

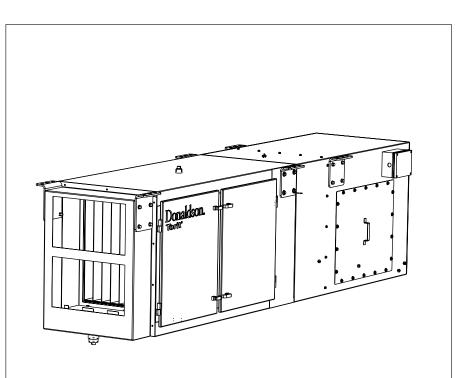
Installation, Operation and Service Information



# Installation and Operation Manual

## Modular MediaFilter<sup>™</sup> – Horizontal Series – Ambient Collectors

Models HA-1A, HA-1B, HA-2A, and HA-2B



Throughout this manual statements indicating precautions necessary to avoid equipment failure are referenced in a **Note**. Statements indicating potential hazards that could result in *personal injury or property damage* are referenced in a **CAUTION!** box.

Illustrations in this manual are for reference only, as actual product may vary.

This manual is property of the owner. Leave with the unit when set-up and start-up are complete. Donaldson Company reserves the right to change design and specifications without prior notice.



## **CAUTION!**

## **Application of Mist Control Equipment**

- Combustible materials such as buffing lint, rouge, aluminum and steel dust, weld fume, or flammable solvents represent fire or explosion hazards. Use special care when selecting and operating all mist collection equipment when combustible materials are present to protect workers and property from damage due to fire and/or explosion. Consult and comply with National and Local Codes relating to fire or explosion, and all other appropriate codes when determining the location and operation of mist collection equipment.
- When combustible materials are present, consult with an installer of fire extinguishing systems familiar with these types of fire hazards and local fire codes for recommendations and installation of fire extinguishing and explosion protection systems. Donaldson dust collection equipment is not equipped with fire extinguishing or explosion protection systems.
- DO NOT allow sparks, cigarettes, or other burning objects to enter the hood or duct of any mist control equipment.
- For optimum collector performance, use only Donaldson replacement parts.

**Warning** – Improper operation of a mist control system may result in conditions in the work area or facility that could result in severe personal injury and product or property damage. Check that all collection equipment is properly selected and sized for the intended use.

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Magnehelic® is a registered trademark of Dwyer Instruments, Inc.



This manual contains specific precautionary statements relative to worker safety. Read thoroughly and comply as directed. Discuss the use and application of this equipment with a Donaldson Torit representative. Instruct all personnel on safe use and maintenance procedures.

## **Data Sheet**

Model Number	Serial Number
Ship Date	Installation Date
Customer Name	
Filter Type	
Accessories	

## Description

The Modular MediaFilter –Horizontal Series ambient collectors are designed to collect airborne mist such as oil- or water-soluble and synthetic coolant from machining operations. Two stages of filtration plus an optional HEPA filter provide a cleaner, healthier work environment as well as a more cost efficient means of mist collection. With airflow capacities from 1,500 to 6,000 cfm, the Modular MediaFilter –Horizontal Series is a strategic component to meeting industrial and government air-quality standards. The high efficiency filter system allows filtered air to be returned to the plant environment.

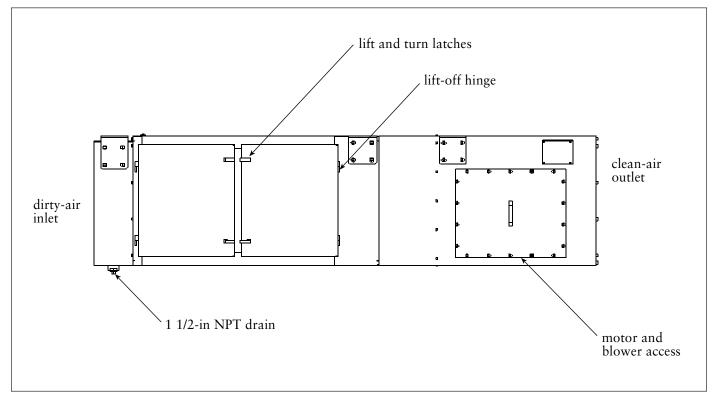
Designed to increase the versatility of the unit, standard options include motor starter controls, drain collection containers, and control boxes with remote START/STOP or machine interlock capabilities.

