

# Recommended Spare Parts List

The following parts should be kept on hand for your **Baker Bantam Notcher**:

Part Number	Description	Quantity
141126	Wedgeblock	32
141124	Square cutters	32
141125	Rounds	8
111005	Drive belts	4
101145	2 <sup>3</sup> / <sub>16</sub> " Pillow block bearings	2

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# ***Introduction***

Congratulations on the purchase of your new **Baker Bantam Notcher**. Your **Baker** should provide you with many years of profitable operation.

The **Baker Bantam Notcher** has been designed to be sturdy, simple and easy-to-use. We hope this manual will familiarize you enough with the machine that you will be able to easily make any adjustments that may ever become necessary.

If you have any questions or comments, please feel free to contact us.

## **Baker Products**

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PRODUCT SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.
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# ***Maintenance***

## ***Daily***

Inspect notcher head and inserts for any visible damage.

Check belt tension.

Clean machine after use.

Inspect and ensure that machine has adequate dust/chip collection to prevent excess buildup or blockage. Waste must not be allowed to build up inside dust chute or around motor, drive belt, pulleys, etc.

## ***Weekly***

Check cutter assembly for tightness.

Grease 2 $\frac{3}{16}$ " pillow block bearings on cutter head driveshaft.

# Changing Drive Belts

- 1: Turn off power, lock out, and tag out.
- 2: On the left side of the cutter head, there is a belt guard that houses the drive pulleys and the drive belts. Loosen the mounting bolts on both sides of the belt guard (See Figure G below).
- 3: To relieve belt tension, loosen and remove the mounting bolts on the yellow cross beam, located directly behind the electrical panel.

Belt Guard Mounting Bolt Locations



- 4: Remove the old belts and replace with four new B52 drive belts.
- 5: Tension the drive belts by pushing down on the yellow cross beam and replace and tighten the mounting bolts.
- 6: Remount the belt guard.

**Figure G:** Belt Guard

# Warranty

Ellington Industrial Supply, Inc. machinery is warranted against defects in material or workmanship for a period of not more than one year, starting from the date of shipment. The warranty period of one (1) year covers all items manufactured by and at our manufacturing facilities including structural frame, cowlings, doors, shafting, dust chutes, belt extenders, and conveyor wheels, A warranty of six (6) months will cover miscellaneous vendor-purchased-supplied items including bearings, chain, sprockets, hydraulic components, etc. A warranty period of ninety (90) days, beginning on the shipment date is provided on all electrical parts. All electrical components and wiring has been installed in accordance with the National Electrical Code (NEC) of the United States of America. **Ellington Industrial Supply, Inc. does not warranty this machine to meet any other requirements or jurisdiction of any electrical code of any other state, municipality, or other country.** No warranty is provided on any electrical components or parts if equipment is powered or connected to a roto-phase electrical converter in order to create a three phase power supply for operational current from a single phase source.

Parts claimed defective must be returned freight prepaid, to our plant in Ellington, Missouri. Any part determined defective due to faulty workmanship or materials will be replaced or repaired (at our option) free of charge, F.O.B. our plant. This warranty does not cover expendable items (i.e. drive belts, band wheels, conveyor belting, blades, guides, etc.). Except as expressly provided herein, this warranty is in lieu of all other warranties, expressed or implied, including a warranty of merchantability or fitness for a particular purpose. This warranty is "void" if the unit has been tampered with, modified, altered, or operated with parts other than supplied or recommended by Ellington Industrial Supply, Inc. In no event shall Ellington Industrial Supply, Inc. be liable for special, indirect, incidental or consequential damages, however arising, including but not limited to, the loss of earnings or the cost of downtime.

Ellington Industrial Supply, Inc. does not warranty this machine to meet requirements of any safety codes of any state, municipality or other jurisdiction, and the purchaser assumes all risk and liability whatsoever resulting from the use thereof whether used singularly or in conjunction with other machinery or apparatus, including, but not limited to, all matters resulting from sawdust generation.

Any change in materials, design, or performance intended to improve any product of Ellington Industrial Supply, Inc. shall not obligate Ellington Industrial Supply, Inc. to modify any previously manufactured equipment.

This warranty is given solely to the "original purchaser" of the equipment and is in no way to be expressed or implied that it is transferable to any other parties without the written consent and approval from the CEO or Sales Manager of Baker Products.

