Donaldson
Torit®

Dalamatic® Cased G2

DLMC ***1/2/16, 1/3/24, 1/4/32, 1/5/40, 2/2/32, 2/3/48, 2/4/64, 2/5/80, 3/2/48,3/3/72,3/4/96,3/5/120***

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 AK03067-01 (ENG)
Revision 0

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.

Contents

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.

2 Product Description

The Dalamatic G2 Cased (DLMC G2), dust collectors are continuous-duty collectors with bag-style filters designed to handle product recovery applications and operations generating nuisance dust. The DLMC G2 provides continuous filtration and high collection efficiency while maintaining a relatively constant system resistance. Standard sizes range from 275.6 to 2066.7 sq ft (25.6 to 192 sq meters) of filter area. A solid-state timer provides the interface for filter cleaning control.

Standard hoppers mate to 50L small dust bin

Intended Use

The DLMC G2 separates solid particulate from an airstream as part of a manufacturing process. The DLMC G2 is designed for negative pressure systems. Contact Donaldson Torit for information on positive pressure systems.

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, refer to drawings shipped with the collector.

Standard Equipment

Dalamatic G2 Cased dust collectors are delivered partially assembled in sections compatible with truck capacity and load restrictions. All models require field assembly of the leg pack, hopper, filter section, compressed air manifold, jet tubes and other system components including ducts, hopper discharge devices, and electrical controls.

Filters

Filter bags are installed prior to shipping.

Hopper

The Dalamatic G2 Cased hopper is an all welded steel hopper.

Solenoid valve

The collector is equipped with electric solenoid valves (typically 220V) that control the pulse-cleaning valves, which in turn release compressed air from the manifold to clean the filters. Solenoid valves are integrated in control panel

Cleaning Controls

Differential Pressure Gauge

A Magnehelic®, or equivalent differential pressure gauge is used to measure the pressure difference between the clean-air and dirty-air plenums and provides a visual display of filter condition. The high-pressure tap is located in the dirty-air plenum and the low-pressure tap is located in the clean-air plenum.

Delta P C01 Control

The Delta P C01 Controller monitors the differential pressure between the clean-air and dirty-air plenums, providing a visual display of the filter condition. When combined with a pulse timer, it manages the pressure drop by turning the cleaning mechanism On and Off at the chosen limits. There are three (3) set points: HIGH (On), LOW (Off) and ALARM. The first two, HIGH (On) and LOW (Off) control the filter cleaning system. The third, ALARM, provides a relay output to activate an external alarm supplied by others.

The user can program the Delta P C01 Controller to pulse while the collector is running, to maintain a relatively constant pressure drop across the filters, pulse only after the collector is shut down (after-shift cleaning), or a combination of both, cleaning while running as well as end of the shift.

Hopper Discharge Accessories

50L Dust Bin

This is standard feature, Do not let the dustbin overfill. It can cause poor dust collector performance.

Turn off the dust collector and empty the dustbin on a regular base (recommend to empty the dustbin when 2/3 full).

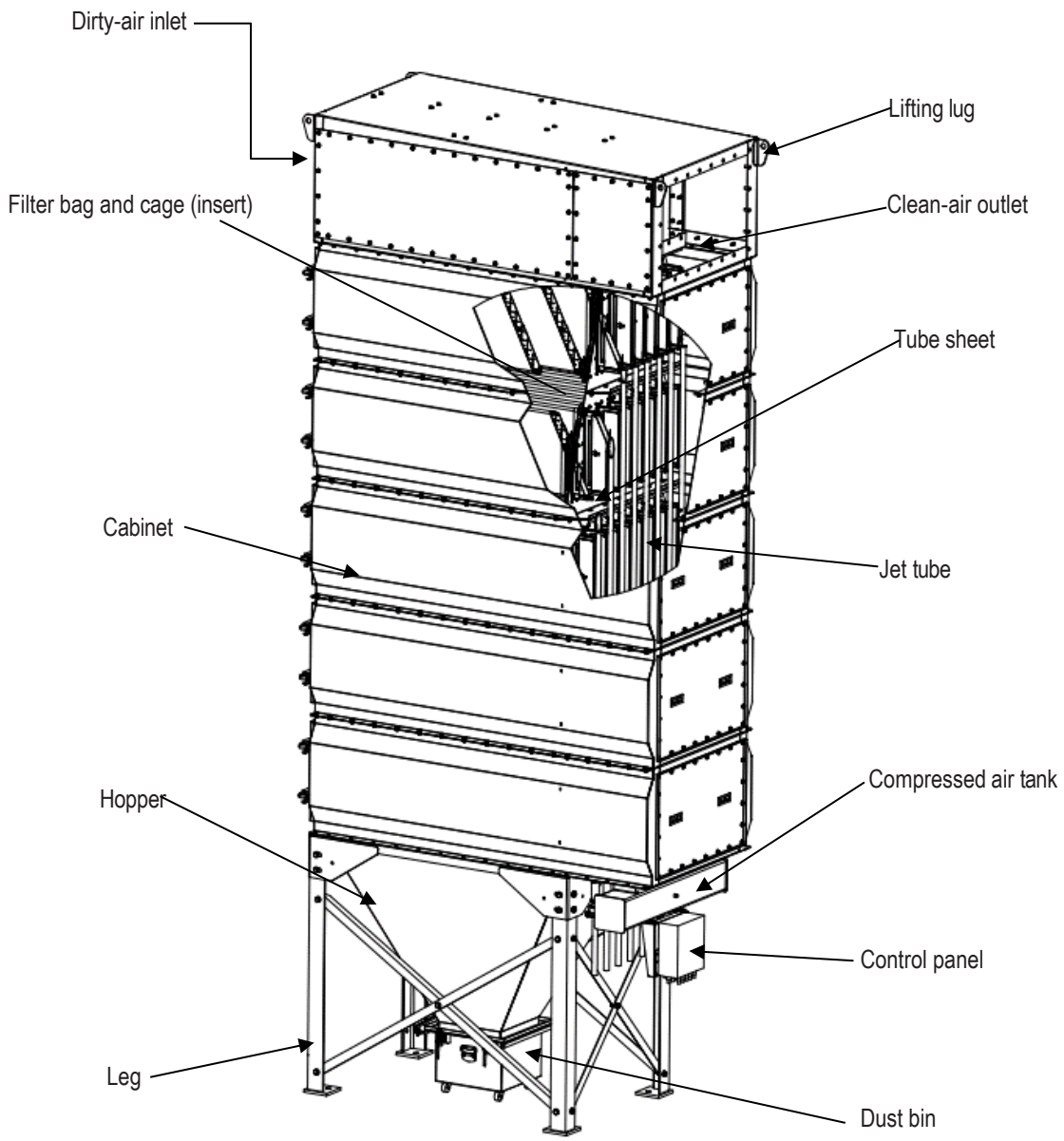
55-Gallon Drum Pack

The drum pack is designed to fit a customer-supplied, standard 55-gallon drum and provides easy access for dust removal and disposal. A flexible hose connects the drum cover to the hopper. Placing a pallet under the drum allows heavier materials to be moved quickly using a forklift or pallet jack. If a pallet is used, the length of flexible hose may need to be shortened.

Rotary Airlock (RAL)

Rotary airlocks are used to maintain a seal on the hopper outlet while material is discharged from the hopper.

Typical Collector Components



Typical Collector Components
(Collector shown with included front inlet and rear outlet)

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.

