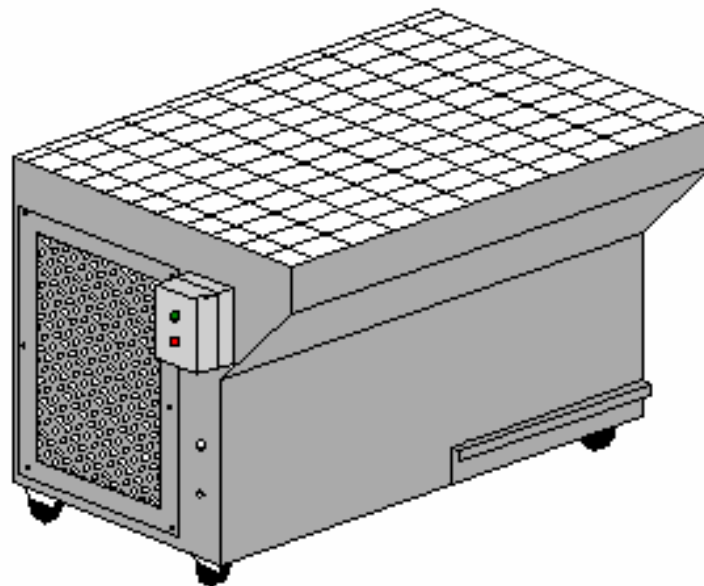


 DIVERSI-TECH inc.
DOWNDRAFT TABLES

OWNER'S MANUAL

MODEL DD2X4



IMPORTANT

This manual contains specific cautionary statements relative to worker safety. Read this manual thoroughly and follow as directed. Hazards of dust control equipment are not all listed in this manual. It is important that use of the equipment be discussed with a Diversi-tech Representative. Persons involved with the equipment or systems should be instructed to operate in a safe manner.

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Caution

Avoid mixing combustible materials, such as buffing lint, paper, wood, aluminum, and magnesium dust, and with dust generate from grinding ferrous metals due to the potential fire hazard caused by sparks in the dust collector. All users of Diversi-tech Equipment should comply with all National and Local Fire Codes and / or other appropriate codes when determining the location and operation of dust control equipment.

Upon Arrival

The Diversi-tech downdraft table is shipped on a crated skid. The skid should be inspected for any visible damage that may have occurred during shipment. If the downdraft table appears to have been damaged during shipping, please advise transport company as soon as possible.

Installations

Compressed Air

Supply 80-90 psi of compressed air to the bulkhead bushing on the side of the unit. Do NOT attempt to supply standard shop air pressure (90psi+) without a pressure regulator. The air tank in the downdraft table is fabricated to allow a maximum of 90psi.

Installation of an air dryer is recommended. Moisture in airline can damage filter(s).

Electrical Connection

The DD2x4 1.5HP downdraft table need not any electrical setup. It is supplied with a 10' cord and male plug, ready to be plugged into to a 120VAC socket. The 1.5HP motor draws ~14.5 Amps , it is therefore advised to have a 20Amp fuse.

For DD2x4 3HP High Static models, the following applies:

Supply voltage to the starter. Make sure the downdraft table's voltage matches the shop voltage. With a flathead screwdriver, open the control box (located on the left side underneath the overhang, on the front of the table). The three power leads must be connected to L1, L2 and L3 on the top part of the contactor. The ground must be connected as well.

See wiring diagram (included in this owner's manual) for more details.

Note: If on start-up the downdraft table seems to be lacking performance or the table sounds very loud, the motor is most likely running in the reverse direction. Reversing leads L1 and L3 will reverse motor rotation in the right direction.

Blower wheel's correct direction of rotation : Clockwise

Warning: Always disconnect power supply before servicing the blower wheel & motor or working with the unit for any reason.

