Section 6

PARTS LIST

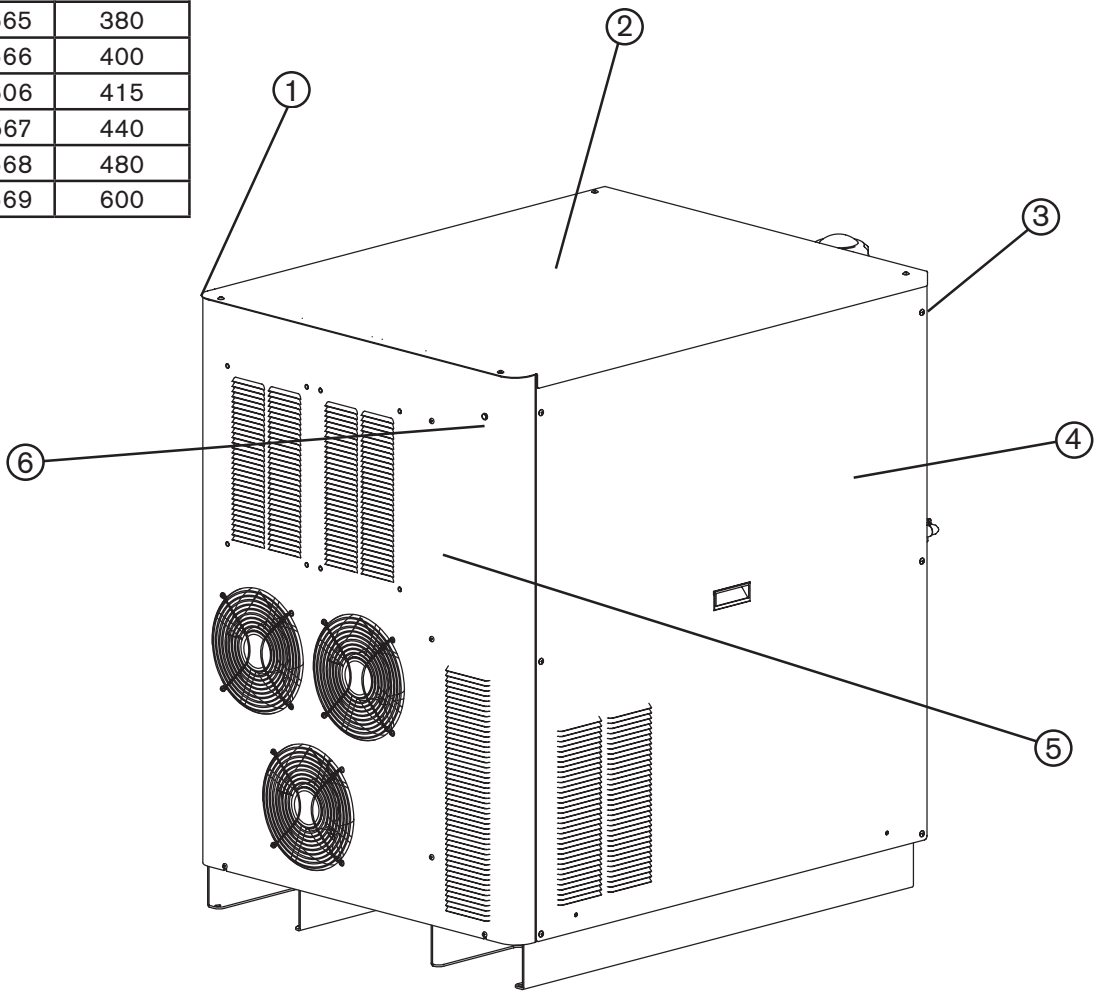
In this section:

Power supply – exterior 6-2
Power supply – left side and rear panel 6-3
Power supply – left side 6-4
Power supply – right side 1 6-5
Power supply – right side 2 6-6
Ignition console 6-7
Torch lead junction box (Optional) 6-8
    Ignition console to junction box leads 6-9
Selection console – exterior and interior view 1 6-10
Selection console – interior view 2 6-11
Metering console 6-12
HyPerformance torch 6-13
    Torch assembly 6-13
    Torch leads 6-14
    Ohmic contact wire 6-14
Consumable parts kits 6-15
Consumables for mirror-image cutting 6-17
    Straight cutting 6-17
    Bevel cutting 6-19
Recommended spare parts 6-20
    Warning Label – 110647 6-21

Power supply – exterior

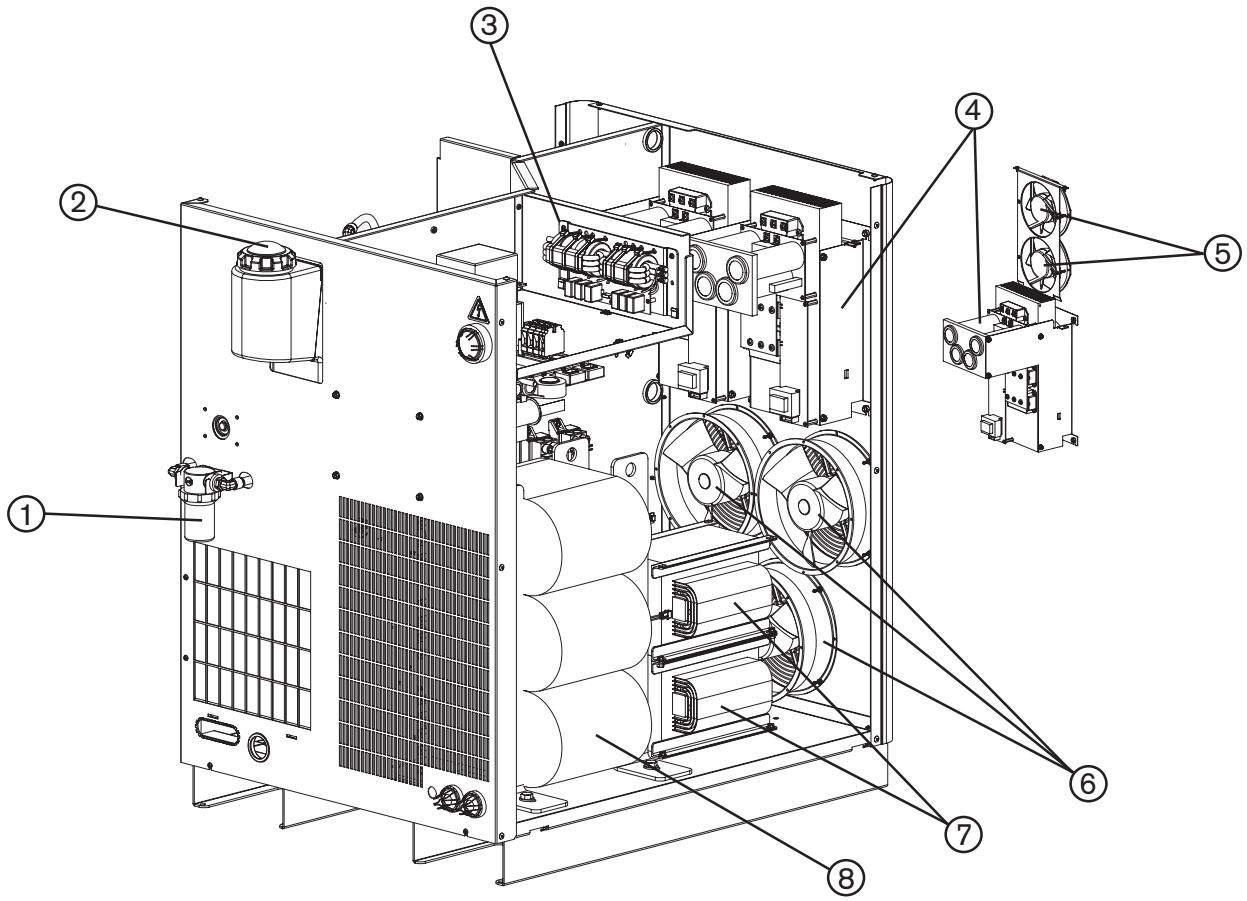
Power supplies		
Without Hypernet	**With Hypernet**	**Voltage (AC)**
078554	078562	200/208
078555	078563	220
078556	078564	240
078557	078565	380
078558	078566	400
078605	078606	415
078559	078567	440
078560	078568	480
078561	078569	600

