KING CANADA

10 & 20 GALLON
PRESSURE ABRASIVE SANDBLASTERS

MODEL: KSB-10
(10 GALLON)

MODEL: KSB-20
(20 GALLON)

INSTRUCTION MANUAL

WARRANTY INFORMATION

2-YEAR LIMITED WARRANTY PRESSURE ABRASIVE SANDBLASTER	**KING CANADA TOOLS OFFERS A 2-YEAR LIMITED WARRANTY FOR NON-COMMERCIAL USE.**

PROOF OF PURCHASE

Please keep your dated proof of purchase for warranty and servicing purposes.

REPLACEMENT PARTS

Replacement parts for this product are available at our authorized King Canada service centers across Canada.

LIMITED TOOL WARRANTY

King Canada makes every effort to ensure that this product meets high quality and durability standards. King Canada warrants to the original retail consumer a 2-year limited warranty as of the date the product was purchased at retail and that each product is free from defects in materials. Warranty does not apply to defects due directly or indirectly to misuse, abuse, normal wear and tear, negligence or accidents, repairs done by an unauthorized service center, alterations and lack of maintenance. King Canada shall in no event be liable for death, injuries to persons or property or for incidental, special or consequential damages arising from the use of our products.

To take advantage of this limited warranty, return the product at your expense together with your dated proof of purshase to an authorized King Canada service center. Contact your retailer or visit our web site at www.kingcanada.com for an updated listing of our authorized service centers. In cooperation with our authorized serviced center, King Canada will either repair or replace the product if any part or parts covered under this warranty which examination proves to be defective in workmanship or material during the warranty period.

PARTS DIAGRAM & PARTS LISTS

Refer to the Parts section of the King Canada web site for the most updated parts diagram and parts list.

KING CANADA INC. DORVAL, QUÉBEC, CANADA H9P 2Y4

www.kingcanada.com

GENERAL & SPECIFIC SAFETY INSTRUCTIONS

1. KNOW YOUR TOOL

Read and understand the owners manual and labels affixed to the tool. Learn its application and limitations as well as its specific potential hazards.

2. KEEP WORK AREA CLEAN.

Cluttered areas and benches invite accidents. Make sure the floor is clean and not slippery due dust build-up.

3. AVOID DANGEROUS ENVIRONMENT.

Don't use machinery in damp or wet locations or expose them to rain. Keep work area well lit and provide adequate surrounding work space.

4. KEEP CHILDREN AWAY.

All visitors should be kept a safe distance from work area.

5. MAKE WORKSHOP CHILD-PROOF.

Use padlocks, master switches or remove starter keys.

6. USE RIGHT TOOL.

Don't force the tool or the attachment to do a job for which it was not designed.

7. ALWAYS WEAR SAFETY GLASSES.

Always wear safety glasses (ANSI Z87.1). Everyday eyeglasses only have impact resistant lenses, they are **NOT** safety glasses. Also use a face or dust mask if operation is dusty.

8. DON'T OVERREACH.

Keep proper footing and balance at all times.

9. MAINTAIN TOOL WITH CARE.

Keep machine clean for best and safest performance. Follow instructions for lubricating and changing accessories.

10. DISCONNECT TOOLS.

Before servicing, when changing accessories or attachments.

11. USE RECOMMENDED ACCESSORIES.

Consult the manual for recommended accessories. Follow the instructions that accompany the accessories. The use of improper accessories may cause hazards.

12. NEVER STAND ON TOOL.

Serious injury could occur if the tool tips over. Do not store materials such that it is necessary to stand on the tool to reach them.

13. CHECK DAMAGED PARTS.

Before further use of the tool, a guard or other parts that are damaged should be carefully checked to ensure that they will operate properly and perform their intended function. Check for alignment of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other parts that are damaged should be properly repaired or replaced.

14. NEVER LEAVE MACHINE RUNNING UNATTENDED.

Turn power ''OFF". Don't leave any tool running until it comes to a complete stop.

SPECIFIC SAFETY INSTRUCTIONS

CAUTION!

READ THESE WARNINGS BEFORE OPERATING

1. Recommended incoming air pressure is 65-120 PSI.

2. Maximum operating air pressure is 120 PSI. If your air compressor supplies air pressure in excess of 120 PSI, it is absolutely necessary to reduce the incoming air pressure to less than 120 PSI. Your air compressor should have a regulator which controls the air pressure, if not have one installed.

