



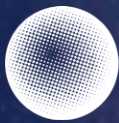
## DOWNDRAFT TABLES DD SERIES



- |                                 |   |
|---------------------------------|---|
| <input type="radio"/> Warranty  | <input type="radio"/> Service Parts         |
| <input type="radio"/> Safety    | <input type="radio"/> Accessory Information |
| <input type="radio"/> Operation | <input type="radio"/> Registration Form     |

# INSTRUCTION MANUAL

2019-03-04



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## **ISTBLAST LIMITED WARRANTY**

**ISTblast warrants all equipment led in this manual which is manufactured by ISTblast and bearing its name, to be free from defects in material and workmanship on the date of sale by an authorized ISTblast distributor to the original purchaser for use. Notwithstanding any special, extended or limited warranty published by ISTblast will, for a period of TWELVE (12) months from the date of sale, repair or replace any part of the equipment determined by ISTblast to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with ISTblast's written recommendations.**

**This warranty does not cover, and ISTblast shall not be liable for general wear and tear, or any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non-ISTblast component parts. Nor shall ISTblast be liable for malfunction, damage or wear caused by the incompatibility with ISTblast equipment with structures, accessories, equipment or materials not supplied by ISTblast, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by ISTblast.**

**This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized ISTblast distributor for verification of the claimed defect. If the claimed defect is verified, ISTblast will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser, transportation prepaid. If the inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor, and transportation.**

**THIS WARRANTY IS EXCLUSIVE, AND IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.**

**ISTblast's sole obligation and the buyer's sole remedy for any breach of warranty shall be as set forth above. The buyer agrees that no other remedy (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available. Any action for breach of warranty must be brought forward within one (1) year of the date of sale.**

**ISTblast MAKES NO WARRANTY, AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IN CONNECTION WITH ACCESSORIES, EQUIPMENT, MATERIALS OR COMPONENTS SOLD BUT NOT MANUFACTURED BY ISTblast. These items sold, but not manufactured by ISTblast (such as electric motors, switches, hose, etc.), are subject to the warranty, if any, of their manufacturer. ISTblast will provide the purchaser with reasonable assistance in making any claim for breach of these warranties.**

### **LIMITATION OF LIABILITY**

**In no event will ISTblast be liable for indirect, incidental, special or consequential damages resulting from ISTblast supplying equipment hereunder, or the furnishing, performance, or use of any products or other goods sold hereto, whether due to a breach of contract, breach of warranty, the negligence of ISTblast, or otherwise.**

**Report all accidents or "near misses" which involve ISTblast products to :**  
- Technical Assistance

**The following items are not covered under the ISTblast warranty policy :**  
- Parts or chassis replacement due to normal wears.

**Report all accidents or negligence involving ISTblast products to our Service Department :**

**1 877 629-8202**



## **NOTICE TO PURCHASERS AND USERS OF OUR PRODUCTS AND THIS INFORMATIONAL MATERIAL**

The products described in this material, and the information relating to these products, are intended for knowledgeable, experienced users of abrasive blasting equipment. No representation is intended or made as to the suitability of the products described herein for any particular purpose of application. No representations are intended or made as to the efficiency, production rate, or the useful life of the products described herein. Any estimate regarding production rates or production finishes, are the responsibility of the user and must be derived solely from the user's experience and expertise, and must not be based on information in this material.

The products described in this material may be combined to other equipment by the user to obtain specific results to the user. No representation or warranty is intended or made as to the result obtained resulting from the combination of specific products and selected by the user. It is the responsibility of the knowledgeable, experienced users of the products mentioned in this material to familiarize themselves with the appropriate laws, regulations and safe practices that apply to these products, and equipment electrically connected to these products and materials that can be used with these products. It is the responsibility of the user to ensure that adequate training of operators has been conducted and a safe working environment is available.

It is the responsibility of the user to insure that proper training of operators has been performed and a safe work environment is provided. Our company is proud to provide a variety of products to the abrasive blasting industry, and we have confidence that the professionals in our industry will utilize their knowledge and expertise in the safe efficient use of these products.

### **SAFETY AND WARNING**

#### **GENERAL SAFETY**

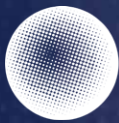
1. Carefully inspect the shipping carton for any signs of transport damage. The damage to the carton often indicates possibility of transport damage to the equipment inside.
2. Carefully remove your ISTblast Downdraf table from the shipping carton and skid.
3. Check your equipment immediately to ensure that it is free of transport damage. Report any transport damage to the carrier without delay for possible claim procedures. ISTblast is not responsible for damage to equipment after it leaves our warehouse.
4. Check the equipment received and compare it with the parts you have received. If any parts are missing, contact the supplier you purchased the equipment from.

