

101765S-A

ESB-007

SPOTBLASTER

IMPORTANT ASSEMBLY
NOTES

1. READ ASSEMBLY INSTRUCTIONS BEFORE STARTING.
2. EXAMINE ALL PACKING MATERIAL TO INSURE THAT NO PARTS ARE DISCARDED.
3. PERFORM EACH ASSEMBLY STEP IN THE ORDER INDICATED.
4. SAVE THIS MANUAL FOR FUTURE REFERENCE.

ESB-007
SPOTBLASTER

ASSEMBLY INSTRUCTIONS

1. LOCATE AND REMOVE HOSE ASSEMBLY AND SMALL SUB-PACK FROM CARTON.
2. LAY CARTON ON IT'S SIDE AND CAREFULLY REMOVE UNIT FROM CARTON.
3. SET UNIT UPRIGHT.

ESB-007

SPOTBLASTER

ASSEMBLY INSTRUCTIONS

4. RELEASE THE (2) SNAP LATCHES ON UNIT BODY AND LIFT THE VACUUM MOTOR HEAD ASSEMBLY FROM UNIT (SEE DIAGRAM 1). CAREFULLY SET ASSEMBLY ASIDE. REMOVE DUST DEBRIS BUCKET FROM UNIT BODY AND SET ASIDE.

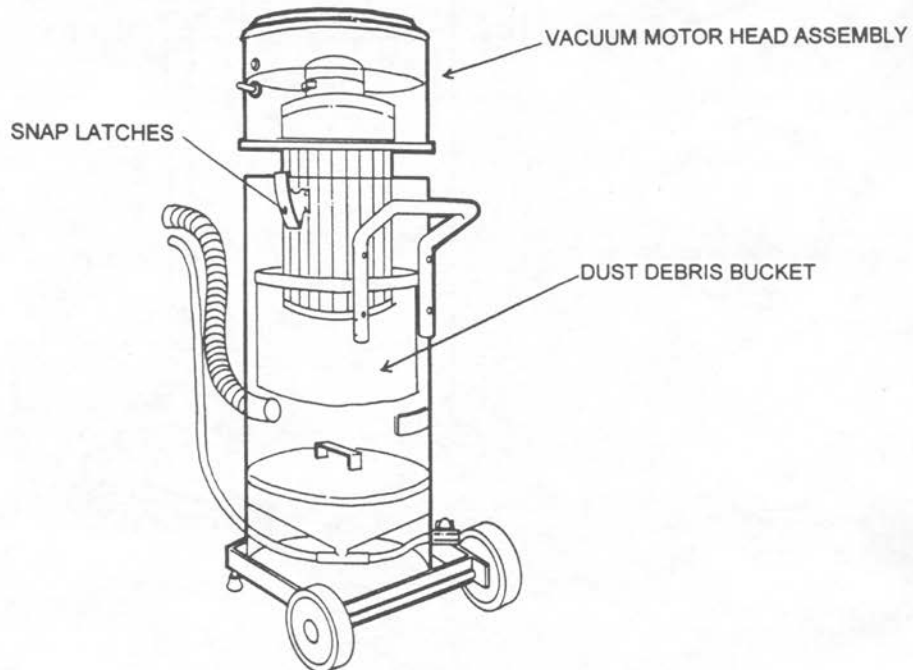
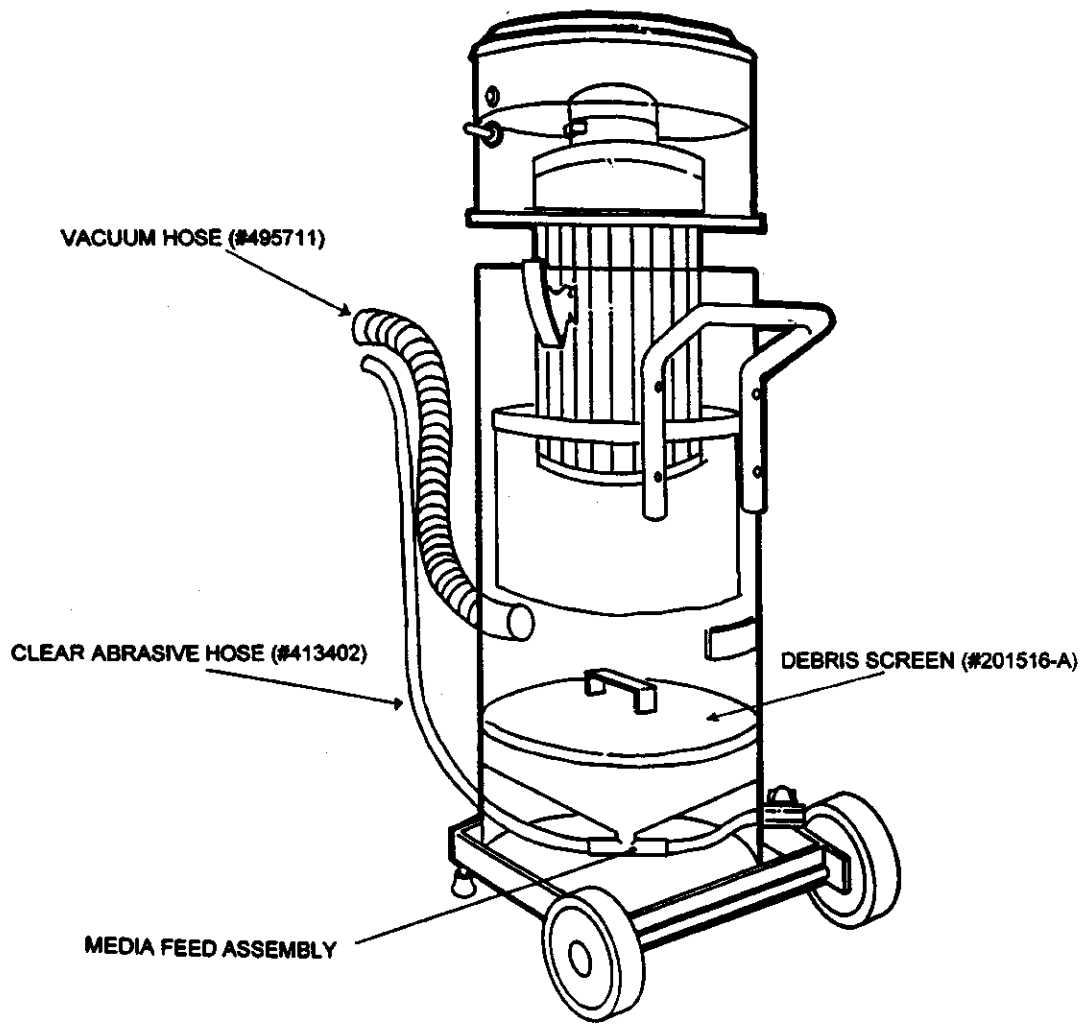