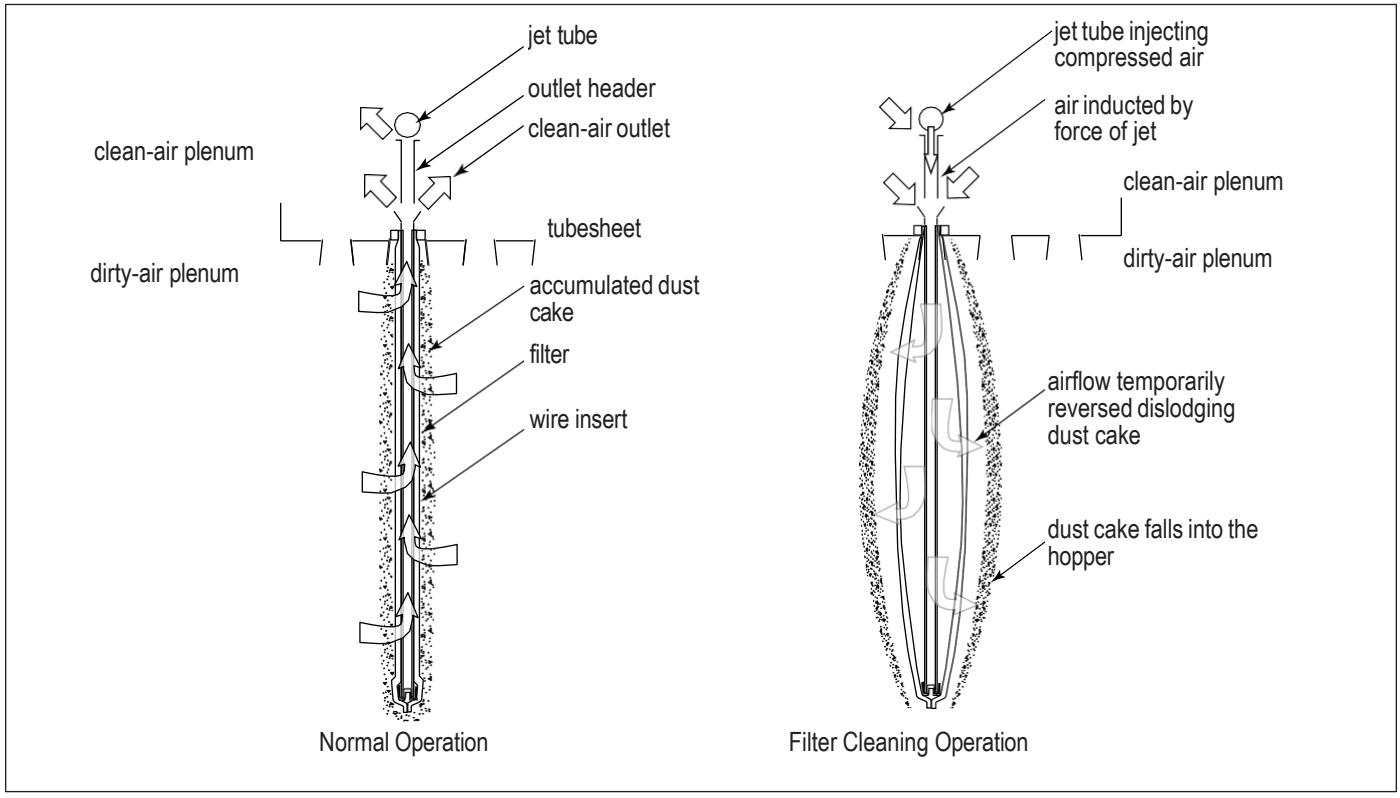
Turn compressed air supply off, bleed and lock out lines before performing service or maintenance work.

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.

During normal operation, dust-laden air is drawn through the supplied dirty air inlet. From there, natural pre-separation, caused by the effects of gravity, takes place with larger particulate falling directly to hoppers due to the optimized bag spacing and fine particles collecting on the outside surface of the filters. Clean, filtered air passes to the center of the filters and discharges through the clean-air outlet.

Filter cleaning is completed using pulse-jet technology. A jet tube positioned over each filter distributes a pulse of compressed air through the filter. As the compressed air enters the filter, airflow is temporarily reversed dislodging the dust cake formed on the outside of the filter. The dust cake falls into the hopper and exits through the hopper outlet.



Collector Operation

Typical Collector Operation Sequence

Start-Up

Verify the process system is ready for operation and all alarm conditions are cleared prior to starting the collector.

1. Turn powered discharge components, such as screw conveyor or rotary airlock, ON.
2. Turn the equipment being served ON.
3. Turn main blower ON, if equipped.
4. Turn Solid-State Timer and compressed-air supply ON.

Shut-Down

Contact your Donaldson representative for shutdown instructions for explosion vented collectors.

To clear residual deposits from the filter bags, filter body, and after the dust producing equipment being served has been turned off:

1. After allowing sufficient time to clear suspended dust from the ducts, turn main blower OFF leaving compressed-air supply ON to allow off-line filter cleaning.

NOTICE

Slowly ramping down airflow will allow accumulated dust to drop into the hopper gradually while the collector continues cleaning. An abrupt reduction in airflow may result in one large release of dust from the filters which may plug the hopper discharge.

2. Wait 10 to 15 minutes and turn Solid-State Timer and compressor OFF.
3. Turn rotary valves, screw conveyors, or other discharge devices OFF after the dust dislodged by the cleaning in step 2 is removed from the hopper.

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. Note the standard collector is not equipped with access platforms unless noted on the specification drawings.

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.

   Abnormal changes in pressure drop may indicate a change in operating conditions and possibly a fault to be corrected. For example, prolonged lack of compressed air will cause an excess build-up of dust on the filters resulting in increased pressure drop. Cleaning off-line with no airflow usually restores the filters to normal pressure drop.

4. Monitor exhaust.
5. Monitor dust disposal.

Dust Disposal

1. Shut the collector OFF prior to emptying the dust container (bin, pail, or drum).
2. Transfer dust from the dust container to a suitable disposal site and dispose of dust in accordance with local requirements for the materials being collected.
3. Empty when dust container is no more than 2/3 full. Check integrity of gasket under container cover. Replace gasket if worn or damaged.
4. If optional slide gate is used, close gate before servicing the dust container.

Sharp edge of slide gate may result in personal injury while closing the slide gate. Keep hands clear when operating the slide gate.

5. Replace or reinstall dust container, reclamp to the collector and open slide gate (if applicable).

NOTICE

To avoid possible damage to the fan motor, maintain a seal below the collector if servicing the dust storage device while the fan is running.

6. The collector can now be returned to service.

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 equipment to access filters and appropriate lifting methods to avoid personal injury and/ or property damage.

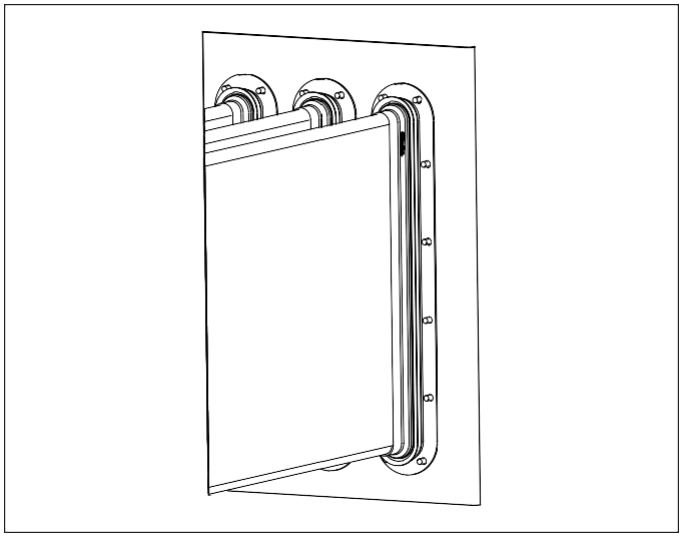
Turn all power OFF and lock out all power before performing service or maintenance work.