Before operating the ISTblast Downdraft table read this Instruction Manual completely. All ISTblast products are engineered and manufactured to the highest performance standards and have been subjected to detail testing before shipment from the factory.

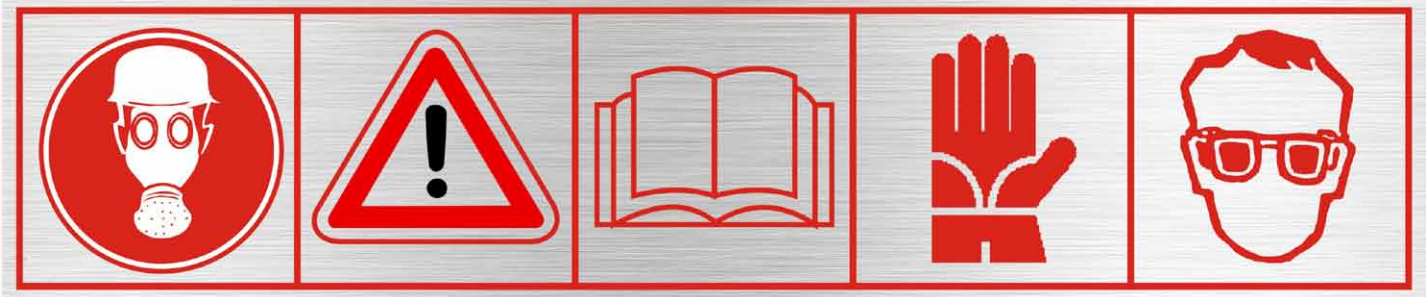
#### **PERSONAL SAFETY**



**PROTECT YOURSELF AGAINST ELECTRIC SHOCK. Rubber gloves and non-skid footwear are recommended where moisture or wetland may be present. A grounding line with a protective circuit must be used for these conditions.**



## **DANGER AND WARNING LABELS**



1

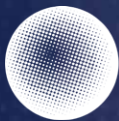
2

3

4

5

1. Wear breathing mask
2. Observe warnings at all times.
3. Read the Instruction Manual carefully.
4. Wear rubber gloves.
5. Wear protective eyewear before use.



**WARNING**

« READ ALL INSTRUCTIONS » Failure to follow the SAFETY RULES identified by a BULLET (●) symbol listed BELOW and other safety precautions may result in serious personal injury.

« SAVE THESE INSTRUCTIONS »

## GENERAL SAFETY RULES

- **KEEP WORK AREA CLEAN.**
- **KEEP CHILDREN AWAY.** Do not let visitors come in contact with the equipment. All visitors should

## PERSONAL SAFETY

- **GUARD AGAINST ELECTRIC SHOCK.** Non-skid footwear is recommended where damp or wet ground may be encountered. A ground fault circuit interrupter protected power line must be used for these conditions.
- **DRESS PROPERLY.** Do not wear loose clothing or jewelry. They can be caught in the moving parts. Wear protective hair covering to contain long hair.
- **USE SAFETY EQUIPMENT. WEAR SAFETY GOGGLES** or glasses with side shields.
- **WEAR A DUST PROOF MASK.**
- **STAY ALERT. USE YOUR COMMON SENSE.** Concentrate on what you are doing. Do not operate the unit when you are tired or under the influence of drugs or alcohol.
- **DO NOT OVERREACH.** Keep proper footing and balance at all times.
- **BEFORE CONNECTING THE UNIT** be sure the power is the same as that specified on the nameplate of the Downdraft Table. With power greater than that specified on the Nameplate can seriously injure the user – as well as damage the Unit.

## UNIT USE AND CARE

- **DO NOT FORCE THE UNIT.** It will perform better and safer at the rate for which it was designed.
- **THE USE OF ANY OTHER ACCESSORIES** not specified in this manual may create a hazard.
- **CLOSE THE MAIN BREAKER SWITCH BEFORE SERVICING** or when not in use.
- **DO NOT ALTER OR MISUSE THE UNIT.** These units are precision built. Any alteration or modification not specified is misuse and may result in a dangerous situation.

Only certified technician should attempt (●) ALL REPAIRS, electrical or mechanical. Contact the nearest IST a repair service facility. Use only IST replacement parts; any other parts may create a hazard.



