1
15	248356	Hose, Gas In 25Ft	1
15	248371	Hose, Gas In 35Ft	1
16	M1114	Conduit/Liner Assembly, 15 Ft	1
16	248357	Conduit/Liner Assembly, 25 Ft	1
16	248372	Conduit/Liner Assembly, 35 Ft	1
17	M1115	Liner,.175-.180 Od X .120 Id Hi Lube 15' Gun W/Rng	1
17	248359	Liner,.175-.180 Od X .120 Id Hi Lube 25' Gun W/Rng	1
17	248375	Liner,.175-.180 Od X .120 Id Hi Lube 35' Gun W/Rng	1
18	191052	Cable, Power/Water Out 15Ft	1
18	228696	Cable, Power/Water Out 25Ft	1
18	232055	Cable, Power/Water Out 35Ft	1
19	M1269	Cable, Control 15Ft - Pistol Pro (Prior to MF490202T)	1
19	M1593	Cable, Control 15Ft, No Ins. Sleeve - Pistol Pro (Eff w/MF490202T)	1
19	296023	Cable, Control, Field Rep, 15 Ft P-Pro	1
19	M1245	Cable, Control 25Ft - Pistol Pro (Prior to MF490202T)	1
19	M1594	Cable, Control 25Ft, No Ins. Sleeve - Pistol Pro (Eff w/MF490202T)	1
19	296024	Cable, Control, Field Rep, 25 Ft P-Pro	1
19	M1246	Cable, Control 35Ft - Pistol Pro (Prior to MF490202T)	1
19	M1595	Cable, Control 35Ft, No Ins. Sleeve - Pistol Pro (Eff w/MF490202T)	1
19	296025	Cable, Control, Field Rep, 35 Ft P-Pro	1
20	235751	Tubing, Silicone Rbr .500 Id X Spool Black	1
21	235225	Strip, Cop .010 X 1.500 X .750	1
22	133362	Strain Relief, Cable (Air) (Prior to MF290005T)	1
22	M1570	Strain Relief, Cable (Air) (Eff w/MF290005T)	1
22	238875	Strain Relief, Molded (Water)	1
23	227449	Jacket, Cable 2 Ft 4 In (Power Pin)	1
24	236764	Cable Cover, Leather W/Velcro 15Ft	1
24	248355	Cable Cover, Leather W/Velcro 25Ft	1
24	248377	Cable Cover, Leather W/Velcro 35Ft	1
25	235831	Cable, Power 15Ft (Air) - Pistol Plus	1
25	248381	Cable, Power 25Ft (Air) - Pistol Plus	1
25	248386	Cable, Power 35Ft (Air) - Pistol Plus	1
26	152577	Strip, Copper .010 X 2.000 X .750	1
27	137495	Fitting, Connection Power Weld	1
28	141694	Screw, Set 312-18 X .37 Conept Sch Stl Pln	1
29	203562	Spring, Strain Relief	1
30	203560	Strain Relief, Spring Retainer	1