Filter Cleaning System

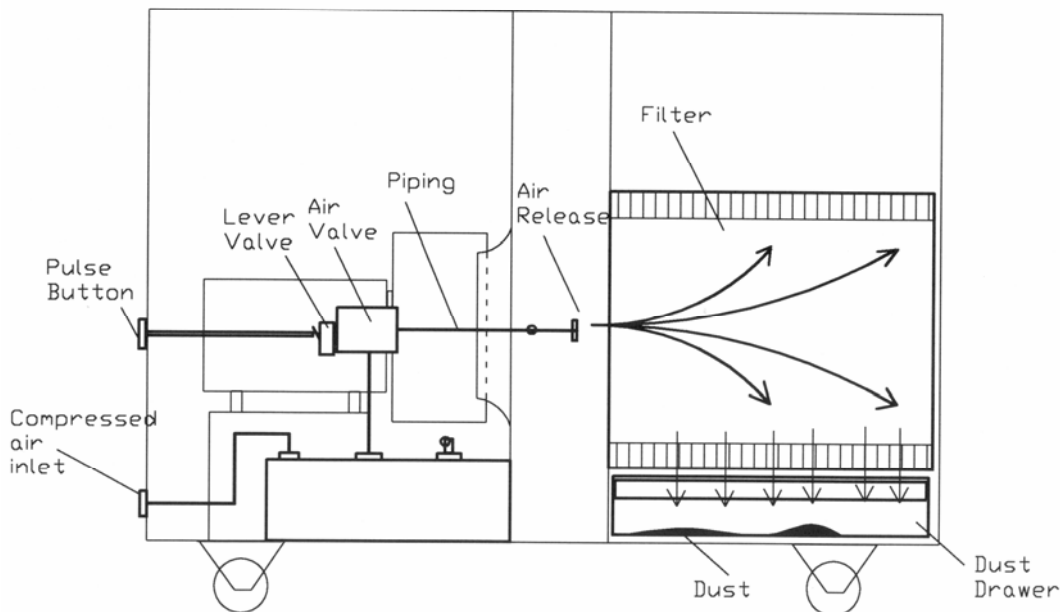
The unit is equipped with a manually operated reverse pulse cleaning system. By pressing the “pulse” button on the side of the table, compressed air is released into the filter - dislodging dust and smoke.

The microprocessor is set on manual mode for on & off line pulsing as often as needed, depending on the user’s application. (Off line pulsing only for aluminum applications). • Pulse Duration: For optimal performance, it is recommended for the user to push the pulse button and immediately release it. User must allow the air tank to fill before pressing the button again. Pulsing sequences should be performed 3 to 5 times a day, with 3 pulse repetitions each sequence for light to medium duty applications.

The air valve discharges large blasts of air through the filter cartridge thus dislodging particles embedded in the filter media. The particles fall into a dust drawer located below the cartridge. The angled v-shaped baffles above the drawer prevent the dust from re-entering the cabinet when the machine is turned on.

**** Neglecting to pulse the filter regularly will reduce filter life ****

DD-2x4 Cleaning Mechanism



Maintenance

Filter Cartridges

The filter's pulsing system is a successful way to clean the filter. Filter life is increased when the system is pulsed regularly according to usage. Over a period of time, a visual inspection or a decrease in air flow may indicate that the filter be removed from the table for manual cleaning.

Filter cartridge life will range from 6 to 18 months, depending on application and hours of usage. Eventually, even after manual maintenance, the blower will not be capable of drawing air through the cartridge due to excessive static build up. A new cartridge is required.

To remove the filter cartridge:

- Decompress the filter by removing the jam nut centered on the filter door. (door is on right side as seen when positioned in front of the table)
- Unlatch the door and open it; this exposes the filter cartridge.
- Remove Cartridge.
-

Warning:

Do not attempt to clean filters containing hazardous materials, be aware that all sewage and waste ordinances have been followed. The filter is of paper-pleat material, do not attempt to wash the filters. Do not wet or clean the cartridge with any liquid, as it may cause the forming of unwanted blockage on the filter media. The cartridge may be weakened causing perforations to the media and ultimately damage of the blower depending on many factors ranging from type of application, density, particle size, humidity, oil, etc...