## ***Service Policy***

In the event that you have any problems, you can call us at (573) 663-7711 any time between 7:30 AM and 5:00 PM (CST), Monday through Friday. A member of our trained staff will answer any questions you may have. We charge nothing for this service.

A member of our service department will visit your plant at your request. He will set your notcher to run at peak performance and can train your staff to keep it in top operating condition. We also offer installation, check out and start up support as required to get you and your equipment off to a new start.

There is a charge for these services. We charge only to cover our costs and do everything we can to keep these costs down. Call for current pricing.

The only other charge is for replacement parts not covered by warranty.

## ***Installing New Indexable Carbide Cutters***

For all indexable tooling, check inserts daily for wear. Worn inserts should be replaced or turned as excessive wear can cause damage to the cutter head or possibly the machine and require excessive horsepower. Check for sharpness. A dull edge, on the tips, exists when a fine white line, approximately 0.005 in. (0.127 mm), runs along the cutting edge. Proper tip maintenance will give you many years of satisfactory service from the cutter head. Factors reducing tip life include high feed speeds, frozen lumber, dirty lumber, and frequency of changing worn inserts.

- 1: Install cutters on the shaft of machine. **NOTE:** Each cutter is numbered and should be installed in the numbered sequence to obtain proper spiral cutting configuration.
- 2: Clean all surfaces in contact with the back of carbide inserts and around wedge blocks.
- 3: To install square inserts, loosen socket head cap screw. Insert square carbide down against seat and tighten screw.

Never operate cutter head without all inserts in place. Failure to do so will result in permanent damage to insert seat. This will void warranty on cutter head as well.

## ***Important: Read this before operating your Baker Bantam Notcher***

Read owners manual completely and understand all aspects of your machine prior to operation. If something is unclear, contact our service department and ask for help or clarification.

Always turn power off, lock out and tag out before servicing machine.

Some screws or bolts may become loosened during transport. Remove all guards and tighten all set screws on the machine before operating and again after the first week. Check the set screws monthly.

Never operate machine without guards in place.

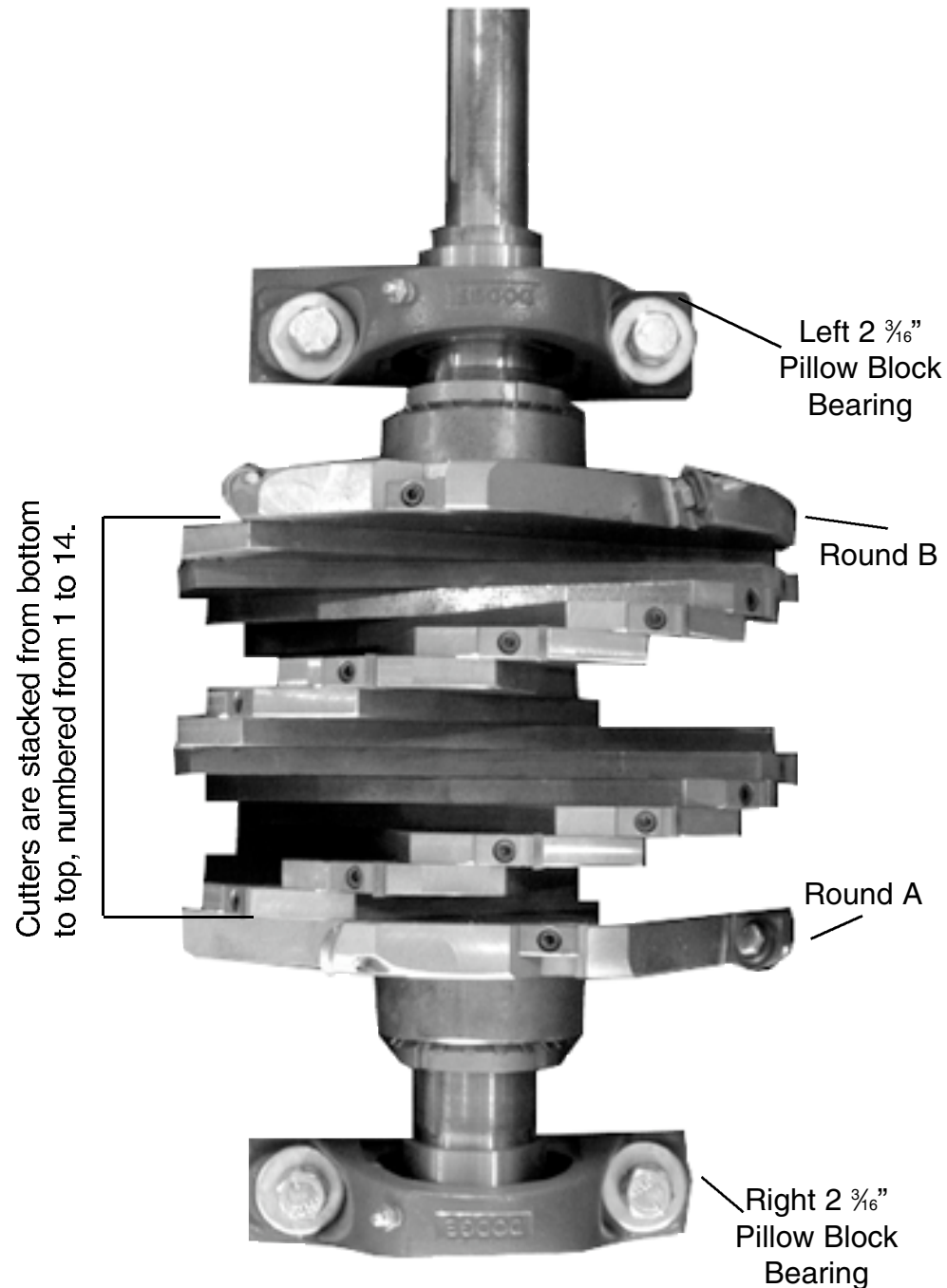
Always wear proper eye and ear protection when operating machine.

