

Torchmate Gantry and Torch - Basic Operation
Let's start from the beginning.

Turn the big black driver box ON.

Turn the Signal generator ON.

Turn the height control ON.

Open the Torchmate 2.09, OFFline.

Import the DXF file, and configure settings.

When the screen has your image displayed, Go to the Controller menu, and select Online to establish a communication link with the signal generator. A safety message will appear before going to Online status.

For the first cut I recommend that you operate in Manual mode. To do, this flip the switch on the Height Control from Auto to Manual. The first switch on the left should be on READ, and the switch on the far right should be on CUT. Manually jog the torch to the highest position by pushing the up button until it is above the material by 2 1/2 to 3 inches.

Attach the Work Clamp (Ground Wire) from the torch unit to the material.

Jog the gantry over the material where you want to start the program, Make sure that there is enough fresh material to make the entire cut.

In the upper right corner of the screen, the Program Coordinates are given, click on the 0 to zero out the position of X and Y axis to set your Home position.

Click on the G-Cd button on the main window of the T-2.09.

Turn the power switch to the Torch ON.

Make sure that you have at least 80 psi of pressure supplied to the torch.

When ready, Click the START button, to begin the program.

Because we are operating in manual mode, the torch should come down to the material sense it, then back off to the pierce height position, fire the torch and move into the cut path. The torch will not raise nor lower, instead it will maintain the pierce height through the cut. Watch the LCD readout on the Height control to see what voltage is being read.

When the program is complete, and you are satisfied with the results, Reset the program, Jog to a new position of fresh material, zero your program coordinates, Switch the far left switch on the height control to SET, and using the big knob, dial the control knob to the voltage setting displayed when running in manual mode(-100 to-200). Now switch back to READ.

Switch to Auto mode and run program again.

The gantry should move to the cut position, then the torch should lower to sense the material, back off to the pierce height, torch should then fire, and move into the cut program.

If the voltage is correct the tip height should not change too much, however if it is too low the tip may dive toward the material, Stop the machine by clicking on any key on the keyboard. Reset and raise the voltage setting. Restart program.

If the voltage is too high and steps away from the material then stop the program, reset, and then dial the voltage down so that it will not step away, and run it again.

These are the steps you will want to take whenever you are cutting different material

I hope this will help you understand the basic operation.