

BLAST-IT-ALL® LEADING THE INDUSTRY IN SURFACE PREPARATION EQUIPMENT

# HESS & ASSOCIATES, INC.

185 Piper Ln. Salisbury, NC 28147 (800) 535-2612 ⊡LIVE CHAT- www.blast-it-all.com



MANUAL DOWNLOAD

LITTLE BLASTER™ w/ DUST COLLECTOR LB4024 / LB4824



www.blast-it-all.com





\*\* WARNING \*\*

**DO NOT USE SAND**. SAND WILL CAUSE SILICA DUST, WHICH IS THE CAUSE OF SILICOSIS DISEASE, A CONDITION OF MASSIVE FIBROSIS OF THE LUNGS. THIS STATEMENT INDICATES A POTENTIAL PERSONNEL HAZARD. FAILURE TO COMPLY WITH THESE INSTRUCTIONS MAY RESULT IN PERSONAL INJURY.

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# **SAFETY**

*** READ ENTIRE MANUAL BEFORE INSTALATION/OPERATING EQUIPMENT ***
1. DO NOT USE SAND SAND WILL CAUSE SILICA DUST, WHICH IS THE CAUSE OF SILICOSIS DISEASE, A CONDITION OF MASSIVE FIBROSIS OF THE LUNGS. THIS STATEMENT INDICATES A POTENTIAL PERSONNEL HAZARD. FAILURE TO COMPLY WITH THESE INSTRUCTIONS MAY RESULT IN PERSONAL INJURY.
2. (COLLECTED DUST) THE CUSTOMER (END USER) ASSUMES THE RESPONSIBILITY FOR CONTACTING THEIR INSURANCE UNDERWRITER AND ADVISING HESS AND ASSOCIATES, INC. IN REGARD TO SPECIFIC APPLICATION REQUIREMENTS OF EXPLOSION VENTING OR IF ADDITIONAL FIRE PROTECTION AND SAFETY EQUIPMENT MAY BE REQUIRED. THE BUYER (END USER) IS ALSO CAUTIONED TO ADHERE TO PRESCRIBED OSHA, NFPA, FEDERAL, STATE, AND LOCAL CODES AND REGULATIONS APPLICABLE TO INDUSTRIAL VENTILATION SYSTEMS, WHICH HESS AND ASSOCIATES, INC. EQUIPMENT MAY BE APPLIED ON.
3. HEARING PROTECTION IS RECOMMENDED WHILE OPERATING MACHINE
4. EYE PROTECTION IS RECOMMENDED WHILE OPERATING MACHINE
5. PROTECTIVE FOOTWEAR IS RECOMMENDED WHILE OPERATING MACHINE
6. Machine MUST be properly Grounded

# SAFETY (cont'd)

7		<ol> <li>Use CAUTION when interacting with any Electrical Components. You MUST incorporate Lock Out / Tag Out Procedures Prior to Servicing Equipment.</li> </ol>
	7	8. Gun MUST ALWAYS be pointed away from the Operator and Towards the item being processed.
	7	<ol> <li>NEVER Blast with ANY Doors OPEN. NO ONE Should be in Front of the Operating Station at the Front of the Blast Cabinet while Loading or Unloading Parts.</li> <li>DO NOT OPEN ANY DOOR WHILE THE MACHINE IS IN OPERATION</li> </ol>
J		10. DO NOT CONNECT TO HIGH PRESSURE BOTTLE GAS, RUPTURE AND/OR EXPLOSION CAN OCCUR.

# **OSHA® FactSheet**

# **Protecting Workers from the Hazards of Abrasive Blasting Materials**

Abrasive blasting uses compressed air or water to direct a high velocity stream of an abrasive material to clean an object or surface, remove burrs, apply a texture, or prepare a surface for the application of paint or other type of coating. Employers must protect workers from hazardous dust levels and toxic metals that may be generated from both the blasting material and the underlying substrate and coatings being blasted. This fact sheet provides information on abrasive blasting material, health hazards, and methods to protect workers.

#### **Abrasive Blasting Materials**

The decision to use a certain type of abrasive material can depend on factors such as cost, job specifications, environment, and worker health.

