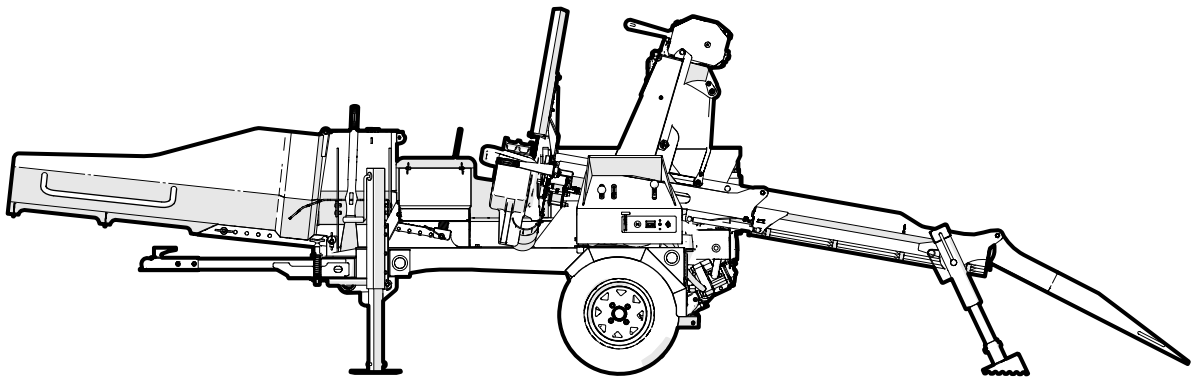
OPERATOR'S MANUAL

WP845 serial number 2E9US1118LS040192 to 2E9US1112MS045081.
WP875 serial number 2E9US1118LS040192 to 2E9US1118MS0875009.

WP845 / **WP**875
Trailer Firewood Processor



Rev May-2021B

Part Number: Z97153_En

WALLENSTEIN

1. Foreword

1.1 Introduction

Congratulations on your choice of a Wallenstein Wood Processor!

This high-quality machine is designed and manufactured to meet the needs of a proficient timber or woodlot industry.

The Wallenstein 800 Series Wood Processor consists of a hydraulic power source, winch, and a splitter. The 800 series models are powered by a Honda® GX390 13 hp (9.6 kW) engine. The two models differ only in their splitter cradle capability:

Model	Split Opening
WP845	25" (61 cm)
WP875	36" (91 cm)

The hydraulic winch is mounted on a frame to winch logs into the log lead in chute and then position the log for cutting to length. Once the log is cut, it falls into the splitting cradle to be split with the hydraulic splitter.

This manual covers the Wallenstein Wood Processor Models WP845 and WP875. The Wallenstein Firewood Processor improves firewood productivity, ergonomics and minimizes handling while reducing the risk of physical strain.

Keep this manual handy for frequent reference and to pass on to new operators or owners. Call your Wallenstein dealer or the Distributor if you need assistance, information or additional copies of the manuals.

Units of measurement in Wallenstein Equipment technical manuals are written as:
US Customary (SI metric)

⚠ WARNING!

Do not attempt to start or operate the machine without thoroughly reviewing this manual for safe and proper operation.

Always keep this manual with the machine.

W034

⚠ WARNING
Cancer and Reproductive Harm
www.P65Warnings.ca.gov

⚠ ADVERTENCIA
Cáncer y Daño Reproductivo
www.P65Warnings.ca.gov

www.wallensteinequipment.com

Table of Contents

1.2 Delivery Inspection Report

Wallenstein WP845 / WP875 Trailer Firewood Processor

To activate warranty, register your product at: *www.wallensteinequipment.com*

This form must be filled out by the dealer at the time of delivery, then signed by the dealer and customer.

The product manuals have been received by me and I have been thoroughly instructed as to care, adjustments, safe operation, and applicable warranty policy.

Customer

Address

City, State/Province, ZIP/Postal Code

( )
Phone Number

Contact Name

Model

Serial Number

Delivery date

I have thoroughly instructed the buyer on the equipment care, adjustments, safe operation and applicable warranty policy and reviewed the manuals.

Dealer

Address

City, State/Province, ZIP/Postal Code

( )
Phone Number

Dealer Inspection Report

_____ Engine Starts and Runs
_____ All Valve Controls Function
_____ All Cylinders and Winch Motor Functions
_____ Wedge Height Adjuster Functions
_____ Loader in Lead-in chutes fold up and latch securely.
_____ Log Stabilizer moves freely.
_____ All Fasteners Tight
_____ Pivot points lubricated.
_____ Hydraulic Connections Tight.
Check winch clutch handle control function.
_____ Check winch rope / hook / fairlead
_____ Grease Machine
_____ Review Operating and Safety Instructions

Safety Checks

_____ All safety decals installed
_____ Guards and shields installed and secured
_____ Retainer installed through hitch points
_____ Check Tire Pressure
_____ All Jacks Function
_____ Check Wheel Lug Torque
_____ Check Operation of Running / Brake / Turn Signal Lights

1.3 Serial Number Location

Always provide the serial number of your Wallenstein product when ordering parts or requesting service or other information.

The Serial Number Plate location is shown in the illustration. **For future reference, record your product Serial Number in the space provided below.**

Record Product Information Here	
Model:	
Serial Number:	

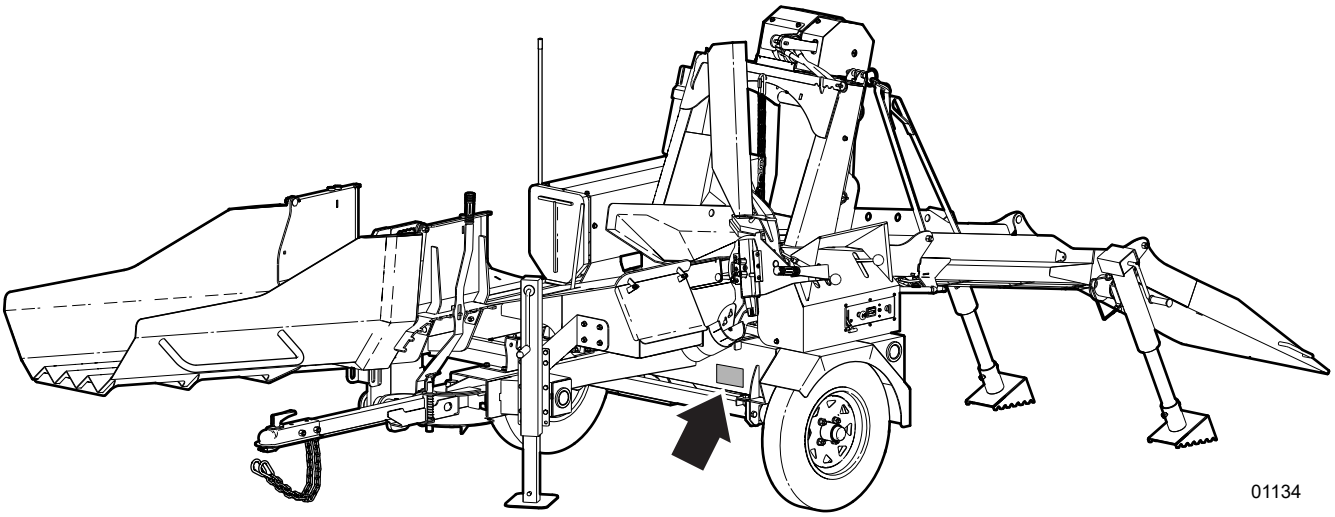
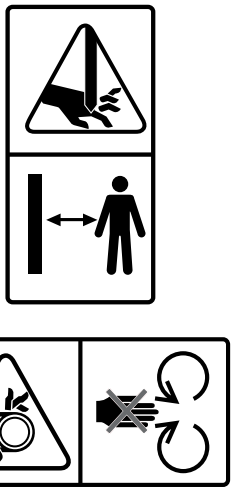


Fig. 1 – Serial Number Plate Location (Typical)

1.4 Types of Decals on the Machine

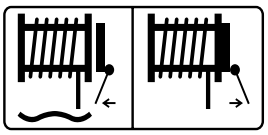
When getting familiar with the Wallenstein product, notice that there are numerous decals located on the machine. There are different types of decals for safety, information, and product identification. The following section explains what they are for and how to read them.

Safety Decals have a yellow background and are generally two panel. They can be either vertical or horizontal.

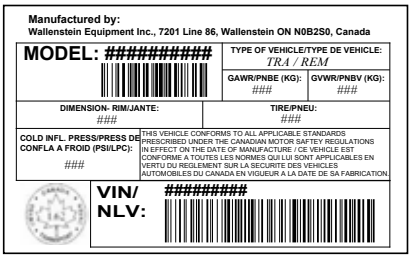


Safety Notice Decals are pictorial with a blue background and generally rectangular with single or multiple symbols. This decal informs what Personal Protective Equipment is required for safe operation.

Informative Decals are generally pictorial with a white background and can vary in the number of panels. This type of decal explains how a control works.



Product Decals indicate machine model and serial number, and other important information.



Maintenance Decals have a green background and can vary to the number of panels. This decal shows a type maintenance required and frequency interval.

See the section on safety signs for safety decal definitions. For a complete illustration of decals and decal locations, download the parts manual for your model product at [www.wallensteinequipment.com.](http://www.wallensteinequipment.com)

2. Safety

2.1 Safety Alert Symbol

This Safety Alert Symbol means:

ATTENTION! BE ALERT!

YOUR SAFETY IS INVOLVED!

The Safety Alert Symbol identifies important safety messages on the Wallenstein Wood Processor and in the manual.

When you see this symbol, be alert to the possibility of personal injury or death. Follow the instructions in the safety message.

2.2 Signal Words

The signal words **DANGER**, **WARNING** and **CAUTION** determine the seriousness level of the warning messages in this manual. The appropriate signal word for each message in this manual has been selected using the following guidelines:

DANGER –

Indicates an imminently hazardous situation that, if not avoided, **will** result in death or serious injury. This signal word is to be limited to the most extreme situations typically for machine components which, for functional purposes, cannot be guarded.

WARNING –

Indicates a potentially hazardous situation that, if not avoided, **could** result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

CAUTION –

Indicates a potentially hazardous situation that, if not avoided, **may** result in minor or moderate injury. It may also be used to alert against unsafe practices.

IMPORTANT – To avoid confusing equipment protection with personal safety messages, a signal word IMPORTANT indicates a situation that if not avoided, could result in damage to the machine.

2.3 Why SAFETY is Important

Three Big Reasons:

- **Accidents can disable and kill**
- **Accidents can cause financial hardship**
- **Accidents can be avoided**

YOU are responsible for the SAFE operation and maintenance of your Wallenstein trailer wood processor. **YOU** must ensure that you and anyone else who is going to use, maintain or work around the wood processor be familiar with the operating and maintenance procedures and related **SAFETY** information contained in this manual. This manual provides good safety practices that should be followed while using this machine.

Remember, **YOU** are the key to safety. Good safety practices not only protect you but also the people around you. Make these practices a working part of your safety program. Be certain that **EVERYONE** using this equipment is familiar with the recommended operating and maintenance procedures and follows all the safety precautions. Most accidents can be prevented.

Do not risk injury or death by ignoring good safety practices.

2.4 Safety Rules

- It is the operator's responsibility to read, understand and follow ALL safety and operation instructions in this manual. If you do not understand any part of this manual and require assistance, contact your dealer, distributor, or Wallenstein Equipment.

- Do not allow anyone to use this machine until they have read this manual. Operator's must have a thorough understanding of the safety precautions and of how the machine works. Review the safety instructions with all users annually.
- The operator of this wood processor must be a responsible, physically able person familiar with machinery and trained in this machine's operation.
- Provide instructions to anyone else who is going to operate the machine. This equipment is dangerous to anyone unfamiliar with its operation.
- Review safety related items annually with all personnel who will be operating or performing maintenance.
- Make sure all safety signs on the machine are understood before operating, servicing, adjusting, or cleaning. Replace any safety sign or instruction sign that is not readable or is missing. The location of all safety signs is indicated on *page 14*.
- Never exceed the limitations of the machine. If its ability to do the job, or to do it safely is in question–**STOP!**
- Inspect and secure all guards before starting.
- Do not modify the equipment in any way. Unauthorized modifications may affect the integrity of the machine or the ability of the machine to perform as designed. Modifications can impair safety or function. They can affect the life of the equipment and void warranty.
- Have a first-aid kit available for use should the need arise.

- Have a fire extinguisher available for use should the need arise and know how to use it.

- Check the machine is clear of debris prior to starting the engine.
- Handle logs with respect and be aware of other personnel in the area.
- Do not touch hot engine parts, muffler cover, hoses, engine body, or engine oil during operation and after the engine has been shut off. Contact may cause burns.
- Always wear appropriate PPE. This equipment includes but is not limited to the following:
  - A hard hat
  - Heavy gloves
  - Hearing protection
  - Protective shoes with slip resistant soles
  - Protective glasses, goggles, or face shield
- The best safety feature is an informed, careful operator—we ask you to be that kind of an operator. It is the operator's responsibility to read, understand and follow ALL safety and operation instructions in the manual. Accidents can be avoided.

- Train all operators to be familiar with equipment's operation. The operator should be a responsible, properly trained and physically able person familiar with machinery. If the elderly are assisting with work, their physical limitations need to be recognized and accommodated.
- Wear hearing protection on a full-time basis. Prolonged exposure to loud noise may cause permanent hearing loss!
  - Noise over 85 dB on a long-term basis can cause severe hearing loss.
  - Noise over 90 dB adjacent to the Operator over a long-term basis may cause permanent, total hearing loss.

2.4.1 Safe Condition

Throughout this manual, we talk about a '*Safe Condition*'. What this means is parking the machine in a manner that makes it safe to service or repair.

Place the machine in a Safe Condition before performing any service, maintenance work or storage preparation by performing the following:

SAFE CONDITION

1. Clear infeed conveyor and splitting hopper.
2. Wind in winch rope.
3. Release all controls and ensure all components have stopped moving.
4. Shut off the engine. Disconnect spark plug lead. Disconnect negative (-) battery cable from battery.
5. Relieve hydraulic system pressure by actuating controls.
6. Chock wheels to prevent movement.

2.5 Equipment Safety Guidelines

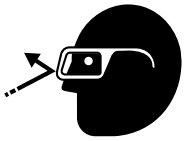
The safety of the operator and bystanders is one of the main concerns in designing and developing equipment. However, every year many accidents occur which could have been avoided by a few seconds of thought and a more careful approach to handling equipment.

- Replace any safety sign or instruction sign that is not readable or is missing. Location of such safety signs is indicated in this manual.
- Never allow young children to work with this equipment. Do not allow persons to use this unit until they have read this manual and have developed a thorough understanding of the safety precautions and of how it works. Review the safety instructions with all users annually.
- Never exceed the limitations of the machine. If its ability to do the job, or to do it safely is in question–**STOP!**

2.5.1 Hydraulic System Safety

- Make sure that all the components in the hydraulic system are kept clean and in good condition.
- Make sure all components are tight, and that lines, hoses and couplings are not damaged before applying pressure to the system.
- Do not use a hand to check for hydraulic oil leaks. Hydraulic fluid escaping under pressure can penetrate the skin causing serious injury. Use a piece of cardboard.

- Wear proper hand and eye protection when searching for a high-pressure hydraulic leak.



- Seek medical attention immediately if injured by a concentrated high-pressure stream of hydraulic fluid. Serious infection or toxic reaction can develop from hydraulic fluid piercing the skin surface.
- Do not attempt any makeshift repairs to the hydraulic lines, fittings, or hoses by using tape, clamps, or cements. Doing so can cause sudden failure and create a hazardous and unsafe condition.
- Relieve pressure on the hydraulic system before working it. The hydraulic system operates under extremely high pressure.
- Replace any hydraulic hose immediately that shows signs of swelling, wear, leaks, or damage before it bursts.
- Do not bend or strike high-pressure lines, tubes, or hoses, or reinstall them in a bent or damaged condition.
- Check to make sure hydraulic hoses are not worn or damaged and are routed to avoid chafing.
- Never adjust a pressure relief valve or other pressure-limiting device to a higher pressure than specified.

2.5.2 Refueling Safety

- Fuel is highly flammable. Handle with care.
- Stop the engine and allow it to cool for five minutes before Refueling. Clean up spilled fuel before restarting engine.
- Do not refuel the machine while smoking or when near open flame or sparks.

- Fill fuel tank outdoors.
- Prevent fires by keeping machine clean of accumulated trash, grease, and debris.
- Do not overfill the fuel tank. Fill until the fuel level is visible 1/2" (12 mm) below the filler neck to leave room for expansion.
- If fuel is spilled, wipe it away carefully and wait until it has dried before starting the engine.
- After refueling, make sure that the fuel cap is on securely to prevent spillage.

2.5.3 Tire Safety

- Failure to follow proper procedures when mounting a tire on a wheel or rim can produce an explosion which may result in serious injury or death.
- Do not attempt to mount a tire unless you have the proper equipment and experience to do the job.
- Have a qualified tire dealer or repair service perform required tire maintenance.
- When replacing worn tires, make sure they meet the original tire specifications.

2.5.4 Chain Saw Safety

A chain saw is inherently hazardous. Potential injuries can be minimized by using proper personal protective equipment and safe operating procedures.

Good cutting action results and chain life increases with correct chain tension. If too loose, a chain can derail; if too tight a chain can bind.

Proper chain lubrication prolongs the life of the saw and increases safety.

Sharpen the saw if:

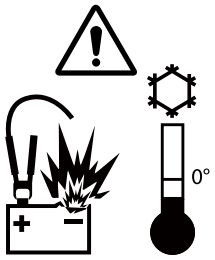
- The chain tends to track sideways while cutting.
- The cut shows fine powder instead of chips.
- There is a burnt wood smell.

Never use a saw chain that:

- Has broken twice.
- Is severely damaged.
- Has excessive saw chain stretch.
- Has broken or cracked components.
- Has loose rivet joints. If you can rotate the rivets with your fingers, they are too loose.

2.5.5 Battery Safety

- Wear gloves and safety glasses or face shield when working on or near batteries.
- Use a battery carrier to lift the battery or place hands at opposite corners to avoid spilling acid through the vents.
- Avoid contact with battery electrolyte:
  - **External Contact:** Flush immediately with water.
  - **Eye Contact:** Flush with water for 15 minutes. Get prompt medical attention. Clean up any spilled electrolyte immediately.
- Avoid contact with battery posts, terminals, and related accessories. They contain lead and lead compounds, chemicals known to cause harm. Wash hands immediately after handling.
- Keep all sparks and flames away from batteries. Gases given off by electrolyte is explosive.
- To avoid injury from spark or short circuit, disconnect battery ground cable before servicing any part of the electrical system.
- Frozen batteries can explode and result in death or serious injury. Do not jump start or charge a frozen battery. Let battery thaw before charging.



