

## SUCTION CABINET ECONOBLAST SERIES

120 V



- Warranty
- Safety
- Operation

- Service Parts
- Accessory Information
- Registration Form



# INSTRUCTION MANUAL

2024-01-02

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**CABINETS TECHNICAL DATA**

<b>GENERAL SPECIFICATIONS</b>	
Cabinet construction	14 gauge
Floor Capacity	500 lb
Gloves	Nylon 8" diam.
Blasting system	Trigger Blast Gun
Piping	1/2" diam.
Nozzle	CN1-5 Ceramic, 5/16" I.D.
Blast Gun	G15
Abrasive Regulator	AR-3/4
Pressure regulator/gauge	Optional
Glass	14" x 22"
Motor (hp)	1/2
Fan (cfm)	400

<b>MODEL</b>	<b>ECONO 2636S</b>	<b>ECONO 3636S</b>	<b>ECONO 3648S</b>	<b>ECONO 4848S</b>
<b>WORK AREA (D X W X H)</b>	26" x 36" x 32"	36" x 36" x 32"	36" x 48" x 32"	48" x 48" x 32"
<b>OVERALL DIMENSIONS (D X W X H)</b>				
<b>WITH DB13</b>	53" x 42" x 67"	63" x 42" x 67"	63" x 54" x 67"	75" x 54" x 67"
<b>WITH DC50</b>	57" x 60" x 78"	67" x 60" x 78"	67" x 72" x 78"	79" x 72" x 78"
<b>DOOR OPENING (W X H)</b>	20" x 29"	30" x 29"		42" x 29"
<b>WEIGHT (lb)</b>	250	300	350	450
<b>VOLTAGE</b>	110 V / 1 ph / 60 Hz / 15 A			

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

The products described in this material, and the information relating to those products, is 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 by the user in a variety of ways for purposes determined solely by the user. No representations are intended or made as to the suitability or engineering balance of the combination of products determined by the user in his selection, nor as to the compliance with regulations or standard practice of such combinations of components or products.

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, equipment that is connected to these products and materials that may be used with these products.

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.

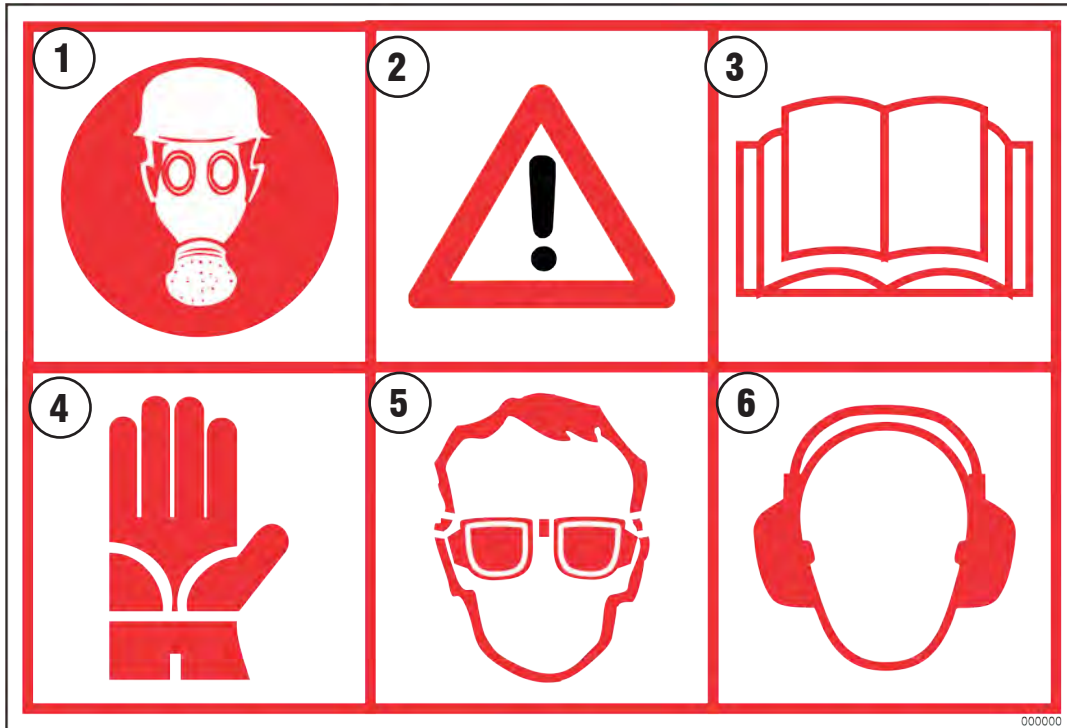
### **SAFETY AND WARNING**

#### **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 IST SANDBLASTING CABINET 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. International Surface Technologies inc. is not responsible for damage to equipment after it leaves our warehouse.
4. Check the equipment 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 IST SANDBLASTING CABINET, read this Instruction Manual completely. All IST products are engineered and manufactured to the highest performance standards and have been subjected to detail testing before shipment from the factory.**

## DANGER AND WARNING LABELS



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
6. Wear earring protection 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 WORKING AREA CLEAN.**
- **KEEP CHILDREN AWAY.** Do not let visitors come in contact with the equipment. All visitors should be kept away from the work area.

## PERSONAL SAFETY

### **WARNING**

**SANDBLAST CABINET MAY EMIT POTENTIALLY HAZARD DUST AND AIRBORNE CONTAMINANTS DURING OPERATION. YOU MUST WEAR APPROPRIATE BREATHING PROTECTION AT ALL TIMES WHILE OPERATING OR STANDING AROUND THE UNIT.**

- **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
- **DO NOT OVERREACH THE EQUIPMENT.** Keep proper footing and balance at all times.
- **BEFORE STARTING TO WORK** you must wear earing protections, efficient for 80 dB or more.

## 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 trained repairmen should attempt (●) **ALL REPAIRS**, electrical or mechanical. Contact the nearest IST ISTblast repair service facility. Use only IST ISTblast replacement parts; any other parts may create a hazard.

## ENVIRONMENTAL CONDITIONS FOR WHICH THE EQUIPMENT IS DESIGNED

- Indoor location
- Altitude 6,562 ft max
- Ambient temperature: 104 °F (40 °C) max
- Relative humidity: 80 %
- Main supply voltage fluctuation +/- 10 %
- To use with noncombustible dust only

## INTRODUCTION

Welcome to the IST® family of sandblasting products. This booklet contains helpful information and acquaints you with the operation and maintenance of your equipment. Please read carefully and follow our recommendations to assure trouble free operation. If you have any questions, please do not hesitate to contact your distributor or our technical service.

## INSTALLATION

1. Unbolt the blast cabinet from the pallet. Attach a strap or a hoist to the eyelets located on the top of the machine and move it to its final location using a lift truck or a crane.
2. Make sure the cabinet is leveled and well grounded. Do not place on a wooden floor or a rubber mat, unless a ground wire has been installed. Check with a qualified electrician.
3. Place the system to the installation location
4. Unwrap and remove the cabinet from the pallet
5. Insure there is adequate space on both sides of the cabinet for full opening of part loading/unloading and maintenance access doors.
6. Insure that there is adequate space at both sides of the system for easy access to components such as the reclaimer and dust collector
7. The dust collector should be located on a leveled area near the back of the cabinet, on the right side (while facing cabinet). Attach one end of the corrugated discharge hose to the outlet of the reclaimer and the other end to the inlet located at the bottom of the dust collector. Secure both ends with the supplied clamps. See dust collector section for more details

All IST ECONO Series cabinets are equipped with a dust collector and a 400 cfm fan motor.

## PNEUMATIC CONNECTION



Connect your shop's air supply line to the air inlet. The hose should have a minimum of 1/2 inch inside diameter. Never use male-female quick couplings. Choose couplings that offer as little restriction to the airflow as possible.

To properly operate, your IST system use clean, dry air. Moisture or oil from the compressed air supply can contaminate the abrasive, and prevent it from flowing freely and cause inefficient blasting.



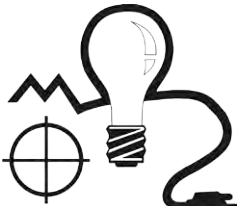
Air dryer



**CAUTION** If you use interlocking connections, secure them with pins. A connection that disconnects under pressure, could cause serious injury.