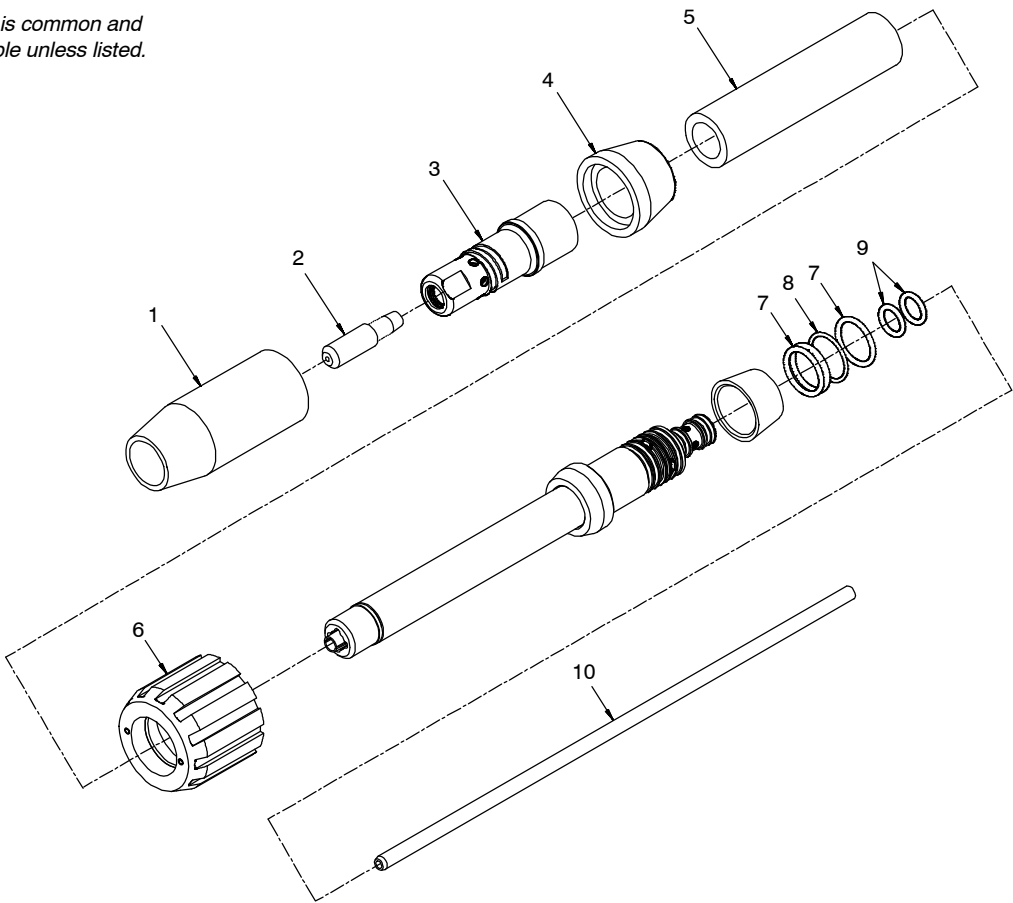
Eff w/Serial No. MC311405T And Following

