

Donaldson.
Torit®

Easy-Trunk™

Installation and Operation Manual

Installation, Operation, and Service Information



This manual contains specific precautions related to worker safety. The hazard alert image denotes safety related instructions and warnings in this manual. DO NOT install, operate, or perform maintenance on this collector until you have read and understood the instructions, precautions and warnings contained within this manual.

English
Master Language

IOM 5918601 (ENG)
Revision 5

IMPORTANT NOTES

This manual has been supplied to assist with the installation, operation and maintenance for the collector purchased. Please read the manual before installing, operating, or performing maintenance on the collector as it contains specific precautions for worker safety. It is the owner's responsibility to ensure that this manual is available for use by installers, operators and maintenance personnel that will be working with this collector. This manual is the property of the owner and should be left with the collector when installation has been completed. **DO NOT** operate this collector until you have read and understood the instructions and warnings located in this manual.

For additional copies of this manual, contact Donaldson Torit.



The Safety Alert Symbol indicates a hazardous situation which, if not avoided could result in death or serious injury. Obey all safety messages following this symbol to avoid possible injury or death. The possible hazards are explained in the associated text messages.

NOTICE

NOTICE indicates a potential situation or practice which is not expected to result in personal injury, but which if not avoided, may result in damage to equipment.

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1 Safety Communication



Improper operation of dust collectors and/or dust control systems may contribute to conditions in a work area or facility which could result in severe personal injury, and product or property damage. All dust collection equipment should be used only for its intended purpose and should be properly selected and sized for its intended use.

Process owners have important responsibilities relating to identifying and addressing potential hazards in their processes. When the potential for handling combustible dust exists within a process the process owner should include combustion hazards in their risk management activities and should comply with applicable codes and standards related to combustible dust.

Electrical installation must be performed by a qualified electrician.

This equipment is not designed to support site ducts, piping, or electrical services. All ducts, piping, or electrical services must be adequately supported to prevent injury and/or property damage.

Site selection must account for wind, seismic zone, and other load conditions.

Equipment may reach peak sound pressure levels above 80 dB (A). Noise levels should be considered when selecting collector location.

Most dusts present safety and health hazards that require precautions. Wear eye, respiratory, head and other protection equipment suitable for the type of dust.

Some components may be heavier than they appear. Use appropriate lifting methods to avoid personal injury and/or property damage.

Combustible Dust Hazards

Among other considerations, the current NFPA standards require owners whose processes involve potentially combustible materials to have a current Dust Hazard Analysis, which can serve as the foundation for their process hazard mitigation strategy. Mitigation may include but is not limited to:

- Prevention of all ignition sources from entering any dust collection equipment.
- Selection and implementation of fire and explosion mitigation, suppression, and isolation strategies appropriate for the risks in their process.
- Development and use of work practices to maintain safe operating conditions, and to ensure combustible dust does not accumulate within their plant or process equipment.

Donaldson designs, manufactures, and sells industrial air filtration products for a wide variety of applications. Some applications may include processes or materials with inherent fire and explosion hazards. Donaldson is neither an expert nor a certified consultant in fire, spark, or explosion detection, suppression, or control. Donaldson does not provide engineering consulting services related to process or dust hazard analyses, or code and standard compliance. Complying with applicable codes and standards and managing the risks associated with the process or materials remains the responsibility of the process owner/operator. Donaldson may provide referrals to consultants, suppliers of equipment or services related to the detection and/or mitigation of sparks, fires and/or explosions, but Donaldson does not assume responsibility for any such referrals, nor does Donaldson assume any liability for the fitness of a mitigation strategy or product for a particular installation or application. The process owner's final selection of dust collectors and risk mitigation strategies should be based on the outcome of a Dust Hazard / Process Hazard Analysis performed by the process owner. Although early engagement of a dust collector supplier provides helpful insights on the availability and features of various products, process owners should consult with a combustible dust expert and/or a process safety expert before making actual product and mitigation strategy selections.

Donaldson recommends that all industrial air filtration system designs be reviewed and approved by an expert consultant who is responsible for the integrity of the system design and compliance with applicable codes and standards. It is the process owner's responsibility to understand the risks in their process and mitigate those risks in accordance with all applicable laws, regulations and standards, including those published by the NFPA. Donaldson also recommends that proper maintenance and housekeeping procedures and work practices be evaluated, developed, and followed to maintain any industrial air filtration products in safe operating condition.

Many factors beyond the control of Donaldson can affect the use and performance of Donaldson products in a particular application, including the conditions under which the product is used. Since these factors are uniquely within the user's knowledge and control, it is essential the user evaluate the Donaldson products to determine whether the product is fit for the particular purpose and suitable for the user's application. All products, product specifications, and data (airflow, capacity, dimensions, or availability) are subject to change without notice, and may vary by region or country.

2 Product Description

The Easy-Trunk is a stand-alone, ready-to-use collector that incorporates the best of dust, smoke, and weld fume collection and filtration with proven filter pulse-cleaning technology to provide significant advantages to the customer. It captures dust, smoke, and weld fume right at the source, before reaching the operator's breathing zone. The filter cleaning technology provides the benefit of built-in filter cleaning by allowing the operator to pulse-clean the filters with compressed air by the simple push of a button.

The Easy-Trunk collector is compact and mobile, allowing it to easily fit through any standard doorway. Once positioned in the work area, simply lock the brakes on the front casters, plug into the wall, flip a switch, and start welding. During pulse-cleaning, make sure a compressed air supply of 90-100 psi is connected to the collector.

The collector is ergonomically designed with the operator panel, pulse buttons, filter access, and dust drawer located at the front of the collector, right at the operator's fingertips. The motor, fan, and air valves are located down and to the rear of the collector, away from the operator to minimize noise.

At the heart of the Easy-Trunk are the Torit Ultra-Web® FR (flame retardant) filters, which have proprietary fine fiber technology to filter submicron-size fume and dust particles. These state-of-the-art filters ensure that only clean air is returned to the plant environment. Always use Donaldson Torit filters to ensure high-efficiency operation and long filter life. Changing them is easy with the exclusive front-mounted slide-in design.

The Easy-Trunk is the ideal weld fume filtration solution for the customer who needs a compact, mobile, and easy-to-use dust collector with uncompromising performance.

Intended Use

Easy-Trunk collectors are portable filter systems designed for light duty or infrequent plant operations and commonly used for dust and welding fumes.

Rating and Specification Information

General rating and specification information can be found in the product literature provided with the collector and is available on the Donaldson website. For specific load values for a collector, see the Specification Control Drawing shipped with the collector.

Standard Equipment

The Easy-Trunk comes standard with a 1.5 Hp power pack, fan motor starter, filter, and fully assembled bench mount extraction arm and round hood with impacter plate. Round hood with light includes switch to turn the collector and light on or off.

3**Operation**

Electrical work during installation, service or maintenance must be performed by a qualified electrician and comply with all applicable national and local codes.