## **Purpose and Intended Use**

Airborne mist is small droplets of liquid that are suspended in the air. Modular MediaFilter – Horizontal Series collectors are commonly used in machine tool operations where metalworking fluids are used. Metalworking fluids include straight oil, water-soluble coolants, soluble oil, and semisynthetic coolants. Other contaminants, such as dust from the part or the tool or smoke from the combustion of the oil or coolant are also generated when using metalworking fluids and should be considered when selecting equipment.

### **CAUTION!**

- Misuse or modification of this equipment may result in personal injury.
- Do not misuse or modify.



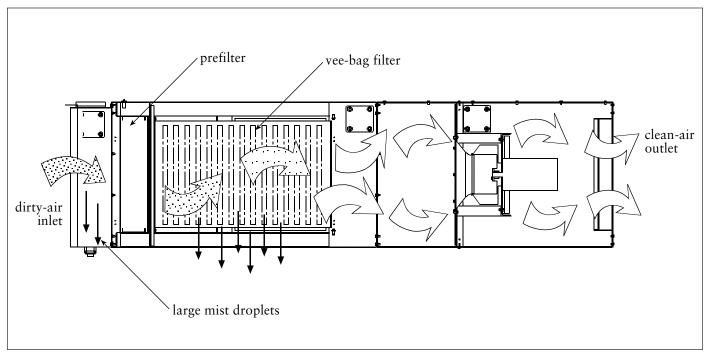
**Rating and Specification Information** 

Modular MediaFilter -Horizontal Series

Specifications	Single Module	Double Module
Electrical Requirements		
voltage/cycle/phase	208/230/460/60/3	208/230/460/60/3
	575/60/3	575/60/3
	200/50/60/3	200/50/60/3
CFM, nominal	1500 to 3000	3000 to 6000
Motor Horsepower	1, 1 1/2, 3, and 5	5 and 15
Filter Area, ft <sup>2</sup>	126	252
Number of Primary Filters	1	2
Shipping Weight, lbs	525	775

## Operation

During normal operation, contaminated air enters the unit through the open inlet located on the back of the unit. The air passes through the first-stage filter assembly designed to collect and coalesce large droplets and particles. Smaller mist droplets pass to a second-stage fiberglass vee-bag filter. The vee-bag's open pleat design and precise bag spacing allows contaminant loading throughout the life of the filter. As mist particles coalesce and form large droplets, the droplets run down into the bottom of the filter and drain into the hopper. The collected liquid drains from the hopper into a P-trap or collection bottle. Clean, mist-free air exits the filter and discharges through the end of the collector.



Unit Operation

## **Inspection on Arrival**

- 1. Inspect unit on delivery.
- 2. Report any damage to the delivery carrier.
- 3. Request a written inspection report from the Claims Inspector to substantiate claim.
- 4. File claims with the delivery carrier.
- 5. Compare unit received with description of product ordered.
- 6. Report incomplete shipments to the delivery carrier and your Donaldson Torit representative.
- 7. Remove crates and shipping straps. Remove loose components and accessory packages before lifting unit from truck.

## **Installation Codes and Procedures**



### CAUTION!

OSHA may have requirements regarding recirculating filtered air in your facility. Consult with the appropriate local authorities to ensure compliance with all codes regarding recirculating filtered air.

- 1. Safe and efficient operation of the unit depends on proper installation.
- 2. Authorities with jurisdiction should be consulted before installing to verify local codes and installation procedures. In the absence of such codes, install unit according to the National Electric Code and NFPA No. 70-latest edition.
- 3. A qualified installation and service agent must complete installation and service of this equipment.
- 4. All shipping materials, including shipping covers, must be removed from the unit prior to, or during unit installation.
  - Note: Failure to remove shipping materials from the unit will compromise unit performance.

## **Site Selection**

- 1. The unit can be suspended or hung from overhead supports. The supports must be adequate to carry the live load of the unit and installation performed to reduce sway or vibration to the unit.
- 2. Provide clearance from heat sources and interference with utilities when selecting the location for suspended units. Reference the Specification Control drawing.

## **Unit Location**

- 1. When hazardous conditions or materials are present, consult with local authorities for the proper location of the collector.
- 2. Load-bearing supports must be sized to accommodate the entire weight of the unit plus the weight of the collected material, and piping. Reference the Specification Control drawing shipped with the unit.
- 3. Locate the collector to ensure easy access to electrical connections and routine maintenance.



