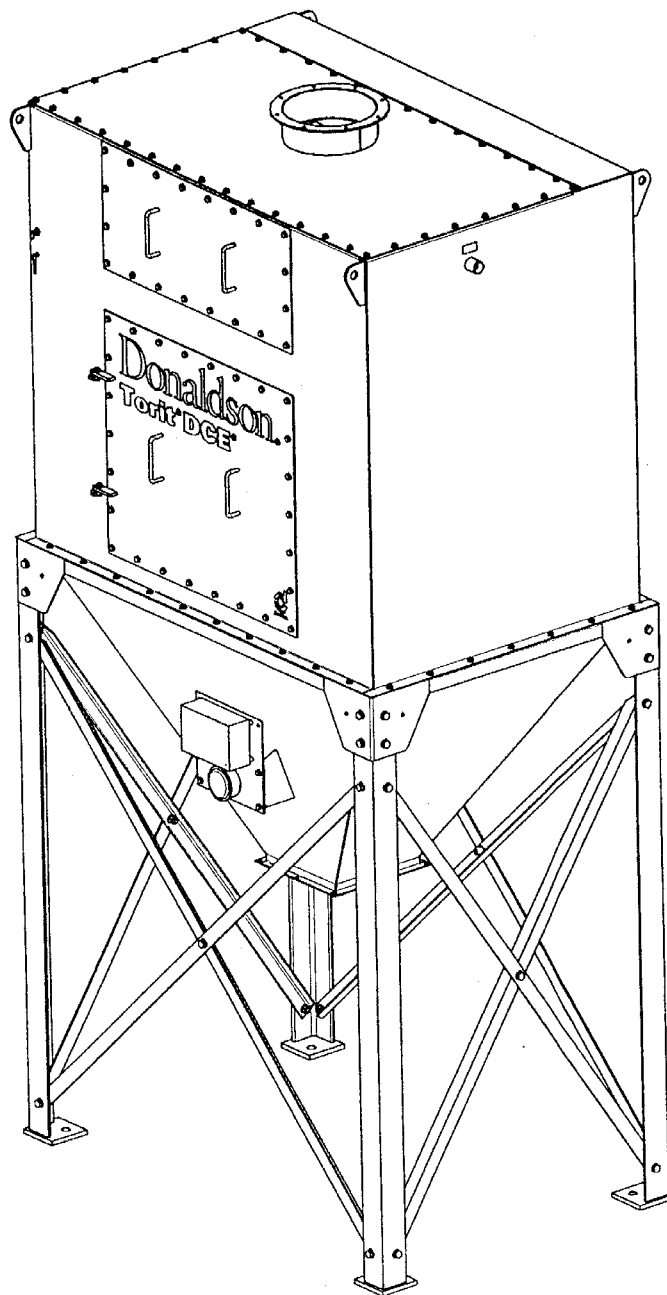




Donaldson.
Filtration Solutions

INSTALLATION AND OPERATION MANUAL

FOR TORIT DCE DUST COLLECTORS TYPE TDS



Please read this manual prior to installation and/or setting-up.

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1. SAFETY RECOMMENDATIONS

This manual contains specific precautionary statements relative to worker safety in appropriate sections. To avoid dangerous situations we give you the following advice:

NOTE

Refers to special information on how to use the dust collector most efficiently.



IMPORTANT

Refers to special information directed towards preventing damage.



CAUTION

Refers to special information designed to prevent injury or extensive damage.