DIAGRAM 1



ESB-007

SPOTBLASTER

ASSEMBLY INSTRUCTIONS

(CONTINUED)

5. LAY UNIT BODY ON IT'S SIDE.
LOCATE HOSE ASSEMBLY AND NOTE THAT ON ONE END OF THE ASSEMBLY, THE CLEAR ABRASIVE HOSE (#413402), PROTRUDES FARTHER THAN THE VACUUM HOSE (#495712). INSERT THE LONG END OF THE CLEAR HOSE THROUGH THE HOLE IN THE UNIT'S BODY (NEAR BASE) AND CONNECT TO MEDIA FEED ASSEMBLY AS SHOWN IN DIAGRAM 2.
SLIDE VACUUM HOSE ONTO PIPE EXTENDING FROM SIDE OF UNIT BODY.

STAND UNIT UPRIGHT.

ESB-007

SPOTBLASTER

ASSEMBLY INSTRUCTIONS

(CONTINUED)

6. YOU MAY NOW LOAD THE BOTTOM OF THE UNIT WITH 15 TO 25 LBS. OF ABRASIVE MEDIA. (SEE ABRASIVE GUIDE. THIS UNIT IS MOST EFFECTIVE WHEN USED WITH A MEDIUM SIZE ALUMINUM OXIDE, 120 - 180 SCREEN SIZE.)

NOTE: WHEN LOADING, IT IS NOT NECESSARY TO REMOVE DEBRIS SCREEN (#201516-A) FROM BOTTOM OF UNIT.

