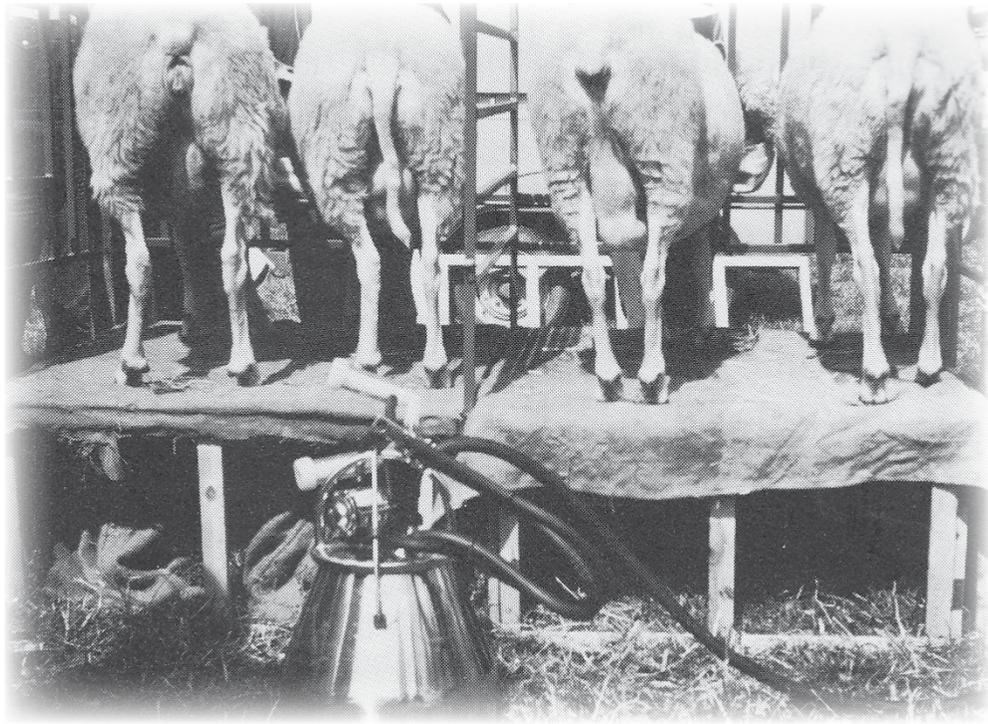


# Instruction Manual for **Portable Sheep Milker**



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## **HAMBY DAIRY SUPPLY**

**2402 SW Water St. Maysville, MO. 64469**

**1-800-306-8937 ● [www.hambydairysupply.com](http://www.hambydairysupply.com)**

# Instructions for assembly of Sheep Bucket Milker

## 1. Unpack all items

Do not throw away packing materials as you may find small items in packaging materials.

## 2. Vacuum pump

Add oil. 10w40 motoroil is recommended.

Remove rubber plug on oil reservoir on top of vacuum pump. Fill the container with oil.

Check oil weekly - small hose on side of oil reservoir has a sight glass.



**7100  
Electric  
Vacuum  
System**



**7400  
Gas Powered  
Vacuum  
System**



**41000  
NuPulse Vacuum  
Supply for 1 or  
2 bucket**



**7300  
LWVS Vacuum  
Supply for  
1 bucket**



Vacuum pumps run on 115 volts. They come on when plugged in. For everyday use in your barn, or for remote mounting of vacuum pump, we recommend installing a 15 amp switched plug on your barn wall. This will allow you to turn the pump on and off with a switch instead of unplugging.

Switched plug-ins are available at most hardware stores.

## 3. Assemble bucket.

Put lid on bucket and snap handle into place.

## Instructions for assembly of Bucket Milker (continued)

4. Connect long blue stripe hose from the stallcock (1/4 turn valve) on side of the white pvc to the black plastic hose port on the bucket lid



Stall cock



Hose port

5. **Plug unit in** to a 115 volt 15 amp circuit. Unit comes on immediately when plugged in.