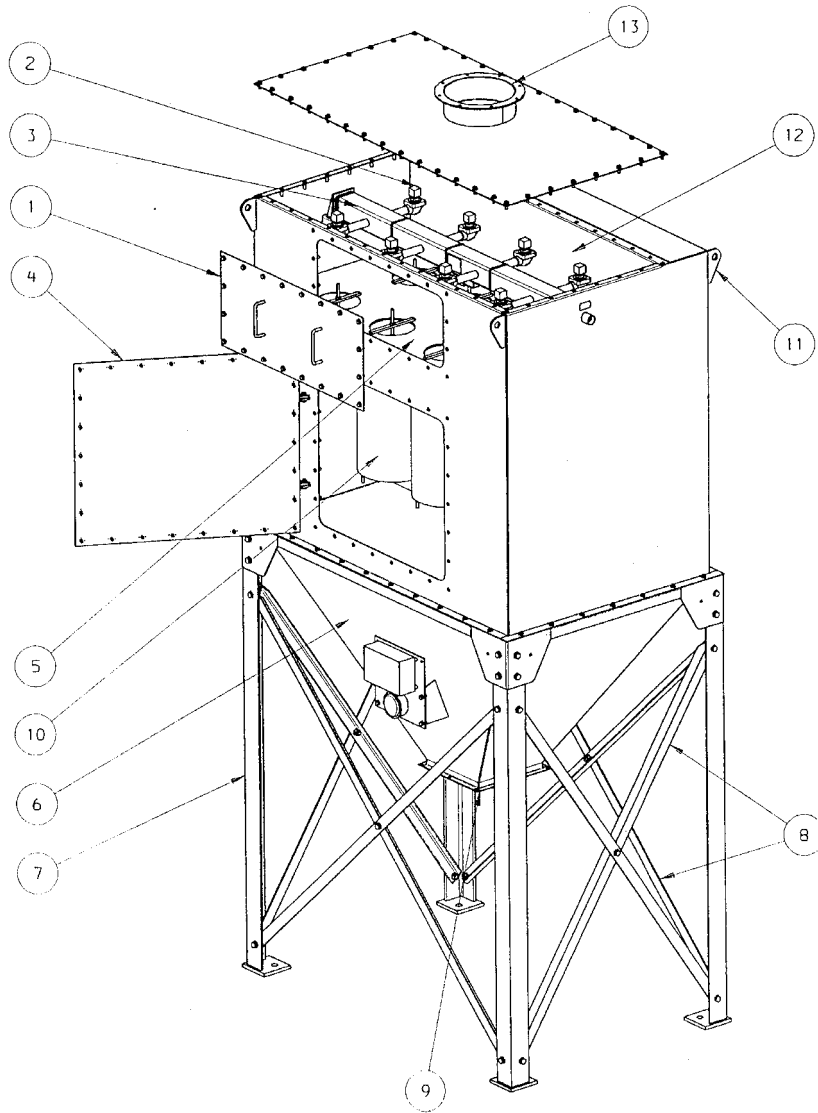


CAUTION

- a) The dust collector has been built in accordance with state-of-the-art standards and recognised safety rules. Nevertheless if not handled carefully, it may put people at risk, or also cause damages.
- b) The dust collector must only be used in technically perfect condition in accordance with its designated use and the instructions set out in the operation manual. Any functional disorders, especially those affecting the safety, should therefore be rectified immediately.
- c) Make sure to give proper training to operators before start-up. The dust collector is designed exclusively for use in accordance with the scope of delivery, drawing(s) and the specification sheet.
- d) The dust collector is not designed for applications with combustible materials involving a potential dust explosion risk (e.g. buffing lint, paper, wood dust, aluminium and magnesium).
- e) It is not allowed to put lit cigarettes or any burning object into the hood or ducting of any dust collection system;
- f) Regular maintenance is important for a good performance of your dust collector.

A prudent user of Torit DCE equipment should consult and comply with all relevant Fire Codes and/or other appropriate codes when determining the location and operation of dust collector equipment.

A hand-operated supply-disconnecting device is necessary for each incoming electrical supply in accordance with EN 60204-1.
- g) To prevent accidents the access to the fan wheel must be impossible during operation. Refer to EN 294.
- h) Disconnect all power before servicing. All electrical work must be done by a qualified electrician according to local codes.
- i) All exposed conductive parts of the electrical equipment and the dust collector shall be connected to the protective bonding circuit (refer to EN 60204-1).
- j) Shutoff and bleed-off compressed air supply before doing any service work
- k) The dust collector cannot be used in a potentially explosive atmosphere (according ATEX directive 94/9/EC), unless stated otherwise on the nameplate of the unit and scope of delivery.



- | | | | |
|----|----------------------------|-----|------------------|
| 1. | Clean air Inspection cover | 8. | Bracing |
| 2. | Diaphragm valve | 9. | Dust outlet |
| 3. | Compressed air manifold | 10. | Filter elements |
| 4. | Dirty air chamber door | 11. | Lifting lugs |
| 5. | Tube sheet | 12. | Clean air plenum |
| 6. | Hopper | 13. | Clean air outlet |
| 7. | Legs | | |

Figure 1: Typical Installation View (TDS8 model illustrated)

2. INTRODUCTION

2.1 Product information

The Torit DCE TDS Dust Collector is used for the collection of airborne dust and particulate. Whether in answer to the problem of air pollution, or as part of a manufacturing process, the TDS provides highly efficient, continuous, on line dust collection.

The filter elements are automatically cleaned by putting alternate elements

temporarily out of action while the others remain in operation. Element sizes are Ø 324 x 660 mm.

The cleaning cycle is adapted in each individual case to the type and volume of dust to be dealt with.

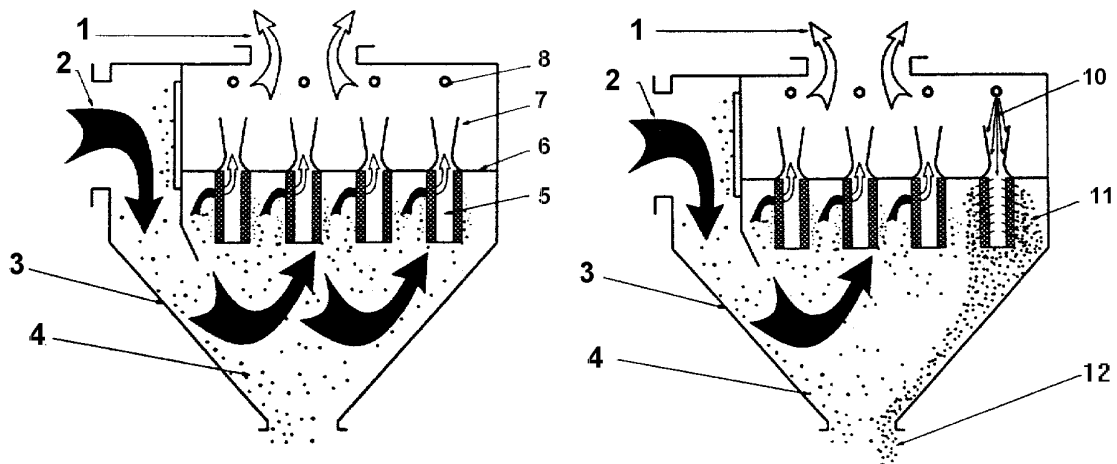
Technical and field support are always available from your local Torit DCE representative and distributors.

2.2 Working principle

During normal operation, contaminated air enters the TDS through the inlet into the inlet plenum where the dust is collected on the outside surface of the filter elements. The clean filtered air flows through the center of the filter elements into the clean air plenum where it exits through the clean air outlet (figure 2). The filter elements are automatically cleaned with the aid of an electronic circuit board through which the solenoid valves are activated, the diaphragm valve opens and a certain volume of compressed air is

blown into the filter element through the manifold.

The compressed air pulse - with the induced air added to it - flows through the filter element and filter medium in a direction opposite to the normal airflow. The result is that the dust caught on the outside of the filter element, is blown off the filter element and falls into the hopper. The air pulse lasts about 80-100 milliseconds, after which the diaphragm valve closes and the filter element is back in operation.



