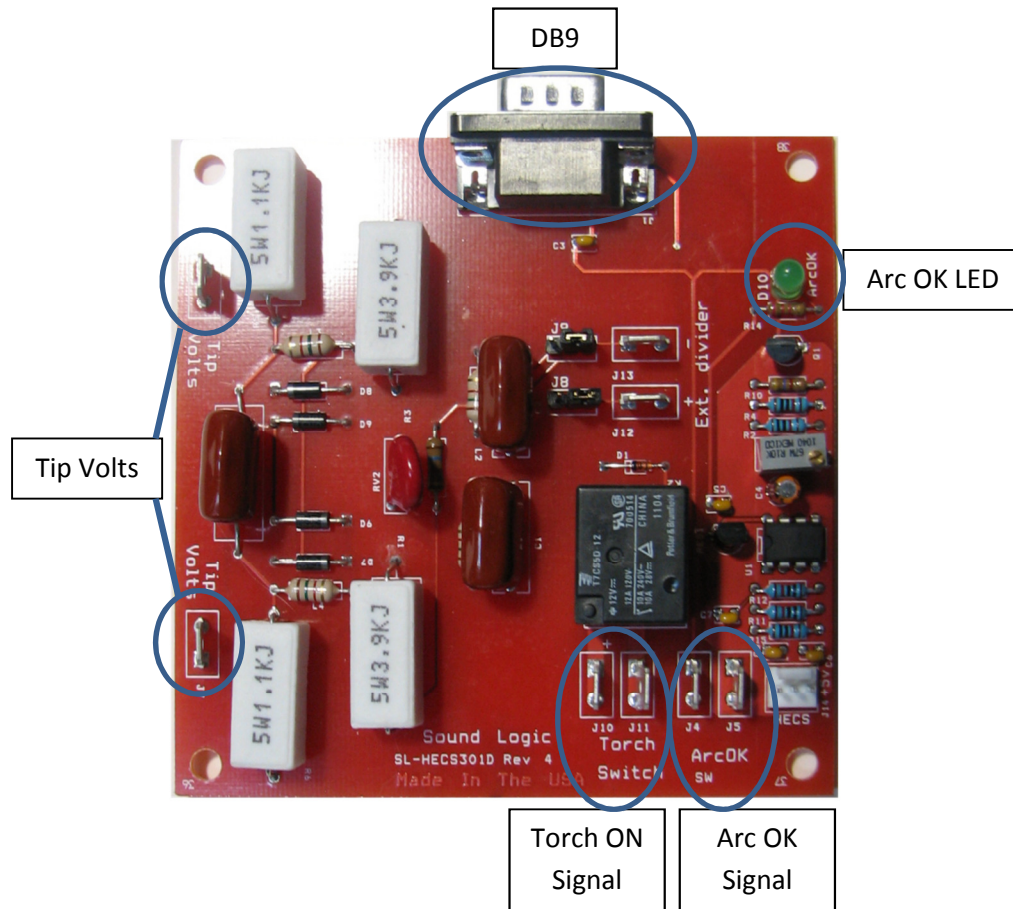


Torch Height Control Setup Guide

Begin by mounting the Plasma Interface Board inside the plasma unit or the drive enclosure. Make sure to connect the DB9 cable from the MachMotion control into the Interface Board. See the diagram below.



