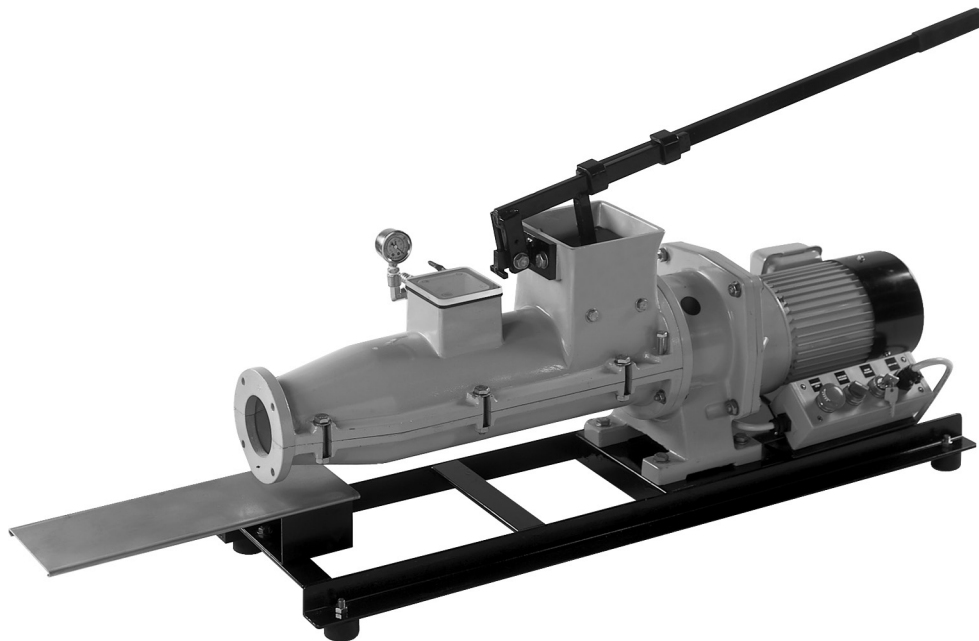




PM-071 / PM-071V

Pugmill Instruction Manual



Please make sure to read the entire instruction manual thoroughly before initial set-up, operation, maintenance and inspection to ensure proper use.

Please keep this instruction manual in a location that is available to the user.

NIDEC-SHIMPO CORPORATION

General Information

The pugmill should be mounted on a table or workbench approximately 20" high. The handle can be attached in-line with or perpendicular to the pugmill. The handle can be detached to save space when the pugmill is not in use. When the handle is attached perpendicular to the pugmill, you *must* bolt the pugmill on to a table or workbench to ensure the stability of the pugmill. When the handle is attached in-line, bolting is unnecessary.

The clay rest is moveable and can be positioned according to user's requirements.

The pugmill uses a key ON/OFF switch. Keep the key in a safe place away from children to avoid accidents.

The Shimpo pugmill may be operated as standard or deairing pugmill. The key switch activates standard mode. To use the deairing capabilities, turn on the green vacuum pump switch.

**CAUTION! KEEP HANDS OUT OF THE HOPPER!
ONLY USE ATTACHED TAMPER TO PUSH CLAY!
PUSH THE RED EMERGENCY/REST BUTTON
TO STOP THE PUGMILL!**

Turn clockwise to release emergency switch and resume use.

A safety grill has been built-in to the hopper for safety purposes. To avoid injury to person or damage to the pugmill, keep hands, tools, and objects out of the hopper. **DO NOT REMOVE THE SAFETY GRILL!**

Operation

Load clay into the hopper in lumps (approximately the size of two fists). Tamp down the clay with the lever tamper, reload, repeat. Clay should be of throwing consistency. Wetter clay can be mixed with drier clay to create an ideal consistency. Be sure clay is free of foreign objects before pugging.

DeAiring

Place the vacuum pump near the pugmill. Plug the vacuum pump into the ADD-A-VAC electrical cord on the pugmill (See diagram at right).

