KING CANADA

10" BENCHTOP GRINDER

MOD.: KC-1090

INSTRUCTION MANUAL

IMPORTANT INFORMATION

PROOF OF PURCHASE

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

REPLACEMENT PARTS

Replacement kits 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.

PARTS DIAGRAM & PARTS LISTS

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

READ ALL INSTRUCTIONS

WARNING

1. KEEP GUARDS IN PLACE and working order.
2. REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
3. KEEP WORK AREA CLEAN. Cluttered areas and benches invite accidents.
4. DON'T USE IN DANGEROUS ENVIRONMENT. Don't use power tools in clamp or wet location, or expose them to rain. Keep work area well lighted.
5. KEEP CHILDREN AWAY. All visitors should be kept safe distance from work area.
6. MAKE WORKSHOP KID PROOF with padlocks, master switches, or by removing starter keys.
7. DON'T FORCE TOOL. It will do the job better and safer at the rate for which it was designed.
8. USE RIGHT TOOL. Don't force tool or attachment to do a job for which it was not designed.
9. WEAR PROPER APPAREL. No loose clothing, gloves, neckties, rings, bracelets, or other jewelry to get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.
10. ALWAYS USE SAFETY GLASSES. Also use face or dust mask if cutting operation is dusty. Every day eyeglasses only have impact resistant lenses, they are NOT safety glasses.
11. SECURE WORK. Use clamps or a vise to hold work when practical. It's safer than using your hand and it frees both hands to operate tool.
12. DON'T OVERREACH. Keep proper footing and balance at all time.
13. MANTAIN TOOL WITH CARE. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
14. DISCONNECT TOOLS before servicing: when changing accessories such as blades.
15. REDUCE THE RISK OF UNINTENTIONAL STARTING. Make sure switch is in OFF position before plugging in.
16. USE RECOMMENDED ACCESSORIES. Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury to persons.
17. NEVER STAND ON TOOL. Serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.
18. CHECK DAMAGED PARTS. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended functions - check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
19. DIRECTION OF FEEDS. Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
20. NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF. Don't leave tool until it comes to a complete stop.

GROUNDING

1. In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This tool is equipped with an electric cord having an equipment - grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded by a qualified electrician.
2. Do not modify the plug provided - if it will not fit the outlet, have the proper outlet installed by a qualified electrician.
3. Improper connection of the equipment - grounding conductor can result in a risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripe is the equipment - grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment - grounding conductor to a live terminal.
4. Check with a qualified electrician or serviceman if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded.
5. Use only 3-wire extension cords that have 3-prong grounding plugs and 3-pole receptacles that accept the tool's plug.
6. Repair or replace damaged or worn core immediately.
7. This tool is intended for use on a circuit that has an outlet that looks like the one illustrated in Sketch A in Figure 1. The tool has a grounding plug that looks like the plus illustrated in Sketch A in Figure 1. A temporary adapter, which looks like the adapter illustrated in Sketches B and C, may be used to connect this plug to a 2-pole receptacle as shown in Sketch B if a properly grounded outlet is not available. The temporary adapter should be used only until a properly grounded outlet can be installed by a qualified electrician. The green - colored rigid ear, lug, etc. extending from the adapter must be connected to a permanent ground such as a properly grounded outlet box.

CAUTON. In Canada only the grounding shown on Figure A will be accepted. Also the extension cords shall be CSA certified SJT type or better.