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

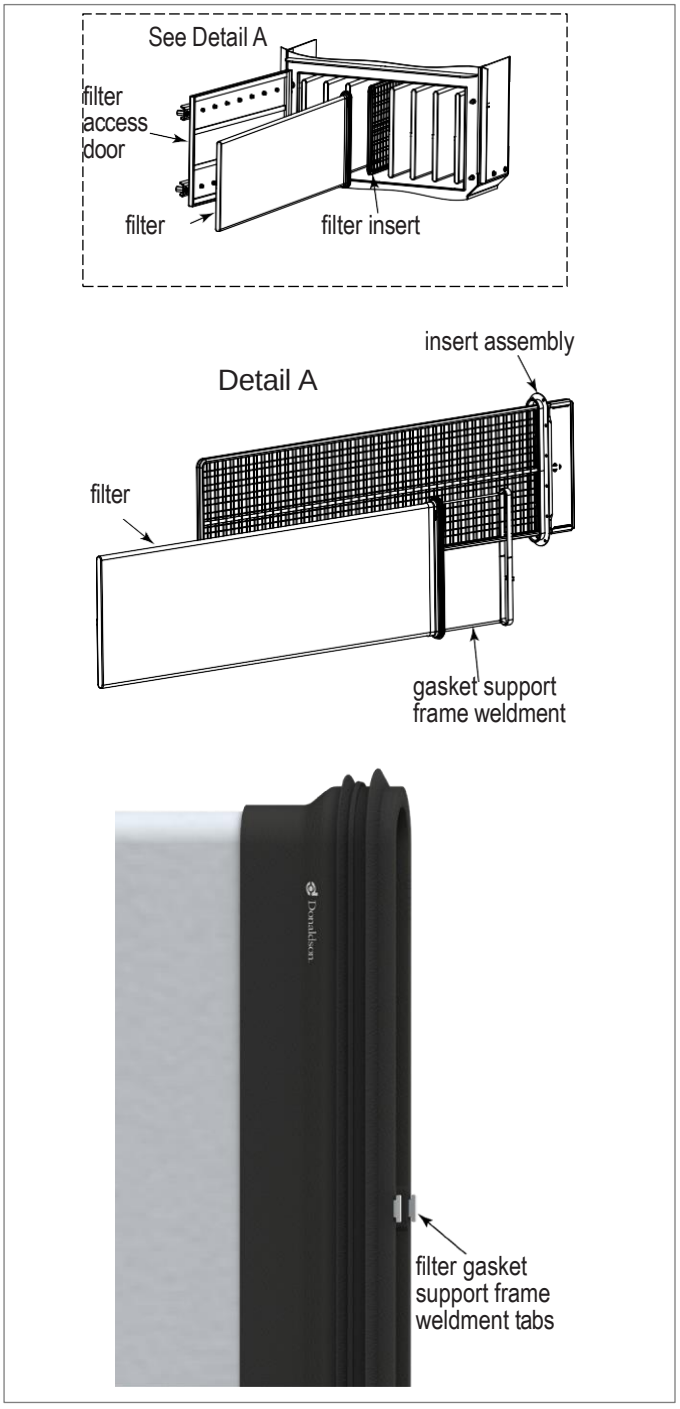
Do not operate with missing or damaged filters.

1. Activate the pulse cleaning for 10 to 15 minutes to remove excess dust from the filter bags.
2. Turn power to the collector OFF.
3. Turn compressed air supply OFF. Discharge compressed air tank.
4. Open filter access doors.
5. Begin filter replacement starting at the top tier of the collector.
6. Remove filter and flter gasket support frame weldment.
7. Remove filter from the filter gasket support frame weldment from the filter and dispose of the filter in accordance with local requirements for the materials being collected.
8. Repeat steps 6-7 in each tier working toward the bottom of the collector for all remaining filters.

9. Insert filter gasket support frame weldment inside new filter.
10. Align filter gasket support frame weldment tabs appropriately in filter gasket.
11. Slide the new filter and filter gasket support frame weldment on filter insert until gasket is fully seated as shown in Filter Gasket Support Frame Weldment.
12. Repeat steps 9-11 to replace all remaining bags.
13. Close filter access doors.
14. Turn compressed air supply ON.
15. Turn power to the collector ON.
16. The collector can now be returned to service.



Installed Filter Bag Assembly



Filter Gasket Support Frame Weldment

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.
Partial loss of suction	Compressed air system	Check compressor for operation. Check interlocks, motor, power supply, and drive belts.
	Incorrect manifold pressure	Check pulse pressure at manifold. See Compressed Air Requirements table.
	Excess moisture in the compressed air supply	Check that the compressed air supply is oil and moisture free.
	No pulse to diaphragm valves	Check the solenoid and diaphragm valves by feeling the rubber hose for pulse. Feel the vent opening on the solenoid valve for pulse. If all valves are affected, check that the LED on the controller is ON. If not illuminated, check power supply and printed circuit board fuse. If isolated solenoid or diaphragm valve is affected, repair or replace as necessary.
	Filters plugged	Check that the dust removal container is not full and that the equipment served is operating. Turn fan OFF and allow the controller to perform several complete cleaning cycles. Replace damaged or torn filters.
	Blower belt slipping	Adjust or replace the drive belts.
	Motor speed low	Check all supply voltage, phase, and motor connections.
	Fan rotation backward	Proper fan rotation is clockwise when viewed from the motor side or counterclockwise when viewed through the inlet cone. See Start-Up/Commissioning.
Total loss of suction	Blower motor stopped	Check motor started overloads, fuses and interlocks. Check motor connections and windings.
	Filters plugged	Check that the dust removal container is not full and that the equipment served is operating. Turn fan OFF and allow the controller to perform several complete cleaning cycles. Remove each filter bag, vacuum outside surfaces, and reinstall. Replace damaged or torn filters.
	Obstructed ductwork	Check and remove obstructions.
Clean-air outlet discharging dust	Filters not installed correctly	See Filter Replacement.
	Filter(s) damaged or worn	Replace filters as necessary. Use only genuine Donaldson replacement parts. See Filter Replacement.

Problem	Probable Cause	Remedy
Total loss of suction	Blower motor stopped	Check motor started overloads, fuses and interlocks.
		Check motor connections and windings.
	Filters plugged	Check that the dust removal container is not full and that the equipment served is operating. Turn fan OFF and allow the controller to perform several complete cleaning cycles. Remove each filter bag, vacuum outside surfaces, and reinstall. Replace damaged or torn filters.
	Obstructed ductwork	Check and remove obstructions.
Clean-air outlet discharging dust	Filter bags not installed correctly	See Filter Bag Replacement.
	Torn or damaged filters	Replace as necessary.

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.

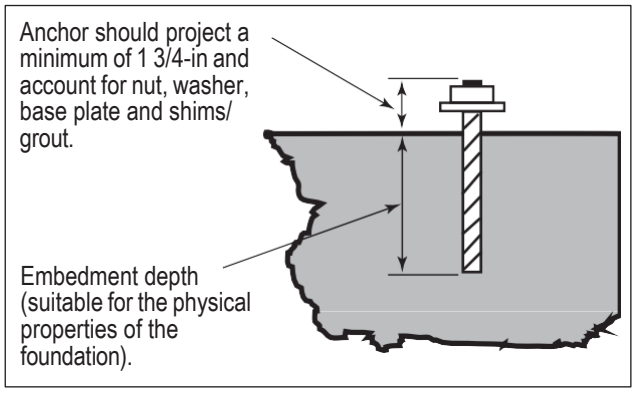
The equipment must be anchored once in final position. Anchors must comply with local code requirements. Anchors, foundation or support framing must be capable of supporting dead, live, wind, seismic, and other applicable loads. Consult a qualified engineer for final selection of foundation or support 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. Use industrial duct design best practices for optimal dust collector performance.