2.5.6 Gas Engine Safety

- **DO NOT** operate engine in an enclosed area. Exhaust gases contain carbon monoxide, which is an odorless and deadly gas.
- **DO NOT** place hands or feet near moving or rotating parts.
- **DO NOT** choke carburetor to stop engine. Whenever possible, gradually reduce engine speed before stopping.
- **DO NOT** tamper with governor springs, governor links or other parts which may increase the governed speed. Engine speed is selected by the original equipment manufacturer.
- **DO NOT** check for spark with spark plug or spark plug wire removed.
- **DO NOT** crank engine with spark plug removed. If engine is flooded, crank until engine starts.
- **DO NOT** strike flywheel with a hard object or metal tool as this may cause flywheel to shatter in operation. Use proper tools to service engine.
- **DO NOT** operate engine without a muffler or heat shield. Inspect periodically and replace if damaged.
- **DO NOT** operate engine with an accumulation of wood chips, dirt, or other combustible materials in the muffler area.
- **DO NOT** use this engine on any forest covered, brush covered, or grass covered unimproved land unless a spark arrester is installed on the muffler. The arrester must be maintained in effective working order by the operator. In the state of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal land.
- **DO NOT** touch hot muffler, cylinder, or fins. Contact may cause burns.
- **DO NOT** run engine with air cleaner or air cleaner cover removed. Engine damage can result.

Be sure to:

- Remove the wire from the spark plug when servicing the engine or equipment to prevent accidental starting. Disconnect the negative wire from the battery terminal.
- Keep cylinder fins and governor parts free of grass and other debris which can affect engine speed.
- Examine muffler periodically to be sure it is functioning effectively. A worn or leaking muffler should be repaired or replaced, as necessary.

2.6 Winch Safety

Refer to winch manual included with your machine.

- **Never stand in line with the path of a rope under tension. Stand to the side to activate the winch. If a rope breaks under tension, it can snap back in an unpredictable direction with great force. The recoil may cause injury or death to a person in its path.**
- **Always keep hands clear of winch rope, hook loop, hook and fairlead opening during installation, operation, and when spooling in or out. Never touch winch rope or hook while under tension or under load.**
- **Always be certain the anchor you select can withstand the load and the strap or chain cannot slip.**
- **Never engage or disengage clutch if winch is under load, winch rope is in tension or drum is moving.**
- **Check rope condition before using winch. Rope may break during operation if knotted, has broken strands, or sharp kinks. Replace rope if damaged. Do not touch rope during operation.**
- **Do not allow anyone within 20 ft (6 m) of logs when winching. Logs can roll in unpredictable ways.**
- **Wind the rope under load. Rope does not wind in properly with no load.**
- **Check that the winching trail is clear of obstructions so logs can be winched in easily.**
- **Never exceed a winching angle of ±25° from the centerline of the machine. If unsure of winch angle, reposition tractor or use a snatch block. Whenever possible winch in line with the machine.**

2.7 Creating a Safe Work Area

The trailer mounted WP800 Series Wood Processors are designed to winch, cut to length, and split logs for firewood. Review and follow safe operating and winching safety instructions in this manual. Also review the safety guidelines included with your chain saw.

Below is an example of a safe work area. Not all work areas are the same, but the principles presented here can be applied to any work area.

Follow these important points to keep bystanders and workers safe from hazards.

- Establish a Safe Zone perimeter around the work area and mark with safety cones. The perimeter should be at least 10 ft (3 m) from any hazard within the work area.
- Never allow workers or bystanders to approach the processor while in operation without first signaling the operator.
- Keep all bystanders in the Safe Zone and never allow them in the Hazard or Work zones.
- Always operate the processor controls from the Operator Zone located at the control panel.
- Only the operator can authorize entry into the Hazard Zone. The operator must first ensure it is safe to enter.
- Always be aware of coworkers. Make eye contact and have a hand signal scheme worked out.
- Use extreme caution around the material stacks. Stacked logs could roll in unpredictable ways.
- Be aware of split wood stacks. Split wood can tumble off the pile.

The safe work area is divided into four zones:

1. **Safe Zone** – This is the area outside the work area perimeter for bystanders or anyone not directly involved with the work. The Safe Zone has minimal potential hazards.
2. **Work Zone** – Workers helping the operator wearing the appropriate PPE are allowed in this area. The Work Zone is outside of the Hazard Zone with limited hazards.
3. **Hazard Zone** – Only workers are allowed in the Hazard Zone and must always make eye contact with the operator before entering. Unauthorized workers or bystanders are not allowed in the Hazard Zone, due to the risks present.
4. **Operator Zone** – Only the operator should be in the Operator Zone.

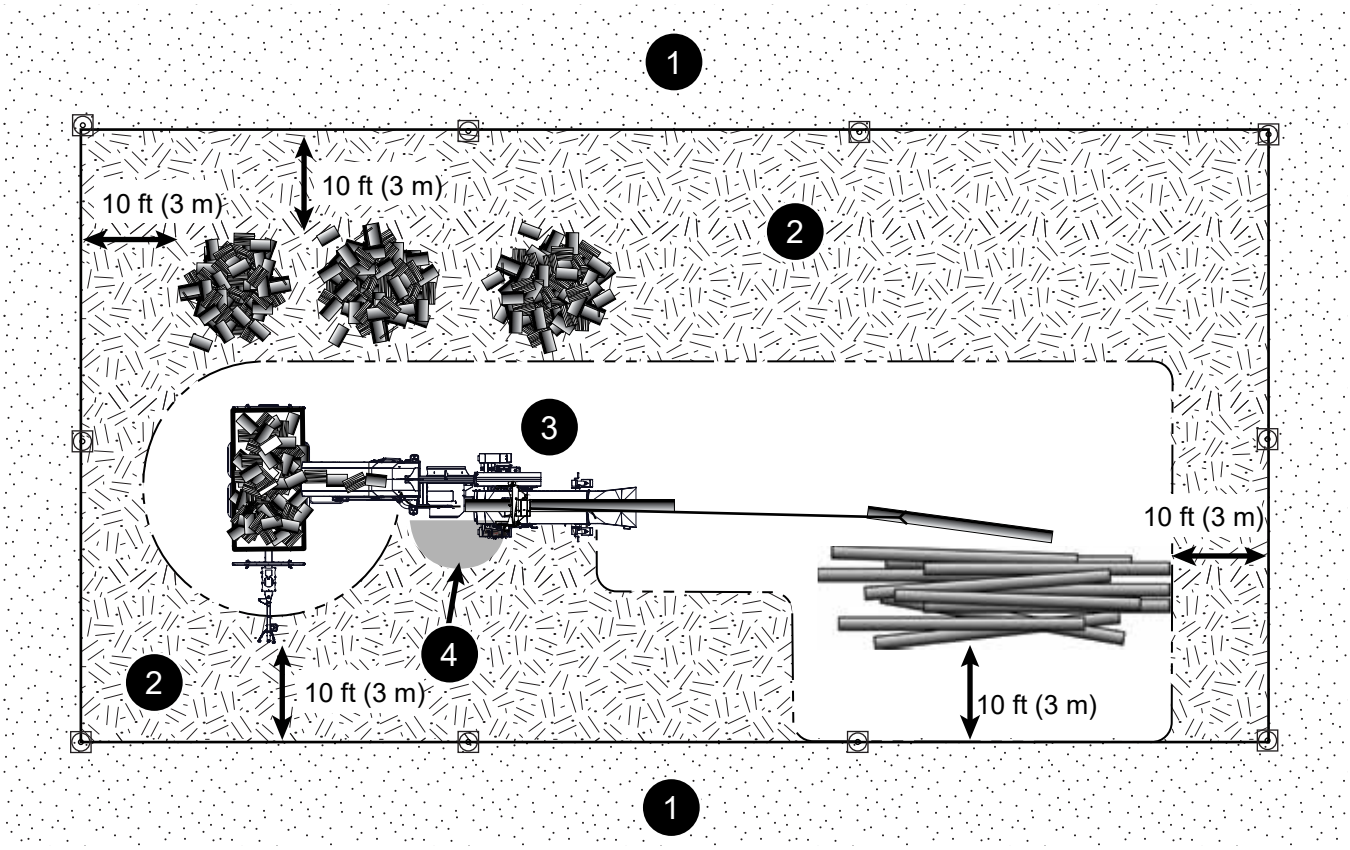


Fig. 2– Safe Work Area

2.8 Sign-Off Form

Wallenstein follows the general Safety Standards specified by the American Society of Agricultural and Biological Engineers (ASABE). Anyone who will be using and/or maintaining the Wood Processor must read and clearly understand ALL Safety, Usage and Maintenance information presented in this manual.

Do not use or allow anyone else to use this Wood Processor until such information has been reviewed. Annually review this information before the season start-up.

Make these periodic reviews of SAFETY and OPERATION a standard practice for all your equipment. We feel that an untrained operator is unqualified to use this machine.

A sign-off sheet is provided to record all personnel who will be working with the equipment have read and understand the information in the Operator's Manual and have been instructed in the operation of the equipment.

Sign-off Form		
Date	**Owner**	**Employee**

2.9 Safety Sign Explanations

The top (or left-hand) panel shows the safety alert (the potential hazard), and the bottom (or right-hand) panel shows the message (how to avoid the hazard).

Practicing good safety means becoming familiar with safety signs and warnings and being aware of the situations that require alertness.

Think SAFETY! Work SAFELY!

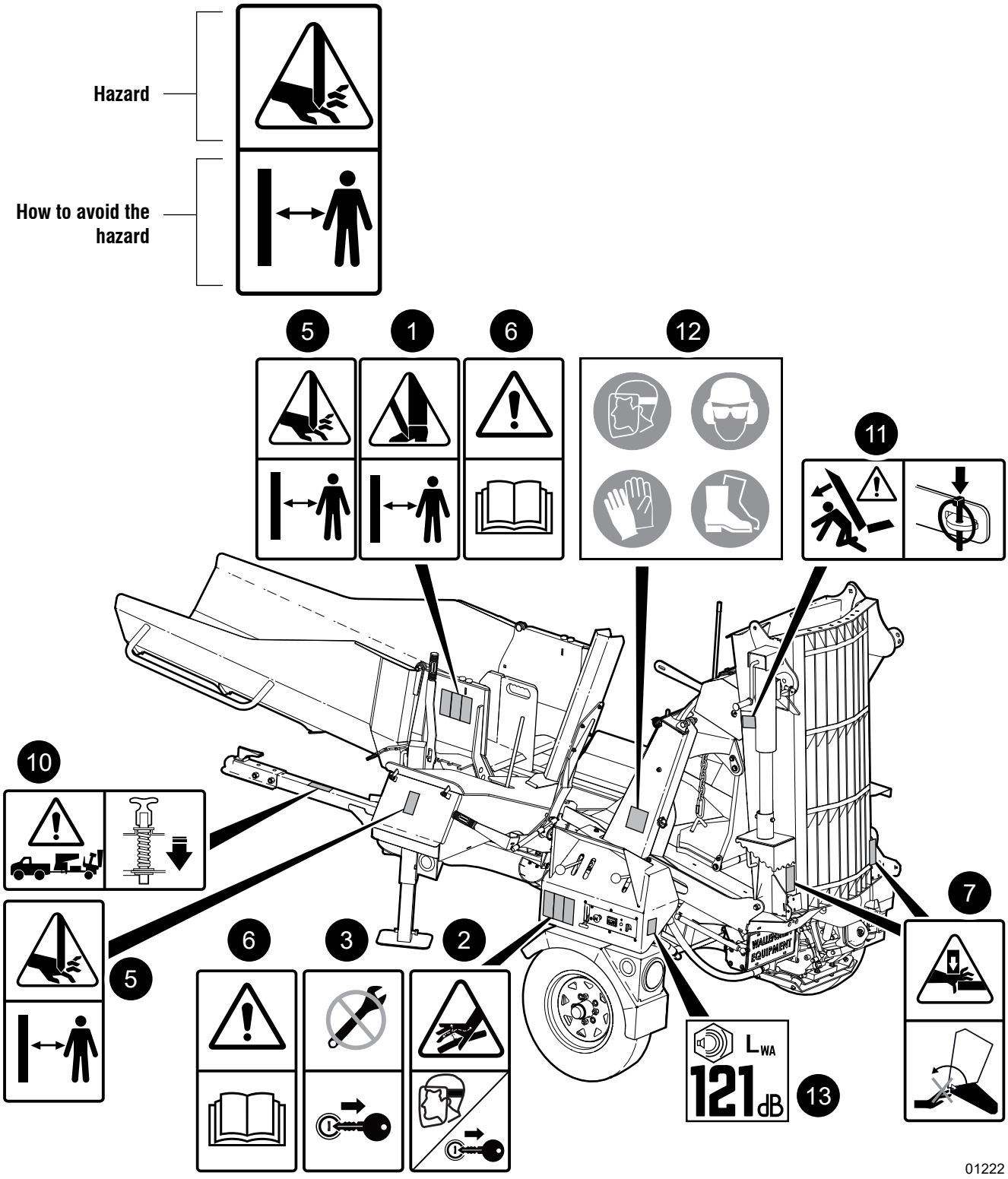


Fig. 3 – Safety Sign Locations—LH Side

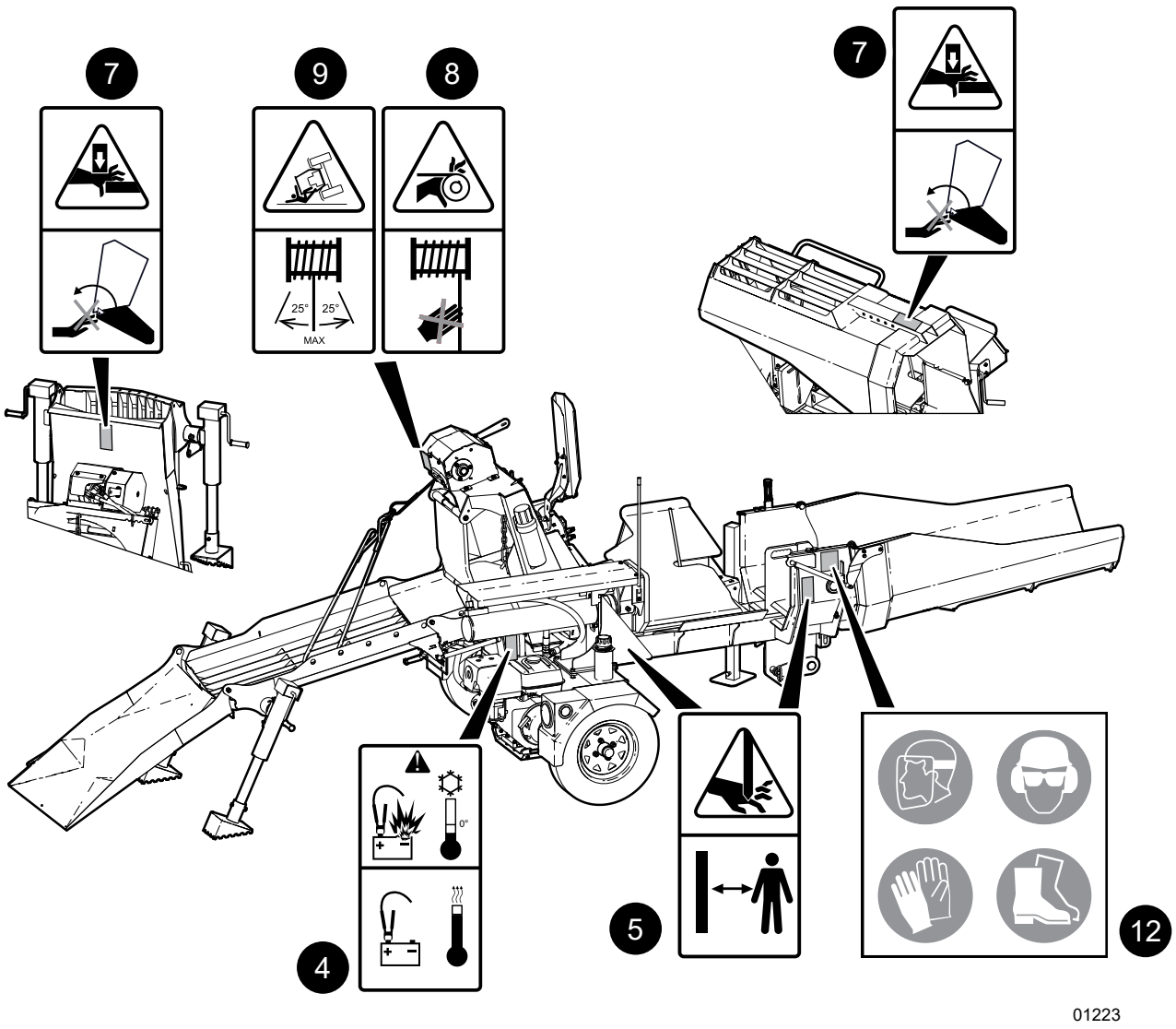
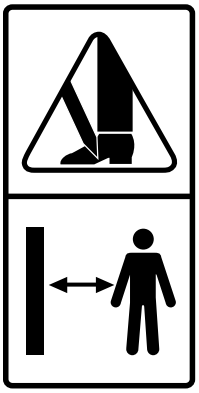


Fig. 4– Safety Sign Locations—RH Side

1. Warning!

Falling objects hazard in this area. Keep feet away from falling split wood.

Always wear steel toed foot wear while machine is operating to avoid serious personal injury.



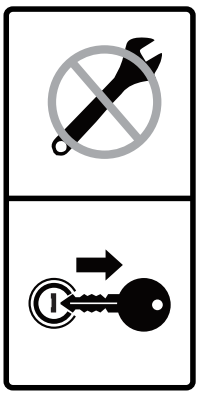
2. Warning!

Hydraulic fluid under pressure in this area. Do not check for leaks with your hand or fingers when the system is pressurized. Serious injury could result.

3. Warning!

Risk of serious injury or death if the engine is not shut off during maintenance procedures.

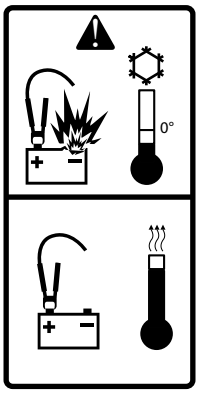
Shut off the engine and remove the key.



4. Warning!

Charging a frozen battery can cause it to explode.

Warm the battery to 60 °F (16 °C) before charging.



5. Warning!

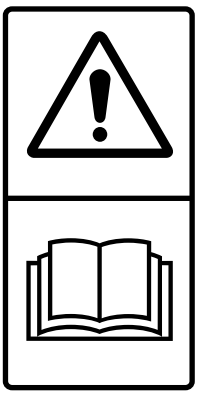
Risk of hands being crushed in this area.

Keep hands clear of all moving parts.

6. Caution!

Refer to the operator's manual. Read ALL operating instructions in the manual and learn the meaning of ALL safety signs on the machine.

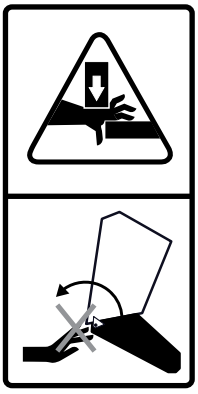
The best safety feature is an informed operator.



7. Caution!

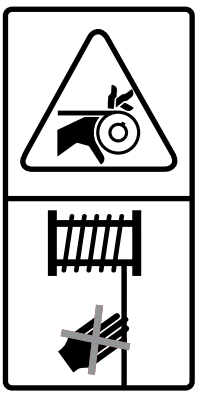
Pinch point hazard. When lowering or raising the chute into position, be aware of pinch points.