Turn all power off and lock out all power before performing service or maintenance work.

Turn compressed air supply off, bleed and lock out lines before performing service or maintenance work.

Check that the collector is clear and free of all debris before starting.

Do not install in classified hazardous atmospheres without an enclosure rated for the application.

NOTICE

The Easy-Trunk collector is intended for (maintenance and light production) intermittent duty, not continuous duty.

To start the Easy-Trunk, plug the power cord into a proper voltage receptacle and turn on the ON/OFF switch mounted on the extraction arm hood. The ON/OFF switch also controls the 65-watt halogen work light mounted in the extraction arm hood.

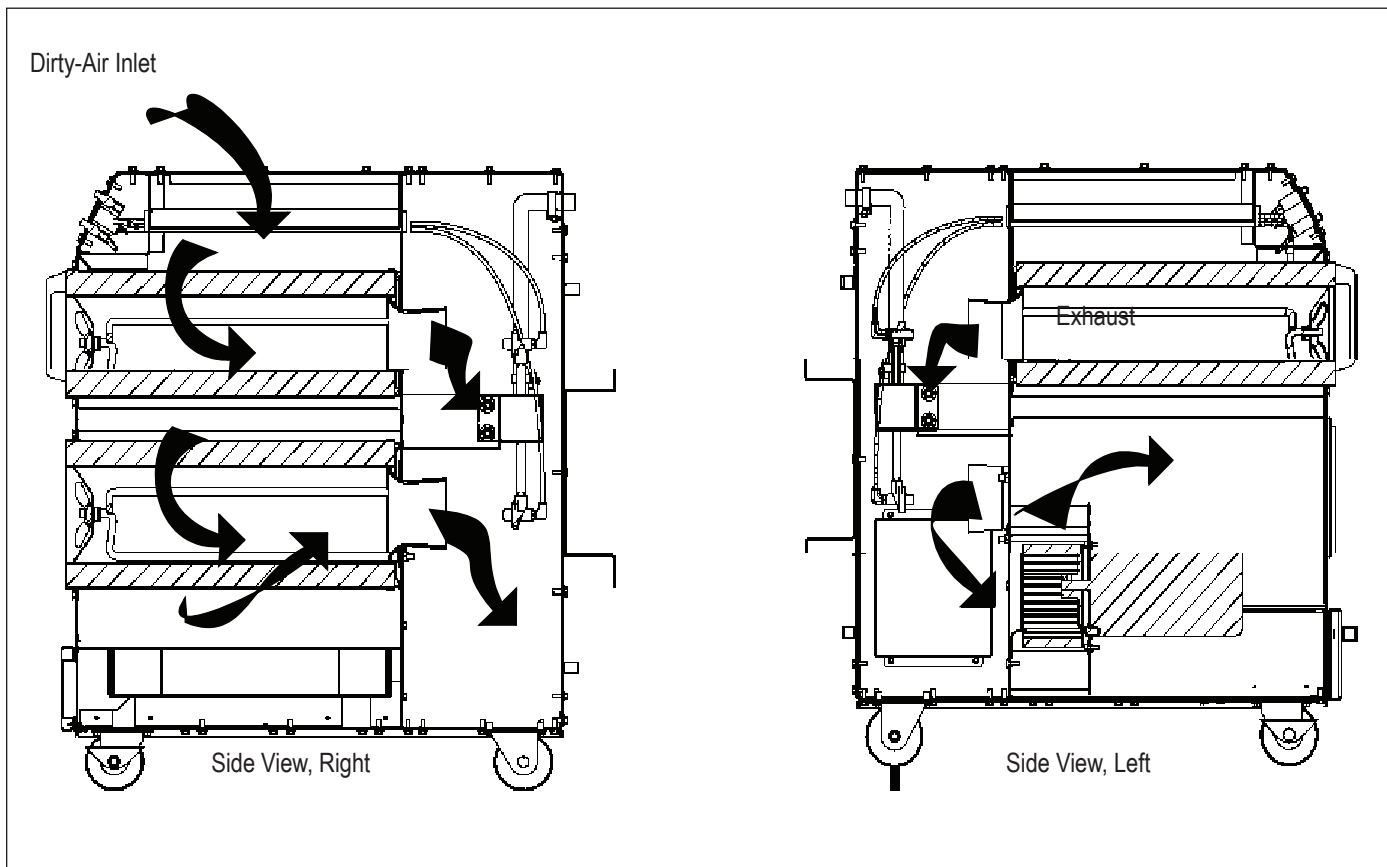
Fume or dust enters through the extraction arm hood, flows through the trunk arm, and into the collector. As the air passes through the filters, fume or dust is captured and collected on the outside surface of the pleated filter cartridges. The clean, filtered air flows up through the center of the filter elements, passes through the venturis into the clean air plenum, through the blower fan, into the silencer section of the cabinet, and finally exits through the clean side air outlet.

The intake hood of the extraction arm should be located 12 to 18 inches above the arc zone in welding applications. The distance may vary slightly depending upon the type of welding. With the intake hood in this general location, the position of the lamp at the end of the trunk should light the work area. The air intake hood is now in a good position to collect fumes and smoke being generated by the welding operation.

The extraction arm can be rotated and has three flexible joints for optimal positioning of the intake hood. Friction devices are located in each flexible joint to hold the intake hood where it is needed.

The Easy-Trunk can easily be rolled to where it is needed by pulling out on the two handles until the stop on each side is engaged. The handles are retracted into the cabinet by pressing down on the release button while sliding the handle back into the cabinet (see Retractable Handle Release).

The blower motor is protected from overloading and overheating by an automatic thermal protection built into the motor.



Collector Operation

4 Product Service



During service activities there is some potential for exposure to the dust in the collector. Most dusts present safety and health hazards that require precautions. Wear eye, respiratory, head and other protection equipment suitable for the type of dust when performing any service activities.

Use appropriate access equipment and procedures.

LOCK-OUT all energy sources prior to performing any service or maintenance on the equipment.

Electrical service or maintenance work must be performed by a qualified electrician and comply with all applicable national and local codes.

Turn compressed air supply OFF, bleed and lock out lines before performing service or maintenance work.

NOTICE

Do not set compressed-air pressure above 100-psig as component damage can occur.

All compressed air components must be sized to meet the system requirements of supply pressure.

The compressed-air supply must be oil and moisture free. Contamination in the compressed air used to clean filters will result in poor cleaning, cleaning valve failure, or poor collector performance.

Purge compressed air lines to remove debris before connecting to the collector's compressed air manifold.

Operational Checklist

1. Monitor the physical condition of the collector and repair or replace any damaged components.

Routine inspections will minimize downtime and maintain optimum system performance. This is particularly important on continuous-duty applications.

