Introduction

Purchaser Agreement

By accepting the delivery by Hud-Son Forest, you promise that you will not change, modify, remove or make guards, shields, or any other safety feature, unusable or unsafe. You are responsible to install any retro fit kits, from time to time, provided to you by Hud-Son that will enhance or preserve the safe use of the product. If you have any questions concerning the equipment you purchased from about its safe use and/or maintenance, please go to our website www.hudson.com or contact your authorized Hud-Son Forest Equipment dealer.

The "H360" Features

- 36” Log Diameter Capacity
- Accepts logs from 3’ to 21’ long
- 23 HP Vanguard Briggs & Stratton Engine with Electric Start
- 24’ Bed 3 x 6 Box Beam Trailer with Cross Supports
- Light Kit for Road Travel
- Trailer and Fenders
- 6 Adjustable Support Legs
- Blade Lubrication System
- Centrifugal Clutch
- Extra Heavy Duty Carriage Head
- Four Post System with 2” Square Tube
- Standard Industrial 1.5” Pillow Block Bearing On Drive & Driven Bandwheels
- Double Hard Woodmizer Bandblades Blades
- Powder Coat Finish
- Dual Measuring System, 4, 5, 6 & 8 Quarter Scale and Standard 1” with 1/16” Scale

Warranty

The warranty registration card must be completely filled out and returned to Hud-Son forest Equipment, Inc. within 30 days of purchase. Failure to do so will void the warranty.

Warranty claims must be registered with the Dealer/Distributor and defective parts must be returned to the Dealer/Distributor at the owner's expense. The Dealer/Distributor will assume the cost of shipping one way in regards to any warranty claim. Freight is standard UPS ground. Any additional charges for expedited services will be paid in full before shipping at the owner's expense.

As of July 1, 2010 Briggs and Stratton Commercial Power’s Vanguard™ air cooled gasoline engines entering the market will feature a three-year commercial limited warranty. For a listing of current warranty terms for your engine, go to BRIGGSandSTRATTON.COM or contact your Authorized Briggs & Stratton Service Dealer.

<table>
<thead>
<tr>
<th>Gasoline Engines</th>
<th>3 year - Check Yellow Pages for your nearest Briggs and Stratton Servicing Dealer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pulley, Sheaves, Welds</td>
<td>1 Year - Call your servicing Hud-Son Dealer</td>
</tr>
<tr>
<td>Drive Shafts &amp; Drive Shaft Bearings</td>
<td>6 Years - Call your servicing Hud-Son Dealer</td>
</tr>
<tr>
<td>Electric Motors</td>
<td>1 year - Call your servicing Hud-Son Dealer and ask for the Warranty Department</td>
</tr>
<tr>
<td>Belts</td>
<td>1 Year - Call your servicing Hud-Son Dealer</td>
</tr>
<tr>
<td>Axles (Trailer Models)</td>
<td>1 Year - Call your servicing Hud-Son Dealer</td>
</tr>
<tr>
<td>Electric Winch &amp; Winch Parts</td>
<td>1 Year - Call your servicing Hud-Son Dealer</td>
</tr>
<tr>
<td>(You will need your winch serial number)</td>
<td>30 Day - Read Manual for proper adjustment &amp; maintenance</td>
</tr>
<tr>
<td>Hud-Son Guide</td>
<td>Breakage &amp; Re-Sharpening - Call Wood-Mizer, Inc. 1-800-224-4600</td>
</tr>
<tr>
<td>Blades</td>
<td>30 Days - Call your servicing Hud-Son Dealer</td>
</tr>
<tr>
<td>Drive Clutch</td>
<td>1 Year - Call your servicing Hud-Son and ask for the warranty department</td>
</tr>
<tr>
<td>Hydraulic Motors, Cylinders, Pumps, Valves &amp; Hose and Fittings</td>
<td>90 Day - Call Hud-Son and ask for the Warranty Department</td>
</tr>
<tr>
<td>Sprockets, Chain and Cord Reel</td>
<td></td>
</tr>
</tbody>
</table>
**How a Warranty Claim is Handled**

All warranty claims that are done in the field will be handled as follows:

a) Customer will call the Dealer/Distributor and acknowledge the problem.

b) If the problem can be solved in the field, new parts will be shipped, invoiced and paid for. A credit will be given upon return of the old parts if covered by warranty.

c) If requested, parts to be replaced must be returned at owner's expense within thirty (30) days to receive credit.

d) If the problem is deemed too severe to be fixed in the field by the customer, then the customer must bring sawmill, at their own expense, to the closest Hud-Son Dealer/Distributor for repair. If the Dealer/Distributor is not qualified for the repair job, then the equipment must be returned to Hud-Son Forest Equipment, Inc. at the customer's expense.

e) If the problem is deemed not to be a warranty problem, an invoice will follow for the parts that were replaced, as well as an invoice for any time spent on the unit by Hud-Son Forest Equipment, Inc. staff and/or Dealer/Distributor staff.

f) Any modification to the H360 that is performed by any personnel other than Hud-Son Forest Equipment, Inc direct staff voids the warranty.

g) Any parts replaced without discretion of the Dealer/Distributor voids the warranty on the part the customer is replacing and no reimbursement will be made.

h) Parts purchased by the customer from an outside source without prior approval by Hud-Son Forest Equipment, Inc will not be reimbursed.

