

48 x 36 RH Vertical Door

**PLEASE READ
BEFORE
USING THIS EQUIPMENT**

ECONO[®]LINE

**FOR OPTIMUM
PERFORMANCE
THIS MACHINE
MUST BE
OPERATED WITH
DUST COLLECTION
SYSTEM.**

**IF USING A 400 OR LARGER DUST
COLLECTOR, YOU MUST REMOVE THE
GROMMET AND GROMMET PLATE FROM
INSIDE THE EXHAUST RING OF THE
CABINET. SIMPLY REMOVE THE (3) BOLTS
AROUND THE EXHAUST RING, REMOVE THE
GROMMET PLATE W/GROMMET, THEN RE-
INSTALL THE (3) BOLTS TO FILL THE
HOLES.**

Econoline Abrasive Products

OPERATING INSTRUCTIONS & PARTS MANUAL BLAST CABINET

PLEASE READ THESE INSTRUCTIONS CAREFULLY BEFORE ATTEMPTING TO ASSEMBLE, OPERATE OR SERVICE THIS BLAST CABINET. FAILURE TO COMPLY WITH INSTRUCTIONS COULD RESULT IN PERSONAL INJURY AND/OR PROPERTY DAMAGE!

RETAIN INSTRUCTION FOR FUTURE REFERENCE.

UNPACKING

When unpacking blast cabinet, inspect unit carefully for any damage that may have occurred during transit.

GENERAL SAFETY INFORMATION

Follow all electrical and safety codes, as well as the national electric code (NEC) and OSHA.

Do Not operate cabinet or air flow with cabinet door or top open.

Do Not use fluids or mix fluids with blast media for blasting. This cabinet is designed to accommodate dry blasting media only.

DO NOT USE SAND IN THIS MACHINE – USING SAND WILL VOID THE WARRANTY

Keep floor around machine cleaned of media. Most forms of blasting materials are very fine and consequently slippery.

Important – check and clean your dust collector frequently

Do not exceed maximum operating pressure of 125 PSI.

WARNING: DO NOT OPERATE CABINETS, OR AIR FLOW WITH CABINET DOOR OR TOP OPEN. THIS COULD RESULT IN SKIN DAMAGE, SERIOUS EYE DAMAGE OR BLINDNESS IF THE BLAST WERE TO COME IN CONTACT WITH UNPROTECTED PARTS OF THE BODY.

WARNING: THIS IS A DRY-BLAST UNIT, IT IS NOT MADE TO ACCOMMODATE MOISTURE OR FLUIDS OF ANY KIND USED SEPARATELY OR AS A MIX WITH BLAST MEDIA

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TROUBLE SHOOTING CHART

WARRANTY

ECONOLINE ABRASIVE PRODUCTS
401 N. GRIFFIN STREET
GRAND HAVEN, MI 49417

PH: 616-846-4150
TOLL FREE: 1-800-253-9968
FAX : 616-846-6341

www.sandblasting.com

ASSEMBLY OPERATION

DO NOT USE ANY QUICK DISCONNECTS

Attach lamp box assembly to cabinet. Attach your air line to the safety switch (see assembly diagram). Use ½" inside diameter air hose with a brass hose barb 3/8" NPT. (Smaller I.D. hose will affect cabinet performance by restricting air flow).

Plug dust collector's electric cord into outlet in lamp box assembly. Plug cord from lamp box into your 110 volt 60 cycle electric line.

Attach one end of dust collector hose to dust collector and insert other end into hole in right side or back of cabinet.

To charge the system, pour approximately 25 to 50 pounds of sandblasting media into the hopper of the cabinet through door opening. Note: your media must not cover the air intake end of the siphon tube.

Air pressure may be regulated anywhere between 10 PSI and 120 PSI depending on the job to be done and media used. Most jobs will be done at pressures of 60 PSI to 80 PSI. Remember when using glass bead, media pressures above 80 PSI will cause your media to fracture and turn to dust.