6. **Adjust vacuum regulator.** Loosen lock nut on top, then turn the middle of the unit to adjust vacuum level until gauge reads 10.0 - Adjust while pump is running with the stall cock closed. This reading should be checked while milking the sheep and adjusted if necessary to maintain a milking vacuum of 10.0



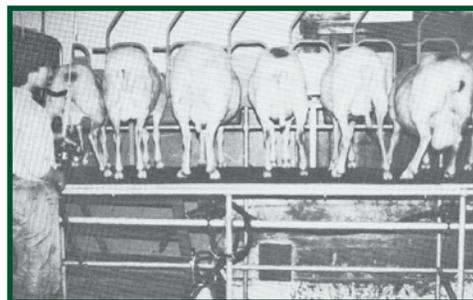
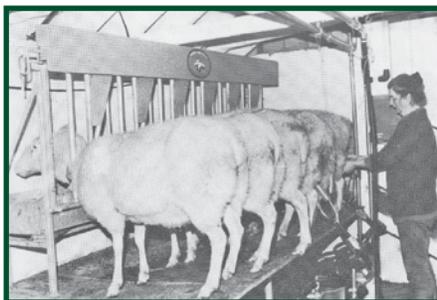
Gauge



Regulator

7. **Adjust pulsator speed.** 120 to 180 ppm Speed screw is on back of pulsator. Adjustment is with allen wrench (provided) DO NOT tighten screw all the way in. More details for pulsator provided on next page

8. **Wash your bucket milker** prior to using.



# Conde Vapor Oil Vacuum Pumps

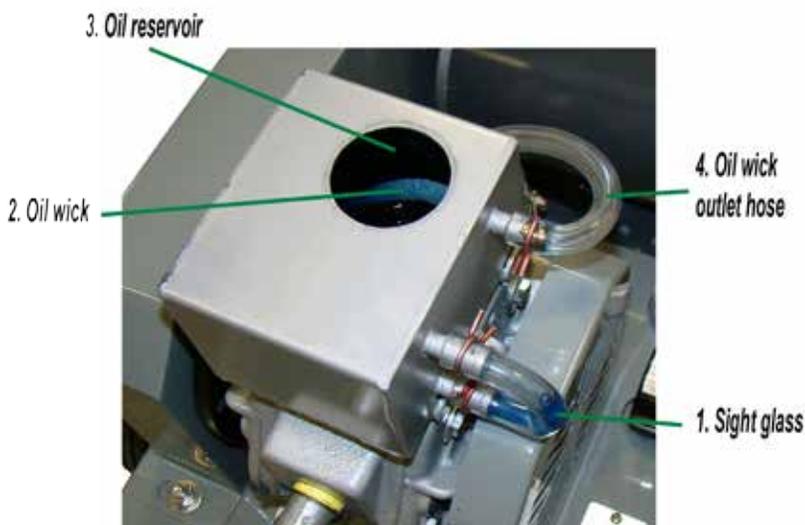
## - Start up & Maintenance

Use a high detergency 10w-40 motor oil for all Conde Vapor Oil Vacuum Pumps. Synthetic oil, like Mobil 1, is recommended by Conde. This includes the LWVS portable, HD portable, or Model 6 stationary pump sold by Hamby Dairy Supply.

When starting a new vapor oil pump, fill oil reservoir above the fittings in which the oil wicks are inserted. This will give the pump extra oil for the first two hours of operation. When refilling, fill to just below oil wick.



**Note!** By looking in sight glass, you'll know when you need oil, because it will be low. It's best if the oil level inside the sight glass should be 1/2 to 3/4 full.



*Adding oil to the oil reservoir.*

# Pulsator Instructions

## Rate Adjustment

The pulsator is adjustable. Using the Allen key supplied, turn the speed governor gently - **CLOCKWISE** to **DECREASE** speed, **ANTI-CLOCKWISE** to **INCREASE** speed - to obtain the rate you require. (See Fig.1)

Ensure that the main slide is clean before making any adjustment.

