Camfil FB-Series
Fluid Seal Bag-in/Bag-out
Filter Housing

Installation, Operation and Maintenance Manual

camfil

Camfil	Installation, Operation & Maintenance Manual
FB Housing	3401i-0404
Camfil —clean air solutions	

Disclaimer

Before proceeding with any Bag-In/Bag-Out undertaking, review this Installation, Operation, and Maintenance Manual and all safety procedures with your company's safety personnel.

Camfil is committed to providing air filtration products, which meet or exceed our customer's expectations. We are dedicated to a corporate-wide policy of continual improvements as a means of insuring our leadership position in the air filtration marketplace.

The Camfil housings and filters are designed to protect personnel and the general public by filtering dangerous materials. The filters you change can be contaminated with these dangerous materials. In order for your complete protection and the protection of the general public, it is imperative you follow these instructions as amended by your safety personnel. The bagging method of changing a filter is not fail-safe, but it is the safest, pragmatic method available for changing a contaminated filter. Since all types of housing designs and configurations cannot be addressed by a single manual or set of safety procedures, we propose a proven method of replacing contaminated filters with clean filters. Once this method is understood by both maintenance personnel and safety personnel, they can adapt the most suitable method to use, based on the housing, location, type of filter/adsorber, and any other mitigating factor that can affect safety.

Carefully study this manual and your safety personnel's amendments so that you have the entire procedure in mind before initiating the change-out procedure. Before initiating this procedure, verify you have all the necessary tools on hand.

Camfil describes the "twist and tape" method and banding method of sealing the bag in the manual, but any method approved by your safety personnel is acceptable, including, but not limited to, thermal sealing of the bag.

Please note: In order to prevent the operator or immediate environment from contamination, use common sense, adhere to the instructions in this manual and consult your company's safety manual.

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Introduction To Bag-In/Bag-Out Housings

Camfil's line of Bag-In/Bag-Out housings are "containment" design, side loading filter housing used for critical applications. These filter housings have been designed to meet the air filtration needs of industries and research facilities that handle dangerous or toxic, biological, radiological or carcinogenic materials. To minimize exposure to these harmful contaminates, while replacing and handling contaminated filters, the housing incorporates a heavy duty plastic bag covered access port. Once the initial filters are installed and the bag attached and secured, all filters, both new and contaminated are handled through the bag, using procedures described throughout this manual, hence the name "Bag-In/Bag-Out".

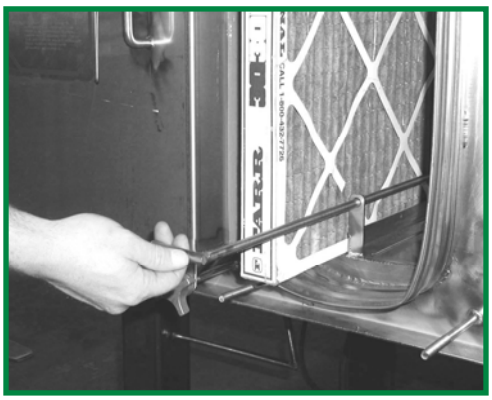
The filter-to-housing seal is accomplished with two filter locking mechanisms which forces the fluid seal channel of the filter against the housing knife-edge sealing surface, thereby making the knife-edge seal inside the fluid (gel) creating a positive airtight seal. The filter locking mechanism is operated from inside the housing and designed to prevent the access door from being installed without the locking mechanism properly secured. When the initial filters are installed or the contaminated filters are changed out, the system must be in-place leak tested to assure the filters are sealed properly and all contaminants will be filtered from the air stream.

Camfil's Bag-In/Bag-Out housing can be designed in an assortment of arrangements, depending on the user's requirements and the types of filters or adsorbers installed inside the housings. Camfil's Bag-In/Bag-Out housings come in various sizes. Sizes range from one half wide housings up to three wide housings. The housings can be supplied individually as small filtration systems or as several housing modules. These modules can be factory welded and stacked together to create a variety of larger filtration systems to meet the customer's needs. Regardless of the filter housing size you may have, the filter change-out procedure described in the manual will remain the same.

Filter Removal Rods

Camfil's Bag-In/Bag-Out multi-wide housings are equipped with filter removal rods for prefilters and final filters, to pull the second and/or third filters to the front access port of the housing. The removal rods are operated from inside the change-out bag using the glove sleeves. Camfil recommends removing the first filter by hand (without the use of the removal rod), to lighten the load that will have to be pulled by the removal rod. If the housing contains adsorbers it may be necessary on a three (3) wide housing, to remove the second adsorber by hand also, before using the removal rod to pull out the third adsorber.

Remove rod for prefilter.

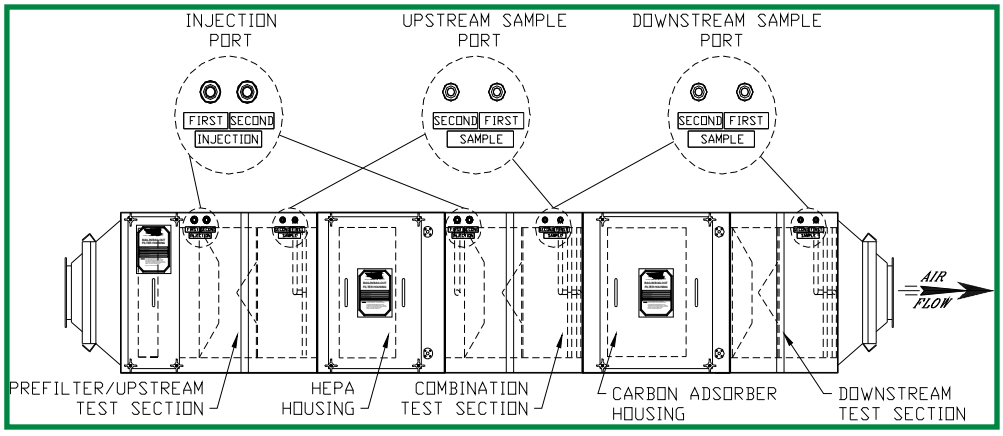


Remove rod for final

In-Place Test Section Housings

Camfil offers qualified In-Place Test Section housings to assist qualified testing technicians while performing In-Place Testing of filters or adsorbers. These test sections have proven to perform as good or better than the conventional method of in-place testing. Camfil has designed and qualified four (4) types of test sections (upstream, combination, downstream and accurate scan) for any need. The upstream test section housing design allows you to disperse a challenge agent uniformly across the filter/adsorber face so that the complete filter/adsorber is challenged. It also samples the concentration entering the downstream filter/adsorber. The combination test section provides the same function as the upstream test section, plus sampling the air stream for leaks, which have by-passed the upstream filter/adsorber. Downstream test sections sample the air stream for leaks, which have by-passed the upstream filter/adsorber. Camfil's "Accurate Scan" test housing is designed to scan the downstream face of a HEPA filter for leaks. The "Accurate Scan" test housing incorporates an access port protected by a heavy duty plastic bag, so all scan testing can be performed from outside the contaminated air stream. A probe is provided with guide rods to scan straight lines across the complete filter face and overlaps so that no part of the filter face will be missed when checking for leaks.

