

SOURCETEC INDUSTRIES INC.

DOWNDRAFT TABLE SERIES "SCT"



*The future is clean air ... the future is **Sourcetec**[®]*

INSTALLATION INSTRUCTION AND MAINTENANCE MANUAL



WARNING!



CARELESS OR IMPROPER USE MAY RESULT IN PERSONAL INJURY. READ SAFETY PRECAUTIONS AND INSTRUCTIONS PRIOR TO OPERATING THIS PRODUCT.

SOURCETEC INDUSTRIES INC.

www.sourcetecindustries.com

TOLL FREE: 1-800-784-2383

OMSCT2012-01

Arrival of Down Draft Table

- Inspect the shipment for any damage that may have been caused in shipping.
- Check that the Down Draft Table is intact.
- Ensure that you have received 2 table surface grates and 2 spark baffle trays (STD).
- For custom built models refer to packing slip.

Compressed Air Supply

- 80 – 90 PSI of compressed air is required for the down draft table.
- Ensure the air is dry and free of any dirt or oil. (It is recommended that you install a dryer & a filter before connecting the compressed air line).
- Connect the compressed air to the bulkhead bushing on the side of the table.
- Quick disconnects and other fittings that may be necessary for the compressed air set up are supplied by others.

Electrical Supply

- Connect suitable voltage to the starter of the down draft table.
- There are three leads that must be connected to L1, L2 and L3.
- Ensure that the ground wire is also connected.
- A wiring diagram has been provided for ease of connection.
- Ensure that lead wire are not crossed or reversed. Doing so may cause the motor to run in reverse direction. (Check that rotation is in the same direction as the flow arrows shown on the motors)

Reverse Pulse Cleaning System

- Sourcetec down draft table is equipped with a reverse pulse cleaning system.
- A Pulse Clean button is located on the unit to start the cleaning mode (manually operated). Check section on the auto-pulse clean.
- Ensure the compressed air is hooked up properly to the unit as previously mentioned prior to attempting to clean the filter.
- Once the Pulse Clean button is activated, a solenoid operated valve will discharge air through the filter cartridge removing any particles, dirt, etc. embedded on them.
- With the micro processor set to “manual mode”, the filter may be pulse cleaned as often as the user wishes.
- Pulse Clean button should be pushed once and immediately released. Ensure that the compressed air tank is refilled prior to using the pulse clean again. Depending on the user’s application, it is recommended that the filter in the unit be cleaned 3 to 5 times per day. This will elongate the life of the filter(s).

Start Up Procedures

- As previously mentioned, the Electrical and Pneumatic connections have already been done prior to reaching this stage.
- While keeping the starter lid off the unit, attach an amp probe to either one of the lines.
- Turn the table on and ensure that the amps do not exceed the motor nameplate.
- Close the lid two thirds to verify the suction. Should there be a problem with the suction, verify that your 2 lead wires have not been reversed.
- Ensure the thermal overload setting is also at the FLA of the nameplate.
- Once the table has been turned off, allow at least 30 seconds downtime before attempting to Pulse Clean.
- Start the Pulse Clean as previously advised. Allow the compressed air tank to refill and test again.
- The table should be allowed to run for 10 to 15 minutes prior to operating the Pulse Clean.
- Fill the spark baffle trays with about ¼” of water. Windshield washer fluid or anti-freeze may be added to the water to avoid evaporation. One cup of either fluid is sufficient.

Congratulations!! You are now ready to utilize your Sourcetec Down Draft Table.

Standard Models: SCT-24, 34, 36 & 38
(2'x 4', 3'x 4', 3'x 6', 3'x8')

- A. Optional Silencer for
- B. Filter Cover
- C. Motor Base
- D. Motor (Spark Proof & Explosion Proof Available – Please contact factory)
- E. Wheel
- F. Cone
- G. Air Tank
- H. Control Panel
- I. Cleaning Mechanism
- J. Caster(s) Optional
- K. Collection Drawer
- L. Filter (HEPA – Optional)
- M. Grates – Choice of: Steel, Aluminum or Fiber Glass or others
- N. Water Trays
- O. Optional - Perforated Platform with Handle

<u>Model</u>	<u>HP</u>	<u>CFM</u>	<u>S.P.</u>	<u>Voltage (STD)</u>
SCT24	1.5	1500	4"	575/3/60
SCT-34	5.0	2995	4"	575/3/60
SCT-36	7.5	4252	4"	575/3/60
SCT-38	10	5000	4"	575/3/60

* Other voltages are available upon request, check with factory some restrictions may apply.

OPTIONS: 208/3/60, 230/3/60, 460/3/60

Note:

Specifications and design may vary slightly based on customization of any of our units.

The factory reserves the right to change the specification and design to suit, meet and/or exceed the required application.

