

# MILKING SYSTEMS MANUAL

**HOEGGER HOME FARM PRODUCTS**

TRAINING SERIES



## HOEGGER HOME FARM PRODUCTS

# MILKING SYSTEM MANUAL

Care and Maintenance

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Thank you for purchasing the Hoegger Milking System, a compact and efficient system built specifically for goats. Over 76 years of goat handling and dairying have gone into the design of this machine, and we know you will get many years of service from it. This manual was designed to help you get the most out of this machine, and to teach you to maintain the unit, as well as diagnose any problems that might develop over time and use.

The Hoegger Milking Systems are extremely durable, and with proper maintenance will deliver a lifetime of service. We have many customers who have used their systems for over 25 years with only routine maintenance and common sense care.

We will be happy to help you with any questions about set-up and care of the Hoegger Milking System. Contact us at:

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## Milking Machine Overview

The Hoegger Milking System is unique to the industry. While virtually all other systems are cow machines converted for use on goats, the Hoegger System is designed from the ground up, specifically for goats.

## The Pulsator

Our system uses an electronic pulsator built into the machine itself. This substantially reduces the amount of residual moisture in the pulsator and helps to make it the easiest to maintain on the market today.

## Vacuum Source

We exclusively use Gast brand rotary vane vacuum pumps because of their renowned ease of maintenance, reliability and longevity.

## Technical Data

### Specifications:

Length: 14"

Width: 13"

Height: 18"

Weight: 45 lbs

Voltage: 110V or 220V as specified

4.8/2.4 amps respectively

Pump: ¼ hp Gast brand rotary vane (oil-less)

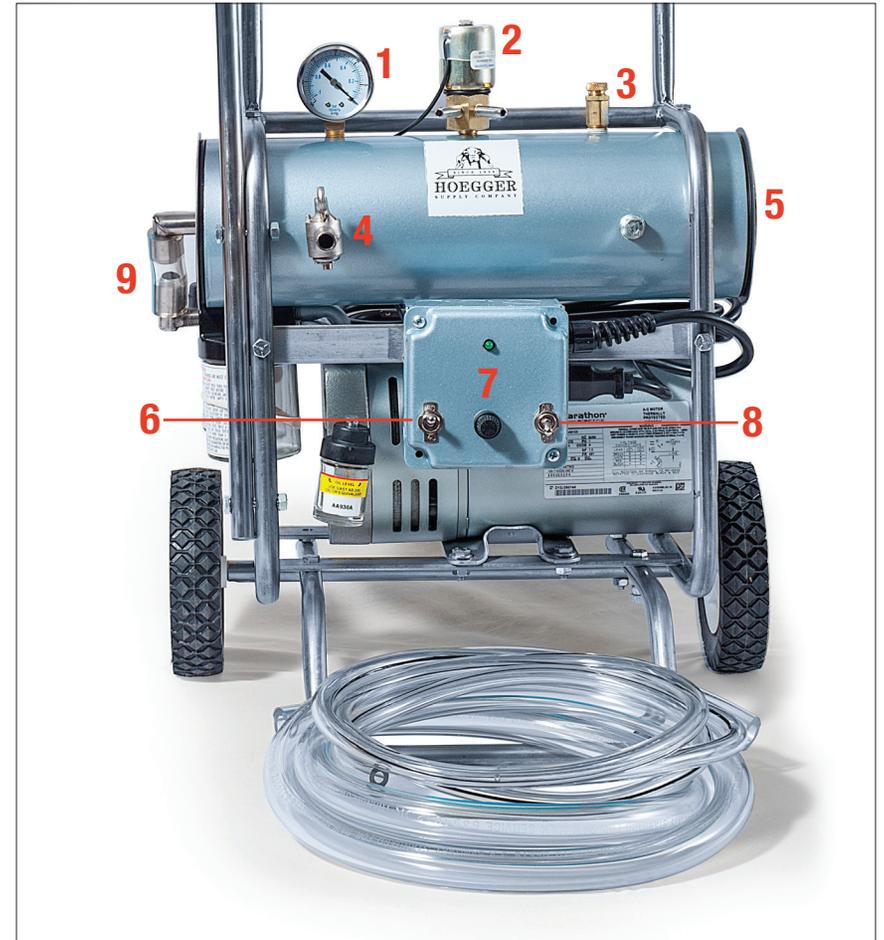
25" vacuum max

Sound level: less than <65 dB

Pulsator: Electronic D.C. 24V solenoid type

60ppm or 40ppm Selector (pulsations per minute)