Users of "High Efficiency" filtration systems must commit to a testing program that will insure the installed filtration system will perform as intended from initial start-up, throughout the life of the filtration system. In some applications, guidelines for filter system testing may not be established by appropriate regulatory agencies or engineering societies. Whenever an organization has no established guidelines, often the standards for in-place testing of air filtration units for nuclear facilities is specified.



Installation Of Filtration Housing

1. Check filtration housing for loose items that may have been stored inside during shipment. Remove any loose items which are present. All loose items should be inventoried and stored in a controlled environment along with filter(s)/adsorber(s). These items should remain in the controlled environment, in there original boxes until installed.

2. To allow for filter(s) installation and change-out, a minimum of four (4) feet of clearance in front of access door(s) is recommended.

3. The filtration housing must be installed in the correct orientation. Be sure the direction of airflow and the position of the housing access door(s) is correct prior to installation of ductwork to filtration housing. To determine the direction of access, imagine that you are standing on the upstream end of the housing, with the airflow striking your back. If the door is on your left, the housing is left hand access. If the door is on your right, the housing is right hand access.

4. The ductwork should be permanently installed to the filtration housing and sealed to prevent leakage between the ductwork and filtration housing. All sections of the filtration system, including fans, dampers, etc. should be complete and ready for operation. The overall filtration system should be securely mounted to a curb, base, or structural support.

5. Following installation of the ductwork and filtration housing, the system should be cleaned to remove dust or debris before installing new filter(s)/adsorber(s) into the system.

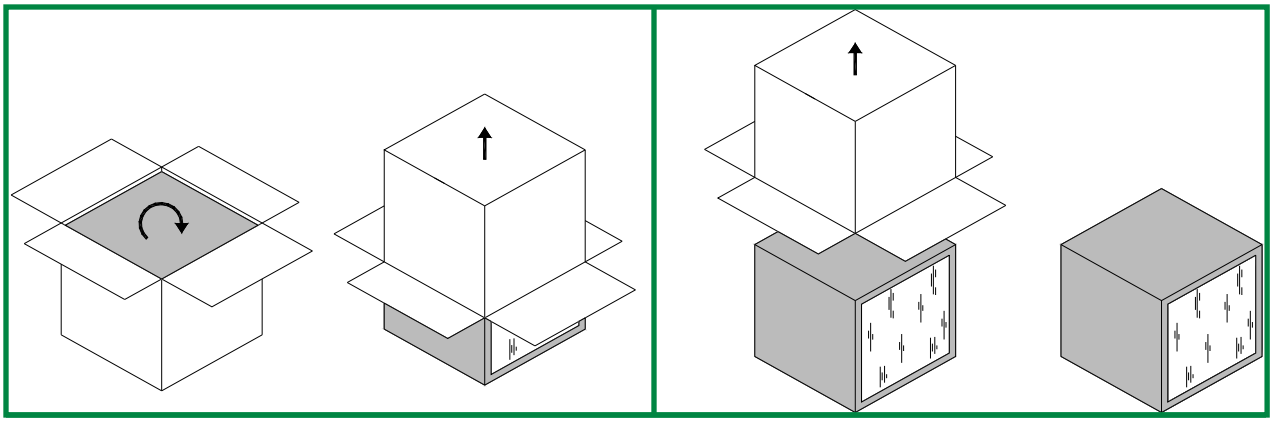
Installation Of New Filter(s) or Adsorber(s) Prior To New System Start-Up

1. Check for correct model number, quantity, type, and size of media.

2. Unpack the filter/adsorber in accordance with Camfil's recommended instructions. Rest filter on floor and cut open taped seam with utility blade (set blade to 1/8" max.). Open box and bag(s) protecting filter/adsorber. Pull excess bag(s) over the edge of the box. Turn box over carefully holding flaps away from filter/adsorber, so filter/adsorber will rest on the floor. Lift box and bag(s) from filter/adsorber.

3. Take extreme caution when removing HEPA filters from their boxes. Handle only the exterior frame of the filter. Touching the filter face can damage the media, adversely affecting the filter's performance and efficiency.

4. Visually inspect the filter/adsorber frame and media for damage prior to installation.

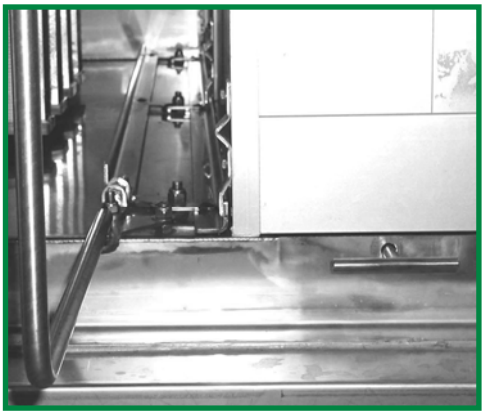


- Open filter/adsorber box.
- Turn box over.
- Filter/adsorber should rest on floor.
- Remove box and packaging..

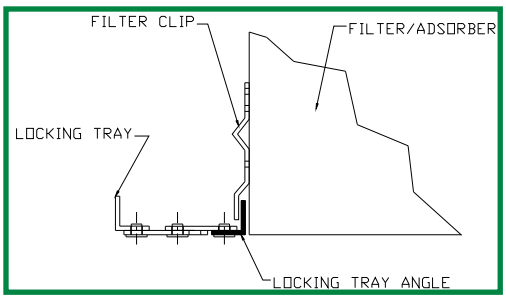
5. To gain access to the inside of the filtration housing, remove the housing access doorknobs by turning counter-clockwise (for housings equipped with swivel latches: do not remove doorknobs; loosen and swivel door bolt out from door corner retainer). Pull the access door straight towards you to remove.

