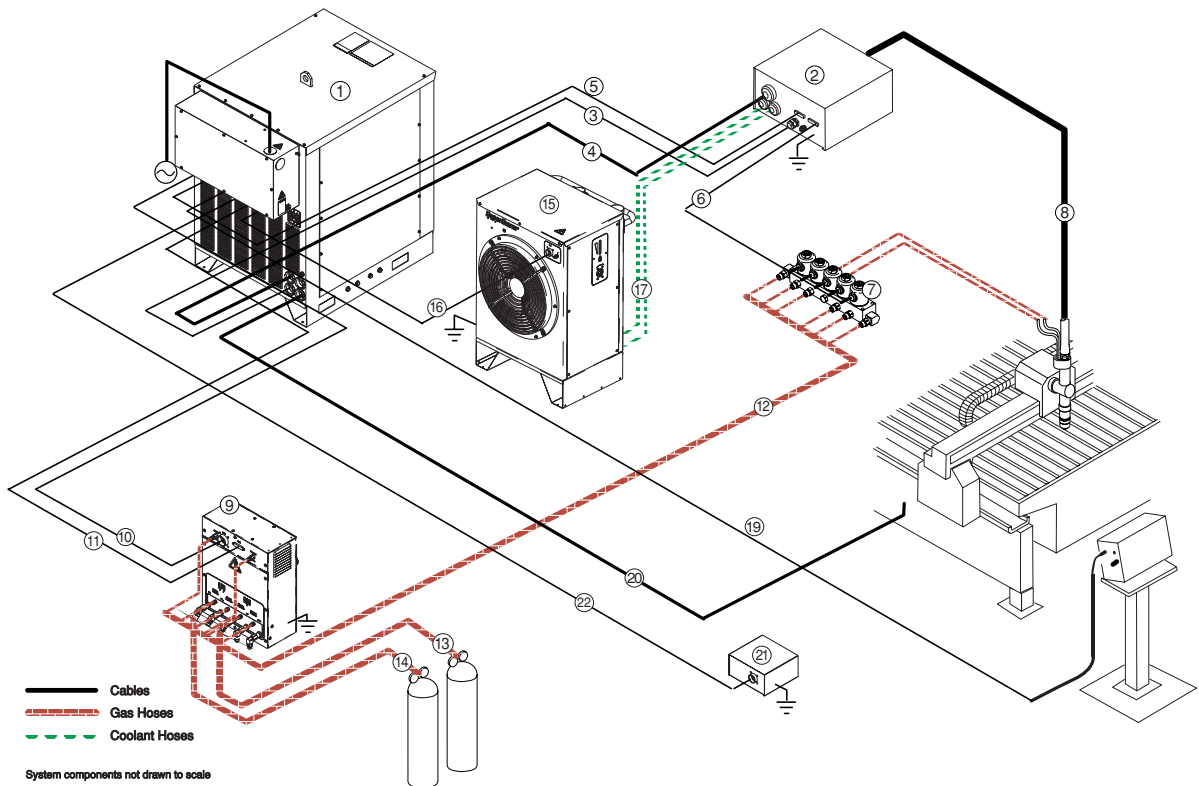


HySpeedTM ***HT4400[®]***

Plasma Arc Cutting System

Product Configuration Manual 803740 - Revision 2



Hypertherm[®]
*The world leader in
plasma cutting technology[™]*

HT4400

Product Configuration Manual (P/N 803740)

Revision 2 October, 2001

**Hypertherm, Inc.
Hanover, NH USA
www.hypertherm.com**

© Copyright 2001 Hypertherm, Inc.
All Rights Reserved

Hypertherm, HyDefinition, HT, HyLife, LongLife, MAX, PAC and Powermax are trademarks of Hypertherm, Inc.,
and may be registered in the United States and/or other countries

Hypertherm, Inc.

Etna Road, P.O. Box 5010
Hanover, NH 03755 USA
603-643-3441 Tel (Main Office)
603-643-5352 Fax (All Departments)
800-643-9878 Tel (Technical Service)
800-737-2978 Tel (Customer Service)

Hypertherm Automation, LLC

5 Technology Drive
West Lebanon, NH 03755 USA
603-298-7970 Tel
603-298-7977 Fax

Hypertherm Plasmatechnik, GmbH

Technologiepark Hanau
Rodenbacher Chaussee 6
63457 Hanau-Wolfgang, Deutschland
49 6181 58 2100 Tel
49 6181 58 2134 Fax
49 6181 58 2123 (Technical Service)

Hypertherm (S) Pte Ltd

No. 19 Kaki Bukit Road 2
K.B. Warehouse Complex
Singapore 417847, Republic of Singapore
65 6 841 2489 Tel
65 6 841 2490 Fax
65 6 841 2489 (Technical Service)

Japan

1952-14 Yata-Natsumegi
Mishima City, Shizuoka Pref.
411-0801 Japan
81 0 559 75 7387 Tel
81 0 559 75 7376 Fax

Hypertherm UK, Ltd

9 Berkeley Court, Manor Park
Runcorn, Cheshire, England WA7 1TQ
44 1928 579 074 Tel
44 1928 579 604 Fax

France

15 Impasse des Rosiers
95610 Eragny, France
00 800 3324 9737 Tel
00 800 4973 7329 Fax

Hypertherm S.r.l.

Via Torino 2
20123 Milano, Italia
39 02 725 46 312 Tel
39 02 725 46 400 Fax
39 02 725 46 314 (Technical Service)

Hypertherm Europe B.V.

Vaartveld 9
4704 SE Roosendaal, Nederland
31 165 596908 Tel
31 165 596901 Fax

Technical Service:

00 800 49 73 7843 – toll-free in Europe
31 165 596900 Tel

Hypertherm Brasil Ltda.

Rua Visconde de Santa Isabel, 20 – Sala 611
Vila Isabel, RJ
Brasil CEP 20560-120
55 21 2278 6162 Tel
55 21 2578 0947 Fax

Section 1

SPECIFICATIONS

In this section:

System Components.....	1-2
Power Supply	1-2
Machine Torch	1-2
Valve Cluster.....	1-2
Gas Console	1-2
Ignition Console	1-2
Water Cooler.....	1-2
Remote Current Control Console - Optional	1-2
Command THC - Optional	1-2
Specifications	1-3
System Requirements	1-3
Power Supply	1-4
Machine Torch	1-5
Valve Cluster.....	1-5
Gas Console	1-6
Ignition Console	1-7
Water Cooler.....	1-8
Remote Current Control Console - Optional	1-9
Command THC - Optional	1-9

System Components

Power Supply

The power supply houses four 100-amp, 15 kHz choppers to produce up to 400A of constant current DC output.

Machine Torch

The maximum production cutting capability of the torch is 1-1/4 inches (32 mm). **To achieve consumable long life, all cuts must begin and end on the plate surface.**

Valve Cluster

The valve cluster consists of 5 valves and interfaces with the machine torch, the ignition console and the gas console. The valve cluster must be located within 4 ft (1.2 m) of the torch and within 50 ft (15.3 m) of the gas console.

Gas Console

This unit houses metering and solenoid valves, pressure readout LEDs and gas selection switches to choose, set and monitor plasma and shield gases. The gas console must be located within 50 ft (15.3 m) of the valve cluster.

Ignition Console

The ignition console generates a high voltage, high frequency signal and couples it to the cathode lead and pilot arc lead. This ignition console must be located within 15 feet (4.6 m) of the torch.

Water Cooler

This unit circulates a coolant solution to the torch. The water cooler interfaces with the ignition console and the power supply. For more information, see *Water Supply Requirements* in the Installation section of this manual.

Remote Current Control Console - Optional

The remote current control console contains a thumbwheel switch to set the arc current. If a machine interface will provide current control for the plasma system, you will not need this console.