Item No.	Diagram marking	Part No.	Description	Quantity
Figure 1-1. Exploded View Of XR - Pistol - Pro Gun (Continued)				
.. 31		203539	.. Fitting, Liner Double Wound Adapter	1
.. 32		189812	.. Housing, Power Pin Rh	1
.. 33		196177	.. Hose, Water Out 10 in.	1
.. 34		202513	.. Fitting, Hose Brs Barbed M 3/16 Tbg X .250-20	1 A/C, 2 W/C
.. 35		193896	.. Pin, Power Assembly	1
.. 36		079974	.. O-ring, .500 Id X .103 Cs Rbr	2
.. 37		229852	.. Guide, Collet Outlet .030-1/16	1
.. 38		M1102	.. Guide, Cone Outlet	1
.. 39		187029	.. Connector, Power/Gas	1
.. 40		189811	.. Housing, Power Pin Lh	1
.. 41		203557	.. Clamp, 1-Ear Type Nom Dim .391 X .236 Wide Special	2
.. 42		255716	.. Kit, Head Tube Assy (Air) AP/PP 180Deg 4In.	1
.. 42		255717	.. Kit, Head Tube Assy (Water) AP/PP 180Deg 4In.	1
.. 43		248329	.. W/C Pistol Block Assy	1
.. 43		248388	.. A/C Pistol Block Assy	1
.. 44		M1154	.. Screw, 008-32 X .625 Soc Hd-Hex Stl Pld Lkg Patch	2
.. 45		227434	.. Drive Roll Knurled	1
.. 46		226588	.. Screw, 010-32 X .37 Btn Hd-Soc Sst Lkg Patch	1
.. 47		248466	.. Screw, 18-8 Hex Socket Shld 6-32 Thread	1
.. 48		155565	.. Screw, Thumb	1
.....		134799	.. O-ring, .176 Id X .070 Cs (Used W/Thumbscrew)	1
.. 49		134624	.. Washer Shldr .141 Id 0.187 Od X .094T .375 Od X .031T Nyl	2
.. 50		227435	.. Arm, Pressure (Machined)	1
.. 51		231443	.. Screw, 006-32 X .44 Soc Hd-Hex Grd 8 Pld Lkg Patch	1
.. 52		227439	.. Drive Roll Assy, Idler .645 Od	1
.. 53		227421	.. Spring, Crspn .360 Od X .059 Wire X .440 Free	1
.. 54		229850	.. Washer, Pressure Arm Precision	1
.. 55		M1376	.. Knob, Tension Pistol Pro/Plus 8-32 Thd	1
.. 56		229851	.. Nut, Pressure Arm Plastic	1
.. 57		005464	.. Screw, Set 250-20x .37 Ovl Pt Sch Stl Pln Nylok	1
.. 58		235753	.. Ftg, Connection Power Weld	1
.. 59		234971	.. Screw, Set 250-20x .31 Conept Sch Stl W/Nyl Patch (Air)	1
.. 59		078753	.. Screw, Set 250-20x .31 Cup Pt Sch Stl Pln	1
.. 60		136679	.. Clamp, Strain Relief	1
.. 61		129351	.. Screw, 008-32 X .50 Hexwhd .34D W/Spl Gndrng Stl Pld	1
.. 62		191121	.. Screw, 006-32 X .37 Btn Hd-Soc Stl Pld	2
.. 63		164592	.. Trigger	1
.. 64		M1223	.. Motor Assembly - Pistol Pro	1
.. 65		M1358	.. Lever, Arm Assy Pistol Plus/Pro	1
.. 66		M1124	.. Set Screw 6-32 X .625	1
.. 67		248328	.. Motor Top Plate	1
.. 68		M1106	.. Pistol Plus Manifold Insulator	1
.. 69		227429	.. Screw, 004-40 X .25 Rnd Hd-Phl Stl Pld Lkkg Patch	3
.. 70		089120	.. Clamp, Hose .375 - .450 Clp Dia Slftng Green	1
.. 71		M1415	.. Kit, Manifold Block-Air Pistol Pro/Plus	1
.. 71		M1452	.. Kit, Manifold Block-Water Pistol Pro/Plus	1
.. 72		M1460	.. O-Ring, .143 Id X .349 Od X .103 Cs, Buna-N (Eff w/MD311616T)	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.

Eff w/Serial No. MC311405T And Following

☞ Hardware is common and not available unless listed.