## Maintenance

- **DO NOT LUBRICATE THE MOVING PARTS**
- Clean the filter at least once per month by means of compressed air. Replace the filter every 6 months. Recommendations are approximate and must be adopted to the real necessities. (Fig.2)
- **EVERY 2 MONTHS** carefully clean the working parts and the pulsator body using tepid water and a mild detergent. Use a soft not-metallic brush to loosen any stubborn dirt. Rinse all parts in clean water and dry.
- Follow the instructions in the diagrams (Fig. 3-4-5-6) for dismantling and assembly procedures.
- Under very damp and dusty conditions the above maintenance should be carried out at least once a month.
- **WHENEVER MILK HAS BEEN SUCKED INTO THE PULSATOR** (eg from a split liner) the pulsator must be immediately washed good and dry.
- It is recommended that the pulsator rate and the milking ratio be checked by means of a pulsator tester at least once a year. This should be carried out by an authorized service center or by a milking machine service technician.
- Whenever a general overhaul of the pulsator is necessary, contact your local dealer.

**Note!**

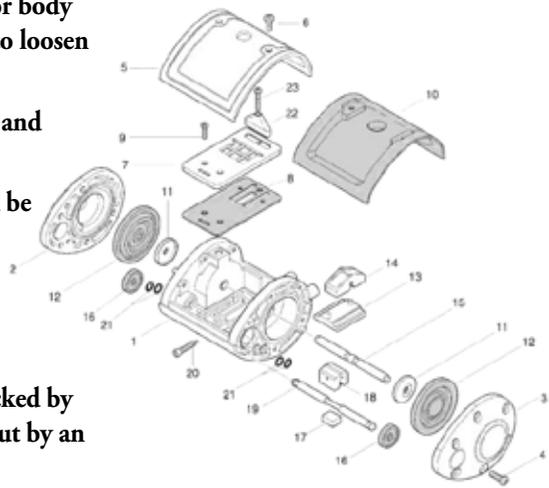


Fig. 1 - Rate adjustment



Fig. 3 - Dismantling main slide and small slide (phase 1)

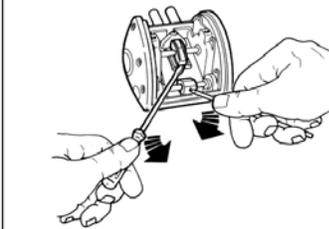


Fig. 5 - Main slide removal (A) and insertion (B)

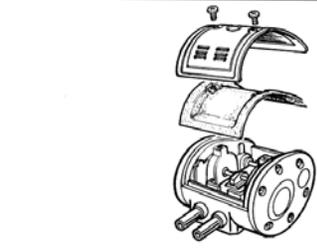
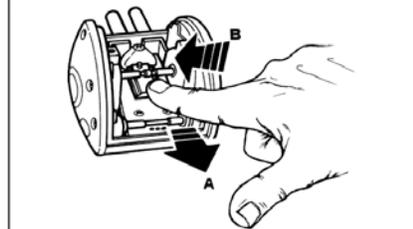


Fig. 2 - Filter cleaning

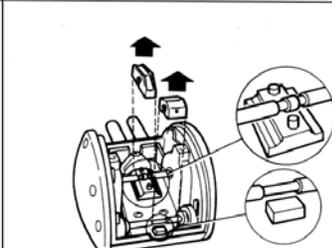


Fig. 4 - Dismantling main slide and small slide (phase 2)

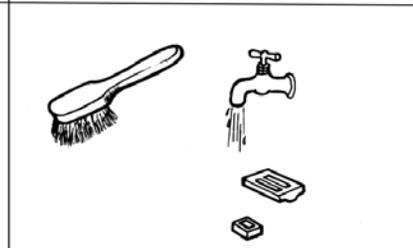


Fig. 6 - Cleaning

# Properly placing Lid Mount and Pulsator



The Lid Mount rubber gasket **MUST** sit flush with lid to create a good seal!



Notice in above photo, the rubber gasket of lid mount is seated **IMPROPERLY** against lid.



When sliding lid mount into pulsator, make sure **FLAT END** of the mount is on **FLAT SPACE** on bottom of the pulsator.



In the photo above, the lid mount is placed **PROPERLY** in pulsator (angled end goes on back with speed screw).