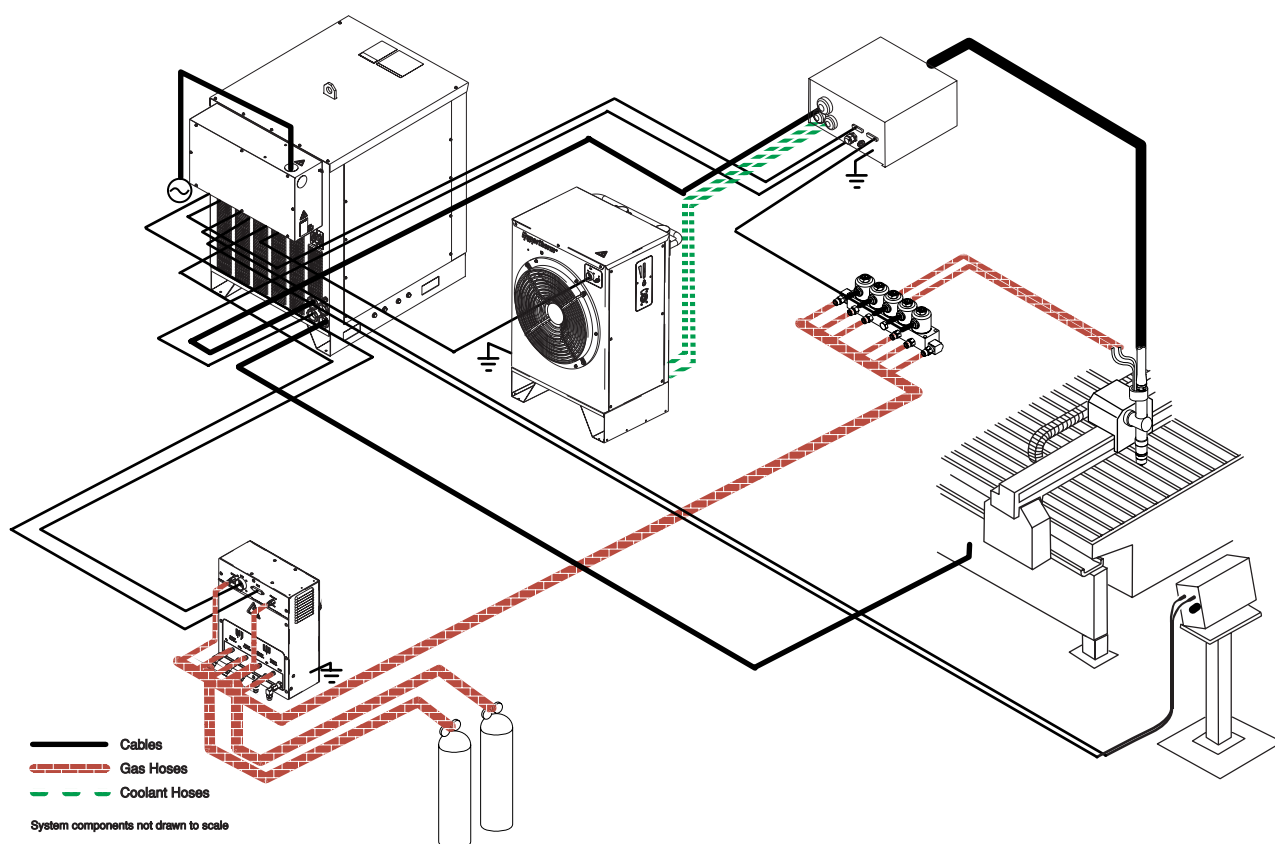
Command THC - Optional

The Command THC is an external torch height control and initial height sensing system designed for plasma cutting applications on an x-y cutting table. Refer to the Command THC instruction manual 802780 for more detailed information.

Specifications

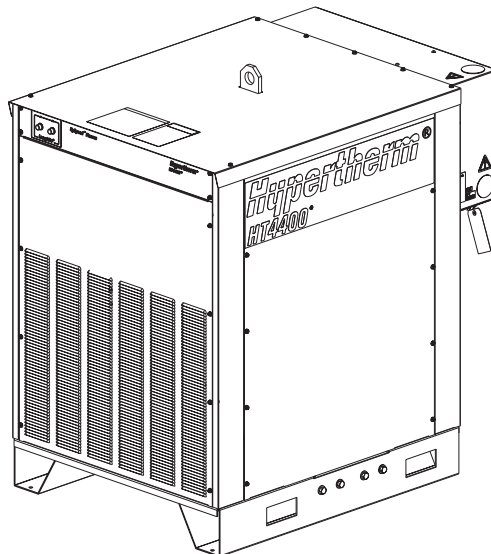
System Requirements

Gas Requirements:	
Plasma Gas Types	Oxygen, Nitrogen
Shield Gas Types	Air; Nitrogen
Gas Quality:	
Oxygen	99.5% pure (liquid gas recommended)
Nitrogen	99.995% pure (liquid gas recommended)
Air	99.995% pure (liquid gas recommended)
Maximum Gas Flow Rates and Inlet Pressures:	
Oxygen	140 scfh (3965 sclh) @ 120 psi +/- 10 psi (8.3 bar +/- 0.7 bar)
Nitrogen	250 scfh (7080 sclh) @ 120 psi +/- 10 psi (8.3 bar +/- 0.7 bar)
Air	250 scfh (5664 sclh) @ 120 psi +/- 10 psi (8.3 bar +/- 0.7 bar)



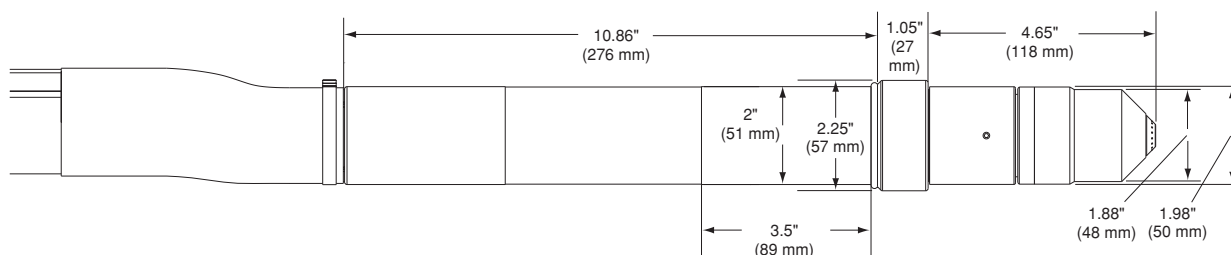
Power Supply

Maximum OCV (U_0)	361 VDC
Maximum Output Current (I_2)	400 Amps
Output Voltage (U_2)	80-200 VDC
Duty Cycle Rating (X)	100% @ 89 kVa, 104° F (40° C)
Temperature Rating	14° F (-10° C) to 104° F (40° C)
Power Factor ($\cos\phi$)	0.94
Cooling	Forced Air (Class F)
Input Power (Input Voltage [U_1 – Input Voltage; I_1 – Input Current])	
077036	200 VAC (U_1), 3 Phase, 50-60 Hz, 257A (I_1)
077037	400 VAC (U_1), 3 Phase, 50-60 Hz, 128A (I_1)
077046	440 VAC (U_1), 3 Phase, 50-60 Hz, 117A (I_1)
077033	480 VAC (U_1), 3 Phase, 60 Hz, 107A (I_1)
077038	600 VAC (U_1), 3 Phase, 60 Hz, 86A (I_1)
* In accordance with IEC 61000-3-12, the R_{scc} (short Circuit Ratio) for the 400 VAC power supply is 100.	
Dimensions and Weight	
Width	34" (863 mm)
Maximum Height	51" (1295 mm)
Maximum Depth	48-11/16" (1236 mm)
Weight	1800 lbs (817 kg)



Machine Torch - 128342 (with 15 ft (4.6 m) Leads) See Section 2 *Ordering* for other lead lengths

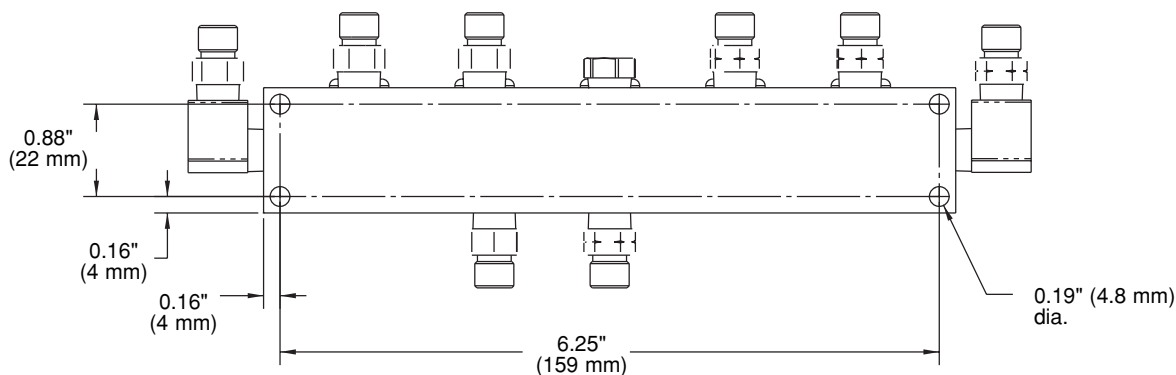
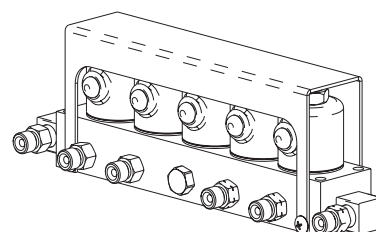
Maximum recommended production cutting thickness	1-1/4" (32 mm)
Maximum current at 100% duty cycle	400A
Dimensions	See figure below
Weight – Torch only	2 lbs (0.9 kg)
Weight – Torch and 15 ft (4.6 m) leads w/o coolant	14.7 lbs (6.7 kg)



Torch with Dimensions

Valve Cluster - 077035

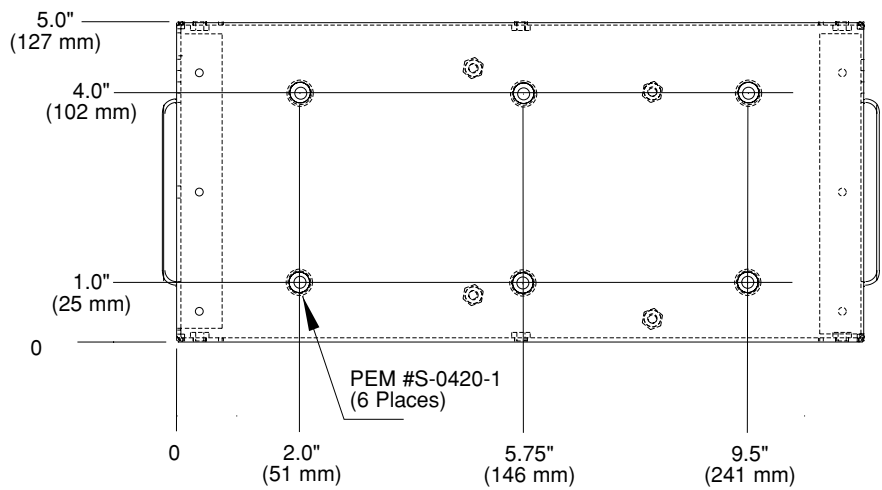
Dimensions and Weight:	
Width	6.6" (168 mm)
Height	2.5" (64 mm)
Depth	1.2" (30 mm)
Weight	2.5 lbs (1.1 kg)