Never wear loose clothing when operating machine.

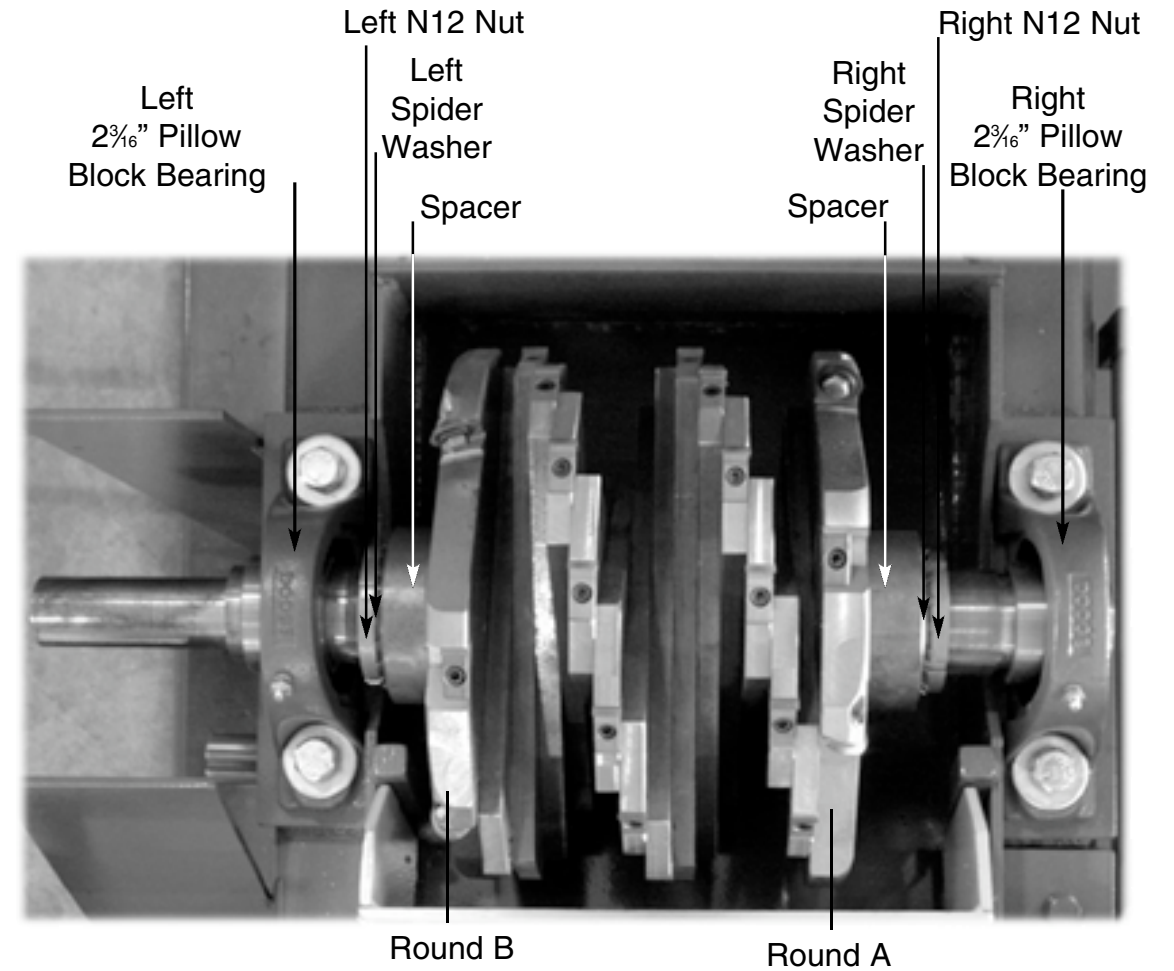