1 AMP Fuse protection to the pulsator circuit



## Parts Identification

1. Vacuum Gauge

2. Pulsator assembly

3. Vacuum Regulator

4. Stall Cock

5. Vacuum Reserve Tank

6. 60/40 Switch

7. Fuse Block

8. ON/OFF Switch

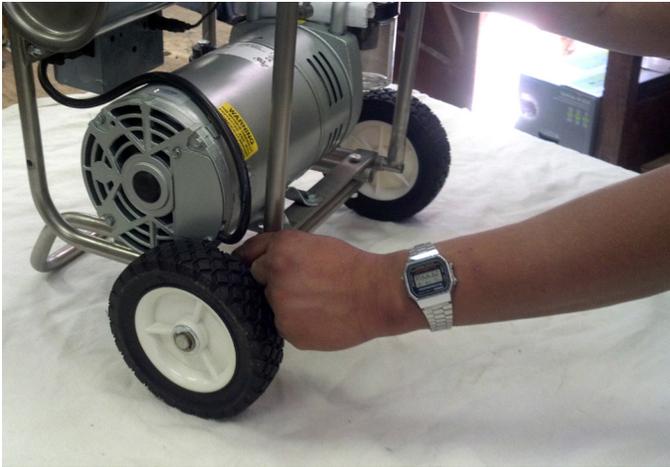
9. Connector Hose

### \*\*\*ATTENTION\*\*\*

If milk gets in the vacuum reserve tank, turn off machine immediately and follow cleaning instruction on page 8.

## Machine Assembly

1. Remove machine from packing board



2. Attache "FOOT" (Attache front bolts [1<sup>1/4</sup>"] through motor strap and foot first, then rear bolts [1<sup>3/4</sup>"] through motor strap, foot, and axel assembly)

3. Remove handle from bottom of machine frame and place in top holes of machine frame.

4. Attach hanger to side of frame using [1<sup>1/2</sup>"] Bolts

## Belly Pail Instructions

As a courtesy to our customers, we deliver the belly pail assembly fully assembled, so that you may have a visual reference for how it works. What follows are instructions for milking and cleaning.

1. Select the desired pulsation rate with the right switch. Your options are 40 and 60 pulsations per minute. Normal pulsation rate is 60, 40 is intended for a doe having difficulty letting down her milk.
2. Turn on machine and allow vacuum to build.
3. Open vacuum to the pail by turning handle parallel to stall cock.
4. Place belly pail under doe.
5. Hold one inflation at a downward angle to close off the vacuum to that inflation. Keep pressure on the tail of the inflation while raising the hole end.
6. Attach inflations to each teat.
7. Milking time should be between 60 and 90 seconds per goat.
8. Use Fight Bac™ or another sanitizing spray or wipe each doe so as not to spread any potential contaminants or infections.
9. After milking with the belly pail, rinse the entire pail and lid with cool water.
10. Detach the ends of the two pulsation lines from the splitter on the lid of the pail.
11. Connect the open ends of the pulsation lines to the solid stainless steel plug.
12. Put entire pail and lid disassembled into your dishwasher and run normally. Do not use hot drying option, as this will ruin your shells and inflations.
13. If you choose to wash and sanitize the pail(s) by hand, use the Dairy Soap and Sanitizer included in your original shipment.

## 35 LB Goat Pail Instructions

Your milk and vacuum line setup was delivered completely assembled for your convenience. You may choose to disassemble this setup after use for cleaning purposes, but note the sequence of assembly so you can duplicate it after cleaning.

!!!IMPORTANT!!! Before first use, wash thoroughly all surfaces that milk will come in contact with.

1. Spray a mist of sanitizing solution on pail interior and lid.
2. With stall cock in the off position (handle parallel to tank) turn on machine.
3. Close vacuum at claw (small stainless lever to be in top position).
4. Open stall cock to allow vacuum into pail.
5. Hold inflations hole down, in a pail of "hot" water and sanitizing solution. Open valve on claw to allow sanitizing solution into inflations, milk hose and pail.
6. Close valve on claw and empty sanitizing solution from pail. Do not rinse! Rinse water can carry bacteria that will contaminate sterile surfaces.
8. Wash utter thoroughly.
9. Express several sprays of milk into a strip cup to check for mastitis and to relax the orifice in the teat.
10. Locate teat into inflation.
11. Open vacuum at claw to attach teat. (stainless lever to be in the down position)
12. Repeat for remaining teats.
13. When milk flow stops, close lever on claw and remove inflation.
14. Express any remaining milk from teat
15. Use a post milking treatment (FightBac, etc) to close orifice in teat and prevent infection

## 35 LB Cow Pail Instructions

!!!IMPORTANT!!! Before first use, wash thoroughly all surfaces that milk will come in contact with.

