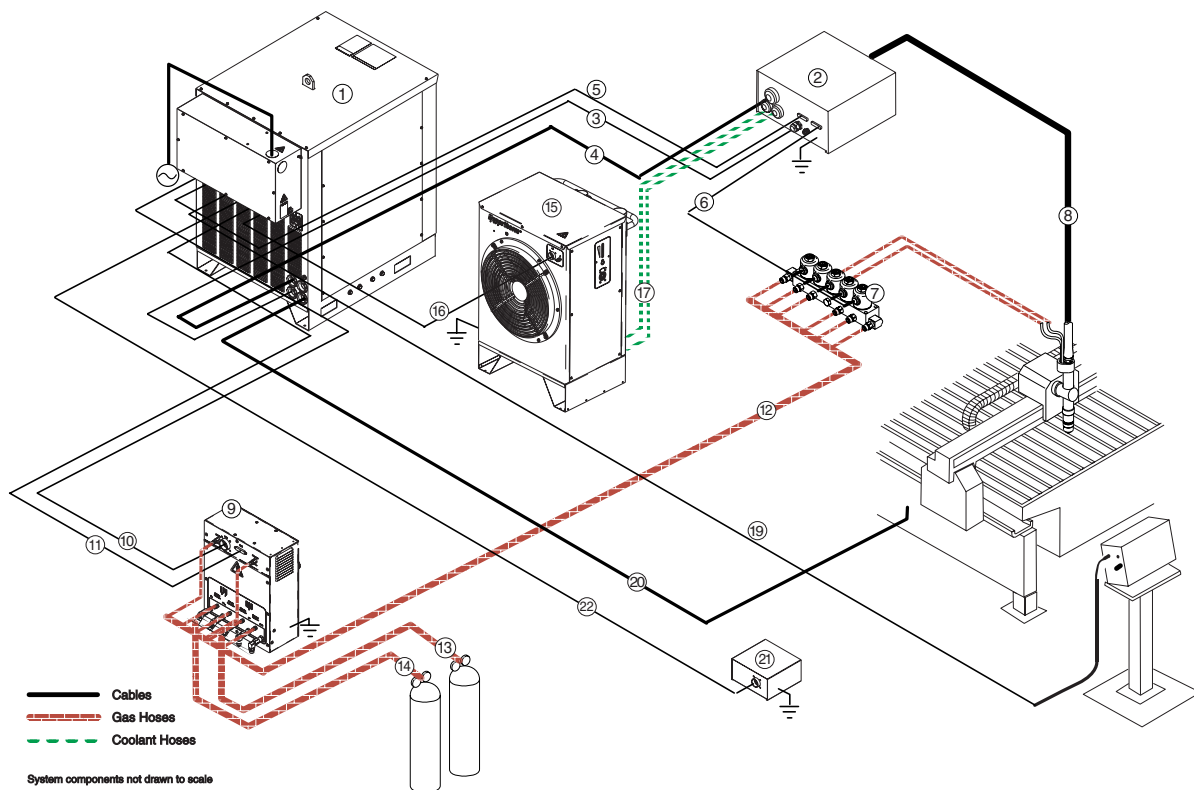


# ***HySpeed™***

# ***HT4400®***

## ***Plasma Arc Cutting System***

### ***Product Configuration Manual 803740 - Revision 1***



***Hypertherm***  
*The world leader in  
plasma cutting technology*

***HT4400***<sup>®</sup>

**Product Configuration Manual**

**(P/N 803740)**

**Revision 1 March, 2000**

**Hypertherm, Inc.  
Hanover, NH USA  
<http://www.hypertherm.com>  
[email:info@hypertherm.com](mailto:info@hypertherm.com)**

© Copyright 2000 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***

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 Singapore Pte Ltd***

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

***Japan***

Shinjuku Park Tower, 30th Floor  
3-7-1 Nishi-Shinjuku, Shinjuku-ko, Tokyo  
163-1030 Japan  
81 03 5326 3142 Tel  
81 03 5326 3001 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  
0805 050 111 Tel  
0805 050 222 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 B.V.***

Burg. Haverkampstraat 13  
7091 CN Dinxperlo, Nederland  
31 315 655866 Tel  
31 315 655886 Fax

***Hypertherm B.V. (ETSO)***

Vaartveld 9  
4704 SE Roosendaal, Nederland  
**00 800 49 73 7843 – toll-free in Europa**  
31 165 596900 Tel  
31 165 596901 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.

