



SUCTION CABINET ECAB SERIE 3-5-7 WITH DB 13 DUST BAG OR DC 50 & DC100 DUST COLLECTOR



- **Warranty**
- **Safety**
- **Operation**
- **Service Parts**
- **Accessory Information**
- **Registration Form**



INSTRUCTION MANUAL



TABLE OF CONTENTS

	Page
CABINETS SPECIFICATIONS	3
NOTICE TO BUYERS AND USERS OF OUR PRODUCTS AND THIS INFORMATION DOCUMENT	4
SAFETY AND WARNING	4
UNIT USE AND CARE	5
GENERAL SAFETY RULES	5
INSTALLATION AND STARTING	6
ABRASIVE MEDIA LOADING	7
OPERATION	7
RECLAIMER	7
SHUT DOWN	7
MAINTENANCE AND ADJUSTMENT OF YOUR SUCTION CABINET	8
SCHEMATIC OF UNIT - FACE VIEW	9
SCHEMATIC OF UNIT - INSIDE VIEW	10
SCHEMATIC OF UNIT - REAR VIEW	11
SCHEMATIC OF COMPLETE RECLAIMER - DETAILS	12
SHOWN WITH DUST COLLECTOR DC SERIES	13
SPARE PARTS FOR CABINET	14
BLAST GUN G5 FOR SUCTION CABINET	15
AR- 3 /4 ABRASIVE REGULATOR (608010) ADJUSTMENT	16
ISTBLAST LIMITED WARRANTY	17
ISTBLAST WARRANTY REGISTRATION	18
WARRANTY INFORMATION / TECHNICAL ASSISTANCE	19
ABOUT THE COMPANY	20



CABINETS SPECIFICATIONS

CABINET TYPE	ECAB 3	ECAB 5	ECAB 7
Item Nb	626104	626129	626139
Dim. ext. (P x L x H)	26"x36"x67"	28"x44"x67"	36"x48"x67"
Dim. int. (P x L x H)	26"x36"x30"	28"x44"x30"	36"x48"x31"
Door Dim. (L x H)	20"x29"	22" x 29"	22" x 29"
Door	Simple		
Weight	405	445	467
Cabinet construction	14 gauge		
Floor Capacity	500 lbs		
Gloves	Rubber 8" diam.		
Blsating system	Foot pedal		
Piping	1/2 " diam.		
Nozzle material	Ceramic		
Abrasive Regulator	AR 3/4		
Blast Gun	G5-CN2-5		
Pressure regulator/gauge	Standard		
Glass	14" x 22"		
Lighting (W)	LED fixture 24"		
Dust collector	DB 13	DC 50	DC 100
Filter area (square feet)	13	50	100
Dimensions (L x H)	15"x 66"	20" x 20" x 78"	28" x 28" x 91"
Reclaimer	RVM 10		
Motor (hp)	1/2		
Fan (cfm)	400		
Fan silencer (dB A)	Under 80		



Welcome to the ISTblast[®] 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.

NOTICE TO BUYERS AND USERS OF OUR PRODUCTS AND THIS INFORMATION DOCUMENT

The products described in this document and the information on these products is aimed at professionals and advanced users of abrasive blasting equipment.

No representation is made or intended as to the suitability of the products described for a particular purpose of the request. No statement is intended or made as to the efficiency, production rate, or the useful life of the products described below. Estimate rates of production or production in regard to the finishes are the responsibility of the user and must be derived solely from the user's experience and expertise, and should not be based on information in this document.

The products described herein may be combined by the user in a variety of means for uniquely determined by the user. No statement is intended or made as to the balance of engineering skill or combination of products by the user's choice, or concerning compliance with the regulations or the practice of these combinations components or products. It is the responsibility of users to learn about the products mentioned in this document to become familiar with the laws, regulations and safety practices that apply to these products, equipment connected to these products and materials that can be used with these products.

It is the responsibility of the user to ensure that appropriate training of operators was carried out and a safe working environment is provided.

Our company is proud to offer a variety of products for industrial blasting, and we trust that our professionals use their industry knowledge and expertise for safe and effective use of these products.

SAFETY AND WARNING

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 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 without delay for possible claim procedures. International Surface Technologies inc. is not responsible for damage to equipment after it leaves our warehouse.
4. 4. Check the equipment list and compare it with the parts you have received. If any parts are missing, contact the supplier you purchased the equipment from.



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

- **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.** Keep proper footing and balance at all times.

