



Mobile Milker

Upon receiving the unit check if there is any visible damage to pump, motor etc... If there is any damage do not attempt to run the unit! Call 800-245-8222 for assistance.

Preparing to run. All milkers are ran and tested before shipping to you and are set at 14" of vacuum. The following checks should be made before operating the system for the first time and as a monthly system check.

Filling the oil reservoir to "HALF FULL"

All pumps are of the oiled type, to ensure long life and trouble free operation the oil tank (#2. in picture) should be filled to HALF FULL with motor oil (10w30 or 10w40 are both acceptable). For normal operation the tank should not be filled past half full. When the oil reservoir is empty refill to half full.

This unit is designed to use very little oil so if you use your pump for 1 hour per day you can expect to use about a quart of oil in 6 months. The pump has an oil catching muffler (#1. in picture) it is necessary to occasionally drain the muffler to empty out the old oil.

To drain the muffler: place a suitable container under the muffler and turn the pet-cock on the bottom of the muffler, once the oil has drained close the petcock. It is a good habit to drain the muffler when you refill the oil reservoir so you don't forget.

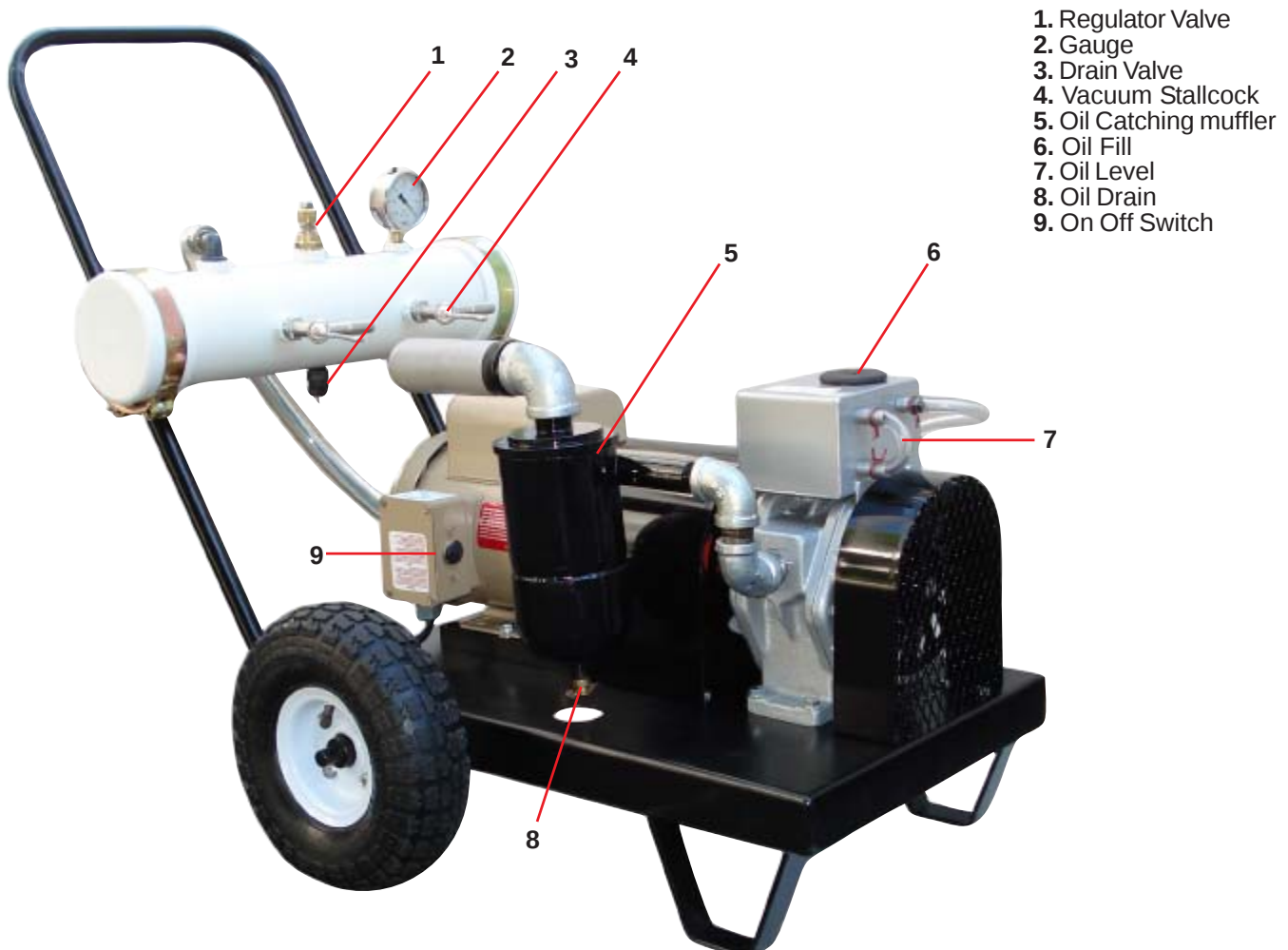
Tip: the petcock is open when you screw it up into the muffler, it is closed when you screw it down towards the ground. If you can feel air coming out when the pump is running the petcock is open.