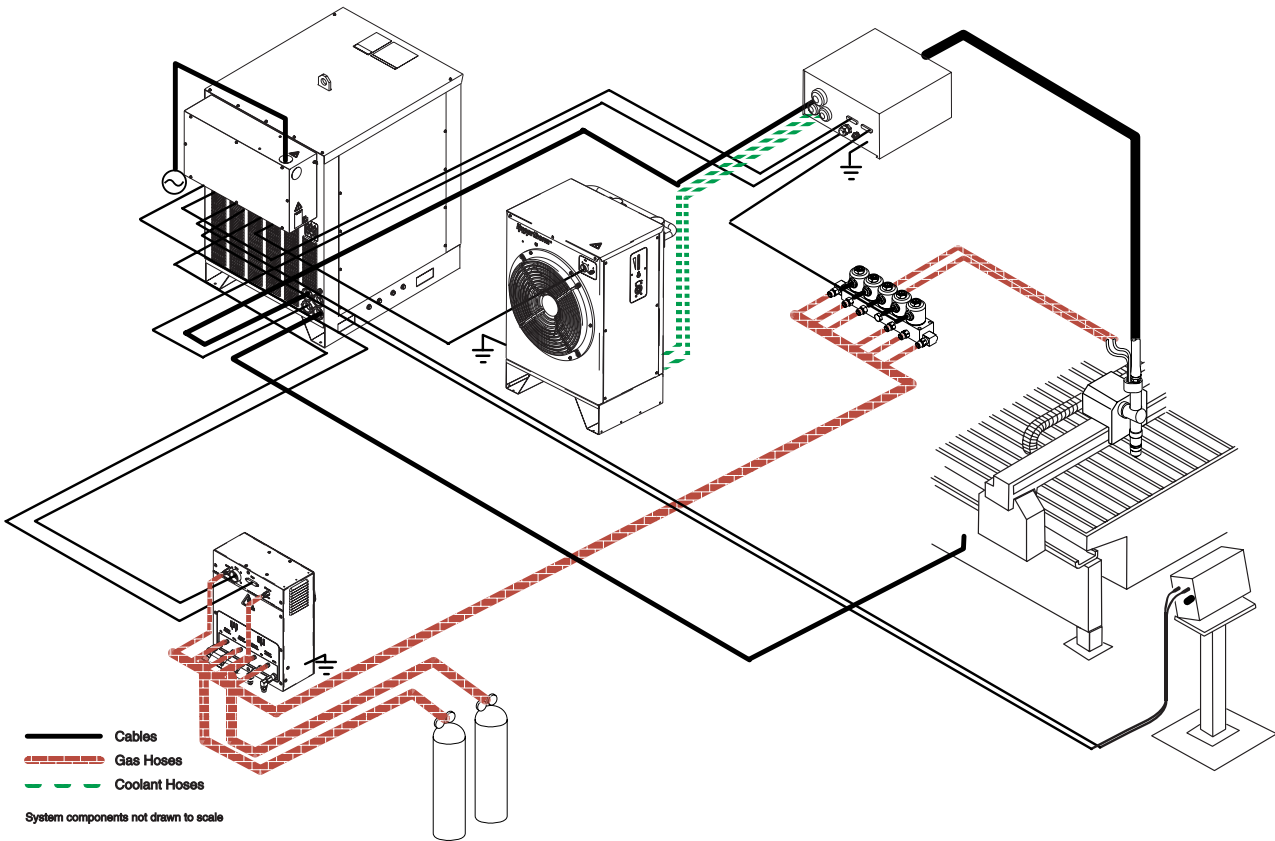
## Command THC - Optional

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

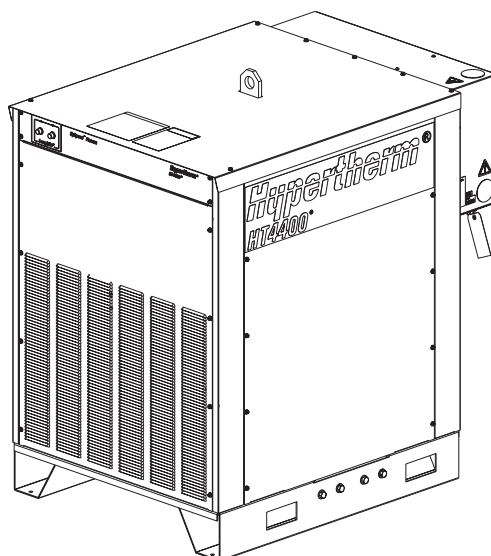
|                                                    |                                                                 |
|----------------------------------------------------|-----------------------------------------------------------------|
| <b>Gas Requirements:</b>                           |                                                                 |
| Plasma Gas Types                                   | Oxygen, Nitrogen                                                |
| Shield Gas Types                                   | A mixture of Oxygen and Nitrogen; Nitrogen                      |
| <b>Gas Quality:</b>                                |                                                                 |
| Oxygen                                             | 99.5% pure (liquid gas recommended)                             |
| Nitrogen                                           | 99.995% pure (liquid gas recommended)                           |
| <b>Maximum Gas Flow Rates and Inlet Pressures:</b> |                                                                 |
| Oxygen                                             | 140 scfh (3965 sclh) @ 140 psi +/- 10 psi (9.6 bar +/- 0.7 bar) |
| Nitrogen                                           | 250 scfh (7080 sclh) @ 140 psi +/- 10 psi (9.6 bar +/- 0.7 bar) |



# SPECIFICATIONS

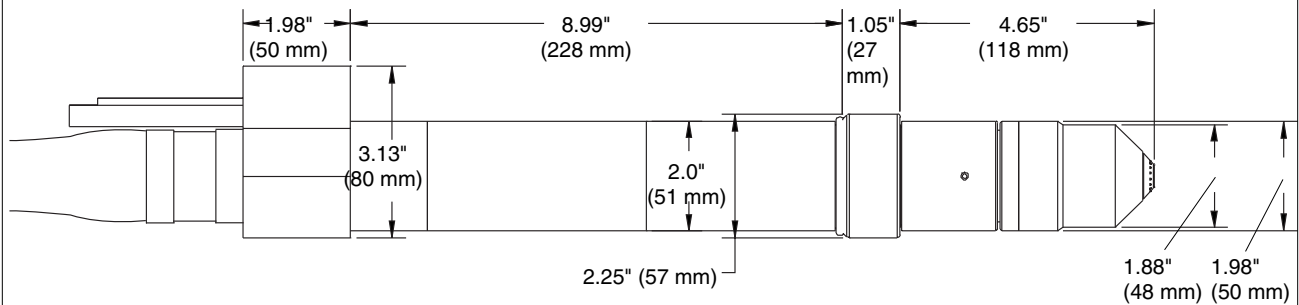
## Power Supply

|                                                                                                        |                                                      |
|--------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| 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 (cosφ)                                                                                    | 0.94                                                 |
| Cooling                                                                                                | Forced Air (Class F)                                 |
| <b>Input Power (Input Voltage (<math>U_1</math> - Input Voltage; <math>I_1</math> - Input Current)</b> |                                                      |
| 077036                                                                                                 | 200 VAC ( $U_1$ ), 3 Phase, 50-60 Hz, 257A ( $I_1$ ) |
| 077037                                                                                                 | 400 VAC ( $U_1$ ), 3 Phase, 50-60 Hz, 128A ( $I_1$ ) |
| 077033                                                                                                 | 480 VAC ( $U_1$ ), 3 Phase, 60 Hz, 107A ( $I_1$ )    |
| 077038                                                                                                 | 600 VAC ( $U_1$ ), 3 Phase, 60 Hz, 86A ( $I_1$ )     |
| <b>Dimensions and Weight</b>                                                                           |                                                      |
| 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