**CORRECT**



**INCORRECT**

# 4 steps to Cleaning Your Bucket

Your milking machine must be kept clean and sanitary in order to have healthy milk that will keep without spoiling. Cleaning should be done immediately after milking. Don't let the milking machine sit dirty as the milk residues may dry on and then they will be much harder to clean. Your new milking machine will come with a one month supply of cleaning chemicals (Pfanzite) and 3 brushes for cleaning.



pic. 1



pic. 2



pic. 3

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- Step 1: WARM RINSE with 2-3 gallon warm water. Draw the warm water (100 degrees) from a bucket through the inflations and hoses (vacuum pump on) into the bucket of your milker. Discard water.
- Step 2: HOT WASH with 2-3 gallon hot water (140 degree) and 1/4 cup of powder Pfanzite dairy detergent. Draw this wash solution through the inflations and hoses and into the bucket. Repeat this step at least 3 times with the hot wash solution.
- Step 3: WARM RINSE with 2 gallon warm water. Draw through milker. Hang all components so that they drip dry in a clean sanitary place. Store your pail upside down on an open shelf rack or use bucket hanger so that it may drip dry.
- Step 4: Remove lid, then remove lid gasket and brush lid with swiss pail brush (pic.2) DO NOT GET PULSATOR WET!

## ACID RINSING OPTION

Acid rinsing is very important for removing milkstone. Milkstone is made primarily of calcium residues from the milk and from hard water. Milkstone likes to stick to stainless steel and glass. Other milk residues, such as protein and fat like to stick to milkstone. This will result in a buildup that will leave your shiny stainless steel looking dull. That buildup can contaminate your milk effecting flavor and quality. It also provides a good medium for bad bacteria to grow on.

If your milking machine gets a dull look, then prepare a solution of 1 gallon hot (140 degree) water along with 1 ounce of Citrophos. Draw that through the milker 4 or 5 times, then brush wash the outside with this solution.

- Step 5: COLD SANITIZE with a chlorine solution 15 minutes prior to milking.



## Washing Accessories & Supplies

Pfanzite powder detergent	25lbs.	7751-0041-033
Duophan	45 lbs. pail	7751-0041-074
Citrophos acid detergent	4 gallon	7751-0240-184
Long handle brush	(pic 1. above)	C-363FO
Swiss pail brush	(pic 2. above)	C-456FO
Inflation brush	(pic 3. above)	1150-003
Hose brush kit		1150-120K
Auto Bucket washer		56200
Small stainless steel sink		56195
Large 29 gallon SS sink	(38 inches x 20 inches)	1070-604
Wall mout or legs for large sink		1053SSWB
Mixing faucet - wall mount		1071-571

# Instructions for Machine Milking Sheep

Sheep like consistency. Milk at the same time each day.  
Follow the same routine each milking.

1. Wash your hands. Dirty hands spread disease.
2. Wear Nitrile Milking Gloves to reduce the spread of mastitis causing germs from your hands. The small cracks and crevices in human hands harbor a lot of bacteria including contagious Staph Aureus.
3. Sanitize your milking machine with a chlorinated sanitizing solution just before you milk.
4. Entrance. Bring the Sheep into a calm, stress free milking environment. Stress, such as loud noise, inhibits milk let down.
5. Warm hands first and then fore strip. Hand milk 1 or 2 squirts from each teat onto the black screen of a strip cup. Look for clots, clumps, blood, or signs of abnormal milk. Fore stripping promotes milk letdown & faster milkout.
6. Teat Prep & Sanitation. The purpose of this step is to reduce the amount of bacteria on teat skin and promote milk let down.
  - Teat Wipes: Wipe and massage each teat for 15 seconds. Use one wipe per sheep or one per teat if they are visibly dirty. Teats will dry in a few seconds due to the alcohol in the wipes.
  - Pre Dipping: Predip with Teat Kote 10/111. Wait 30 seconds, then dry off with a paper or cloth towel. Use one clean towel per cow. Do not reuse the towel as this may spread diseases from one sheep to the next.
7. The goal is to milk clean, dry teats. Wet udders are a good conduit for bad bacteria and mastitis (udder infection). Wet udders may drip down to the top of the liner, and if the liner slips it will suck in the dirty water. Limit water use on the udder.
8. Apply the milker within one minute of the beginning of teat preparation. This maximizes the animals natural milk letdown (oxytocin), speeds up milk flow, and reduces the machine on time. Let the vacuum pull the milker onto the teat.

DO NOT force the teat into the liner. It only needs to go in about 1/2 inch.