4) Additional Information and Notes

Always call your servicing dealer first! Dealers/Distributors carry parts and are very. Remember that modifying your unit or using parts that are not approved by Hud-Son Forest Equipment, Inc can void your warranty.

**Safety Guidelines**

The reason for the Safety section is to inform the operators and maintenance personnel, the precautions that should be taken while operating or servicing the "H360". These are a few basic safety guidelines to follow, always use good judgment and have a safe attitude.

Please read and follow ALL the instructions in this manual before operating the "H360" for the first time. These instructions were produced for your benefit. Your ability to understand and follow the instructions is essential for the safe operation of this product.

Please fill out the information for quick reference:

| Dealer: ___________________________________________ | Phone Number ___________________________ |
| Address: __________________________________________ |                                          |
| Purchase Date: ___________________________ | Serial Number: __________________________ |

This manual is filled with the latest information and specifications at the time of publication. We have the right to make changes as they are needed. Any of the changes in our product may cause a variation between the illustrations and explanations in the manual and the item that you have purchased.
General Safety Procedures:

1) Always wear safety glasses, ear protection and gloves while operating or servicing the machine.

2) Keep all body parts and foreign objects away from all moving parts. Do not reach into the machine while it is still operating.

3) Do not attempt to override any safety features on the machine.

4) Inspect the machine before every use for wear, damage and correct function. If the machine has been damaged or is not running correctly, DO NOT attempt to operate the machine. Repair or replace all parts when necessary.

5) Do not wear loose clothing or jewelry while operating or servicing the machine.

6) All replacement parts should be of the same specifications and operation as the original parts of the machine.

7) All guards and covers must be in place before operating the machine.

8) Before starting the machine, be sure that it is set up properly.

9) DO NOT operate or service any machinery while under the influence of drugs or alcohol, while tired or if you are unable to control your movements.

10) All worn or damaged decals should be replaced.

11) Any modifications to the product require written approval from Hud-Son Forest Equipment.

12) The processor should only be used when it is on level, stable ground.

Hydraulic Safety Precautions

1) All WARNING statements must be carefully observed to help prevent personal injury.

2) Should a Hydraulic hose ever rupture, burst or need to be disconnected, shut-off all pumps and release the pressure. Do not attempt to grasp the hose, this could cause serious injury.

3) Keep hoses away from potential hazards, such as fire, sharp surfaces, extreme heat or cold, heavy impact. Hoses should not be allowed to kink, twist, curl, crush or bend tightly so that the fluid flow is compromised.

Periodically inspect all the hoses for wear, due to the fact that these conditions can cause damage to the hose and can possibly result in personal injury.

4) The hose should never be used as a handle to move the machinery around. Stress can cause damage to the hose and possibly cause personal injury.

5) Before replenishing the fluids, retract the system to prevent overfilling the pump reservoir. Any reservoir overfilled can cause personnel injury due to excess reservoir pressure created when cylinders are retracted.

The safety rules are made for the benefit of the persons operating and servicing the machine, to prevent injury to oneself or others. Please review all setup and operating procedures before attempting to run the machine, whether covered in this manual or not, to ensure the safest operation of this product.

Hud-Son Forest Equipment is not liable for damage to property or personal injury due to unsafe use of the product. Hud-Son Forest Equipment is not liable for damage to property or personal injury due to the failure of any person and/or operator to follow the instructions and recommendations set forth in this manual or any other instructions or recommendations contained in other literature issued by other vendor manuals in the owner's kit.

Product Safety Decals

The decals shown are used on the "H360" to identify warnings and prohibited actions. It is very important that you understand the meaning of the decals, for your safety and the safety of others. Decals are to be replaced if worn or illegible.
Caution - Be EXTRA careful around these areas, unsafe prac-
tices may cause personnel injury or damage.

Danger - Be careful around any rotating parts, they may cause
personnel injury or damage.

Danger - Be sure to be very cautious and alert, these areas
may cause personnel injury or damage.

Caution - Operating equipment without guards may cause per-
sonnel injury or damage.

Blade Lube Tank - be sure to use the correct lubrication, if
incorrect lube is used it may cause personnel injury or dam-
age.

Notice - Please remember to send in warranty card and infor-
mation.

Caution - All debris needs to be removed from machine be-
fore transporting, failure to so may cause personnel injury or
damage.

Care and Maintenance

The "H360" requires a certain amount of care and maintenance, so that it may continue to perform at its best. If you are not confident in your ability to perform the maintenance that is required, please look into having a professional come in and perform the work for you.

### MAINTENANCE SCHEDULE CHART - Service Recommendations for the H360

<table>
<thead>
<tr>
<th>Service Item</th>
<th>Daily</th>
<th>40 Hours</th>
<th>See Manual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check Engine Oil Level</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Check/Clean Engine Air Filter</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Check Hydraulic Oil Level (Fill 1” from Top)</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clean Unit of Bark, Saw Dust and Other Debris</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lubricate Grease Fittings and Oil Points</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Check Tire Pressure - Upon transport</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Check Cylinders and Seals for leakage</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clean Battery Connections</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Check Wiring and Connections for Corrosion and Decay</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fuel - Fill as needed</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sawblade lube - Fill as needed</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Check Hoses/Gauges for Damage, Cracks, Leakage (Chaffing, Dry Rot, Cracks, Replaces Hoses)</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Change engine oil after 8 hours of operation on a new engine (break-in period)

CAUTION!