## STARTING PROCEDURES



1. Connect power supply using sufficient electrical input (refer to electrical diagram supplied with instructions manual for minimum requirement).



2. Connect compressed air for cartridges pulse cleaning (**do not exceed 80 psi** to avoid damaging cartridges).



3. Ensure the engine rotation is in the same direction than the arrow.

## ELECTRICAL CONNECTIONS

All electrical connections to the Downdraft Table should be made by a qualified electrician and must comply to the codes, standards, and procedures specified by the local authority having jurisdiction.

The customer is responsible for providing appropriate disconnecting means adjacent to the equipment for each incoming power circuit.



It is important to connect the ISTblast system to an Earth Ground to bleed off static electricity, which may be generated while blasting. The Earth Ground may also reduce the discomfort an operator may experience when static electricity is discharged.



## VERIFY INSTALLATION

1. Check that all pipe and hose connections are tightly fastened and air tight.
2. Check that all electrical box covers are securely installed.
3. You have to provide an air inlet (**80 psi max.**)

### AIR INLET

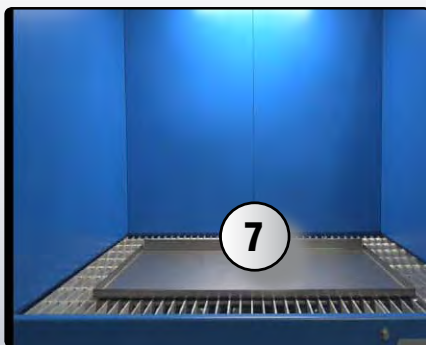
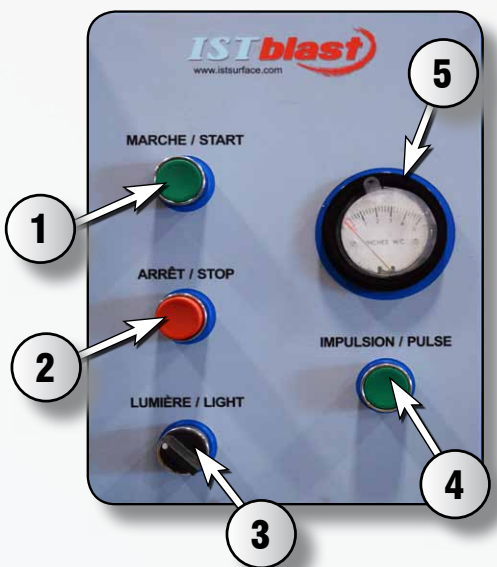




## OPERATION

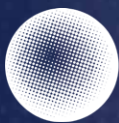
### WARNING

Do not use the downdraft table for spray applications if it was originally designed for grinding applications, and vice versa. It could lead to system failure, clog cartridge filters and even cause fire and/or explosion.



1. Press on **START** button (1) to turn on the ventilation system Engine
2. Open the light using **LIGHT** switch (3) (if your system is built with this option).
3. Place part on the grid and start working. Operate on the table only when the ventilation system is working.
4. The work surface is designed to withstand up to **1,500 lb load capacity**.
5. Use optional electrical (**max. 20A**) and pneumatic outputs (6) to power work tools.
6. Avoid placing small objects or objects that may deteriorate on the grid (wood, cardboard, etc.).
7. It is allowed and even recommended to cover partially the work surface with a metal plate, the work surface that is not covered by the metal plate will suck even more airflow. (7)
8. After each use **AND BEFORE TURNING OFF THE SYSTEM**, pulse 2-3 times the cartridge filters by pressing the **PULSE** button (4). The fan engine must be running (1) in order to be able to pulse.
9. The gauge (5) shows the pressure differential between the clean and the dirty side of the cartridge and will indicate when the cartridges must be replaced (**value of 4.5**) or if a cartridge is damaged or not properly installed (**value of 0**).
10. When done, press on **STOP** button (2) to turn off the engine.
- 11.