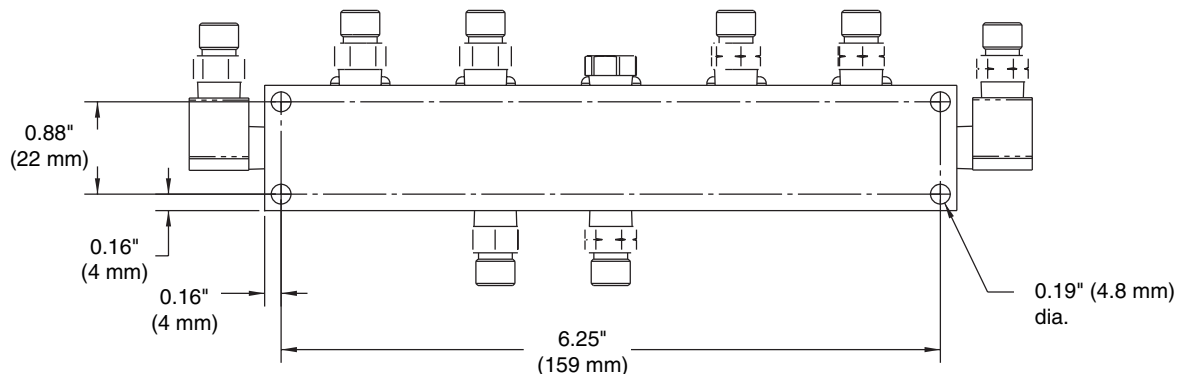
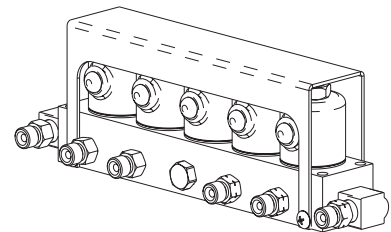
|                                                    |                   |
|----------------------------------------------------|-------------------|
| Maximum recommended production cutting thickness   | 1-1/4" (32 mm)    |
| Maximum current at 100% duty cycle                 | 400A              |
| 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) |