Normal Operation (left)

Cleaning of Filterelements (right)

1. Clean air outlet
2. Dirty air inlet
3. Hopper
4. Heavy dust

5. Filter element
6. Tube sheet
7. Diaphragm valve

8. Air pulse
9. Dust
10. Dust Outlet

Figure 2: Operational Schematic

3. DELIVERY AND INSPECTION

TDS dust collectors are usually shipped in one or more separate parts, mounted on wooden pallets. The shipments should be checked on delivery for possible damage. Compare the parts received against the packing list. If there is damage or parts missing, notify the delivery company and your local Torit DCE representative.

Parts shipped loose with the delivery (depending on your order):

- Hopper and leg set
- Dust disposal system
- Transition pieces
- Fan set
- Fan box
- Silencer
- Platform

- Spare parts
- Anchor bolts
- Hardware/Sealant

➔ NOTE

The collector comes with a can of paint with the colour the unit is painted in. Use it to touch up scratches and dents on the bodywork.

4. ERECTION OF THE EQUIPMENT



CAUTION

You should ensure all persons carrying out work on the supplied equipment follow any relevant recognised standards or codes and are competent to do so. Areas requiring competent person include:

- Lifting and erection
- Electrical installation, inspection and maintenance
- Pneumatic installation, inspection and maintenance

4.1 Location

It is recommended to mount the TDS dust collector on a reinforced concrete foundation. It is also possible to install the dust collector on another structure.

For the calculation of the load on the foundation or on the structure; the following factors will have to be considered: the weight of the dust collector, if necessary including fan/motor units, as well as the maximum weight of the dust taking into account the hopper capacity and eventually the snow and the wind conditions to be expected locally. (see scope of delivery, specification sheet and outline).

There should not be any obstructions near the place where the collector is to be located, for pipes, wires or protruding roofs could cause problems for the crane which in most cases will be necessary to put the collector on the right spot.

To save time it is recommended to prepare the foundation before the collector arrives and in that case it is essential to locate the anchor bolts correctly.

The dust collector should be located with consideration for:

- emptying the dust disposal (item 11, fig. 1)
- shortest runs of inlet and outlet ductwork
- radius bends on elbows as big as possible
- easy access to electrical and compressed air connections
- convenience of maintenance.

4.2 Required tools and equipment

- Crane/Fork lift
- Slings/ Clevis Pins and adequate lifting equipment
- Standard tools (e.g. screwdrivers, wrenches, etc.)
- Drill
- Pipe Sealant

5. INSTALLATION

5.1 Unloading and transporting to location

→ NOTE

Before unloading remove all packing and strapping.

- A crane is recommended for the unloading, transport and installation of the dust collector. A crane will be needed to put the hopper in position on the foundation and after that, the top section of the collector on top of the hopper.



CAUTION

Chains or slings with an adequate safe working load must be used. Refer to the collector nameplate for weight of equipment supplied by Torit DCE. The chains must be long enough to ensure that the lifting angle between diagonal chains is not greater than 90°. When using a forklift the forks must be of a suitable length and adjusted to ensure a stable lift.



NOTE

Depending on the order, the hopper and leg set come already pre-mounted. Only the collector will still need to be mounted on the hopper. Follow steps 6 and 7 when this is the case.

1. Stand the hopper(s) up with the disposal end up (hopper outlet).
2. Use drift pins to align the holes in the hopper gussets and legs, and attach the legs with the M16 x 40 bolts, washers and nuts. **Do not tighten hardware at this time!**
3. Use drift pins to align the holes in the crossbracings on the rear side of the leg set.
4. Recheck the position of the legs and crossbracings against Figure 'Leg bolting details' and 'Standard Leg Packs' and the drawing.
5. Flip over the now-assembled hopper/leg pack assembly so that it is standing on its legs (hopper outlet pointing down). This step may require a crane.
6. Lift the assembled collector onto the foundation. Fasten each footplate of the leg anchor bolts with flat washers, lock washers and nuts. **Do not tighten hardware at this time!** (Depending on the type of anchor bolts, anchor bolts can be mounted afterwards).



CAUTION

The dust collector must be anchored (refer to the replacement parts list for the type of anchor) and the wind bracing supplied with the legs must be fixed onto the legs in both directions (see outline unit).

5.2 Fan unit

If the fan is supplied by Torit DCE, it will be mounted on top of the collector. Bigger fans usually are placed on the floor next to the dust collector.

The opening in the collector for the fan should be located between the cross stiffeners and it is recommended to make use of vibration dampers and a flexible connection system.

5.3 Inlet duct

The dimensions of the inlet ducts should be such that the required volume of air can be exhausted at such a speed that no dust is deposited in the inlet ducting.

Piping should be kept as short as possible with bends having a maximum radius. All connections should be carefully sealed by means of sealant, paste or tape. Connect the inlet duct onto the inlet flange of the inlet plenum.

→ NOTE

A control valve should be installed in the suction pipe to prevent overloading the collector when starting the unit because

of the low initial pressure drop of the filter elements.