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	228332	Panel: Top, with label		1
3	075241	Sheet metal screws		1
4	228535	Panel: Right or left side, with label		1
5	228534	Panel: Front, with label		1
6	129633	Green power lamp assembly		1
8	228611	Kit: Hypernet upgrade (not shown)		1

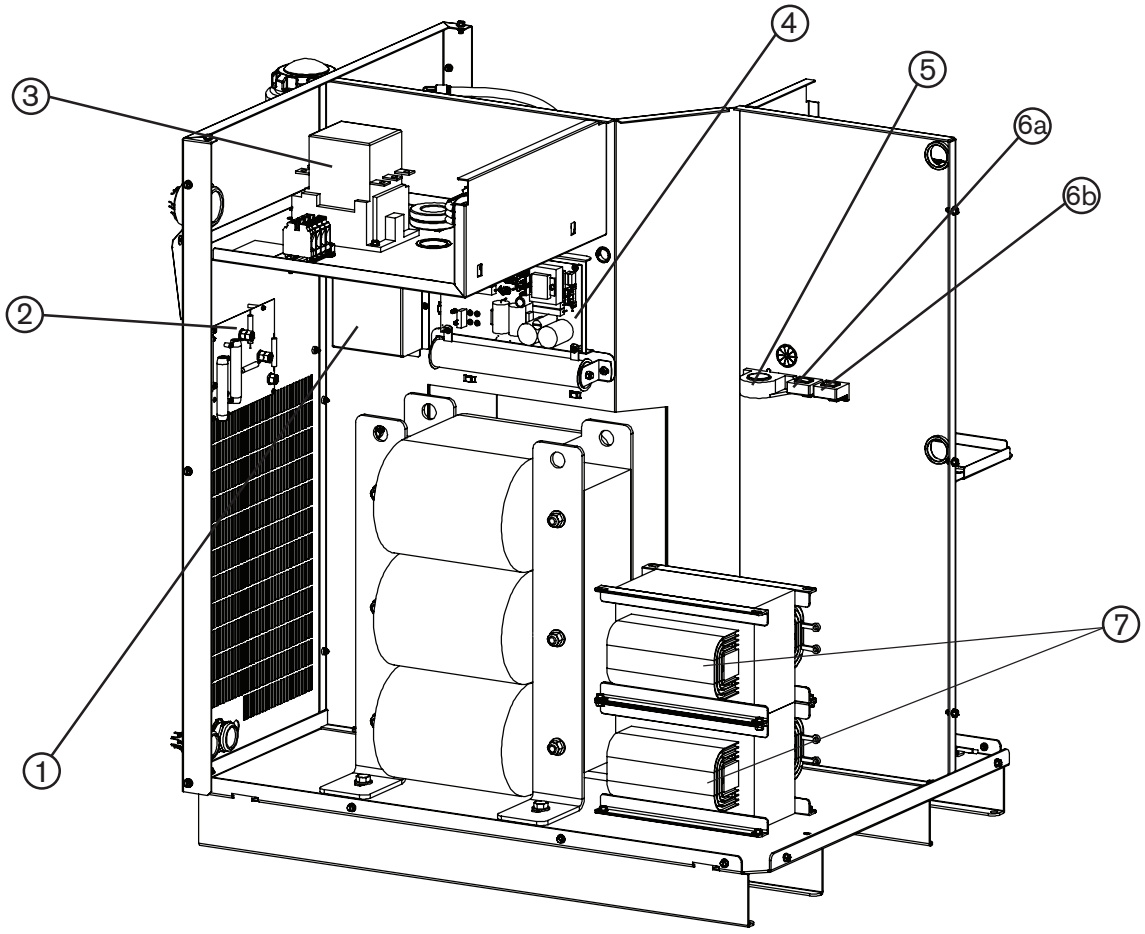
Power supply – left side and rear panel



Item	Part Number	Description	Designator	Qty.
1	027634	Filter housing		1
	027664	Filter element		1
2	127014	Cap: Coolant reservoir		1
3	229034*	EMI filter: 80 amp, 50-60 HZ		1
4	129792	Chopper assembly	CH1, CH2	2
5	127039	6” fan: 230 CFM, 115 VAC 50-60 HZ		2
6	027079	10” fan: 450-550 CFM, 120 VAC 50-60 HZ		3
7	014280	Inductor		2
8	014295	200 volt main transformer: 45.5 KW, 3 ph, 50 HZ	T2	1
	014296	220 volt main transformer: 45.5 KW, 3 ph, 50-60HZ		1
	014297	240 volt main transformer: 45.5 KW, 3 ph, 60 HZ		1
	014302	380 volt main transformer: 45.5 KW, 3 ph, 50 HZ		1
	014295	400 volt main transformer: 45.5 KW, 3 ph, 50 HZ		1
	014295	415 volt main transformer: 45.5 KW, 3 ph, 50 HZ		1
	014296	440 volt main transformer: 45.5 KW, 3 ph, 50-60 HZ		1
	014297	480 volt main transformer: 45.5 KW, 3 ph, 60 HZ		1
	014298	600 volt main transformer: 45.5 KW, 3 ph, 60 HZ		1
	228309	Kit: Thermistor replacement for main transformer		1