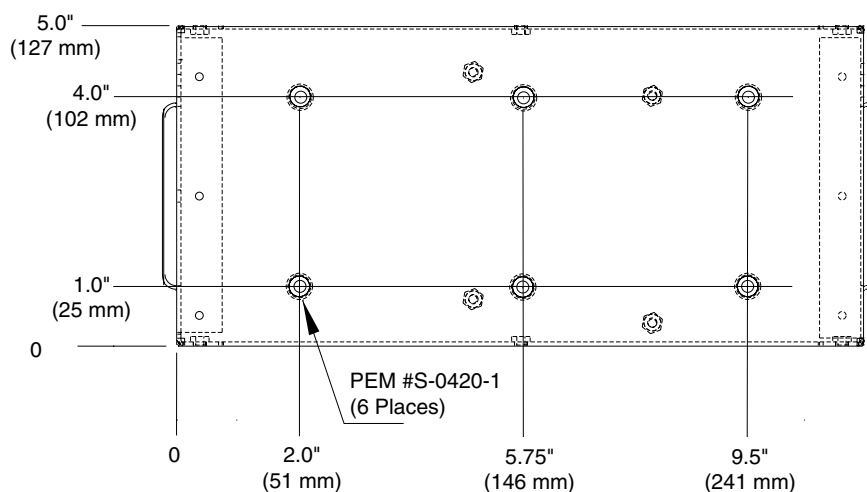
**Valve Cluster Mounting Dimensions**



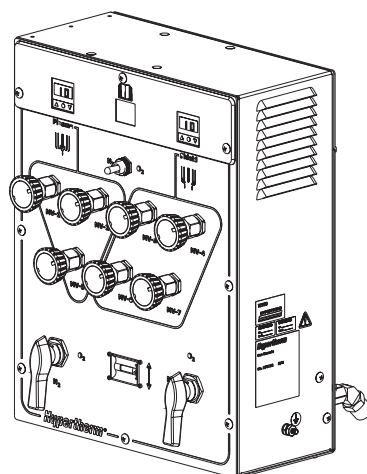
# SPECIFICATIONS

## 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) |

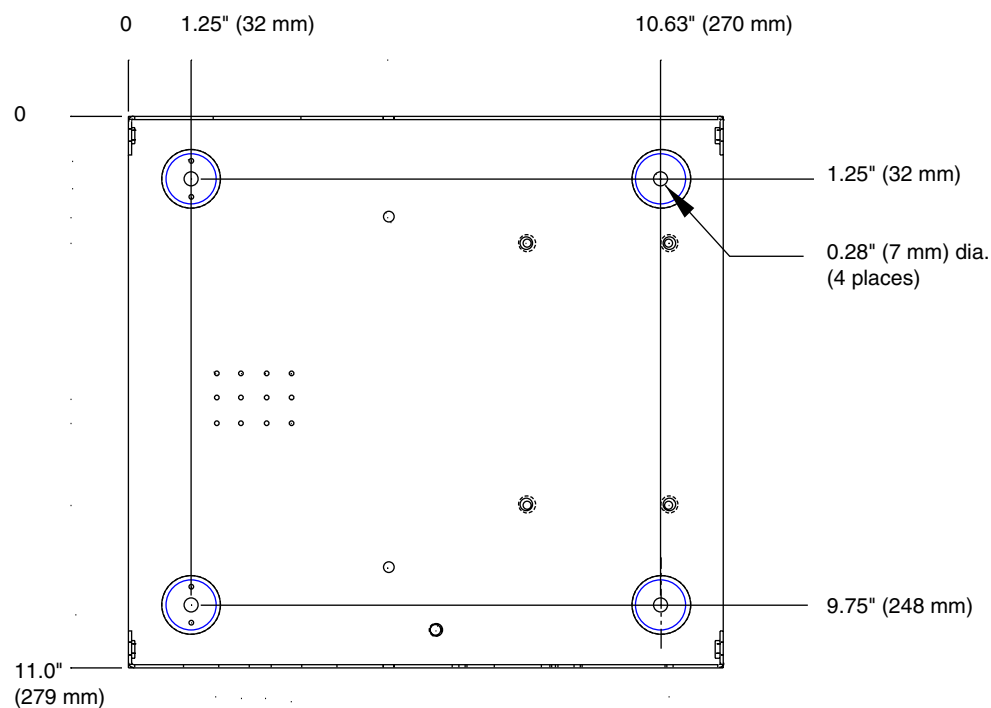


**Gas Console Mounting Dimensions (bottom view)**



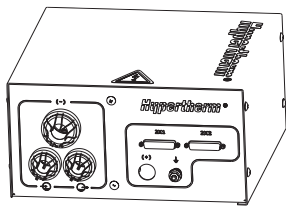
Ignition Console - 078088

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

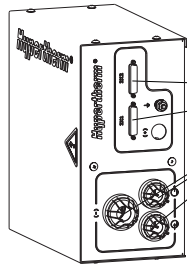


Ignition Console Mounting Dimensions (bottom view)

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