5.4 Platform

The platform is shipped loose and has to be mounted on the unit according following mounting instructions:



CAUTION

- Platform fully galvanised.
- Max allowable point load (on surface 200x200 mm): 1500 N
- Max allowable load: 200 kg/m²
- Grate: 30x30 mm
- Self-closing door

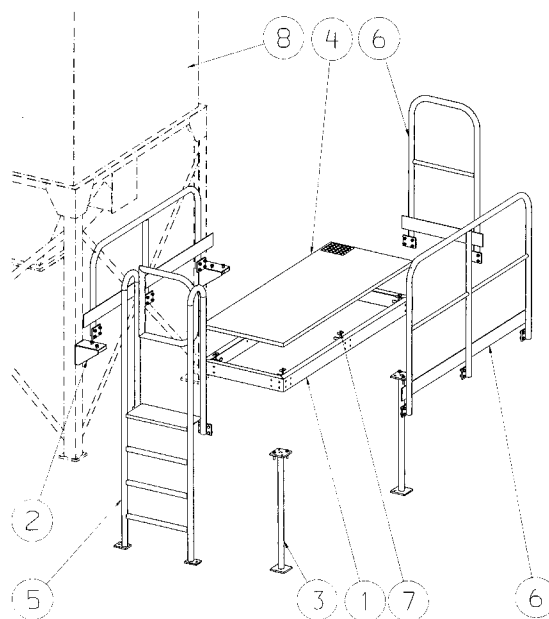
- Step 1: Mount frame 1 on supports (item 2) and on legs (item 3) (14 x M12x35) (figure 'Front view').
- Step 2: Mount walking grid (item 4) on the frames with normal fastening (1 fastener - item 7 - near each corner) (figure 'Front view' + detail).
- Step 3: Mount ladder (item 5) on frame (8 x M10x30) (figure 'Front view').



NOTE

Ladder can be mounted on either 270° or 90°-side.

- Step 4: Mount guardrails (item 6) on frame (56 x M10x30) (figure 'Top view')
- Step 5: Anchor the platform and the ladder to the foundation.



- 1. Frame service platform
- 2. Support
- 3. Leg

- 4. Walking grid
- 5. Ladder
- 6. Guardrails

- 7. Fastener
- 8. TDS

Figure 3: Exploded view

5.5 Magnehelic gauge

(if not factory installed)

The gauge should be mounted in a suitable place and in accordance with the instructions supplied with it. Special attention should be paid to the correct connection of the high and low pressure sides, the bottom connection is the high pressure side.

5.6 Dust discharge systems

Dust collectors can be fitted with various dust discharge systems (see scope of delivery for your dust discharge system).

The selection of a suitable discharge system depends on:

- the volume of the dust handled
- the nature of the dust concerned
- storage possibilities and ultimate destination of dust

All dust discharge systems are mounted underneath the dust hopper. Hoppers have standard discharge outlets.

There are marked differences in flange dimensions between the different types of rotary airlocks, screw conveyors, double acting valves or other discharge systems so that in most cases a transition piece will have to be used to connect the discharge system to the discharge outlet on the hopper. Such transition pieces can be supplied by us on request (see scope of delivery).

Whatever the discharge outlet, it can always be easily fitted to the dust

collector. A 5 mm soft rubber gasket should be used between all connecting flanges to prevent leakage. Electric motors should be connected in accordance with the wiring diagram and the local rules and regulations. Special attention should be paid to the correct direction of rotation.

To ensure an effective evacuation of dust deposit in the hopper (for difficult dischargeable types of dust) a vibrator can be mounted on the hopper (as an option). The vibrator will be controlled by an optional vibrator module, which can be added into the controller. For installation see separate manual: "Vibrator module".

5.7 Installation of elements

(if not factory installed)

Unscrew the square nut of the crank until it touches the lock nut at the end of the crank.

Apply a thin coating of grease or vaseline film to the gasket and hang the element on the bracket with the square nut descended into the slot provided for this purpose.

Next, turn the crank **by hand** until the filter element is satisfactorily secured, do **not** use any tools to achieve this.

The gasket will now be sufficiently compressed to prevent any leakage. The cartridges in type TDS6 to TDS8 are fitted in rows of 2 and in the other types in rows of 4. Two rows of elements can be reached through each door.

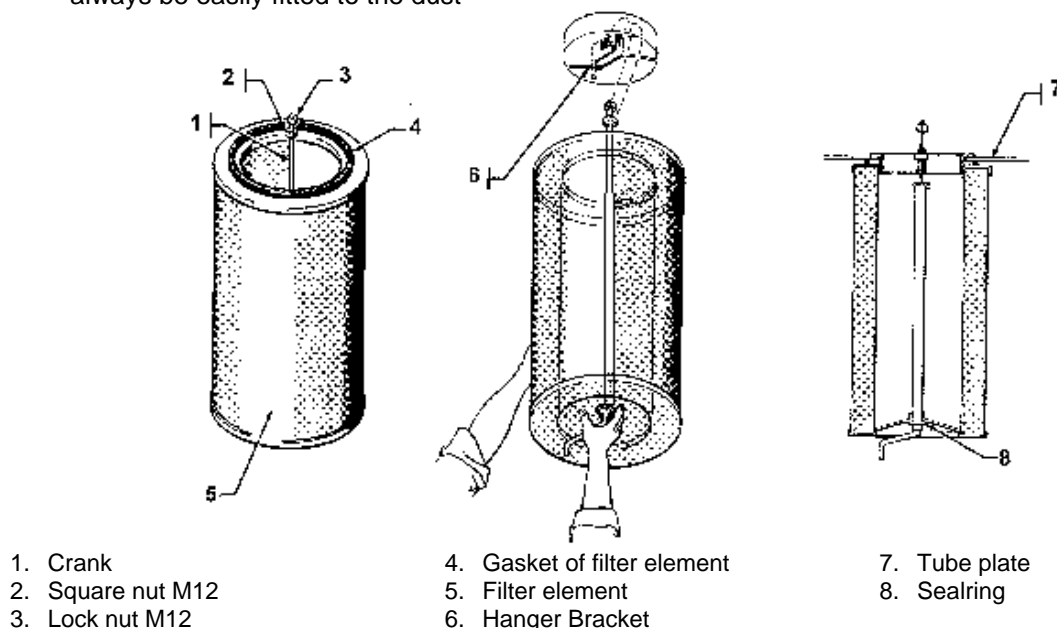


Figure 4: Cross section of filterelement

6. INSTALLATION - ELECTRICAL SYSTEM

6.1 General description of the electrical component parts

The electrical system for the TDS dust collectors consists of various component parts. These are:

- the control box incorporating the printed circuit board
- the pilot valve box containing the solenoid valves

The **standard power supplies** of the control boxes are: 220V/240VAC - 50/60 Hz, 110V/115VAC - 50/60 Hz and 24VDC.