7. REPLACE DUST DEBRIS BUCKET (#551050) IN BODY OF UNIT.

8. REPLACE VACUUM MOTOR HEAD ASSEMBLY AND SECURE WITH SNAP LATCHES.

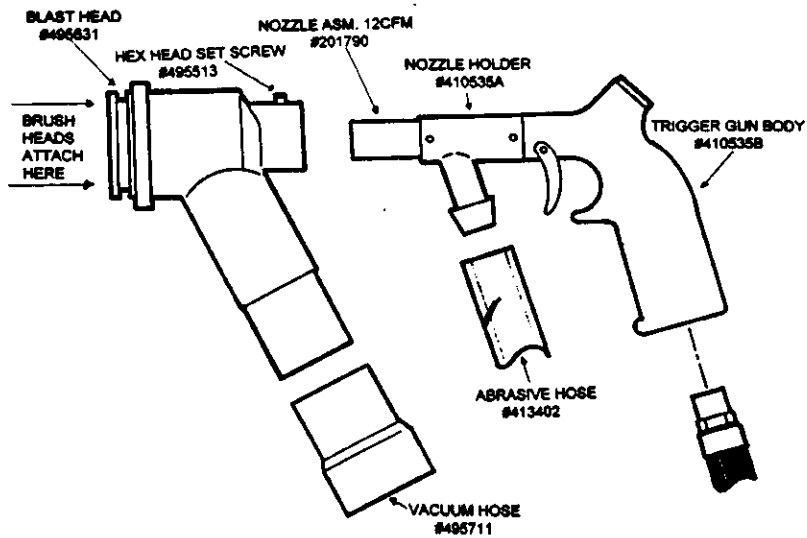
ESB-007

SPOTBLASTER

ASSEMBLY INSTRUCTIONS

(CONTINUED)

9. REMOVE GUN ASSEMBLY FROM SUB-PACK.
ATTACH ABRASIVE HOSE (#413402) TO HOSE BARB ON NOZZLE HOLDER (#410535A) SECTION OF TRIGGER GUN.
SLIDE VACUUM HOSE (#495711) ONTO BLAST HEAD ASSEMBLY (#495531).
ATTACH AIR HOSE (#202578) TO TRIGGER GUN (#410535B).
SEE DIAGRAM 3.



ESB-007

SPOTBLASTER

ASSEMBLY INSTRUCTIONS

(CONTINUED)

10. ATTACH THE OTHER END OF AIR HOSE (#202578) TO AIR REGULATOR / FILTER (# 411133). (NOTE AIR FLOW DIRECTIONAL ARROW ON REGULATOR). AIR HOSE CAN NOW BE ATTACHED TO HOSE ASSEMBLY WITH TY-WRAPS.

11. THREAD PRESSURE GAUGE INTO REGULATOR / FILTER BODY ON SIDE OF UNIT.

12. ATTACH 1/2" OR LARGER AIR LINE FROM COMPRESSOR TO REGULATOR USING A 3/8 NPT FITTING.

IMPORTANT: WHEN CONNECTING AIR TO REGULATOR, AVOID USING QUICK DISCONNECTS AS THESE GREATLY REDUCE AIR VOLUME TO GUN AND WILL CAUSE UNIT TO PULSE.

SEE DIAGRAM 4

13. SELECT THE DESIRED BRUSH FOR YOUR APPLICATION AND ATTACH TO THE BLAST HEAD USING THE RUBBER STRAP PROVIDED.

14. YOUR SPOTBLASTER UNIT SHOULD NOW BE READY FOR OPERATION.

ESB-007

SPOTBLASTER

OPERATING INSTRUCTIONS

WARNING

**SAFETY GLASSES MUST BE WORN WHEN
OPERATING THIS EQUIPMENT !**

1. WITH AIR CONNECTED AND COMPRESSOR ON , SET REGULATOR AT APPROXIMATLY 75 - 100 PSI DEPENDING ON SURFACE TO BE CLEANED AND MEDIA BEING USED.

NOTE: GLASS BEAD WILL SHATTER IF USED AT PRESSURES GREATER THAN 75 TO 80 PSI.

2. CONNECT POWER CORD TO POWER SOURCE.

3. TURN POWER SWITCH ON VACUUM HEAD TO THE "ON" POSITION.

4. WITH ONE HAND HOLDING THE TRIGGER GUN, AND THE OTHER HAND ON THE BRUSH HEAD ASSEMBLY, MOVE IN THE DIRECTION WHERE FINISHING IS REQUIRED. THERE IS NO NEED TO PUSH HARD ON BRUSHES AS THEIR ONLY FUNCTION IS TO TRAP ABRASIVE AND MAINTAIN A CLOSED VACUUM AREA FOR THE ABRASIVE TO BE RECYCLED.