## ELECTRICAL CONNECTIONS

Connect cabinet power supply cord to standard 120 V / 15 A outlet. *Note: None-standard voltage is also available.*



All electrical connections to the IST cabinet 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.

For detailed electrical connections wiring requirements, overload and starter, Refer to electrical drawings on pages 22 and 23.



It is important to connect the IST 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. Check that the dust drum under the dust collector is sitting firmly and is center (if equipped).
4. Turn the cabinet snap switch to the "On" position. The cabinet lights will power on and the dust collector fan and the reclaimer will start.
5. Set the blast air pressure regulator to the desired pressure
6. Insert both hands into the cabinet gloves, take the gun and press the foot pedal. Blasting will start, wait a few second and the blast flow will stabilize.
7. Turn the cabinet snap switch to the "Off" position. Light will turn off and the dust collector fan and reclaimer will stop.

**CAUTION : Disable and lock out power sources before performing service or maintenance work. Do not look into the fan outlet to determine the correct motor rotation. Check that the fan exhaust is clear of tools and free of debris before checking fan rotation. To avoid personal injury, stay clear of the fan exhaust.**

## PROPER AIRJET/NOZZLE COMBINATIONS

Make sure you have a proper air jet/nozzle combination. Standard IST suction cabinets are equipped with 5/32" air jets and 5/16" nozzles.

A simple way to determine if you have an incorrect combination is to check the abrasive regulator at the bottom of the reclaimer when the operator's pedal is depressed. If media is being discharged out of the regulator, there is an incorrect jet/nozzle combination or an obstruction inside the gun.

### AIR CONSUMPTION TABLE (cfm<sup>0</sup>)

		PRESSURE (psi <sup>1</sup> )					
Orifice	Nozzle	40	50	60	70	80	100 <sup>2</sup>
1/8"	1/4"	12	15	17	19	21	26
5/32"	5/16"	19	23	27	30	34	42
3/16"	3/8"	27	33	38	43	48	58
7/32"	7/16"	38	46	52	60	65	80
1/4"	1/2"	49	58	67	76	85	94

<sup>0</sup> cfm: cubic feet per minute.

<sup>1</sup> psi: Pressure at nozzle in pound per square inch.

<sup>2</sup> Optimal pressure.



**LOADING ABRASIVE MEDIA**

**WARNING**

Your suction cabinet is designed to operate efficiently with most **recyclable abrasive media** on the market. However, certain types such as sand, recycled glass or silica are not recommended and should not be used in our blast cabinet.

These abrasives generate very fine dust that may block the bag's pores, obstruct the ventilation system and cause dust accumulation inside the cabinet while in use. Instead, use reclaimable abrasives such as glass beads, aluminum oxide steel grit or plastic media.

**For better results** for the reclaiming process, **please call one of our technical representatives** if you have to use a different **type of abrasive** from the one your equipment has been set for at the factory.

**Manufactured Abrasives**

NAME	TYPE	SHAPE	HARDNESS SCALE	DENSITY PDS/CUFT	CONTENT SILICA	DUST FACTOR	MESH SIZE	REUSE FACTOR	AVAILABILITY
Aluminium Oxide	Oxide	Irregular	8 Mohs	120	None	Low	6-600	Good	Good
Silicon Carbide	Carbide	Angular	9 Mohs	100-110	None	Low	6-600	Good	Good
Glass Beads	Silica	Spherical	5-6 Mohs	100	0 free Silica	Low	20-325	Good	Good
Plastic Grit	Polyurethane	Angular	3-4 Mohs	58-60	None	Low	12-80	Good	Good
Chilled Iron & Steel Grit	Metallic	Angular	40-68 Rc Rockwell C	250	None	Very Low	18-200	High	Good
Chilled Iron & Steel Shot	Metallic	Spherical	40-68 Rc Rockwell C	250	None	Very Low	7-200	High	Good

**LOADING ABRASIVE MEDIA**

**Follow these steps to avoid locking the drain at the bottom of the cabinet when adding a brasive media.**



1. Turn on the cabinet to activate the vacuum system.



2. **SLOWLY** add **approximately** half a bag of abrasive media through the grating inside the cabinet.



**NOTE:** Some cabinets can hold more than half a bag when added gradually.

## OPERATION

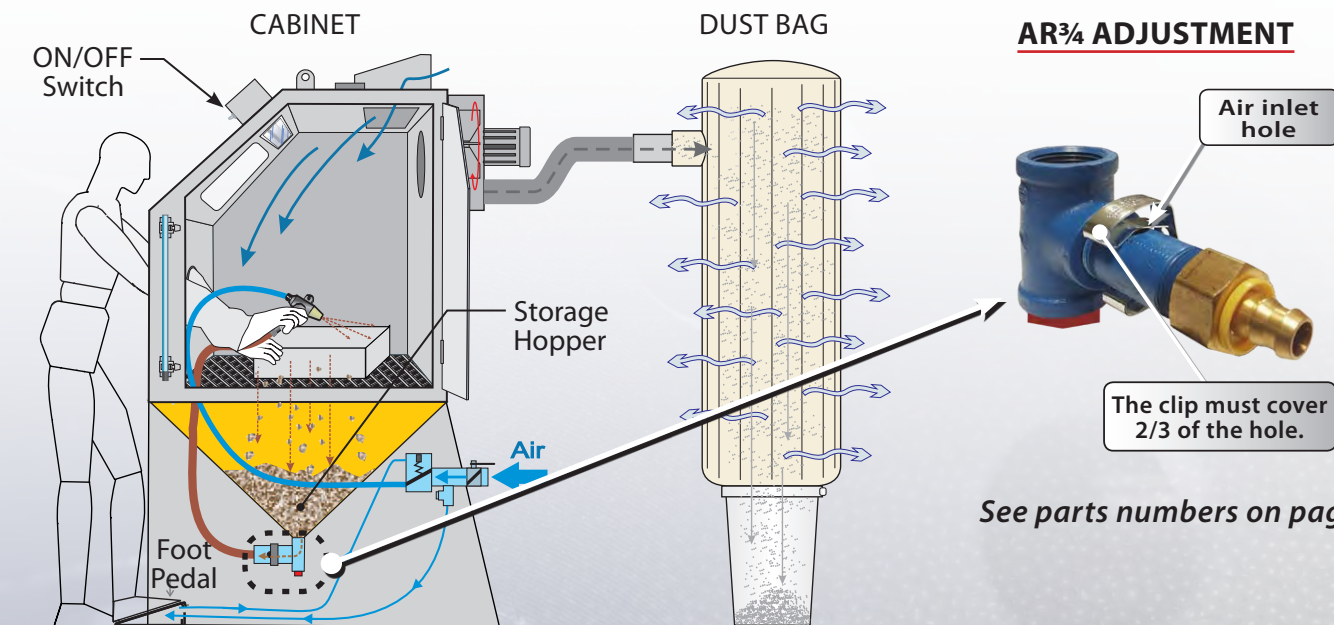
Turn on compressed air and turn on lightning and motor with the power switch. Compressed air must be clean, dry, and oil free.



1. When using the unit, air pressure should not exceed 110 psi. Place the part to be treated inside the cabinet. The parts must be free of oil, grease, and moisture. Close and latch the cabinet load doors.
2. After closing the door, insert your hands into the two front glove openings. The blasting gun should be held firmly in one hand and the part to be treated in the other hand. The stream of abrasive should be oriented to the bottom of the working space.
3. Pressing on the trigger will release compressed air flow to the blast gun. As the compressed air passes through the air jet, it creates a vacuum inside the gun and sucks up the media from the cabinet and propels it out through the nozzle. Hold the gun or nozzle at a 90° angle to the part at a distance that produces the fastest results. If you have opted for the G5 foot-control pedal upgrade kit (600115), use the pedal to activate the flow of compressed air.
4. After it hits the part, abrasive media will fall at the bottom of the cabinet in the storage hopper to be used again. The dust will be evacuated to the DB13 dust bag or the DC50 dust collector.

### AR 3/4 ABRASIVE REGULATOR

Located at the bottom of the recovery hopper, the AR 3/4 abrasive regulator meters the amount of media discharged from the nozzle. Be sure that nothing seals off the hole completely. You can adjust the opening using the adjustable clamp that must be located over it, covering about 2/3 of the hole. A smaller opening will bring more abrasive to the nozzle; a wider opening will bring less abrasive. A complete opening or a complete covering will interrupt the abrasive flow. To insure the performances of your equipment, the compressed air supply must be clean and dry. Oil or humidity in the compressed air will cause an abrasive jam at the abrasive regulator level, reducing and even stopping the abrasive flow.



