












PORTABLE PRESSURE BLASTER

Model 80 PX



INSTRUCTION MANUAL & PARTS

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READ ALL INSTRUCTIONS BEFORE USING THIS MACHINE

- 1. KEEP THE WORK AREA CLEAN.** Cluttered areas invite injuries.
- 2. CONSIDER WORK AREA ENVIRONMENT.** Don't use sandblaster in damp, wet, or poorly lit locations. Keep work area well lit. Don't use compressors in the presence of flammable gases or liquids.
- 3. KEEP CHILDREN AWAY.** All children should be kept away from the work area. Don't let them handle tools, hose or extensions cords, also. No one should be in the area of the sandblasting if they don't have the same protective equipment you are using.
- 4. DRESS PROPERLY.** Wear protective clothing because a dust and abrasive hazard exists. As a minimum, wear a hood (included), a dust mask to prevent inhaling the material being removed, and heavy duty gloves.
- 5. PERIODICALLY INSPECT THE SAND CARRYING COMPONENTS.** These are being sandblasted on the inside whenever you use the sandblaster, and will wear much more rapidly than components.
- 6. SECURE THE WORK.** Use clamps or a vise to hold the work if it is small or light weight. It's safer than using your hands and it frees both hands to operate the nozzle.
- 7. DON'T OVERREACH.** Keep proper footing and balance at all times.
- 8. MAINTAIN TOOLS WITH CARE.** Follow instructions for lubricating and changing components and accessories.
- 9. DISCONNECT AIR COMPRESSOR POWER** when not in use, before servicing and when changing components.
- 10. AVOID UNINTENTIONAL STARTING.** Be sure the nozzle valve is in the off position when not in use.
- 11. STAY ALERT.** Watch what you are doing, use common sense. Don't operate any machine or tool when you are tired.
- 12. REPLACEMENT PARTS.** When servicing, use only identical replacement parts.

SAFETY INSTRUCTIONS FOR SANDBLASTER

1. **BEFORE OPENING THE TANK**, release the air pressure on the sand tank. To do this, turn off the air supply valve (14), to release pressure in the line. Ensure that the tank pressure gauge (05) reads zero, then open the tank.
2. **MAINTAIN CORRECT AIR PRESSURE.** Pressure should not exceed 125 PSI. If it does, the safety valve (06), is supposed to release the excess pressure. If this doesn't happen, stop all work immediately, and use the air compressor to reduce the excess pressure. Do not investigate the sandblaster's pressure problem until the pressure gauge (05) reads zero.

ASSEMBLING THE SANDBLASTER

1. Refer to the drawing for step 1, to assemble the intake manifold (08). First, attach the pressure gauge (05) to the top intake manifold, turning the gauge so that it can be seen across the top of the tank. Next, attach the throttling valve (18) to the bottom of the manifold. Attach the nipple connector (7A), to the throttling valve. Attach the joint pipe (07), to the manifold.
2. Refer to the drawing for step 2, to assemble the water trap filter (12). Two nipple connectors (07) are screwed into each side of the filter. On one side, attach the air supply valve (14), to the nipple connector (7), and then attach the male/female connector (15), to the other side of the air supply valve. When you're ready to operate the sandblaster, the air hose from the compressor will fasten to the male/female connector (15).
3. Place the tank (03) on a table with the four clips up. Refer to the drawing for step 3. Screw the water trap filter (12) and its parts into the hole at the side of the intake manifold. Then screw the open end of the joint pipe (07) with intake manifold (08) and pressure gauge (05) attached into the threaded hole on the side of the filler pipe on top of the tank. Again, be sure that the manifold and gauge are vertical.
4. Refer to the drawing for step 4, assembly of the sand outlet valve into the hole at the bottom of the tank. Attach four parts, in order: Nipple connector (07), sand metering valve (18), nipple connector (07) and the sand outlet pipe (19).
5. Refer to the drawing for step 5, for connecting the sand metering valve assembly (step 4). Slide the two hose clamps (26), over each end of the sand hose (25). Press one end of the hose over the nipple on the sand outlet pipe (19), and the other end over the nozzle coupling (27). Both hose ends should be firmly seated on the nipples. Slide the hose clamps along the hose to each nipple and tighten the clamps very firmly. They have to resist the force of 65 to 125 PSI.
6. Fasten the handlebars (02) to the tank using pan screws (11) and washers (10) and hex nuts (09). Note: keep the handle curve ends upward.
7. Install the axle foots (20) on the tank using the screws (16). Locate the axle (23) and slide it through the holes in the slides of the axle foots (20). Place one wheel (22) at each end of the axle and fasten them into place with cotter pins (24) and washer (21).
8. Insert the fixed foot (17) onto fitting on bottom of the tank near the edge. Use your last cotter pin (24) to hold the foot to the tank.
9. Before beginning operations, go back over each connection, double checking to ensure that all tight and properly sealed.

