

Section 6

PARTS LIST

In this section:

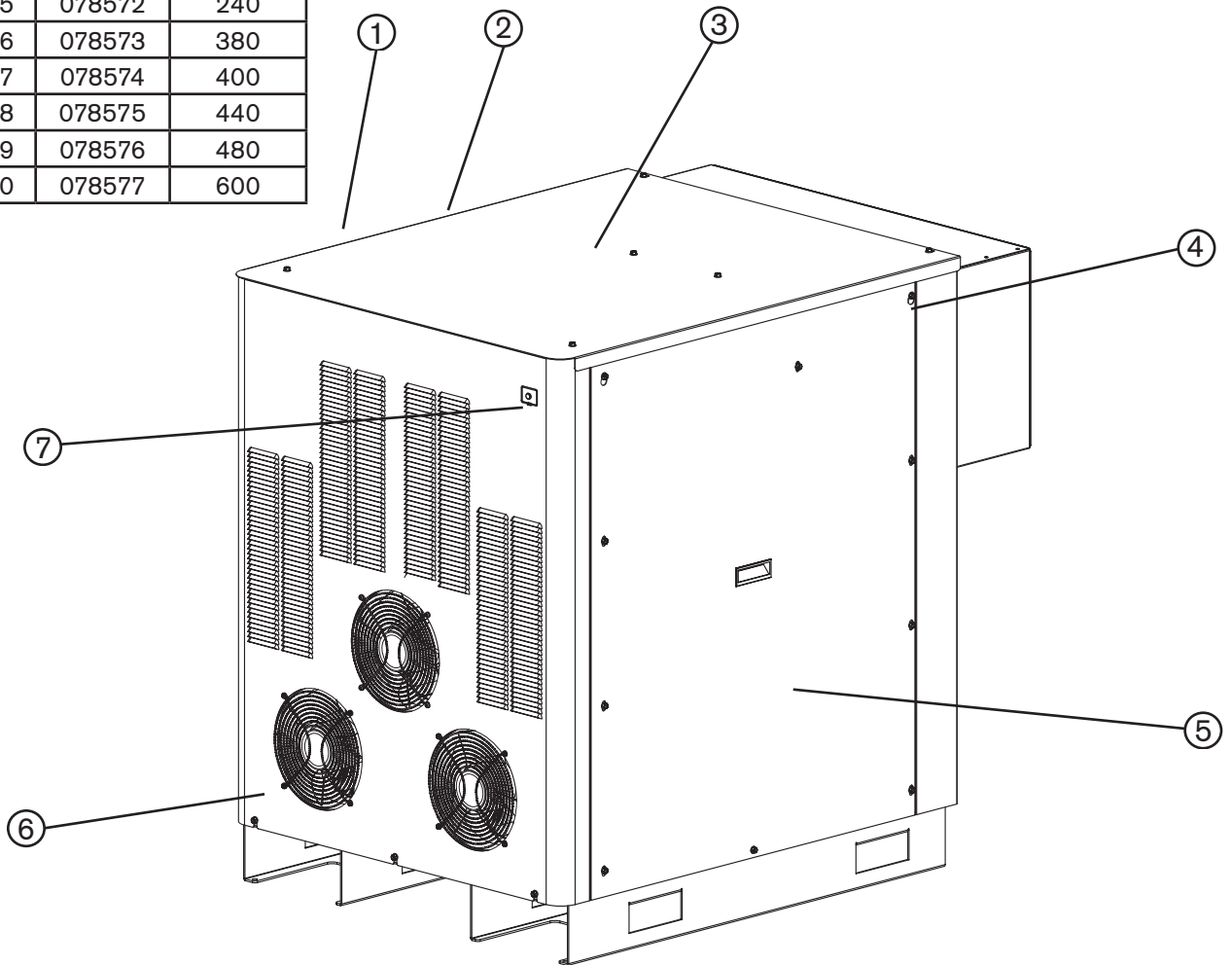
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Power supply

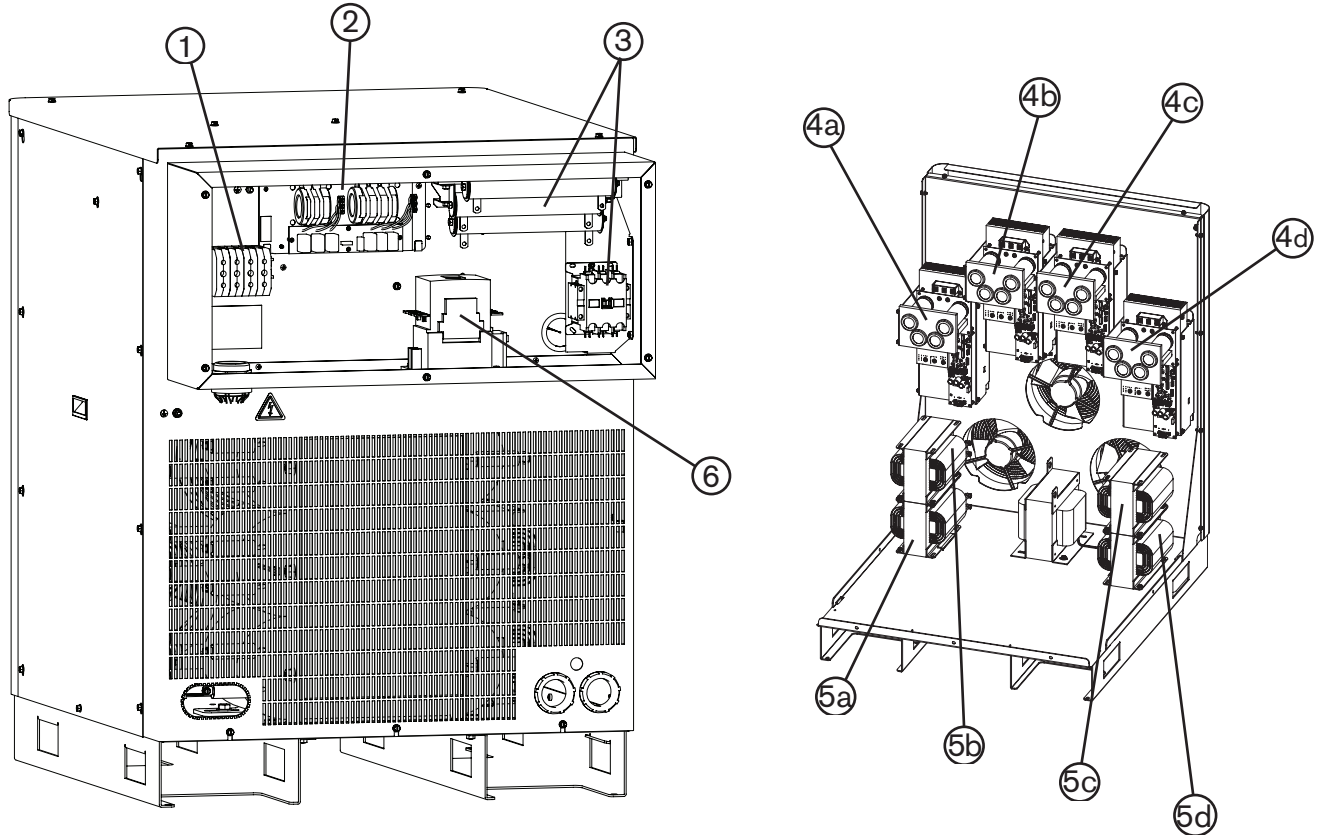
Power supplies		
Without Hypernet	With Hypernet	Voltage (AC)
078523	078570	200/208
078524	078571	220
078525	078572	240
078526	078573	380
078527	078574	400
078528	078575	440
078529	078576	480
078530	078577	600

Note: The Hypernet option is currently used with the ArcGlide® torch height control. See the ArcGlide instruction manual (806450) for more information.



