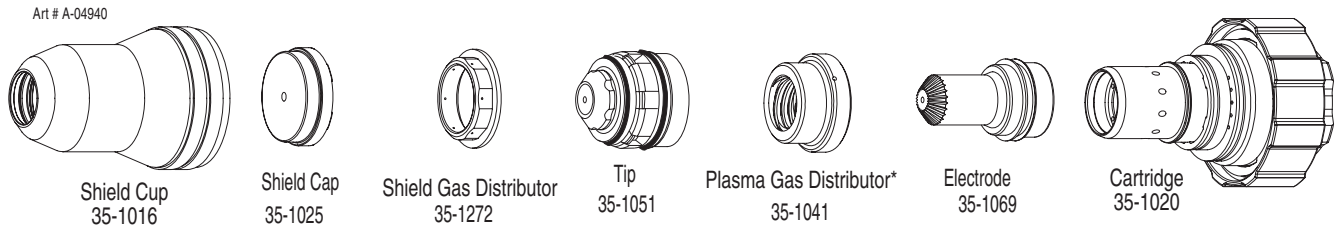


Section 8: Torch Data

Mild Steel, 55A

O₂ Plasma / Air Shield



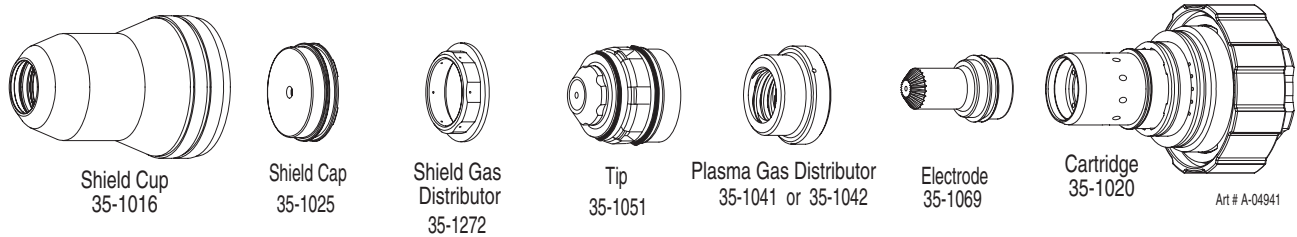
55A Mild Steel (O ₂ /Air)										
Material Thickness			Cut Flow Pressures		Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
			Plasma (O ₂)	Shield (Air)						
(ga)	(in)	inch	(PSI)	(PSI)	Volts	(in) ±0.005	(ipm)	(in)	(sec)	(in)
21		0.033	70	20	120	0.125	600	0.200	0.0	0.073
16		0.060	70	20	120	0.125	400	0.200	0.0	0.071
10		0.135	80	20	126	0.125	180	0.200	0.2	0.083
	3/16	0.188	80	20	127	0.125	120	0.200	0.2	0.081
	1/4	0.250	80	20	128	0.125	85	0.200	0.3	0.086

55A Mild Steel (O ₂ /Air)									
Material Thickness		Cut Flow Pressures		Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
		Plasma (O ₂)	Shield (Air)						
(mm)		(Bar)	(Bar)	Volts	(mm) ±0.1	(mm/min)	(mm)	(sec)	(mm)
1		4.8	1.4	120	3.2	14040	5.1	0.0	1.8
2		4.8	1.4	121	3.2	8760	5.1	0.0	1.9
3		5.5	1.4	125	3.2	5830	5.1	0.2	2.0
4		5.5	1.4	126	3.2	3930	5.1	0.2	2.1
5		5.5	1.4	127	3.2	2920	5.1	0.2	2.1
6		5.5	1.4	128	3.2	2360	5.1	0.3	2.2

Mild Steel

55A

Air Plasma / Air Shield



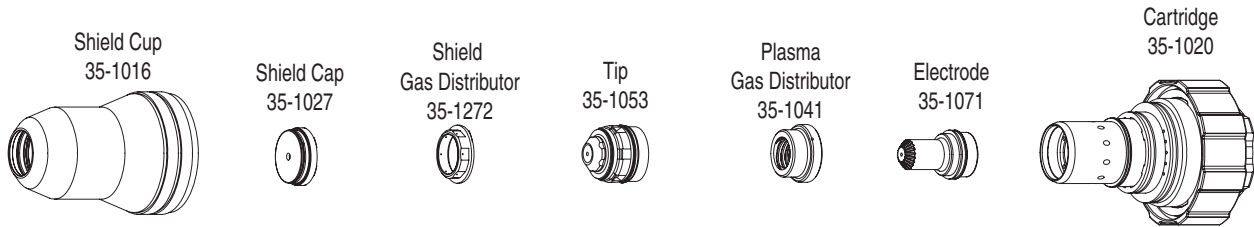
55A Mild Steel (Air/Air)										
Material Thickness			Cut Flow Pressures		Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
			Plasma (Air)	Shield (Air)						
(ga)	(in)	inch	(PSI)	(PSI)	Volts	(in) ±0.005	(ipm)	(in)	(sec)	(in)
21		0.033	70	20	152	0.188	500	0.200	0.1	0.079
16		0.060	70	20	154	0.188	300	0.200	0.1	0.086
10		0.135	92	80	166	0.188	190	0.200	0.2	0.079
	3/16	0.188	92	80	166	0.188	130	0.250	0.3	0.089
	1/4	0.250	92	80	170	0.188	95	0.250	0.3	0.090

55A Mild Steel (Air/Air)									
Material Thickness		Cut Flow Pressures		Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
		Plasma (Air)	Shield (Air)						
(mm)		(Bar)	(Bar)	Volts	(mm) ±0.1	(mm/min)	(mm)	(sec)	(mm)
1		4.8	1.4	152	4.8	11500	5.1	0.1	2.0
2		4.8	1.4	157	4.8	6920	5.1	0.1	2.1
3		6.3	5.5	163	4.8	5460	5.1	0.2	2.0
4		6.3	5.5	166	4.8	4180	5.6	0.2	2.1
5		6.3	5.5	167	4.8	3180	6.4	0.3	2.3
6		6.3	5.5	169	4.8	2610	6.4	0.3	2.3