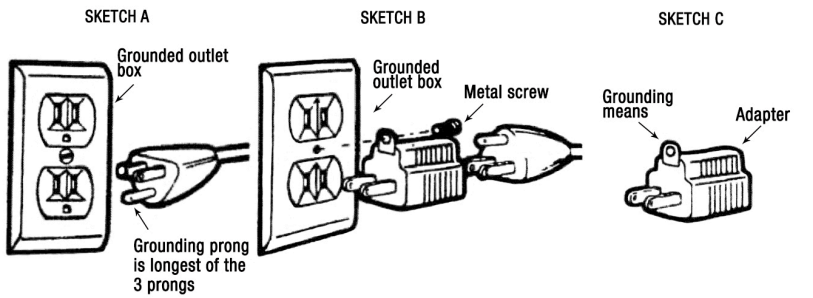


Figure (1) Grounding Methods

FOR YOUR OWN SAFETY READ INSTRUCTION MANUAL BEFORE OPERATING GRINDER

1. Wear eye protection
2. Use grinding wheel suitable for speed of grinder.
3. Standing beside the bench grinder during it is started. Not facing directly it in front.
4. One minute idle rotation is necessary for the new grinder wheel. Should the new grinder wheel breaks, it will happen within first one minute.
5. Don't take the wheel guard apart off.
6. Don't take the grinder wheel to cut anything.
7. Don't take anything to stress the grinder wheel tightly.
8. Take the file to remove the burr on the grinder wheel always.
9. Keeping the distance between the spark breaker and the grinder wheel less than 1/16 inch.
10. Connect to a supply circuit protected by a circuit breaker or time-delay fuse.

A. Replace cracked wheel immediately.
B. Always use guards and eye shield.
C. Do not over-tighten wheel nut.
D. Use only flanges furnished with this grinder.

Changing Accessories

TURN OFF AND UNPLUG THE BENCH GRINDER. USE ONLY GRINDING WHEELS THAT MEASURE 10 INCHES IN DIAMETER. THIS TOOL HAS 1 INCH ARBORS ON BOTH SIDES.

Follow the steps presented below to remove and replace an accessory.

1. Raise the eye shield up, out of the way.
2. Loosen and pull the tool rest out as far as possible. Do not remove it.
3. Loosen and pull the spark guard out as far as possible. Do not remove it.
4. Remove the five screws from the side of the wheel cover and remove the cover.
5. Insert a flat bladed screwdriver into the slot in the left end of the grinder of rotor shaft. Hold the screwdriver firmly to keep the shaft from turning as you loosen and remove the next nut in the center of the grinding wheel or other accessory.
   NOTE: If you are changing only the right side accessory, you need to remove the left wheel cover. A hole in the center of the cover permits screwdriver insertion into the slotted shaft. Unscrew the nut in the center of the grinding wheel, it may be necessary to strike the wrench sharply in the loosening direction with the heel of your hand to loosen the nut.
   NOTE: The nut on the right side of the grinder has a standard right hand thread (turn counter-clockwise to loosen). The one on the left side has a left thread (turn clockwise to loosen).
6. Remove the spacer, the wheel washer and the wheel.
7. Inspect the wheel for cracks, chips or any other visible damage (other than normal wear) and discard if such damage is found. Inspect the blotter for damage. If the blotter is missing or severely damaged, replace it with a piece of the cardboard or blotter paper cut in the same shape. NEVER USE A GRINDING WHEEL WITHOUT A BOTTLER.
8. Install the new wheel or other accessory. Be sure that both wheel washers are in place (concave sides toward wheel). See Figure 2.
   NOTE: If you are installing a wire wheel brush at this time, place the spacer as shown in Figure 3.
9. Hold as before and tighten the nut firmly but do not over-tighten. OVER-TIGHTENING CAN CRACK A GRINDING WHEEL.
10. Replace the wheel cover and its five screws.

12. Adjust the tool rest to 1/8" from the accessory and tighten securely.

13. Adjust the eye shield to a point between your eyes and the accessory.

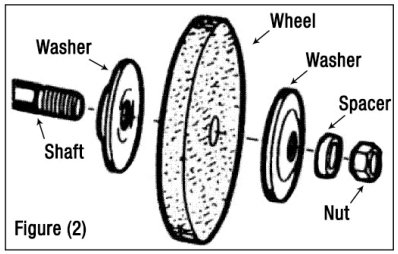


Figure (2)

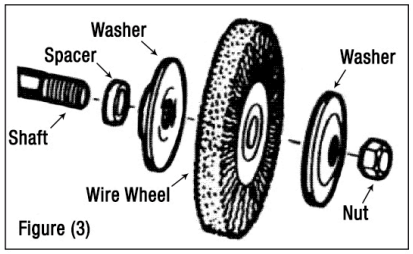


Figure (3)

DESCRIPTION	MAXIMUM SAFE SPEED (RPM)
GRINDING WHEELS	
5/8″ Face, 10″ dia, 60 Grit Medium Grinding Wheel	4 136
3/4″ Face, 10″ dia, 60 Grit Medium Grinding Wheel	4 136
5/8″ Face, 10″ dia, 36 Grit Coarse Grinding Wheel	4 136
1/2″ Face, 10″ dia, 60 Grit Medium Grinding Wheel	3 825
BUFFING WHEELS	
5/8″ Face, 10″ dia, Cotton Buffing Wheel	3 600
DRESSING ACCESSORIES	
Cutter Type Wheel Dresser	
Replacement Cutter For Dresser Set	====
WIRE WHEEL BRUSHES	
1/2″ Arbor, 5/8″ Face, 10″ Diameter	3 600

Operating Instructions

As you face your bench grinder, the wheel on the left is a medium (60 Grit) wheel for medium material removal and general purpose grinding.

