

# OPERATING INSTRUCTIONS

## LEHMAN SLIP-O-MATIC SUSPENDED PUMPS

### (MODELS: T60, T100)

#### **IMPORTANT:**

Do not attempt to use your slip-o-matic casting machine without reading the operating instructions and fully understanding its operation. Check your machine for damage caused in shipment before attempting to use it. These models were not designed to mix slip or reclaim trimmings unless equipped with an optional mixer.

**DO NOT OVERFILL THE MACHINE! OVERFILLING WILL CAUSE SERIOUS DAMAGE TO THE BEARING DRIVE ASSEMBLY AND WILL VOID THE WARRANTY.**

#### **MAXIMUM SLIP CAPACITIES ARE AS FOLLOWS:**

**T60 & - T100 50 U.S. GALLONS** (keep the slip level below the overfill hole in the side of the tank)

**D35 - 35 U.S. GALLONS** (keep slip level maximum of 4 inches below the wood dowels)

**D75C - 75 U.S. GALLONS** (keep slip level maximum of 4 inches below the wood dowels)

**D125C - 125 U.S.GALLONS** (keep slip level maximum of 4 inches below wood dowels)

#### **WARNING:**

The motor on these machines is equipped with a grounded electrical cord. **Always** be sure the motor is fully grounded. If the receptacle (outlet) you are using is not grounded, it is recommended that you have a ground line installed. **An ungrounded cord can cause severe electrical shock!**

#### **ABOUT THE PUMP:**

The slip-o-matic centrifugal pump was designed to be a heavy-duty pump suitable for the small studio as well as the largest commercial pottery. It can run dry or submerged in the slip for long periods of time with or without the pouring nozzle open. As the pump is running, it is creating gentle agitation and conditioning the slip.

A totally enclosed bearing assembly that is lubricated and sealed at the factory drives this pump. There are no seals, bearings or pump packings exposed to the slip. This eliminates any maintenance by the user.

These pumps are belt driven by a v-belt, they should be checked occasionally for belt tension and condition. A loose belt can cause slippage and greatly reduce pumping capacity.

**Pumping capacity varies from six to eight gpm depending on model and slip viscosity.**

#### **PREPARING YOUR MACHINE FOR USE:**

Some models require some very simple assembly. If you need technical assistance with this assembly you may call our service department.

When assembly is complete, run the pump dry for a short period of time to insure free movement of all parts. Next, put enough slip in the tank to cover the lower pump parts and run some slip through the hose and nozzle and back into the tank to test the pump. This procedure will also get rid of any air that is trapped in the hose and allow you to get the feel of the nozzle before attempting to fill any molds. After you have determined that everything is working properly, fill the tank to the desired level.

### **FILLING/DRAINING MOLDS:**

Arrange your molds on the tabletop area. Small molds and large molds with small bases should be set on boards that will span two or more dowels. Hold the nozzle over the pour hole, turn the machine on and open the nozzle. Fill the mold slowly to keep the slip from splashing onto the interior walls of the mold. Filling the mold too fast can cause air bubbles in the greenware. The pouring nozzle will allow you to regulate the flow of slip from a small trickle up to a full stream.

When the molds are ready to drain, tip them over to drain right back into the tank. Leave the motor running when draining and the pump will gently agitate the slip and keep it in ideal casting condition.

### **LEAVING THE MACHINE AFTER POURING:**

When you are finished pouring for the day, refill the machine. This will keep the slip from drying on the sides of the tank. You can take a few ounces of water and gently pour on top of the slip to create a thin (1/8") moisture seal and cover the machine until you are ready to pour again.

### **CARE AND MAINTENANCE:**

The life of your pump/casting machine will be determined by the care you give it. It is in your best interest to **keep it clean!** The fiberglass tank and trough of your machine may be scraped with a plastic or wooden utensil. A rubber squeegee works great to keep the liquid slip pushed down in the tank. **Do not** use a metal scraper to clean the tank, as it will permanently scratch the fiberglass.