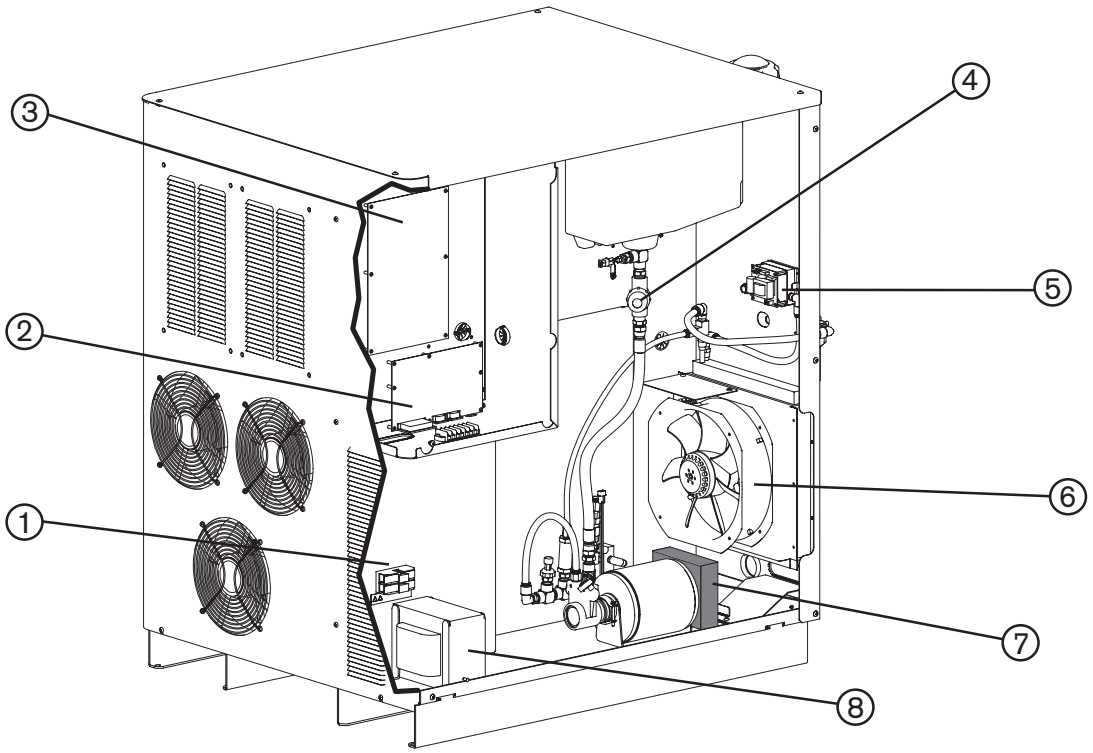
* 400/415 volt power supply only

Power supply – left side



Item	Part Number	Description	Designator	Qty.
1	003149	Relay: Pilot arc, 120 VAC	CR1	1
2	041837	PCB: I/O	PCB6	1
3	003217	Contactor (200 VAC - 240 VAC)	CON1	1
	003233	Contactor (380 VAC - 600 VAC)	CON1	1
4	229238	Start circuit assembly	PCB1	1
5	109483	Current sensor: Hall 200 amp, 4 volt	CS3	1
6a	109004	Current sensor: Hall 100 amp, 4 volt	CS2	1
6b	109004	Current sensor: Hall 100 amp, 4 volt	CS1	1
7	014280	Inductor: 4 MH		2

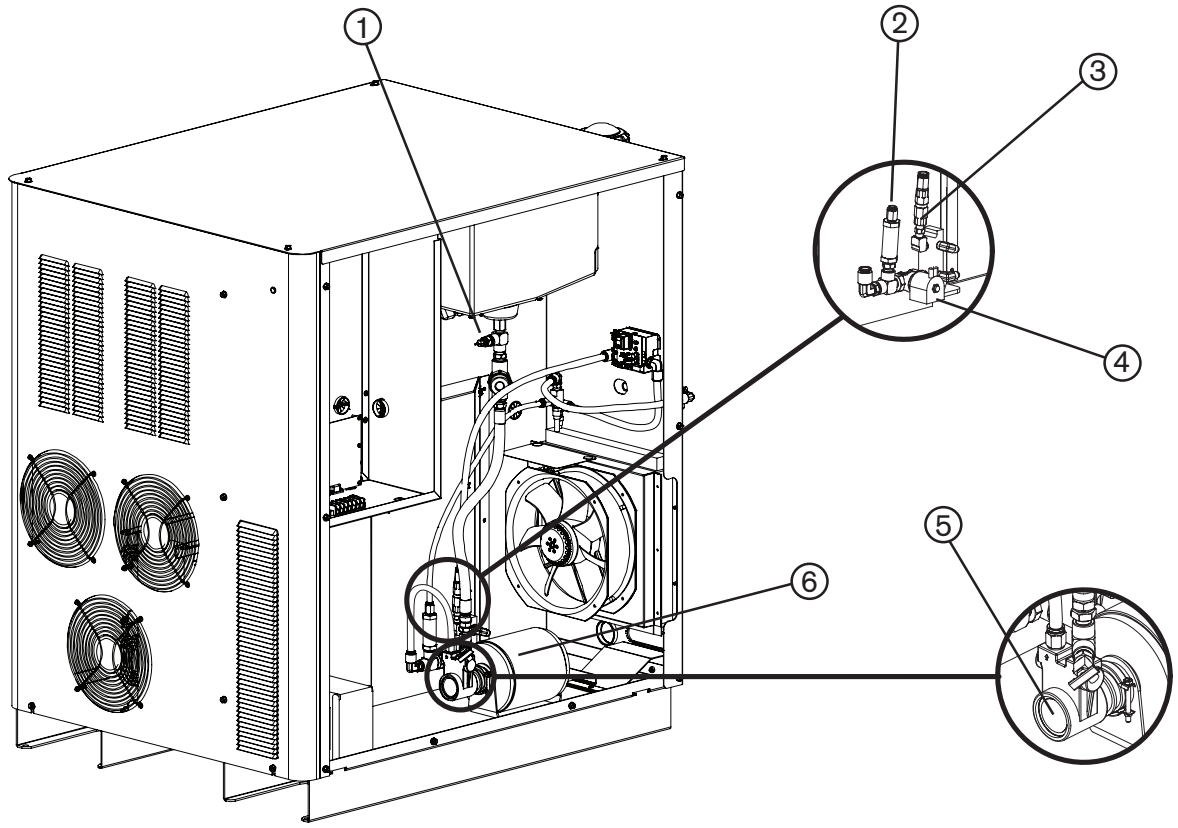
Power supply – right side 1



Item	Part Number	Description	Designator	Qty.
1	008551*	Fuse: 7.5 amp, 600 volt	F1, F2	2
	008709**	Fuse: 20 amp, 500 volt	F1, F2	2
2	228548	Control PCB	PCB3	1
3	041802	Power distribution PCB	PCB2	1
	108028	Fuse: 3 amp		1
	108075	Fuse: 6.3 amp		1
	108709	Fuse: 10 amp		1
4	027926	Filter assembly: 1/2” NPT low profile		1
5	229206	Flow switch assembly	FLS	1
6	229066	Heat exchanger assembly		1
7	127039***	Fan (for pump motor): 230 cfm, 115 VAC, 50-60 Hz		1
8	129786	Control transformer: 200/208 volt, 50-60 HZ	T2	1
	229117	Control transformer: 220 volt, 50-60 HZ		1
	129966	Control transformer: 240 volt, 60 HZ		1
	229094	Control transformer: 380 volt, 50 HZ		1
	129787	Control transformer: 400 volt, 50-60 HZ		1
	229451	Control transformer: 415 volt, 50-60 HZ		1
	229013	Control transformer: 440 volt, 50-60 HZ		1
	129967	Control transformer: 480 volt, 50-60 HZ		1
	129989	Control transformer: 600 volt, 50-60 HZ		1

