

# Spare Parts

1	24" Blade
2	1 ¼" Bearings
2	SFT26 1 ⅝" Bearing
1	174 DP Bimba Air Cylinder
1	172 DP Bimba Air Cylinder
1	A62 Belt
1	Arrow C33352 ¼" Trio
1	5A541 ¼" Air Solenoid Valve
1	SS-GO1-C7Y-R-C115-E20 Hydraulic Solenoid Valve
1	5Z253 ¼" Filter, Regulator, Lubricator Combo
1	UHMW 14 ½" x 2" x 6"

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# ***Introduction***

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

The **Baker MultiSelect** 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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Ellington, MO 63638

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# ***Options***

## ***Extension Conveyor***

The **Baker MultiSelect** is equipped with a waste conveyor that runs below the machine and carries ends trim pieces to desired end. An extension conveyor removes the pieces from the working area. This extension can be at an incline so that the end trim pieces drop into a **Baker Self-Dumping Steel Hopper** or onto another conveyor.

## ***Live Rollers***

Additional lengths are available in 1' increments.

## ***Unscrambler***

An unscrambler separates the cants so that they enter the machine one at a time. The unscrambler is made up of an infeed deck, V-deck, and dealer deck. The manually operated is controlled by foot pedals on the operator stand. The automatically operated is controlled by limiting switches so that wood travels automatically and foot pedals serve as manual overrides. Air stops on the dealer deck that straighten boards before they fall onto the infeed rollers and the loading of individual cants onto the infeed rollers are controlled by the triggers on the joysticks.

## ***Dust Pipes and Blowers***

Dust pipes and blowers should be attached to insure proper dust removal and to create a safer and cleaner working area. Each saw head is equipped to accept a 4" round pipe. A minimum of 500 cubic feet is recommended.

# Troubleshooting

## **MultiSelect does not run.**

- Check power.
- Consult an electrician.

## **MultiSelect does not cut square edges.**

- See "Adjusting the Cutting Angle".

## **MultiSelect vibrates.**

- Check for worn bearings.
- Check to insure that saws are not lose on the mandrel.

## **MultiSelect saw head blades runs backward.**

- Swap incoming power leads T1 and T2.
- Consult an electrician.

# Warranty

Worldwide Equipment Sales, 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. **Worldwide Equipment Sales, 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 Worldwide Equipment Sales, Inc. In no event shall Worldwide Equipment Sales, 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.

Worldwide Equipment Sales, 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 Worldwide Equipment Sales, Inc. shall not obligate Worldwide Equipment Sales, 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 (314) 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 saw 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.

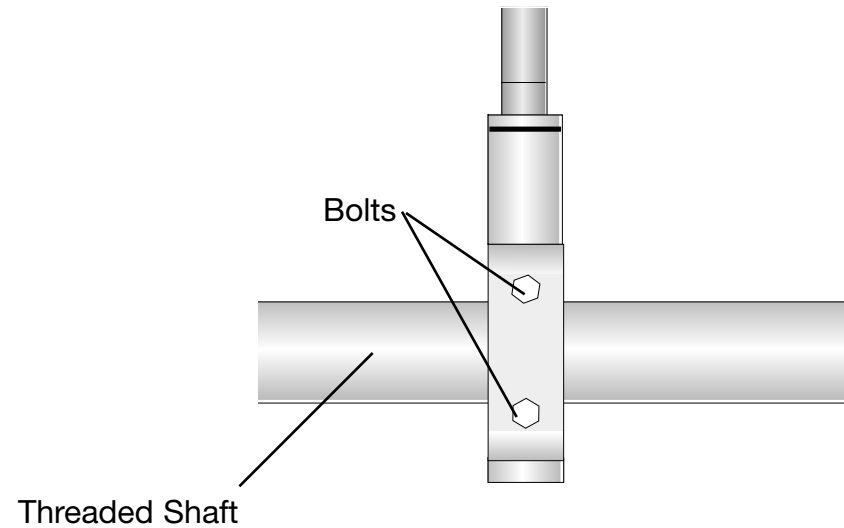
## ***Maintenance***

### ***Every 200 hours (once per month)***

Grease the *saw mandrel bearings* and *shaft bearings*. The grease should be rated for high-speed, high-temperature bearings. We recommend Mystik JT-6 or equivalent.