Item	Part Number	Description	Designator	Qty.
1	See table above	Power supply		
2	228363	Panel: Left side, with labels and handles (not shown)		1
3	228362	Panel: Top, with labels		1
4	075241	Sheet metal screws		1
5	228395	Panel: Right side, with labels and handles		1
6	228361	Panel: Front, with labels		1
7	129633	Green power lamp assembly		1
8	228604	Kit: Hypernet upgrade (not shown)		1

Power supply



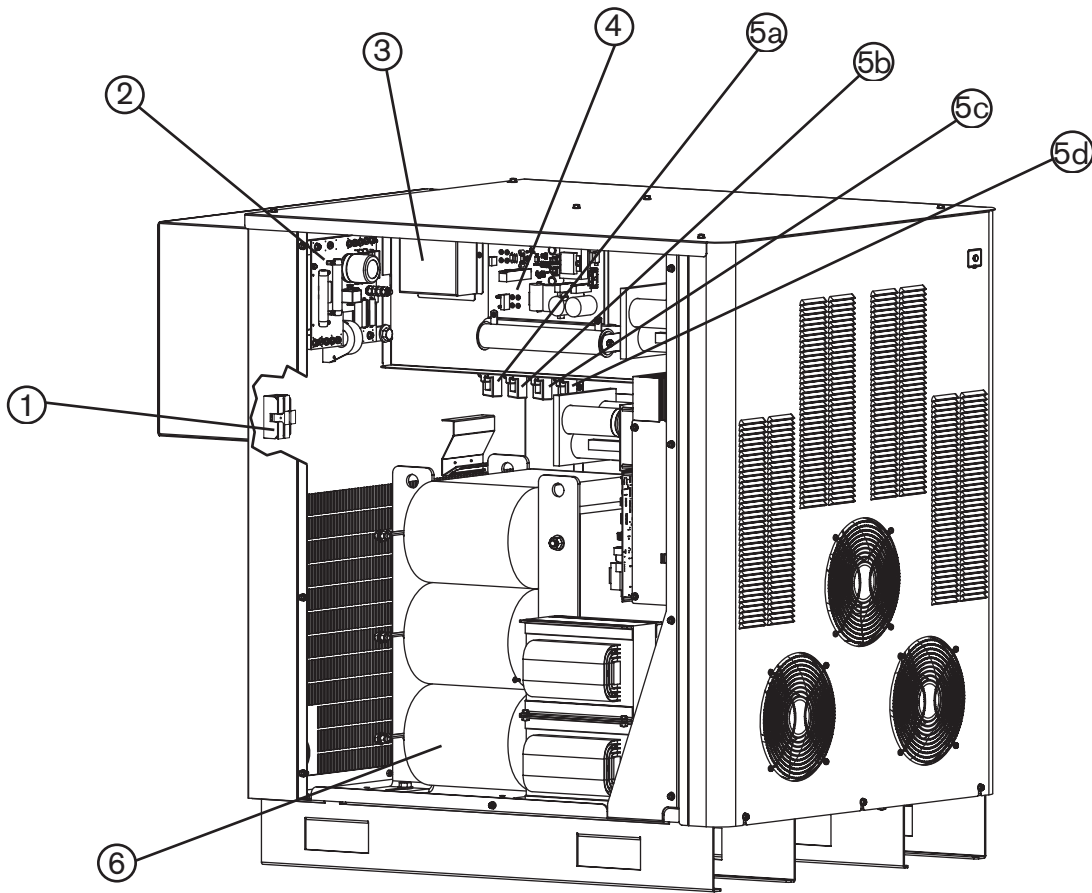
<u>Item</u>	<u>Part Number</u>	<u>Description</u>	<u>Designator</u>	<u>Qty.</u>
1	229214*	Terminal block: Input power	TB1	1
	229033**	Terminal block: Input power	TB1	1
2	229195	EMI filter (400 volt power supply only)		1
3	428064	Kit: HPR400/800 inrush circuit		1
4a	129792	Chopper assembly	CHA	1
4b	129792	Chopper assembly	CHB	1
4c	129792	Chopper assembly	CHC	1
4d	129792	Chopper assembly	CHD	1
	127039	6" fan: 230 CFM, 115 VAC 50-60 HZ		8
5a	014080	Inductor: 100 amp, 4 mH	L1	1
5b	014080	Inductor: 100 amp, 4 mH	L2	1
5c	014080	Inductor: 100 amp, 4 mH	L3	1
5d	014080	Inductor: 100 amp, 4 mH	L4	1
6	003218*	Contactors	CON1	1
	003233**	Contactors	CON1	1

* 200, 220, and 240 volt power supplies

** 380, 400, 440, 480, and 600 volt power supplies

PARTS LIST

Power supply



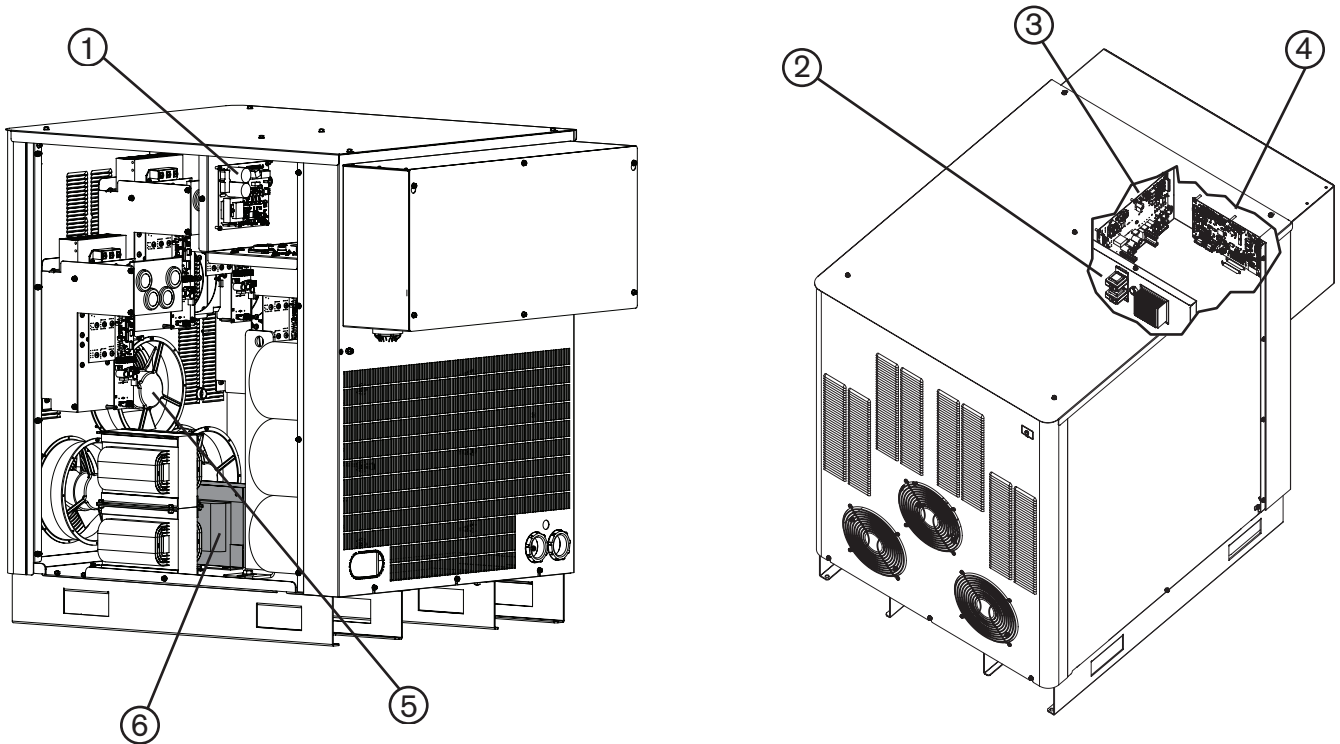
Item	Part Number	Description	Designator	Qty.
1	108847*	Fuse: 7.5 amp, 600 volt, high surge	F1, F2	2
	008709**	Fuse: 20 amp, 500 volt, slow blow	F1, F2	2
2	229213	PCB: I/O		1
3	003149***	Relay: Pilot arc, 120 VAC	CR1	1
4	229238	Start circuit assembly	PCB1	1
5a	109004	Current sensor: Hall 100 amp, 4 volt	CS1	1
5b	109004	Current sensor: Hall 100 amp, 4 volt	CS2	1
5c	109004	Current sensor: Hall 100 amp, 4 volt	CS3	1
5d	109004	Current sensor: Hall 100 amp, 4 volt	CS4	1
6	014321	200 volt main transformer: 80KW, 3 ph, 50 HZ	T2	1
	014322	220 volt main transformer: 80KW, 3 ph, 50 HZ		1
	014323	240 volt main transformer: 80KW, 3 ph, 60 HZ		1
	014324	380 volt main transformer: 80KW, 3 ph, 50 HZ		1
	014325	400 volt main transformer: 80KW, 3 ph, 50 HZ		1
	014326	440 volt main transformer: 80KW, 3 ph, 50 HZ		1
	014327	480 volt main transformer: 80KW, 3 ph, 60 HZ		1
	014328	600 volt main transformer: 80KW, 3 ph, 60 HZ		1
	228309	Kit: Thermistor replacement for main transformer		1