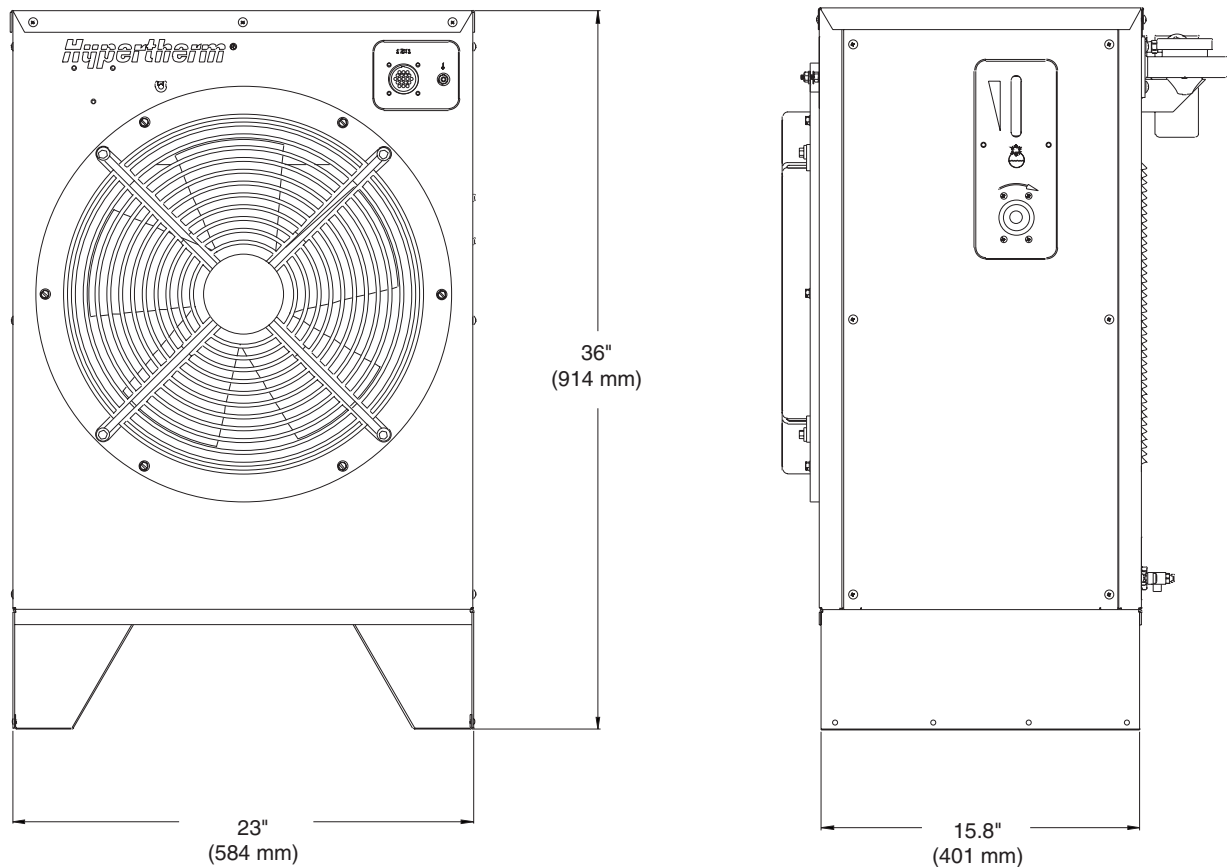
Vertical Mounting

Power supply and water cooler connections

# SPECIFICATIONS

## Water Cooler - 077034

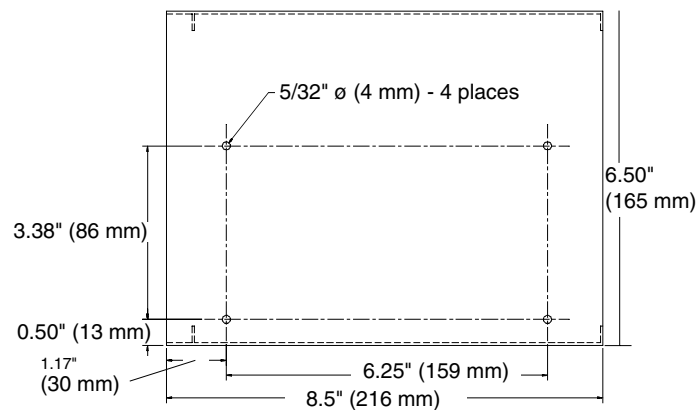
|                      |                      |
|----------------------|----------------------|
| Width                | 23" (584 mm)         |
| Height               | 36" (914 mm)         |
| Depth                | 15.8" (401 mm)       |
| Weight               | 148 lbs (67.2 kg)    |
| Coolant capacity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