Mild Steel

100A

O₂ Plasma / Air Shield



Art # A-04863

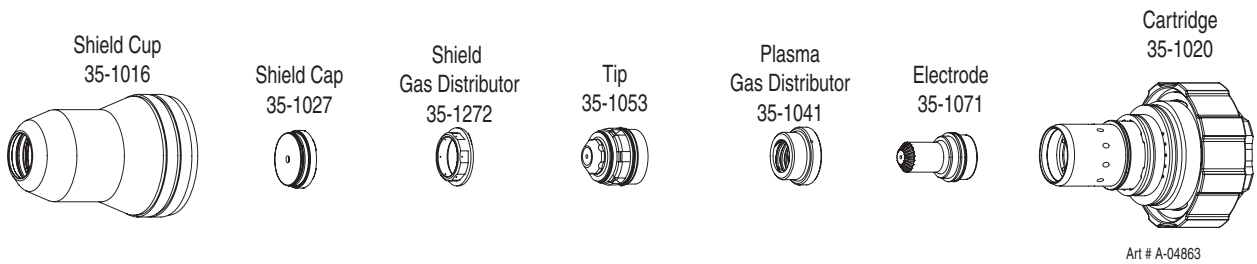
100A Mild Steel (O ₂ /Air)										
Material Thickness			Cut Flow Pressures		Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
			Plasma (O ₂)	Shield (Air)						
(ga)	(in)	inch	(PSI)	(PSI)	Volts	(in) ±0.005	(ipm)	(in)	(sec)	(in)
16		0.060	94	49	127	0.110	500	0.250	0.1	0.071
10		0.135	94	49	134	0.110	240	0.250	0.2	0.081
	3/16	0.188	94	49	128	0.120	185	0.250	0.3	0.073
	1/4	0.250	94	49	130	0.120	130	0.300	0.3	0.095
	3/8	0.375	94	49	138	0.130	80	0.300	0.3	0.113
	1/2	0.500	94	49	138	0.140	57	0.300	0.3	0.113
	5/8	0.625	94	49	144	0.140	45	0.350	0.5	0.111
	3/4	0.750	94	49	150	0.150	25	0.350	0.6	0.138
	1	1.000	94	49	164	0.200	10	NR	NR	0.140

Material Thickness		Cut Flow Pressures		Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
		Plasma (O ₂)	Shield (Air)						
(mm)	(mm)	(Bar)	(Bar)	Volts	(mm) ±0.1	(mm/min)	(mm)	(sec)	(mm)
2		6.5	3.4	129	2.8	11050	6.4	0.1	1.9
3		6.5	3.4	132	2.8	7580	6.4	0.2	2.0
4		6.5	3.4	131	2.9	5500	6.4	0.2	2.0
5		6.5	3.4	128	3.1	4500	6.5	0.3	1.9
6		6.5	3.4	130	3.1	3610	7.3	0.3	2.3
8		6.5	3.4	134	3.2	2640	7.6	0.3	2.7
10		6.5	3.4	138	3.3	1950	7.6	0.3	2.9
12		6.5	3.4	138	3.5	1580	7.6	0.3	2.9
15		6.5	3.4	142	3.6	1230	8.5	0.4	2.8
20		6.5	3.4	152	4.0	580	9.5	0.6	3.5
25		6.5	3.4	163	5.0	280	NR	NR	3.6

Mild Steel

100A

Air Plasma / Air Shield



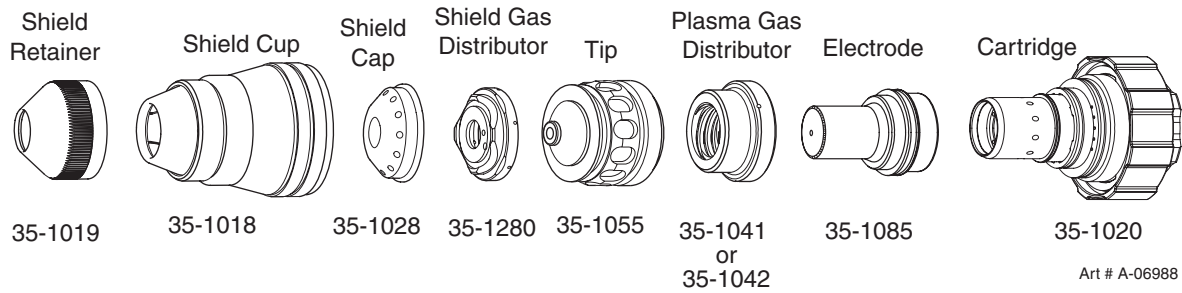
100A Mild Steel (Air/Air)										
Material Thickness			Cut Flow Pressures		Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
			Plasma (Air)	Shield (Air)						
(ga)	(in)	inch	(PSI)	(PSI)	Volts	(in) ±0.005	(ipm)	(in)	(sec)	(in)
16		0.060	90	45	149	0.110	600	0.250	0.1	0.072
10		0.135	90	45	145	0.110	300	0.250	0.2	0.065
	3/16	0.188	90	45	149	0.110	210	0.250	0.3	0.073
	1/4	0.250	90	45	152	0.120	150	0.300	0.3	0.078
	3/8	0.375	90	45	152	0.130	85	0.300	0.3	0.091
	1/2	0.500	90	45	159	0.140	75	0.300	0.3	0.095
	5/8	0.625	90	45	153	0.140	55	0.350	0.5	0.099
	3/4	0.750	90	45	163	0.150	30	0.350	0.6	0.120
	1	1.00	90	45	180	0.200	20	NR	NR	0.112

Material Thickness		Cut Flow Pressures		Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
		Plasma (Air)	Shield (Air)						
(mm)		(Bar)	(Bar)	Volts	(mm) ±0.1	(mm/min)	(mm)	(sec)	(mm)
2		6.2	3.1	148	2.8	13340	6.4	0.1	1.8
3		6.2	3.1	146	2.8	9340	6.4	0.2	1.7
4		6.2	3.1	147	2.8	6650	6.4	0.2	1.7
5		6.2	3.1	149	2.8	5120	6.5	0.3	1.9
6		6.2	3.1	151	3.0	4150	7.3	0.3	2.0
8		6.2	3.1	152	3.2	2950	7.6	0.3	2.2
10		6.2	3.1	153	3.3	2120	7.6	0.3	2.3
12		6.2	3.1	157	3.5	1960	7.6	0.3	2.4
15		6.2	3.1	155	3.6	1540	8.5	0.4	2.5
20		6.2	3.1	166	4.0	720	9.5	0.6	3.0
25		6.2	3.1	179	5.0	520	NR	NR	2.9