To Adjust Vacuum Level

A vacuum level of 14" Hg is set at the factory but should be checked or adjusted before milking for the first time and as a monthly system check. The vacuum level at the gauge(2) should be kept between 14 and 15" Hg for Cows and between 11 and 12 inches for Goats. To adjust vacuum level, close both stallcocks(4) on the balance tank. Loosen the 1/2" locknut on top of the brass regulator(1), to increase vacuum level turn brass collar on the regulator clockwise, to decrease vacuum level turn the collar counterclockwise once the desired vacuum level is reached on the gauge tighten the 1/2" locknut regulator. The vacuum level is now set.

The bottom of the balance tank has a drain valve, this is to allow moisture and water to drain out of the tank after the unit is shut down, The operation of this drain valve is totally automatic and needs no attention.

The system is a direct drive system which has no belts or pulleys to adjust.





Mobile Milker W/Tank

Upon receiving the unit check if there is any visible damage to pump, motor etc... If there is any damage do not attempt to run the unit! Call 800-245-8222 for assistance.

Assembly: All milkers are ran and tested before shipping to you, for ease of shipping the unit is shipped in 2 separate boxes. Assemble the pump and tank using the 4 bolts provided, place the pump on the tank so the inlet and outlet ports on the pump are above the clear plastic end of the tank. Remember to bolt the handle in place at the same time as you bolt the pump and tank together. Thread the muffler and the regulator assembly into the pump and attach the hose from the pump to the tank.

Great, your ready to go!

Setting the pressure: The vacuum should be set at 14" for cows and 12" for goats and sheep. To adjust the setting, close the lever stallcock on the tank to stop air from getting into the pump. Now loosen the locknut on the brass regulator and adjust the pressure by turning the brass nut on the regulator by hand, once the desired pressure is set simply snug up the locknut.

Lubrication: This is a "DRY" pump and requires no lubrication of any kind ever.

Connecting a milker: The tank is equipped with a lever stallcock, connect the 1/2" hose from your milking pail to this stallcock to put your bucket under vacuum.

