

## SAND BLAST CABINET



MODEL: KSB-110N KSB-110N-9



DOUBLE DOOR VERTICAL MODEL: KSB-350

## INSTRUCTION MANUAL

COPVEIGHT @ 2000 ALL DIGHTS DESERVED BY KING CANADA TOOLS INC

### IMPORTANT INFORMATION



#### 2-YEAR

LIMITED WARRANTY
FOR BOTH SAND BLAST CABINETS

#### KING CANADA TOOLS

OFFERS A 2-YEAR LIMITED WARANTY 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 tool are available at our authorized KING CANADA service centers across Canada. For servicing, contact or return to the retailer where you purchased your product along with your proof of purchase.

#### 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, negligence or accidents, repairs or 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 warranty, the product or part must be returned for examination by the retailer. Shipping and handling charges may apply. If a defect is found, KING CANADA will either repair or replace the product.

### **GENERAL SAFETY INSTRUCTIONS** FOR POWER TOOLS



#### 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. GROUND THE TOOL.

This tool is equipped with an approved 3-conductor cord and a 3-prong grounding type plug to fit the proper grounding receptacle. The green conductor in the cord is the grounding wire. NEVER connect the green wire to a live terminal.

#### 3. KEEP GUARDS IN PLACE.

Keep in good working order, 10. ALWAYS WEAR SAFETY GLASSES. properly adjusted and aligned.

#### 4. REMOVE ADJUSTING KEYS AND WRENCHES.

Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.

#### 5. KEEP WORK AREA CLEAN.

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

#### 6. AVOID DANGEROUS ENVIRON-MENT.

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

#### 7. KEEP CHILDREN AWAY.

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

#### 8. MAKE WORKSHOP CHILD-PROOF.

-with padlocks, master switches or by removing starter keys.

#### 9. WEAR PROPER APPAREL.

Do not wear loose clothing, gloves, neckties or jewelry (rings, watch) because they could get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair. Roll up long sleeves above the elbows.

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 cutting operation is dusty.

#### 11. AVOID ACCIDENTAL STARTING.

Make sure the swich is in the "OFF" position before plugging in.

### **ASSEMBLING THE KSB-110N** SAND BLAST CABINET



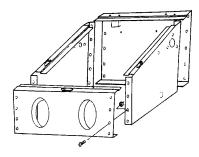
Any sand blast cabinet will produce a powerful flow of abrasive particles. To avoid personal injury and property damage, read and understand this manual before assembling, operating or servicing. Failure to follow these instructions could result in operator injury as well as void the sand blasting system.

Your KSB-110N sand blast cabinet is designed for cleaning, polishing and finishing with dry abrasives ONLY, such as glass bead or plastic granule abrasives. The finishes can vary from coarse to fine according to the sizing of the glass bead. On delicate parts, start out with minimal air pressure to avoid unnecessary peening or undesired, excessive abrasion. Abrasive media is very slippery and should be cleaned up immediately to avoid possible operator injury.

#### KSB-110N ASSEMBLY INSTRUCTIONS

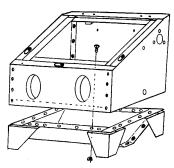
#### Step 1.

Connect the front panel (8), rear panel (9), right panel (10), left panel (11) with the screws supplied.



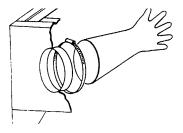
#### Step 2.

Fix the cabinet to the base (12) and the four legs (14 & 15), then place the screen (32) into the cabinet.



#### Step 3.

Secure the glove (31) with the glove clamp (30) onto the front panel as illustrated.

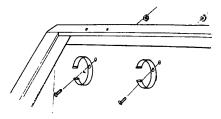




# ASSEMBLINGTHE KSB-110N SAND BLAST CABINET

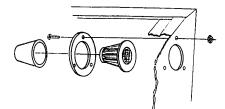
Step 4.

Install the light clamps (13) as illustated.



Step 5.

Assemble the filter.

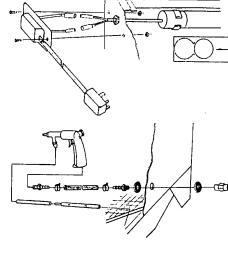


#### Step 6.

Push the fluorescent light (39) forward into the light clamps, then put the electric cord outside the hole through panel 11, use screw nut (38) which is enclosed on the cord to secure, then combine with the circuit inside the wire connection box (44) and tighten on panel 11.

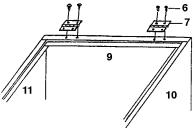


Assemble the blast gun.



#### Step 8.

Once these steps have been completed, you must now assemble the lid assembly (1), but first, assemble the lid hinges (7) with the screws (6) to the top of the rear panel (9).



