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BADGER FIREWOOD PROCESSOR OPERATOR'S MANUAL

8201 STATE ROUTE 12 • PO BOX 345 • BARNEVELD, NY 13304

A N O T E F R O M H U D - S O N

Thank you for your purchase of the Badger firewood processor from Hud-Son Forest Equipment. We are pleased that you chose us as your supplier of your forestry equipment.

Hud-Son Forest Equipment has been in the forestry business since 1965 and prides itself on developing new and innovative products for the forestry business. Our product line is always transforming so please check us out on the web at www.hud-son.com for the up and coming developments we are making.

Should you have any questions with the setup of your firewood processor or have any technical questions please feel free to contact our onsite technician Monday - Friday, 8 to 4:30 and Saturdays from 8 to noon eastern time at 1-800-765-7297. We are always available to our customers for any questions or concerns they may have about their equipment.

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INTRODUCTION

Purchaser Agreement

By accepting the delivery of your firewood processor by Hud-Son Forest Equipment you agree that you will not modify your mill from it's original assembly. This will VOID any warranty from Hud-Son Forest Equipment.

Please fill out the information for quick reference:

Dealer:	_____
Phone Number:	_____
Address:	_____ _____
Purchase Date:	_____
Model:	_____
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.

DISPUTES

All disputes, claims and causes of action arising out of the delivery, use, or warranty claims for personal injury and or property damage must:

1. Claimant must provide a written notice of the claim or dispute to the company (at the address below) at least 30 days after the claim arose prior to commencement of any action;

2. Company has 60 days to make a decision on the claim and will provide a written response to claimant;

3. No action may be commenced until after the company has provided its decision on the claim;

4. All claims against the company for any cause related to delivery, design defects,

repairs, use of the equipment or warranty shall be filed in Supreme Court, Oneida County, State of New York. The parties may file for Arbitration in Oneida County New York after consent by both parties.

5. Construction and interpretation of this agreement and any and all claims shall be subject to the Laws of the State of New York.

6: The address for submission of claims is:

Hud-Son Forest Equipment
PO Box 345
8201 State Route 12
Barneveld, NY 13304

7. Notices under this agreement must be in writing and sent by certified or registered mail.

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. (Be Sure The Machine Is OFF.)

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

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

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 or while tired.

10) All worn or damaged decals should be replaced.

11) Any modifications to the product require written approval from Hudson Forest Equipment or warranty becomes null and void.

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

13) Inspect hydraulic winch cable for wear, if frayed or kinked cable should be replaced.

14) Be sure to turn down/off engine for any repairs, lubrication or adjustments to the machine.

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, heavy impact, or extreme heat or cold. Hoses should not be allowed to kink, twist, curl, crush or bend tightly so that the fluid flow is compromised.
- 4) Periodically inspect all the hoses for wear, which can cause damage to the hose and can possibly result in personal injury.
- 5) 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.
- 6) 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 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 on the following page are used on the Hud-Son Saw Mills 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 practices 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 personnel injury or damage.

BLADE LUBE TANK - be sure to use the correct lubrication, if incorrect lube is used it may cause personnel injury or damage.

NOTICE - Please remember to send in warranty card and information.

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

CAUTION FIRE HAZARD - Keep all sawdust away from motor.



Daily maintenance of this machine includes checking engine oil, hydraulic fluid, cable, safety equipment and the splitter trough needs to be cleaned out in front and behind the push plate. Neglecting to do this will result in splitter damage which will NOT be covered under warranty.

PROCESSOR FILTERS SHOULD BE CHANGED AFTER 10 HOURS OF INITIAL USE AND EVERY 100 HOURS THEREAFTER.

Winching Tips

* NOTE - Be very careful when winching the logs. When winch is winding in make sure that it is not being kinked or wound in one position. While pulling be alert not to tip machine over.

Be sure the rear dig legs are angled into the ground and that they have a good solid spot to dig into. This unit can NOT be ran on a paved surface. The unit must be able to dig into the soil to hold itself in place.

Make sure winch is oiled. Without oil it does not move freely and will rust up.

WARNING!

Be sure to stay clear of the winch when it is pulling the cable in.

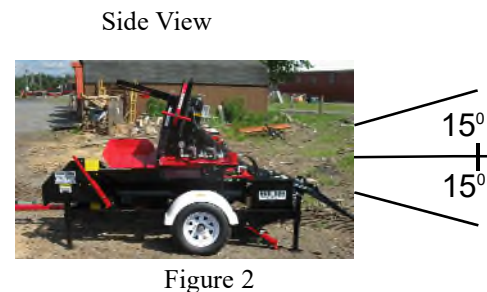
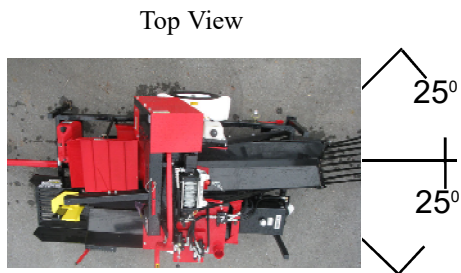
Disregarding this could result in serious injury or death.

- 1.) **WARNING:** Never use a ball and/or ball mount as an anchor point for tow strap or winch cable. Severe personal injury or death could occur.
- 2.) Use OEM tow hooks, recovery eyes or a clevis mount for attachment of a strap to the winch cable.
- 3.) Always heed to all recommendations, cautions and warnings/stickers and decals.
- 4.) The use of a snatch block with this winch may cause severe damage to the machine and/or operator and others in the immediate area.
DO NOT USE SNATCH BLOCK WITH THIS MACHINE!

Rating:

Maximum line pull angle for winching must not exceed the following angles.

- 1.) 25 degree left or right from straight ahead (see figure 1). Caution: Exceeding the maximum line pull rating may overload winch, winch mount, and/or front mounted receiver.
- 2.) 15 degree angle up or down from horizontal. (see figure 2).