5. WHEN OVER THE AREA TO BE FINISHED, SQUEEZE THE TRIGGER AND CONTINUE TO MOVE THE GUN SMOOTHLY OVER THE SURFACE UNTIL FINISH DESIRED IS ACHIEVED.

NOTE: TO ADJUST THE AMOUNT OF ABRASIVE COMING OUT OF THE GUN , ADJUST THE MEDIA VALVE (#495740) WHILE OPERATING GUN UNTIL GOOD PERFORMANCE IS OBTAINED. UNIT WILL NOT OPERATE WITH VALVE IN FULL CLOSED POSITION. THE CLOSER THE VALVE IS TO BEING CLOSED, THE MORE MEDIA THE GUN WILL TRY TO PULL. SEE DIAGRAM 5.

INSTRUCTIONS AIR HOSE REGULATOR TO TRIGGER GUN

ECONOLINE®

AIR HOSE SHOULD BE 3/8" ID MIN. 10FT. LENGTH

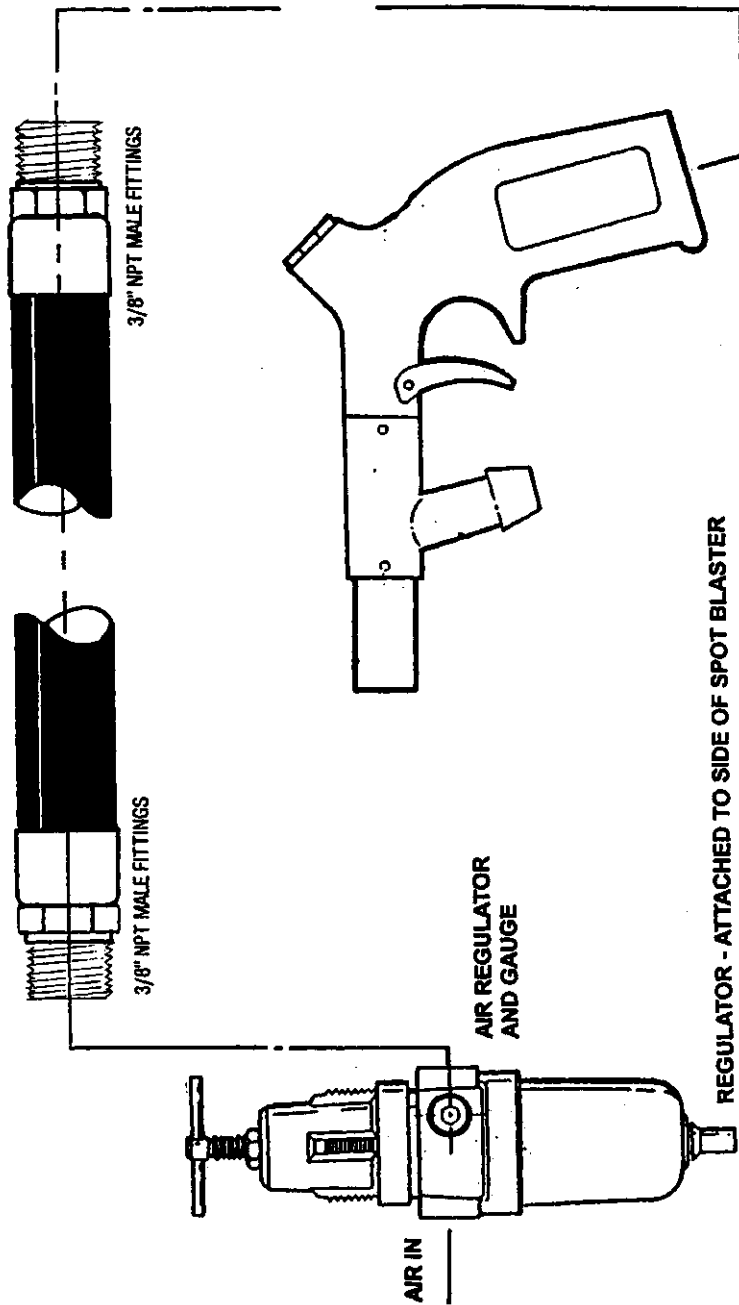


DIAGRAM 4

ESB-007
SPOTBLASTER
TROUBLE SHOOTING TIPS

PROBLEM:

DECREASE IN BLAST PERFORMANCE

POSSIBLE SOLUTIONS:

1. POSSIBLE LOW AIR PRESSURE.

CHECK AIR COMPRESSOR AND HOSE CONNECTIONS FOR ANY LEAKS. HOSE SIZE SHOULD BE AT LEAST 1/2". CFM INPUT IS CRITICAL, REMOVE QUICK DISCONNECTS FROM INPUT HOSES AS THEY GREATLY DECREASE AIR VOLUME.

