



17" LONG STROKE DRILL PRESS WITH SAFETY GUARD

01/2017



TRU-CUT
DUAL LASER GUIDE SYSTEM



MODEL: KC-119FC-LS

INSTRUCTION MANUAL

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WARRANTY INFORMATION



**2-YEAR
LIMITED WARRANTY
FOR THIS 17" DRILL PRESS**

**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 purchase 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.

NOTE TO USER

This instruction manual is meant to serve as a guide only. Specifications and references are subject to change without prior notice.

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 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 type 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, 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 ENVIRONMENT.

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. USE PROPER SPEED.

A tool will do a better and safer job when operated at the proper speed.

10. USE RIGHT TOOL.

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

11. 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.

12. ALWAYS WEAR SAFETY GLASSES.

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

13. DON'T OVERREACH.

Keep proper footing and balance at all times.

14. MAINTAIN TOOL WITH CARE.

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

15. DISCONNECT TOOLS.

Before servicing, when changing accessories or attachments.

16. AVOID ACCIDENTAL STARTING.

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

17. USE RECOMMENDED ACCESSORIES.

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

18. 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.

19. 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.

20. NEVER LEAVE MACHINE RUNNING UNATTENDED.

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

SPECIFIC SAFETY INSTRUCTIONS FOR DRILL PRESS

1. TO AVOID INJURY FROM PARTS BEING THROWN BY THE SPRING

Follow the instructions exactly as given and shown in "Adjusting the quill return spring".

2. USING A DRILL PRESS VISE

When using a drill press vise, always fasten it to the table.

3. NEVER DO "FREEHAND WORK"

Never do any work "Freehand" (hand holding the workpiece rather than supporting it on the table) except when you have polishing to do.

4. SECURE the lock head to the column, table support to column and table to table support before operating the drill press.

5. NEVER move the head or table while the drill press is running.

6. USE THE RECOMMENDED SPINDLE SPEED for the specific operation and workpiece material. Check the panel inside the guard cover for drill information. For accessories, use the instructions provided with the accessories.

7. NEVER climb on the drill press table, it could break or pull the entire drill press down on you.

ELECTRICAL INFORMATION



WARNING

ALL ELECTRICAL CONNECTIONS MUST BE DONE BY A QUALIFIED ELECTRICIAN. FAILURE TO COMPLY MAY RESULT IN SERIOUS INJURY! ALL ADJUSTMENTS OR REPAIRS MUST BE DONE WITH THE MACHINE DISCONNECTED FROM THE POWER SOURCE. FAILURE TO COMPLY MAY RESULT IN SERIOUS INJURY!

POWER SUPPLY

WARNING: YOUR DRILL PRESS MUST BE CONNECTED TO A 120V WALL OUTLET, WITH A MINIMUM 15-AMP. BRANCH CIRCUIT AND USE A 15-AMP TIME DELAY FUSE OR CIRCUIT BREAKER. FAILURE TO CONNECT IN THIS WAY CAN RESULT IN INJURY FROM SHOCK OR FIRE.

GROUNDING

Your drill press must be properly grounded. Not all outlets are properly grounded. If you are not sure if your outlet is properly grounded, have it checked by a qualified electrician.

WARNING: IF NOT PROPERLY GROUNDED, THIS DRILL PRESS CAN CAUSE ELECTRICAL SHOCK, PARTICULARLY WHEN USED IN DAMP LOCATIONS. TO AVOID SHOCK OR FIRE, IF THE POWER CORD IS WORN OR DAMAGED IN ANY WAY, HAVE IT REPLACED IMMEDIATELY.

If this drill press should malfunction or breakdown, grounding provides a path of least resistance for electric current, to reduce the risk of electric shock. This drill press is equipped with a cord having an equipment-grounding conductor and grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

WARNING: TO MAINTAIN PROPER GROUNDING, DO NOT REMOVE OR ALTER THE GROUNDING PRONG IN ANY MANNER.

120V OPERATION

As received from the factory, your drill press is ready to run for 120V operation. This machine is intended for use on a circuit that has an outlet and a plug which looks like the one illustrated in Fig.1.

WARNING: DO NOT USE A TWO-PRONG ADAPTOR(S) FOR THEY ARE NOT IN ACCORDANCE WITH LOCAL CODES AND ORDINANCES. NEVER USE IN CANADA.

EXTENSION CORDS

The use of any extension cord will cause some loss of power. If you do not have a choice, use the table in Fig.2 to determine the minimum wire size (A.W.G-American Wire Gauge) extension cord needed. Use only 3-wire extension cords which have 3-prong grounding type plugs and 3-hole receptacles which accept the tool's plug.

For circuits that are further away from the electrical circuit box, the wire size must be increased proportionately in order to deliver ample voltage to the drill press motor. Refer to Fig.2 for wire length and size.

TURNING THE DRILL PRESS ON/OFF

This Drill Press comes with a 2 step activation safety switch, refer to Fig.3, which starts and stops the machine. To turn the Drill Press on;

1. Push up on the emergency stop button (A) Fig.3 and lift the switch cover (B) upwards as shown.
2. Press the green On button (C) to start the Drill Press.
3. To stop the Drill Press, you can either press the red Off button (D) or lower the switch cover and push the large emergency stop button (E).