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

Provisional Anchor Bolt Recommendations

The quantity of anchor bolts should match the number of holes provided in the base plates of the collector. Anchor diameter is typically 1/8-inch less than the baseplate hole diameter. Anchors should project a minimum of 1 ¾ -inch and account for nut, washer, baseplate, and shims/grout.



Typical Foundation Anchor

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 and IOM 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.

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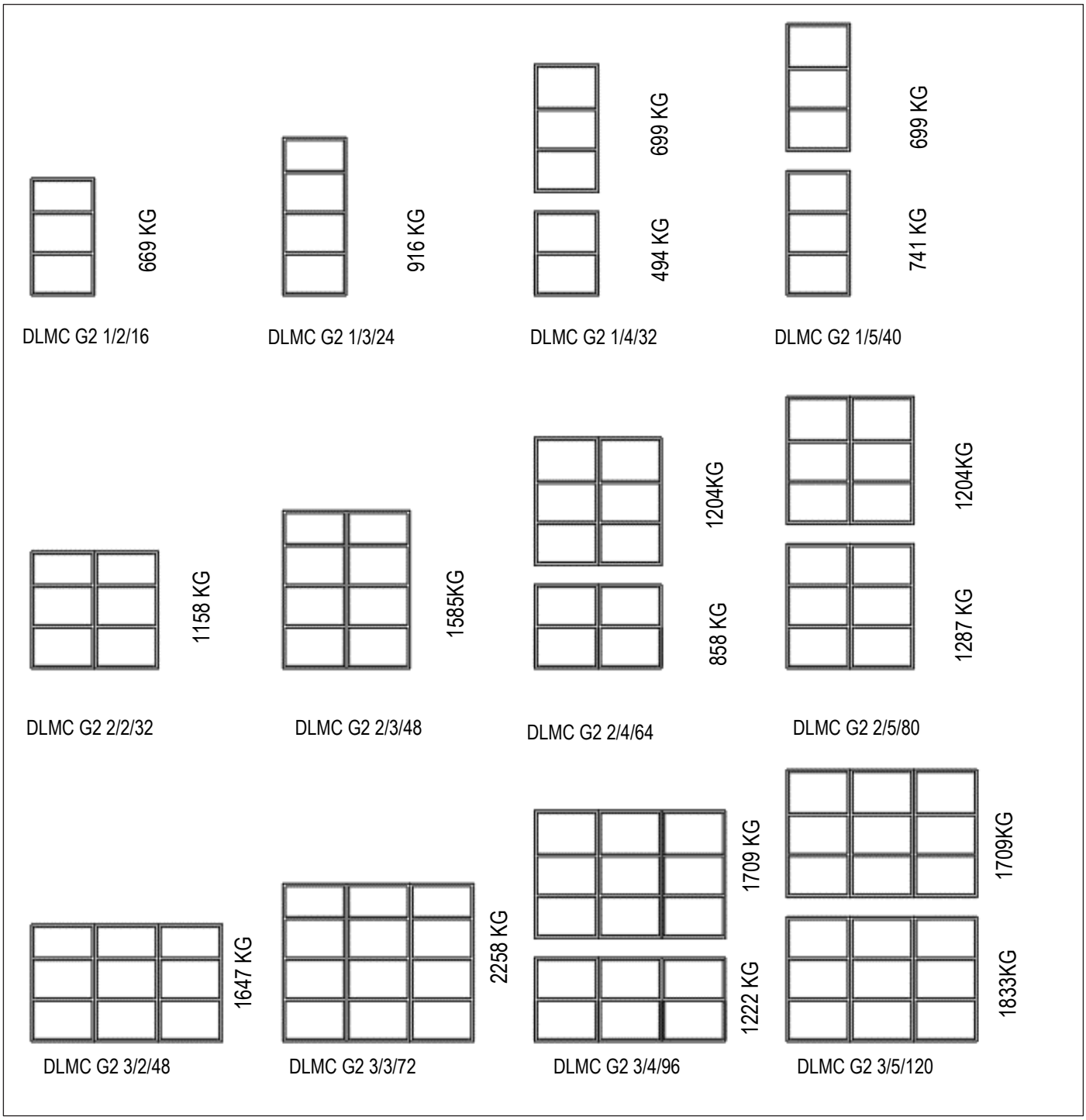
Shipping Information



Shipping Weight for Weights Listed Above (in kg)	
Includes:	**Excludes:**
Inserts	Jet Tubes
Filter Bags	Manifold Assembly
Filter Gasket Support Frame	Skids and Packing
Standard Cover Packs	Shipped Loose Items

Hopper and Leg Installation

Anchors must comply with local code requirements and be capable of supporting dead, live, wind, seismic and other applicable loads.

Anchor sizes shown are provisional, as final anchor sizing will depend on jobsite load conditions, equipment location, foundation/framing design variables and local codes.

Consult a qualified engineer for final selection of suitable anchors.

Temporary support is required until all legs and cross-bracing are in place.

Reference Typical Foundation Anchor and leg assembly drawing shipped with the collector prior to starting assembly.

Assembly Step 1

1. Prepare the foundation or support framing in the selected location. Locate and install anchors.
2. Place hopper upside down on level ground as shown on Hopper and Leg Installation illustration.
3. Assemble legs and cross braces according to drawings shipped with the collector.
4. Use drift pins to align bolt holes.
5. Assemble supplied temporary braces identified in drawing shipped with collector.
6. Tighten all supplied hardware.

Assembly Step 2

7. Lift complete assembly and upright as shown.
8. Carefully lower assembly onto pad and align foot pads with anchors.
9. Level all horizontal and vertical members. Use shims under legs if necessary.
10. Secure anchors and retighten all hardware prior to removing crane.
11. Remove temporary brace(s) shown in Typical Collector Components illustration.
12. Apply sealant to hopper flange per drawings supplied.

Assembly Step 3

Note: Proceed to Assembly Step 4 for DLMC G2 2 and 3 tier models.

13. Apply sealant to upper flange of lower filter section as shown on Field Joining Pack drawing shipped with collector.
14. Remove rear clean side access panels from upper and lower filter sections.
15. Lift upper filter section and lower onto lower filter section carefully.
16. Use drift pins to align bolt holes.
17. Tighten supplied hardware to secure upper and lower filter sections per drawings shipped with collector.
18. Do not remove crane.

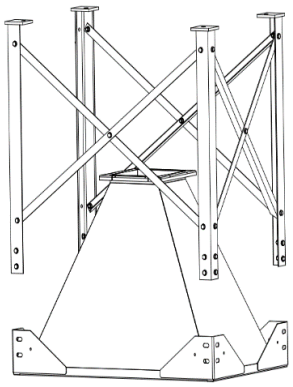
Assembly Step 4

19. Remove rear clean side access panel(s).
20. Lift filter section(s) and carefully lower onto hopper.
21. Use drift pins to align bolt holes.
22. Tighten supplied hardware to secure section(s) per drawings shipped with collector.
23. Do not remove crane until all hardware is secured and tightened.

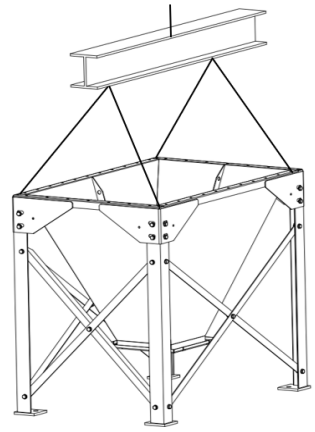
NOTICE Do not lift filter housing with inlet, compressed air tank or optional top mounted fan installed.

