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## **BULK TANK, INC.**

### **SpinFlow Air Filter System**

## Installation, Operation and Maintenance Instructions

BTI recommends maintaining a filtration inspection logbook to assist in establishing a replacement schedule that can help achieve optimal performance from your SpinFlow filter system.

#### **SpinFlow Mounting Information**

All BTI SpinFlow Filter Systems should be mounted to the frame or stable platform by using two mounting brackets (P/N: BTA-BRK). These brackets are stainless steel, 8.00" in diameter with feet and 7/16" pre-drilled holes.

#### **Tractor Mounting**

When mounting on a tractor, the unit can be mounted either horizontally or vertically. This application offers an added benefit in that the filter unit will act as a silencer if mounted within 24" of the blower discharge port. Do not hard mount the filtration unit to the blower. A soft silicon pipe should be placed between the two. Hard mounting the filter to the blower will subject it to harsh vibration that can cause stress cracks on the weldment.

Recommended rubber hose to use between the units is either a 3.5" or 4.5" diameter silicon turbo "step-hump-hose".

#### **Trailer Mounting**

There are several ways of mounting the filter systems on dry bulk trailers. The key criteria to remember are:

- The hot hose should be supported; the inlet weldment will not the hot hose and quick disconnect for a long period of time.
- The filter system can be mounted vertically or horizontally by bolting the mounting brackets to a structural member or permanent part of the trailer.
- Allow a minimum of 6-8" between mounting brackets anywhere along the tubed housing.
- There must be at least 20" beyond the end cap in order to remove the filter element for inspection of replacement.
- There should be a check valve after the filtration unit to stop any product in the event of reverse flow.

WARNING: All hoses and/or piping should be sufficiently supported by structurally sound brackets that are not connected to the filter system itself. Before starting please inspect the unit for any damage, which might have been caused during shipping. <u>NOTE</u>: Neither the inlet of the outlet piping on BTI SpinFlow Filter Systems were not designed or fabricated to hold non-supported hoses and/or piping. This can void all warranties and removes BTI from any liability should a failure occur resulting from insufficient support of hoses and/or piping.

# BTI gives a 12-month warranty on all filter elements. The warranty exists for a 12-month period from the date the element was put in service. The warranty is also voided if the heat dot on top of the filter element has changed color from amber to black, or has been removed.

**Filter Element Inspection Procedure** – BTI recommends that in a tractor/pneumatic tank trailer application the SpinFlow filter element be inspected on a weekly basis. The element must be replaced with a new BTI element at or before 12 months.

# CAUTION: Do not service canister while under pressure. Make sure to remove caps and hose before opening lid.

For BTI SpinFlow filter element part number BTA-PEL16SS or BTA-PEL16SS-FG

The following inspection procedure <u>must</u> be followed in order for the product to maintain its warranty. Any change or deviation from this procedure from voids the BTI product warranty and removes BTI from any contamination liability.

- Open Blow Down Valve
- Remove disconnect safety pin, unlatch cam hook and open lid.
- Caution: Open slowly and listen for pressure.
- Pull the element completely out of the assembly housing.
- Carefully look into the housing at the bottom gasket and guide plate. Replace gasket if is worn or if it has taken compression set.
- Inspect outlet pipe for wear; ensure that all gaskets seal properly.
- Check the inside of the sidewall of the housing for oil residue and small particles. Remove with clean cloth, steam, or cleaning device of choice.
- Carefully inspect the outer surface of the filter element by looking into the pleated area for very dark color media, oil or grease residue, fiberglass fibers, and product build up. If the surface appears to have heavy deposits of contaminates such as metal, iron oxide, product build up, and/or the element has been in service for 12 months, replace the element.
- Carefully inspect the inside of the element by turning it upside down. If needed use a flashlight to help spot potential filter element damage.
  - If the perforated metal core and/or media show signs of deterioration replace the filter element immediately.
  - If the expanded metal core and/or media do not show signs of deterioration, but has been in service for 12 months, replace the filter element immediately.
  - If product has built up inside this area, replace the filter element immediately.
  - NOTE: Whenever the filter element is changed, also replace the bottom gasket.
- Inspect lid gasket and replace if damaged.
- Inspect pressure plate and spring in lid and replace if necessary.
- <u>ALL</u> BTI filters with long outlet pipe projection <u>MUST</u> have a stainless centering ring installed, <u>AND</u> a filter element gasket.