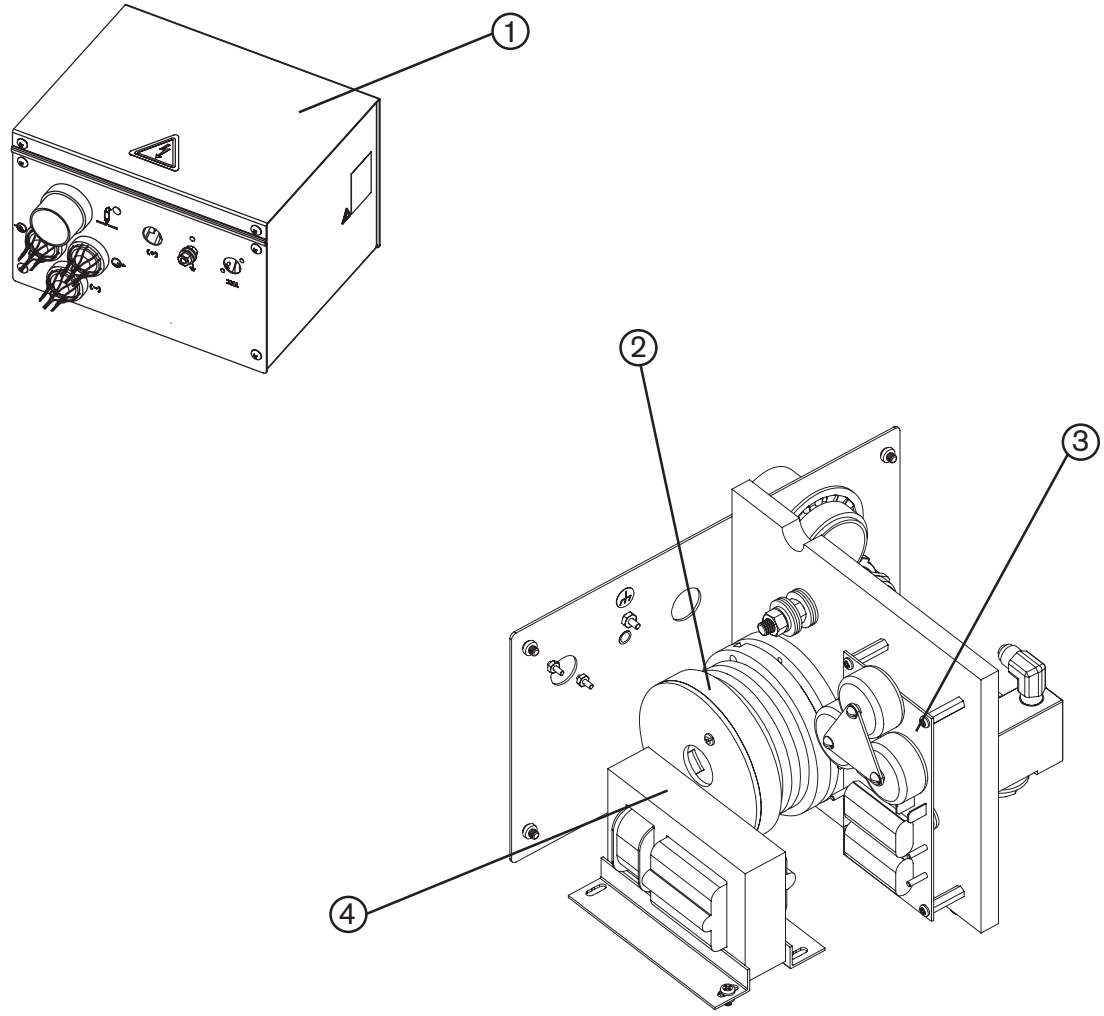
*380, 400, 415, 440, 480, and 600 volt power supplies
**200/208 and 240 volt power supplies
***415 volt power supply only

Power supply – right side 2



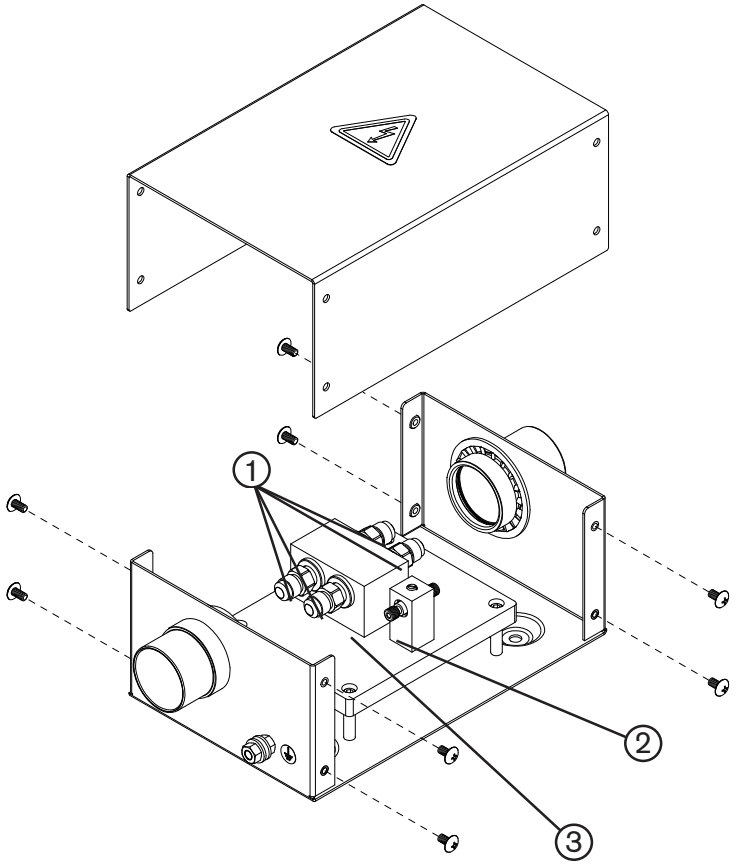
Item	Part Number	Description	Designator	Qty.
1	109393	Temperature sensor	T2	1
2	006132	Check valve (relief valve): 1/4” NPT, 200 psi		1
3	006075	Check valve: 1/4” FPT		1
4	229229	Solenoid valve assembly: 3/8”, 240 volt	CLT SOL	1
5	228171	Kit: Pump with clamp		1
6	228230	Kit: Motor with clamp		1
7	031122	Pump to motor shaft coupler (not shown)		1

Ignition console



Item	Part Number	Description	Designator	Qty.
1	**078172**	**Ignition Console**		
2	129831	Coil assembly	T2	1
3	041817	HFHV Ignition PCB	PCB IGN	1
4	129854	Transformer	T1	1

Torch lead junction box (Optional)