Technical Specifications

Basic:

- Manually Operated Pulse Cleaning System
- Air Flow – See Attached
- Static Pressure: 4"
- Operating Temperature: 70 Degrees F +/- Ambient

Fan:

- Motor HP: See Attached
- Voltage: See Attached

Cabinet:

- Table Height: 39"
- Material: Black Steel
- Thickness: Reinforced 14 Gauge
- Colour: Grey / Black
- Paint Finish: Primer & Epoxy Coated

Filter:

- Dimensions will vary with the size of the table
- Dimensions for this units are: _____
- Material: Cellulose (80% Paper & 20% Polyester)
- Efficiency: 99.5% @ 0.5 Micron
- Cartridge Removal: Side Access
- Inlet: Top Baffle Trays
- Filter Area: _____
- Discharge: Left Side of Table

Spark Arrestance Features:

- Metal Mesh Pre-filters: Optional
- Spark Trap: Water Tray
- Spark Trap: Cartridge semi-circle baffle
- Fire Retardant Cartridge

Cartridge Cleaning System:

- Manual Reverse Pulse Clean / Automatic
- Required CFM per Module: 0.4 FT3 / Pulse
- Compressed Air Pressure: 80 – 100 PSI
- Air Properties: Clean, Dry, Without Oil / Water

Compressed Air Tank:

- Quantity & Size: 1 per Table, vary with size of table.
- Location: Internal Blower Compartment

Maintenance

Daily Procedure:

- Particles and stray material at the surface should be blown in to the table towards the filter using compressed air.
- If metal mesh prefilters are being used, reverse their direction prior to blowing out into the table.
- If a rubber mat is being used, it will need to be swept clean with a small broom, directing the particles into the table.

Weekly Maintenance:

- Metal mesh filters should be pulled out and either blown out with air (or washed) depending on how dirty they have become. Similar maintenance is required for spark baffle trays.
- With the metal mesh prefilters out, the table housing should be swept clean.
- The dust drawer should be emptied. A visual inspection will allow you to determine the dumping cycle.

Bi-Weekly to Monthly:

- Inspection of cartridge required. Follow procedure as outlined in standard maintenance for the polyester filter.
- Manually cleaning the filters may be required depending on type of application and hours of usage.
- 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 will be required. (see replacements parts list for part number).
- Verify that motor is well in tact, bolts are firm, and the motor base is secured. With the machine off, manually turn the wheel to ensure no marks are seen. The wheel should not have a wobbling effect. If the machine exerts a burning smell, it is most probably due the fact that the blower wheel is slightly touching the inlet cone. A minor adjustment may have to be made by a qualified technician.
- Safety Valve: Test the safety valve (on air tank) by pulling on the spring tensioned ring. A short spurt of air will be heard and will confirm that it is functioning properly.

Cellulose Filter Cartridge (Standard):

The filters pulsing system is a successful way to clean the filter. Filter life is increased if 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.

To manual clean the filter outside the table:

- 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)
- Remove the five aluminum knobs from the corners of the filter door panel.
- Gently remove panel, exposing the filter cartridge.
- Remove Cartridge. The cartridge should then be held at its horizontal position so as to be tapped for removal of debris. This procedure may be done directly over a waste bag for easy disposal.
- Blow compressed air through the cartridge in the reverse direction of air flow. This should be done at the exterior of the shop (room) or in a well-ventilated area.
- Several factors should be considered before cleaning is attempted. Cleaning should be carried out on water-soluble materials only. Hydrocarbons may not be removable. The use of solvents may attack certain components of the filter, thus consultation of the manufacturer is required. 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.
- The cartridge needs to be replaced periodically. The filter life can range from 6 to 18 months depending on many factors ranging from type of application, density, particle size, humidity, oil, etc...