Commonly used abrasive materials:

- Silica sand (crystalline)
- Coal slag
- Garnet sand
- Nickel slag
- Copper slag
- Glass (beads or crushed)
- Steel shot
- Steel grit
- Specular hematite (iron ore)

Alternative, less toxic blasting materials include:

- Ice cubes
- Dry ice
- Plastic bead media
- Sponge
- Sodium bicarbonate (baking soda)



Abrasive blasting creates high levels of dust. Photo courtesy of NIQSHiess & Associates Man. # 561

- Ground walnut shells, ground corn cob and other biodegradable materials
- High pressure water

#### \*\*\*\* CAUTION \*\*\*\*

Abrasive blasting creates high levels of noise that can cause substantial hearing loss. Always wear hearing protection. Employers must administer a hearing conservation program as required by the OSHA Occupational Noise standard.

## **Health Hazards**

Abrasive blasting operations can create high levels of dust and noise. Abrasive material and the surface being blasted may contain toxic materials (e.g., lead paint, silica) that are hazardous to workers.

- Silica sand (crystalline) can cause silicosis, lung cancer, and breathing problems in exposed workers.
- Coal slag and garnet sand may cause lung damage similar to silica sand (based on preliminary animal testing).
- Copper slag, nickel slag, and glass (crushed or beads) also have the potential to cause lung damage.
- Steel grit and shot have less potential to cause lung damage.
- Slags can contain trace amounts of toxic metals such as arsenic, beryllium, and cadmium.

# How to Protect Workers from Exposure to Abrasive Blasting Materials

Each abrasive blasting operation is unique, involving different surfaces, coatings, blast material, and working conditions. Before beginning work, employers should identify the hazards and assign a knowledgeable person trained to recognize hazards and with the authority to quickly take corrective action to eliminate them. Use engineering and administrative controls, personal protective equipment (PPE), including respiratory protection, and training to protect workers involved in abrasive blasting activities. Engineering controls, such as substitution, isolation, containment, and ventilation are the primary means of preventing or reducing exposures to airborne hazards during abrasive blasting operations. Administrative controls, including the use of good work and personal hygiene practices, can also reduce exposure. When engineering and administrative controls cannot keep exposures to hazardous materials below OSHA permissible exposure limits, respiratory protection must be used.



Abrasive blasting using a dust collection system with multiple exhaust ducts. (Photo courtesy of Flexaust, Inc. This equipment is shown for illustrative purposes only and is not intended as an endorsement by OSHA of this company, its products or services.)

#### **Engineering Controls**

#### 1. Substitution

- Use a less toxic abrasive blasting material.
- Use abrasives that can be delivered with water (slurry) to reduce dust.

#### 2. Isolation and Containment

- Use barriers and curtain walls to isolate the blasting operation from other workers.
- Use blast rooms or blast cabinets for smaller operations.
- Use restricted areas for non-enclosed blasting operations.
- Keep coworkers away from the blaster.

#### 3. Ventilation

• Use exhaust ventilation systems in containment structures to capture dust.

Employers can use OSHA's free On-site Consultation Program for advice on safety and health issues.

#### Administrative Controls

Perform routine cleanup using wet methods or HEPA filtered vacuuming to minimize the accumulation of toxic dusts.

- Do not use compressed air to clean as this will create dust in the air.
- Clean and decontaminate tarps and other equipment on the worksite.
- Schedule blasting when the least number of workers are at the site.
- Avoid blasting in windy conditions to prevent the spread of any hazardous materials.

#### **Personal Hygiene Practices**

- Prohibit eating, drinking, or using tobacco products in blasting areas.
- Provide wash stations so workers can wash their hands and face routinely and before eating, drinking, or smoking.
- Vacuum or remove contaminated work clothes before eating, drinking or smoking.

- Provide accommodations for end-of-shift showers and change areas with separate storage facilities for street clothes, protective clothing and equipment.
- Keep contaminated clothing and equipment out of the clean change area.

#### **Respiratory Protection**

An abrasive-blasting respirator must cover the wearer's head, neck, and shoulders to protect the wearer from rebounding abrasive. Workers must use only respirators approved by NIOSH to provide protection from dusts produced during abrasive-blasting operations.

 Type CE NIOSH-certified blasting airline respirator with positive pressure blasting helmet.