## Air Stops

The standard Baker MultiSelect is equipped with four air stops. The stops move along a shaft after loosening the two holding bolts. Move the stop until desired distance is between the stop and the closest saw. Retighten the bolts.



**Figure K: Air Stop located on Outfeed End of MultiSelect**

## Important: Read This Before Operating Your Baker MultiSelect

Some screws may become loosened during transport. Check and tighten all set screws on the machine before operating and again after the first week. Check the set screws monthly to insure maximum pulley and sprocket life.

Turn power off, lock out and tag out before changing blades or servicing machine.

Never operate machine without guards and doors in place.

Always wear proper eye and ear protection when operating machine.

Never wear loose clothing when operating machine.

Stay away from moving blades when operating machine.

All controls are located on operator stand. Operator should not leave seat while machine is in operation.

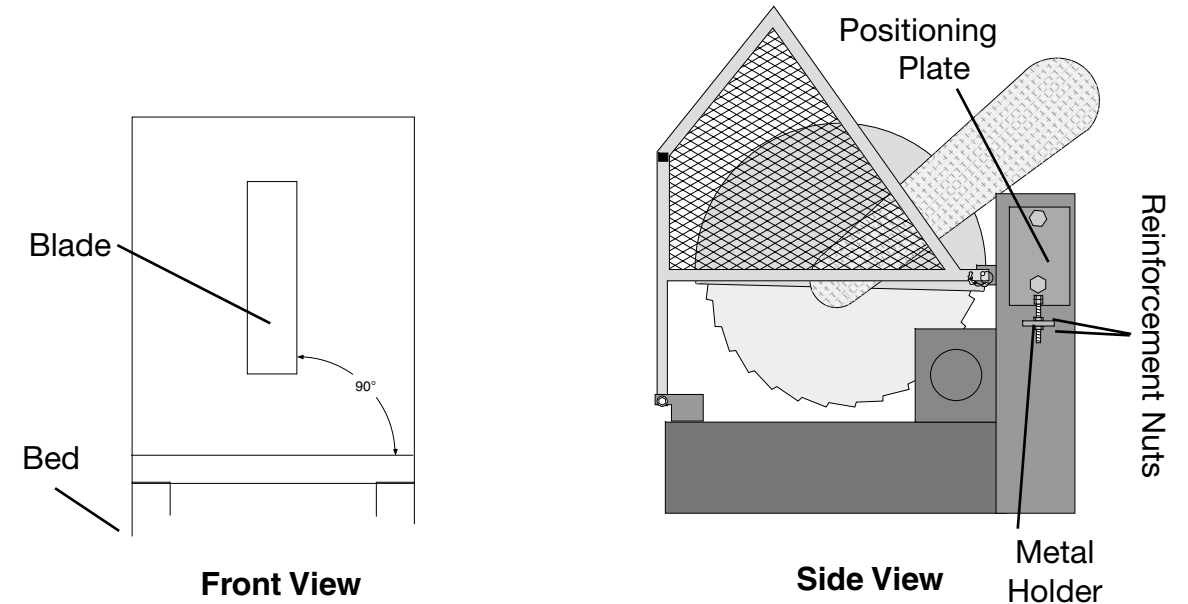
Always provide proper suction for adequate dust removal.

