



# PARTS & MAINTENANCE MANUAL

Model 462-200 PEACEKEEPER™ for Mark I and Mark II SENTINEL™ Vacuum Controllers

## GENERAL INFORMATION

The PEACEKEEPER Noise Suppressor & Air Filter is a retrofitable product for the Sentinel line of vacuum controllers. The PEACEKEEPER suppresses the noise created by air flow into the controller and provides a larger washable filter for all Sentinel units, including those that presently use only paper filtration. PEACEKEEPER units are available to fit every size Sentinel and are easy to install and maintain.

For best performance in a milking system, the controller should be placed as close to the receiver group as possible. This correct placement will ensure that the pressure differential between the milking vacuum and the vacuum controller is minimized.

To avoid noise generated by the vacuum controller, performance is often compromised by placing the controller some distance from the milking pit, for example, in the attic, equipment room or other distant location.

Testing has shown that the PEACEKEEPER can reduce the existing noise level from the controller by up to 15 decibels. By using the PEACEKEEPER, the vacuum controller can be positioned in the optimum location for best performance.

Additionally, the extra-fine filter, with its closely tailored, tapered fit to the PEACEKEEPER, provides improved filtration properties over filters that are presently being used. Since the washable filter can be reused over an extended period of time, it provides an operating cost reduction when compared with paper filters which must continually be replaced. The substantially larger size of the filter extends the time between filter cleanings. Another feature of the PEACEKEEPER is that the filter can be removed for cleaning without disconnecting the Sentinel vacuum controller from the system.

## ASSEMBLY

1. Remove the PEACEKEEPER from its shipping box and disassemble it by removing the three screws around the outside of the body.
2. Remove the main filter (406-21) from the Sentinel Mark II vacuum controller and set it aside. The main filter is not used when

the PEACEKEEPER is used. Replace the outlet body (406-1) of the controller with the Threaded Outlet Body (406-100) supplied with the PEACEKEEPER. Refer to the Parts & Maintenance Manual of the Sentinel Mark II Vacuum Controller for instructions on disassembly and replacement of this part. **CAUTION:** The PEACEKEEPER cannot be properly assembled to the vacuum controller unless the Threaded Outlet Body is used. Be sure to check the controller for proper operation after installing the Threaded Outlet Body prior to installing the PEACEKEEPER.

**IMPORTANT:** The plugged hole between the two labels on the PEACEKEEPER is for a future option. **Do not tamper with or remove the plug.**

3. Insert the vacuum controller into the Body Assembly as far as it will go. The threaded portion of the controller outlet body will protrude through the bottom of the Body Assembly.
4. Take the Adapter Ring provided with the PEACEKEEPER and screw it onto the Threaded Outlet Body of the controller. The base of the PEACEKEEPER Body Assembly should now be sandwiched between the Threaded Outlet Body and the Adapter Ring. Tighten for a snug fit. The Adapter Ring should be checked periodically to assure that it is not loose.
5. Position the Isolator, flat side up, ridges (wedges) down, over the dome of the controller and slide it down until the ridges contact the foam ring around the circumference of the Body Assembly. The top surface of the Isolator should be approximately level.
6. Push the Lid Assembly down over the dome of the vacuum controller so that it comes in contact with the Body Assembly. If necessary, twist the lid to align the screw holes in the body with those in the lid. Insert and tighten the three screws. (Do not overtighten.) The screws can be spun in easily if manual clamping pressure is applied between the rim of the Lid Assembly and the bottom of the Body Assembly. This also applies to disassembly. Be sure the Mark II's dome filter seat is centered in the hole in the Lid Assembly of the PEACEKEEPER.
7. Install the dome filter and filter cap on the controller through the Lid Assembly of the PEACEKEEPER. Twist the filter cap only in the clockwise direction to prevent unlocking the dome.
8. Making sure that the Filter markings are visible around the outside and that the arrows point upward, place the Filter around the top part of the Lid Assembly. Proper placement of the Filter is important because the Filter has a specially tapered configuration

## ASSEMBLY (cont.)

which exactly fits the Lid Assembly. Make sure the Filter is inserted into the lip surrounding the Lid Assembly. The top surface of the Filter should be below the level of the top surface of the Lid Assembly.