*See parts numbers on page 17*

## SHUT DOWN

1. Release the trigger. The blast will stop.
2. Once cleaning is finished, await 10 to 15 seconds before turning off the power switch and opening the door of the cabinet in order to allow the evacuation of dust in suspension.
3. Open the door and remove the blast treated parts from the blast cabinet
4. Close air supply
5. Turn power switch to the off position.
6. Empty the DC50 dust drawer or the DB13 dust bag pail.
7. Shake bags of your dust collector (disregard if you system is equipped with a DB13 dust bag )

## PROPER AIRJET/NOZZLE COMBINATIONS

Make sure you have a proper air jet/nozzle combination. Standard IST suction cabinets are equipped with 5/32" air jets and 5/16" nozzles.

A simple way to determine if you have an incorrect combination is to check the abrasive regulator at the bottom of the reclaiming when the operator's pedal is depressed. If media is being discharged out of the regulator, there is an incorrect jet/nozzle combination or an obstruction inside the gun.

JET	NOZZLE	AIR CONSUMPTION
1/8"	1/4"	21 cfm @ 80 psi*
5/32"	5/16" standard	34 cfm @ 80 psi*
3/16"	3/8"	48 cfm @ 80 psi*
7/32"	7/16"	65 cfm @ 80 psi*

● cfm: Cubic Feet / Minute \* psi: Pounds / Square Inch

## CHANGING THE MEDIA

When changing from one type or size of media to another, it can be extremely important to clean out the blast and recovery hoses, storage hopper, and the cabinet interior thoroughly to avoid contamination of the new media.

**During normal sandblasting operation, the media should be replaced completely every 8 hours.**

## CLEANING THE SYSTEM

1. Turn the system off.
2. You need a container large enough to collect used media. Place the container under the AR ¾ valve (part 25, page 17).
3. Remove AR ¾ rubber plug (part 26, page 17), media will fall in your container.
4. Turn on system and press foot pedal, to make sure all media has been removed from the blast hose and nozzle.
5. Turn off system and put back AR ¾ rubber plug (part 26, page 17).
6. When cleaning is done put back everything in place.

## RELOADING WITH NEW ABRASIVE MEDIA

Refer to Abrasive Loading procedure on page 9.

## MAINTENANCE CABINET AND DUST COLLECTOR



### DAILY MAINTENANCE & OPERATION

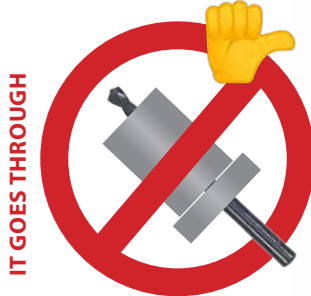
1. Check both the quantity and quality of abrasive frequently. If required, clean out the system and reload with new media.
2. Check for wear on all parts in direct contact with the blasting action: nozzle, gloves, window, plastic shield, air-jet, gun etc. Special attention must be given to nozzle, nozzle ring and rubber protector to avoid premature wear of gun. Make sure ventilation inlet is always free of obstruction.
3. Empty dust bag (DB13) or dust collector's bottom hopper regularly (DC50).
4. **Baghouse Dust Collector:** After each use, shake bags inside the dust collector. Never shake bags while the cabinet is running. Never wash bags, instead use compressed air, **blowing from the outside to the inside of the bag**, (the opposite would clog the bag's pores and make it unusable).

### WEEKLY

- **Sandblast Nozzle:** check the I.D. using a drill bit that is 1/8" wider than the original diameter of the nozzle. If the drill bit fits in, replace the nozzle. A worn nozzle will cause a drop of abrasive pull and velocity.
- **Abrasive hose:** Check abrasive hose for wear. It has to be changed before it gets any perforation. Give a special attention to parts of the hose that are curved.
- **Couplings and gaskets:** Check on a regular basis the hose couplings and gaskets for wear.
- **Media filters:** Replace bags when the dust collector is unable to evacuate the dust cloud from the cabinet.

**NOZZLE AND JET MAINTENANCE**

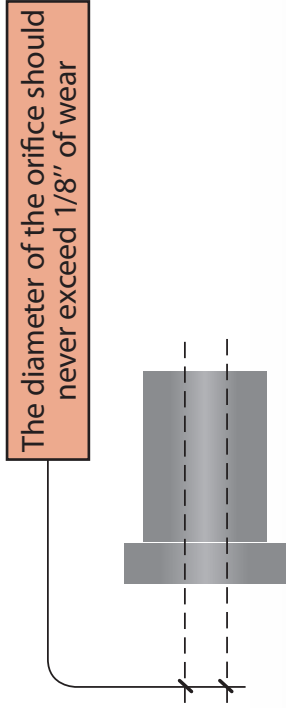
**Nozzle:** check the nozzle regularly for wear using a drill bit **1/8" larger than the original nozzle diameter**



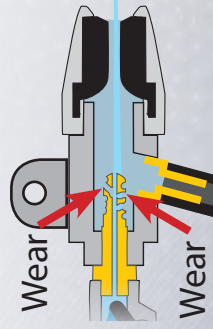
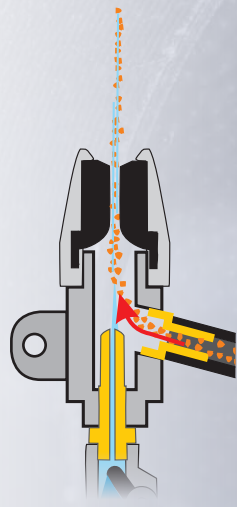
**IT GOES THROUGH**  
**WORN NOZZLE TO BE REPLACED**



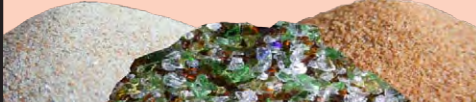
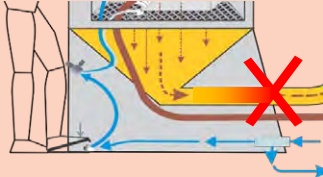
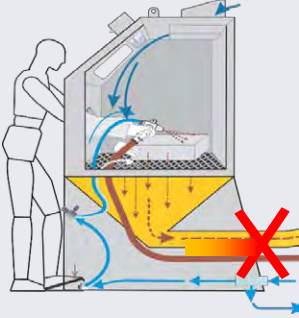

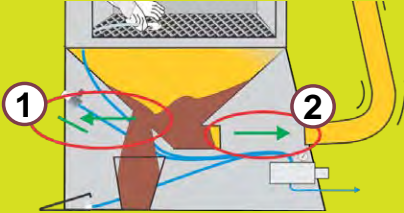
**DOES NOT GOES THROUGH**  
**NOZZLE IN GOOD SHAPE**



**Air Jet :** check regularly the wear of the injector and replace the **rubber sheath** if necessary to avoid wear from the outside

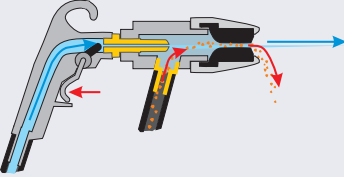
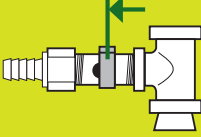
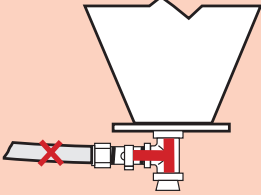
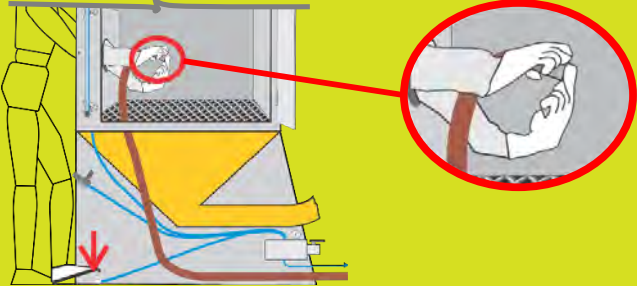
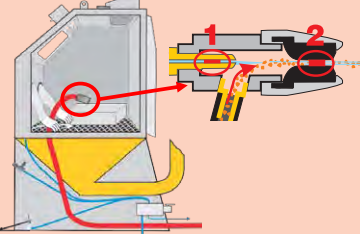