SAFETY TIPS

Isolate winch before putting your hands in or around the fair lead or wire rope drum (The Danger Zone).

GENERAL OPERATION

The Badger's hydraulic pump is used to power the winch. The engine must be running for winch operation. The winch has minimum pulling capabilities at engine idle.

The winch is operated by a manually operated hydraulic switching valve.

- Wear leather gloves when handling winch cable. DO NOT handle cable with bare hands as broken wires can cause injuries.

- NOTE: **When extending winch cable, ensure that at least five wraps of cable remain on drum under load. Serious personal injury or property damage may result if this is not done.**

- Ensure that all persons stand well clear of winch cable and load during winch operation. 1.5 times the cable length is the recommended distance. If a cable pulls loose or breaks under load it can lash back and cause serious personal injury or death.

- Draping a heavy blanket or similar object over the extended winch cable is recommended as it will dampen any lash back should a failure occur.

- DO NOT operate the winch control when the engine is OFF and a load remains on the cable. This may put the winch into free-spool mode when not required, therefore not holding the load.

- Ensure the winch clutch is totally engaged before starting any winch operation. When engaging or disengaging the clutch it may be necessary to rotate the drum by hand to align the clutch pin or move hydraulic control lever to unlock winch.

- NEVER disengage the winch clutch under load.
- Store the winch with clutch lever function in the HIGH GEAR position.
- The maximum winch capacity is available on the first layer of rope on the bare winch drum. During all winching operations it is recommended to unspool the rope back to the first layer so as to provide maximum capacity and avoid rope damage. **Ensure that at least five wraps of cable remain on the drum at all times.**

- The MileMarker winch is a 2-speed unit, low speed for heavy or loaded winching and high speed for line retrieval.

- DO NOT use the winch to lift, support or otherwise transport personnel.
- DO NOT drive your vehicle to assist the winch in any way. Vehicle movement in combination with winch operation may overload the cable, the winch itself, or cause damaging shock loads.

- Shock loads when winching are dangerous! A shock load occurs when an increased force is suddenly applied to the cable. A vehicle rolling back on a slack cable may induce a damaging shock load.

Unwinding Winch Cable

To unwind cable by hand, turn top lever to “FREE” (free spool). Turn side lever to “FREE” (free spool). Both levers should be in “FREE” positions to unwind cable.

WARNING

- Wear leather gloves when handling winch cable. Do not handle cable with bare hands. Broken wires cause injuries.
- When fully extending winch cable, make sure that five wraps of winch cable remain on drum at all times. Failure to do this may cause serious injury.
- Pull off cable by hand to desired length. Connect to load leaving one foot of slack in cable.

Pulling Load

Turn top lever to “LOW” (lock low gear). Leave the side lever at “FREE” (free spool). This will engage the winch into low gear.

WARNING

- Direct all personnel to stand clear of winch cable during winch operation. A snapped winch cable will cause serious injury or death.

CAUTION

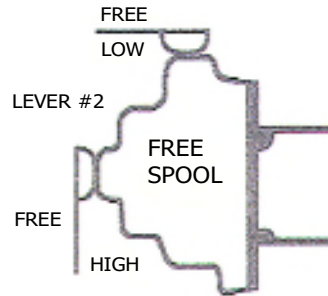
- Winch cable must be wound onto the drum under a load of at least 500 lbs. or outer wraps will not draw the inner wraps and damage the winch cable.

OPERATION OF HIGH GEAR

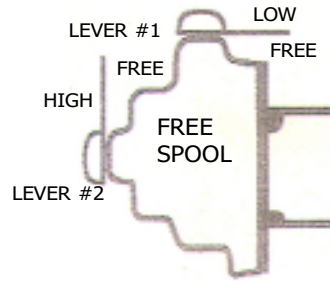
Turn top lever to “FREE”. Turn side lever to “HIGH” (lock high gear).

MILE MARKER HYDRAULIC 2-SPEED WINCH LEVER POSITIONS

VIEW #1

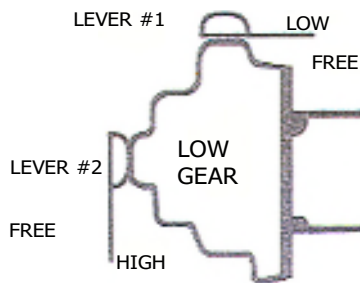


VIEW #2

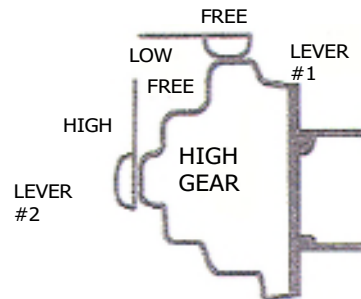


WARNING
DO NOT MOVE SHIFT LEVERS WITH LOAD ON WINCH CABLE!

VIEW #3



VIEW #4



WARNING
DO NOT MOVE SHIFT LEVERS WHEN POWERING WINCH IN OR OUT!
LEVER POSITIONS ARE WINCH MODES:

LEVER #1	LEVER #2	MODE	VIEW
FREE	FREE	FREE SPOOL	1
LOW	HIGH	LOCK	2
LOW	FREE	LOW GEAR	3
FREE	HIGH	HIGH GEAR	4

- Do not overload your winch. Do not maintain power to the winch. Do not maintain power to the winch if the drum stops. Overloads can damage the vehicle, winch or winch rope and create unstable operating conditions.

- It is recommended to lay a heavy blanket or jacket over the rope about half way along to the hook attachment. If a rope failure should occur, the weight of the cloth will act as a damper and help prevent the broken rope from whipping.

- Remember to move the blanket or coat as winching proceeds, but halt winching when doing so.

USE OF NYLON SLING & SHACKLE

A shackle should always be used when attaching winch hooks to nylon slings, NOTE: The shackle must pass through both eyes of the sling. The safe working load of the nylon sling is based on the use of both eye ends.