Softer metals and materials or delicate parts should be cleaned at lower pressures. Non-critical parts requiring rapid cleaning may be done with higher air pressures for speed. Bear in mind that abrasives break down, and nozzles wear out twice as fast at 110 PSI than they do at 80 PSI.

For best results, operator should provide continuous gun movement over work surface, feathering media to produce consistent finish. Lower pressure produces finer finishes.

To blast, insert arms into gloves, grasp blast gun and depress foot pedal.

MAINTENANCE

Check gun's blast nozzle and air jet occasionally for signs of wear. When the opening inside the nozzle becomes too large, the result will be a poor blast pattern. If the gun fails to throw media, check abrasive hose, siphon tube and gun body for blockage. Excessive wear of air jet will also cause poor or complete loss of abrasive flow.

Water and/or oil in your air line will cause problems with the efficiency of your blasting. Before blasting, always drain water and/or oil from your air lines and compressor. We suggest a quality water filter be installed in the air line between compressor and blast cabinet.

Good visibility speeds up work; Clean dust from window often and replace the plastic window underlayment and window when needed. The lampshield will also become frosted and require replacement. Visibility is also greatly affected by the condition and type of dust collection system you use. Filters should be cleaned often and dust emptied from canister regularly (more than a gallon of debris is too much).

If after extended use of the machine the gasket around the door or window(s) becomes damaged or worn, it can be replaced (see diagram and parts list for cabinet).

This equipment is designed to the finest point of simplicity. With reasonable care it should give you many years of excellent service.

Blasting by its very nature is a high maintenance process. The same forces acting to separate materials from targeted pieces wear on the system itself.

Keep spare parts in stock to avoid down time.

PARTS LIST FOR AIR SYSTEM – 48 x 36 RH VERTICAL DOOR

<u>DESCRIPTION</u>	<u>PART NUMBER</u>
1. Air intake	
2. Door safety switch	411706
3. Air hose connecting safety switch to regulator(40")	201863
4. Pressure regulator	411116R
5. Air gauge only	411116G
6. Universal Siphon Tube	201785
7. Air hose connecting regulator to foot pedal	201715
8. Foot Pedal	201714YW
9. Trap Door Spring	411601
10. Trap Door Gasket	410546
11. Air hose connecting foot pedal to brass elbow	201715
12. Trap Door	n/a
13. Air inlet connecting air hose from foot pedal to cabinet	411100
13a. Hex nut 3/4" – 16 for air inlet	411551
14. Gun hose connecting gun to cabinet (48")	201872
15. Clear Abrasive Hose – (specify # of feet req.) (6'req.)	413403
16. Gun Complete - Standard for 48x36 RHVD	201540 see gun diagrams for individual part no.

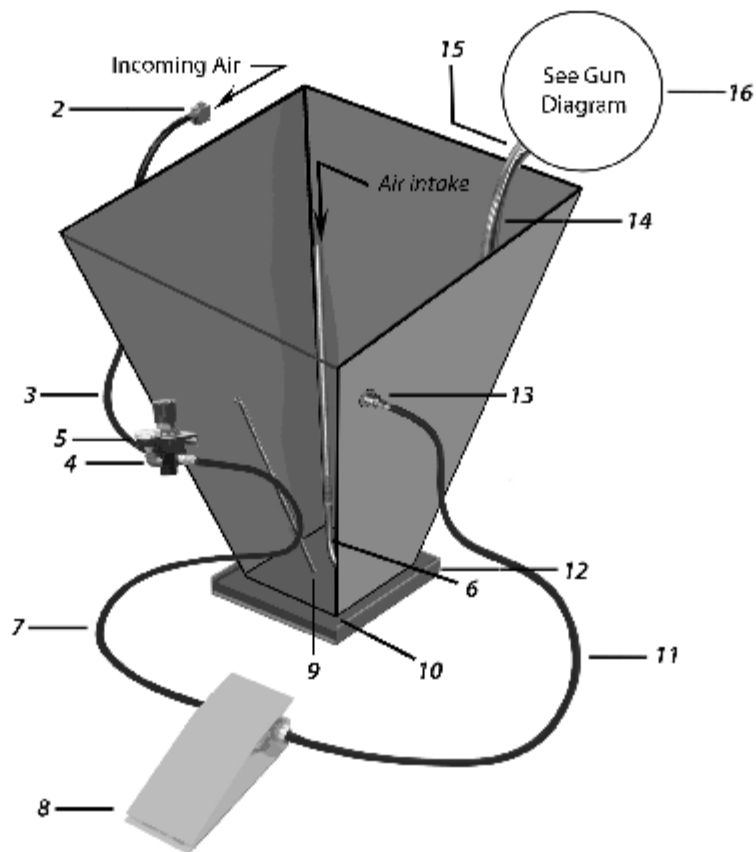
Call 1-800-253-9968 for assistance in locating an ECONOLINE distributor in your area