3. Read and understand the instruction manual before operating.

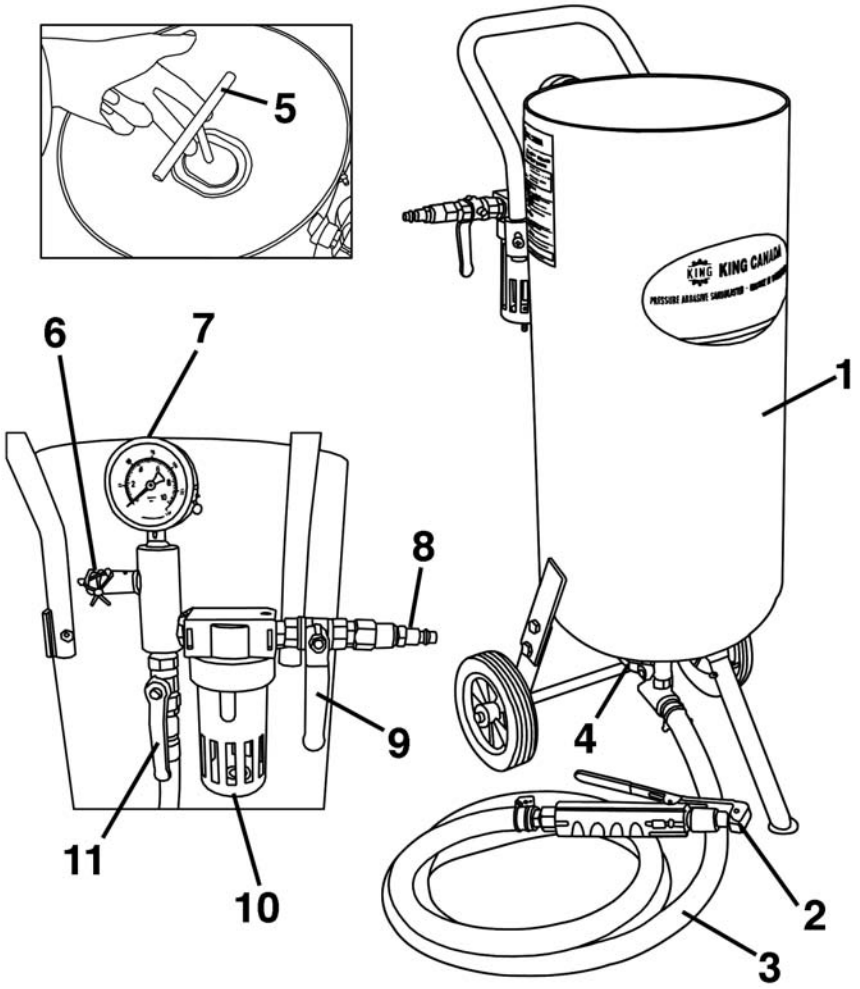
4. Always wear a protective sandblasting hood and gloves when loading, starting and sandblasting.

5. Never aim the abrasive air stream at yourself or other persons.

6. Check and replace all abrasive hoses and fittings on a regular basis as these parts "wear" the same as the abrasive ceramic nozzles.

7. Release all air pressure from the tank before storage or routine inspection and maintenance.

GETTING TO KNOW YOUR SANDBLASTER



1. Pressure tank
2. Media gun
3. Media hose
4. Media cut-off valve
5. Lid with handle
6. Safety pressure relief
7. Tank pressure gauge
8. 1/4" NPT Air inlet connector
9. Air pressure cut-off valve
10. Water separator filter
11. Media cut-off valve

SANDBLASTER SPECIFICATIONS

Model	KSB-10
Operating pressure	65-120 PSI
Air consumption	6-25 CFM
Tank size	10 Gallon
Maximum amount of abrasive	40 lbs
Recommended air compressor	5 HP

Model	KSB-20
Operating pressure	65-120 PSI
Air consumption	6-25 CFM
Tank size	20 Gallon
Maximum amount of abrasive	80 lbs
Recommended air compressor	5 HP

ASSEMBLY

UNPACKING

Remove all loose parts from the carton. Carefully lift the sandblaster pressure tank from the carton and place it upside down on a level work surface. Remove all other items from the carton and follow all of the following assembly, operation and maintenance instructions in this manual.

INSTALLING WHEELS AND FOOT TO PRESSURE TANK

First step is to locate the 2 axle brackets (A) Fig.1 and 4 short hex. bolts. Position the axle brackets on the inside of the welded brackets (B) and secure each axle bracket in place using 2 hex. bolts each.