UNIT USE AND CARE

- **BEFORE CONNECTING THE UNIT, to an electrical power,** be sure the power is the same as that specified on the nameplate of the Sand Blasting Cabinet. With power greater than that specified on the Nameplate can seriously injure the user – as well as damage the Unit. if you have doubts, do not connect the unit
- **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 a 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.



INSTALLATION AND STARTING

Before operating the ISTblast SANDBLASTING CABINET, 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.

1. **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.**

All ISTblast ECAB series cabinets are equipped with a tubular type dust bag for dust collection or an optional high-performance dust collector model DC-50.

a) DB -13 Dust Bag :

The dust bag, pail and clamps are packed inside the cabinet. Place dust bag behind the cabinet and install the opening of the dust bag to the outlet of the reclaimer using the supplied clamp. (Page 11, No. 21).

b) DC-50, DC 100 Dust Collector :

The dust collector should be located on a leveled area near the back of the cabinet, at the right side. 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 manual for more details.

2. **Connect the electrical power cable to a power source of 120 volts, 15 amps**

All electrical connections to the ISTblast cabinet should be made by a qualified electrician and must adhere to the codes, standards, and procedures specified by the 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 the ground to discharge static electricity, which can be generated when sanding. The ground can also reduce the discomfort to which an operator may face when static electricity is dissipated.

3. **The compressed air supply inlet is located at the front of the cabinet (Page 9). Compressed air connection must be made with a pipe or hose of at least 1/2" in diameter. Do not use quick connect male-female type, but connections with the fewest restrictions possible. The compressed air must be clean, dry and free of oil for optimum operation of the unit.**



ABRASIVE MEDIA LOADING

Note : Your suction cabinet is designed to operate efficiently with most of light and reclaimable abrasive media on the market. However, certain types such as **sand, crushed glass or silica are not recommended** and should not be used in your 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 or aluminum oxide.

To fill, start the unit so that the ventilation system is running, open the cabinet door and slowly pour a maximum amount of abrasive 25 lbs (about 1/2 bag) at the bottom of the cabinet. The abrasive will be sucked and directed to the storage hopper.

Warning : To operate properly, your ISTblast system requires clean, dry air. Moisture or oil in the compressed air supply can contaminate the abrasive, which can prevent it from flowing freely and cause inefficient blasting

OPERATION

1. Open the air inlet and turn on the motor. When you work, blasting pressure should not exceed 80 to 90 lbs. Place the part to be cleaned inside the cabinet. It must be dry and free of oil or grease.
2. After closing the door, put on protective gloves. Hold the gun with one hand while holding part with the other.

As soon as it hit the part to clean, abrasive falls at the bottom of the cabinet and directed to the abrasive regulator AR ¾ (Page 12, No. 11). Dust is itself is directed to the bag or dust collector.

RECLAIMER

Although it is adjusted at the factory, you can increase the amount of fine dust sucked by the recycler and fed to the collector bag DB 13 or the dust collector. To do this, you have to move the rubber strip (Page 12, # 6) so as to release more or less the holes are behind it.

To avoid a deadlock, it is recommended to empty and clean the drawer recycler every day. (Page 12, # 8)

SHUT DOWN

1. Once cleaning is finished, await 10 to 15 seconds before turning off the engine and opening the door of the cabinet in order to allow the evacuation of dust in suspension.
2. put off the electrical motor.
3. Shut off the air from the compressor.

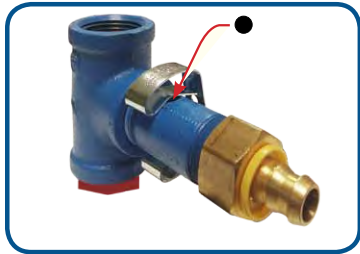


MAINTENANCE AND ADJUSTMENT OF YOUR SUCTION CABINET

1. Check both the quantity and quality of abrasive frequently. If required, clean out the system and reload with new media. During normal blasting operation, the media should be replaced completely after 8 hours. Make sure to use dry, clean abrasive such as glass beads no. BT-6 (50-70).
2. Before starting the machine, shake the dust bag vigorously by hand . **See the dust collector manual for more details.**
3. Empty dust pail or dust collector's bottom hopper regularly

Warning:

Never shake bags while cabinet reclaimer is running. Never wash dust bags : 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).