1. Spray a mist of sanitizing solution on pail interior and lid.
2. With stall cock in the off position (handle parallel to tank) turn on machine.
3. Pull the black shut off valve and lock in down position on bottom of claw.
4. Open stall cock to allow vacuum into pail.
5. Hold inflations hole down, in a pail of "hot" water and sanitizing solution. Open valve on claw to allow sanitizing solution into inflations, milk hose and pail
6. Close valve on claw and empty sanitizing solution from pail. Do not rinse! Rinse water can carry bacteria that will contaminate sterile surfaces.
8. Wash utter thoroughly.
9. Express several sprays of milk into a strip cup to check for mastitis and to relax the orifice in the teat
10. Hold claw, clear bowl down, inflations up, under utter.
11. Open vacuum at claw and lock
12. Grasp one shell and raise the "hole end" up while keeping pressure on the "tail end" of the inflation to keep vacuum from escaping the claw
13. Locate teat in "hole end" of inflation and straighten "tail end" of inflation to open vacuum to inflation
12. Repeat for remaining teats (this must be done with care so as not to break vacuum on the already attached inflations)
13. when milk flow stops, close lever on claw and remove inflations
14. express any remaining milk from teat
15. use a post milking treatment (FightBac, etc) to close orifice in teat and prevent infection.

## 35 LB Pail Cleaning Procedures

1. When milking has been completed, hold inflations, hole down, in a pail of **cold water**. Open valve on claw to rinse inflations, milk line and pail (this will prevent milk stone, or calcium build up)
2. Hold inflations, hole down, in a pail of **hot water** and **cleaning solution**. Open valve on claw to allow cleaning solution into inflations, milk hose and pail.
3. Wash pail. **\*NOTE — Disassemble milking equipment (claws, milk hoses etc.) and wash thoroughly at least once a week**

## Machine Maintenance

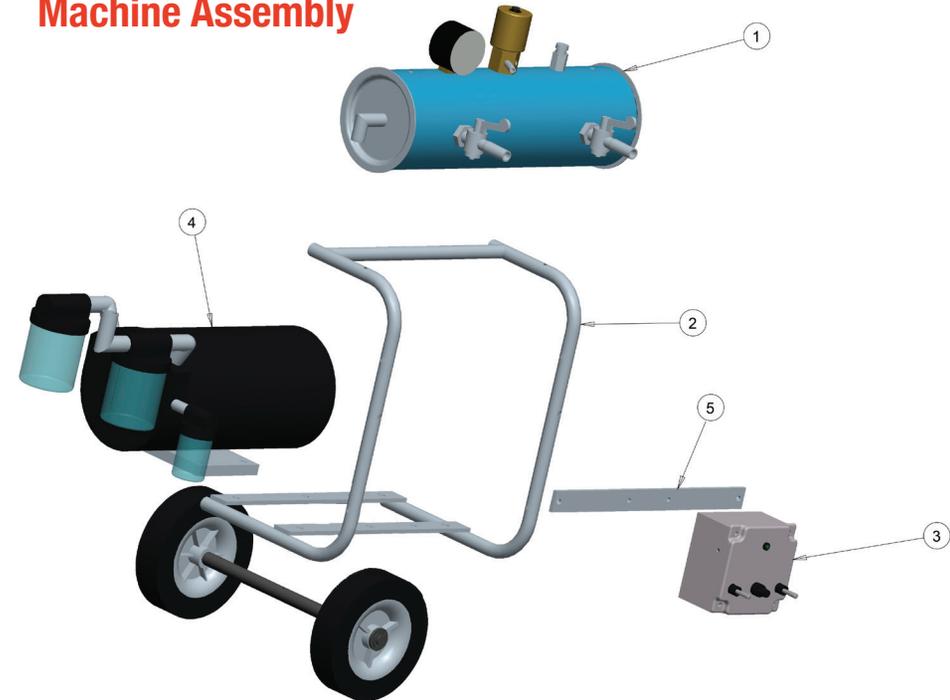
- Do not immerse any part of the machine in water or spray with water.
- Wipe any accumulated dust off with a moist cloth.
- Follow cleaning instructions below for weekly maintenance and before any long term storage.