T0030

Figure 1-2. (Water) Head Tube Assembly Of XR - Pistol - Pro Gun

Item No.	Part No.	Description	Quantity
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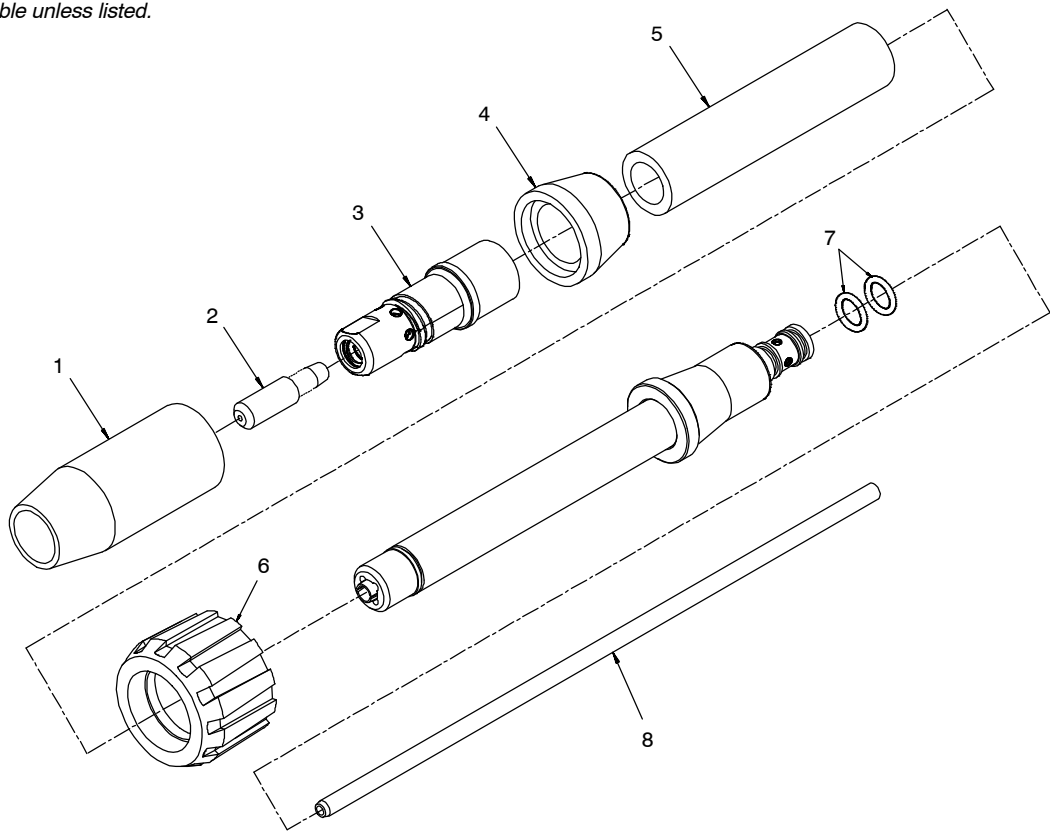
Figure 1-2. (Water) Head Tube Assembly Of XR - Pistol - Pro Gun
(Figure 1-1 Item 42)

.....	255717	.. Kit, Head Tube Assy (Water) AP/PP 180deg 4in.	1
... 1	198855	.. Nozzle, Copper 5/8in. Orifice Tapered	1
... 2	206189	.. Tip, Fastip .312 Od .052 And 3/64Al Wires	1
... 3	229670	.. Diffuser, .281/.312 Od Collar Fastip 1/8 Rec Aluma	1
... 4	232284	.. Insulator, Nozzle Collared	1
... 5	M1369	.. Jacket Outer Insulating W/C Pistol Pro	1
... 6	229889	.. Nut, Head Tube Rotation Water	1
... 7	194261	.. O-Ring, .551 Id X .070 Cs 70 Duro Buna-n	3
... 8	210771	.. O-Ring, 14.99mm Id X 1.27mm Cs 70 Duro Buna-n	1
... 9	191191	.. O-Ring, .312 Id X .070 Cs 70 Duro Buna-n	2
... 10	M1273	.. Liner, Teflon .047-.062 Wire Pistol Pro	1
.....	230970	.. Kit, Replacement O-Rings Head Tube Water	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.

Eff w/Serial No. MC311405T And Following

☞ Hardware is common and not available unless listed.