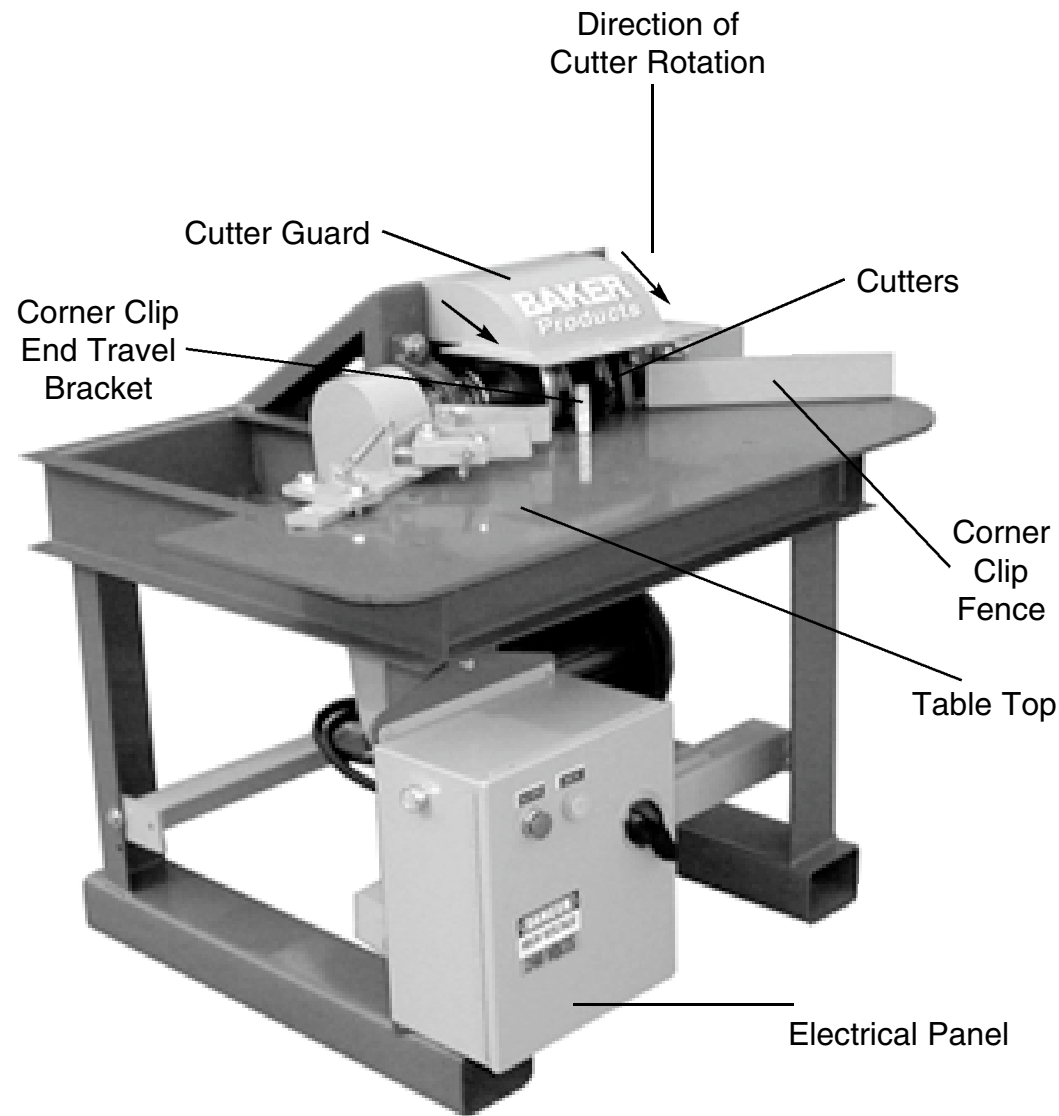
Always provide proper suction for adequate chip removal.