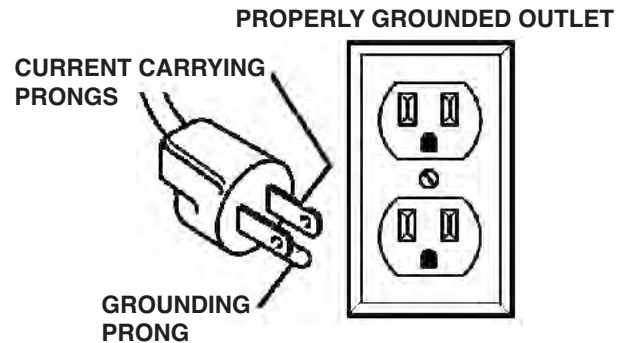


Figure 1

Tool's Amperage Rating	Cord Size in A.W.G.			
	25	50	100	150
3-6	18	16	16	14
6-8	18	16	14	12
8-10	18	16	14	12
10-12	18	16	14	12
12-16	14	12	-	-

Figure 2

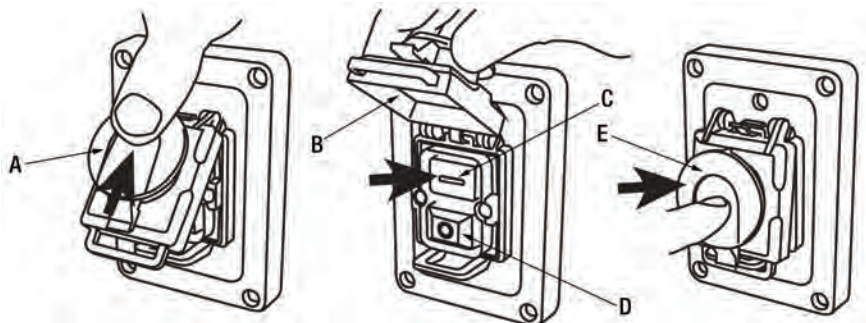


Figure 3



GETTING TO KNOW YOUR DRILL PRESS

1. Cast-iron base.
2. Table lock handle.
3. Tilting table.
4. 3/4" chuck.
5. Limit switch safety guard.
6. 2 step activation safety switch.
7. Pulley cover.
8. Motor belt tension lever.
9. Head locking set screws (2)
10. Dual laser attachment.
11. Feed handle (1 of 3)
12. Column and rack
13. Table raising/lowering handle
14. Bevel angle scale
15. Safety guard lock knob
16. Dual laser attachment switch
17. Spring return
18. Depth stop rod with depth scale
19. Table support lock handle
20. Column and rack locking collar
21. Locking set screw (1 of 2)

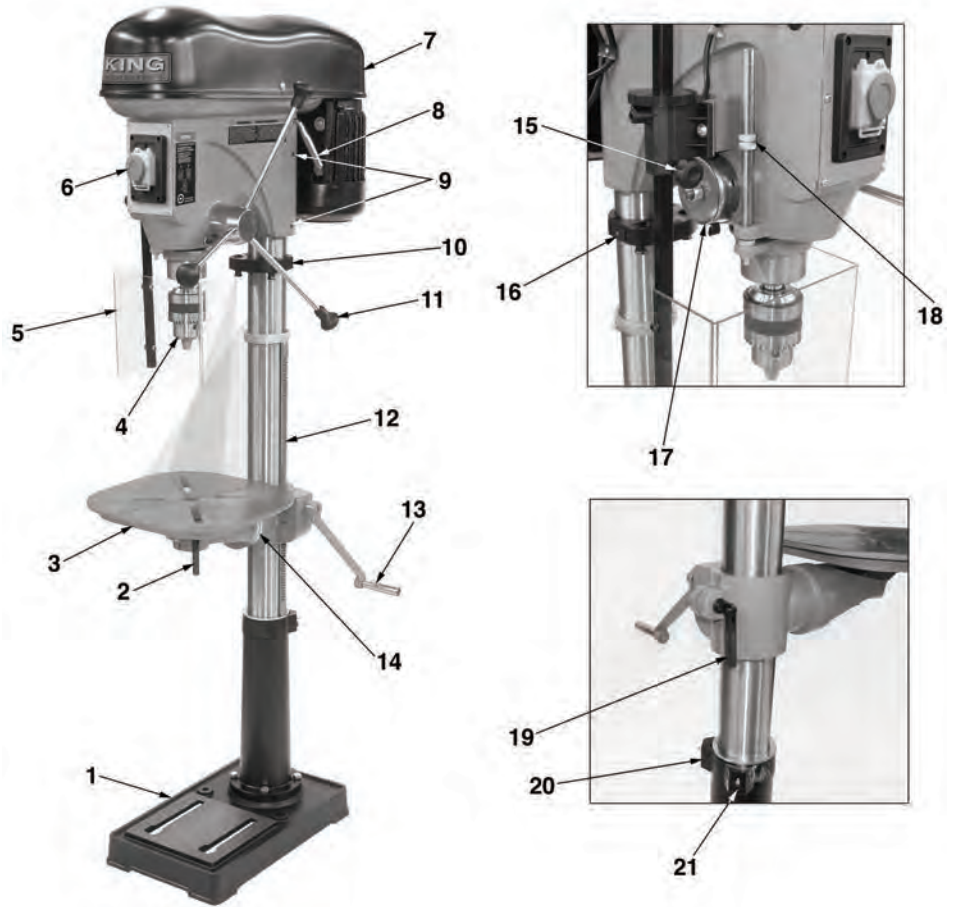


FIGURE 4

SPECIFICATIONS

MODEL.....	KC-119FC-LS
VOLTAGE	110V/220V (prewired 110V)
AMPS	12.5A/6.25A
MOTOR R.P.M.	1725
Hz/PHASE.....	60 Hz / 1 PHASE
CHUCK CAPACITY	3/4"
SWING	16-15/16"
MAX. DISTANCE FROM CHUCK TO THE COLUMN.....	8-7/16"
MAX. DISTANCE FROM CHUCK TO THE TABLE	23-3/4"
MAX. SPINDLE TRAVEL.....	.6"
NUMBER OF SPEEDS/RANGE OF SPEEDS	12 (255-2750 RPM)
SPINDLE TAPER	MT#3
WEIGHT	230 LBS

FIGURE 5

ASSEMBLY



BASE, COLUMN & TABLE ASSEMBLY

- 1) Position the base (A) Fig.6 on the floor. Remove the protective covering and discard.
- 2) Remove protective sleeve from the column & column support (B) and discard. Place the column assembly on the base, align the holes in the column support with the holes in the base.
- 3) Locate four long hex. bolts from the parts bag.
- 4) Install a hex. bolt (C) in each hole through the column support and the base and tighten with the adjustable wrench.