## MAINTENANCE



1. Activate cartridge filters pulsation after each use only when the fan is on.

<b>WARNING</b>	<b>PULSING CARTRIDGES DURING OPERATION MAY RESULT IN A FIRE AND/OR EXPLOSION (PULSASING CARTRIDGES RESULTS IN COMBUSTIBLE DUSTS BEING RAISED INTO SUSPENSION AND A SPARK COULD CREATE IGNITION).</b>



2. Empty dust drawers regularly.



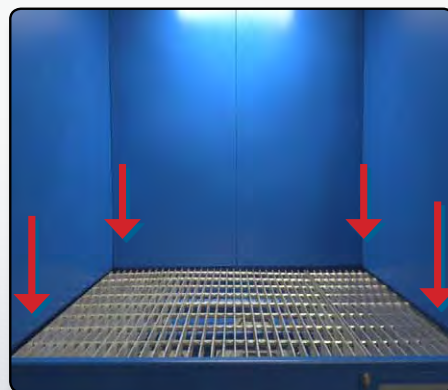
3. Replace cartridge filters when the pressure differential achieves 4.5. When new cartridges are put in place, the pressure differential should indicate 1.0 in / H<sub>2</sub>O.



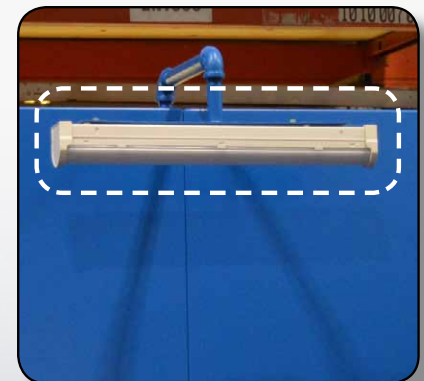
4. Inspect cartridges when the pressure differential value is 0. This means at least one of the cartridge is damaged or not properly installed.



5. No lubrication is required on engine or bearings (the fan is bolted directly on the shaft of the engine in direct drive).



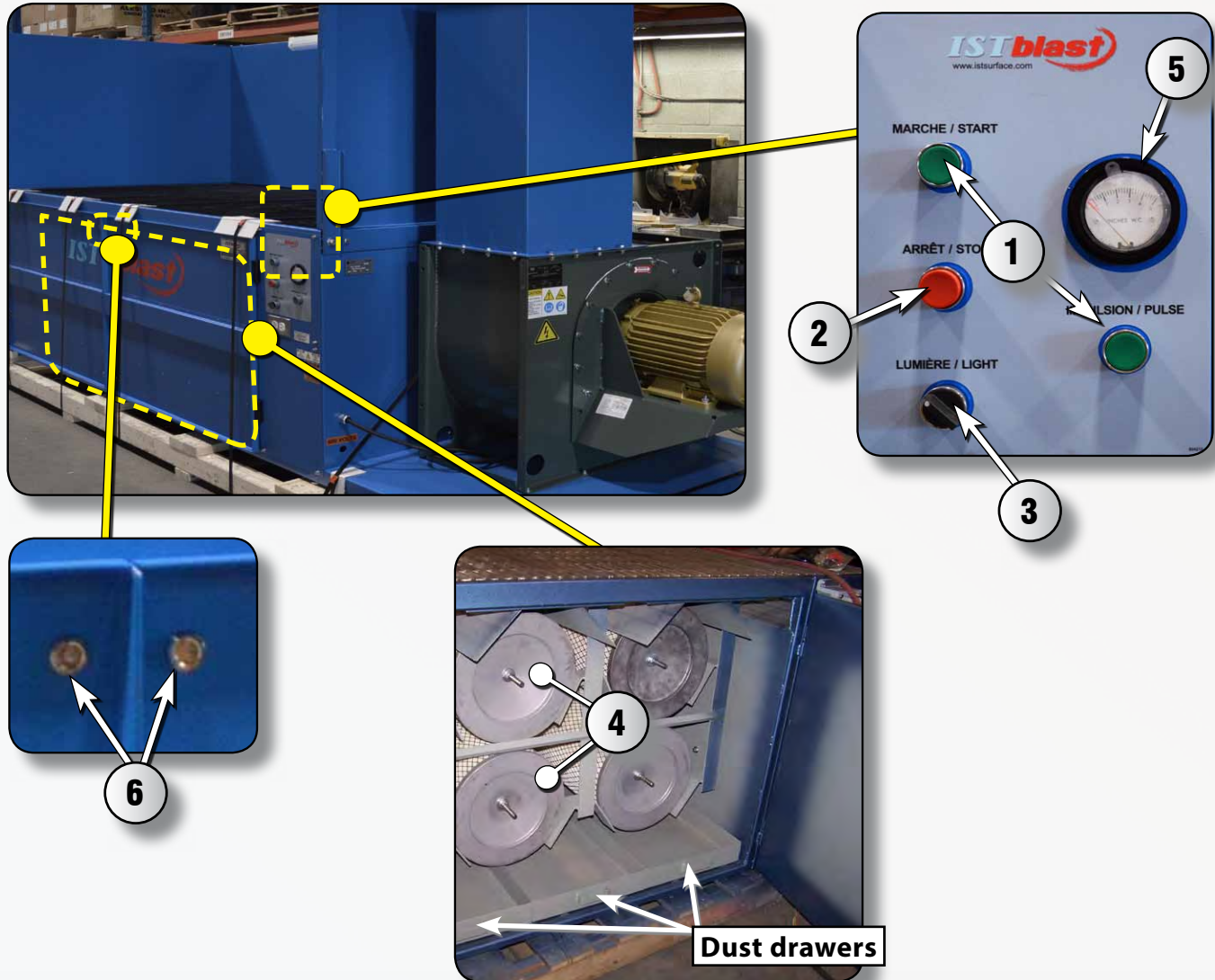
6. Verify the work surface grid to make sure it is properly installed and not damaged (the load capacity decreases if the grid is damaged).



