# FIREWOOD PROCESSORS

DYNA

PRODUCTS



# OPERATOR'S MANUAL Models: SC-15 AUTO-SPLIT SC-16 RAPID-SPLIT Model Year: 2024



#### FACTORY SERVICE AND SUPPORT

888-820-3962 Toll Free 989-823-6200 Local Phone 231-660-7973 Service & Parts 231-734-3681 Fax dynaparts@dyna-products.com 8440 State Rd Millington, MI 48746 USA

Visit our website for a list of US Dealers. www.dyna-products.com



Factory Located in Millington, MI Made in the USA

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#### INTRODUCTION

**THANK YOU** for purchasing your DYNA Firewood Processor. DYNA Products continues to be a market leader in the small to mid-size firewood processor category. Constant innovation, attention to detail, and customer feedback are the main driving forces behind our steady growth.

**IMPORTANT!!** Please read and understand this entire Operator's Manual before setting up and operating your processor. Operators must familiarize themselves with the safety, mechanical and maintenance specifications along with operational instructions to ensure the successful, safe and long lived use of your processor.

If you have any questions, contact us anytime!

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This manual is to provide the owner/operator with specifications and procedures for safety of operations, maintenance, and repair of your DYNA Firewood Processor. Safety should always be kept in mind when this machine is being operated, serviced, stored and transported.



#### WARRANTY INFORMATION

This equipment comes with a 3 year limited warranty. If any product or part is proved to be defective within 3 years from date of purchase, by reason, of improper workmanship and/or material we will replace, or repair at our discretion, the part or product at no charge to you.

To obtain warranty service, the customer must deliver the part or product to the factory address at their expense. A copy of the original sales invoice is required when requesting warranty work.

The warranty is limited to 1 year on the splitter wedge and the conveyor belt. The saw chain is not covered. The KOHLER and HONDA engines are warrantied according to their factory warranty (typically 2 years). The CAT/KOHLER engines are also warrantied according to their vendor. (typically 2 years)

The above warranty does not cover defects caused by modification, alteration, or repair of the part or product in question, by anyone other than the manufacturer. Physical abuse to, or misuse of the product or use or assembly thereof in any manner contrary to the accompanying instructions and will void warranty.

#### DYNA FIREWOOD PROCESSOR LIMITED WARRANTY (EXPLANATION OF APPLICATION)

During the warranty period the manufacturer of the DYNA Firewood Processor will provide the customer replacement or defective parts which qualify for warranty at no charge. It is the customer's responsibility to replace defective parts unless special arrangements are made with selling dealer or with the manufacturer. Labor costs for replacing chains, bearings, all hydraulic components, or any "bolt on" components such as splitter head, splitter back post, log decks, and engine are not reimbursed to customer. Defective parts are to be returned to DYNA Products at the customer's expense.

Any unapproved repairs or modifications attempted by any individual voids all warranty and liability obligations from the manufacturer. It is the customer's responsibility to deliver the machine to a Dealer or engine service center. Arrangements must

#### WARRANTY INFORMATION

first be made with either the manufacturer or the selling dealer. The manufacturer does not normally reimburse the customer for any traveling costs that occur in such cases.

All engine (CAT, KOHLER, or HONDA) warranties are handled through their manufacturer. (typically 2-3 years) These do not come under the warranty covered by DYNA Products. Contact info provided below.

CAT	
KOHLER General Power	
HONDA Pace Equipment	

Proper storage and adequate lubrication is important for this machine. Engine oil and coolant levels must be checked daily. Failure to replace wear parts or maintaining proper adjustments can cause consequential damage. Impairments caused by neglect on any of these issues are not covered by manufacturer's warranty.

Fire or heat damage caused by failure to remove canvas engine cover is not covered by manufacturer's warranty. This refers to damages of any kind to the cover, engine, or any part of the machine.

Transport damages such as road wrecks or any collision of any sort during transit are not covered by manufacturer's warranty.

Bolts and nuts should be checked periodically. All shielding and guarding must be properly installed and functional to keep warranties valid.