ABRASIVE SELECTION

The kind of sand you choose will greatly influence the amount of time needed to clean a given surface area. Sandblasting materials include silicon carbide, alumina, silica sand, bank sand and beach sand. However, bank sand and beach sand, even if washed, will still contain shell, coral and organic materials. These absorb moisture much more readily than the other materials. As a result, the moisture in bank and beach sands frequently causes plugging of the sand metering valve. If you elect to reuse sand, remember it does wear out. The sharp edges become rounder, and are less effective. It's at that point you should replace the batch of sand you're using.

LOADING ABRASIVES INTO TANK

1. Check your abrasive to be sure it's dry, and won't clog the meter valve (18), sand outlet pipe (19), hose (25), or other components.
2. Put on the protective clothing.
3. Turn the air supply valve (14) to the off (horizontal) position.
4. Watch the pressure gauge (05) and make sure it reads zero pressure.
5. Be sure to get enough into the tank to do the job at hand. But if this is a big job, fill the tank only $\frac{3}{4}$ full, and reload as needed to finish the work.

TIP: if the humidity is 90-100%, the water trap (12) won't be able to trap all of the moisture in a $\frac{3}{4}$ full tank. Better to reduce the amount of abrasive, load more frequently, and empty the water trap more often. This will reduce the possibility of clogging the bottom of the tank or the line.

6. With the correct amount of abrasive in the tank, and close the gasket (01) then open the air supply valve (14)
7. Check for air leaks at the filler cap as you begin to pressurize the tank from the compressor.

MAINTENANCE

1. You should make every effort to protect your air compressor from any damage it may receive from your sandblasting work. Your best option is to keep the compressor in a room separate from the sandblaster, using a long hose to provide the PSI needed to do your work. A second choice is to keep the compressor up wind from the sandblasting and the greater the distance between them, the better. Other than that, you should continue standard maintenance procedures for the compressor.
2. Some parts of the sandblaster will wear much more rapidly than others. The parts needing close attention carry the air/abrasive mixture, starting with the sand hose (25), and going through the metal fittings, the shut off gun.
3. If air leaks develop in any of these parts, you should stop all work, and find what needs to be repaired or replaced. When it's new, the sand hose (25) has 2 cord piles and the walls are $\frac{1}{4}$ " thick. As the interior diameter is sandblasted, this wall becomes thinner and thinner. One way to inspect the hose and other parts affected by blasting is to put on your protective clothing. Then pressurize the system and close the nozzle shut off gun. Close your hand loosely around the hose and run it up and down the hose across the fittings and nozzles. You'll be able to feel any leaks. You can also spot places in the hose where the wall is getting very thin. These show up as blisters in the hose. If you find such a blister, get a new hose immediately. If that blister breaks, the abrasive will come out of the side of the hose at 65 or more PSI.

IMPORTANT SAFETY INSTRUCTION



WARNING : When using tools such as your air compressor, whether powered by electric motor or gasoline engine, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and personal injury.

You should review the safety instructions for your air compressor before beginning sandblasting with this machine.