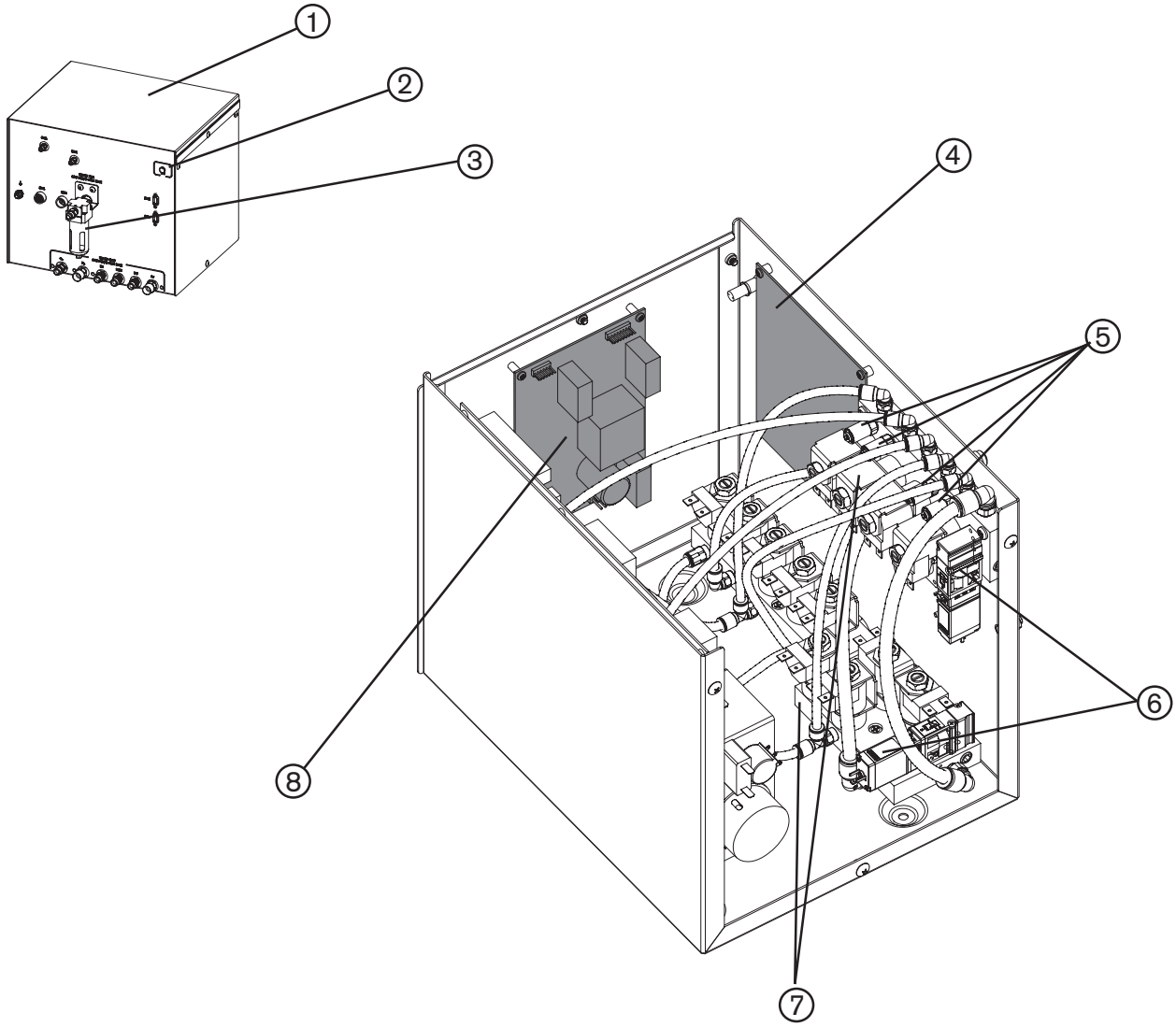
Item	Part Number	Description	Qty.
	078619	**HPRXD junction box**	1
1	015007	Coolant fitting	4
2	104763	Pilot arc fitting	1
3	104762	Coolant block	1

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

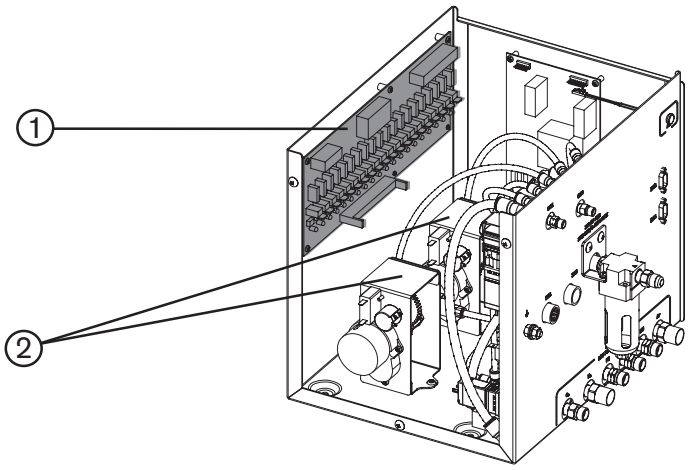
Part no.	Description	Part no.	Description
428420	3 m (10 ft)	428425	10 m (35 ft)
428421	4.5 m (15 ft)	428426	12.2 m (40 ft)
428339	5.5 m (18 ft)	428427	13.7 m (45 ft)
428422	6 m (20 ft)	428428	15 m (50 ft)
428423	7.5 m (25 ft)	428429	16.8 m (55 ft)
428424	9.1 m (30 ft)		

Selection console – exterior and interior view 1



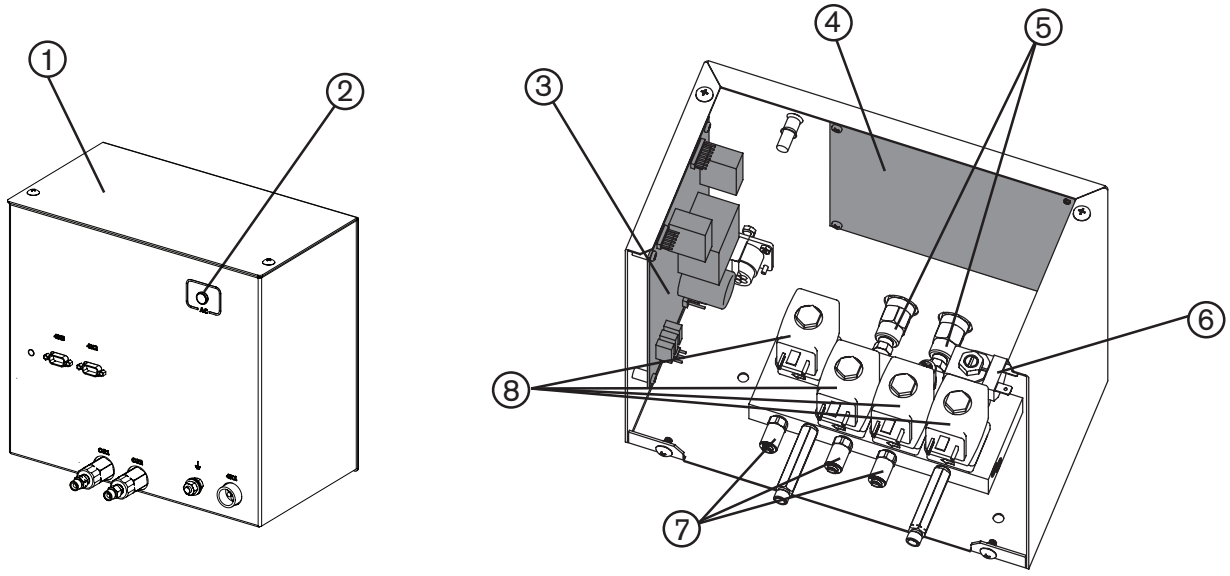
Item	Part Number	Description	Designator	Qty.
1	**078533**	**Selection console**		
2	129633	Green power lamp		1
3	011109	Filter assembly		1
	011110	Filter element		1
4	228069	Kit: Control PCB	PCB2	1
5	005263	Pressure sensor	P1 – P4	4
	123780	Pressure sensor wire harness	P1 – P4	1
6	228984	Solenoid valve	SV3 and SV10	2
7	006109	Solenoid valve	SV1 and SV2, SV4–SV9, SV11–SV15	13
	006112	Replacement solenoid coil		
8	041897	Power distribution PCB	PCB1	1
	008756	Fuse: 5A, 250V, slow blow	F1	1