Keep hands clear to avoid injury.



8. Caution!

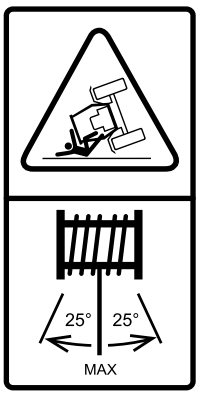
Winch entanglement hazard. When using the winch, keep hands clear of the winch rope to avoid injury.



9. Warning!

Tip over hazard. Do not exceed ±25° pull angle from the centerline of the machine.

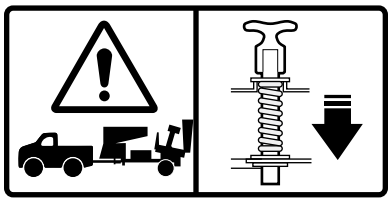
Use snatch blocks when winching at angles greater than 25°.



10. Caution!

Risk of machine moving unexpectedly. When moving the processor, always make sure that the swivel tongue lock pin is fully engaged.

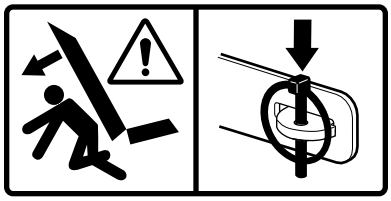
Personal injury or machine damage could result.



11. Caution!

Risk of machine moving unexpectedly. Make sure latch is in place during transport.

Personal injury or machine damage could result.



12. Warning!

Always wear appropriate Personal Protective Equipment when using this machine. For example:

- A hard hat
- Heavy gloves
- Hearing protection
- Protective shoes with slip resistant soles
- Protective glasses, goggles, or face shield

13. Caution!

Noise level hazard. The noise declaration decal indicates the sound power (L_{WA}) emitted by the machine when operating. For this machine, it can be up to 121 decibels at close distances.

Noise exposure over 85 dB on a long-term basis can cause severe hearing loss. Exposure over 90 dB over a long-term basis may cause permanent, total hearing loss.

IMPORTANT! If parts are replaced that have safety signs on them, new signs must be applied. Safety signs must always be replaced if they become damaged, are removed, or become illegible.

Safety signs are included in the product decal kit available from your authorized dealer. Decals are not available separately.

2.9.1 Replacing Damaged Safety Signs

- Always keep safety signs clean and legible.
- Replace safety signs that are missing or have become illegible.
- Parts that were replaced with a safety decal on them must also have the safety sign replaced.
- Replacement safety signs are available from your authorized Distributor, Dealer Parts Department, or Wallenstein Equipment.

Procedure

1. Be sure that the installation area is clean and dry.
2. Be sure temperature is above 50 °F (10 °C).
3. Determine exact position before removing from the backing paper.
4. Pull the decal off the backing sheet, align the sign over the specified area, then carefully press the exposed sticky backing in place.
5. Use a piece of the backing paper to smooth the decal out, pressing from the center outwards.
6. Small air pockets can be pierced with a pin and smoothed out using the piece of sign backing paper.

3. Familiarization

Wallenstein Wood Processors are designed to process cut logs into split firewood. Logs are winched up the lead-in chute up to the log length guide. A chain saw cuts the log and the block falls in to the splitting chamber. The wedge splits the wood and pushes it out the splitter chute. Power to drive the machine is provided through the gas engine and hydraulic pump.

3.1 To the New Operator or Owner

It is the responsibility of the owner or operator to read this manual and to train all other operators before they start working with the machine. Follow all safety instructions. Untrained operators are not qualified to use the machine.

1. Review control location, function, and movement directions.
2. Move the unit to a large open area to allow the operator to become familiar with control function and machine response. When a new operator is familiar and comfortable with the machine, they can proceed with the work.
3. Do not allow untrained operators to use the machine. They can endanger themselves and others or damage property and the machine.

IMPORTANT! Make sure all operators understand how to put the machine in a safe service position before servicing or repairing. See *page 7.*

3.2 Job Site Familiarization

It is the responsibility of the operator to be thoroughly familiar with the work site prior to starting. Prevent the chance or possibility of problems or accidents by avoiding unsafe situations.

Some items operators should check include, but are not limited to:

1. Avoid close or cramped work spaces. Be sure there is enough space and clearance for the machine.
2. Position the machine so prevailing winds blow engine exhaust fumes and chain saw chips away from operator's station.
3. Choose flat and level ground and make sure the machine is level before operating.
4. Avoid muddy or soft ground as the jacks will sink in. If unavoidable, use boards or plates to increase the surface area of the jack feet.

3.3 Operator Orientation

IMPORTANT! When describing controls throughout this manual, the directions for left-hand, right-hand, backward, and forward are determined when standing at the operator controls facing the direction of forward machine travel.

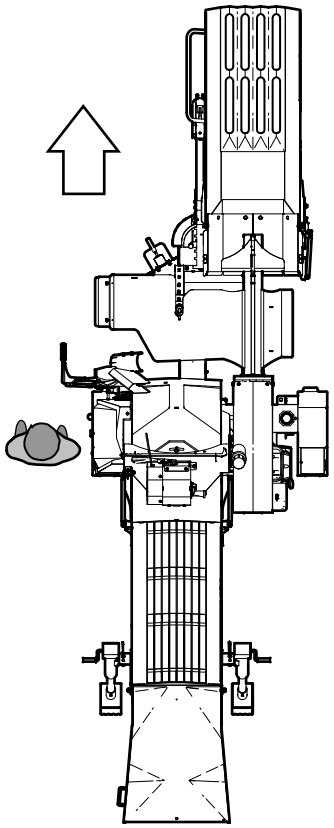


Fig. 5–Direction of Forward Machine Travel

3.4 Machine Components

The WP845 model is shown, however both 800 Series models have the same features.

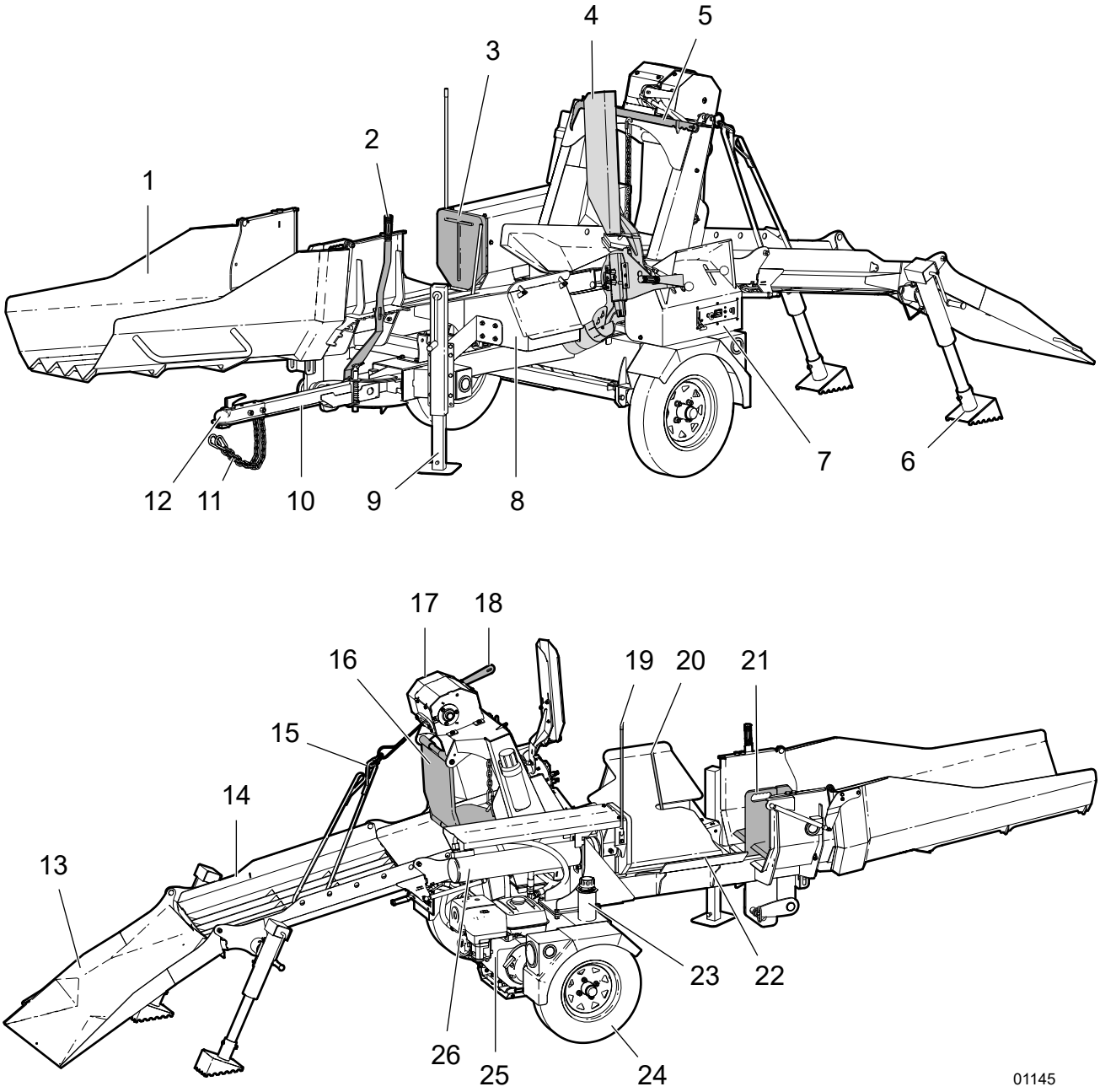


Fig. 6–Machine Components

1. Splitter Chute
2. Wedge Height Adjust Lever
3. Push Block
4. Chain Saw Holder
5. Hookaroon
6. Bracing Jacks
7. Operator's Control Panel
8. Tool Box
9. Crank Jack
10. Pivoting Tongue
11. Safety Chains
12. Hitch Coupler
13. Lead-in Chute
14. Log Loader Chute
15. Winch Rope / Hook
16. Log Stabilizer
17. Winch
18. Winch Control Lever
19. Push Block Locator
20. Log Stop Guide
21. Splitting Wedge
22. Splitting Cradle
23. Hydraulic Oil Reservoir
24. Wheels –5.30-12 LRC USA Trail 4on4"
25. Honda® GX390 Engine
26. Hydraulic Cylinder

4. Controls

Before starting to work, all operators should familiarize themselves with the location and function of all controls.

4.1 Hour Meter

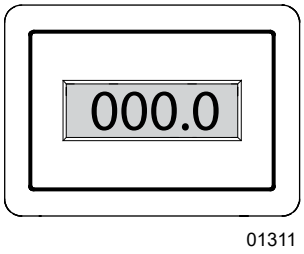


Fig. 7 – Hour Meter

4.2 Engine

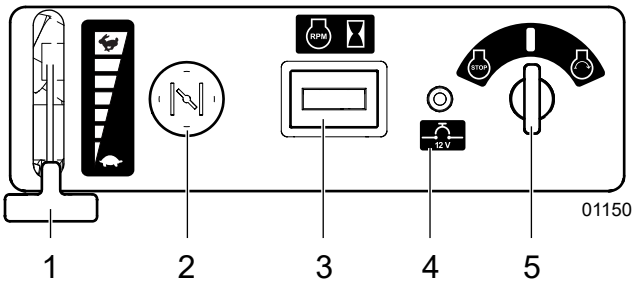


Fig. 8 – Operator's Control Panel

1. Engine Throttle
2. Choke Control
3. Engine Hour Meter
4. Circuit Protector
5. Ignition switch

1. Throttle

This lever controls the engine speed. Push the lever up to increase engine speed and down to decrease.

2. Choke

This push / pull knob controls the position of the engine Choke.

- Pull the knob out to (close the choke) start a cold engine.
- Push the knob in (to open the choke) as the engine warms.

Always push the knob fully in when operating the machine. Refer to the engine manufacturer's manual for complete starting details.

3. Engine RPM / Hour Meter

The Hour Meter gauge displays engine rpm when the engine is operating, and it shows engine hours when stopped. It only counts hours when the engine is operating. It does not shut off and is powered from its own internal battery.

4. Circuit Protector

The Circuit Protector safeguards the battery/charging circuit. A short circuit, or a battery connected with reverse polarity, will trip the circuit protector.

5. Ignition Switch

This key-operated switch controls the electric power to the engine.

STOP – Turn key fully counter-clockwise to stop the electrical system power and turn the engine off.

ON – Turn clockwise to detent at the on position. This is the position where the engine will continue to run.

START – Turn fully clockwise to the last spring-loaded detent position to engage the starter solenoid and start the engine. Release the key when the engine starts and it returns to the RUN position.

4.3 Hydraulic Controls and Auto Cycle

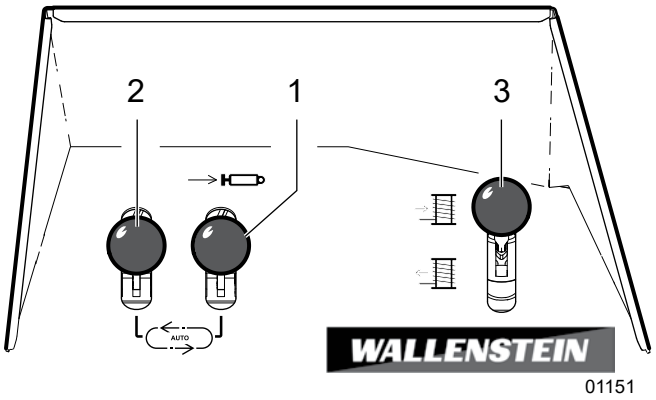


Fig. 9–Hydraulic Controls

1. Splitter Cylinder Extend
2. Splitter Cylinder Retract
3. Hydraulic Winch Control

Hydraulic Controls

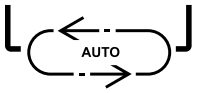
Lever 1—controls the cylinder extend (the first half of the cylinder Auto Cycle).

- Push down into detent to extend the cylinder.
- When the cylinder has fully extended, the lever kicks out to neutral and stops cylinder movement. Push up on the lever to manually retract the cylinder.

Lever 2—controls the cylinder retract (the second half of the cylinder Auto Cycle).

- Push down into detent and the cylinder retracts.
- When the cylinder has fully retracted, the lever kicks out to neutral and stops cylinder movement. Lever 2 has no function in the upper position.

Auto Cycle

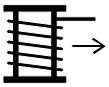


Push both levers down into the detent position to initiate the splitting Auto Cycle.

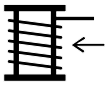
The splitter cylinder extends to split the log. When the cylinder is at the end of its stroke, Lever 1 kicks out detent. The cylinder then begins to retract. When fully retracted, Lever 2 kicks out of detent and the cylinder stops.

Hydraulic Winch Control

The far right-hand valve lever is for the Hydraulic Winch Control.



Pull the lever up to unwind the rope under power. Release the lever to stop.



Push down and hold the lever to wind in the winch rope.

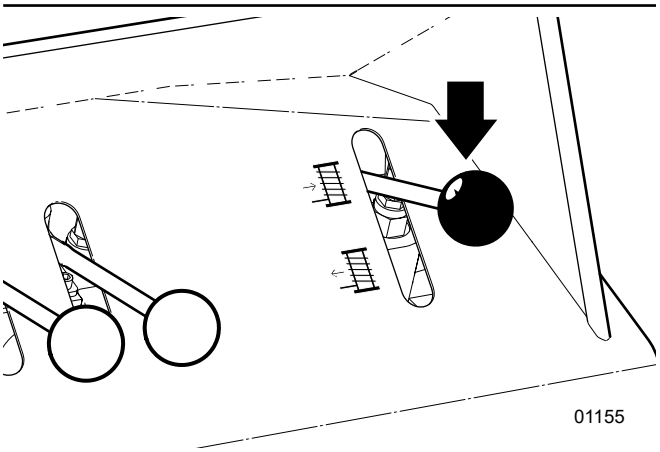
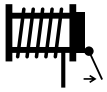


Fig. 10–Winch Control Lever

4.4 Winch Gear Lever

The Winch Gear Lever controls the winch drive system.



Pull the lever back (towards the operator) to engage the winch gear and hydraulic motor.

Push the lever forward to disengage the winch gear from the hydraulic motor, allowing the gear to free wheel.

Push the lever forward into free wheel to pull rope out and attach it to a log.

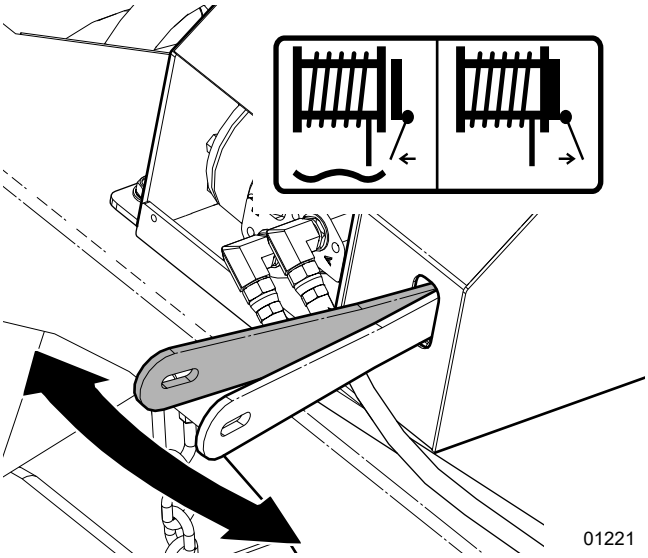
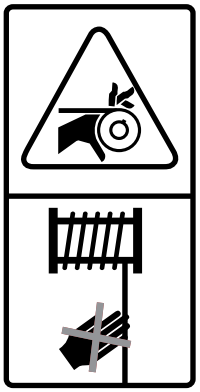


Fig. 11 – Winch Gear Lever

CAUTION!

Stay clear of the winch rope while winching. Injury from entanglement or rope burn could occur!

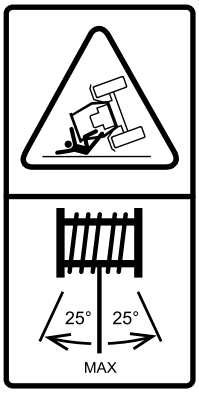
W056



WARNING!

Risk of machine roll over. Rope pull angle must not exceed 25° from the center axis of the machine. Exceeding that angle can subject the machine to a tipping load and cause the machine to roll over.

W074



CAUTION!

The wood processor winch is designed to use synthetic rope. Use synthetic rope as replacement only. Failure to do so creates an unsafe work environment and voids warranty.

W079

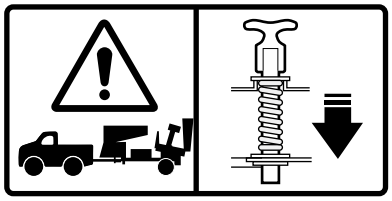
4.5 Swivel Tongue

Sometimes repositioning the machine is necessary when it is not possible to get the tow vehicle to the front of the processor. Use the Swivel Tongue to reposition the machine when the split wood stack is in the way. Swing the tongue out to connect to the tow vehicle.