7. To change the lighting system, the whole module needs to be replaced.



## UNIT SCHEMATIC - FACE VIEW

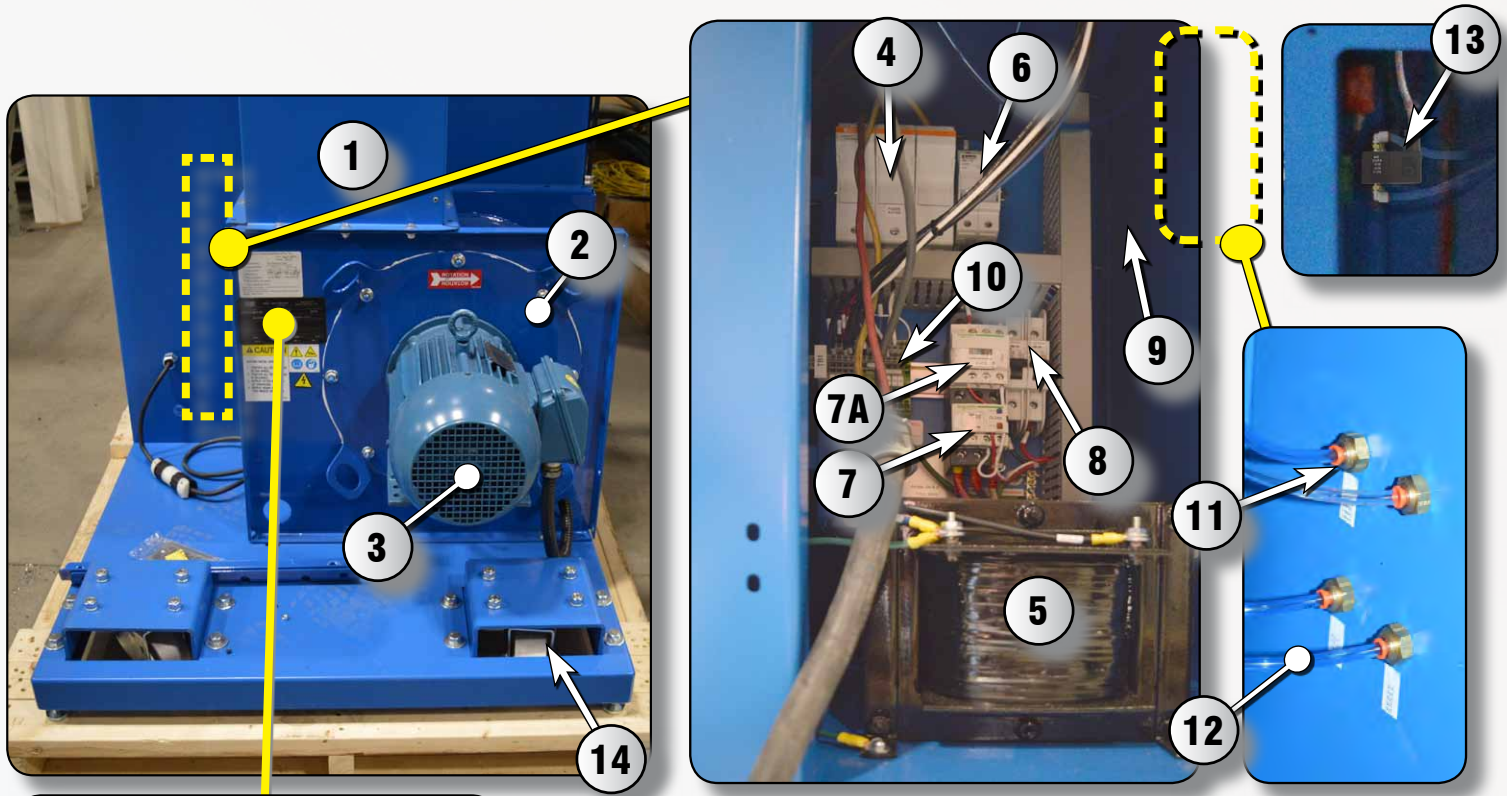


#	STOCK	DESCRIPTION
1	917926	GREEN PUSH BUTTONS
2	917811	RED PUSH BUTTON
3	917895	ON/OFF LIGHT SWITCH

#	STOCK	DESCRIPTION
4	901376	FILTER CARTRIDGE