#### WARRANTY INFORMATION

Certain wear parts are not covered under this warranty. Saw bar, saw chain, canvas covers, and tires are not covered under any circumstances. Splitting wedge and discharge conveyor belt limited to a 1 year warranty.

Hydraulic components must be returned with all ports plugged or capped. Any contamination within the component will void the warranty. All components must be complete as shipped from factory.

Warranty is only valid when the machine has been operated under normal circumstances and was properly maintained according to manufacturer recommendations. Any damages caused by foreign material or logs that are larger than rated for this model are not covered by this warranty.

Owner agrees while requesting any warranty claims or reimbursements that only replacement parts or repairs of existing defective parts will be provided.

This manual is to provide the machine owner/operator with specifications and procedures for safe operations, maintenance, and repair of this DYNA Firewood Processor. Safety should always be kept in mind as this machine is being operated, serviced, stored and transported. The noteworthy words are described below as each issue is addressed in the following pages.

Noteworthy Word	Likelihood of Occurrence	Degree of Injury or Damage	
	Will occur if warning is ignored	Severe	
	Can occur if warning is ignored	Severe	
	Will or can occur if ignored	Minor or Severe	
NOTICE	Important, but not hazard related	Minor	

This equipment was designed and manufactured with safety in mind. This by itself will not prevent injury. It is the operator's responsibility in practicing good judgment during operation of this machine. It is important that all safety procedures are followed as described in this manual. The operator has the full responsibility to follow all OSHA and ANSI guidelines.

# 

Any person that is intoxicated or mentally impaired by alcohol or any form of drugs must stay at least 100' away from the machine. Any unreasonable and senseless behavior is prohibited anywhere near the general vicinity of the machine. Any person operating the machine in such condition could result in severe injury or death.

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Improper use of this machine can result in severe injury or death. Only qualified personal are allowed to operate this machine. All potential operators must be trained and familiarized with this manual before operating the DYNA Firewood Processor

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It is the responsibility of the owner of this DYNA Firewood Processor to train and qualify the operators of this machine. The owner also assumes the authority and responsibility to insure that all operators are practicing the "Safety of Operation" described in this manual while operating, transporting and servicing this machine. Performing scheduled preventive maintenance and following manufacturer's repair recommendations is the owner's responsibility and the lack thereof can cause machine harm and personal endangerment. Any unapproved modifications or repairs without manufacturers approval will void all warranties and can cause damage to the machine and result in severe personal injury or death.

# NOTICE

The manufacturer of the DYNA Firewood Processor reserves the right to make modifications or changes to this machine without advanced notice. It is the owner's responsibility to stay current with all advancements in safety procedures that are required by the manufacturer of the DYNA Firewood Processor. See more information in the Warranty Section, page 5-7.

#### SAFETY OF OPERATION

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This machine was built and designed with your safety in mind. Your physical well-being is important to us. Decals and guarding were installed on your machine for your safety. It will only serve as your protection if the decals are read, understood, and followed as indicated. Guarding should be left installed and maintained.

All operators or potential operators are to read and understand the complete owner's manual. It is the owner of this machine's responsibility to insure that all individuals operating this machine are properly trained and qualified according manufacturer's recommendations. Any individual who has not read and understood this owner's manual and decals is **NOT** qualified to operate this machine. The operator's safety is dependent on the individual's knowledge of this machine and how to safely operate this machine at full potential.

## 

Almost all accidents occur when proper operator safety procedures are not followed or machine has not been properly maintained and/or adjusted to manufacturer recommendations. Operator mistakes normally occur when the individual has operated the machine for a length of time. After the operator is accustomed to the machine the alertness and cautiousness has a tendency to fade away. Reaching into splitter area while splitter is in motion, steadying the log while feeding log forward or holding onto the wood while saw is in function are some common mistakes made when accidents happen. Usually these mistakes are made by experienced operators. Always maintain the initial operator alertness throughout all the time spent operating this machine.

This machine is intended to be operated by experienced machinery operators. Operator shall also be aware of any additional personnel in the general vicinity. Each person should always know the whereabouts of the other person(s). Operators are to be familiarized with the safety of operation of this manual.