Dust Drawer

The dust drawer should be emptied periodically. Perform visual inspections during the first few weeks of operation to determine proper dumping cycle. Periodically inspect the gasket on the drawer to ensure proper sealing. If the table is used for aluminum dust applications, the drawer must be emptied daily.

Baffle Trays

The Baffle trays located underneath the steel bar grating should be cleaned out periodically. Perform visual inspections during the first few weeks of operation to determine proper cleaning cycle.

Metal Mesh Prefilters (option)

The Prefilters located inside the baffle trays should be taken out and either blown out with compressed air or washed depending on how dirty they have become.

Safety Valve (located on the air tank in the blower/motor housing)

Test the safety valve by pulling on the spring tensioned ring. A short spur of air will be heard and will confirm that it is functioning properly.

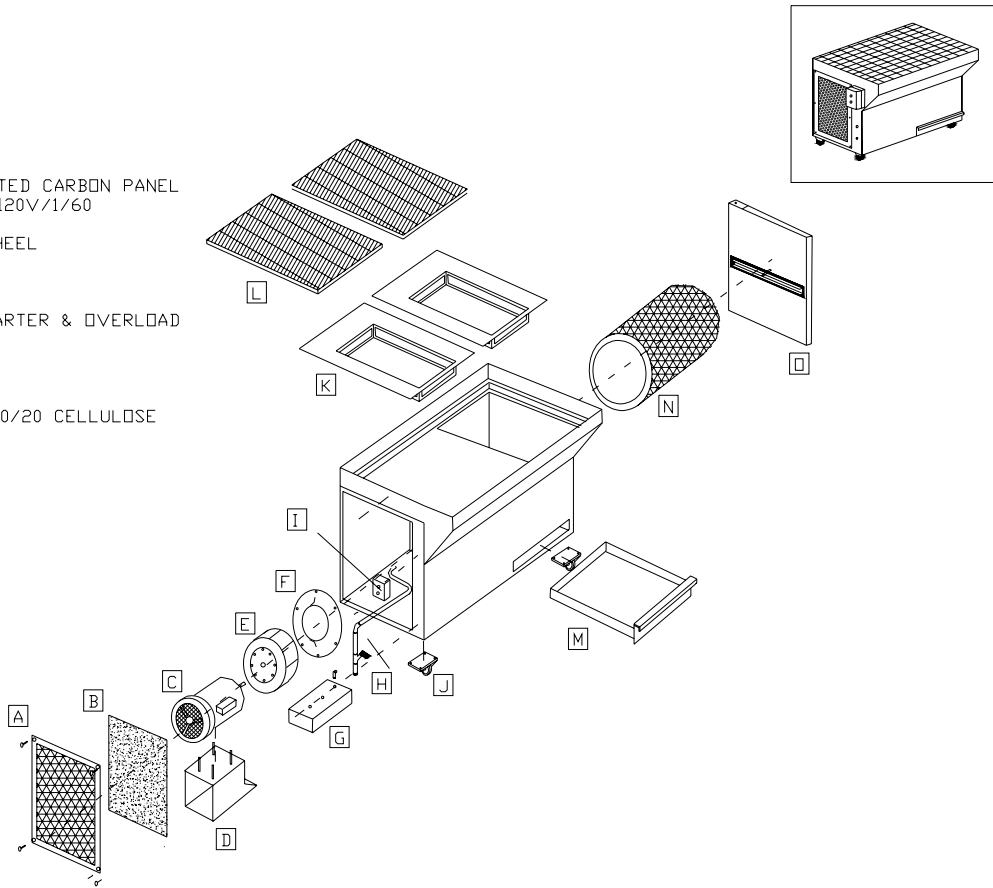
Continuous Cleaning Operations

Particles and stray material at the surface should be blown into the table towards the filter using compressed air. If a PVC mat (option) is used, it must be swept clean with a broom, directing particles into the table.