Never reach beyond the cutters guard to remove any material while the machine is running.

Always stand directly in front of the machine facing the cutter head.



# Overall View



**Figure E:** Top View of Cutter Head Assembly

7: Bolt bearing down with  $\frac{5}{8}$ " bolts. Loosen bolts and retighten. This makes sure the bearing has squared itself. **NOTE:** Look carefully at base frame area to make sure it is clear of dirt. Make sure there is no side push on bearing as it is bolted down.

Carbides will not chip unless a foreign object in the wood is hit. If they are faulty or braze is bad, they will fail in the first few minutes of operation. Several broken carbide tips result from improper handling in and out of machine. Always put wood between cutters and any possible metal "bumping" spot.

**WARNING!** Never run without tips. Doing so will damage the seats.

# Changing Cutter Head Tips and Segments

**NOTE:** Be sure cutters have stopped completely and always turn off power, lock out, and tag out before working on cutters. Refer to *Figures E* and *F* on pages 15 and 16 while reading the following instructions.

## Removing or Changing Cutters

- 1: Loosen the two bolts holding the left *pillow block bearing* to base. Then, loosen the *set screws* on the left *pillow block bearing*. Remove bearing.
- 2: Loosen the *left N12* (wrench provided) *jam nut* that secures the left *spacer*, *spider washer*, and *cutters* on shaft. **NOTE:** You will have to pry off the points on the *spider washer* off the *spacer* with a tool (i.e. a screw driver, knife, etc.).
- 3: For the right side, repeat steps 1-2.
- 4: Take off the *N12 jam nut*, tilt shaft up from right end, remove spacers and cutter as required.
- 5: Put on new or resharpened cutters. Make sure that the two-winged fillers between end cutters are spaced in spiral fashion, carbide overhang does not touch steel of any adjacent cutter, and the key is secure in cutters or replaceable cutters are bolted together. **IMPORTANT:** When the shaft is tilted from right end, make sure the the letter on Round A is facing the right pillow block bearing (the bottom bearing). The cutters should also be stacked from bottom to top in numerical order from 1 to 14. Once cutters are placed, place Round B on top of the 14th cutter. The letter on Round B should be facing the left pillow block bearing (the top bearing).
- 6: Replace *spacer*, *spider washer*, and *N12 jam nut* and make sure that the *N12 jam nut* is far enough to the left to be well clear of bearing when it is put back on.

# Initial Setup

## Unpacking

Remove the two bolts on front that are holding the table top to the frame. These are for packaging only.

Anchor the machine to floor with the bolts in foot pads. **NOTE:** The *corner clip fence* and the *corner clip end travel bracket* will need to be removed prior to notching material. See page 8 for details.

## Electrical

Hooking up electrical systems should be done by a qualified electrician.

## Cutter Rotation

Notcher: Top of cutters should rotate in a forward and downward direction. See direction of rotation arrows on page 6.

Consult electrician to reverse direction if cutters are not rotating properly.

