

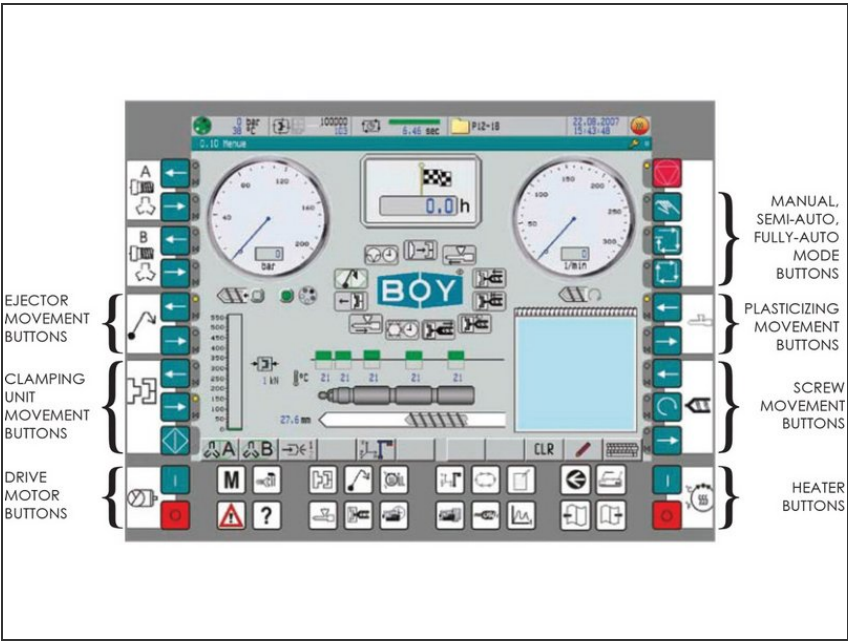


Boy 22A Injection Molding Guide

Written By: Wade Warman

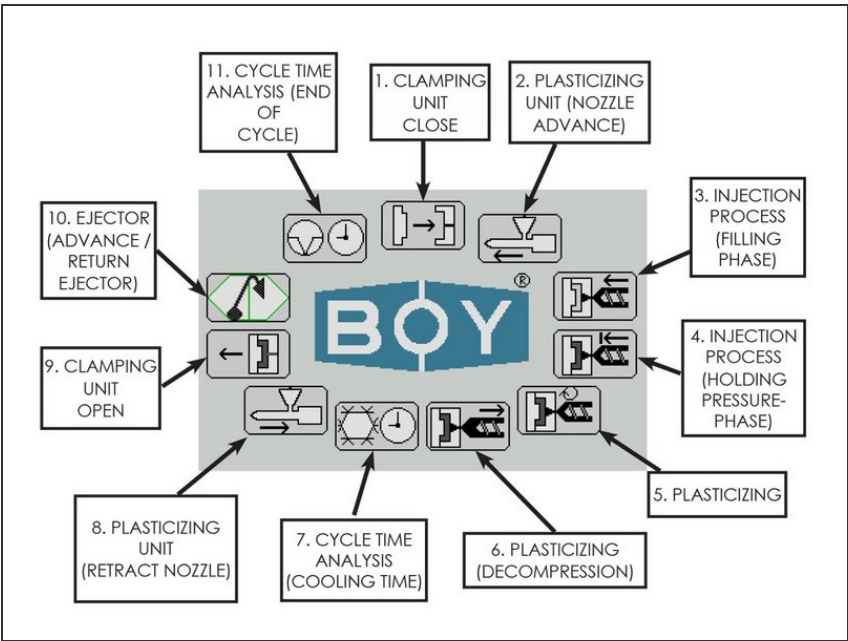


Step 1 — CONTROL PANEL - SIDE BUTTONS



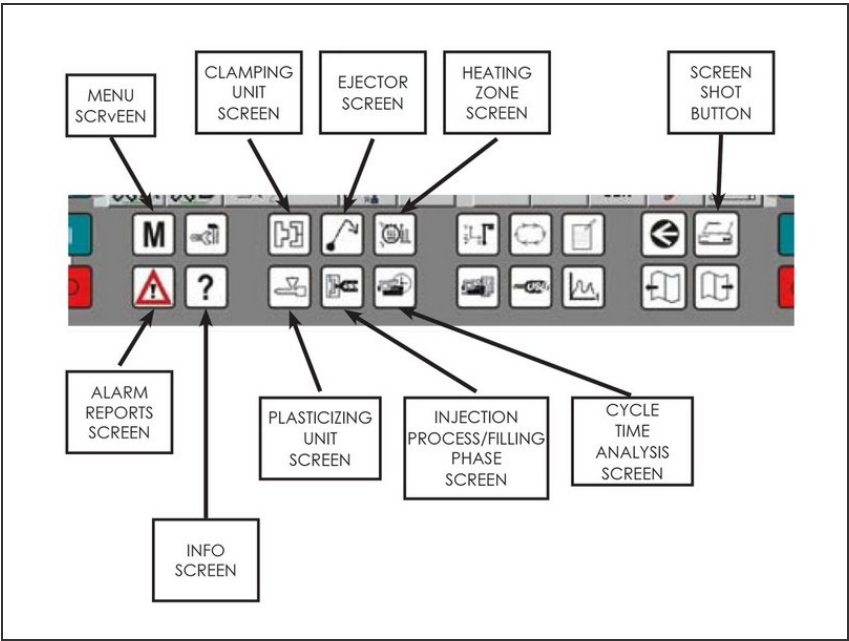
CONTROL PANEL - SIDE BUTTONS

Step 2 — MAIN SCREEN CYCLE DIRECT SELECTION BUTTONS



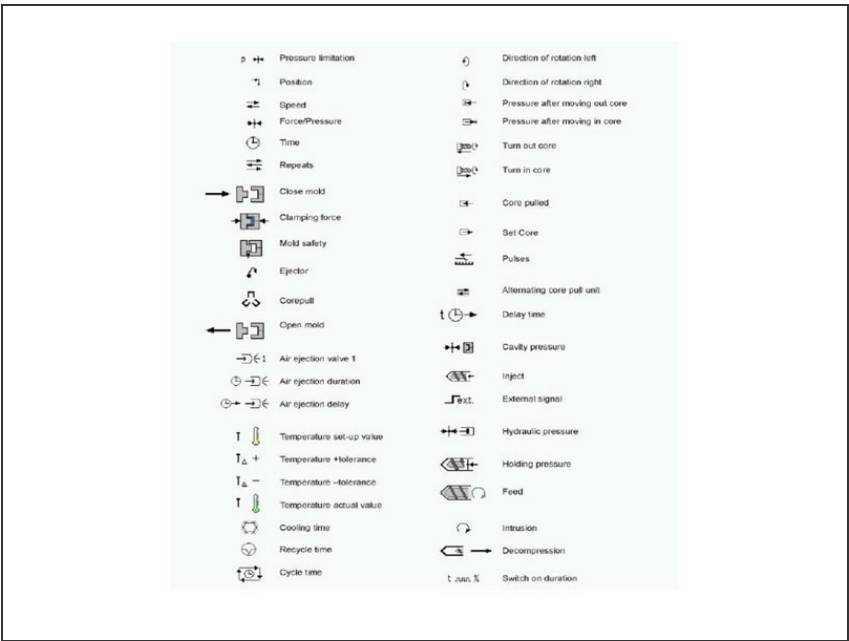
MAIN SCREEN CYCLE DIRECT SELECTION BUTTONS