Do not lift collector by the door.

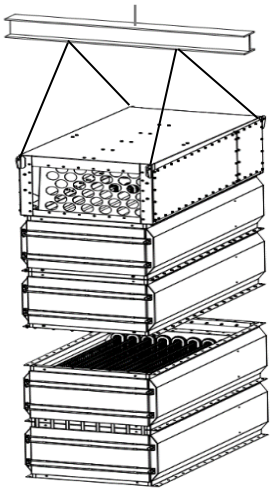
The lifting points provided have been designed to support the individual sections of the collector as shipped to the site. Do not use the lifting points to lift the entire weight of the collector. Carefully follow the assembly sequence to avoid exceeding the load capacity of the lifting points.



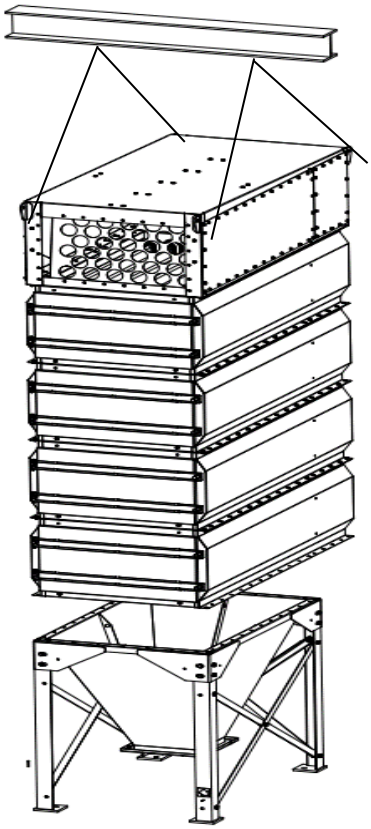
Assembly Step 1



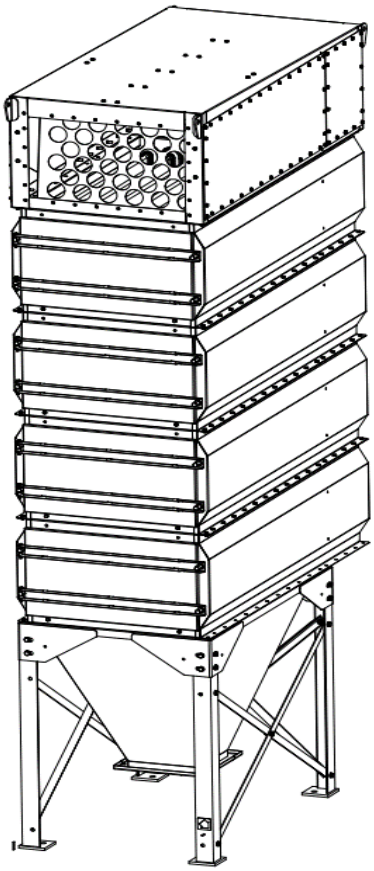
Assembly Step 2

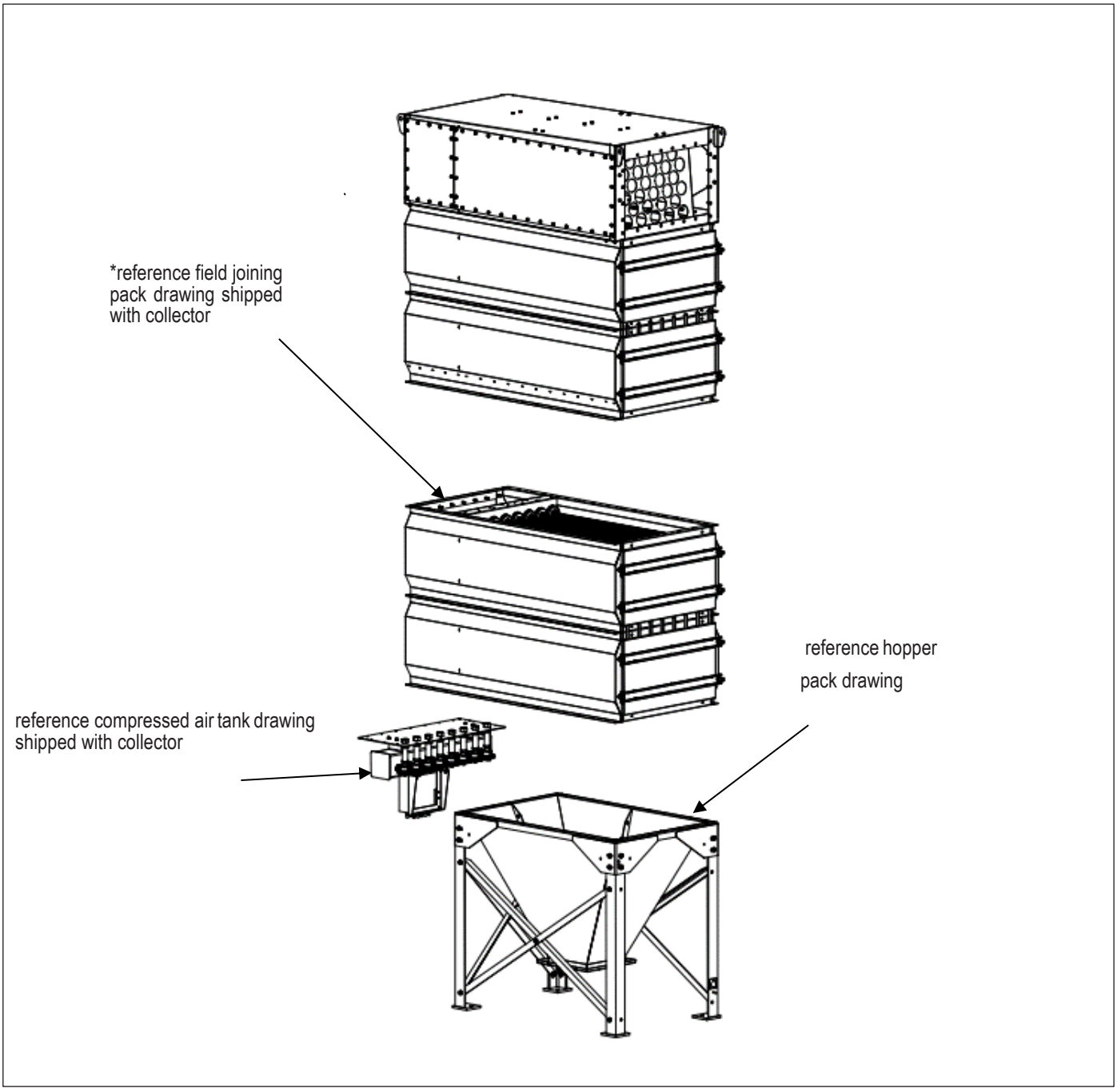


Assembly Step 3



Assembly Step 4





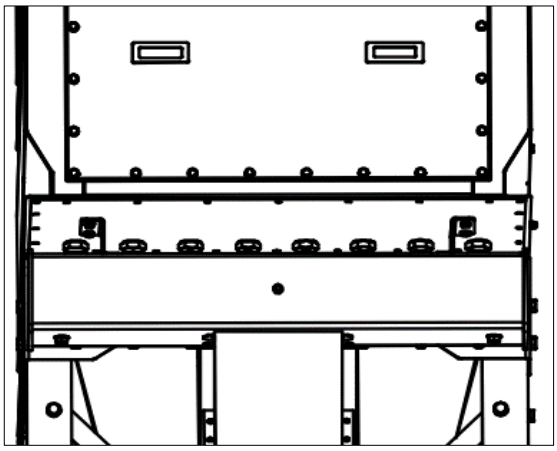
Sealant Detail

Compressed Air Manifold Installation

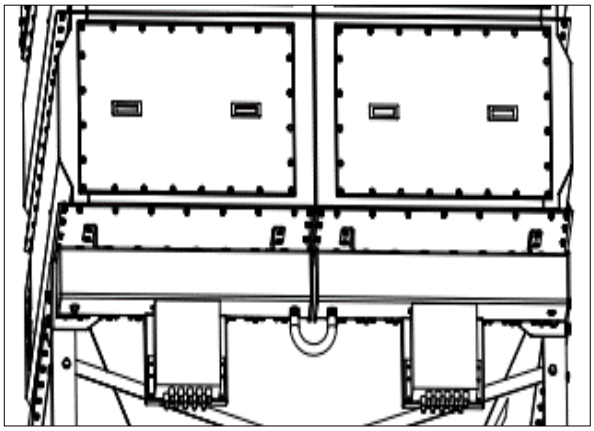
1. Apply sealant per Manifold installation drawing shipped with the collector.
2. Lift the assembly up to fit to the bottom of the clean air plenum.

NOTICE	For ease of installation, manifold assembly may be mounted to a pallet to lift into place.