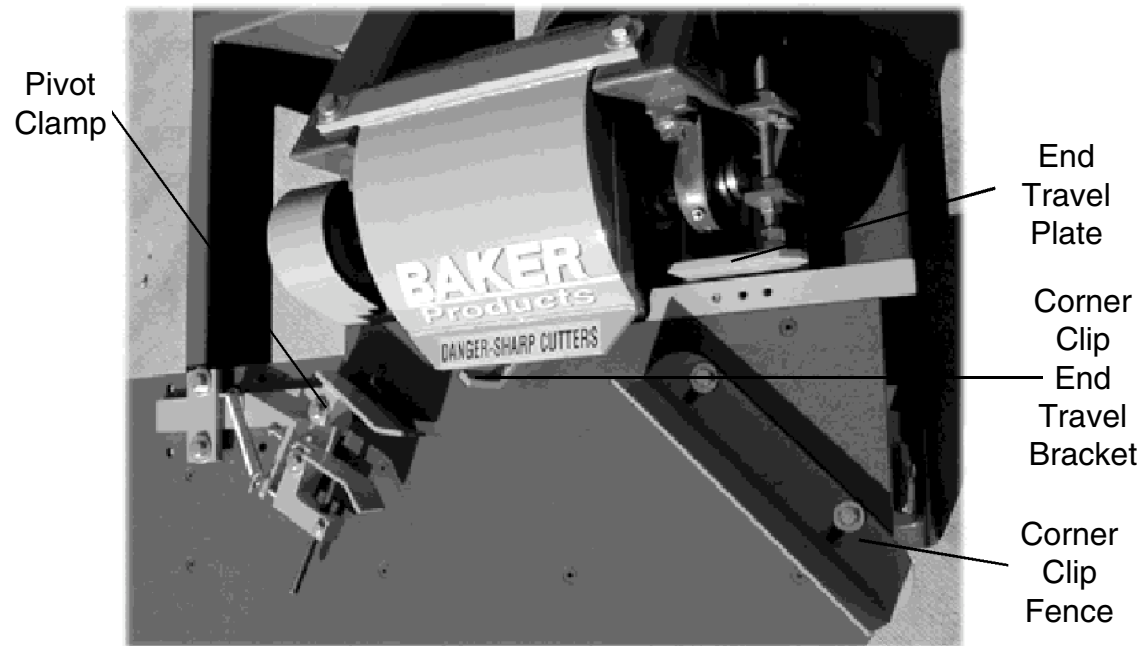
## Chip Removal

Connect blower pipe to 8 in. (203 mm) dust chute on rear on machine. Machine must be attached to a blower system in order to run properly. Failure to provide proper chip removal will cause damage to machine and void warranty. A minimum of 2,300 CFM is required for proper chip removal.

## Removing the Corner Clip Fence and the Corner Clip End Travel Bracket

Your **Baker Bantam Notcher** was shipped with the corner clip fence and the corner clip end travel bracket attached. In order to notch material, it is necessary to remove these attachments. Simply loosen the mounting bolts on both the *corner clip fence* and the *corner clip end travel bracket*. Remove both items and store in a desired location for future use.

After the stringers have been notched and a clipped corner is desired on deck boards, replace the *corner clip fence* and the *corner clip end travel bracket*. The *corner clip fence* has slots for adjusting the angle and the depth of the clip.



**Figure A:** Top View of Table Top

## Adjusting the Notch Width

**NOTE:** Always turn off power, lock out, and tag out before making any adjustments. **NOTE:** For a standard 9" (229 mm) wide notch, **no split chippers** are provided. The keyway and lock nut on the outside of the radius cutters holds the head assembly on the shaft. Please refer to *Figures E* and *F* on pages 15 and 16. The adjustable end of the notcher head is the end closest to the drive pulleys.