4. the AR 3/4 abrasive regulator is located at the bottom of the reclaimer, (Page 12, no. 11). 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 1/3 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. **Search the adjustment will allow the maximum abrasive effect without pulsation.**
5. Make sure you have a proper air jet/nozzle combination. Standard ECONOBLAST series suction cabinets are usually equipped with 5/32" air jets and 5/16" nozzles. A simple way to determine if you have the wrong combination is to check the regulator abrasive under the recycler when the pedal is released. If the abrasive is thrown out of the regulator, you have a improper combination jet/nozzle.

Proper jet/nozzle combination :

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

6. 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 have to be changed if necessary. The nozzle, washer nozzle and protective rubber (Page 15) should be checked periodically to prevent premature wear of the gun.

WARNING :

Make sure to use appropriate safety equipment. (Ear plugs, dust mask etc.).



SCHEMATIC OF UNIT - FACE VIEW



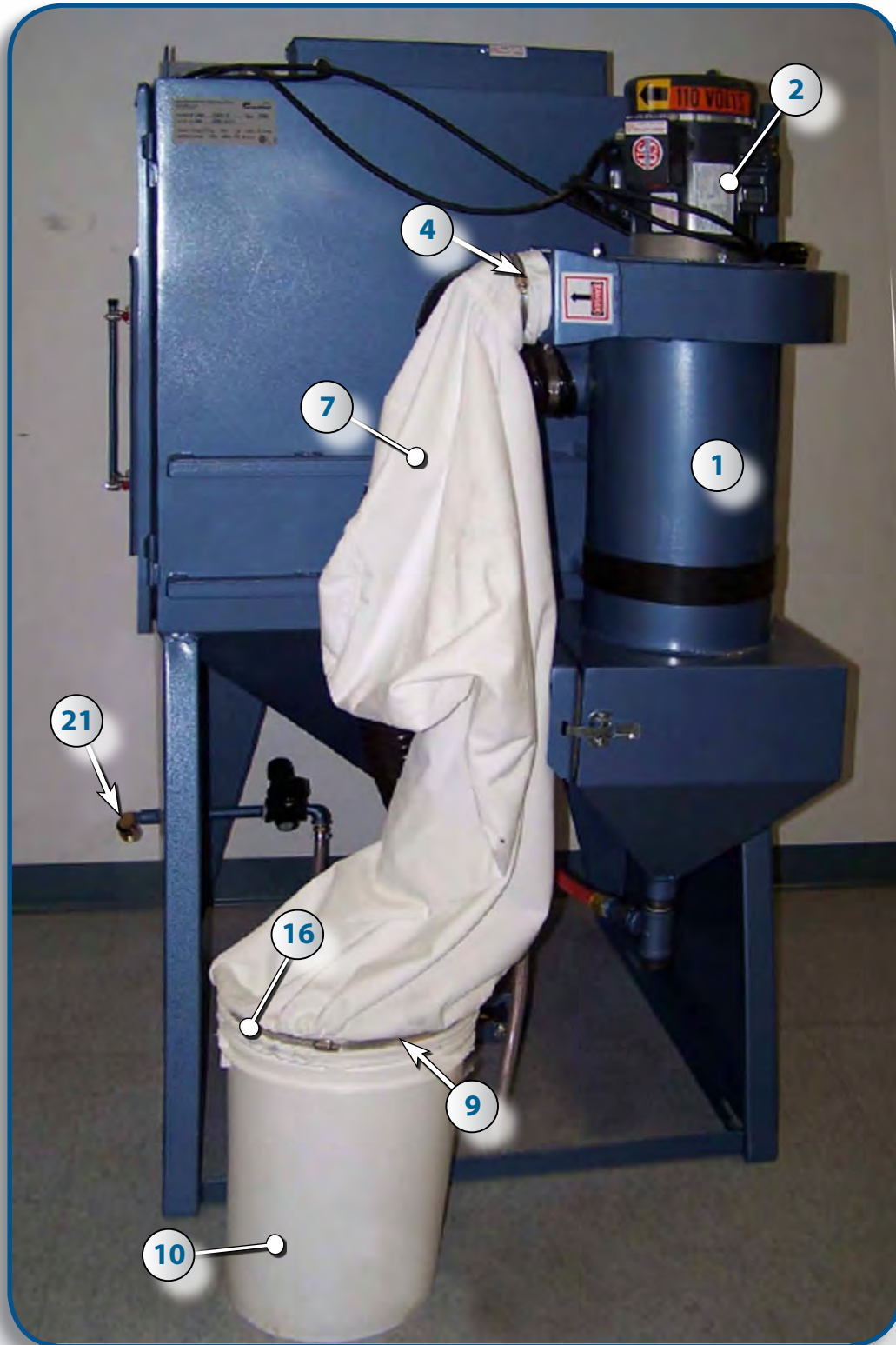


SCHEMATIC OF UNIT - INSIDE VIEW





SCHEMATIC OF UNIT - REAR VIEW



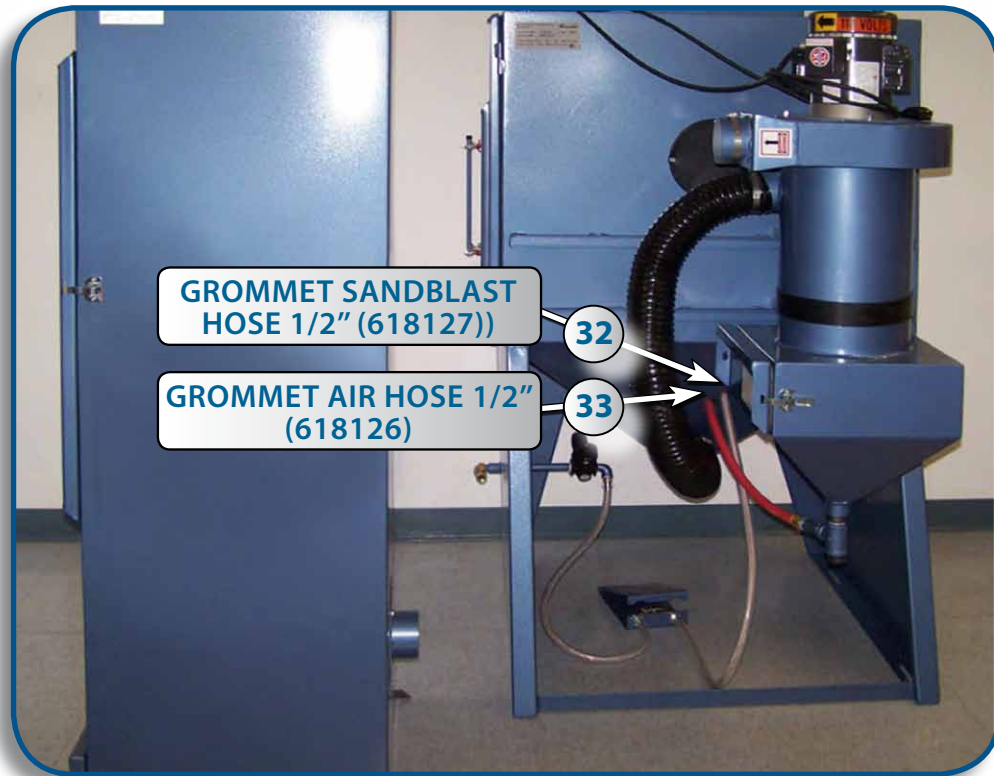


SCHEMATIC OF COMPLETE RECLAIMER - DETAILS





SHOWN WITH DUST COLLECTOR DC SERIES



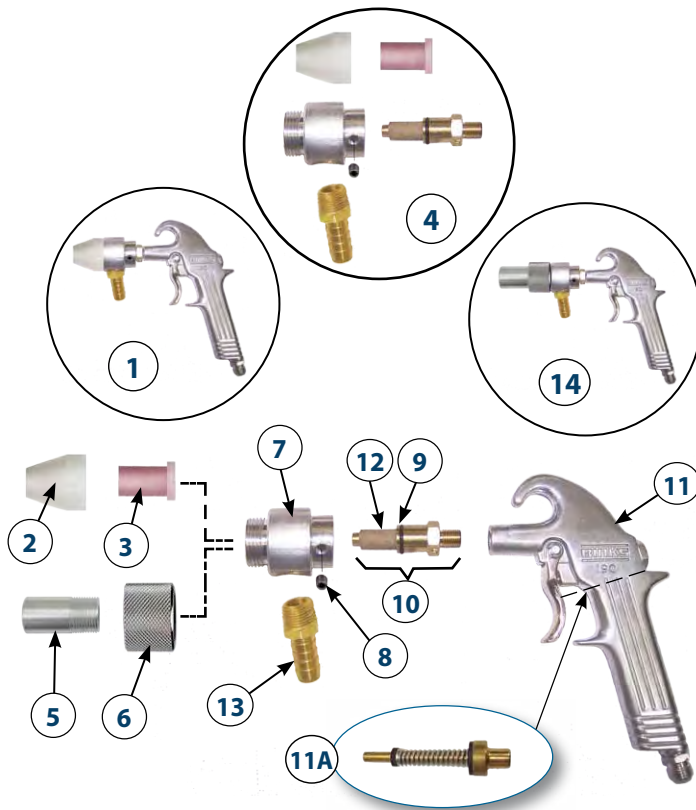


SPARE PARTS FOR CABINET

1	609186	RVM 10" COMPLETE RECLAIMER WITH MOTOR
2	616311	ELECTRIC MOTOR ½ HP 120V / 1PH / 60 HZ / 3450 RPM
3	610525	½ HP IMPELLER
4	624117	T CLAMP #64 (4")
5	606161	SUCTION HOSE 3 1 / 2 " ± (SOLD PER FOOT)
6	618334	SBR RUBBER 1/8" X 2" WIDE
7	601315	DB-13 DUST BAG
8	618318	RUBBER FOAM ½" X ¼" 37.5 LONG
9	624137	T CLAMP T-188 11¼" (SOLD PER UNIT)
10	601310	23 L WHITE PLASTIC DUST PAIL
11	608010	COMPLETE AR-¾" REGULATOR (VOIR FIGURE 3)
12	606104	½" ± PVC COMPRESSED AIR HOSE (SOLD PER FOOT)
13	610270	2 WAY PNEUMATIC PEDAL
	608604	PEDAL VALVE
14	608022	PRESSURE REGULATOR
15	606148	MULTI-PURPOSE ABRASIVE CONVEYING HOSE ½" ± (SOLD PER FOOT)
16	610120	G-5 CN2-5 COMPLETE BLAST GUN STD. W. 5/16" NOZZLE ORIFICE (SEE P. 8)