* 380, 400, 440, 480, and 600 volt power supplies

** 200, 220, and 240 volt power supplies

*** CR1 is located under the cover

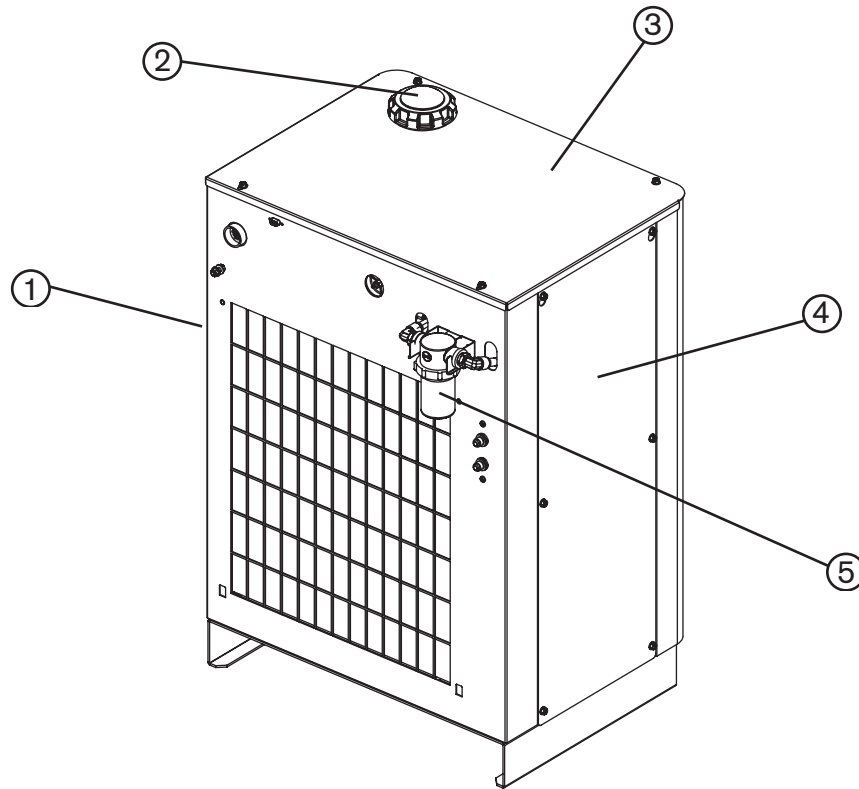
Power supply



<u>Item</u>	<u>Part Number</u>	<u>Description</u>	<u>Designator</u>	<u>Qty.</u>
1	141027	PCB: Pump motor drive	PCB7	1
2	229212	Inductor: 5 amp, 1.4 mH		2
3	041802	PCB: Power distribution	PCB2	1
	108028	Fuse: 3 amp, 250 volt	F5, F6, F7	3
	108075	Fuse: 6.3 amp, 250 volt (slow-blow)	F1, F2, F3	3
	108709	Fuse: 10 amp, 250 volt	F4	1
4	141030	PCB: Control	PCB3	1
5	027079	10" fan: 450-550 CFM, 120 VAC 50-60 HZ		3
6	229225	Control transformer: 400 volt, 50-60 HZ	T2	1
	229226	Control transformer: 380 volt, 50-60 HZ		1
	229227	Control transformer: 480 volt, 60 HZ		1
	229228	Control transformer: 600 volt, 60 HZ		1
	229230	Control transformer: 240 volt, 60 HZ		1
	229231	Control transformer: 200 and 208 volt, 50-60 HZ		1
	229232	Control transformer: 440 volt, 50-60 HZ		1
	229233	Control transformer: 220 volt, 50-60 HZ		1

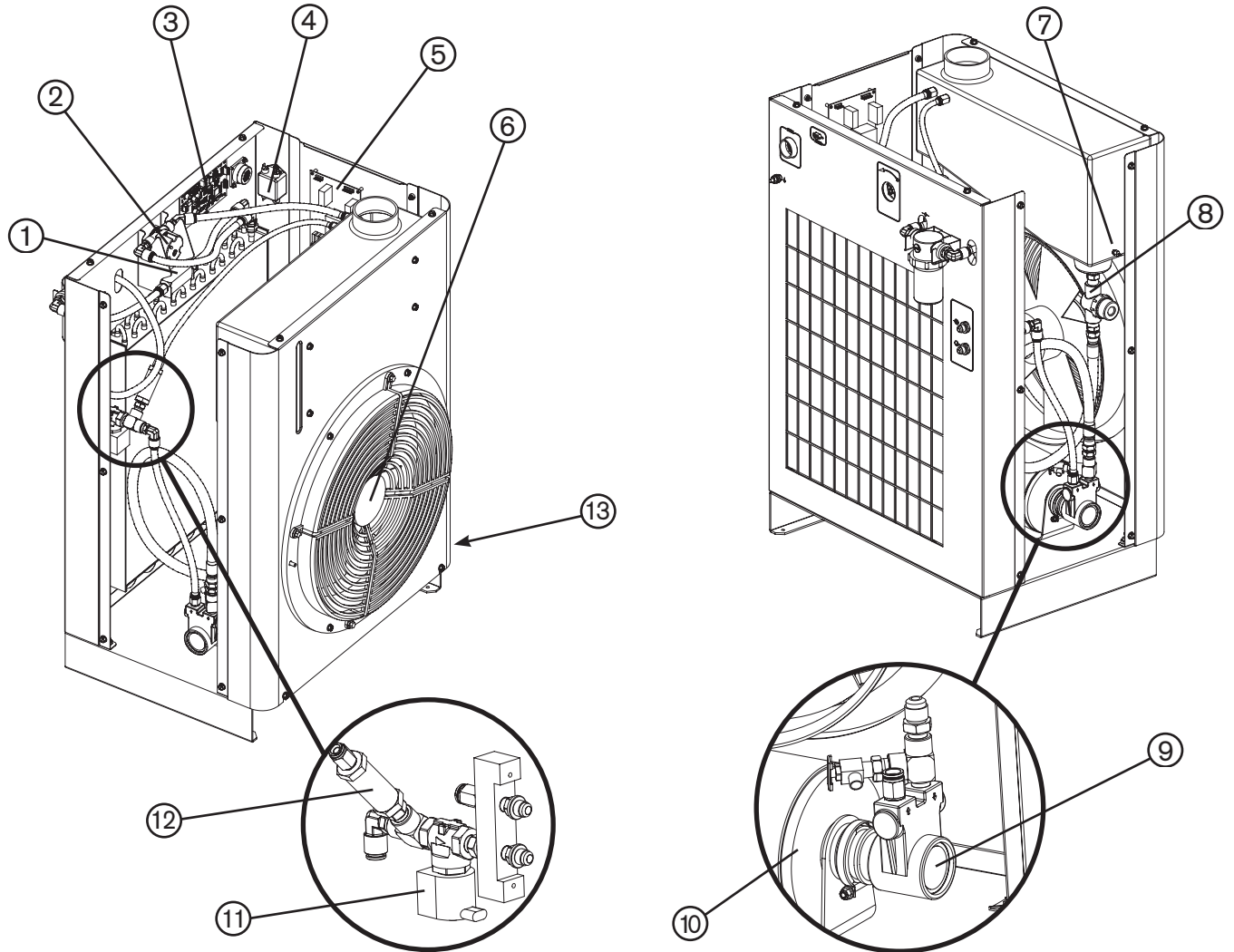
PARTS LIST

Cooler



<u>Item</u>	<u>Part Number</u>	<u>Description</u>	<u>Designator</u>	<u>Qty.</u>
	078531	Cooler		
1	101022	Panel: Right side		1
2	127014	Filler cap		1
3	228366	Panel: Top, with labels		1
4	110507	Panel: Left side		1
5	027634	Filter housing		1
	027664	Filter element		1