6. To install prefilter(s) (if required for the application), push the prefilter inside the housing using the slide track. Make sure to install prefilters with the pleats in the vertical position.

7. To install primary filter(s)/adsorber(s), release the locking mechanism handle from the handle latch. Slowly open the locking mechanism by pulling the handle fully open. Load the filter(s)/adsorber(s) into the housing with the fluid seal channel towards the housing knife-edge (opposite the locking mechanism). Make sure the filter/adsorber is correctly orientated when placing inside of the filtration housing. The filter clips should be positioned on the top and bottom of the filter (see pictures). The filter shall be installed with the pleats, or separators in the vertical position. Install adsorbers with the carbon beds in the horizontal position. Push the filter(s)/adsorber(s) to the back of the filtration housing until it stops. For filtration housings that contain more than one filter/adsorber, it may be necessary to push one filter as far inside the housing as possible. Next, install the second filter to help push the first filter to the back of the housing. When all the filter(s)/adsorber(s) are installed correctly in a multi-wide housing, the last filter/adsorber edge should be aligned with the sealing surface edge.

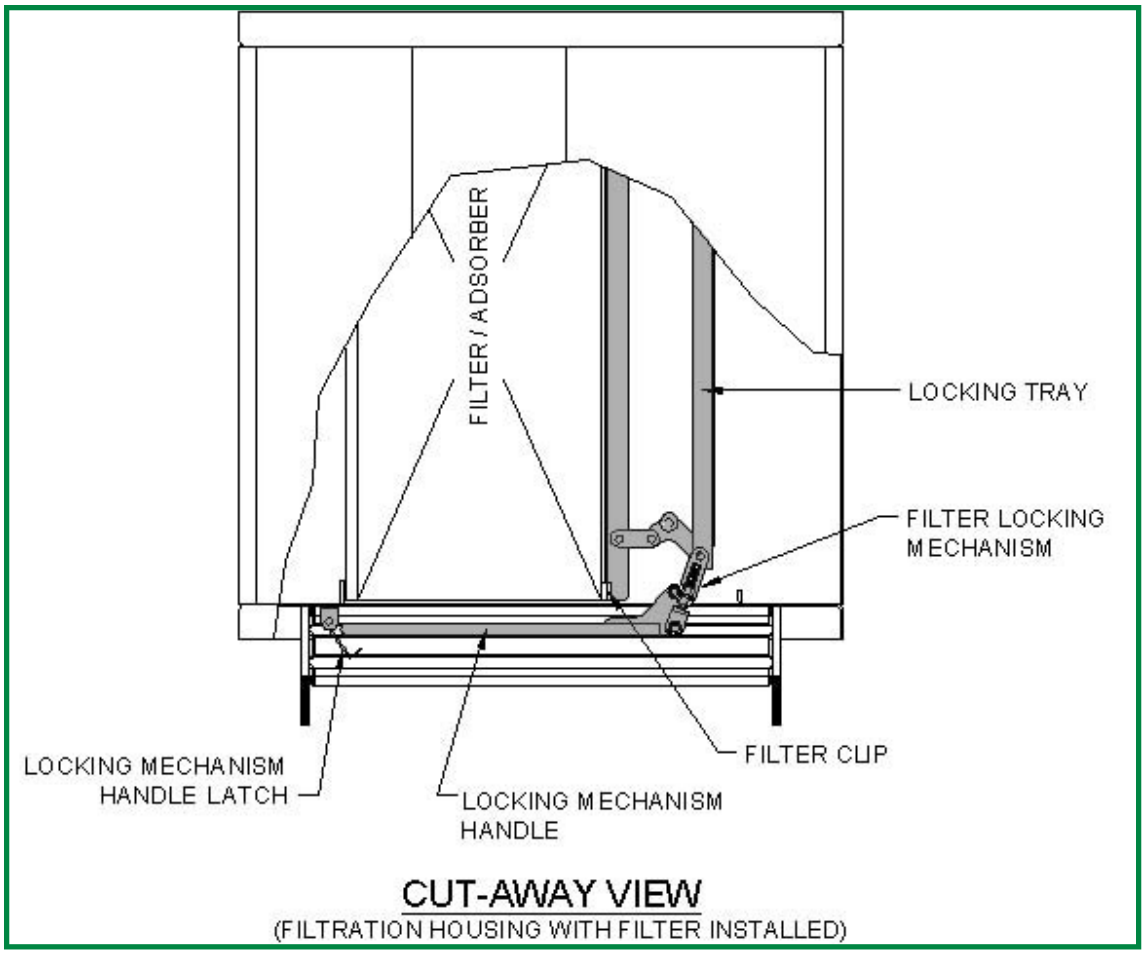


Correct filter installation, with locking tray angle between clip and filter frame



Incorrect filter installation, with locking tray angle outside clip and filter frame

8. Once the filter(s)/adsorber(s) is loaded inside the housing, slowly close the locking mechanism handle by pushing the locking mechanism handle towards the locking handle latch (see illustrations and pictures on this page and pictures on next page). This allows the fluid seal channel on the filter/ adsorber to seal with the knife-edge sealing surface. Lock the locking mechanism handle with the handle latch.



CUT-AWAY VIEW
(FILTRATION HOUSING WITH FILTER INSTALLED)

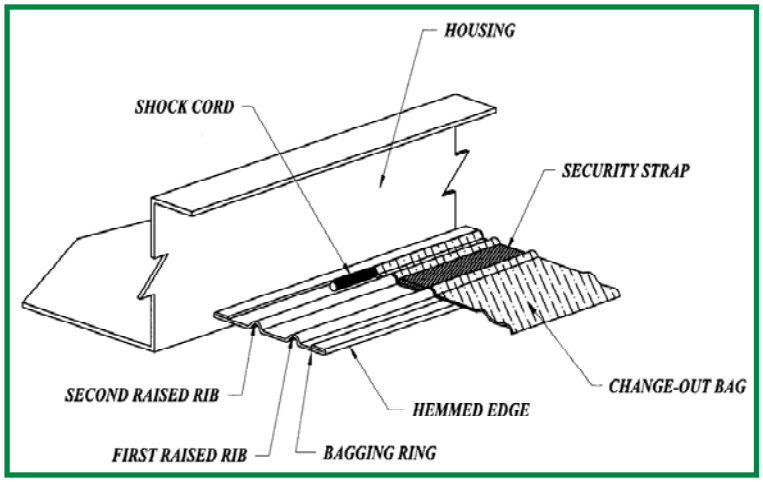
Slowly close the locking mechanism handle by pushing the handle towards the handle latch.