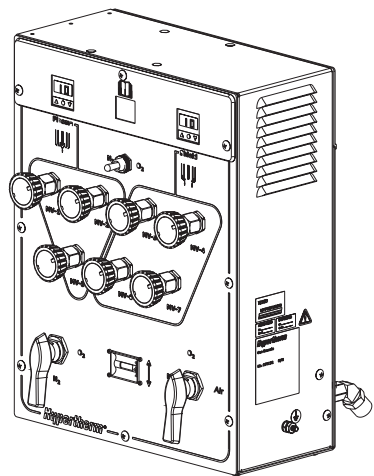
Valve Cluster Mounting Dimensions

Gas Console - 077032

Dimensions and Weight:	
Width	11.5" (290 mm)
Height	14.5" (370 mm)
Depth	5.0" (127 mm)
Weight	28.7 lbs (13 kg)

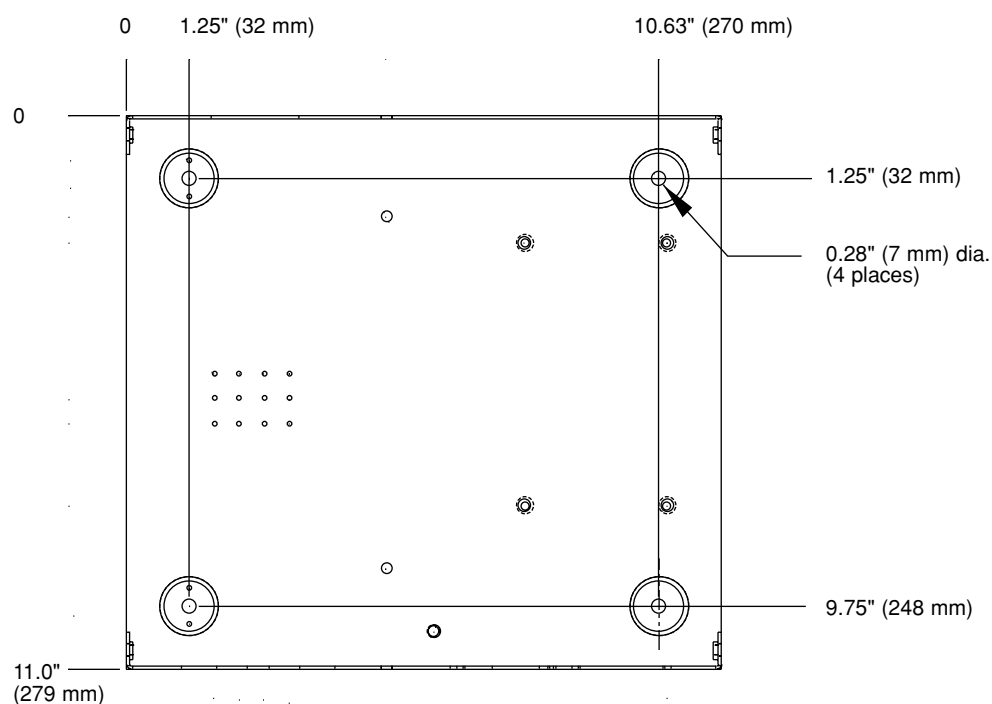


Gas Console Mounting Dimensions (bottom view)

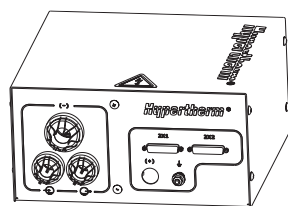


Ignition Console - 078088

Dimensions and Weight:	
Width	12" (305 mm)
Height	6.25" (159 mm)
Depth	11.25" (286 mm)
Weight	20.5 lbs (9.3 kg)

**Ignition Console Mounting Dimensions (bottom view)**

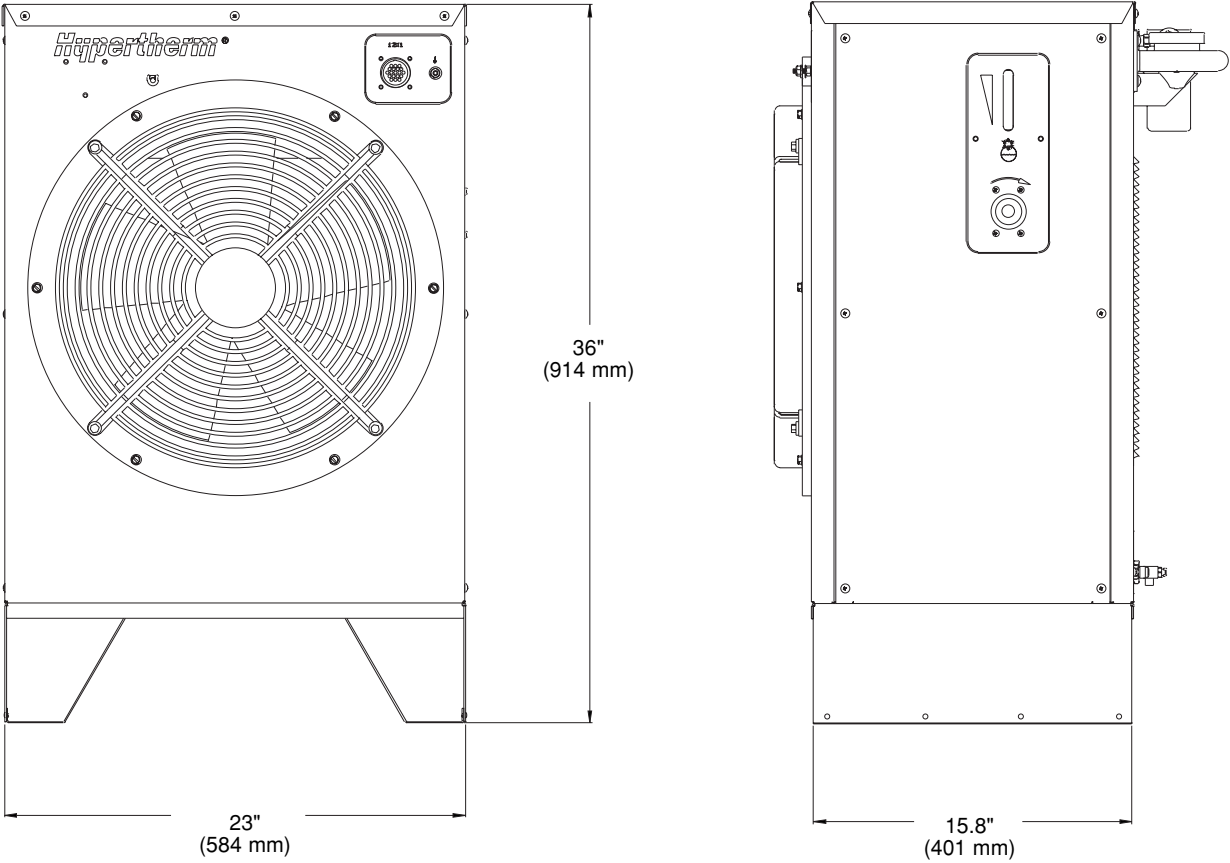
Hypertherm recommends mounting the ignition console either horizontally or in the vertical position with the power supply and water cooler connections facing out as shown.

**Horizontal Mounting****Vertical Mounting**

Power supply and
water cooler connections

Water Cooler - 077034

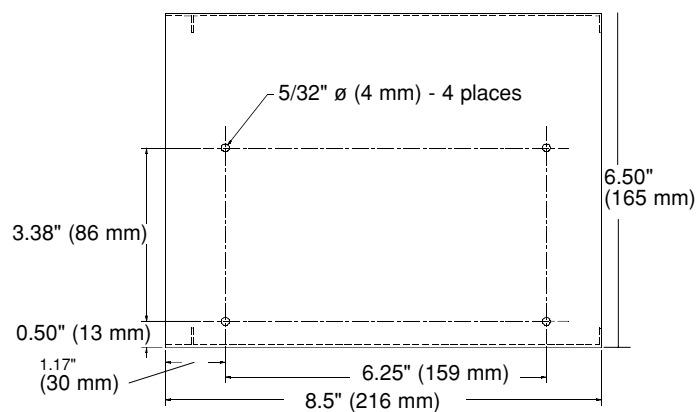
Width	23" (584 mm)
Height	36" (914 mm)
Depth	15.8" (401 mm)
Weight	148 lbs (67.2 kg)
Coolant capacity	2.5 gal (9.5 l)
Minimum coolant flow	0.85 gpm (3.2 l/min)



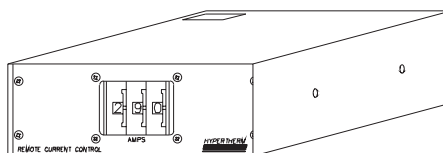
Water Cooler with Dimensions

Remote Current Control Console - Optional - 077020

Dimensions and Weight:	
Width	6.5" (165 mm)
Height	2.5" (64 mm)
Depth	8.63" (219 mm)
Weight	3 lbs (1 kg)



Remote Current Control Mounting Dimensions (bottom view)



Command THC - Optional

Refer to the Command THC X-Y Product Configuration Manual 802600.