Exploded View of Model DD2x4 Downdraft Table

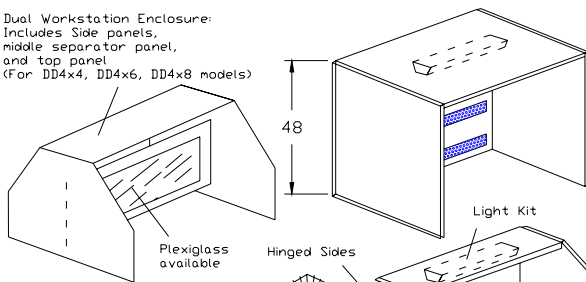
LEGEND

- A MOTOR PANEL
- B AFTERFILTER-ACTIVATED CARBON PANEL
- C 1.5HP TEFC MOTOR 120V/1/60
- D MOTOR BASE
- E POLYMER BLOWER WHEEL
- F CONE
- G AIR TANK
- H PNEUMATICS
- I MAGNETIC MOTOR STARTER & OVERLOAD
- J CASTERS (QTY: 4)
- K BAFFLE TRAY
- L STEEL BAR GRATING
- M DUST DRAWER
- N FILTER CARTRIDGE 80/20 CELLULOSE
- O HINGED FILTER DOOR

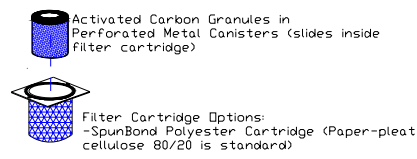
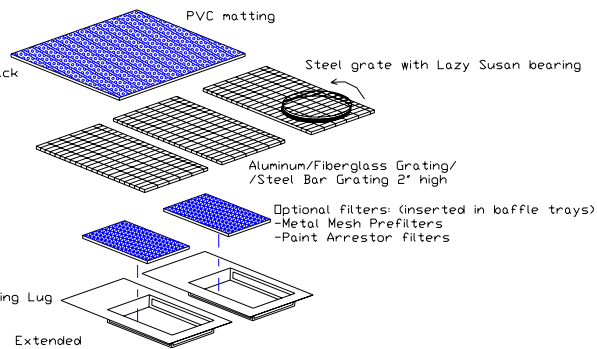
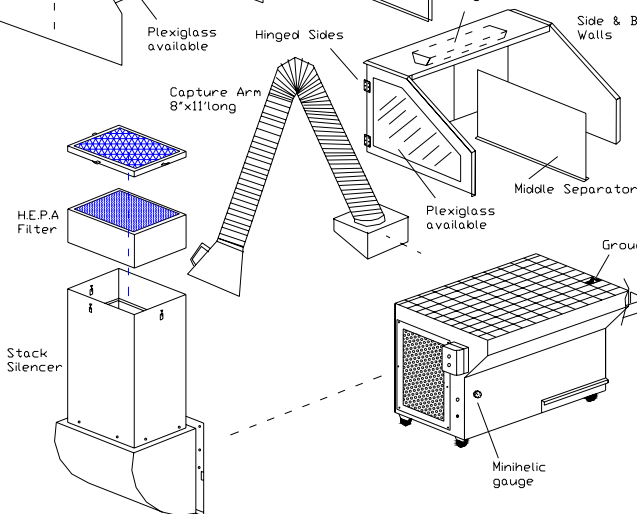


Exploded View of Downdraft Table Options

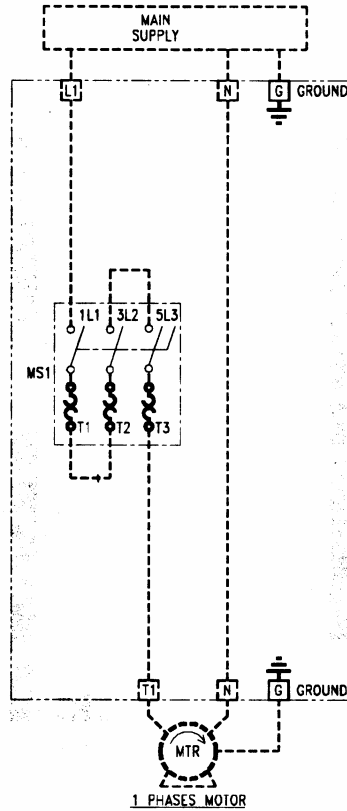
Dual Workstation Enclosure:
Includes Side panels,
middle separator panel,
and top panel
(For DD4x4, DD4x6, DD4x8 models)