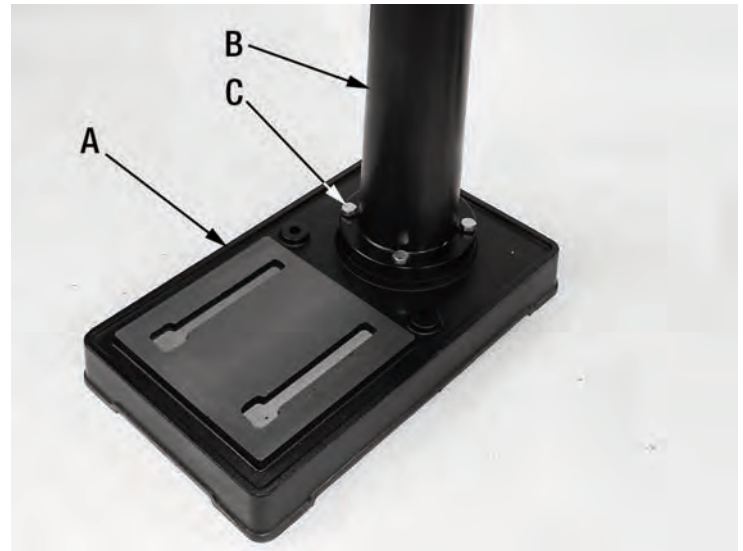


FIGURE 6

- 5) Loosen pan head screw (A) Fig.7 in column collar (B) using a Phillips screwdriver and then remove collar (B) and rack (C) from the column.

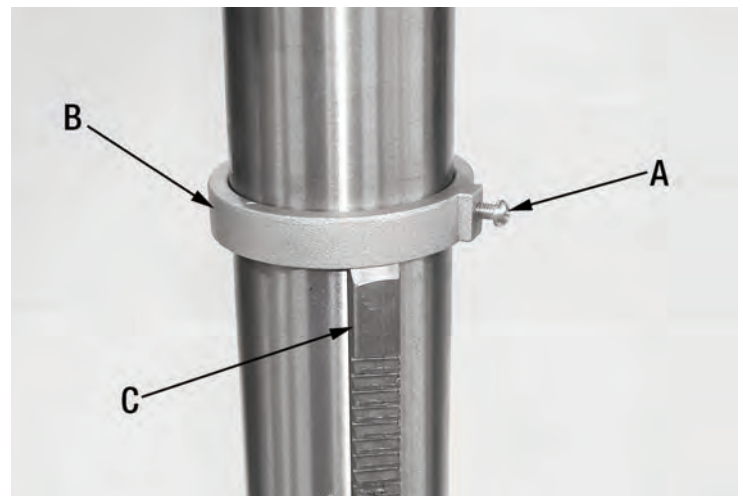


FIGURE 7

- 6) Slide rack (A) Fig.8 down through the large round opening in the table support (B). Engage rack in gear mechanism found inside the opening of the table support.

- 7) While holding the rack (A) Fig.8 and table support (B) in an engaged position, slide both down over the column (C). Slide rack down the column until the rack is positioned against the lower column support (D).

- 8) Replace column collar (B) Fig.7 and position it bevel side down over the rack (C). Tighten pan head screw (A) in collar. To let the rack slide when the table is swung to the left or right around the column, the collar must sit loosely over the rack and should not be angled on the column. Only tighten pan head screw enough to keep the collar in place, otherwise the collar may break due to excessive pressure.

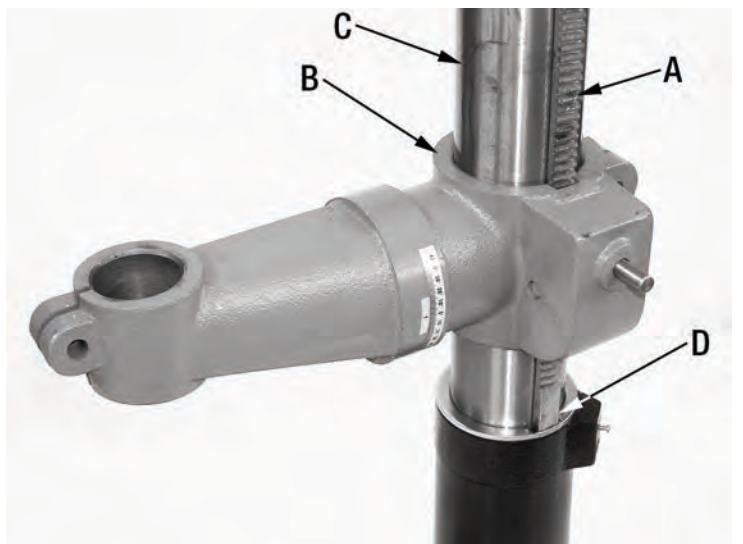


FIGURE 8



ASSEMBLY

BASE, COLUMN & TABLE ASSEMBLY continued...

- 9) Locate the crank handle (A) Fig.9 and install it on the worm gear shaft on the side of the table support. Tighten the hex. bolt (B) on the flat section of the worm gear shaft.
- 10) Install the table support lock handle (C) Fig.9 to the table support as shown.