Mild Steel

200A

Air Plasma / Air Shield



200A Mild Steel (Air/Air)										
Material Thickness			Cut Flow Pressures		Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
			Plasma (Air)	Shield (Air)						
(ga)	(in)	inch	(PSI)	(PSI)	Volts	(in) ±0.005	(ipm)	(in)	(sec)	(in)
	1/4	0.250	90	60	163	0.140	185	0.300	0	0.096
	3/8	0.375	90	60	160	0.140	130	0.300	0.1	0.131
	1/2	0.500	90	60	162	0.140	100	0.300	0.3	0.150
	5/8	0.625	90	60	164	0.140	75	0.300	0.4	0.158
	3/4	0.750	90	60	168	0.180	60	0.350	0.5	0.176
	1	1.000	90	60	177	0.200	35	0.500	1.5	0.189
	1-1/4	1.250	90	60	185	0.250	20	NR	NR	0.209
	1-1/2	1.500	90	60	189	0.250	15	NR	NR	0.225
	2	2.000	90	60	204	0.300	10	NR	NR	0.270

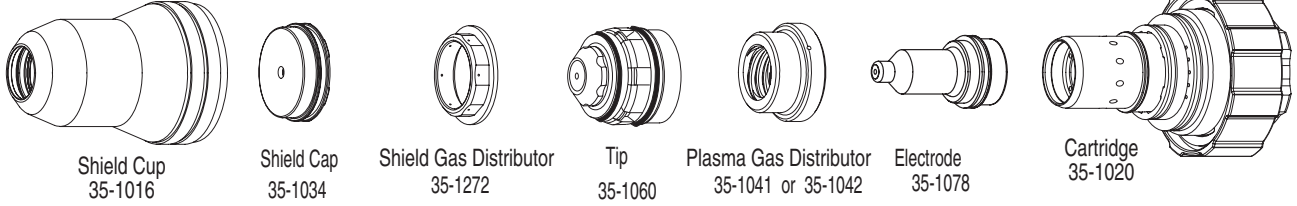
200A Mild Steel (Air/Air)									
Material Thickness		Cut Flow Pressures		Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
		Plasma (Air)	Shield (Air)						
(mm)	(mm)	(Bar)	(Bar)	Volts	(mm) ±0.1	(mm/min)	(mm)	(sec)	(mm)
	6	6.2	4.1	163	3.6	4700	7.6	0	2.4
	8	6.2	4.1	161	3.6	3970	7.6	0.1	2.9
	10	6.2	4.1	160	3.6	3190	7.6	0.1	3.4
	12	6.2	4.1	162	3.6	2710	7.6	0.3	3.7
	15	6.2	4.1	163	3.6	2080	7.6	0.4	4.0
	20	6.2	4.1	169	4.6	1430	9.5	0.6	4.5
	25	6.2	4.1	176	5.0	920	12.5	1.4	4.8
	32	6.2	4.1	185	6.4	500	NR	NR	5.3
	38	6.2	4.1	189	6.4	380	NR	NR	5.7
	44	6.2	4.1	196	6.9	320	NR	NR	6.2
	50	6.2	4.1	203	7.5	260	NR	NR	6.8

Stainless Steel

55A

Air Plasma / Air Shield

Art # A-04942



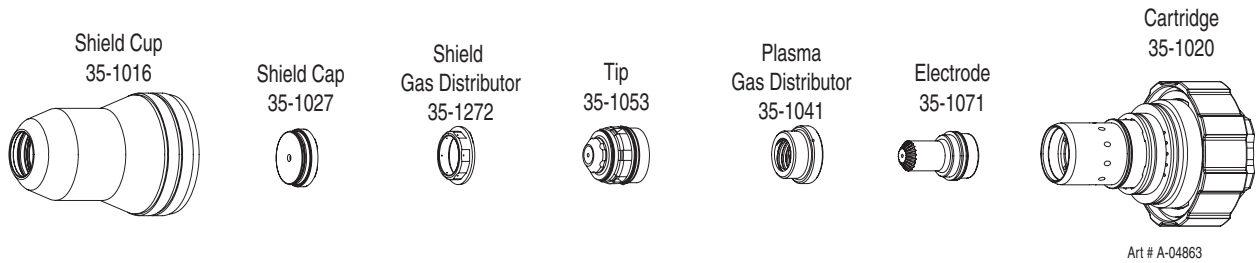
55A Stainless Steel (Air/Air)										
Material Thickness			Cut Flow Pressures		Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
			Plasma (Air)	Shield (Air)						
(ga)	(in)	inch	(PSI)	(PSI)	Volts	(in) ±0.005	(ipm)	(in)	(sec)	(in)
21		0.034	70	20	104	0.125	600	0.200	0.0	0.067
16		0.063	70	50	105	0.150	350	0.200	0.0	0.068
10		0.141	70	50	110	0.150	100	0.200	0.1	0.086
	3/16	0.188	70	50	112	0.150	60	0.200	0.1	0.086
	1/4	0.250	70	50	112	0.150	40	0.200	0.2	0.088

Material Thickness		Cut Flow Pressures		Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
		Plasma (Air)	Shield (Air)						
(mm)		(Bar)	(Bar)	Volts	(mm) ±0.1	(mm/min)	(mm)	(sec)	(mm)
0.8		4.8	1.4	104	3.2	15240	5.1	0.0	1.7
1		4.8	1.4	104	3.3	14060	5.1	0.0	1.7
1.5		4.8	3.4	105	3.7	9750	5.1	0.0	1.7
2		4.8	3.4	106	3.8	7610	5.1	0.0	1.8
3		4.8	3.4	109	3.8	4400	5.1	0.1	2.1
4		4.8	3.4	111	3.8	2180	5.1	0.1	2.2
5		4.8	3.4	112	3.8	1450	5.1	0.1	2.2
6		4.8	3.4	112	3.8	1130	5.1	0.2	2.2