Support personnel involved in cleanup and other related activities may also need respiratory protection.

When respirators are used, employers must establish a comprehensive respiratory protection program as required by the OSHA Respiratory Protection standard (29 CFR 1910.134).

#### Personal Protective Equipment

- Hearing protection
- Eye and face protection
- Helmet
- Leather gloves that protect to full forearm and aprons (or coveralls)
- Safety shoes or boots

#### Worker Training and Hazard Communication

- Provide training to abrasive blasters and support personnel on blasting health and safety hazards, how to use controls, personal hygiene practices, safe work practices and the use of PPE and respirators.
- Manufacturers are required to include appropriate health hazard information on the blasting materials on safety data sheets (SDS) as required under OSHA's Hazard Communication standard (29 CFR 1910.1200).
- Obtain and read the manufacturer's SDS for health hazard information on the abrasive blasting material you are using.

For more information on abrasive blasting and control measures see: OSHA's guidance document: "Abrasive Blasting Hazards in Shipyard Employment" (2006); and eTool: Mechanical Removers (Ship Repair).

Disclaimer: This OSHA Fact Sheet provides a general overview of the requirements in OSHA standards related to abrasive blasting. It does not alter or determine compliance responsibilities in these standards or the Occupational Safety and Health Act of 1970. Since interpretations and enforcement policy may change over time, the reader should consult current OSHA interpretations and decisions by the Occupational Safety and Health Review Commission and the courts for additional guidance on OSHA compliance requirements.

This is one in a series of informational fact sheets highlighting OSHA programs, policies or standards. It does not impose any new compliance requirements. For a comprehensive list of compliance requirements of OSHA standards or regulations, refer to Title 29 of the Code of Federal Regulations. This information will be made available to sensory-impaired individuals upon request. The voice phone is (202) 693-1999; teletypewriter (TTY) number: (877) 889-5627.

For assistance, contact us. We can help. It's confidential.



www.osha.gov (800) 321-OSHA (6742)

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U.S. Department of Labor

#### **Applicable OSHA Standards and Safety and Health Topic Pages**

The following table provides links to several OSHA standards (not all-inclusive) that may contain requirements that apply to abrasive blasting operations. For example, the removal of lead paint by abrasive blasting will likely require employers to follow provisions of the OSHA Lead standard. Safety and health topic pages listed here provide employers and workers with information that may be useful for safely conducting abrasive blasting.

General Industry	Shipyard Industry	Construction Industry	OSHA Topics Page(s)
1910.94, Ventilation	1915.33 & 1915.34, Chemical & Mechanical paint removers	1926.57, Ventilation	Ventilation
	Ventilation (as it applies to shipyard employment, 1910.94)		
	1915.13, Cleaning and other cold work		
1910.95, Occupational noise exposure	1910.95, Occupational noise exposure (as per Shipyard "Tool Bag" Directive, CPL 02- 00-182)	1926.52, Occupational noise exposure 1926.101, Hearing Protection	Noise
1910.132, Personal Protective Equipment	1915 Subpart I, Personal Protective Equipment	1926 Subpart E, Personal Protective Equipment	Personal Protective Equipment
Respiratory Protection (1910.134)	1915.154, Respiratory Protection refers to (1910.134)	1926.103, Respiratory Protection (refers to 1910.134)	Respiratory Protection
1910.141, Sanitation	1915.88, Sanitation	1926.51, Sanitation	
1910.1000, Air contaminants	1915.1000, Air contaminants	1926.55, Gases,vapors,	Permissible Exposure
Table Z-1, Limits for air contaminants	Table Z – Shipyards	Appendix A, Threshold	Hazardous and Toxic
Table Z-2, Toxic and Hazardous Substances		limit values of airborne contaminants for construction	Substances
Table Z-3, Mineral dusts			
Beryllium See 1910.1000, Table Z-1 for air contaminants	Beryllium See 1915.1000, Table Z	Beryllium See Table 1926.55, Appendix A	Beryllium
Silica See 1910.1000, Table Z-3	Silica See 1915.1000, Table Z	Silica See 1926.55, Appendix A	Silica
1910.1018, Inorganic Arsenic	1915.1018, Inorganic Arsenic	1926.1118, Inorganic Arsenic	Arsenic
1910.1025, Lead	1915.1025, Lead	1926.62, Lead	Lead (General Industry) Lead (Construction)
1910.1026, Chromium(VI)	1915.1026, Chromium(VI)	1926.1126, Chromium(VI)	Hexavalent Chromium
1910.1027, Cadmium	1915.1027, Cadmium	1926.1127, Cadmium	Cadmium
1910.1200, Hazard Communication	1915.1200, Hazard Communication (refers to 1910.1200)	1926.59, Hazard Communication (refers to 1910.1200)	Hazard Communication