Air System Diagram

Notes:

All valves and regulators have a marking "Air In & Out" or they have an arrow indicating direction of air flow. They will not work if reversed.

The end of the siphon tube (free air intake) must be open for abrasive to flow.



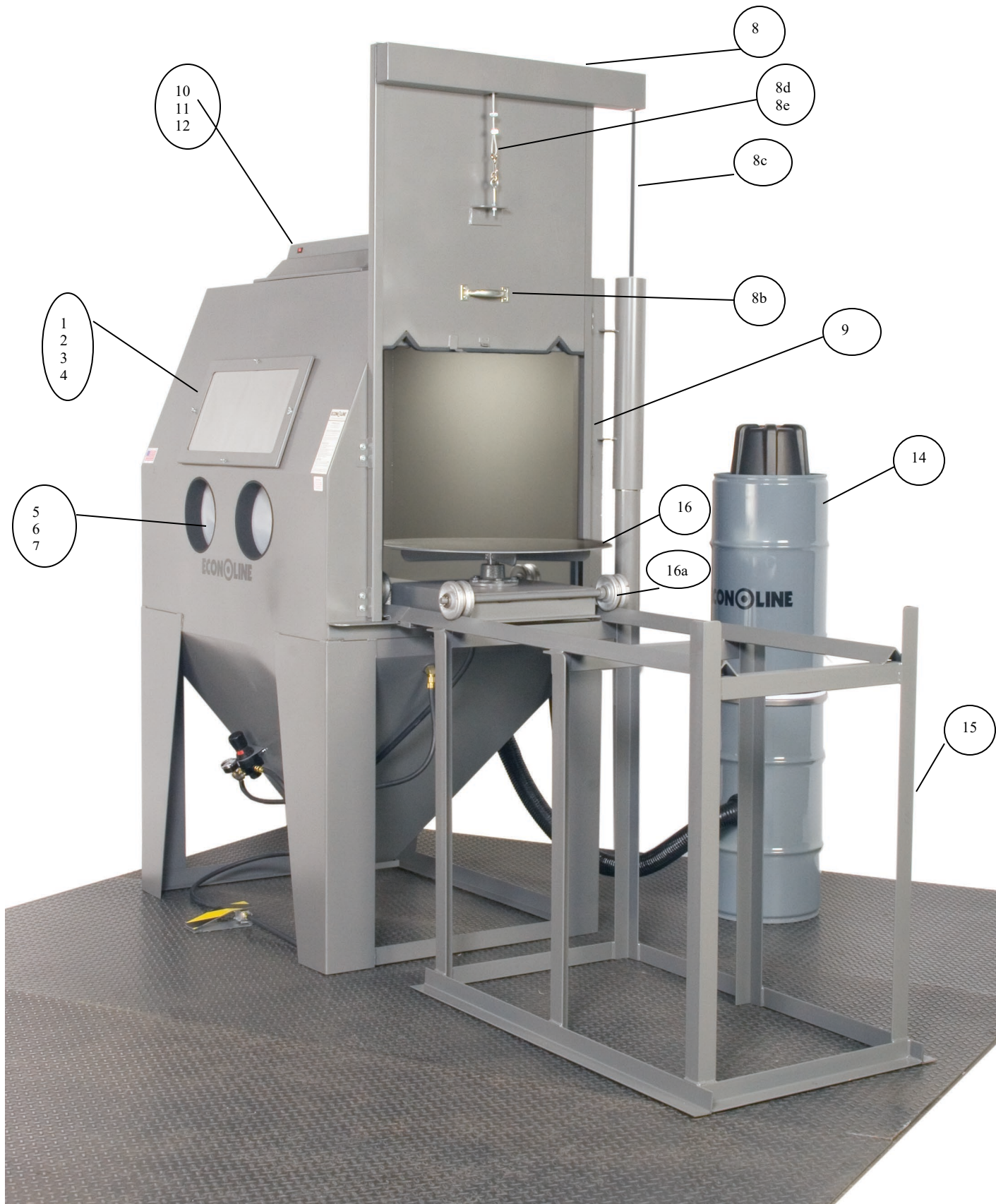
PARTS LIST FOR BLAST CABINET - 48x36 RH VD

