

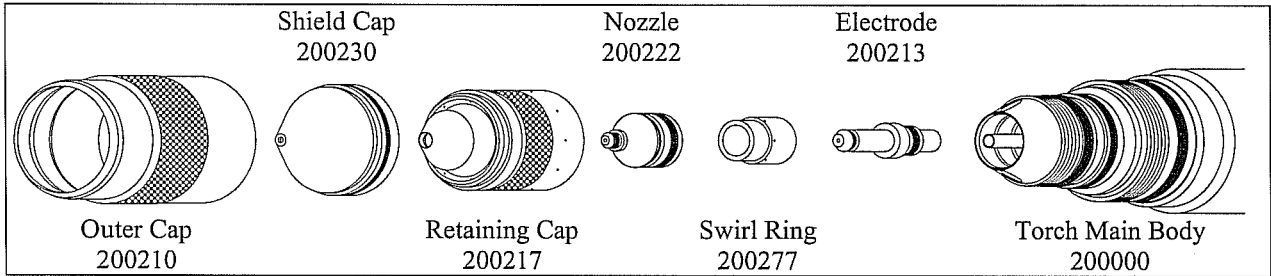
Cutting Charts

The cutting charts shown on the following pages are intended to give the operator the best starting point to use when making a cut on a particular material type and thickness. Small adjustments may have to be made to achieve the best cut. Also, remember that the arc voltage must be increased as the electrode wears in order to maintain the correct cutting height.

Cutting Chart Index

Material	Process	Current	Plasma Gas	Shield Gas	Page
Mild Steel	Cutting	30 Amps	Oxygen	Oxygen	4-14
Mild Steel	Cutting	50 Amps	Oxygen	Oxygen	4-15
Mild Steel	Cutting	70 Amps	Oxygen	Air	4-16
Mild Steel	Cutting	100 Amps	Oxygen	Air	4-17
Mild Steel	Cutting	200 Amps	Oxygen	Air	4-18
Stainless Steel	Cutting	30 Amps	Air	Air	4-19
Stainless Steel	Cutting	50 Amps	Air	Nitrogen	4-20
Stainless Steel	Cutting	70 Amps	Air	Nitrogen	4-21
Stainless Steel	Cutting	70 Amps	H17	Nitrogen	4-22
Stainless Steel	Cutting	100 Amps	Air	Nitrogen	4-23
Stainless Steel	Cutting	100 Amps	H17	Nitrogen	4-24
Stainless Steel	Cutting	200 Amps	Air	Nitrogen	4-25
Stainless Steel	Cutting	200 Amps	H17	Nitrogen	4-26
Aluminum	Cutting	30 Amps	Air	Nitrogen	4-27
Aluminum	Cutting	50 Amps	Air	Nitrogen	4-28
Aluminum	Cutting	70 Amps	Air	Nitrogen	4-29
Aluminum	Cutting	100 Amps	Air	Nitrogen	4-30
Aluminum	Cutting	200 Amps	Air	Nitrogen	4-31
Mild Steel	Marking	10 Amps	Nitrogen	Nitrogen	4-32
Stainless Steel	Marking	8 Amps	Nitrogen	Nitrogen	4-33
Aluminum	Marking	10 Amps	Nitrogen	Nitrogen	4-34

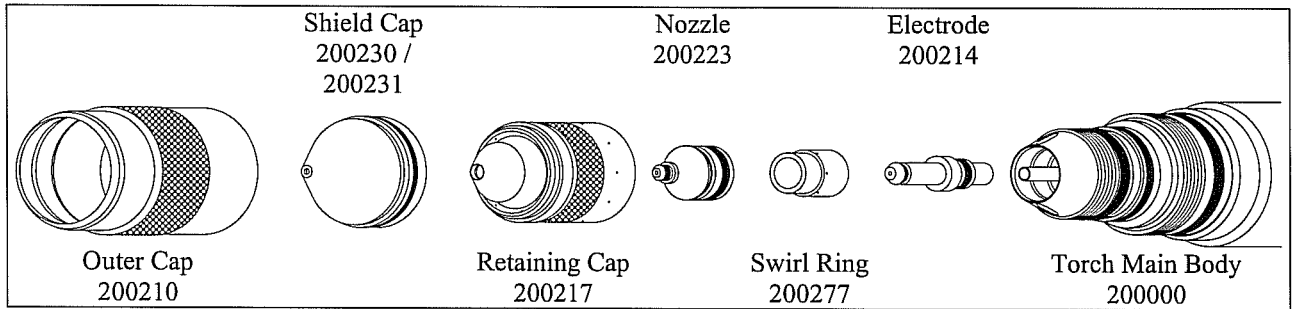
Mild Steel
30 Amps – Oxygen Plasma / Oxygen Shield



Material Thickness			Preflow (Air) (psi)	Plasma (Oxygen) (psi)	Shield (Oxygen) (psi)	Arc Voltage (volts)	Travel Speed		Cutting Height		Pierce Height		Motion Delay (msec)
(ga)	(in)	(mm)					(ipm)	(m/min)	(in)	(mm)	(in)	(mm)	
20	.036	.9	30	100	12	115	105	2.67	.065	1.7	.110	2.8	100
18	.048	1.2	30	100	12	117	97	2.46	.075	1.9	.110	2.8	100
16	.060	1.5	30	100	12	119	90	2.29	.105	2.7	.110	2.8	100
14	.075	1.9	30	100	12	122	65	1.65	.100	2.5	.110	2.8	100
12	.105	2.7	30	100	12	127	45	1.14	.100	2.5	.110	2.8	100
11	.120	3.0	30	100	12	129	41	1.04	.110	2.8	.125	3.2	100
10	.135	3.4	30	100	12	133	33	.838	.120	3.0	.125	3.2	100

1. Arc voltage tolerance is +/- 1 volt. Note that the arc voltage will have to be increased as the electrode wears.
2. 1 inch = 25.4 mm; 1 scfh = 28.316 l/h; 1 psi = .0689 bar = 6.895 KPa
3. Revised on 12/5/03

**Mild Steel
50 Amps – Oxygen Plasma / Oxygen Shield**



Cold-Rolled Steel / Shield Cap 200231

Material Thickness			Preflow (Air)	Plasma (Oxygen)	Shield (Oxygen)	Arc Voltage	Travel Speed		Cutting Height		Pierce Height		Motion Delay
(ga)	(in)	(mm)	(psi)	(psi)	(psi)	(volts)	(ipm)	(m/min)	(in)	(mm)	(in)	(mm)	(msec)
14	.075	1.9	30	80	20	123	85	2.16	.115	2.9	.115	2.9	100
12	.105	2.7	30	80	20	126	70	1.78	.135	3.4	.135	3.4	100
10	.135	3.4	30	80	17	133	45	1.14	.145	3.7	.145	3.7	100