IMPORTANT

All the instructions related to the control box are mentioned in a separate Torit DCE manual. (ref. 1A3119-8064 for IPC Controller). Make sure you refer to it

6.2 Control boxes with printed circuit boards

All TDS-units can be fitted with either a STD IPC-Controller or an IPC-Controller with differential pressure switch (part number 1A31599361 and 1A31599362 respectively). The control box is factory mounted on the dust collector, according to our standards (except when specified by order).

6.3 Solenoid valves connection (= pre-wiring)

Solenoid valves are factory pre-wired.

6.4 Downtime pulsing

If the cleaning of the filter elements is difficult due to the nature of dust, it is possible to operate the electronic/pneumatic cleaning device with the fan set shut off. We recommend this if the dust collector is put out of operation for a longer period. On the standard control boxes there is a downtime pulse function device that can be set by means of a slide connector.

Be sure that during the cleaning cycle after fan shut down the power supply to the control box is not disconnected. See OIM for Control boxes.



NOTE

This prevents uneconomical use of compressed air.

7. INSTALLATION - PNEUMATIC SYSTEM

Connect the compressed air supply line to the dust collector manifold (connection 1" BSP inside thread). In principle it is possible to connect the supply to one side or the other of the manifold, a plug will have to be used to close the connection opening on the opposite side.

The various couplings in the compressed air system should be sealed with material like Teflon tape or the Loctite product "Pipe Sealant".

To make sure the compressed air in the manifold is both clean and dry it is recommended to include a compressed air filter in the supply system.

A pressure regulator complete with manometer should be fitted to be able to control the compressed air pressure.



NOTE

Care should be taken that the compressed air filter/regulator and the air lines are amply dimensioned.



IMPORTANT

- Filter must never be filled with oil! Arrows on the apparatus indicate the direction of flow. Please pay attention to this during assembly.
- Be sure that all compressed air components are adequately sized to meet the maximum system requirements of 50 Nliters per pulse at max 7 bar supply pressure (= design pressure).
- The piping should be installed to provide a fall in the directions of the airflow to assist in the drainage. A blow-down cock should be provided at the lowest point of the installation.
- It is a requirement that adequate precaution is taken to avoid exceeding this pressure. Relief, safety valve is required if the connected supply can exceed this pressure. A label is also attached to each manifold indicating manifold design details.
- Compressed air requirements 600-700 kPa (6-7 bar)
- Clean (max. particle size: 50 µm)
- Free of condensate
- Max. oil content: 3 mg/m³



IMPORTANT

Clean and purge the air feed pipe before connecting it to the manifold to make sure all impurities, which could possibly clog the valves, are removed.

8. START UP

Before starting up the dust collection system, the following points have to be checked first:

Electrical system

- Check voltage of controller.
- Check voltage of fan (and if applicable the discharge systems).
- Check number of outlets in control box actuated.
- Check fuses (2x) in controller.

Pneumatic system

- Check compressed air pressure (6 - 7 bar at filter).
- Check if oil/water drain is working.
- Is the compressed air main valve open?

Starting

- Close the damper valve 45 degrees or halfway.
- Start rotary airlock or other discharge system if applicable. Check direction of rotation, if incorrect: stop, switch off main voltage and exchange 2 feeds in cable box of motor. Repeat start-up procedure.
- Start control box. Check that all solenoid valves are operated.
- Start fan. Check direction of rotation. If incorrect: stop, switch off main voltage and exchange 2 feeds in cable box of motor. Repeat start-up procedure.
- Check ΔP . It should read 0 - 200 mm WG. If less than 0, exchange tubes.

The dust collector is now operational!!

9. SETTING THE VARIOUS FUNCTIONS

Adjust the control valve in the suction pipe so that the required volume of air passes the dust collector. Check if the suction at all suction points of the system is satisfactory.



NOTE

Air volume can be measured with the aid of a Pitot tube and U-tube pressure gauge.

- On leaving the factory the circuit board is set at a 10 second interval between the cleaning of each filter element section.

If Δp exceeds its expected value it can usually be reduced by shortening the interval period.

On completion of the running-in time the difference in pressure across the filter elements normally comes to 50 - 100 mm WG.



NOTE

Do not raise the cleaning pulse time above 80-100 ms. Longer pulses do not improve cleaning results, but only waste compressed air.

- The compressed air consumption can be decreased by lengthening the interval periods between the cleaning pulses (2 - 30 s).

If a differential pressure gauge/switch is fitted it should be set at the desired ΔP ; as soon as this present level is reached the cleaning system will automatically be put in operation

10. OPERATION SCHEDULE

To ensure a good performance of your dust collector follow the checkpoints mentioned below according the timetable.

No.	Checkpoint	Type of control	Recommended action	Day	Weeks			
					2	4	8	26
1.	Control box	Visual check delta P	See trouble shooting guide in Controller manual	X				
2.	Dust disposal system	Check contents of dustbin(s)	If ¾ full, empty dustbin	X				
3.	Fan set	Excessive noise	See trouble shooting guide chapter 12	X				
4	Clean air chamber	Emission : dust carry over in clean air chamber	See trouble shooting guide chapter 12		X			
5	Controls settings	Check settings of both potentiometers (pulse time 100 milliseconds, interval time 10 seconds) on the control box (see separate manual)	Interval time normally to be set at 10 seconds. Pulse time 100 milliseconds.		X			
6	Filter/regulator	Oil and/or water is in the reservoir	Switch off and bleed compressed air prior servicing. Clean oil/water separator. Check compressor.		X			
7	Solenoid valves	Noise of escaping air is produced	See trouble shooting guide		x			
8	Diaphragm valves	Noise of escaping air is produced	See trouble shooting guide			X		
9	Doors	Visual check gaskets	Replace gaskets if necessary			X		
10	Connecting ducts	Check for leakage	Repair if necessary				X	
11	Dust collector and platform	Check damage, strength and corrosion	Repair or replace if necessary					X
12	Filter element	Preventive replacement of all filter elements	Unless otherwise specified in the scope of delivery every 2 years.					