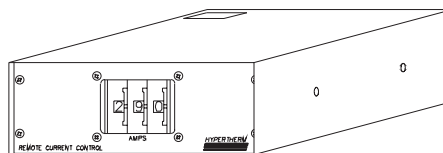
**Water Cooler with Dimensions**

## 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.

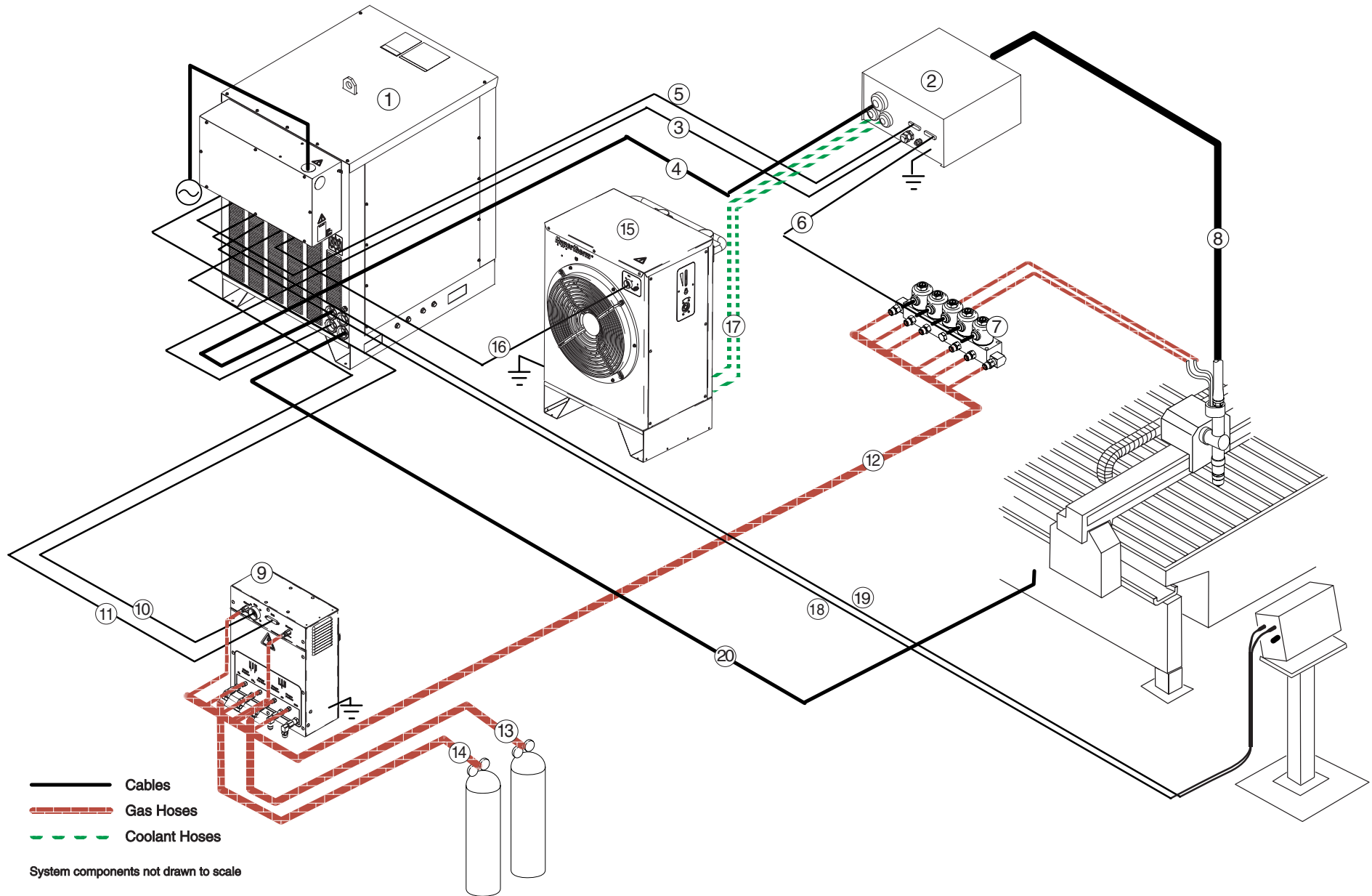
### Valve Cluster

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

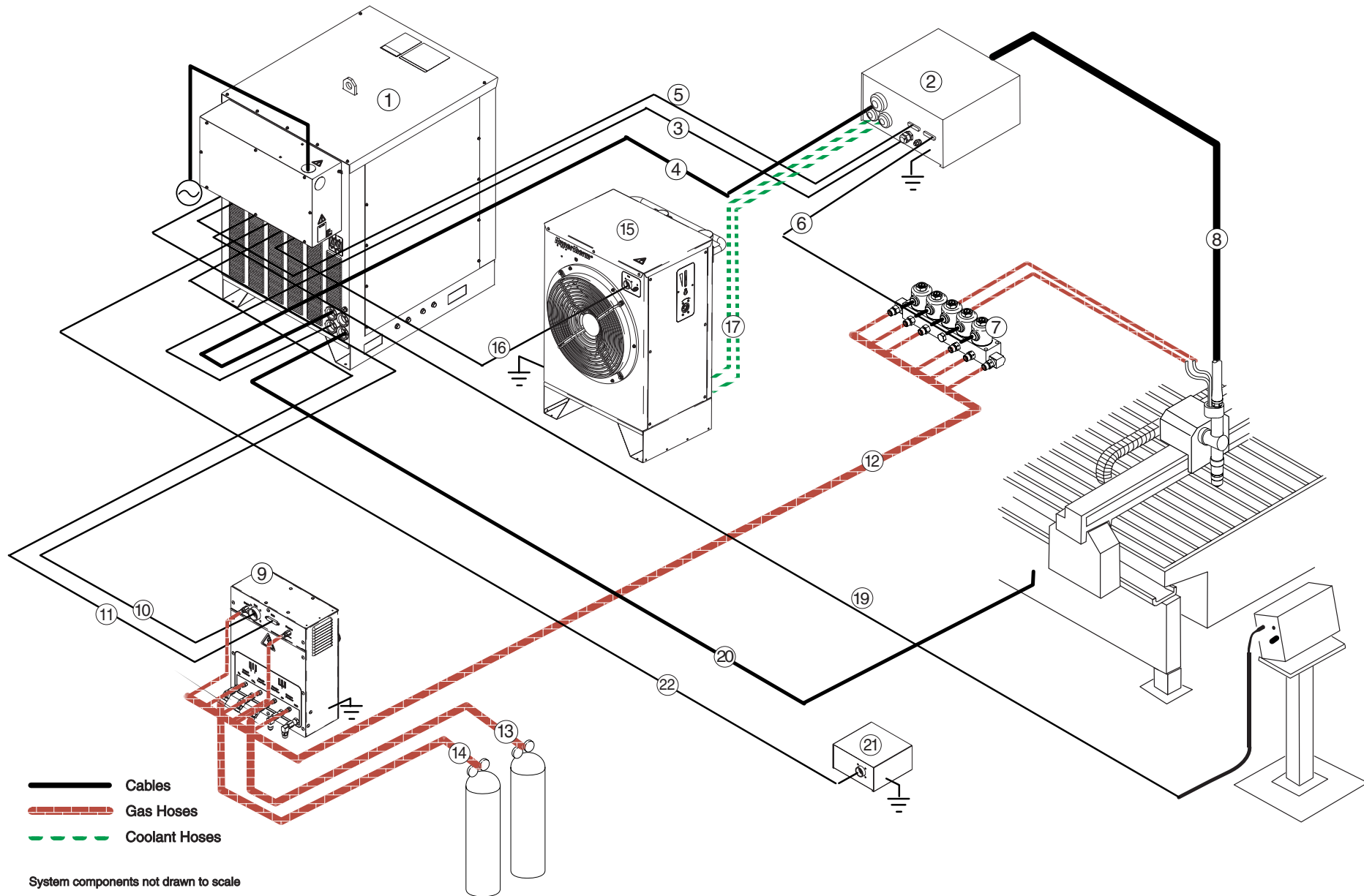
The valve cluster must be located within 50 ft (15.3 m) of the gas console.