#### CAUTION!

Donaldson Torit equipment is not designed to support site-installed ducts, interconnecting piping, or electrical services. All ducts, piping, or electrical services supplied by others must be adequately supported to prevent severe personal injury and/or property damage.

## **Electrical Wiring**



## CAUTION!

- Electrical installation must be performed by a qualified electrician and comply with all applicable national and local codes.
- Lock out electrical power sources before performing service or maintenance work.
- Do not install in classified hazardous atmospheres without an enclosure rated for the application.
- 1. All electrical wiring and connections, including electrical grounding, should be made in accordance with the National Electric Code and NFPA No. 70-latest edition.
- 2. Check local ordinances for additional requirements that apply.
- 3. The appropriate wiring schematic and electrical rating must be used. See unit's rating plate for required voltage.
- If the unit is not furnished with a factorymounted disconnect, an electric disconnect switch having adequate amp capacity shall be installed in accordance with Part IX, Article 430 of the National Electric Code and NFPA No. 70-latest edition. Check unit's rating plate for voltage and amperage ratings.
- 5. Refer to the wiring diagram for the number of wires required for main power wiring and remote wiring.

## **Rigging Instructions**

Suggested Tools & Equipment

Crane or ForkliftSocket Wrenches, metricSlings, Spreader Bars,<br/>and Clevis PinsEnd Wrenches, metricDrift PinsLevelDrift PinsDrill and Drill BitsClampsReciprocating SawScrewdriversScrewdrivers

#### **Hoisting Information**

- 1. Use all lifting points provided.
- 2. Use clevis connectors, not hooks, on lifting slings.
- 3. Use spreader bars to prevent damage to units casing.
- 4. Check the Specification Control drawing for weight and dimensions of the unit, subassemblies, and components to ensure adequate crane capacity.
- 5. Allow only qualified crane operators to lift the equipment.
- 6. Refer to applicable OSHA regulations and local codes when using cranes, forklifts, and other lifting equipment.
- 7. Lift unit and accessories separately, and assemble after unit is in place.
- 8. Use drift pins to align holes in section flanges during assembly.

## CAUTION!

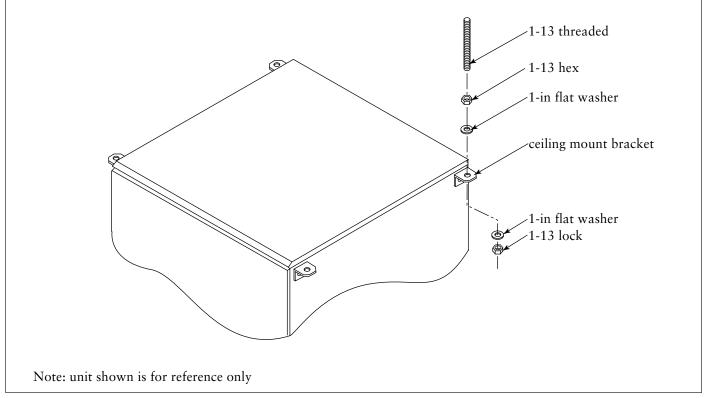
- Failure to lift the collector correctly can result in severe personal injury or property damage.
- Use appropriate lifting equipment and adopt all safety precautions needed for moving and handling the equipment.
- A crane or forklift is recommended for unloading, assembly, and installation of the collector.
- Location must be clear of all obstructions, such as utility lines or roof overhang.

## **Standard Equipment**

#### **Ceiling Mount**

- 1. Position the unit as close to the mist source as possible allowing optimum extraction air movement.
- 2. Remove the transportation support from the power pack.
- 3. Install the discharge cover.
- 4. Use six pieces of 1-13 threaded rod to suspend unit.
- 5. Place a 1-in flat washer on the threaded rod and thread a 1-13 lock nut a minimum of 1 1/2-in.

- 6. Insert rod with washer and hex nut through the ceiling mount bracket from the bottom up.
- 7. Place another 1-in flat washer from the top down and secure with a hex nut as shown.
- 8. Lift the unit into position and secure to ceiling joists.
- 9. Level unit and tighten all hardware.