# Initial Setup

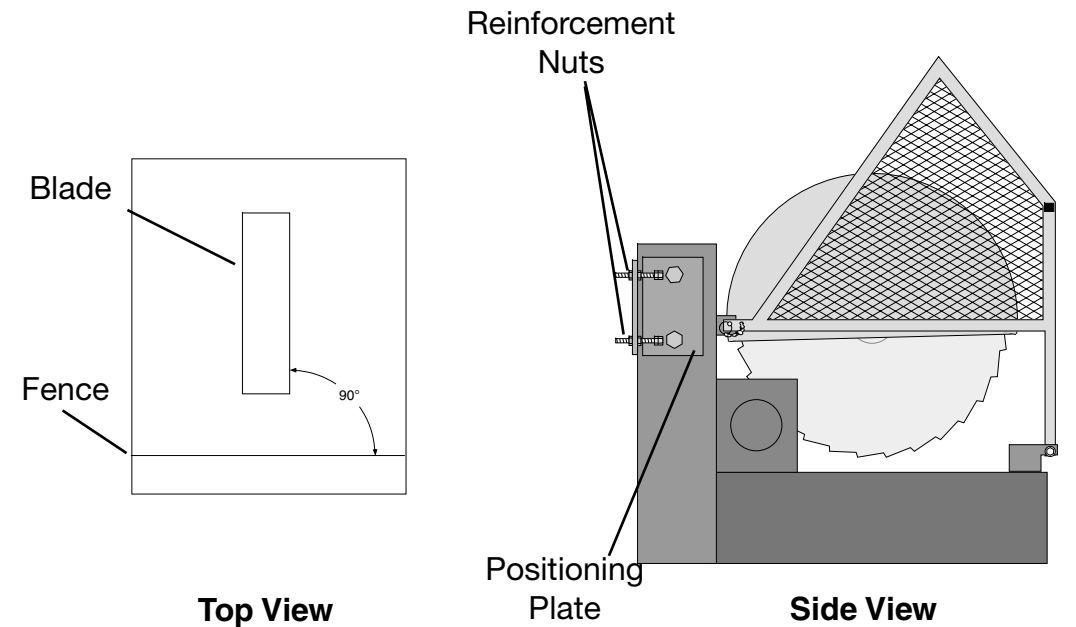
Hooking up electrical systems should be done by a qualified electrician. After hooking up electrical systems, make sure the blades are running forward.

For dust removal, the **Baker MultiSelect** is equipped to accept a 4" round pipe on each saw head. For proper dust removal, a minimum of 500 cubic feet per minute (CFM) recommended.

Set up infeed, outfeed, and extension conveyors to accommodate your **Baker MultiSelect**.



**Figure I: Squaring the Blade to the Roller Bed**



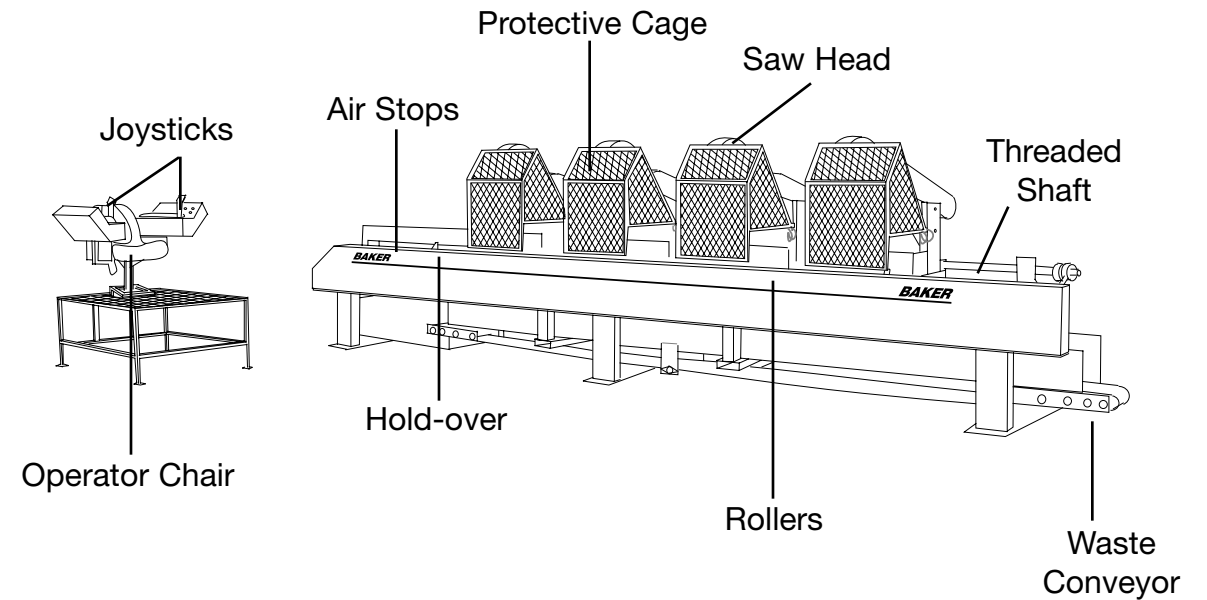
**Figure J: Squaring the Blade to the Fence**

# Squaring the Blade to the Fence

The *positioning plate* on the outfeed side is used to square the blade to the fence. If the front of the blade needs to move towards the outfeed side, the *positioning plate* needs to move back. If the front of the blade needs to move toward the infeed side, the *positioning plate* needs to come forward.