USE OF GLOVES

When handling or rewinding the cable always use gloves to eliminate the possibility of cuts caused by burrs and broken strands. Inspect cable and equipment frequently. The cable should be inspected for damage that could reduce its breaking strength. A frayed cable with broken strands should be replaced immediately. Always replace the cable with a MileMarker recommended replacement part. Any substitution must be identical in strength, quality, lay and stranding. Never hook the cable back onto itself. Hooking the cable back onto itself creates an unacceptable strain, breaking individual strands which in turn weakens the entire cable. Use a sling. Avoid continuous pulls from extreme angles as this causes cable to pile up at one end of the drum.

Mile Marker Inc. Hydraulic Winch Limited Warranty

Mile Marker Inc. warrants each winch when used in normal service against factory defects in materials and workmanship to the original purchaser, (Commercial and recreational warranty) for the period of two (2) years. (Exclusion from this warranty are cables, the finish, and any condition Mile Marker determines to have been caused by abnormal or mis-use. The Mile marker hydraulic motor has a five (5) year warranty. The owner will be responsible for removing the winch and returning it to the Mile Marker, freight prepaid. Mile Marker will repair or replace all or any winch parts, found defective after inspection. See each individual product package for more details warranty information.

Set - Up

The Hud-Son Badger is easily set-up. Use the following instructions to set up the unit. Check hydraulic oil, lubrication and fuel levels before operating.

Due to the Badger motor being set at a 15° angle, the proper oil height should read full at the notches in the dip stick. **DO NOT** go by the manufacturers marks. The proper oil level mark has been notched and painted. The oil quantity will remain the same as motor specs.

1) The Badger will need to be removed from the towing unit. Place the Badger at desired location.

a.) Remove the pin from the trailer jack and rotate to the vertical position. Crank the jack to lift the coupler from the ball hitch. Remove the safety towing chains and Badger from towing unit then level the Badger using the jack.

2) The Badger has 4 legs on its corners. Loosen the bolts, and the legs will drop to the ground, re-tighten the bolts.

a.) The drop legs are for stabilization only and to keep the machine level during operation.

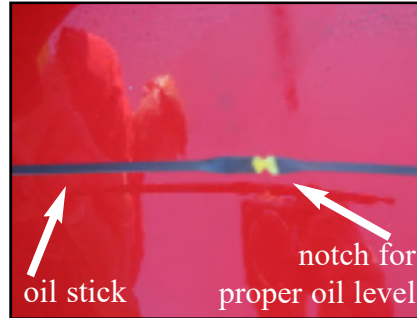
2-B) The rear legs should set on the ground to stabilize the unit, but not support the unit off the ground.

3) There are 2 grab legs to the rear of the machine. Remove the hair pin and hold up pin. Let grab legs drop to the ground. Insert the 1/2" hitch pin in the lower hole. This will stop the grab legs from folding up. See Figures 1 and 2 on following page.

4) Unhook cable from Badger tail and flip Badger tail off log tray and let it rest on the ground.



Bar lube tank



Engine Oil Dip Stick



Hydraulic tank



5) Go to the front of the machine. Remove the 3/4" draw pin that holds the trailer tongue and towing bolt with the lock nut. Remove the tongue and set it out of the way. The Badger is now set up and ready to operate.



Figure 1

Operation

1) Choke and start the engine. Allow the engine to idle for a few minutes at low speed to warm up.

The Badger should be ran with the engine at full throttle for all cutting and splitting operations.

The choke is not needed to start once engine is up to temperature.



Figure 2

2) Operating the winch - Refer to winch operation part of manual page 5.

a.) Hook cable to end of log closest to Badger using provided choker chain.

3) Once the cable is hooked onto the choker chain, check to be sure everyone is clear of the cable and log path.

4) Make sure to put the winch into lock mode if in free spool mode. Use the hydraulic lever to pull the log forward with the winch. You may need to use a cant hook to roll the log into position if the log does not line up with the trough.



Figure 1-A

5) When the log is on the trough (figure 5-A) remove the choker chain and move it to the back end of the log. Then reconnect the winch to the chain (figure 5-B)



Figure 5-A



Figure 5-B

- 6) Adjust the wood length rod to desired length (figure 6-A)
 7 a) Pull D-handle to raise log hold down as log enters cutting area while winching (Figure 7-A and 7-A-1)
 7 b) Winch the log up the trough through the guard until the log is at desired length. Release the winch lever (Figure 7-B)



Figure 6-A



Figure 7-A



Figure 7-A-1



Figure 7-B

*** BE CAREFUL WHEN WINCHING THE LOG. BE SURE THE WINCH IS ON LOW SPEED AND SAW BAR IS FULLY RAISED IN UP POSITION.**

- 8) Saw the log. Using the handle push down until the saw bar is close to the log. Push the toggle switch to start the chain, pull down on the handle and cut the log off.



Figure 8-A



Figure 8-B

- 9) Once cut through, the log will drop. Release the toggle switch and let the handle raise to start position. The handle is spring loaded to go back up in raised position.



Figure 9-A

* NOTE When you are near the end of the cut, go a little faster to the end and the log will drop perfectly into the splitter box.

10) Once the log rolls into the splitter box, use the wedge adjuster handle to set the height of the wedge. There are many different positions. You can lower the wedge all the way down to be just a single split or raise it up to center the log on the 4-way wedge.

11) Using the splitter lever, forward the log into the wedge. Once the log is split, push the lever back to return ram. Use the winch again to advance the log. Continue this until the log is winched up as far as possible. At this point you will need to go back and winch in another log from the pile. This log will be winched up the trough until it bumps up to the existing log. You can now winch the first log up to be cut and split. Continue this step until your logs are done.

Stopping Processing Logs

- 1) When done, slowly throttle down the engine and then turn off the engine.
- 2) Be sure the saw dust is cleared from under the machine. Clear debris from the splitter and log tray areas.

Trouble Shooting

The Saw Bar must be in the down position for any and all adjustments or maintenance.

Log is not lined up to the trough - Use a cant hook or peavy to roll the log to line up.