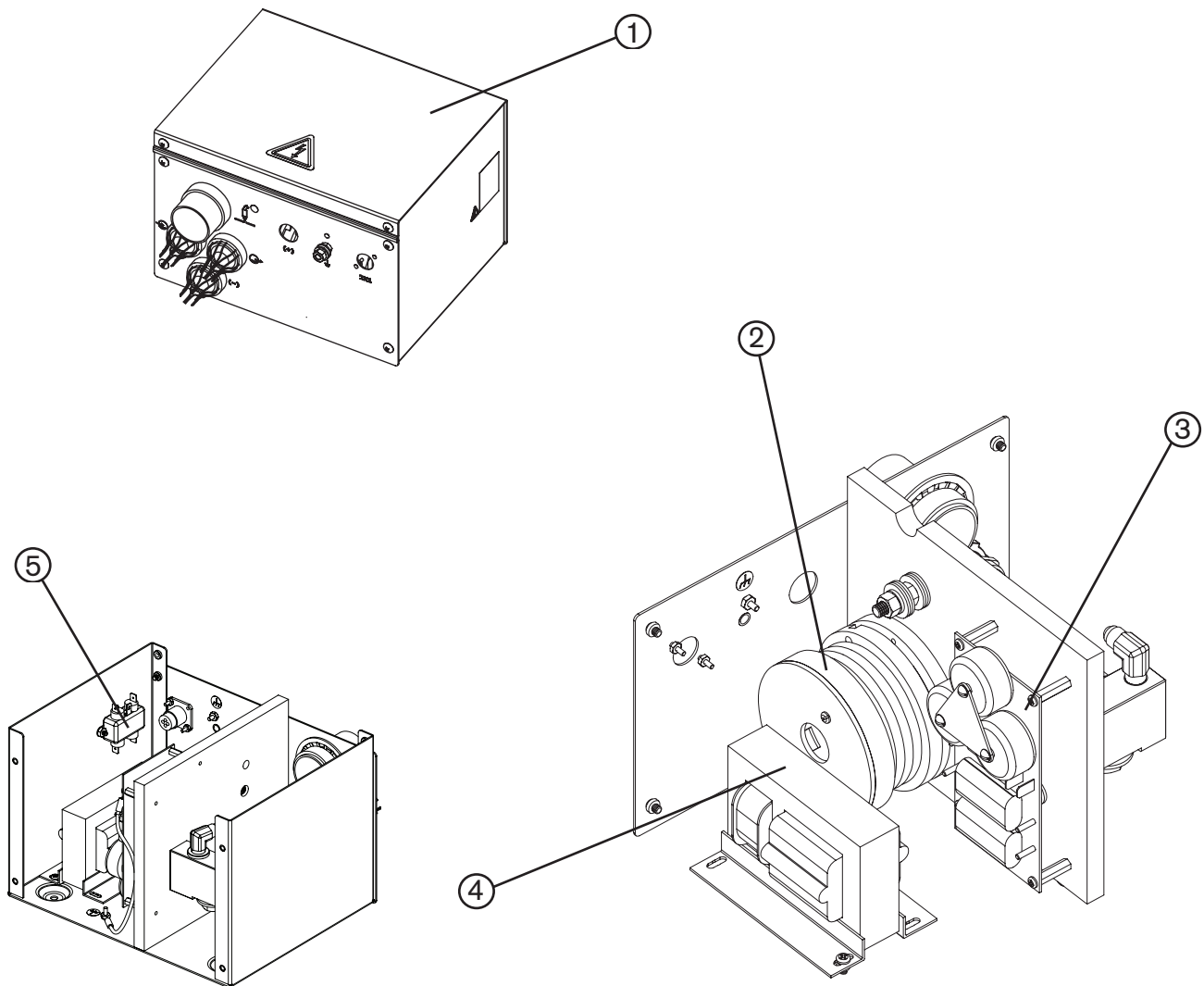
Cooler



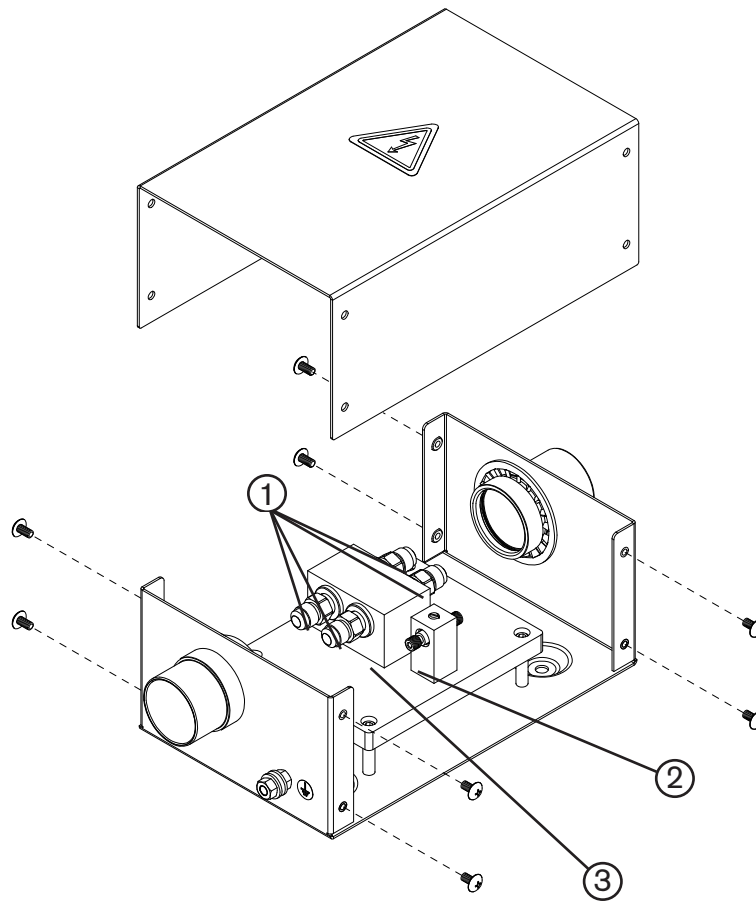
<u>Item</u>	<u>Part Number</u>	<u>Description</u>	<u>Designator</u>	<u>Qty.</u>
1	006113	Check valve		1
2	229235	Flow sensor: 23 lpm (6 gpm)	FS1	1
3	141033	PCB: Cooler sensor		1
4	009040	EMI filter: 250 VAC, 2 amp, 1 phase		1
5	041897	PCB: Console power distribution		1
	008756	Fuse: 5 amp, 250 volt (slow-blow)	F1	1
6	027658	Fan: 240 volt, 240 watt, 2910 cfm		1
7	229224	Temperature sensor	TS1	1
8	027926	Filter assembly: 1/2", NPT, low profile		1
9	228171	Kit: Pump with clamp		1
10	228230	Kit: Motor with clamp, 1/3 hp		1
11	229229	Solenoid valve		1
12	006132	Check valve (bypass valve): 1/4" NPT, 200 psi		1
13	109207	Capacitor (not visible)		1
	031122	Pump to motor shaft coupler (not shown)		1

PARTS LIST

Ignition console



<u>Item</u>	<u>Part Number</u>	<u>Description</u>	<u>Designator</u>	<u>Qty.</u>
1	078172	Ignition Console		
2	129831	Coil assembly	T2	1
3	041817	HFHV Ignition PCB	PCB IGN	1
4	129854	Transformer	T1	1
5	009045	EMI filter		1

Torch lead junction box (Optional)

Item	Part Number	Description	Qty.
	078619	HPRXD junction box	1
1	015007	Coolant fitting	4
2	104763	Pilot arc fitting	1
3	104762	Coolant block	1