- 1: Locate the *positioning plate* on the outfeed side of saw head.
- 2: If the *positioning plate* needs to move back, move the *first reinforcement nuts* away from the *metal holder*. If the *positioning plate* needs to move forward, move the *second reinforcement nut* away from the *metal holder*.
- 3: Loosen the nuts on the *positioning plate*.
- 4: Move the *positioning plate* either forward or backward to the position where the blade makes a 90° angle with the fence. (See Figure J.)
- 5: Retighten the nuts on the *positioning plate*.
- 6: Move the *reinforcement nuts* so that they are tight against the *metal holder*.

# Overall View



# Controls

All controls are centrally located and easily accessible from an operator chair. The following explains the controls as they appear while sitting in the operator chair on a model that feeds left to right.

## Left Side Panel

The buttons on the panel to the left of the operator chair start the machine.

**E-Stop Button** - kills all power when pushed in.

**Hyd. Pump Button** - activates the hydraulic system.

**Unscrambler Switch** - turns unscrambler on or off.

**Waste Button** - turns waste conveyor on.

**Manual Switch for Unscrambler** - switches the control on automatic unscrambler from the limit switches to the foot pedals.

**Setup Key** - a key on the left panel that puts machine in *setup* mode by cutting power and lowering heads. The key should be turned to *setup* and removed when operator leaves chair to make adjustments. The MultiSelect cannot be operated without the key turned to auto. Hydraulic pump will run while key is in *setup* mode.

## Right Side Panel

**Bottom Buttons** - send power to the individual saw heads.

**Top switches**- turn the individual saws to *off*, *auto*, or *setup* depending on the desired function. You do not have to use all of the saws at one time. Turn the switches corresponding to those saws you want to use to *auto* and leave the others on *off*. The saws should be switched to *setup* when making manual

# Adjusting the Cutting Angle

If your **Baker MultiSelect's** saw heads do not cut square edges, adjust the position of each blade by moving the blade *positioning plates* located on the sides of each saw head. The blade should be square (form a 90° angle) with both the bed and the fence.

## Squaring the Blade to the Roller Bed

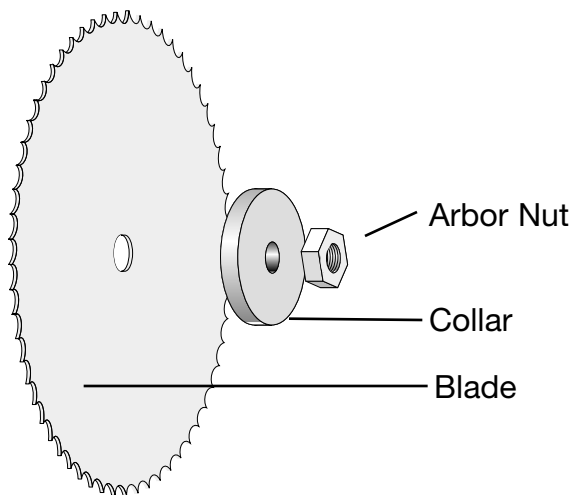
A *positioning plate* on the infeed side of each saw head moves up and down to square the blade to the bed. If the bottom of the blade needs go toward the infeed side, the *positioning plate* needs to be moved up. If the bottom of the blade needs to go toward the outfeed side, the *positioning plate* need to be moved down.

- 1: Locate the *positioning plate* on the infeed side of the saw head.
- 2: If the *positioning plate* needs to be moved up, move the top *reinforcement nut* up. If *positioning plate* needs to be moved down, move the bottom *reinforcement nut* down.
- 3: Loosen the nuts on the *positioning plate*.
- 4: Move the *positioning plate* either up or down to the position where the blade makes a 90° angle with the bed. (See Figure I.)
- 5: Retighten the nuts on the *positioning plate*.
- 6: Move the *reinforcement nuts* so that they are tight against the metal holder.