T0029

Figure 1-3. (Air) Head Tube Assembly Of XR - Pistol - Pro Gun

Item No.	Part No.	Description	Quantity
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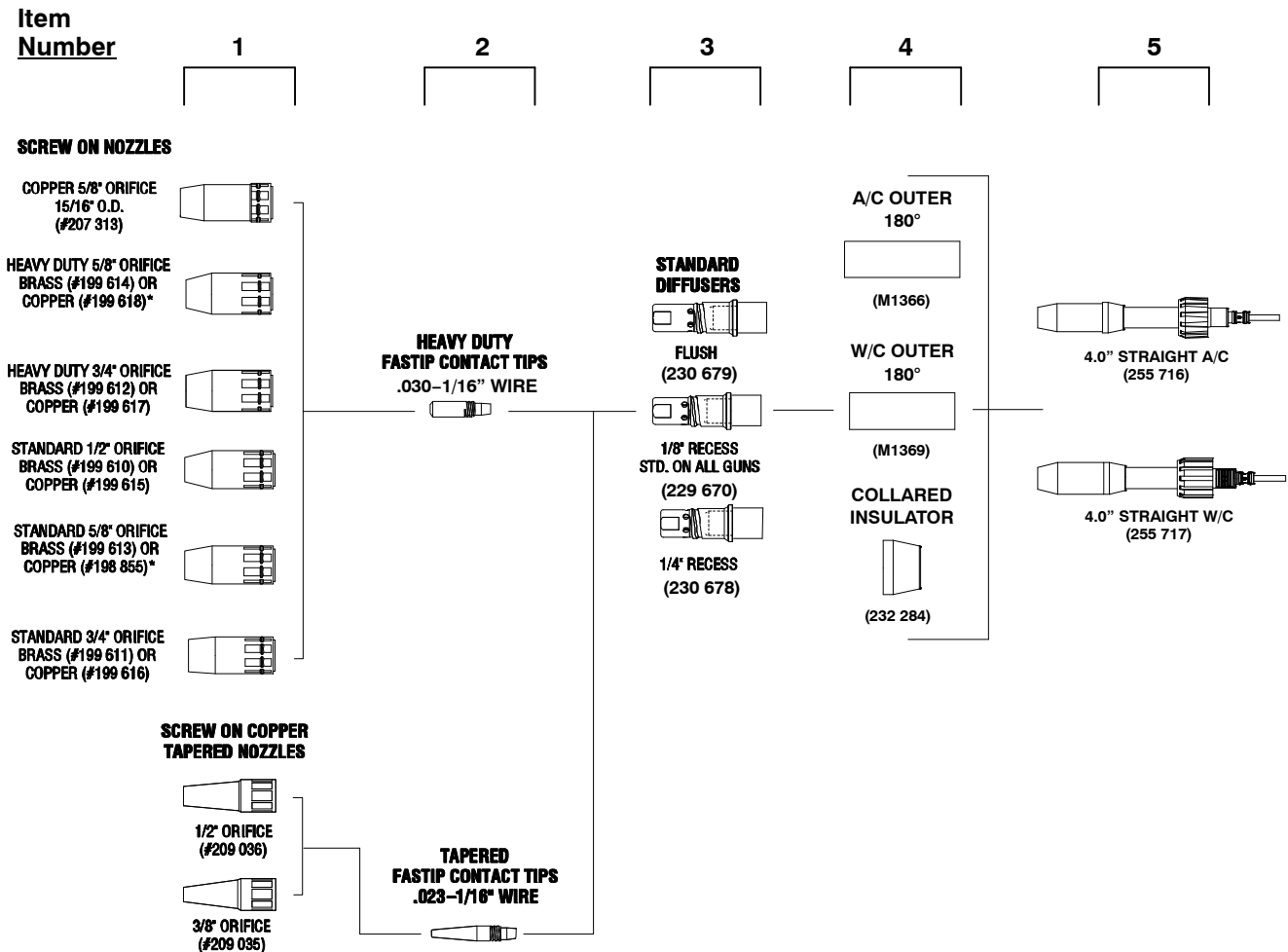
Figure 1-3. (Air) Head Tube Assembly Of XR - Pistol - Pro Gun
(Figure 1-1 Item 42)

.....	255716	.. Kit, Head Tube Assy (Air) AP/PP 180deg 4in.	1
... 1	198855	.. Nozzle, Copper 5/8in. Orifice Tapered	1
... 2	206189	.. Tip, Fastip .312 Od .052 And 3/64Al Wires	1
... 3	229670	.. Diffuser, .281/.312 Od Collar Fastip 1/8 Rec Aluma	1
... 4	232284	.. Insulator, Nozzle Collared	1
... 5	M1366	.. Jacket Outer Insulating A/C Pistol Pro	1
... 6	227168	.. Nut, Head Tube Rotation	1
... 7	191191	.. O-Ring, .312 Id X .070 Cs 70 Duro Buna-n	2
... 8	M1273	.. Liner, Teflon .047-.062 Wire Pistol Pro	1
.....	230969	.. Kit, Replacement O-Rings Head Tube Air	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.