PARTS LIST

Ignition console to junction box leads

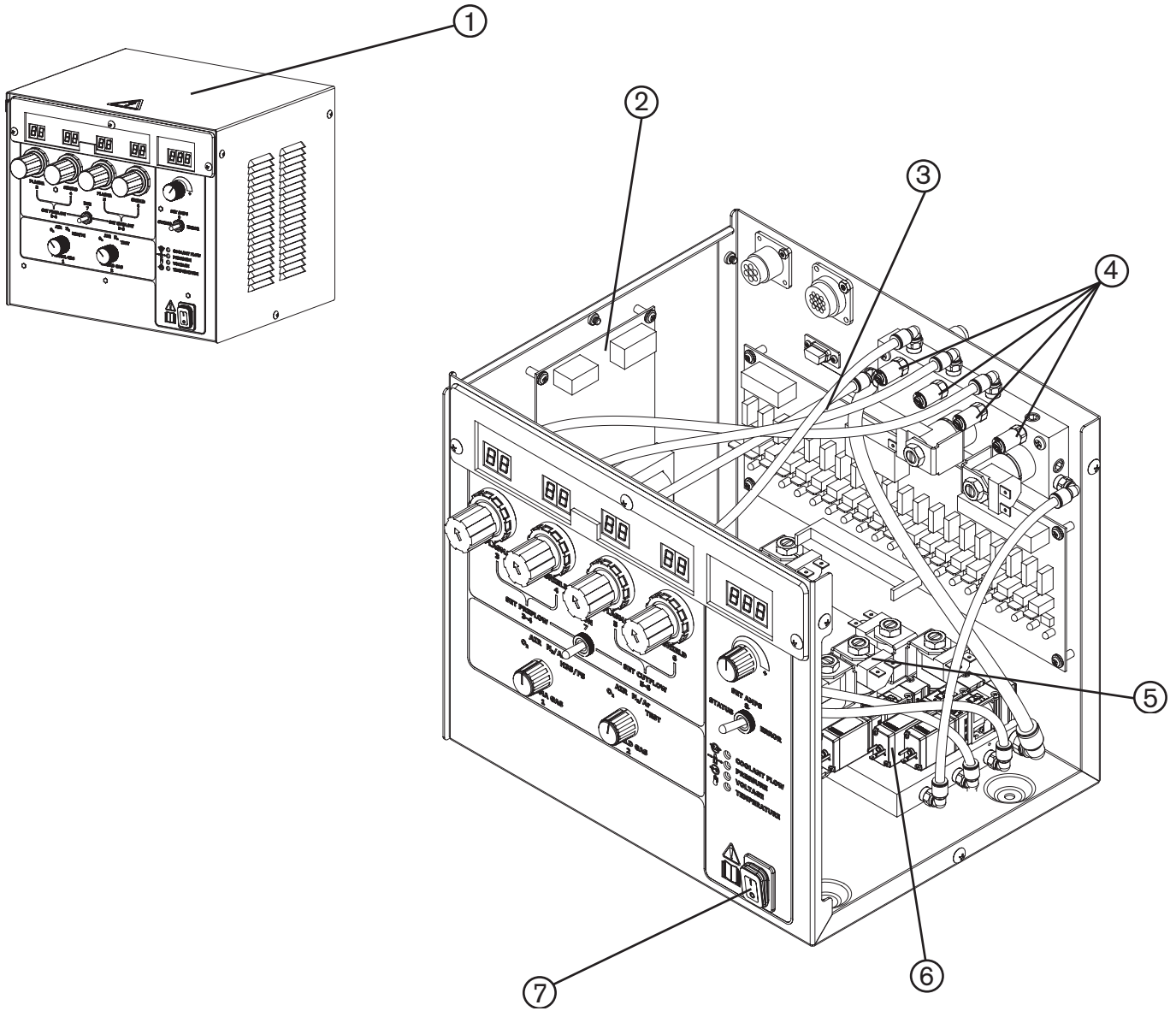
Caution:



Total lead length from the ignition console to the torch must be less than or equal to:
20 m (65 feet) for HPR130XD / HPR260XD
15 m (50 feet) for HPR400XD / HPR800XD

Part no.	Description	Part no.	Description
428420	3 m (10 ft)	428425	10 m (35 ft)
428421	4.5 m (15 ft)	428426	12.2 m (40 ft)
428339	5.5 m (18 ft)	428427	13.7 m (45 ft)
428422	6 m (20 ft)	428428	15 m (50 ft)
428423	7.5 m (25 ft)	428429	16.8 m (55 ft)
428424	9.1 m (30 ft)		

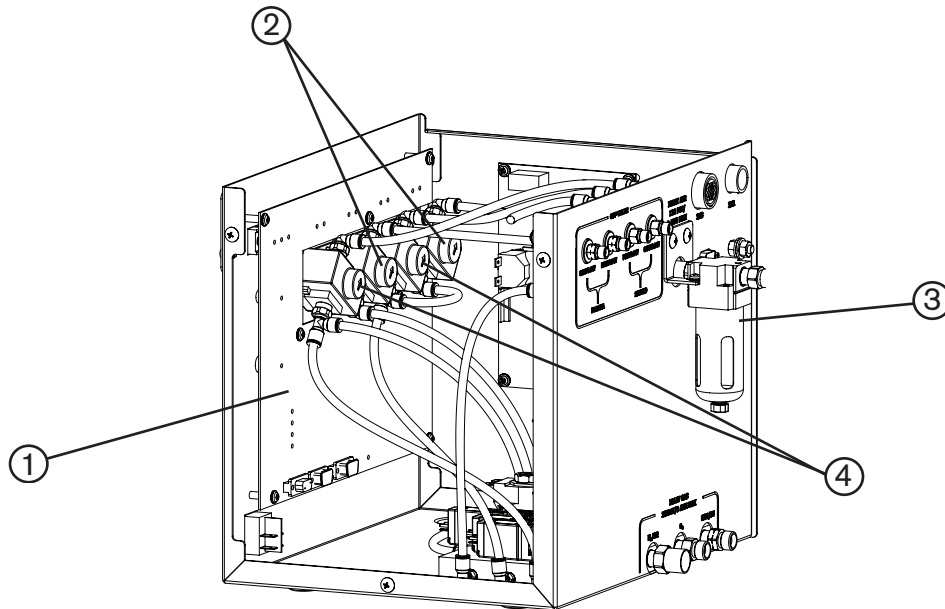
Gas console



<u>Item</u>	<u>Part Number</u>	<u>Description</u>	<u>Designator</u>	<u>Qty.</u>
1	078532	Gas Console		
2	041805	Power distribution PCB	PCB1	1
	008756	Fuse: 5 amp, 250 volt		1
3	041822	Valve driver PCB	PCB3	1
	008756	Fuse: 5 amp, 250 volt		1
4	005263	Pressure sensor	PT1-PT4	4
5	006109	Solenoid valve	SV2, SV3, SV4, SV6, SV8-SV14	11
	006112	Replacement solenoid coil		
6	228984	Solenoid valve	SV1, SV5, SV7	3
7	005262	Illuminated power switch	SW1	1

PARTS LIST

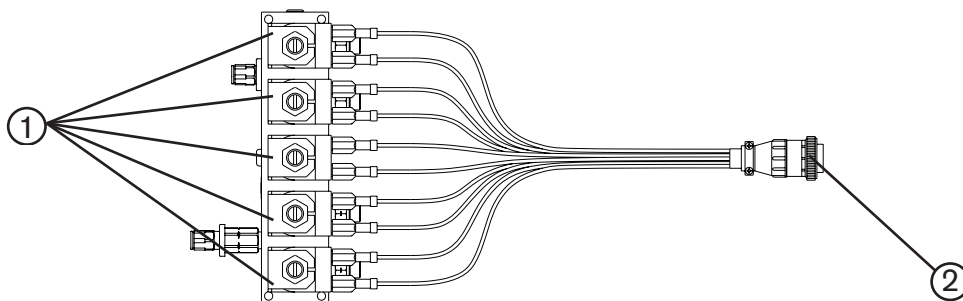
Gas console



<u>Item</u>	<u>Part Number</u>	<u>Description</u>	<u>Designator</u>	<u>Qty.</u>
1	041912	Control PCB	PCB2	1
2	229128	Regulator assembly with elbow fitting	PR3, PR4	2
3	011109	Air filter housing		1
	011110	Air filter element		1
4	229129	Regulator assembly with elbow and tee fitting	PR1, PR2	2