Ceiling Mount

#### **Magnehelic Gauge**

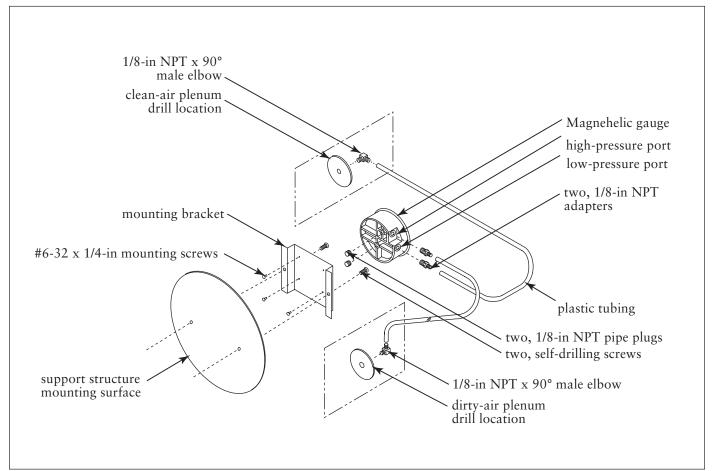
The Magnehelic is a differential pressure gauge used to measure the pressure difference between the clean- and dirty-air chambers and provides a visual display of filter change requirements. The high-pressure tap is located in the dirty-air chamber and the low-pressure tap is connected the clean-air chamber.

1. Choose a convenient, accessible location on or near the unit for mounting that provides the best visual advantage.

If unit is equipped with factory-installed pressure taps, skip to Step 5.

- 2. Before drilling, place a piece of non-combustible cloth over the filter opening in the clean-air chamber to protect them from drilling chips.
- 3. Place a piece of wood behind the drill location in the dirty-air chamber to protect the filters from damage by the drill bit. Use a .406-inch diameter bit to drill the holes.
- 4. Mount the pressure tap hardware in the cleanand dirty-air chamber.
- 5. Plug the pressure ports on the back of the gauge using two, 1/8-in NPT pipe plugs supplied. Install two, 1/8-in NPT male adapters supplied with the gauge into the high- and low-pressure ports on the side of the gauge. Attach the mounting bracket using three, #6-32 x 1/4-in screws supplied.

- 6. Mount the gauge and bracket assembly to the supporting structure using two self-drilling screws.
- 7. Thirty-five feet of plastic tubing is supplied and must be cut in two sections. Connect one section of tubing from the gauge's high-pressure port to the pressure fitting located in the dirtyair chamber. Connect remaining tubing from the gauge's low-pressure port to the fitting in the clean-air chamber. Additional tubing can be ordered from your representative.
- 8. Carefully remove the cloth protecting the filters. Close access doors and tighten securely by hand.
- 9. Zero and maintain the gauge as directed in the manufacturer's Operating and Maintenance Instructions provided.
- 10. Repeat the above steps to install the Magnehelic Gauge for the HEPA module.



Magnehelic Gauge Installation

## **Electrical Connection**

All the Modular MediaFilter —Horizontal Series Ambient collectors must be equipped with a customer-supplied safety disconnect with short circuit protection, contactors, and overload protection.



### CAUTION!

- Electrical installation must be performed by a qualified electrician and comply with all applicable national and local codes.
- Lock out electrical power sources before performing service or maintenance work.
- Do not install in classified hazardous atmospheres without an enclosure rated for the application.

- 1. Mount the control box in a convenient, accessible location.
- 2. Make the wiring connections to the fan motor according to the wiring diagram located inside the control box and the instructions on the motor decal.

**Note:** All electrical components must be sized for the supply voltage and motor horsepower.

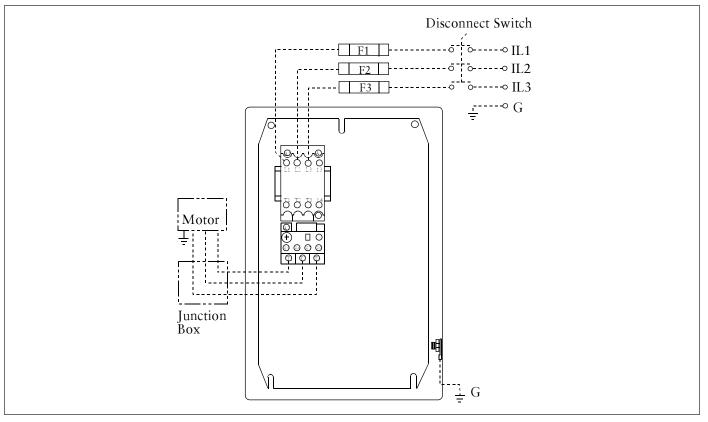
3. Turn the fan-motor ON then OFF and check for proper rotation by removing the inspection cover located on the side of the unit. Proper rotation is counterclockwise.