3. Use drift pins to align bolt holes.
4. Use supplied hardware to secure manifold assembly to bottom of clean air plenum.
5. Reference Single or Multiple Manifold Installation illustrations.



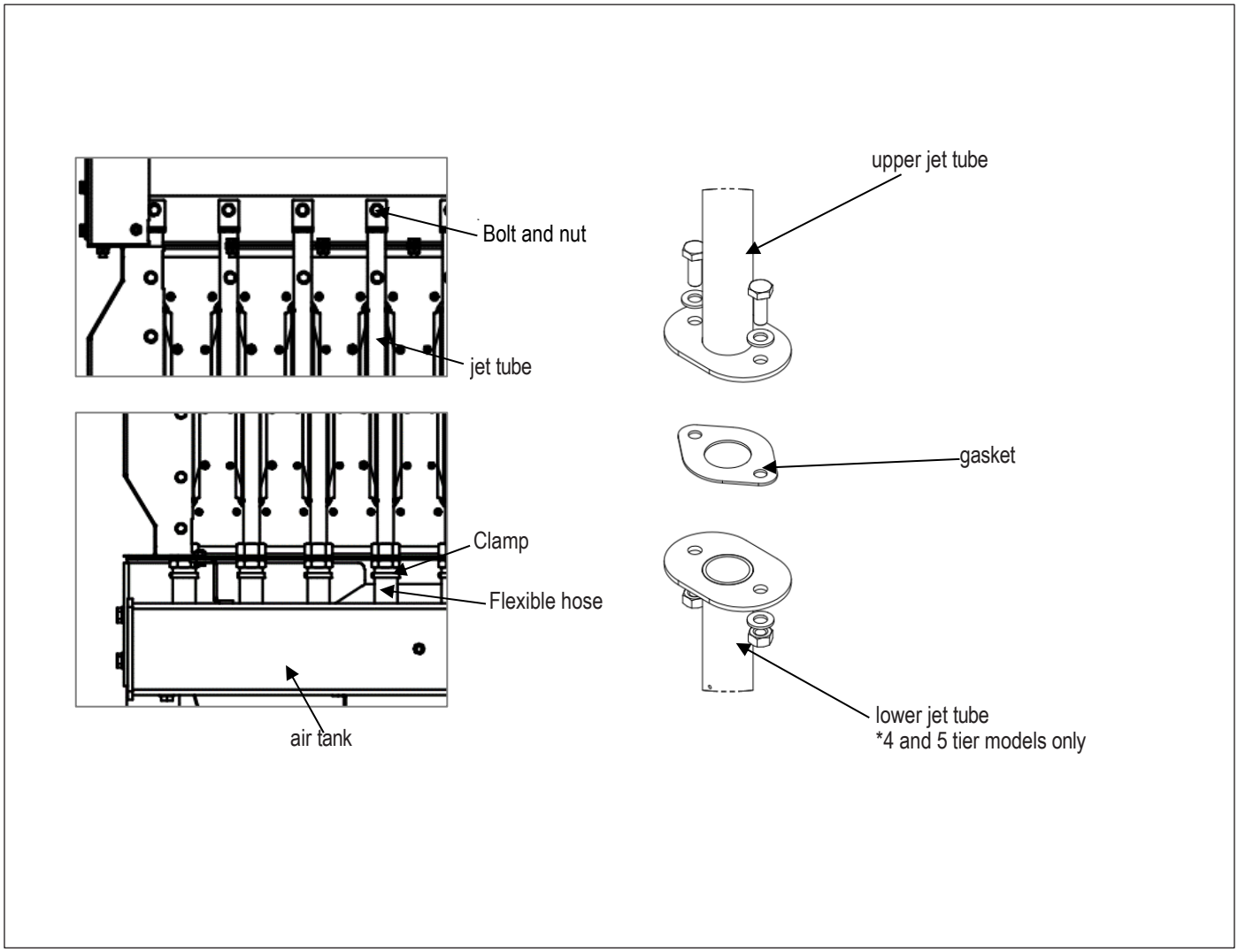
Single Manifold Installation



Multiple Manifold Installation

Jet Tube Installation

1. Loosen couplings on diaphragm valve and couplings on jet tube.
2. On 4 and 5 tier collectors only, assemble lower and upper jet tubes with bolts finger tight.
3. Align jet tubes with loosened couplings and drop jet tube through coupling and diaphragm valve.
4. Fasten brackets to collector body.
5. Tighten all bolts and couplings.
6. Check for compressed air leak.



Jet Tube Installation

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.

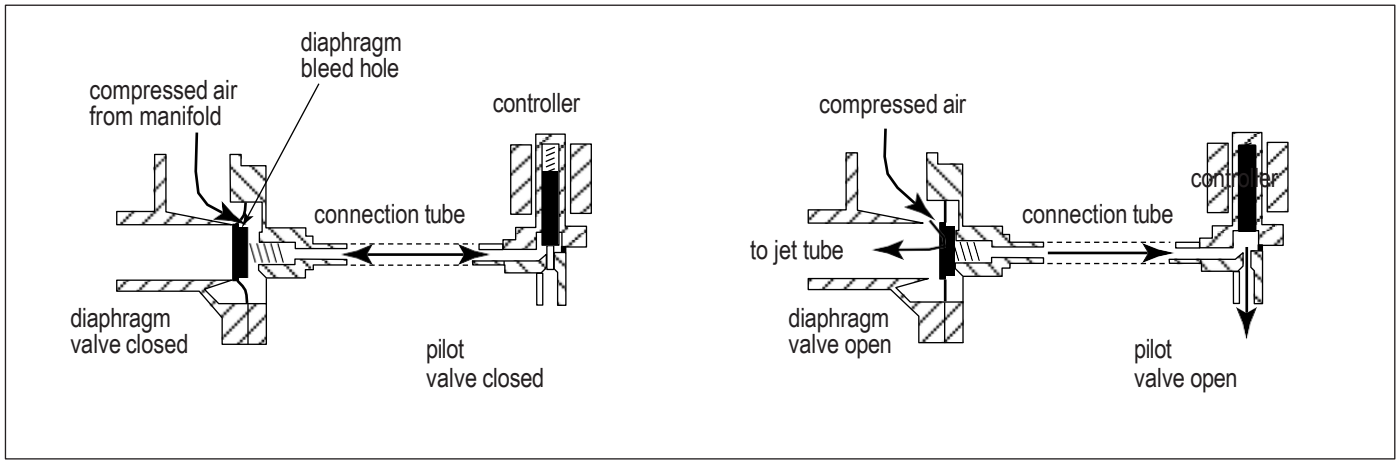
All compressed air components must be sized to meet the system requirements of supply pressure.