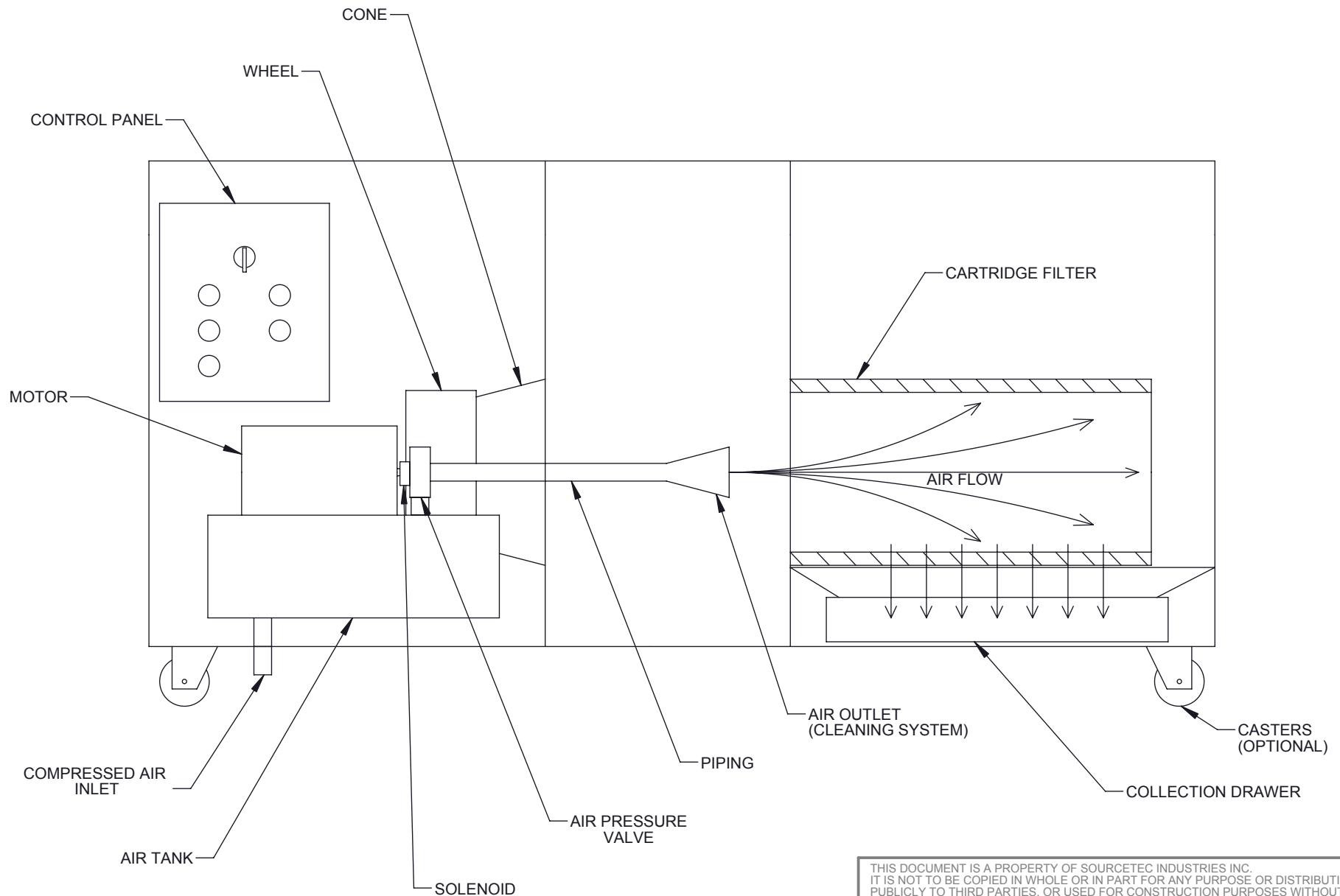
Dust Drawer:

- 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 to ensure proper sealing. Replace if needed.

Spark Baffle Trays:

- Spark baffle trays can be used dry, with water or sand depending on the table's application. Once a week a visual inspection should be done and trays emptied.
- Sludge may form upon contact of dirt and dust and should be removed before hardening. Removal of sludge may be performed with a spatula, and then the pans can be hosed down.
- Handle any contaminants present in the tray similarly to water or sludge. Pressure wash with hot water & detergent if needed.

Note: Use of water in the spark baffle tray is not suitable for all applications.