Locking handle should close fairly easily, until approximately 1" before the locking handle latch. Then moderate pressure should be applied to lock handle.

Warning: Do not force the locking handle to close. See page 17 if locking handle needs adjustment.

Lock the locking tray handle with the handle latch.

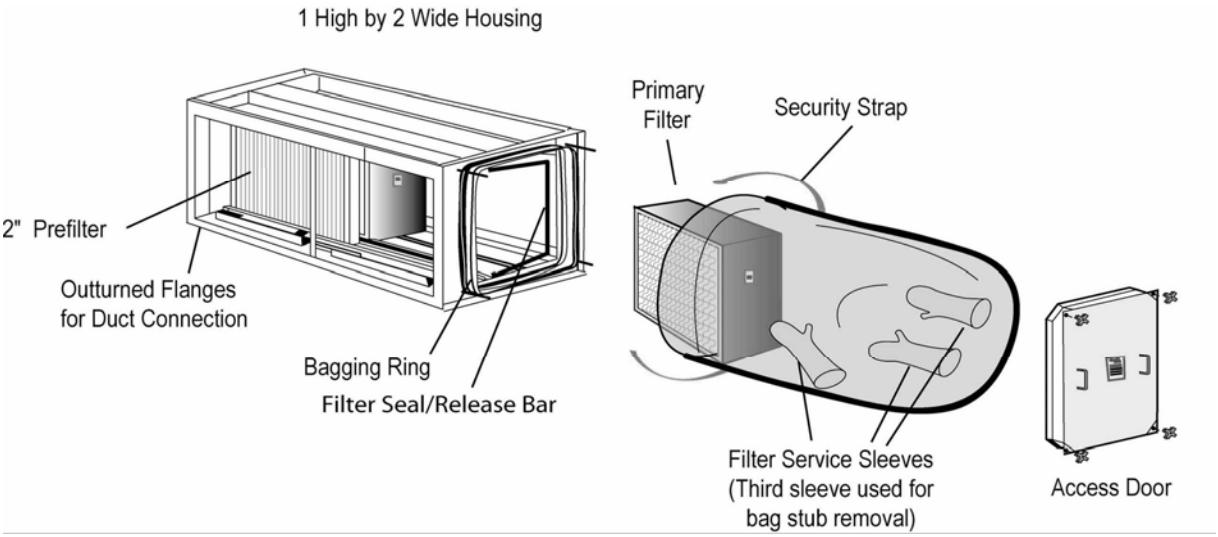
9. Install the plastic change-out bag(s) over the bagging ring(s). Check the door label to insure the correct change-out bag size is installed (see Spare Parts and Accessories page 18), each change-out bag has a tag with the bag size located on the shock cord, hemmed into the bag opening. The shock cord is to be located between the second raised rib of the bagging ring and the housing. The seam of the bag should be located at the top of the ring so the bag gloves are in the correct position. Once the change-out bag has been installed on the bagging ring, install the security strap around the change-out bag with the Velcro side out. The security strap is to be located between the first and second raised ribs of the bagging ring. Tighten the security strap and secure any excess strap so that it does not interfere with the door seal when the door is installed. After the change-out bag has been secured with the security strap, extend the bag out completely. Fold and roll the bag towards the housing, squeezing trapped air out of the folded/rolled portion of the bag until the bag is tucked neatly between the bagging ring and the filter access port. While holding the change-out bag in this position, replace the housing access door carefully. Tighten the doorknobs alternately by turning clockwise until door is sealed against the housing. The filtration system is now ready for operation.



FILTER CHANGE-OUT

(Replacing Contaminated Filters Or Adsorbers)

Bag-In/Bag-Out Concept



Consult your safety officer before beginning filter change-out, to assure all proper procedures are followed for your application.

Note: Filtration housings that contain more than one filter/adsorber are equipped with filter removal rods. Filtration housings containing multiple prefilters also are equipped with removal rods. The filter removal rod can be operated from inside the change-out bag to aid in removing the second or third filter/adsorber inside the housing. To operate the filter removal rod, grab the handle from inside the bag glove and pull filter/adsorber towards you. It is recommended on all multi-filter change-outs that the first filter/adsorber be removed by hand to lighten the load that will have to be pulled by the removal rod. Adsorbers are very heavy, and it may require a hard pull to remove them from the housing. For filtration housing containing three (3) adsorbers, it may be necessary to remove the second adsorber by reaching inside the filtration housing and pulling the adsorber out by hand.

1. Before replacing a contaminated filter(s)/adsorber(s), the airflow through the filtration system must be stopped. This can be performed by shutting-down the system, or bypassing the airflow through the system to another system, when applicable. To minimize possible contamination, close upstream and downstream dampers (if equipped). It is recommended that protective clothing, gloves, and respirators be worn when changing filters with dangerous contaminants. Consult your safety officer before beginning filter change-out to assure all proper procedures are followed for your application.

2. To gain access to the inside of the filtration housing, remove the housing access doorknobs by turning counter-clockwise (for housings equipped with swivel latches: do not remove doorknobs; loosen and swivel door bolt out from door corner retainer). Pull the access door straight towards you to remove.

3. To remove a prefilter, or header track filter, extend the change-out bag and follow steps 4 through 6. When removing filters or adsorbers sealed by a locking mechanism, extend the change-out bag and release the locking mechanism handle from the handle latch. Slowly open the locking mechanism by pulling the handle fully open, this will pull the filter away from the knife-edge sealing surface. Upon completion follow steps 4 through 6.

4. Use one change-out bag per filter/ adsorber removed (multiple prefilters can be removed inside one change-out bag as long as the weight is approximately 25 lbs. or less). Carefully remove the filter from inside the filtration housing by inserting your arms into the change-out bag gloves and pulling the filter into the change-out bag. A Camfil change-out shelf can assist in making the change-out easier (as shown in picture, see Spare Parts and Accessories, page 18), or use a table to place filter after removing from housing. Inspect the sealing surface of the filtration housing to insure no foreign matter will interfere with the new filter to be installed. Remove arms from the change-out bag gloves, leaving gloves inside bag.