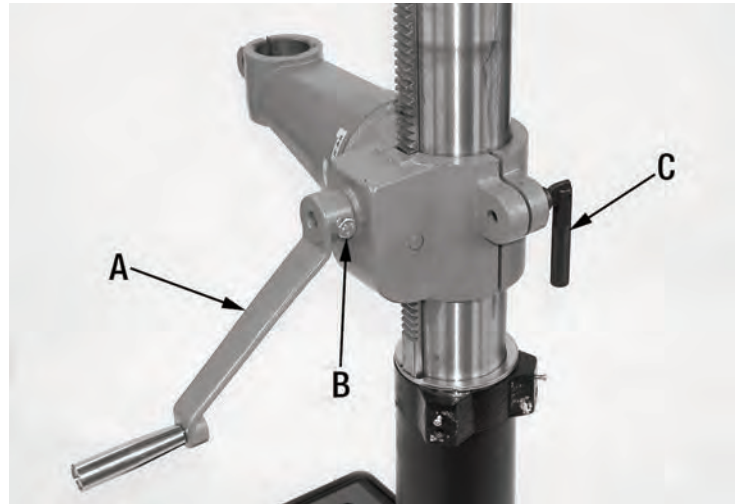


FIGURE 9

- 11) Install the table lock handle (A) Fig.10 to the table support (B) as shown. Do not tighten.
- 12) Slide the table (C) Fig.10 into the opening of the table support. Tighten table lock handle (A).

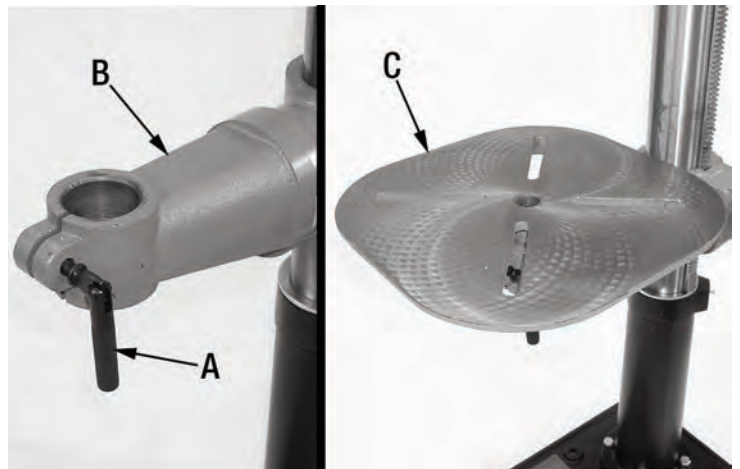


FIGURE 10

INSTALLING THE HEAD

Warning! The drill press head is very heavy, it is not recommended to attempt installation of the head by yourself, obtain help.

- 1) Carefully lift the head (A) Fig.11 above the column (B) and slide it down on the column as far as it will go. Align the head with the table and the base.
- 2) Using a 5 mm hex. key, tighten both head set screws (C) on the right side of the head.

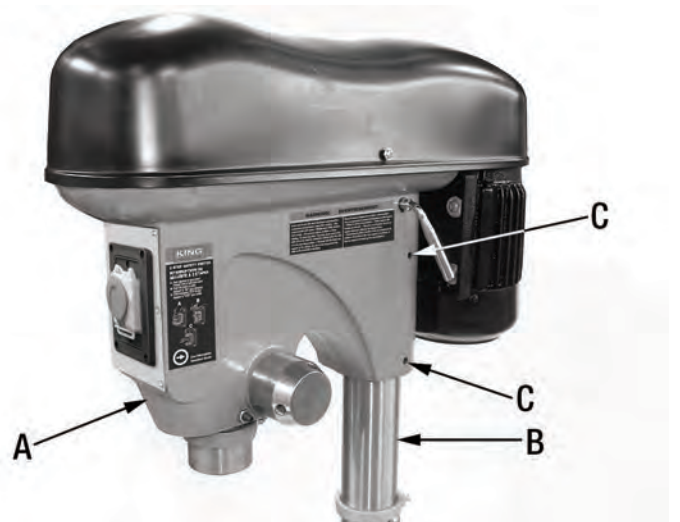


FIGURE 11

ASSEMBLY



INSTALLING PULLEY COVER KNOB OR LOCKING PULLEY COVER

- 1) For safety reasons, user may be required to lock the pulley cover (B) Fig.12 to prevent easy access to the pulleys. This can be done by using the small pan head screw (A) which came installed.
- 2) If safety is less of a concern, you can install the lock knob (C) Fig.12 to the pulley cover (B) instead.

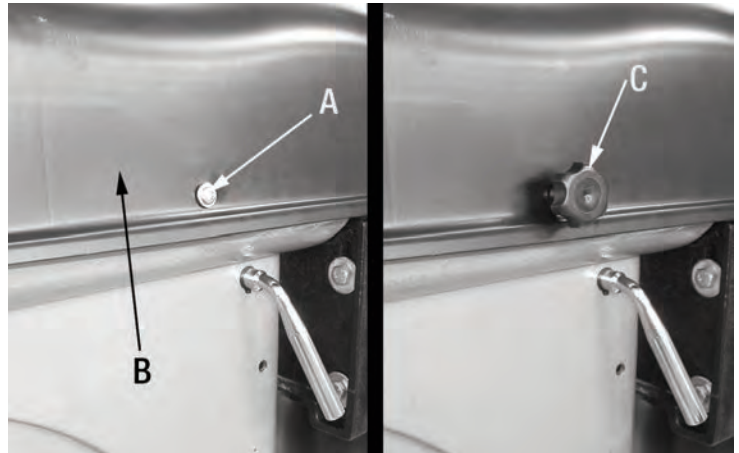


FIGURE 12

INSTALLING THE FEED HANDLES

- 1) Locate the three feed handles (A) Fig.13 among the loose parts.
- 2) Screw the feed handle tightly into the threaded holes in the hub (B).