1. Fold the log loader and lead-in chutes up to prevent damage when moving the processor.
2. Lift the lock pin to release the swivel tongue. Make sure the lock and the area around are clear of debris so the pin snaps into position.
3. Swing the tongue to the desired position.
4. Hook the ball hitch up to your tow vehicle. Use the stabilizer jacks to raise or lower the tongue as required.
5. Raise stabilizer jacks so they are clear of other objects.
6. Slowly begin to drive the tow vehicle forward. As you drive away, the processor will align with the tongue and the lock pin will snap into position.
7. Once the processor has straightened out, stop the tow vehicle. Check to make sure the lock pin has firmly engaged before moving further.

⚠ CAUTION!

When moving the processor, always make sure that the swivel tongue lock pin is fully engaged.



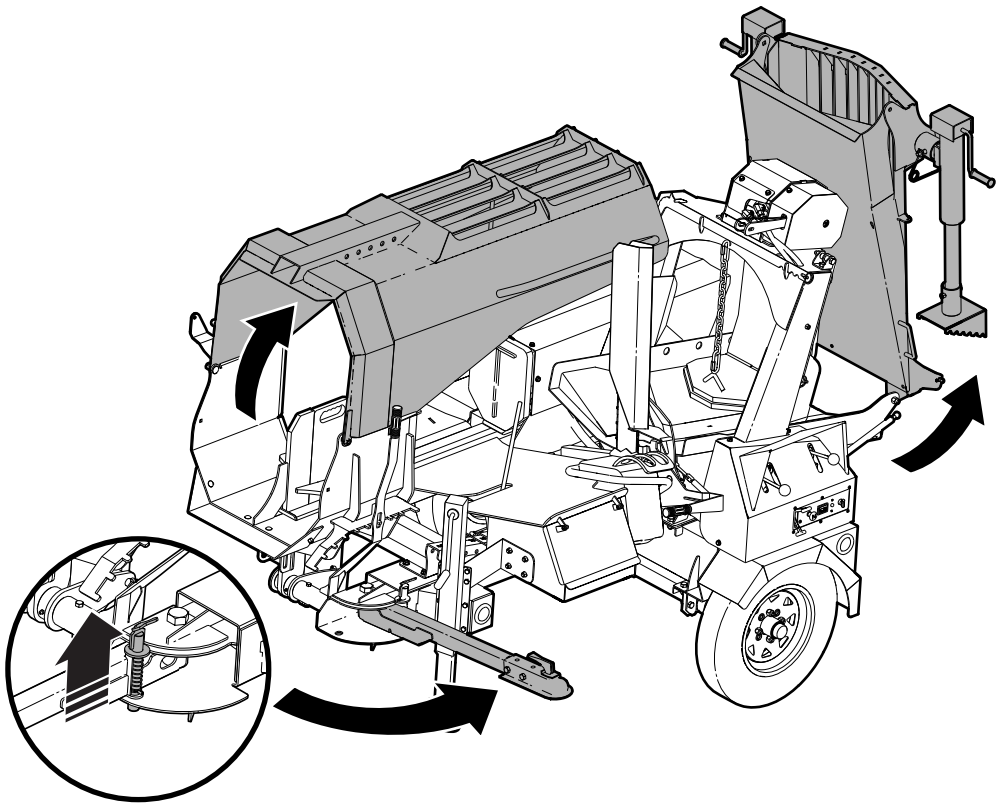
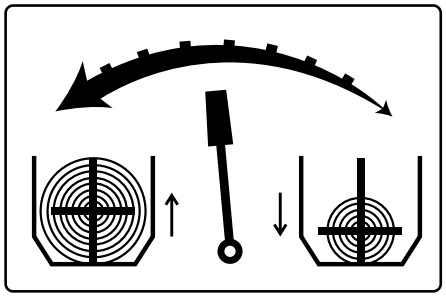


Fig. 12– Swivel Tongue

4.6 Splitting Wedge Height Lever

This lever sets the height of the splitting wedge.



- Pull the lever out slightly to clear the adjustment cogs, then adjust the lever height as required.
- For even-sized splits, align the centre wedge with the centre of the log for four-way splits up to 22" (56 cm).
- For smaller logs, fully lower the wedge for a two-way split.

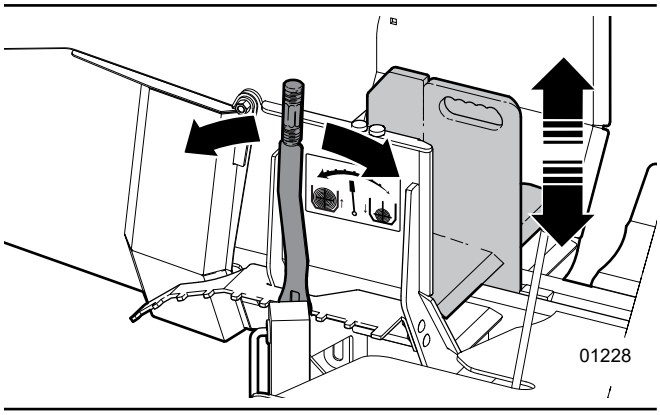


Fig. 13–Adjusting Wedge Height

4.7 Adjustable Log Stop Guide

Position the spring-hinged Log Stop Length Guide for desired firewood length and consistent saw cuts. The indicator can be set for log cuts from 14–24 inches with each hole 2 inches (5 cm) apart. Cut lengths are indicated on the top side of the guide.

1. Remove the snapper pin from the guide base
2. Move the guide to the desired length and replace the snapper pin.
3. Advance the log up the chute so the end of the log contacts the spring-loaded guide rod.

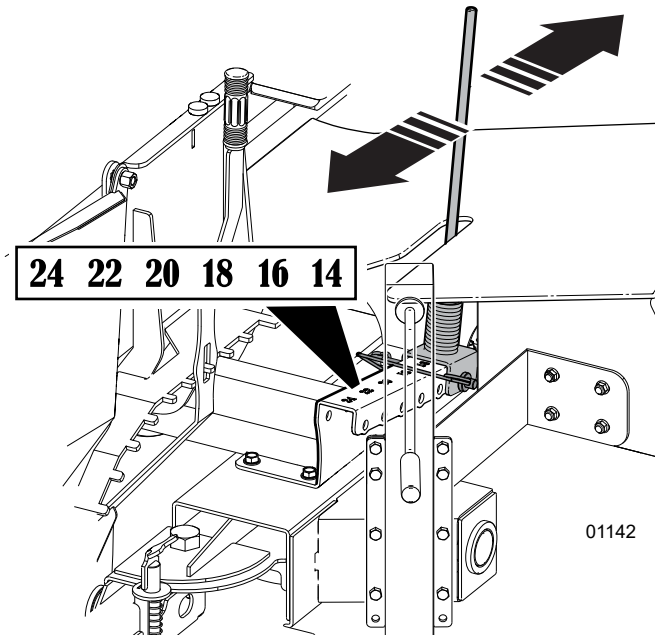


Fig. 14–Log Stop Guide

4.8 Splitter Chute Height Adjuster

The adjustable sliding bracket controls the height of the end of the splitter chute, up to 54" (1.37 m). This allows for split wood to be loaded directly onto a conveyor, or into a high sided dumper.

To adjust the splitter chute height:

1. Lift the splitter chute up slightly to take the load off the adjuster.
2. Remove the latch pin that secures hitch pin.
3. Pull out the hitch pin that holds the adjuster in place.
4. Raise the splitter chute to the required height, line up the hitch pin holes, and replace the hitch pin.
5. Secure the hitch pin with the latch pin.

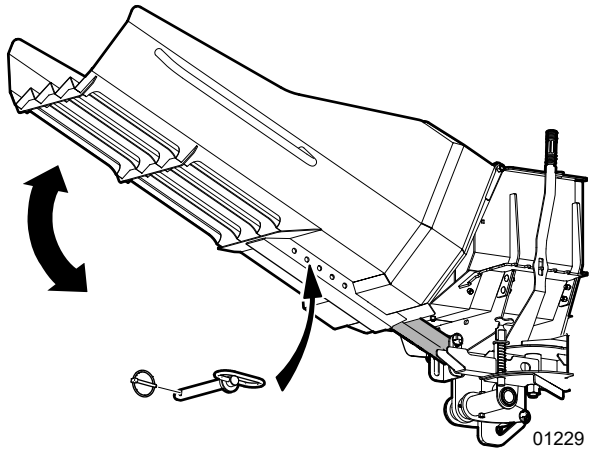


Fig. 15– Adjusting Splitter Chute Height

4.9 Attaching and Unhooking

Make sure there is enough room and clearance to safely reverse the tow vehicle up to the wood processor.

1. Have an assistant guide you as you back up if no back up camera is available. Stop about 1 ft (30 cm) away from the coupler.
2. Using the drop leg jack, raise the trailer tongue so that it is higher than the ball hitch on the tow vehicle. Raise the coupler latch so it is upright, unlocked.
3. Slowly back the tow vehicle until the hitch coupler and the ball are aligned. Stop the vehicle and apply the parking brake.
4. With the drop leg jack, lower the trailer so the hitch coupler hitches over the ball.
5. Flip the coupler latch to lock the coupler around the ball.
6. Install the snapper pin through the coupler latch.
7. Raise and stow the drop leg jack.
8. Attach the safety chains crossed underneath the tongue to the tow vehicle.
9. Connect the light harness of the trailer to the tow vehicle. Make sure the harness has enough length to make turns without tension but does not drag on the ground.
10. Check the function of all lights. Have your helper call out each lighting function as you check it.

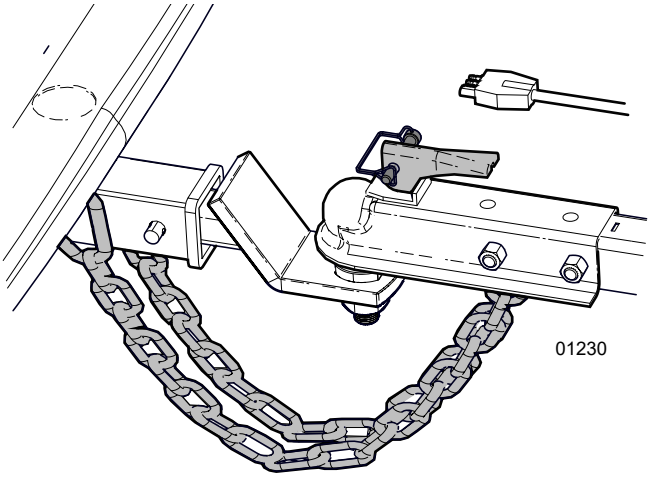


Fig. 16– Trailer hitch

5. Machine Set-Up

Use the tow unit to position the wood processor at the work site. Choose a clear, level area to set the machine up.

- **Determine a safe work area / trailer location:**
  - **Ground should be firm and level.**
  - **Area must be clear of stones, branches or hidden obstacles that might cause a tripping, hooking, or snagging hazard.**
  - **There must be no overhead hazards such as branches, cables, electrical wires and so on.**
- **Determine a safe split stack location:**
  - **Stack split wood on level ground. Make sure it does not interfere with safe operation of the machine.**

⚠ CAUTION!

Park the machine so prevailing winds blow exhaust gases / fumes away from the operator.

W006

1. Place wheel chocks behind the tires.
2. Crank the drop leg jacks to raise the hitch coupler and unhook the tow vehicle from the Wood Processor.
3. Adjust the drop leg jacks to level the machine.
4. Remove the snapper pins securing the bracing jacks and turn them up to the bracing position.
5. Replace the snapper pins to secure the jacks.

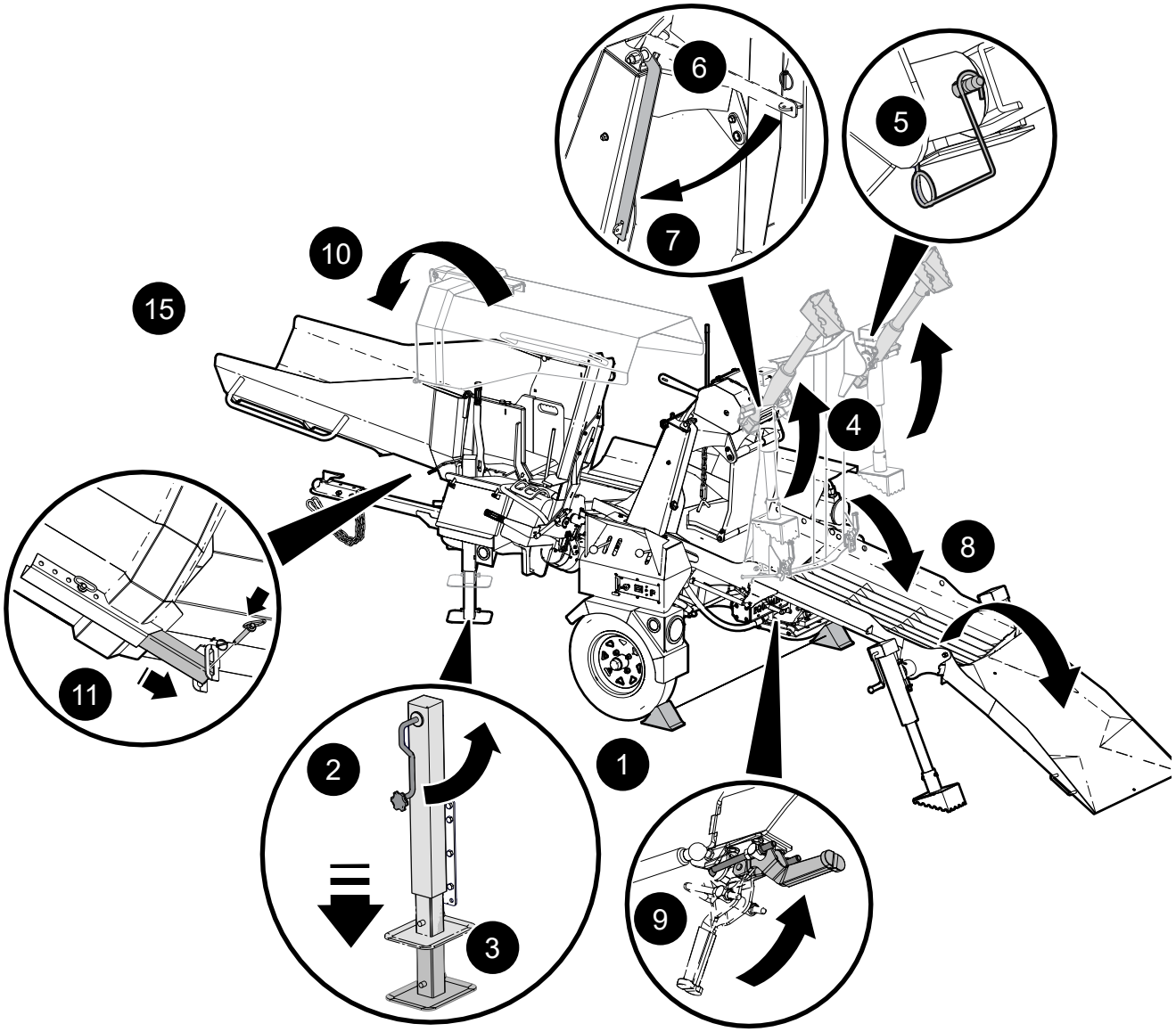


Fig. 17– Machine Set Up

6. Remove the latch pin that holds the chute lock arm to the log loader chute.
7. While holding the log loader chute, pull the lock arm away from the chute and swing it down. Secure the lock arm to the side of the frame with the latch pin.
8. Carefully fold the log loader chute down.
9. Under each side of the chute, hook the latch over the catch plate. Snap the handle of the latch clamp into lock position. There is one on each side.
10. Carefully unfold the splitter chute.
11. Adjust the splitter chute to the required height, using the chute lock arm and placing the hitch pins in the appropriate hole position.
12. Crank the bracing jacks until the jack feet are firmly into the ground.
13. Ensure the front lip of the lead in chute is on the ground (to avoid catching on logs). If required, adjust the front drop leg jacks so the lead in chute is level with the ground and the bracing jacks have a firm grip.
14. Check the log stabilizer and chain. The stabilizer should move freely. The purpose of the stabilizer is to keep the log from freely rolling.
15. Move the wagon, trailer, or conveyor into position under the discharge chute, as required.
16. Reverse the above procedure when preparing to leave the work site or transporting.

NOTE: *Swivel the tongue during setup to prevent tongue being buried in the split wood stack.*

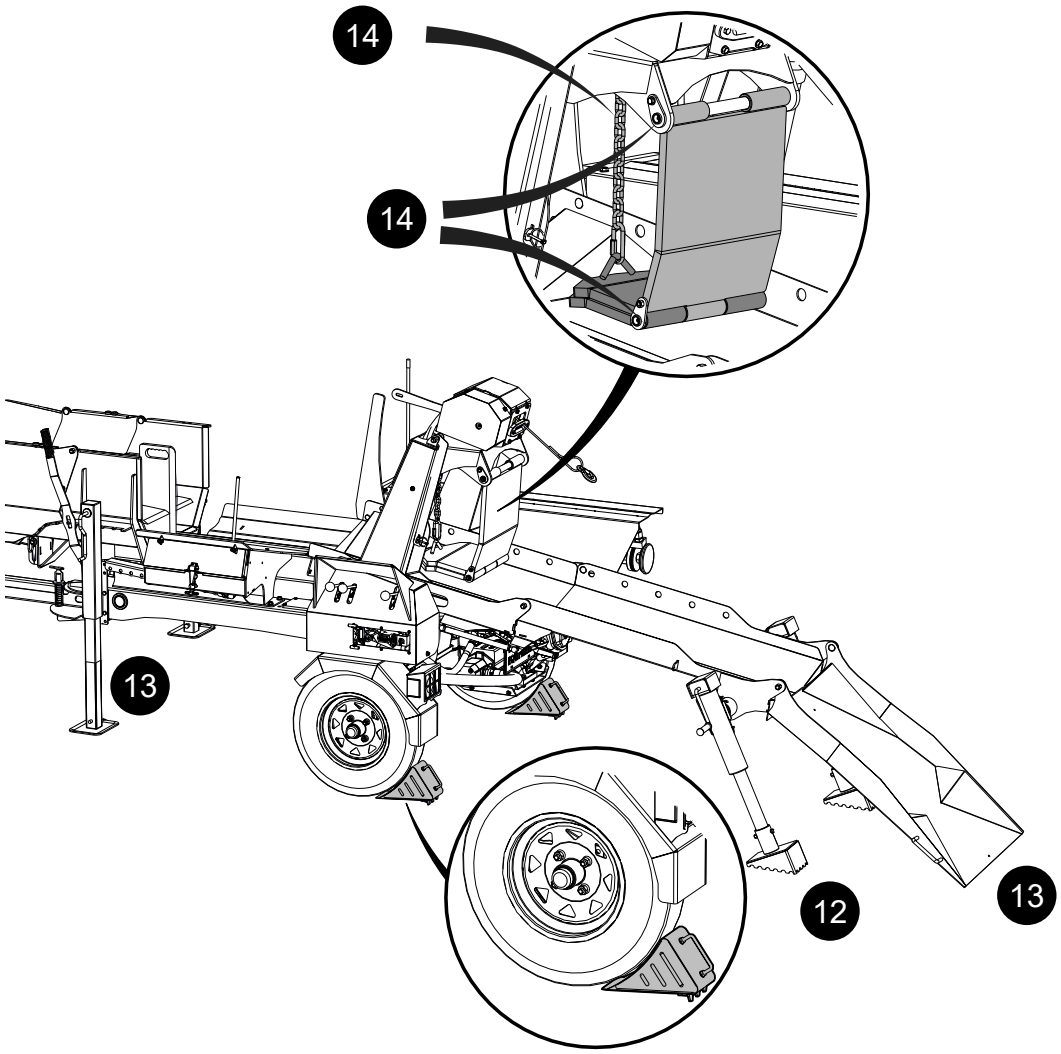


Fig. 23– Machine Set Up

5.1 Attaching Chain Saw to Holder

⚠ CAUTION!