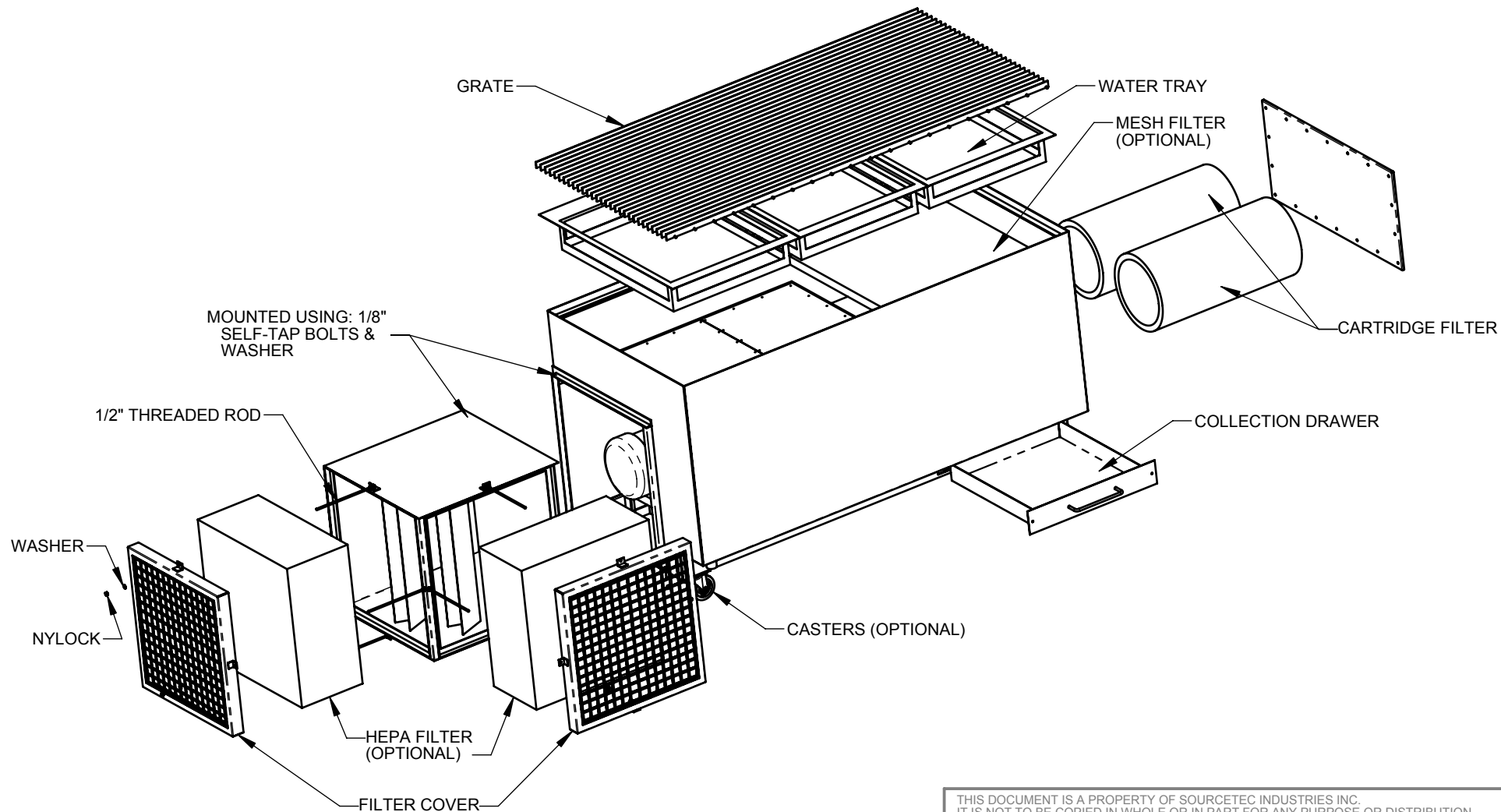
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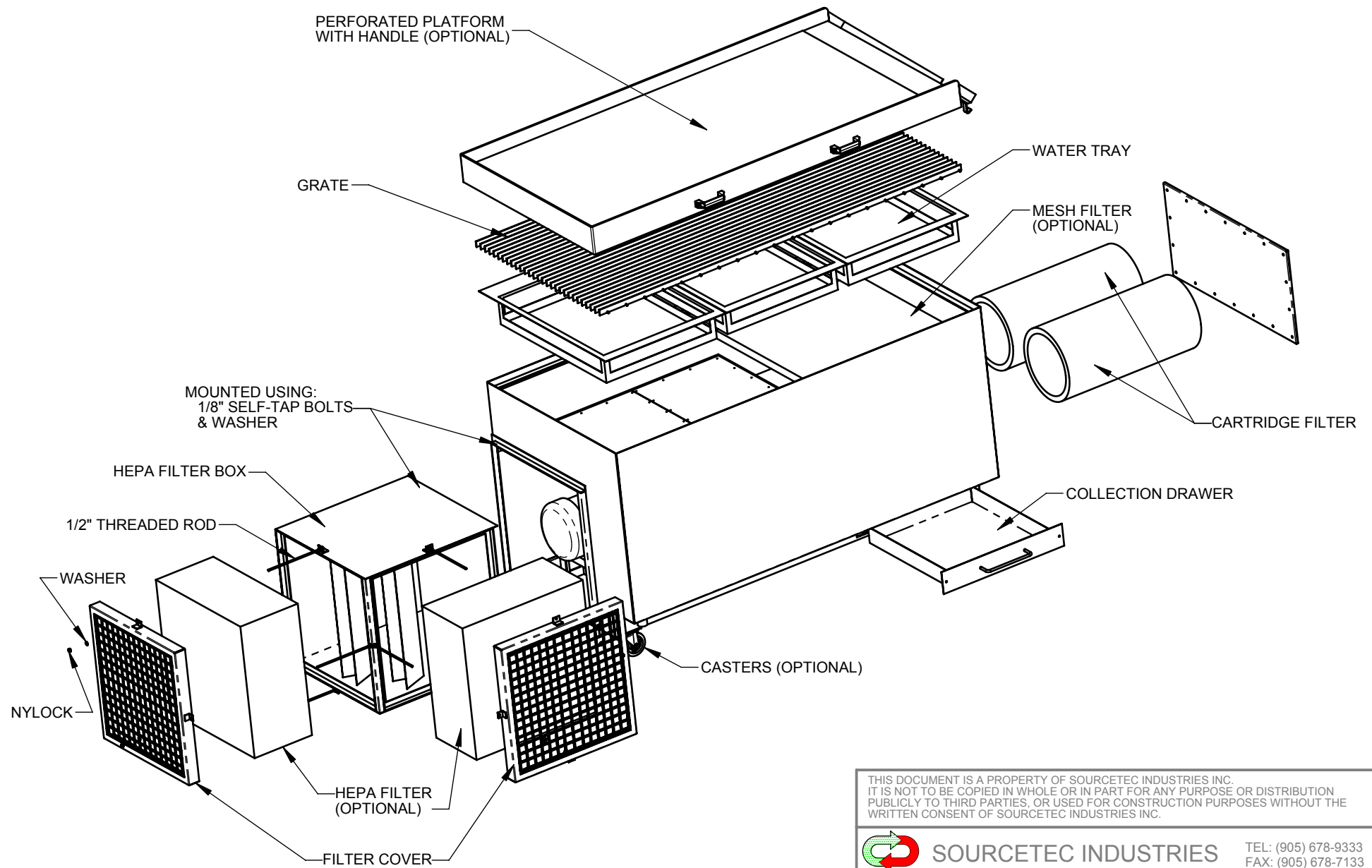
DRAWN BY: ETO		DESCRIPTION: DOWNDRAFT TABLE PROFILE	
DATE: JAN 15, 2013			
MATL:	PRODUCT No: DDT - 3X6	REV. 0	
SCALE:	WGT:	DRAWING No: E7205-A6	SHEET 1 OF 1