Maintenance Procedures requiring special training or tools should be performed by a trained technician.

A routine inspection of the entire machine is encouraged. Check to see if all fittings are tight and secure. Make sure all nut are tightened. Check to see any damage that may need to be repaired before and further damage occurs. Routinely checking the equipment and proper maintenance will help in keeping the H360 running to the best of its ability.
Set-Up and Operation

The "H360" requires a minimal amount of set-up before operation. Be sure to wear safety glasses, gloves and ear protection at all times while operating the "H360".

H360 Set-Up
Before operating the "H360" the following procedures need to be performed:
1) Check oil level
2) Check blade lubrication and hydraulic levels
3) Be sure all levers and valves are in the neutral/center position before starting the engine
4) Be sure all persons are clear of the equipment
5) Make sure the unit is level and stable

Start Engine Procedure
1) Summer Use: Be sure to let the unit idle for at least 5 minutes before any use.
2) Winter Use: Be sure to let the unit idle for at least 15 minutes before any use.
3) If the unit has been sitting for a period of time, allow the unit to run long enough to have the oil do a complete circulation before use.

Log Specifications
1) Can handle logs up to 36" in diameter
2) The logs can be from 3' to 21' long

Control Panel Set-Up

Steps for Setting-Up the "H360"

A. Machine Set-Up
a. Machine should be placed on a level and secure ground.
b. Rotate the towing jack to vertical position. Crank jack handle until the machine is lifted off the vehicle hitch. Unhook electrical/brake cable, towing chain and break away switch. Unit is now completely unhooked from vehicle.
c. Lower all 6 legs on frame. The legs should set securely on the ground. Level the unit using the legs and the jack, lock the legs into place once level.
d. Start the engine (use the Start Engine procedure). Let engine warm up.

B. Fenders
a. Both Fenders need to be removed before any cutting or Loader set-up. Fenders are easily lifted out of the brackets, place out of the way. Remember to put Fenders back in place before moving or transporting. (See Pic 1)
C. **Hydraulic Log Loader Set-Up**
   a. Make sure NO ONE is standing near or under the Loader while setting up the machine.
   b. Remove pins from the lower feet and place in pin holder (See Pic 2)
   c. Start the pump
   d. Run Loader in Up position, which lowers down the Loader legs till firmly on ground (See Pic 3)
   e. Unhook Loading Bar, place pins in bracket, and lower bar to holding pocket (See Pic 4 & 5)
   f. Run Loader in Down Position, to lower the deck.
   g. Turn off Pump, ready to load logs.
Steps for Operating The "H360"

A. Ratchet System for Squaring Pins
a. When ratchet dog is in the back position, pulling the lever (towards operator), it will lower the Squaring Pins. (See Pic 6)
b. When ratchet dog is in the front position, pushing the lever (away from operator), it will raise the Squaring Pins. (See Pic 7)
c. Using the locking bolt, lock the Squaring Pins into position.

B. Loading the logs
a. Once the Loader is lowered to the ground, place the log onto the loader. Once in place raise the deck to roll the log onto the trailer.

C. Tensioning the Blade
NEVER tension your blade with the engine running. Your mill is shipped to you without any tension on the blade. If there is tension left on the blade for a period of time, it can cause flat spots in the belt. This will cause the blade to fall off the wheel. Always remember to de-tension your blade when you are done sawing for the day.
a. To tension the blade, remove the guards and loosen the nut on the tensioning bolt.
b. Turn the adjusting bolt or stud, clockwise until 30-35 pounds of torque is achieved. The recommended tool for this is a torque wrench. By hand, rotate blade 3-4 full revolutions; this centers the blade on the wheels.
c. With gloves on, pull up on the blade at the center guard. Allow for no more than a ¼" movement up or down on the blade.
d. Perform a simple test call the "Flutter" test. Put the guards on and then run the engine at full RPM's and watch the blade under the blade guard. The blade must run straight, if it does not, shut the engine down and apply more tension. Keep in mind that over tensioning will also cause the blade to flutter. You should have attained proper tension around 30-35 pounds.
e. A tensioned blade should come off the bottom of the band wheel and run straight across to the other band wheel, so there is NO sag in the blade between the two wheels.
D. Setting Logs
Once the track is set, the head is in place and the blade is tensioned correctly, you are almost ready cut.

a. Place the log determined by the mills size, on the center of the track. Using the log dogs secure the log to the track. Be sure to dog the log high enough (1/2" way up the log) to ensure the log does not move. If the log is too big for the log dog to hold in place, but your sawmill head still rolls unobstructed use the "Cheater" to hold it. (for use on the 18/228 only).

b. Be sure the adjustable guides are clear of the log. This can be achieved by loosening the guide bracket and sliding it as far to the operator's side as needed to clear the log.

E. Getting Ready to Cut
Now is the time to debark or clean your log. This can be achieved by the simple chainsaw attachment, called a Log Debarker (available through Hud-Son Forest Equipment Inc.) or your can pressure wash the logs to remove any mud. By debarking and cleaning your log it will extend the life of your blade.

a. Adjust the Hud-Son guides so that they are slightly (no more than 2 inches) wider than the maximum width of the log.