DESCRIPTION	PART NUMBER
1. Window frame	309344-66
2. Window Plexi-glass 12x24	411405
3. Window Underlayment 12" x 24" (10 pieces pre-cut) 24 x 120" roll	313286 311535
4. Window gasket material (specify # of feet)	411403
5. Armhole gasket (specify # of feet req.)	411402
6. Glove Clamps (pair)	414513-2
7. Gloves 33 x 9 (pair) Left hand only Right hand only	412011 412012L 412012R
8. Side Door --- special for 48x36 rhvd	call
8a. Side Door Pulley – 2 required (not shown)	401966
8b. Pull Handle	411705
8c. 3/16" Cable - 6' required	401969
8d. Eye bolts – 2 required	401971
8e. 5/16" quick link – 2 required	401967
9. Side door gasket (specify # of feet)	411403
10. Lamp box assembly complete	202835-LED
11. Lampshield rigid plastic 11.8 x 25	411422
12. Lamp box gasket (specify # of feet)	411403
13. Work table (expanded metal) 48 x 36 –special sizes (Not shown)	call
14. Dust Collector – 10' Bag style	201768G-B10

Optional :

15. Outside Track - Built to match cabinet -	201460-66
16. Turntable and Cart	201725-66
16a. Casters for Cart – 4 required	401965

****The picture shown includes the optional track and turntable cart**



Gun overview

Parts List

<i>Part Description</i>		<i>Part #</i>	
1. Tungsten carbide nozzle	12 CFM 9/16" O.D. x 1/4" I.D.	410201	
	25 CFM 3/4" O.D. x 5/16" I.D.	201382	
	45 CFM 3/4" O.D. x 7/16" I.D.	410209	
	-Boron carbide nozzle (optional upgrade)	12 CFM	410208
		25 CFM	410207
		45CFM	410206
2. Gun body	12 CFM	201756	
	25 CFM	201757	
	Pistol grip (fits both 25 and 45 CFM nozzles)	201775	
3. Air Jet assembly	12 CFM 1/8" I.D.	201394	
	25 CFM 5/32" I.D.	201383	
	25 CFM for Pistol grip	201851	
	45 CFM	201541	
4. Complete Gun Assembly	12 CFM	201379	
	25 CFM	201381	
	Pistol grip -25 CFM	201540	
	-45 CFM	201542	

The standard nozzle supplied with cabinet is manufactured from tungsten carbide. Note the tapered end of the nozzle goes inside the gun (see drawing).

Boron carbide nozzles are available as an optional upgrade. This material is harder than tungsten carbide and should resist wear longer.

*Call 1-800-253-9968 for assistance in locating an Econoline distributor in your area.