**TROUBLESHOOTING**

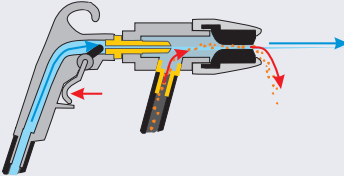
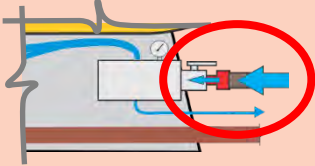
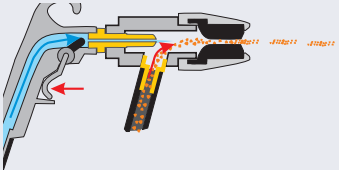
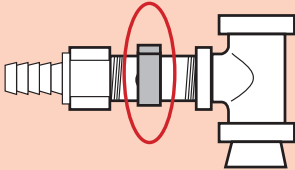
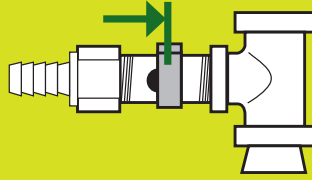
TYPE OF FAILURE	POSSIBLE CAUSE	SOLUTION
<p><b>Excessive dust in the cabinet (poor visibility) and / or very dusty abrasive (inefficient)</b></p>	<p>Non-recyclable abrasive<sup>3</sup></p> 	<p>Follow abrasive drain and cleaning procedures and replace with recyclable abrasive.</p>
	<p>Suction hose (behind the cabinet) is partially or completely blocked</p> 	<p>Follow the procedures for resolving a clogged suction hose.</p>
<p><b>Suction hose outlet (behind the cabinet) partially or completely blocked</b></p> 	<p><u>Incorrect filling procedure:</u> too much abrasive or poured too quickly.</p> 	<p>Open the service door (1) and disconnect the abrasive suction hose (2) at the bottom of the hopper, remove the abrasive in excess and repeat the filling procedures properly.</p> 
	<p>Lack of cfm (problem with the dust collector) which causes the outlet to become progressively blocked.</p>	<p>Follow the procedures for resolving a dusty cabinet as described above.</p>

<sup>3</sup> Never use non-recyclable abrasive in IST cabinets, such as slag, silica sand, recycled glass, or other like them. IST cabinets are designed to be used exclusively with recyclable abrasive that generates a limited amount of dust. Ask your IST representative for more information.

**TROUBLESHOOTING (CONT'D)**

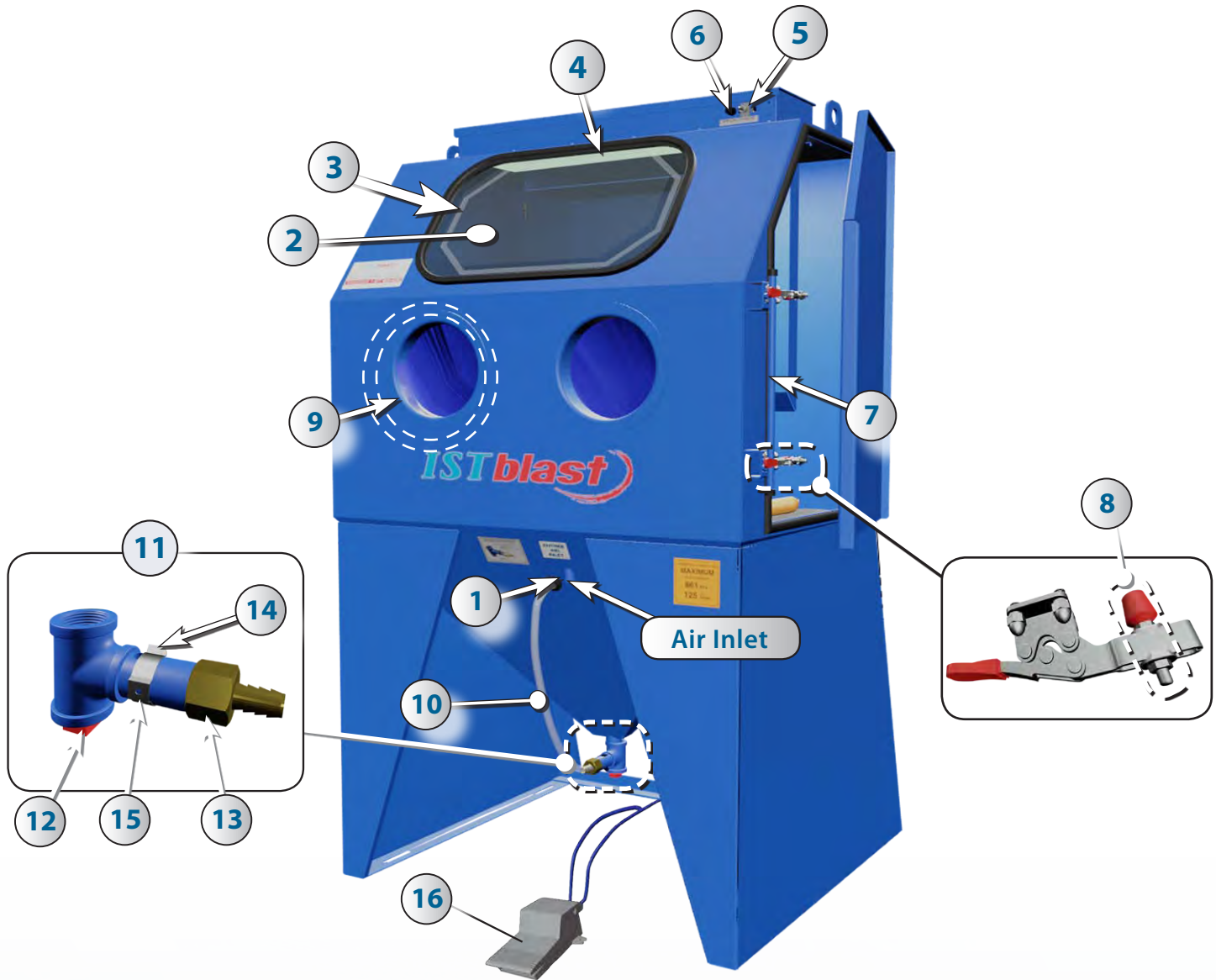
TYPE OF FAILURE	POSSIBLE CAUSE	SOLUTION
<p><b>Lack of abrasive in the mix (the nozzle blows mainly air)</b></p> 	<p>Incorrect adjustment of the AR ¾ Abrasive Valve</p>	 <p>Slightly close the opening of the AR ¾ valve and test again : <b>Less air = more abrasive</b></p>
	 <p>Blocked AR¾ abrasive valve and/or abrasive transport hose to nozzle</p>	<ol style="list-style-type: none"> <li>1. Place a finger at the nozzle opening to obstruct the air outlet and activate the blaster to force air upstream of the nozzle to unblock it.</li> </ol>  <ol style="list-style-type: none"> <li>2. If this does not solve the problem, disassemble the AR¾ abrasive valve and transport hose in an attempt to isolate the obstruction.</li> </ol>
	<p>Abrasive transport hose to nozzle is obstructed (gun) or improperly installed. Wrong air jet to nozzle opening ratio.</p>	<ol style="list-style-type: none"> <li>1. Inspect the hose for holes (especially under the screened floor if it has been exposed to abrasive blasting) and replace as necessary.</li> <li>2. Remove the gun from the hose and insert it again to the bottom of the hose.</li> </ol>
	<p>The ratio should be 2 to 1 (nozzle inner diameter = 2 times air jet inner diameter)</p> 	<p><b>Disassemble the gun and check the nozzle and the air jet for wear:</b></p> <ol style="list-style-type: none"> <li>1. If the nozzle is damaged by excessive wear from the outside, replace it.</li> <li>2. If the internal diameter of the nozzle exceeds 1/16" of its original size, replace it.</li> </ol>