Step 3 — CONTROL PANEL-BOTTOM BUTTONS



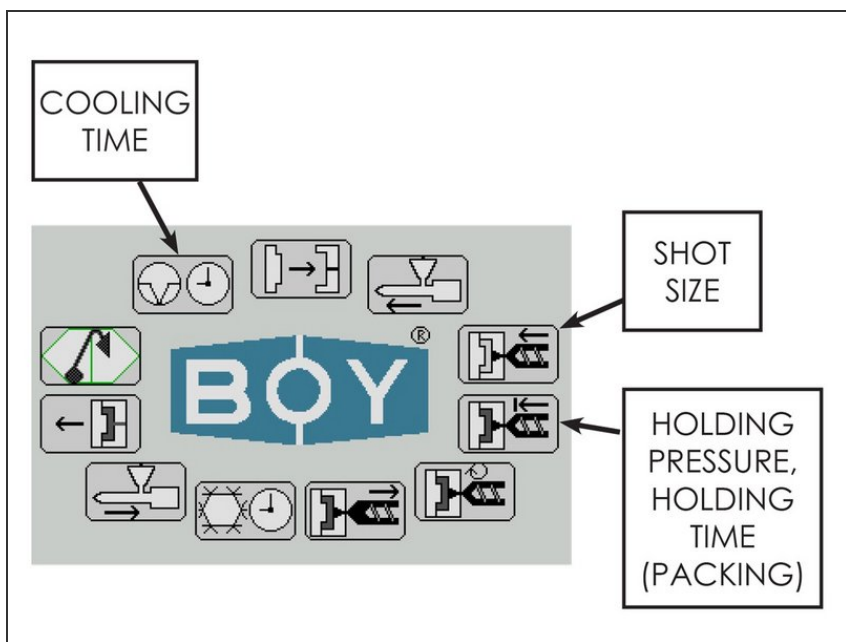
● CONTROL PANEL-BOTTOM BUTTONS

Step 4 — ICON LEGEND



● ICON LEGEND

Step 5 — PARAMETERS TO ADJUST



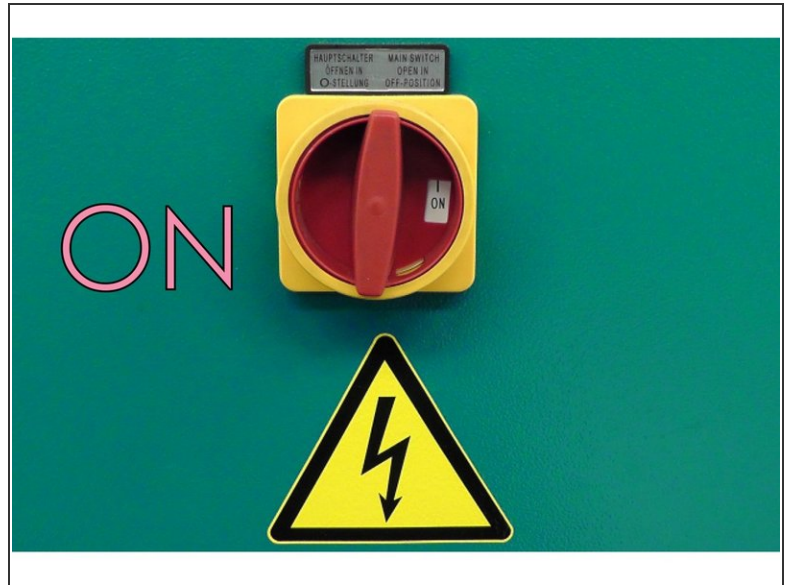
● PARAMETERS TO ADJUST

Step 6 — Turn on Chiller



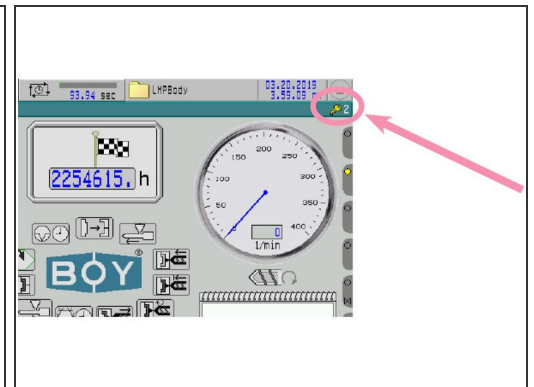
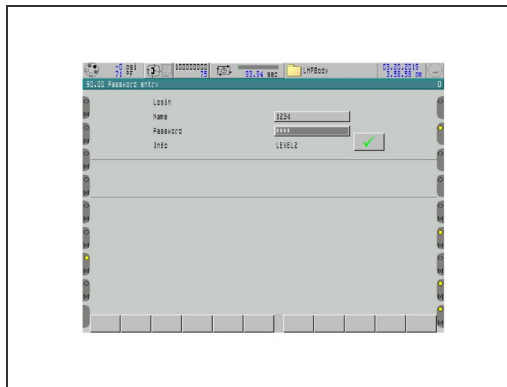
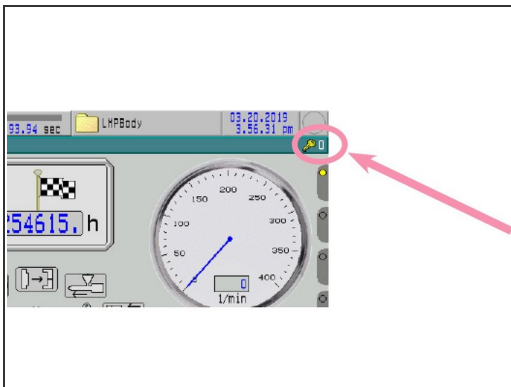
● Turn on Chiller (Side of machine)

Step 7 — Turn on Main power



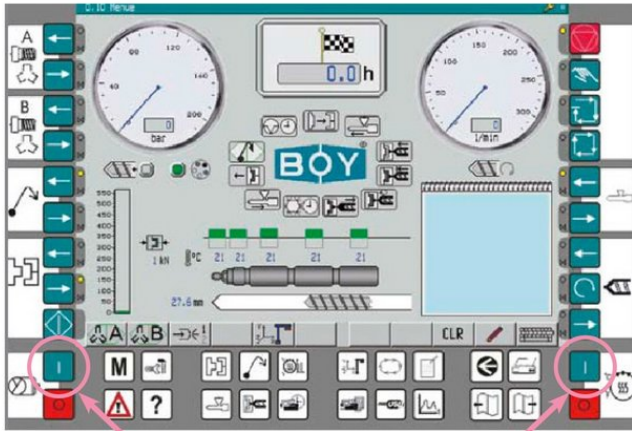
- Turn on Main power (Front)

Step 8



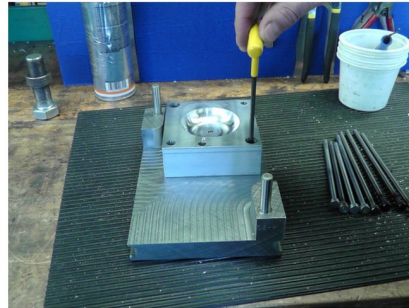