SPECIFICATIONS

DESCRIPTION	VALUE
Tank dimensions	10" DIA.; 24 ½" LENGTH
Overall dimensions	17 ¾"L X 13 ¾"W X 33"H.
Weight	50 LBS
Hose length	8 FEET

AIR SUPPLY REQUIREMENTS

HOSE INTERIOR DIAMETER	HOSE LENGTH	NOZZLE INTERIOR DIAMETER	COMPRESSOR HORSEPOWER	CFM 100PSI
3/8"	8 feet	1/8"	5	20
1/2"	10 feet	3/16"	10	45
1/2"	25 feet	1/4"	25	85

We recommend that air pressure in the range of 65-125 PSI will provide the best results.

SAVE THESE INSTRUCTIONS

You will need these instructions for the safety instructions, the operating procedures, the parts list and the warranty. Put them in a safe and dry place for future reference

TROUBLESHOOTING TIPS



PROBLEM !?



POSSIBLE SOLUTION :

Surging of blast flow !?

Air pressure too low..... See "Lack of air"
 Too much media..... Adjust media valve

Excessive media consumption !?

Media valve open too far..... Close slightly
 Air pressure too low..... Check pressure gauge

Clogging and plugging of blast flow !?

Debris in media.....Purge & screen
 Media size too large.....Use small grit size
 Nozzle plugs.....Use larger nozzle
 Nozzle plugs againAdjust media valve
 Wet media.....Dry media, drain water from air

Moisture in abrasive media !?

Wet media.....Change or use dry media
 Water in airDrain water from air lines
 Water in tank.....Empty, dry out and refill

Humid weather !?

Moderate humidity.....Keep media dry as possible
 Moderate humidity again.....Use drier or moisture separator
 High humidity.....Avoid that period of use if possible

Overtaxed compressor !?

Compressor too small.....Restrict time used
 Nozzle size too large.....Use smaller size
 Too many leaks in plumbing.....Seal & tighten plumbing
 Holes in abrasive hose.....Replace
 Air filter on compressor plugged.....Clean

Lack of air pressure !?

Compressor too small.....Use smaller nozzle
 Supply valves not on full position.....Open valves
 Nozzle size too large.....Use smaller size
 Leaks in plumbing.....Seal & tighten plumbing
 Holes in abrasive hose.....Replace hose
 Air filter on compressor plugged.....Clean filter
 Urethane gasket worn or dirty.....Clean or replace gasket

