



Installation Instructions for the SB4P Filter Element Retrofit Kit

For First Time Replacement of Obsolete SB4 Filter Element Used on Model AF-12 & AF-25 Afterfilters

SB4P Retrofit Kit

P/N 240-434-999

The retrofit kit includes:

- **SB4P replacement filter element**
- **Threaded aluminum filter retainer with pre-installed square cut seal (black)**
- **Square cut seal (red)**
- **4" aluminum stud bolt (fully threaded)**

NOTE: The installation of this retrofit kit is only necessary when replacing the obsolete SB4 filter element for the first time.

After this one-time retrofit is complete, the SB4P filter element should be replaced according to the recommended preventive maintenance schedule.

SB4P Filter Element only

P/N 240-435-000

SAHARA AIR PRODUCTS

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Service Guide



Before servicing components, it is advised that this entire Service Guide be studied and clearly understood.

This guide contains maintenance procedures for replacing filter elements installed on Sahara Air Products regenerative air dryers.

Read and observe all Warnings and Advice in this Service Guide, as well as those in the air dryer instruction manual which was included with the air dryer upon shipment. They provide information that can help prevent serious injury, damage to components, or both.

Follow your company's maintenance and service, installation, and diagnostics guidelines.

Use proper tools to help avoid serious personal injury or damage to components.

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SERVICE GUIDE

Installation Instructions for the SB4P Filter Element Retrofit Kit

FIRST TIME INSTALLATION OF RETROFIT KIT



Attention / Warning!

The filter housings must be **DEPRESSURIZED** prior to replacing elements!



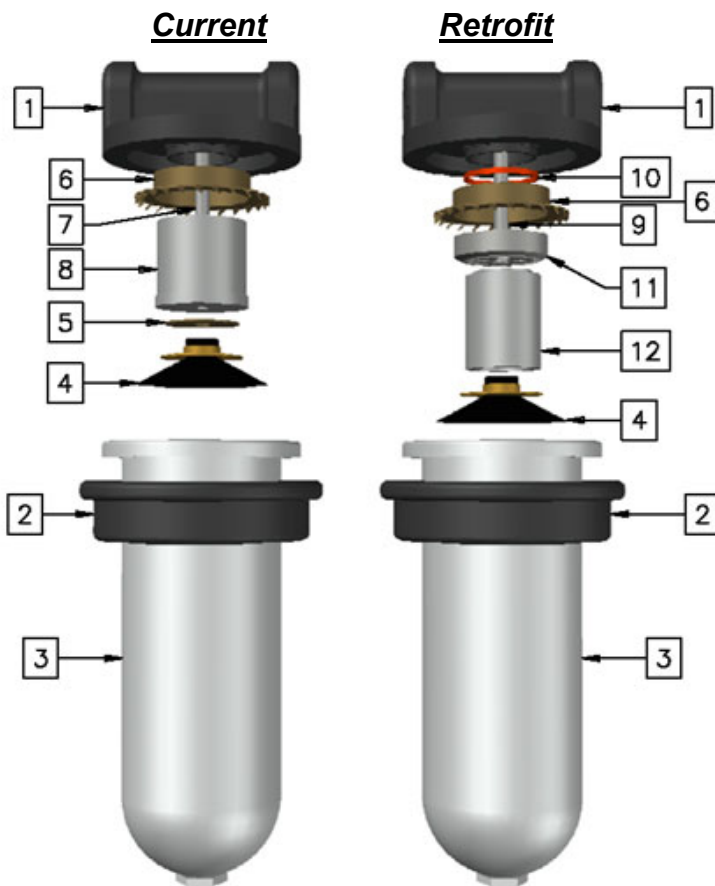
Filter elements should **NOT** be cleaned with compressed air.

If the filters are able to be isolated by themselves, the dryer can continue to flow air. The dryer should be powered off first. Isolate and depressurize the filter only. Isolating the pilot filter will disable all control air.

1.0.1 Installation Instructions

The retrofit kit is to be installed using the following steps:

- Isolate the filter by closing the manual valves before and after the filter, if supplied, or by isolating complete drying system. Can also potentially isolate pilot air line only, if isolation valves are installed.



Item	Qty.	Description
1	1	Filter inlet/outlet housing
2	1	Retaining nut
3	1	Canister bowl
4	1	Plastic filter retainer with washer
5 *	1	Washer
6	1	Air deflector ring
7 *	1	Stud bolt (both ends threaded)
8 *	1	SB4 filter element
* Obsolete items which can be discarded.		
Replacement items included in retrofit kit (9, 10, 11, 12):		
9	1	Stud bolt (fully threaded)
10	1	Red square cut seal
11	1	Threaded aluminum filter retainer with pre-installed black square cut seal
12	1	SB4P filter element

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Installation Instructions for the SB4P Filter Element Retrofit Kit

FIRST TIME INSTALLATION OF RETROFIT KIT

1.0.1 Installation Instructions (continued)

- Completely depressurize the filter or dryer as required.
- Remove filter canister bowl (Item 3) by fully unthreading retaining nut (Item 2) from filter inlet/outlet housing (Items 1). Set these items aside for reinstallation.
- Remove plastic filter retainer with washer (Item 4). Set aside for reinstallation.
- Remove old washer (Item 5) and filter element (Item 8). Discard both items
- Remove air deflector ring (Item 6). Set aside for reinstallation.
- Remove stud bolt (Item 7). Discard this item.
- Install new red square cut seal (Item 10) onto tenon area of filter inlet/outlet housing (Item 1) where air deflector ring (Item 6) originally sat flush.
- Reinstall air deflector ring (Item 6) onto new red square cut seal (Item 10).
- Install new threaded aluminum filter retainer (Item 11) with gasket/seal facing air deflector ring (Item 6). Thread onto new stud bolt (Item 9) by hand until snug against air deflector ring (Item 6).
- Install new filter element (Item 12: SB4P) with machined tenon end inserted into recessed area of new threaded aluminum filter retainer (Item 11).
- Reinstall plastic filter retainer with washer (Item 4) onto new stud bolt (Item 9) with plain end of filter element facing metal washer of filter retainer (Item 4). Hand tighten until snug.
- Reinstall filter canister bowl (Item 3) and retaining nut (Item 2) onto filter inlet/outlet housing (Item 1). Hand tighten until snug.
- Slowly repressurize the filter or dryer as required.
- Check for air leaks with soap solution.
- Place back into service.

2.0 Maintenance

- Once the filter has had this retrofit kit installed to replace the obsolete SB4 filter element using this one-time replacement procedure, the SB4P filter element (P/N 240-435-000) should be replaced according to the recommended preventive maintenance schedule which can be found in the air dryer instruction manual.

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Installation Instructions for the SB4P Filter Element Retrofit Kit

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When contacting Henderson Engineering, please have the following information available:

- **Serial Number** which can be found on the air dryer; either on the ASME code nameplate on the dryer towers or in the electrical enclosure.
- **Model Number** which can be found on the air dryer; either on the ASME code nameplate on the dryer towers or in the electrical enclosure.
- Inlet air temperature and pressure.
- Actual inlet flow rate.

A specification data sheet for the SB4P filter element is available; request document Reference 184.



Henderson Engineering Co., Inc.,
is proud to be certified to the
ISO 9001 Quality Management System
standards and guidelines.

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