Locate the axle (C) Fig.1, 2 cotter pins (D), 4 large washers (E) and both wheels (F). Insert a cotter pin into one of the end holes of the axle and using a screwdriver, split the pins apart to prevent it from backing out.

Slide a washer, pnemaatic wheel and another washer on the axle against the cotter pin. Then insert the axle into both holes in the axle brackets. Then complete the other side by sliding a washer, wheel and washer and secure the entire assembly to the axle brackets using the last cotter pin, split the pins apart to prevent it from backing out.

Now install the foot (G) to the foot post and secure it into place by inserting a cotter pin, split the pins apart to prevent it from backing out.

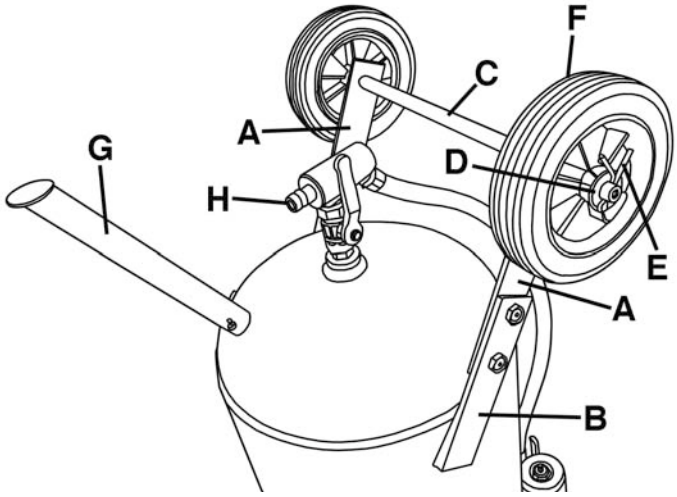


Figure 1

INSTALLING MEDIA HOSE TO BOTTOM OF PRESSURE TANK

Locate the media hose (A) Fig.2 and push it onto the sand outlet connector (B), also refer to (H) Fig.1. Make sure it is push in all the way and then secure it into place by tightening the screw (C) on the wire clamp. To avoid a potentially dangerous situation, make sure that the media hose is securely fixed and will not slide off.

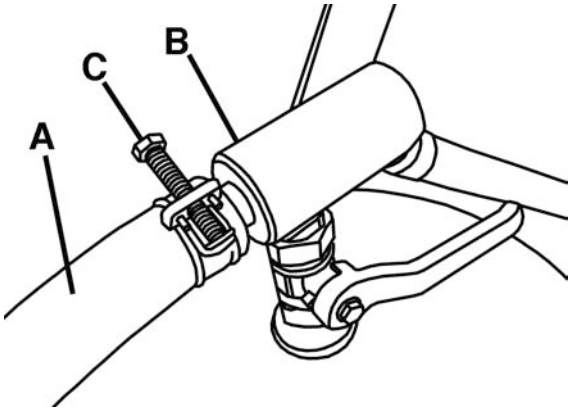


Figure 2

INSTALLING MEDIA GUN TO MEDIA HOSE

Locate the media gun (A) Fig.3 and the supplied teflon tape. Place teflon tape around the threads of the media hose adaptor (B) in a clockwise direction and screw the media gun onto the adaptor. Make sure the media gun is tightened securly to the adaptor and also make sure the screw (C) of the wire clamp is tightened properly.

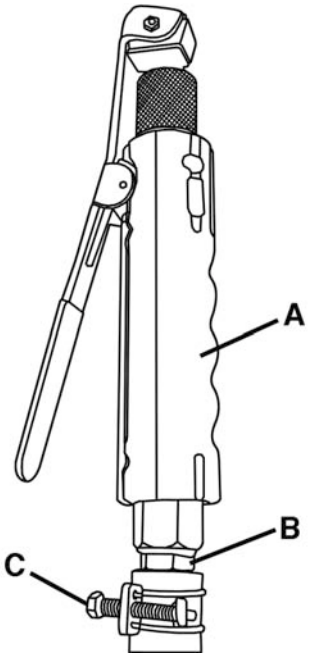


Figure 3

ASSEMBLY

INSTALLING TRANSPORT HANDLE TO PRESSURE TANK

All previous assembly instructions were done with the pressure tank positioned upside down, now it is time to flip it right side up.