5	908945	MINIHELIC PRESSURE GAUGE
6	924197	DOOR LATCH

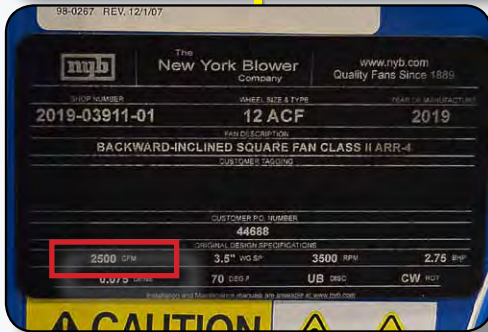


**UNIT SCHEMATIC - RIGHT VIEW**



**Electrical panel**

(For parts see electrical schematic attached)



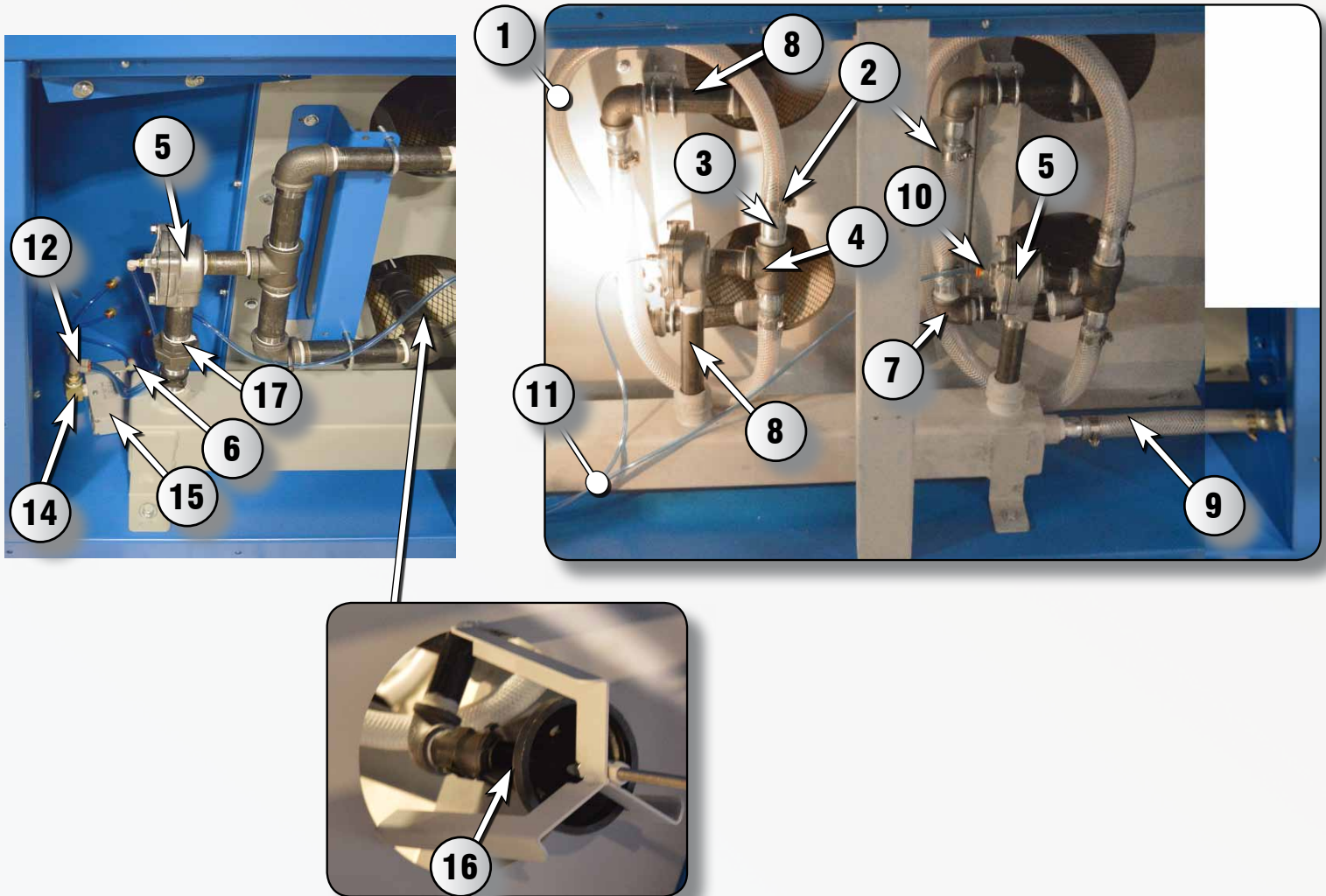
\* Please check the cfm on this ID plate to determine what kind of motor is installed