- Press KEY Icon to sign in as a Level 2 User
- User Name: 1234
- Password: 1234

Step 9 — Turn on both Heaters



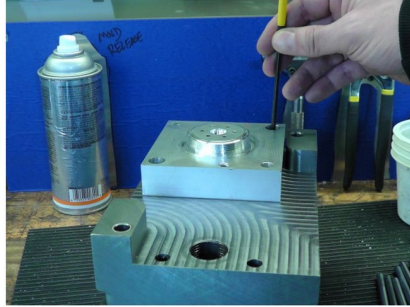
- Turn on both Heaters and let them reach operating temp. Note: this process takes a while and is normal. You can observe the process by pressing the HEATING ZONE button at the bottom of the Control Panel

Step 10 — Install the Cavity mold



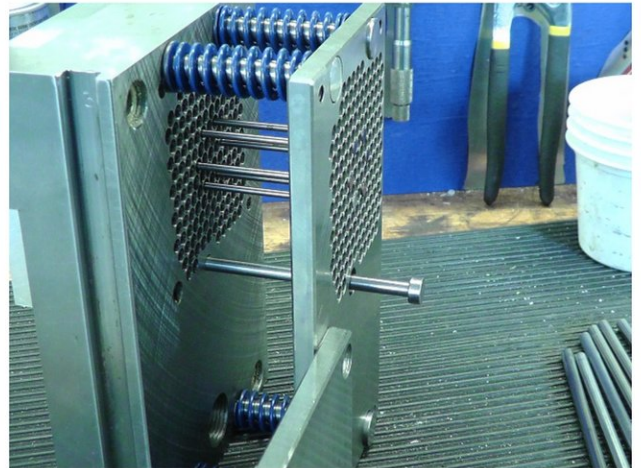
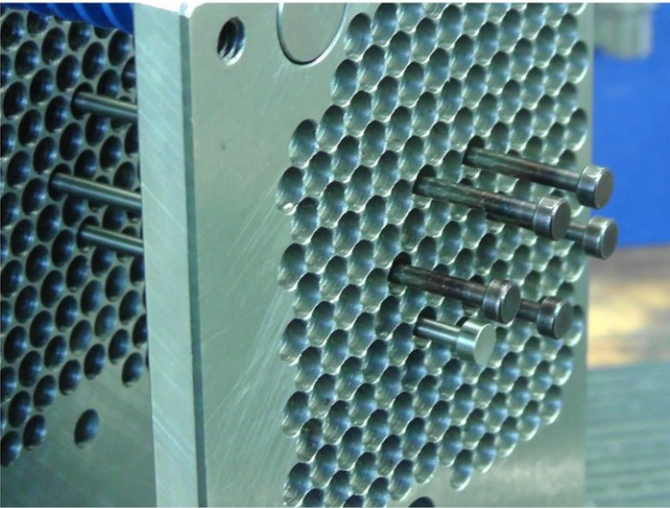
- Install the Cavity mold on the MUD insert. (Remember not to force it!)