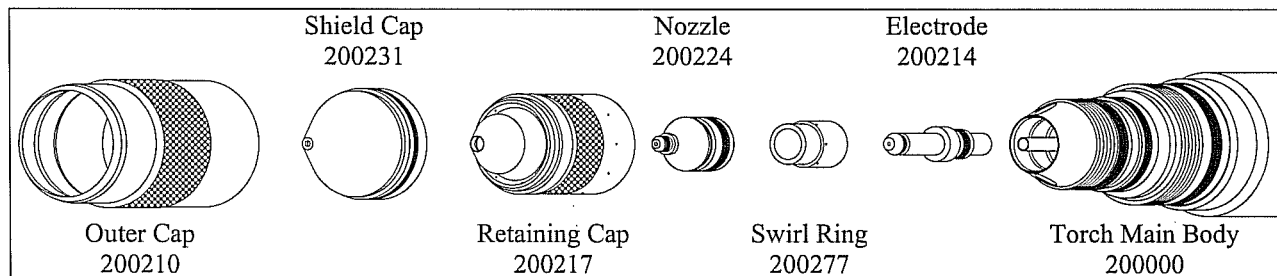
Hot-Rolled Steel / Shield Cap 200230

Material Thickness			Preflow (Air)	Plasma (Oxygen)	Shield (Oxygen)	Arc Voltage	Travel Speed		Cutting Height		Pierce Height		Motion Delay
(ga)	(in)	(mm)	(psi)	(psi)	(psi)	(volts)	(ipm)	(m/min)	(in)	(mm)	(in)	(mm)	(msec)
14	.075	1.9	30	80	20	123	85	2.16	.115	2.9	.115	2.9	100
12	.105	2.7	30	80	20	126	70	1.78	.135	3.4	.135	3.4	100
	.125	3.2	30	80	55 *	110	180	4.57	.100	2.5	.135	3.4	100
10	.135	3.4	30	80	55 *	115	170	4.32	.110	2.8	.135	3.4	100
	3/16	4.8	30	80	55 *	120	125	3.18	.140	3.6	.145	3.7	200
	1/4	6.4	30	80	55 *	125	65	1.65	.140	3.6	.165	4.2	250

* Air may be used for the shield gas when cutting hot-rolled material

1. Arc voltage tolerance is +/- 1 volt. Note that the arc voltage will have to be increased as the electrode wears.
2. 1 inch = 25.4 mm; 1 scfh = 28.316 l/h; 1 psi = .0689 bar = 6.895 KPa
3. Revised on 10/26/05

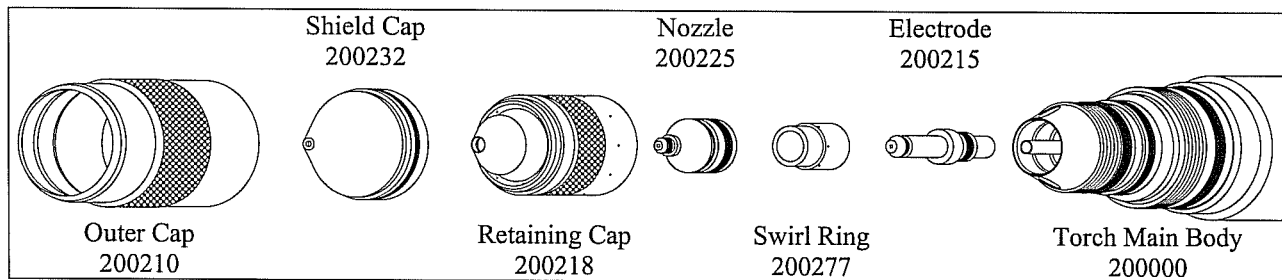
Mild Steel
70 Amps – Oxygen Plasma / Air Shield



Material Thickness		Preflow (Air)	Plasma (Oxygen)	Shield (Air)	Arc Voltage	Travel Speed		Cutting Height		Pierce Height		Motion Delay
(in)	(mm)	(psi)	(psi)	(psi)	(volts)	(ipm)	(m/min)	(in)	(mm)	(in)	(mm)	(msec)
1/8	3.2	25	80	47	116	170	4.32	.100	2.5	.100	2.5	100
3/16	4.8	25	80	47	117	140	3.56	.100	2.5	.100	2.5	100
1/4	6.4	25	80	47	122	95	2.41	.110	2.8	.125	3.2	200
3/8	9.5	25	80	47	128	62	1.57	.140	3.6	.150	3.8	250

1. Arc voltage tolerance is +/- 1 volt. Note that the arc voltage will have to be increased as the electrode wears.
2. 1 inch = 25.4 mm; 1 scfh = 28.316 l/h; 1 psi = .0689 bar = 6.895 KPa
3. Revised on 9/26/01

Mild Steel
100 Amps – Oxygen Plasma / Air Shield

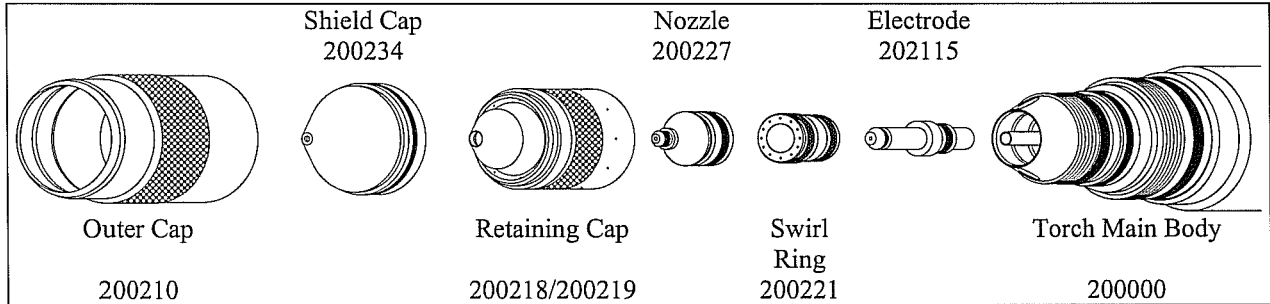


Material Thickness		Preflow (Air) (psi)	Plasma (Oxygen) (psi)	Shield (Air) (psi)	Arc Voltage (volts)	Travel Speed		Cutting Height		Pierce Height		Motion Delay (msec)
(in)	(mm)					(ipm)	(m/min)	(in)	(mm)	(in)	(mm)	
1/4	6.4	20	80	35	125	125	3.18	.090	2.3	.125	3.2	150
3/8	9.5	20	80	35	131	90	2.29	.130	3.3	.175	4.4	200
1/2	12.7	20	80	35	135	62	1.57	.155	3.9	.200	5.1	250
5/8	15.9	20	80	35	143	45	1.14	.185	4.7	.200	5.1	250
3/4 *	19.1	20	80	35	145	35	.889	.185	4.7	.200	5.1	300