Locate the transport handle (A) Fig.4 and fix it to both pressure tank handle brackets (B) using a pan head screw, washer and hex. nut on each side.

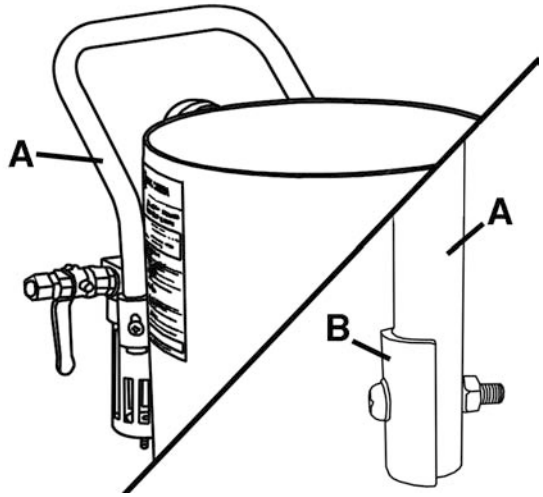


Figure 4

INSTALLING MALE QUICK CONNECT AND INTERMEDIATE CONNECTOR TO AIR PRESSURE VALVE

The male quick connect (A) Fig.5 must be installed to the intermediate connector (B) and then both must be installed to the air pressure valve (C).

To prevent air leaks, place teflon tape in a counterclockwise direction around the threads of the male quick connect (A) and screw it into the intermediate connector (B).

Place teflon tape in a counterclockwise direction around the threads of the intermediate connector (B) and screw it into the air pressure valve (C).

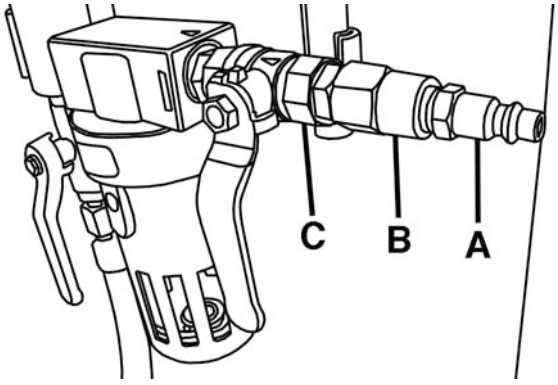


Figure 5

PLACING LID WITH HANDLE INSIDE PRESSURE TANK

Locate the lid with handle (A) Fig.6. This lid gets placed into the opening of the pressure tank. When compressed air is introduced into the pressure tank, lift the handle up and the lid will be held in place by the build up of pressure in the tank. See Fig.6.

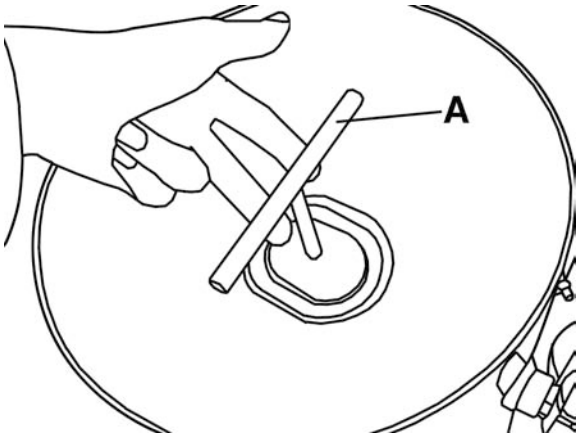


Figure 6

OPERATION

WARNING! SANDBLASTING PRESENTS A REAL HAZARD OF SILICOSIS AND OTHER LUNG CONTAMINATION INJURIES! These injuries are permanent and can get worse over time. If you use sandblasting equipment without the proper headgear, eye protection, and respirator, your lungs and eyes may become irreversibly contaminated. DO NOT use this sandblaster unless you know how to use it, protect yourself correctly, and keep all unprotected bystanders away. **If you have never used this type of equipment before, WE STRONGLY RECOMMEND that you read books, trade magazines, or get formal training before beginning any projects.**

AIR COMPRESSOR INFO

Sandblasting operations are extremely demanding on some compressors and can cause a compressor overload or overheated condition. Refer to your compressor instruction manual and make sure that it can handle the load of sandblasting. If it can, you must follow these setup recommendations:

For optimal results, we recommend using a 5 HP air compressor with a minimum of a 12 CFM rating.