2. Periodically check the compressed air components and replace compressed air filters.

Drain moisture following the manufacturer's instructions. With the compressed air supply ON, check the cleaning valves, solenoid valves, and tubing for leaks. Replace as necessary.

3. Monitor pressure drop across filters. Cleaning off-line with no airflow usually restores the filters to normal pressure drop.
4. Monitor exhaust.
5. Monitor dust disposal.

Filter Replacement



Most dusts present safety and health hazards that require precautions. Wear eye, respiratory, head and other protection equipment suitable for the type of dust.

Use proper safety and protective equipment when removing contaminants and filters.

Dirty filters may be heavier than they appear. Use appropriate lifting methods to avoid personal injury and/ or property damage.

Turn all power OFF and lock out all power before performing service or maintenance work.

Turn compressed air supply OFF, bleed and lock out lines before performing service or maintenance work.

Do not operate with missing or damaged filters.

1. Turn all power to the collector OFF.
2. Start at the top access port
3. Remove the filter access covers by turning the knob counterclockwise.
4. Break the seal between the filter cartridge and the sealing surface.
5. Rotate the cartridge slightly to remove dust that may have accumulated on the top of the filter.
6. Slide the filter out the access port along the suspension yoke and dispose of in accordance with local requirements for the materials being collected.
7. Clean any dust from the yoke threads that may have accumulated during the filter removal.
8. Inspect and clean the sealing surface prior to installing a new filter if necessary.

NOTICE

Clean dust from gasket sealing area to ensure a positive filter gasket seal.

9. Check for any accumulation of dust and remove as necessary.
10. Slide the new filter cartridge onto each suspension yoke.

NOTICE

Insert the filter, gasket end first.

11. Wipe cover gaskets clean and replace covers. Tighten securely by hand.

NOTICE

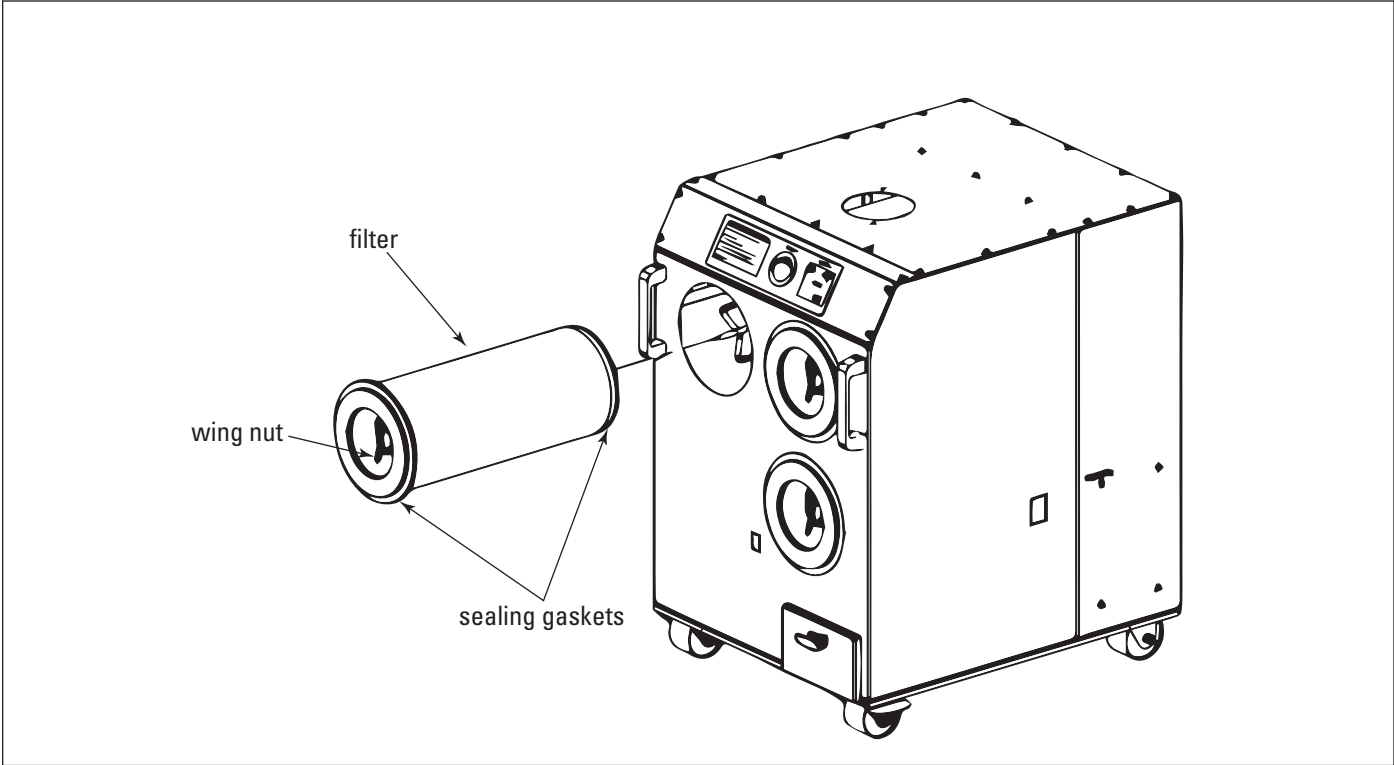
Inspect and replace any covers with damaged or missing gaskets. Failure to do so may result in leakage in the collector.

Tighten access covers securely by hand. Gaskets must be compressed to seal properly.

12. Turn electrical power and compressed air supply ON before starting collector.

NOTICE

Do not operate collector without door closed or electrical overload will occur.



Filter Replacement

Filter Cleaning



Do not overclean the filters as filter damage may result. Refer to filter cleaning instructions located on the collector front operator panel.

Less than three seconds between pulses will cause a lack of compressed air supply to the manifold and a lack of cleaning pressure.