#	STOCK	DESCRIPTION
1	601444	MUFFLER
2	NPN	IMPELLER (ISTBLAST)
3*	925206	6 000 cfm 7.5 hp 600 V MOTOR
	916463	5 000 cfm 7.5 hp 600 V MOTOR
	925238	2 500 cfm / 3 hp / 600 V MOTOR
4	-/-	FUSES (SEE ELECTR. SCHEMATIC)
5	617216	600/120 250 VA TRANSFORMER
6	917919	TERMINAL POWER

#	STOCK	DESCRIPTION
7	918014	RELAY
8	917951	ATQR 1-¼ A FUSES
9	917965	TMR 3.2/10 FUSES
10	616865	CONNECTION TERMINALS
11	324502	"PUSH-IN" CONNECTOR
12	324571	1/4" BLUE POLY TUBE
13	608568	SOLENOID VALVE
14	916836	4" ROTATIVE WHEEL
15	916838	2½" WHEEL



**UNIT SCHEMATIC - REAR VIEW**

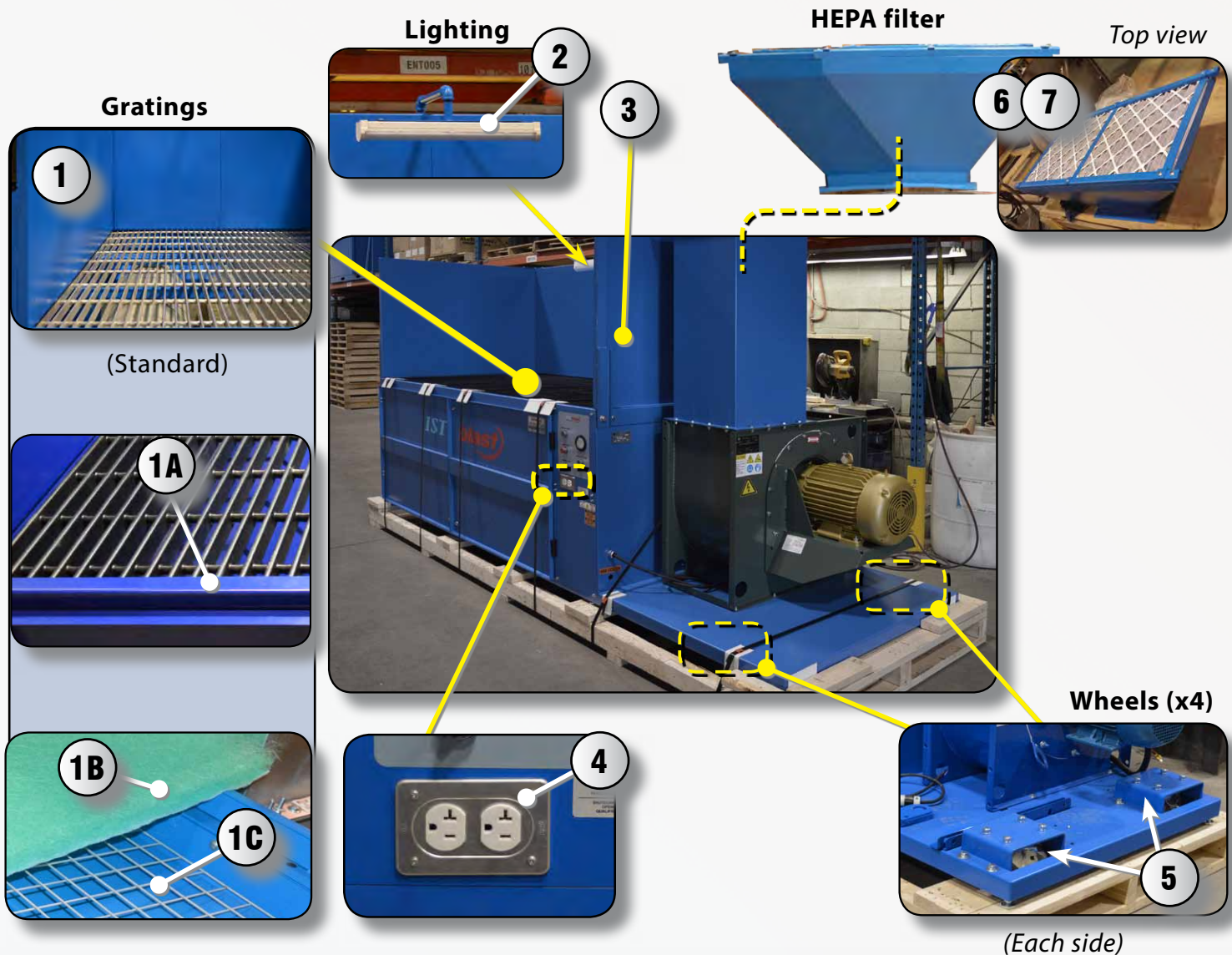


#	STOCK	DESCRIPTION
1	606107	1" PVC HOSE
2	624106	#16 (1") HOSE CLAMP
3	630690	1" PA FITTING ADAPTOR
4	630630	1" PA "T"
5	608353	GOYEN VALVE
6	324561	90° x 1/8" PUSH-IN'
7	630640	1" FF @ 90° PA ELBOW
8	630619	1" x 10" PA NIPPLE

#	STOCK	DESCRIPTION
9	606107	1" PVC HOSE
10	324570	PUSH-IN CONNECTOR
11	324571	1/4" BLUE POLY TUBE
12	324506	3-WAY PUSH-IN CONNECTOR
14	632226	1/4" PL "T"
15	608519	PILOT VALVE
16	908203	CLEANSING FLUTE
17	630680	1" UNION

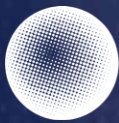


## UNIT SCHEMATIC - OPTIONAL PARTS



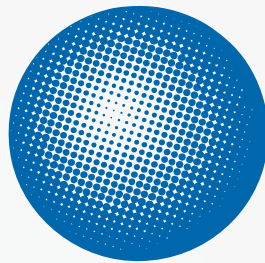
#	STOCK	DESCRIPTION
1	933036	METAL GRID (BY PI <sup>2</sup> ) (STANDARD)
1A	619350	RUBBERIZED METAL GRID (SOLD BY PI <sup>2</sup> )
1B	911208	PAINT ARRESTOR FOAM (SOLD BY PI <sup>2</sup> )
1C	933148	RETAINING FOAM GRID (SOLD BY PI <sup>2</sup> )
2	617161	24" FIXTURE C/W LED LIGHT