## ASSEMBLING AND OPERATING THE KSB-110N SAND BLAST CABINET



#### Step 9.

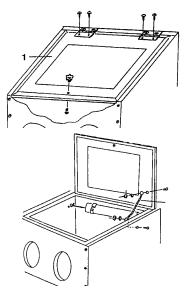
Once the hinges are assembled, place the lid under the two hinges. Assemble the front locking knob (2) and lock into position. Now secure the lid to the hinges with the screws (6), (you must apply pressure to the lid).

#### Step 10.

Open the top lid and connect the positioning chain with a screw and nut at each end as illustrated.

### OPERATION INSTRUCTIONS (KSB-110N)

Place the sand blast cabinet system near a 115V/60Hz AC electrical outlet. Make sure to check if the power source is



adequate for use with this sand blast cabinet. An electrician should be consulted if the proper outlet is not available or if the user has any questions about the condition of their electrical circuit.

Attach the air supply line from a compressor capable of maintaining 5 CFM at 80psi to the inlet connection found on the right side of the cabinet. Because of the variation in air supply systems, the air inlet coupling is not provided. Use the particular fitting that is compatible with your air supply system. \*DO NOT OPERATE THE KSB-110N SAND BLAST CABINET AT OVER 100 PSI.

Check the air supply line fittings and hose attachments to the rear of the gun. Also make sure the media supply hose is attached tightly on the nipple on the underside of the gun. Place no more than 10 pounds of abrasive media into the center of the cabinet. Excessive amounts will create clouded cabinet conditions, blow-by of media through the exhaust, or sluggish and ineffective blasting performance. With the air supply connected, if all the fittings and the joints are not leaking and the unit is plugged in, you are ready to test the sand blast cabinet. Follow the startup operation steps below.

- -Place the part into the cabinet. Always close and latch the lid after placing the part in the cabinet prior to blasting. Severe injury to the skin and eyes may result from exposure to the blast stream.
- After putting your hands into the gloves, grasp the gun and depress the trigger. This should begin the blasting flow. If no flow is seen, you may need to clear the tube by covering the gun nozzle momentarily.
- -Now you may begin blasting the part. You should move the blast stream continuously over the part in an even and circular motion. The flow should not be too hard or concentrated to avoid undesirable peening.



## ASSEMBLING THE KSB-350 SAND BLAST CABINET

Any sand blast cabinet will produce a powerful flow of abrasive particles. To avoid personal injury and property damage, read and understand this manual before assembling, operating or servicing. Failure to follow these instructions could result in operator injury as well as void the sand blasting system.

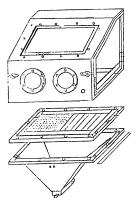
Your KSB-350 vertical sand blast cabinet is designed for cleaning, polishing and finishing with dry abrasives ONLY, such as sand, glass bead or plastic granule abrasives. The finishes can vary from coarse to fine according to the sizing of the glass bead or sand. On delicate parts, start out with minimal air pressure to avoid unnecessary peening or undesired, excessive abrasion. Abrasive media is very slippery and should be cleaned up immediately to avoid possible operator injury.

#### KSB-350 ASSEMBLY INSTRUCTIONS

- 1) Fasten the four leg supports to the four legs of the stand. Mount nuts on the inside of the legs.
- 2) Fasten frame #36 and the four legs with screws and nuts.
- 3) Fasten shelf to the holes in the middle of the legs with screws, washers and nuts.



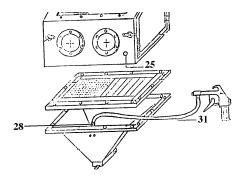
4) Place the funnel, foam tape, net frame and net in this order on top of the stand assembly and fasten with screws, washers and nuts. Punching holes through the foam tape will be necessary.

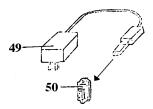


## ASSEMBLING AND OPERATING THE KSB-350 SAND BLAST CABINET



- 5) Connect the air input pipe #28 and the hose #31 to the sand input at the bottom of the sanding gun. The connector below the gun handle is the air input. The air input hose must be supplied by the operator. The outer diameter of the hose is 5/8", enter the air input hose throught the protective ring #25 at the front of the cabinet and connect to the gun.
- 6) The user can connect a vacuum to the flange and dust outlet located at the rear of the cabinet. Install dust outlet, this will allow you to reduce the amount of dust generated in the cabinet while you work.
- 7) Insert power adaptor (#49) into socket (#50) located at the rear of the cabinet and plug power adaptor to a standard 110V outlet.





#### **OPERATING THE KSB-350**

#### **IMPORTANT!**

- Close and latch the doors at all times prior to operating the sand blast cabinet.
- Clean up all spills, sand particles are very slippery.
- When using your sand blast cabinet, a 5 HP compressor is recommended. A fine grade of abrasive is recommended to prevent clogging.
- A) Select the apropriate nozzle for your needs. The sand input hose feeds from the sand input pipe and is attached to the front of the gun. The air input is attached to the base of the gun. This part of the gun is fitted with 1/4" threads which will fit most air hoses. At the front side of the cabinet is the opening for the air input hose from your compressor. Connect your hose to the bottom handle of the gun.