Section 2

ORDERING

In this section:

Ordering the HT4400 System	2-2
Component Mounting Limitations	2-2
HT4400 System with Machine Current Control	2-3
HT4400 System with Remote Current Control	2-4
HT4400 System with Remote Current Control and Command THC Option	2-5
HT4400 System with Machine Current Control and Command THC Option	2-6
HT4400 Order Forms	2-7

Ordering the HT4400 System

Ordering a system can be a complex procedure. Hypertherm recommends the following components to operate the HT4400 system:

- Power supply
- Ignition console and connecting cables and hoses
- Gas console and connecting cables and hoses
- Valve cluster and connecting cables and hoses
- Torch assembly with leads
- Water cooler and connecting cables and hoses
- Machine interface I/O cable to start and control the system from the CNC

In addition, current control needs to be set by some means. Hypertherm offers these 2 options to control current:

- Remote current control console and its connecting cable
- or
- Machine V/C interface cable for customers supplying their own current control

To operate a torch height control, Hypertherm offers:

- Command THC system and its connecting cables - If ordering a THC system, also see Command THC X-Y Table Product Configuration Manual #802600 for more details.

Note: If ordering the Command THC, do not order the Machine Interface I/O cable (item 19).

If two torches are to be employed simultaneously, you will need to order 2 complete HT4400 systems and:

- Hold cable

Component Mounting Limitations

Ignition Console

The ignition console must be located within 15 ft (4.6 m) of the torch.
The ignition console must be mounted horizontally or vertically as shown in Section 1.

Gas Console

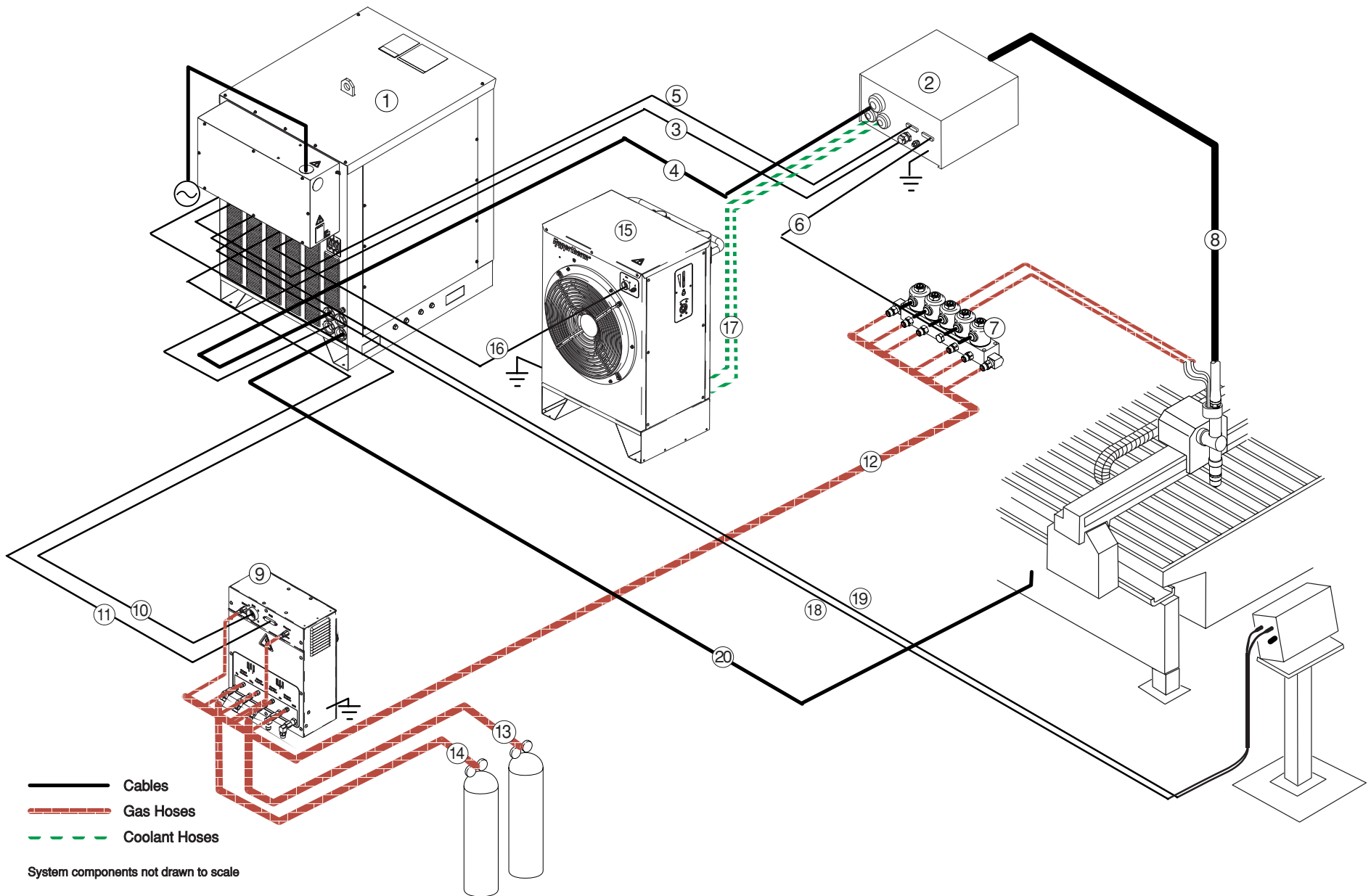
The gas console must be located within 50 ft (15.3 m) of the valve cluster.

Valve Cluster

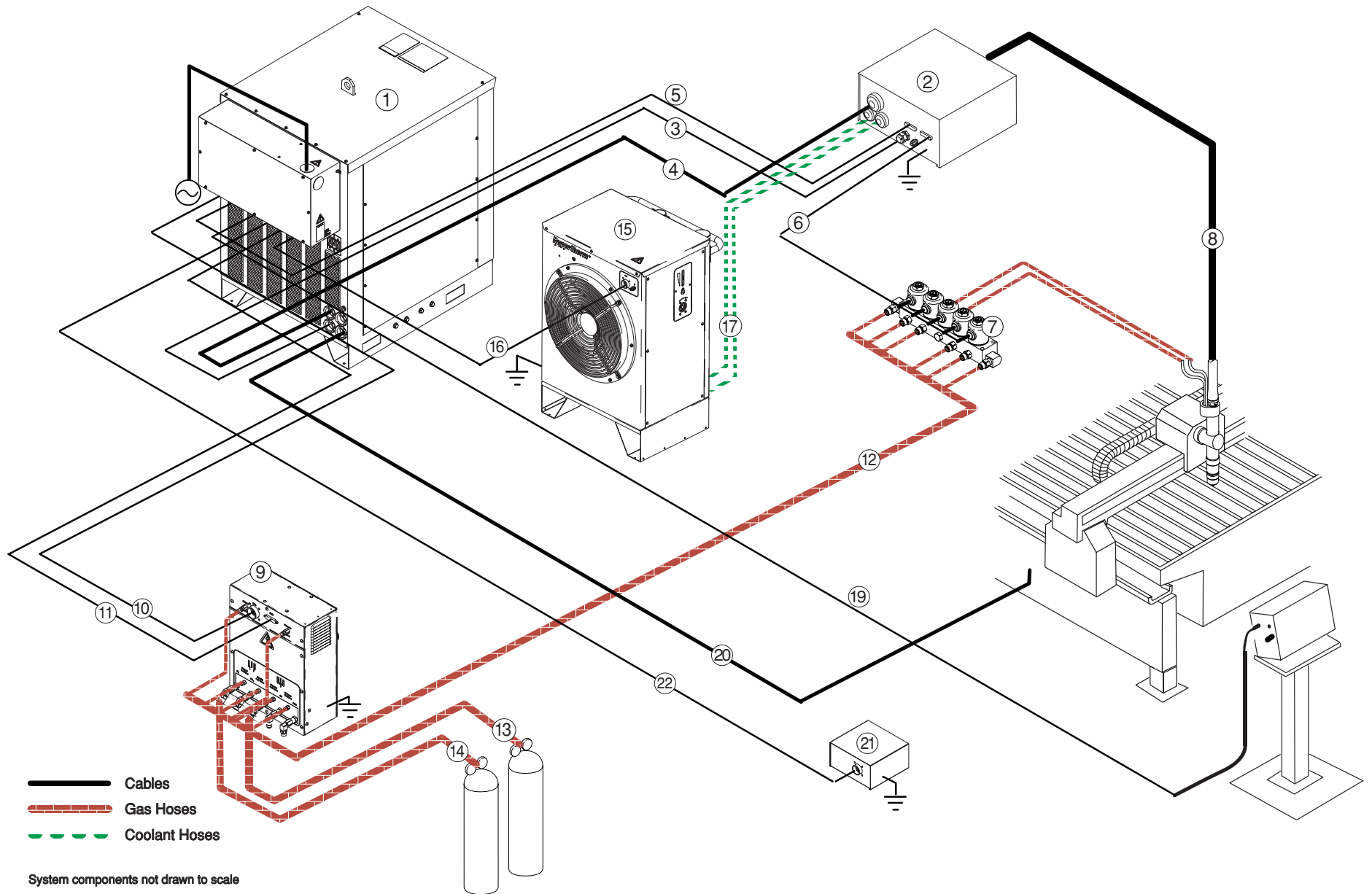
The valve cluster must be located within 4 ft (1.2 m) of the torch.
The valve cluster must be located within 50 ft (15.3 m) of the gas console.

Use the diagrams on the following pages along with the order forms to order the correct configuration for your site. The components in the diagrams are not drawn to scale. The layouts are shown to assist in ordering and to show where the interconnecting cables and hoses terminate - location of the system components will vary from site to site.