9. Place the Filter Ring over the top part of the Filter and Lid Assembly. Snap the Filter Ring into place, making sure that it snaps around the entire 360 degrees of the top of the Lid Assembly. Make sure that the Filter is inserted under the outside lip of the Filter Ring.

NOTE: If controller has been disassembled, always check the vacuum controller for proper operation before installing or re-installing the PEACEKEEPER.

## DISASSEMBLY

1. Shut the vacuum system off.
2. Before removing the vacuum controller/PEACEKEEPER from the vacuum system, loosen the Adapter Ring one or two turns. This will facilitate disassembly of the Body Assembly from the controller in Step 9.
3. Gently unsnap and remove the Filter Ring.
4. Remove the Filter by gently pulling up on it in several places around its circumference.
5. Remove the filter cap and dome filter from the controller. Twist filter cap only in the clockwise direction.
6. Unscrew and remove the three screws attaching the Lid Assembly to the Body Assembly.
7. Grasp the rim of the Lid Assembly in two places 180 degrees apart and lift it from the Body Assembly/controller.
8. Gently lift up on the Isolator and slide it up off the controller dome.
9. Unscrew the Adapter Ring from the threads of the controller body and remove the PEACEKEEPER Body Assembly.

## MOUNTING CONTROLLER WITH PEACEKEEPER

1. Refer to the Parts & Maintenance Manual of the Sentinel Vacuum Controller for complete instructions on proper location and mounting instructions specific to the controller.
2. The PEACEKEEPER is approximately 13" in diameter. Modification to the existing mounting location for the combined vacuum controller/PEACEKEEPER unit may therefore be necessary. Some clearance around the circumference of the PEACEKEEPER should be maintained to facilitate installation, removal and filter change.

## CLEANING

### TO CLEAN WASHABLE FILTER:

1. Clean when indentations appear in Filter or when Filter is encrusted with dirt.
2. Remove white Filter Ring from top of Lid Assembly by snapping off gently.
3. Carefully remove Filter. Washable Filter can be removed and replaced while controller is in operation.
4. Wash Filter in warm, soapy water, using a mild dishwashing soap. Avoid twisting while washing. Then immerse Filter in clean water and, while immersed, gently squeeze repeatedly. Multiple rinses may be required to remove all soap and dirt residue.
5. Compress water out of Filter by applying gentle pressure. Do not wring.
6. IMPORTANT: Reinstall Filter so that "UP" markings are on the OUTSIDE surface and arrows point UPWARD.
7. Reinstall Filter Ring. Be sure it is securely snapped in place.

### TO CLEAN INTERNAL COMPONENTS:

1. When controller is removed for cleaning, wipe plastic parts of PEACEKEEPER with a damp cloth and soapy water. DO NOT USE SOLVENTS.
2. Gently clean noise suppressant material by removing lodged dirt from porous areas with a vacuum cleaner or air blower. (Wear adequate eye protection.)

### PARTS REPLACEMENT MODEL 462-200

<u>Part Name</u>	<u>Part No.</u>
Body Assembly	462-1-200
Lid Assembly	462-2-200
Filter Ring	462-3
Filter	462-4
Isolator	462-5-200
Adapter Ring	462-6-200
Screw	462-8
Lid Gasket #	462-14
Threaded Outlet Body +	406-100

# This part comes installed on 462-2 Lid Assembly, but may be obtained separately.

+ This part is supplied to adapt the Sentinel Mark II to the PEACEKEEPER

FILTER RING

FILTER

UP 

UP 

LID\*

SCREW (3)