11. SERVICE



CAUTION

- Disconnect electrical power before servicing.
- Shut-off and bleed compressed air supply before servicing any compressed air components.
- No welding should be performed inside unit without fire protection.
- Avoid contact or exposure to dust as much as possible during servicing or maintenance. Wear dust mask and protective gloves.

11.1 Element replacement

Remove all filter elements, starting with those nearest the door by turning crank counterclockwise until crank is loose enough to remove filter from hanger bracket.

Disassemble crank from elements and install in new elements as shown in Figure "Cross Section of Filter Element". Install elements in cabinet as explained under Installation of Elements.



NOTE

All filter elements should be changed at the same time.



CAUTION

Dust laden filters may be heavy and difficult to handle when removed through access door opening. Provide appropriate means of access to replace elements in safety in case no platform is installed.



IMPORTANT

Do not drop the element on the floor or any other hard surface. Damage to the filter element will occur, resulting in leakage



IMPORTANT

The genuine Torit DCE filter element is the only replacement filter that will provide the high level of performance that you expect from your investment in the Torit DCE Dust collector.

11.2 Dust Removal



IMPORTANT

Do not let the dustbin overflow. 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 3/4 full).

If plastic bags are used, a pressure balance pipe is recommended. If shipped loose it has to be mounted according figure 7.

A hole is already predrilled in the back of the hopper for the connection. If the system is installed to remove the bin from the back (0° position), a hole (dia 28.5 mm) has to be drilled on the opposite side of the hopper. The predrilled hole has to be closed.



CAUTION

Where the dust has self-heating properties, it is important to remove any deposits in the dust container to reduce the risk of an explosion

11.3 Diaphragm valve

Valve disassembly and reassembly



CAUTION

Depressurise valve before making repairs.

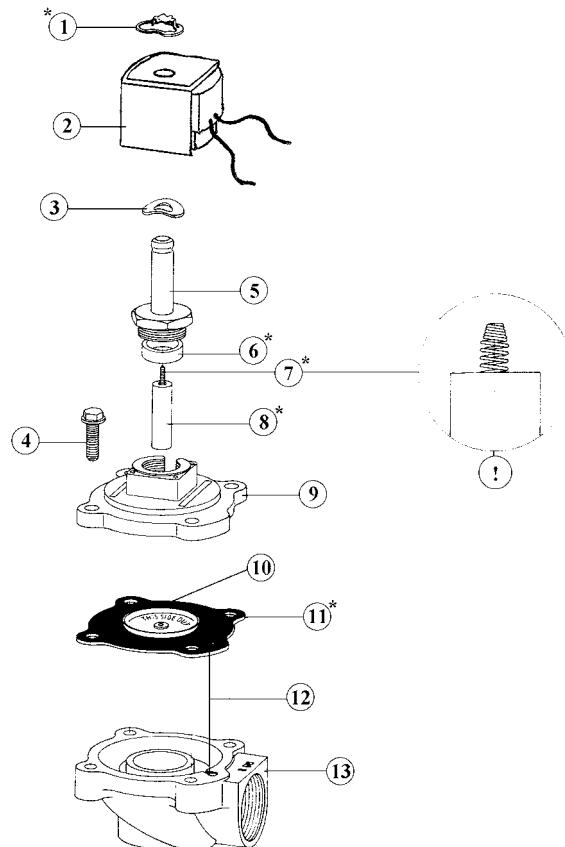


CAUTION

To avoid damage to the valve body, **DO NOT OVERTIGHTEN PIPE CONNECTIONS**. If Teflon tape, paste, spray or similar lubricant is used, use extra care due to reduced friction.

Depressurise valve. Proceed in the following manner:

1. Remove bonnet bolts and valve bonnet.
2. Diaphragm assembly is now accessible for cleaning or replacement. Replace diaphragm assembly if worn or damaged.
3. Reassemble in reverse order of disassembly paying careful attention to exploded views provided for placement of diaphragm assembly.
4. When replacing diaphragm assembly be sure the marking "**THIS SIDE OUT**" on the diaphragm assembly is facing the valve bonnet and that the bleed hole in the diaphragm assembly is in alignment with cavity in valve body and bonnet. The external contours of the diaphragm, body and bonnet must all be in alignment.
5. Replace bonnet bolts and tighten in a criss-cross manner. Torque bonnet bolts (4) $7 \pm$ Newton meters.
6. After maintenance operate the valve a few times to be sure of proper opening and closing.



- 1. Retainer clip (*)
- 2. Coil
- 3. Washer spring
- 4. Bonnet bolts (4)
- 5. Sol base sub assembly (torque to 20 Nm)
- 6. Silencer (*)
- 7. Spring (*)

- 8. Core assembly (*)
- 9. Valve bonnet
- 10. Marking "THIS SIDE OUT" on diaphragm assembly to face valve bonnet
- 11. Diaphragm valve (*)
- 12. Bleed hole in diaphragm assembly must be in

alignment with cavity in valve body and bonnet. The external contours of the diaphragm assembly, body and bonnet must be in alignment.