Stainless Steel

100A

Air Plasma / Air Shield



Art # A-04863

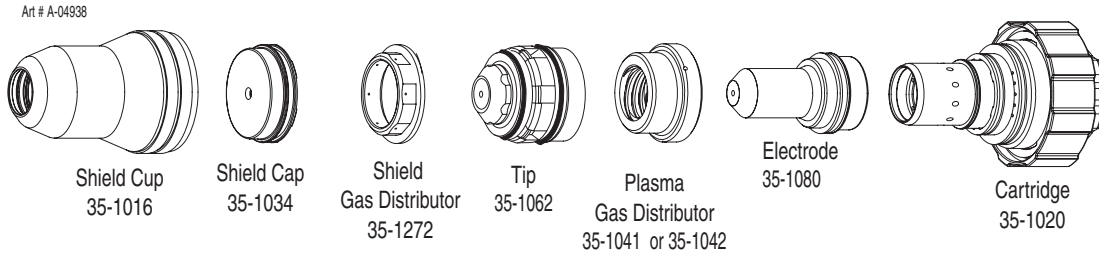
100A Stainless Steel (Air/Air)										
Material Thickness			Cut Flow Pressures		Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
			Plasma (Air)	Shield (Air)						
(ga)	(in)	inch	(PSI)	(PSI)	Volts	(in) ±0.005	(ipm)	(in)	(sec)	(in)
16		0.063	85	42	144	0.080	500	0.200	0.0	0.099
10		0.141	85	42	150	0.100	225	0.325	0.0	0.102
	3/16	0.188	85	42	153	0.140	175	0.325	0.1	0.105
	1/4	0.250	85	42	155	0.140	100	0.325	0.1	0.105
	3/8	0.375	85	42	160	0.140	65	0.325	0.2	0.110
	1/2	0.500	85	42	166	0.160	45	0.325	0.4	0.112
	5/8	0.625	85	42	165	0.160	35	0.350	1.0	0.114

100A Stainless Steel (Air/Air)									
Material Thickness		Cut Flow Pressures		Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
		Plasma (Air)	Shield (Air)						
(mm)	(mm)	(Bar)	(Bar)	Volts	(mm) ±0.1	(mm/min)	(mm)	(sec)	(mm)
1.5		5.7	2.9	144	2.0	12700	5.1	0.0	2.4
2		5.7	2.9	145	2.1	11290	5.7	0.0	2.5
3		5.7	2.9	149	2.0	6330	8.3	0.0	2.6
4		5.7	2.9	150	3.6	7030	8.3	0.1	2.7
5		5.7	2.9	153	3.6	4170	8.3	0.1	2.7
6		5.7	2.9	155	3.6	2960	8.3	0.1	2.7
8		5.7	2.9	158	3.6	2080	8.3	0.2	2.7
10		5.7	2.9	161	3.6	1580	8.3	0.2	2.8
12		5.7	2.9	165	4.0	1260	8.3	0.4	2.8
15		5.7	2.9	165	4.1	960	8.7	0.8	2.9

Stainless Steel

100A

H35 Plasma / N2 Shield



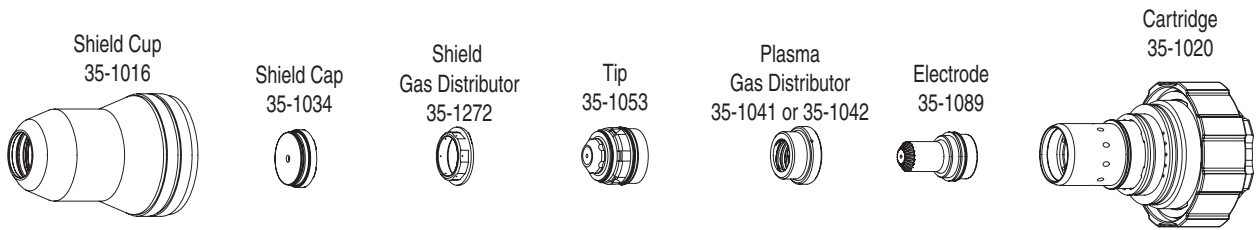
100A Stainless Steel (H35/N2)										
Material Thickness			Cut Flow Pressures		Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
			Plasma (H35)	Shield (N2)						
(ga)	(in)	inch	(PSI)	(PSI)	Volts	(in) ±0.005	(ipm)	(in)	(sec)	(in)
	3/8	0.375	100	80	145	0.130	50	0.250	0.3	0.090
	1/2	0.500	100	80	148	0.130	37	0.250	0.5	0.100
	5/8	0.625	100	80	152	0.140	26	0.250	0.6	0.115

100A Stainless Steel (H35/N2)									
Material Thickness		Cut Flow Pressures		Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
		Plasma (H35)	Shield (N2)						
(mm)	(mm)	(Bar)	(Bar)	Volts	(mm) ±0.1	(mm/min)	(mm)	(sec)	(mm)
10		6.9	5.5	145	3.3	1220	6.4	0.3	2.3
12		6.9	5.5	147	3.3	1010	6.4	0.5	2.5
15		6.9	5.5	151	3.5	740	6.4	0.6	2.8

Stainless Steel

100A

N2 Plasma / H2O Shield



Art # A-07239

100A Stainless Steel (N2/H2O)										
Material Thickness			Cut Flow Pressures		Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
			Plasma (N2)	Shield (H2O)						
(ga)	(in)	inch	(PSI)	Ball *	Volts	(in) ±0.005	(ipm)	(in)	(sec)	(in)
10		0.141	100	5	160	0.125	160	0.200	0.000	0.074
	3/16	0.188	100	5	157	0.125	100	0.250	0.300	0.080
	1/4	0.250	100	5	155	0.125	60	0.250	0.300	0.086
	3/8	0.375	100	5	159	0.125	50	0.250	0.300	0.087
	1/2	0.500	100	5	169	0.130	35	0.300	0.500	0.100
	5/8	0.625	100	5	175	0.140	30	0.300	0.600	0.110
	3/4	0.750	100	5	177	0.150	25	NR	NR	N/A

Material Thickness		Cut Flow Pressures		Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
		Plasma (N2)	Shield (H2O)						
(mm)		(Bar)	Ball *	Volts	(mm) ±0.1	(mm/min)	(mm)	(sec)	(mm)
3		6.9	5	161	3.2	4810	4.5	0	1.8
4		6.9	5	159	3.2	3530	5.5	0.1	1.9
5		6.9	5	157	3.2	2400	6.4	0.3	2.1
6		6.9	5	155	3.2	1750	6.4	0.3	2.2
8		6.9	5	157	3.2	1390	6.4	0.3	2.2
10		6.9	5	160	3.2	1210	6.5	0.3	2.3
12		6.9	5	167	3.3	970	7.3	0.5	2.5
15		6.9	5	173	3.5	800	7.6	0.6	2.7
20		6.9	5	178	3.9	600	NR	NR	N/A

* Ball setting for shield water is set using a line pressure of 55 PSI / 3.8 Bar

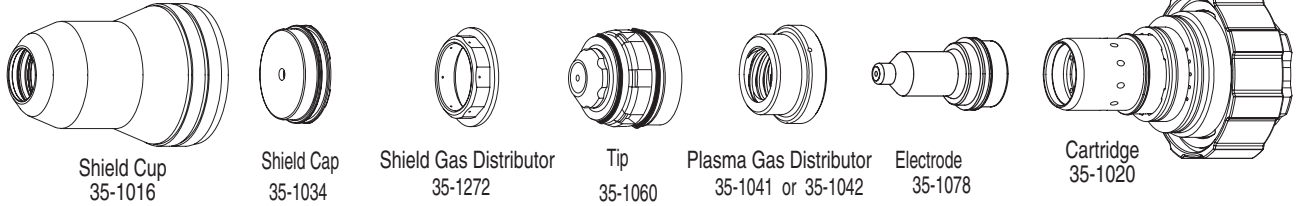
NOTE: Ohmic height sensing is not recommended with water shield.
Water on the plate interferes electrically with the ohmic sensing system.

