



Please read this Manual before using the Peacekeeper and save it for future reference.

## PARTS & MAINTENANCE MANUAL

**Model 462-100 PEACEKEEPER - Noise Suppressor & Air Filter for the Model 100 Sentinel Vacuum Controller and the 462-350 PEACEKEEPER for the Models 350 & 500 Sentinel Vacuum Controllers**

### GENERAL INFORMATION

The PEACEKEEPER Noise Suppressor & Filter is a retrofittable 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.

### 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 filter retaining ring (348-19), the main filter (AP-58) and the air filter gauge (348-12) from the Sentinel Vacuum Controller. Set aside the air filter gauge provided with the Sentinel Models 100, 350 & 500, as it is designed to be used with the controller in its standard configuration, i.e. with a paper filter and will not function properly with the PEACEKEEPER. **IMPORTANT:** Some early units had a plugged hole between the two labels on the PEACEKEEPER. Do not remove this plug. Newer units do not have this plugged hole.
3. With the main filter and air filter gauge removed, screw the filter retaining ring as far up the controller body as possible. The flat side of the ring should face down (away from the controller).
4. Insert the vacuum controller into the Body Assembly as far as it will go. The threaded portion of the controller body will protrude through the bottom of the Body Assembly.
5. Take the Adapter Ring provided with the PEACEKEEPER and screw it onto the threaded body of the controller. The base of the PEACEKEEPER Body Assembly should now be sandwiched between the flat sides of the filter retaining ring and the Adapter Ring. Tighten for a snug fit. These retaining rings should be checked periodically to assure that they are not loose.

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6. Position the Isolator (462-5-100 or 462-5-350), 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. With the Model 100, be careful not to push the Isolator too far down on the dome. The top surface of the isolator should be approximately level.
7. 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 over tighten.) The screws can be spun in easily if manual clamping pressure is applied between the rim of the Lid Assembly (462-2-100 or the 462-2-350) and the bottom of the Body Assembly (462-1-100 or the 462-1-350). This also applies to disassembly. Be sure the Dome Seal (462-15-100 or the 462-15-350) makes good contact around the entire circumference of the controller dome.
8. Making sure that the Filter (462-4) 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 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 (462-3) 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 the controller has been disassembled, always check the vacuum controller for proper operation before installing or reinstalling the PEACEKEEPER.**

### DISASSEMBLY

1. Shut the vacuum system off.
2. Remove the vacuum controller/PEACEKEEPER from the vacuum system.
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. Unscrew and remove the three screws attaching the Lid Assembly to the Body Assembly.
6. Grasp the rim of the Lid Assembly in two places 180 degrees apart and apply a slight twisting motion while lifting the Lid Assembly from the Body Assembly/controller. Make sure the Dome Seal is not dislodged during this operation.
7. Gently lift up on the isolator and slide it up off the controller dome.
8. Unscrew the Adapter Ring from the threads of the controller body and remove the PEACEKEEPER Body Assembly.