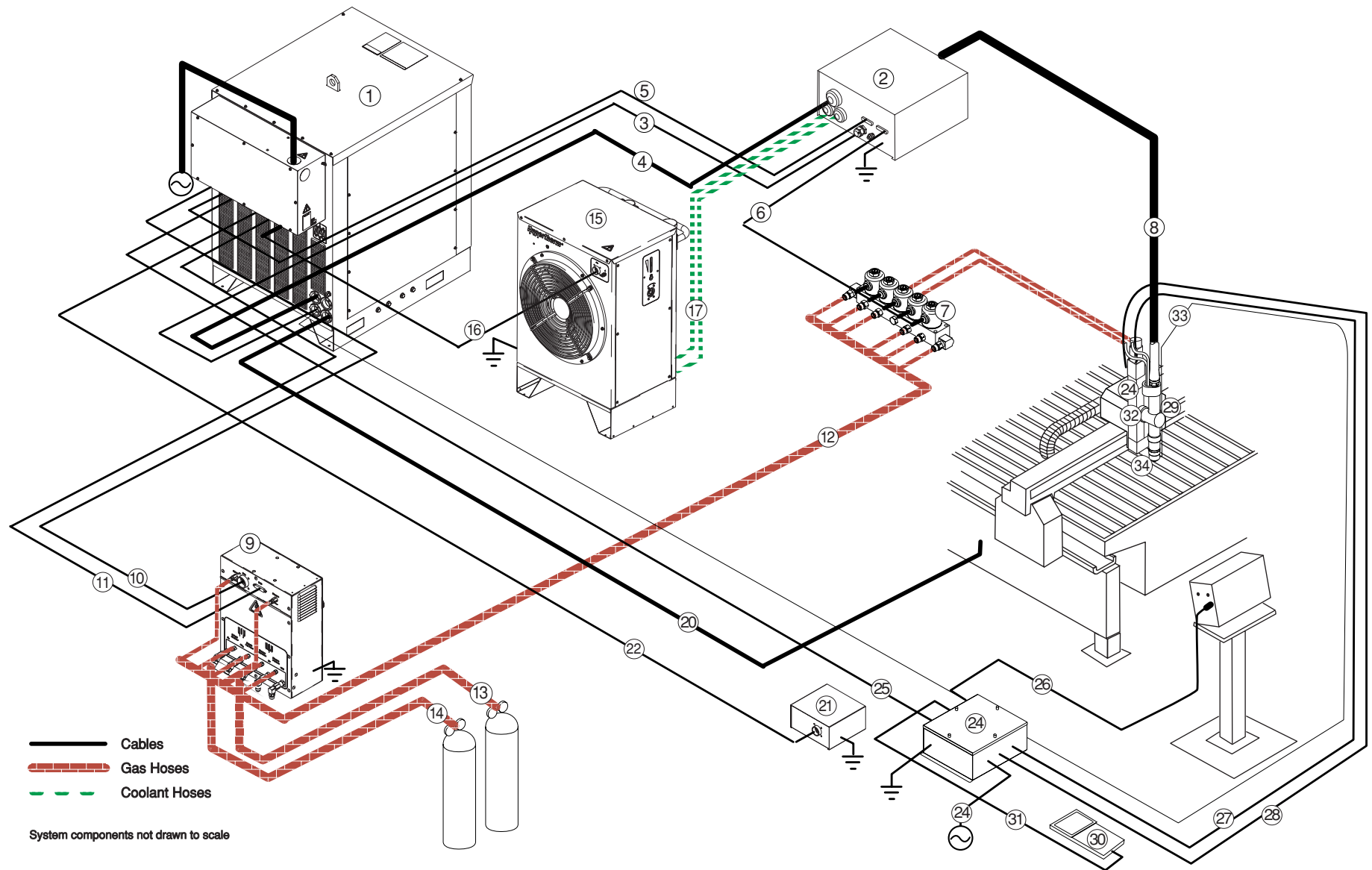
HT4400 System with Machine Current Control



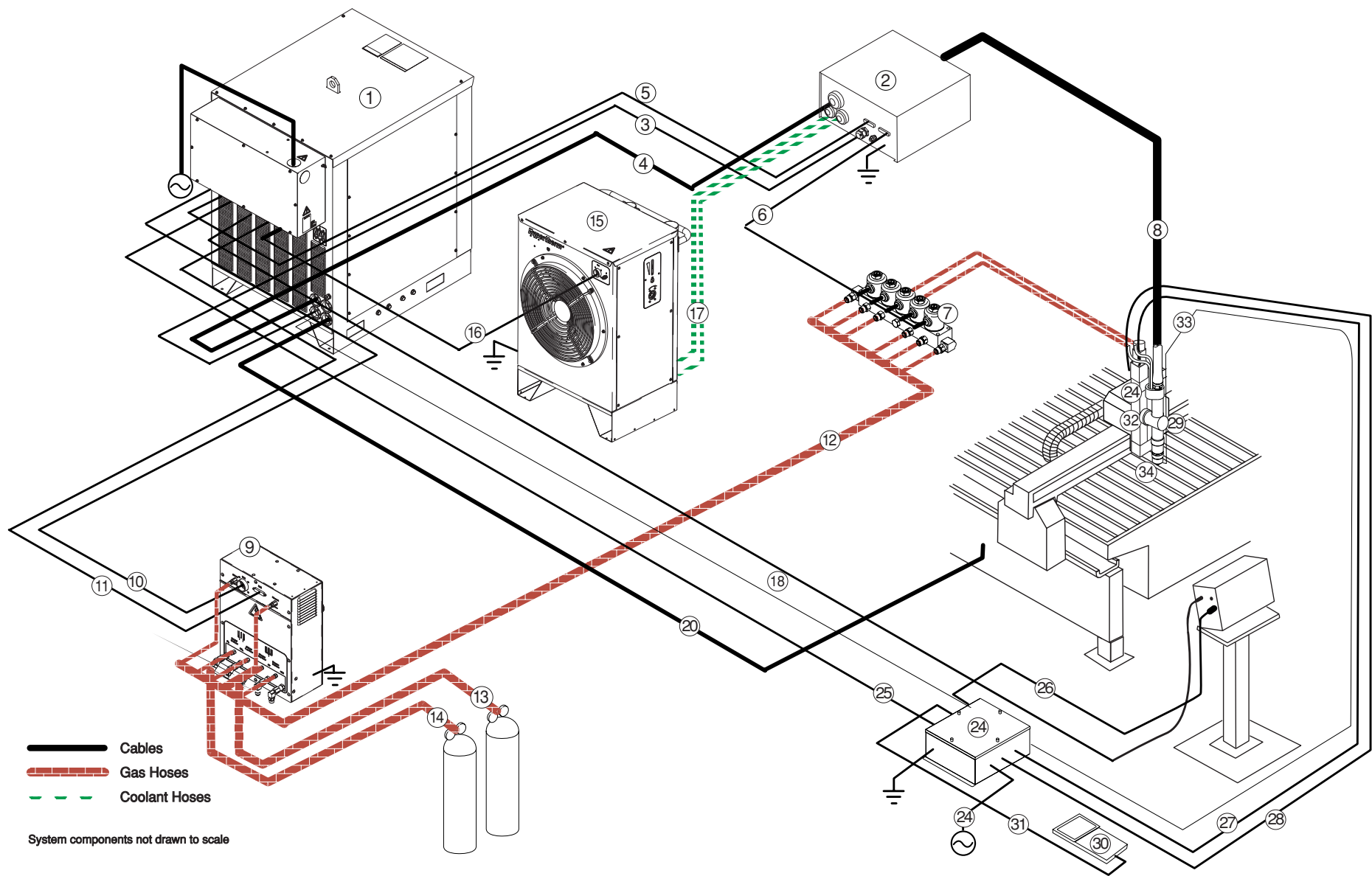
HT4400 System with Remote Current Control



HT4400 System with Remote Current Control and Command THC Option



HT4400 System with Machine Current Control and Command THC Option



Distributor Information:

HYPERTHERM HT4400 Order Form

Customer Information:

1 HT4400 Power Supply

- ☐ 077036 HT4400 PS,200V,50-60 Hz
☐ 077037 HT4400 PS,400V,50 Hz
☐ 077033 HT4400 PS,480V,60 Hz
☐ 077038 HT4400 PS,600V,60 Hz

2 Ignition Console

- ☐ 078088

3 Nozzle (Pilot Arc) Lead

- | | |
|--|---|
| ☐ 123552 10 ft (3.0 m) | ☐ 123530 60 ft (18.3 m) |
| ☐ 123553 15 ft (4.6 m) | ☐ 123531 75 ft (22.9 m) |
| ☐ 123554 20 ft (6.1 m) | ☐ 123532 100 ft (30.5 m) |
| ☐ 123528 25 ft (7.6 m) | ☐ 123534 125 ft (38.1 m) |
| ☐ 123555 30 ft (9.1 m) | ☐ 123535 150 ft (45.7 m) |
| ☐ 123556 40 ft (12.2 m) | ☐ 123536 175 ft (53.3 m) |
| ☐ 123529 50 ft (15.2 m) | ☐ 123537 200 ft (61.0 m) |

4 Negative Lead

- | | |
|--|---|
| ☐ 123418 10 ft (3.0 m) | ☐ 123316 60 ft (18.3 m) |
| ☐ 023382 15 ft (4.6 m) | ☐ 023124 75 ft (22.9 m) |
| ☐ 023136 20 ft (6.1 m) | ☐ 023080 100 ft (30.5 m) |
| ☐ 023078 25 ft (7.6 m) | ☐ 123084 125 ft (38.1 m) |
| ☐ 023101 30 ft (9.1 m) | ☐ 023081 150 ft (45.7 m) |
| ☐ 023135 40 ft (12.2 m) | ☐ 123097 175 ft (53.3 m) |
| ☐ 023079 50 ft (15.2 m) | ☐ 023188 200 ft (61.0 m) |