Chain is having problems cutting - Chain needs to be re-sharpened or replaced - Check tension on chain - Lube Oil (check) - Make sure bar is not worn out or bent, no burr on bar.

Winch cable is coming unwrapped - Keep at least 5 wraps of cable on the winch at all times.

Cable will not release - Push hydraulic winch lever in both directions for a couple



Figure 10-A



Two Way Split

Four Way Split



Figure 11-A

of seconds, then release both levers on the winch side of winch, and free roll the cable, once cable is released, lock lever back into place.

* NOTE - Be very careful when winching the logs. When winch is winding in make sure that it is not being kinked or winding in one spot on the spool. While pulling be alert to not tip machine over if log snags on pile.

Be sure the rear dig legs are angled into the ground and that they have a good solid spot to dig into.

This unit can NOT be ran on a paved surface. The unit must be able to dig into the soil and hold the unit in place.

Be sure to stay clear of the winch when it is pulling the cable in. Disregard to this could result in serious injury or death.

Transport

The Badger is a compact unit that folds onto itself for easy towing. Follow these steps for transporting the unit.

- 1) Be sure cable is in all the way. Powering up the engine may be needed if winch cable is not pulled all the way in. If the cable is pulled in you will not need to power up the engine.
- 2) Use the travel bar lock to lock the saw bar into place (figure 2-A). Clean all debris from upper log tray area and splitter tray.
- 3) Insert the hitch tongue into the pocket and lock into place with the provided 3/4" hitch pin and safety bolt (if the hitch has been removed).
- 4) Rotate the trailer jack to the vertical position. Crank the jack up to raise the unit and support the front of the machine.
- 5) Loosen the eye bolts on all four legs. Raise legs to the top position and re-tighten bolts to hold legs in place.
- 6) The rear dig legs need to be raised and locked in the up position. If unit has been run, you may need to pull unit ahead about 1 foot after hooking up to the towing vehicle to remove them from the ground.



Figure 2-A

- 7) Hook the Badger up to the towing vehicle.
- 8) Lower the jack until it is off the ground. Remove pin and rotate jack to horizontal position and pin back into place.
- 9) Hook up the safety towing chains to towing unit.
- 10) Be sure the unit is clean of all debris before transporting.
- 11) Remove the key before towing.
- 12) Do NOT tow this unit at a high rate of speed!

WHEN TOWING DO NOT EXCEED 45 MPH!

~ BAR AND CHAIN MAINTENANCE ~

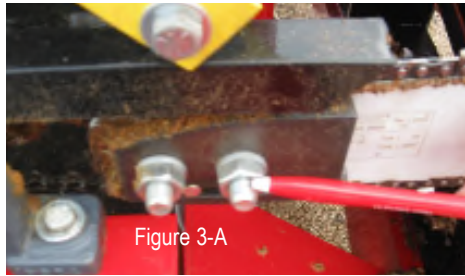
Make sure motor is off and key is removed. Removing Bar Chain for Maintenance:



- 1.) Put bar in down position and lock down with travel bar lock (Figure 1-A).
- 2.) Remove safety cover on front of machine.



(Figure 3-B) For the 5/16" nut chain tensioner bolt.



3.) Loosen the two nuts that hold the tension plate to the bar assembly (Figure 3-A). Adjust chain tension if necessary or loosen to remove chain and bar.



4.) Remove the two bolts from pillow block bearing, so the bearing can be removed until its is put back on on.



6.) Loosen tension from screw on the bar tension plate (5/16" nut).

7.) Remove chain then clean the bar, oil port, slides, and grove for chain.

8.) Make sure oil reservoir port is clear of any dirt or sawdust before putting new chain on bar.

Assembling Bar Chain After Maintenance

1.) Be sure all parts are clean and all oil ports/slots are clean of saw dust and/or dirt.

2.) Put parts back on machine in the following order:

2 a. Slide bar on the bar assembly studs.

2 b. Place chain on bar and sprocket.

2 c. Put on bar tensioner block. Be sure that the tensioner stud is properly aligned with the tension slot in the bar and sets flat against the bar assembly. Put on washer and nuts and hand tighten.

2 d. Replace and tighten the two bolts on the pillow block bearing and/tighten with wrench after it is removed and replaced.

2 e. Adjust chain tension to the same tension used on a chainsaw bar and tighten the saw bar nuts.

2 f. Start machine and run chain for 20-30 seconds. Then shut down engine.

3.) Replace safety guard on front of machine.

4.) Be sure to unlock the bar from the maintenance position.

5.) Place bar in the up position. You are ready to start cutting again.

MAINTENANCE FOR CLUTCH

- Most clutch parts do not require maintenance and can not be replaced.
- Bearings are sealed for life of clutch.
- Armature, rotor, and brake wear evenly and cannot be replaced individually.
- Coil cannot be removed.

ADJUSTMENT FOR WEAR

- All Ogura one-piece clutches are adjusted at factory. (no initial adjustment required)
- As adjustable clutches wear, they can be re-gapped to extend overall life.
- If clutch fails to pull in or will not continue to pull in when hot, air gap may need adjustment.