	$\frac{1}{64}$	.015625
	$\frac{1}{32}$	.03125
	$\frac{3}{64}$	.046875
$\frac{1}{16}$	$\frac{5}{64}$	.0625
	$\frac{7}{64}$	.078125
	$\frac{9}{64}$	.09375
$\frac{1}{8}$	$\frac{11}{64}$	.109375
	$\frac{13}{64}$	.125
	$\frac{15}{64}$	.140625
$\frac{3}{16}$	$\frac{17}{64}$	.15625
	$\frac{19}{64}$	.171875
	$\frac{21}{64}$	.1875
	$\frac{23}{64}$	.203125
$\frac{1}{4}$	$\frac{25}{64}$	.21875
	$\frac{27}{64}$	.234375
	$\frac{29}{64}$	.25
	$\frac{31}{64}$	.265625
$\frac{5}{16}$	$\frac{33}{64}$	.28125
	$\frac{35}{64}$	.296875
	$\frac{37}{64}$	.3125
	$\frac{39}{64}$	.328125
$\frac{3}{8}$	$\frac{41}{64}$	.34375
	$\frac{43}{64}$	.359375
	$\frac{45}{64}$	.375
	$\frac{47}{64}$	.390625
$\frac{7}{16}$	$\frac{49}{64}$	.40625
	$\frac{51}{64}$	.421875
	$\frac{53}{64}$	.4375
	$\frac{55}{64}$	.453125
$\frac{1}{2}$	$\frac{57}{64}$	.46875
	$\frac{59}{64}$	.484375
	$\frac{61}{64}$	.5
$\frac{9}{16}$	$\frac{63}{64}$	.515625
		.53125
		.546875
		.5625
		.578125
$\frac{5}{8}$		.59375
		.609375
		.625
		.640625
$\frac{11}{16}$		.65625
		.671875
		.6875
		.703125
$\frac{3}{4}$		.71875
		.734375
		.75
		.765625
		.78125
$\frac{13}{16}$		.796875
		.8125
		.828125
		.84375
$\frac{7}{8}$		.859375
		.875
		.890625
		.90625
$\frac{15}{16}$		.921875
		.9375
		.953125
		.96875
1		.984375
		1.

SECTION 2 – PARTS LIST INCLUDING CONSUMABLES



Ref. T0031

Figure 2-1. Consumables Flowchart

Item No.	Part No.	Description	Quantity
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Consumables Flowchart

Table 2-1. Nozzles

...	1	...	◆199610	..	Nozzle, Screw On Brass 1/2 In. Orifice	...	1
...	1	...	◆199611	..	Nozzle, Screw On Brass 3/4 In. Orifice Straight	...	1
...	1	...	◆199612	..	Nozzle, Screw On Brass 3/4 In. Orifice Straight Heavy Duty	...	1
...	1	...	◆199613	..	Nozzle, Screw On Brass 5/8 In. Orifice	...	1
...	1	...	◆199614	..	Nozzle, Screw On Brass 5/8 In. Orifice Heavy Duty	...	1
...	1	...	◆199615	..	Nozzle, Screw On Copper 1/2 In. Orifice	...	1
...	1	...	◆199616	..	Nozzle, Screw On Copper 3/4 In. Orifice	...	1
...	1	...	◆199617	..	Nozzle, Screw On Copper 3/4 In. Orifice Heavy Duty	...	1
...	1	...	198855	..	Nozzle, Screw On Copper 5/8 In. Orifice	...	1
...	1	...	199618	..	Nozzle, Screw On Copper 5/8 In. Orifice Heavy Duty	...	1
...	1	...	◆207313	..	Nozzle, Screw On Copper 5/8 In. Orifice 15/16 OD	...	1
...	1	...	◆209035	..	Nozzle, Screw On Copper 3/8 In. Orifice Tapered (Requires Diffuser 229 670, 230 678 Or 230 679, Used With Any Tapered FasTip™ Contact Tip)	...	1
...	1	...	◆209036	..	Nozzle, Screw On Copper 1/2 In. Orifice Tapered (Requires Diffuser 229 670, 230 678 Or 230 679, Used With Any Tapered FasTip™ Contact Tip)	...	1