Aluminum

55A

Air Plasma / Air Shield

Art # A-04942



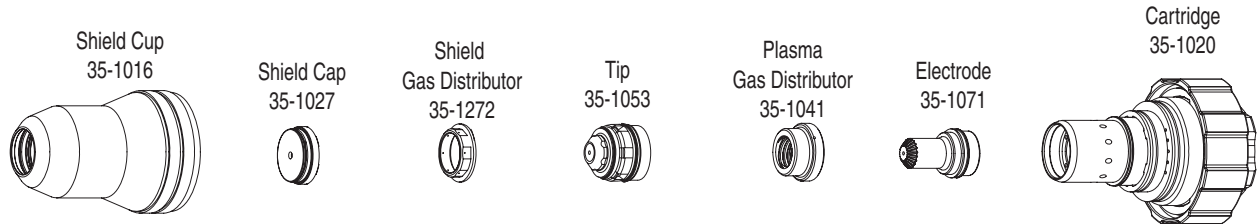
55A Aluminum (Air/Air)										
Material Thickness			Cut Flow Pressures		Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
			Plasma (Air)	Shield (Air)						
(ga)	(in)	inch	(PSI)	(PSI)	Volts	(in) ±0.005	(ipm)	(in)	(sec)	(in)
23		0.031	70	50	100	0.100	600	0.150	0.0	0.066
16		0.064	70	50	105	0.100	400	0.200	0.0	0.070
10		0.135	70	50	115	0.150	140	0.200	0.0	0.084
	3/16	0.188	70	50	120	0.150	100	0.200	0.0	0.084
	1/4	0.250	70	50	122	0.150	50	0.200	0.1	0.089

55A Aluminum (Air/Air)									
Material Thickness		Cut Flow Pressures		Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
		Plasma (Air)	Shield (Air)						
(mm)		(Bar)	(Bar)	Volts	(mm) ±0.1	(mm/min)	(mm)	(sec)	(mm)
1		4.8	3.4	101	2.5	13950	4.1	0.0	1.7
2		4.8	3.4	107	2.8	8790	5.1	0.0	1.9
3		4.8	3.4	113	3.5	5130	5.1	0.0	2.0
4		4.8	3.4	117	3.8	3130	5.1	0.0	2.1
5		4.8	3.4	120	3.8	2360	5.1	0.0	2.2
6		4.8	3.4	122	3.8	1550	5.1	0.1	2.2

Aluminum

100A

Air Plasma / Air Shield



Art # A-04863

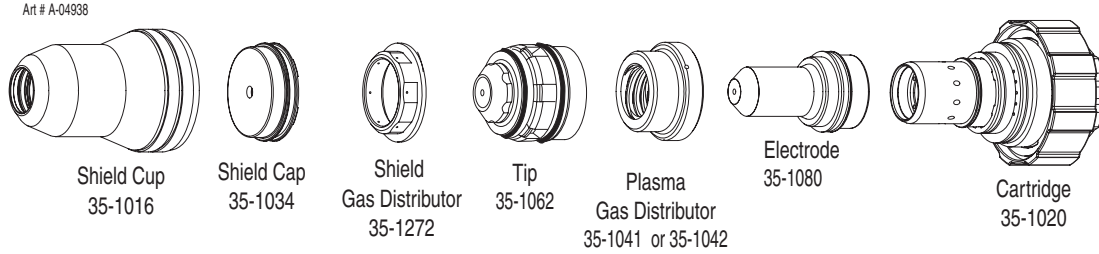
100A Aluminum (Air/Air)										
Material Thickness			Cut Flow Pressures		Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
			Plasma (Air)	Shield (Air)						
(ga)	(in)	inch	(PSI)	(PSI)	Volts	(in) ±0.005	(ipm)	(in)	(sec)	(in)
16		0.064	85	42	154	0.130	500	0.200	0.0	0.103
10		0.135	85	42	157	0.130	260	0.200	0.0	0.106
	3/16	0.188	85	42	156	0.130	120	0.325	0.1	0.100
	1/4	0.250	85	42	158	0.140	100	0.325	0.2	0.104
	3/8	0.375	85	42	162	0.140	75	0.325	0.2	0.107
	1/2	0.500	85	42	168	0.140	45	0.325	0.3	0.109
	5/8	0.625	85	42	175	0.140	35	0.325	0.4	0.112
	3/4	0.750	85	42	180	0.180	35	0.350	0.9	0.121

Material Thickness		Cut Flow Pressures		Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
		Plasma (Air)	Shield (Air)						
(mm)		(Bar)	(Bar)	Volts	(mm) ±0.1	(mm/min)	(mm)	(sec)	(mm)
2		5.9	2.9	155	3.3	11430	5.1	0.0	2.6
3		5.9	2.9	156	3.3	8050	5.1	0.0	2.7
4		5.9	2.9	157	3.3	5100	6.4	0.0	2.6
5		5.9	2.9	156	3.3	2980	8.3	0.1	2.6
6		5.9	2.9	158	3.5	2650	8.3	0.2	2.6
8		5.9	2.9	160	3.6	2210	8.3	0.2	2.7
10		5.9	2.9	163	3.6	1790	8.3	0.2	2.7
12		5.9	2.9	167	3.6	1310	8.3	0.3	2.8
15		5.9	2.9	173	3.6	960	8.3	0.4	2.8
20		5.9	2.9	181	4.9	890	9.9	1.0	3.1