- To make adjustments, you will need:

0.015" - 0.022" feeler gauge

9/16" open-end wrench

Factory setting is 0.016

- Identify clutch model from label located on back of field.
- There are three inspection slots on brake shroud.
- Place feeler gauge in slot between armature and rotor.
- Slowly tighten brake nut until armature and rotor contact feeler gauge.
- Almost all Ogura clutches use 24UNF brake bolt, thus one turn of brake nut equates to approximately 0.04" of axial movement. (for reference only: feeler gauge is still required)
- Setting gap towards low range will increase cycle life between adjustments.
- Caution: do not set gap below minimum or clutch may be damaged
- Once gap is set, rotate armature and rotor, check gap with feeler gauge, and make adjustments as required.
- Apply full voltage to clutch
- Rotate armature and rotor to verify no

contact between armature and brake shroud

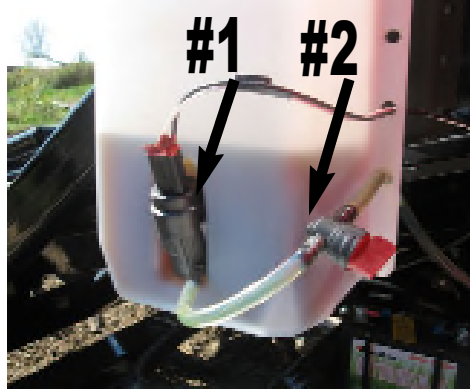
- If there is contact, back off brake nuts and retry until there is no contact



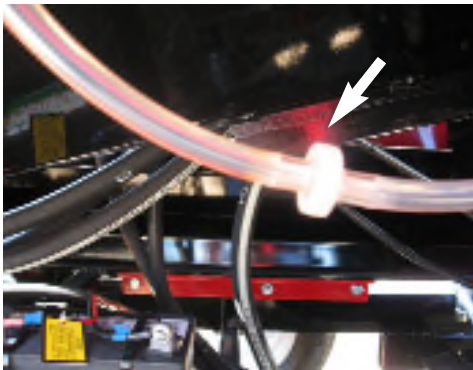
Badger Lube Order



Saw bar arm shown in locked position for road travel



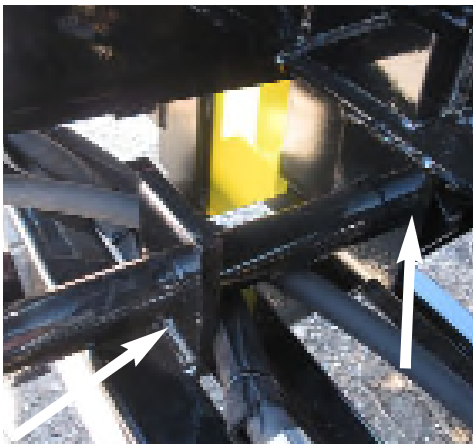
Bar Oil Lube Tank # 1: pump ;
#2: flow inline control and shut off valve



Saw bar oil line/1-way flow valve



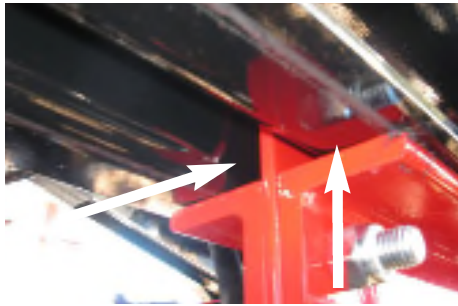
Battery — check connections/disconnect before
working on electric system



Wedge lift — lube swing arms at swivel points



Wood tray — oil on swivel points



Splitter slide rail — lube bottom of rail with grease



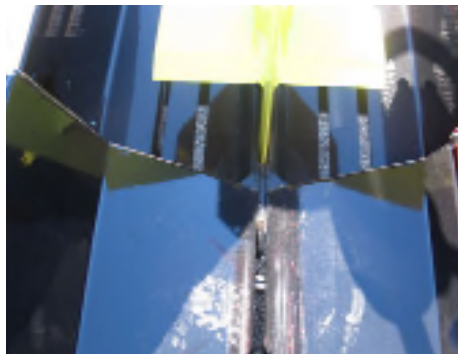
Engine cover (hood)



Splitter tray, keep this area clear of debris



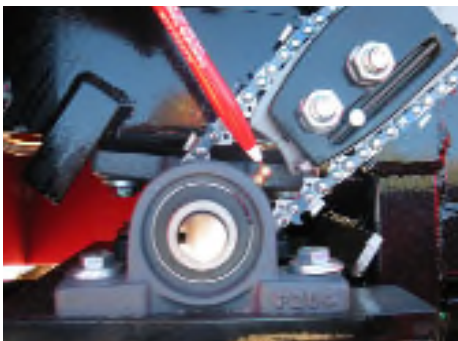
Hours meter and tach



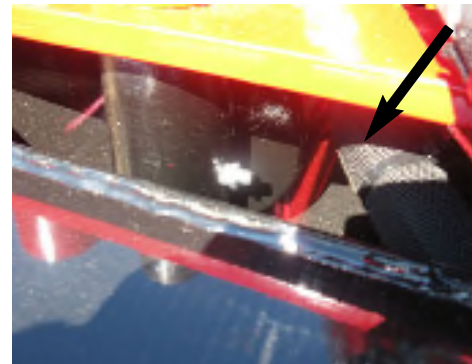
Keep splitter tray free of oil and grease to prevent bark build up



Hydraulic oil filter - takes AW-32-WT hydraulic oil.
Replacement 40-20 Hyd filter



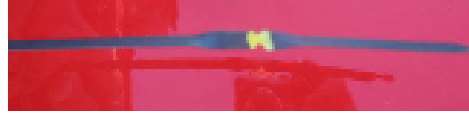
Grease all pillow block bearings with one shot of grease



(Rear) splitter ream keep this area clear of dirt and debris (grease)



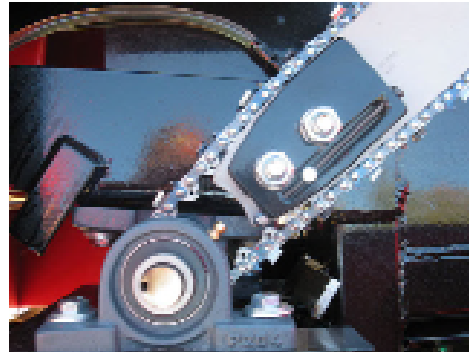
Chain tensioner screw



Engine oil dip stick - full is at notch area on dip stick.
Do not use checked marks.