5. Once the filter/adsorber is removed from the housing into the change-out bag, tightly twist the change-out bag together between the filter access port and the contaminated filter. Tape or tie strap approximately 8" of the twisted bag to secure and cut in the middle of section. Tape over exposed edges where bag was cut. Remove the contaminated filter/ adsorber for disposal. A banding kit can also be used (as shown in picture, see Spare Parts and Accessories, page18). Remove the change-out bag security strap and gently position the bag's shock cord between the two raised ribs of the bagging ring. If the filtration system only has a single filter, proceed to step 7.

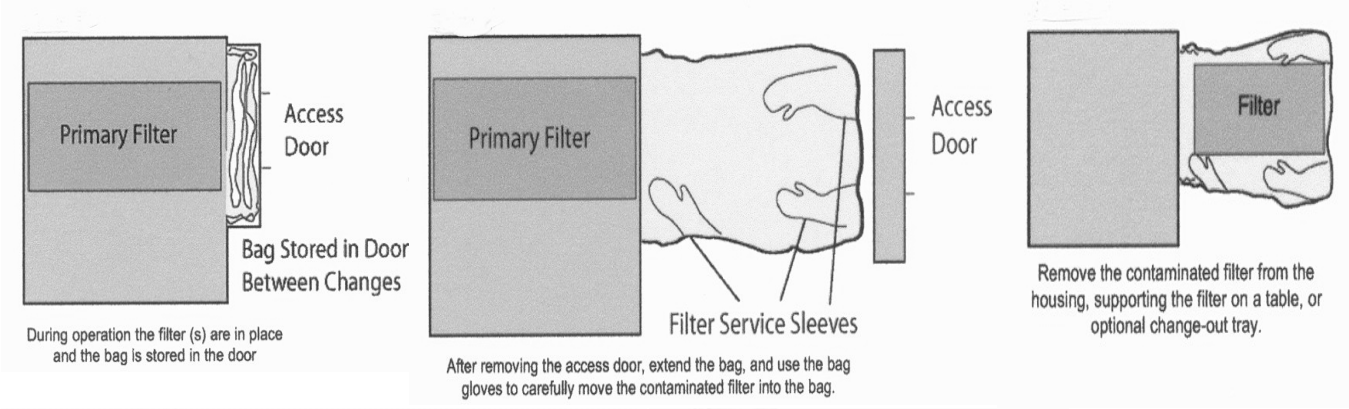
6. Install a new, empty change-out bag around the bagging ring (over top of the "stub" bag), and locate the shock cord between the second raised rib and the housing, with the seam of the bag located at the top of the bagging ring. Remove the "stub" bag (inside bag) from the bagging ring and pull to the bottom end of the change-out bag. Re-install security strap and carefully remove the next filter/adsorber from inside the filtration housing by inserting your arms into the change-out bag gloves, and pulling the filter into the change-out bag. Continue repeating steps 4 through 6 until all filters are removed from the filtration housing, using a new change-out bag for each filter/adsorber. When all filters are removed there should still be a "stub" bag remaining on the bagging ring.

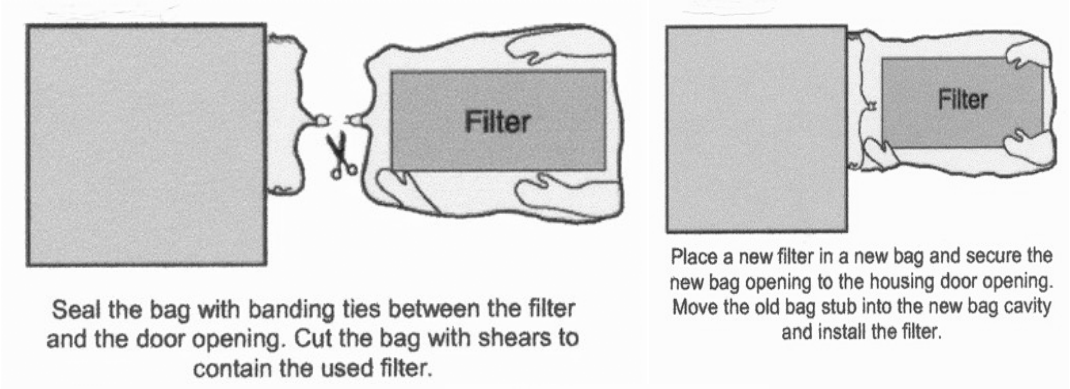
7. Place a new change-out bag over a new filter/ adsorber to be installed (see Installation of New Filter for proper unpackaging and preparations). Make sure the new filter/ adsorber is orientated so that when placing inside of the filtration housing the filter clips will be on the top and bottom of the filter (see pictures, page 7). Carefully pull the shock cord of change-out bag to the bottom of the filter. Pull the remainder of the bag down until the filter is at back of the change-out bag. Turn the filter/adsorber over and pull the bag up. Install the new change-out bag with filter/adsorber around the bagging ring (over top of the "stub" bag), locating the shock cord between the second raised rib and the housing, with the seam of the bag located at the top of the bagging ring. Insert arm into change-out bag glove closest to housing and remove the "stub" bag from the bagging ring. Pull as much of the "stub" bag as possible into the glove while turning the glove "inside-out", use one of the other gloves to help push all the "stub" bag into the glove turned "inside-out". Reinstall the security strap and slide the new filter/adsorber into the filtration housing. Once the filter is installed into the housing, tightly twist the change-out bag together between the filter access port and the glove turned "inside-out". Tape or tie strap approximately 8" of the twisted bag to secure, and cut in the middle of section. Tape over exposed edges where bag was cut, and remove the excess portion of the bag. A banding kit can also be used. Repeat this step until all filters are installed inside housing, using a new change-out bag for each new filter/adsorber installed. For filtration housings that contain more than one filter/adsorber, it may be necessary to push one filter as far inside the housing as possible, then install the second filter to help push the first filter to the back of the housing.