2. MOISTURE IN THE ABRASIVE.

AIR SUPPLY MUST BE CLEAN AND DRY. DRAIN COMPRESSOR TANK, CHECK AIR FILTER, AND REPLACE MEDIA WITH FRESH DRY ABRASIVE.

3. FILTER NEEDS CLEANING.

CLEAN AIR FILTER.

4. ABRASIVES ARE WORN OR TOO FINE.

ADD NEW ABRASIVE.

5. GUN BLOCKAGE.

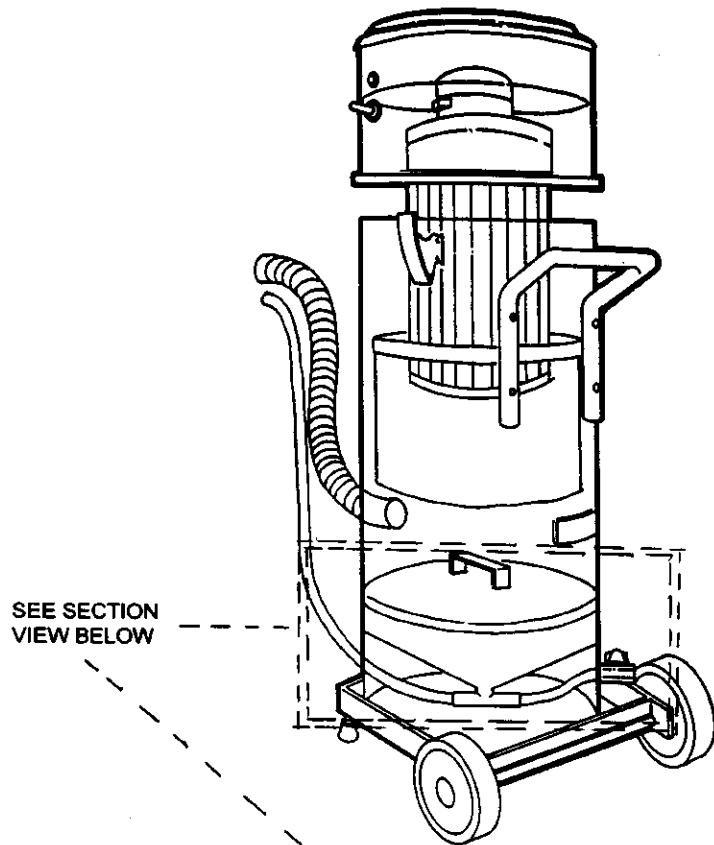
DISCONNECT AIR AND POWER, UNSCREW NOZZLE AND TAKE A PAPER CLIP OR THIN WIRE AND LOOSEN POSSIBLE BLOCKAGE IN THE GUN.

6. MEDIA VALVE IMPROPERLY ADJUSTED.

ADJUST MEDIA VALVE (#495740) WHILE OPERATING GUN UNTIL GOOD PERFORMANCE IS OBTAINED.

7. NOZZLE AND AIR JET WORN.

REPLACE NOZZLE AND AIR JET.



SECTION VIEW - BOTTOM
MEDIA FEED - ESB-007

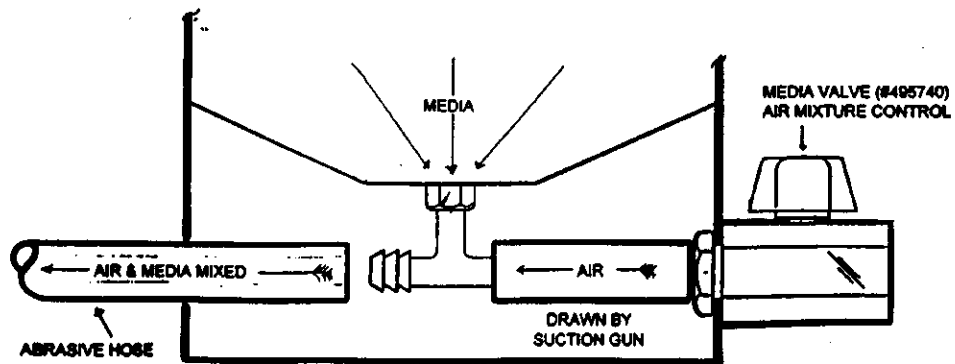


DIAGRAM 5

ESB-007

SPOTBLASTER

OPERATING TIPS

1. KEEP MACHINE CLEAN TO ASSURE OPTIMUM PERFORMANCE.
2. AFTER EACH USE, LIFT OFF VACUUM HEAD AND KNOCK OFF DUST FROM FILTER. AFTER ONE HOUR OF CONTINUOUS BLASTING, LIFT OFF VACUUM HEAD AND BLOW OFF DUST WITH AIR OR VACUUM.
3. THE FLATHEAD BRUSH (#495611) IS FOR FLAT SURFACES. THE OUTSIDE CORNER BRUSH (#495631) , AND THE INSIDE CORNER BRUSH (#495621) ARE AVAILABLE AS OPTIONAL ACCESSORIES AND IMPROVE PERFORMANCE WHEN WORKING IN CORNERS.
4. BEFORE YOU START WE RECOMMEND THAT YOU SPREAD OUT THE BRUSH HAIRS IN SUCH A WAY, THAT IT DOES NOT COVER THE JET SPRAY INSIDE THE BRUSH, BECAUSE THE ABRASIVES WILL DAMAGE THE BRUSH HAIRS.
5. WHEN BLASTING A 90 DEGREE CORNER, ALIGN THE GUN AT A 45 DEGREE ANGLE TO REACH THE DEEPEST AREA. MOVE THE GUN IN A SLOW ROTATING MOTION FOR BEST RESULTS.



Abrasive Blasting 'MEDIA' General Information

Abrasive blast cleaning removes foreign matter such as corrosion and old coating from a surface by hurling abrasive particles a base material (substrate).

Some major advantages of blasting over other cleaning methods: dirt and dust remain in the cabinet, cleaning is through and prepares a good base for layout, cutting, welding and paint or other surface finish and the operating cost is low.

By using different abrasives you may vary the treatment from one that removes foreign materials without affecting tolerance to etching a part in preparation for re-coating.

ABRASIVES

The type of abrasive determines cost and effectiveness of the blast-cleaning operation. The variables are quality of finish desired and time required to obtain that finish. Start with a lasting, durable abrasive using the smallest size that will do the job then work up to largest size that does an acceptable job in the shortest time.

Factors that govern efficiency of abrasive-blast media:

SHAPE

Smooth...round particles hammer the base material to impart a peened finish and to dislodge brittle scale better than sharp-edged particles do.

Sharp...edged particles remove material quickly, leaving an etched or matte finish.

SIZE

This determines finished roughness of work. Large particles bring more kinetic energy to the work surface, but excessively large particles remove more material than small ones. As the abrasive works, particles break into smaller and smaller sizes.

HARDNESS

The harder the abrasive the deeper it penetrates and faster it works. Soft abrasives deform and waste kinetic energy. Brittle abrasive waste energy by fracturing.

MASS

For equal size, denser particles have more kinetic energy and work faster.

BREAK DOWN RATE

This is the rate of fracture of abrasive during blasting. The more resistant to impact fracture, the more consistent the blasting action.

CLEANING...Abrasive blasting removes corrosion oxides, flux slag, heat treat scale, surface discoloration and paint.

FINISHING...it imparts a shiny-bright, matte or etched surface to work and will blend defects and marks.

PEENING...It can increase fatigue life of work piece by hammering to leave the surface under residual compressive stress.

ABRASIVES

Econoline Abrasive Products strives to maintain a varied inventory of blasting abrasives. Utilizing a worldwide base of reputable suppliers 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

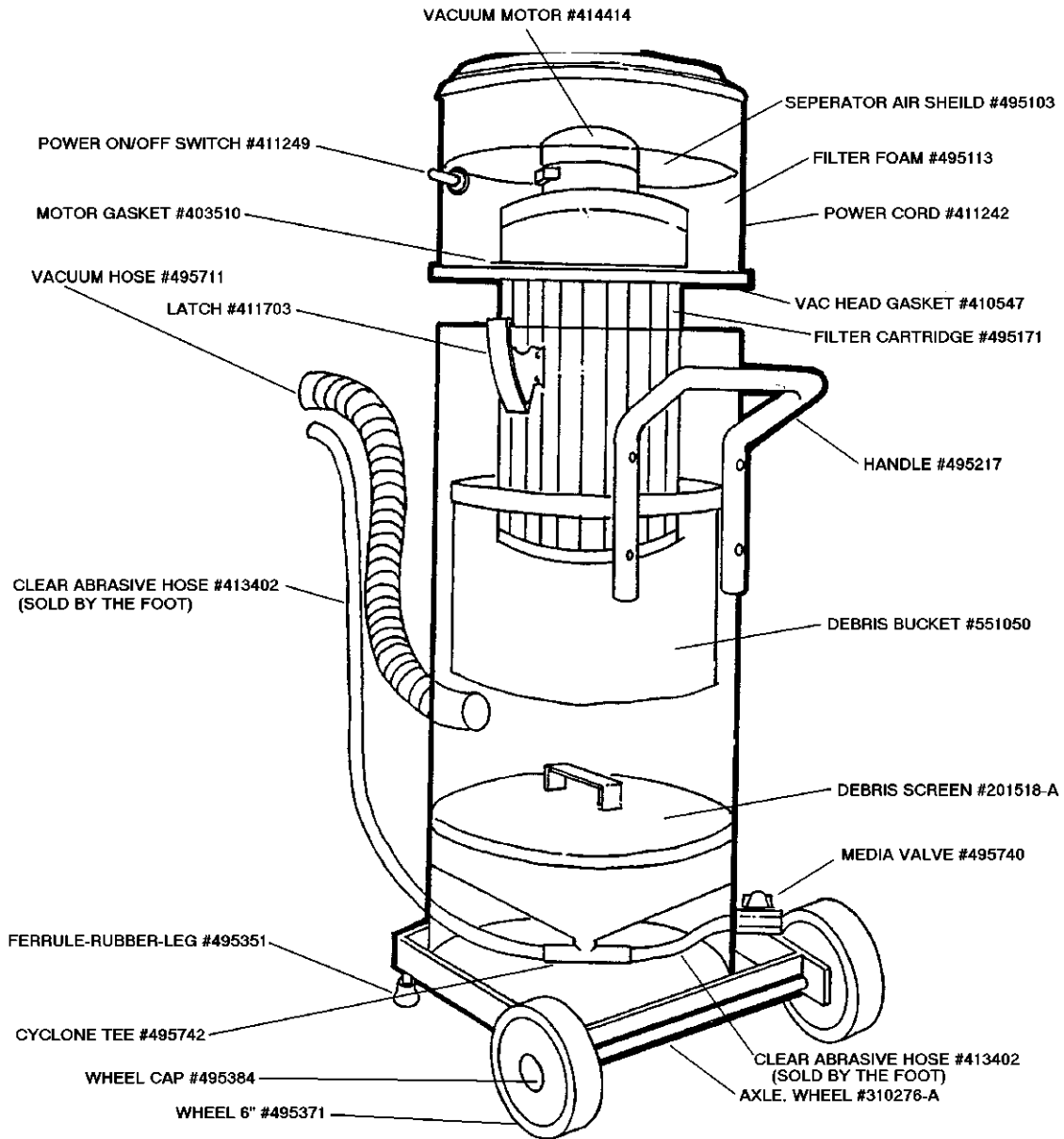
When blasting silicon carbide is extremely fast cutting, this sharp media is used for cleaning very hard surfaces such as tungsten carbide.

Plastic

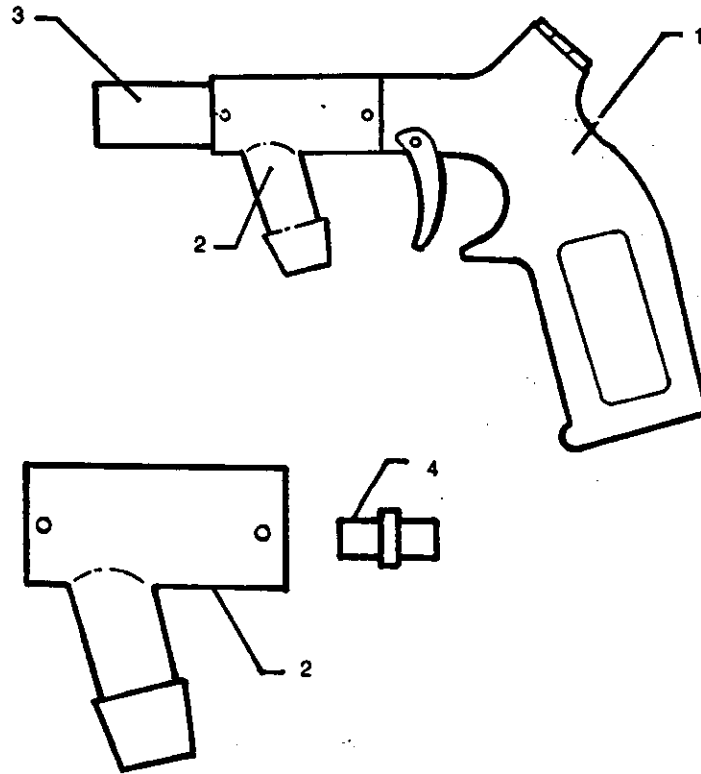
This new, dust free media is a special formulation of plastic materials that has high tensile, compressive and flexural strength combined with comparatively low hardness. Used for deflashing plastic parts and cleaning molds, dies, electronic connections and circuit boards. It can effectively deburr machined-iron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