NOTICE

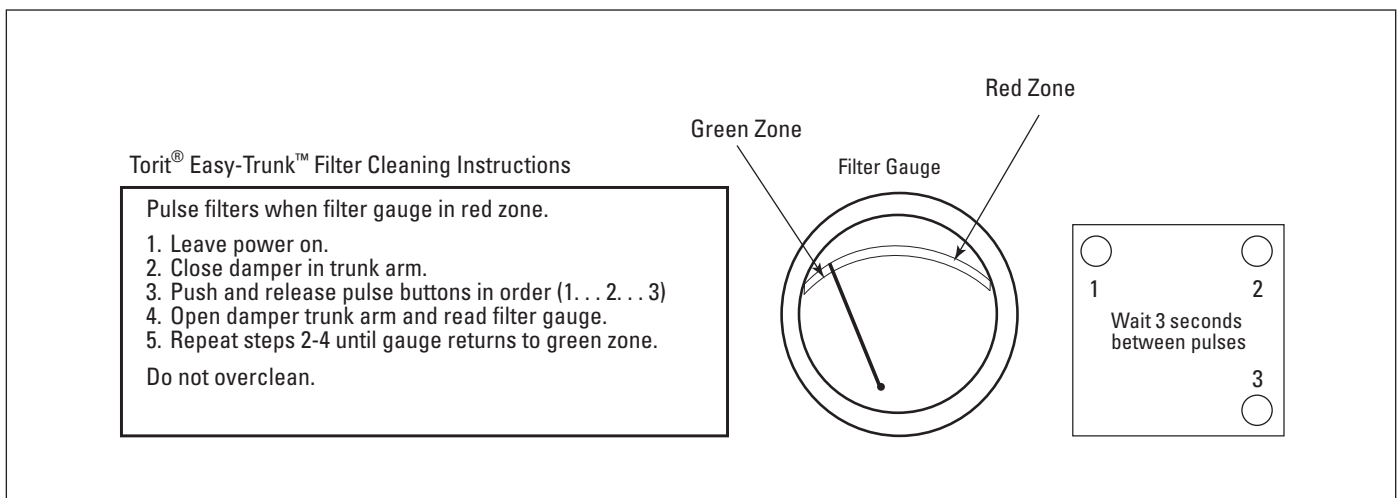
Do not push and hold the pulse button. Press and release quickly for optimum cleaning of the filters.

Before attempting to clean the filters, make sure a compressed air supply of 90 -100 psig is connected to the threaded coupling in the back of the Easy-Trunk. While the Easy-Trunk is on and running, make sure the damper is fully open on the extraction arm. Check the filter gauge on the operator panel to see what color zone (red or green) the filter gauge indicator is in. If it is in the green zone, do not pulse-clean the filters. If the indicator is in the red zone, proceed as follows:

1. Leave power on.
2. Close the damper in the extraction arm by turning the handle above the hood. Notice that the filter gauge indicator drops back into the green zone.
3. Quickly press and release each pulse button in sequence, making sure to wait three seconds between pulses to allow the air manifold to recharge.
4. Open the damper in the extraction arm.
5. Read the filter gauge indicator.
6. Repeat steps 2-5 until the filter gauge indicator is in the green zone.

If the filter gauge fails to return to the green zone after several cleaning attempts, filter replacement may be necessary.

Every time a pulse button is pressed and released, a reverse jet of high pressure air is introduced through the venturis into the filter cartridge. The back flushing of air through the filter initiates the cleaning cycle, which will dislodge any dust or contaminant accumulated on the outside of the filter media. In turn, the dust will fall into the dust drawer located in the bottom of the Easy-Trunk, where it can be easily removed and properly disposed.



Filter Cleaning Gauge Panel

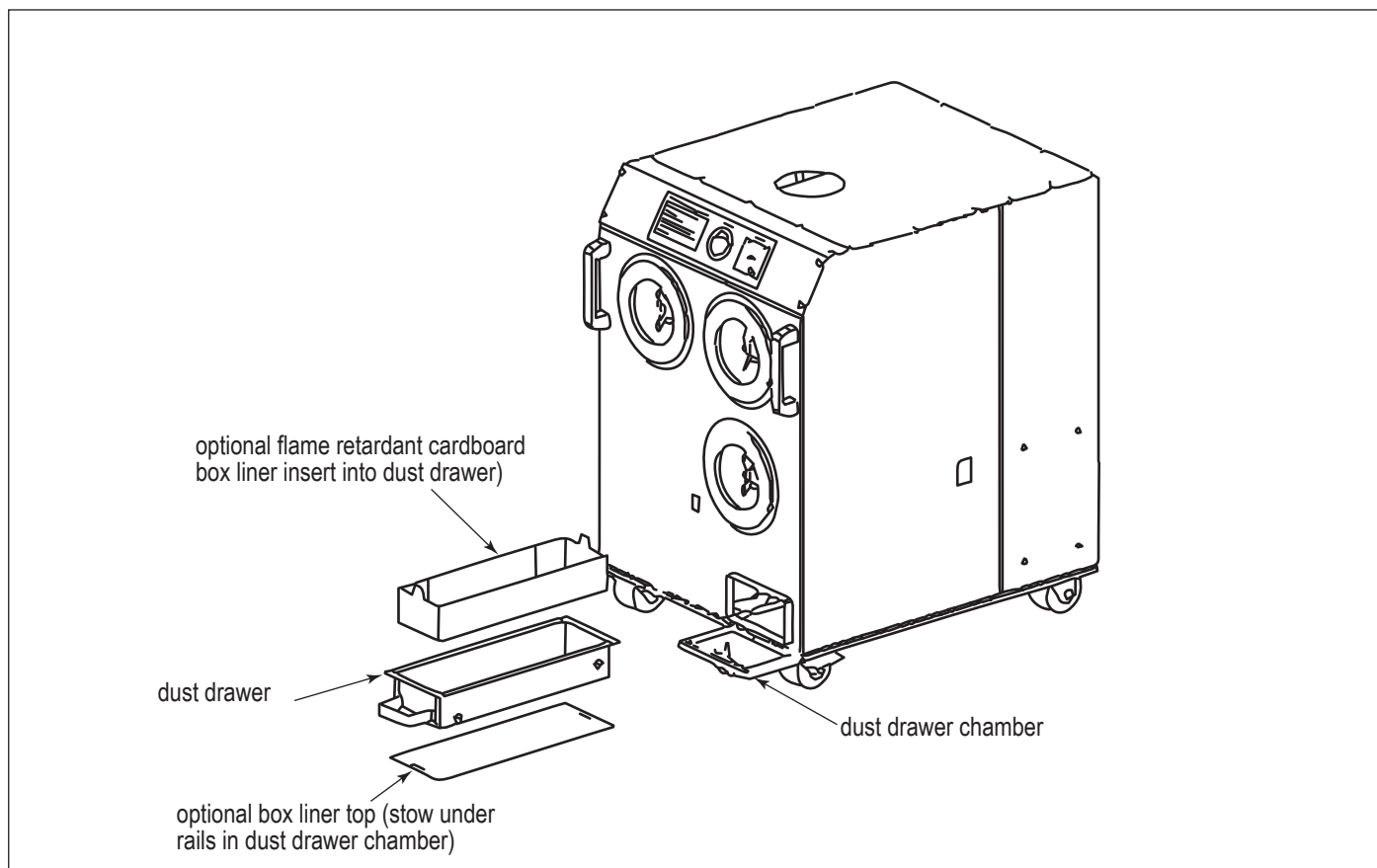
Dust Disposal

The Easy-Trunk provides a built-in, sealed dust drawer for the capture and removal of weld fume dust and contaminants from the collector. The dust drawer is located at the front of the collector for easy access and simple disposal.