To reverse rotation, single-phase power supply:

Follow manufacturer's instructions on the motor's nameplate.

To reverse rotation, three-phase power supply:

Turn electrical power OFF at source and switch any two leads on the output-side of the fanmotor starter.



Motor Starter Wiring Diagram

## **Preliminary Start-Up Check**

- 1. Check all electrical connections for tightness and contact.
- 2. Check for and remove all loose items in or near the inlet and outlet of the unit.
- 3. Check that all remote controls are wired into the control system and all service switches are in the OFF position.
- 4. Check that all optional accessories are installed properly and secured.
- 5. Check that hopper discharge is open and the storage container or drains are installed and sealed properly.
- 6. Turn power ON at source.
- 7. Turn the fan motor ON then OFF to check for proper rotation by referencing the rotation arrow located on the motor's mounting plate.

#### To reverse rotation, single-phase power supply:

Follow manufacturer's instructions on the motor's nameplate.

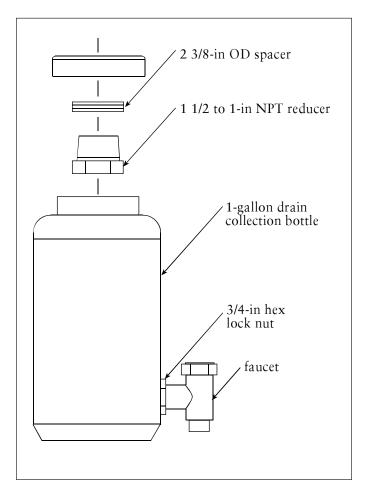
#### To reverse rotation, three-phase power supply:

Turn electrical power OFF at source and switch any two leads on the output-side of the fanmotor starter.

## **Optional Equipment**

#### **Drain Collection Container**

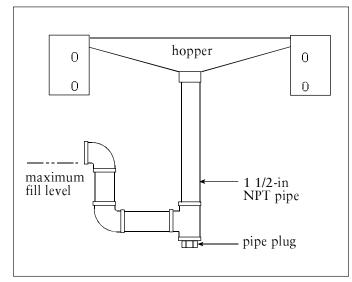
- 1. Install the drain collection container during installation or after unit is in its final operating position.
- 2. Turn unit OFF.
- 3. Remove the container by unscrewing the container from the cap. Clean the container, faucet, and re-install.
  - **Note:** Close the faucet before turning the collector back ON.



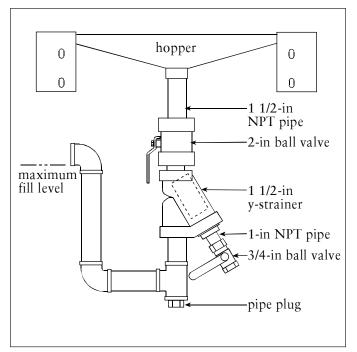
Drain Collection Container

#### **P-Trap or Y-Strainer Installation**

- 1. Install the 1 1/2-in NPT pipe as shown below.
- 2. Plumb the P-trap to a receptacle or install a return line back to the machine center.
- 3. Fill P-trap before starting unit.



P-Trap Installation



Y-Strainer Installation

#### **First-Stage Filters**

An optional 4-in impinger with a 1-in aluminum mesh filter, or a 4-in high efficiency filter are available for heavy liquid-load applications. These are re-usable filters and may need periodic cleaning.

#### **HEPA Filter**

Recommended for applications generating smoke or other fine particulate, the optional HEPA filter features 99.97% efficiency on 0.3-micron particles. The HEPA filter is used in machining processes generating large amounts of heat or in applications using straight oil as a lubricant or coolant.