# LITTLE BLASTER w/CARTRIDGE DUST COLLECTOR

	*** READ BEFORE OPERATING EQUIPMENT ***
	<ol> <li>Remove all shipping protection Check for any concealed shipping damage, if discovered, report the damage to your freight carrier AS Non-Disclosed Hidden Damage immediately.</li> </ol>
Ø	<ol> <li>Blast Cabinet should be placed in a desired location, away from any water or moist environment. If moist compressed air is present at this location, install a good moisture separator.</li> </ol>
	<ol> <li>Install Air Controls (READ INSTALLATION –" Little Blaster™ AIR CONTROLS")</li> </ol>
	4. Install Cartridge Dust Collector: Packaged with machine are bolts, washers, nuts and gasket material. Apply gasket to back of cabinet around large hole, press to make a firm bond to cabinet and squeeze together at seam. Align the 4-hole bolt pattern of the Dust Collector and install bolts, washers, and nuts. Tighten bolts and nuts securely.
	<ol> <li>Remove Window Frame/Window Glass and Install the Mylar Roll into the Mylar Dispenser. Pull Mylar from the Mylar Dispenser Across the Window Opening. Place the Window Glass/Window Frame on Top of the Mylar, Securing with Plastic Knobs.</li> </ol>
RS	<ul> <li>7. Plug electrical cord from side of dust collector into plug from light box.</li> <li>(READ OPERATION - "Little Blaster™ CARTRIDGE DUST COLLECTOR")</li> </ul>
	<ol> <li>Connect your air supply line to machine air inlet on left rear leg, we recommend using 1/2" I.D. Hose or Pipe minimum supply line. (Again, make sure your air supply line is free from oil and moisture). (If not, install a good moisture separator).</li> <li>Part #: 16-815 (DO NOT USE ANY QUICK DISCONNECT COUPLINGS)</li> </ol>
	<ol> <li>Connect the electrical cord from light box to a grounded electrical source.</li> <li>120-volt/60 cycle, single phase</li> <li>A 20 AMP breaker or fuse should be used.</li> <li>MAKE SURE MACHINE HAS PROPER GROUND</li> </ol>
AGGREGATES	<ol> <li>Charge blast machine with abrasive. Pour media into cabinet through one of the doors and fill to bottom of screen in sump of cabinet. Media Sold Separately @ Blast-It-All Online Store DO NOT FILL ABOVE SCREEN.</li> </ol>

# Little Blaster™ AIR CONTROLS

*** READ BEFORE OPERATING EQUIPMENT ***
<ol> <li>Remove Box from inside of the Machine. Box contains :</li> <li>➢ Foot Petal, ½" Air Regulator w/Assembled Hoses</li> <li>➢ Blast Gun w/Assembled Hose</li> <li>➢ ½" Barbed Brass Fitting</li> </ol>
2. Connect Air Regulator to the Bracket on the Front of the Machine w/Lock Ring
<ol> <li>Apply Teflon Tape to the ½" Barbed Brass Fitting and install to the to the Inside Left Leg of the Machine (Coupler). Attach/Secure Inlet Air Hose to the Barbed Brass Fitting.</li> </ol>

# Little Blaster™ AIR CONTROLS (cont'd)

4. Insert Air Hose from the Foot Petal through the Rubber Grommet on the Right Side of the Sump.
<ol> <li>Remove Work Grate from inside of the Machine. Insert the Media Hose (attached to Gun) from the Inside, through the Rubber Grommet on the Back Sump. Replace the Work Grate, ensuring the hoses are routed through the Work Grate Opening.</li> </ol>
6. Attach/Secure Air Hose to the Back of the Blast Gun.