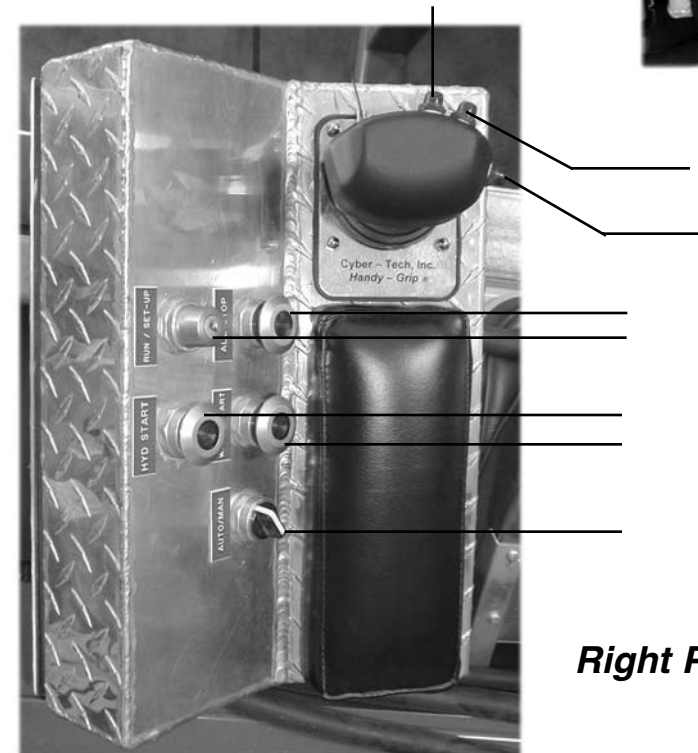
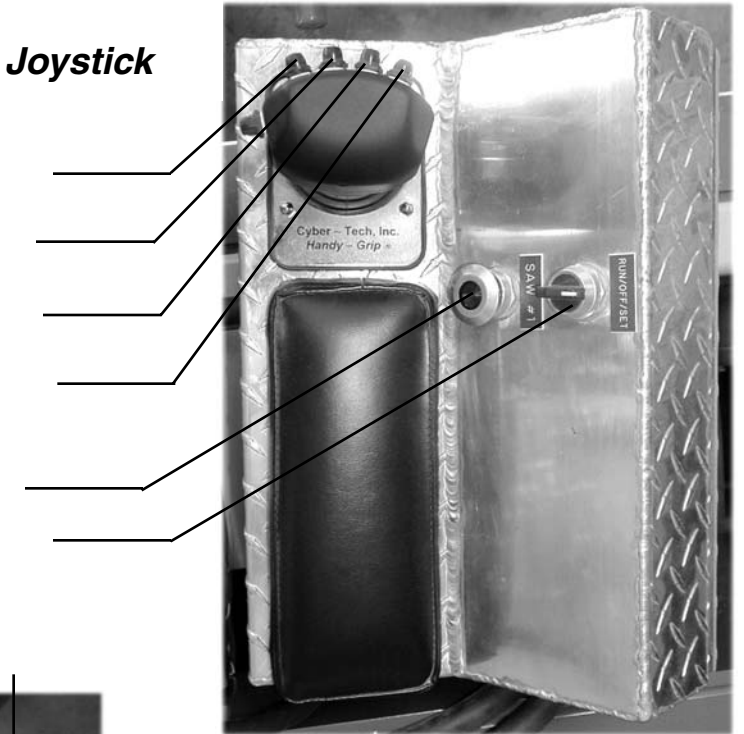
# Changing the Blade

- 1: Put machine in setup mode by turning the key on the left control panel and the top switches on the right. Lock out and tag out.
- 2: Lower the protective cage. (See "Protective Cage")
- 3: Press the saw firmly into a piece of wood to prevent blade rotation while loosening the *arbor nut*.
- 4: Locate the *arbor nut* on the outside of the blade. Use a wrench to remove this nut.
- 5: Carefully remove the collar and the blade.
- 6: Make sure the teeth on the newly installed blade are pointing down and toward the back of the saw, and replace in reverse order.



**Figure H: Blade Fastening**

**Figure X:  
Left Panel and Left Joystick**



**Figure X:  
Right Panel and Right Joystick**

## Left Joystick

**Pull left joystick back** - lowers all saws whose switches are turned to *auto* and brings clamps to wood and disables flippers.

**Push the left joystick forward** - lowers the fixed head saw (the head closest to stops) and brings clamps to wood and disables flippers.

**Move the joystick to the left** - wood travels left.

**Move the joystick to the right** - wood travels right.

**Press the left side of the thumb switch on top of joystick while holding the joystick either to the right or left** - speeds up wood flow. Hold overs and flippers are disabled in turbo mode.