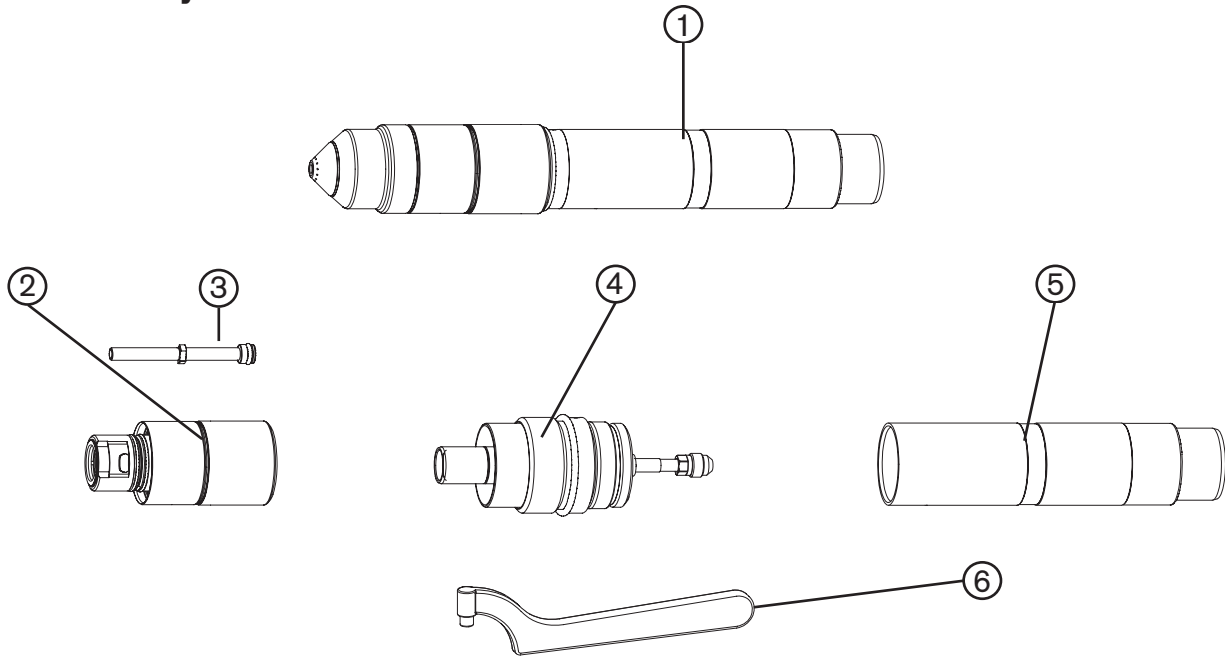
Off-valve

<u>Item</u>	<u>Part Number</u>	<u>Description</u>	<u>Designator</u>	<u>Qty.</u>
	078534	Off valve assembly		1
1	006109	Solenoid valve	V16-V20	5
	006112	Replacement solenoid coil		5
2	123748	Off-valve cable		1



HyPerformance torch

Torch assembly



<u>Item</u>	<u>Part Number</u>	<u>Description</u>
1	228354	HPR400XD machine torch assembly
2	220706	Quick-disconnect torch
3	220571	Water tube
4	220705	Quick-disconnect receptacle
5	220789	Torch mounting sleeve assembly: Standard, 181 mm (7 in)
	220788	Torch mounting sleeve assembly: Short, 114 mm (4.5 in)
	220790	Torch mounting sleeve assembly: Long, 248 mm (9.75 in)
6	104269	2" spanner wrench
	128879	Torch kit: O-rings, water tube and seal
	128880	Quick disconnect kit: O-ring and connector

PARTS LIST

Torch leads

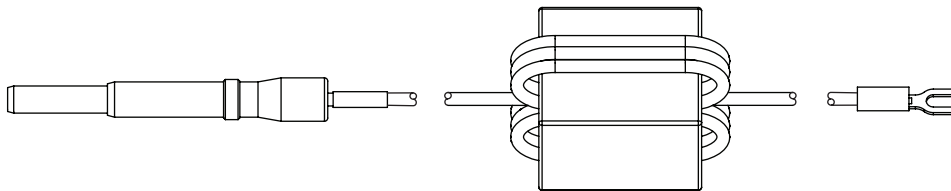


Part no.	Description
228291	2 m (6 ft)
228292	3 m (10 ft)
228293	4.5 m (15 ft)
228294	6 m (20 ft)
228295	7.5 m (25 ft)
228296	10 m (35 ft)
228297	15 m (50 ft)

Note: A 20 m (65 ft) torch lead is not available for HPR400XD systems

Ohmic contact wire (Not part of the HPR400XD system. Shown for reference only.)

Note: The Ohmic extension wire found in appendix C is for robotic applications only



Part no.	Length
123983	3 m (10 ft)
123984	6 m (20 ft)
123985	7.5 m (25 ft)
123986	9 m (30 ft)
123987	12 m (40 ft)
123988	15 m (50 ft)
123989	23 m (75 ft)
123990	30 m (100 ft)
123991	45 m (150 ft)

Consumable parts kits

Note: See *Consumable selection* or *Cut charts* in section 4 for specific applications

Mild steel parts kit – 228367

<u>Part Number</u>	<u>Description</u>	<u>Qty.</u>
026009	O-ring: 0.208" X 0.070"	5
027055	Lubricant: Silicone 1/4-oz tube	1
044028	O-ring: 1.364" X 0.070"	2
104119	Tool: Consumable removal / replacement	1
104269	Wrench: Spanner	1
220179	Swirl ring: 80 A/130 A	1
220180	Swirl ring: 30 A	1
220181	Electrode: 130 A	2
220182	Nozzle: 130 A	3
220183	Shield: 130 A	2
220187	Electrode: 80 A	2
220188	Nozzle: 130 A	2
220189	Shield: 80 A	1
220192	Electrode: 30 A	2
220193	Nozzle: 30 A	2
220194	Shield: 30 A	1
220340	Water tube with o-ring	1
220352	Electrode: 200 A	2
220353	Swirl ring: 200 A	1
220354	Nozzle: 200 A	3
220435	Electrode: 260 A	2
220436	Swirl ring: 260 A	1
220439	Nozzle: 260 A	3
220552	Electrode: 50 A	2
220553	Swirl ring: 50 A	1
220554	Nozzle: 50 A	2
220555	Shield: 50 A	1
220571	Water tube with o-ring (bevel)	1
220629	Electrode: 400 A	3
220631	Swirl ring: 400 A	1
220632	Nozzle: 400 A	3
220635	Nozzle retaining cap: 400 A	1
220636	Shield: 400 A	2
220637	Shield cap: 400 A	1
220665	SilverPlus electrode: 130 A	1
220666	SilverPlus electrode: 200 A	1
220668	SilverPlus electrode: 260 A	1
220747	Shield cap: 130 A	1
220754	Nozzle retaining cap: 30 A	1
220756	Nozzle retaining cap: 130 A	1
220757	Nozzle retaining cap: 200 A	1
220760	Nozzle retaining cap: 260 A	1
220761	Shield: 200 A	2
220764	Shield: 260 A	2

PARTS LIST

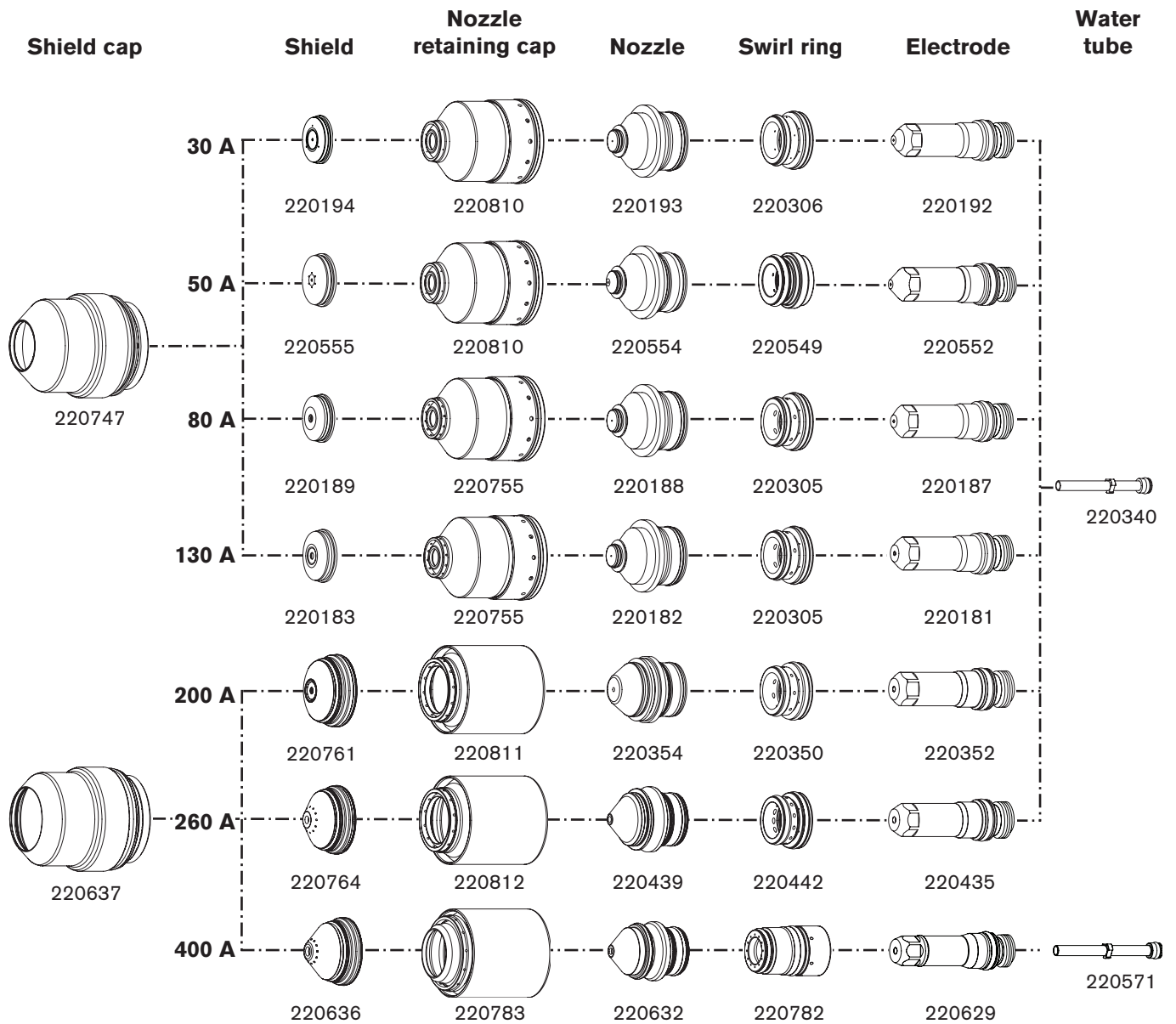
Stainless steel and aluminum parts kit – 228368