# Little Blaster™ AIR CONTROLS (cont'd)



 Teflon Tape and Attach the Media Valve to the Bottom of the Sump and Attach/Secure the Media Hose from the Back of the Sump to the Media Valve's Barbed Brass Fitting. *Small Fitting Should Always be Facing Up an Remain Open.*

# **OPERATION**

# Little Blaster™

	*** READ BEFORE OPERATING EQUIPMENT ***
	<ol> <li>Preparing Parts for Blasting : All parts to be processed must be free of oil, grease, and moisture. Make sure parts are dry before putting into cabinet for processing.</li> </ol>
	<ul> <li>2. Air Pressure :</li> <li>Set air pressure at 40 ~ 80 PSI. Most parts for blasting should be blasted at 80 PSI. Designate parts to be processed, start at lower pressure, and work up the PSI scale to obtain desired finish.</li> <li>DO NOT CONNECT TO HIGH PRESSURE BOTTLE GAS, RUPTURE AND EXPLOSION CAN OCCUR.</li> </ul>
	3. Gun Angle and Distance: Direct blast at part with an approximate (45-60) degree angle with ricochet toward the back side of cabinet. Do not hold at 90 degree to part being processed. This will cause the media to blast to bounce back into the blast stream and slow blasting action. Also 90-degree angle will cause excessive wear on gun and viewing window. Hold gun approximately 6 inches from part being cleaned.
	GUN MUST ALWAYS BE POINTED AWAY FROM THE OPERATOR AND TOWARD ITEM BEING PROCESSED. NEVER BLAST WITH ANY OF THE CABINET DOORS OPEN. WHILE LOADING AND UNLOADING, NO ONE SHOULD BE AT THE OPERATOR STATION AT FRONT OF THE BLAST CABINET.
Ø	<ul> <li>4. Media : Media should be good quality and dry. Damp media will cause the media not to flow and will clog abrasive flow. Media Available @ Blast-It-All Online Store</li> <li>IF YOU ARE HAVING A PROBLEM SELECTING MEDIA FOR A SPECIFIED JOB, CONTACT YOUR DISTRIBUTOR FOR THEIR RECOMMENDATIONS</li> </ul>

# **OPERATION**

Little Blaster™ CARTRIDGE DUST COLLECTOR



# **OPERATION**

# Little Blaster™ CARTRIDGE DUST COLLECTOR (cont'd)



# TROUBLSHOOTING

		1. Caking of Media :
	Α.	Media caking is caused by moisture in compressed air supply or
		oily and greasy parts. If this is not corrected, media will not flow
		and will clog gun. Check air supply. If water or moisture is present,
		install a good moisture trap. If oily or greasy parts are being blast
		treated, you should first degrease and dry parts.
	В.	If blast gun should occasionally clog, tightly seal the front of the
		nozzle against the inside front the blast cabinet and push foot
	,	valve down 3 to 4 seconds. This will cause the system to back blast
		through the gun and media hose and clear the media hose.
		2. Gun Air Pressure Drop :
•		Set air regulator at <b>80 PSI</b> on air gauge. Push foot valve and if
		gauge reading should drop, check the air supply pipe or hose. A
$\bigcirc$		restriction in the supply line such as reducers or quick couplers will
		cause pressure drop. Also, if the blast cabinet is too far from the
		air compressor, a pressure drop can occur. We recommend 1/2" -
		1" I.D. air supply line. The bigger the better.
		2 Door Vicibility Excessive Dust :
•	Δ	5. Fool Visibility - Excessive Dust . Cabinat Air inlat blackad, chack for blackage
Ch	д. В	Dust collector sump full and needs emptied
	Б. С	Cartridge contaminated. Clean by pushing up and down
	с. п	Media breakdown - replace media and clean dust collector
	D.	
		4. Poor Media Flow :
	Α.	Wet or damp media caused from moisture or oil in compressed air
		line.
		Use dry air or install a moisture filter.
	В.	Replace media and clean media sump and hose.
	C.	Media level should be below media screen.
	D.	Hole in media hose from wear, replace hose assembly.
	Ε.	Poor Air Flow/CFM
	F. 1	Worn Gun Body, Nozzle or Orifice