## Machine Cleaning

- Remove end cap assembly.
- Clean inside of vacuum tank and small connector hose from pump to tank and reassemble. **Do not store disassembled.**
- Remove filter caps
- Close stall cocks
- Turn on machine
- Spray "Brake Parts Cleaner" into intake side of pump for 3-5 seconds
- Replace filter caps
- Clean filter muffler (Part #11 in Gast Manual)

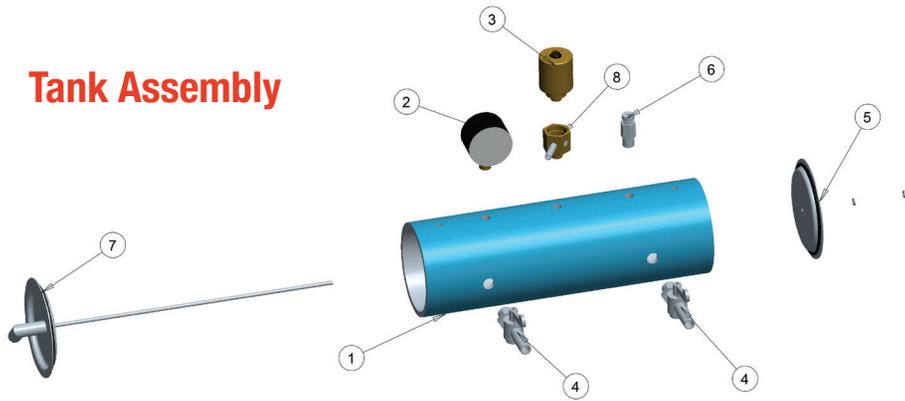
## MACHINE REPLACEMENT PARTS

### Machine Assembly



1. Tank Assembly	MS37	4. Vacuum Pump	SMS2
2. Frame	SMS1	5. Controller Strap	SMS4
3. Controller Assembly	MS38		

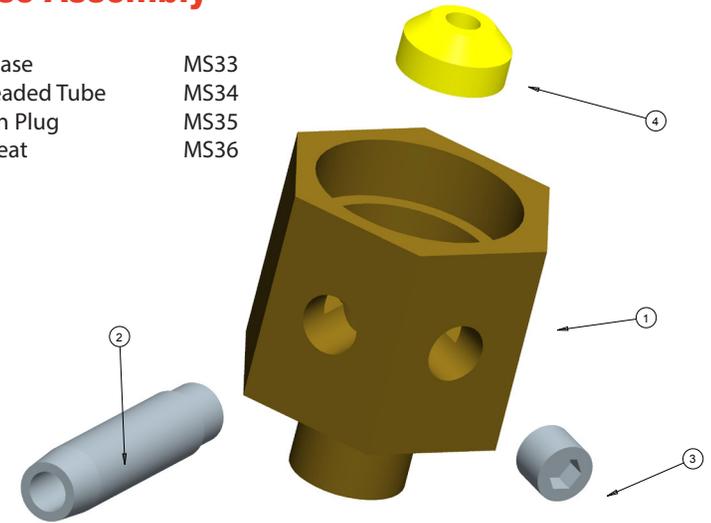
## Tank Assembly



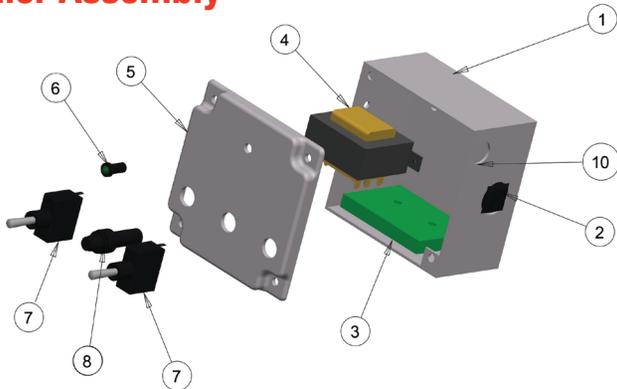
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|----------------------------|------|
| 1. Vacuum Reserve Tank     | SMS3 |
| 2. Vacuum Gauge            | MS3  |
| 3. Pulsator/Solenoid       | MS13 |
| 4. Stall Cock Valve        | MS21 |
| 5. End Cap with 3/16" Hole | MS29 |
| 6. Vacuum Regulator        | MS4  |
| 7. End cap with Elbow      | MS30 |
| 8. Pulsator Base Assembly  | MS28 |