5 Cable - Ignition Console to Power Supply

- | | |
|--|---|
| ☐ 123446 10 ft (3.0 m) | ☐ 123559 60 ft (18.3 m) |
| ☐ 123557 15 ft (4.6 m) | ☐ 123513 75 ft (22.9 m) |
| ☐ 123447 20 ft (6.1 m) | ☐ 123514 100 ft (30.5 m) |
| ☐ 123448 25 ft (7.6 m) | ☐ 123515 125 ft (38.1 m) |
| ☐ 123449 30 ft (9.1 m) | ☐ 123516 150 ft (45.7 m) |
| ☐ 123450 40 ft (12.2 m) | ☐ 123560 175 ft (53.3 m) |
| ☐ 123512 50 ft (15.2 m) | ☐ 123561 200 ft (61.0 m) |

6 Cable - Ignition Console to Valve Cluster

- ☐ 123509 6 ft (1.8 m)
☐ 123510 10 ft (3.0 m)
☐ 123511 15 ft (4.6 m)

7 Valve Cluster

- ☐ 077035

8 Torch Assembly with Leads

- ☐ 128430 with 6 ft (1.8 m) Leads
☐ 128431 with 10 ft (3.0 m) Leads
☐ 128342 with 15 ft (4.6 m) Leads

9 Gas Console

- ☐ 077032

10 Cable 1 - Gas Console to Power Supply

- | | |
|--|---|
| ☐ 123446 10 ft (3.0 m) | ☐ 123559 60 ft (18.3 m) |
| ☐ 123557 15 ft (4.6 m) | ☐ 123513 75 ft (22.9 m) |
| ☐ 123447 20 ft (6.1 m) | ☐ 123514 100 ft (30.5 m) |
| ☐ 123448 25 ft (7.6 m) | ☐ 123515 125 ft (38.1 m) |
| ☐ 123449 30 ft (9.1 m) | ☐ 123516 150 ft (45.7 m) |
| ☐ 123450 40 ft (12.2 m) | ☐ 123560 175 ft (53.3 m) |
| ☐ 123512 50 ft (15.2 m) | ☐ 123561 200 ft (61.0 m) |

11 Cable 2 - Gas Console to Power Supply

- | | |
|--|---|
| ☐ 123562 10 ft (3.0 m) | ☐ 123568 60 ft (18.3 m) |
| ☐ 123563 15 ft (4.6 m) | ☐ 023497 75 ft (22.9 m) |
| ☐ 123564 20 ft (6.1 m) | ☐ 023498 100 ft (30.5 m) |
| ☐ 123565 25 ft (7.6 m) | ☐ 123087 125 ft (38.1 m) |
| ☐ 123566 30 ft (9.1 m) | ☐ 023499 150 ft (45.7 m) |
| ☐ 123567 40 ft (12.2 m) | ☐ 123031 175 ft (53.3 m) |
| ☐ 023496 50 ft (15.2 m) | ☐ 023500 200 ft (61.0 m) |

12 Hoses - Gas Console to Valve Cluster

- | | |
|---|--|
| ☐ 128482 5 ft (1.5 m) | ☐ 128486 25 ft (7.6 m) |
| ☐ 128483 10 ft (3.0 m) | ☐ 128487 30 ft (9.1 m) |
| ☐ 128484 15 ft (4.6 m) | ☐ 128488 40 ft (12.2 m) |
| ☐ 128485 20 ft (6.1 m) | ☐ 128489 50 ft (15.2 m) |

13 Oxygen Hose - Gas Console to Gas Supply

- | | |
|--|---|
| ☐ 024607 10 ft (3.0 m) | ☐ 024611 60 ft (18.3 m) |
| ☐ 024204 15 ft (4.6 m) | ☐ 024398 75 ft (22.9 m) |
| ☐ 024608 20 ft (6.1 m) | ☐ 024206 100 ft (30.5 m) |
| ☐ 024205 25 ft (7.6 m) | ☐ 024490 125 ft (38.1 m) |
| ☐ 024609 30 ft (9.1 m) | ☐ 024159 150 ft (45.7 m) |
| ☐ 024610 40 ft (12.2 m) | ☐ 024612 175 ft (53.3 m) |
| ☐ 024155 50 ft (15.2 m) | ☐ 024333 200 ft (61.0 m) |

14 Nitrogen Hose - Gas Console to Gas Supply

- | | |
|--|---|
| ☐ 024210 10 ft (3.0 m) | ☐ 024615 60 ft (18.3 m) |
| ☐ 024203 15 ft (4.6 m) | ☐ 024148 75 ft (22.9 m) |
| ☐ 024232 20 ft (6.1 m) | ☐ 024116 100 ft (30.5 m) |
| ☐ 024134 25 ft (7.6 m) | ☐ 024491 125 ft (38.1 m) |
| ☐ 024613 30 ft (9.1 m) | ☐ 024120 150 ft (45.7 m) |
| ☐ 024614 40 ft (12.2 m) | ☐ 024616 175 ft (53.3 m) |
| ☐ 024112 50 ft (15.2 m) | ☐ 024124 200 ft (61.0 m) |

15 Water Cooler

- ☐ 077034

16 Cable - Water Cooler to Power Supply

- ☐ 123517 5 ft (1.5 m)
☐ 123518 10 ft (3.0 m)
☐ 123519 15 ft (4.6 m)

17 Hoses - Water Cooler to Ignition Console

- | | |
|--|---|
| ☐ 128499 5 ft (1.5 m) | ☐ 128052 60 ft (18.3 m) |
| ☐ 028652 10 ft (3.0 m) | ☐ 028443 75 ft (22.9 m) |
| ☐ 028440 15 ft (4.6 m) | ☐ 028444 100 ft (30.5 m) |
| ☐ 028653 20 ft (6.1 m) | ☐ 028747 125 ft (38.1 m) |
| ☐ 028441 25 ft (7.6 m) | ☐ 028445 150 ft (45.7 m) |
| ☐ 128495 30 ft (9.1 m) | ☐ 128064 175 ft (53.3 m) |
| ☐ 128496 40 ft (12.2 m) | ☐ 028637 200 ft (61.0 m) |
| ☐ 028442 50 ft (15.2 m) | |

18 Cable - Machine V/C Interface to Power Supply
(If selected, do not select 21 or 22.)

☐	123580	10 ft (3.0 m)	☐	123584	60 ft (18.3 m)
☐	023851	15 ft (4.6 m)	☐	023855	75 ft (22.9 m)
☐	123581	20 ft (6.1 m)	☐	023856	100 ft (30.5 m)
☐	023852	25 ft (7.6 m)	☐	023903	125 ft (38.1 m)
☐	123582	30 ft (9.1 m)	☐	023857	150 ft (45.7 m)
☐	123583	40 ft (12.2 m)	☐	123585	175 ft (53.3 m)
☐	023854	50 ft (15.2 m)	☐	023858	200 ft (61.0 m)

19 Cable - Machine I/O Interface to Power Supply
(Do not select if using the Command THC.)

☐	123574	10 ft (3.0 m)	☐	123579	60 ft (18.3 m)
☐	123575	15 ft (4.6 m)	☐	023894	75 ft (22.9 m)
☐	123576	20 ft (6.1 m)	☐	023895	100 ft (30.5 m)
☐	023892	25 ft (7.6 m)	☐	123089	125 ft (38.1 m)
☐	123577	30 ft (9.1 m)	☐	023896	150 ft (45.7 m)
☐	123578	40 ft (12.2 m)	☐	123033	175 ft (53.3 m)
☐	023893	50 ft (15.2 m)	☐	023897	200 ft (61.0 m)

20 Cable - Power Supply to Work Table

☐	123418	10 ft (3.0 m)	☐	123316	60 ft (18.3 m)
☐	023382	15 ft (4.6 m)	☐	023124	75 ft (22.9 m)
☐	023136	20 ft (6.1 m)	☐	023080	100 ft (30.5 m)
☐	023078	25 ft (7.6 m)	☐	123084	125 ft (38.1 m)
☐	023101	30 ft (9.1 m)	☐	023081	150 ft (45.7 m)
☐	023135	40 ft (12.2 m)	☐	123097	175 ft (53.3 m)
☐	023079	50 ft (15.2 m)	☐	023188	200 ft (61.0 m)

21 Remote Current Control Console
(If selected, also select 22. Do not select 18.)

☐ 077020

22 Cable - Remote Current Control Console to Power Supply
(If selected, also select 21. Do not select 18.)

☐	123150	10 ft (3.0 m)	☐	123590	60 ft (18.3 m)
☐	123586	15 ft (4.6 m)	☐	023874	75 ft (22.9 m)
☐	123587	20 ft (6.1 m)	☐	023875	100 ft (30.5 m)
☐	023871	25 ft (7.6 m)	☐	123088	125 ft (38.1 m)
☐	123588	30 ft (9.1 m)	☐	023876	150 ft (45.7 m)
☐	123589	40 ft (12.2 m)	☐	123032	175 ft (53.3 m)
☐	023873	50 ft (15.2 m)	☐	023877	200 ft (61.0 m)

23 Hold Cable - Power Supply#1 to Power Supply#2

☐	123591	10 ft (3.0 m)	☐	123594	40 ft (12.2 m)
☐	023340	15 ft (4.6 m)	☐	023342	50 ft (15.2 m)
☐	123592	20 ft (6.1 m)	☐	023343	100 ft (30.5 m)
☐	023341	25 ft (7.6 m)	☐	023344	150 ft (45.7 m)
☐	123593	30 ft (9.1 m)			