# Instructions for Machine Milking Sheep *continued*

9. Adjust milking unit so it hangs square with out twisting the teats. A little forward tension will provide faster milkout.
10. The sheep is finished milking when the large volume of milk flow drops off to a trickle. Milk out time should be 5 to 10 minutes on most goats. Pinch off the rubber milk tubes on the bottom of the inflations, then gently pull the inflation down off the teats.
11. Animals that were hard to milk by hand will take longer to milk with a machine. Most healthy udders will shrink significantly when milked out...Except for the first few days when the udder has a lot of swelling (edema). Usually the swelling leaves within a few days and then the udder should shrink when milked out. Dynamint udder cream will help reduce swelling if used in the first few days after lambing.



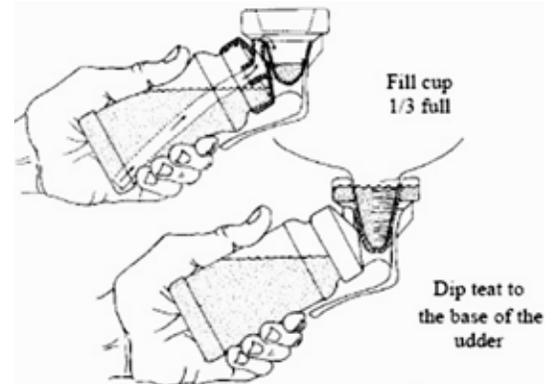
12. Should you post strip? No! Research has shown that post stripping may cause more harm than benefit. It may train the sheep to hold back some milk and your hands will contaminate the teat end at a vulnerable time when the Keratin teat end seal is open. If the sheep is not milking out properly, then you may need to adjust the way the milker is hanging, adjust the pulsator, or vacuum level, or have your milking machine checked for proper operation.

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13. Post dip IMMEDIATELY for Teat disinfection. Post dipping sanitizes the teat skin including the opening at the bottom of the teat. Post dipping has been proven to dramatically reduce cases of udder infections. Post Dip with AstroTek. Teat Kote 10/111, or DermaSept protocol tested teat dips. Use the Hamby Dairy Supply dip cup provided with your milking machine. This non-return style dip cup provides a fresh dose of teat dip for each teat. For temperatures below 25 degrees, DermaSept is recommended because it will not freeze.



14. It is important to keep the sheep standing for a while after milking. This will give some time for the wax-like seal of the teat orifice to seal back up. A good solution is to have a rack of fresh hay and fresh water available right after they exit the milking parlor.



# Instructions for Machine Milking Sheep continued

## Milking Sheep with the ITP205 Milker

The Interpuls 205 Claw is especially designed for rapid and efficient milking sheep. Features individual claw piece with a completely automatic shut-off valve controlled by vacuum.

Instructions for use: When ready to milk, complete your normal equipment set-up making sure the lever on the ITP205 is in the UP position. Prep the teats as shown on previous page, then gently place the teat in the liner (figure 2). When the teat enters the liner, the shut-off valve opens automatically turning on the milking unit.

To stop milking, remove the teat from the inflation by gently pressing on the inflation's opening near the teat to release vacuum (figure 3). The rapid inlet of air creates a pressure difference across the valve which sucks the valve against its seat, creating immediate shut-off. On units with individual green shutoffs, turn off this valve prior to removing from teats.

During washing, position the lever down (figure 4) to keep the valve open. This will prevent closing due to the turbulence of the water. Remember: Lever is UP for milking. DOWN for washing.

### ITP205 Advantages

The ITP205 allows you to milk quickly and efficiently.

It reduces vacuum fluctuations during cluster application and removal.

With proper splitters and tubes, it is easily fitted to any make of milking equipment (figure 1). The ITP205 uses industry standard 5/8 milk hose. It works equally well for bucket milking and pipeline milking systems.

The valve closes automatically if the cluster is accidentally removed or kicked off.

Damaged or diseased teats can be isolated from milking.

Comes apart easily for inspections or cleaning.