## Pulsator Base Assembly

- |                        |      |
|------------------------|------|
| 1. Pulsator Base       | MS33 |
| 2. 5/16" Threaded Tube | MS34 |
| 3. 5/16" Allen Plug    | MS35 |
| 4. Plunger Seat        | MS36 |



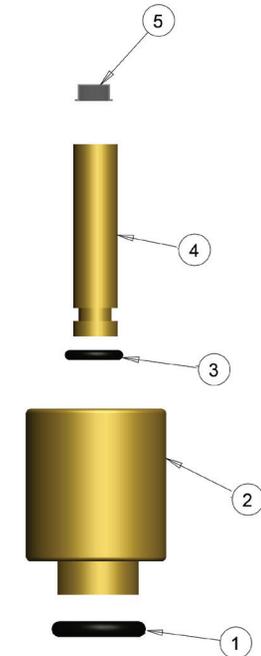
## Controller Assembly



- |                    |      |
|--------------------|------|
| 1. Control Box     | SMS3 |
| 2. AC Outlet       | MS14 |
| 3. PSB 30          | MS15 |
| 4. Transformer     | MS9  |
| 5. Switch Cover    | MS19 |
| 6. Indicator Light | MS10 |
| 7. Switch          | MS1  |
| 8. Fuse Holder     | MS11 |

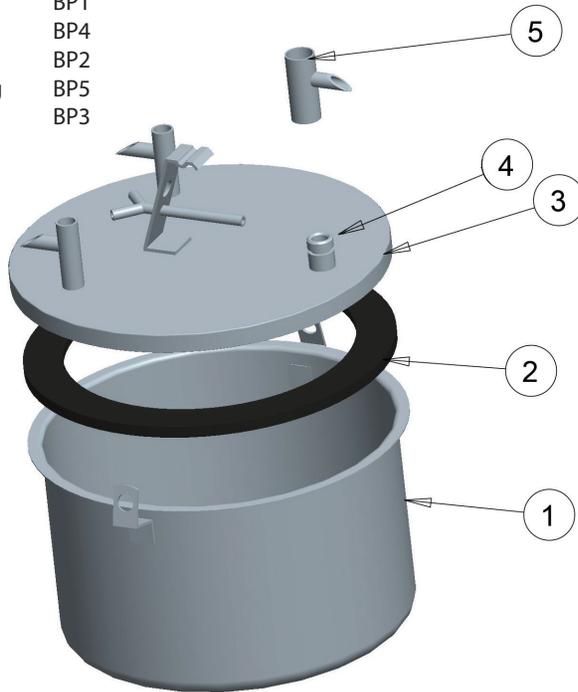
## Solenoid Assembly

- |                    |       |
|--------------------|-------|
| 1. Solenoid O Ring | MS32  |
| 2. Solenoid        | MS13  |
| 3. Plunger O Ring  | MS 25 |
| 4. Plunger         | MS31  |
| 5. Pulsator Screen | MS17  |



## Pail Assembly

- |                  |     |
|------------------|-----|
| 1. Pail          | BP1 |
| 2. Gasket        | BP4 |
| 3. Lid Assembly  | BP2 |
| 4. Swivel O Ring | BP5 |
| 5. Swivel        | BP3 |



## Belly Pail Accessories

Belly Pail Gasket	[BPG]
Pail Plugs	[BPP]
Shell	[13F-3]
Inflations	[13F-4]
Small Shell	[13FF-3]
Small Inflation	[13FF-4]

## 35 LB Pail Accessories

Vac Tube Line Splitter	[13G-7]
Milk Tube Line Splitter	[13G-8]
Elbow (Stainless Steel)	[13G-9]
Elbow (Plastic)	[13G-10]
In-line Shut Off Valve-Vacuum 3/8"	[13G-11]
In-line Shut Off Valve-Milk 1/2"	[13G-12]
Goat and Sheep Claw	[13B]

## General Parts for Hoegger Milking System

Vanes for the Vacuum Pump	[VANES]
Milk Tubing	
9/16"	[13G-2]
3/8"	[13G-14]
1/2"	[13G-1]
5/8"	[13G-3]
1/4" Vacuum Tubing	[13G-4]
1/4" Twin Vacuum Tubing	[13G-5]
Vacuum Gauge	[13C]
Solenoid	[SOL]
Stall Cock	[13G-6]
Hydraulic Oil	[OIL]
Felt Filter	[FF]

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[www.hoeggermilkingystems.com](http://www.hoeggermilkingystems.com)