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FAX: (905) 678-7133

DRAWN BY: ETO		DESCRIPTION: DOWNDRAFT TABLE ASSEMBLING DRAWING	
DATE: JAN 14, 2013		PRODUCT No: DDT - 3X6 BU	
MATL: MILD STEEL		REV. 1	
SCALE: 1:23	APPROX WGT. 930 lbs.	DRAWING No: E8205-A3.1	SHEET 1 OF 1



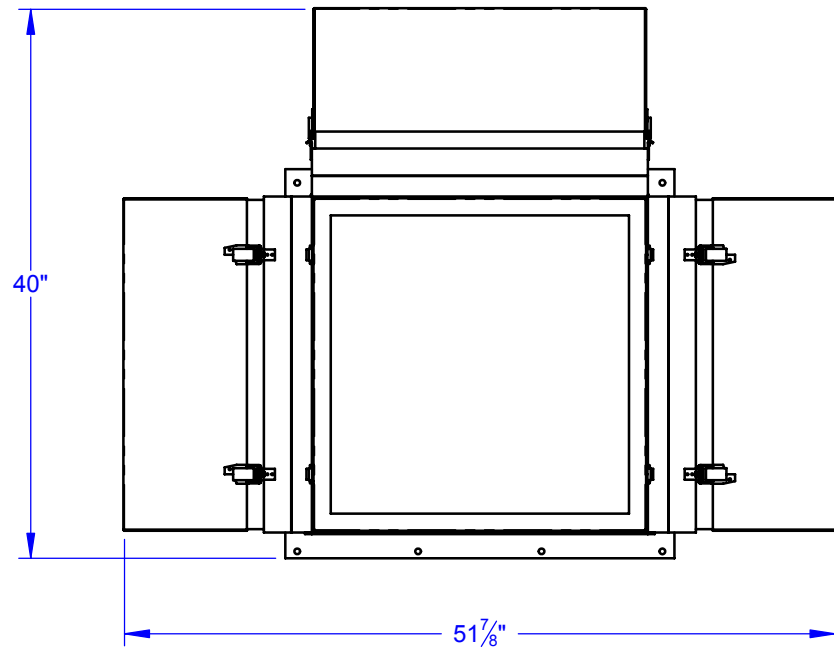
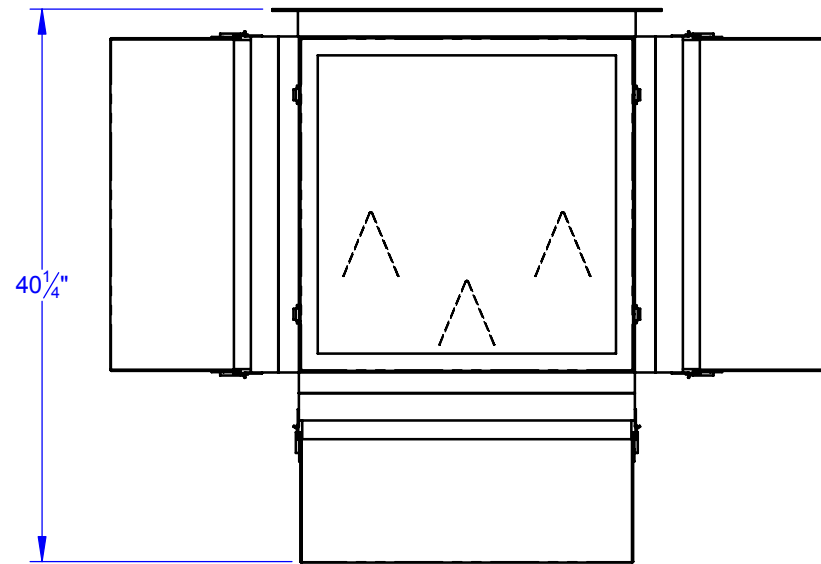
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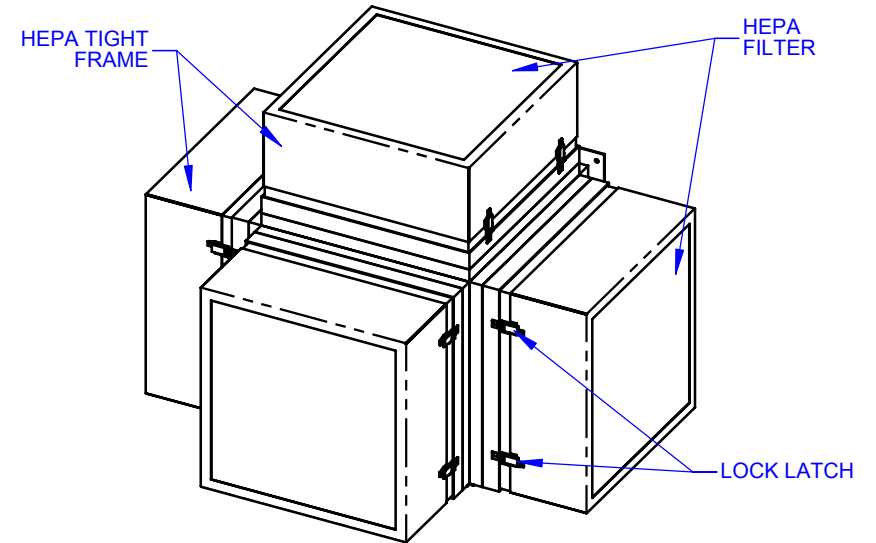
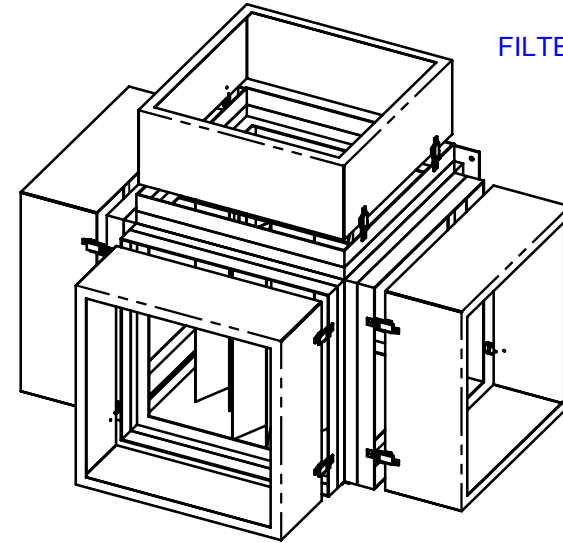
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FAX: (905) 678-7133


DRAWN BY: ETO		DESCRIPTION: DOWNDRAFT TABLE ASSEMBLING DRAWING	
DATE: JAN 11, 2013		PRODUCT No: DDT - 3X6 BU REV. 1	
MATERIAL: APPROX. WGT. 1020 lbs.		DRAWING No: E8205-A3 SHEET 1 OF 1	