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.

Compressed air pressure must be set to the pressure listed in the Compressed Air Requirements table to ensure proper operation.

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 shown in the compressed air requirements table.
4. The pulse-cleaning controls are factory set to clean one or more filters every 10-seconds during a cleaning cycle.



Compressed Air Pulse Cleaning Control System

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.

Cleaning Controls

Magnehelic® Gauge

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

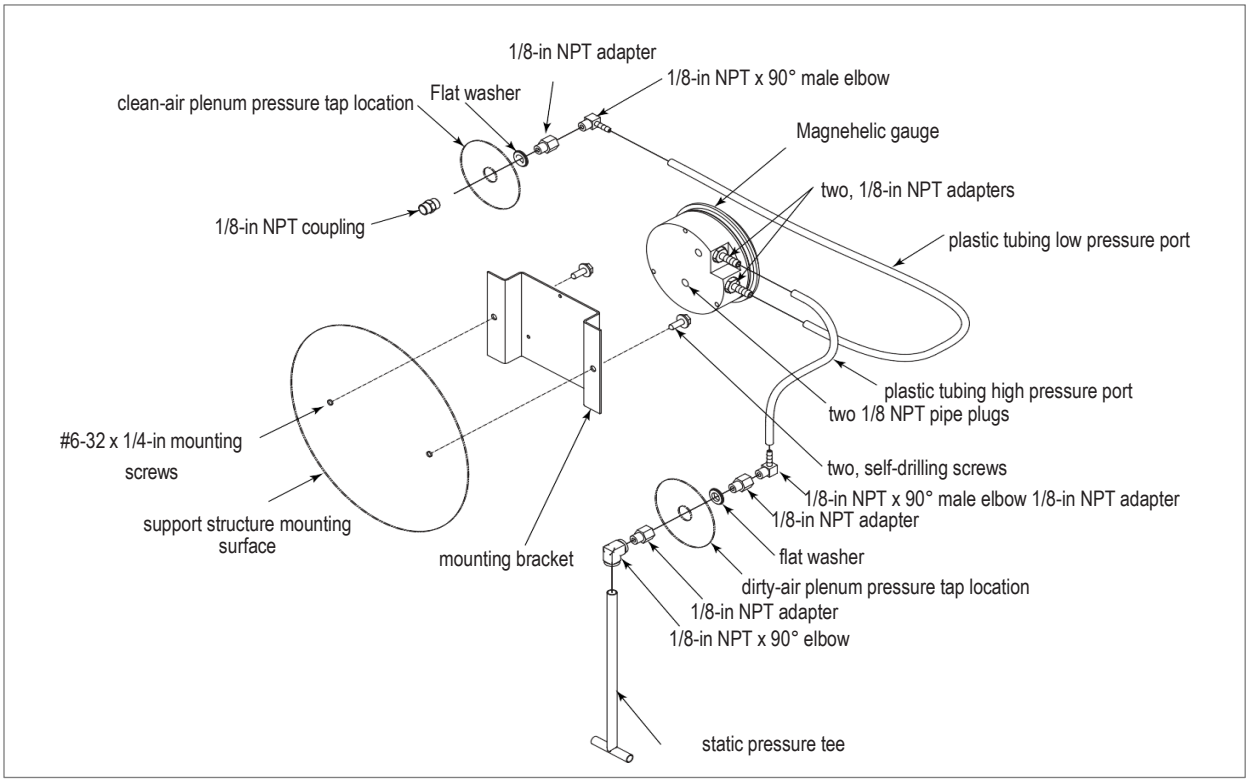
2. Plug the pressure ports on the back of the gauge using two, 1/8-in NPT pipe plugs supplied. Install two, 1/8-in NPT male adapters supplied with the gauge into the high- and low-pressure ports on the side of the gauges.

3. Attach the mounting bracket using three, #6-32 x 1/4-in screws supplied.

4. Mount the gauge and bracket assembly to the supporting structure using two, self-drilling screws.

5. 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 dirty-air plenum. Connect remaining tubing from the gauge's low- pressure port to the fitting in the clean-air plenum. Additional tubing can be ordered from your representative.

6. Zero and maintain the gauge as directed in the manufacturer's Operating and Maintenance Instructions provided.



Magnehelic Gauge Installation

Delta P C01 Control

For complete information, see the most current version of the Delta PC01 Installation, Operation, and Maintenance manual.

Hopper Discharge Accessories

55-Gallon Drum Pack

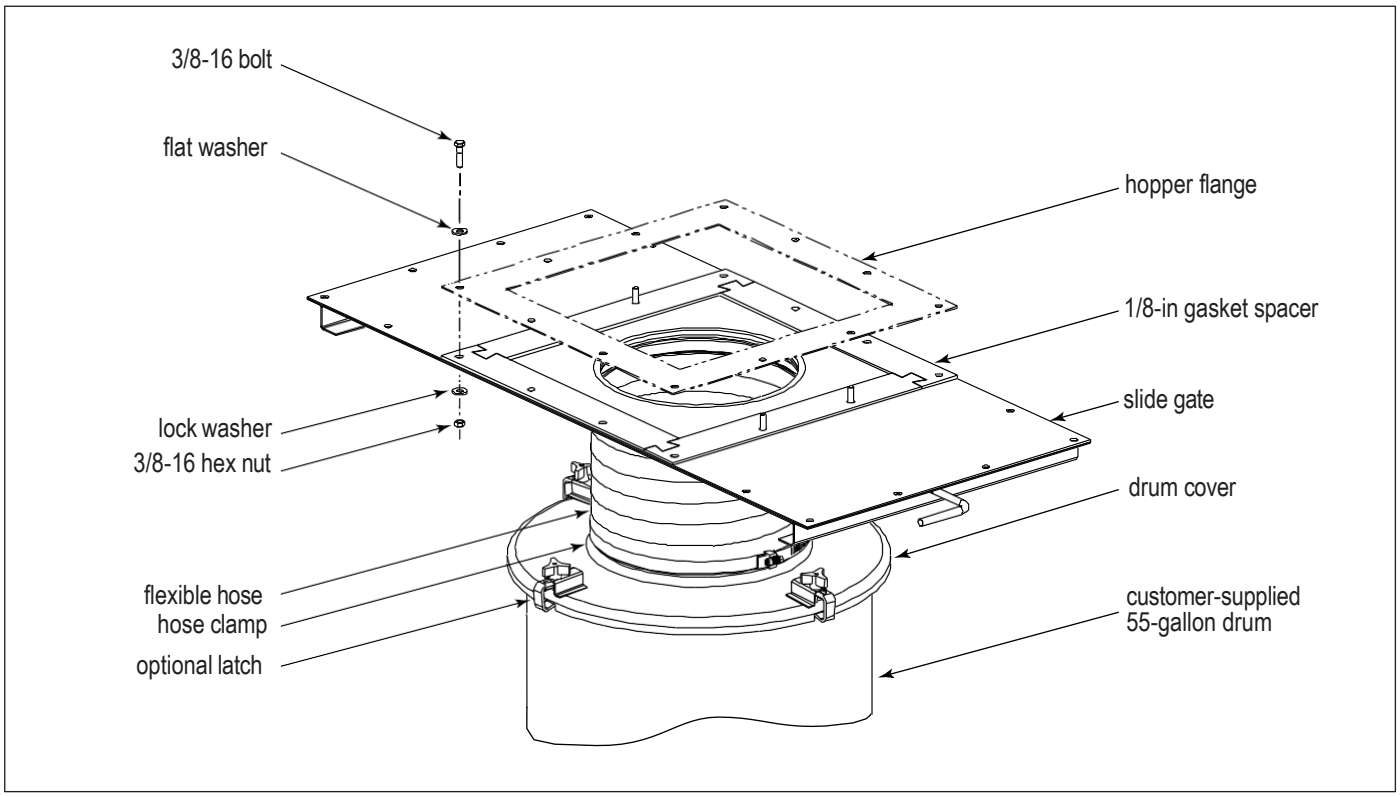
Sharp edge of slide gate may result in personal injury while closing the slide gate. Keep hands clear when operating the slide gate.