(\textbf{Note: as you cut slabs, boards or squares you may need to adjust the guide to ensure the best performance and quality cuts})

b. Find the top of the log with the blade. Remember, that you may have cheaters in place so be sure these are clear when making the first cut. You will be removing the top potion of the log. (top slab)

c. On the manual lift models, crank your head down to the desired height and click up one notch to set the head. Make sure your blade will clear your dog assembly.

d. Start your engine, let it idle for at lest 2 minutes. (Refer to the engine manual for proper engine maintenance)

e. With the engine in idle position, increase the throttle to start the blade. Sawing should always be done with the engine in full throttle.

f. Gently push the saw head through the log, pushing on the head frame. If the engine starts to labor, you are going to fast, slow down. Go slow through burls and knots as the engine may bog down through these parts of a log.

g. When you are at the end of the log, power down the engine, crank the head up so that will clear the log and roll back to the front of the log. For ease of operation, put the slabs on the operator's side of the mill, this way you will not have to dig through sawdust for your lumber.

h. You now have a flat surface on top of your log, remove the cheaters (if applicable), you will no longer need them, as long as the log dogs will hold the log in place.

i. Set your log dog assembly so that they are standing in the track. Turn the cut side of the log, using a cant hook, ¼ of a turn. The flat side must be flush against the squaring pin to assure a square cant.

j. Adjust the log dog at an angle to the track so that the blade can pass over the top, but so that the dogs are effective in securing the log.

k. Once again, increase the engine throttle to start the blade, and saw another slab. You will repeat step (I) until your log is squared into a cant. You may now saw your dimensional lumber.

l. Steps (I-K) may not be applicable if a cant is not desired.

F. Cutting Dimensional Lumber
You can cut down to a 1" thick bottom board. To achieve this you will use the moveable side of the dog and the short squaring pins welded in the track.

a. You will need to determine the size lumber that can be cut and how many, then using the scale start sawing your lumber. Lower the blade to desired thickness and saw your board. Repeat this process unit all lumber is cut.

b. You may need to turn your cant to make the desired lumber.
G. Replacing the Blade
No matter how well you care for your blade, they will dull after time and need to be changed. Longevity of your blade depends on how well you maintain it.

a. The engine needs to be stopped, turned off and the key removed, this ensures that the engine can not be accidentally turned back on. On engines with manual start, you will need to remove the spark plug wire prior to servicing.
b. Loosen and remove wing nuts so you can remove the outside and center guards on all models.
c. Loosen band blade tensioner bolt until adjusting bolt is flush with threaded plated. With a gloved hand, put hand on the top of the band blade and push down. (Use extreme CAUTION, dull blades are still sharp and may be hot).
d. Remove band blade from both band wheels and take out of carriage.
e. Inspect new or sharpened blade, be sure blade teeth are facing in correct direction. Teeth should always point away from the operator. (Towards discharge chute). Be sure to wipe blade clean of all oily substance prior to installing. A clean, dry rag or cloth works best.
f. Starting from your stationary wheel set the blade on the wheel then thread though your guides. Work the blade over the tensioning wheel until the blade is set. (Picture needed).
g. Lightly tension the blade to remove the slack, and then turn the wheel in the direction of travel (towards the operator) 3-4 rotations to be sure the blade is tracking properly on the wheel (picture needed).
h. Once the new blade is tracking properly, replace the guards and re-tension the blade as previously stated.

H. End of Processing Lumber
a. Completely decrease engine throttle and turn engine switch, red one, to off position.
b. The blade will continue to turn automatically and will coast to a stop.
c. If you are done sawing for the day, de-tension the blade, so that you do not have flat spots.

I. Blade Maintenance
Longevity of band blades depends on how well they are cared for. Using a lube tank, Log Debarker, band blade sharpener, debarker, tooth setter, all will help keep your blade in top condition. Be sure to clean your logs by using a pressure washer or debarker to keep them free of mud and debris.

J. Blade suggestions
a. Never force a dull blade, this will result in overheating of the blade.
b. Overuse of a blade jeopardizes the ability of the saw blade to be re-sharpened.
c. A new blade may stretch after cutting and may have to be re-tensioned to assure a quality lumber.
d. De-tension the band blade after each day of cutting.
e. Never operate the mill without the guard in place.

The Hud-Son Forest Equipment, Inc sawmill comes with a Wood-Mizer DoubleHard band blade. Wood-Mizer has an excellent re-sharpening program for your band blade.

K. Adjusting Sawmill Guides
a. Purpose of the Guides
i. Superior Hud-Son guide design. Supports on the top, bottom and back of the blade, where can the blade go? This guide design limits the chance of blade wander.
ii. The lower blade holds the blade up and decreases the chance of "diving". Most companies only use a top support.
iii. The closer to the log the guides are to the log the better support the blade has as it cuts.
b. Adjusting the guides
i. Tools that will be needed:
   1. 17 mm wrench
   2. 17 mm socket
   3. 9/16" wrench
   4. 3/16" Allen wrench
ii. All guides are aligned and set at the factory, but occasionally they get moved out of adjustment in shipping or
after a period of usage. It is important that they be checked often for proper alignment and adjusted correctly.

iii. To adjust your guides correctly you must first tension the blade properly as previously described. A tensioned blade should come off the bottom of the band wheel and run straight across to the other, so there is NO sag between the two wheels.