24 Command THC X-Y System

☐ 050021

25 Cable - Command THC to Power Supply

☐	123209	5 ft (1.5 m)	☐	123216	45 ft (13.7 m)
☐	123210	10 ft (3.0 m)	☐	123023	50 ft (15.2 m)
☐	123211	15 ft (4.6 m)	☐	123494	55 ft (16.7 m)
☐	123212	20 ft (6.1 m)	☐	123217	75 ft (22.9 m)
☐	123022	25 ft (7.6 m)	☐	123218	100 ft (30.5 m)
☐	123213	30 ft (9.1 m)	☐	123219	125 ft (38.1 m)
☐	123214	35 ft (10.7 m)	☐	123220	150 ft (45.7 m)
☐	123215	40 ft (12.2 m)			

26 Cable - Command THC to CNC Interface

☐	123209	5 ft (1.5 m)	☐	123216	45 ft (13.7 m)
☐	123210	10 ft (3.0 m)	☐	123023	50 ft (15.2 m)
☐	123211	15 ft (4.6 m)	☐	123494	55 ft (16.7 m)
☐	123212	20 ft (6.1 m)	☐	123217	75 ft (22.9 m)
☐	123022	25 ft (7.6 m)	☐	123218	100 ft (30.5 m)
☐	123213	30 ft (9.1 m)	☐	123219	125 ft (38.1 m)
☐	123214	35 ft (10.7 m)	☐	123220	150 ft (45.7 m)
☐	123215	40 ft (12.2 m)			

27 Cable - Command THC to Lifter

☐	123209	5 ft (1.5 m)	☐	123216	45 ft (13.7 m)
☐	123210	10 ft (3.0 m)	☐	123023	50 ft (15.2 m)
☐	123211	15 ft (4.6 m)	☐	123494	55 ft (16.7 m)
☐	123212	20 ft (6.1 m)	☐	123217	75 ft (22.9 m)
☐	123022	25 ft (7.6 m)	☐	123218	100 ft (30.5 m)
☐	123213	30 ft (9.1 m)	☐	123219	125 ft (38.1 m)
☐	123214	35 ft (10.7 m)	☐	123220	150 ft (45.7 m)
☐	123215	40 ft (12.2 m)			

28 Cable - Command THC to Motor Drive

☐	123197	5 ft (1.5 m)	☐	123204	45 ft (13.7 m)
☐	123198	10 ft (3.0 m)	☐	123021	50 ft (15.2 m)
☐	123199	15 ft (4.6 m)	☐	123495	55 ft (16.7 m)
☐	123200	20 ft (6.1 m)	☐	123205	75 ft (22.9 m)
☐	123020	25 ft (7.6 m)	☐	123206	100 ft (30.5 m)
☐	123201	30 ft (9.1 m)	☐	123207	125 ft (38.1 m)
☐	123202	35 ft (10.7 m)	☐	123208	150 ft (45.7 m)
☐	123203	40 ft (12.2 m)			

29 Mounting Block - Command THC

☐ 128279

30 Pendant - Command THC

☐ 053019

31 Extension Cable - Pendant to Command THC

☐ 123018 25 ft (7.6 m)
☐ 123019 50 ft (15.2 m)

32 Breakaway Kit - Command THC

☐ 128281

33 IHS Ohmic Contact Wire - Command THC

☐	123464	10 ft (3.0 m)	☐	123039	50 ft (15.2 m)
☐	123465	20 ft (6.1 m)	☐	123224	75 ft (22.9 m)
☐	123221	25 ft (7.6 m)	☐	123225	100 ft (30.5 m)
☐	123222	30 ft (9.1 m)	☐	123226	125 ft (38.1 m)
☐	123223	40 ft (12.2 m)	☐	123227	150 ft (45.6 m)

34 Retaining Cap with IHS Tab - Command THC

☐ 120907

Additional Torch(es)
(If needed to minimize consumable changing time)

☐ 120651 ☐ Quantity

Distributor Information:

HYPERTHERM HT4400 Order Form

Customer Information:

1 HT4400 Power Supply

- ☐ 077036 HT4400 PS,200V,50-60 Hz
☐ 077037 HT4400 PS,400V,50 Hz
☐ 077033 HT4400 PS,480V,60 Hz
☐ 077038 HT4400 PS,600V,60 Hz

2 Ignition Console

- ☐ 078088

3 Nozzle (Pilot Arc) Lead

- | | |
|--|---|
| ☐ 123552 10 ft (3.0 m) | ☐ 123530 60 ft (18.3 m) |
| ☐ 123553 15 ft (4.6 m) | ☐ 123531 75 ft (22.9 m) |
| ☐ 123554 20 ft (6.1 m) | ☐ 123532 100 ft (30.5 m) |
| ☐ 123528 25 ft (7.6 m) | ☐ 123534 125 ft (38.1 m) |
| ☐ 123555 30 ft (9.1 m) | ☐ 123535 150 ft (45.7 m) |
| ☐ 123556 40 ft (12.2 m) | ☐ 123536 175 ft (53.3 m) |
| ☐ 123529 50 ft (15.2 m) | ☐ 123537 200 ft (61.0 m) |

4 Negative Lead

- | | |
|--|---|
| ☐ 123418 10 ft (3.0 m) | ☐ 123316 60 ft (18.3 m) |
| ☐ 023382 15 ft (4.6 m) | ☐ 023124 75 ft (22.9 m) |
| ☐ 023136 20 ft (6.1 m) | ☐ 023080 100 ft (30.5 m) |
| ☐ 023078 25 ft (7.6 m) | ☐ 123084 125 ft (38.1 m) |
| ☐ 023101 30 ft (9.1 m) | ☐ 023081 150 ft (45.7 m) |
| ☐ 023135 40 ft (12.2 m) | ☐ 123097 175 ft (53.3 m) |
| ☐ 023079 50 ft (15.2 m) | ☐ 023188 200 ft (61.0 m) |

5 Cable - Ignition Console to Power Supply

- | | |
|--|---|
| ☐ 123446 10 ft (3.0 m) | ☐ 123559 60 ft (18.3 m) |
| ☐ 123557 15 ft (4.6 m) | ☐ 123513 75 ft (22.9 m) |
| ☐ 123447 20 ft (6.1 m) | ☐ 123514 100 ft (30.5 m) |
| ☐ 123448 25 ft (7.6 m) | ☐ 123515 125 ft (38.1 m) |
| ☐ 123449 30 ft (9.1 m) | ☐ 123516 150 ft (45.7 m) |
| ☐ 123450 40 ft (12.2 m) | ☐ 123560 175 ft (53.3 m) |
| ☐ 123512 50 ft (15.2 m) | ☐ 123561 200 ft (61.0 m) |

6 Cable - Ignition Console to Valve Cluster

- ☐ 123509 6 ft (1.8 m)
☐ 123510 10 ft (3.0 m)
☐ 123511 15 ft (4.6 m)

7 Valve Cluster

- ☐ 077035

8 Torch Assembly with Leads

- ☐ 128430 with 6 ft (1.8 m) Leads
☐ 128431 with 10 ft (3.0 m) Leads
☐ 128342 with 15 ft (4.6 m) Leads

9 Gas Console

- ☐ 077032

10 Cable 1 - Gas Console to Power Supply

- | | |
|--|---|
| ☐ 123446 10 ft (3.0 m) | ☐ 123559 60 ft (18.3 m) |
| ☐ 123557 15 ft (4.6 m) | ☐ 123513 75 ft (22.9 m) |
| ☐ 123447 20 ft (6.1 m) | ☐ 123514 100 ft (30.5 m) |
| ☐ 123448 25 ft (7.6 m) | ☐ 123515 125 ft (38.1 m) |
| ☐ 123449 30 ft (9.1 m) | ☐ 123516 150 ft (45.7 m) |
| ☐ 123450 40 ft (12.2 m) | ☐ 123560 175 ft (53.3 m) |
| ☐ 123512 50 ft (15.2 m) | ☐ 123561 200 ft (61.0 m) |

11 Cable 2 - Gas Console to Power Supply

- | | |
|--|---|
| ☐ 123562 10 ft (3.0 m) | ☐ 123568 60 ft (18.3 m) |
| ☐ 123563 15 ft (4.6 m) | ☐ 023497 75 ft (22.9 m) |
| ☐ 123564 20 ft (6.1 m) | ☐ 023498 100 ft (30.5 m) |
| ☐ 123565 25 ft (7.6 m) | ☐ 123087 125 ft (38.1 m) |
| ☐ 123566 30 ft (9.1 m) | ☐ 023499 150 ft (45.7 m) |
| ☐ 123567 40 ft (12.2 m) | ☐ 123031 175 ft (53.3 m) |
| ☐ 023496 50 ft (15.2 m) | ☐ 023500 200 ft (61.0 m) |

12 Hoses - Gas Console to Valve Cluster

- | | |
|---|--|
| ☐ 128482 5 ft (1.5 m) | ☐ 128486 25 ft (7.6 m) |
| ☐ 128483 10 ft (3.0 m) | ☐ 128487 30 ft (9.1 m) |
| ☐ 128484 15 ft (4.6 m) | ☐ 128488 40 ft (12.2 m) |
| ☐ 128485 20 ft (6.1 m) | ☐ 128489 50 ft (15.2 m) |