## 

Keep children, bystanders and animals at least 100' away from machine while in operation. Beware of any potential flying pieces of wood from saw or out of the splitting wedge. Logs on the deck also have the potential to fall or possibly roll off causing severe damage to the machine or to the operator and any bystanders.

#### CALIFORNIA

Proposition 65 Warning

Diesel engine exhaust fumes and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

## 

Before starting machine make a circle around your machine. The machine area should be restricted to any by-passers. It is absolutely necessary that the operator has unobstructed access to the machine with no protruding branches, logs, stumps, or uneven ground to cause tripping and possibly result in severe injury. The log deck and discharge conveyor should be secured. Check for loose components, tools, or foreign objects in or on any part of the machine. Check for blown or leaky hoses or disconnected fuel lines. Make sure all caps are on reservoirs or tanks and are tightly secured. Make sure all canvas covers are removed while in operation.

## 

Operator must always be on alert for any potential dangers. Also be watchful for any emergency shut-downs caused by equipment failures or unpredictable sudden harmful situations caused by jammed or falling wood or logs that could result in personal harm or injury. Operator must always be accessible to the controls and shut-down features of the machine.

# 

Always make sure loose clothing and gloves are contained to prevent any danger of snagging on logs, wood and any moving parts. Long hair, neckties, jewelry, shirt tails, loose shirt sleeves or open coats all have potential danger of catching in moving machinery parts or wood. Always make sure shoe strings are properly tied and not in excessive length to prevent tripping and falling in or against machine resulting in severe injury. Never wear shorts, short sleeve shirt or open toed shoes while operating the machine.

Always follow your local OSHA standards in wearing protective equipment. Never operate the machine without the following equipment: safety glasses and face shield, hard hat, hearing protection, strong gloves, long sleeve shirt or coat.

# NOTICE

Decals have been installed on your machine for your own safety and information. It is important that these remain installed at all times. Read and follow all the safety guidelines described on these decals. In the event that any of these decals are damaged, removed, or torn off, replacements should be ordered from the manufacturer.



# 

No person should ever climb onto or into the machine while it is running. Moving parts will cause severe injury if allowed to catch on a person's clothing or a body part. Never ride on the machine while in transit.

# 

Never stand underneath discharge conveyor at any time. Falling wood can potentially injure someone. Do not stand near the woodpile that has accumulated underneath conveyor, since wood has a tendency to avalanche down from the top and potentially hit bystanders. Never stand within 30' of the saw. Wood chips can fly a long way at a high rate of speed. Saw chain can potentially break and fly off the bar. A chain hitting someone will result in severe injury or death. Sometimes as wood is being split, small pieces can fly out of splitting area (especially frozen wood). It is absolutely essential that no person other than the operator is closer than 30' of the splitting area while machine is in operation. Being hit by a piece of flying wood can cause injury and is very dangerous. Never pass underneath log deck while logs are loaded. Falling logs will cause severe injury or death.

# 

After new machine has been in operation for approximately 2 hours, stop machine and go over all the bolts and nuts. Tighten any loose bolts or nuts. Running machine with loose components can potentially cause serious machine failure or harmful situations. Vibration can loosen any fasteners during transport.

## 

After new machine has been in operation for approximately 2 hours, stop machine and go over all hydraulic fittings. Watch for any leakage or oily spots around hose connections. Tighten any fitting that seems to be loose. Beware of potentially hot oil causing serious burns. Always check oil temperature at any time before attempting to work on the hydraulic system. Allow oil to cool down to ambient temperature before doing anything with the system. Never work with hydraulic oil or its components without hand protection and eye protection.

# 

**ALWAYS** remember to remove the canvas cover from engine before starting the engine. Heat from the muffler will ruin the cover and potentially engulf the engine in flames.

# 

Always secure safety chain on the discharge conveyor. Do not use winch cable to support your conveyor. Never stand underneath conveyor even if it isn't running. Failure of the cable winch or safety cable will allow the conveyor to collapse resulting in severe injury. Be sure the log deck leg pins are properly in place before loading logs onto the deck. Log deck will collapse if pins are not in place. Always install safety brackets onto the conveyor before transit.