c. Now that the blade is tight, slightly loosen the Allen head that holds the guide shoes, so that they slide up and down freely. Now loosen the bolt that fastens the aluminum guide bracket to the guide rod, so that the guide bracket can be moved in, out and it can be rotated in either direction.

d. Set the guide bracket so that the back bearing is on the same plane as the blade, so that if the blade were to wander back it would hit the back bearing evenly across the middle of the roller. If the bearing needs to be adjusted up or down, loosen the bolt that holds it to the guide bracket and space it in either direction using the washers that are on either side of the bearings.

e. Once the bearing is set, position the guide bracket so that the bearing is 1/8” behind the back of the blade. Once the bearing is in position, tighten the bolt on top of the guide bracket in to place. Be sure the guide is 90° to the blade.

f. The guide shoes are to be set using a sheet of paper to gauge the spacing. Place the paper between the shoe and the blade, slide the shoe so that it is pitching the paper and tighten the bolt so that the shoe is set in place. Do the same on the bottom of the blade. Note that you do not want the shoe to be pitching the blade so hard that it is prohibiting blade travel.

g. Make sure that all nuts and bolts are tightened firmly.

L. Using the Lumber Scale

a. All Hud-Son saw mills are equipped with a Lumber Scale. The scale is used to make the dimensioning process simple. The scale incorporates 4 separate scales with the blade kerf factored in for each increment.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Resulting Thickness</th>
</tr>
</thead>
<tbody>
<tr>
<td>4/4</td>
<td>1”</td>
</tr>
<tr>
<td>5/4</td>
<td>1 1/4”</td>
</tr>
<tr>
<td>6/4</td>
<td>1 1/2”</td>
</tr>
<tr>
<td>8/4</td>
<td>2”</td>
</tr>
</tbody>
</table>

Note:
The 1” standard ruler does NOT account for kerf. When using this scale be sure to plan on kerf. 1” increments will result in approximately a 7/8” end result, depending on what blade is being used.
## TROUBLE SHOOTING

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blade is Diving/Rising</td>
<td>Dull Blade</td>
<td>Sharpen or Replace Blade</td>
</tr>
<tr>
<td></td>
<td>RPM's Not High Enough</td>
<td>Saw at Full Throttle</td>
</tr>
<tr>
<td></td>
<td>Blade Not Tensioned Properly</td>
<td>Check Torque on Tensioning Bolt</td>
</tr>
<tr>
<td></td>
<td>Sawing Soft Pitch Wood</td>
<td>(Perform &quot;Flutter&quot; Test)</td>
</tr>
<tr>
<td></td>
<td>(Pitch Build-up in Blade Gullets)</td>
<td>Use Lubricant on Blade</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Saw Tree from the Top to the Bottom (small end to wide end)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Slow Down</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reset Teeth to Proper Set</td>
</tr>
<tr>
<td>Mill Sawing Hard</td>
<td>RPM's Not High Enough on Engine</td>
<td>Always Saw at Full Throttle</td>
</tr>
<tr>
<td></td>
<td>Belt is Slipping</td>
<td>Adjust Belt Tension</td>
</tr>
<tr>
<td></td>
<td>Sawing Hard Wood</td>
<td>Slow Down your Sawing Speed</td>
</tr>
<tr>
<td></td>
<td>Dull Blade</td>
<td>Sharpen or Replace Blade</td>
</tr>
<tr>
<td></td>
<td>Bark or Sawdust Build-up on Wheels or Track</td>
<td>Clean Wheels and Track</td>
</tr>
<tr>
<td>Engine Powers Down (Loosing RPM's)</td>
<td>Pushing the Mill to Fast</td>
<td>Slow Down your Sawing</td>
</tr>
<tr>
<td></td>
<td>Dirty Air Filter</td>
<td>Clean or Replace your Air Filter</td>
</tr>
<tr>
<td></td>
<td>Dull Blade</td>
<td>Sharpen or Replace Blade</td>
</tr>
<tr>
<td>Mill Not Sawing Square</td>
<td>Over Dogged</td>
<td>Loosen Dog Pressure</td>
</tr>
<tr>
<td></td>
<td>Track Not Level &amp; Square</td>
<td>Level Track</td>
</tr>
<tr>
<td></td>
<td>Cables are Out of Adjustment</td>
<td>Re-adjust Cables</td>
</tr>
<tr>
<td></td>
<td>Not Putting Flatside of Cant Flush with Squaring Post on the First</td>
<td>Re-Adjust Blade Guides</td>
</tr>
<tr>
<td></td>
<td>Turn Bad Trolley Bearing</td>
<td></td>
</tr>
<tr>
<td>Log Moves When Dogged</td>
<td>Over Dogged, to Much Pressure on Dogs</td>
<td>Loosen Dog Pressure</td>
</tr>
<tr>
<td>New Blade will Not Cut</td>
<td>Blade Could be Turned Inside Out</td>
<td>Turn the Blade So that the Teeth are Pointing in the Discharge Direction</td>
</tr>
<tr>
<td>Boards have Fine or Large Lines</td>
<td>A Tooth is the Blade is Out of Set</td>
<td>Reset Tooth in Blade</td>
</tr>
<tr>
<td>in them Every Several Inches in</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a Repeating Pattern</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Powerfeed Stops Working</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydraulic Pressure</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## TRANSPORT INSTRUCTIONS

*Follow all the steps to safely transport The "H360"

1. Raise log loader off the ground. Lock into transport position with bar stationary pins.
2. Install transport bar to log loader legs, using the empty leg hole, reinsert pin to hold bar in place.
3. * Note: NEVER transport The "H360" without transport bars in position. *
4. Raise rear legs of frame and pin in raised position.
5. Raise jack to desired height, hook hitch to vehicle. Plug in lights and brakes. Hook-up safety chains and break-away switch.
6. Lift front legs and lock in transport position.
7. Be sure to clean unit of all loose debris, including all bark, sawdust and dirt.
ALWAYS WEAR GLOVES AND EYE PROTECTION WHEN OPERATING SAWMILL
2) Setting Up Trailer Model

You will need to unbolt the head from the track. The travel bolts are located behind your guide arms at the base of the mill head.

