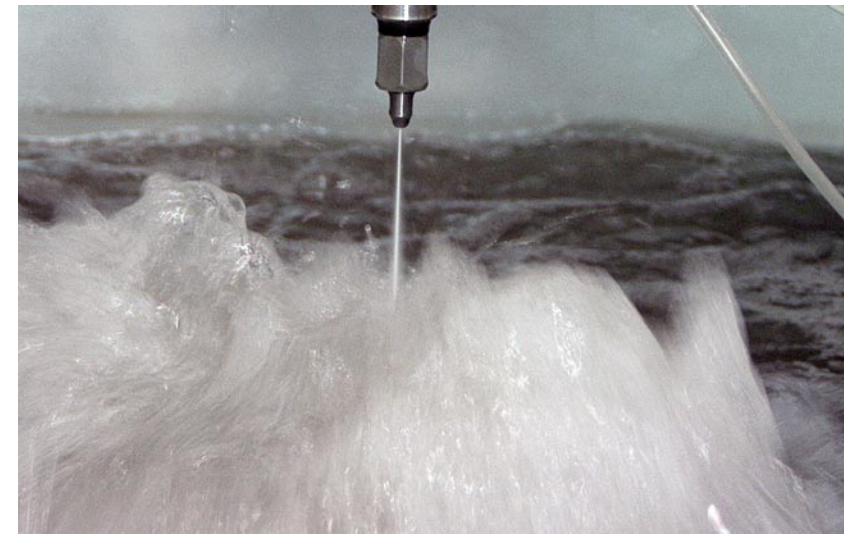


OMAX 55100 Waterjet info

Blot:/share2/nick/waterjet-info • Modify as appropriate.

For help talk to one of the people who were trained — Andrew, Corwin, Tim, Nick.a
OMAX contact — Mike, 206-793-5256, mikediquirico@yahoo.com



Startup procedure

1. Fill hopper to top every day. It's bad to run out.
 - clean top of bag well
 - slit with fresh razor blade - paper bits are bad
 - close hopper drain valve
 - pull stopper up and twist while opening hopper inlet
2. Close air tank drain (all the way in corner)
3. Turn on air and water
4. Check water filter pressure — 40 is normal. Below 30 replace filter!
5. Turn on pump main power and charge pump
6. Turn computer on
7. Check airflow under computer.
8. Start OMAX make program (homing message).



6. Open top of pump unit
 - a. Check main pump oil level
 - b. Check internal water filter pressure drop
 - more than 15 psi, order new
 - more than 20 - don't use machine
 - c. Check toilet tank and three cooling lines going into it. Should flow well and evenly
 - d. Check belt
7. Close top and check airflow behind machine. Replace filter if insufficient.
8. Home machine
 - a. Homes > Advanced > Auto Home
 - b. Right click on "Go Home" Go to middle of table, z-axis up all the way.
9. Verify pump settings (Setup > Pump and Nozzle Settings)
High should be 45K. Low should be 20K.
10. Test > water only. Verify:
 - a. High and low settings are .5K psi higher on pump
 - b. It says "T" for transducer-measured
 - hold blue button down while radio button to change setting
11. Check stream quality - cone should be 2 inches wide
 - if greater or if it has a shoulder or lots of mist: replace mixing tube first, then jewel, then both together
12. Right click on "Go Home <", go to Path Start (default). Rotate mixing tube 90 deg

*If you are not going to be cutting for a while, turn off the charge pump to save water and filters.

Shutdown procedure

1. Right click on "Go Home <-" and then Go to middle of table. Z axis up all the way
2. Test > Water Only for 30 sec to clear out nozzle.
3. Exit OMAX Make.
4. Shut down Windows on computer
 - *WAIT FOR BLUE SCREEN screen before powering down*
5. Behind machine:
 - a. Bleed air from hopper, close valve
 - b. Turn off air and water
 - c. Bleed air tank (it's loud, tell people)
6. Turn off pump unit
7. Clean machine with soap and water — avoid getting plastic feed hopper wet.

Cutting

ALWAYS use a muff. If grit backsplashes onto tilt-a-jet, it will void warranty.

Calibrate Tilt-a-Jet

Calibrate tilt-a-jet once a week or when the head crashes into something.

1. Place granite block on bed, ensure block is level.
2. Remove mixing tube from nozzle and chuck dial gauge instead.
3. Home > Auto Square Tilt — using block and dial gauge.
4. Home > Advanced > calibrate > auto square perpendicular
5. Remove existing
6. Take four readings and enter them into menu
7. Check everything
8. SAVE your changes else work will be in vain
9. Check garnet flow with Setup->Pump & Nozzle Settings->Test->
 - a. let garnet flow into cup for one minute, should be ~ one pound
 - b. enter weight into test

How to deal with clogs

When the head clogs there will be a fountain of water.

Check that the catcher and its tube are dry and that no water got into the plastic hopper.

Test > water & abrasive. If not, take nozzle apart.

Flip nozzle upside down and run with water.

If a cut is interrupted

Restart by first doing > Go Home, then manually move the head to "go to spot on path" just before it was interrupted, and press start.

To replace jewel/mixing tube

Whenever you do something like changing the pump oil, jewel or mixing tube log it in the computer with History > Add Notes

Do not ever cut zinc, lead, or galvanized material. This makes the water in the machine hazardous waste.