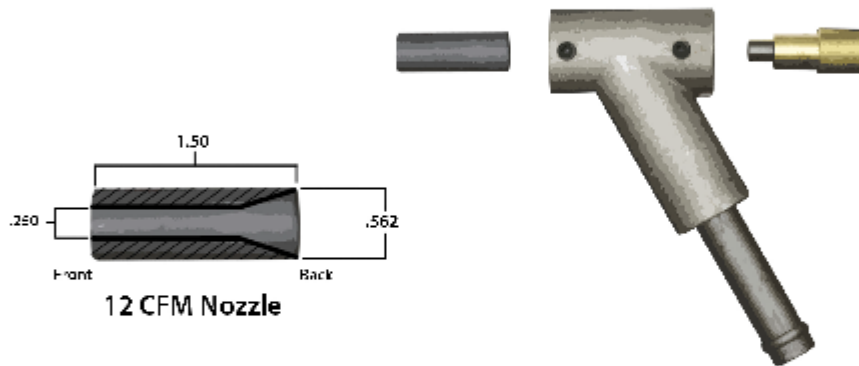
Gun Diagrams

This blast gun is designed to create a static vacuum. This vacuum draws abrasive through siphon tube and abrasive hose into gun body, where compressed air pushes media through blast nozzle.

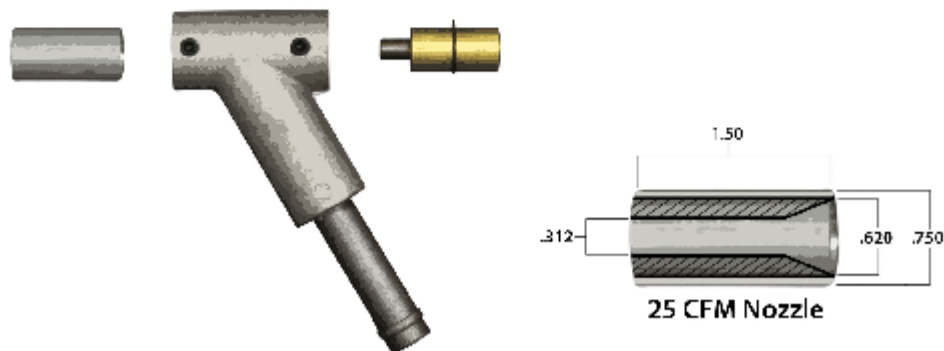
Maintenance and repair of this gun can be done quickly and simply. Loosen allen head screws in gun body to remove and inspect nozzle and air jet for wear.

Excessive wear on either of these parts will cause poor abrasive flow, and blast pattern.

12 CFM Gun Assembly



25 CFM Gun Assembly



Pistol Grip Gun Diagram

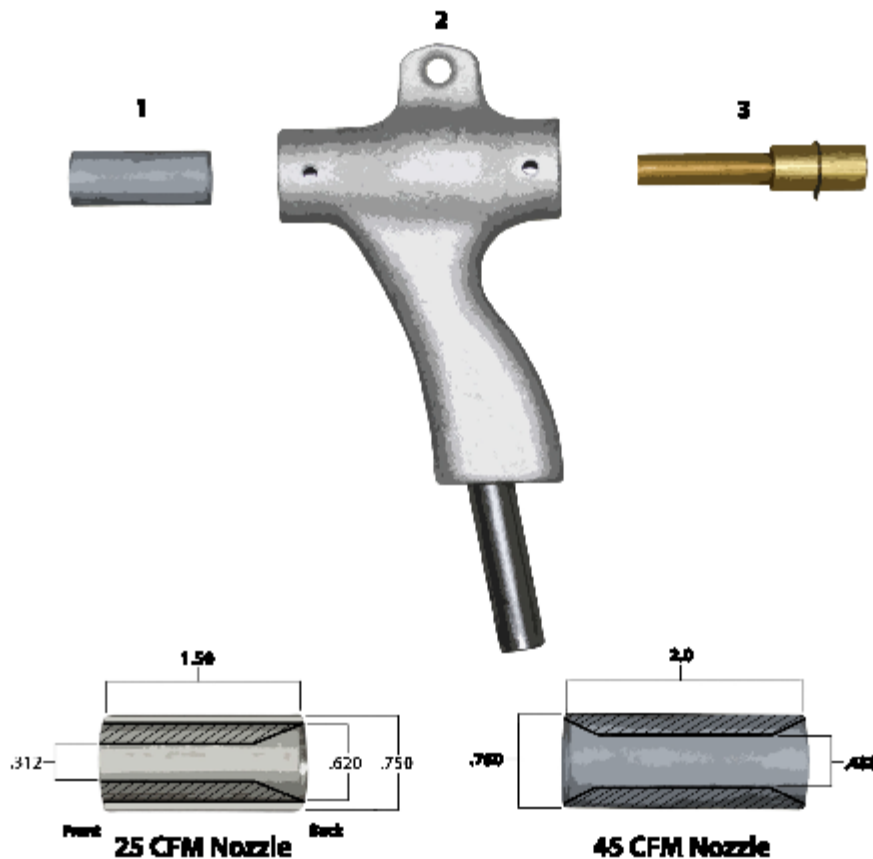
This blast gun is designed to create a static vacuum. This vacuum draws abrasive through siphon tube and abrasive hose into gun body, where compressed air pushes media through blast nozzle.