Review your chain saw manual for safe operating and handling procedures before beginning work.

⚠ WARNING!

Do not attach a chain saw to the holder with a bar length longer than 30" (75 cm). The cutting chain could contact the push block or cylinder rod causing a hazardous situation. Injury or machine damage could result from flying debris.

IMPORTANT! The chain saw must have dual bar-mounting studs to mount the chain saw adapter plate. Saws with captive guide bar nuts require them to be removed.

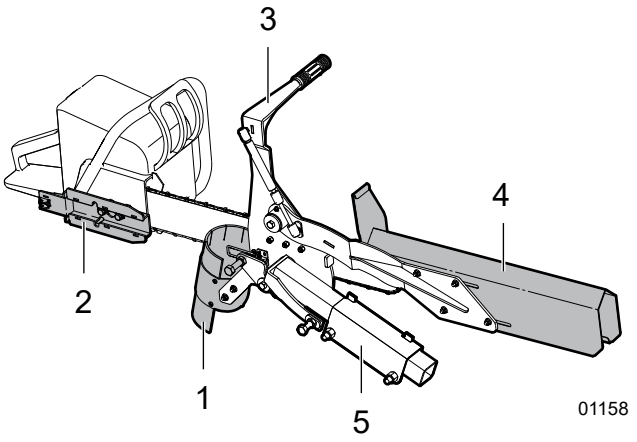


Fig. 18– Pivoting Chain Saw Holder

1. Debris Chute
2. Universal Chain Saw Adapter Plate
3. Pivot Handle
4. Chain Saw Guard
5. Pivot Base

Procedure

1. Remove the chain sprocket cover nuts from your chain saw. Some chain saws feature captive guide bar nuts in the chain sprocket cover. On these saws, replace the guide bar nuts with bushing spacers (2).
2. Thread the two bar mounting studs (3) onto the guide bar studs on your saw.
3. Install the universal chain saw adapter plate (1) over the bar mounting studs.

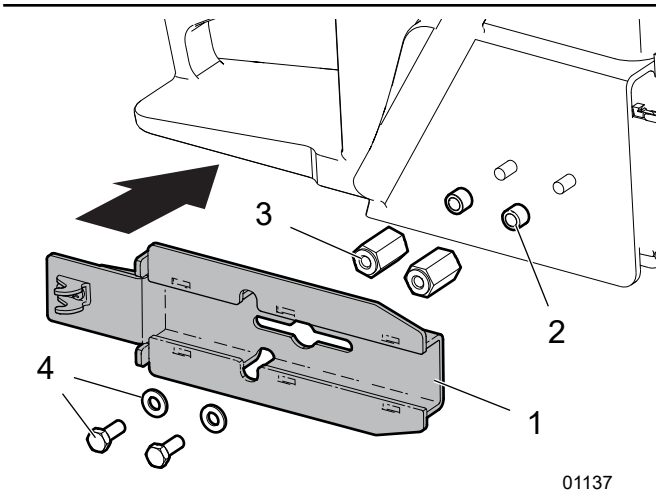


Fig. 19– Universal Chain Saw Adapter Install

1. Universal chain Saw Adapter
2. Bushing Spacers
3. Bar Mounting Studs
4. Hex Bolts and Washers

4. Fasten everything together with the M8 x 20 mm hex bolts (4) and washers.
5. Slide the saw adapter plate into the guides on the chain saw pivot. Make sure the draw latch is open so the saw can slide in without interference.

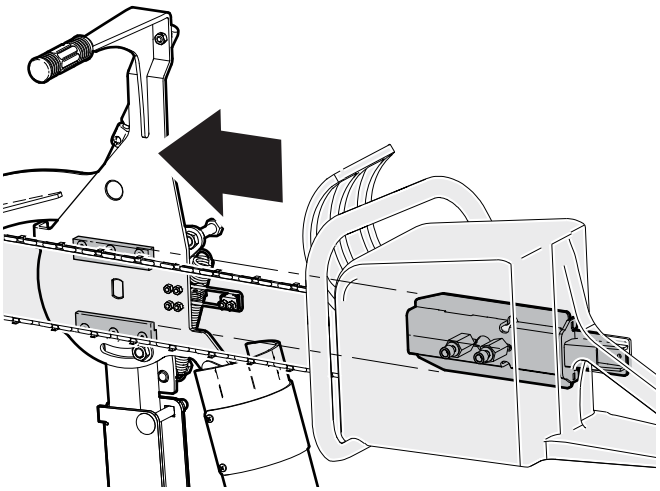


Fig. 20– Chain Saw Pivot

6. Close the draw latch over the catch on the saw / adapter plate. This tightens the saw to the pivot assembly. Check saw movement through its range of motion and adjust as required.

NOTE: Some adjustment may be required to the pivot base, depending on the saw length.

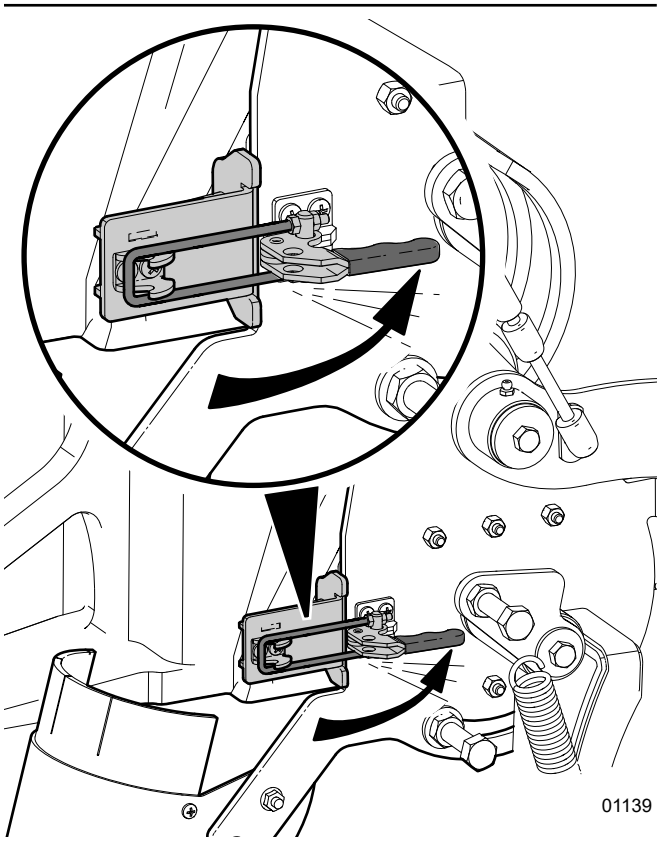


Fig. 21–Draw Latch on Chain Saw Pivot Frame

7. Check the range of motion of the saw. Make sure the bar cannot contact any part of the machine. Pull the saw off and adjust the adapter plate position as required.

5.2 Setting Log Stop Guide

- Pull out the snap lock pin to reposition the indicator.
- Set it at any desired position along the slide.
- Advance the log up to the stop for each cut.

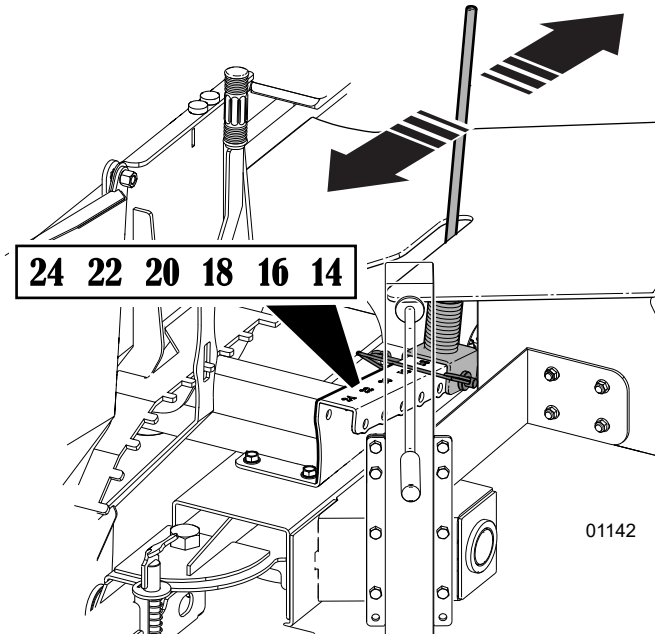


Fig. 22–Log Stop Guide

6. Operating Instructions

6.1 Operating Safety

- **Keep bystanders away at a safe distance at least 20 ft (6 m) from stacking zone. Mark the zone with safety cones.**
- **De-limb logs and precut to length.**
- **Operate the machine in daylight or good artificial light only.**
- **Make sure machine is properly stationed, adjusted and in good operating condition.**
- **Store fuel well away from the material pile.**
- **Perform the Pre-start Checks before starting work.**
- **Do not operate on hillsides or when working area is cluttered, wet, muddy, or icy to prevent slipping and tripping. Keep working area clean and free of debris.**
- **Stop engine if leaving the machine unattended.**
- **Operate the machine only when physically fit and not under the influence of alcohol, drugs or medicines that can cause drowsiness.**
- **Avoid loose fitting clothing, uncovered long hair, jewelry, and loose personal articles. These can get caught in moving parts.**
- **Do not allow anyone within the work or hazard zones during operation.**
- **Do not try to process more than one log at a time. The extra log can move unexpectedly and cause injury.**
- **Use a peavey or the provided hookaroon if repositioning cut logs in the splitting cradle. Never reach into the splitting area with your hands when the machine is operating.**
- **Do not try to split logs across the grain. Some logs can burst or splinter and fly out of the machine causing injury.**
- **Use care when pulling logs from a pile for splitting as they can roll when attaching rope or winching toward wood processor. Handle logs using a peavey for positioning.**
- **Keep working area clean and free of debris to prevent tripping.**
- **Review Winch Safety on *page 11*.**
- **Read the chain saw operator's manual and follow all safety instructions.**

6.2 Pre-start Checks

1. Check engine oil level. See *page 31*.
2. Check fuel level. See *page 31.* Turn fuel supply valve on.
3. Check engine air cleaner. See *page 46.*
4. Review operation and function of the Controls (see *page 30*).
5. Review Machine Set-up (see *page 26*).
6. Check the following areas each time the machine is operated. It is important for both personal safety and good maintenance practices that a walk around check is performed before operating the Wood Processor.

Area to Check	✓
Check and lubricate the machine per the Maintenance Schedule on page 43.	
Check the condition of the choker strap. Replace if torn or worn out.	
Check for entangled material. Remove any twine, wire or other material that has become entangled.	
Check the condition of the winch rope for visible damage. Replace if kinked, frayed, has knots, cuts, or any broken strands. Failure to replace could result in breakage.	
Check the wedge and block. Inspect for damaged or broken components and excessive wear. Lubricate, repair or replace as required.	
Make sure all guards, deflectors and shields are installed before starting and operating the machine.	
Check all fasteners and tighten, and ensure your equipment is working and in good repair.	
Check for hydraulic leaks. Tighten fittings or replace components to stop leaks.	
Check hydraulic fluid level. Top level up as required.	
Check the condition of the winch. It must be in good condition to operate properly.	

6.3 Fuel Level Check

Check the fuel level before each use. Starting with a full tank helps to eliminate or reduce operating interruptions for refueling.

The fuel tank is located on the engine. Avoid running the tank dry.

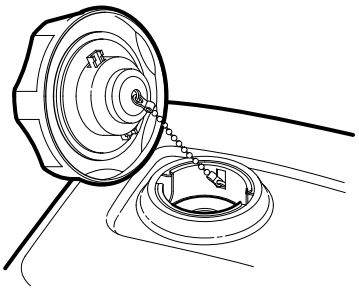


Fig. 24–Fuel Filler Cap

6.3.1 Refueling

Fuel tank capacity: **1.61 US gal (6.1 L).**

⚠ WARNING!

Fuel vapors can explode causing injury or death. Do not smoke while refueling. Keep sparks, flames, and hot components away.

W027

Refuel in a well-ventilated area with the engine stopped. If the engine has been running, allow it to cool first. Never refuel the engine inside a building where gasoline fumes can encounter flames or sparks.

This engine is certified to operate on unleaded gasoline with a pump octane rating of 86 or higher (a research octane rating of 91 or higher).

Refer to the engine manual for additional information on fuels.

1. Clean the area around fuel tank cap. Fill the tank to 1/2" (12 mm) below bottom of filler neck to provide space for any fuel expansion. **Do not overfill!**
2. Install fuel fill cap securely and wipe up any spilled fuel.

6.4 Engine Oil Level Check

Check engine oil level before each use.

Check with the machine parked on level ground and the engine stopped.

IMPORTANT! Running the engine with a low oil level can cause engine damage that is not covered by warranty.

IMPORTANT! Refer to the engine owner's manual included in the manual tube for further information on engine oils.

1. Remove the oil level dipstick and wipe it clean.
2. Fully insert the oil level dipstick, then remove it to check the oil level. **The proper level is when the oil is visible at the full (upper) mark on the dipstick.**
3. If the oil level is low, add oil until the level is at the full mark. **SAE 10W-30 is recommended for general use.**
4. Reinstall the oil level dipstick.

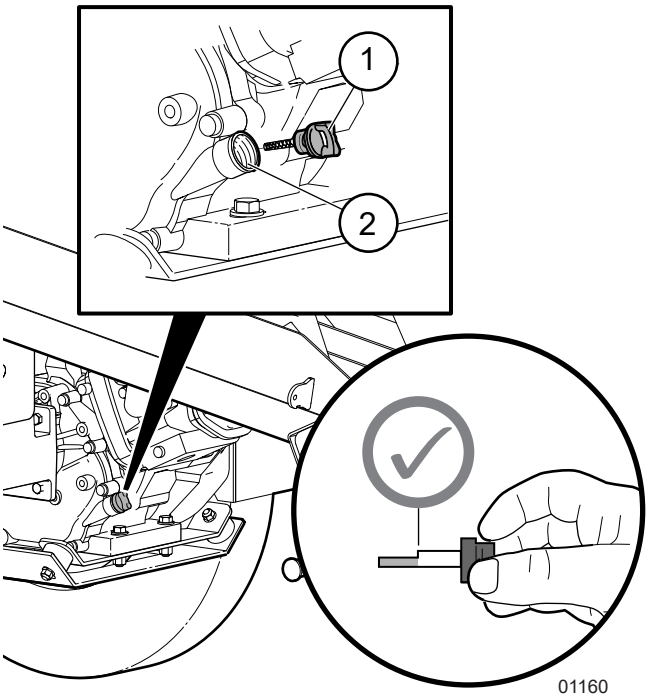


Fig. 25–Engine Oil Level check

1. Oil Level Dipstick
2. Oil Filler

6.5 Hydraulic Oil Level Check

Check hydraulic oil level daily. The hydraulic oil sight glass is on the front of the tank. Check with the machine parked on level ground and the engine stopped.

The proper level is when the oil fills the glass window. If the level is not visible in the sight glass, add oil.

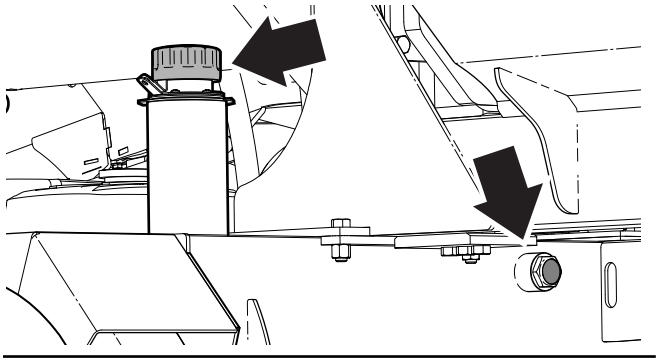


Fig. 26– Oil Level Sight Glass and Filler Cap

IMPORTANT! Do not operate machine if oil level is not visible in the sight glass. Damage to the pump and other components can occur.

Do not overfill the tank past the sight glass window.

IMPORTANT! Hydraulic oil quality should be inspected every 50 hours. If the oil is dirty or smells burnt, it should be replaced.

IMPORTANT! Be aware of high oil temperatures. Temperatures higher than 180 °F (82 °C) could cause seal damage and degrade oil quality.

6.5.1 Adding Oil to the Tank

The hydraulic system uses **Dexron® III ATF**. Dexron VI or Mercon® are acceptable substitutes.

Procedure:

1. Clean the area around filler cap and remove it.
2. Use a clean funnel and add oil until the level just fills the sight glass window.
3. Install filler cap securely. Wipe up any spilled oil.

Check levels after changing filters or servicing hydraulic components.

6.6 Starting Procedure

Read the engine manufacturer owner's manual before starting for more detailed instructions.

⚠ WARNING!

Engine exhaust contains carbon monoxide, an odorless, poisonous gas. Breathing it can cause unconsciousness or death.

Never operate engine in a closed, or even partly closed area. Exhaust gases can build up to dangerous levels.

W072

The Wood Processor should be set up to work and otherwise ready to run.

1. Open the fuel supply valve on the engine.

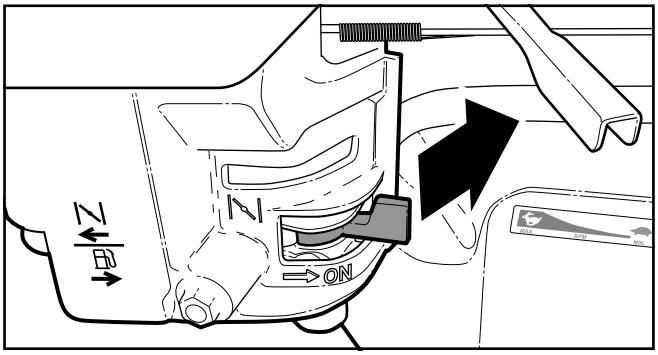


Fig. 27– Fuel supply valve

2. Ensure the hydraulic controls are in neutral position (out of detent).
3. If the engine is cold, pull out (close) the choke. If the engine is warm, leave the choke pushed in.
4. Move the throttle to 1/4 throttle position.