## **Service Information**

#### **Operational Checklist**

- 1. Monitor overall performance of the collector.
- 2. Monitor exhaust. Exhaust should remain visually clean throughout filter life. If leaks are visible, check the filters and optional HEPA filter for positive gasket seals.
- 3. Monitor hopper drainage. If slow or stopped, check hopper and drain lines for obstructions and clean as necessary.
- 4. Check P-trap and refill if necessary.
- 5. Monitor pressure drop across filters. If the pressure is high, clean or replace the first-stage filters. If the reading remains high, the second-stage vee-bag filter may need replacement.

#### First-Stage Filter Cleaning

- 1. Remove the first-stage filter.
- 2. Replace 4-in multi-vee filter as necessary.
- 3. Tap metal first-stage filters gently over an appropriate waste container to dislodge particulate. If further cleaning is required, soak in an appropriate wash tank, rinse, dry, and re-install.



## CAUTION!

- Use proper safety and protective equipment when removing contaminants and filters.
- Use care when removing filters to avoid personal injury.

#### Second-Stage Vee-Bag Filter Replacement

- 1. Open the two filter access doors.
- 2. Remove the vee-bag filter support rod by lifting the rod from its retaining brackets.
- 3. Pull rod from the bag loops.
- 4. Move the vee-bag filter to the filter track side of the unit and slide it off its track while guiding the trailing bags from the cabinet. Dispose of properly.
- 5. Install a new vee-bag filter in the track and carefully place the individual bags in the cabinet.
- 6. Reach through the adjacent door and distribute the bags. Insert the support rod through all loops.
- 7. Place the rod in the retaining brackets at each end.
- 8. Inspect the door gaskets for condition and replace as necessary.
- 9. Close and secure doors.

#### HEPA Filter

- 1. Open the HEPA module's access door.
- 2. Pull the two clamping handles up to lower the filter from its seal.
- 3. Remove the filter and dispose of properly.
- 4. Install new HEPA filter with the filter gasket and the airflow direction arrow pointing toward the power pack. Push clamping handles down to raise the filter to the seal.
- 5. Inspect the door gaskets for condition and replace as necessary.
- 6. Close and secure doors.

#### Dirty-Air Inlet Hopper

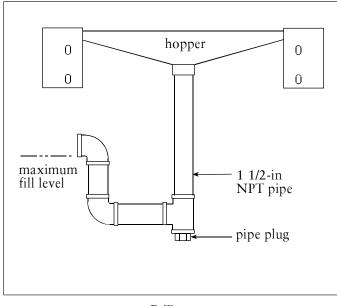
Clean hopper by scraping the particulate out. Do not allow particulate to fall into drain.

#### Vee-Bag Filter Module Hopper

- 1. Access the hopper through the filter access doors.
- 2. Clean hopper by scraping the particulate out. Do not allow particulate to fall into drain.

#### P-Trap Maintenance

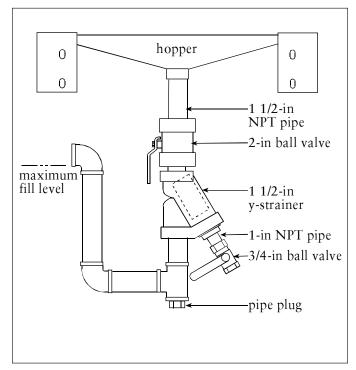
- 1. Place a suitable container under the P-trap, turn the collector OFF, and remove the pipe plug.
- 2. Allow fluid and particulate to drain.
- 3. Use thread sealant and replace pipe plug.
- 4. Refill the P-trap with suitable fluid before restarting the collector.



P-Trap

#### P-Trap with Y Strainer, Screen Cleaning

- 1. Place a suitable container under the screen clean-out valve, turn the collector OFF, close the P-trap valve, then open the screen clean-out valve.
- 2. Allow fluid and particulate to drain.
- 3. With the clean-out valve open, *slowly* open the P-trap valve. This allows fluid still trapped in the hopper to drain.
  - **Note:** A substantial amount of fluid may be trapped in the hopper and could exceed the container capacity. Open the P-trap valve *slowly*.



Y-Strainer

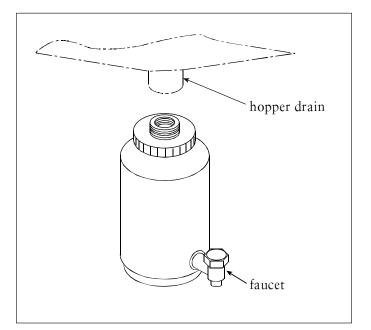
#### P-Trap with Y Strainer, Screen Removal

- 1. Close the P-trap valve.
- 2. Unscrew the screen cap and pull the screen out.
- 3. Clean the screen and the inside of the Y-strainer body, and reassemble taking care to seat the screen in the body and cap.
- 4. Close the clean-out valve.
- 4. Refill the P-trap with suitable fluid before restarting the collector.