Aluminum

100A

H35 Plasma / N2 Shield



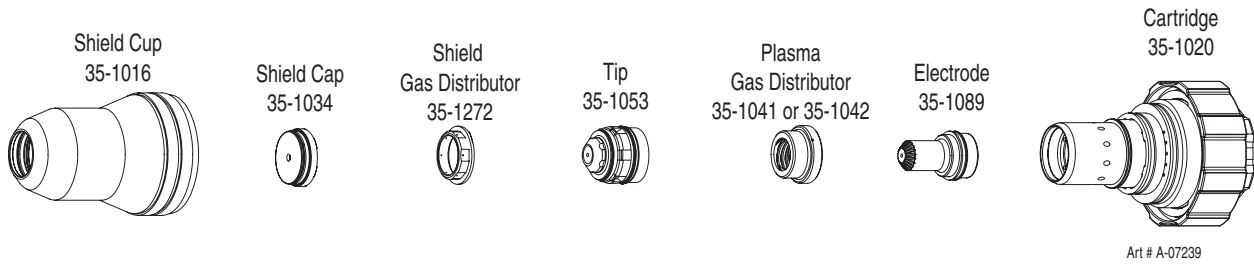
100A Aluminum (H35/N2)										
Material Thickness			Cut Flow Pressures		Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
			Plasma (H35)	Shield (N2)						
(ga)	(in)	inch	(PSI)	(PSI)	Volts	(in) ±0.005	(ipm)	(in)	(sec)	(in)
	3/8	0.375	120	50	150	0.188	60	0.350	0.1	0.100
	1/2	0.500	120	50	156	0.188	40	0.350	0.4	0.110
	5/8	0.625	120	50	160	0.188	30	0.350	0.5	0.113
	3/4	0.750	120	50	171	0.250	20	0.350	0.6	0.130

100A Aluminum (H35/N2)									
Material Thickness		Cut Flow Pressures		Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
		Plasma (H35)	Shield (N2)						
(mm)		(PSI)	(PSI)	Volts	(mm) ±0.1	(mm/min)	(mm)	(sec)	(mm)
10		8.3	3.4	151	4.8	1450	8.9	0.1	2.6
12		8.3	3.4	155	4.8	1130	8.9	0.3	2.7
15		8.3	3.4	159	4.8	830	8.9	0.5	2.8
20		8.3	3.4	174	6.8	430	8.9	0.6	3.4

Aluminum

100A

N2 Plasma / H2O Shield



100A Aluminum (N2/H2O)										
Material Thickness			Cut Flow Pressures		Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
			Plasma (N2)	Shield (H2O)						
(ga)	(in)	inch	(PSI)	Ball *	Volts	(in) ±0.005	(ipm)	(in)	(sec)	(in)
10		0.135	100	5	148	0.125	170	0.200	0.0	0.072
	3/16	0.188	100	5	158	0.125	80	0.250	0.3	0.080
	1/4	0.250	100	5	158	0.125	60	0.250	0.3	0.085
	3/8	0.375	100	5	161	0.125	50	0.250	0.3	0.086
	1/2	0.500	100	5	170	0.130	35	0.300	0.6	0.091
	5/8	0.625	100	5	180	0.140	20	0.300	0.8	0.120

100A Aluminum (N2/H2O)									
Material Thickness		Cut Flow Pressures		Arc Voltage	Torch Working Height	Travel Speed	Initial Piercing Height	Pierce Delay	Kerf Width @ Rec. Speed
		Plasma (N2)	Shield (H2O)						
(mm)		(Bar)	Ball *	Volts	(mm) ±0.1	(mm/min)	(mm)	(sec)	(mm)
4		6.9	5	152	3.2	3350	5.6	0.1	1.9
5		6.9	5	158	3.2	1960	6.4	0.3	2.1
6		6.9	5	158	3.2	1640	6.4	0.3	2.1
8		6.9	5	160	3.2	1390	6.4	0.3	2.2
10		6.9	5	162	3.2	1210	6.5	0.3	2.2
12		6.9	5	168	3.3	970	7.3	0.5	2.3
15		6.9	5	177	3.5	610	7.6	0.7	2.8

* Ball setting for shield water is set using a line pressure of 55 PSI / 3.8 Bar

NOTE: Ohmic height sensing is not recommended with water shield.
Water on the plate interferes electrically with the ohmic sensing system.

TORCH REPLACEMENT PARTS

Returns

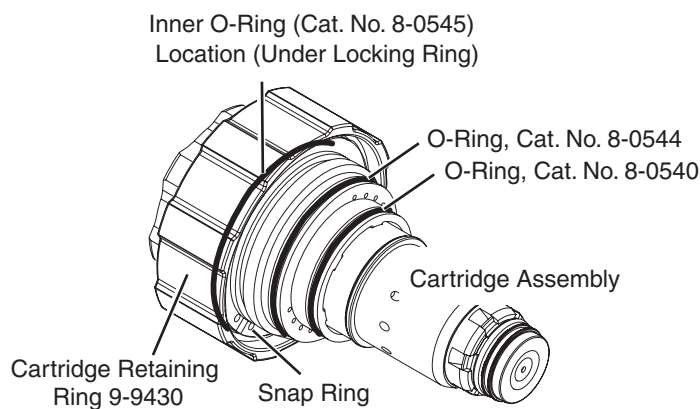
If a product must be returned for service, contact your authorized distributor. Materials returned without proper authorization will not be accepted.

Ordering Information

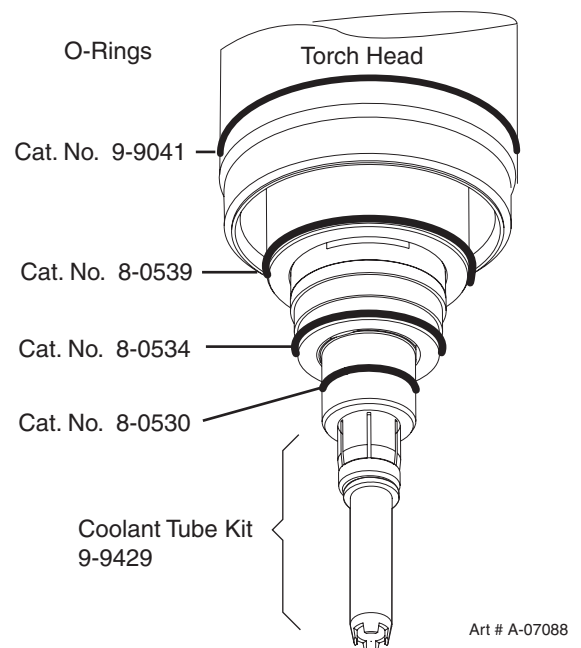
Order replacement parts by catalog number and complete description of the part or assembly. Also include the model and serial number of the machine or torch.

Refer to parts diagrams within the body of the manual for consumable parts and replacement O-Ring catalog numbers.