17	603212	E3 NYLON SLEEVE GLOVES, 8" ID X 30" LONG (SOLD IN PAIRS ONLY)
18	624128	T-CLAMP T-128 8" (SOLD PER UNIT)
19	611022	¼" PRESSURE GAUGE
20	610202	4 ½" X 18" PROTECTIVE GLASS FOR HALOGEN FLOOD LIGHTS (BEFORE 2017)
	613029	PROTECTIVE ACETATE FOR LED LIGHT FIXTURE (AFTER 2017)
21	608102	½" FEMALE BALL VALVE FOR COMPRESSED AIR INLET
22	610288	ISTBLAST ® STANDARD DOOR LOCK
23	618321	¼" X 1" RUBBER DOOR GASKET (SOLD PER FOOT)
24	939143	THREADED PLUG SQUARE 1" NPT
25	610207	WINDOW'S RUBBER GASKET
26	610205	14" X 22" LAMINATED SAFETY WINDOW
27	613026	RPW 26 SELF-ADHESIVE PROTECTIVE ACETATE
28	617130	LED LIGHT FIXTURE 14.5W (100W) 5000K
29	617014	ON/OFF SWITCH
29A	617019	SWITCH PROTECTION
30	616934	AGC 2 AMP. FUSE 250 V
	616907	FUSE HOLDER
31	910223	TOGGLE STEM
32	618126	GROMMET
33	618127	GROMMET
34	632960	PL ADAPTOR ¾" FPT X ½" B
35	608011	AR ¾" CLIP
36	610455	ECAB 3 - 26" X 36" EXPANDED STEEL FLOOR
	610457	ECAB 5 - 28" X 44" EXPANDED STEEL FLOOR
	610459	ECAB 7 - 36" X 48" EXPANDED STEEL FLOOR
37	610229	8" Ø GLOVE FLANGE