		<ol> <li>Blasting Gun : After 10 - 12 hours of blast orifice and nozzle should b the nozzle shows wear, rot prevent uneven wear. If th checked, it could result in t of nozzle and damage to th If wear is detected on the replace.</li> </ol>	ting time the air e checked. If cate <b>1/4 Turn</b> to is is not the destruction ne gun housing. orifice tip,			
	Drain Cap	<ol> <li>After thumping the cartricap should be removed a emptied from dust collect box, bag or container, for disposing.</li> </ol>	idge, the drain and the <b>dust</b> ctor sump into a r ease of			
ITEM	DESCR	IPTION	FREQUENCY			
NOZZLES	INSPECT FOR WEAR		DAILY			
MEDIA HOSE	INSPECT FOR WEAR / HOLES		MONTHLY			
GUN BODY	INSPECT FOR WEAR		MONTHLY			
GUN ORIFICE	INSPECT FOR WEAR		MONTHLY			
MYLAR	INSPECT FOR POOR VISABILITY		PER USE			
VIEW WINDOW	Intrin       Description         NOZZLES       INSPECT FOR WEAR         MEDIA HOSE       INSPECT FOR WEAR / HOLES         GUN BODY       INSPECT FOR WEAR         GUN ORIFICE       INSPECT FOR WEAR         MYLAR       INSPECT FOR POOR VISABILITY         VIEW WINDOW       INSPECT FOR DAMAGE					
DUST / DEBRIS REMOVAL	REMOVE DUST / DEBRIS ACCUM	VULATION PER USE				
DUST FILTERS	CLEAN		AS NEEDED			
FLEX HOSE	Image: Constraint of the second se					
GLOVES	INSPECT FOR WEAR / HOLES		WEEKLY			
WEAR PLATES	ITEMDESCRIPTIONIOZZLESINSPECT FOR WEARMEDIA HOSEINSPECT FOR WEARMEDIA HOSEINSPECT FOR WEAR / HOLESJUN BODYINSPECT FOR WEARJUN ORIFICEINSPECT FOR WEARMYLARINSPECT FOR POOR VISABILITYIEW WINDOWINSPECT FOR DORN VISABILITYIEW WINDOWINSPECT FOR DUST / DEBRIS ACCUMULATIONUST / DEBRISREMOVE DUST / DEBRIS ACCUMULATIONUST FILTERSCLEANLEX HOSEINSPECT FOR WEAR / LEAKSLOVESINSPECT FOR WEAR / HOLES/ VAR PLATESINSPECT WEAR PLATE / LINERS FOR WEAR					

# MAINTENANCE

# VENTURI BLAST GUN TUNING :

	WATCH THE VIDEO FROM BLAST-IT-ALL <sup>®</sup> https://www.youtube.com/watch?v=dKT9XeFhNNY
	<ol> <li>Attach &amp; Secure Vacuum Gage Hose to the Bottom of the gun. Vacuum Gauge Part # 011267 Vacuum Gauge Kit Part # ( TBD )</li> </ol>
	<ol> <li>Attach &amp; Secure Compressed Air (80psi) Hose to the Orifice Inlet.</li> </ol>
	<ol> <li>Open Air Flow into the Orifice Inlet and Adjust the Orifice Inlet <i>IN or OUT</i> until 15 ~ 18 in Hg Vacuum is Achieved. Tighten Lock Nut to Maintain Position.</li> </ol>
25 - 100 - 100 - 0 - 0 - 0 - 0 - 0 - 0 - 0	<ol> <li>When Range of Vacuum Can Not be Achieved, Part/Parts Replacement will be Required.</li> </ol>