# 

**NEVER** reach into saw area while engine is running. Saw chain is extremely dangerous if in motion. One can lose body parts by saw before one knows what happened.

**NEVER** reach into splitting area while engine is running. Extreme pressure is applied as splitting ram pushes wood through wedge. Wood will at times snap upward from where ram is pushing against. Hands can potentially be pinched in or be hit by flying wood. As wood passes through splitting wedge, at times the piece will fling off small pieces as it breaks open, or piece will at times completely fly out of the splitter itself. Severe injury or loss of a body part will result if hands are caught or pinched in this action.

**NEVER** reach in around motor chains, deck chains, cables, sprockets, or any moving component of this machine. Never remove any guarding of any kind.

# 

Never attempt to process logs with nails, wire, stones, any kind of hardware or foreign object. These objects can cause breakage of equipment and become a potential missile.

Never attempt to process logs with vines or vine-like materials wrapped around the log. This can result in dragging in body parts or catching onto machine components causing machine damage or personal injury. If vines or branches get wrapped around sprockets or shafts, immediately stop the engine and remove the material.

## 

**NEVER** operate this machine indoors or in any enclosed or unventilated area. Engine exhaust fumes can cause severe sickness or death. Never refuel in an unventilated area or while engine is running. DO NOT SMOKE WHILE REFUELING OR OPERATING THE MACHINE. Be careful to not overfill the fuel tank. Clean up any spilled fuel before starting machine. Follow recommended oil changes for the engine.

# 

Never jump start your engine during freezing temperatures. A frozen battery can be explosive. Always first warm the battery before attempting to use jumper cables. Watch for a bulging battery or ice formation within battery acid. Insure your battery has the proper cold cranking amps while starting in cold conditions. Always keep battery in a ventilated area since battery fumes are explosive. Never allow battery acid to make contact with your skin or clothes since it is extremely corrosive and will severely burn. Never allow battery to be exposed to sparks or open flame. Always use face and hand protection when servicing a battery. Always keep battery in the enclosure on the machine.

## 

Always keep machine well maintained and any broken or worn parts replaced. Never remove any guarding or safety devices from the machine. Replace any shields after one happens to be destroyed or lost.

Before servicing any part of machine, shut engine off and remove key from ignition.



Beware of hot engine muffler or any other component of the machine. Severe burns can result by making contact with a heated part.



Do not slam log deck arms down from raised position. Hinge or pivot bolt could break, consequentially causing severe injury. Keep hands and arms away from the hinge or chains while lowering the deck arms. These are severe pinch points. Beware of deck arm leg sliding out of arm. This will happen if leg is not properly pinned onto the arm. Double check all pins before attempting to raise or lower deck arms. Always make sure deck arm legs are firmly resting on the ground before operating the machine.

## NOTICE

Always lower front stabilizer leg before operating or after parking the machine. Never rely on the jack for machine stability in operation or storage. Always park the machine on level ground. Always keep tire pressure at recommended levels.

## 

Never attempt to operate the machine on any kind of slope. The machine can slowly move or creep away from the proper location causing potential personal injury or equipment damage.

## 

Never operate the the machine without the conveyor safety chain properly hooked. Failure to do so could potentially cause the conveyor to collapse causing injury or death.

# 

Before transporting machine follow the transportation procedures of this manual found in the "Transportation Procedures" section. Always use the correct size ball or hitch coupler. Always fasten safety chains onto hitch by crossing them underneath the tongue. Make sure jack and stabilizer leg is fully retracted and secured. Double check the hitch lock and insure it is properly latched before taking off. Make a round surrounding the machine, double checking that the deck arms are securely pinned, discharge conveyor safety chain is properly hooked, conveyor transport brackets are installed, and there are no loose pieces of wood or tools on the machine. Watch for any dangling machine parts that might be loose or broken. Make sure all caps on tanks are tight and properly secured. Remove keys from ignition to avoid losing them. If equipped with lights, make sure they are working properly. Check tire pressure and make sure wheel lugs are tight.