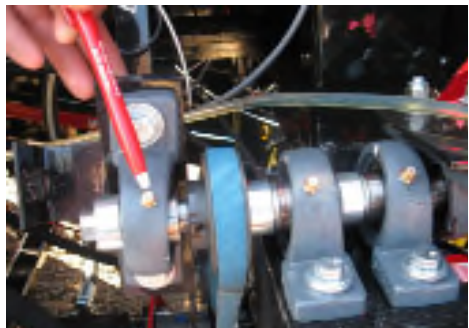
Saw bar arm locked in maintenance position



Bar and Chain



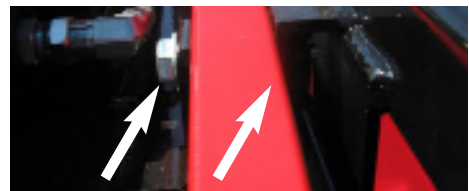
Saw bar locked in maintenance position



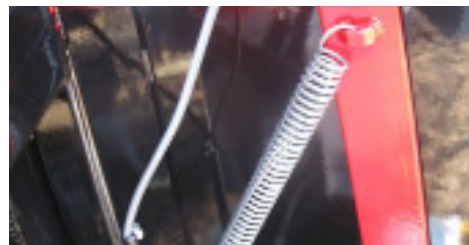
Saw drive assembly grease all bearings



Grease saw bar arm at upper and lower swivel points



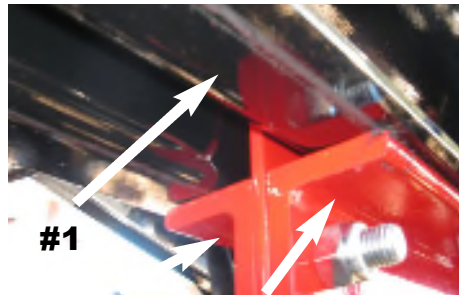
Oil saw bar arm at pivot point



Saw bar lift spring



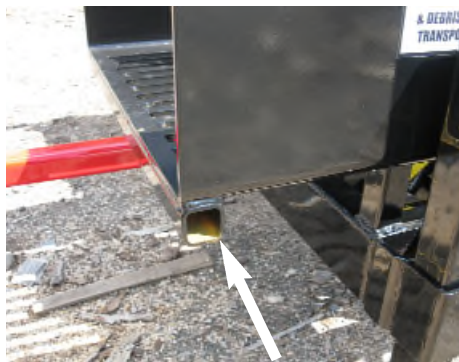
Hydraulic oil tank shut off valve



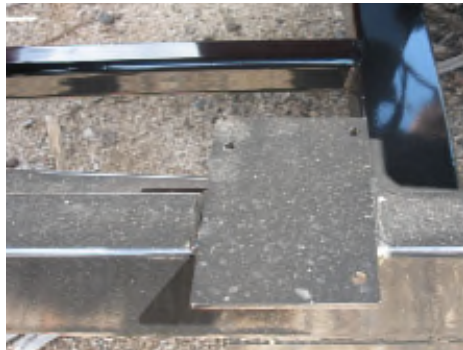
Splitter ram slide rail #1 and ram retainer irons #2



Keyhole slide chain grab grab hook on end of winch cable



Optional conveyor mounting bracket



Mounting plate for hydraulic control valve for conveyor



Hydraulic oil tank vent cap and fill port



Hydraulic oil pressure gauge



Adjusting bolts for wood rod length



Bar maintenance guard



Lifting shackle



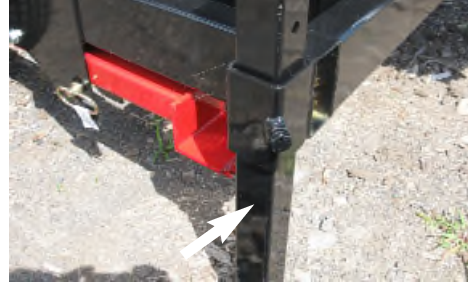
Leg locking bolt



Jack and hitch assembly



Badger paw /grab legs



Drop leg for stabilizing and leveling machine



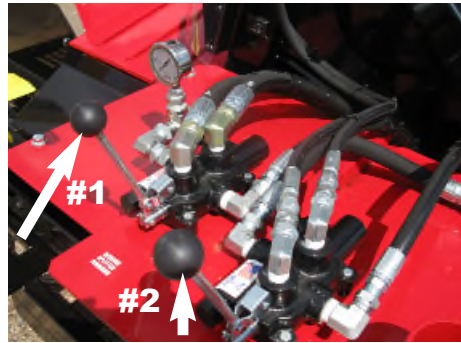
Saw bar handle lock



Badger tail assembly



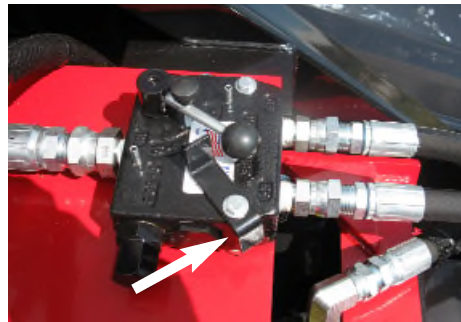
Control panel



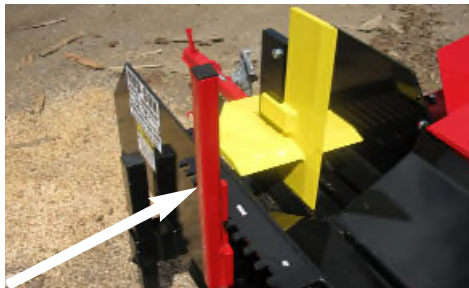
#1 Splitter ram control valve
#2 winch control valve