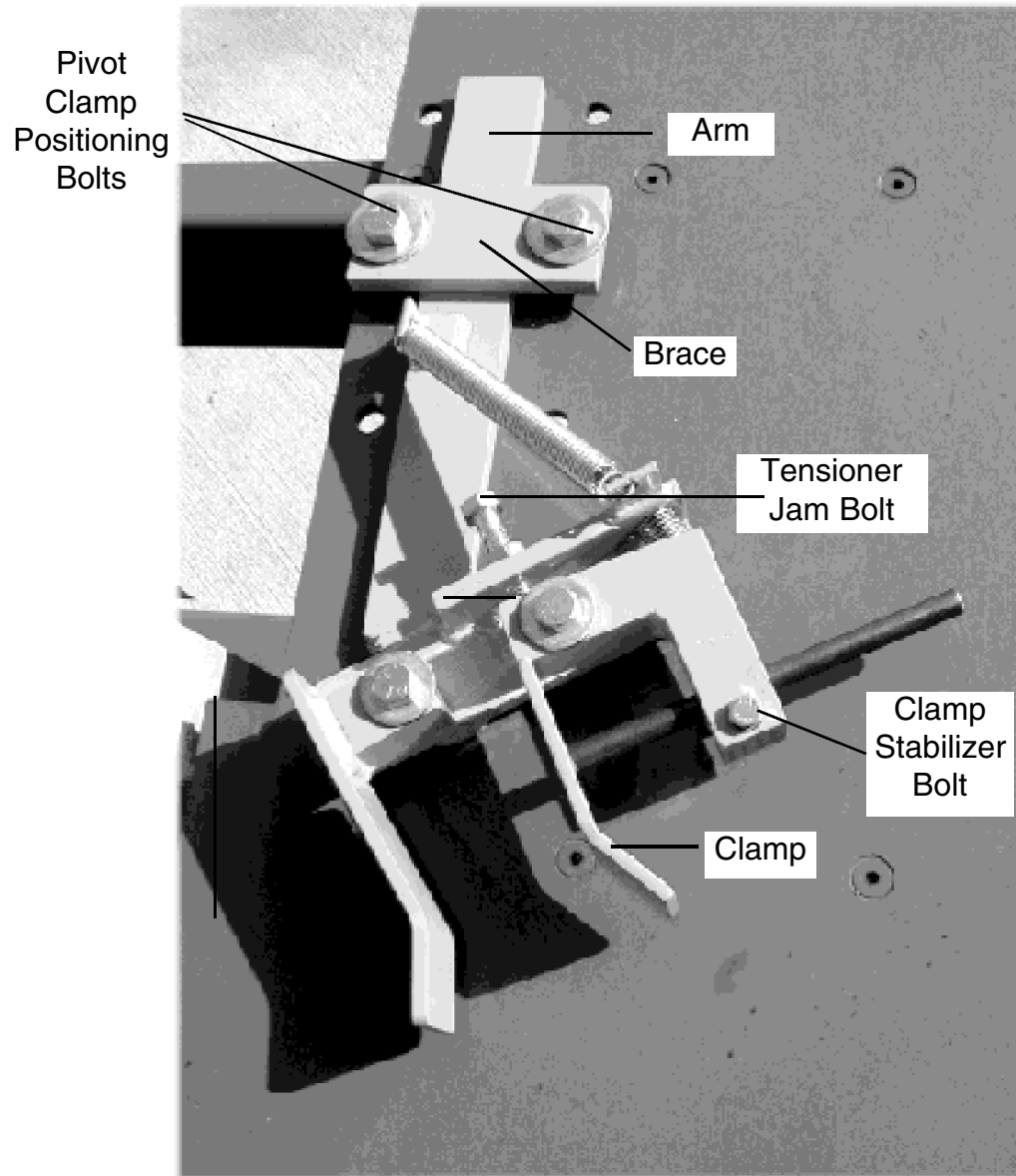
### Adjusting Notch Width less than 9" for Cutter Heads Equipped with Split Chippers

- 1: Loosen lock nut on side of split chippers.
- 2: Pull back radius cutter to loosened nut.
- 3: Four bolts (2 on each side of shaft) hold split chipper in place. Remove split chippers as desired.
- 4: After appropriate chippers are removed, slide radius cutter up tight against remaining chippers in head. Take care to note that carbide in last chipper has to be slide away from radius plate so as not to be crushed when securing lock nut.
- 5: Tighten lock nut either against radius cutter or spacers depending on amount of threaded shaft.
- 6: Retighten lock nut on the opposite of head.

### Adjusting Notch Width from 9" or larger

It is not possible to make notch width adjustments to notch larger than 9" unless the machine was specially ordered to do so.





**Figure D:** Top View of Pivot Clamp Assembly

## Operation

Your new **Baker Bantam Notcher** is designed to cut one stringer at a time. This depends on the thickness of the stringer. The throat opening is 4 $\frac{1}{8}$ " (105 mm), Therefore, any combined thickness over 3 $\frac{1}{2}$ " (89 mm) will jam against the guard and stop the table. Quantity must be determined for your applications by trial. **NOTE:** The end travel plate, corner clip end travel bracket, and the corner clip fence must be removed prior to notching stringers.