# 

Operator or any bystander must be a minimum of 30' from machine while logs are loading onto deck. Falling or rolling logs will cause severe injury or possibly death. Personnel loading logs onto deck must very careful and watchful of hitting or hanging forks or bucket on machine or deck. Lowering logs onto deck must be done very slowly and carefully. Always beware that logs will potentially start rolling or falling against machine causing machine damage or injury.

## 

Never climb into the conveyor at any time. Never ride on the conveyor belt while in motion or in transport. Never remove a piece of wood from the conveyor while in operation. Never reach underneath the conveyor while in operation. Never remove any foreign objects such as sticks, bark, branches, slivers or any

kind of material lodged anywhere on the conveyor while the machine is in operation. This refers to the flat rollers, frame, belt, or the bearings. Any contact with a moving belt is always very dangerous and will grab any clothes or body parts, potentially dragging a person into the machine and consequentially causing injury or death.

#### SAFETY IN SET-UP PROCEDURES

## 

Any person that is intoxicated or mentally impaired by alcohol or drugs must stay at least 100 ft. away from the machine. Any unreasonable and senseless behavior is prohibited anywhere near the general vicinity of the machine. Any person operating the machine in such condition will result in severe injury or death.

## 

Improper use of this machine can result in severe injury or death. Only qualified personnel are allowed to operate this machine. All potential operators must be trained and familiarized with this manual before operating this Dyna Firewood Processor.

## 

Be cautious of the site selection which you plan on operating this machine. Absolutely no slope is necessary for both smooth operation and safety of the operator. As logs advance toward saw feed deck and as wood falls into splitter it is essential that the machine is on a level plane.

## 

As you plan your location consider the saw discharge area. The saw will project dust,chips and debris at least 10 feet from machine. This material can caused injury or damage to the eyes. Insure your discharge conveyor will deposit the wood into a safe area, which could potentially fall or avalanche into someone or something which would cause damage or personal injury.

#### The following steps must be taken for each initial set-up:

- 1) Check all the safety decals, gauge, fluid levels and the condition of saw. Replace or replenish as needed.
- 2) Check for any broken or worn parts, chains or hydraulic components. Repair or replace as needed.
- 3) Make sure daily maintenance is up-to-date on engine. Refer to engine manual for daily maintenance instructions.
- 4) Check for any loose nuts and bolts. Watch for any dangling components or hose. Tighten as needed.
- 5) Check all the guarding. Make sure each one is totally functional and intact. Replace or repair any damages.
- 6) Place your machine in a level spot. Point your discharge conveyor into safe location. Insure that your saw discharge is also pointing in a safe direction.
- 7) Lower your front stabilizer leg before lowering the jack. Securely pin the stabilizer leg at the correct height. After stabilizer leg is secured, lower jack until it raises the machine and unhook the hitch from vehicle. After vehicle is removed from the area, lower the machine with the jack until stabilizer leg is bearing approximate equal amount of weight.
- 8) Double check that the machine is level and stabilized in all four corners.
- Remove canvas covers from controls and engine. WARNING Failure to remove cover from engine before starting engine will ruin cover and potentially harm the engine and machine.

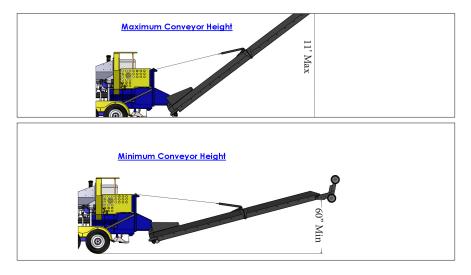
- Make sure everything is clear of the discharge conveyor. Totally remove the two stabilizer brackets from the conveyor. Unhook the safety chain up by the winch and make sure chain is not able to snag anywhere on the machine.
- 11) Carefully lower the conveyor by the cable winch until wheels on upper section rest on the ground and the winch cable has some slack.
- 12) Securely latch the upper section to the lower section. **BEWARE!** Make sure latch handle is fully retracted.
- 13) Raise the conveyor to proper operating height. Do not exceed the angles shown below.
- 14) Hook conveyor safety chain to the hook beside the winch. Lower cable winch until the weight is on the safety chain.
  BEWARE! Never operate the machine without the safety chain properly hooked.
- 15) Remove log deck pin.
- 16) Lower log deck.
- 17) Unpin deck arm legs. Locate right hole in leg so that arm is approximately level horizontally. Re-pin the log deck arm and the leg. **BEWARE!** Insure the small keeper pin is properly secured and lock to the main pin.
- 18) Remove the engine and control panel covers. **BEWARE!** Never install cover on a hot engine. This will ruin the cover and potentially cause fire.
- 19) Before operating the machine, check the saw chain for sharpness. Remove chain and resharpen or replace with another sharp chain if needed. Never operate a machine with a dull chain.
- 20) Go over your daily maintenance check list before operating the machine.
- 21) Follow all safety precautions described in this manual.

