

HT2000
6kV Transformer Replacement
Kit: 128194

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HYPERTHERM, Inc.
P.O. Box 5010
Hanover, New Hampshire 03755-5010
Tel.: (603) 643-3441
Fax: (603) 643-5352
<http://www.hypertherm.com>
[email:info@hypertherm.com](mailto:info@hypertherm.com)

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Hypertherm Offices Worldwide:

Hypertherm, Inc.

Etna Road, P.O. Box 5010
Hanover, NH 03755 USA
Tel.: (603) 643-3441 (Main Office)
Fax: (603) 643-5352 (All Departments)
Tel.: (800) 643-9878 (Technical Service – toll-free in USA and Canada)
Tel.: (800) 737-2978 (Customer Service – toll-free in USA and Canada)
email: info@hypertherm.com (General Information)
email: service@hypertherm.com (Technical/Customer Services)

Hypertherm Plasmatechnik GmbH

Technologiepark Hanau
Rodenbacher Chaussee 6
D-63457 Hanau-Wolfgang, Germany
Tel.: 49 6181 58 2100
Fax: 49 6181 58 2134

Hypertherm (S) Pte Ltd

No. 19 Kaki Bukit Road 2
K.B. Warehouse Complex
Singapore 417847
Tel.: 65 841 2489
Fax: 65 841 2490

Hypertherm UK Ltd

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

France

15 Impasse des Rosiers
95610 Eragny, France
Tel.: 33 1 30 37 15 28
Fax: 33 1 30 37 15 79

Hypertherm S.r.L.

Via Torino 2
20123 Milan, Italy
Tel.: 39 02 725 46 312 (Customer Service)
Tel.: 39 02 725 46 314 (Technical Service)
Fax: 39 02 725 46 400 (All Departments)

Hypertherm B.V.

Burg, Haverkampstraat 13
7091 CN Dinxperlo, The Netherlands
Tel.: 31 315 655 866 (Customer Service)
Fax: 31 315 655 886

European Technical Support Organization (ETSO)

Edisonstraat 12
3281 NC Numansdorp, The Netherlands
Tel.: 00 800 4973 7843 (00 800 Hypertherm) – (toll-free Technical Service)
Tel.: 31 186 659494
Fax: 31 186 659495

Japan

Shinjuku Park Tower
30th Floor
3-7-1 Nishi-Shinjuku
Shinjuku-ku, Tokyo
163-1030, Japan
Tel.: 81 03 5326 3142
Fax: 81 03 5326 3001

Installation of 6 kV Transformer in HT2000 - sheet 1 of 2

Kit 128194



WARNING



SHOCK HAZARD: Always turn off power and wait 5 minutes before removing cover of the power supply or remote high frequency console. If power unit is directly connected to a line disconnect box, place line disconnect switch to OFF position. Lock out and tag out switch before proceeding!

To improve torch start reliability, replace the 5 kV high voltage transformer with the 6 kV high voltage transformer assembly 129150. When changing this transformer, also change the 2 spark gap assembly capacitors from .002 μ F (009280) to 1400pF (009975).

Tools Required:

- 11/32" nut driver
- 1/2" nut driver
- Flat-head screwdriver (short handle)

1. Verify that all power to the plasma system is turned OFF. See warning above.
2. Locate the 5 kV transformer in the plasma system.
3. Using the 11/32" nut driver and the 1/2" nut driver, remove the 2 transformer wires that are attached to the spark gap assembly (Figure 1). Save the hardware.
4. Disconnect the transformer's plastic receptacle from its mating connector.
5. Using the 11/32" nut driver, remove the nuts securing the 5 kV transformer (Figure 2). Save the hardware.
6. Remove the 5 kV transformer and replace with the 6 kV transformer. Secure transformer using the hardware saved in step 5.