3	NPN	PANELS

#	STOCK	DESCRIPTION
4	NPN	120 V /20 A DOUBLE OUTLETS
5	916836	ROTATING WHEELS
6	911126	HEPA FILTER
7	911167	PRE FILTER



## INFORMATION / TECHNICAL ASSISTANCE

ISTblast is a registered trademark of:



**International  
Surface  
Technologies**  
[istsurface.com](http://istsurface.com)

For more information, pricing or technical support, contact your local IST distributor or call / fax to our Consumer Information numbers:

**TEL.: 1 877 629-8202 & 450 963-4400 FAX : 450 963-5122**

Or visit us at:  
**[istsurface.com](http://istsurface.com)**





## ABOUT THE COMPANY

### WHO WE ARE

IST is a leading industrial manufacturer of standard and custom engineered equipment for the surface treatment industry and the solvent recycling industry.

### MISSION

IST is dedicated to being an innovative and trusted supplier in the conception, fabrication and distribution of surface treatment equipment and recycling equipment.

The success of our mission relies on the following core values :

### **Innovation - Integrity - Quality**

The products, technologies and industry expertise of IST are used in a wide range of manufacturing and industrial applications, including but not limited to :

- General Manufacturing
- Industrial Equipment
- Metal forming
- Aerospace and Aviation
- Rail and Transit
- Marine
- Automotive
- Petroleum
- Flexography (labelling) & Lithography
- Wood finishing
- Power & Energy
- Pharmaceutical