The wheel on your right is a coarse (36 Grit) wheel for fast material removal.

To operate the bench grinder, put on safety glasses and turn the tool on. Allow it to reach full speed (1725 RPM) before grinding. Hold the workpiece firmly and against the tool rest. Hold very small pieces with pliers or other suitable clamps. Feed the work smoothly and evenly into the grinding wheel. Move the work slowly and avoid jamming the work against wheel. As the wheel tends to slow down you should occasionally release the pressure to let the wheel return to full speed.

Grind only the face of the grinding wheel and never the side of it. (Same few wheels are designed for side grinding and will say so on their blotters.)

CAUTION: Prolonged grinding will cause most materials to become hot. Use care when handing them.

WARNING

When using electrical tools, please follow basic safety requirements for your own safety and also to reduce risk of fire and electric shock.

PLEASE READ YOUR INSTRUCTION MANUAL CAREFULLY BEFORE BEGINNING OPERATION.

EXTENSION CORDS:

The use of extension cords of an inadequate size may create a voltage drop possibly causing damage to your motor. This is important keep your warranty valid.

ELECTRIC WIRE TYPE (AWG):

If you must use your power tool or machine at a considerable distance from the power source, an extension cord or adequate size must be used for safety and to prevent loss of power and over heating. Use the table below to determine the minimum wire size required.

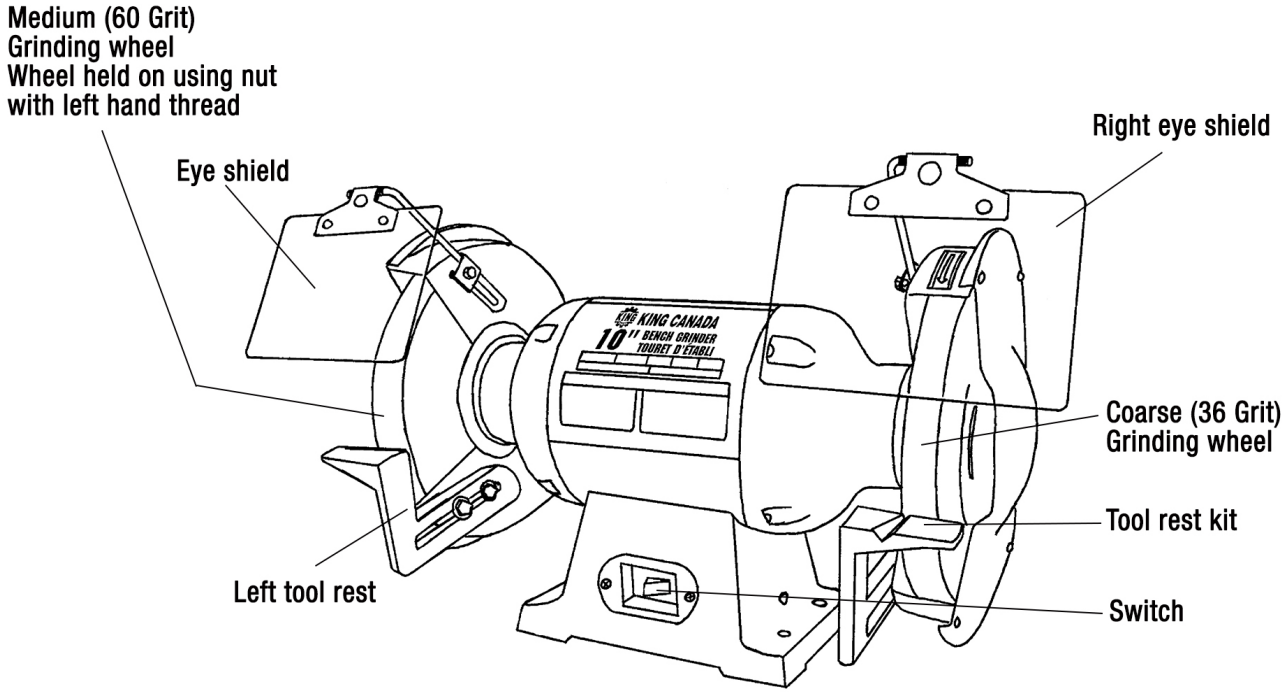
CHART FOR MINIMUM WIRE SIZE (AWG) OF EXTENSION CORDS				
Total Extension Cord Length (Feet)	25	50	75	100
Gauge (120V)	16	14	12	10