* Edge start or moving pierce recommended

1. Arc voltage tolerance is +/- 1 volt. Note that the arc voltage will have to be increased as the electrode wears.
2. 1 inch = 25.4 mm; 1 scfh = 28.316 l/h; 1 psi = .0689 bar = 6.895 KPa
3. Revised on 3/25/03

Mild Steel
200 Amps – Oxygen Plasma / Air Shield



Retaining Cap 200218

Material Thickness		Preflow (Air)	Plasma (Oxygen)	Shield (Air)	Arc Voltage	Travel Speed		Cutting Height		Pierce Height		Motion Delay
(in)	(mm)	(psi)	(psi)	(psi)	(volts)	(ipm)	(m/min)	(in)	(mm)	(in)	(mm)	(msec)
1/4	6.4	16.5	60.4	60	115	180	4.57	.040	1.0	.200	5.1	200
3/8	9.5	16.5	60.4	60	122	140	3.56	.090	2.3	.225	5.7	200
1/2	12.7	16.5	60.4	60	125	110	2.79	.120	3.0	.250	6.4	300
5/8	15.9	16.5	60.4	60	127	80	2.03	.125	3.2	.250	6.4	500

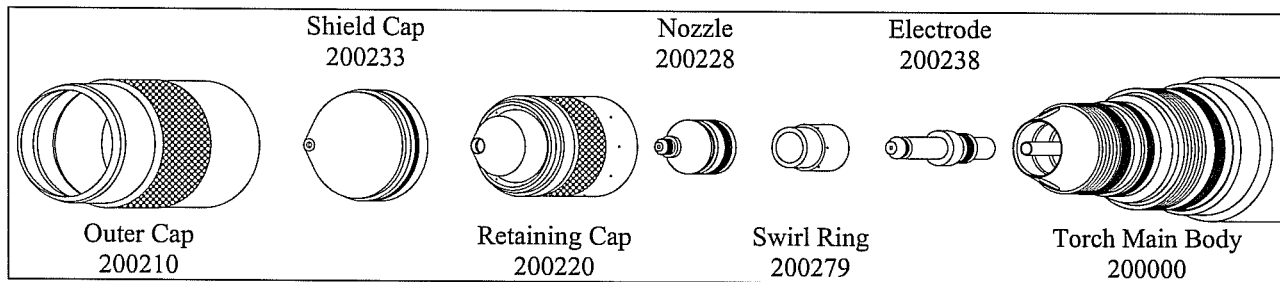
Retaining Cap 200219

Material Thickness		Preflow (Air)	Plasma (Oxygen)	Shield (Air)	Arc Voltage	Travel Speed		Cutting Height		Pierce Height		Motion Delay
(in)	(mm)	(psi)	(psi)	(psi)	(volts)	(ipm)	(m/min)	(in)	(mm)	(in)	(mm)	(msec)
3/4	19.1	16.5	60.4	65	132	65	1.65	.160	4.1	.300	7.6	700
1	25.4	16.5	60.4	65	140	45	1.14	.200	5.1	.300	7.6	800
1.25 **	31.8	16.5	60.4	65	150	25	.635	.240	6.1	.300	7.6	200
1.5 **	38.1	16.5	60.4	65	160	17	.432	.300	7.6	.300	7.6	200
1.75 **	44.5	16.5	60.4	65	170	12	.305	.345	8.8	.300	7.6	200
2.0 **	50.8	16.5	60.4	65	190	7	.178	.500	12.7	.305	7.6	200

** Edge start or moving pierce recommended

1. Arc voltage tolerance is +/- 1 volt. Note that the arc voltage will have to be increased as the electrode wears.
2. 1 inch = 25.4 mm; 1 scfh = 28.316 l/h; 1 psi = .0689 bar = 6.895 KPa
3. Revised on 12/5/03

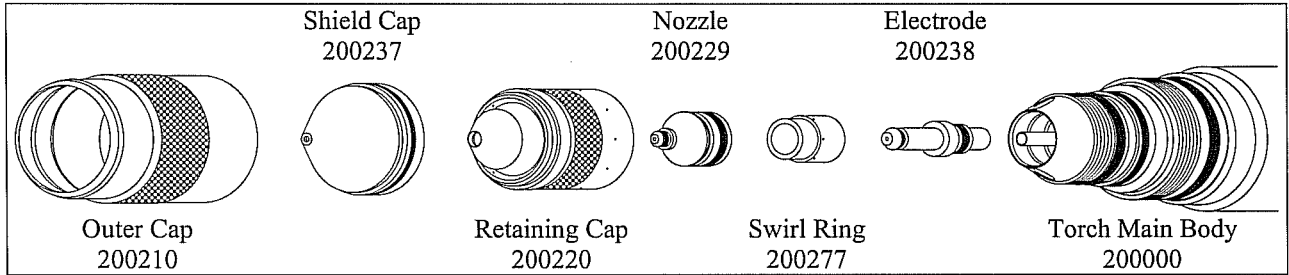
**Stainless Steel
30 Amps – Air Plasma / Air Shield**



Material Thickness			Prewlow (Air) (psi)	Plasma (Air) (psi)	Shield (Air) (psi)	Arc Voltage (volts)	Travel Speed		Cutting Height		Pierce Height		Motion Delay (msec)
(ga)	(in)	(mm)					(ipm)	(m/min)	(in)	(mm)	(in)	(mm)	
20	.036	0.9	30	80	30	73	190	4.83	.025	.64	.050	1.3	100
18	.048	1.2	30	80	30	74	160	4.06	.025	.64	.050	1.3	100
16	.060	1.5	30	80	30	75	120	3.05	.025	.64	.050	1.3	100
14	.075	1.9	30	80	30	77	88	2.24	.020	.51	.050	1.3	100

1. Arc voltage tolerance is +/- 1 volt. Note that the arc voltage will have to be increased as the electrode wears.
2. 1 inch = 25.4 mm; 1 scfh = 28.316 l/h; 1 psi = .0689 bar = 6.895 KPa
3. Revised on 11/21/00