### MOUNTING CONTROLLER WITH PEACEKEEPER

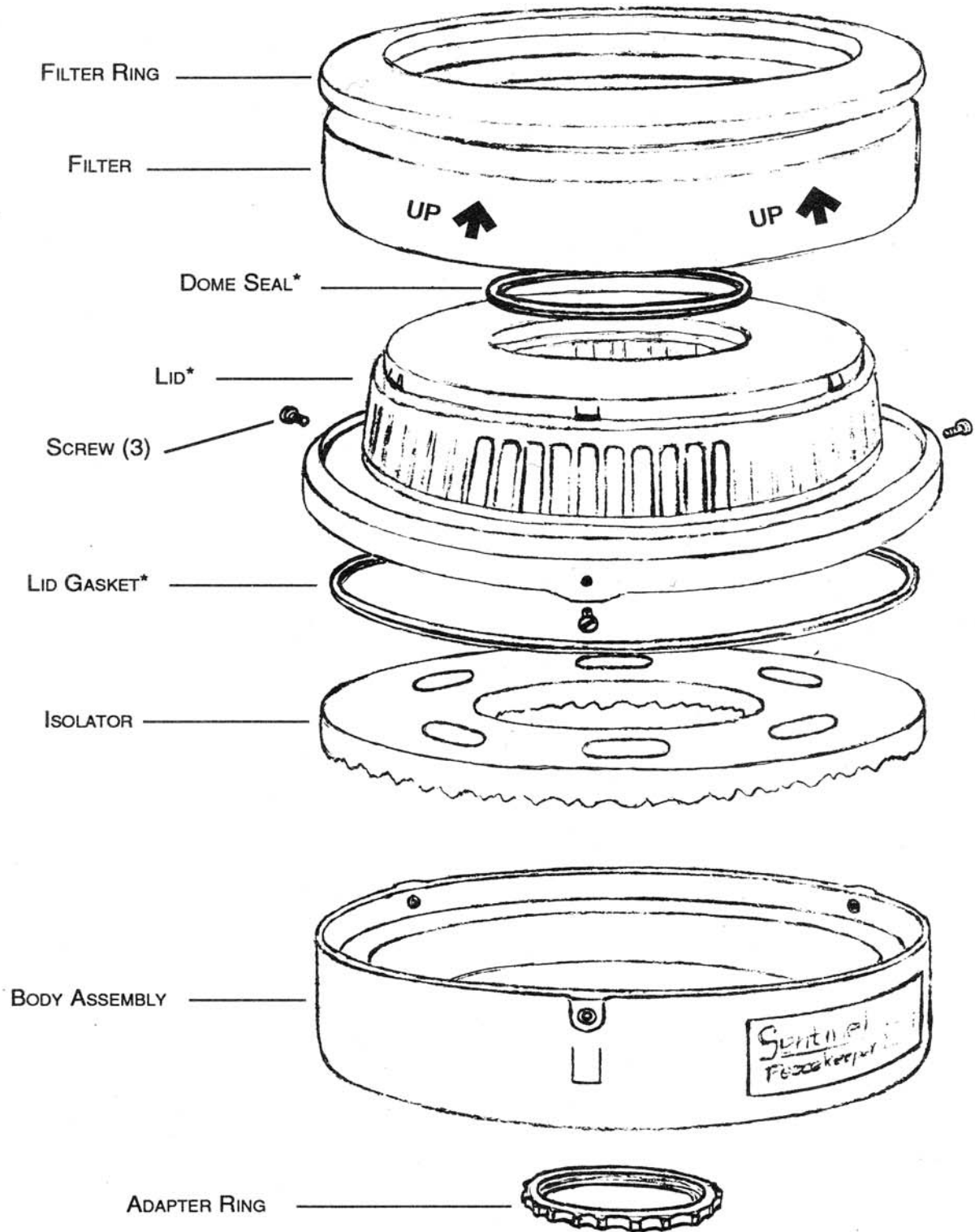
1. Refer to the Parts & Maintenance Manual of the Sentinel Vacuum Controller for complete instructions on proper location and mounting instructions specific to the controller.
2. The PEACEKEEPER is approximately 13" in diameter. Modification to the existing mounting location for the combined vacuum controller/Peacekeeper 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 the Filter or when filter is dirty.
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.

### CLEANING - 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.**



\* DOME SEAL, LID AND LID GASKET MAKE UP LID ASSEMBLY

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Parts Replacement - Model 462-100 & 462-350 PEACEKEEPERS		
Part Name	Model 462-100	Model 462-350
Body Assembly	462-1-100	462-1-350
Lid Assembly	462-2-100	462-2-350
Filter Ring	462-3	462-3
Filter	462-4	462-4
Isolator	462-5-100	462-5-350
Adapter Ring	462-6-100	348-19
Screw	462-8	462-8
Lid Gasket (#)	462-14	462-14
Dome Seal (#)	462-15-100	462-15-350

(#) These parts come installed on the 462-2-100 and the 462-2-350 Lid Assemblies, but may be obtained separately.

**1. LIMITED WARRANTY:** Seller warrants that the goods delivered shall be free from defects in material and workmanship for a period of one (1) year from the date of Seller's shipment. Seller's sole obligation and Buyer's exclusive remedy for defects in the goods shall be limited, at Seller's option, to either repair or replacement of goods determined to be defective. Transportation and any other delivery costs to return defective goods to Seller for repair or replacement shall be the responsibility of Buyer. Any claim by Buyer must be made by Buyer to Seller in writing within five (5) days of the discovery of the claimed defect but in no event after the expiration of one (1) year from the date of Seller's shipment, whichever is less. Buyer's failure to so notify Seller of such defects within the above time periods shall bar Buyer from any remedy under this Warranty, or for recovery of damages or losses due to defects in the goods. Any return of goods shall be subject to the prior written approval of Seller.

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