Clean Air Workstation:
Includes side, back and top panels,
backdraft hood & light kit



WIRING DIAGRAM FOR DOWNDRAFT TABLE 120v/1/60 SINGLE PHASE



WIRING DIAGRAM FOR HIGH STATIC 3HP DOWNDRAFT TABLE 208-230/ 460/ 575v /3/60 3PHASE

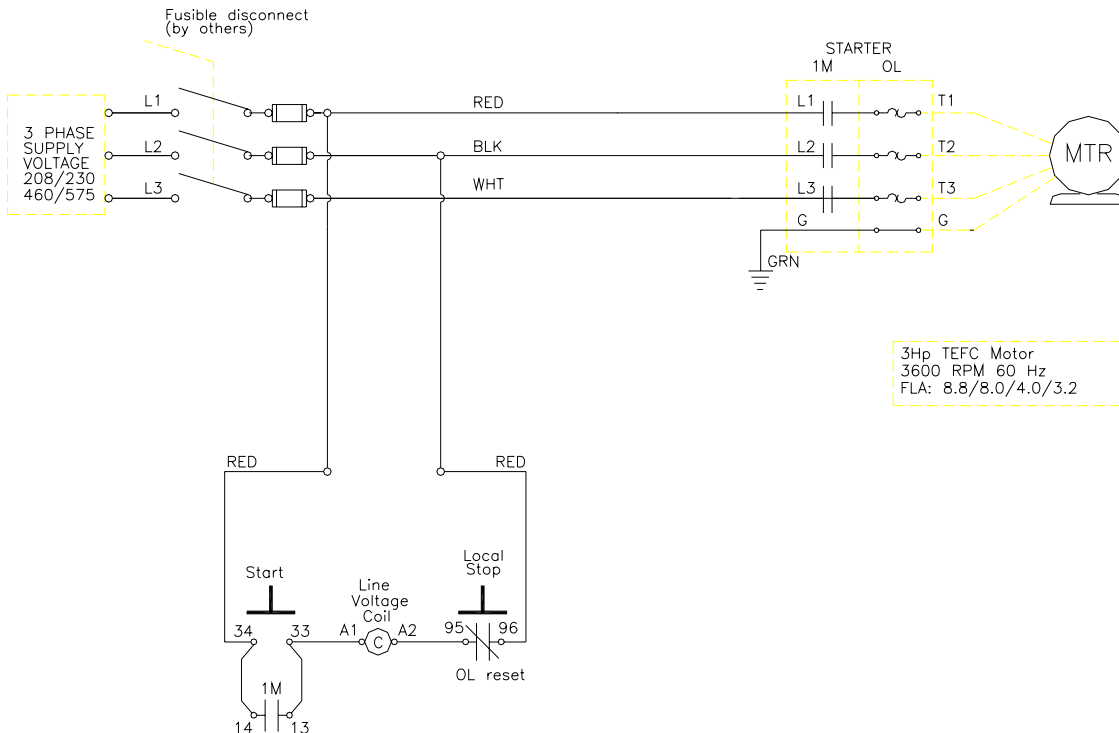


Table Options

Part Number	Description
O-2X4-SBW	Side and back walls
O-2X4-HSBW	Hinged Side and back walls
O-2X4-PSBW	Plexiglass Side and Back Walls
O-2X4-HPSBW	Hinged Plexiglass Side and Back Walls
O-2X4-PVC	PVC mat (placed above grating on table surface)
O-2X4-SB	Spun Bond Polyester Filter cartridge [UPCHARGE]
O-2X4-MM	Metal mesh prefilters, Set of 2 (16" x 25" x 1")
O-2X4-LK	Light kit
O-2X4-CA	Capture arm (8" dia. x 11" long) c/w mounting bracket, flexhose & blast gate
O-2X4-PAF	Paint arrestor prefilters, Set of 2 (16" x 25" x 1") with 10 spare pads
O-2X4-FG	Fiberglass grating [UPCHARGE]
O-2X4-AG	Aluminum grating [UPCHARGE]
O-2X4-MH	Minihelic gauge
O-2X4-GL	Grounding lug
O-2X4-MS	Middle Separator
O-2X4-SSS	Side stack silencer [UPCHARGE]
O-2X4-HFM	Hepa filter and frame [UPCHARGE]
O-2X4-SSSH	Side stack silencer with HEPA filter [UPCHARGE]
O-2X4-LS	Steel grate with lazy susan bearing [UPCHARGE]
O-2X4-EO	Cabinet with 12" front overhang [UPCHARGE]
O-2X4-ET	Empty table with collar

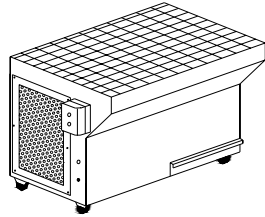
Replacement Parts

Part Number	Description
S-2X4-0001	Paper pleated Filter Cartridge (80% Cellulose / 20% Polyester)
S-2X4-0002	Spun Bond Polyester Filter Cartridge
S-2X4-0003	Metal mesh prefilter 16" x 25" x 1"
S-2X4-0004	Metal mesh prefilter 24" x 24" x 1" (Models mfg'd October 2004 or prior)
S-2X4-0005	Rotary motor starter