LID GASKET\*

ISOLATOR

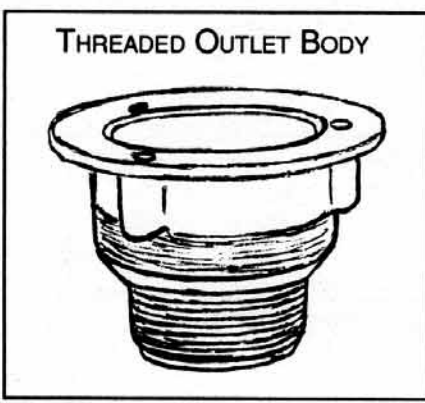
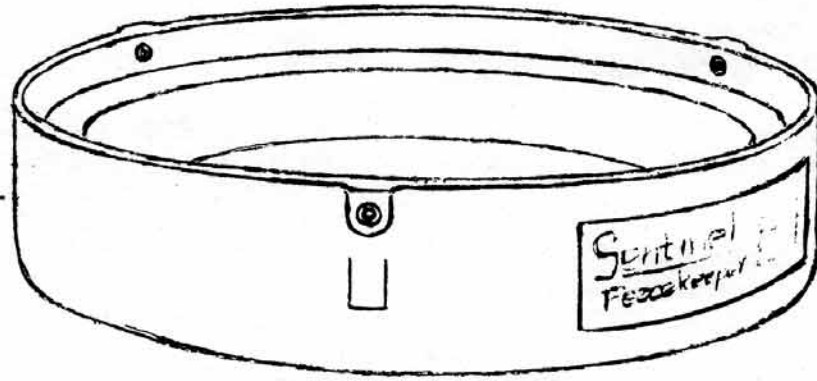
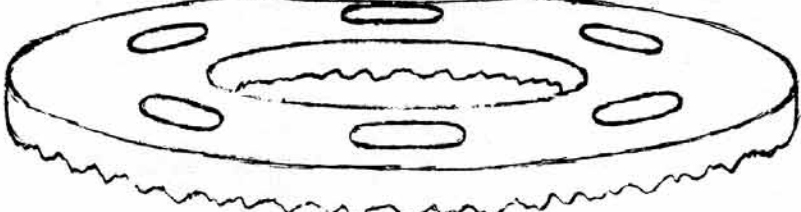
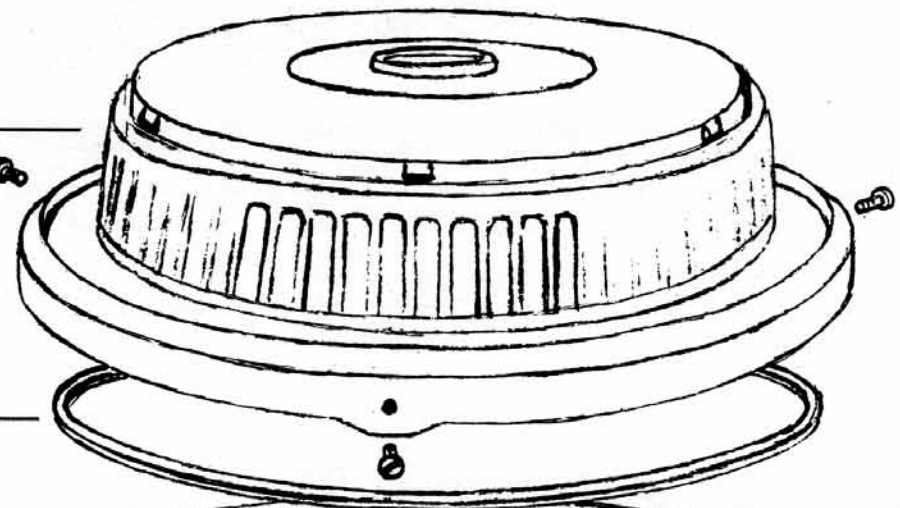
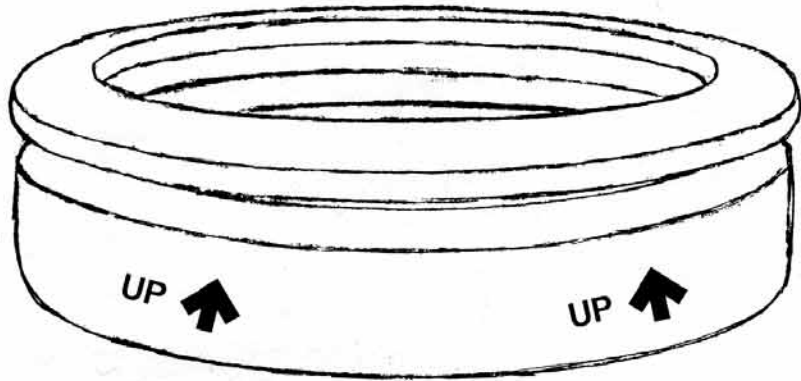
BODY ASSEMBLY

THREADED OUTLET BODY

Sentinel  
Feedkeeper

ADAPTER RING

\* LID AND LID GASKET MAKE UP LID ASSEMBLY





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