**TROUBLESHOOTING (END)**

TYPE OF FAILURE	POSSIBLE CAUSE	SOLUTION																																																
<p>Lack of abrasive in the mix (the nozzle blows mainly air)</p> 	<p>Air supply problem (using a quick connect or a connection that creates a restriction to the cabinet air supply)</p> 	<p>Follow cabinet air connection guidelines (see chart page 8)</p> <table border="1" data-bbox="894 646 1484 837"> <thead> <tr> <th rowspan="2">Buse ID</th> <th colspan="6">Pression (psi)</th> </tr> <tr> <th>40</th> <th>50</th> <th>60</th> <th>70</th> <th>80</th> <th>100</th> </tr> </thead> <tbody> <tr> <td>1/4"</td> <td>12</td> <td>15</td> <td>17</td> <td>19</td> <td>21</td> <td>26</td> </tr> <tr> <td>5/16"</td> <td>19</td> <td>23</td> <td>27</td> <td>30</td> <td>34</td> <td>42</td> </tr> <tr> <td>3/8"</td> <td>27</td> <td>33</td> <td>38</td> <td>43</td> <td>48</td> <td>58</td> </tr> <tr> <td>7/16"</td> <td>38</td> <td>46</td> <td>52</td> <td>60</td> <td>65</td> <td>80</td> </tr> <tr> <td>1/2"</td> <td>49</td> <td>58</td> <td>67</td> <td>76</td> <td>85</td> <td>94</td> </tr> </tbody> </table> <p>And use only straight couplings as indicated in the manual</p>	Buse ID	Pression (psi)						40	50	60	70	80	100	1/4"	12	15	17	19	21	26	5/16"	19	23	27	30	34	42	3/8"	27	33	38	43	48	58	7/16"	38	46	52	60	65	80	1/2"	49	58	67	76	85	94
Buse ID	Pression (psi)																																																	
	40	50	60	70	80	100																																												
1/4"	12	15	17	19	21	26																																												
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3/8"	27	33	38	43	48	58																																												
7/16"	38	46	52	60	65	80																																												
1/2"	49	58	67	76	85	94																																												
<p>Too much abrasive in the mix (the jet is jerky and discharges too much abrasive)</p> 	<p>Incorrect adjustment of the AR 3/4 abrasive metering valve</p> 	<p>Slightly open the orifice of the AR 3/4 valve : <b>More air = less abrasive</b></p> 																																																



**UNIT SCHEMATIC - FACE VIEW**



1	618126	Grommet
2	610205	22" x 14" Laminated Window
3	613026	RPW 26 Self-Adh. Plastic Shield, 20 3/4" x 12 7/8"
4	610207	E3 Window's Rubber Gasket
5	617014	On / Off Power Switch
	617019	Protection for Switch
6	616935	AGC 10 amp. 250 V Fuse
	616907	Fuse Holder
7	610288	Standard ISTblast® Complete Door Lock
8	910223	Door Latch Rubber Bumper Screw

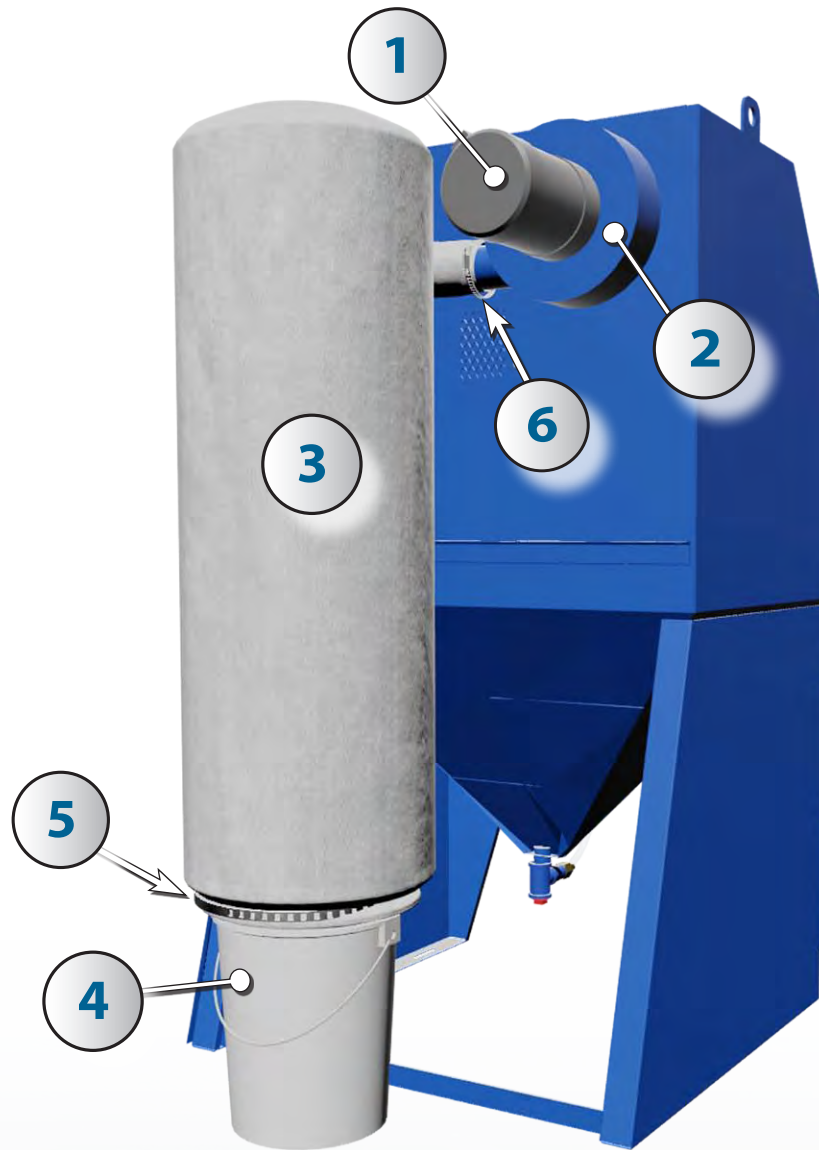
9	610229	8" Ø Glove Flange (sold by unit)
10	606104	1/2" Diameter PVC Abrasive Hose (sold per foot)
11	608010	AR 3/4" Abrasive Regulator
12	936143	Threaded Polyethylene Plug for AR 3/4" Abrasive Regulator
13	632960	PL Adaptor 3/4" FPT x 1/2" B
14	608011	AR 3/4" Clip
	603505	3/4" X 3" Nipple
16	600115	OPTION Factory Mounted Pedal Kit & G5 Blast Gun
	600215	OPTION Pedal Kit & G5 Blast Gun (parts only)

**UNIT SCHEMATIC - INSIDE VIEW**



1	617161	Light Fixture for DEL (since 2017)
	610322	Protective Glass for DEL (since 2017)
2	610455	ECONO 26" X 36" Expanded Steel Floor
	610453	ECONO 28" X 44" Expanded Steel Floor
	610451	ECONO 36" X 36" Expanded Steel Floor
	610456	ECONO 36" X 48" Expanded Steel Floor
3	618321	Rubber Door Gasket Type D (sold per foot)
4	603212	E3 Nylon Sleeve Gloves, 8" ID x 30" long (sold in pairs only)
5	*****	G15 Trigger Operated Sandblast Gun (see next page)
6	606104	½" Diameter PVC Abrasive Hose (sold per foot)
7	606103	3/8" Ø Air Hose (sold per foot)
8	624128	T128 8" Ø Clamp for gloves

**UNIT SCHEMATIC - REAR VIEW**



1	616306	1/3 hp Electric Motor 120V AC, 60 Hz, 3450 rpm
2	610523	1/3 hp ECONOBLAST® Turbine, 1/2" shaft
	610522	High-Efficiency ECONOBLAST Turbine
3	601315	DB-13 Dust Bag
4	601310	Dust Pail
5	624137	T188 (11 1/4") Clamp for Dust Pail
6	624117	T64 (4") Ø clamp

**G15 BLAST GUN, PARTS LISTING**

A	#	Part No.	Description
Complete pre-assembled gun	1	610110	G15 Gun Body
	2	610111	G15 Suction Head
	3	607039	G15 Nozzle Adaptor
	4	632761	3/8" MPT x 1/2" Stem Brass
	5	618218	G15 Rubber Protector
	6	618100	G15 O-Ring
	7	NPN	Hexagonal Screw 1/4" - 20 x 1/4"
	8	910104	G15 Repair Kit