#### SAFETY IN TRANSPORT PROCEDURES

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#### Absolutely never attempt to work on a hot machine.

Always allow all components of the machine to reach ambient temperatures before any transport preparations or any maintenance procedures.





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Always make sure the engine muffler and hydraulic pump is cooled down to ambient temperature before installing engine cover. Canvas covers are not under manufacturer's warranty under any circumstances.

- 1) After machine has been cooled to ambient temperatures, remove all lose pieces of wood, bark, branches, and any foreign debris on any part of the machine. Clear all excess wood out of the splitter. Make sure all debris is cleared underneath the machine.
- 2) Unhook safety chain from discharge conveyor. Lower the conveyor down all the way the ground.
- 3) Unlatch the upper and lower sections of the conveyor.
- 4) Winch the conveyor all the way up to transport position. As conveyor is being raised, carefully watch for any obstructions that might hinder the wheels from rolling freely or any obstacles preventing the conveyor from folding together.
- 5) Install the two/four conveyor transport brackets. Make sure the brackets are all secured properly with the locking pins.
- 6) Unpin and raise the log deck legs. Repin at the leg on the highest point possible. Do the same for all of the legs.
- Lift the deck and allow it to swing in against the transport stops. Follow all safety precautions as described previously. Watch out for all pinch points as described on the decals.
- 8) Secure the deck with the safety pin against the transport stops. (Model SC12 support brackets)
- 9) Install the engine and control panel covers.

## SAFETY OVERVIEW

The DYNA firewood processor is a machine that can cause great bodily injury or death to persons operating it incorrectly or those within close vicinity.

It is the operator's responsibility to keep him/herself safe and those around him/her.

Never use the firewood processor for anything but wood processing.

- 🕂 Be sure to always wear hard hat, safety goggles, and safety clothing such as gloves, coats, chaps, boots and ear protection.
- Never reach into the saw area while the machine is running. The chainsaw can cause serious injury.
- Never reach into the splitting area with the machine running. The log splitter ram and wedge can cause serious injury.
- Never stand or walk underneath the conveyor. The conveyor could collapse or falling blocks of wood may hit a person. The conveyor can cause serious injury.
- Never reach into any moving parts of the machine, such as, chains, sprockets, saw bar, splitter ram, wedge, motors, cables and even wood chunks.
- ALWAYS use a safety chain to support the conveyor securely, while conveyor is extended and while traveling in the transport position.
- 🕂 ALWAYS, use safety chains on the hitch and use proper lighting when traveling on a road.
- ALWAYS keep out from under the logs on the deck. They could drop and cause serious injury.
- CAUTION! Maintain full attention on splitting wedge and keep hand on splitter lever while splitting ram is in forward motion.
- Never operate the firewood processor while under the influence of alcohol or drugs

#### SC-15 AUTO-SPLIT • SET UP

#### SETTING UP YOUR FIREWOOD PROCESSOR

Read and understand this entire section for proper and safe set up.

To set up the firewood processor conveyor, follow these steps:

1. Lower the conveyor with the electric winch until the conveyor is completely unfolded

- 2. Snap the locks securely into place, see Fig 1.
- 3. Raise the conveyor to a convenient height, see Fig 2. Then fasten the safety chain.



Fig. 1



Fig. 2

NEVER stand underneath the conveyor.

ALWAYS USE THE SAFETY CHAIN ON THE CONVEYOR!