1. Prior to emptying the dust drawer, it is recommended that all filter elements be pulse-cleaned.
2. Turn power OFF.
3. Facing the front of the collector, open the small door located at the bottom right-hand corner of the collector.
4. Reach inside and underneath the dust drawer opening and remove the flat, slotted cardboard top.
5. Reach inside the opening again, grasp the dust drawer handle, and pull the dust drawer forward and out of the collector.
6. Slide the slotted cardboard top over the tabs provided on the cardboard box insert of the dust drawer.
7. Dispose of the cardboard box and contaminants in a safe and responsible manner.
8. Place a new slotted cardboard top inside the collector (underneath rails) and new cardboard box insert into the dust drawer.
9. Slide the dust drawer back through the opening, pushing forward until the dust drawer is firmly seated and sealed.
10. Close the small door and twist the T-handle, locking and sealing the door.
11. Turn on the power and resume operation.

Extraction Arm Maintenance (Bench Mount)

Refer to the Extraction Arm Installation and Operation Manual for instruction.



Dust Drawer

Troubleshooting

Problem	Probable Cause	Remedy
Fan blower 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.
	Collector 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.
	Damaged motor	Replace damaged motor.
Fan blower and motor start, but do not stay running	Incorrect motor starter installed	Check for proper motor starter and replace if necessary.
	Access doors are open or not closed tight	Close and tighten access doors. See Filter Replacement.
	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.
	Blower motor thermal overload protection has tripped.	
	Electrical circuit overload	Check that the power supply circuit has sufficient power to run all equipment.
Insufficient airflow	Fan rotation backwards	Proper fan rotation is clockwise when viewed from the motor side or counterclockwise when viewed through the inlet cone. See Start-Up/Commissioning.
	Access doors open or not closed tight	Check that all access doors are in place and secured. Check that the hopper discharge opening is sealed and that dust container is installed correctly.
	Fan exhaust area restricted	Check fan exhaust area for obstructions. Remove material or debris. Adjust damper flow control.
	Filters need replacement	Remove and replace using genuine Donaldson replacement filters. See Filter Replacement.
	Extraction arm damper closed	Locate the damper control handle and move the handle to be in line with the rigid ducting. This will be the wide open setting.
	Obstruction in ducting or hood	Check the hood, ducting, flex duct and exhaust ducting (if used) for blockage. Remove any debris that is blocking airflow. See Extraction Arm Installation and Operation Manual.
	Filters not properly sealed	Ensure filters are tightly sealed. See Filter Removal and Installation.
	Filters are dirty	Pulse clean filters. See Filter Cleaning.

Problem	Probable Cause	Remedy
Insufficient airflow continued	Filter packs need replacement	Remove and replace using genuine Donaldson replacement filter packs. See Filter Replacement.
	Flexible ducting is torn or collapsed or rigid ducting is broken or collapsed	Check the flexible ducting and replace any damaged parts. Check the rigid ducting on the Extraction Arm or exhaust ducting (if applied) for cracks or collapsed section(s). See Extraction Arm Installation and Operation Manual.
Compressed air is leaking	Pulse button(s) not working	Apply compressed air and remove front operator panel. Check each pulse button for air leakage. If leak is found, replace the pulse button(s).
	Diaphragm valve(s) not working	Apply compressed air and remove rear access panel. Check each diaphragm valve for air leakage. If leak is found, replace or rebuild the diaphragm valve(s).
	Pneumatic pulse tube(s) cracked	Bleed compressed air and remove the front operator and rear access panels. Replace all pneumatic tubing.
	Compressed air manifold is cracked	Remove rear access panel and apply compressed air. Check air manifold and connecting hardware for air leakage. Replace the manifold or hardware as necessary.
Pulse function does not work properly or does not work at all	Lack of compressed air	Check that a minimum of 90-psig is available. See Compressed Air Installation.
	Low compressed air supply	Maintain compressed air supply between 90-100-psig during pulse cleaning operation.
	Compressed air supply contaminated	Maintain a moisture and contaminant free system for the compressed air supply.
		Replace or repair pulse buttons, diaphragm valves and pneumatic.
	Pulse button has failed	Remove operator panel and pneumatic line from bad pulse button. Apply compressed air. Use thumb to cover open end of pneumatic line. Quickly remove and replace thumb. If cleaning pulse occurs, replace pulse button.
	Diaphragm valve has failed in open position and leaking compressed air	Remove operator panel and apply compressed air. Push pulse button for bad diaphragm valve and check area surrounding button. If compressed air is escaping from pulse button, replace the diaphragm valve.
	Pneumatic line plugged	Remove operator panel and rear access panel if necessary. Apply compressed air. Remove pneumatic line from the pulse button. Tube is plugged if compressed air does not escape.

Troubleshooting

Problem	Probable Cause	Remedy
Visual discharge of dust from exhaust	Filters not sealed	Tighten filters securely.
	Filter damage, dents in the end caps, gasket damage or holes in pleated media	Replace filters as necessary. Use only genuine Donaldson replacement parts. See Filter Installation.
	Residual dust from previous leak	Remove the rear access panel and inspect clean air section for contamination. Clean as necessary.
Dust is outside of the dust drawer	Dust drawer not sealed properly	Check that dust drawer is fully seated and sealed in the dust drawer chamber. Check dust drawer gasket for rips, tears, or deformity. Replace gasket as necessary and spray replacement gasket with release agent. See Replacement Parts Manual.
		Check condition of dust drawer wheels. Replace as necessary if they are bent, loose or missing.
Filter gauge in the red zone with new filters installed	Filter gauge tubing is pinched, plugged or restricted	Remove operator panel and rear access panel if necessary. Remove tubing from the gauge one side at a time. Inspect each tube for any pinched plugged, or restricted areas.
	Filter gauge tubing is loose or disconnected	Remove operator panel and rear access panel if necessary. High port on the gauge should be connected to the brass barbed fitting directly behind the operator panel.
	Filter gauge tubing has a hole	Remove operator panel and rear access panel if necessary. Remove tubing from gauge one side at a time. Inspect each tube for nicks, cuts, or holes and replace as necessary.
	Filter gauge has failed	Replace filter gauge if all filter tubing troubleshooting proves ineffective in correcting the problem.

Appendix A - Installation

Installation



Electrical Installation (including bonding and grounding of the collector) must be performed by a qualified electrician.

This equipment is not designed to support site ducts, piping, or electrical services. All ducts, piping, or electrical services must be adequately supported to prevent injury and/or property damage.

Do not install in classified hazardous atmospheres without an enclosure rated for the application.

Service must be performed by trained and qualified maintenance personnel.

Turn all power off and lock out all power before performing service or maintenance work. It is not unusual for the equipment to be operated from a remote location, so equipment may start or stop unexpectedly.

Equipment may reach peak sound pressure levels above 80 dB (A). Noise levels should be considered when selecting equipment location.

Location and Site Selection



Codes may regulate recirculating filtered air in your facility. Consult with the appropriate authorities having jurisdiction to ensure compliance with all national and local codes regarding recirculating filtered air.