Attach the vacuum pump hose to the vacuum fitting and secure with hose clamp. Be sure that both ends of hose are connected properly to ensure a good vacuum.

Place a padded mat under the vacuum pump for decreased vibration and noise.

Before stopping vacuum pump motor, open the vacuum valve to prevent oil from the pump being sucked into the vacuum chamber. Close the valve when the vacuum gauge returns to zero.

Cleaning

The Shimpo Pugmill is designed with ease of cleaning in mind.

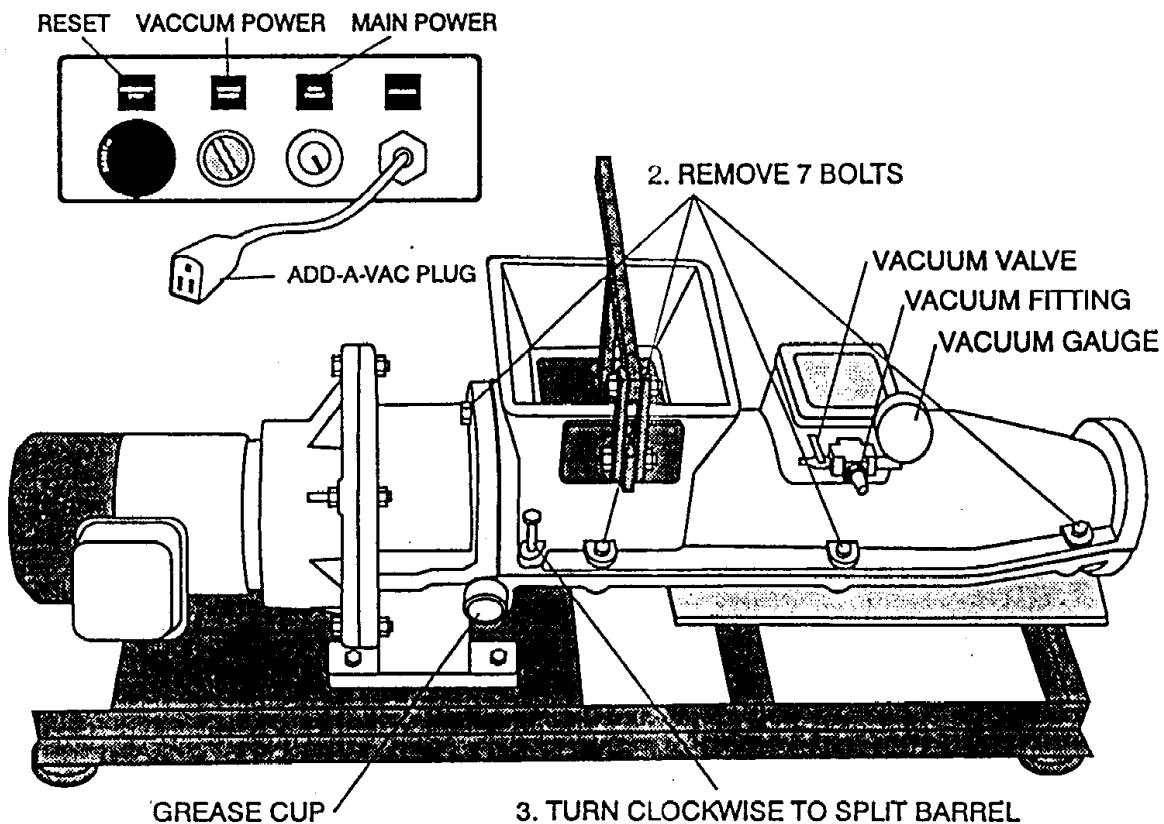
1. Turn off switches and make sure the pugmill is unplugged from power!
2. Unscrew the 3 bolts on each side of barrel and 1 on the midline of the hopper (see diagram below).
3. Turn the 2 bolts, 1 on each side of barrel, clockwise (see diagram below), to split the upper and lower barrel. This will give full access to the barrel and blades for maximum ease in cleaning.
4. Properly reassemble the hopper when cleaning is complete.