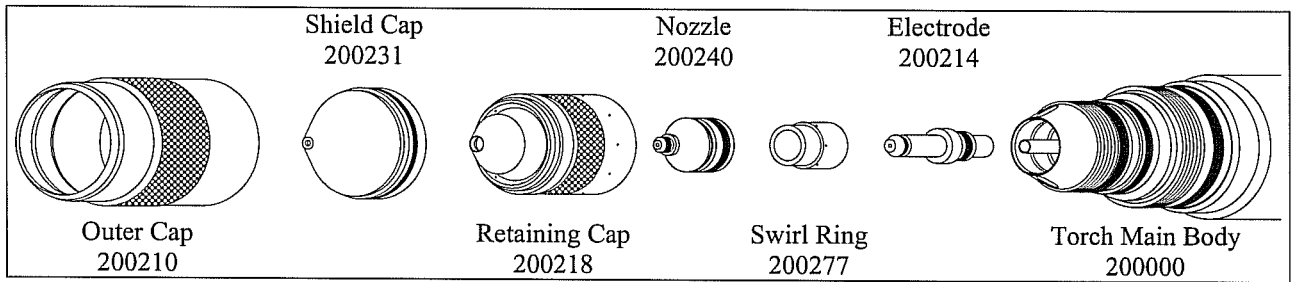
Stainless Steel
50 Amps – Air Plasma / Nitrogen Shield



Material Thickness			Preflow (Air)	Plasma (Air)	Shield (Nitrogen)	Arc Voltage	Travel Speed		Cutting Height		Pierce Height		Motion Delay
(ga)	(in)	(mm)	(psi)	(psi)	(psi)	(volts)	(ipm)	(m/min)	(in)	(mm)	(in)	(mm)	(msec)
14	.075	1.9	30	70	40	92	100	2.54	.035	.89	.060	1.5	100
12	.105	2.7	30	70	40	94	70	1.78	.035	.89	.060	1.5	100
11	.120	3.0	30	70	40	96	60	1.52	.035	.89	.060	1.5	100
10	.135	3.4	30	70	40	96	50	1.27	.035	.89	.060	1.5	100
	3/16	4.8	30	70	40	97	45	1.14	.035	.89	.075	1.9	200
	1/4	6.4	20	70	40	103	35	.889	.040	1.0	.085	2.2	250

1. Arc voltage tolerance is +/- 1 volt. Note that the arc voltage will have to be increased as the electrode wears.
2. 1 inch = 25.4 mm; 1 scfh = 28.316 l/h; 1 psi = .0689 bar = 6.895 KPa
3. Revised on 10/26/05

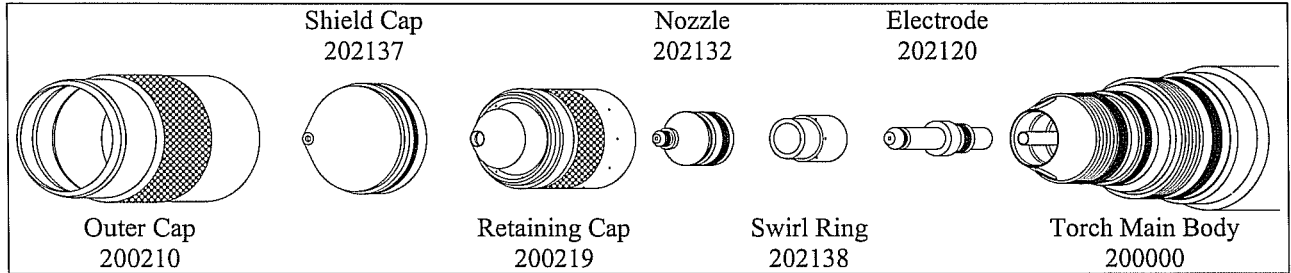
**Stainless Steel
70 Amps – Air Plasma / Nitrogen Shield**



Material Thickness			Prewlow (Air) (psi)	Plasma (Air) (psi)	Shield (Nitrogen) (psi)	Arc Voltage (volts)	Travel Speed		Cutting Height		Pierce Height		Motion Delay (msec)
(ga)	(in)	(mm)					(ipm)	(m/min)	(in)	(mm)	(in)	(mm)	
10	.135	3.4	20	65	47	125	100	2.54	.075	1.9	.100	2.5	100
	3/16	4.8	20	65	47	125	80	2.03	.075	1.9	.100	2.5	100
	1/4	6.4	20	65	47	135	55	1.40	.105	2.7	.125	3.2	200
	3/8	9.5	20	65	47	145	30	.762	.135	3.4	.150	3.8	250

1. Arc voltage tolerance is +/- 1 volt. Note that the arc voltage will have to be increased as the electrode wears.
2. 1 inch = 25.4 mm; 1 scfh = 28.316 l/h; 1 psi = .0689 bar = 6.895 KPa
3. Revised on 3/30/01

**Stainless Steel
70 Amps – H17 Plasma / Nitrogen Shield**

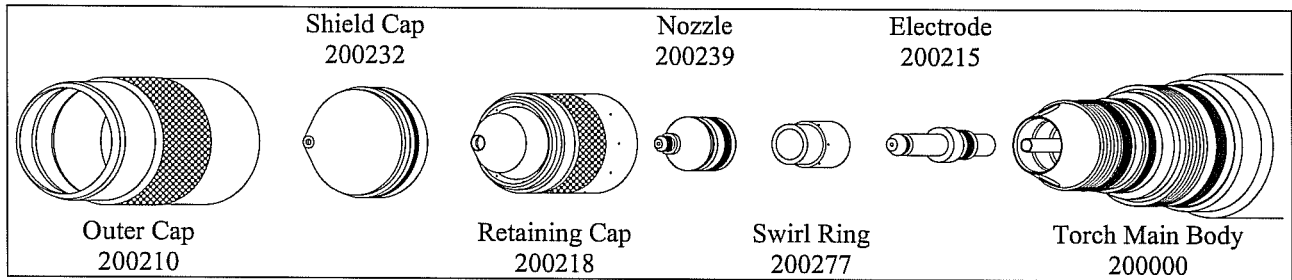


Material Thickness		Preflow (Nitrogen)	Plasma (H17)*	Shield (Nitrogen)	Arc Voltage	Travel Speed		Cutting Height		Pierce Height		Motion Delay
(in)	(mm)	(psi)	(psi)	(psi)	(volts)	(ipm)	(m/min)	(in)	(mm)	(in)	(mm)	(msec)
3/16	4.8	35	65.5	40	135	80	2.03	.140	3.6	.200	5.1	200