**Press right side thumb switch** - flips the board. Flippers disable hold overs when activated.

**Press trigger** - If infeed is on the left, press trigger to load the cant onto the rollers. If infeed is on the right, press trigger to activate air stops on unscrambler dealer deck. The air stops allow the boards to be straightened before falling on the infeed rollers.

## Right Joystick

The **Baker MultiSelect** comes standard with four stops.

**Move joystick forward** - activates first stop.

**Move joystick right** - activates second stop.

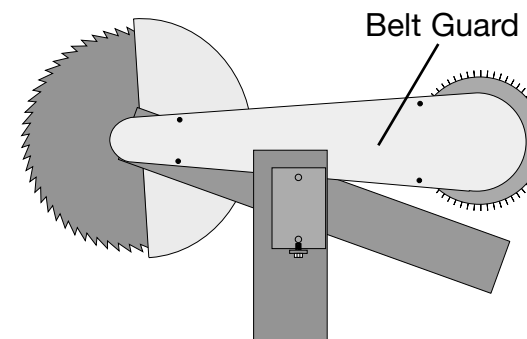
**Move joystick back** - activates third stop.

**Move joystick left** - activates fourth stop.

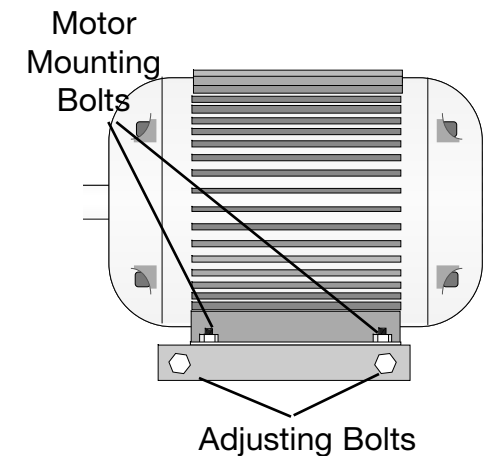
**Press the right side of the thumb switch on top of joystick** - releases stops.

## Changing the Belts

- 1: Turn key on left control panel to *setup* and remove.
- 2: Turn power off, lock out, tag out, and allow the machine to come to a complete stop.
- 3: Lower protective cage. (See "Protective Cage".)
- 4: Remove the belt guard that extends from the motor to the *saw mandrel*. (See Figure F.)
- 5: While standing behind the saw head, loosen the nuts on the *motor mounting bolts*. (See Figure G.)
- 6: Use the *adjusting bolts* to move the motor forward. This causes the pulley to move forward, which in turn, loosens the belts.
- 7: Remove the belts.
- 8: Replace in reverse order.



**Figure F: Side View of Saw Head**



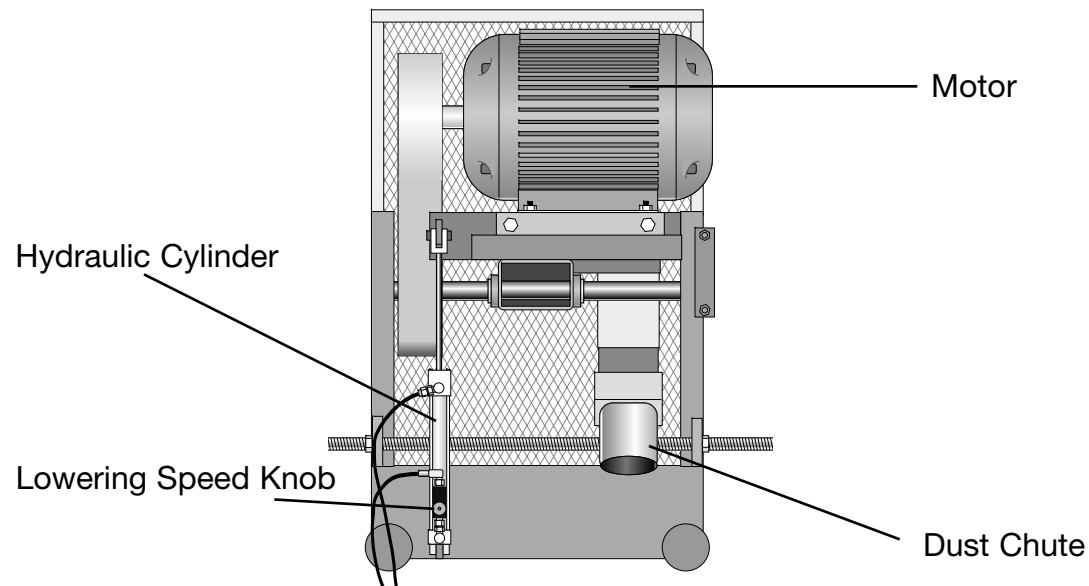
**Figure G: Back View of Saw Head**

# Adjusting Lowering Speed

**Note:** In colder weather, start saw hydraulics 15 minutes prior to operation. When hydraulic fluid is cold, saws may lower slower.