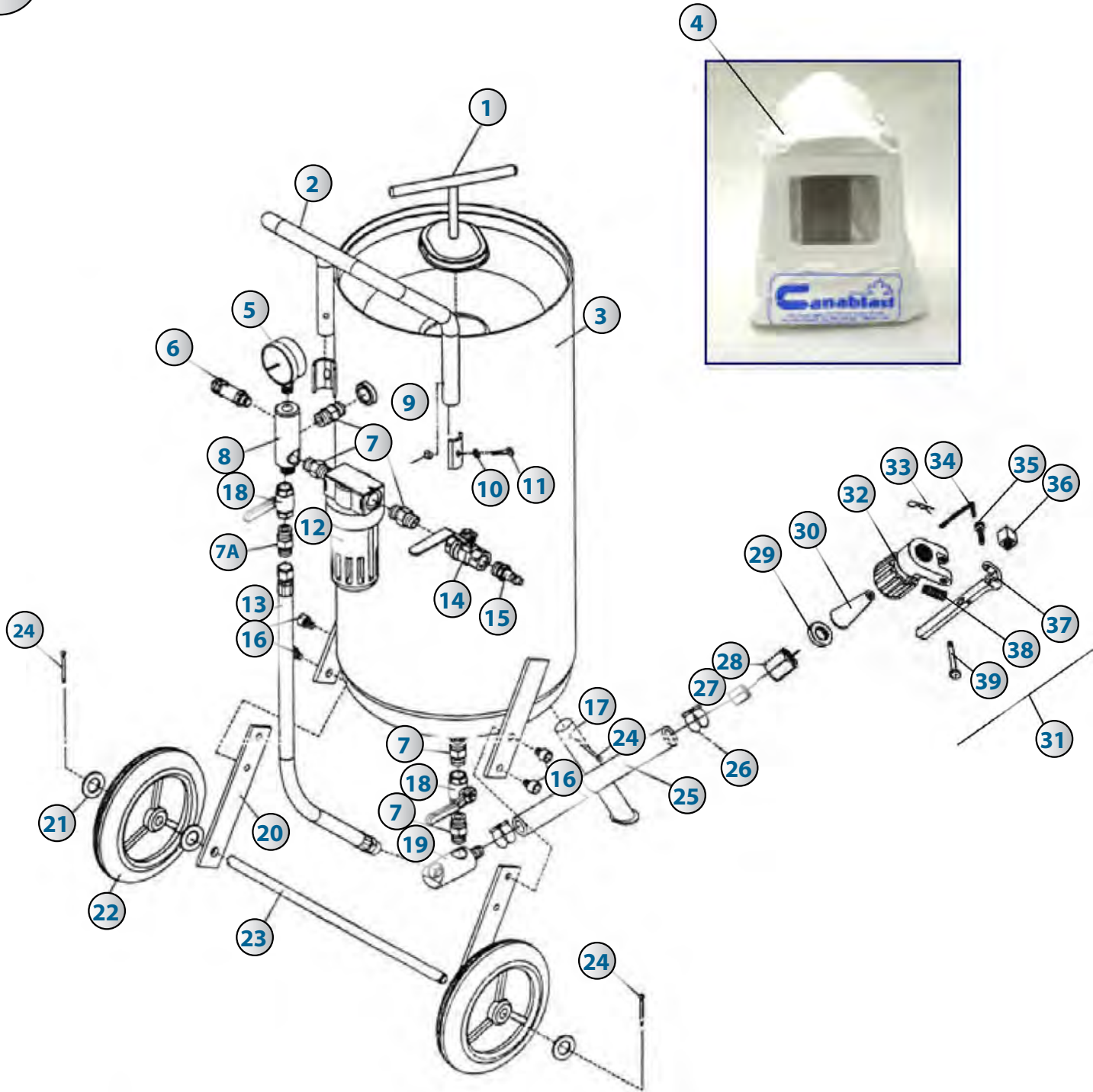
Lack of abrasive flow !?

Blaster tank empty.....Fill tank
 Moisture in media.....Dry media
 Not enough air pressure.....Check system
 Abrasive hose kinked.....Straighten
 Debris in media.....Clean or screen media