* H17 = 17.5% Hydrogen / 32.5% Argon / 50% Nitrogen

1. Arc voltage tolerance is +/- 1 volt. Note that the arc voltage will have to be increased as the electrode wears.
2. 1 inch = 25.4 mm; 1 scfh = 28.316 l/h; 1 psi = .0689 bar = 6.895 KPa
3. Revised on 5/7/03

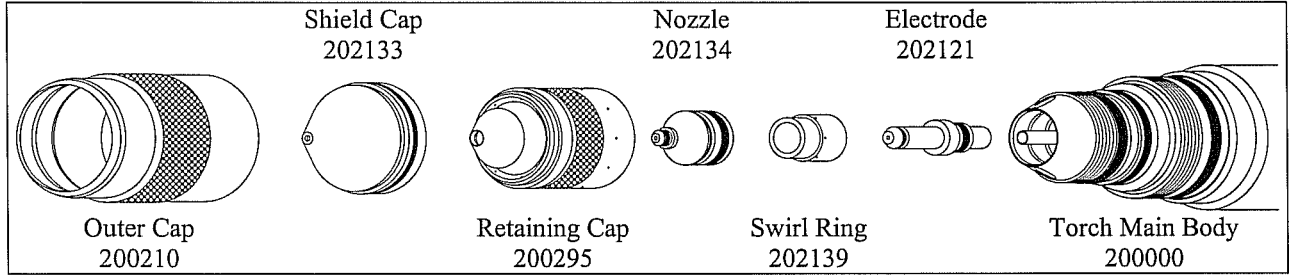
**Stainless Steel
100 Amps – Air Plasma / Nitrogen Shield**



Material Thickness		Prewlow (Air) (psi)	Plasma (Air) (psi)	Shield (Nitrogen) (psi)	Arc Voltage (volts)	Travel Speed		Cutting Height		Pierce Height		Motion Delay (msec)
(in)	(mm)					(ipm)	(m/min)	(in)	(mm)	(in)	(mm)	
1/4	6.4	20	80	35	143	90	2.29	.110	2.8	.125	3.2	150
3/8	9.5	20	80	35	147	75	1.91	.150	3.8	.175	4.4	200
1/2	12.7	20	80	35	157	50	1.27	.190	4.8	.200	5.1	250

1. Arc voltage tolerance is +/- 1 volt. Note that the arc voltage will have to be increased as the electrode wears.
2. 1 inch = 25.4 mm; 1 scfh = 28.316 l/h; 1 psi = .0689 bar = 6.895 KPa
3. Revised on 3/25/03

**Stainless Steel
100 Amps – H17 Plasma / Nitrogen Shield**

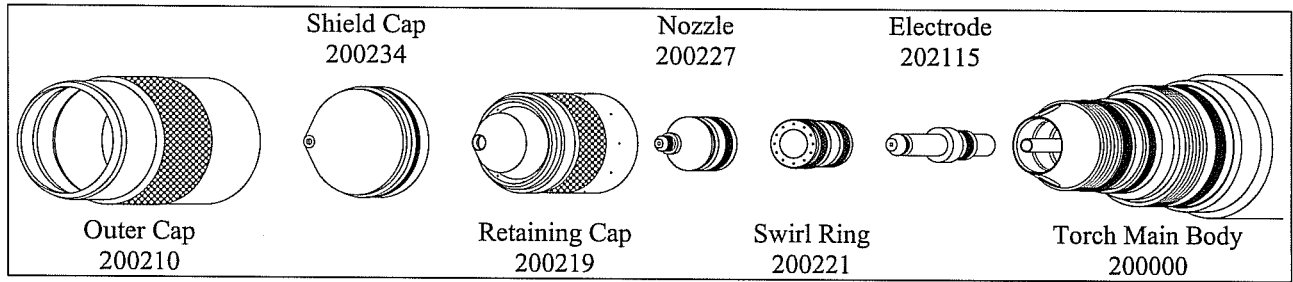


Material Thickness		Preflow (Nitrogen)	Plasma (H17)*	Shield (Nitrogen)	Arc Voltage	Travel Speed		Cutting Height		Pierce Height		Motion Delay
(in)	(mm)	(psi)	(psi)	(psi)	(volts)	(ipm)	(m/min)	(in)	(mm)	(in)	(mm)	(msec)
1/4	6.4	28	66	50	134	90	2.29	.125	3.2	.200	5.1	300

* H17 = 17.5% Hydrogen / 32.5% Argon / 50% Nitrogen

1. Arc voltage tolerance is +/- 1 volt. Note that the arc voltage will have to be increased as the electrode wears.
2. 1 inch = 25.4 mm; 1 scfh = 28.316 l/h; 1 psi = .0689 bar = 6.895 KPa
3. Revised on 5/7/03

**Stainless Steel
200 Amps – Air Plasma / Nitrogen Shield**

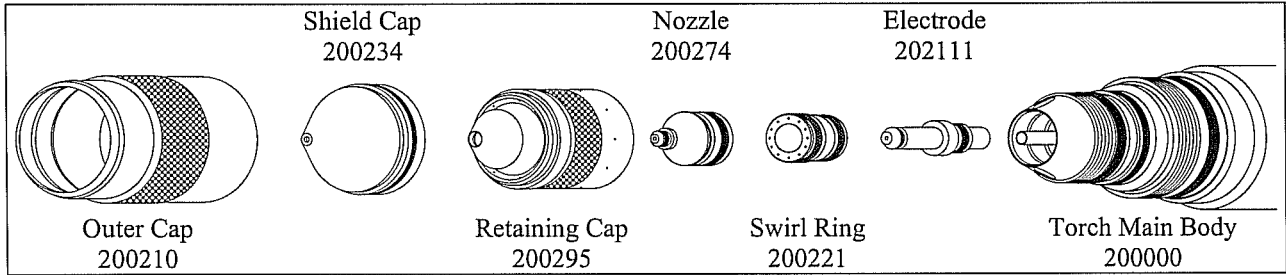


Material Thickness		Prewlow (Air) (psi)	Plasma (Air) (psi)	Shield (Nitrogen) (psi)	Arc Voltage (volts)	Travel Speed		Cutting Height		Pierce Height		Motion Delay (msec)
(in)	(mm)					(ipm)	(m/min)	(in)	(mm)	(in)	(mm)	
1/4	6.4	16.5	60.4	65	135	125	3.18	.120	3.0	.200	5.1	200
3/8	9.5	16.5	60.4	65	140	90	2.29	.130	3.3	.225	5.7	200
1/2	12.7	16.5	60.4	65	143	70	1.78	.135	3.4	.250	6.4	300
5/8	15.9	16.5	60.4	65	147	60	1.52	.165	4.2	.300	7.6	600
3/4	19.1	16.5	60.4	65	150	50	1.27	.175	4.4	.300	7.6	800
1.0	25.4	16.5	60.4	65	160	35	.889	.200	5.1	.325	8.3	1000
1.25 **	31.8	16.5	60.4	65	170	20	.508	.250	6.4	.325	8.3	300
1.5 **	38.1	16.5	60.4	65	180	10	.254	.275	7.0	.325	8.3	300
2.0 **	50.8	16.5	60.4	65	180	5	.127	.275	7.0	.325	8.3	300