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-WM	OPTION				ZZON NU	NOZZLE - #	•)         #• (3/           5         20-07	5 20-06	RD GUN	NOZZLE - # 5) #6 (3/	20-079[	VS 20-090(	JN ORIFIC	ORIFICE - #	5 20-06	- L#) :SX	& (IN) * BC	2) #6 (6/: 5 20-041	-5 20-045 5 20-045		6 IN	20-50	
9009B					DARD GI		20-075	20-085	STANDA	#5 (5/16		20-085V 20-095M	DARD GL	56137 att	20-065	GUN ASS	+ NOZZLE #	() #5 (5/3 20-041-	t 20-042- 1 20-043-	SUN NO2	z	502	
.A					STAN		<b>#4 (1/4)</b> 20-074	20-084 20-094	<b>DE SPRAY</b>	#4 (1/4)			STAN.	100/87	20-064	NDARD (	TOP	#4 (4/32, 20-041-4	20-042-4 20-043-4		3	20-	
°		$\odot$					CERAMIC	BORON	WIE	MATERIAL:	CERAMIC	TUNGSTEN BORON		AA ATED ALL -	BRASS	STA		CERAMIC:	TUNGSTEN: BORON:	STA	MATERIAL:	CARBON NITRATED STEEL	
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ITEM ND.	PART ND.	DESCRIPTION
1 2 3 4 5 6A 6B	23-053 23-050 24-054-64  22-111 22-112	WINDDW FRAME WINDDW, VIEWING WINDDW GASKET  GLDVE, SNAP-IN (LEFT DNLY) GLDVE, SNAP-IN (RIGHT DNLY)
7 8 9 10 11 12 13 13	10-152-40 10-152-48 15-718 15-719 15-720 24-054-84 10-050-40 10-050-48	GRATE (LB 4024) GRATE (LB 4824) DDDR STRIKER (EITHER SIDE) DDDR CAM (EITHER SIDE) DDDR CAM RUBBER GRIP DDDR GASKET SUMP SCREEN (LB 4024) SUMP SCREEN (LB 4824)
14 15 16 17 18	24-055 20-200 011191 011190	CLEAN DUT DODR GASKET MEDIA VALVE MYLAR GLASS PROTECTOR MYLAR HOLDER

Little Blaster™ LIGHT BOX ASSEMBLY PARTS



8

9

10

SWITCH MOUNTING PLATE

COMPLETE LIGHT BOX (EXCEPT 3 & 4)

FEMALE RECEPTACLE

B198-2

13-616-1

010800 LBLTBX





\*NDTE: ITEM (2A) RUBBER SEAL MUST BE IN PLACE TO REDUCE PREMATURE MOTOR FAILURE

ITEM ND.	PART ND.	DESCRIPTION
1	D2025	DUST COLLECTOR BODY
2	11-1524	DUST COLLECTOR CARTRIDGE (INCLUDES 2A,2B,2C)
2A	11-1524S	RUBBER SEAL
2B	30-601	1/4" WASHER
20	30-510	1/4" WING NUT
3	13-200	MDTOR, 120V, 60/50 Hz, 6.9 AMP
4	24-056	GASKET, MOTOR SEAL
5	24-054-48	GASKET, TOP SEALING
6	010172	CORD, MALE PLUG
7	D2025-09	MOTOR BRACKETS
8	D2025-05&06	MOTOR HOUSING
9	D2025-04	COVER PLATE
10	010217	2" PIPE CAP
11		LIFT HANDLE

# Little Blaster™ RECOMMENDED CONSUMABLE/SPARE PARTS

PART NO.	DESCRIPTION		
23-050	WINDOW, VIEWING		
22-111	GLOVE, SNAP-IN (LEFT ONLY)		
22-112	GLOVE, SNAP-IN (RIGHT ONLY)		
20-200	MEDIA VALVE		
011191	MYLAR GLASS PROTECTOR		
20-054	NOZZLE NUT HOLDING		
20-074	NOZZLE CERAMIC, ¼" I.D. SIZE 4		
20-075	NOZZLE CERAMIC, 5/16" I.D. SIZE 5		
20-076	NOZZLE CERAMIC, 3/8" I.D. SIZE 6		
20-084	NOZZLE CARBIDE, ¼" I.D. SIZE 4		
20-085	NOZZLE CARBIDE, 5/16" I.D. SIZE 5		
20-086	NOZZLE CARBIDE, 3/8" I.D. SIZE 6		
20-053	"O"RING – NOZZLE SEALING		
20-040	GUN BODY ONLY		
20-052	LOCKNUT, ORIFICE		
20-063	RUBBER COVER, ORIFICE		
20-064	ORIFICE AIR 4/32" I.D. SIZE 4 INCLD. #6 & #7		
20-065	ORIFICE AIR 5/32" I.D. SIZE 5 INCLD. #6 & #7		
20-066	ORIFICE AIR 6/32" I.D. SIZE 6 INCLD. #6 & #7		
21-032	CLAMP, HOSE		
18-084	HOSE, MEDIA 1/2" I.D. (SPECIFY LENGTH)		
14-302	FITTING-HOSE TO GUN ½" HOSE x 3/8" MPT		
20-041	GUN, STD. COMP. W/CERAMIC NOZZLE (SPECIFY LENGTH)		
20-042	GUN, STD. COMP. W/CARBIDE NOZZLE (SPECIFY LENGTH)		
11-1524	DUST COLLECTOR CARTRIDGE (INCLUDES 2A, 2B, 2C)		
13-200	MOTOR, 120V, 60/50 HZ, 6.9 AMP		