Selection console – interior view 2



Item	Part Number	Description	Designator	Qty.
1	041822	Valve driver PCB	PCB3	1
	008756	Fuse: 5 A, 250V, slow-blow	F1	1
2	129999	Motor valve assembly	MV1, MV2	2
	229217	Selection console wire harness		1
	228347	Hose kit		1

Metering console

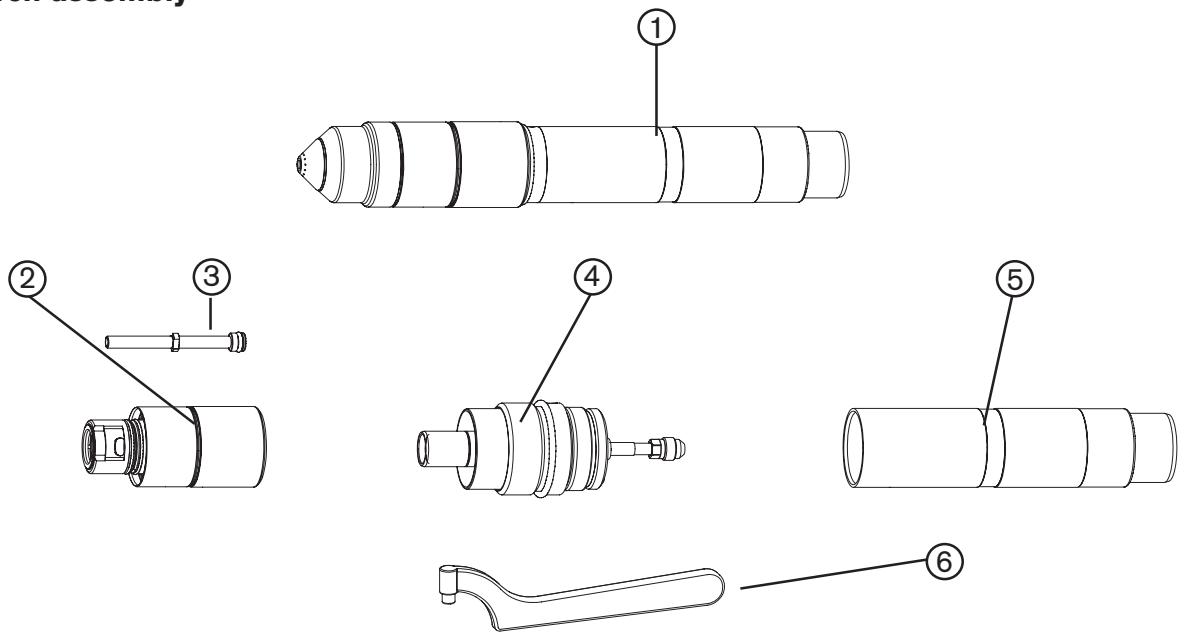


Item	Part Number	Description	Designator	Qty.
1	**078535**	**Metering console**		**1**
2	129633	Green power lamp		1
3	041897	Power distribution PCB	PCB1	1
	008756	Fuse: 5 amp, 250V, slow-blow	F1	1
4	228069	Kit: Control PCB	PCB2	1
5	006077	Check valves		2
6	006109	Solenoid valve	SV16	1
	006112	Replacement solenoid coil		
7	005263	Pressure transducer (3 of 4 shown)	P5-P8	4
	123802	Pressure transducer wire harness		1
8	006128*	Proportional valve	B1-B4	4
	228023**	Kit: HPR gas metering manifold upgrade		1
	229032	Metering console wire harness		1

* Gas consoles with a serial number of 500134 or later take this part number
** Gas consoles with a serial number of 500133 or earlier must order this kit

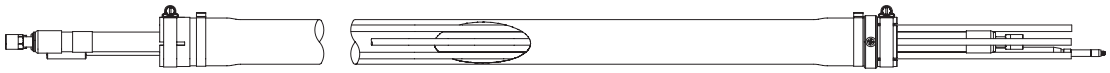
HyPerformance torch

Torch assembly



Item	Part Number	Description
1	228521	**HPR260XD 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

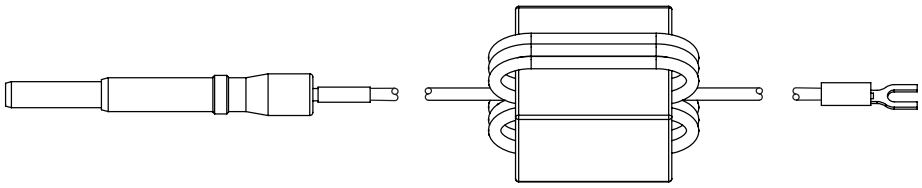
Torch leads



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)
228547	20 m (65 ft)

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

Note: The ohmic contact wire is not part of the HPR260XD system. Shown for reference 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* for specific applications

Mild steel consumable starter kit – 228422

Part Number	Description	Qty.
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	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: 80 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
220637	Shield cap	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