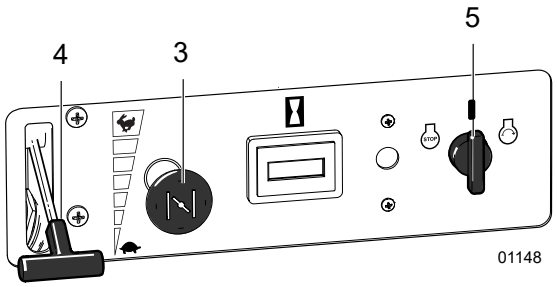


Fig. 28– Control Panel

5. Turn the ignition key to start the engine. Release the key when the engine has started. The key returns to the run position when released.

START – Turn fully clockwise to engage the starter solenoid and start the engine. When the engine starts, release the key allowing it to return to the *ON* position.

6. Idle the engine for a few minutes to allow it to warm up.
7. Gradually push the choke control knob in as the engine warms.
8. Increase throttle setting to maximum. Maximum engine speed is required for smooth operation of hydraulic functions.

6.7 Stopping Procedure

1. Stop winching, cutting and splitting logs.
2. Move the throttle to idle position to slow the engine speed.
3. Set all hydraulic controls to neutral.
4. Turn off the ignition switch to stop the engine. Shut off the fuel supply valve.

STOP – Turn key fully counter-clockwise to stop the electrical system power and turn the engine off.

6.8 Emergency Stopping

In an emergency

- Shut off the engine
- Set all hydraulic controls to neutral
- Correct fault situation before restarting engine and resuming work.

6.9 Winching

WARNING!

Synthetic rope that fails under tension can snap back with great force causing injury or death. Avoid sudden jerks, quick starts or stops. Start slowly and smoothly. Replace if kinked, badly frayed, has knots, cuts, or broken strands.

W095

CAUTION!

Always make sure the area is clear of bystanders when operating the winch. Never use the winch to hold or secure loads.

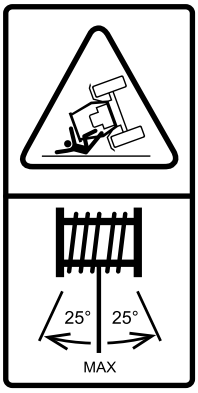
W055

CAUTION!

Stay clear of the winch rope while winching. Injury from entanglement or rope burn could occur!

W056

- **Never stand directly in line with the winch rope while winching. Do not touch winch rope during operation.**
- **Check rope condition before using winch. Rope may break during operation if it is cut, knotted, has broken strands or worn. Replace rope if damaged.**
- **Do not exceed winching angle of more than ±25°. Exceeding that angle risks tipping the machine over. Use a log peavey to move the log in line with the Wood Processor. Operate only on level ground.**



- **Check rope condition before using winch. Rope may break during operation if it is knotted, has broken strands or sharp kinks. Replace rope if damaged.**
- **Do not winch down a slope; always winch up a slope. Winching down a slope could cause the log to roll resulting in crushing injuries.**
- **Do not operate on hillsides or when working area is cluttered, wet, muddy or icy to prevent slipping and tripping.**
- **Do not winch across a slope. Always winch up-slope.**
- **Do not allow anyone not directly involved with winching within 10 ft (3 m) of winch or logs during winching operation. Keep children away. Logs could roll in unpredictable ways.**
- **Always wind in the rope under load. Rope does not wind in properly if not under load.**
- **Do not touch or grasp the rope during winching operation.**
- **Always use the winching strap or a choker chain to attach to the log for winching. The winching rope can be damaged if dragged under the log if a choker or strap is not used.**

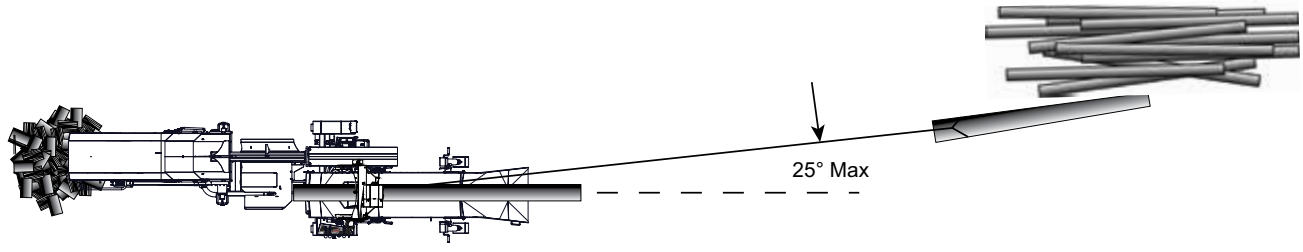


Fig. 32–Safe Winch Angle

- **Always be aware of hazards when winching and moving logs. Inspect your work zone to take these hazards into account:**
  - **Objects along winch route**
  - **Structures close or in the work zone**
  - **Winching on a slope**

Procedure

1. Release the winch rope by moving the winch gear lever to the left.
2. Grasp the hook on the winch rope and pull the rope out to the logs.
3. Attach the 60" (1.5 m) winch strap to the log, then attach the winch rope to the strap. Do not attach the winch rope directly to the log. Alternatively, a standard log chain can be used.

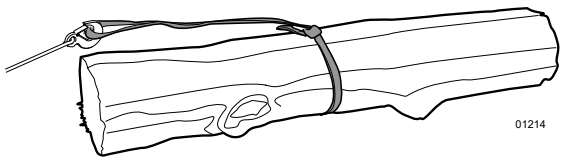


Fig. 29–Winch Strap

4. Engage winch drive mechanism with the winch gear lever.
5. Use the winch to pull log into log lead-in chute. Ensure the log does not catch on the front lip of the lead-in chute.

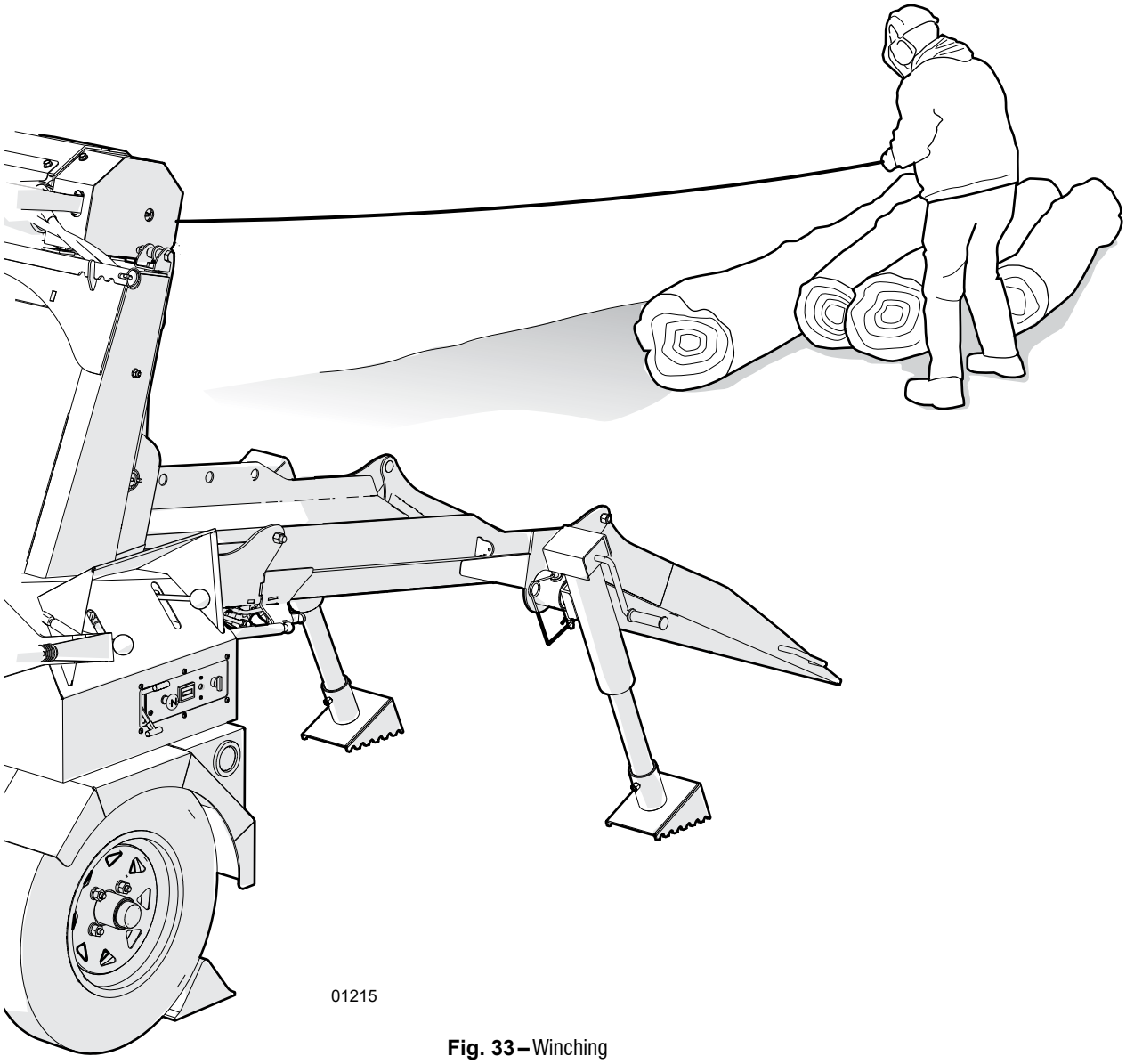


Fig. 33–Winching

6.10 Position the Log

1. Continue to winch the log up log loader chute to the log stabilizer and stop the winch.

IMPORTANT! Stop winching when the hook reaches the winch. If the operator is winching and the log is not moving, it is most likely because the winch is fully retracted. Continuing could pull the hook off the end of the rope.

2. Ensure the log is stable, disengage the winch gear, pull out the rope slightly.
3. Detach the winch hook from the strap and move the strap to the far end of the log.
4. Pull out the winch rope and re-attach the winch hook.
5. Engage the winch gear and begin winching the log through the log stabilizer up to the log stop guide. Make sure the log does not catch on the front lip of the lead in chute.

⚠ WARNING!

Log Stabilizer is heavy! Never attempt to push a log by hand through the stabilizer opening. The stabilizer could drop suddenly and cause serious injury. Always use appropriate procedure and tools to push or pull the log through the opening.

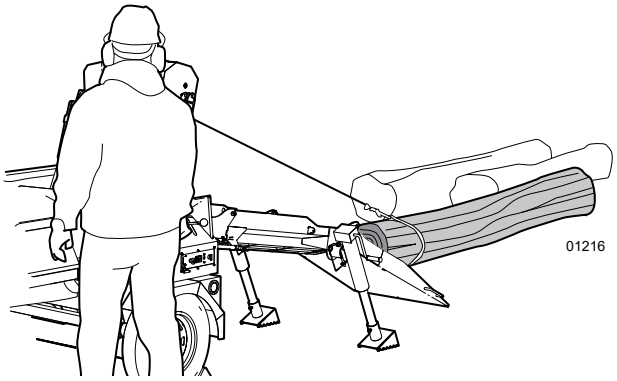


Fig. 30– Winching First Log

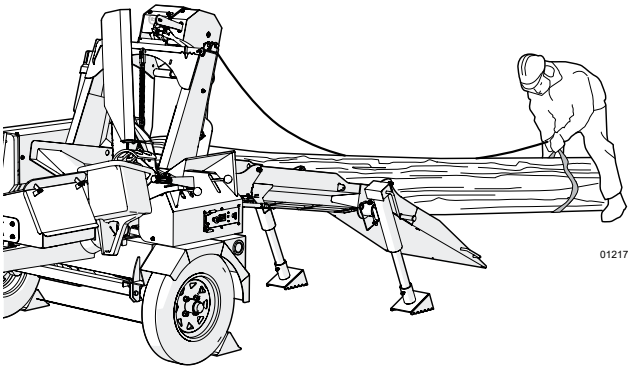


Fig. 31– Move winch strap

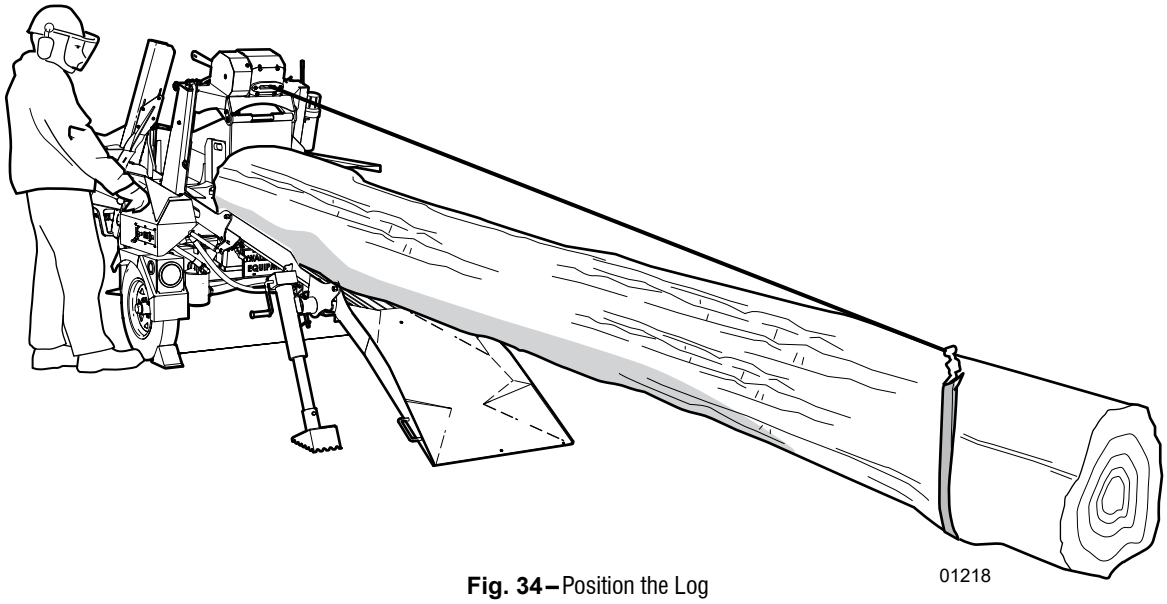


Fig. 34– Position the Log

6.11 Cutting

⚠ WARNING!

Review the chain saw operator's manual and follow all safety instructions.

Always wear appropriate Personal Protective Equipment when using a chain saw.

⚠ CAUTION!

Always apply the chain saw brake when leaving the saw idling.

Make sure your chain saw is sharpened and in good working order.

Have the Log Stop Guide set to the desired cut length (see *page 29*), with the log winched up to it.

1. Operate the saw as you normally would to cut a log. You can also push on the chain saw holder handle. The guard stays on top of the log as the saw cuts through it.
2. Decrease cutting pressure as you finish the cut.
3. Let the cut log roll into the splitting cradle.

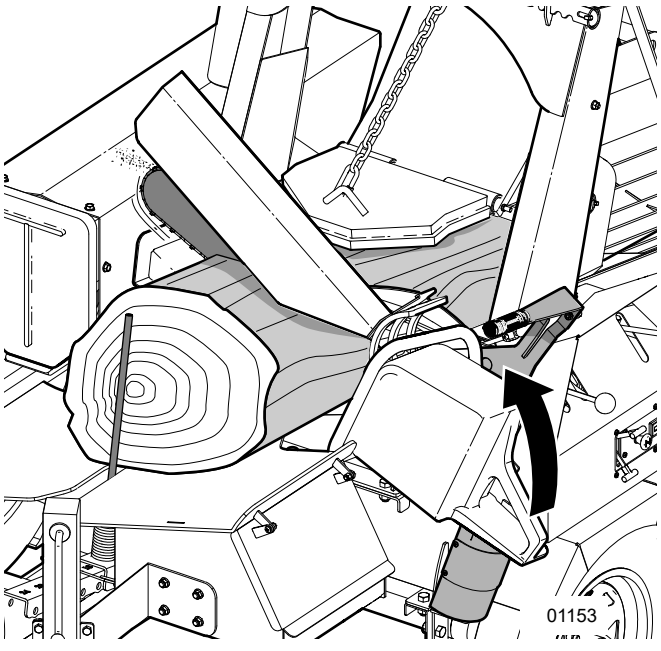


Fig. 35–Cutting the log

6.12 Splitting

⚠ CAUTION!

Risk of pinching or crushing hazard! Never reach into the splitting cradle to reposition a log. Use a log peavey, hookaroon or another tool.

W043

After each cut, the log rolls onto the splitting cradle.

1. Using the wedge height lever, set the height of the wedge according to the diameter of the log. The control lever is on the side of the splitting cradle. Raise or lower depending on log size.

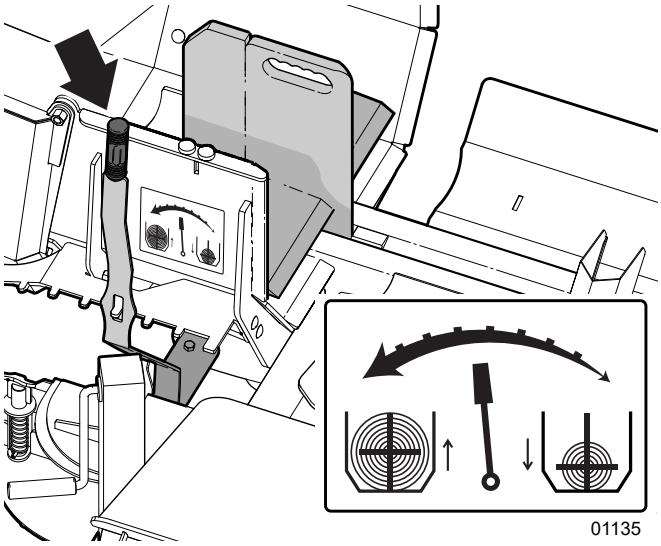


Fig. 36–Splitting Cradle

NOTE: A six-way splitting wedge is available as an accessory.

2. Push both splitter control levers down into detent to begin the Auto Cycle. The push block extends to split the wood, then retracts automatically. Both control levers reset to neutral when the auto-cycle completes.

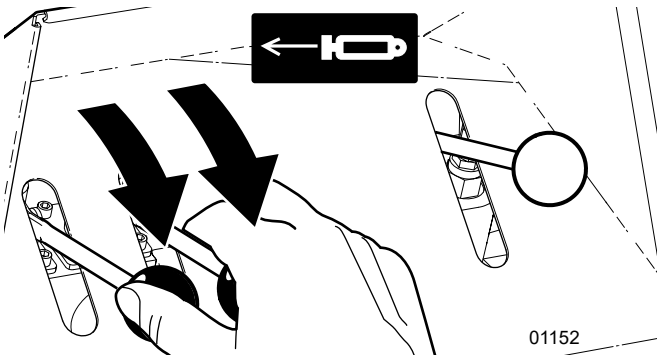


Fig. 37–Push Both Control Levers Down

At the end of the cylinder stroke, the *extend* control lever kicks out of detent to neutral and the cylinder then retracts.

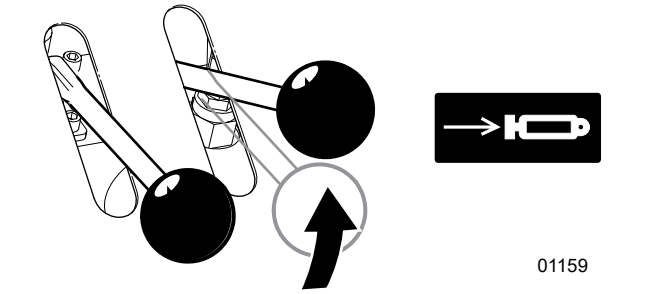


Fig. 38–Cylinder Retracts

When the cylinder has fully retracted, the *retract* control lever kicks out to neutral and the push block is set for the next cycle.