Saw bar handle



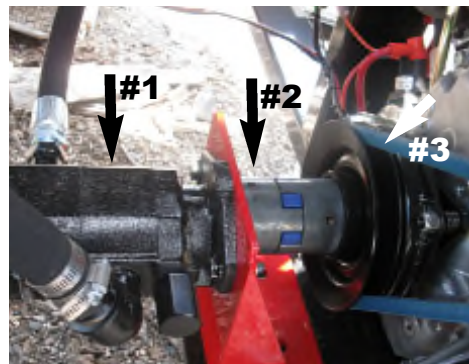
Flow control valve for winch



Wedge height adjusting lever



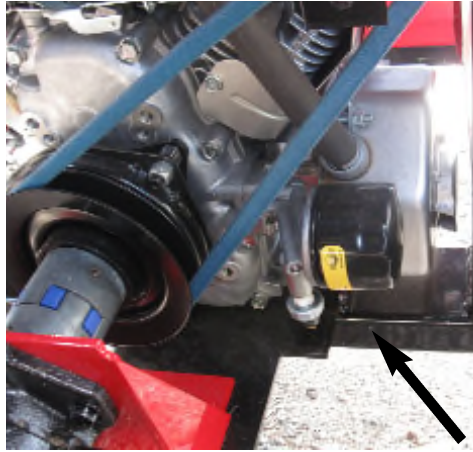
Bar oil tank



#1: Main hyd. pump; #2: Luv Joy coupler;
#3: Electric clutch assembly



Belt tensioner and idler pulley



Engine oil filter
Replacement: # 12-485 - Briggs: # 842921



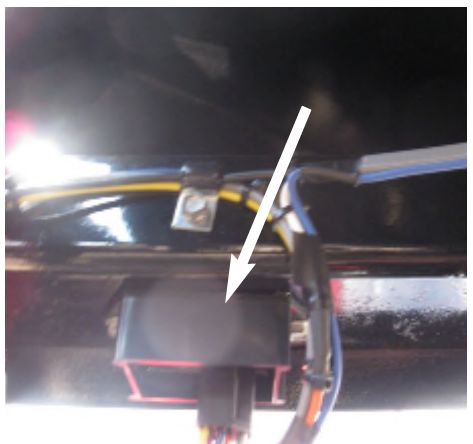
Wood tray locking pin



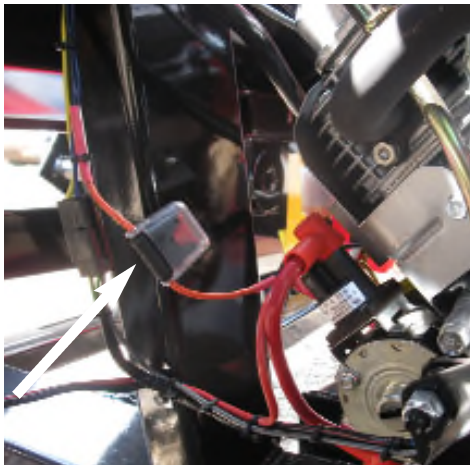
Engine cover (open)



#1: Engine oil check stick; #2 Engine oil fillport



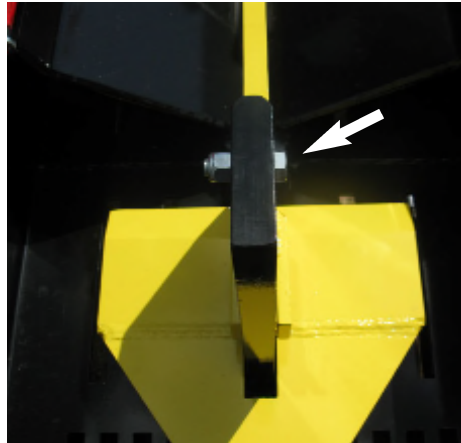
Soft start relay located under H-frame on machine



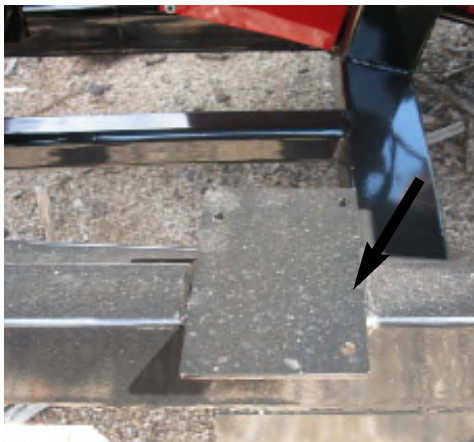
Power fuse block for clutch and soft start relay