Maintenance

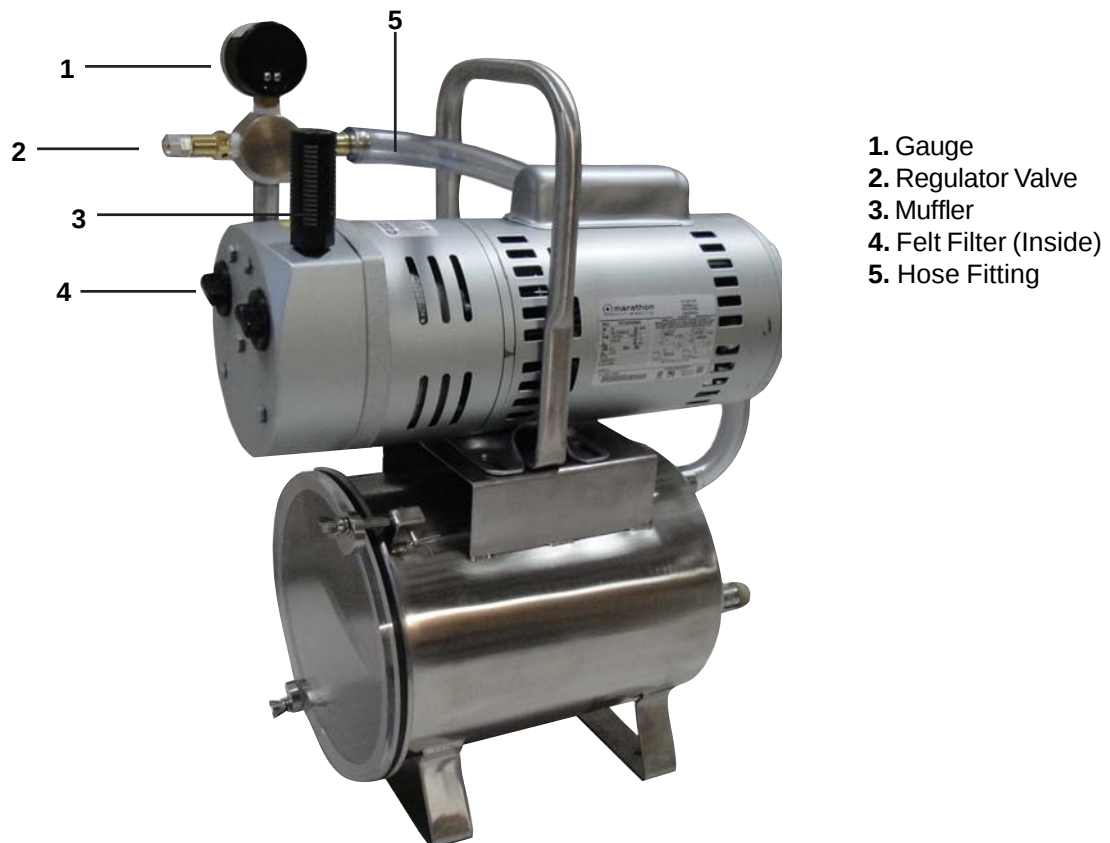
The Gast pump is a robust pump which only requires light maintenance, if the following procedures are followed you can expect to get many years of trouble free service from your pump.

Drying the pump: After milking run the pump for a few minutes without the pail attached and the stallcock open. This will allow dry air to flow through the pump and help reduce moisture from being trapped in the pump.

Flushing the pump: In the event you overflow a milk pail and get milk into the pump or you need to clear the pump of foreign particles such as excessive dust from bedding or feed, flushing should clear the pump and remove any debris in the pump. To flush the pump remove the felt filters from the filter holders (Fig. 4) for both the intake and output then replace the filter holders back into the pump. Remove the muffler and the clear hose from the gauge assembly. **At this point take the pump outside as there will be some mess associated with the cleaning process to follow.** Place a rag over the exhaust hole in the pump. With the pump running spray a flushing solvent into the barb fitting you previously removed the clear hose from (Fig. 5) While continuing to hold the rag over the exhaust hole continue to spray the flushing solvent into the pump until it comes out clean on the rag.

CAUTION: Wear eye protection and only flush the pump outside. Never use combustible solvent such as kerosine or fuel.

Filters: Keep filters clean and replace if necessary, If clogged they can be cleaned with flushing solvent and left to dry.





