

THC SENSOR CARD REV 14

DAMGER
HIGH VOLTAGE
WHEN TORCH
is ON

To TORCH -
(ELECTRODE WIRES)

TO TORCH POS
(WORKCLAMP WIRE)

Mount card at least 1/2" from any
Metal. Use 1/2" or longer standoffs
above metal case Do not let shell
of DB9 contact metal of
Plasma Case

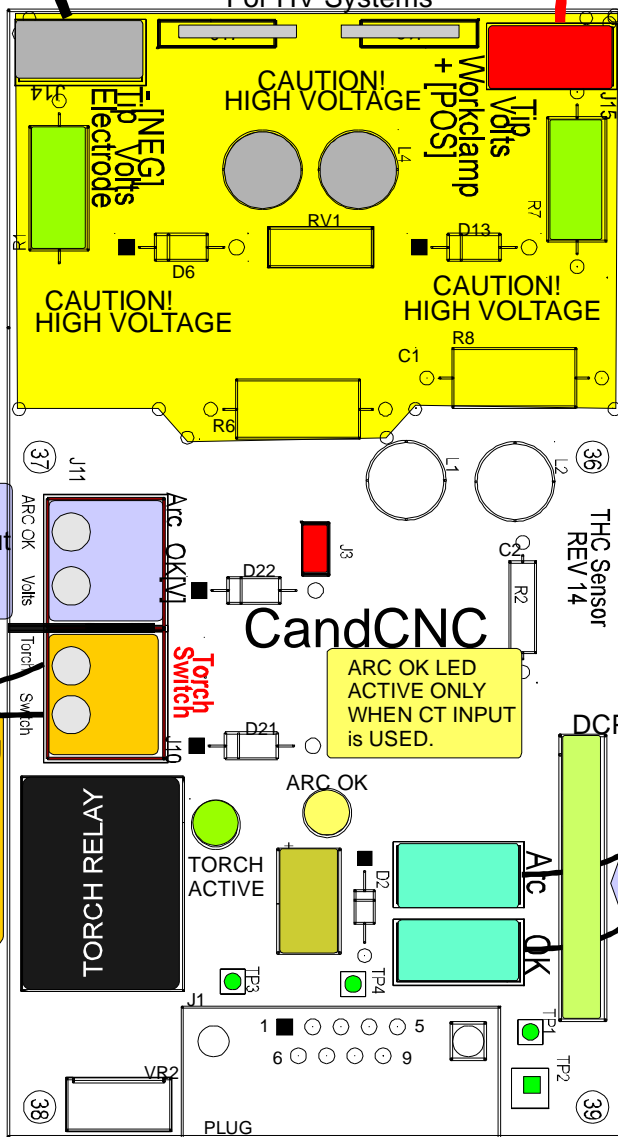
Spark Gap
For HV Systems

TORCH SWITCH
NO POLARITY

TO ARC XFR
[OK to Move]
Relay Contacts
(DRY CONTACTS)
NO POLARITY

FOR CT (Current
Transformer) Input
Only. See page
information

NOTE: BOARD Lettering
(silkscreen) on REV14
cards is **REVERSED**
For J11 and J10.
J10 is the Torch Switch
Wires



ARC OK LED
ACTIVE ONLY
WHEN CT INPUT
is USED.