** Edge start or moving pierce recommended

1. Arc voltage tolerance is +/- 1 volt. Note that the arc voltage will have to be increased as the electrode wears.
2. 1 inch = 25.4 mm; 1 scfh = 28.316 l/h; 1 psi = .0689 bar = 6.895 KPa
3. Revised on 4/28/04

**Stainless Steel
200 Amps – H17 Plasma / Nitrogen Shield**

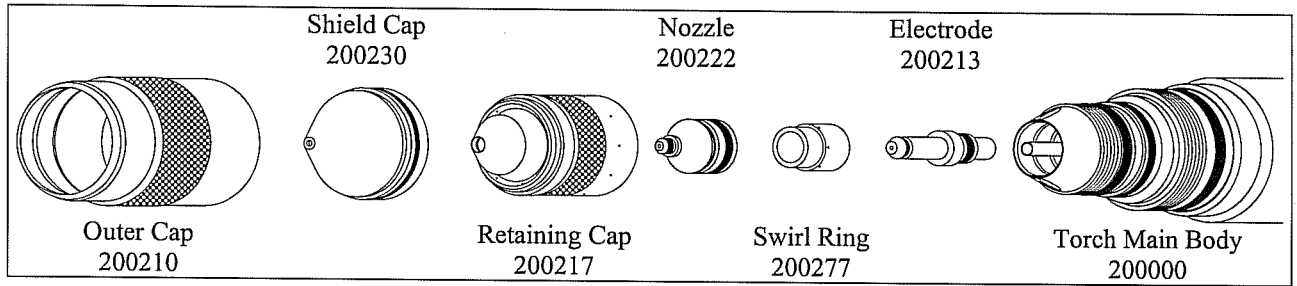


Material Thickness		Preflow (Air)	Plasma (H17)*	Shield (Nitrogen)	Arc Voltage	Travel Speed		Cutting Height		Pierce Height		Motion Delay
(in)	(mm)	(psi)	(psi)	(psi)	(volts)	(ipm)	(m/min)	(in)	(mm)	(in)	(mm)	(msec)
3/8	9.5	39.5	69.5	88	150	80	2.03	.175	4.4	.250	6.4	300
1/2	12.7	39.5	69.5	88	150	80	2.03	.200	5.1	.275	7.0	500
5/8	15.9	39.5	69.5	88	153	65	1.65	.225	5.7	.275	7.0	700
3/4	19.1	39.5	69.5	88	155	55	1.40	.225	5.7	.300	7.6	900
1.0	25.4	39.5	69.5	88	173	30	.762	.250	6.4	.325	8.3	1300

* H17 = 17.5% Hydrogen / 32.5% Argon / 50% Nitrogen

1. Arc voltage tolerance is +/- 1 volt. Note that the arc voltage will have to be increased as the electrode wears.
2. 1 inch = 25.4 mm; 1 scfh = 28.316 l/h; 1 psi = .0689 bar = 6.895 KPa
3. Revised on 12/5/03

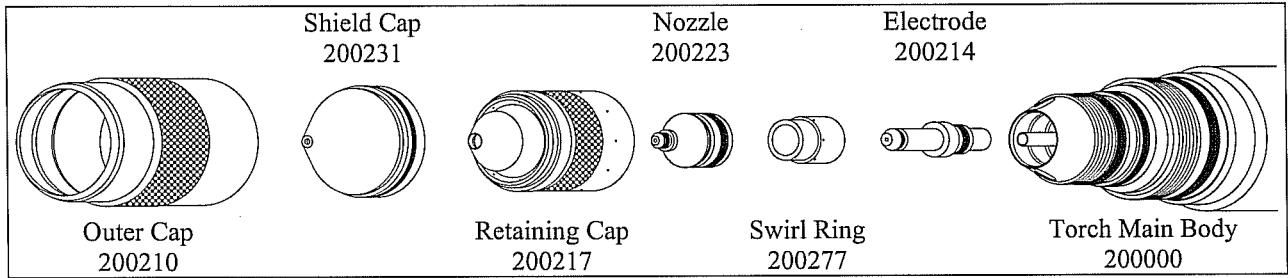
Aluminum
30 Amps – Air Plasma / Nitrogen Shield



Material Thickness		Prewlow (Air) (psi)	Plasma (Air) (psi)	Shield (Nitrogen) (psi)	Arc Voltage (volts)	Travel Speed		Cutting Height		Pierce Height		Motion Delay (msec)
(in)	(mm)					(ipm)	(m/min)	(in)	(mm)	(in)	(mm)	
.040	1.0	30	100	20	128	150	3.81	.040	1.0	.065	1.7	100
.050	1.3	30	100	20	128	120	3.05	.040	1.0	.075	1.9	100
.063	1.6	30	100	20	128	90	2.29	.040	1.0	.085	2.2	100

1. Arc voltage tolerance is +/- 1 volt. Note that the arc voltage will have to be increased as the electrode wears.
2. 1 inch = 25.4 mm; 1 scfh = 28.316 l/h; 1 psi = .0689 bar = 6.895 KPa
3. Revised on 11/21/00