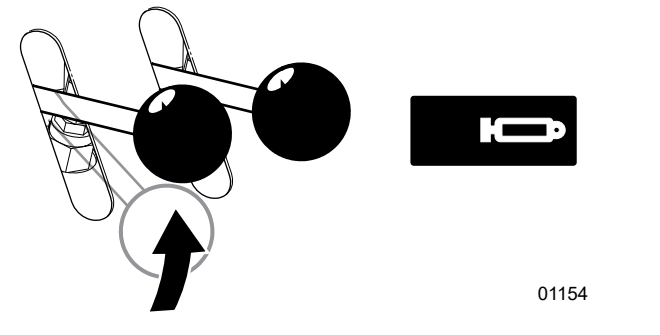


Fig. 39–Reset for the next cycle

Winch the log up to the guide again to make the next cut. Continue cutting and splitting to finish the log.

6.13 Next Log

As the first log finishes, it will be too short to winch in. At this point, winch in another log behind the first one and use it to push the first log into the cutting area.

1. Make sure the first log in the Wood Processor is stable, then release the rope and hook.
2. Pull the rope out to the second log.
3. Wrap the winch strap around log. You may need to roll the log onto the strap using a log peavey.
4. Attach the winch hook onto the winch strap.

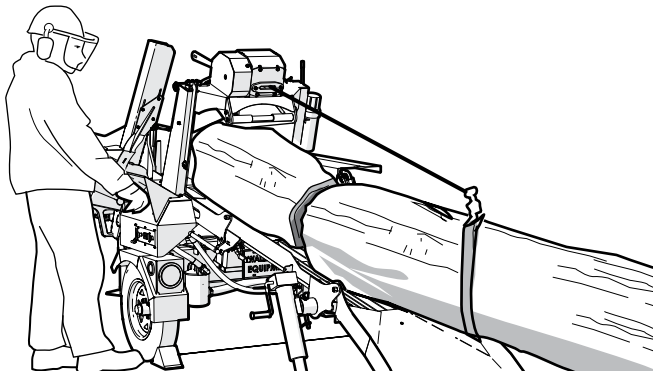


Fig. 40–Use second log to push first one

5. Engage winch drive mechanism with the winch gear lever.
6. Use the winch to pull log into log lead in chute up against the first log. Use it to push the first log up to the cutting guide.
7. After a few cuts, reposition the winch strap to the far end of the second log, and continue winching and cutting.

6.14 Last Log

As you finish the last log, you will find it is too short to winch in.

1. Move the last log up using a log peavey as a lever inserted into holes at side of chute.
2. Lever the log up to the cutting guide, until it is fully processed.
3. Be aware of the heavy log stabilizer. Use caution when finishing up the last log.

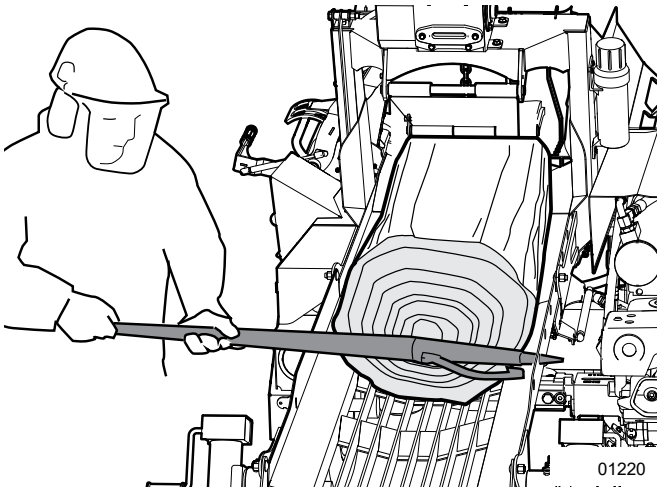


Fig. 41 – Pushing last log through

CAUTION!

Risk of serious injury. Never attempt to push a log through the stabilizer opening by hand. The stabilizer could drop suddenly and cause serious injury. Always use appropriate procedure and tools to push or pull the log through the opening.

6.15 Efficient Processing

We recommend following this procedure for an effective work flow:

1. Move log into position with winch or peavey.
2. Cut log and let it roll into the splitting cradle.
3. Engage splitter.
4. While the log is being automatically split, use the winch to move the next log segment into position.
5. Cut the next log segment.
6. The previous log has finished splitting and the ram has returned to its start position.
7. Allow the cut log to roll into the cradle, begin splitting, while winching the log into position for the next cutting.
8. Repeat until complete.

6.16 Wood Discharge

The split wood is pushed out of the chute as each additional log moves through the machine.

Set the chute height to pile on the ground or into a trailer, wagon or conveyor.

6.17 Machine Break-In

Although there are no operational restrictions on the Wood Processor when used for the first time, it is recommended that the following mechanical items be checked:

After 1–5 hours of operation:

1. Check all nuts, bolts and other fasteners. Tighten to their specified torque.
2. Check hydraulic system for leaks. Tighten all leaking fittings and replace any leaking components.
3. Check machine fluid levels: Fuel, engine oil, and hydraulic oil reservoir. Top up as required.
4. Check condition of winch.
5. Check the condition of the rope. Replace if cut, knotted, worn or if it has any broken strands.
6. Check for entangled material. Remove all entangled material before resuming work.
7. Lubricate all grease fittings.

After 20 hours of operation:

8. Repeat steps 1 through 7 listed above.
9. Change engine oil after 20 hours.
10. Go to the normal servicing and maintenance schedule as defined in the Maintenance Section. See *page 8*.

6.18 Transporting

- Fold up the splitter chute, and the lead-in and loader chutes.
- Hook up the lead in chute lock arm and install latch pin.
- Remove any loose tools or debris from the machine.
- Make sure that the machine is securely attached to the tow unit with a retainer through the 3-point-hitch arms.
- Never allow riders on the machine.
- Plan your route to avoid heavy traffic.
- Comply with state and local laws governing safety and transporting of machinery on public roads.
- Do not exceed a safe travel speed. Slow down for rough terrain and cornering.

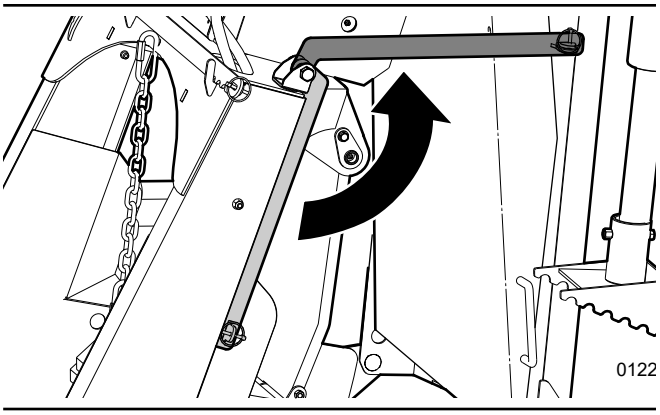


Fig. 42–Chute lock arm and latch pin

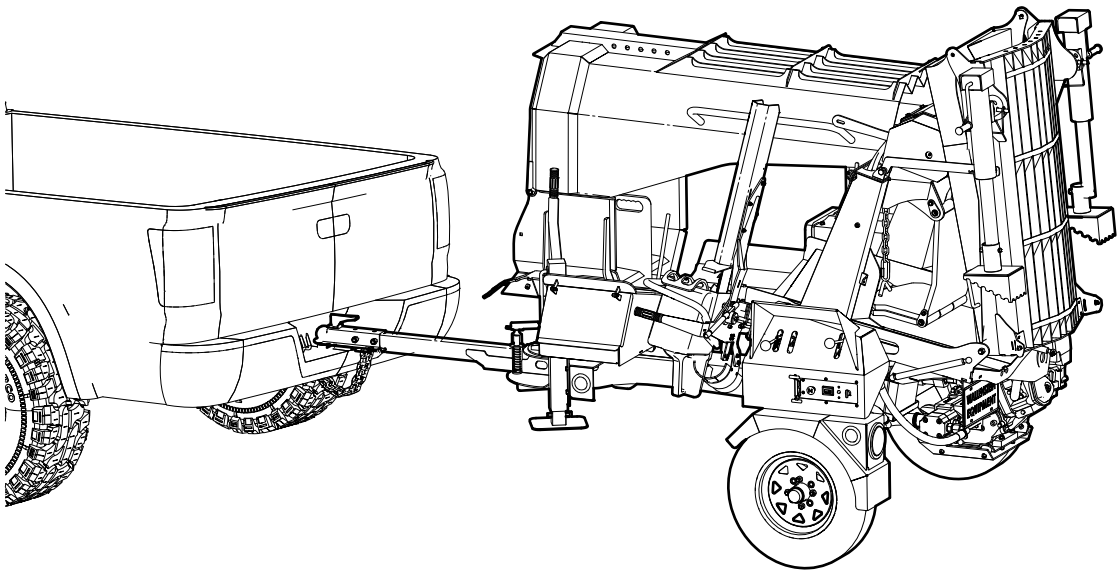


Fig. 43–WP845 ready for transport

6.19 Storage

- **Store the unit in a dry, level area away from human activity.**
- **Support the frame with planks if required.**
- **Do not permit children to play on or around the stored machine.**

Placing Wood Processor in Storage

After the season's use or when the machine will not be used for a period, completely inspect all major systems of the wood processor. Replace or repair any worn or damaged components to prevent any unnecessary down time at the beginning of the next season.

1. Remove all material from the machine.
2. If storing for more than 1 month, add stabilizer to the fuel system. Run the engine for a few minutes to allow the stabilized fuel to cycle through. Refer to the engine manual for further information on engine storage.
3. Thoroughly wash the machine with a pressure washer or water hose to remove all dirt, mud, or debris.
4. Inspect all moving parts for entangled material. Remove all entangled material.
5. Check the condition of winch rope. Replace or adjust as required.
6. Fold up and secure all chutes.
7. Block and chock the wheels to prevent accidental movement.
8. It is best to store the machine inside. If that is not possible, cover with a waterproof tarp.

Removing from Storage

When removing this machine from storage, follow the Pre-start Checks on *page 30*.

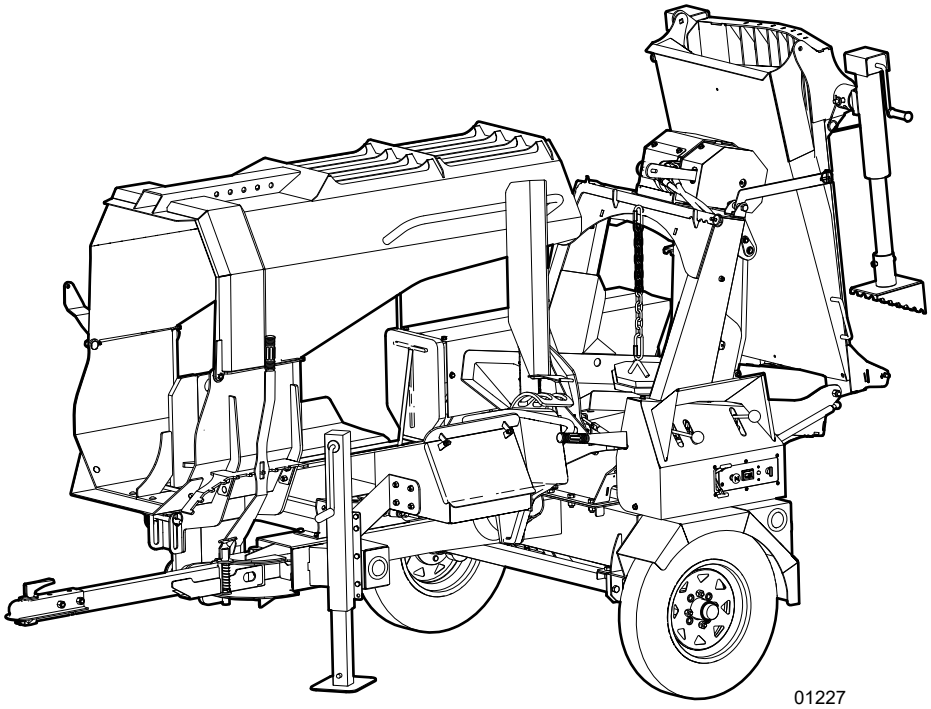


Fig. 44–WP875 ready for storage

7. Service and Maintenance

⚠ WARNING!

Risk of serious personal injury. Stop engine before performing ANY service or maintenance procedure. Reinstall all covers and shields removed before putting machine back into service.

W033

⚠ WARNING!

Shut down the machine and allow it to cool before performing any service, maintenance, or inspection procedure. Engine components and oil may be hot enough to cause injury.

Make sure the machine is in a Safe Condition to work on. Review Maintenance Safety beforehand.

W041

Place the machine in a Safe Condition before performing any service, maintenance work or storage preparation by performing the following:

SAFE CONDITION

1. Clear infeed conveyor and splitting hopper.
2. Wind in winch rope.
3. Release all controls and ensure all components have stopped moving.
4. Shut off the engine. Disconnect spark plug lead. Disconnect negative (-) battery cable from battery.
5. Relieve hydraulic system pressure by actuating controls.
6. Chock wheels to prevent movement.

- **Good maintenance is your responsibility. Poor maintenance is an invitation to trouble.**
- **Follow good shop practices.**
  - **Keep service area clean and dry.**
  - **Be sure electrical outlets and tools are properly grounded.**
  - **Use adequate light for the job at hand.**
- **Make sure there is plenty of ventilation. Never operate the engine of the engine in a closed building. The exhaust fumes may cause asphyxiation.**
- **Before working on this machine, shut off the engine and turn fuel valve off.**
- **Never work under equipment unless it is blocked securely.**
- **Always use personal protection equipment such as eye, hand and hearing protection when performing any service or maintenance work. Use heavy gloves when handling sharp components.**
- **Where replacement parts are necessary for periodic maintenance and servicing, genuine factory replacement parts must be used to restore your equipment to original specifications. The manufacturer cannot be responsible for injuries or damages caused by use of unapproved parts and/or accessories.**
- **A fire extinguisher and first aid kit should be kept readily accessible while performing maintenance on this equipment.**
- **Periodically tighten all bolts, nuts and screws and check that all electrical and fuel connections are properly secured to ensure unit is in a safe condition.**
- **When completing a maintenance or service procedure, make sure all safety shields and devices are replaced before returning machine to service.**

7.1 Fluids and Lubricants

1. Engine Oil

SAE 10W-30 motor oil of API service class SJ is recommended for general use. **Refer to the engine manufacturer's manual for maintenance and service information.**

2. Grease

Use an SAE multi-purpose high temperature grease with extreme pressure (EP) performance. Also acceptable is an SAE multipurpose lithium-based grease.

3. Engine Fuel

This engine is certified to operate on unleaded gasoline with a pump octane rating of 87 (R+M)/2 or higher, research Octane Number (RON) 90 octane minimum. Gasoline up to 10% ethyl alcohol, 90% unleaded is acceptable.

4. Hydraulic Oil

Use Dexron® III ATF for all operating conditions. Dexron VI or Mercon® are acceptable substitutes.

5. Storing Lubricants

Your machine can operate at top efficiency only if clean lubricants are used. Use clean containers to handle all lubricants. Store them in an area protected from dust, moisture, and other contaminants.

7.2 Maintenance Schedule

Refer to your engine instruction manual for specific maintenance instructions / requirements.

Perform at time shown or hour interval, whichever comes first. **Item**	**Every 8 hours or Daily**	**Every 50 hours or Annually**	**Every 100 hours or Annually**	**Reference**
Winch Rope Condition	●			
Check hydraulic hoses, fittings, frame slide	●			
Check that all fasteners are secure	●			
Check engine oil level	●			See *page 31*
Check fuel Level	●			See *page 31*
Check engine air filter		●		See *page 46*
Check hydraulic oil level	●			See *page 32*
Change engine oil		●		See engine manual
Grease frame slide, hinges, pivot points		●		See *page 44*
Check tire pressure			●	See tire sidewall.
Change hydraulic oil filter			●	See *page 45*
Change engine air filter			●	See engine manual
Clean machine			●	

7.3 Greasing

- Use a hand-held grease gun for all greasing.
- Wipe grease fitting with a clean cloth before greasing to avoid injecting dirt and grit.
- Replace and repair broken fittings immediately.
- If fittings will not take grease, remove and clean thoroughly. Also, clean lubricant passageway. Replace fittings if necessary.

Location	Grease Points – Every 50 hours or annually
1	Winch
2	Upper Right-hand Log Stabilizer
3	Upper Left-hand Log Stabilizer
4	Lower Right-hand Log Stabilizer
5	Lower Left-hand Log Stabilizer
6	Wedge Adjustment Arm bushing
7	Push Block Frame Slide

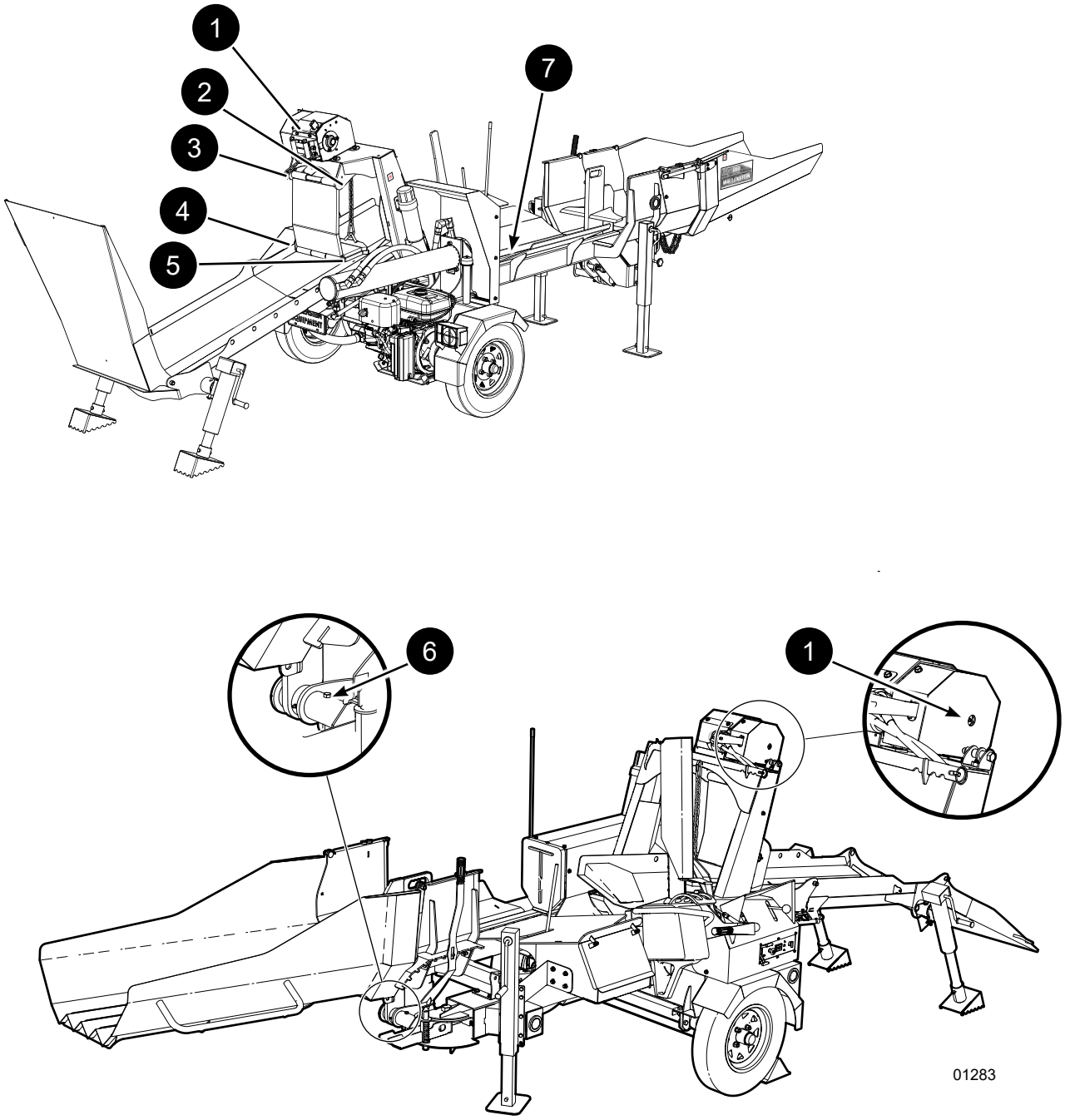


Fig. 45–Grease points

7.4 Hydraulic System Filter and Oil Change

Allow the machine to cool before changing the oil. Hot oil can cause burns if it contacts exposed skin. It is best to change oil while the machine is warm however, to keep the contaminants in suspension.