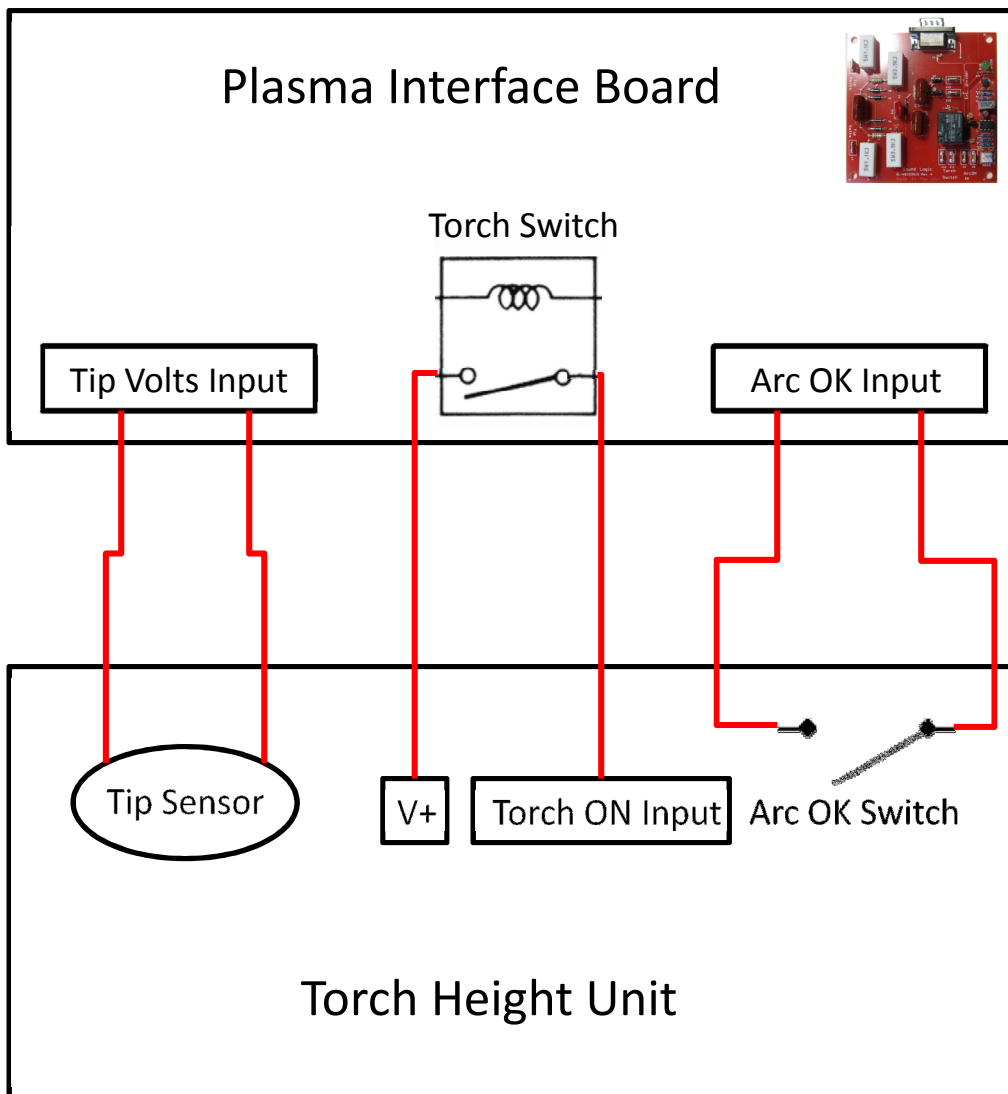
To setup the torch height control, connect the three signals on the plasma cutter listed below to the Torch Interface Board:

THC Signals	Common Names	Specification
Arc OK	Ready to Move, Arc Transfer	Activate Input by Connecting Spades
Torch Switch	Plasma On, Torch On, Start Torch	Relay Contact Output
Tip Volts	Plasma/Torch Tip Volts	0V – 250VDC Input

To find the signals, follow the procedure below.

1. Determine the manufacturer and model of the plasma system
2. Find the appropriated documentation on the plasma system provided by the manufacturer
3. Locate the three required signals in the documentation. If there are any questions, contact the plasma manufacturer

Below is an example on how to connect the Sensor Board.



Attention

Do not connect anything to the breakout board inputs listed in the table below.



Used Inputs	Port-Pin Address	Input Signals in Mach3	Function
X0	1-10	OEM Trig #1	Drive Error
X3	1-13	Probe	Torque Input/Floating Head Sensor
X6	2-11	THC Down	THC Down
X7	2-12	THC Up	THC Up
X8	2-13	THC On	Arc OK

These are used for the torch height control. They are highlighted in the diagram below. All the other inputs should be available.