Equipment location must conform to all codes and standards, should be suitable for the type of dust being handled and should ensure easy access for service and utility connections. Site selection must account for wind, seismic zone and other load conditions.

The equipment must be anchored once in final position. Anchors must comply with local code requirements. Anchors, foundation or support framing must be capable of supporting dead, live, wind, seismic, and other applicable loads. Consult a qualified engineer for final selection of foundation or support framing.

Note: Ensure the inlet has at least five diameters of straight duct prior to the collector inlet including a transition to the full inlet dimensions. Inlet transition should have a taper with a maximum of a 90-degree included angle.

Follow industry practice relative to clean air velocity into a fan.

Delivery and Inspection

Upon arrival inspect equipment and report any damage to delivery carrier. File any damage claims with the delivery carrier. Request a written inspection report from the Claims Inspector to substantiate all damage claims.

Compare the equipment received with the description of product ordered. Report any incomplete shipments to the delivery carrier and your Donaldson Torit representative.

Unloading and Positioning



Equipment should be lifted only by qualified crane or fork truck operators.

Failure to lift the equipment correctly can result in severe personal injury and/or property damage.

1. Remove any crates or shipping straps.
2. Lift the packaged collector from transport container.
3. Inspect for any damage and/or missing parts and report to freight carrier.
4. Check for any hardware which may have become loose during shipment and tighten as necessary.

Lifting Information



Failure to lift the equipment or sub-assemblies correctly can result in severe personal injury and/or property damage. Only qualified crane or forklift operators should be allowed to lift equipment.

1. Use all lifting points provided.
2. Use clevis connectors, not hooks, on lifting slings.
3. Use spreader bars to prevent damage to equipment.
4. Check the Specification Control drawing for weight and dimensions of the collector and components to ensure adequate crane capacity.
5. Lift collector and accessories separately and assemble after collector is in place.
6. Use drift pins to align holes in section flanges during assembly.

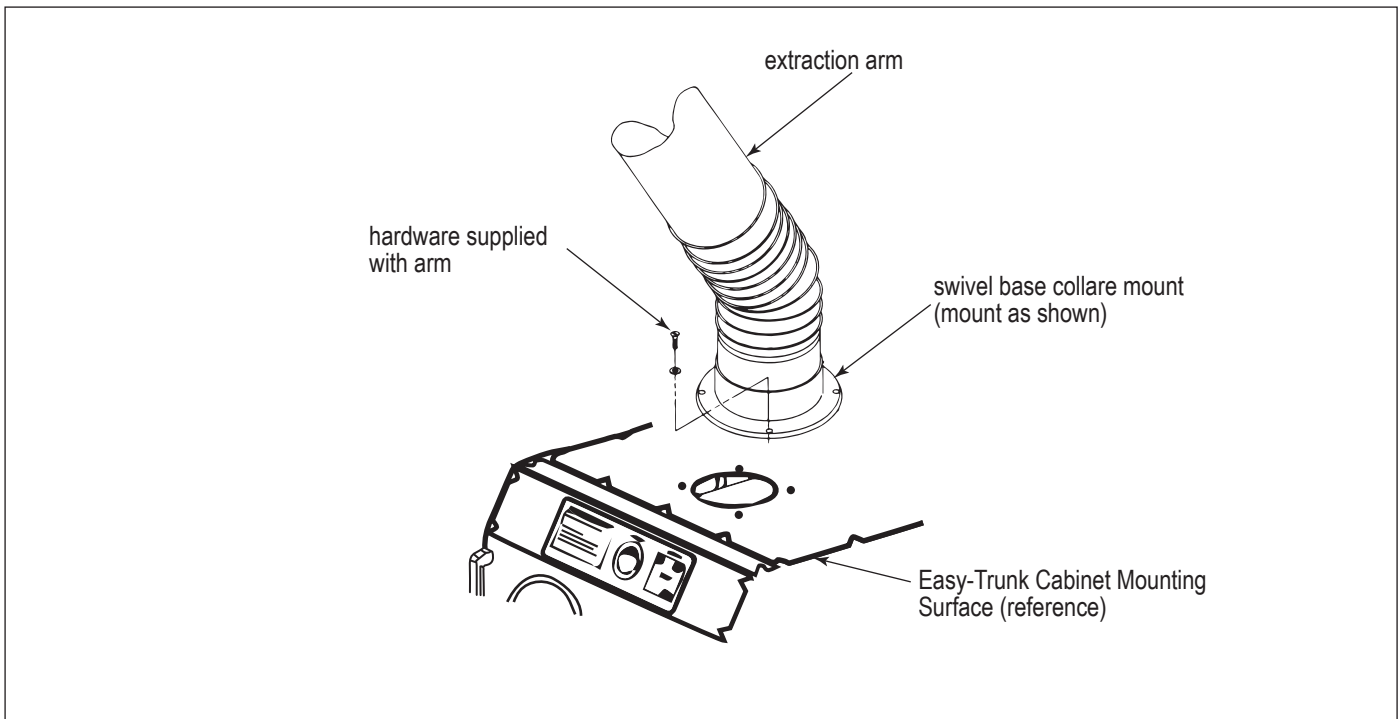
Extraction Arm Mounting



Improper mounting of an extraction arm may result in personal injury and/or property damage. Follow all installation directions carefully.

Fasten the Extraction Arm as shown and reference installation instructions in the Extraction Arm Installation and Operation Manual.

1. The Extraction Arm requires a collar ring mount adapter that allows you to fit the onto a larger bolt hole circle - 9.12-in diameter.
2. Locate collar ring mount onto the Easy-Trunk and fasten down with four (4) 5/16-in - 18 x 1-in long slotted screws on the 9.12-in diameter bolt hole circle.
3. Using a 5/16-in diameter drill bit and drill, bore out holes on the inside 7.6-in diameter bolt hole circle.
4. Remove the flexible ducting from the swivel base casting joint by following the instructions in the Ex-Arm Installation and Operation Manual.
5. Locate the extraction arm onto the collar ring mount adapter by aligning the holes and fasten in place using the supplied bolts, lock washers, and nuts through the opening in the swivel base joint.
6. Install flexible ducting back onto the joint by following the instructions in the Ex-Arm Installation and Operation Manual.



Extraction Arm Mounting - Collectors Built Before 6/1/92
(Extraction arm and bolt pattern may differ from picture)

Electrical Wiring



Electrical installation, service, or maintenance work must be performed by a qualified electrician and comply with all applicable national and local codes.

Turn all power off and lock out all power before performing service or maintenance work. It is not unusual for the equipment to be operated from a remote location so equipment may start or stop unexpectedly.

The appropriate wiring schematic and electrical rating must be used. See collector's rating plate for required voltage.

Do not install in classified hazardous atmospheres without an enclosure rated for the application.