OPERATING A BUCKET MILKER (COWS)

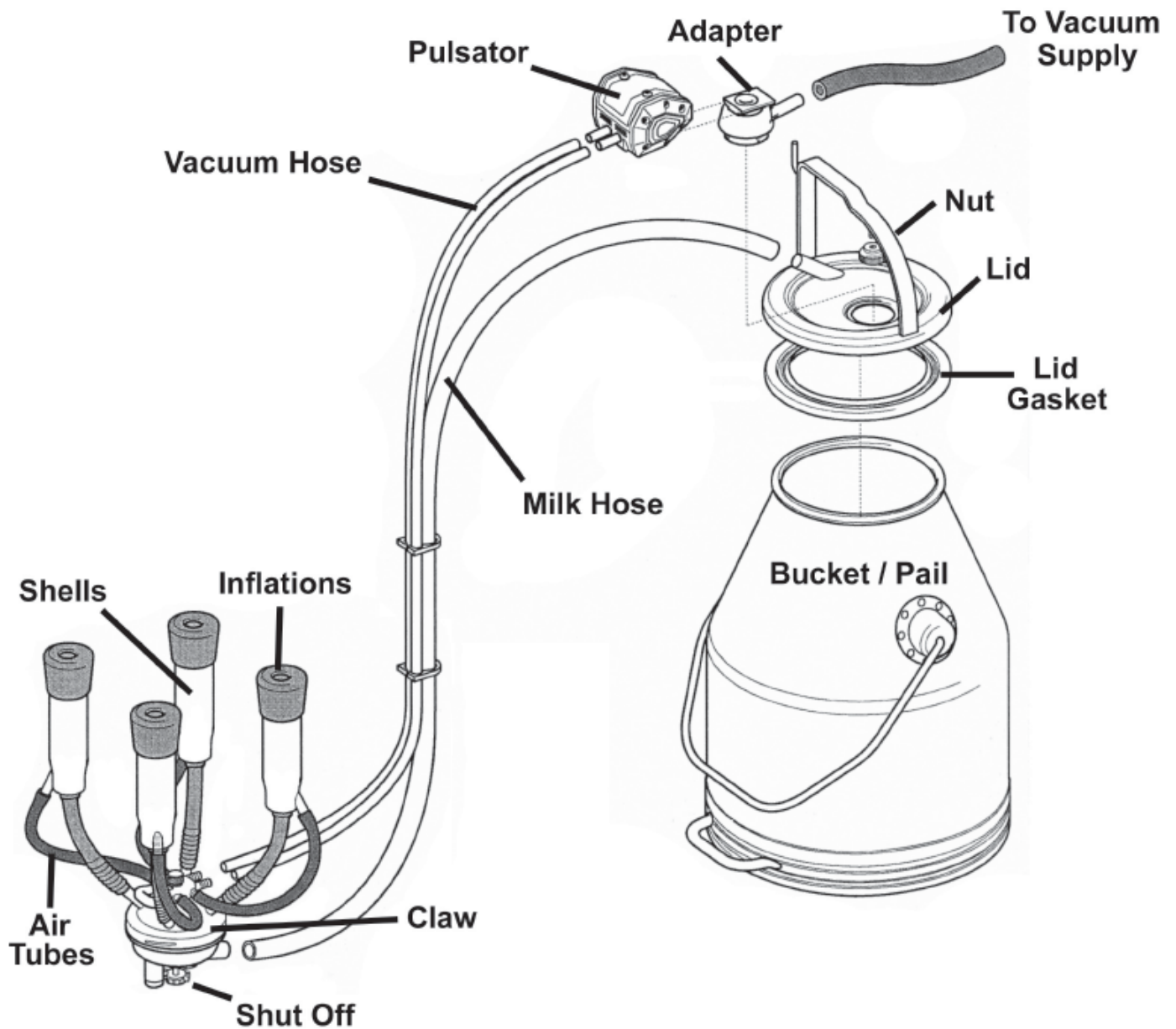
The following guidelines will assist the first time user in properly operating a pail type milker system.