Keep your compressor completely isolated from your sandblasting environment, or keep the work area downwind from the compressor. Airborne abrasive dust will destroy rings, pistons, valves, and bearings. Make sure to increase the maintenance interval of your compressor if using it in sandblasting operations.

BEFORE OPERATING, PUT ON A PROTECTIVE HOOD AND GLOVES. Always wear these protective items when operating and while servicing your sandblaster!

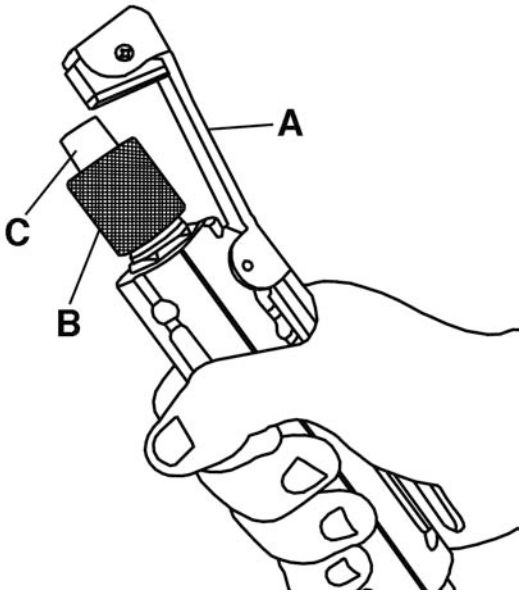


Figure 7

CERAMIC NOZZLES

Sandblasting requires a high volume of compressed air. The quality of sandblasting can be reduced by using the incorrect combination of nozzle, hose size, air pressure and CFM. Experimentation will lead you to your optimum settings for your particular sandblasting task.

This sandblaster comes with 4 different ceramic nozzles (2, 2.5, 3 and 3.5mm). Install the appropriate size for the job by following these instructions;

Apply pressure on the media gun lever (A) Fig.7, loosen and remove nut (B), remove the ceramic nozzle (C) and replace it with the desired size and reinstall it in the reverse order.

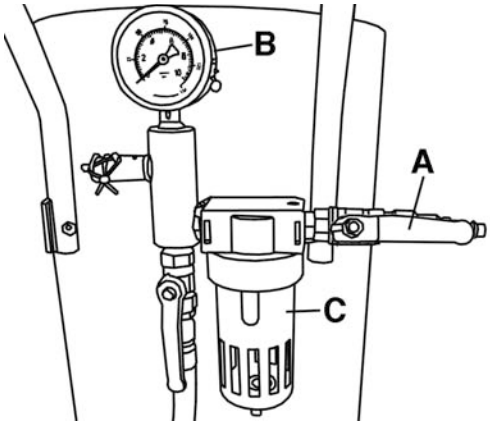


Figure 8

SELECTING AND LOADING ABRASIVE INTO THE TANK

The type of abrasive you choose will greatly influence the amount of time needed to clean a given surface area. All abrasives have benefits and drawbacks such as quality of surface finish, abrasive life and toxicity. Here are a few examples of abrasive types;

Steel type abrasives- Produces a rough finish and removes paint very well, has a long life but must be completely dry to prevent rusting.
Alumina type abrasives- Produces a smoother finish but has a shorter life span.
Glass type abrasives- Works well for soft metals, the life span is limited and not well suited for repetitive recycling.
Sand type abrasives- Easy to find and produces an average finish,has a good recycling life and is economical.

Before loading abrasive into tank, make sure it is perfectly dry, or else it will clog the meter valve, the media hose and other components. Make sure the air supply valve (A) Fig.8 is in the off position (horizontal) and that the air pressure gauge (B) reads zero as shown in Fig.8.

Without causing a hazardous dust cloud, pour the abrasive into the top opening of the tank. With the 10 gallon tank model KSB-10, you can load up to 40 lbs of abrasive, with the 20 gallon tank model KSB-20 you can load up to 80 lbs of abrasive. Only fill the tank enough for the job at hand, if you have a big job then only fill it 3/4 full and reload as needed.If the humidity is 90-100%, the water separator filter (C) won't be able to separate all the moisture in a 3/4 full tank. It is better to reduce the amount of abrasive, load more frequently and empty the water separator filter more often. This will reduce the possibility of clogging the bottom of the tank or the line.

OPERATION

PRE-OPERATION STEPS AND CONNECTING AIR SUPPLY

Once the appropriate nozzle is installed and your abrasive is loaded in the tank, you are now ready to connect the air supply hose to the air inlet and start sandblasting.