1. Connecting the extraction arm (bench mount) to the Easy-Trunk requires only a screwdriver.
2. Apply a coating of white lithium grease to the extraction arm mounting surface on the Easy-Trunk to create a seal.
3. Secure the extraction arm to the Easy-Trunk using the supplied screws.

USA

The Easy-Trunk requires a 120V single phase 20 amp minimum circuit to operate. The 65-watt halogen light and the on/off switch operate on a 12V circuit. The 1-1/2 Hp motor is rated at 14 amps or less at 120V and is also supplied with an automatic thermal overload protection.

Japan

The Easy-Trunk operates at a standard 200/50/60/3 VAC electrical power source.

China

The Easy-Trunk operates at a standard 220/50/1 VAC electrical power source.

NOTICE

Use of any other type of motor may cause the collector not to start or experience electrical component damage.

Fuses are provided in the electrical control box to protect both the 120V and 12V circuits.

Compressed Air Installation



Turn compressed air supply OFF, bleed and lock out lines before performing service or maintenance work.

A safety exhaust valve should be used to isolate the compressed air supply. The safety exhaust valve should completely exhaust pressure in the collector manifolds when closed, should be capable of being interlocked with fire or explosion mitigation equipment and should include provisions to allow closed-position locking.

NOTICE

Do not set compressed-air pressure above 100-psig as component damage can occur.

All compressed air components must be sized to meet the system requirements of supply pressure.

The compressed-air supply must be oil and moisture free. Contamination in the compressed air used to clean filters will result in poor cleaning, cleaning valve failure, or poor collector performance.

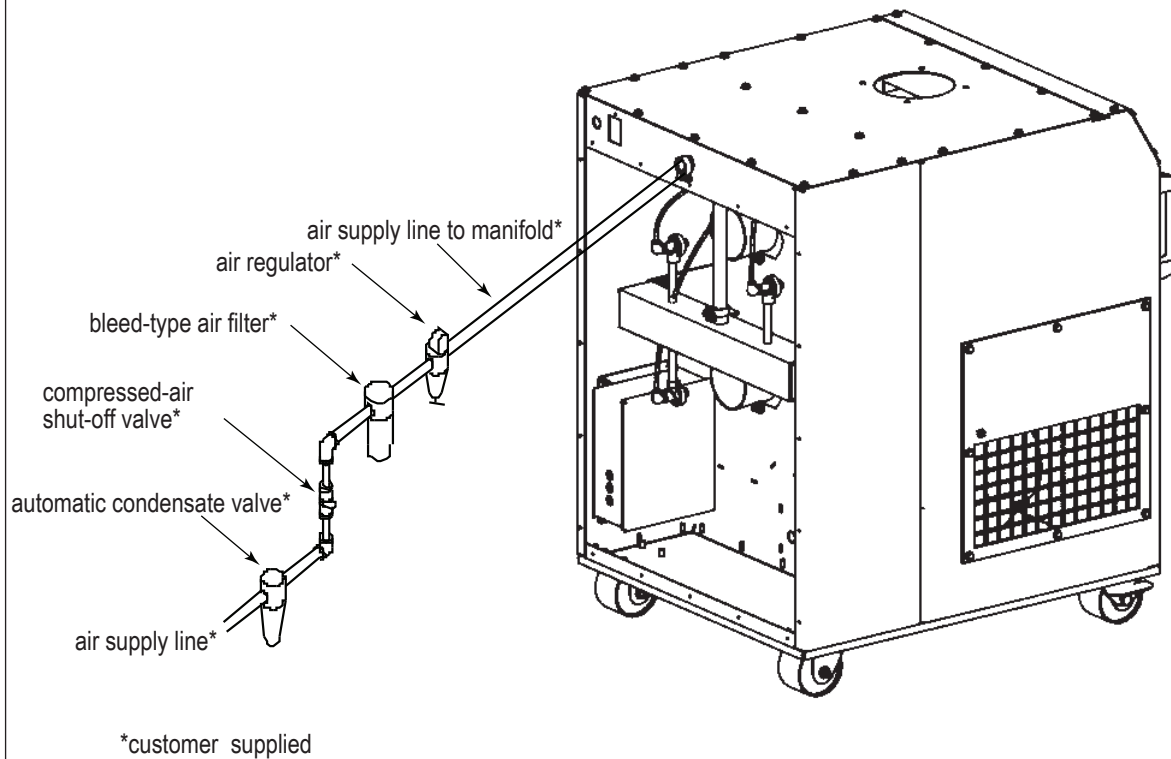
Purge compressed-air lines to remove debris before connecting to the collector's compressed-air manifold.

1. Remove the pipe plug from the collector's air manifold and connect the compressed-air supply lines. Use thread-sealing tape or pipe sealant on all compressed-air connections.
2. Install a shut-off valve, bleed-type regulator with gauge, filter, and automatic condensate valve in the compressed-air supply line.
3. Set compressed-air supply pressure to a level suitable for the filters (90-psig).
4. The pulse-cleaning controls are factory set to clean one or more filters every 10-seconds during a cleaning cycle.



Turn all power off and lock out all electrical power sources.

Turn compressed-air supply OFF and bleed lines before performing service or maintenance work.



Typical Component Installation

Start-up / Commissioning

Instruct all personnel on safe use and maintenance procedures.



Electrical installation, service, or maintenance work must be performed by a qualified electrician and comply with all applicable national and local codes. This equipment may start or stop unexpectedly from a remote location.

Turn all power off and lock out all power before performing service or maintenance work.

Turn compressed air supply OFF, bleed and lock out lines before performing service or maintenance work.

Check that the collector is clear and free of all debris before starting.

Do not operate in classified hazardous atmospheres without an enclosure rated for the application.

Optional fans over 600 lbs must be independently supported.

1. Check all electrical connections for tightness and contact.
2. Check for proper rotation on all motors as described below.



Do not look into fan outlet to determine rotation. View the fan rotation through the back of the motor.

Check that the exhaust plenum is free of tools or debris before checking fan rotation.

Stand clear of exhaust to avoid personal injury.

Do not interchange a power lead with the ground wire. Severe personal injury and/or property damage may result.

- a. "Bump" the fan to initiate rotation.
 - b. As the fan is winding down (unpowered) compare fan rotation to the rotation label (located on fan housing) direction.
3. If the fan rotation is reversed, correct the rotation.

To reverse rotation, single-phase power supply: Follow manufacturer's instructions on the motor's nameplate.

To reverse rotation, three-phase power supply: Switch any two leads on the motor junction box.

- a. Turn power to the collector OFF and Lock-Out all energy sources.
- b. Within the junction box, swap the connection location of two power leads on the terminal block, making certain not to swap a power lead and the ground wire.



Do not interchange a power lead with a ground wire or severe personal injury and/or property damage may result.