<u>Part Number</u>	<u>Description</u>	<u>Qty.</u>
026009	O-ring: 0.208" X 0.070"	5
027055	Lubricant: Silicone 1/4-oz tube	1
044028	O-ring: 1.364" X 0.070"	2
104119	Tool: Consumable removal / replacement	1
104269	Wrench: Spanner	1
220179	Swirl ring: 80 A/130 A mild steel	1
220180	Swirl ring: 30 A mild steel	2
220181	Electrode: 130 A mild steel	1
220197	Nozzle: 130 A stainless steel	2
220198	Shield: 130 A stainless steel	1
220307	Electrode: 130 A stainless steel	4
220337	Nozzle: 80 A stainless steel	2
220338	Shield: 80 A stainless steel	1
220339	Electrode: 80 A stainless steel	4
220340	Water tube with o-ring	1
220342	Swirl ring: 200 A stainless steel	1
220343	Nozzle: 200 A stainless steel	2
220346	Nozzle: 200 A aluminum	1
220405	Swirl ring: 260 A stainless steel/aluminum	1
220406	Nozzle: 260 A stainless steel/aluminum	2
220571	Water tube with o-ring (bevel)	1
220637	Shield cap: 400 A	1
220707	Shield: 400 A stainless steel	2
220708	Nozzle: 400 A stainless steel	3
220709	Electrode: 400 A stainless steel	3
220712	Nozzle retaining cap: 400 A stainless steel	1
220747	Shield cap: 130 A	1
220755	Nozzle retaining cap: 130 A CCW	1
220756	Nozzle retaining cap: 130 A mild steel, CW	1
220758	Nozzle retaining cap: 260 A stainless steel	1
220759	Nozzle retaining cap: 200 A aluminum	1
220762	Shield: 200 A stainless steel	1
220763	Shield: 260 A stainless steel/aluminum	1
220814	Nozzle retaining cap: 60 A HDi	1
220815	Shield: 60 A HDi, stainless steel	1
220847	Nozzle: 60 A HDi, stainless steel	2

