Home Axis – 16, 18i, 21i, 180i, 210i Controls

1. If you are only changing the home position, you will first need to change the appropriate axis to zero. See note below.
2. Select MDI mode.
3. Press the OFFSET/SETTING key, then the SETTING soft key to select a setting screen.
4. Set the cursor to PARAMETER WRITE, select 1 then INPUT.
5. You will see a PS 100 alarm, hold in CANCEL and press RESET.
6. There are scribe lines on each axis that line up the machine home positions. Locate the one for the axis you are homing.
7. The axis to be homed must be at least three (3) inches away from the scribe mark in the negative direction and then jogged to the scribe mark in the positive direction only. If you go past the scribe mark in the positive direction, back up three (3) inches and re-jog to the scribe line.
8. The 16, 18, 21, 180i and 210i controls use parameter 1815.4.
9. To find parameter 1815, press the SYSTEM key, type in 1815, then a NO.SRH soft key will appear, press that and it will take you to the parameter.
10. When at scribe mark, change parameter 1815.4 (APZ) – see note below – back to 1. The control will want you to cycle power. If you are changing more than one axis, go back to SYSTEM and change the next axis to 1, then power the control off.
11. In MDI mode, set PARAMETER WRITE back to 0, press the RESET button and the 100 alarm will to away.
12. Check home position.
13. Twin table machines will have a V axis under the Z axis (see note below).

Parameter 1815.4 Example

<table>
<thead>
<tr>
<th>Parameter</th>
<th>APC</th>
<th>APZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>1815</td>
<td>X</td>
<td>0 0 1 1 0 0 0 0</td>
</tr>
<tr>
<td></td>
<td>Y</td>
<td>0 0 1 0 0 0 0 0</td>
</tr>
<tr>
<td></td>
<td>Z</td>
<td>0 0 1 1 0 0 0 0</td>
</tr>
<tr>
<td></td>
<td>V</td>
<td>0 0 1 1 0 0 0 0</td>
</tr>
<tr>
<td>1815</td>
<td>7</td>
<td>6 5 4 3 2 1 0</td>
</tr>
</tbody>
</table>

NOTES

This is the way it should appear with no alarms. You need to change the APZ to 0 first, before changing the home position. You will not get an alarm for the X axis, as it is set to 1.
You will get the APZ alarm since it is at 0.
You will not get the APZ alarm since it is at 1.
This axis will only appear if you have a twin table machine.
The .4 in step 8 corresponds to the APZ column.
Home Axis – INNOVA

Be sure ext G53 (common) and G54 and G55 work coordinates are set to zero. Record these values because they will need to be put back in.

1. Put the machine in MDI mode and leave it there until you have completed this procedure.
2. Select the FUNCTION key.
3. Select the SETTINGS key.
4. Select the CHP key.
5. Select the HANDY key.
6. In the Handy page select Parameter Write. (There should be a check mark in the box next to Parameter Write.) Ignore the PS100 alarm.
7. Select the FCT key.
8. Go to the Jog function.
9. Jog the axis needing a home position close to the home scribe line. Close the jog screen when finished.
10. Use the MPG to move the axis to the scribe line. Use a straight edge to line the scribes up.
11. Return to MDI mode.
12. Select the Position function key.
13. Select the CHP key.
14. Select the ALL key.
15. Select the OPR key.
16. Select the Origin Relative Position key.
17. When the box appears, select the axis you are homing and select OK.
18. Power off the CRT, just as you would normally power down.
19. Power on the CRT.
20. Select the Position function key.
21. Select the CHP key.
22. Select the ALL key.
23. Check to see if machine position and relative are zero for the axis that is being homed.
24. If they are not, go back to step 9. If they are zero then go on to the next step.
25. Select the FCT key.
26. Select the System key.
27. Select the CHP key.
28. Select the Param key.
29. Select the OPR key.
30. Select the Number Search key.
31. In the box type 1815, then click OK.
32. You are now at parameter 1815. In the bit 4 column put a check in the box of the axis you are homing.
33. You will get a PS000 alarm – Please cycle power.
34. Power off the CRT.
35. Power on the CRT.
36. Go back to step 1 and deselect the Parameter Write, then push the RESET button.
37. You should now be able to run the machine as normal.
Home Axis – 0 Controls

1. Press the EMERGENCY STOP button
2. Press the DGNOS/PARAM hard key.
3. Press the PARAMETER soft key. You will be in the SETTING 1 screen.
4. Press the PAGE DOWN key to get to the SETTING 2 screen.
5. Cursor up or down to get to PWE.
6. Press the MDI key.
7. Press number 1 and then INPUT.
8. You will get a PS100 alarm.
9. Pull out the EMERGENCY STOP button.
10. Hold CAN and press RESET to clear the PS100 alarm.
11. Press the DGNOS/PARAM hard key.
12. There are scribe lines on each axis that line up the machine home positions. Locate the one for the axis you are homing.
13. The axis that is being homed must be at least three (3) inches away from machine (scribe mark) home in the negative direction when starting. Jog or MPG the axis to the scribe mark in the positive direction only. If you go past, jog it back and start over.
14. Make sure the specific parameter for the axis being homed is 0.

Example (OMC control):
Parameter #22 bit 0, 1 and 2 are for X, Y and Z

<table>
<thead>
<tr>
<th>Bit 5</th>
<th>Bit 4</th>
<th>Bit 3</th>
<th>Bit 2</th>
<th>Bit 1</th>
<th>Bit 0</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Z</td>
<td>Y</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15. You will see a PS000 alarm when changing these parameters. This means to cycle CRT power off and on.
16. When at the scribe mark, change parameter back to 1. PS000 alarm will want you to cycle power again.
17. Press the DGNOS/PARAM hard key.
18. Disable PWE. Press the PARAMETER soft key. You will be in the SETTING 1 screen.
19. Press the PAGE DOWN key to get to the SETTING 2 screen.
20. Cursor up or down to get to PWE.
21. Press the MDI key.
22. Press number 0 and then INPUT.
23. Check home position.