Step 11 — Install the Core mold



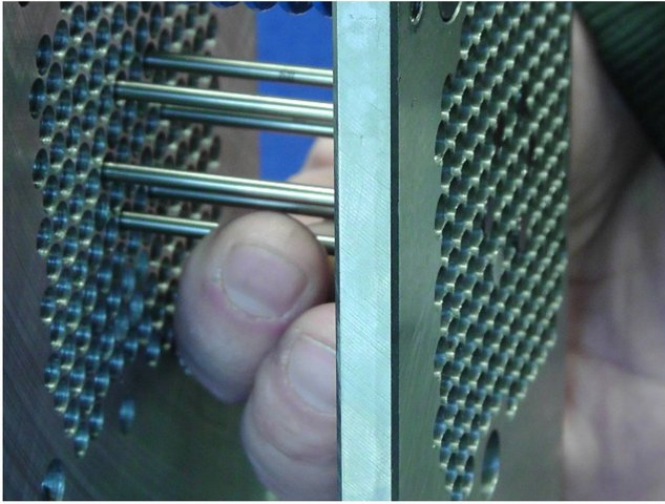
- Install the Core mold on the MUD insert

Step 12 — Install Ejector Pins



- To help do this, you may want to shine a light through the other side to help with placement, or even put the pins in from the other side to ensure they are located properly
- Also, don't forget the sprue ejector pin!

Step 13 — Check Ejector Pins



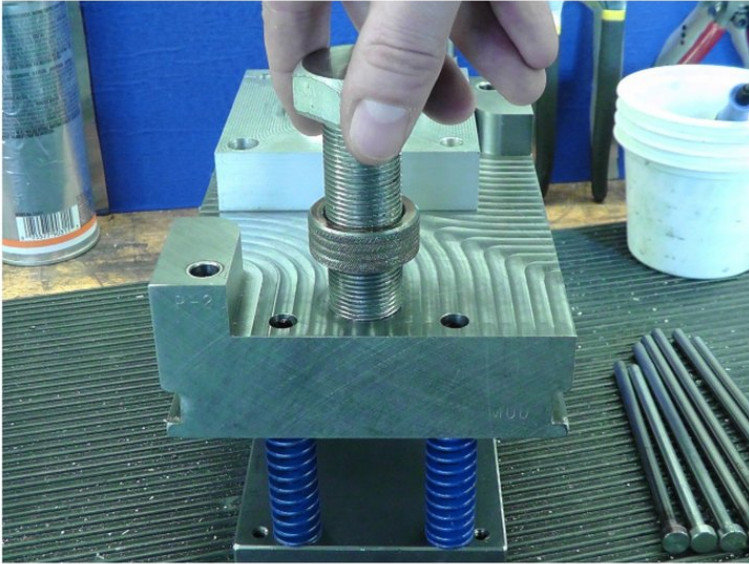
- Remember to spin each pin with your fingers so as to test to see if they bind. If they do not spin once inserted, change them out as they may be bent

Step 14 — Attach the back push-plate



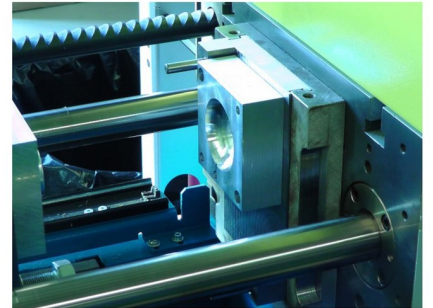
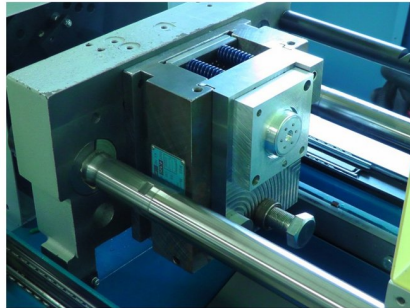
- Attach the back push-plate

Step 15 — Install the large bolt onto the Core MUD insert



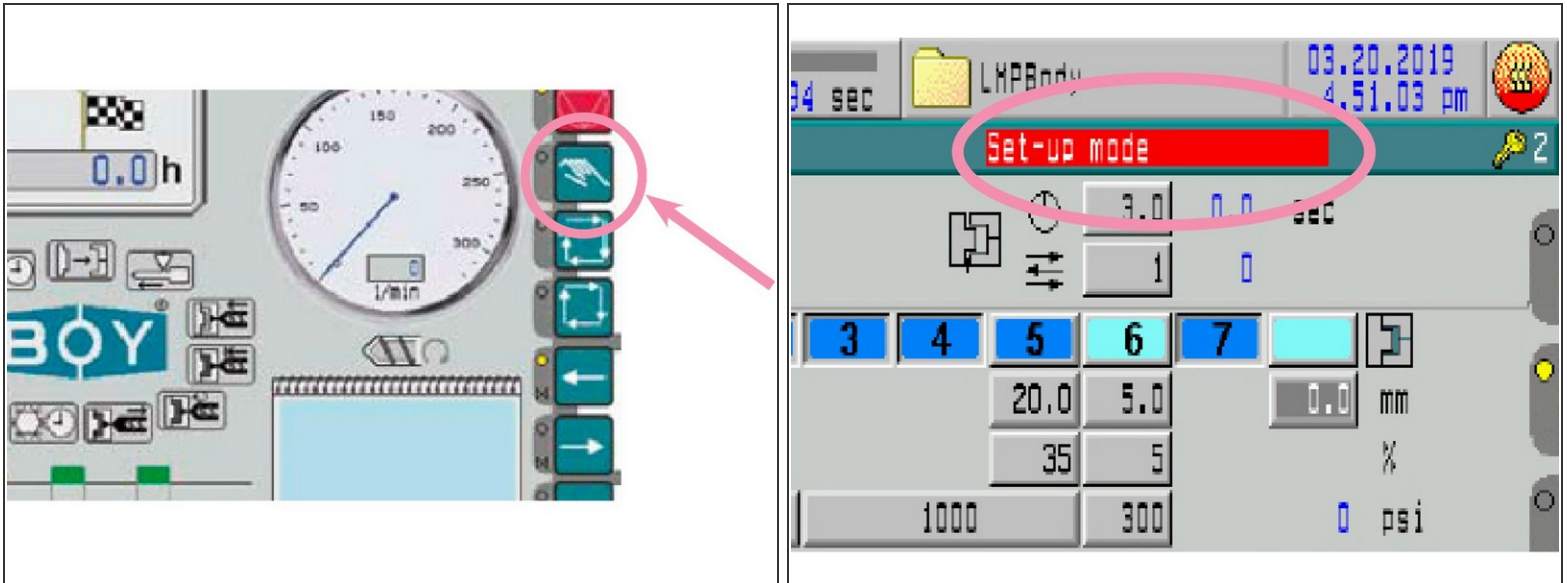
- Install the large bolt onto the Core MUD insert