**NOZZLE AND AIR JET COMBINATIONS**

A		Nozzle				Complete Air Jet	
G15	Nozzles	Model	Orifice	Lenght	Code	Code	Orifices
A		B				C	
610100	Ceramic	CN1-4	1/4"	1-1/4"	605000	610113	1/8"
610101	Ceramic (Standard)	CN1-5	5/16"		605001	610114	5/32"
610102	Tungsten	TN1-4	1/4"	1-1/4"	605002	610113	1/8"
610103	Tungsten	TN1-5	5/16"		605003	610114	5/32"

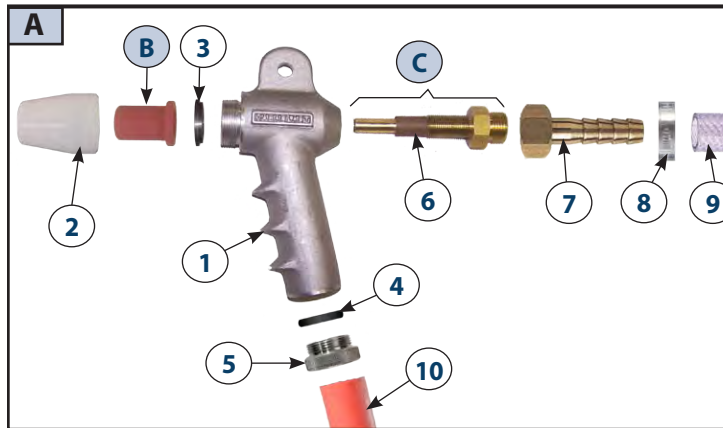
\* Pre-assembled sandblast guns includes parts 1 to 6, plus a combination of B-C

CERAMIC NOZZLE		
CN_		Cost-efficient nozzle for occasional use with soft abrasive media, such as glass beads, walnut shell, and steel shot / grit.

TUNGSTEN CARBIDE NOZZLE		
TN_		Higher durability nozzle for regular use with highly abrasive media, such as aluminum oxide and GMA Garnet.

**OPTION G5 GUN, PRESSURE REGULATOR , FOOT PEDAL  
PARTS LIST (PRE-ASSEMBLED)**

**G5 GUN**



Pre-assembled gun	1	610119	Blast Gun Body only
	2	607037	Nozzle Adaptor
	3	618017	NW-2 Rubber Washer
	4	618112	O-Ring
	5	607038	Hose Adaptor
	6	618219	Rubber Protector
	7	632771	½" Brass Female Swivel Hose Barb
	8	624015	¾" O-Clamp
	9	606104	½" PCV Compressed Air Hose (sold per foot)
	10	606148	½" Multipurpose Abrasive Conveying Hose (sold per foot)

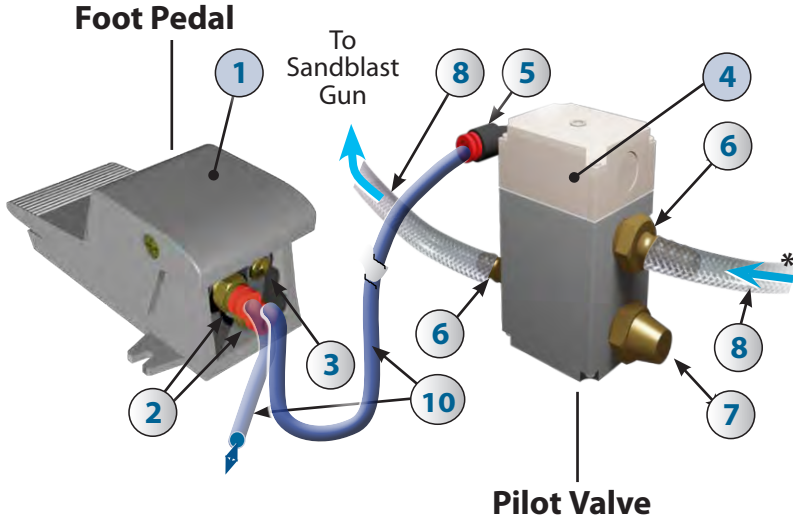
**NOZZLES LIST FOR THE G5 GUN**

PROPER AIR JET/NOZZLE COMBINATIONS								
	Complete blast guns (pre-		Nozzles				Air jet	Orifices ±
	G5	Nozzles	Type	Orifice	Length	Code		
	A		B				C	
	610121	Ceramic	CN2-4	1/4"	1-¼"	605004	610116	1/8"
	610120	Ceramic	CN2-5	5/16"		605005	610117	5/32"
	610166	Ceramic	CN2-6	3/8"		605015	610109	3/16"
	610122	Ceramic	CN2-7	7/16"		605006	610118	7/32"
	610123	Tungsten	TN2-4	1/4"		605007	610116	1/8"
	610124	Tungsten	TN2-5	5/16"		605008	610117	5/32"
	610167	Tungsten	TN2-6	3/8"		605018	610109	3/16"
	610125	Tungsten	TN2-7	7/16"		605009	610118	7/32"
	610126	Boron carbide	BN2-4	1/4"		605010	610116	1/8"
	610127	Boron carbide	BN2-5	5/16"		605011	610117	5/32"
	610168	Boron carbide	BN2-6	3/8"		605021	610109	3/16"
	610128	Boron carbide	BN2-7	7/16"		605012	610118	7/32"

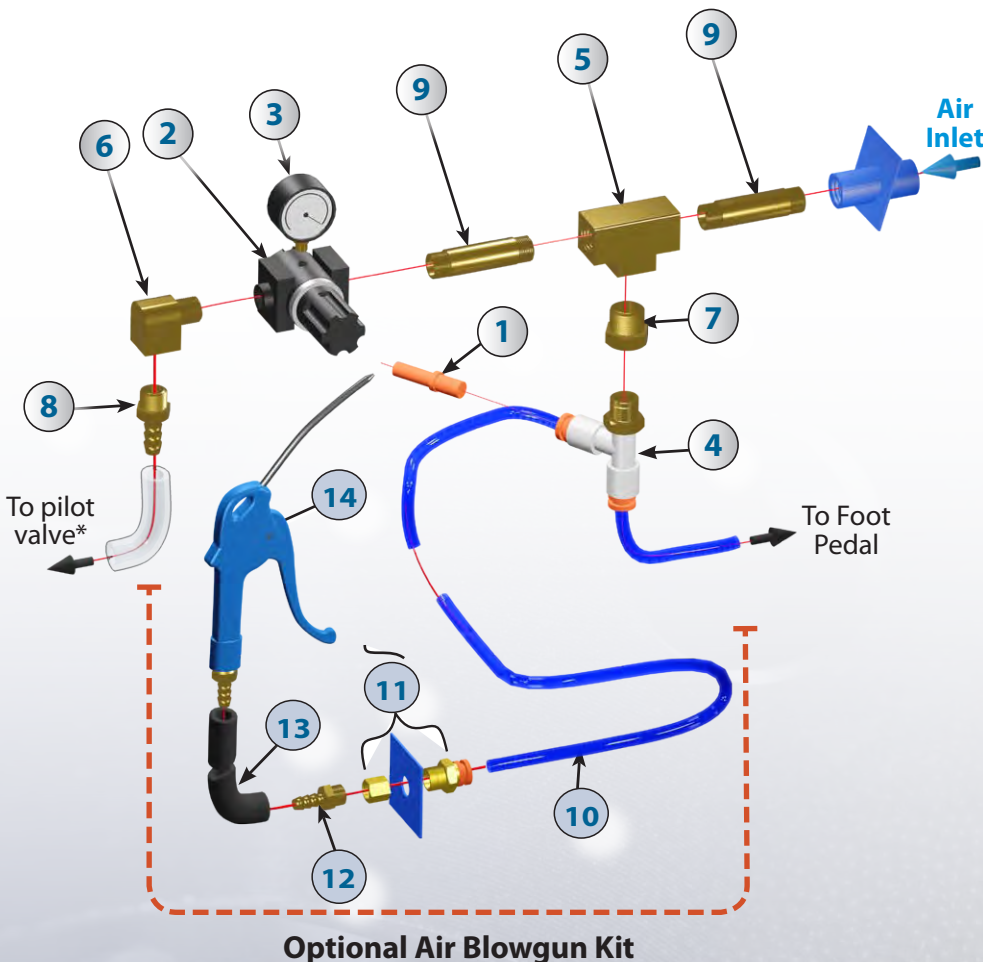
\*Pre-assembled blast guns include all parts, plus a B-C combination.