Once your head is unbolted from the traveling position, roll it down the track to be sure the area and track are free of obstructions. If your head rolls on it's own, you will need to adjust your leveling legs. Return the head to the center of the trailer and re-bolt or raise the center the legs to secure the head, and then set your leveling legs. Always secure the head before re-leveling.

Once your trailer is level and the head will not roll on it's own, you are ready to continue. Once again, if your trailer is not straight or flat, you will not saw your boards accurately.

ALWAYS TRAVEL WITH THE MILL HEAD LOCKED IN THE TRAVEL POSITION. FAILURE TO DO SO WILL CAUSE SERIOUS DAMAGE TO MILL, VEHICLE AND POSSIBLY OTHERS.

Tensioning Blade On All Models

Never tension your blade with the engine running. Your mill is shipped to you without any tension on the blade. The reason being is that tension applied to the blade for long periods of time can cause flat spots in the belts. This will cause your blade to fall off the wheel. Always remember to de-tension your blade when you are done sawing for the day.

On the top of the guards (18 & 228) you will find 2 connecting nuts, loosen both of these on 2006 models and older.

Turn the adjusting bolt or stud clockwise until 30-35 pounds of torque is achieved. (See picture 3d) The recommended tool for this procedure would be a torque wrench. By hand rotate blade 3 or 4 full revolutions. This centers the blade on the wheels.

With gloves on, pull up on blade at the center guard. Allow for no more than a 1/4” movement up or down on the blade.

A simple test called the "flutter" test can be performed at this point. Put guards on and then run the engine at full RPM's and watch the blade under the blade guard. The blade must run straight. If it does not, shut the motor down and apply more tension. Keep in mind that over tensioning will also cause the blade to flutter. You should have attained proper tension around 30-35 pounds of torque.

A tensioned blade should come off the bottom of the band wheel and run straight across to the other, so there is no sag in the blade between the two wheels.
5) Settings Logs, Using Dogging System, Sawing Lumber

Once you have set your track, the head and tensioned the blade, you are now almost ready to cut.

Place your log on the center of the track. Using the log dogs secure your log to the track. Dog the log high enough (1/2" way up log) to ensure the log does not move.

Be sure that your adjustable guides are clear of the log. This can be achieved by loosening the guide bracket and sliding it as far to the operators side as needed to clear the log.

Now is the recommended time to debark or clean your log. This can be achieved by the simple chainsaw attachment called a Log Debarker, which is available through Hud-Son Forest Equipment, Inc, or by pressure washing your logs to remove any mud. By debarking and cleaning your logs, you will extend blade life.

Find the top of the log with the blade and read your measurement. Remember, that you may have cheaters in place so be sure these are clear when making your first cut. (Refer to the log scale section of the manual to determine which is your correct height.)

Start the engine. (Always refer to the engine manual for proper engine maintenance.)

With the engine in idle position, increase the throttle to start the blade. Sawing should always be done with engine at full throttle.
ALWAYS WEAR GLOVES AND EYE PROTECTION WHEN OPERATING SAWMILL

Gently feed the saw head through the log. If the engine starts to labor, you are going to fast. Go slow through burls and knots as the engine may bog down through these parts of the log.

When you are at the end, power down the engine, crank the head back up and roll back to the beginning. For ease of operation, put the slabs on the operator's side of the mill. This way you will not have to dig through sawdust for your lumber.

Now that you have a squared side under your log, remove your cheaters. You will no longer need them for this log, as long as the log dogs hold it in place.

Set your log dog assembly so that they are standing up on the track. Lay the cut side of the log against the squaring pin. The flat side must be flush against the squaring pin to assure a square cant.

Adjust the log dog at an angle to the track so that the blade can pass over the top, but so that dogs can effectively secure the log.

Once again, start engine and repeat step h and i until your log is square. Once all your slabs are removed and your log is square, you will be able to cut your dimensional lumber.

Bandblade Information

1) Replacing The Bandblade.

No matter how well you care for your blade, they will dull after time and need to be changed. Longevity of your blade depends on how well you maintain it.

a) Stop engine and remove key. On engines with manual start, we recommend that you disconnect the spark plug wire prior to servicing or leaving unattended.

b) On the Oscar 18 and 228 loosen and remove nuts on the top of guard on 2006 models and older. On the Oscar 30, 36 and 52. Loosen and remove wing nuts to remove outside and center guards.

c) Loosen bandblade tensioner bolt until adjusting bolt is flush with threaded plate. (See picture 4a)

d) With gloved hand, put hand on top of bandblade and push down. (Use caution, dull blades are still sharp and may be hot. See picture 4b.)
The tensioning bolt can easily be loosened or tightened with a socket wrench as pictured above.