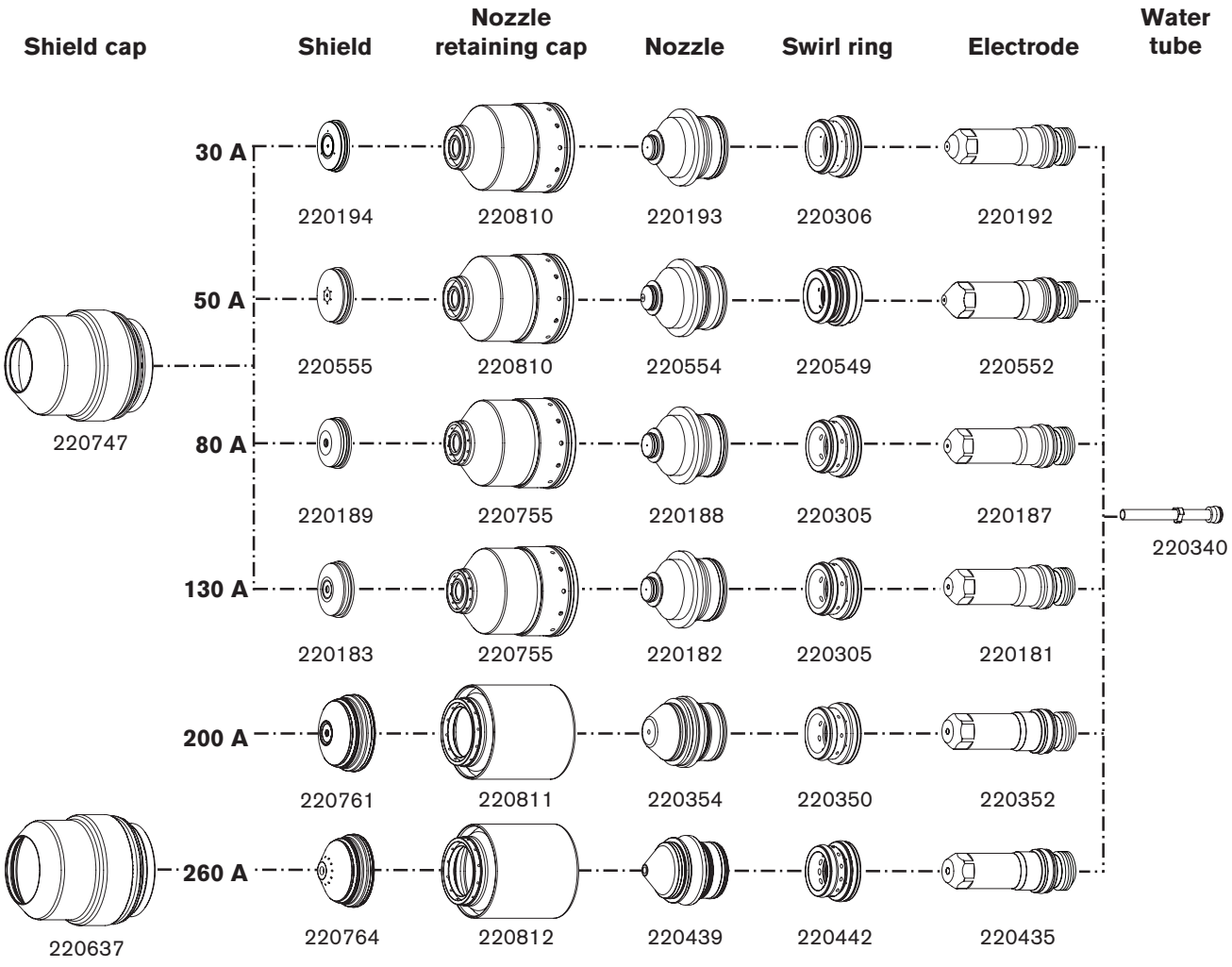
Stainless steel and Aluminum consumable starter kit – 228423

Part Number	Description	Qty.
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	2
220197	Nozzle:130 A	2
220198	Shield:130 A	1
220307	Electrode:130 A	4
220337	Nozzle:80 A	2
220338	Shield:80 A	1
220339	Electrode:80 A	4
220340	Water tube	1
220342	Swirl ring:200 A	1
220343	Nozzle:200 A	2
220405	Swirl ring:260 A	1
220406	Nozzle:260 A	2
220637	Shield cap	1
220747	Shield cap:130 A	1
220755	Nozzle retaining cap:130 A (CCW)	1
220758	Nozzle retaining cap:260 A	1
220762	Shield:200 A	1
220763	Shield:260 A	1
220814	Nozzle retaining cap: 60 A HDi	1
220815	Shield: 60 A HDi	1
220847	Nozzle: 60 A HDi	2