Figure 1

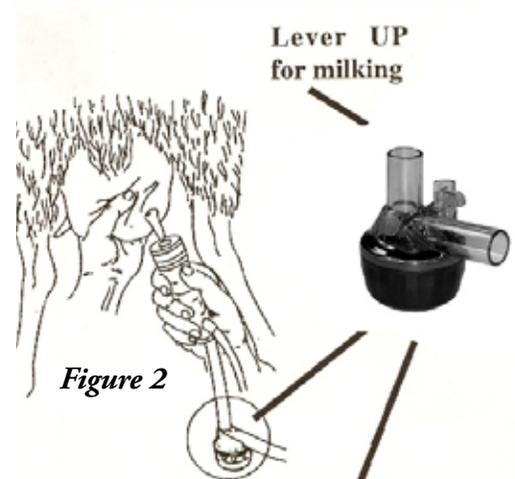


Figure 2

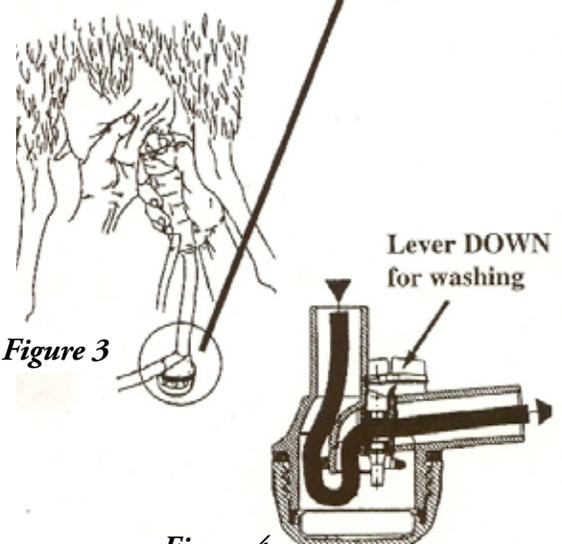


Figure 3

Figure 4

# Replacement Parts for Sheep Milkers

## ■ Inflations, Liners & Claws

Small silicone fits clear shell for Nigerians, & sheep (1 year life) .....	4801 .....	set of 2
Small clear sheep shell for mini inflations .....	4807 .....	each
ITP 205 claw for 1/2" tubing .....	ITP2059001.....	set of 2
Replacement for Quickie claw .....	4336.....	set of 2

## ■ Milk, Vacuum & Pulsation tubing (replace at least once per year)

5/8" Silicone Milk Hose opaque .....	1090-096FT.....	per foot
1/2" Milk Hose clear with blue stripe .....	1090-002VFT.....	per foot
Single pulsation hose.....	4716.....	per foot
Clear Vacuum Hose - thick wall blue stripe .....	4328.....	per foot
Clear Milk Y 5/8 x 1/2 x 1/2.....	ITP2020009 .....	each
Pulsation Y for 1/4 tubing.....	7140 .....	each
Bracket to hold hoses and Y's.....	ITP2040010 .....	each
Shut off for 3/8 milk hose (green plastic) .....	4339 .....	each
Shut off for 1/2 milk hose (green plastic) .....	4750.....	each
Shut off for 5/8 milk hose (white plastic).....	21910.....	each
Shut off for 5/8 milk hose (stainless steel) .....	21918.....	each



*Shut off for 1/2 milk hose (green plastic)*

## ■ Lid Gaskets

Gasket for our stainless steel lid, DeLaval, Caprine Supply and others.....	1053
Gasket for buckets-generic .....	1041
Gasket for NuPulse buckets - OEM thicker USA quality .....	1053
Thick lid gasket.....	1065



*ITP Lid Mount*

## ■ Pulsators and adaptors

Interpuls long life pulsator with filter 50/50 .....	1081-161
ITP repair kit for LL90 pulsator 50/50.....	1081-151
ITP mount for our bucket lid .....	1081-173
ITP permanent mount.....	161406



*Better vacuum gauge for portables (glycerin filled)*

## ■ Vacuum gauges and regulators

Small vacuum gauge for portables 2 inch dia. ....	7124
Better vacuum gauge for portables (glycerin filled). ....	7126
Generic vacuum gauge 3.5 inch dia. ....	7135
Brass vacuum regulator...all portables up to 1.5 HP 3/4 NPT .....	7121
Foam filter for our vacuum regulator. ....	7122



*Vacuum Regulator shown without filter*