Qty.	Description	Catalog Number
1	XT-301 Torch w/ 25' / 7.6 m Leads, w/ 100-Amp Mild Steel Consumables	2-7000
1	XT-301 Torch w/ 35' / 10.6 m Leads, w/ 100-Amp Mild Steel Consumables	2-7001
1	XT-301 Torch w/ 50' / 15.2 m Leads, w/ 100-Amp Mild Steel Consumables	2-7002
1	XT-301 Torch w/ 75' / 22.9 m Leads, w/ 100-Amp Mild Steel Consumables	2-7003
1	XT-301 Torch w/ 100' / 30.5 m Leads, w/ 100-Amp Mild Steel Consumables	2-7004
1	O-Ring Lubricant (Christo-Lube MCG-129)	9-4893
1	Water Shield Regulator	8-6118
1	Coolant Tube Kit	9-9429
1	Cartridge Tool	9-9431
1	Torch Cartridge (includes Cartridge Tool)	35-1020
1	Shield Cup (all applications except 200-A Mild Steel)	35-1016
1	Cartridge Retaining Ring	9-9430

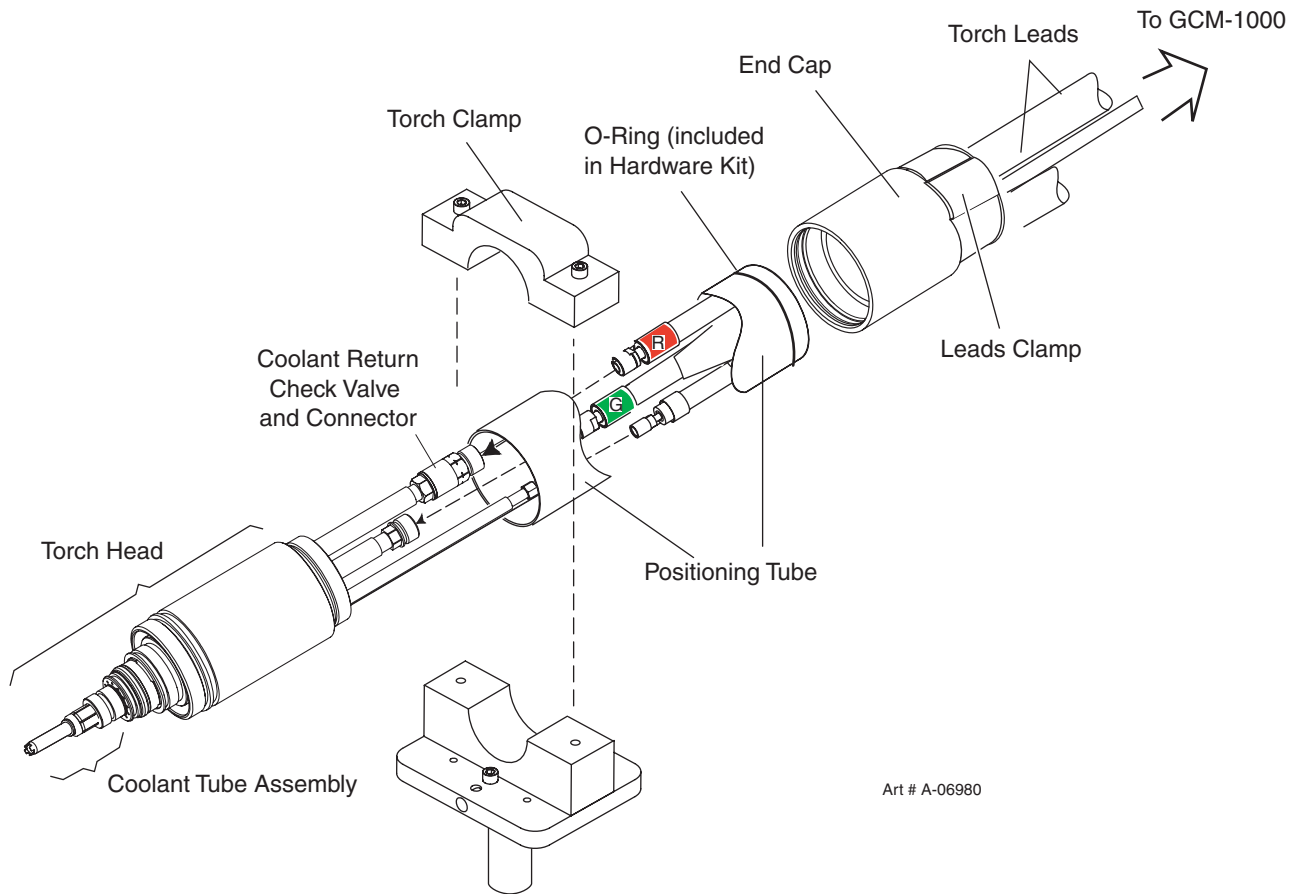


Art # A-07087

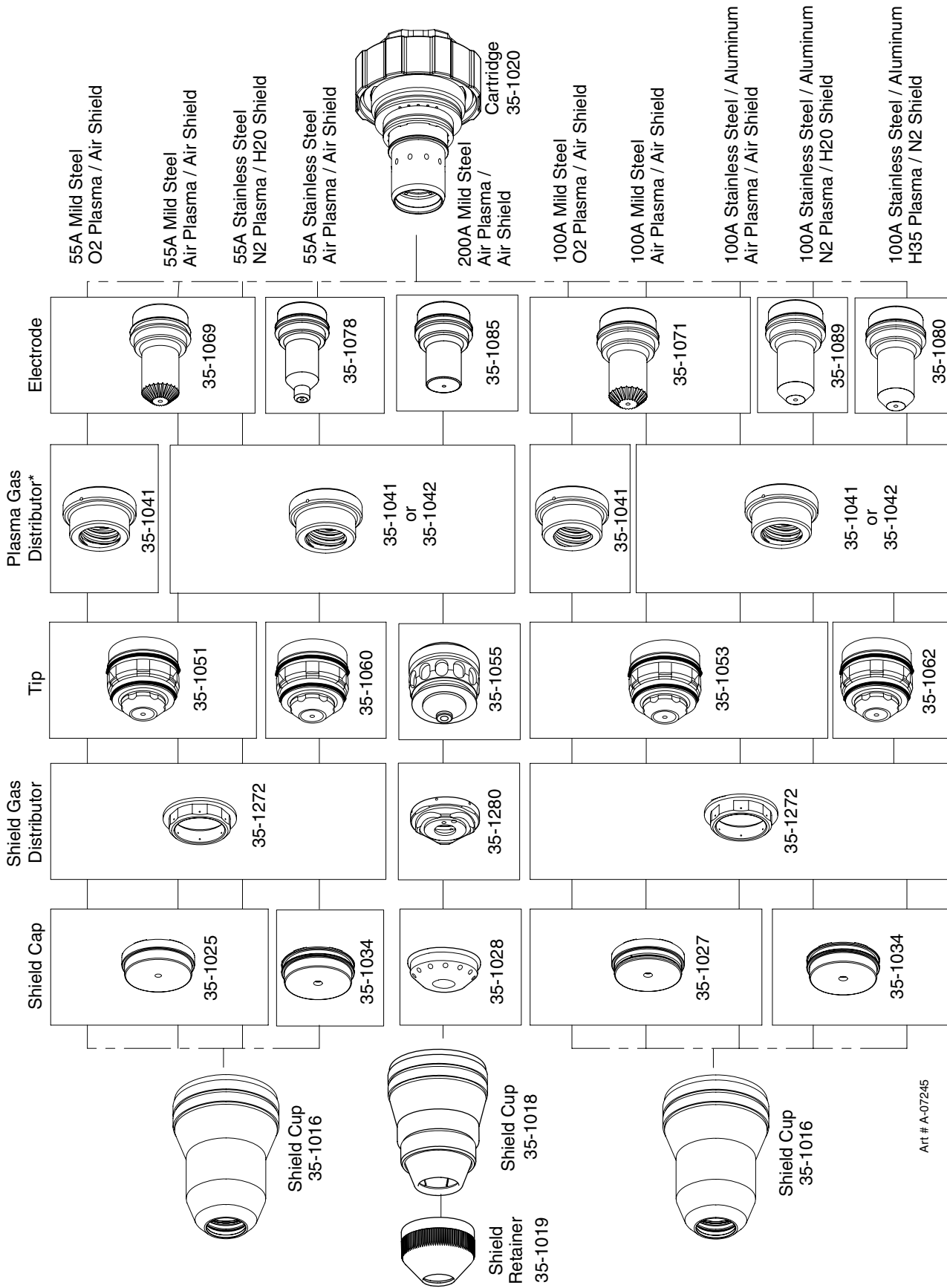


Art # A-07088

Qty.	Description	Catalog Number
1	XT-301 Torch Head Kit	35-1001
1	Torch Mounting Tube (includes Mounting Tube Hardware Kit)	9-4700
1	Mounting Tube Hardware Kit (includes Mounting Tube O-ring)	9-4847
1	Torch Clamp Assembly	9-9336
1	Coolant Check Valve Kit	9-4846
1	Ohmic Clip (not shown)	9-9414



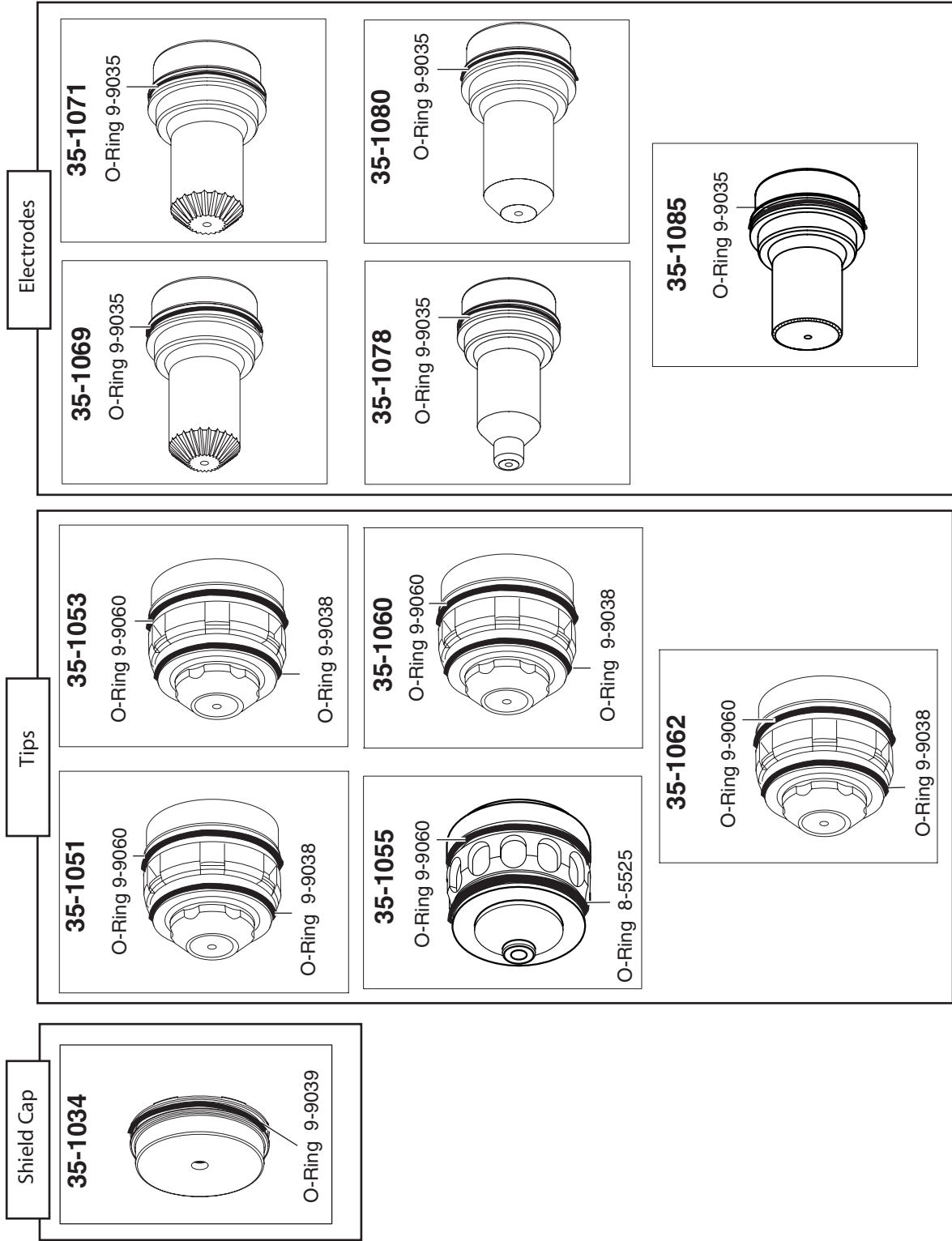
Consumables Selection Chart



*CAUTION: Do not use Plasma Gas Distributor No. 35-1042 with Oxygen.

Art # A-07245

Consumables O-Ring Locations and Catalog Numbers



Art # A-07248

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