FIGURE 13

INSTALLING AND USING THE LIMIT SWITCH PROTECTED SAFETY GUARD

The limit switch safety guard is intended to protect the operator during drilling operations. If the safety guard is not positioned in its closed position (in front of the drill chuck), the safety guard limit switch will prevent the drill press from starting. Close the safety guard and then press the green On button to start. If the safety guard is opened during a drilling operation the drill press will shut off automatically, the safety guard will need to be closed and the green On button will need to be pressed to restart drill press.

- 1) Mount the limit switch bracket (A) Fig.14 to the mounting bracket (B) using 2 pan head screws (C) as shown.

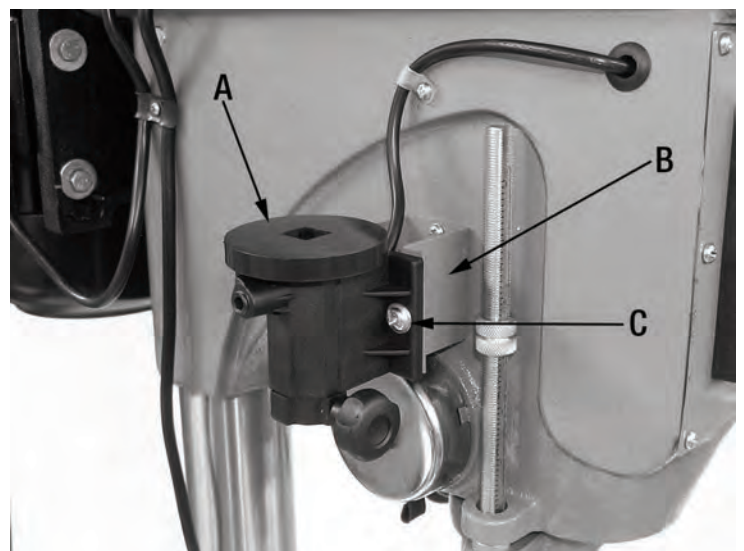


FIGURE 14



ASSEMBLY & ADJUSTMENTS

INSTALLING AND USING THE LIMIT SWITCH PROTECTED SAFETY GUARD continued...

- 2) Remove cap screw (A) Fig.15 from the bar and safety guard assembly (B).
- 3) Slide the bar and safety guard assembly (B) up into the limit switch bracket (C). Reinstall cap screw (A).
- 4) Adjust the height of the bar and safety guard assembly and secure its position by tightening lock knob (D).

It is recommended to test the limit switch safety guard before any drilling operation. Turn drill press on and open the safety guard, the drill press MUST shut off. If it doesn't, the safety guard needs to be reinstalled correctly.

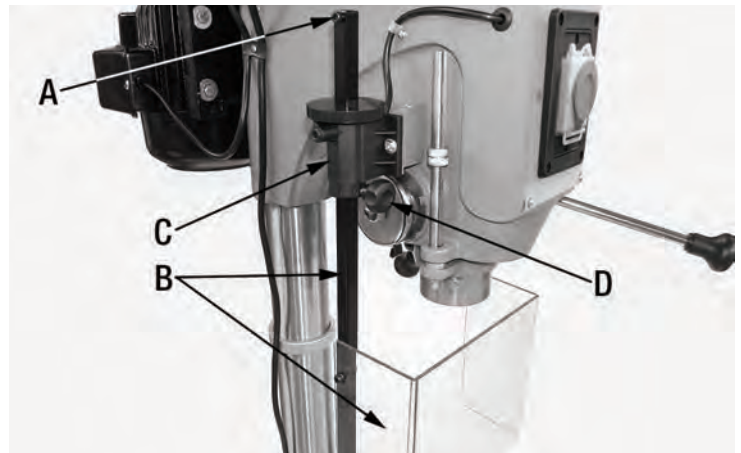


FIGURE 15

INSTALLING THE CHUCK

- 1) Locate the 3/4" chuck (A) Fig.16 and arbor (B) in the box of parts.
- 2) Clean out the tapered hole in the chuck, also clean the arbor nose with a clean cloth. Make sure there are no foreign particles sticking to the surfaces. The slightest piece of dirt on the arbor nose or the chuck will prevent the chuck from seating properly. This will cause the drill to "wobble".

NOTE: If the tapered hole in the chuck is extremely dirty, use a cleaning solvent on a clean cloth.

- 3) Push the chuck up on the arbor nose and arbor nose up into the drill spindle (C) as far as they will go.
- 4) Turn the chuck sleeve clockwise and open the chuck jaws completely.
- 5) Lightly tap the nose of the chuck with a piece of wood to insure the proper seating of the chuck on the arbor.

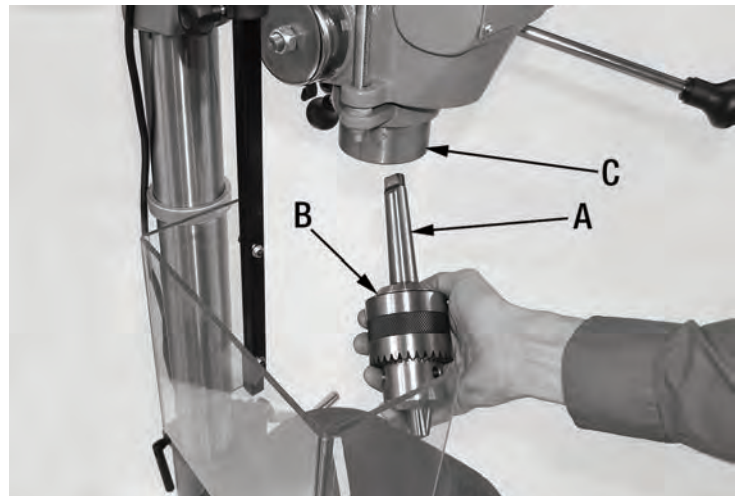


FIGURE 16

REMOVING THE CHUCK & ARBOR

- 1) Lower the quill using the feed handles. Align key holes in spindle and quill (A) Fig.17 as shown by rotating the chuck (C) by hand.
- 2) Insert drift key (B) into key holes in the quill.
- 3) Tap key drift key lightly until the chuck and arbor fall out of the spindle.