**OPTION FOOT CONTROL PEDAL AND PNEUMATIC TREE FOR SUCTION ECONO SERIES SANDBLASTING CABINETS (SINCE 2022)**

**FOOT PEDAL AND PILOT VALVE**



#	Part #	Description
1	610345	Pneumatic foot pedal (complete)
2	950264	1/4" Push-in Fittings
3	950265	1/4" Brass Plug
4	608519	1/2" NPT Pilot Valve
5	324561	1/8" NPT 1/4" Tube Push-in Fitting
6	632760	1/2" Hose Barb Fitting
7	608287	1/2" NPT Blowhole
8	606104	1/2" PVC Air Hose (sold by foot)



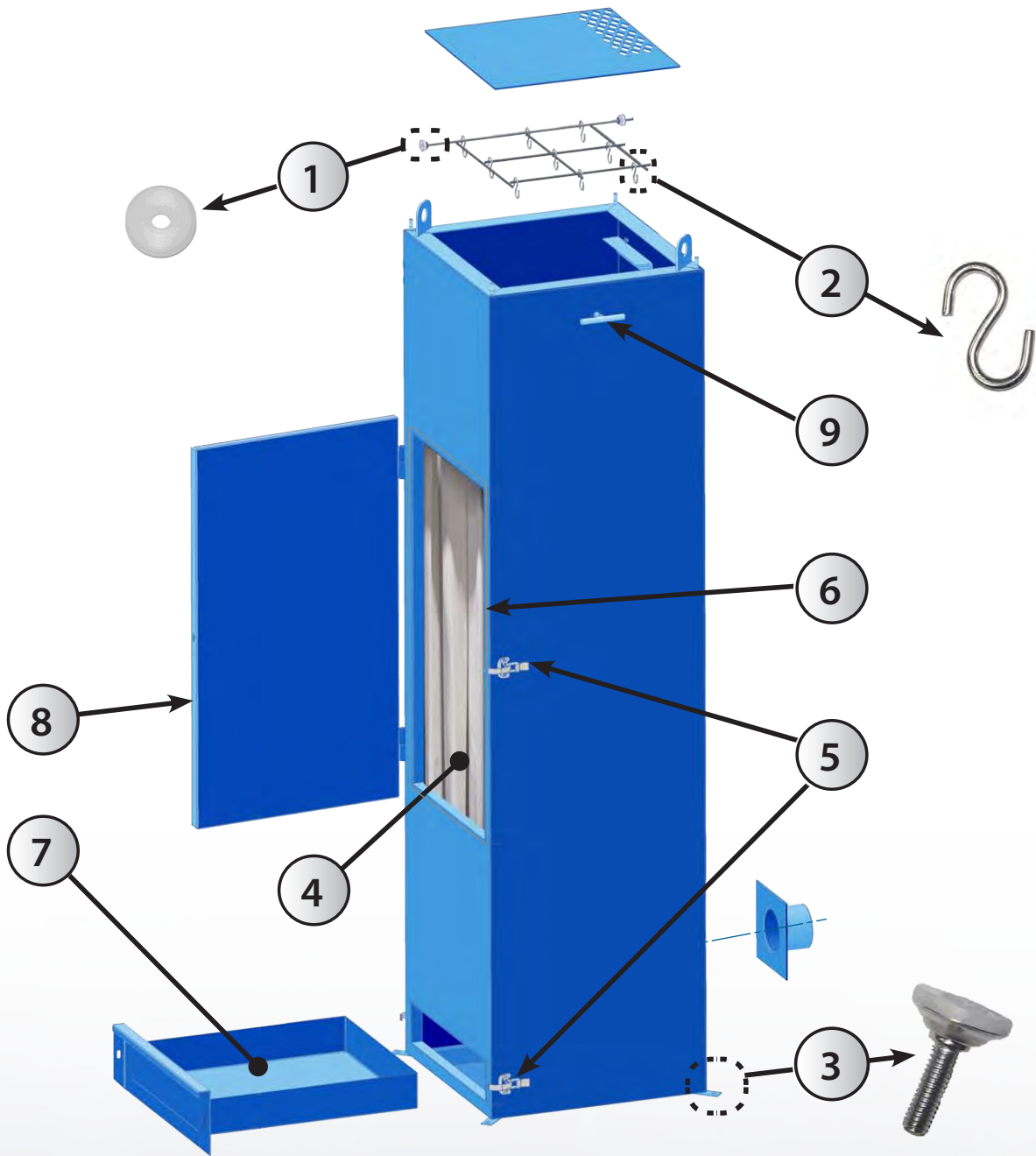
#	Part #	Description
1	324504	1/4" Plug
2	608022	1/2" Pressure Regulator
3	611022	1/4" NPT Pressure Gauge
4	612453	1/4" FPT "T" Push-in
5	632720	PL 1/2" FPT Brass "T"
6	632730	PL 1/2" MPT x 1/2" FPT @ 90° Elbow
7	632745	1/2" MPT @ 1/4" FPT Hex. Reducer
8	632760	1/2" MPT x 1/2" TU Hose Barb Fitting
9	932108	1/2" x 3" Lg. Nipple
<b>STANDARD</b>		
10	324571	1/4" Blue Poly. Tube (sold/fo.)
11	324503	1/4" x 1/4" TU Bulkhead Push-in Fitting
12	632270	1/4" MPT x 1/4" TU Hose Barb Fitting
13	606147	1/4" Multipur. Hose (sold/fo.)
14	610275	Air Blowgun c/w Fitting
<b>Kit soufflette à air EN OPTION</b>		

**RECOMMENDED SPARE PARTS**

Description	Configuration	Part #	Qty
<b>Cabinet</b>			
Nylon gloves	All Models	603212	1
5/16" ID* Nozzle		605001	1
5/32" ID* Air Jet		610114	1
"Blast Hose (sold by foot)"	2636-2844-3636	606148	6
	3648-4848	606148	7
Safety Glass	All Models	610205	1
Window Shield		613026	5
<b>Dust Collector</b>			
Filtering Bag	DB13	601315	1
	DC50	601316	9
Dust Carrying Hose	DC50	606167	6

\*Corresponds to the standard items and may not reflect your actual cabinet configuration.

**OPTION BAGHOUSE DUST COLLECTOR DC50 - GENERAL PARTS LIST**



#	Part #	DESCRIPTION*
1	619006	ROLLER FOR BAGS RACK
2	601309	"S" HOOK
3	612427	LEVELING LEG
4	601316	DB6HP 56"LG X 5¼" Ø DUST BAG
5	610269	TOGGLE STEM