80 PX sandblaster

Exploded view

A



80 PX sandblaster

Figure A

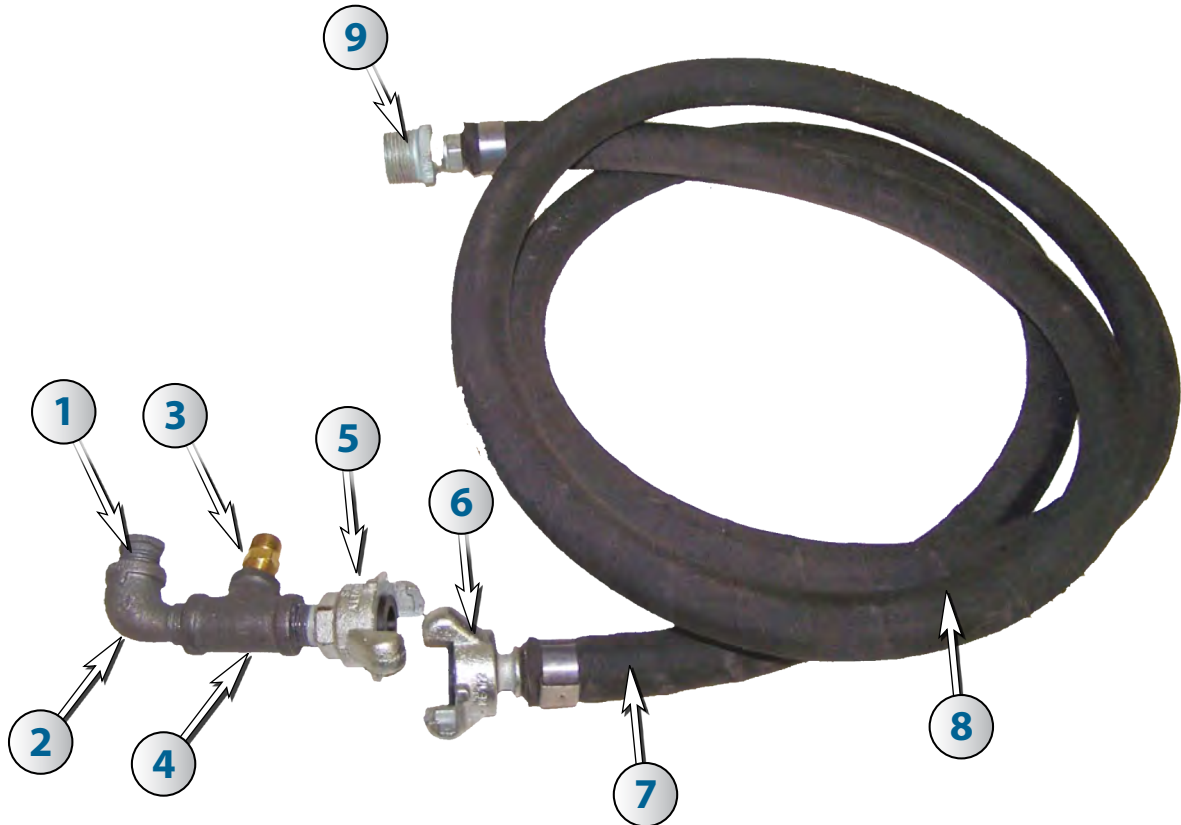
Parts list

#	STOCK	DESCRIPTION	QTY	#	STOCK	DESCRIPTION	QTY
1	601110	Closure plug and gasket	1	20		Axle foots	2
2		Handlebar	1	21		Washer	4
3		Tank	1	22		Wheels	2
4	603033	Hood	1	23		Axle	1
5	611022	Pressure gauge	1	24		Cotter pins	3
6	608220	Safety valve	1	25	601112	Sand hose 3/8 x 8'	1
7		Nipple connector	5	26	601113	Clamp	2
7A		Nipple connector	1	27	601114	Intake connector 3/8	1
8		Intake manifold	1	28	630401	Galvanized bushing 1 - 3/8	1
9		Hex Nut (M6)	2	29	618015	Washer NW-0	1
10		Washer	2	30	605031	Ceramic nozzle CN3-2 1/8"	2
11		Pan screw	1	31	602007	RCM-12 Complete	1
12		Water trap filter	1	32	602121	Body	1
13		Air hose	1	33	602125	Pin	1
14		Brass air supply valve 3/8"	1	34	602132	Allen key	1
15		Male-female connector	1	35	602127	Allen screw	1
16		Screw (M8x10)	4	36	602126	Block	1
17		Foot	1	37	602123	Handle	1
18	608005	Steel sand metering valve 3/8"	2	38	602122	Spring	1
19	601111	Sand outlet pipe	1	39	602124	Axle	1

80 PX sandblaster accesories

Exploded view

B



Parts list

Figure B

#	STOCK	DESCRIPTION	#	STOCK	DESCRIPTION
1	630350	1/2" x 3/8" FITTING	6	607002	QC 1/2 COUPLING
2	630341	1/2" ELBOW FITTING	7	624205	CLAMP
3	632504	3/8" BRASS NIPPLE	8	606001	SBH 1/2" SANDBLASTING HOSE (SOLD BY FOOT)
4	630329	"T" FITTING 1/2 X 1/2 X 3/8	9	607050	NC 1/2 COUPLING
5	607070	TC 1/2 TANK COUPLING	6 to 9	606011	COMPLETE SANDBLAST HOSE ASSEMBLY

Who we are

Canablast is a leading industrial manufacturer of standard and custom engineered equipment for the surface treatment industry and the solvent recycling industry.

Mission

Canablast is dedicated to being an innovative and trusted supplier in the conception, fabrication and distribution of surface treatment equipment and recycling equipment.

The success of our mission relies on the following core values :

Innovation
integrity
Quality

Markets served

The products, technologies and industry expertise of Canablast 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 (labelling) & Lithography**
 - **Wood finishing**
 - **Power & Energy**
 - **Pharmaceutical**

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