NOTE: Place one hand below the chuck to catch it when it falls out.

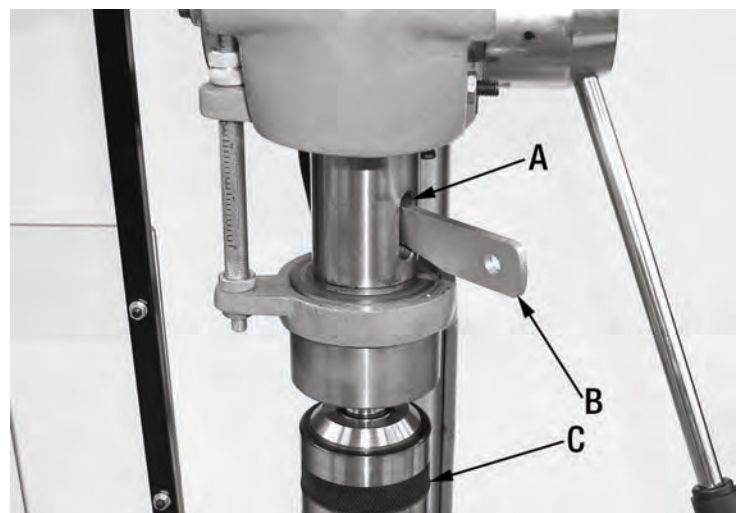


FIGURE 17

ASSEMBLY & ADJUSTMENTS



INSTALLING DUAL LASER GUIDE ATTACHMENT

WARNING! Do not look directly at the laser beams. Do not aim the laser beams at any person or any object other than your workpiece.

NOTE: This dual laser guide attachment supplied with this drill press is universal, 4 different mounting brackets are supplied. This allows the user to install the dual laser guide attachment to this drill press or other drill presses.

- 1) Place appropriate mounting bracket (B) Fig.18 and laser attachment (A) around the column as shown and fix them together using two pan head screws (C).
- 2) The dual laser switch (D) is located on the right side of the laser attachment.
- 3) Slide the battery compartment cover (E) forward and remove it, insert two AAA batteries (not included) and reposition battery compartment cover.
- 4) To adjust the position of the dual lasers, simply turn and move the laser heads (F) to the desired position.

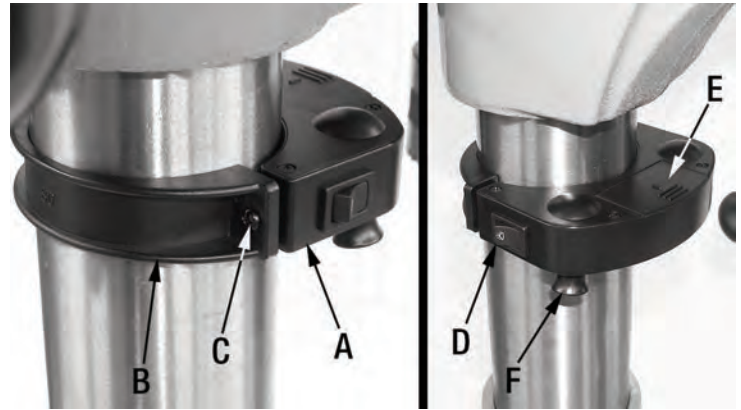


FIGURE 18

TENSIONING BELTS / SETTING DESIRED DRILLING SPEED

NOTE: The drill press is shipped with the belts installed, but they should be properly tensioned before use.

- 1) Lift the guard (A) Fig.19 and keep it opened.
- 2) Loosen the belt tension set screws (B) located on both sides of the drill press head. Release tension to the motor belt by turning belt tension handle (C) counterclockwise. The motor pulley (D) can now be removed.
- 3) Loosen hex. bolts (A) Fig.20 which secure the centre pulley (B). Slide pulley to the left to loosen tension on the spindle pulley. The spindle belt (C) can now be removed.
- 4) Choose the desired speed for your drilling operation, and move the spindle and motor belts to the indicated position on the pulleys as indicated in the speed chart below. You can also refer to the speed chart on the inside of the belt guard Fig.20.
- 5) Once both belts are positioned on the pulleys, turn the belt tension handle (C) Fig.19 clockwise to apply tension to the belts.

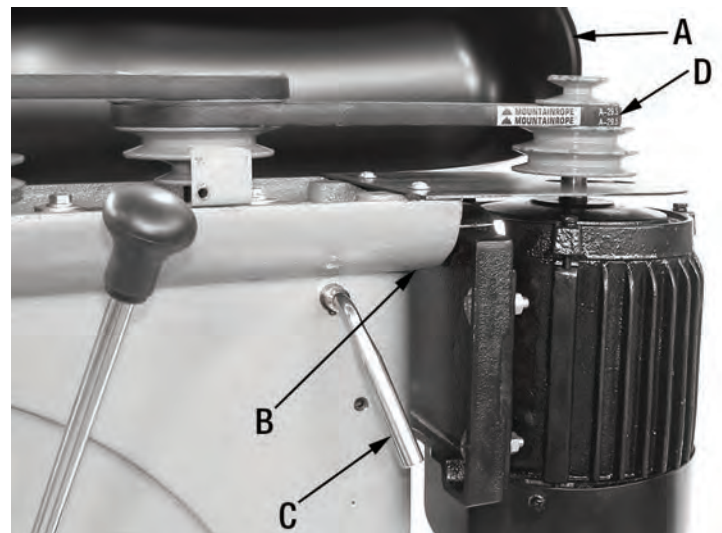


FIGURE 19

NOTE: The belts should deflect approximately 1/2" by applying finger pressure at the mid-point of the belts between the pulleys.