- 1: Be sure all guards are in place.
- 2: Start cutter motor by pushing start button on the face of the electrical control panel, located on the left front side below the table. Machine is now ready to cut.
- 3: Place one end of the material into the *pivot clamp* (See Figure B below). Make sure that the end of the material is firmly held in place. Slowly push the material into the *cutter head*. Once the material has come in contact with the *end travel plate*, slowly pull back. Rotate the material over end for end and place it into the *pivot clamp* then push it into the cutter head. The material is now notched on both ends. Remove the material and stack at a desired location. Repeat step #3 as many times as required.

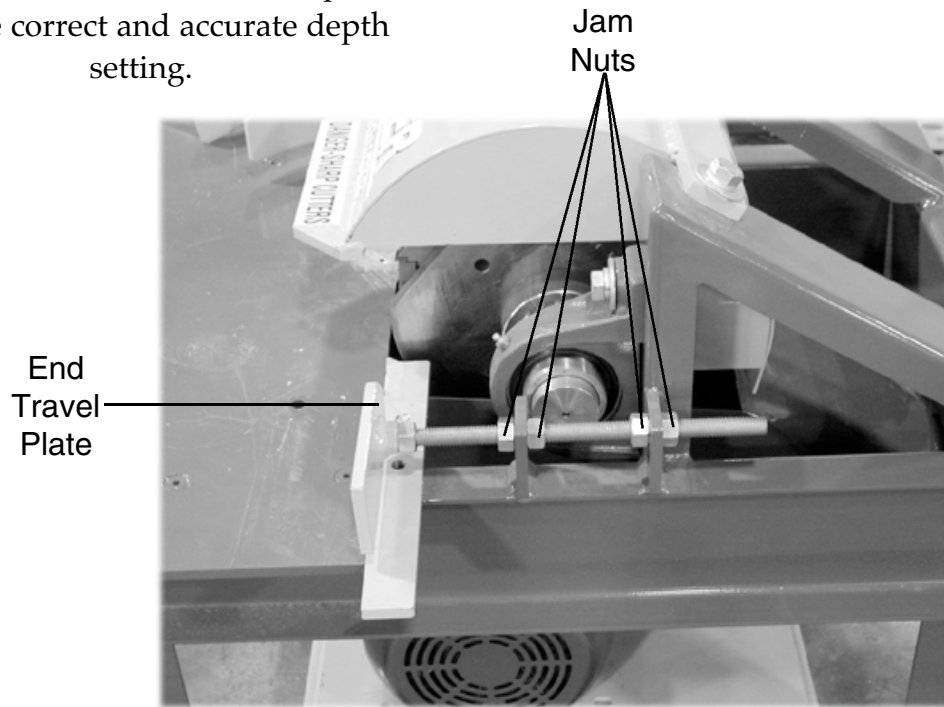


**Figure B:** Top View of Table Top

# Adjustments

## Depth of Cut

- 1: Turn off power, lock out, and tag out. **Warning!** Failure to do so may result in serious personal injury.
- 2: To determine the current depth of cut, place one end of the board into the *pivot clamp*. Gently push the board towards the *cutter head* until it stops. With the material pushed against the *cutter head*, measure from the edge of the other end of the material to the *end travel plate*. Move the *end travel plate* in the desired direction using the *jam nuts* (See Figure C below). The depth of cut ranges from 0 to 3" (0 to 76 mm). You may have to make a few test passes to achieve the correct and accurate depth setting.



**Figure C:** Right Side View of Bantam Notcher

## Position of Notch

- 1: To determine the current position of the notch, turn on power. Place one end of the material into the *pivot clamp*. Gently push the material into the the *cutter head*. Once the material has come in contact with the *end travel plate*, pull back on the material. Remove the material and turn off power, lock out, and tag out.
- 2: Measure from the end of the notch to the end of the material. Take note of the measurement. Measure from the left side of the *brace* to the end of the *arm*. If the *pivot clamp assembly* needs to move, loosen the *pivot clamp positioning bolts* (see Figure D on page 12). Slide the entire assembly until the desired position is reached. Tighten the *pivot clamp positioning bolts*. You may have to make a few test passes to achieve the correct and accurate setting.