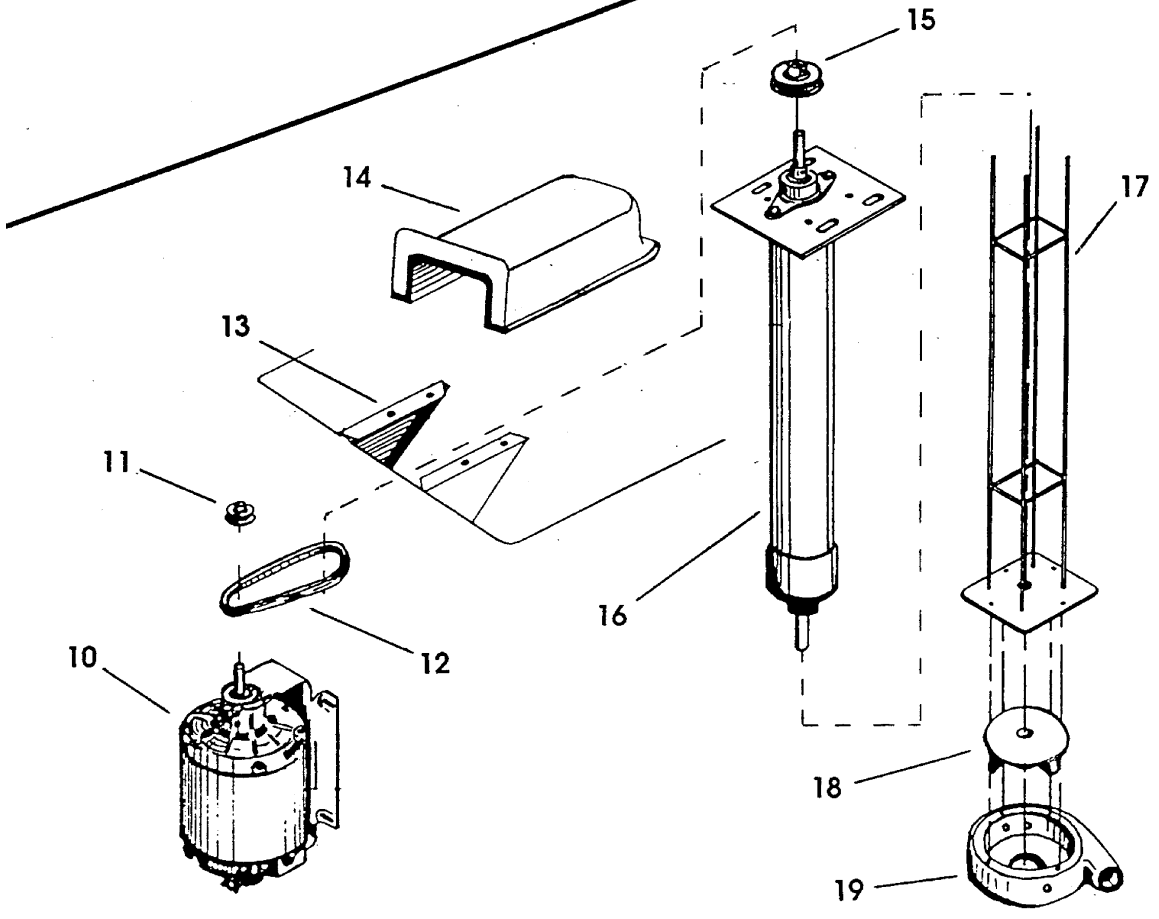
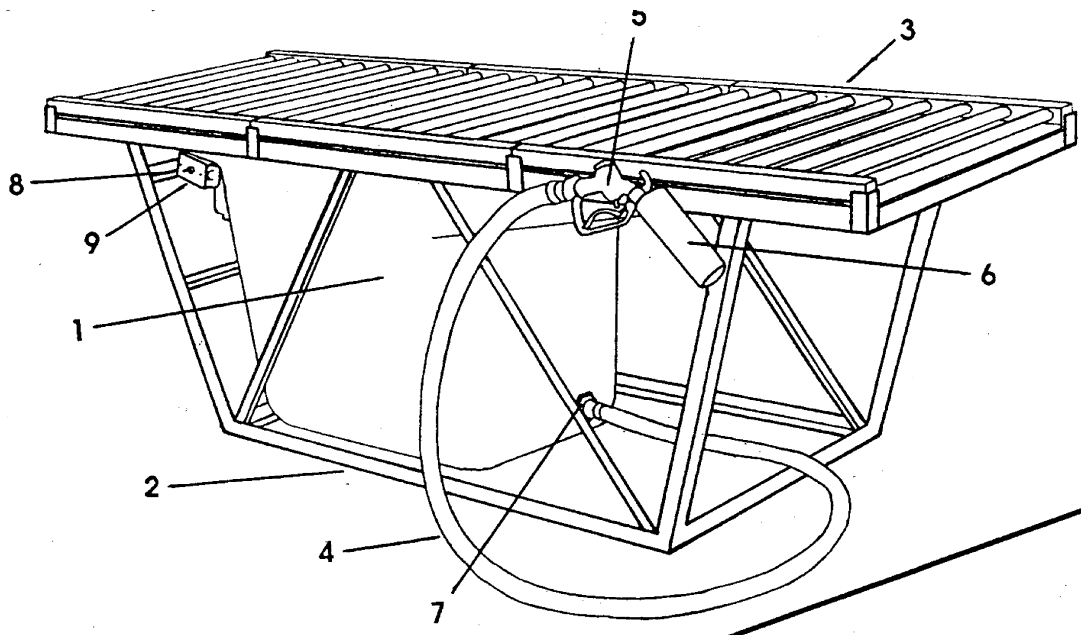
It is advisable to completely empty your machine from time to time. Fill the tank with water and turn it on. Pump the water through the hose and nozzle and right back into the tank. Wash the inside of the tank at the same time and then pump the water out. The machine can be left dry or with water in it indefinitely. When you are ready to pour again, fill the machine.

