

Small 50 Spray and Grout Pump

Cleaning instructions

1. Empty hopper
2. Pull out drain plug from under the hopper
3. Disconnect the material hose
4. Disconnect the gauge
5. Disconnect the gun
6. Rinse hopper and unit clean with water (display panel is splash proof) until all material is rinsed thoroughly
7. Replace the drain plug
8. Fill hopper with water
9. Turn unit on via the remote (if attached) or the valve on the gun (pump will start turning)
10. Clean the end of the stator with the supplied cleaning tool to remove any debris (tool was designed not to interfere with screw)
11. Stop unit
12. Wipe the end of the hose clean (the side to be inserted back into the stator)
13. Insert sponge ball into the end of hose (this will wipe clean the hose)
14. Insert the hose back onto the stator
15. Fill hopper with water
16. Turn unit on and set above 50hz
17. Catch the sponge ball from the other side of hose (only one time necessary)
18. Clean gauge, tips and gun thoroughly
19. Drain any excess water left in the hopper and pump

Fine tuning:

Have the unit auto-reverse when pump is stopped

1. Shut off unit by turning the switch on the right side to the 0 position
2. Hold down the plus & minus buttons simultaneously
3. Turn the unit back on the 1 position still holding the plus & minus buttons (about 5 seconds) a number 3 will flash and you can now release

To deactivate, simply follow steps 1 – 3

Adjusting the screw / stator:

1. Attach the gauge to the end of the stator
2. Attach the hose to the end of the gauge
3. Fill unit with water
4. Kink hose to restrict flow
5. Turn on unit
6. Check the gauge to read 150 psi or 10 bar (note that the top numbers measure bar)
 - If more, then loosen the 3 bolts with 19mm wrenches one revolution each until correct
 - If less, then tighten the 3 bolts with 19mm wrenches one revolution each until correct

For technical support please call IMER USA, Monday – Friday, 8am – 5pm (301) 336-3700

Small 50 Spray and Grout Pump

Setup for pumping only:

1. Attach gauge to pump
2. Attach 1" hose to gauge (see section on fine tuning the pump)
3. Plug in power cord (blue light will illuminate)
4. Plug 5v remote cable into yellow port
5. Fill hopper with water (this lubricates the hose)
6. Turn on pump (yellow dial on right side) from position 0 to 1 (numbers should illuminate on LED read out)
7. Set LED to read 50Hz by using the plus or minus buttons
8. Set the dial (below + / - buttons) to forward (clockwise)
9. Press on the remote switch to begin pumping (material will begin to flow)
10. Add slurry mix of Portland cement based product (only if using cement based materials) to last half gallon of water in the hopper. *This will lubricate hose to allow material to flow easier.*
11. Add your material to pump into the hopper
12. Adjust pump speed accordingly

Setup for pumping and spraying of cement based materials:

1. Follow steps 1 – 3 pumping only section (remote cable not used for this operation)
2. Loosen handle clamps and slide handle away from unit
3. Insert compressor into handle and push towards the hopper until the rubber isolators make contact and then tighten knobs to clamp handle
4. Attach air hose from the compressor into either port on the right side of unit when looking at the display panel
5. Attach the air line to the remaining open air port
6. Attach the Koine gun to the end of the material hose (valve on gun should be closed)
7. Select the right nozzle for the application (orifice size and spray pattern)
8. Attach the air line to the gun
9. Follow steps 5 – 8 above
10. Open the air valve on the gun (this will start the compressor and the pump)
11. Follow steps 10 – 12

Setup for pumping and spraying of paints and coatings:

1. Follow steps 1 – 5 in the previous section
2. Attach the finish and coatings gun to the end of the material hose (red valve on gun should be closed)
3. Select the right nozzle for the application (orifice size and spray pattern)
4. Attach the air line to the gun
5. Fill the hopper with water (This lubricates the hose)
6. Set LED to read 25Hz by using the plus or minus
7. Set the dial (below + / - buttons) to forward (clockwise)
8. Open the valve on the gun (this will start the compressor and the pump)
9. Pour the material to be used into the hopper once all the water is out of the hopper
10. Adjust pump speed accordingly and bleed air from valve accordingly from gun

Turn page for cleaning and fine tuning

Small 50 Jams Upon Start-Up

Inappropriate Slurry

- A wet soupy slurry is not correct. In fact the wet slurry makes the pump more susceptible to jamming. The extra water washes away the Portland from around the sand and then all the sand collects in the cavity of the rotor and the pump jams.
- The correct slurry is a pancake batter to self – leveling type consistency.
- The slurry consists of Portland & Water, NO SAND.

The Ratio of Sand or Aggregate to Cement Is Too High.

- When spraying mortar the ratio cannot exceed 3 parts sand to 1 part Portland and lime. If this ratio is exceeded there will not be enough Portland coating the sand and the sand will begin to collect together, which will lead to the pump jamming.
- When pumping grout the ratio of aggregate to cement cannot exceed 10-15%. If the concentration of aggregate is too high, there will not be enough cement coating the aggregate for it to travel smoothly through the stator/rotor, this will lead to jamming.
- It is worthwhile noting that the higher the PSI of the grout, the easier it usually is to pump the material. This is because higher PSI grouts have a correspondingly higher concentration of cement which allows the aggregate to flow more smoothly.
- Many grouts are sand grouts without aggregate, these usually pump very easily.

Poorly Mixed Material

- If the material to be pumped is not mixed thoroughly, then the sand and or aggregate in the material will not be coated completely, and this will lead to jamming.
- We have rarely seen an instance where our Minuteman did not mix and feed Small 50 very well. We have seen instances where a Stow 2 bag mortar mixer took 9 minutes to mix a load and even then it was marginally blended.

Finally! A Word To The Wise

- **DO NOT!** Head off to your initial pumping or spraying job without first having practiced with the Small 50... Practice makes the job a lot easier.
- If you have a difficulty call us right away at 800-275-5463

Thank – you

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