- 6) Retighten hex. bolts (A) Fig.20 to secure centre pulley.
- 7) Retighten the belt tension set screws (B) Fig.19.
- 8) Close the belt guard.
- 9) If the belts slip while drilling, reajust the belt tension.

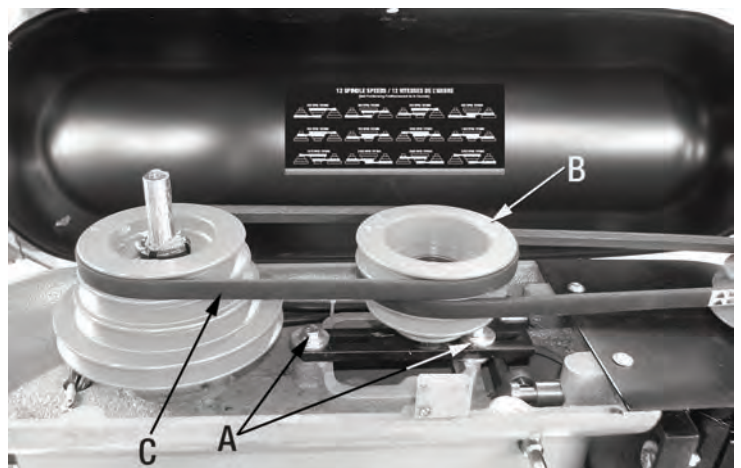
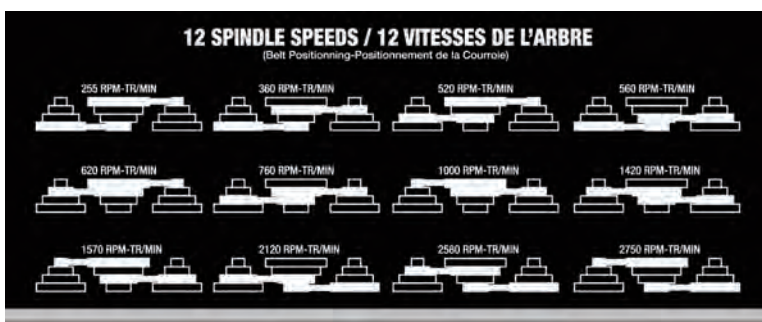


FIGURE 20





ADJUSTMENTS & OPERATION

ADJUSTING THE TABLE SQUARE TO THE HEAD

- 1) Insert a precision round steel rod (A) Fig.21 approximately 3" long into the chuck and tighten.
- 2) With the table (B) raised to working height and locked into position, place a combination square (C) flat on the table beside the rod.
- 3) If an adjustment is necessary, loosen the table bevel lock bolt (A) Fig.22 with an adjustable wrench and the set screw (B) with a hex. key. This adjustment is located under the table.
- 4) Align the table square to the rod by tilting the table.
- 5) Retighten the table bevel lock bolt and set screw.

TILTING THE TABLE

To use the table in a bevel position, loosen the bevel lock hex. bolt (A) Fig.22 with an adjustable wrench. Then loosen the set screw (B) with a hex. key. Tilt the table to the desired angle by reading the bevel scale (C) on the table support. Retighten the bevel lock bolt and set screw.

FEEDING

Pull down the feed handles with only enough effort to allow the drill to cut. Feeding too slowly might cause the drill to burn...feeding too rapidly might stop the motor...cause the belt or drill to slip... tear the workpiece loose or break the drill bit.

HOLE LOCATION

Make an indentation in the workpiece where you want the to drill a hole using a centre punch or a sharp nail. Before turning the switch ON, bring the drill bit down to the workpiece, lining it up with the hole location.

POSITIONING THE TABLE AND WORKPIECE

Lock the table to the column in a position so that the tip of the drill is just a little above the top of the workpiece. Always place a piece of back-up material (wood, plywood) on the table underneath the workpiece. This will prevent splintering or making a heavy burr on the underside of the workpiece as the drill breaks through. To keep the back-up material from spinning out of control, it must come in contact with the left side of the column.

WARNING! To prevent the workpiece or the back-up material from being torn from your hand while drilling, position them against the left side of the column. If the workpiece or the back-up material are not long enough to reach the column, clamp them to the table. Failure to do this could result in personal injury.