Step 16 — Load the MUD inserts into the MUD Frame



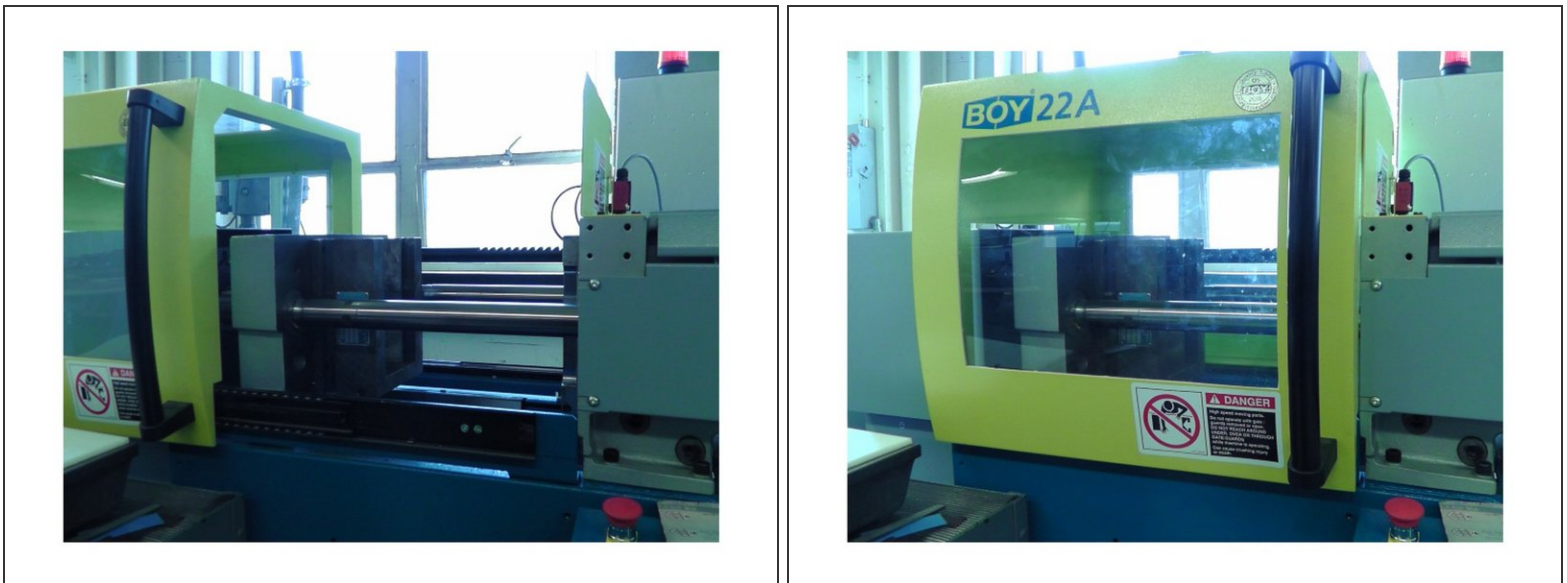
- Load the MUD inserts into the MUD Frame within the machine
- Remember: if the inserts start to bind and don't move easily, remove them, take a breath, and start again

Step 17 — Enter SET-UP mode

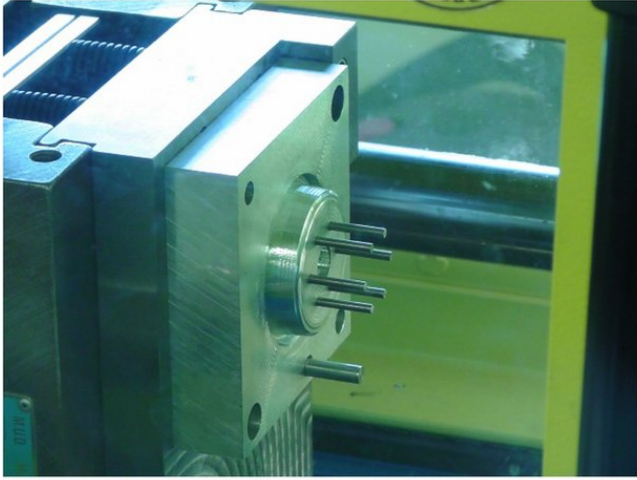


- Press and hold the Manual Mode Button for more than 3 seconds. (You should see a progress bar fill, followed by “SETUP MODE” at the top-right of the screen)