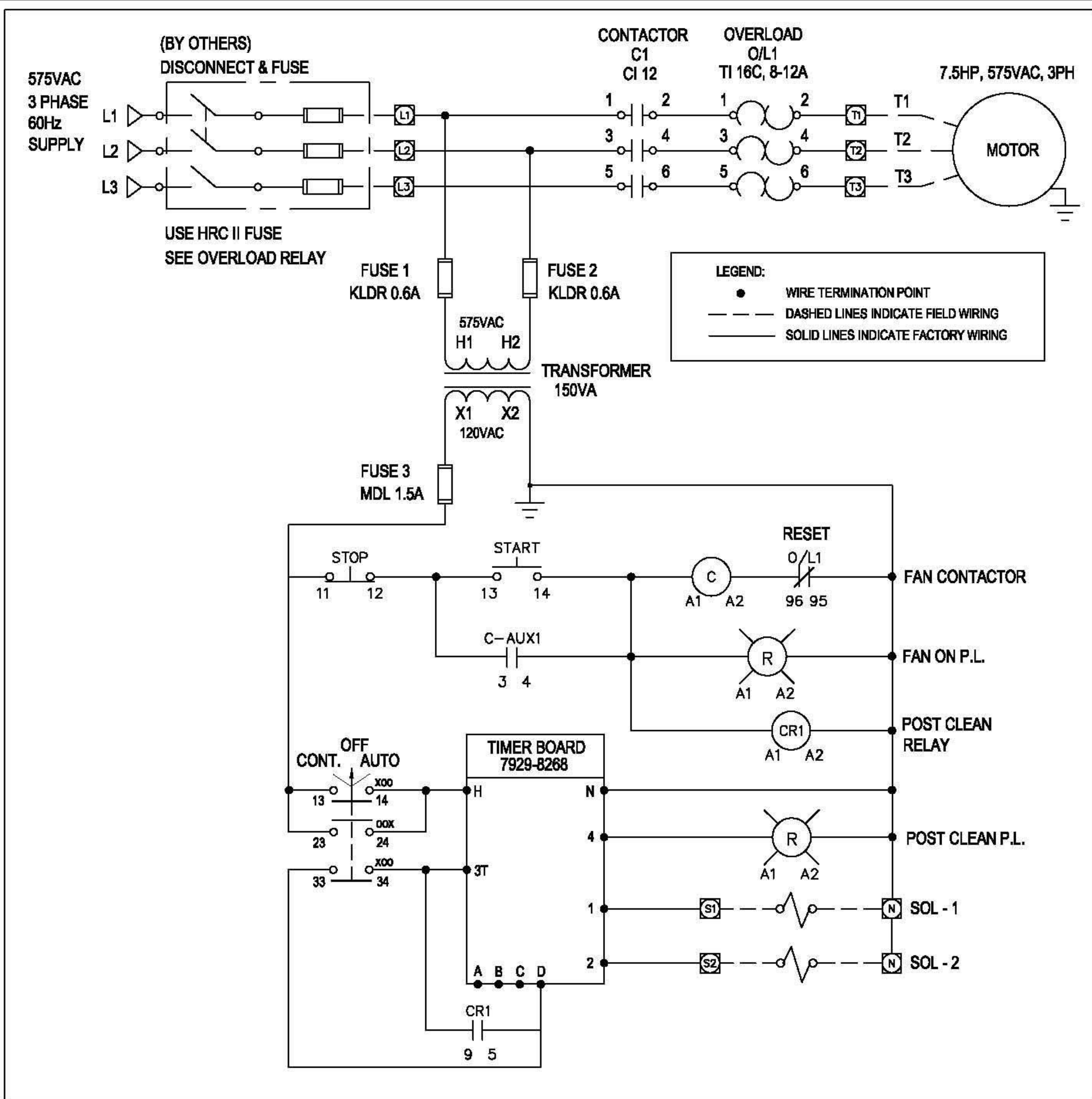


3D VIEW
FILTERS REMOVED



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 SOURCETEC INDUSTRIES		TEL: (905) 678-9333	
		FAX: (905) 678-7133	
DRAWN BY: L.B.M		DESCRIPTION:	
DATE: DEC 10, 2010		HEPA FILTER BOX	
MATL: MILD STEEL		PRODUCT No: DDT - 3x8 BU	REV. 0
SCALE: 1:14	WGT: 160 lbs.	DRAWING No: F0203-C0	SHEET 1 OF 1