Operating a pail milker requires minimal training and minimal equipment knowledge, *but does require proper equipment maintenance and the development of a special technique in applying the milking claw as opposed to hand milking or using suspended buckets.*

1. Using the 1/2" vacuum hose supplied, connect the adapter on the bucket lid to the vacuum system.
2. The vacuum supplied to the adapter on the lid supplies vacuum to both the bucket and the pulsator.
3. To always insure that a positive seal is maintained, the adapter gasket and lid gasket should always be kept clean and free of milk build up.
4. Vacuum levels to operate the bucket milker can be between 13" to 15" of mercury. The recommended level is 14"Hg for Cows. Buckets require a large volume of vacuum to completely satisfy their requirements, if vacuum levels are too low it will be harder to apply the milking unit. If too high health problems can occur.
5. When applying the milker unit (claw) the shut off on the claw must be opened to allow vacuum to be supplied to the unit, make sure the vacuum pump is running and you can hear air being drawn into the opening of the inflations. While holding the claw in your left hand, fold the shells and inflations down towards the ground so that the inflation "kinks" and cuts the vacuum off to the inflation. Once all 4 of the inflations are "kinked" and no air is able to enter the inflations through the inflation openings the pulsator will start pulsating this will indicate you are now ready to apply the milker unit. Begin placing the inflations on the animal one at a time while supporting the claw and applying slight upward pressure on the inflations already placed on the animal to help maintain their position until all 4 inflations are attached.
6. Cleaning of the bucket can be done both manually and CIP (Cleaned In Place). The claw can be CIP by submerging in a sink/bucket and drawing the rinse solution through the unit. This will also clean the milk hose from the claw to the bucket. The cleaning procedure of the bucket can be accomplished by using the existing solutions drawn through the claw and milk line and manually scrubbing the inside with a brush.
7. After the cleaning procedure is accomplished, the claw should be positioned so that it will drain any residual cleaning solution and the bucket should be turned upside down to ensure complete draining.
8. Inflations should be changed regularly (for rubber inflations every 1200 milkings or sooner if damage is apparent).
9. Milk tubing and pulsation line should be replaced every year to promote sanitary conditions and maintain flexibility.
10. The pulsator should be periodically cleaned. For BRK, or Interpuls pulsators this is done by submerging the pulsator in water and cleaning with a soft toothbrush style brush, Use warm soapy water (mild dish soap is fine). To dry the pulsator, place it on the bucket on let it operate on the bucket for several minuets until dry. Do not attempt to dry when freezing conditions exist. **And remember BRK, and Interpuls pulsators should Never be oiled or lubricated.**
11. Pulsators should be rebuilt every 1500 hours of operation. All the parts that should be replaced are available in a kit from Parts Dept. This rebuild can be performed by the dairyman requires no special skills.

Please note: Cow side practices and pre and post care of the animal is left solely up to the dairyman. Parts Dept. recognizes the practices published by the National Mastitis Council, Milking Machine Manufacturers Council, and established 3A guidelines. Parts Dept. makes no claim as to the right and wrong way of using this type of milking system. Parts Dept. only describes the function of how the piece of equipment was designed to work and has been proven to work in practical field applications. Parts Dept. will not be held accountable for any claims or damages due to the incorrect use of equipment.

Typical Cow Bucket





OPERATING A BUCKET MILKER (Goats)

The following guidelines will assist the first time user in properly operating a pail type milker system.

Operating a pail milker requires minimal training and minimal equipment knowledge, but does require proper equipment maintenance and the development of a special technique in applying the milking cluster as opposed to hand milking.