EFF w/MC311405T And Following

Item No.	Part No.	Description	Quantity
Consumables Flowchart (Continued)			
Table 2-2. Heavy Duty FasTip™ Contact Tips*			
... 2	♦206185	.. .030 in. (0.8 mm)	1
... 2	♦206186	.. .035 in. (0.9 mm)	1
... 2	♦206187	.. .040 in. (1.0 mm) or .035 in (0.9 mm) Aluminum Wire	1
... 2	206188	.. .045 in. (1.2 mm)	1
... 2	♦206189	.. .052 in. (1.3 mm) or 3/64 in (1.2 mm) Aluminum Wire	1
... 2	206190	.. 1/16 in. (1.6 mm)	1
... 2	♦206191	.. .068 in. (1.7 mm) or 1/16 in (1.6 mm) Aluminum Wire	1
Table 2-2. Tapered FasTip™ Contact Tips*			
... 2	♦209025	.. .030 in. (0.8 mm)	1
... 2	♦209026	.. .035 in. (0.9 mm)	1
... 2	♦209027	.. .045 in. (1.2 mm)	1
... 2	♦209028	.. 3/64 in. (1.2 mm)	1
... 2	♦209029	.. .052 in. (1.3 mm)	1
... 2	♦209030	.. 1/16 in. (1.6 mm)	1
Table 2-3. Gas Diffusers			
... 3	229670	.. 1/8 in. Tip Recess – For Heavy Duty FasTip Contact Tips (Standard On All Guns)	1
... 3	♦230678	.. 1/4 in. Tip Recess – For Heavy Duty FasTip Contact Tips	1
... 3	♦230679	.. Flush Tip – For Heavy Duty FasTip Contact Tips	1
Table 2-4. Insulators			
... 4	M1366	.. Insulator, Head Tubes Aluma/Pistol Pro A/C 4 In.	1
... 4	M1369	.. Insulator, Head Tubes Aluma/Pistol Pro W/C 4 In.	1
... 4	232284	.. Insulator, Nozzle Collared Diffuser	1
Table 2-5. Head Tube Assemblies			
... 5	255716	.. Kit, Head Tube Assy (A) AP/PP 180Deg 4In.	1
... 5	255717	.. Kit, Head Tube Assy (W) AP/PP 180Deg 4In.	1
Table 2-6. Head Tube Liners (Not Shown)			
.....	M1272	.. Liner, Teflon .030–.035 Wire Pistol Pro	1
.....	M1273	.. Liner, Teflon .047–.062 Wire Pistol Pro	1
Wire Kit (Not Shown)			
.....	♦230708	.. Kit, Idler Roll 1/16 (.062)	1
.....	♦198377	.. Hardwire Liner Kit, 30W For Steel&Stainless	1

♦OPTIONAL

*All contact tips are packaged in bags of 25.

BE SURE TO PROVIDE MODEL WHEN ORDERING REPLACEMENT PARTS.

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

Notes

Notes

Miller Electric Mfg. LLC

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

For International Locations Visit
www.MillerWelds.com