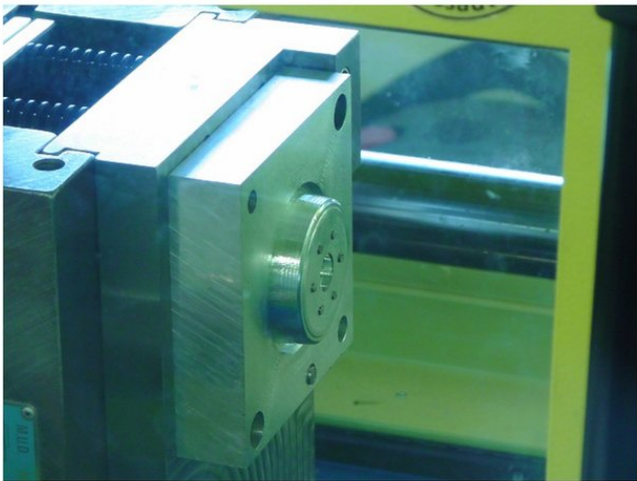
Step 18 — Close the Safety Gate



- Close the Safety Gate

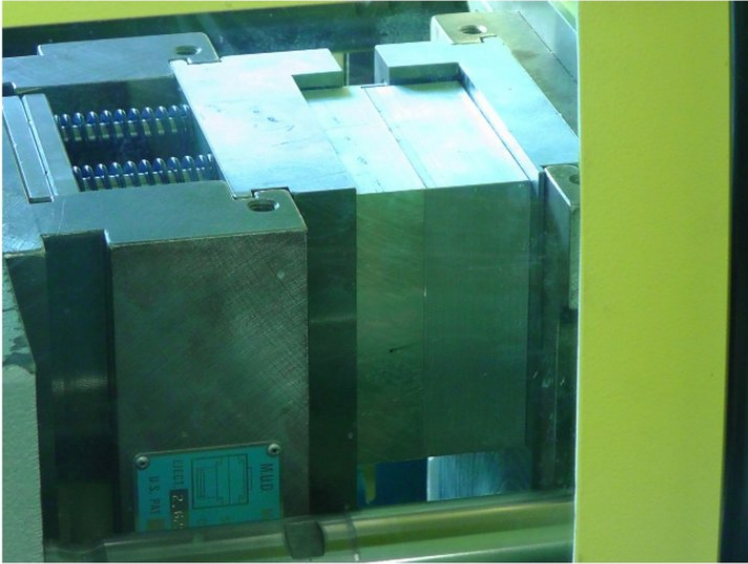
Step 19 — Test the ejector pins by pressing the -> Ejector button.

- Test the ejector pins by pressing the -> Ejector button.

Step 20 — Retract the ejector pins

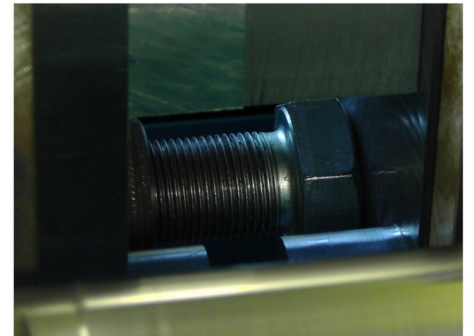
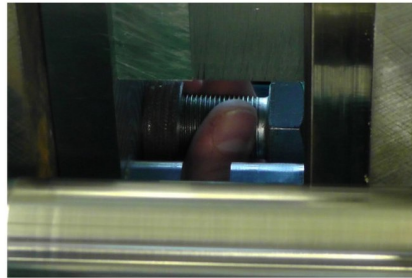
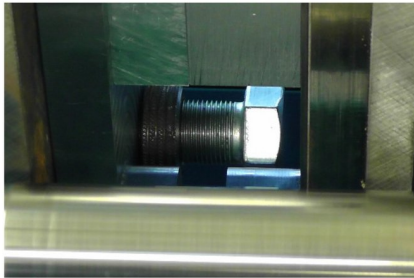
- Retract the ejector pins by pressing the -> Ejector button.
- This process is done to check that you have installed all the necessary ejector pins and the sprue pin, that they all properly eject, and that they still move somewhat freely in the mold. If your ejector pins are not all ejecting properly, remove the MUD insert and confirm you've followed the proper steps to set up the mold.

Step 21 — Close Clamping Unit



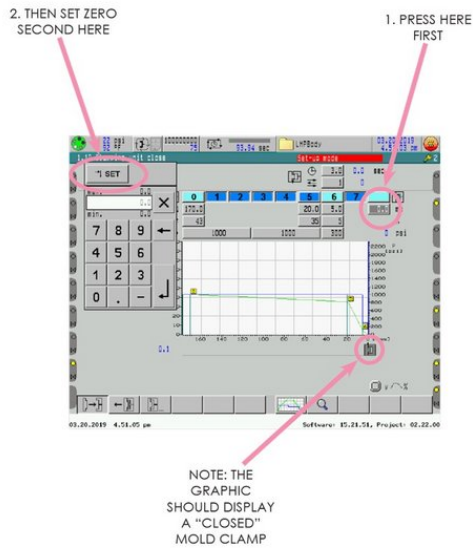
- While still in SETUP MODE, press the -> Clamping Unit Button to close the mold fully closed. (The mold should move slowly during this process)

Step 22 — Adjust Large spacing bolt



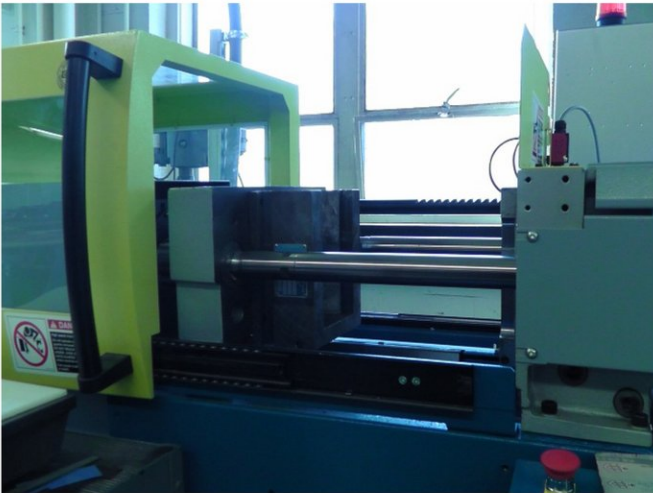
- While the molds are closed, open the safety gate and turn the large bolt on the core insert counter clockwise until it reaches the surface of the cavity insert.
- Turn the locking nut clockwise until it is tight against the core insert, thus locking the bolt in place.
- This step will ensure the mold inserts will not “yawn” and create flash at the top of the mold