#### Drain Collection Container

- 1. Turn unit OFF.
- 2. Remove the container by unscrewing the container from the cap. Clean the container, faucet, and reinstall.

**Note:** Close the faucet before turning the collector back ON.



Drain Collection Container

## Split Taper™ Bushing Mounting Instructions

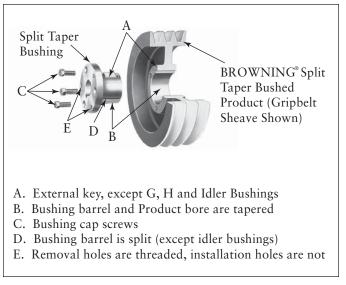
Many fans are furnished with split taper bushings for mounting the impeller to the shaft. When properly assembled, the bushings grip the hub with a positive clamping action.

- 1. Bushel barrel and bore of impeller are tapered to ensure concentric mounting and a true running propeller.
- 2. Capscrews, when tightened, lock bushing in propeller. Use special plated capscrews and nylock nuts.

		Torque
Bushing No.	Bolt Size	Ft-Lbs
QT/QH/L/H	1/4-20	7-1/2

- 3. Bushing is split so that when the locking capscrews force bushing into tapered bore, the bushing grips the shaft with a positive clamping fit. This will withstand vibration and heavy loads without being loosened.
- 4. Impeller and bushing assembly is keyed to the shaft and held in place by compression, which adds driving strength.
  - Note: Before assembly, ensure shaft and keyway are clean and smooth. Check key size with both shaft and bushing keyway.
- 5. To assemble, insert the capscrews through the clearance holes in the bushing and install bushing loosely into the impeller. Do not press or drive. Start capscrews by hand, turning them just enough to engage threads in the nylock nut. Do not use a wrench at this time. The bushing should be loose enough in the propeller to move freely. Slide impeller and bushing assembly onto shaft, allowing adequate clearance for shaft end play to prevent friction. Fit key into keyway. Do not force impeller and bushing onto shaft. If it does not go on easily, check shaft, bushing, and key sizes once again.

Tighten capscrews gradually and evenly with wrench similar to mounting an automobile wheel. Rotate a quarter turn on each capscrew successively until all capscrews are tight. These capscrews force the taper bushing into



## Split Taper Bushing Installation

the hub, which in turn compresses the bushing onto the shaft. This makes a positive clamping fit. The torque must not exceed the value specified in the table.



#### **CAUTION!**

Do not attempt to pull bushing flange flush with hub end. There should be a clearance which varies approximately 3/16-in to 1/4-in with the bushing size when tightened. This is not a locating dimension.

#### Impeller Assembly Removal

- 1. Remove all capscrews from impeller and hub assembly.
- 2. Insert capscrews into the threaded holes in the bushing flange.
- Tighten each bolt in quarter of a turn increments to push the impeller off the bushing. This forces the bushing loose from the propeller hub and releases the compression so that the entire assembly will slide from the shaft.
- 4. Pull the bushing off the shaft.
  - Note: If the assembly has been in place sometime it may be necessary to use a wheel puller to remove the bushing. Never use a wheel puller on the impeller.

Browning<sup>®</sup> is a registered trademark and Split Taper<sup>™</sup> is a tradename of Emerson Power Transmission Manufacturing, L.P.