With Slide Gate

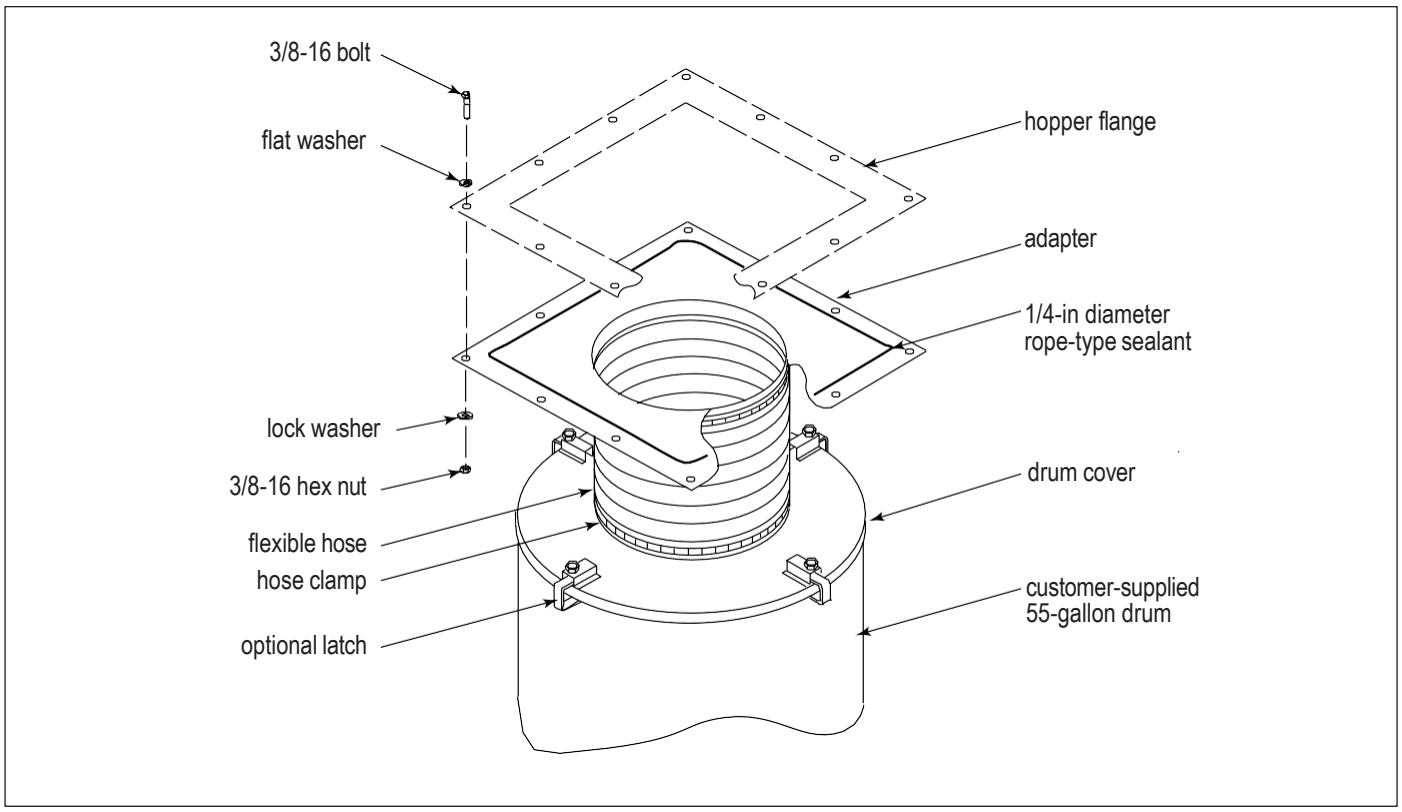
1. Place the 1/8-in gasket spacer between the hopper flange and slide gate as shown.
2. Attach the drum pack and slide gate to the hopper flange using 3/8-16 bolts, washers and hex nuts.
3. Attach the drum cover to the 55-gallon drum.
4. Use latches to secure the cover to the drum, if equipped.
5. Connect the flexible hose between the drum cover and slide gate. Secure with hose clamps.

Without Slide Gate

1. Place 1/4-in diameter rope-type sealant between the hopper flange and the drum cover mounting flange toward the inside edge of the bolt pattern.
2. Fasten using the bolts, washers, and nuts supplied.
3. Attach the drum cover to the 55-gallon drum.
4. Use latches to secure the cover to the drum, if equipped.
5. Connect the flexible hose between the drum cover and the adapter. Secure with hose clamps.



55-Gallon Drum Pack with Slide Gate



55-Gallon Drum Pack without Slide Gate

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 tot swap a power lead andthe 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 or dust discharge device is properly attached to the collector (if supplied).
6. Check that fan exhaust damper is set to the fully-closed position (if supplied).
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 the pressure listed in the Compressed Air Requirements table to ensure proper operation.
12. Turn fan motor ON.
13. Using the damper (or a variable speed drive controller), adjust the air volume to the collector to the design air volume.

NOTICE Excessive airflow can shorten filter life and damage fans.

14. Turn powered hopper discharge material handling system components ON.
15. Turn ON remaining optional accessories.

16. Ensure any and all fire and explosion mitigation systems are engaged and armed.

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. To remove dust accumulations from the filters, execute a full pulse cleaning cycle and purge discharged dust from the hopper prior to shutting down the collector.
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. Remove top mounted fan from collector.
9. Remove inlet section.
10. Remove rear access covers and jet tubes.
11. Remove and lower compressed air tank.
12. Disconnect main filter housing from hopper and leg assembly.
13. Seperate and remove hopper from leg pack.
14. Disassemble bracing.
15. Once all cross bracing has been taken down, remove anchor bolts and lower leg pack columns.
16. Secure all collector components to a suitable transport carrier and transport to a disposal site suitable for the dust in the collector.

Spare List

SN	P/N	Description
1	R080895-000-600	Dura-Life Oleophobic EN0701665
2	P285285-016-223	Dura-Life std EN0701607
3	R080897-000-600	Dura-Life Anti-static EN0701681
4	R080898-000-600	Dura-Life Oleophobic Anti-static
5	R080900-000-600	Tetratex
6	R080901-000-600	Tetratex Anti-static
7	8PP-AK01144-01	Solenoid valve, ASCO, 115V 50/60hz
8	8PP-AK01144-02	Solenoid valve, ASCO, 220V 50/60hz
9	8PP-AK01004-00	Delta P-C01 115V/230V

Product Information

(Process Owner to complete and retain for your records)

Model Number _____ Serial Number _____

Ship Date _____ Installation Date _____

Filter Type _____

Collected Dust _____

Dust Properties: Kst _____ Pmax _____ MIE _____ MEC _____

Accessories _____

Other _____

_____

Service Notes

Date	Service Performed	Notes

Service Notes

Date	Service Performed	Notes

Donaldson's comprehensive dust collection solutions help process owners effectively address their dust, fume, and mist collection challenges by providing knowledgeable guidance, industry-leading equipment as well as unrivaled aftermarket service and support.

Donaldson.

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