S-2X4-0006	3HP magnetic motor starter [specify voltage when ordering]
S-2X4-0007	Air valve
S-2X4-0008	Fingertip lever valve
S-2X4-0009	1.5HP TEFC motor 120v/1/60
S-2X4-0010	1.5HP BI Blower Wheel
S-2X4-0011	3HP TEFC motor [specify voltage when ordering]
S-2X4-0012	3HP BI Blower Wheel
S-2X4-0013	Fiberglass grating 32"x24"
S-2X4-0014	Aluminum grating 32"x24"
S-2X4-0015	Baffle Tray
S-2X4-0016	Perforated metal canister (activated carbon holder)
S-2X4-0017	55lbs bag of A40 activated carbon
S-2X4-0018	Paint arrestor filter frame (with 1 pad included)
S-2X4-0019	10 spare paint arrestor filter pads
S-2X4-0020	HEPA Filter 99.95% Eff.
S-2X4-0021	Activated carbon filter (inserted in silencer)
S-2X4-0022	Casters (Set of 4)

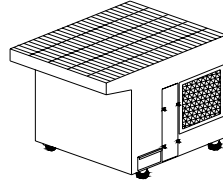
Application Kits Available

CK-2X4-WELD	<u>Welding Kit</u> Side and Back Walls / Metal mesh prefilter / grounding lug
CK-2X4-GD	<u>Grinding & Deburring Kit</u> Side and Back Walls / Metal mesh prefilter
CK-2X4-AGD	<u>Aluminum Grinding & Deburring Kit</u> Side and Back Walls / Metal mesh prefilter / PVC mat / Offline filter pulse cleaning setup
CK-2x4-SPRAY	<u>Spray Painting Kit</u> Side and Back Walls / Paint arrestor prefilter w/ 10 spare pads / Polyester filter / Activated Carbon
CK-2X4-HS	<u>High Static Kit Upcharge</u> 3HP motor, 2,600cfm blower, 325fpm downdraft velocity (Available in 208/230/460/575v/ 3 phase)
CK-2X4-CAW	<u>Clean Air Workstation Kit</u> Side and Back Panels 48" high with Top Enclosure, Backdraft hood and Light Kit
CK-2X4-ODOR	<u>Odor Adsorption Kit</u> Perforated metal canister with activated A40 carbon granules