The pouring nozzle requires as much attention than any other part of the machine. The slip dust that is created in the casting room will dry up all of the lubrication on the plunger stem o-ring causing it to stick (usually in the open position). This is easily remedied by soaking the nozzle in a bucket of water overnight. When you take it out of the water, dry it off and hold the nozzle upside down (with the plunger stem pointing up). Put one drop of lightweight oil around the stem and depress the handle of the nozzle several times to allow the oil to get down to the o-ring inside. The nozzle can be disassembled occasionally for cleaning, just remember to oil the o-ring during reassembly.

**If you need technical assistance or need to order parts, you may contact our  
SERVICE DEPARTMENT at:**

**Lehman Mfg.  
304 N. Fairgrounds Rd.  
Kentland, IN 47951  
(219) 474-6011**

**Our hours are 8am to 5pm CST Monday thru Thursday.**  
**Please have your model and serial number ready when you call.**



## T60 & T100 Part Numbers

NO	PART DESCRIPTION	T60	T100
1	Fiberglass Tank	T6075	T1075
2	Steel Frame	T6076	T1076
3	Dowel Top Rack Complete	T186	T186
-	Dowel Side Rail Only (2 per Top Rack)	T339B	T339B
-	Dowel Rod Only (9 per Top Rack)	T1101	T1101
4	Pouring Hose	T330	T330
5	Pouring Nozzle	30002	30002
6	Nozzle Holster	T090	T090
7	Loose Tank Fitting	5034AN	5034AN
8	On-Off Switch	4X846	4X846
9	Switch Box Cover	SM104	SM104
10	Motor	TGF2054	TGF2054
11	Motor Pulley	3X900	3X900
12	V-Belt	4L290	4L290
13	Pump Mount Brackets (pr)	T750B	T750B
14	Belt Guard	T105B	T105B
15	Pump Pulley	3X903	3X903
16	Bearing Drive Assembly	T732	T732
17	Pump Tower	T648	T648
18	Pump Impeller	P540-5	P540-5
19	Pump Housing	T545B	T545B
-	Pump Complete (Parts #15 - #19 are assembled)	T1CPB	T1CPB

### PARTS NOT SHOWN

Motor to Switch Cord	T1127
Power Cord	1VEP4
Pump Outlet Tube	T460B

T1127
1VEP4
T460B

### NOTES: