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SBP-215
SANDBLAST HOPPER

INSTRUCTION & PARTS MANUAL

2-8-12

IMPORTANT!
READ BEFORE USE!
DO NOT DISCARD!

INSTRUCTION MANUAL FOR THE 5 GALLON
ABRASIVE BLAST EQUIPMENT WITH SUCTION GUN.

OWENER'S MANUAL FOR ABRASIVE BLAST EQUIPMENT

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 inteded for knowledgeable, experiencced users of abrasive blasting equipment.

No representation is intended or made as to the suitability of the products described herein for any particular purpose or application. No represention 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's experiece and exepertise, and must not be based on information in this material.

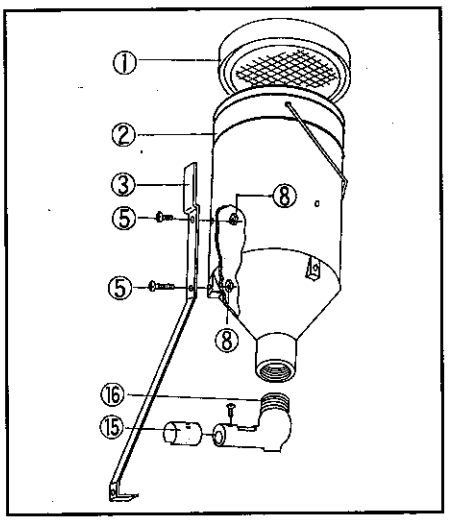
The products described in this material may be combined by the user in a variety of ways for purposes determined solely by the user. No representations are inteded or made as to the suitability or engineering balance of the combination of products determined by the user in this selection, nor as to the compliance with regulations or standard prectice of such combinations of components or products.

It is the respponsibility of the knowledgeable, experienced users of the products mentioned in this material to familiarize with the appropriate laws, regulations and safe prectices that apply to these products, equipment that is connected to these products, and materials that may be used with these products.

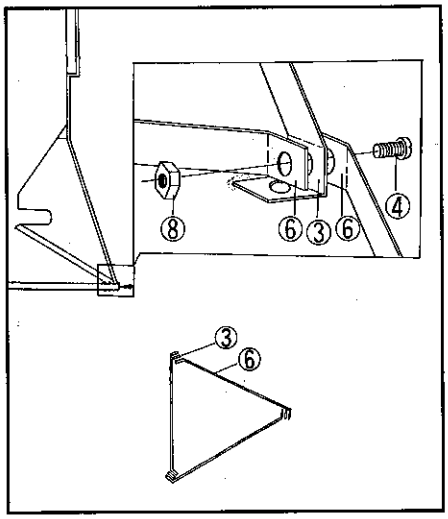
It is the responsibility of the user to insure that proper training of operators has been performed and a safe work environment is provided.

IMPORTANT WARNING FOR SAFE, PRODUCTIVE BLAST CLEANING:

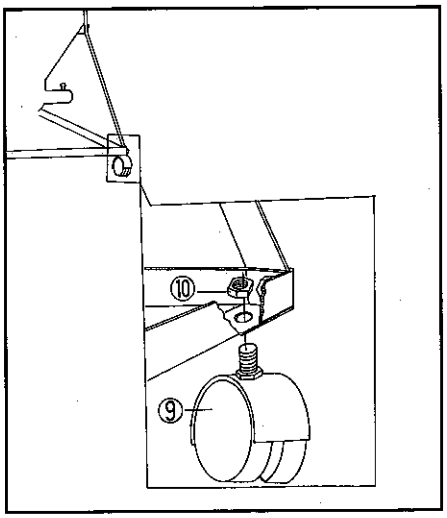
1. Use protective equipment: Abrasive-resistant clothing , safety shoes, leather glves, ear protection, helmet and safety goggles.
2. Check for possible silicosis or other toxic hazards.
3. Do not blast with damaged or worn equipment.
4. Unless otherwise skpecified, maximurm working pressure of blast machine and related components must not exceed 125 psi.
5. Point nozzle only at area being cleaned.
6. Use only abrasives specifically intended for blasting.
7. Keep unprotected workers out of the blast area.
8. Before operating machine:
   Check fittings and hose for wear. Safety-wire couplings together.
   Check helmet filters and air supply.
   Test remote controls.
   Make sure blast machine is adequately grounded.
   Check pop-up valve for alignment.
   Check all fittings for tightness.
9. Do not weld on blast machine-this voids National Board approval.
10. Do not substitute for parts from other manufactures, or modify equipment in any way.
11. Do not attempt to move blast machine when machine containg abrasive.
12. This machine and accessories should only be operated by qualified, experienced users.



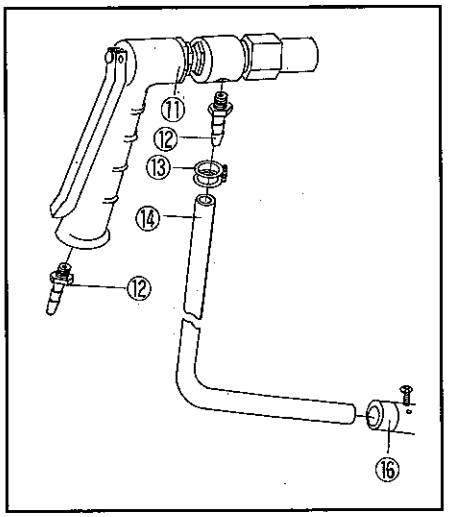
Step1. Connect leg (#3), Feed elbow (#16) and adjustment sleeve(#15) onto the hopper plastic bucket(#2)



Step2. Connect the three pieces of the leg (#3) with the bracket connecting board/. Please pay attention to the mutual position when assemblying #3 and #6.



Step3. Connect the plastic movable castor (#9) of the three legs.



Step4. To connect the suction gun (#11), suction hose (#14) as illustrated, then insert the other end of the suction hose into the FEED elbow(#16) and tighten the screw to fix.

INTRODUCTION:

This Suction Gun is designed for abrasive blasting where the air supply is limited or where low pressure blasting is necessary to protect delicate parts or soft surfeces. An air hose and a material hose are jointed in the suction gun assembly. Air rushing at high velocity thuough the air jet creates a partial vacuum in the material hose. As a result, abrasive is sucked up from the feed elbow through the material hose and propelled out the nozzle.

SET UP AND OPERATION:

1. The Set Up procedure is in four setps described as follows:
2. Air Jets and Nozzles: The standard suction gun is shipped with a 1/8" diameter air jet and a 5/16" diameter nozzle. Other sizes of jets and nozzles should be used in the folling combinations only:

AIR JET	**NOZZLE**
1/16"	3/16"
1/8"	5/16"
3/16"	3/8"
1/4"	1/2"

3. Compressor Requirements: For most applications, the compressor should be large enough to maintain 80-90psi under working con ditions. Delicate work however, may require pressures to be lower. The C.F.M. requirement for the compressor varies with the size of the air jet. See the Air and Abrasive Data.

4. Air Supply Hose: Joint the air supply hose to the 1/2" air hose Adapan of the sucfian gun recommended air supply hose diameters are given in the data. These recommendations are important!! For best results the air supply hose should be as short as possible. Installation of a moisture separator is recommended to avlid abrasive clotting. The main cause of abrasive blockage is moisture.

5. Insert the material hose into the feed elbow at the bottom of the hopper. The slot in the adjusting sleeve should be facing up.

AIR AND ABRASIVE DATA

VARIABLE	1/16" Jet	1/8"Jet	3/16" Jet	1/4" Jet
CFM required (1)	4-6 CFM	17-25 CFM	37-58 CFM	67-103 CFM
Required I.D. of	1/2" up to 50'	1/2" up to 25'	1/2" up to 25'	3/4" up to 50'
Air Supply Hose	3/4" over 50'	3/4" over 25'	3/4" over 25'	1" over 50'
Abrasive mesh size (2)	30-180	30-180	20-180	16-180

(1) The size of the jet, not the nozzle, determines air consumption.
(2) With heavy metallic abrasives, such as steel grit, do not use anyting coaser than 30 mesh.

6. Abrasive Loading: Place the screen over the hopper and fill the hopper with abrasive. Do not allow foreign material (paper, cigarette butts, etc.) to enter the hopper. Any common blasting abrasive may be used but the abrasive must be specifically manufactured for blasting. See the data recommended mesh sizes.

7. Operation: To begin blasting, squeeze the trigger.

ADJUSTMENT:

1. Air Jet: The air Jet can be moved in and out of the suction body by loosening the set screw. This adjustment controls suction. The maximum suction will be obtained when the jet is 1/16" to 1/8" from full forward. The air jet in the suction Gun has been factory adjusted, and the setting need not be changed unless problems are experienced.

2. Air/Abrasive Mixture: The air/abrasive ratio can be controlled by loosening the brass retaining screw in the feed elbow and moving the hose in (more abrasive) or out (less abrasive). The proper adjustment can only be determined by experience. in general a "lean" mixture is best, with as little abrasive as necessary to do the job.

MAINTENANCE:

1. Air Jet Sleeve: periodically inspect the rubber air jet sleeve and replace it when. This will prolong the life of the jet.

2. Valve Seat: periodically inspect the neoprene valve seal and replace it when worn. Failure to replace the neoprene seal will cause the suction gun to leak, wasting air and resulting in damage to the valve seat.

3. Nozzle: Replace the nozzle when it's diameter has increased by more than 1/16" or sooner if suction diminishes noticeably. NOTE: Do not use a wrench for tightening the blast nozzle a wrench will crack the liner. Screw it in hand tight only.

TROUBLESHOOTING:
Obstructions:

1. Remove nozzle and check for blockage in the suction head and nozzle.

2. If the material hose clogs, it is usually a sign of the abrasive mixture being too rich (the material hose is too far into the feed elbow). The hose can be cleared by the following methods.

3. Remove the material from the feed elbow and put it in a bucket or other container. Raise the gun assembly to let the abrasive fall out of the hose and into the bucket. If the hose is packed and abrasive does not flow, use care and continue using the following method.

IMPORTANT WARNING:
Sefety clothes must be worn while clearing obstructed hose. The hose should be secured to prevent whipping and spraying abrasive.

4. Remove the material hose from the feed elbow and put in a bucket or other container. Reduce line pressure. Press the outlet end of the nozzle straight against a flat surface and squeeze the trigger. Back pressure will force the obstruction out of the material hose and into the bucket.

ABRASIVE CLOTTING:

1. If abrasive frequently clots and jams the feed elbow, material hose or suction head check the following.

2. Excessive Moisture: This may be due to an inadequate compressor that pumps oil or water into the air line or to an air line long enough for moisture to condense on the inside. Install a moisture separator. If the problem continues, it may be necessary to change the abrasive in the hopper daily, especially is fine mesh abrasive is used. Some abrasive abosorbs moisture from the air when left in the hopper overnight.

3. Abrasive mixture too rich, adjust per instruction on the "ADJUSTMENT"
4. Opening in the adjusting sleeve is too small. Slot should be facing up.

POOR SUCTION:

1. If the suction is too low to draw abrasive. Check for " Obstruction"

2. Inadequate air supply see SET UP AND OPERATION AND ABRASIVE DATA.

3. Air Jet adjustment, see SET UP AND OPERATION AND ABRASIVE DATA.

4. Nozzle Worn, see SET UP AND OPERATION AND ABRASIVE DATA.

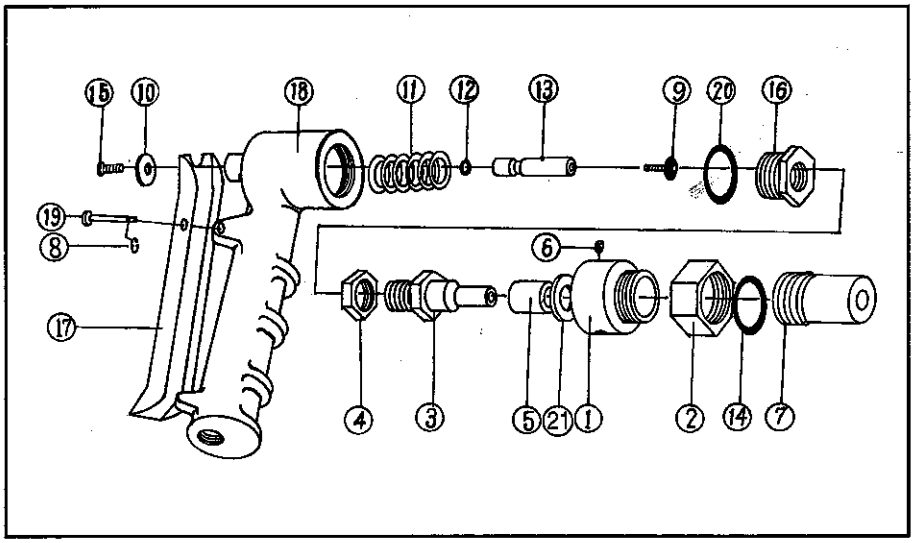
5. Wrong jet/nozzle combination, see SET UP AND OPERATION AND ABRASIVE DATA.

Air blow-back through the feed elbow.

1. Jet worn out, or too big for the nozzle. see SET UP AND OPERATION AND ABRASIVE DATA.

2. Remove the nozzle and check for blockage in the suction head and nozzle.

SUCTION GUN ASSEMBLY

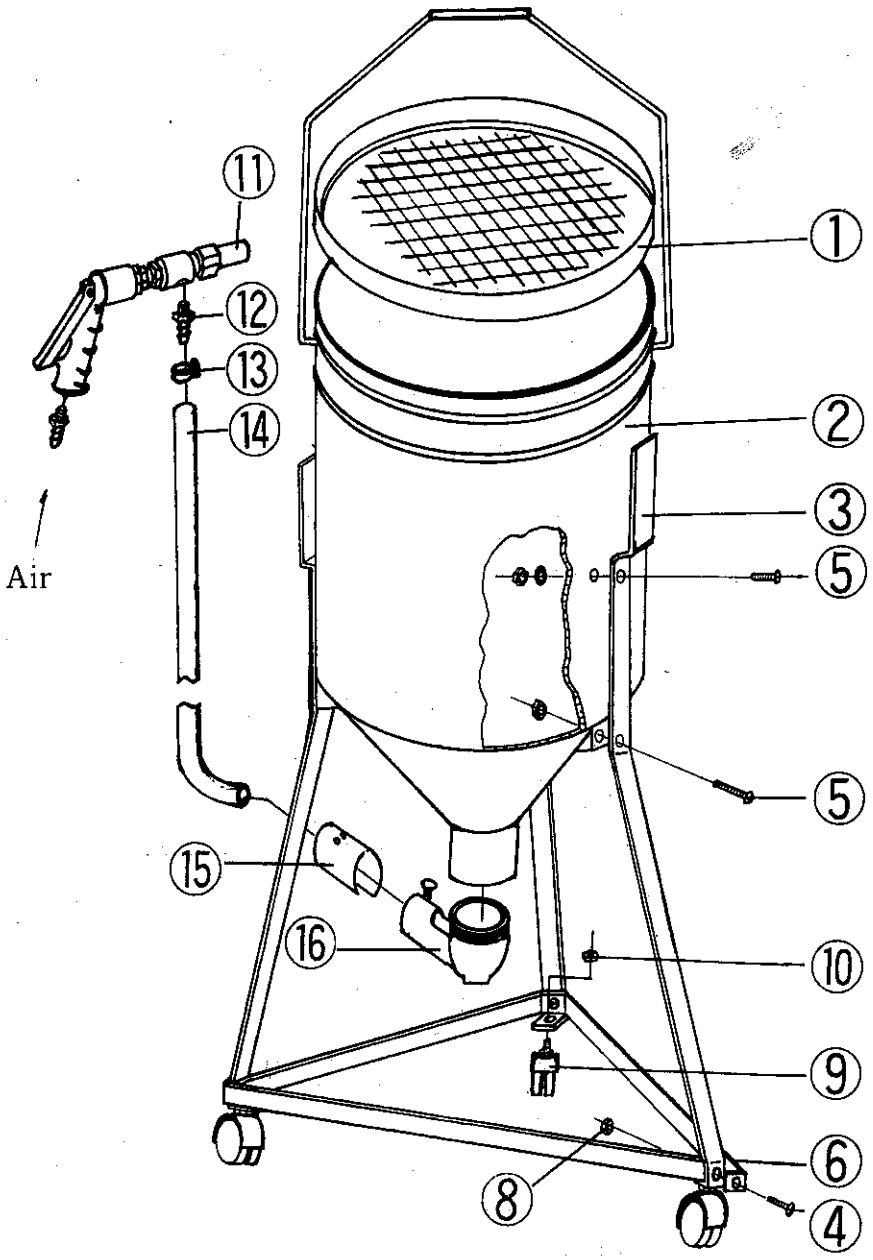


PARTS LIST

1.	Suction body
2.	Suction Body Nut
3.	Air Jet, Specify Size:1/16" Orifice 1/8" Orifice (standard), 3/16" Orifice, 1/4 Orifice
4.	Lock Nut
5.	Air Jet Sleeve
6.	Set Screw, Cone Point, 1/4NC x 1/4"
7.	Nozzle, Specify Size: 3/16" orifice 5/16" Orifice (standard), 3/8" Orifice, 1/2 Orifice
8.	Retaining Ring
9.	Screw, Round Head
10.	Valve Lift Washer

11.	Spring, 3/8" I.D. x1-1/8" Long
12.	O-Ring
13.	Valve Stem
14.	O-Ring
15.	Screw
16.	Valve Seat
17.	Valve Trigger
18.	Body
19.	Trigger Hinge Pin
20.	Valve Seat Gasket
21.	Washer

REPLACEMENT PARTS LIST



PARTS LIST

PART#	DESCRIPTION	Q'TY
1.	Screen	1PC
2.	LLD-PE bucket	1PC
3.	Leg	3 PCS
4.	1/4" x 3/4" Screw	3 PCS
5.	1/4" x 5/8" Screw	6 PCS
6.	Leg connecting board	3 PCS
8.	1/4" nut	9 PCS
9.	Movable castor	3 PCS
10.	Movable castor nut	3 PCS
11.	Suction gun (SB-215G)	15 ESET
12.	3/8" PT x 1/2" PE Adaptor	2 PCS
13.	Hose clamp (22 mm)	1PC
14.	Suction hose	1PC
15.	Adjustable sleeve	1PC
16.	Feed elbow	1PC