Always wear gloves when handling blades. Changing the blades is done from the front of the mill.

Remove bandblade from both bandwheels and take out of carriage.

Inspect new or sharpened bandblade. Be sure bandblade teeth are facing the proper direction. Teeth should always point away from the operator. (Towards discharge chute) Be sure to wipe blade clean of all oily substance prior to installing. A clean, dry rag or cloth works best.

Starting from your stationary wheel set the blade on the wheel then thread through your guides. Work the blade over the tensioning wheel until the blade is set.

Threading the blade through the guide system will help keep the blade in place while you are working it over the bandwheels.

Lightly tension your blade to remove the slack, then turn your wheels in the direction of travel (towards the operator) 3 to 4 rotations to be sure your blade is tracking properly on the wheel.

The bandblade should be flush against the back of the wheel.
Once your blade is tracking properly, replace the guards and follow Section 3, Part 4 of the manual to properly re-tension your blade.

Blade Maintenance

Longevity of your blade depends on how well you maintain it. Using a lube tank, Log Debarker, bandblade sharpener, debarker, tooth setter, will help keep your blades in top condition. Be sure to clean your logs by using a pressure washer or debarker to keep them free of mud and debris.

Turn the valve until you have a drip approximately every 2 seconds before you start the blade and while you are cutting. This will help cool the blade and prevent stress to the blade. NEVER use flammable or petroleum based products in your lube tank. Soapy water or windshield washer fluid works best. If you choose not to have a lube tank installed, be sure to use a spray bottle of water on your blade to cool it.

The Log Wizard is a chainsaw attachment that mounts to the bar of most chainsaws and strips the log of bark and debris. It can also be used as a notcher or planer.

The semi automatic bandblade sharpener will allow you to cut operating costs by sharpening your own blades.

The Adjustable Handsetter (toothsetter) is a must for any blade. Part # TS-101 A.
Blade Suggestions

Never force a dull blade; this will result in the blade overheating.

Overuse of the blade jeopardizes the ability of the saw blade to be re-sharpened.

A new blade may stretch after cutting and may have to be re-tensioned to assure quality lumber.

De-tension the bandblade after each day of use.

Never operate mill with guards off.

Your Hud-Son Forest Equipment, Inc sawmill comes with a Wood-Mizer DoubleHard bandblade. Wood-Mizer has an excellent re-sharpening program for your bandblade. Wood-Mizer has an excellent re-sharpening program for your bandblades. For details call 1-800-244-4600.

Adjusting Sawmill Guides

1) Purpose Of The Guides

One of the many reasons that Hud-Son Forest Equipment, Inc sawmills are leading in the industry is due to their superior guide designs. With support on the top, bottom and back of the blade, where can it go? Our guides limit the chance of blade wander. The lower support holds the blade up and decreases the chance of "diving," while most companies use only top support. The closer the guide assembly is to the log, the better support the blade has as it cuts.

All guides are aligned and set at the factory but occasionally they get moved out of adjustment in the shipping process or after being used for a period of time. It is important that they be checked often for proper alignment and adjusted accordingly.

a) Tools Needed:

17mm wrench
17mm socket
9/16" wrench
3/16" Allen wrench

5b) The Hud-Son shoe guides are designed for maximum support of the saw blade. The top, bottom and back of the blade are all supported.
b) To adjust your guides properly you must first tension the blade properly as described in Section 3 part 4. A tensioned blade should come off the bottom of the band wheel and run straight across to the other, so there is no sag in the blade between the two wheels.

c) Now that the blade is tight, slightly loosen the Allen head that holds the guide shoes so that they slide up and down freely. Now loosen the bolt that fastens the aluminum guide bracket to the guide rod, so that the guide bracket can be moved in and out and it can be rotated in either direction.

d) Set the guide bracket so that the back bearing is on the same plane as the blade, so that if the blade were to wander back it would hit the back bearing evenly across the middle of the roller. If the bearing needs to be adjusted up or down, loosen the bolt that holds it to the guide bracket and space it in either direction using the washers that are on either side of the bearing.

e) Once the bearing is set, position the guide bracket so that the bearing is spaced 1/8" behind the back of the blade. Once the bearing is in position, tighten the bolt on the top of the guide bracket into place. Be sure guide is 90° to the blade.

f) The guide shoes are to be set using a sheet of paper to gauge the spacing. Place the paper between the shoe and the blade, slide the shoe so that it is pinching the paper, and tighten the bolt so that the shoe is set in place. Do the same on the bottom of the blade. Note that you do not want the shoes to be pinching the blade so hard that they are prohibiting blade travel.

g) Make sure that all nuts and bolts are tightened firmly.

5c) Pictured is a close-up of the guide. It shows all the bolts and bearings that can possibly be adjusted. Note how the teeth are outside of the guide.
5d) Pictured above is the adjustable guide bar and T-handle. The guide bar is used for adjusting the width of the throat (gap between the log and the guide). Be sure your guide is positioned as close to log as allowed for maximum support and a superior cut.