4. Ensure all equipment access panels are sealed and secure.
5. Check that the dust container is properly sealed and clamped.
6. Check that fan exhaust damper is set to the fully-closed position.
7. Check and remove all loose items in or near the inlet and outlet of the collector.
8. Check that all remote controls and solenoid enclosures (if applicable) are properly wired and all service switches are in the OFF position.
9. Check that all optional accessories are installed properly and secured.
10. Turn power ON at source.
11. Turn the compressed-air supply ON. Set compressed-air supply pressure to a level suitable for the filters (90-psig).
12. Turn fan motor ON.
13. Adjust airflow with the exhaust damper.

NOTICE

Excess airflow can shorten filter life, cause electrical system failure and fan motor failure.

Decommissioning

Once the collector has reached the end of operational life it will need to be decommissioned.



During decommissioning, there is potential for exposure to the dust in the collector. Most dusts present safety and health hazards that require precautions. Wear eye, respiratory, head, and other protection equipment suitable for the type of dust when performing any decommissioning activities.

LOCK-OUT all energy sources prior to performing any decommissioning activities on the equipment.

Electrical service must be performed by a qualified electrician.

Disconnection of ducts must be performed by a qualified contractor.

1. Follow the typical shut-down sequence steps located in the operation section to remove as much contaminant from collector as possible.
2. Lock-Out all energy sources to the collector, material handling system and other associated equipment.
3. Remove all filters from the collector and dispose of in a suitable fashion for the dust in the collector. (See Filter Replacement for removal instructions).
4. Disconnect electrical power from the collector and material handling system components and remove any associated conduit or hardware from the exterior of the collector.
5. Clear residual dust accumulations from surfaces inside the collector and associated components in a fashion suitable for the dust, prior to further disassembly.
6. Remove and dispose of all material handling components from the collector hopper discharge.
7. Disconnect all ducts from the collector.
8. Proceed to disassemble collector by removing sub-assemblies in the reverse order of the steps given in Appendix A.
Note: The clean air plenum, dirty air plenum, tube sheet and cleaning assembly may be removed in separate steps instead of as one unit.
9. Once all cross bracing has been taken down, remove anchor bolts and lower leg pack columns.
10. Secure all collector components to a suitable transport carrier and transport to a disposal site suitable for the dust in the collector.

Note: The clean air plenum, dirty air plenum, tube sheet, and cleaning assembly may be removed in separate steps instead of as one unit.

Donaldson Industrial Air Filtration Warranty

Donaldson warrants to the original purchaser only that the Goods will be free from defects in material and manufacture for the applicable time periods stated below: (1) Major structural components for a period of ten (10) years from the date of shipment; (2) Non-Structural, 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 a period of twelve (12) months from date of shipment; and (3) Donaldson-built filter elements for a period of eighteen (18) months from date of shipment.

Buyer is solely responsible for determining if goods fit Buyer's particular purpose and are suitable for Buyer's process and application. Seller's statements, engineering and technical information, and recommendations are provided for the Buyer's convenience and the accuracy or completeness thereof is not warranted. If, after Seller receives written notice, within the warranty period, that any goods allegedly do not meet Seller's warranty, and Seller, in its sole discretion, determines that such claim is valid, Seller's sole obligation and Buyer's exclusive remedy for breach of the foregoing warranty or any Seller published warranty, will be, at Seller's option, either: (i) repair or replacement of such goods or (ii) credit or refund to Buyer for the purchase price from Seller. In the case of repair or replacement, Seller will be responsible for the cost of shipping the parts but not for labor to remove, repair, replace or reinstall the allegedly defective goods. Refurbished goods may be used to repair or replace the goods and the warranty on such repaired or replaced goods shall be the balance of the warranty remaining on the goods which were repaired or replaced. Any repair or rework made by anyone other than Seller is not permitted without prior written authorization by Seller, and voids the warranty set forth herein. Seller warrants to Buyer that it will perform services in accordance with the Sales Documents using personnel of required skill, experience and qualifications and in a professional and workmanlike manner in accordance with generally recognized industry standards for similar services. With respect to any services subject to a claim under the warranty set forth above, Seller shall, in its sole discretion, (i) repair or re-perform the applicable services or (ii) credit or refund the price of such services at the pro rata contract rate and such shall be Seller's sole obligation and the exclusive remedy for breach of the foregoing warranty on services. Products manufactured by a third party ("Third Party Product") may constitute, contain, be contained in, incorporated into, attached to or packaged together with, the goods. Buyer agrees that: (a) Third Party Products are excluded from Seller's warranty in this Section 7 and carry only the warranty extended by the original manufacturer, and (b) Seller's liability in all cases is limited to goods of Seller's design and manufacture only. EXCEPT FOR SELLER'S WARRANTY OF TITLE TO THE GOODS, SELLER EXPRESSLY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES WHATSOEVER, WHETHER, EXPRESSED OR IMPLIED, ORAL, STATUTORY, OR OTHERWISE, INCLUDING BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY AND ANY WARRANTIES ARISING FROM TECHNICAL ADVICE OR RECOMMENDATIONS, COURSE OF DEALING OR OF PERFORMANCE, CUSTOM OR USAGE OF TRADE. Seller's obligations do not cover normal wear and tear or deterioration, defects in or damage to any goods resulting from improper installation, accident or any utilization, maintenance, repair or modification of the goods, or any use that is inconsistent with Seller's instructions as to the storage, installation, commissioning or use of the goods or the designed capabilities of the goods or that, in its sole judgment, the performance or reliability thereof is adversely affected thereby, or which is subjected to abuse, mishandling, misuse or neglect or any damage caused by connections, interfacing or use in unforeseen or unintended environments or any other cause not the sole fault of Seller, and shall be at Buyer's expense. Seller's warranty is contingent upon the accuracy of all information provided by Buyer. Any changes to or inaccuracies in any information or data provided by Buyer voids this warranty. Seller does not warrant that the operation of the goods will be uninterrupted or error-free, that the functions of the goods will meet Buyer's or its customer's requirements unless specifically agreed to, or that the goods will operate in combination with other products selected by Buyer or Buyer's customer for its use.

The terms of this warranty may only be modified by a special warranty document signed by a Director, General Manager or Vice President of Donaldson. To ensure proper operational performance of your equipment, use only genuine Donaldson replacement parts.

This Product is provided subject to and conditioned upon Donaldson's Terms of Sale ("Terms"), a current copy of which is located at termsofsale.donaldson.com. These Terms are incorporated herein by reference. By purchasing or using this Product, the user accepts these Terms. The Terms are available on our website or by calling our customer service line at 1-800-365-1331.

Significantly improve the performance of your collector with genuine Donaldson Torit replacement filters and parts.

Important Notice: Many factors beyond the control of Donaldson can affect the use and performance of Donaldson products in a particular application, including the conditions under which the product is used. Since these factors are uniquely within the user's knowledge and control, it is essential the user evaluate the products to determine whether the product is fit for the particular purpose and suitable for the user's application. All products, product specifications, availability and data are subject to change without notice, and may vary by region or country.



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