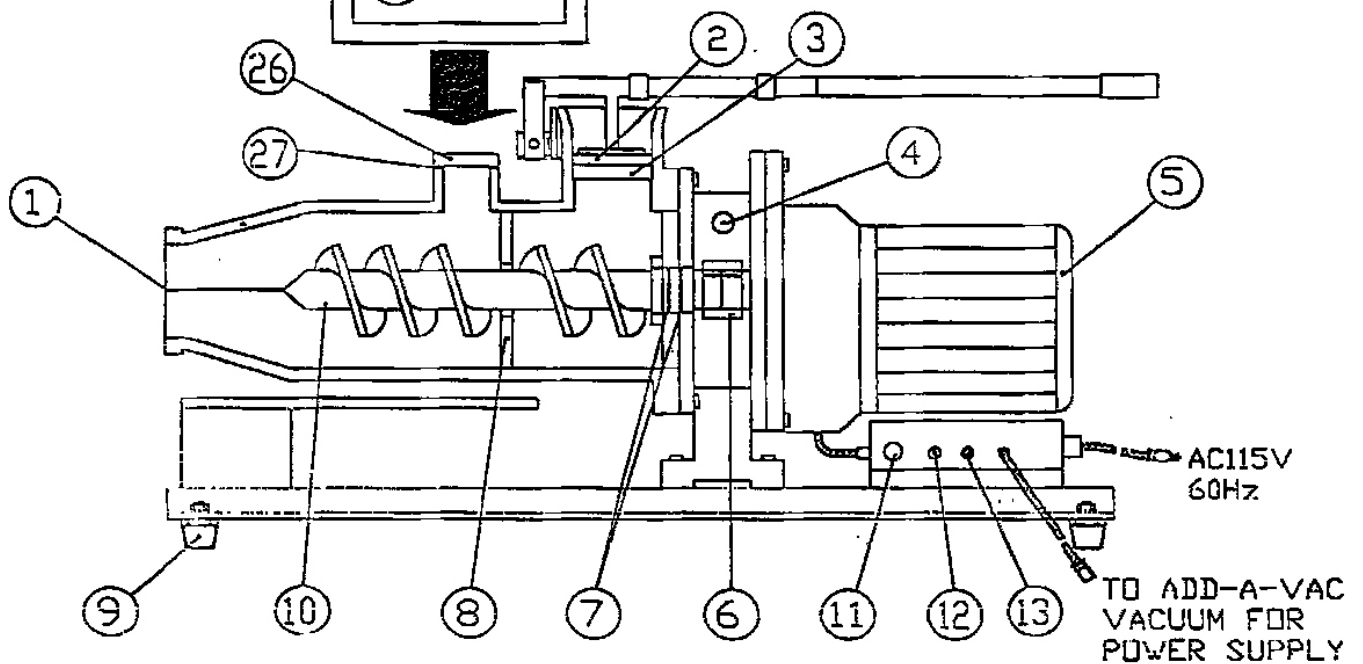
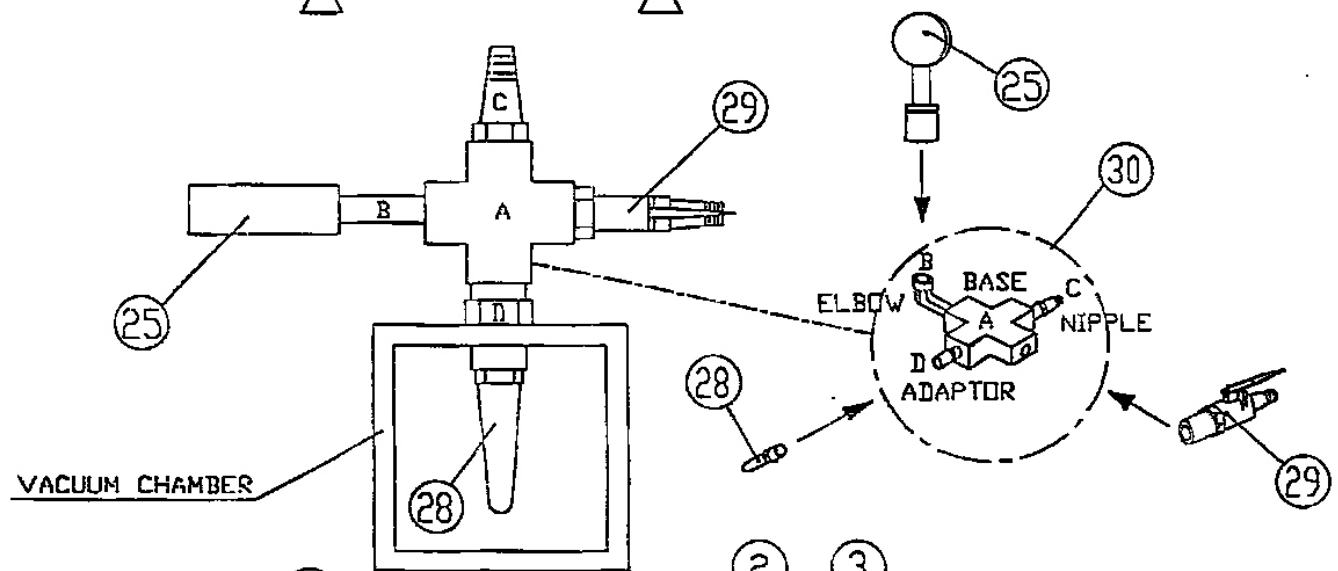
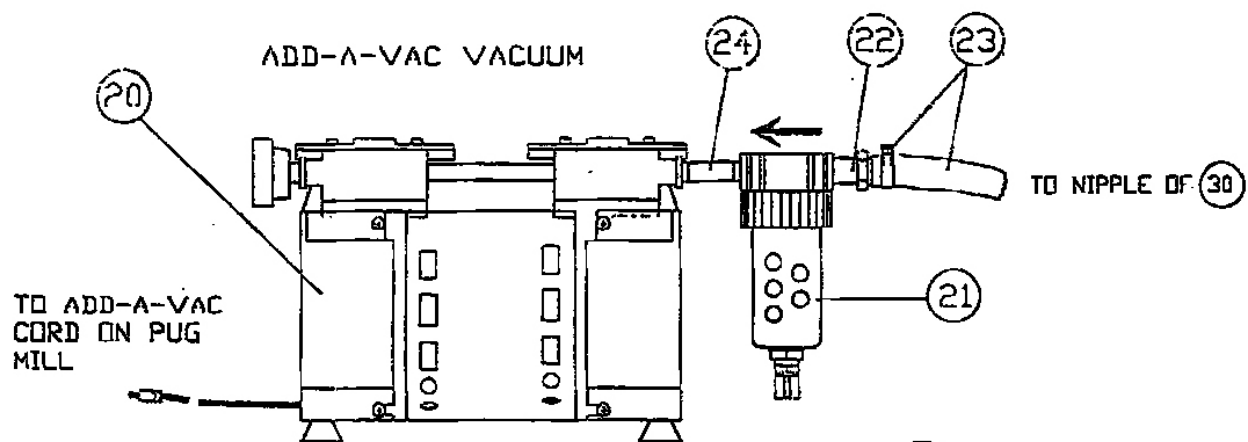
If it is necessary to clean clay out of the vacuum chamber, turn off the pugmill, take the cover off of the vacuum chamber and remove clay.