The **Baker MultiSelect's** saw heads have adjustable lowering speeds. The blade is set to raise as quickly as possible but the lowering speed should be adjusted to accommodate your wood types and sizes.

A hydraulic flow control valve with *lowering speed knob* on the back of each head behind the hydraulic cylinder controls the speed at which the saw blade lowers. (See Figure E.) Turn the knob clockwise to slow the speed at which the saw comes down. The saw will lower faster if the knob is turned counterclockwise.



**Figure E: Back View of Saw Head**

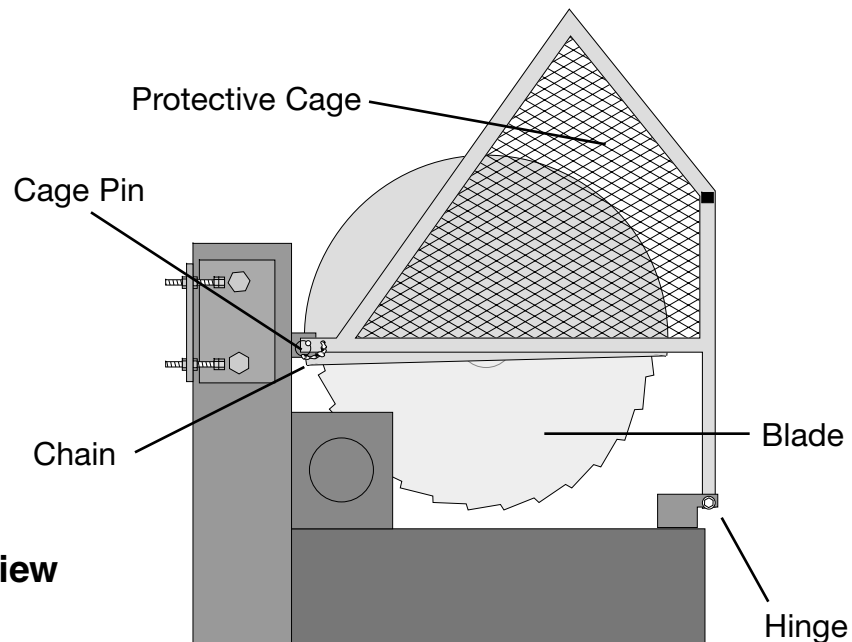
**Press the left side of the thumb switch** - brings *hold-overs* to wood. The wood should be pushed to back rail prior to cutting. Saws down automatically bring hold-overs to wood and release when saws return to up position.

**Press trigger** - If infeed is on the left, press trigger to activate air stops on the optional unscrambler dealer deck. The air stops allow the boards to be straightened before falling on the infeed rollers. If infeed is on the right, press trigger to load the cant onto the rollers.

# Protective Cage

A protective cage covers all working parts of each saw of the **Baker MultiSelect**.

- 1: Put machine in setup mode by turning key on left control panel and top switches on right. Remove key, lock out and tag out.
- 2: Remove the *cage pins* from the protective cage. There is a pin attached to a chain on each side of the cage. (See Figure C.)
- 3: Pull the cage forward. The protective cage is attached to the front by hinges.
- 4: After making adjustment, return protective cage to its permanent position.



**Figure C: Side View of Saw Head**

# Changing Saw Head Position

The saw heads sit on a track and have a threaded shaft running through them. They can be moved to accommodate your needs. (See Figure D.)

To move the saw heads:

- 1: Put machine in *setup* mode by turning key on left control panel and top switches on right. Remove key, lock out and tag out.
- 2: Move the *positioning nuts* away from heads.
- 3: Move the head to desired position. Determine where to place the heads by measuring the distance between the blades.
- 4: Move the nuts back toward the head until they are tight against the sides.
- 5: Make sample cut with saw and check cut material to make sure the machine has been set up properly.

**Figure D: Back View of Saw Head**