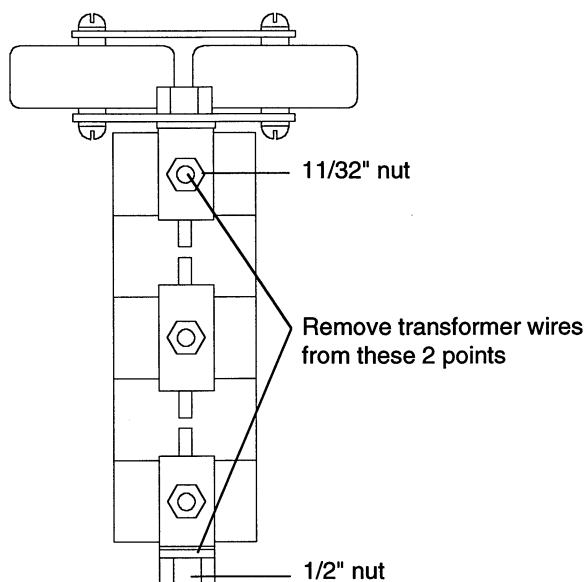


Figure 1 Spark Gap Assembly

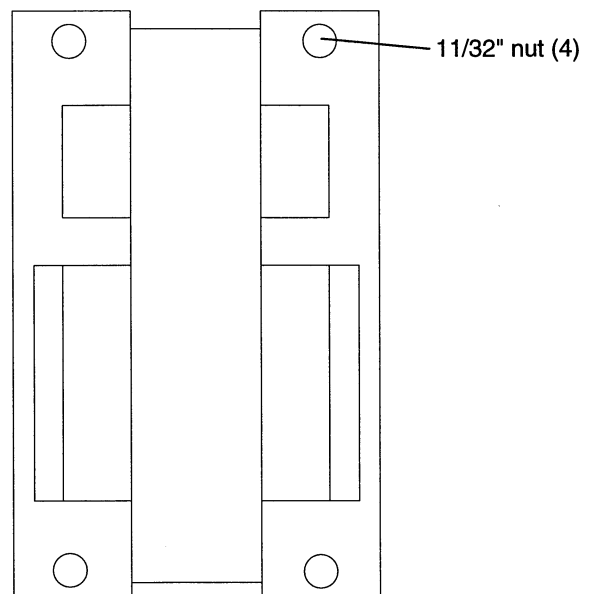


Figure 2 Transformer - top view

Installation of 6 kV Transformer - sheet 2 of 2

- Twist the 2 wires on the transformer primary side 2 turns and connect the transformer's plastic receptacle to its mating connector - Figure 3).
- Twist the wires on the secondary side of the transformer 2 turns and attach the large ring terminal to the bottom of the spark gap assembly, and the small ring terminal to the upper electrode nut of the spark gap assembly. See Fig. 4. Secure wires using hardware saved in step 3.

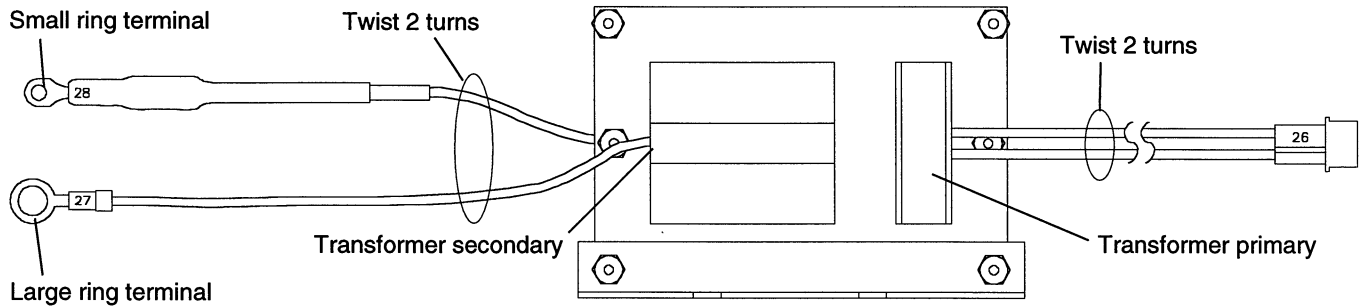


Figure 3 6 kV Transformer Assembly 129150 - side view

- Using the short flat-head screwdriver, remove the 2 screws, washers and capacitor bracket securing the 2 spark gap capacitors.
- Remove the wire from the high-frequency coil and twist off the capacitors. Take care no to lose the supporting hardware located under the capacitors.
- Install the 1400pF capacitors.
- Replace capacitor bracket and high-frequency coil wire.

Installation is complete. Refer to your plasma system's instruction manual to operate. If the installation was not successful, or if there is no improvement in torch start reliability, call the nearest Hypertherm Technical Services Department listed at the front of your plasma system's instruction manual.

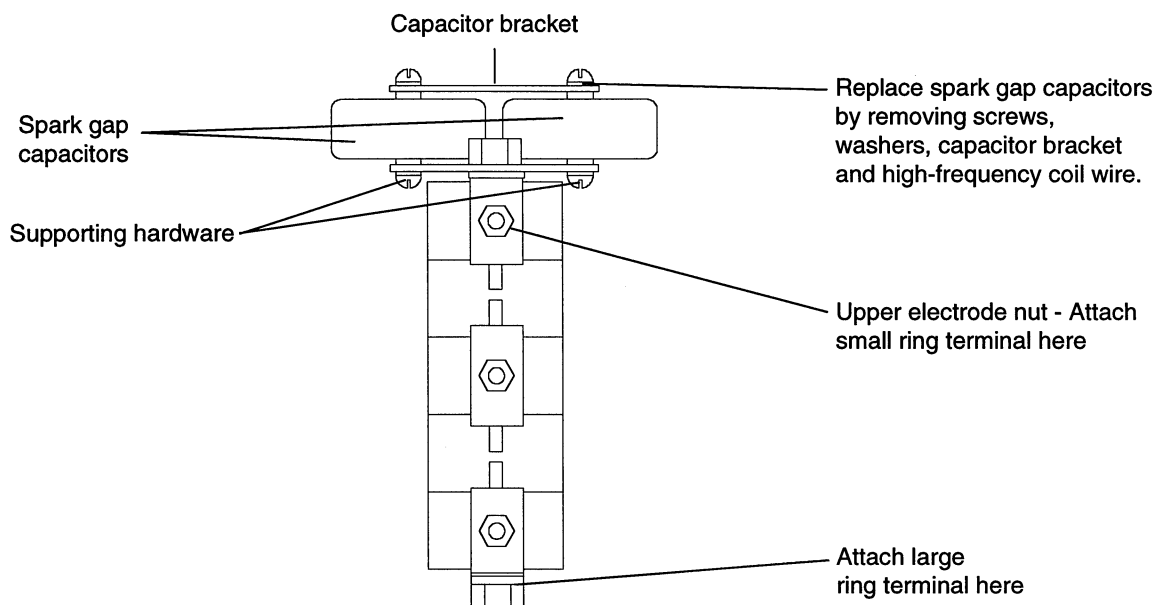


Figure 4 Spark Gap Assembly Connections and Capacitor Replacement