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

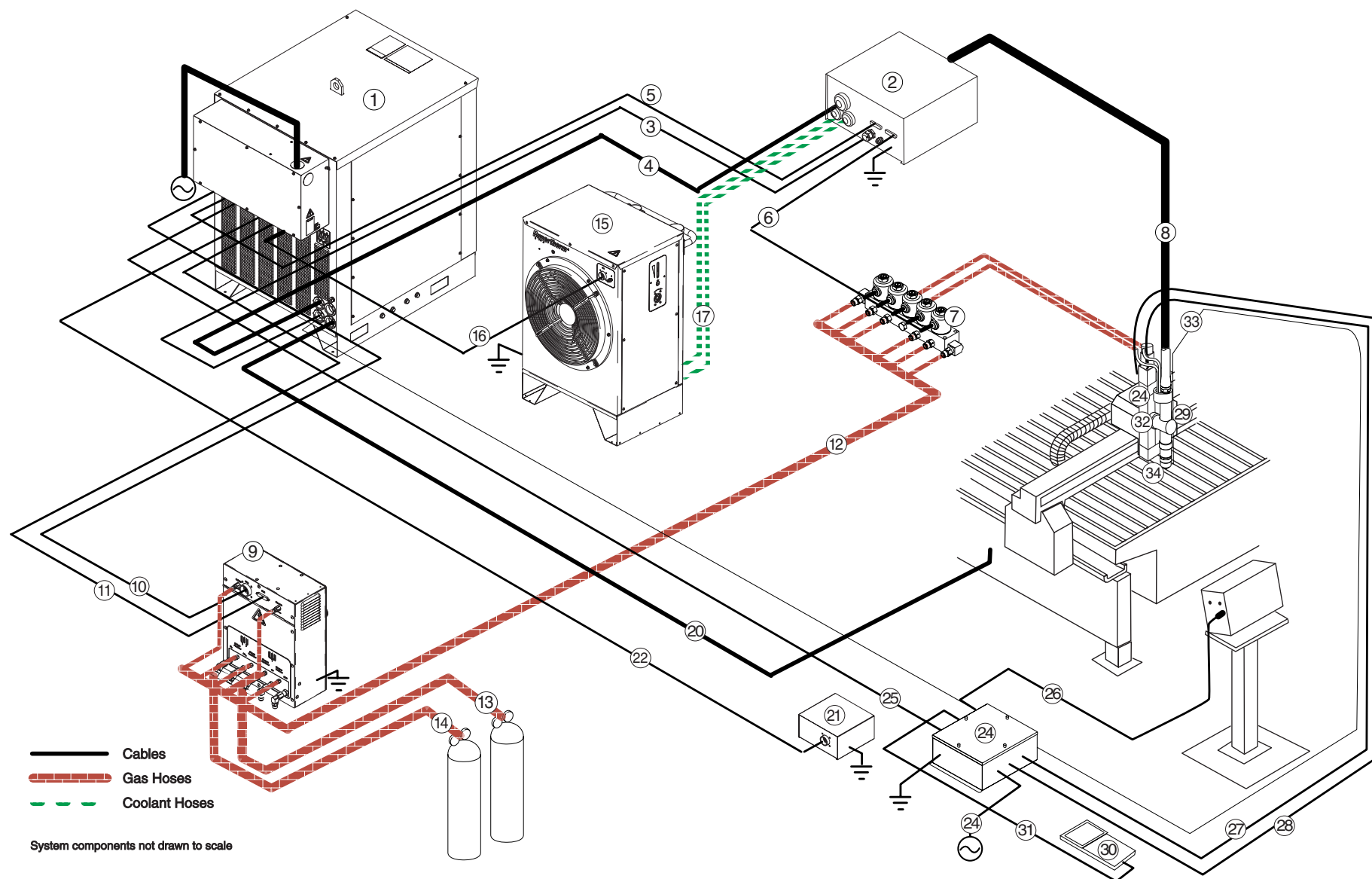


## HT4400 System with Remote Current Control

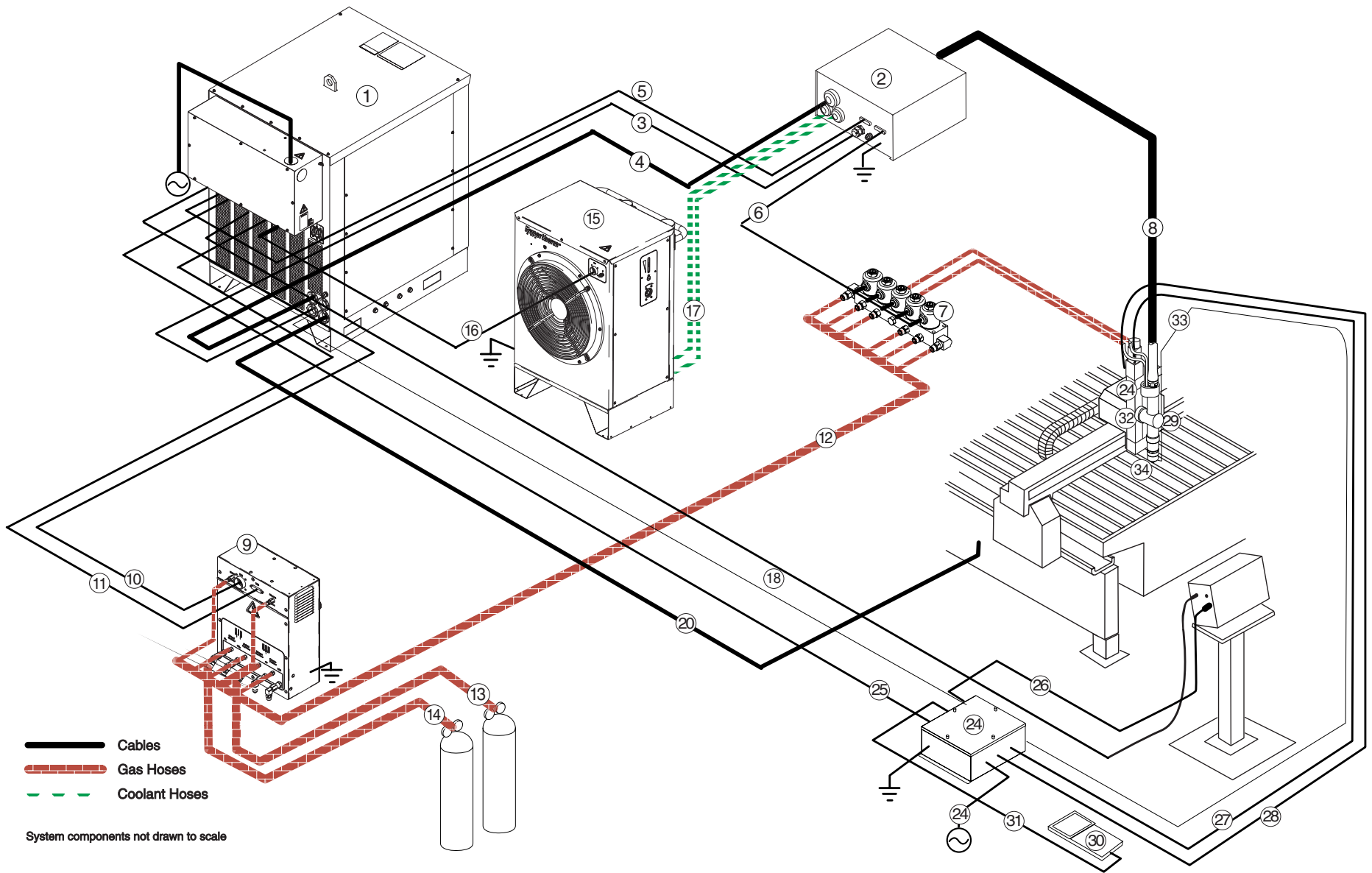




## HT4400 System with Remote Current Control and Command THC Option



## 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**

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

**4 Negative Lead**

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

**5 Cable - Ignition Console to Power Supply**

- |                                                |                                                 |
|------------------------------------------------|-------------------------------------------------|
| <input type="checkbox"/> 123446 10 ft (3.0 m)  | <input type="checkbox"/> 123559 60 ft (18.3 m)  |
| <input type="checkbox"/> 123557 15 ft (4.6 m)  | <input type="checkbox"/> 123513 75 ft (22.9 m)  |
| <input type="checkbox"/> 123447 20 ft (6.1 m)  | <input type="checkbox"/> 123514 100 ft (30.5 m) |
| <input type="checkbox"/> 123448 25 ft (7.6 m)  | <input type="checkbox"/> 123515 125 ft (38.1 m) |
| <input type="checkbox"/> 123449 30 ft (9.1 m)  | <input type="checkbox"/> 123516 150 ft (45.7 m) |
| <input type="checkbox"/> 123450 40 ft (12.2 m) | <input type="checkbox"/> 123560 175 ft (53.3 m) |
| <input type="checkbox"/> 123512 50 ft (15.2 m) | <input type="checkbox"/> 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**