IF CLAY HAS HARDENED IN THE MILL

If clay has become too stiff or dried out because the hopper and/or nozzle have been left uncovered, the easiest remedy is to pour approximately one cup of water in the hopper and let set overnight or until the clay softens enough to allow the pugmill to start.

NOTE: Do not turn the pugmill on until the clay has softened. Damage may result to the coupling if you try to *force* stiff clay through the barrel. Soften with water first.





Ref #	Part #	PART DESCRIPTION	Q'ty
1	PM000001	GASKET FOR EXTRUDING BARREL	1
2	RMB00010	TAMPER	1
3	RMB00040	GRATE	1
4	PM015	PLASTIC COVER	1
5	PM016	MAIN MOTOR W/GEAR REDUCER	1
6	PM017	CYLINDRICAL SEPARATE COUPLING	1
7	PM013	G-RING	1
8	PM018	VACUUM PLATE	1
9	BRKA0200560	FIXED FOOT	1
10	PM014	EXTRUDING SCREW	1
11	PM003	EMERGENCY SWITCH	1
12	PM008	SELECTOR SWITCH	1
13	PM007	KEYED START SWITCH	1
20	AVP001	VACUUM PUMP	1
21	AVP003	FILTER FOR VACUUM PUMP	1
22	AVP004	NIPPLE FOR FILTER V/P	1
23	AVP005	HOSE WITH TWO CLIPS	1
24	AVP014	BRASS PIPE NIPPLE 1/4" LENGTH 1-1/2"	1
25	AVP006	PRESSURE GAUGE	1
26	AVP007	PLASTIC COVER FOR VACUUM CHAMBER	1
27	AVP008	GASKET FOR VACUUM CHAMBER	1
28	AVP009	FILTER FOR VACUUM CHAMBER	1
29	AVP010	AIR DRAIN VALVE	1
30	AVP012	TUBE FITTINGS COMPLETE SET FOR VACUUM CHAMBER (4 PCS)	1
			1

Storage

When the pugmill is not in use, seal the hopper and nozzle with a plastic bag held in place with a rubber band or tape so that the clay remaining inside of barrel will not dry out.

If the pugmill is to be stored or will not be used for a prolonged period of time, it is advisable to clean the hopper and barrel thoroughly.

Maintenance

A grease cup is mounted on back of the pugmill. Rotate clockwise periodically to insure proper lubrication of gears. Refill whenever grease runs out. Call Shimpo for grease requirements.

The vacuum pump has a moisture collector which takes out moisture contained in the clay. Unscrew the knob at the bottom of the clear vacuum chamber on the vacuum pump to release water in the filter.

Warranty

LIMITED EXPRESS WARRANTY: Shimpo warrants, to the original purchaser of new products only, that this product shall be free from defects in workmanship and materials under normal use and proper maintenance for one year from the date of original purchase. This warranty shall not be effective if the product has been subject to overload, misuse, negligence, or accident, or if the product has been repaired or altered outside of Shimpo's authorized control in any respect which in Shimpo's judgment, adversely affects its condition or operation.

DISCLAIMER OF ALL OTHER WARRANTIES: The foregoing warranty constitutes the **SOLE AND EXCLUSIVE WARRANTY**, and Shimpo hereby disclaims all other warranties, expressed, statutory or implied, applicable to the product, including, but not limited to all implied warranties of merchantability and fitness.

LIMITATION OF REMEDY: Buyer must have Shimpo's authorization before returning the product, properly repackaged, freight prepaid to Shimpo to obtain warranty service.

Under this warranty, Shimpo's **SOLE OBLIGATION SHALL BE TO REPAIR OR REPLACE** the defective product or part, at Shimpo's option. Shimpo reserves the right to satisfy warranty obligation in full by reimbursing Buyer for all payments made to Shimpo, whereupon, title shall pass to Shimpo upon acceptance of return goods.

INDEMNIFICATION & LIMITATION OF DAMAGES:

Buyer agrees to indemnify and hold Shimpo Instruments harmless from and against all claims and damages imposed upon or incurred arising, directly or indirectly, from Buyer's failure to perform or satisfy any of the terms described herein. In no event shall Shimpo be liable for injuries of any nature involving the product, including incidental or consequential damages to person or property, any economic loss or loss of use.

MERGER CLAUSE: Any statements made by the Seller's representative do not constitute warranties except to the extent that they also appear in writing in this contract. This writing constitutes the entire and final expression of the parties' agreement.

MANUFACTURED BY

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