Maintenance and repair of this gun can be done quickly and simply. Loosen allen head screws in gun body to remove and inspect nozzle and air jet for wear.

Excessive wear on either of these parts will cause poor abrasive flow, and blast pattern.

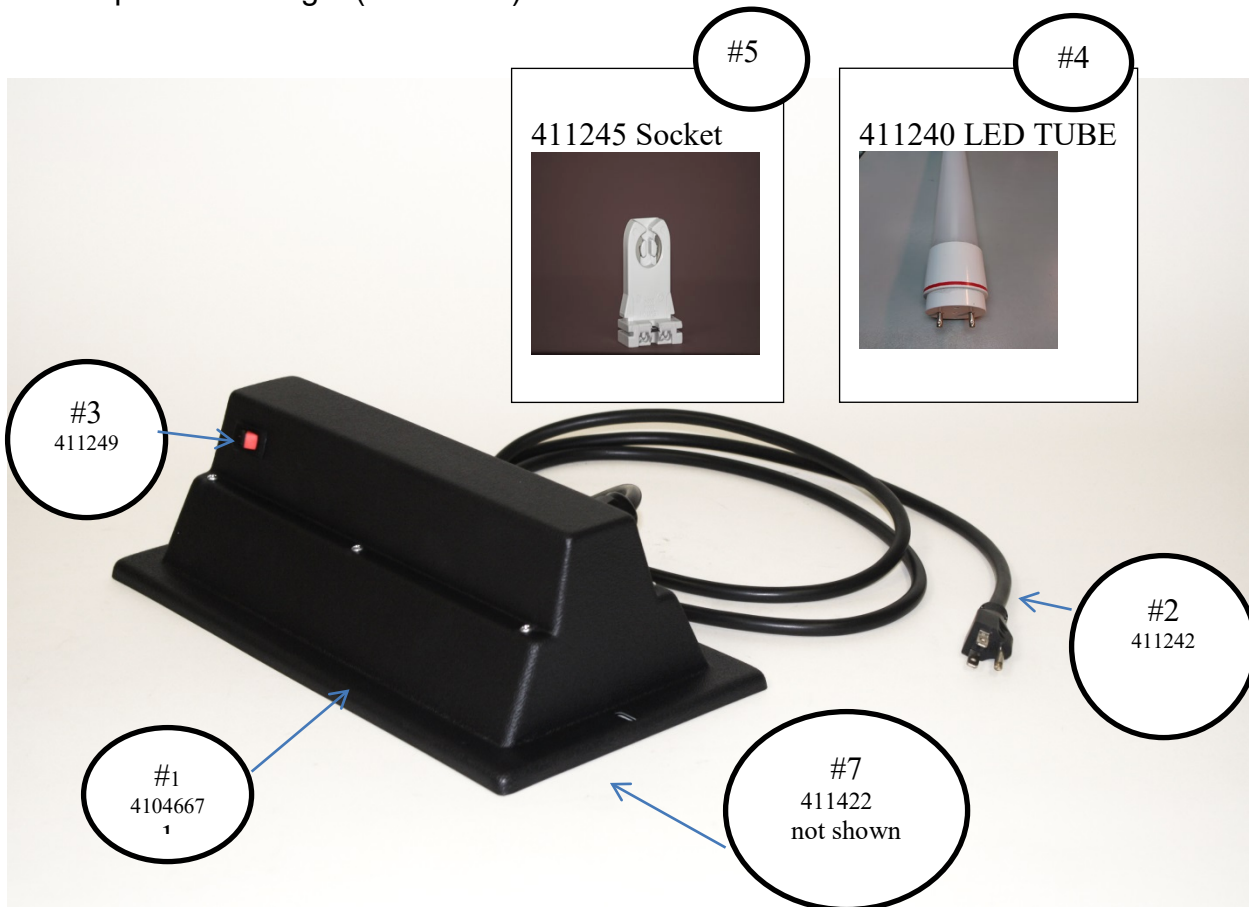
Note: The 25 CFM nozzle fits both the regular 25 CFM gun body and the pistol grip gun body.