13 Oxygen Hose - Gas Console to Gas Supply

- | | |
|--|---|
| ☐ 024607 10 ft (3.0 m) | ☐ 024611 60 ft (18.3 m) |
| ☐ 024204 15 ft (4.6 m) | ☐ 024398 75 ft (22.9 m) |
| ☐ 024608 20 ft (6.1 m) | ☐ 024206 100 ft (30.5 m) |
| ☐ 024205 25 ft (7.6 m) | ☐ 024490 125 ft (38.1 m) |
| ☐ 024609 30 ft (9.1 m) | ☐ 024159 150 ft (45.7 m) |
| ☐ 024610 40 ft (12.2 m) | ☐ 024612 175 ft (53.3 m) |
| ☐ 024155 50 ft (15.2 m) | ☐ 024333 200 ft (61.0 m) |

14 Nitrogen Hose - Gas Console to Gas Supply

- | | |
|--|---|
| ☐ 024210 10 ft (3.0 m) | ☐ 024615 60 ft (18.3 m) |
| ☐ 024203 15 ft (4.6 m) | ☐ 024148 75 ft (22.9 m) |
| ☐ 024232 20 ft (6.1 m) | ☐ 024116 100 ft (30.5 m) |
| ☐ 024134 25 ft (7.6 m) | ☐ 024491 125 ft (38.1 m) |
| ☐ 024613 30 ft (9.1 m) | ☐ 024120 150 ft (45.7 m) |
| ☐ 024614 40 ft (12.2 m) | ☐ 024616 175 ft (53.3 m) |
| ☐ 024112 50 ft (15.2 m) | ☐ 024124 200 ft (61.0 m) |

15 Water Cooler

- ☐ 077034

16 Cable - Water Cooler to Power Supply

- ☐ 123517 5 ft (1.5 m)
☐ 123518 10 ft (3.0 m)
☐ 123519 15 ft (4.6 m)

17 Hoses - Water Cooler to Ignition Console

- | | |
|--|---|
| ☐ 128499 5 ft (1.5 m) | ☐ 128052 60 ft (18.3 m) |
| ☐ 028652 10 ft (3.0 m) | ☐ 028443 75 ft (22.9 m) |
| ☐ 028440 15 ft (4.6 m) | ☐ 028444 100 ft (30.5 m) |
| ☐ 028653 20 ft (6.1 m) | ☐ 028747 125 ft (38.1 m) |
| ☐ 028441 25 ft (7.6 m) | ☐ 028445 150 ft (45.7 m) |
| ☐ 128495 30 ft (9.1 m) | ☐ 128064 175 ft (53.3 m) |
| ☐ 128496 40 ft (12.2 m) | ☐ 028637 200 ft (61.0 m) |
| ☐ 028442 50 ft (15.2 m) | |

18 Cable - Machine V/C Interface to Power Supply
(If selected, do not select 21 or 22.)

☐	123580	10 ft (3.0 m)	☐	123584	60 ft (18.3 m)
☐	023851	15 ft (4.6 m)	☐	023855	75 ft (22.9 m)
☐	123581	20 ft (6.1 m)	☐	023856	100 ft (30.5 m)
☐	023852	25 ft (7.6 m)	☐	023903	125 ft (38.1 m)
☐	123582	30 ft (9.1 m)	☐	023857	150 ft (45.7 m)
☐	123583	40 ft (12.2 m)	☐	123585	175 ft (53.3 m)
☐	023854	50 ft (15.2 m)	☐	023858	200 ft (61.0 m)

19 Cable - Machine I/O Interface to Power Supply
(Do not select if using the Command THC.)

☐	123574	10 ft (3.0 m)	☐	123579	60 ft (18.3 m)
☐	123575	15 ft (4.6 m)	☐	023894	75 ft (22.9 m)
☐	123576	20 ft (6.1 m)	☐	023895	100 ft (30.5 m)
☐	023892	25 ft (7.6 m)	☐	123089	125 ft (38.1 m)
☐	123577	30 ft (9.1 m)	☐	023896	150 ft (45.7 m)
☐	123578	40 ft (12.2 m)	☐	123033	175 ft (53.3 m)
☐	023893	50 ft (15.2 m)	☐	023897	200 ft (61.0 m)

20 Cable - Power Supply to Work Table

☐	123418	10 ft (3.0 m)	☐	123316	60 ft (18.3 m)
☐	023382	15 ft (4.6 m)	☐	023124	75 ft (22.9 m)
☐	023136	20 ft (6.1 m)	☐	023080	100 ft (30.5 m)
☐	023078	25 ft (7.6 m)	☐	123084	125 ft (38.1 m)
☐	023101	30 ft (9.1 m)	☐	023081	150 ft (45.7 m)
☐	023135	40 ft (12.2 m)	☐	123097	175 ft (53.3 m)
☐	023079	50 ft (15.2 m)	☐	023188	200 ft (61.0 m)

21 Remote Current Control Console
(If selected, also select 22. Do not select 18.)

☐ 077020

22 Cable - Remote Current Control Console to Power Supply
(If selected, also select 21. Do not select 18.)

☐	123150	10 ft (3.0 m)	☐	123590	60 ft (18.3 m)
☐	123586	15 ft (4.6 m)	☐	023874	75 ft (22.9 m)
☐	123587	20 ft (6.1 m)	☐	023875	100 ft (30.5 m)
☐	023871	25 ft (7.6 m)	☐	123088	125 ft (38.1 m)
☐	123588	30 ft (9.1 m)	☐	023876	150 ft (45.7 m)
☐	123589	40 ft (12.2 m)	☐	123032	175 ft (53.3 m)
☐	023873	50 ft (15.2 m)	☐	023877	200 ft (61.0 m)

23 Hold Cable - Power Supply#1 to Power Supply#2

☐	123591	10 ft (3.0 m)	☐	123594	40 ft (12.2 m)
☐	023340	15 ft (4.6 m)	☐	023342	50 ft (15.2 m)
☐	123592	20 ft (6.1 m)	☐	023343	100 ft (30.5 m)
☐	023341	25 ft (7.6 m)	☐	023344	150 ft (45.7 m)
☐	123593	30 ft (9.1 m)			

24 Command THC X-Y System

☐ 050021

25 Cable - Command THC to Power Supply

☐	123209	5 ft (1.5 m)	☐	123216	45 ft (13.7 m)
☐	123210	10 ft (3.0 m)	☐	123023	50 ft (15.2 m)
☐	123211	15 ft (4.6 m)	☐	123494	55 ft (16.7 m)
☐	123212	20 ft (6.1 m)	☐	123217	75 ft (22.9 m)
☐	123022	25 ft (7.6 m)	☐	123218	100 ft (30.5 m)
☐	123213	30 ft (9.1 m)	☐	123219	125 ft (38.1 m)
☐	123214	35 ft (10.7 m)	☐	123220	150 ft (45.7 m)
☐	123215	40 ft (12.2 m)			

26 Cable - Command THC to CNC Interface

☐	123209	5 ft (1.5 m)	☐	123216	45 ft (13.7 m)
☐	123210	10 ft (3.0 m)	☐	123023	50 ft (15.2 m)
☐	123211	15 ft (4.6 m)	☐	123494	55 ft (16.7 m)
☐	123212	20 ft (6.1 m)	☐	123217	75 ft (22.9 m)
☐	123022	25 ft (7.6 m)	☐	123218	100 ft (30.5 m)
☐	123213	30 ft (9.1 m)	☐	123219	125 ft (38.1 m)
☐	123214	35 ft (10.7 m)	☐	123220	150 ft (45.7 m)
☐	123215	40 ft (12.2 m)			

27 Cable - Command THC to Lifter

☐	123209	5 ft (1.5 m)	☐	123216	45 ft (13.7 m)
☐	123210	10 ft (3.0 m)	☐	123023	50 ft (15.2 m)
☐	123211	15 ft (4.6 m)	☐	123494	55 ft (16.7 m)
☐	123212	20 ft (6.1 m)	☐	123217	75 ft (22.9 m)
☐	123022	25 ft (7.6 m)	☐	123218	100 ft (30.5 m)
☐	123213	30 ft (9.1 m)	☐	123219	125 ft (38.1 m)
☐	123214	35 ft (10.7 m)	☐	123220	150 ft (45.7 m)
☐	123215	40 ft (12.2 m)			

28 Cable - Command THC to Motor Drive

☐	123197	5 ft (1.5 m)	☐	123204	45 ft (13.7 m)
☐	123198	10 ft (3.0 m)	☐	123021	50 ft (15.2 m)
☐	123199	15 ft (4.6 m)	☐	123495	55 ft (16.7 m)
☐	123200	20 ft (6.1 m)	☐	123205	75 ft (22.9 m)
☐	123020	25 ft (7.6 m)	☐	123206	100 ft (30.5 m)
☐	123201	30 ft (9.1 m)	☐	123207	125 ft (38.1 m)
☐	123202	35 ft (10.7 m)	☐	123208	150 ft (45.7 m)
☐	123203	40 ft (12.2 m)			

29 Mounting Block - Command THC

☐ 128279

30 Pendant - Command THC

☐ 053019

31 Extension Cable - Pendant to Command THC

☐ 123018 25 ft (7.6 m)
☐ 123019 50 ft (15.2 m)

32 Breakaway Kit - Command THC

☐ 128281

33 IHS Ohmic Contact Wire - Command THC

☐	123464	10 ft (3.0 m)	☐	123039	50 ft (15.2 m)
☐	123465	20 ft (6.1 m)	☐	123224	75 ft (22.9 m)
☐	123221	25 ft (7.6 m)	☐	123225	100 ft (30.5 m)
☐	123222	30 ft (9.1 m)	☐	123226	125 ft (38.1 m)
☐	123223	40 ft (12.2 m)	☐	123227	150 ft (45.6 m)

34 Retaining Cap with IHS Tab - Command THC

☐ 120907

Additional Torch(es)
(If needed to minimize consumable changing time)

☐ 120651 ☐ Quantity