Consumables for mirror-image cutting

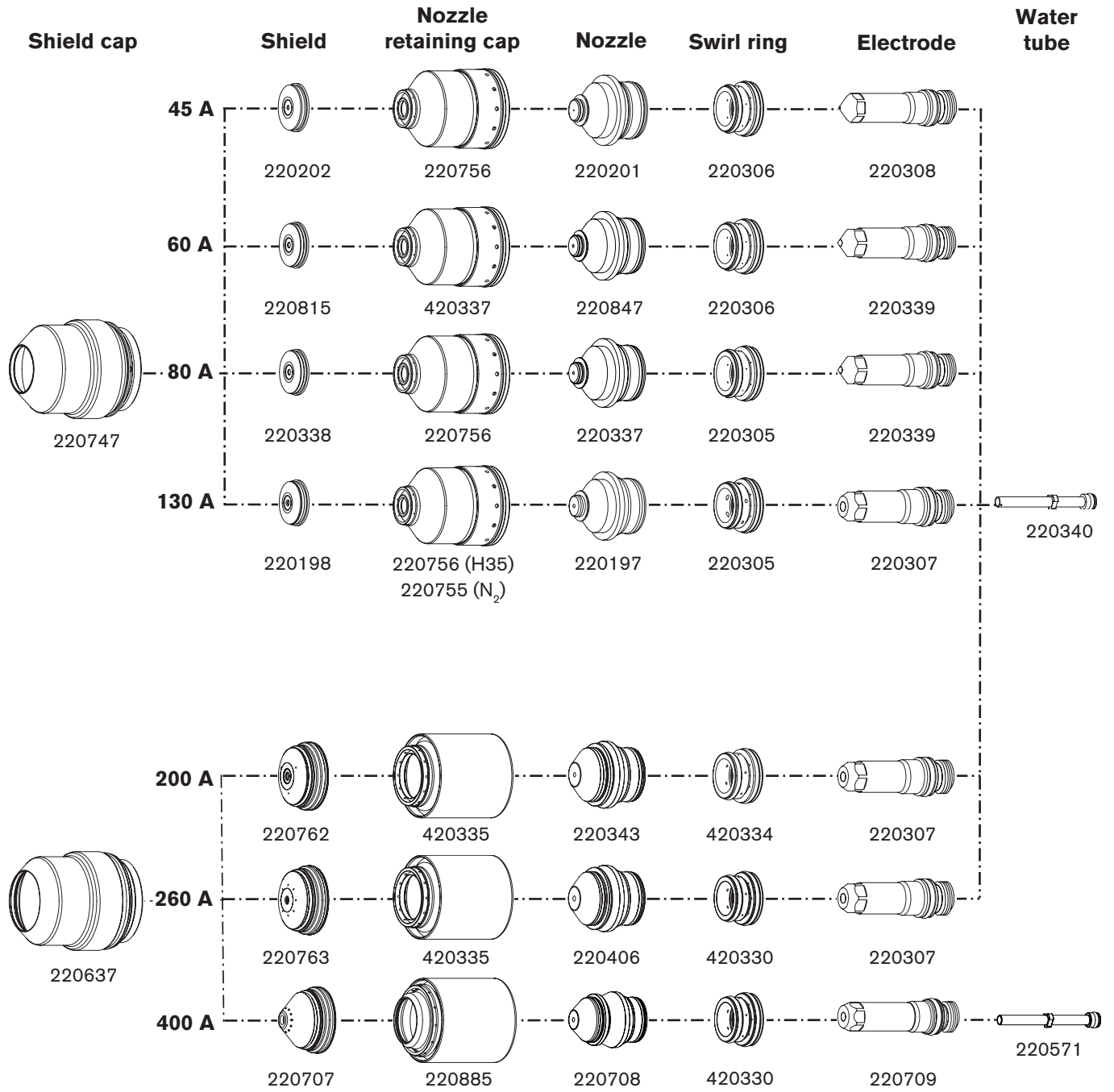
Straight cutting

Mild steel



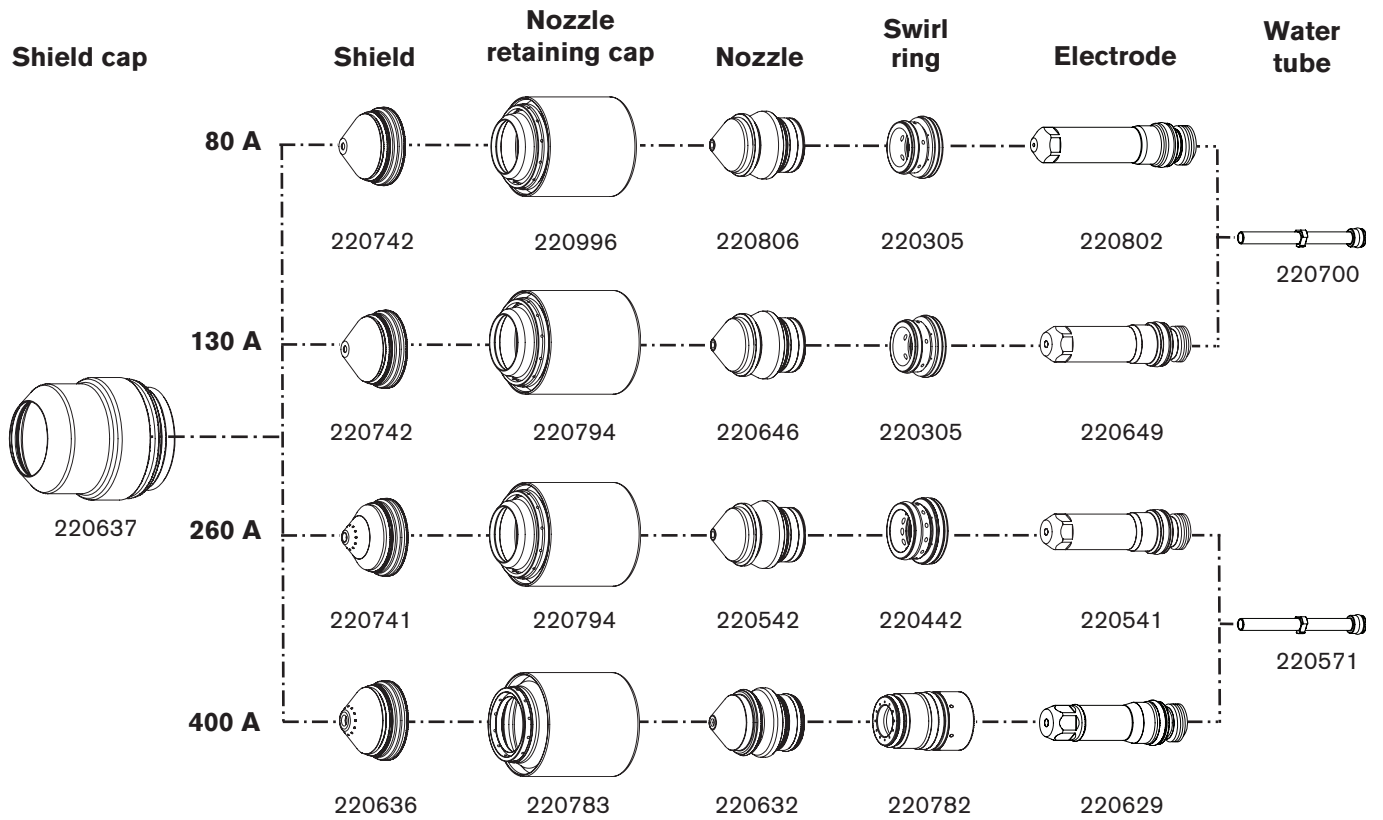
PARTS LIST

Stainless steel



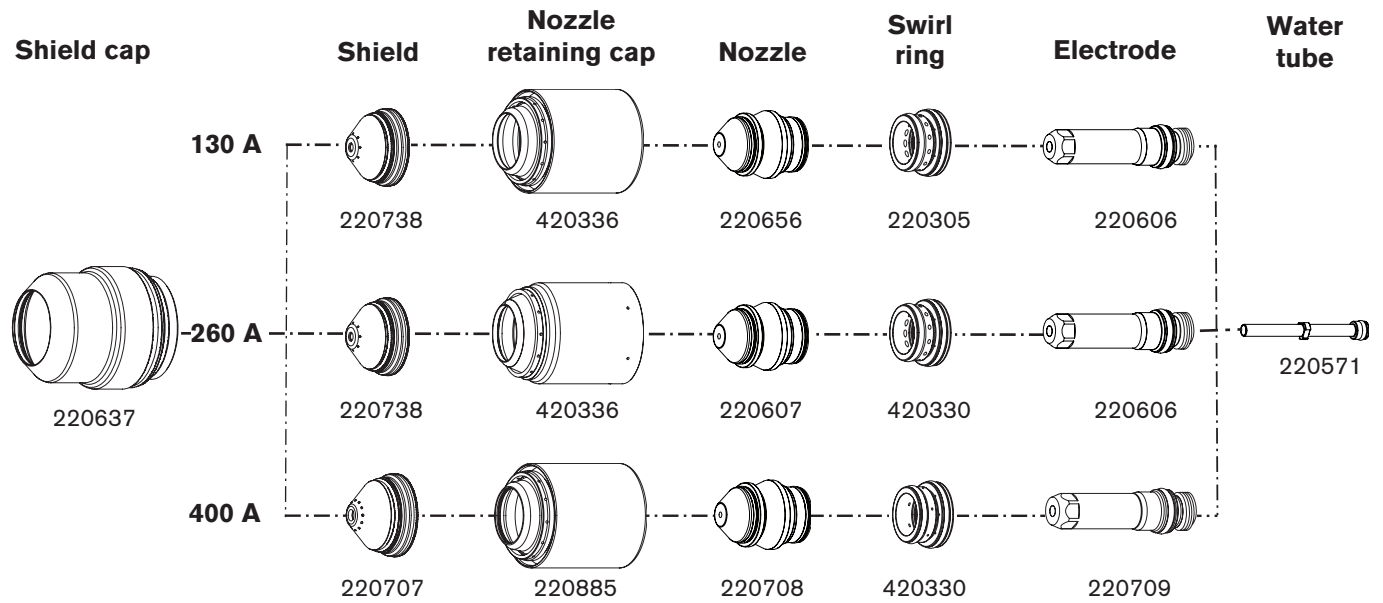
Bevel cutting

Mild steel



PARTS LIST

Stainless steel



Recommended spare parts

Power supply

<u>Part Number</u>	<u>Description</u>	<u>Designator</u>	<u>Qty.</u>
129633	Green power lamp assembly		1
129792	Chopper assembly	CH1, CH2, CH3, CH4	1
127039	6" fan: 230 CFM, 115 VAC 50-60 HZ		1
027079	10" fan: 450-550 CFM, 120 VAC 50-60 HZ		1
003149	Relay: Pilot arc, 120 VAC	CR1	1
229213	PCB: I/O		1
003232*	Contactora	CON1	1
003228**	Contactora	CON1	1
109004	Current sensor: Hall 100 amp, 4 volt	CS1, CS2, CS3, CS4	1
229238	Start circuit assembly	PCB1	1
008551	Fuse: 7.5 amp, 600 volt	F1, F2	2
141030	PCB: Control	PCB3	1
041802	PCB: Power distribution	PCB2	1
108028	Fuse: 3 amp, 250 volt	F5, F6, F7	3
108075	Fuse: 6.3 amp, 250 volt (slow-blow)	F1, F2, F3	3
108709	Fuse: 10 amp, 250 volt	F4	1
228171	Kit: Pump with clamp		1
228230	Kit: Motor with clamp		1
141027	PCB: Pump motor drive	PCB7	1

* 200/208, 220 and 240 volt power supplies

** 380, 400, 440, 480 and 600 volt power supplies

Cooler

<u>Part Number</u>	<u>Description</u>	<u>Designator</u>	<u>Qty.</u>
041897	PCB: Console power distribution		1
008756	Fuse: 5 amp, 250 volt (slow-blow)	F1	1
027634	Filter housing (on the rear panel of the cooler)		1
027664	Filter element		1
027926	Filter housing (under the coolant tank)		1
229235	Flow sensor	FS1	1
006113	Check valve: 3/8" FPT		1
229229	Solenoid valve		1
141033	PCB: Cooler sensor		1

Ignition console

<u>Part Number</u>	<u>Description</u>	<u>Designator</u>	<u>Qty.</u>
041817	HFHV Ignition PCB		1
129854	Transformer	T1	1

PARTS LIST

Gas console

<u>Part Number</u>	<u>Description</u>	<u>Designator</u>	<u>Qty.</u>
041805	Power distribution PCB	PCB1	1
041822	Valve driver PCB	PCB3	1
005263	Pressure sensor	PT1-PT4	1
006109	Solenoid valve	SV2, SV3, SV4, SV6, SV8-SV14	2
228984	Solenoid valve	SV1, SV5, SV7	1
005262	Illuminated power switch	SW1	1
011109	Air filter housing (on the rear panel of the selection console)		1
011110	Air filter element		1