25 & 45 CFM Gun Assembly



PARTS LIST FOR LARGE LIGHT BOX COMPLETE ASSEMBLY #202835-LED

<u>DESCRIPTION</u>	<u>PART NUMBER</u>
1. Light Box cover only	410466
2. Power Cord	411242
3. Light Switch (on/off)	411249
4. LED tube 7W / T8 / 5000K (2 required)	411240
5. Socket	411245
6. Lamp Shield – large (not shown)	411422



WARNING: This fixture has been modified and no longer operates fluorescent lamps. Ballast has been removed and there is line voltage being supplied to sockets. **DO NOT INSTALL FLUORESCENT LAMPS.**

ABRASIVES

Econoline Abrasive Products strives to maintain a varied inventory of blasting abrasives. Utilizing a worldwide base of reputable suppliers, Econoline is able to provide consistent delivery of quality abrasive products. Econoline looks forward to servicing your abrasive needs.

WHAT MEDIA TO USE

Brown Aluminum Oxide

Widely used as a cutting media. It can produce an “anchor” pattern in preparation for re-coating. It’s excellent for removing foreign matter, deburring, frosting glass and lettering stone. It is extremely fast cutting, can be reused many times and is classified in various sizes for a wide selection of finishes.

Glass Beads

Available in a wide range of sizes, glass beads are generally the most popular media used in most cabinets today. This all-purpose media is used for honing, polishing, peening, blending, finishing, removing light burrs and cleaning most light foreign matter such as carbon and other surface residues from pistons and valves. And with no base-metal removal or dimensional change. Weld and solder flaws can also be detected via glass bead blasting.

Black Silicon Carbide

When blasting silicon carbide is extremely fast cutting, this sharp media is used for cleaning very hard surfaces such as tungsten carbide.

Plastic

This new, dust free media is a special formulation of plastic materials that has high tensile, compressive and flexural strength combined with comparatively low hardness. Used for deflashing plastic parts and cleaning molds, dies, electronic connections and circuit boards. It can effectively deburr machined-iron castings and non-ferrous screw machine parts.

	ALUMINUM OXIDE	GLASS BEAD	SILICON CARBIDE	PLASTIC
FINISHING	X	X	X	
CLEANING / REMOVAL	X	X	X	X
SURFACE TREATMENT	X	X	X	
CLEANING SPEED	HIGH	MED	VERY HI	MID-HI
RE-USE	MED-HI	HIGH	MED-LO	MED
DUST LEVEL	HIGH	LO	MED-LO	MED
PROBABILITY OF METAL REMOVAL	MED-HI	VERY-LO	MED-HI	VERY-LO
HARDNESS (MOH SCALE)	8-9	5.5	9	3-4
TYPICAL BLAST PRESSURE	20-90	20-55	20-90	20-60
ANGULAR OR SPHERICAL	ANGULAR	SPHERICAL	ANGULAR	BOTH