NOTE:

Please verify the motor voltage and follow the recommended electric standards for a wall outlet.

Ex.: 10 Amp motor/110V = 25 Amp wall outlet

FOR A CONNECTION ON 220V, PLEASE CONTACT YOUR ELECTRICIAN.



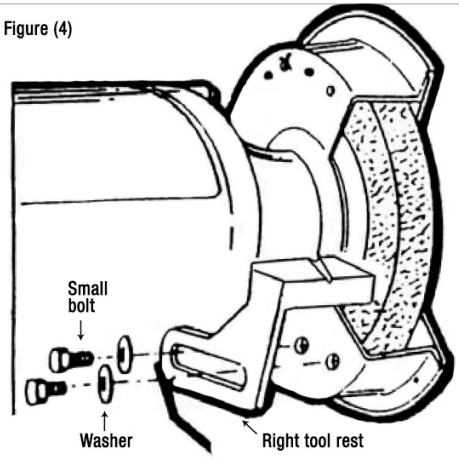
SWITCH (Wear Eye Protection)

The switch is located on the front of the grinder near the bottom. To turn the tool "ON", depress the rocker switch at the top near the word "ON". To turn the tool "OFF", depress the lower portion of the switch rocker, near the word "OFF".

INSTALLING TOOL RESTS

TURN OFF AND UNPLUG THE BENCH GRINDER
Remove the tool rests from the top portion of the poly-foam carton liner and install them to the wheel guards as shown in the figure. Use the bolts and washers you removed from the bag to secure them in place, shown in the Figure 4.
NOTE: There is a left and right tool rest. Refer to Figure 4 to ensure that you install them correctly.
When in actual size, the tool rests should be adjusted to within 1/8" of the grinding wheel or other accessory being used.

Figure (4)



REPLACEMENT PARTS

Illustrated below are the available replacement kits for your 10″ Bench Grinder. They are as follows:

1. Eye Shield Kit (Part number 2510900151). See Figure 5. This eye shield kit includes Left and Right eye shields and all the parts necessary for assembly. See Figure 6 below.
2. Tool Rest Kit (Part number 2510900311). This tool rest kit includes Left and Right tool rests and all parts necessary for assembly. See Figure 7 below.
3. Switch (Part number 2510900321).

A variety of grinding wheels are available at your nearest King Canada dealer.

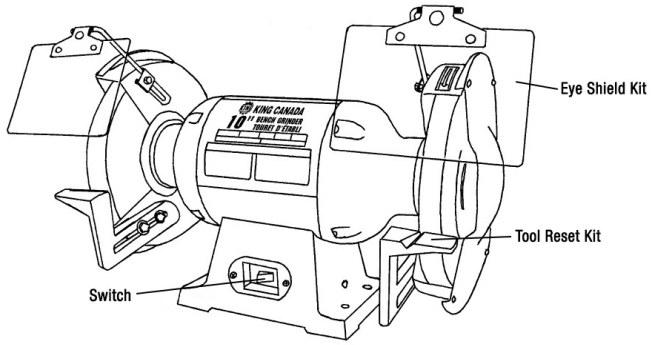


Figure (5)

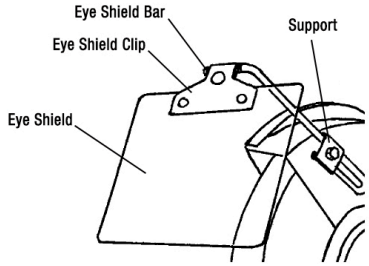


Figure (6)

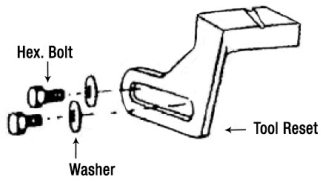


Figure (7)