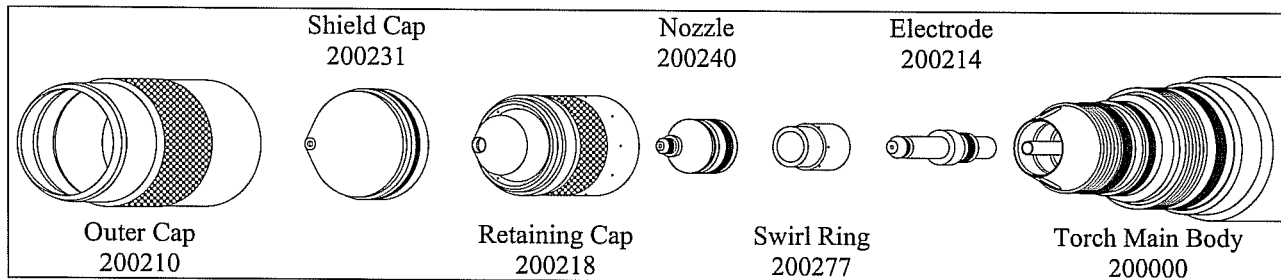
Aluminum
50 Amps – Air Plasma / Nitrogen Shield



Material Thickness		Preflow (Air)	Plasma (Air)	Shield (Nitrogen)	Arc Voltage	Travel Speed		Cutting Height		Pierce Height		Motion Delay
(in)	(mm)	(psi)	(psi)	(psi)	(volts)	(ipm)	(m/min)	(in)	(mm)	(in)	(mm)	(msec)
.050	1.3	25	80	30	131	180	4.57	.050	1.3	.100	2.5	100
.063	1.6	25	80	30	137	140	3.56	.090	2.3	.100	2.5	100
.080	2.0	25	80	30	137	90	2.29	.075	1.9	.100	2.5	100

1. Arc voltage tolerance is +/- 1 volt. Note that the arc voltage will have to be increased as the electrode wears.
2. 1 inch = 25.4 mm; 1 scfh = 28.316 l/h; 1 psi = .0689 bar = 6.895 KPa
3. Revised on 11/21/00

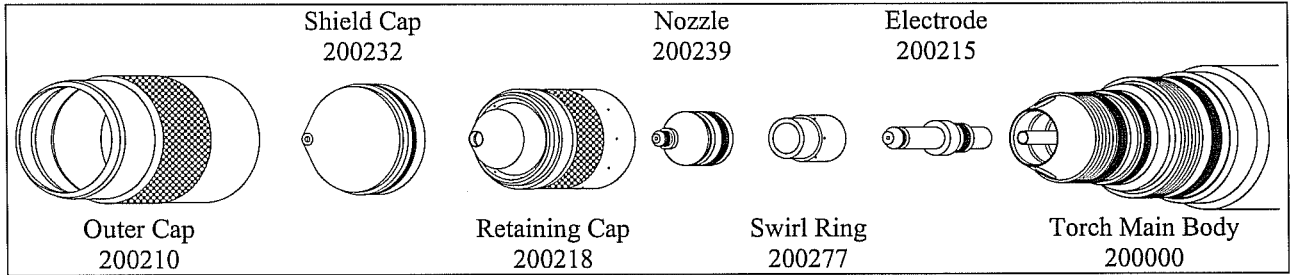
Aluminum
70 Amps – Air Plasma / Nitrogen Shield



Material Thickness		Preflow (Air) (psi)	Plasma (Air) (psi)	Shield (Nitrogen) (psi)	Arc Voltage (volts)	Travel Speed		Cutting Height		Pierce Height		Motion Delay (msec)
(in)	(mm)					(ipm)	(m/min)	(in)	(mm)	(in)	(mm)	
.080	2.0	25	65	47	128	180	4.57	.100	2.5	.100	2.5	100
1/8	3.2	25	65	47	128	120	3.05	.090	2.3	.100	2.5	100
3/16	4.8	25	65	47	135	60	1.52	.110	2.8	.125	3.2	100
1/4	6.4	25	65	47	135	45	1.14	.080	2.0	.125	3.2	100
3/8	9.5	25	65	47	145	40	1.02	.120	3.0	.150	3.8	200
1/2	12.7	25	65	47	150	30	.762	.150	3.8	.175	4.4	250

1. Arc voltage tolerance is +/- 1 volt. Note that the arc voltage will have to be increased as the electrode wears.
2. 1 inch = 25.4 mm; 1 scfh = 28.316 l/h; 1 psi = .0689 bar = 6.895 KPa
3. Revised on 3/30/01

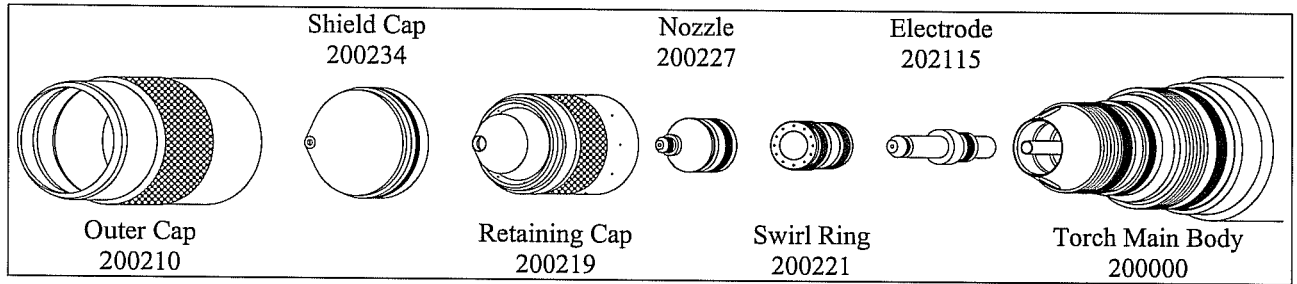
Aluminum
100 Amps – Air Plasma / Nitrogen Shield



Material Thickness		Preflow (Air)	Plasma (Air)	Shield (Nitrogen)	Arc Voltage	Travel Speed		Cutting Height		Pierce Height		Motion Delay
(in)	(mm)	(psi)	(psi)	(psi)	(volts)	(ipm)	(m/min)	(in)	(mm)	(in)	(mm)	(msec)
1/4	6.4	20	80	35	146	95	2.41	.125	3.2	.150	3.8	150
3/8	9.5	20	80	35	155	80	2.03	.155	3.9	.175	4.4	200
1/2	12.7	20	80	35	160	60	1.52	.170	4.3	.200	5.1	250

1. Arc voltage tolerance is +/- 1 volt. Note that the arc voltage will have to be increased as the electrode wears.
2. 1 inch = 25.4 mm; 1 scfh = 28.316 l/h; 1 psi = .0689 bar = 6.895 KPa
3. Revised on 3/25/03