Log hold down handle oil pulley and cable



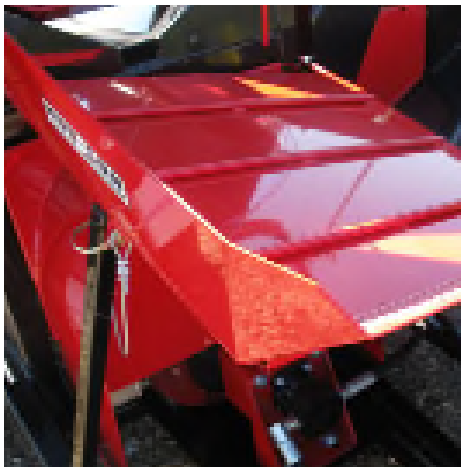
Wedge retainer bolt



Mounting plate for hydraulic control valve for conveyor

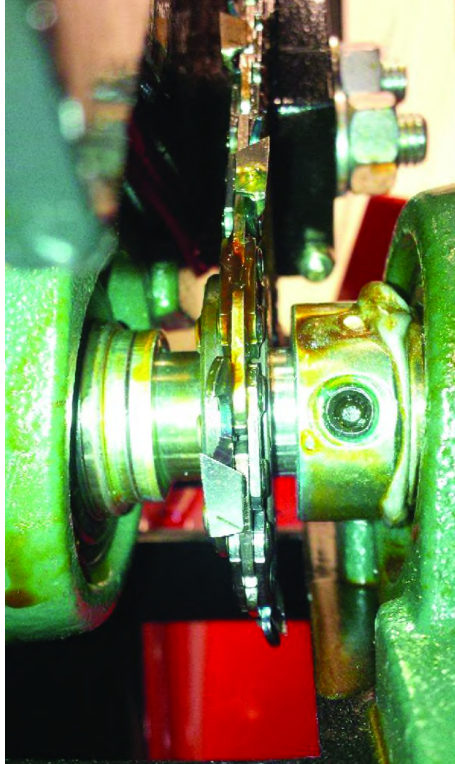


Saw bar drive assembly removed from machine



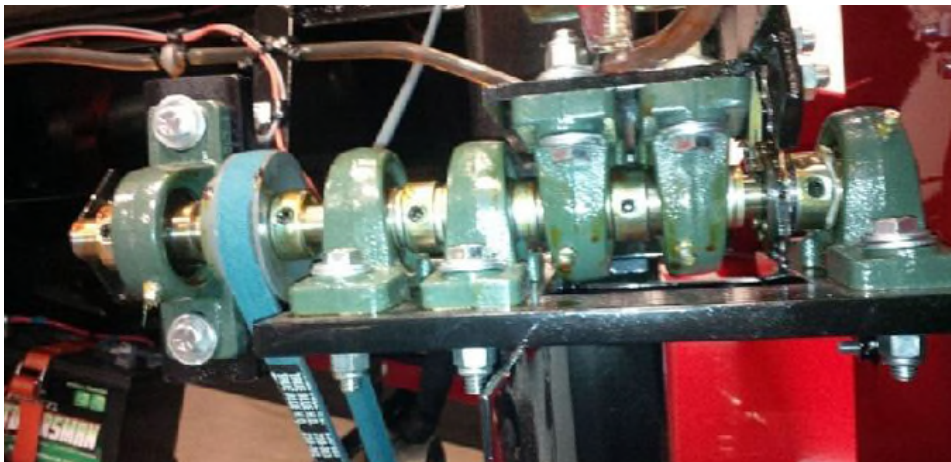
Flip up wood tray to access engine cover

Badger Saw Drive System Set Up



To change the chain drive sprocket remove the pilot bearing one (1) shim and the locking shaft collar, slide off the old sprocket and key. Inspect the key and make sure it is not worn out or damaged. Replace key if necessary. Install new sprocket and key if necessary. Reassemble in reverse order from disassembly order.

(Note) The pilot bearing does not have set or lock screws in it. It does not require them. They are removed at the factory.



Set up from left to right; looking at the drive assembly with the guard cover off parts will be in the following order;

Locking shaft collar, bearing, pulley, locking shaft collars, bearing, shim, locking shaft collar, shim, bearing, three (3) shims, bearing, locking shaft collar bearing, two (2) shims, chain drive sprocket and key, locking shaft collar, one (1) shim and pilot bearing.

PART NUMBER	DESCRIPTION
HYD-02-08-16	Flow Control Valve
CHA-01-375-050-87	Saw Chain
SPR-01-12-26	Sprocket
KEY-01-03-24	Chain sprocket key - 1/4 - key way
SAW-01-25	Saw Bar Stihl Patterns 3623-005-
BEA-01-12	Bearing 3/4 drive assy.
BEL-02-58-063	Belt
CLU-02-18	Clutch (Ogura)
COU-03-L100-18	Love joy pump -L100 5/8
COU-06-L100-16	Spyder
PUM-002	Oil pump (BAR)
TAN-01-6Q	6qt.Processor Lube Tank w/o Pump
SS808-81-0004	Soft Start
BAT-02-230	Battery
FIL-02-10-20	Filters (hyd. filter)
	2017 and newer filter (hyd.) Hud-Son #HY-FL-17-20; Common# U9L3FE
HYD-03-25-12-08	Splitter Valve
CHA-05-04-68	Choker chain
CAB-02-04	Cable throttle cable
TRA-02-015	Jack
ENG-05-010	Tach and Hour

Firewood Processor Warranty

1) Introduction To Your Warranty

Warranty registration cards must be completed 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 cost of shipping one way in regards to any warranty claim. Freight is standard UPS ground. Any expedited services are at an additional charge and will be paid in full before shipping at the owner's expense. All processors have a 90-day warranty against manufacturers defects.

2) What's Covered And By Who?

Out sourced components will be warranted by the respective company for a period equal to

the warranty in place at the time of shipping, as shown below from date of purchase.

If a 6-way wedge is purchased, the splitting system/hydraulic cylinder & weldment/fixtures warranty could be voided.

Due to operator mis-use, and or neglect of the operator to use good judgement when using the 6 way wedge. For example: the operator tries to cross cut a block of wood or split a block that has extreme cross grain or has knots that will cause the splitter to jam or cause personal injury or damage to the machine.

This will be determined after the inspection of the Manufactory of Hud-Son,and the component MFG of the hydraulic system components, causes of damage from these items could raise from. Operator tampering with pressure controls or relief valves that are factory set, and can be checked to see if they have been tampered with or reset from a factory setting.

Gasoline Engines	3 years - Check yellow pages for your nearest Briggs & Stratton Servicing Dealer.
Drive Shafts & Drive Shaft Bearings	6 months - Call your servicing Hud-Son Dealer.
Axles (Trailer Models)	6 months - Call your servicing Hud-Son Dealer.
Bar/Chain/Sprocket	No Warranty
Hydraulic Motors, Cylinders, Pumps, Valves and Hose & Fittings	6 months - Call Hud-Son and ask for the warranty department.
Clutch	30 days - Call Hud-Son and ask for the warranty department.

3) 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 the processor, 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 it by Hud-Son Forest Equipment, Inc. staff and/or Dealer/Distributor staff.

- f) Any modification to the processor 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.
- i) Always call your servicing dealer first! Dealers/Distributors carry parts and are very knowledgeable with the inner workings of your processor. Remember that modifying your processor or using parts that are not approved by Hud-Son Forest Equipment, Inc can void your warranty.



Thank you for choosing



Hud-Son Forest Equipment, Inc.
8201 State Rt. 12, PO Box 345 Barneveld, NY 13304
info@hud-son.com

We have an onsite technician available to answer any questions
Monday - Friday 8 to 4:30 and Saturday from 8 to noon. 315-896-7297.

WWW.HUD-SON.COM