Step 23 — Set the Mold Zero position



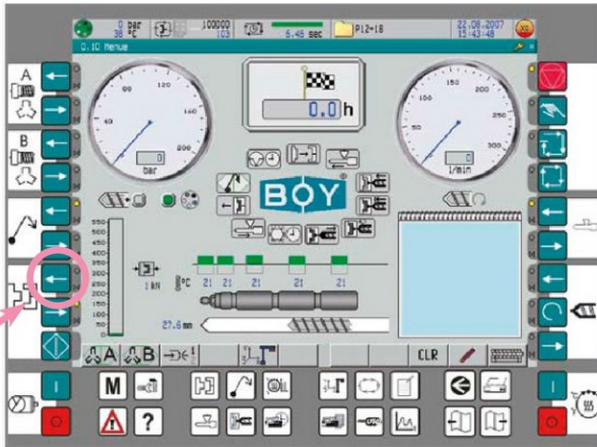
- After the bolt is tightened against the cavity, set the position of the mold to zero by pressing the SET button on the pop-up number pad.

Step 24 — Close the safety gate



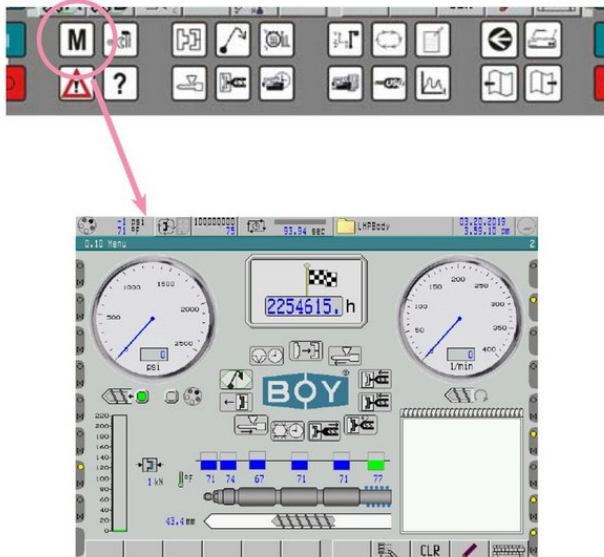
- Close the safety gate

Step 25 — Retract the mold



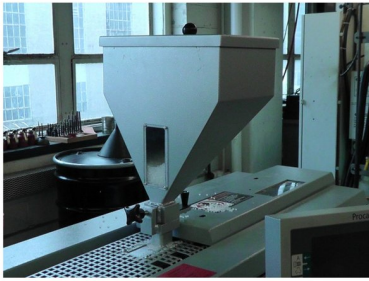
- Retract the mold by pressing the -> Clamping Unit button

Step 26 — Return to the Main screen



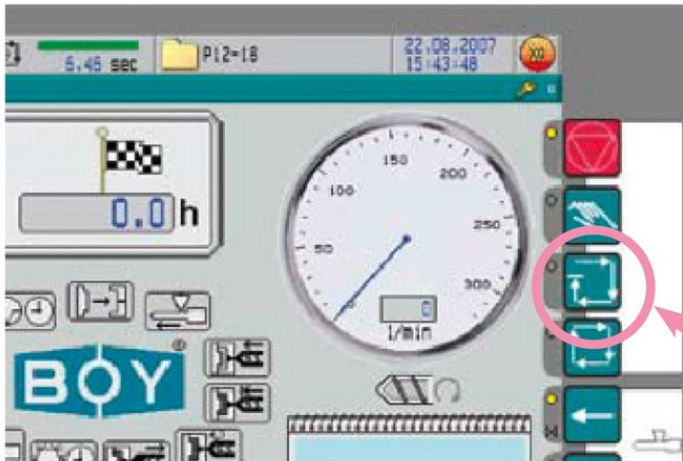
- To return to the Main screen, press the "M" button on the bottom of the control panel

Step 27 — Check the Resin Hopper



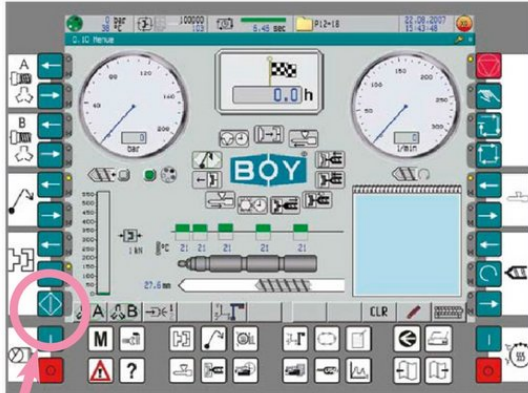
- Check the Resin Hopper, (located on top of the machine body) to make sure enough resin is available. Add more if needed by removing the lid and adding about 1 coffee can of resin