# WARRANTY BLAST-IT-ALL

A Division of Hess & Associates, Inc. 185 Piper Lane Salisbury, NC 28145 P O Box 1615 Salisbury, NC 28147 Toll Free 800-535-2612 Fax 704-638-9311

WARRANT



Hess & Associates, Inc. Warrants to the original purchaser of the merchandise sold, to be free from defects in material or workmanship under normal use and service for a period of (5) years. This warranty does not cover typical wear items. Upon prompt notification by the purchaser, to LHA, components that are determined by LHA to be defective will be repaired or replaced at no additional charge F.O.B. our factory.

This warranty requires the following:

- 1) A completed and returned Warranty Registration card.
- 2) Use of Genuine Blast-it-all<sup>®</sup> OEM replacement parts purchased through Hess and Associates, Inc, Blast-it-all<sup>®</sup> to include common wear items. For the entire period of the warranty.
- 3) Failures to provide proof of the purchase of Blast-it-all® OEM wear Items voids warranty.

Manufacturer shall have the right to inspect prior replacing all merchandise in question.

Manufacturer shall not be required to pay any removal or installation charges whatsoever

Manufacturer shall not be held liable for prospective profits, special or consequential damages, nor shall any recovery of any kind against manufacturer be greater in amount the cost of the repairs of defects in workmanship

This warranty does not apply to damage caused by accidents, damage occurring during transit, alterations by unauthorized personnel, abuse or damage by flood, fire or acts of God, nor by artificially generated electric currents or any other cause whatsoever except defects in material or factory workmanship.

In ALL cases, defective parts must be returned to Hess and Associates, Inc. before credit is issued.

This warranty is in lieu of all other warranties expressed, written or implied and releases Hess and associates, Inc. of all other obligations and liabilities whatsoever. This warranty neither assumes nor authorizes any person any obligation other than those specified by this warranty.



**DO NOT USE SAND!** SAND WILL CAUSE SILICA DUST, WHICH IS THE CAUSE OF SILICOSIS DISEASE, A CONDITION OF MASSIVE FIBROSIS OF THE LUNGS. THIS STATEMENT INDICATES POTENTIAL PERSONEL HAZARD. FAILURE TO COMPLY WITH THESE INSTRUCTIONS MAY RESULT IN PERSONAL INJURY.

VENTURI GUN AIR * MOTOR DATA:								
	BLAST PRESSURE (PSI):							
NOZZLE: INCHES:	INCHES:	50	60	70	80	90	100	REQUIREMENTS:
#4 1/4"	#4 4/32"	14.26	16.39	18.62	20.76	22.99	25.00	AIR (CFM)
		5	5	5	7.5	7.5	7.5	MOTOR (HP)
#5 5/16"	#5	22.28	25.61	29.09	32.43	35.92	40.00	AIR (CFM)
	5/32"	7.5	7.5	7.5	10	10	10	MOTOR (HP)
#6 3/8"	#6 3/16"	32.01	36.86	41.90	46.85	51.60	56.00	AIR (CFM)
		10	10	15	15	15	15	MOTOR (HP)

# VENTURI BLAST DATA

VENTURI GUN NOZZLE PART #'S:						
NOZZLES: INCHES:	#4 1/4	#5 5/16	#6 3/8			
CERAMIC	20-074	20-075	20-076			
TUNGSTEN	20-084	20-085	20-086			
BORON	20-094	20-095	20-096			

VENTURI GUN ORIFICE PART #'S:					
ORIFICE: #4 INCHES: 4/32		#5 5/32	#6 6/32		
BRASS	20-064	20-065	20-066		

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