1. Using the 1/2" vacuum hose supplied, connect the adapter on the bucket lid to the vacuum system.
2. The vacuum supplied to the adapter on the lid supplies vacuum to both the bucket and the pulsator.
3. To always insure that a positive seal is maintained, the adapter gasket and lid gasket should always be kept clean and free of milk build up.
4. Vacuum levels to operate the bucket milker can be between 11" to 13" of mercury. The recommended level is 12"Hg for goats. Buckets require a large volume of vacuum to completely satisfy their requirements, if vacuum levels are too low it will be harder to apply the milking unit. If too high health problems can occur.
5. Standard clusters have auto valves it is necessary for the novice machine milker to understand the key points of auto valves before using them. Auto valves are exactly what they sound like they are automatic shut off valves that are designed to shut off vacuum flow to an open inflation when there is no teat present. This allows you to have either one inflation on the goat milking or two inflations on the goat milking. They do this by the air rushing in the open inflation and forcing the metal disk in the body of the valve up against the hole inside the body of the valve this shuts off the air flow. Once a teat is inserted into the inflation the disk drops out of the way of the hole and the vacuum is applied again to the teat and milking commences. To apply an inflation simply put the inflation on the teat and the auto valve will open and start milking. The correct method to remove an inflation once milked out is to slip your little finger in-between the teat and the inflation, this allows air to rush into the inflation and the auto valve shuts off. There is a side lever on the auto valves and a great deal of confusion surrounds this lever so please read this section carefully. **THE LEVER IS NOT AN ON / OFF SWITCH** it is there to force the valve to stay open during your wash cycle. For correct operation it is imperative the levers on all valves in the system are in the up position during the entire milking process they also must be in the down position for the washing solution to be able to flow up the inflations during the wash cycle. So to recap **ALL LEVERS UP FOR MILKING / ALL LEVERS DOWN FOR WASHING.** Other important notes for auto valves. They do not stop the pulsation so when the valves are closed you will still see the inflation pulse slightly also they are vented to keep milk flow moving and away from the teat end. This means you will hear them venting even when they are closed (this is not an uncontrolled leak and it is supposed to happen).
6. Cleaning of the bucket can be done both manually and CIP (Cleaned In Place). The cluster can be CIP by submerging in a sink/bucket and drawing the rinse solution through the unit. This will also clean the milk hose from the claw to the bucket. The cleaning procedure of the bucket can be accomplished by using the existing solutions drawn through the claw and milk line and manually scrubbing the inside with a brush.
7. After the cleaning procedure is accomplished, the cluster should be positioned so that it will drain any residual cleaning solution and the bucket should be turned upside down to ensure complete draining.
8. Inflations should be changed regularly (for silicone inflations every 2500 milkings or sooner if damage is apparent).

OPERATING A BUCKET MILKER (Goats)

9. Milk tubing and pulsation line should be replaced every year to promote sanitary conditions and maintain flexibility.

10. The pulsator should be periodically cleaned. For BRK, or Interpuls pulsators this is done by submerging the pulsator in water and cleaning with a soft toothbrush style brush, Use warm soapy water (mild dish soap is fine). To dry the pulsator, place it on the bucket on let it operate on the bucket for several minuets until dry. Do not attempt to dry when freezing conditions exist. **And remember BRK, and Interpuls pulsators should Never be oiled or lubricated.**

11. Pulsators should be rebuilt every 1500 hours of operation. All the parts that should be replaced are available in a kit from Parts Dept. This rebuild can be performed by the dairyman requires no special skills.

Please note: Goat side practices and pre and post care of the animal is left solely up to the dairyman. Parts Dept. recognizes the practices published by the National Mastitis Council, Milking Machine Manufactures Council, and established 3A guidelines. Parts Dept. makes no claim as to the right and wrong way of using this type of milking system. Parts Dept. only describes the function of how the piece of equipment was designed to work and has been proven to work in practical field applications. Parts Dept. will not be held accountable for any claims or damages due to the incorrect use of equipment.

Typical Goat Bucket