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

**11 Cable 2 - Gas Console to Power Supply**

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

**12 Hoses - Gas Console to Valve Cluster**

- |                                               |                                                |
|-----------------------------------------------|------------------------------------------------|
| <input type="checkbox"/> 128482 5 ft (1.5 m)  | <input type="checkbox"/> 128486 25 ft (7.6 m)  |
| <input type="checkbox"/> 128483 10 ft (3.0 m) | <input type="checkbox"/> 128487 30 ft (9.1 m)  |
| <input type="checkbox"/> 128484 15 ft (4.6 m) | <input type="checkbox"/> 128488 40 ft (12.2 m) |
| <input type="checkbox"/> 128485 20 ft (6.1 m) | <input type="checkbox"/> 128489 50 ft (15.2 m) |

**13 Oxygen Hose - Gas Console to Gas Supply**

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

**14 Nitrogen Hose - Gas Console to Gas Supply**

- |                                                |                                                 |
|------------------------------------------------|-------------------------------------------------|
| <input type="checkbox"/> 024210 10 ft (3.0 m)  | <input type="checkbox"/> 024615 60 ft (18.3 m)  |
| <input type="checkbox"/> 024203 15 ft (4.6 m)  | <input type="checkbox"/> 024148 75 ft (22.9 m)  |
| <input type="checkbox"/> 024232 20 ft (6.1 m)  | <input type="checkbox"/> 024116 100 ft (30.5 m) |
| <input type="checkbox"/> 024134 25 ft (7.6 m)  | <input type="checkbox"/> 024491 125 ft (38.1 m) |
| <input type="checkbox"/> 024613 30 ft (9.1 m)  | <input type="checkbox"/> 024120 150 ft (45.7 m) |
| <input type="checkbox"/> 024614 40 ft (12.2 m) | <input type="checkbox"/> 024616 175 ft (53.3 m) |
| <input type="checkbox"/> 024112 50 ft (15.2 m) | <input type="checkbox"/> 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**

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

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

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

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

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

**20 Cable - Power Supply to Work Table**

|                                 |                |                                 |                 |
|---------------------------------|----------------|---------------------------------|-----------------|
| <input type="checkbox"/> 123418 | 10 ft (3.0 m)  | <input type="checkbox"/> 123316 | 60 ft (18.3 m)  |
| <input type="checkbox"/> 023382 | 15 ft (4.6 m)  | <input type="checkbox"/> 023124 | 75 ft (22.9 m)  |
| <input type="checkbox"/> 023136 | 20 ft (6.1 m)  | <input type="checkbox"/> 023080 | 100 ft (30.5 m) |
| <input type="checkbox"/> 023078 | 25 ft (7.6 m)  | <input type="checkbox"/> 123084 | 125 ft (38.1 m) |
| <input type="checkbox"/> 023101 | 30 ft (9.1 m)  | <input type="checkbox"/> 023081 | 150 ft (45.7 m) |
| <input type="checkbox"/> 023135 | 40 ft (12.2 m) | <input type="checkbox"/> 123097 | 175 ft (53.3 m) |
| <input type="checkbox"/> 023079 | 50 ft (15.2 m) | <input type="checkbox"/> 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.)

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

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

|                                 |               |                                 |                 |
|---------------------------------|---------------|---------------------------------|-----------------|
| <input type="checkbox"/> 123591 | 10 ft (3.0 m) | <input type="checkbox"/> 123594 | 40 ft (12.2 m)  |
| <input type="checkbox"/> 023340 | 15 ft (4.6 m) | <input type="checkbox"/> 023342 | 50 ft (15.2 m)  |
| <input type="checkbox"/> 123592 | 20 ft (6.1 m) | <input type="checkbox"/> 023343 | 100 ft (30.5 m) |
| <input type="checkbox"/> 023341 | 25 ft (7.6 m) | <input type="checkbox"/> 023344 | 150 ft (45.7 m) |
| <input type="checkbox"/> 123593 | 30 ft (9.1 m) |                                 |                 |

**24 Command THC X-Y System**

☐ 050021

**25 Cable - Command THC to Power Supply**

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

**26 Cable - Command THC to CNC Interface**

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

**27 Cable - Command THC to Lifter**

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

**28 Cable - Command THC to Motor Drive**

|                                 |                |                                 |                 |
|---------------------------------|----------------|---------------------------------|-----------------|
| <input type="checkbox"/> 123197 | 5 ft (1.5 m)   | <input type="checkbox"/> 123204 | 45 ft (13.7 m)  |
| <input type="checkbox"/> 123198 | 10 ft (3.0 m)  | <input type="checkbox"/> 123021 | 50 ft (15.2 m)  |
| <input type="checkbox"/> 123199 | 15 ft (4.6 m)  | <input type="checkbox"/> 123495 | 55 ft (16.7 m)  |
| <input type="checkbox"/> 123200 | 20 ft (6.1 m)  | <input type="checkbox"/> 123205 | 75 ft (22.9 m)  |
| <input type="checkbox"/> 123020 | 25 ft (7.6 m)  | <input type="checkbox"/> 123206 | 100 ft (30.5 m) |
| <input type="checkbox"/> 123201 | 30 ft (9.1 m)  | <input type="checkbox"/> 123207 | 125 ft (38.1 m) |
| <input type="checkbox"/> 123202 | 35 ft (10.7 m) | <input type="checkbox"/> 123208 | 150 ft (45.7 m) |
| <input type="checkbox"/> 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**

|                                 |                |                                 |                 |
|---------------------------------|----------------|---------------------------------|-----------------|
| <input type="checkbox"/> 123464 | 10 ft (3.0 m)  | <input type="checkbox"/> 123039 | 50 ft (15.2 m)  |
| <input type="checkbox"/> 123465 | 20 ft (6.1 m)  | <input type="checkbox"/> 123224 | 75 ft (22.9 m)  |
| <input type="checkbox"/> 123221 | 25 ft (7.6 m)  | <input type="checkbox"/> 123225 | 100 ft (30.5 m) |
| <input type="checkbox"/> 123222 | 30 ft (9.1 m)  | <input type="checkbox"/> 123226 | 125 ft (38.1 m) |
| <input type="checkbox"/> 123223 | 40 ft (12.2 m) | <input type="checkbox"/> 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