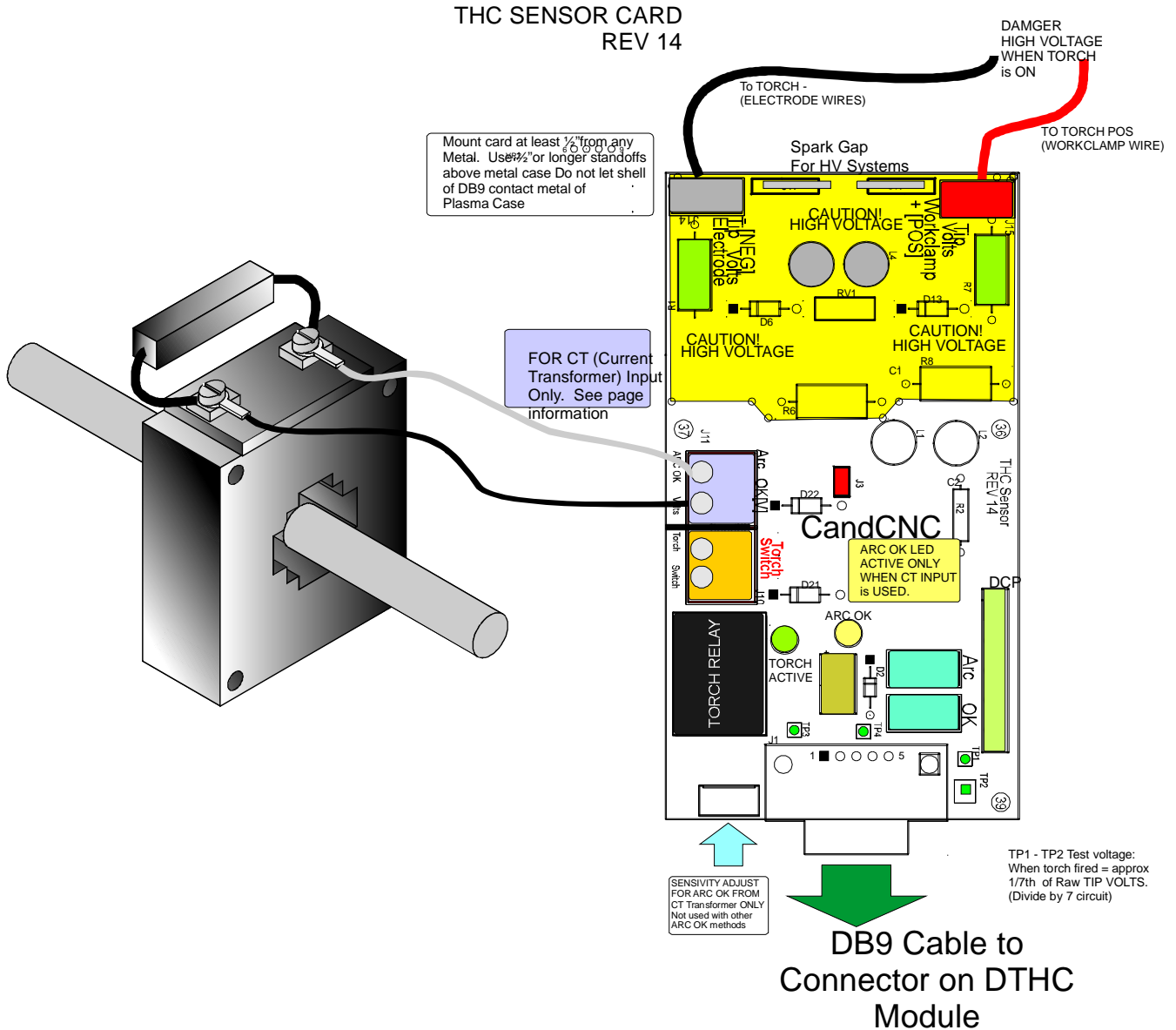
Input Jack
for
Digital Current
Probe (DCP)

SENSIVITY ADJUST
FOR ARC OK FROM
CT Transformer ONLY
Not used with other
ARC OK methods

TP1 - TP2 Test voltage:
When torch fired = approx
1/7 of Rat TIP VOLTS.

DB9 Cable to
Connector on DTHC
Module

CONNECTIONS FOR SYSTEMS USING CT TRANSFORMER



CT Transformer is an OPTION and must be ordered separately. It is used on Plasma Cutters that do not have an available ARC OK (Called other names by different Plasma manufacturers). The ARC OK provides feedback to the control that a valid pierce has been made and the arc current is at a level where motion can be released and the cut begun. The ARC OK is used only when the control has the THC enabled (Screen button). IT IS REQUIRED for Automated cutting with THC. All CandCNC THC Sensor cards have had the ability to use an external Current Transformer (CT) placed in the AC line to the plasma. The CT will only sense AC current so cannot be used on the DC side of the plasma. A new DC Current Probe (DCP) will be introduced in 2009 (late summer) that will read and sense the actual DC current at the WorkClamp lead and the REV14 card has the pads for the connector that will interface the DCP (Digital Current Probe) through the THC Sensor. To use the DCP you will have to have a DTHC Module Rev 8 or later. You can trade in older DTHC modules for the upgrade when you purchase a new DCP module.