First make sure the air supply valve (A) Fig.9 and the blast hose air supply valve (B) are in the closed position (horizontal).

Also make sure the abrasive valve (A) Fig.10 is closed position (horizontal).

Connect the air supply hose from your compressor to the air inlet (C) Fig.9. Turn the compressor on and adjust its air pressure regulator between 65-120 PSI, depending on your requirements.

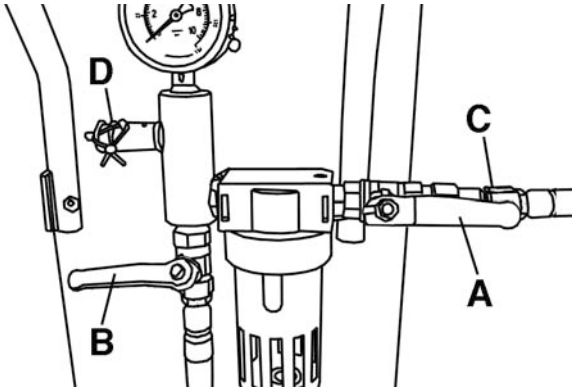


Figure 9

Move the air supply valve (A) Fig.9 to the open position (vertical), then lift the lid with handle (A) Fig.11 upwards to seal the tank closed so that the tank can pressurize.

Note: If the tank relief valve (D) Fig.9 trips open and exhausts air, immediately turn the compressor off and correct the over-pressurization problem with the compressor. If the tank exceeds its rated pressure, it may explode, causing severe injury or death.

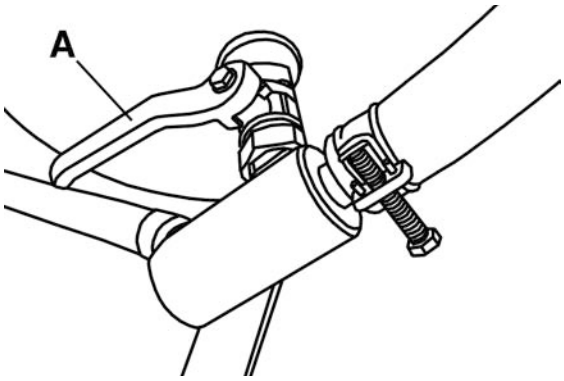


Figure 10

Move the blast hose air supply valve (B) Fig.9 and the abrasive valve (A) Fig.10 to the open position (vertical).

Point the media gun at the workpiece and press on the gun lever (see Fig.7) to begin sandblasting. Move the media gun in a slow circular motion, try to keep the media gun about 4” away from the workpiece. It will be necessary to experiment with different pressures, abrasives and ceramic nozzles to gain practical experience.

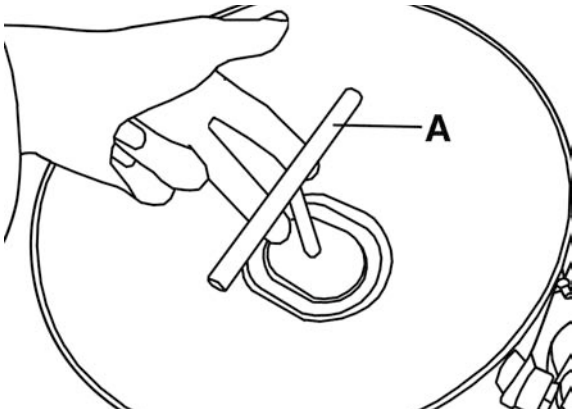


Figure 11

WHEN THE SANDBLASTING OPERATION IS OVER

When the sandblasting operation is over, always close the air supply valve (A) Fig.9 before you disconnect the air supply line (C), or else the residual air will expel sand backwards through the water saparator filter and out the air inlet, damaging the water separator filter.

Be carefull when disconnecting the air supply hose, there is still a high amount of pressurized air in the system. Once the air supply hose is removed, the small bleed valve on the air supply valve will release air from the tank, once the air pressure goes below 60 PSI, open the air supply valve to quickly release the remaining air pressure in the tank.

MAINTENANCE INSPECTION

Check the following items each time you use the sandblaster and replace any parts immediately if they are worn or damaged:
- Look for excessively worn or cracked ceramic nozzles.
- Look for leaking thread fittings with soapy water or a spray bottle.
- Look at the sand blasting hose for thin walls or bubbling.
- Look for worn or leaking valves with soapy water or a spray bottle.