Step 28 — Press the “SEMI-AUTO” button



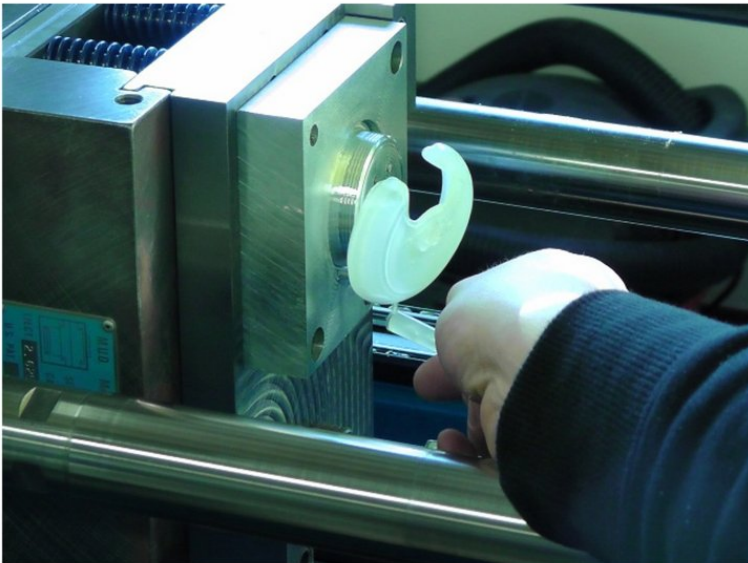
- Press the “SEMI-AUTO” button

Step 29 — Begin the run cycle



- Press the START button, (or open and close safety gates) to begin the run cycle.

Step 30 — Remove part



- After cycle is complete, open safety gate and remove part

Step 31 — create a new part OR return to Manual mode

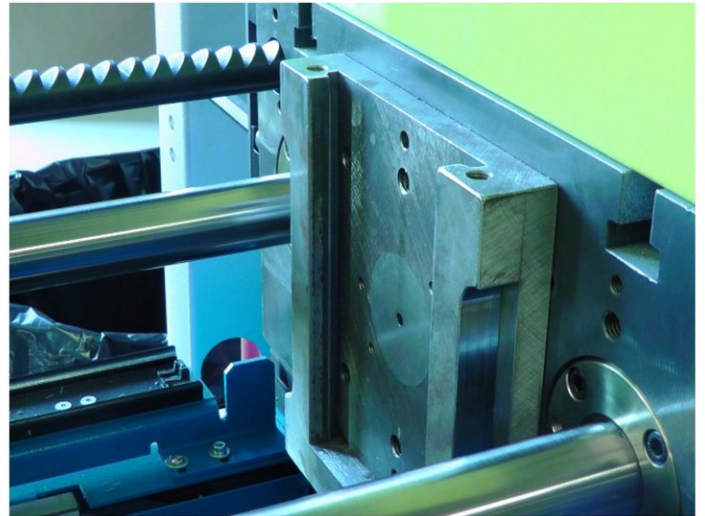
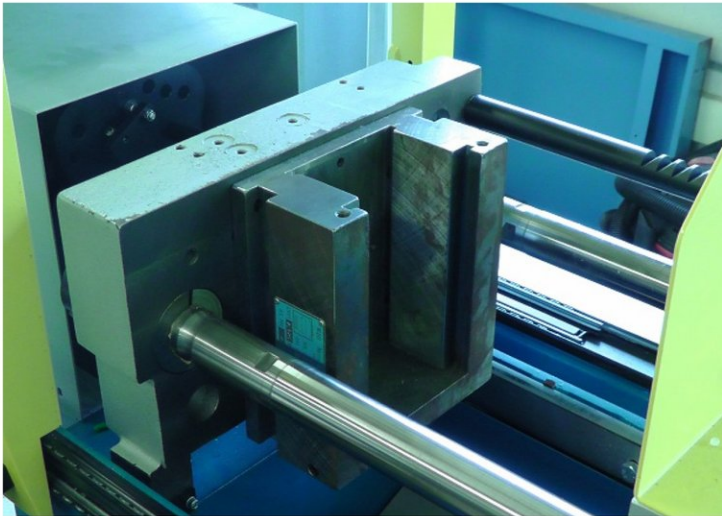


OR



- Close safety gate to create a new part OR return to Manual mode to change parameters by pressing the MANUAL button

Step 32 — After your run is finished...



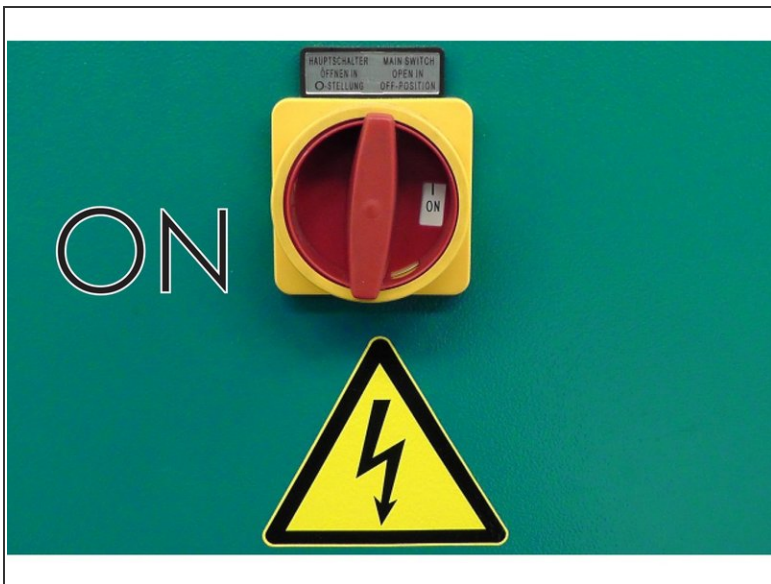
- When finished with the run, remove all parts, make sure ejector pins are fully retracted, make sure clamping system (mold) is fully open, and finally, remove MUD inserts

Step 33 — Disassemble mold



- Disassemble mold and return all ejector pins, shims, screws, and anything else used in this process to its proper home.

Step 34 — Turn off Main power



- Turn off Main power

Step 35 — Turn off chiller



- Turn off chiller