13. Valve body

(!) Place conical spring end on top

(*) Parts included in the diaphragm repair kit

Figure 5: Diaphragm Valve

12. TROUBLE SHOOTING GUIDE

→ NOTE

Please consult other manuals if necessary (e.g. controls, fans...)



CAUTION

Disconnect all power and compressed air supply before services.

TROUBLE	POSSIBLE CAUSE	REMEDY
A. Fan and motor does not start	1. Wiring	Rewire per local and national codes for proper wire size. Check and correct internal motor wiring for proper connections for your voltage. (reference Motor Manufacturer Wiring Diagram on motor). Correct wiring for proper input voltage. Check input to motor circuits for voltage on all leads. Check the electrical supply circuit for proper output voltage or fuse, circuit breaker fault. Replace if necessary.
	a. Proper wire size not used for motor.	
	b. Not wired correctly.	
	c. Unit not wired for available voltage.	
	d. Input circuit down.	
B. Fan and motor starts, but does not keep running.	e. Electrical supply circuit down.	Check for proper motor overload protection. Reset or replace if needed for proper value. Tighten inspection door securely. Install slide gate, drum cover arrangement, or other accessories to hopper discharge. See Dust Discharge System and Operating Adjustments Section. Check airflow in ducting for proper requirements. Adjust the damper control until the proper airflow is achieved and the fan motor amperage draw is within manufacturer motor ratings. Check that the supply circuit has sufficient power to run all equipment.
	1. Starter kicks out.	
	a. Incorrect overload protection is installed.	
	b. Collector inspection door is off or not closed tight.	
	c. Hopper discharge open to atmosphere.	
C. Excessive noise / vibration of the fan unit	d. Fan damper control not adjusted properly.	Clean the blades Replace the fan wheel Replace the bearings.
	e. Electrical circuit fuses.	
	1. Fan wheel out of balance due to:	
	a. Dust deposit on the blades	
	b. Worn blades.	
	2. Worn bearings.	



CAUTION

If this happens, it should be rectified at once.

D. Dust emission out of clean air outlet	1. Filterelements installed improperly.	Check that gaskets on the filterelement(s) are facing into the cabinet first (see Filter-element Installation Section located in this manual). Check whether the seal rings at the bottom of the filter elements are fitted. Replace the filterelements. Use only genuine Torit DCE filterelements (see Ordering Information at spare parts list). See Installation of Filter elements. Tighten inspection door securely.
	2. Filterelement damage, dents in the end caps, gasket damage or holes in pleated media.	
	3. Inspection door is loose.	

TROUBLE

E. Insufficient airflow

POSSIBLE CAUSE

1. Fan rotation backwards.
2. Collector openings not tight or closed.
3. Fan exhaust area is restricted.
4. Filter elements plugged with particulate.
 - a. Filter elements need to be replaced.
 - b. Lack of compressed air.
 - c. Pulse cleaning not energized (pulse red led does not light up).
 - d. Dust storage area is too full or plugged.
5. Pulse valves are not functioning.
 - a. Pulse valves are leaking compressed air.
 - b. Pulse control printed circuit board has failed.
 - c. Pulse control timer board is out of adjustment.

REMEDY

- Check fan rotation. Refer to rotation sticker on fan housing.
- Check inspection door, that it is in place and tightened securely. Also check hopper discharge area that openings are closed off and that the optional hopper attachments are installed.
- Check fan exhaust area for blockage. Remove material or debris that is blocking the fan exhaust area or adjust damper flow control on fan exhaust area.
- Remove and replace using only genuine Torit DCE filter elements (see Filter Element Installation and Replacement Parts List).
- Check compressed air supply for 6 bar minimum.
- Refer to the trouble shooting guide from the Controller Operating Manual. Check wiring of solenoid valves (see Electrical Connection Section and Field Electrical Connection Schedule).
- Clean out dust storage area.
- Lock out all electrical power to the TDS and bleed off the compressed air supply. Check for debris, valve wear or diaphragm failure by removing the diaphragm cover on the pulse valves. Also check for solenoid leakage and/or damage. If pulse valves or solenoid valves are damaged replace part(s) (refer to Replacement parts List).
- Refer to the Operating Manual of the Controller.
- Refer to the Operating Manual of the Controller.