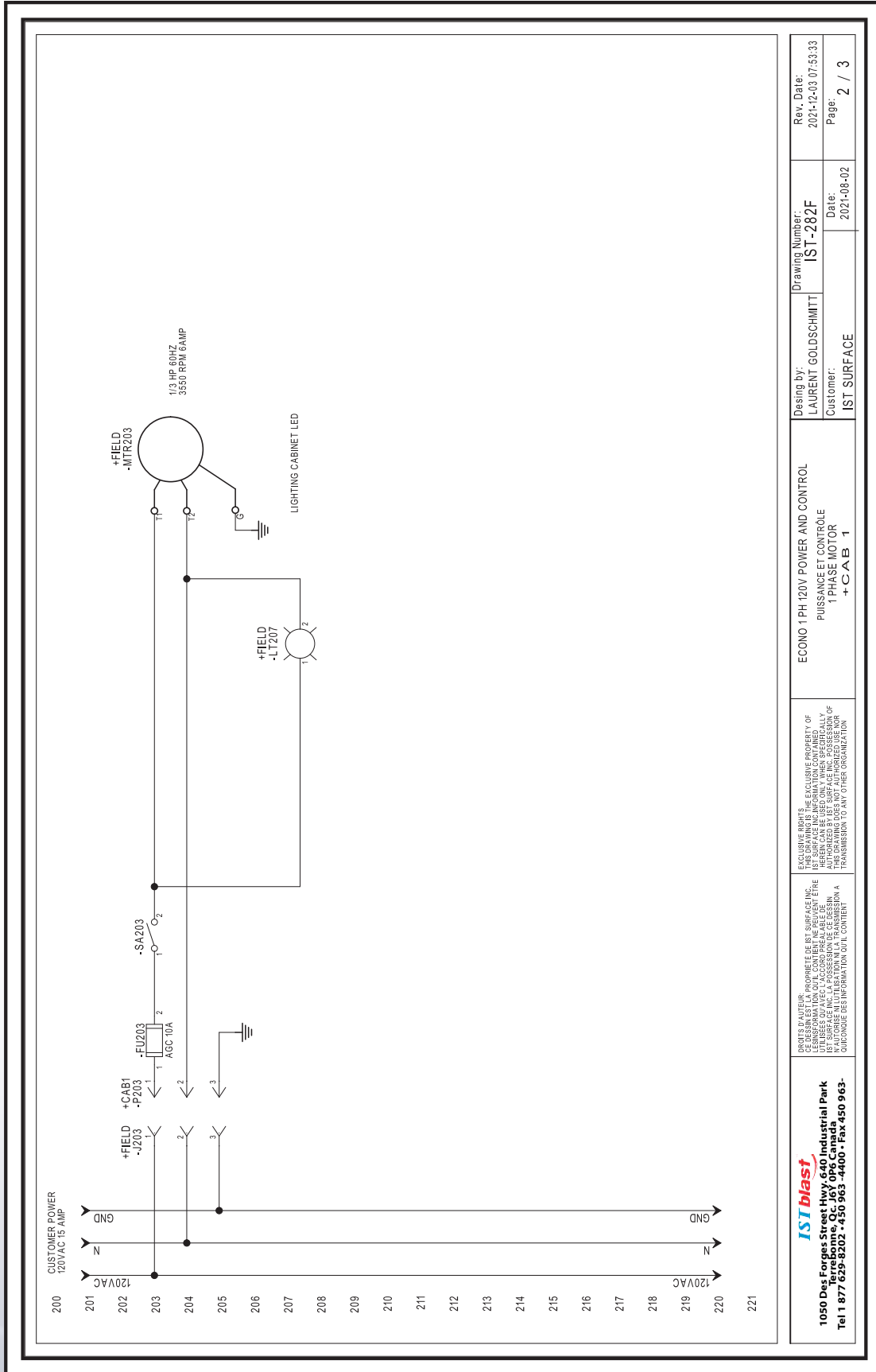
#	Part #	DESCRIPTION*
6	618321	TYPE "D" RUBBER SEAL (SOLD BY FOOT)
7	NPN	DUST DRAWER
8	NPN	ACCESS DOOR
9	NPN	MANUAL SHAKER HANDLE

*(All items are sold by the foot or individually)*





**ELECTRICAL SCHEMATIC - 1 PH / 120 V - DIAGRAM**



Desing by: LAURENT GOLDSCHMITT  
Drawing Number: **IST-282F**  
Rev. Date: 2021-12-03 07:53:33  
Page: 2 / 3

Date: 2021-06-02  
Customer: **IST SURFACE**

ECONO 1 PH 120V POWER AND CONTROL  
PUISSANCE ET CONTRÔLE  
1 PHASE MOTOR  
+ C A B 1

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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 TWENTY FOUR(24) 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** 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 **Canablas** be liable for malfunction, damage or wear caused by the incompatibility with **Canablas** equipment with structures, accessories, equipment or materials not supplied by **Canablas** , 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 **Canablas** distributor for verification of the claimed defect. If the claimed defect is verified, **Canablas** 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** 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 two (2) years 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.



**INFORMATION / TECHNICAL ASSISTANCE**

**ISTblast** is a registered trademark of:

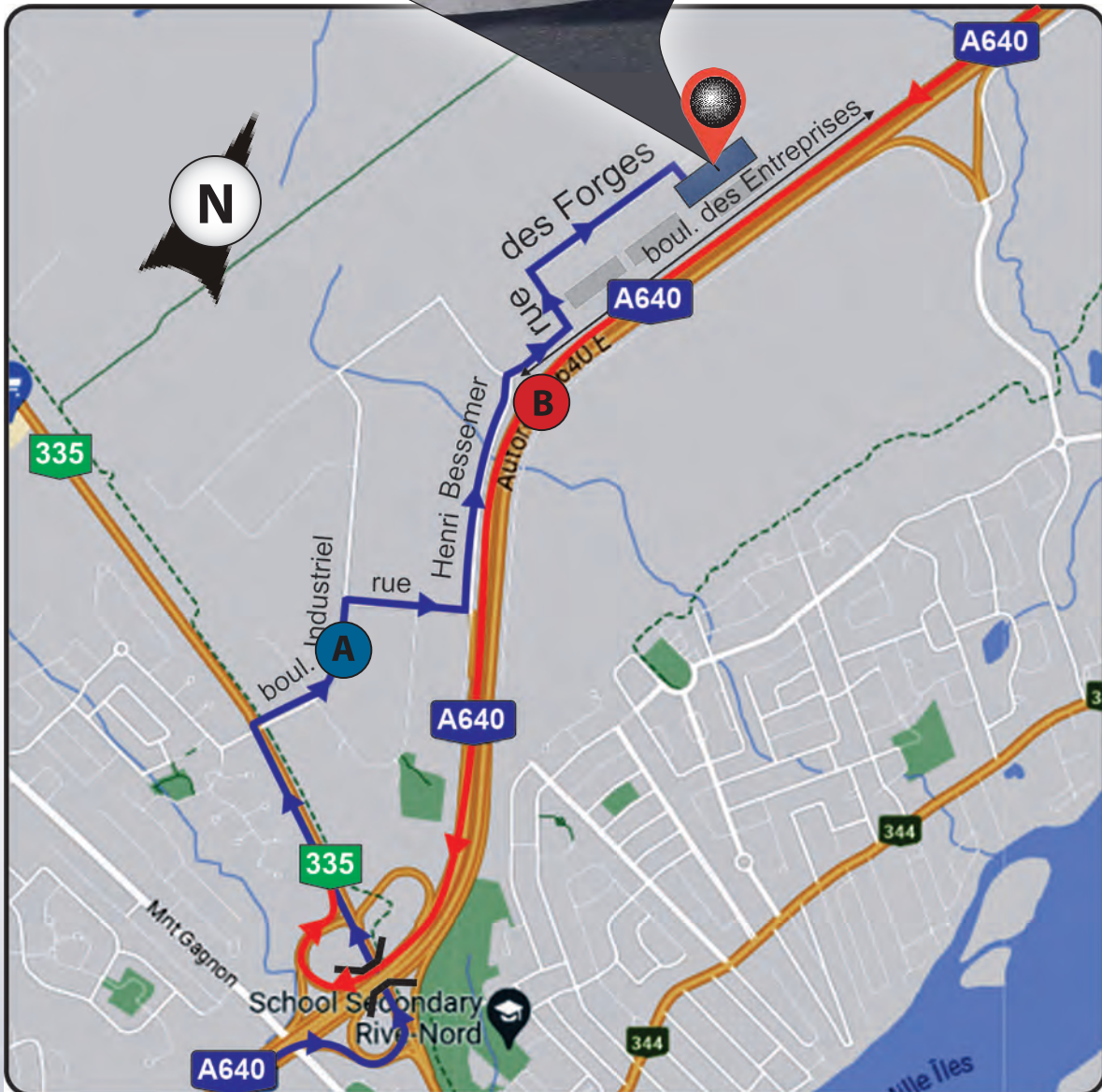


For more information, pricing or technical support, contact your local  
IST distributor or call / fax to our Consumer Information numbers:

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

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

**OUR MAP LOCATION**



## ABOUT THE COMPANY

### WHO WE ARE

IST is a leading manufacturer of equipment for the surface treatment industry and the solvent recycling industry. Our extensive line of equipment includes batch units and automated machines designed to achieve the highest manufacturing standards.

### MISSION

IST works tightly with their customers to transform industrial processes to improve their quality, productivity, and environmental footprint.

### OUR SERVICES

- Custom Design & Fabrication
- Installation & Startup
- Preventative Maintenance Program
- Private Labels
- Testing Lab
- 24/7 Technical Support5656

### INDUSTRIES WE SERVE

- Aerospace & Aviation
- Aluminium Smelters
- Automotive
- Construction & Civil Engineering
- Flexography (labelling) & Lithography
- Foundry & Forge
- General Manufacturing
- Military
- Power & Energy
- Rail & Mass Transit
- Shipyards
- Wood finishing