ESB-007 PARTS LIST



ASSEMBLY DIAGRAM FOR 12 CFM TRIGGER GUN



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.

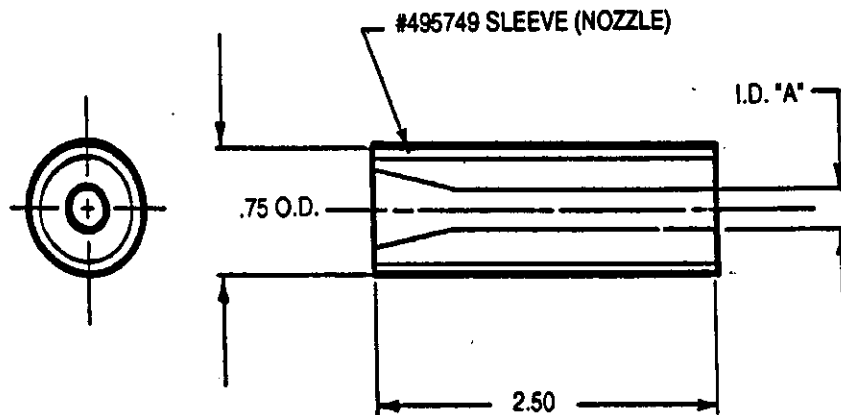
To extend life of gun assembly it is important to rotate the air jet and nozzle in gun body regularly.

PARTS LIST FOR 12 CFM TRIGGER GUN

Description	Catalog #	Part #
1. Gun Body		410535B
2. Nozzle holder		410535A
3. Nozzle assembly 12 CFM		201790
4. Air jet 12 CFM		410537
5. Gun assembly complete		201788

NOZZLE ASSEMBLY

Nozzle assembly 12CFM	#201790
Nozzle assembly 25CFM	#201791



I.D. "A" = 1/4" #201790 Nozzle assembly 12CFM
 I.D. "A" = 5/16" #201791 Nozzle assembly 25CFM

IMPORTANT

Replacement and service parts may be ordered by using either catalog or part number listed above.

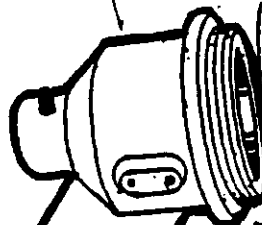
Call 1-800-253-0968 for assistance in locating an ECONOLINE distributor in your area.

ESB-007
SPOTBLASTER
BRUSH ASSEMBLY

OUTSIDE CORNER BRUSH
(#495631)



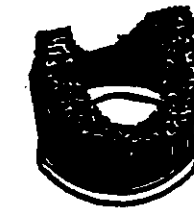
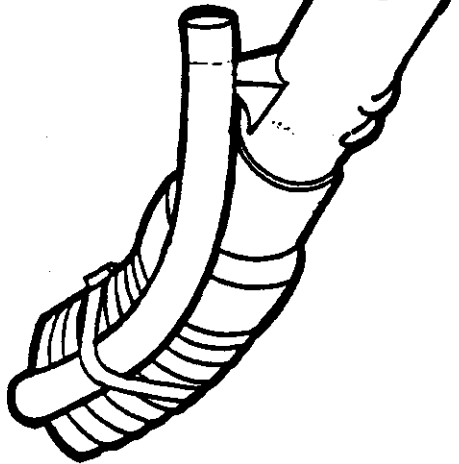
BLAST HEAD ONLY
(#495531)



FLATHEAD BRUSH
(#495611)



BLAST HEAD ASSEMBLY
W/BRUSH
(#495530)



INSIDE CORNER BRUSH
(#495621)