### ALWAYS WEAR GLOVES AND EYE PROTECTION WHEN OPERATING SAWMILL

### Section 6 - Drive Belt & Bandwheel Belt Sizes

**Oscar 18**
- Bandblade Size: 132” x 0.35 x 1-1/4
- Drive Belt: B77 Crowned Back Belt
- Bandwheel Belt: Standard Pyrathane Belt
  (Can be replaced with B49 Crowned Back)

**Oscar - 228**
- Bandblade Size: 132” x 0.035 x 1-1/4
- Drive Belt: B77 Crowned Back Belt
- Bandwheel Belt: Standard Pyrathane Belt
  (Can be replaced with B49 Crowned Back)

**Oscar - 30**
- Bandblade Size: 160” x 0.035 x 1-1/4
- Drive Belt: 5L880 or B85
- Bandwheel Belt: Standard Pyrathane Belt
  (Can be replaced with B49 Crowned Back)

**Oscar - 36 & Farm Boss**
- Bandblade Size: 189” x .042 x 1-1/4
- Drive Belt: 5L880 or B85
- Bandwheel Belt: Standard Pyrathane Belt
  (Can be replaced with B77 Crowned Back)

**Oscar - 36 & Farm Boss with 25” Bandwheels**
- Bandblade Size: 167” x .042 x 1-1/4
- Drive Belt: 5L880 or B85
- Bandwheel Belt: Standard Pyrathane Belt
  (Can be replaced with B77 Crowned Back)

**Oscar - 52 & Farm Boss 52**
- Bandblade Size: 221” x .052 x 1-1/2
- Drive Belt: B86 or 5/8 x 89”
- Bandwheel Belt: Standard Pyrathane Belt
  (Can be replaced with B77 Crowned Back)
### Board Feet = (12" x 12 x 1" = 144 Cubic Inches

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Board Ft./In.</th>
<th>Board Ft./Ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 x 2</td>
<td>0.013</td>
<td>0.16</td>
</tr>
<tr>
<td>2 x 2</td>
<td>0.013</td>
<td>0.33</td>
</tr>
<tr>
<td>1 x 4</td>
<td>0.028</td>
<td>0.33</td>
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<tr>
<td>2 x 4</td>
<td>0.055</td>
<td>0.66</td>
</tr>
<tr>
<td>1 x 5</td>
<td>0.034</td>
<td>0.41</td>
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<tr>
<td>1 x 6</td>
<td>0.042</td>
<td>0.50</td>
</tr>
<tr>
<td>2 x 6</td>
<td>0.083</td>
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<td>1 x 8</td>
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<td>1.60</td>
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<td>3 x 3</td>
<td>0.063</td>
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<td>1.33</td>
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<td>5 x 5</td>
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<td>6 x 6</td>
<td>0.250</td>
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<td>8 x 8</td>
<td>0.444</td>
<td>5.33</td>
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<tr>
<td>10 x 10</td>
<td>0.694</td>
<td>8.33</td>
</tr>
<tr>
<td>12 x 12</td>
<td>1.000</td>
<td>12.00</td>
</tr>
</tbody>
</table>

Example: 16 x 1.33 + 9.111 = # of Board Feet
21.28 + .99 = 22.28 Board Feet
Cage Locking System

To use the locking system pull cage back to the starting end of track. Pull “T” hand so that the shaft slides into locking hole. Once the shaft is in place, cage is secured.

To unlock cage, turn “T” handle in opposite direction so that the shaft pulls out of the hole. The cage is now free to move.

European Mill Warranty

PARTS ONLY.
No warranty on labor or shipping.

All other warranties are stated below.

<table>
<thead>
<tr>
<th>Category</th>
<th>Warranty Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gasoline Engines</td>
<td>2 years-Check yellow pages for your nearest Briggs &amp; Stratton Servicing Dealer.</td>
</tr>
<tr>
<td>Pulley, Sheaves, Welds, Tracks</td>
<td>1 year-Call your servicing Hud-Son Dealer.</td>
</tr>
<tr>
<td>Drive Shafts &amp; Drive Shaft Bearings</td>
<td>6 years-Call your servicing Hud-Son Dealer.</td>
</tr>
<tr>
<td>Electric Motors</td>
<td>1 year-Call Hud-Son and ask for the warranty department.</td>
</tr>
<tr>
<td>Belts</td>
<td>1 year-Call your servicing Hud-Son Dealer.</td>
</tr>
<tr>
<td>Axles (Trailer Models)</td>
<td>1 year-Call your servicing Hud-Son Dealer.</td>
</tr>
<tr>
<td>Electric Winch &amp; Winch Parts</td>
<td>1 year-Call your servicing Hud-Son Dealer.</td>
</tr>
<tr>
<td>(You will need your winch serial number)</td>
<td></td>
</tr>
<tr>
<td>Hud-Son Guide</td>
<td>30 Days-Read manual for proper adjustments &amp; maintenance.</td>
</tr>
<tr>
<td>Blades</td>
<td></td>
</tr>
<tr>
<td>Drive Clutch</td>
<td>30 Days-Call your servicing Hud-Son Dealer.</td>
</tr>
<tr>
<td>Hydraulic Motors, Cylinders, Pumps, Valves and</td>
<td>1 year-Call Hud-Son and ask for the warranty department.</td>
</tr>
<tr>
<td>Hose &amp; Fittings</td>
<td></td>
</tr>
<tr>
<td>Sprockets, Chain and Cord Reel</td>
<td>90 Days-Call Hud-Son and ask for the warranty department.</td>
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</tbody>
</table>
Thank you for choosing HUD-SON for your forestry needs.