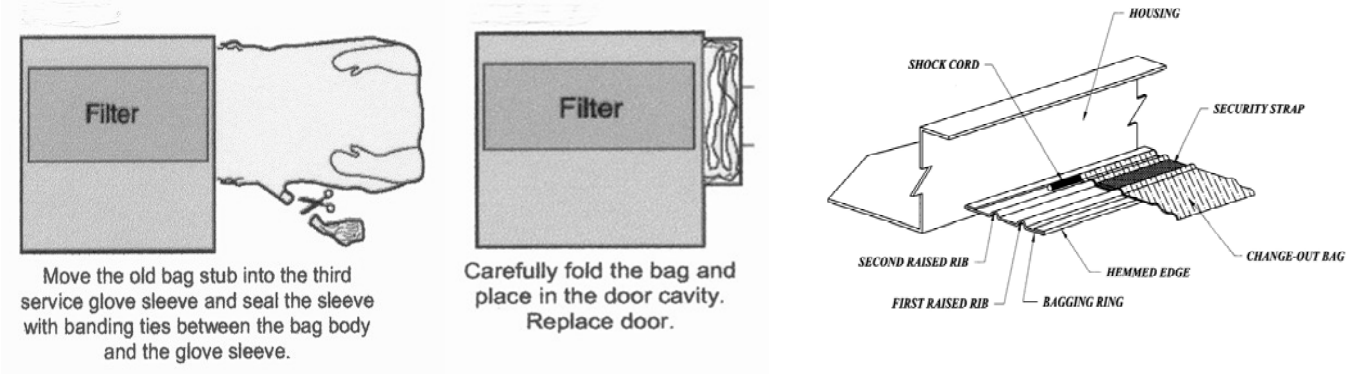
8. Once all filters/adsorbers are installed in the housing, secure the change-out bag with the security strap as described in "Installation of New Filter". If the housing has locking mechanisms for the filters, slowly close the locking mechanism handle by pushing the locking mechanism handle closed to allow the fluid seal channel on the filter/adsorber to seal with the knife-edge sealing surface. Lock the locking mechanism handle with the handle latch.

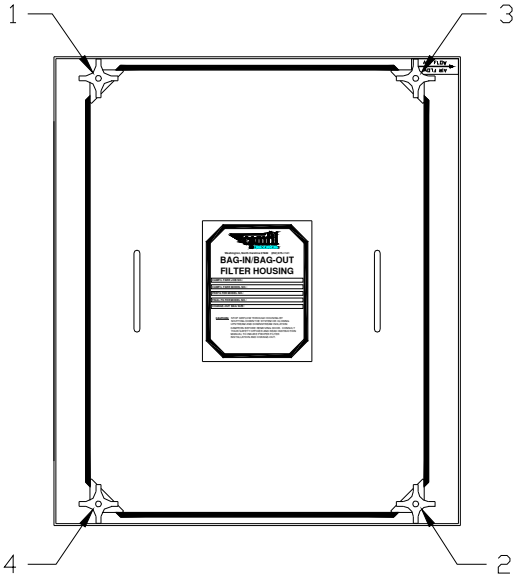
9. The "stub" bag inside the glove closest to the housing can be removed by twisting tightly together and taping or tie strapping, and cutting off (remember to tape over exposed potion). If the "stub bag" will not interfere with the access door seal, the "stub" bag can remain inside the new bag until the next filter change -out. After the change-out bag has been secured with the security strap, extend the bag out completely. Fold and roll the bag towards the housing, squeezing trapped air out of the folded/rolled portion of the bag until the bag is tucked neatly between the bagging ring and the filter access port. While holding the change -out bag in this position, replace the housing access door carefully. Tighten the doorknobs alternately by turning clockwise until door is sealed against the housing (see diagram on next page). The filtration system is now ready for operation. Open upstream and downstream dampers (if equipped) and restart the system, or redirect by-passed airflow through the system.

Filter Change-Out Overview:



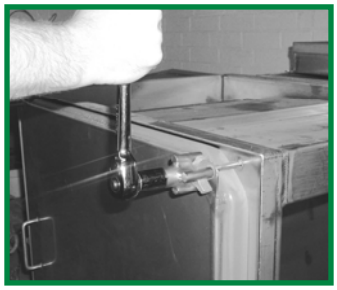


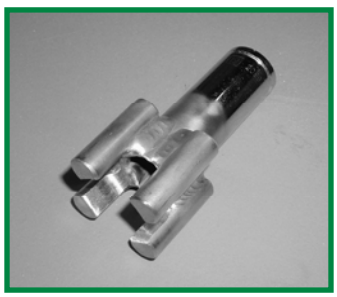




Access Doorknob Tightening Sequence

Doorknob Installation Ratchet Attachment can assist during tightening of doorknobs. To order from Camfil see Spare Parts and Accessories, page 18.





Maintenance

Important Note

Proper maintenance of the filtration housing is vital for proper operation. To maintain the desired level of filtration, it is necessary to perform filter(s)/adsorber(s) change-out when they are no longer functioning properly. To determine when media change-out is required, the following guidelines must be considered:

1. Components

For Particulate Filters (prefilters, HEPA filters):

- The pressure drop across the filter exceeds the recommended change-out pressure drop or system design pressure.
- The HEPA filter in-place leak test shows an unacceptable penetration of challenge aerosol.

For Carbon Adsorbers (HEGA):

- The in-place leak test shows an unacceptable penetration of challenge agent.

2. Filtration System

The filtration system is the containment structure built by Camfil. This structure may be a single housing, or a complete filter train (consisting of multiple, adjoining housings), depending on the scope of the contract. The filtration system is no longer functioning properly when any of the following occurs:

- A periodic site inspection, routine maintenance checks, or other planned surveillance testing reveals torn gaskets, broken welds, stripped threads on door bolts, or any other indication that the system's ability to contain the process airstream has been compromised.

To assure that the filtration system is maintained at peak performance, the owner must commit to periodic component maintenance, inspections/repairs, and test performed by qualified In-Place Testing personnel. These safe guards will insure containment has not been compromised, as well as a prompt and sufficient program outlining needed repairs.

Some components of the filtration system can be replaced, if damaged in service (see following pages for instructions). Access door gaskets can be removed and new gaskets installed and the locking mechanism front seal gasket can be replaced. Please call Camfil at 252-975-1141, with any comments or question regarding any equipment or procedures in this manual. Camfil will answer any questions regarding the systems and components we design and build.

Door Gasket Replacement

If the gasket on the access door becomes damaged, it can be replaced with new gasket by the user. You may purchase replacement gasket from Camfil (see Spare Parts and Accessories, page 18). The following steps should be taken to replace a door gasket:

1. Remove the door with the damaged gasket from the filtration housing. The filtration system will have to be shut down for removal, consult you safety personnel first.

2. **Warning: This step may require the use of sharp objects. Take extreme caution when performing this step.** With the door moved to a suitable work area, remove the damaged gasket from the door by cutting, tearing or pulling until all of the gasket is removed from the door. Scrape or cut off the remaining adhesive caulking from the door. Remove any remaining adhesive caulking, dirt, grease, with a clean wipe or cleaning solvent.