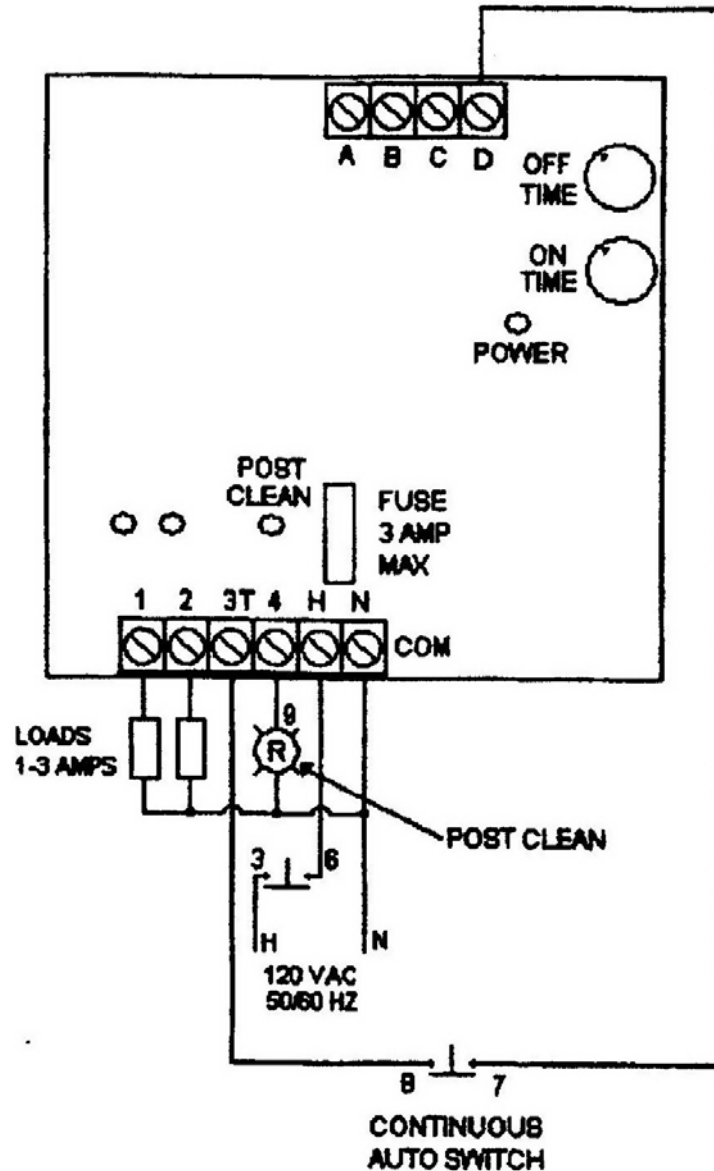
ELECTRICAL SCHEMATIC
NOTE
CLIENT/CUSTOMER
CONTACT



Mississauga, Ontario, Canada
Tel: (905) 678-9344 Fax: (905) 678-7131
Holland, Ohio, USA 1-800-784-2383
www.sourcetechnologies.com
E-mail: sales@sourcetechnologies.com

TITLE: SMTR4389 SCHEMATIC	
DRAWN BY:	SCALE:
CHECKED BY:	DWG. NO. SMTR4389
DATE: DEC. 10, 2012	REV:

FOR AUTO PULSE SEQUENTIAL TIMER
(TIMER IS PREWIRED IF PROVIDED WITH CONTROL PANEL)



SEQUENCE:

ON POWER UP, No.1 ON, THEN OFF, THEN No.2 ON THEN BACK TO No.1, AND CONTINUING FOR 9 PULSES. CLEAN LIGHT IS LIT DURING CYCLES.

IF CONTINUING AUTO SWITCH IS IN THE CLOSED CONTINUOUS POSITION, THE TIMER WILL STOP AFTER NO MORE THEN 9 PULSES, AND CLEAN LIGHT WILL GO OFF. TIMER WILL STAY STOPPED UNTILL POWER IS DISCONNECTED.

PULSE TIME RANGE:

ON = 16 - 600 MILLISECONDS

OFF = 1 - 60 MILLISECONDS



SOURCECETEC INDUSTRIES

TEL: (905) 678-9333
FAX: (905) 678-7133

DRAWN BY: L.B.M.		DESCRIPTION: SEQUENTIAL TIMER	
DATE: JAN 12, 2012			
MATL:		PRODUCT No: DDT-38	REV.0
SCALE: NONE		DRAWING No: F0203-A6	



*The future is clean air ... the future is **Sourcetec**®*

Warranty and Service Policy

One Year Limited Warranty

Air cleaning products and systems manufactured by Sourcetec Industries Inc. are warranted for a period of one year from date of original purchase. Sourcetec's liability shall be limited to repair or replacement of defective material within the warranty period when returned freight prepaid to its plant or to a service depot designated by Sourcetec. This warranty does not apply to products subjected to any accidents, alteration, abuse, or misuse. Warranties on equipment not of seller's manufacture are limited to terms of warranty furnished by seller's suppliers.

Our responsibility ceases upon delivery to any common carrier and we do not, unless previously instructed, insure shipments beyond point of delivery to such a carrier.

No material will be accepted for credit when returned without permission. All materials accepted for credit is subject to at least a 25% handling charge, and permission must be obtained before equipment is returned.

Equipment specially built to customer specifications and requirements is not subjected to cancellation or returnable for credit under any conditions.

We reserve the right to modify or alter materials, dimensions, design and construction when necessary, to improve the performance of our product and/or accessories, or to meet delivery requirements.

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E-mail: customerservice@sourcetecindustries.com