SPARE PARTS FOR G5 BLAST GUN



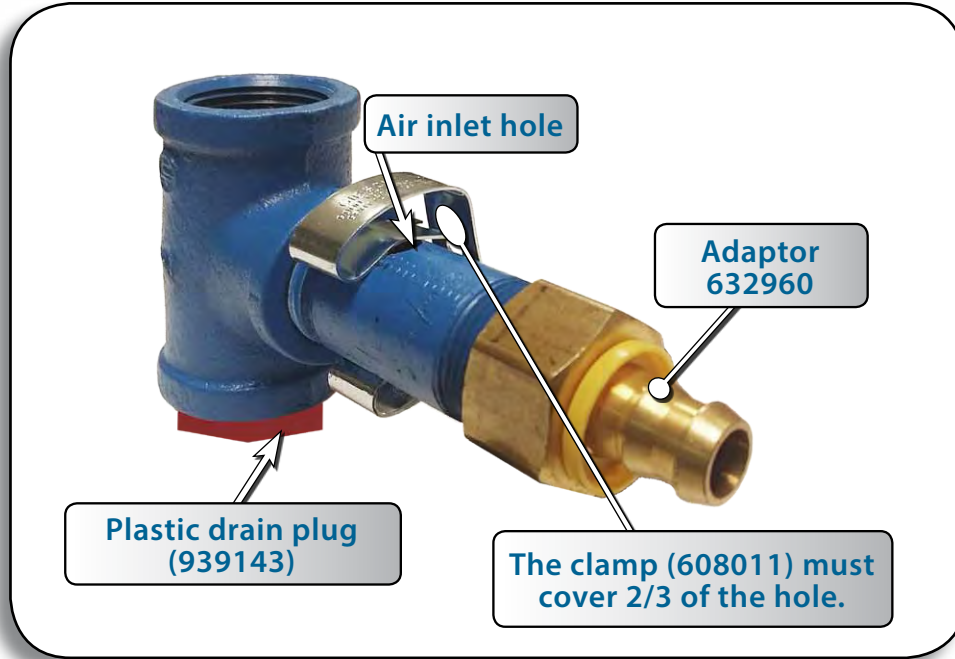
1	610100	G15-CN1-4, complete blast gun w/ceramic nozzle 1/4"
	610101	G15-CN1-5, complete blast gun w/ceramic nozzle 5/16" (standard)
	610102	G15-TN1-4, complete blast gun w/tungsten carbide nozzle 1/4"
	610103	G15-TN1-5, complete blast gun w/tungsten carbide nozzle 5/16"
2	607039	NA-G15 nozzle adaptor
3	605000	CN1-4, 1/4" Ceramic nozzle
	605001	Buse céramique CN1-5 5/16" (standard)
	605002	Buse au carbure de tungstène TN1-4 1/4"
	605003	Buse au carbure de tungstène TN1-5 5/16"
4	610148	Suction head ass'y including # 2 - 3 - 7 - 8 - 10 - 13
5	605415	BC1-3 3/16" Boron carbide nozzle
	605416	BC1-4 1/4" Boron carbide nozzle
	605417	BC1-5 5/16" Boron carbide nozzle
	605359	DC1-3 3/16" Tungsten carbide nozzle
6	607043	3/4" thread, male nozzle adaptor
7	610111	G-15 Suction head
8	NPN	Hexagonal screw 1/4" - 20 x 1/4"
9	618100	G15 "O" ring
10	610112	G15 3/32" air jet for 3/16" nozzle
	610113	G15 1/8" air jet for 1/4" nozzle
	610114	G15 5/32" air jet for 5/16" nozzle (standard)
11	610110	G15 Gun body
11A	910104	G15 Repair Kit
12	618218	G15 rubber protector
13	632761	3/8" MPT x 1/2" stem brass hose barb
14	610106	G15-BC1-3, complete blast gun w/boron carbide nozzle 3/16"
	610107	G15-BC1-4, complete blast gun w/boron carbide nozzle 1/4"
	610108	G15-BC1-5, complete blast gun w/boron carbide nozzle 5/16"

PARTS LIST (PRE-ASSEMBLED)

G5 COMPLETE BLAST GUN (PRE-ASSEMBLED)		NOZZLE			AIR JET (COMPLETE)	ORIFICE ↓
		TYPE	ORIFICE	CODE		
610121	Ceramic	CN2-4	1/4"	605004	610116	1/8"
610120	Ceramic (standard)	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"



AR- 3 / 4 ABRASIVE REGULATOR (608010) ADJUSTMENT





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

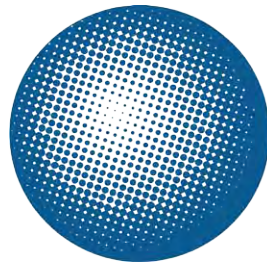
The following items are not covered under the ISTblast warranty policy:
- Parts or chassis replacement due to normal wears.

Defective material or workmanship is not considered normal wear



WARRANTY INFORMATION / TECHNICAL ASSISTANCE

ISTblast is a registered trademark of:



International
Surface
Technologies

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:
www.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.

MARKETS SERVED

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 (Labeling) & Lithography
- Wood finishing
- Power & Energy
- Pharmaceutical

