

Setting reference marks home

Our machines has home / limit switches, hard stops; the control can automatically home by itself.

Some customers have a big CNC lathe and mill ill that they do not want home switch far away. It's waste the time for waiting. We can set the reference marks home anywhere we want.

This is an example for setting the reference mark home for Z- axis. If your machine is ATC tool changer, you cannot set Z-axis reference home because it is relative to height position tool change (G30).

1. Turn on power, press **Cycle start** machine home.



Z axis home switch position

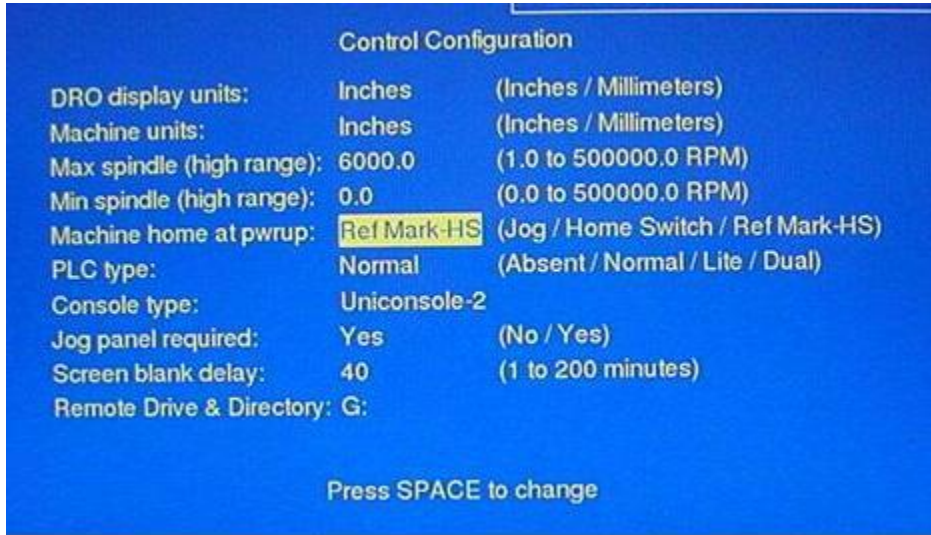
2. Jog Z-axis moves to position **-15.00** (we want Z-axis reference mark home right here).

3. Mark the reference marks home.

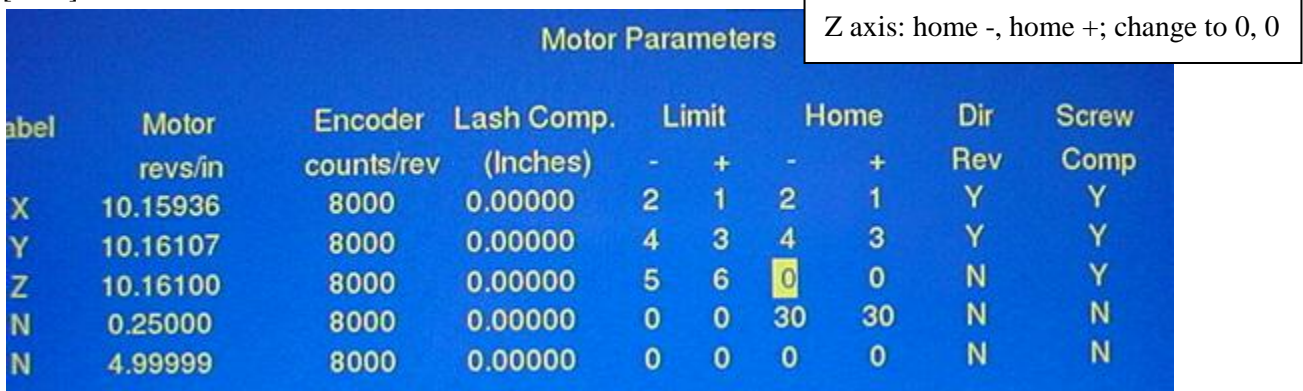


Mark the reference mark

4. Select F1 [Set Up] →→ F3 [Config] →→ 137 enter →→ F1 [Control] Use arrow key high light [Home Switch] and press **Space** key change to [Ref-Mark-HS].



5. Go to F2 [Machine] →→ F2 [Motor]. Changing Z-axis Home - and Home + to 0 (zero). Press F10 [Save].



6. Go to F2 [Machine] →→ F1 [Jog]. Set Z travel. The original travel for Z is -24.24 with home switch. Now, we use reference mark home at **-15.00** so the travel Z (+) is **15.00** and the travel (-) is **-9.24 (-24.24 +15 = -9.24)**
Press F10 [Save].



7. Reboot power.

8. Press **Cycle start** machine home with Z reference home and X ,Y with home switch.

Before turning off power, move Z-axis to zero (under MDI, types: Z0 and press **cycle start). The Z-axis moves to zero at reference mark that you want Z reference home right there for next time.**

Note:

1. Write it down what you changed to keep record for change back to Home switch.
2. Tool off set has to be set, and part zero again.