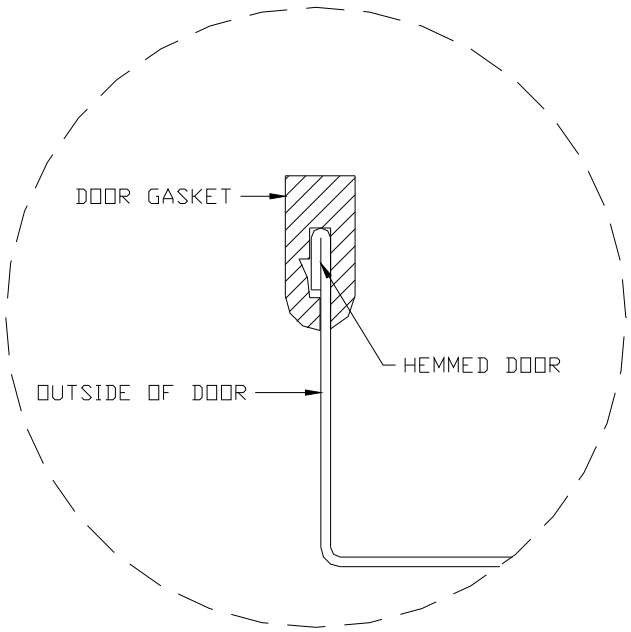
3. Position door so the hemmed edge is up and dry fit the new gasket to the door just like previous gasket was installed, and cut gasket to length. Allow for 3/4" overlap when cutting, this is to compress the gasket edges back together when performing the final installation. It is important to cut gasket as straight as possible.

4. Locate adhesive caulking (DC 732 or equal) and caulking gun. Cut tip off adhesive tube so that a bead of caulking approximately 1/8" to 3/16" diameter will be produced. Deposit a continuous bead of caulking (1/8" to 3/16" diameter) inside the bottom of the extruded gasket channel.

5. Start placing gasket on door so that the hemmed edge of door will lay inside the bottom of the extruded gasket channel (refer to illustration). With one hand, use your thumb and index finger to gently pinch the extruded gasket together while placing the gasket with the other hand until the entire door is covered. Apply an even layer of caulking over the face area of the cut ends (do not apply to thick). Install ends together over door while compressing gasket. Apply a very thin layer of caulking around the outside edge of the joint.

6. Check the alignment of the gasket and reposition gasket if needed while caulking in pliable. Gently lift and turn door over on table with the gasket face down. Apply caulking around the perimeter where the top edge of the gasket meets the door. The adhesive caulking generally takes 24 hours to fully cure.

7. After the adhesive caulking fully cures, the door can be reinstalled on the housing.



SECTION VIEW

Removable Fluid Seal Locking Mechanism

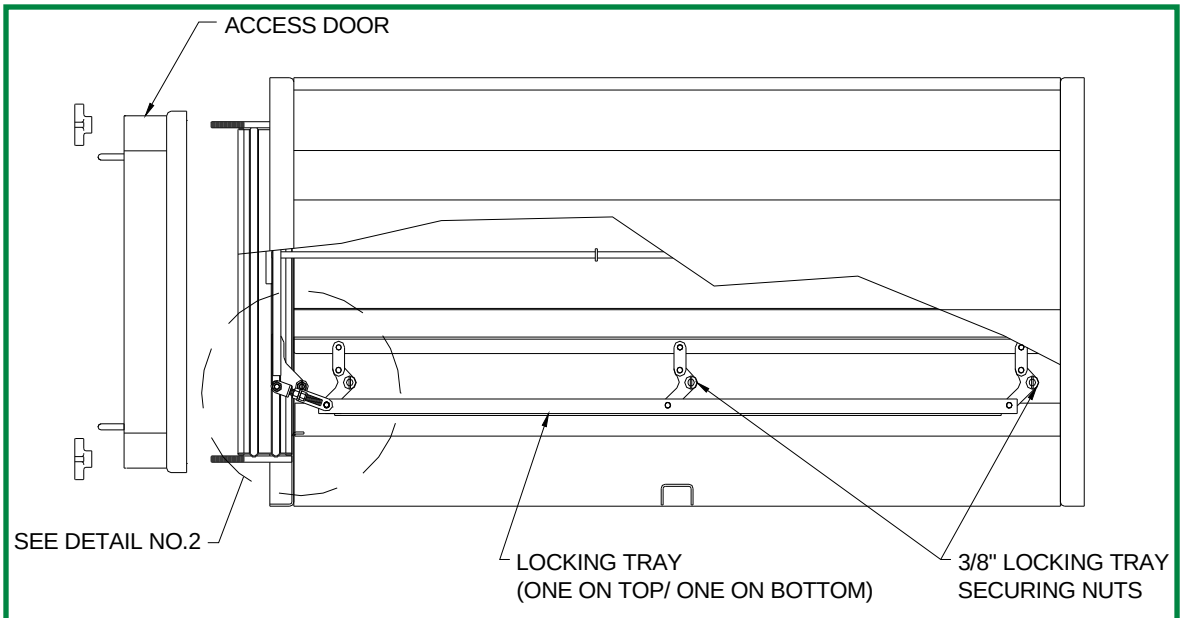
Camfil Fluid Seal housings are equipped with removable locking mechanisms. Under extreme working environments, it could be possible for the locking mechanism to deteriorate and need replacement. If your housing has been in service for an extended period of time and the locking trays are suspect to be deteriorated or damaged, contact Camfil for replacement locking mechanisms. The following steps should be taken to replace a fluid seal locking mechanism. To have a understanding of the various parts of the locking mechanism, study detail illustrations No. 1 and No. 2 (next page) before replacing locking mechanism.

1. Consult your company's safety personnel before replacing any part which has been in service. Camfil is not responsible for any personnel or procedures which include accessing a filtration housing that has been put into service.

2. Remove the access door to gain access to the inside of the filtration housing.

3. There are two locking mechanisms installed in each filtration housing (top and bottom). Take caution when removing the top locking mechanism, so that the locking mechanism does not fall. This could damage the housing or injure the personnel working on the locking mechanism. Measure the distance which the 3/8" locknuts are positioned on the locking mechanism adjustment (refer to Detail No. 2 on next page), this dimension will be used when replacing the new locking mechanism. Remove two (2) 3/8" locknuts from backside of adjustment studs connected to pivot arms and linkage tabs (one on top, one on bottom). Remove two (2) 5/16" locknuts from the pivot arms (one on top, one on bottom), which is connected to the housing with 5/16" studs. Remove the locking handle from the locking mechanism assembly and filtration housing. Remove 3/8" locknuts from locking trays, all nuts must be removed before locking mechanism can be removed from housing (save all locknuts for replacement installation).