# OPERATINGTHE KSB-350 SAND BLAST CABINET

- B) Set the compressor's pression regulator to 40-80 PSI. Do not set the regulator above the Maximum PSI.
- C) Open the door and place material you are working with in the center of the cabinet.

#### **CLOSE DOOR LATCHES PROPERLY**

- D) Place your hands into the rubber gloves inside the cabinet. Make sure your fingers are in the proper positions and that you can easily move your hands and grip things.
- E) Grip the gun with one hand. Point the nozzle at the bottom of the cabinet and operate the gun for a moment to make sure everything is working properly. If leaking is detected, disconnect the air hose and have it repaired before using again.
- F) Hold the material you are working with in your hand. Position your fingers so that the rubber glove is not in the way of the area you are blasting. You may have to reposition your fingers many times during the blasting to ensure you have blasted every area of your material.
- G) Press the trigger of the gun to begin blasting. Aim the nozzle directly at the surface of the material. Bring the nozzle to within 2 inches from the material if necessary. Move the gun in a side-to-side or circular motion, always making sure that your fingers are not in the way.

WARNING! Do not aim the nozzle at your fingers, rubber gloves or the fluorescent light.

- H) To check on the progress of your blasting, remove your hand from the gun first and pull then pull your hand from the glove. Remove your other hand. Once the gun is OFF, open the door and inspect your material. If it is necessary to continue blasting, follow the previous steps as necessary.
- I) Once complete, remove your hands from the gloves and shut off the compressor. Open the door and remove your material.

Note: Your sand blast cabinet has a fitting for your shop vacuum in order to remove any dust created by blasting. When using the vacuum, a paper filter should be placed over the standard filter.

# MAINTAINING YOUR SAND BLAST CABINET



### \*DISCONNECT THE POWER AND THE AIR SUPPLY BEFORE ANY MAINTENANCE.

All sand blast systems are prone to plugging or wear because of the abrasive material used and the applications. The following items should be checked for wear as indicated:

#### PLUGGED CONDITIONS

The blast nozzle may become plugged from moist media. Try dislodging the media with a drill bit held in your hand. You may need to get rid of the moist media. If the abrasive pick-up hose appears to be plugged, cover the gun tip and force the air back throught the hose. Dust may fly up when you do this so make sure the lid is down and secure.

#### WEAR CONDITIONS

This is usually noted when an excessive amount of dust appears in the cabinet. Dust will occur if:

- -The abrasive blasting media is worn out. If it has lost its granular or spherical appearance or has a lot of debris from the parts being blasted and mixed in, replace media. This is usually noticed when the abrasive media that exits the nozzle looks like a smoke cloud coming instead of a stream.
- The air outlet vent is plugged or air flow is blocked. Cleaning this vent should help reduce the dust in the cabinet.

The gun parts may wear out. This is usually evident when the blast pattern is too wide and ineffective, simply replace the nozzle or the orifice.

#### REPLACING THE TRANSPARENT PVC BOARD

On the underside of the top lid, there is a 1mm replaceable transparent PVC board, when at work, if the transparent PVC board is getting misty or unclear, it may be replaced with a new one to avoid affecting the sight during work.

#### REPLACING NOZZLES

Note: When replacing a nozzle, it should be compatible with the bore. A small bore nozzle should be compatible with a small bore air jet ceramic nozzle. A bigger nozzle should be compatible with the bigger one.

#### REPLACING FLUORESCENT LIGHT

The standard fluorescent light bulb inside the protective covering can be replaced and purchased from your nearest Hardware store. Make sure the replacement fluorescent light bulb is identical to the one which came with your sand blast cabinet.



### TROUBLE SHOOTING

PROBLEM	CAUSE	REMEDY
Excessive dust in cabinet.	Exhaust vent is plugged or air flow is blocked.	Clean rear vent and keep vent away from the wall.
	Abrasive media worn.	Replace abrasive media.
	Too mush abrasive media inside cabinet.	Remove excess media.
	Loose air line or fitting connections.	Tighten fittings and make sure air lines are secure.
Uneven blasting actions.	Too mush abrasive media inside cabinet.	Remove the excess media.
	Moisture present inside the cabinet.	Check air line to make sure there is no moisture in it.
Inadequate speed or ineffeciency of blast.	Abrasive media worn.	Replace abrasive media.
	Pressure is too low.	Increase inlet pressure and make sure the control valve is fully opened.
Static electricity.	Dry weather conditions.	Leave the item being cleaned on the grating.

#### PARTS DIAGRAM & PARTS LISTS

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

### **ERRATUM 2009**



#### **KSB-110N-9 NEW GUN AND NOZZLES**

As of 2009, this Sandblast Cabinet now comes with a new gun and nozzles. To obtain a replacement gun and/or nozzles for this Sandblast Cabinet model KSB-110N-9, please use the following King Canada accessory model numbers;

### Mod. KM-035 Replacement gun



Mod. KM-036 Replacement Nozzles (4pc. kit)