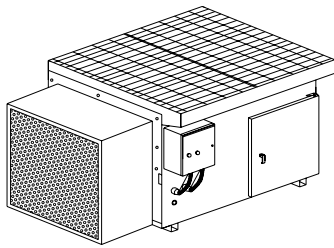
The Downdraft Table Family



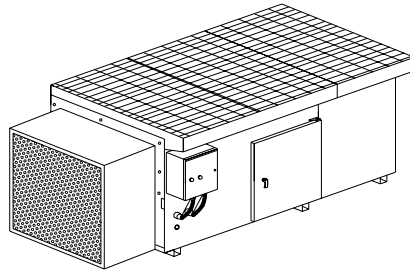
DD2X4



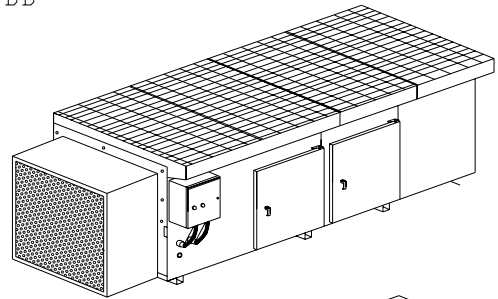
MINIDD



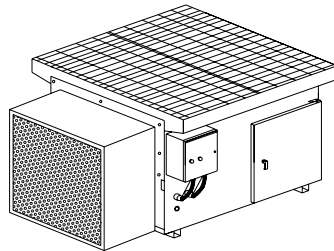
DD3X4



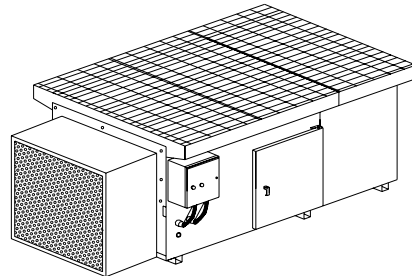
DD3X6



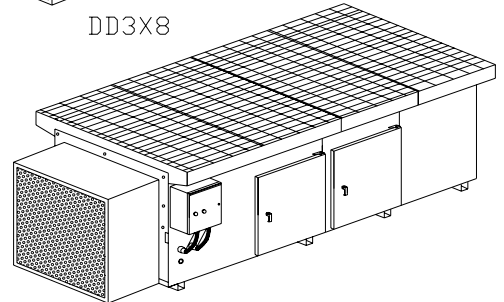
DD3X8



DD4X4



DD4X6



DD4X8

WARRANTY

Effective immediately, the following policy will apply to all equipment.

LIMITED EQUIPMENT WARRANTY

All Diversi-Tech units are warranted to be free from defects in material for a period of two years from the date of purchase. Diversi-Tech Inc. will repair, at our option, any defective parts returned to the manufacturer's plant in Montreal - Quebec freight prepaid- which fail during the warranty period. This warranty is limited to replacement parts ONLY, subject to on site or in house evaluation of defective materials and does not apply to any personal liability or property loss that occurs due to the use or installation of this equipment.

FREIGHT CLAIMS

All Diversi-Tech units are sold ex-plant, Montreal, Qc., Canada. Therefore, it is the user's responsibility to file any freight claims for obvious or concealed damages which developed in transit from Montreal to your location or when drop shipped.

RETURN MATERIAL POLICY

1. Prior to the return of material, for whatever reason, a return manufacturing authorization number (RMA#) is required from the Diversi-Tech production control department.

This procedure is necessary for proper control and handling of returned materials. Fax us or call to obtain the RMA.

2. All material must be returned prepaid. Credit will be given for returns for warranty replacement. Freight collect shipments will not be accepted.

It is the shipper's responsibility to insure that material being returned to Diversi-Tech is adequately packaged for shipment to preclude damages.

Diversi-Tech Inc.

2025, 52nd Avenue, Lachine, Quebec, H8T 3C3

Telephone: (514) 631-7300

Fax: (514) 631-9480

Toll Free: 1 800 361-3733

www.diversitech.ca

info@diversitech.ca