Problem	Probable Cause	Remedy
Blower fan and motor do not start	Improper motor wire size	Rewire using the correct wire gauge as specified by national and local codes.
	Not wired correctly	Check and correct motor wiring for supply voltage. See motor manufacturer's wiring diagram. Follow wiring diagram and the National Electric Code.
	Unit not wired for available voltage	Correct wiring for proper supply voltage.
	Input circuit down	Check power supply to motor circuit on all leads.
	Electrical supply circuit down	Check power supply circuit for proper voltage. Check for fuse or circuit breaker fault. Replace as necessary.
	Blown fuse	Check all fuses. If fuse has blown, check the circuit that the fuse was protecting for possible motor, transformer, control device or wiring problem.
	Overload relay tripped	Reset overload. Check amp draw on motor leads. If amp draw exceeds the rated amps listed on the motor nameplate, check for blower or airflow problems.
	Defective overload heater or overload assembly	Replace as necessary.
	Defective transformer	Check that 115-Volts are present at the transformer outlet terminals.
Blower fan and motor start, but do not stay running	Incorrect motor starter installed	Check for proper motor starter and replace if necessary.
	Electrical circuit overload	Check that the power supply circuit has sufficient power to run all equipment.
Clean-air outlet discharging oil mist	Filters not installed correctly	See Second-Stage Vee-Bag Filter Replacement on Page 15.
	Filter damage	Replace filters as necessary. Use only genuine Donaldson replacement parts.
	Access drawers loose	Tighten access doors securely.

## Troubleshooting

Problem	Probable Cause	Remedy
Insufficient airflow	Fan rotation backwards	Check blower rotation as indicated on the rotation arrow on the blower housing. See Preliminary Start-Up Check on Page 13.
	Access doors open or not closed tight	Check that all access doors are in place and secured.
	Fan exhaust area restricted	Check fan exhaust area for obstructions. Remove material or debris.
	Plugged first-stage filter	Remove and clean or replace.
	Filter needs replacement	Remove and replace using genuine Donaldson replacement filters. See Second-Stage Vee-Bag Filter Replacement on Page 15.
	Plugged HEPA filter	Replace as necessary.
Insufficient hopper discharge	Plugged P-trap	Clean P-trap. See P-Trap Maintenance on Page 16.
	Plugged drain collection container	Remove and clean collection container and faucet. See Drain Collection Container on Page 17.
Liquid leaking from collector door	Plugged P-trap	Clean P-trap. See P-Trap Maintenance on Page 16.
	Drain collection container full or plugged	Turn unit OFF. Drain collection container. See Drain Collection Container on Page 17.

## Service Notes

Date	Service Performed	Notes

## Service Notes, continued

Date	Service Performed	Notes

## The Donaldson Torit Warranty

Donaldson warrants to the original purchaser that the major structural components of the goods will be free from defects in materials and workmanship for ten (10) years from the date of shipment, if properly installed, maintained and operated under normal conditions. Donaldson warrants all other Donaldson built components and accessories including Donaldson Airlocks, TBI Fans, TRB Fans, Fume Collector products, Donaldson built electrical control components and Donaldson built Afterfilter housings for twelve (12) months from date of shipment. Donaldson warrants Donaldson built filter elements to be free from defects in materials and workmanship for eighteen (18) months from date of shipment. Donaldson does not warrant against damages due to corrosion, abrasion, normal wear and tear, product modification, or product misapplication. Donaldson also makes no warranty whatsoever as to any goods manufactured or supplied by others including electric motors, fans and control components. After Donaldson has been given adequate opportunity to remedy any defects in material or workmanship, Donaldson retains the sole option to accept return of the goods, with freight paid by the purchaser, and to refund the purchase price for the goods after confirming the goods are returned undamaged and in usable condition. Such a refund will be in the full extent of Donaldson's liability. Donaldson shall not be liable for any other costs, expenses or damages whether direct, indirect, special, incidental, consequential or otherwise. The terms of this warranty may be modified only by a special warranty document signed by a Director, General Manager or Vice President of Donaldson. Failure to use genuine Donaldson replacement parts may void this warranty. THERE EXIST NO OTHER REPRESENTATIONS, WARRANTIES OR GUARANTEES EXCEPT AS STATED IN THIS PARAGRAPH AND ALL OTHER WARRANTIES INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHETHER EXPRESS OR IMPLIED ARE HEREBY EXPRESSLY EXCLUDED AND DISCLAIMED.

### **Parts and Service**

For genuine Donaldson Torit replacement filters and parts, call the Parts Express Line







Donaldson Company, Inc. Dust Collection Group P.O. Box 1299 Minneapolis, MN 55440-1299 donaldsontorit@donaldson.com Donaldson Company, Inc. is the leading designer and manufacturer of dust, mist, and fume collection equipment used to control industrial-air pollutants. Our equipment is designed to help reduce occupational hazards, lengthen machine life, reduce in-plant maintenance requirements, and improve product quality.