TROUBLESHOOTING CHART

SYMPTOM	POSSIBLE CAUSES	CORRECTIVE ACTION
Too much dust in cabinet	<ol style="list-style-type: none"> 1. Exhaust unit not functioning efficiently. 2. Media is broken down or deteriorated. 	<ol style="list-style-type: none"> 1. All models. Remove lid from exhaust canister and clean cloth filter 2. Replace blasting media
Noticeable speed and efficiency are lost in blasting operation	<ol style="list-style-type: none"> 1. Media is broken down or deteriorated from constant use. 	<ol style="list-style-type: none"> 1. Replace media
Static Electricity	<ol style="list-style-type: none"> 1. Weather conditions, excessive dust in unit 	<p>1. Proceed as follows:</p> <ol style="list-style-type: none"> a. Properly ground the machine b. Allow work piece to rest on the work table grating in the unit. This will discharge static electricity through the cabinet into the unit's ground wire.
Poor Blast Pattern	<ol style="list-style-type: none"> 1. Worn nozzle 	<ol style="list-style-type: none"> 1. Replace nozzle
Poor Abrasive Flow	<ol style="list-style-type: none"> 1. Abrasive level too low 2. Dirty abrasives 3. Wet abrasives 4. Worn air jet 5. Worn nozzle 6. Worn siphon tube 7. Insufficient air <ol style="list-style-type: none"> a. When machine stands idle, check pressure gauge. With foot pedal depressed, needle on gauge should not drop below desired blasting pressure b. Needle should hold steady and not drop during blasting 8. Nozzle installed backwards 9. Clogged gun 10. Plugged siphon tube 	<ol style="list-style-type: none"> 1. Add abrasives 2. Replace, possibly install filter screen 3. Replace, possibly install water filter 4. Replace 5. Replace 6. Replace 7. Proceed as follows: <ol style="list-style-type: none"> a. Larger compressor, larger air line, smaller gun b. Larger compressor, smaller gun 8. Cone shaped end should be installed in towards air jet 9. Take apart, clean & reassemble 10. Check to see that hole is clear on both sides of the siphon tube

WARRANTY

ECONOLINE

THIS PRODUCT HAS BEEN MANUFACTURED AND ENGINEERED TO THE HIGHEST STANDARDS.

FIVE YEAR WARRANTY

ECONOLINE ABRASIVE PRODUCTS GUARANTEES ITS BLAST CABINETS AGAINST DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF FIVE YEARS FROM THE ESTABLISHED PURCHASE DATE. ECONOLINE WILL REPAIR OR REPLACE, FREE OF CHARGE, ANY DEFECTIVE PARTS DETERMINED TO BE COVERED UNDER THIS WARRANTY BY OUR FACTORY SERVICE PERSONNEL.

THE PARTS MUST BE RETURNED TO THE FACTORY, FREIGHT COLLECT, WITH A LETTER OF EXPLANATION. ON ACCEPTANCE OF CLAIM ECONOLINE WILL REPLACE DEFECTIVE PART.

CONDITIONS

THIS WARRANTY DOES NOT APPLY IF THE UNIT HAS BEEN MISUSED, ALTERED, OR USED FOR ANY PURPOSE OTHER THAN IN ACCORDANCE WITH THE OPERATING AND ASSEMBLY INSTRUCTIONS PROVIDED.

THIS WARRANTY DOES NOT COVER TRANSPORTATION, INTERIOR OR EXTERIOR FINISHES, HOSE ASSEMBLIES, NOZZLES, AIR JETS, WINDOWS, FILTERS, LAMPSHIELDS OR MEDIA VALVE.

OPERATION OF THIS UNIT WITH NATURAL SAND SHALL RENDER THIS WARRANTY NULL AND VOID.

WARNING

DO NOT USE SAND OR ANY ABRASIVE CONTAINING SILICA.
USE OF COMPOUNDS CONTAINING SILICA IS A HEALTH
HAZARD.

FREE SILICA WHEN INHALED CAN LEAD TO SERIOUS,
PERMANENT, DISABLING AND DEADLY DISEASE (SILICOSIS).