

# **SVRS Quick Installation Guide**

800-374-7405 www.vac-alert.com

- The Vac-Alert<sup>™</sup> SVRS unit is installed:
  - Vertically.
  - Above or off a tee installed on the main drain suction line.
  - No closer than 1 foot and within 5 feet from the circulation pump where possible.
- Since the SVRS is an air passageway only, the unit does not convey water, and therefore can be installed on small or large pipe sizes.
- Most installations can be completed in less than 30 minutes.

The Vac-Alert<sup>™</sup> SVRS unit is plumbed into the main drain line between the pump and the main drain. For simple testing be sure to install a fast-acting, full port test valve between the unit and the main drain.

- Parts needed (Fig. 1):
  - O Tee fitting
    - O 1-1/2" reducer bushing
    - 6-inch piece of 1-1/2" PVC pipe
    - Fast-acting, full port test valve



FIGURE 1. Vac-Alert<sup>™</sup> SVRS installation parts needed.

- The unit may need to be **field adjusted** to accommodate normal operating system vacuum. Normal operating vacuum is the vacuum reading obtained on the Vac-Alert<sup>™</sup> gauge when there is no air leaking through the unit's vent port.
- The unit has been factory adjusted to accommodate system vacuum levels up to **10 inches of mercury**. Vacuum levels higher than this will require field adjusting of the unit.
- The SVRS unit should be installed on pools/spas with drain(s) protected with a properly installed cover certified to ASME/ANSI A112.19.8-2007.

### Field Adjusting the Vac-Alert™ SVRS

The unit is designed to protect against main drain entrapment; therefore, any secondary source lines such as skimmer or vacuum lines must be closed off before adjusting or testing the unit.

- 1. With the pump running and all secondary source lines closed off:
  - a) **Remove the security cap** using the spanner tool provided (Fig. 2).
  - b) Remove the vent screen (Fig. 3).





FIGURE 2. Remove security cap with the spanner tool.

FIGURE 3. Remove the vent screen.

c) **Test for an air-leak** by quickly tapping your finger over the vent hole (i.e., on, off, on, off). If there is an air-leak, you will feel suction. Your finger should not remain on the vent hole, otherwise the vacuum inside the unit will equalize with your finger resulting in a false sense of an air leak (Fig. 4).



 $\ensuremath{\mathsf{FIGURE}}$  4. Test for an air leak by tapping the vent hole (the gray end of the  $\ensuremath{\mathsf{SVRS}}$  unit).



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- 2. If a leak is present: adjust the unit to handle a higher vacuum level:
  - a) Turn off the pump.
  - b) If not already removed, remove the security cap using the spanner tool provided (Fig. 2).
  - c) Lock open the piston by pushing a screwdriver through the *vent opening* until a clicking sound is heard (the vent screen must already be removed; Fig. 5). With a flat head screwdriver, turn the adjustment screw two full revolutions to the right/clockwise (Fig. 6).





FIGURE 5. Lock open the piston.

FIGURE 6. Turn the adjustment screw.

d) Reset the piston by gently pressing down the reset lever (Fig. 7).





FIGURE 7. Reset lever. In the *up* position before being reset, and the *down* position after being reset.

- e) Restart the pump.
- Check again for an air leak. If an air leak persists, lock open the piston, and repeat this procedure two revolutions at a time until air no longer leaks through the vent end of the SVRS unit.

#### CAUTION:

- If the adjustment screw must be adjusted completely inward to the adjustment stop, be sure to **back off a quarter turn** (counterclockwise) to set the unit to its maximum working position.
- **Do not over-adjust** the unit as this could impair performance.
- Start and stop the pump at least three times to make sure the unit does not react to pump start-up surge. Allow the unit's vacuum level to drop below 5 inches of mercury before each start of the pump. Adjust the unit further if required.
- 5. When adjustment is completed, **replace the vent screen and security cap**.

### Testing the Vac-Alert™ SVRS

## The SVRS unit must be tested successfully at least three times.

The unit is easily tested by closing the fast-acting test valve installed between the unit and the main drain while the circulating pump is fully primed and running. *Close the test valve quickly, with a quick snap: open-shut-open.* Closing the test valve this way simulates an entrapment event (Fig. 8).



FIGURE 8. Fast-acting, full port test valve.

In lieu of a test valve, place a test mat (Fig. 9) over the main drain to simulate an entrapment event.



FIGURE 9. Test mat.

#### For further assistance, please call Vac-Alert<sup>™</sup> at 800-374-7405.