1. Be sure to chock the wheels to prevent the machine from moving while working.
2. Place a pan under the filter head.
3. Remove bottom hose and strainer to drain oil.
4. Allow the oil to drain then remove hydraulic oil filter.
5. Apply a light coat of oil to the O-ring to the new filter and install it. Snug up by hand and then tighten a further 1/2 turn.
6. Install and secure bottom hose and strainer.
7. Fill the reservoir with Dexron III oil. **Reservoir capacity: 6.8 US gal (26 L)**
8. Run the machine for 1–2 minutes while operating cylinder to remove air from the system. Check filter head for oil leaks.
9. Check hydraulic reservoir oil level. Top up as required.
10. Dispose of the used oil in an environmentally approved, safe method.

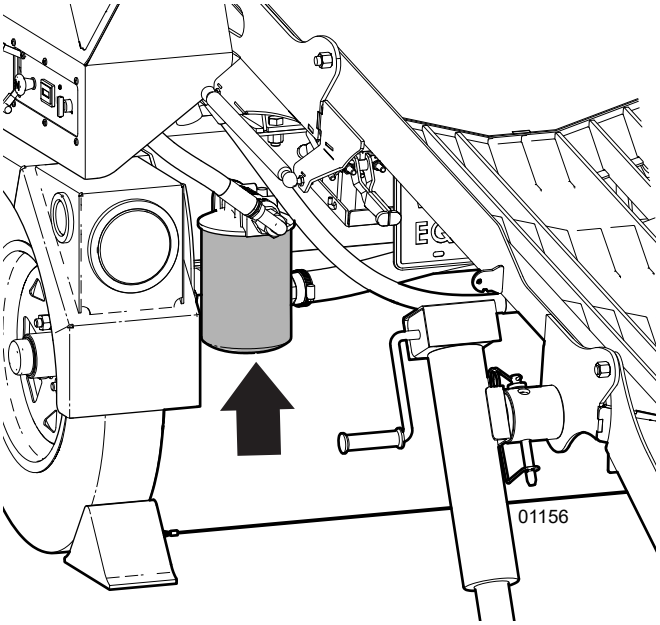


Fig. 46– Hydraulic Oil Return Filter

7.5 Engine Air Cleaner

Check air filter every 50 hours of operation. Change air filter elements every 100 hours of operation or annually.

NOTE: Refer to the engine manual for information on servicing the air cleaner.

A dirty air filter can restrict air flow to the carburetor, reducing engine performance. If the engine is operated in very dusty areas, clean the air filter more often than specified.

IMPORTANT! Operating the engine without an air filter, or with a damaged air filter, can allow dirt to enter the engine, causing rapid engine wear. This type of damage is not covered by warranty.

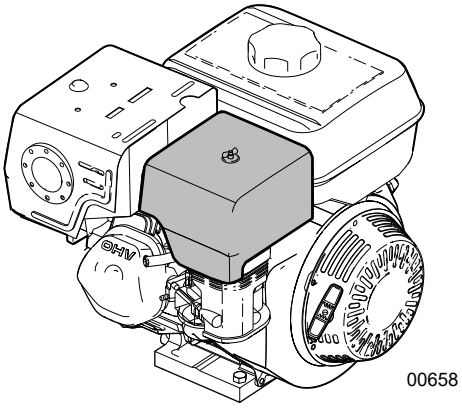


Fig. 47–Engine Air Cleaner

7.5.1 Inspection

Remove the air cleaner cover and inspect the filter elements. Clean or replace dirty filter elements. Always replace damaged filter elements.

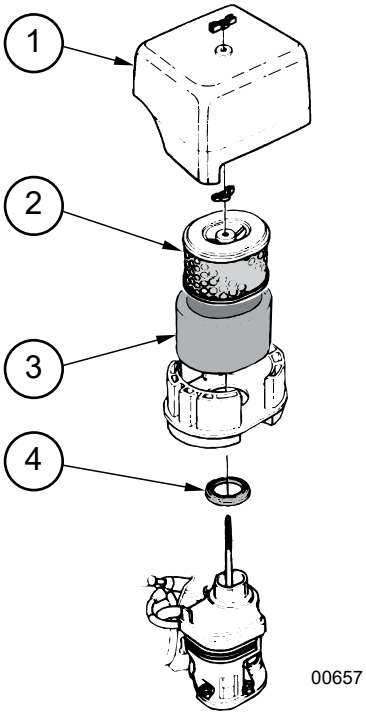


Fig. 48–Honda™ GX270 Air Cleaner

1. Air Cleaner Cover
2. Paper Filter Element
3. Foam Filter Element
4. Gasket

7.6 Synthetic Rope Replacement

⚠ CAUTION!

Avoid the risk of rope failure. Do not replace rope with one that is not approved for use on this winch. Rope properties may be unknown and failure could result. Refer to the parts manual for replacement rope type.

W094

Rope Inspection

It is a good idea to check the entire rope for wear and re spool it neatly after every use. Check the winch rope for any cut strands, fraying parts, abrasion, or heat damage from the winch. After use, all winch lines will get a little fuzzy from abrasion. This is normal, but **if an entire strand is cut the winch line needs to be replaced or fixed**. For the winch line to work properly and maintain its strength, all strands must be intact.

Both heat and UV exposure break down the fibers of the synthetic rope weakening it and making it brittle over time. Frequent use in mud, dirt and sandy conditions can also damage a synthetic rope if it is not properly cleaned and cared for.

Cleaning Synthetic Rope

When dirt and grit become lodged in between the strands of the winch line they cause abrasion to the fibers when the winch line is put under a load. Over time this can cause a breakdown in the integrity and strength of the rope.

Wash winch rope if it gets dirty by unspooling the entire line from the winch and lay it on a clean surface. Once the line is laid out, rinse it well with water from a hose.

To really get the strands free of dirt and grit, fill a bucket with water and mild soap. Push together on the rope to open the strands up and rinse in the water. Run the entire length of the winch line through the water until it is cleaned.

8. Troubleshooting

In the following table, there are probable causes and solutions to the problems that you may encounter.

If you encounter an issue that is difficult to solve even after having read through this trouble shooting section, please call your local dealer, distributor or Wallenstein. Before calling, please have the serial number for your Wood Processor handy.

Problem	Cause	Solution
Winch motor does not move	Rope jammed	Disengage winch gears, pull rope out and guide rope on to the spool when retracting
Rope does not pull out	Winch gears engaged	Disengage winch gears
Rope does not retract	Winch gears disengaged	Engage winch gears
Cylinder rod moves slowly or does not move.	Wood jammed around wedge.	Shut machine off and safely remove wood.
Cylinder rod / Winch motor moves slowly or does not move.	No pressurized hydraulic oil.	Oil filter plugged. Change filter.
	No pressurized hydraulic oil	Low hydraulic oil level, top up
	Not enough pressure.	Call technician, system relief setting may be low.
	Low engine speed.	Check that choke is off, check throttle is set to maximum.
Control handle doesn't go to neutral after rod is fully retracted.	Detent set too tight.	Call technician, adjustment required with detent on valve.
	Hydraulic fluid too cold.	Allow machine to warm up.
	Hydraulic fluid is too old or contaminated.	Change hydraulic fluid and filter
Control handle goes to neutral before rod is fully retracted.	Detent set too loose.	Call technician, adjustment required with detent on valve.
Control handle doesn't go to neutral when released.	Control may be damaged.	Call technician, control may need service or be replaced.
Cylinder stops on contact with wood.	Second stage on pump not functioning.	Call technician, pump may need service or be replaced.
Wedge jumps.	Wedge frame jamming.	Lubricate wedge frame wear plates.
Leaking hydraulic hose.	Hose worn or damaged.	Replace hose.
Leaking cylinder.	Seals worn.	Call technician, seal replacement may be required.
Engine related issues.	Refer to your engine instruction manual for specific trouble shooting instructions / requirements.	

9. Specifications

9.1 Machine Specifications[1]

Model	WP845	WP875
Engine Power / Model	Honda® GX390 Engine, 389 cc	
Hydraulic Pump Flow / Type	22 US gpm (83.2 Lpm) / 2 Stage	
Cylinder Diameter / Stroke	4.50" / 25.75" (121 mm / 654 mm)	4.50" / 37.75" (121 mm / 959 mm)
Splitter Control Valve Type	Dual Valve Open Centre with Auto Cycle Detent	
Full Stroke Splitting Cycle Time	8.2 Seconds	12 Seconds
Splitting Force	25 ton	
Maximum Split Length	27" (69 cm)	39" (99 cm)
Maximum Log Diameter	22" (56 cm)	
Wedge Configuration	Adjustable 4-Way	
Suspension	Torflex® Suspension	
Tire Size / Type	5.30 x 12.00 / Highway Tire	
Ball Hitch Size	2" (50 mm) Ball Coupler and Safety Chains	
Trailer Light Package	Highway Lights and Wiring	
Weight	2035 lb (923 kg)	2273 lb (1 031 kg)
Dimensions Extended (L x W x H)	220" x 60" x 66" (559 cm x 152 cm x 168 cm)	244" x 60" x 66" (620 cm x 152 cm x 168 cm)
Dimensions Folded (L x W x H)	126" x 60" x 79" (320 cm x 152 cm x 201 cm)	161" x 60" x 79" (409 cm x 152 cm x 201 cm)
Winch	Hydraulic, Valve Operated Winch	
Winch Rope Length	50' (15.2 m)	
Winch Pulling Force	1550 lb (703 kg)	
Maximum Discharge Chute Height	54" (1.4 m)	
Hydraulic Reservoir Capacity	6.8 US gal (26 L)	
Winch Strap Length	60" (1,5 m)	
Accessories	Adjustable 6-way Wedge Option	
	Nylon Chain saw Holster	
	48" (1.2 m) Log Peavey	
	Firewood Net Frame	
	Firewood Net	
	Spare Pivoting Chain Saw Adaptor	

1 Specifications subject to change without notice

9.2 Common Bolt Torque Values

Checking Bolt Torque

The tables shown give correct torque values for various bolts and capscrews. Tighten all bolts to the torque values specified in the table, unless indicated otherwise. Check tightness of bolts periodically.

IMPORTANT! If replacing hardware, use fasteners of the same grade.

IMPORTANT! Torque figures indicated in the table are for non-greased or non-oiled threads. Do not grease or oil threads unless indicated otherwise. When using a thread locker, increase torque values by 5%.

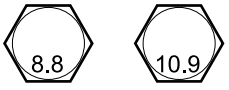
NOTE: Bolt grades are identified by their head markings.

Imperial Bolt Torque Specifications

Bolt Diameter	Torque Value					
	SAE Gr. 2		SAE Gr. 5		SAE Gr. 8	
	lbf•ft	N•m	lbf•ft	N•m	lbf•ft	N•m
1/4"	6	8	9	12	12	17
5/16"	10	13	19	25	27	36
3/8"	20	27	33	45	45	63
7/16"	30	41	53	72	75	100
1/2"	45	61	80	110	115	155
9/16"	60	95	115	155	165	220
5/8"	95	128	160	215	220	305
3/4"	165	225	290	390	400	540
7/8"	170	230	420	570	650	880
1"	225	345	630	850	970	1320

Metric Bolt Torque Specifications

Bolt Diameter	Torque Value			
	Gr. 8.8		Gr. 10.9	
	lbf•ft	N•m	lbf•ft	N•m
M3	0.4	0.5	1.3	1.8
M4	2.2	3	3.3	4.5
M6	7	10	11	15
M8	18	25	26	35
M10	37	50	52	70
M12	66	90	92	125
M14	83	112	116	158
M16	166	225	229	310
M20	321	435	450	610
M30	1,103	1 495	1,550	2 100



9.3 Hydraulic Fitting Torque

Tightening Flare Type Tube Fittings

1. Check flare and flare seat for defects that might cause leakage.
2. Align tube with fitting before tightening.
3. Hand-tighten swivel nut until snug.
4. To prevent twisting the tube, use two wrenches. Place one wrench on the connector body and tighten the swivel nut with the second. Torque to values shown.

If a torque wrench is not available, use the FFFT (Flats From Finger Tight) method.

Hydraulic Fitting Torque					
Tube Size OD	Hex Size Across Flats	Torque value		Flats From Finger Tight	
Inches	Inches	lbf•ft	N•m	Flats	Turns
3/16	7/16	6	8	2	1/6
1/4	9/16	11–12	15–17	2	1/6
5/16	5/8	14–16	19–22	2	1/6
3/8	11/16	20–22	27–30	1-1/4	1/6
1/2	7/8	44–48	59–65	1	1/6
5/8	1	50–58	68–79	1	1/6
3/4	1-1/4	79–88	107–119	1	1/8
1	1-5/8	117–125	158–170	1	1/8

Values shown are for non-lubricated connections.

9.4 Wheel Lug Nut Torque

⚠ CAUTION!

Loose wheel lug nuts can result in broken studs, risking the wheel coming off the axle hub. Keep lug nuts torqued to proper specification.

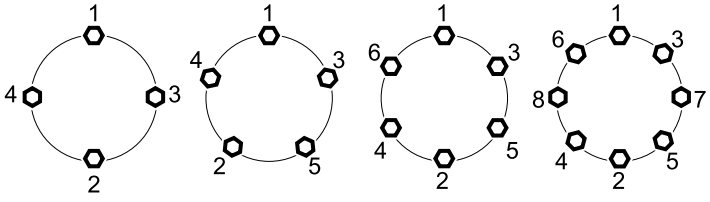
Maintaining proper wheel lug torque on your trailer axle is an extremely important safety measure. Always use a properly calibrated torque wrench.

Torque wheel lug nuts before first road use and after each whe removal. Check and re-torque after the first 10 mi (16 km), 25 mi (40 km), and again at 50 mi (80 km). Check periodicall thereafter.

- Start all lugs by hand to prevent cross threading.
- Tighten lug nuts following the Wheel Lug Torque Pattern. Tighten each set of lug nuts in stages, as shown.

Wheel Lug Nut Torque				
Wheel Size	Units	1st Stage	2nd Stage	3rd Stage
8"	lbf•ft N•m	12–20 16–26	30–35 39–45.5	45–55 58.5–71.5
12"	lbf•ft N•m	20–25 26–32.5	35–40 45.5–52	50–60 65–78
13"	lbf•ft N•m	20–25 26–32.5	35–40 45.5–52	50–60 65–78
14"	lbf•ft N•m	20–25 26–32.5	50–60 65–78	90–120 117–156
15"	lbf•ft N•m	20–25 26–32.5	50–60 65–78	90–120 117–156
16"	lbf•ft N•m	20–25 26–32.5	50–60 65–78	90–120 117–156

Wheel Lug Torque Pattern



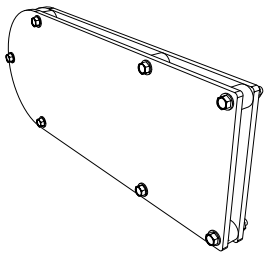
4-Bolt 5-Bolt 6-Bolt 8-Bolt

10. Accessories

Contact your dealer for pricing and availability

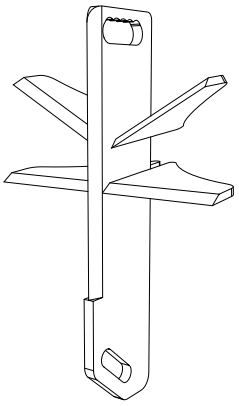
Nylon Chain saw Holster

Safely holds your second chain saw keeping it off the ground and out of the way.



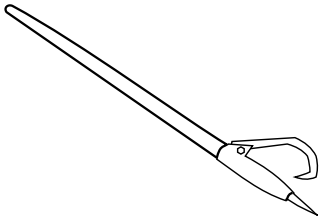
6-Way Wedge

Boost your productivity and make quick work out of chunks by splitting into six pieces at once.



Log Peavey – 48" (1.2 m)

Helps to move those heavy log timbers into position and through the Wood Processor.



11. Product Warranty

LIMITED WARRANTY

Wallenstein products are warranted to be free of defects in materials and workmanship under normal use and service, for a period of

Five Years for Consumer Use

Two Years for Commercial/Rental Use

from the date of purchase, when operated and maintained in accordance with the operating and maintenance instructions supplied with the unit. Warranty is limited to the repair of the product and/or replacement of parts.

This warranty is extended only to the original purchaser and is not transferable.

Repairs must be done by an authorized dealer. Products will be returned to the dealer at the customer's expense. Include the original purchase receipt with any claim.

This warranty does not cover the following:

1) Normal maintenance or adjustments
2) Normal replacement of wearable and service parts
3) Consequential damage, indirect damage, or loss of profits
4) Damages resulting from:
   - Misuse, negligence, accident, theft or fire
   - Use of improper or insufficient fuel, fluids or lubricants
   - Use of parts or aftermarket accessories other than genuine Wallenstein parts
   - Modifications, alteration, tampering or improper repair performed by parties other than an authorized dealer
   - Any device or accessories installed by parties other than an authorized dealer
5) Engines. Engines are covered by the manufacturer of the engine for the warranty period they specify. For the details of your engine warranty, see your engine owner's manual. Information about engine warranty and service is also available in the FAQ section at www.wallensteinequipment.com

rev. Nov-2018

12. Alphabetical Index

S

T

W

WALLENSTEIN

www.wallensteinequipment.com