Aluminum
200 Amps – Air Plasma / Nitrogen Shield

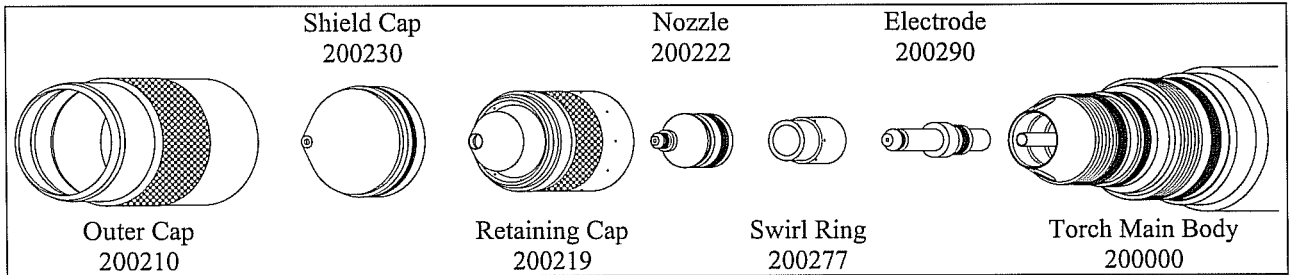


Material Thickness		Prewlow (Air) (psi)	Plasma (Air) (psi)	Shield (Nitrogen) (psi)	Arc Voltage (volts)	Travel Speed		Cutting Height		Pierce Height		Motion Delay (msec)
(in)	(mm)					(ipm)	(m/min)	(in)	(mm)	(in)	(mm)	
1/4	6.4	16.5	60.4	65	140	190	4.83	.080	2.0	.200	5.1	200
3/8	9.5	16.5	60.4	65	145	145	3.68	.100	2.5	.250	6.4	300
1/2	12.7	16.5	60.4	65	155	110	2.79	.120	3.0	.300	7.6	400
3/4	19.1	16.5	60.4	65	160	65	1.65	.200	5.1	.350	8.9	600
1.0	25.4	16.5	60.4	65	175	35	.889	.200	5.1	.350	8.9	800
1.5 **	38.1	16.5	60.4	65	185	15	.381	.200	5.1	.350	8.9	200
2.0 **	50.8	16.5	60.4	65	185	6	.152	.200	5.1	.350	8.9	200

** Edge start or moving pierce recommended

1. Arc voltage tolerance is +/- 1 volt. Note that the arc voltage will have to be increased as the electrode wears.
2. 1 inch = 25.4 mm; 1 scfh = 28.316 l/h; 1 psi = .0689 bar = 6.895 KPa
3. Revised on 12/5/03

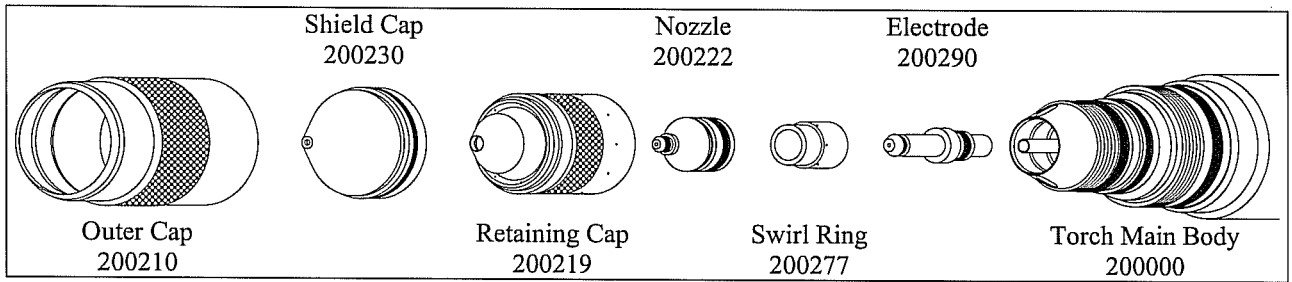
Mild Steel - Marking
10 Amps – Nitrogen Plasma / Nitrogen Shield



Material Thickness			Preflow (Air)	Plasma (Nitrogen)	Shield (Nitrogen)	Arc Voltage	Travel Speed		Cutting Height		Pierce Height		Motion Delay
(ga)	(in)	(mm)	(psi)	(psi)	(psi)	(volts)	(ipm)	(m/min)	(in)	(mm)	(in)	(mm)	(msec)
All Thicknesses			25	25	20	120	150	3.81	.050	1.3	.050	1.3	0

1. Revised on 7/20/01

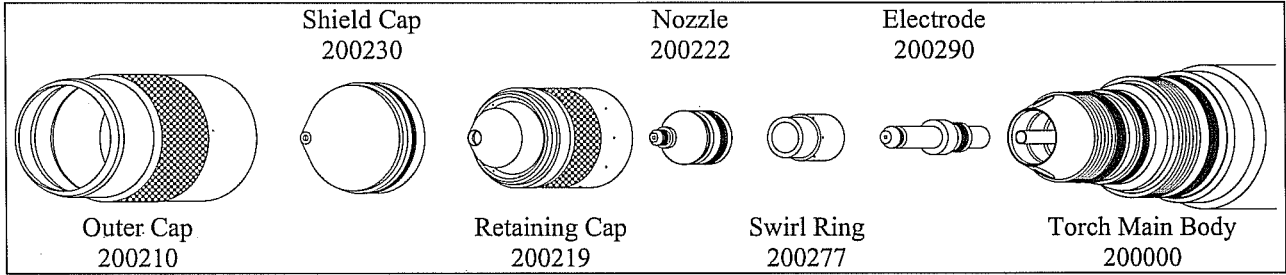
Stainless Steel - Marking
8 Amps – Nitrogen Plasma / Nitrogen Shield



Material Thickness (ga) (in) (mm)	Prewflow (Air) (psi)	Plasma (Nitrogen) (psi)	Shield (Nitrogen) (psi)	Arc Voltage (volts)	Travel Speed		Cutting Height		Pierce Height		Motion Delay (msec)
					(ipm)	(m/min)	(in)	(mm)	(in)	(mm)	
All Thicknesses	23	23	20	120	150	3.81	.050	1.3	.050	1.3	0

1. Revised on 7/20/01

Aluminum - Marking
10 Amps – Nitrogen Plasma / Nitrogen Shield



Material Thickness			Preflow (Air) (psi)	Plasma (Nitrogen) (psi)	Shield (Nitrogen) (psi)	Arc Voltage (volts)	Travel Speed		Cutting Height		Pierce Height		Motion Delay (msec)
(ga)	(in)	(mm)					(ipm)	(m/min)	(in)	(mm)	(in)	(mm)	
All Thicknesses			25	25	30	120	100	2.54	.050	1.3	.050	1.3	0

1. Revised on 7/20/01