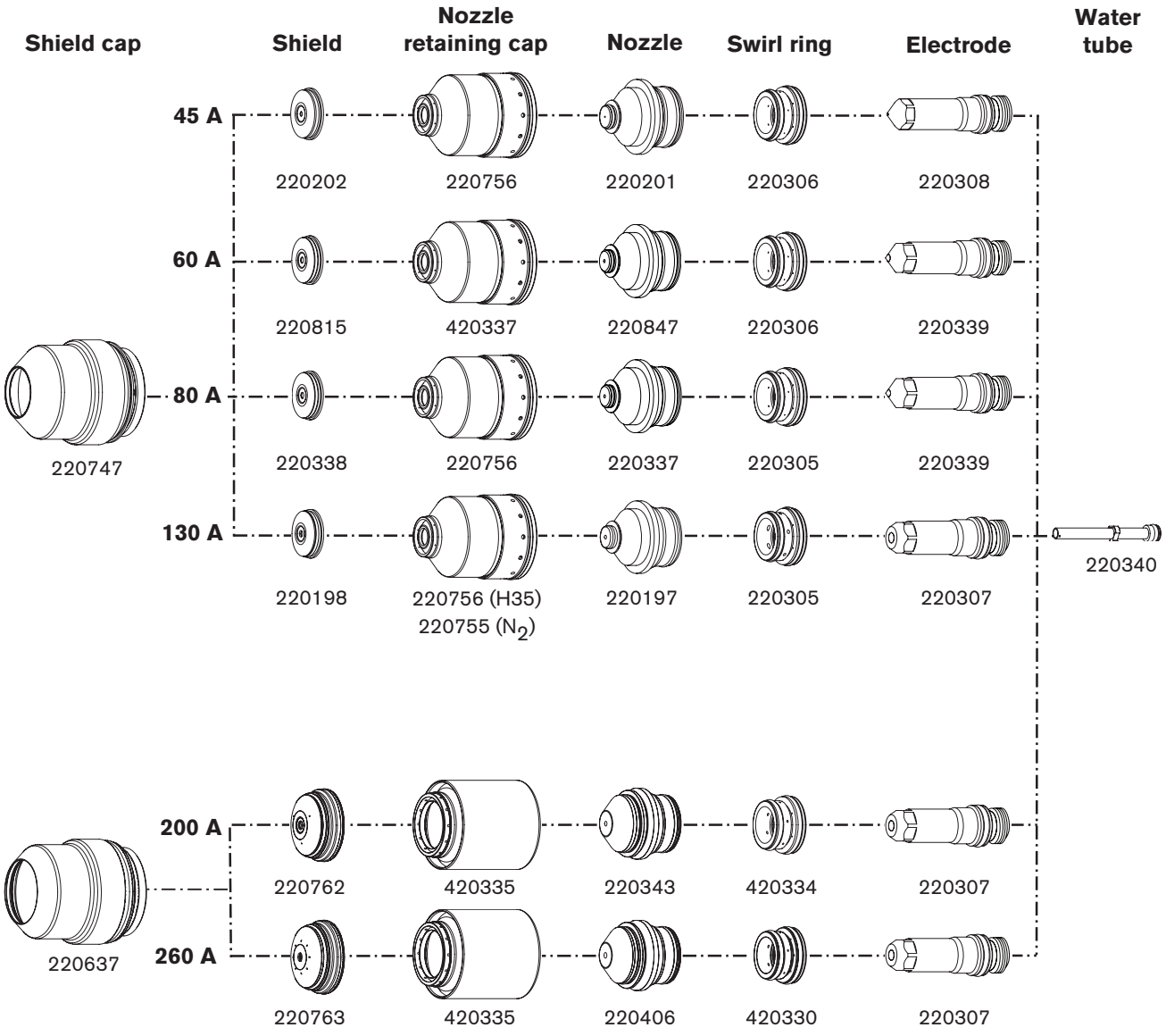
Consumables for mirror-image cutting

Straight cutting

Mild steel

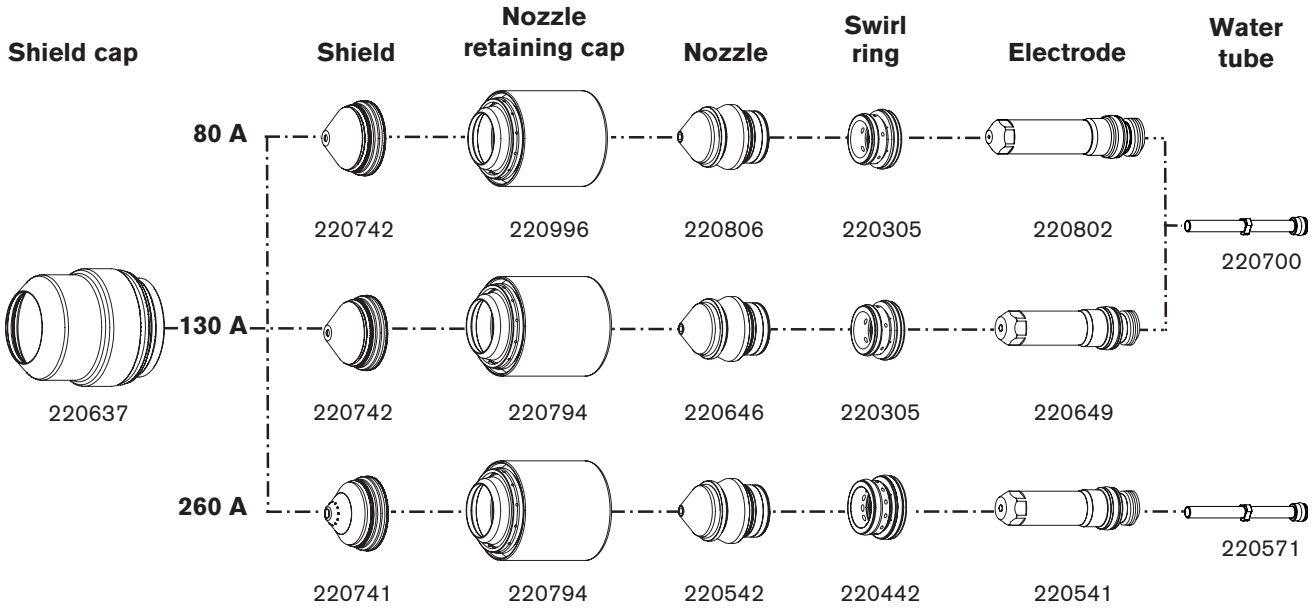


Stainless steel

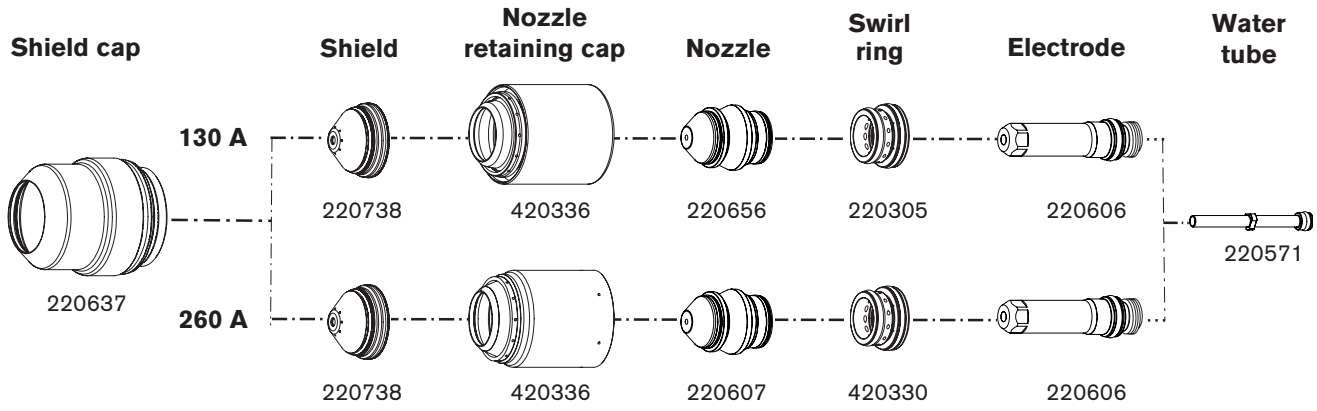


Bevel cutting

Mild steel



Stainless steel



Recommended spare parts

Power supply

Part Number	Description	Designator	Qty.
129633	Green power lamp assembly		1
027634	Filter housing		1
027664	Filter element		1
129792	Chopper assembly	CH1	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
041837	PCB: I/O		1
003217	Contactor (200 VAC-240 VAC)	CON1	1
003233	Contactor (380 VAC-600 VAC)	CON1	1
109004	Current sensor: Hall 100 amp, 4 volt		1
229238	Start circuit assembly	PCB1	1
008551*	Fuse: 7.5 amp, 600 volt	F1, F2	2
228548	Control PCB	PCB3	1
041802	Power distribution PCB	PCB2	1
229206	Flow switch assembly	FLS	1
006075	Check valve: 1/4” FPT		1
229229	Solenoid valve assembly	CLT SOL	1
228171	Pump assembly with clamp: 80 gpm, 200 psi		1
228230	Motor with clamp: 1/3 HP, 240 volt, 50-60 HZ		1

* 400, 415, 480, and 600 volt power supplies

Ignition console

Part Number	Description	Designator	Qty.
041817	HFHV Ignition PCB		1
129854	Transformer	T1	1

Selection and metering consoles

Part Number	Description	Designator	Qty.
041828	Control PCB		1
041897	Power distribution PCB		1
041822	Valve driver PCB		1
006109	Solenoid valve		2
005263	Pressure sensor		1
228984	Solenoid coil		1
006112	Replacement solenoid coil		1

Warning Label – 110647

This warning label is affixed to some power supplies. It is important that the operator and maintenance technician understand the intent of these warning symbols as described. The numbered text corresponds to the numbered boxes on the label.



1. Cutting sparks can cause explosion or fire.

1.1 Do not cut near flammables.

1.2 Have a fire extinguisher nearby and ready to use.

1.3 Do not use a drum or other closed container as a cutting table.

2. Plasma arc can injure and burn; point the nozzle away from yourself. Arc starts instantly when triggered.

2.1 Turn off power before disassembling torch.

2.2 Do not grip the workpiece near the cutting path.

2.3 Wear complete body protection.

3. Hazardous voltage. Risk of electric shock or burn.

3.1 Wear insulating gloves. Replace gloves when wet or damaged.

3.2 Protect from shock by insulating yourself from work and ground.

3.3 Disconnect power before servicing. Do not touch live parts.

4. Plasma fumes can be hazardous.

4.1 Do not inhale fumes.

4.2 Use forced ventilation or local exhaust to remove the fumes.

4.3 Do not operate in closed spaces. Remove fumes with ventilation.

5. Arc rays can burn eyes and injure skin.

5.1 Wear correct and appropriate protective equipment to protect head, eyes, ears, hands, and body. Button shirt collar. Protect ears from noise. Use welding helmet with the correct shade of filter.

6. Become trained. Only qualified personnel should operate this equipment. Use torches specified in the manual. Keep non-qualified personnel and children away.

7. Do not remove, destroy, or cover this label. Replace if it is missing, damaged, or worn.