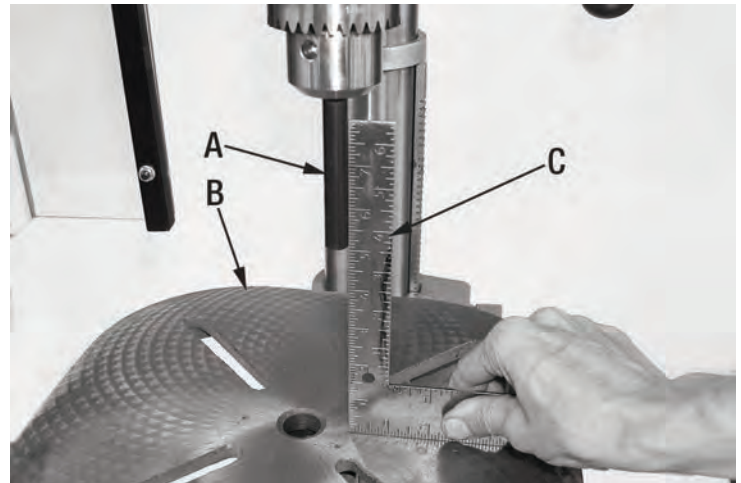


FIGURE 21

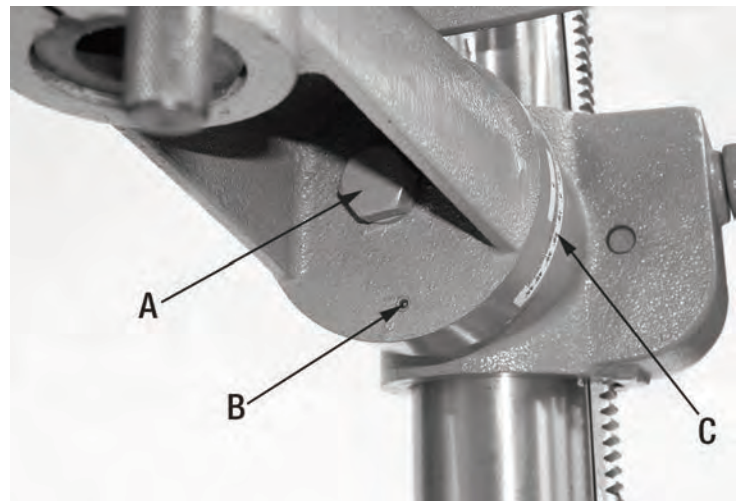


FIGURE 22

MAINTENANCE / TROUBLESHOOTING



MAINTENANCE

WARNING! For your own safety, turn the switch “OFF” and remove the plug from the power source before maintaining or lubricating your drill press.

- Keep the Drill Press clean and free of dust and debris. Painted surfaces can be wiped with a damp rag.
- Periodically lubricate all sliding or moving parts including the column and rack (A & C) Fig.8 and the quill (C) Fig.16 (use any all purpose grease, available at any hardware store).
- Lightly grease the belt tension slide bars (A) Fig.23 every two months or as needed depending on frequency of use.
- Bearings in the quill and the V-belt pulleys are sealed and permanently lubricated – no further lubrication is required.
- Frequently blow out any dust that may accumulate inside the motor. After operation, remove chips or dirt on the machine and apply a coat of furniture-type paste wax to the table and the column, this will help keep the surfaces clean and free of rust.

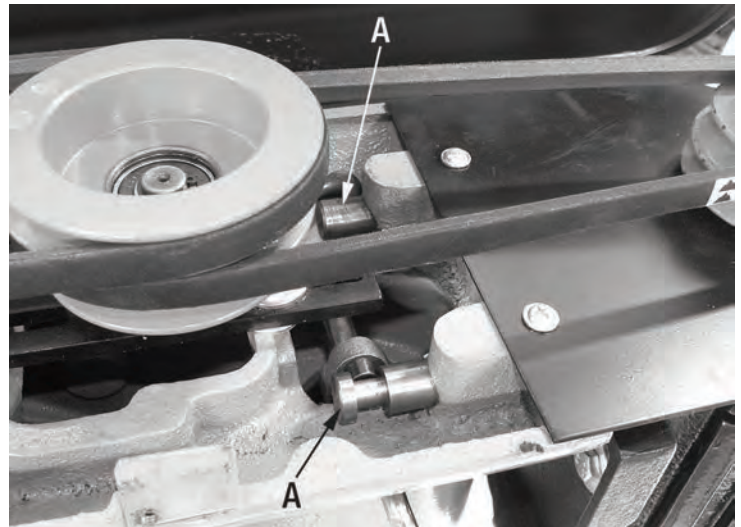


FIGURE 23

PROBLEM	PROBABLE CAUSE	SOLUTION
Noisy operation.	<ol style="list-style-type: none"> 1. Incorrect belt tension. 2. Dry spindle. 3. Loose spindle pulley. 4. Loose motor pulley. 	<ol style="list-style-type: none"> 1. Adjust the tension. 2. Lubricate the spindle. 3. Tighten the retaining nut on the pulley as needed. 4. Tighten the set screws which hold the pulleys in place.
Drill bit burns.	<ol style="list-style-type: none"> 1. Incorrect speed. 2. Chips not coming out of hole. 3. Dull drill bit. 4. Feeding too slow. 5. Not lubricated. 	<ol style="list-style-type: none"> 1. Change the speed. 2. Retract the drill bit frequently to clear the chips. 3. Resharpener the drill bit. 4. Feeding too fast...allow the drill bit to cut. 5. Lubricate the drill bit with cutting or motor oil.
Wood splinters on underside of workpiece.	<ol style="list-style-type: none"> 1. No “Back-up material” under the workpiece. 	<ol style="list-style-type: none"> 1. Support the workpiece or clamp it.
Workpiece torn loose from hand.	<ol style="list-style-type: none"> 1. Not supported or clamped properly. 	<ol style="list-style-type: none"> 1. Support the workpiece or clamp it.
Drill bit binds in workpiece.	<ol style="list-style-type: none"> 1. Workpiece is pinching the drill bit or there is an excessive feeding pressure. 2. Improper belt tension. 	<ol style="list-style-type: none"> 1. Support the workpiece or clamp it. 2. Adjust the tension of the belt.
Excessive drill bit wobbling.	<ol style="list-style-type: none"> 1. Bent drill bit. 2. Worn spindle bearings. 3. Drill bit is not properly installed in the chuck. 4. Chuck not properly installed. 	<ol style="list-style-type: none"> 1. Use a straight drill bit. 2. Replace the bearings. 3. Install drill bit properly. 4. Install chuck properly.
Quill returns too fast or too slow.	<ol style="list-style-type: none"> 1. Spring has improper tension. 	<ol style="list-style-type: none"> 1. Adjust the spring tension.
Chuck will not stay attached to the spindle. It falls off when trying to install it.	<ol style="list-style-type: none"> 1. Dirt, grease or oil on the tapered inside surface of the chuck or on the spindle tapered surface. 	<ol style="list-style-type: none"> 1. Using a household detergent, clean the tapered surfaces of the chuck and the spindle to remove the dirt, grease and oil.