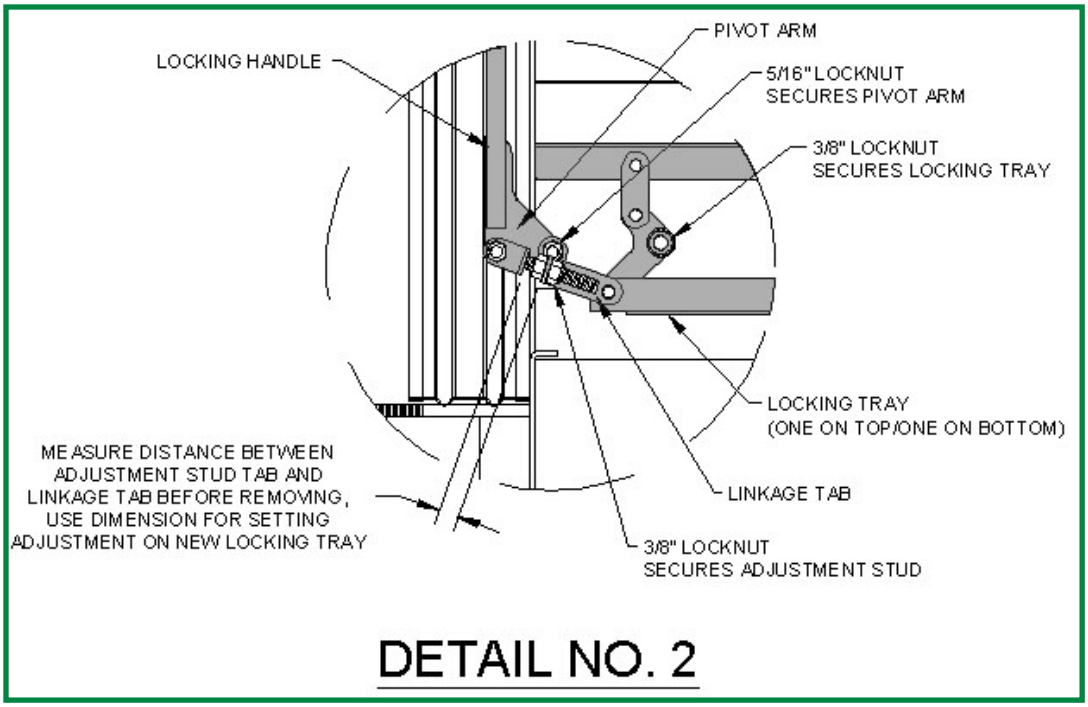
4. Remove the locking mechanisms from the filtration housing. **(Note: There is a nylon flat washer around each 3/8" stud between the locking mechanism and filtration housing. These nylon flat washers should remain around 3/8" studs, but could fall from the top studs when the locking mechanisms are removed. Be sure the nylon washers are around studs, before replacing new locking mechanism)**



CUT-AWAY VIEW
DETAIL NO. 1

5. Install replacement locking mechanisms and secure with 3/8” locknuts which were removed from replaced locking mechanism. **Note: Before replacing new locking mechanism, be sure the nylon washers are around studs.** Tighten 3/8” locknuts securing locking trays to housing, then loosen the locknuts 1/4 turn **(This step is critical to allow free movement of the locking tray)**. Install locking handle by sliding adjustment studs through linkage tabs, and pivot arms through 5/16” studs connected to housing. Tighten 5/16” locknuts on pivot arms, then loosen 1/4 turn **(This step is critical to allow free movement of the locking handle)**.

6. Using the dimension that was recorded in step 3, tighten 3/8” locknuts on adjustment studs. This may require adjusting the inside 3/8” nut to the correct dimension also. To assure there is free movement of both locking trays, open and close locking mechanism several times with the locking handle (push to close, pull to open).



DETAIL NO. 2

Locking Mechanism Adjustment

1. When installing filter(s)/adsorber(s) and/or closing the locking mechanism, do not force the handle closed. The locking mechanisms are preset at the factory (when installed in a filtration system from the factory) with the correct tension on the locking handle. The handle should move fairly easily until within approximately 1” of the locking handle latch, then moderate pressure should be applied to latch and secure the handle. If the handle takes more than moderate pressure to latch, the locking mechanism adjustment should be corrected for the proper tension.

2. **Excessive tension:** To adjust the tension of the locking handle, locate the 3/8” locknuts on the adjustment studs (one on top, one on bottom), refer to Detail No. 2. If there is excessive tension on the locking mechanism handle, adjust the 3/8” locking nuts by turning counter-clockwise until the proper tension is achieved. Tighten the inside nuts back up to the locknuts.

3. **Insufficient tension:** To adjust the tension of the locking handle, locate the 3/8” locknuts on the adjustment studs (one on top, one on bottom), refer to Detail No. 2. If there is insufficient tension on the locking mechanism handle, loosen the inside nuts and adjust the 3/8” locking nuts by turning clockwise until the proper tension is achieved. Tighten the 3/8” locknuts back to the inside nuts.

Spare Parts and Accessories

When placing an order for replacement parts, please provide Camfil with the original job order number and housing model number. This information can be found on the access door label, like the one pictured below.

Camfil Job Number →
Camfil Housing Model Number →
Prefilter Model Number (If Applicable) →
Final Filter Model Number →
Change-Out Bag Size →

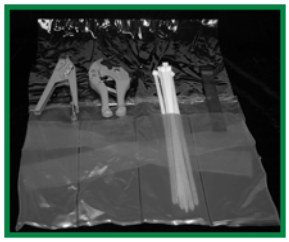
Camfil offers additional parts and accessories which can be used for repairing door gaskets, or assisting in the Filter Change-Out.

Door Gasket……Camfil Part Number: M32001001
(order by the foot, to determine length need, measure circumferance of door which the gasket is to be replaced, and add one foot extra, carry to next highest foot length)

Doorknobs……..Camfil Part Number: M36001000

Change-Out Shelf……Camfil Part Number: Contact Camfil

Banding Kit……Camfil Part Number: M34001023 » » »



Doorknob Installation
Ratchet Attachment……Camfil Part Number: M60000471 » » »

Notes

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Camfil has a policy of continuous research, development and product improvement. We reserve the right to change designs and specifications without notice.

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