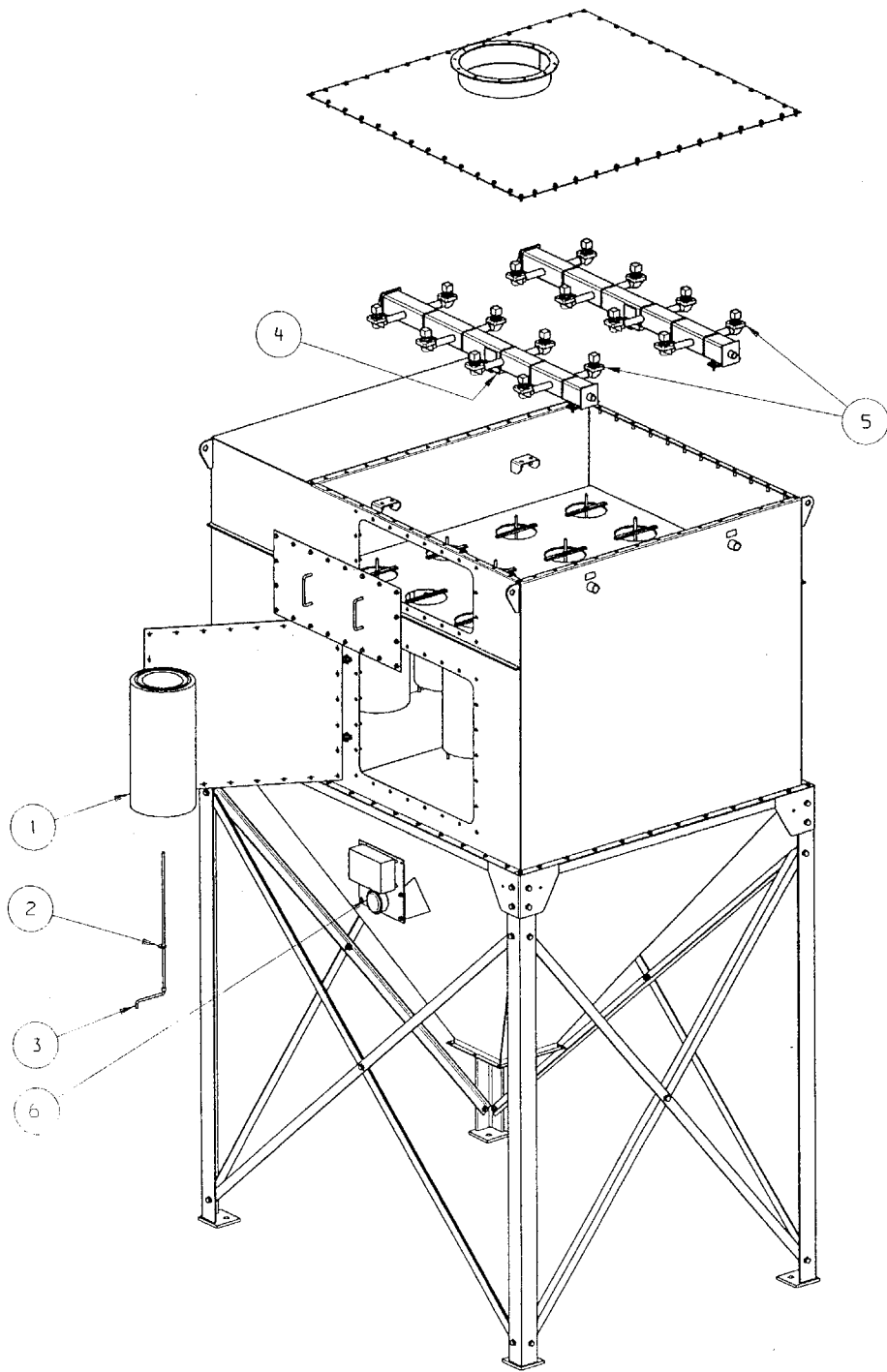


Figure 6: Parts Drawing (TDS16 model illustrated)

13. SPARE PARTS

Ref. nr.	Description	TDS 6 to 24	TDS 32 to 48
	Venturi (plastic)	N/A	262-2339
	Lock nut M12	N/A	262-3004
	Square nut M12	N/A	262-3003
	Bracket	N/A	262-3005
1	Filter element	see scope of delivery	
2	Seal ring	262-3002	
3	Crank	262-3001	
	Solenoid 24 VDC (spare coil)	N/A	AD1000123
	Solenoid valve mounting hardware for coil	N/A	AD1000122
4	Connection strip solenoid 6 valves	262-1307	N/A
	Connection strip solenoid 12 valves	262-1308	N/A
4	Enclosure with 4 solenoid valves (24 VDC) IP 65	N/A	AD1000213
	Enclosure with 6 solenoid valves (24 VDC) IP 65	N/A	AD1000214
	Enclosure with 8 solenoid valves (24 VDC) IP 65	N/A	AD1000215
	Tube elbow push-in fitting 6/8	N/A	AD1000217
	Tube flexible 6/8 black	N/A	AD1000218
5	Diaphragm valve	262-0139	262-0007
	Repair kit for diaphragm valve (diaphragm)	262-0087	262-0013
	Repair kit for diaphragm valve (coil/connector kit)	262-0138	
	Bulkhead connector 3/4" (incl. compression nut + seal)	N/A	262-0049
	Manifold coupling 3/4" (incl. compression nut + seal)	N/A	262-0050
	Anchor bolt M16 for dust collector	262-2430	
6	Magnehelic kit	727-0229	



CAUTION

In order to maintain the original collector specification and to ensure the same level of safety, only genuine spare parts should be fitted.



NOTE

When ordering parts, give model number and serial number of dust collector, description and quantity of parts desired.

14. CONTACT ADDRESSES

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15. CE DECLARATION

UK

CE DECLARATION OF CONFORMITY

(Machinery directives 89/392/EEC and 91/368/EEC)

Manufacturer: **Donaldson® Europe B.V.B.A.**
Interleuvenlaan 1 - B-3001 Leuven, Belgium

Description of the machinery: **Dust Collector**

Brand: **Donaldson Torit DCE**

Type: **TDS**

Description: see attached scope of delivery

The undersigned, authorised by Donaldson Europe NV, certifies that the machine described above, provided that it is installed, maintained and used in accordance with the instructions for use and the codes of practice, meets the essential safety and health requirements of the "machinery" Directive and the following stipulations and standards:

- Machinery directives 89/392/EEC and 91/368/EEC
- Low voltage directive 73/23/EEC
- EN 60204-1 (ed. Oct. 92) safety of machinery. Electrical equipment of machines - General requirements
- Pressure equipment directive (97/23/EC)
- Electromagnetic compatibility Directive 89/336/EEC
- Equipment and protective systems intended for use in potentially explosive atmospheres 94/9/EC.

And the essential principles of the following standards

- EN292-1/-2 (ed. Sept 91) Safety of Machinery
- EN294 (ed. Jan.93) Safety of Machinery - Safety distances to prevent danger zones being reached by upper limbs.

IMPORTANT! Read the Operation and Instruction Manual before using this machine. If you require additional copies contact your local Donaldson Torit DCE representative.

The machinery must not be put into service until the machinery into which it is to be incorporated has been declared in conformity with the provisions of the above mentioned directives.



Signature:
Name: Jos Dottermans
Position: Director Torit DCE Europe

Date: 11 August 2004