#### SC-15 AUTO-SPLIT • SET UP CONT'D

ENGINE RPM'S.... Diesel, CAT = 2600 RPMS Kohler Gas = 3700 RPMS

<u>THE HYDRAULIC SYSTEM</u> uses a standard 46 weight hydraulic fluid. Check the oil level daily. It should always be in between the high and low marks on the level gauge. The hydraulic oil tank holds approximately 30 gallons of oil. See Fig 3.Check the level before you run the machine.

The log deck needs to be lowered before the logs can be placed on top. These are serious pinch points and can cause serious injury, see Fig 4. The legs must be dropped to the ground or set on blocks and pinned into place.



Fig. 3



Fig. 4

The logs can now be loaded onto the log deck. Never load logs from the engine side of the machine. It works best to keep the logs single layer high without piling them on top of each other. ALWAYS keep out from under the logs on the deck. They could drop and cause serious injury.

#### SC-15 AUTO-SPLIT • OPERATION OPERATING THE MACHINE

The logs can now be advanced toward the in-feed trough and deposited one at a time.

The joystick controls have appropriate instructions for the travel direction of the chains. See Fig 5. Be sure to use only one function per joystick simultaneously.

The log is then brought into position to the orange marker.

See Fig 6.

Next, pull the lever for the clamp, when it is clamped, the saw will automatically start and travel through the log. The log will drop into the splitter hopper and the lever must be pushed the opposite direction to raise the saw. The clamp will open when the saw reaches the up position.

To split, both doors must be closed. Pressing the start button (the front button) on the right joystick will start the auto cycle. Pressing the stop button (the rear button)will stop the auto cycle and remains stopped till you press the start button again. The left lever is to operate

the splitter in manual mode. You can move the splitter in either direction with the doors open, ONLY if the engine is at idle.

The wedge may be raised to the log's center to maximize the split. Be sure and keep the log centered across the wedge especially with the wedge. NEVER split with excess log mass on a horizontal wedge wing only. This causes excess fatigue on the wing and can bend or break it. The warranty on the wedge is voided if this happens.

While the splitter is returning, you may advance the log into position again. You cannot saw a log while the splitter ram is in motion. These two functions operate independently.



Fig. 5



Fig. 6

#### SC-15 AUTO-SPLIT • OPERATION CONT'D

Your machine is equipped with a dedicated oiler system. Fig 7. Flow control for the dedicated oiler is located on the control panel. See Fig 8. Adjusting this knob counterclockwise will increase flow and clockwise will decrease flow



Fig. 7



#### MAINTENANCE

The Clamp Pressure should be approximately 600 psi. This can be read by completely lowering the clamp. If the pressure is too low, the saw motor will start softly or hesitate. The relief valve for this is located at the top of the control block. See Fig 9.



Fig.9

The Saw Feed Pressure should be set at approximately 95-110 psi. If it is adjusted too high, the saw motor will stick and stall. If it is too low it may feed too slowly or it may pulse. Try to adjust it as high as possible without stalling the saw. The relief valve is is a hand knob located on the side of the control block .



See Fig. 10.

### SC-15 AUTO-SPLIT • MAINTENANCE

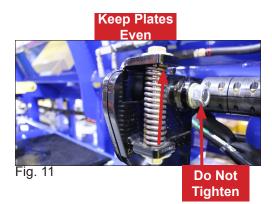
The Splitter Pressure should read 2800 psi to 3000 psi. You can get that reading by stalling the splitter cylinder in the extended position. You can adjust this on the splitter block.

The bearings are sealed bearings and should be greased with one shot of grease every 200 hours of use.

The engine must be maintained according to the instructions of the engine manual.

The saw chain (.404) must be sharpened or replaced whenever it is dull. If it is dull, it will make sawdust instead of chips, and it will pull the bar to the side and cause binding. The hydraulic fluid is standard 46 weight hydraulic fluid. Keep the soft start pivot greased daily. See Fig 11.

Change the hydraulic filter every 250 hours of use. See Fig 12. Check the air filter every 20 hours. Replace them if dirty. Change the engine oil every 50 running hours (Diesels every 250 hours).





### SC-15 AUTO-SPLIT • TROUBLESHOOTING

PROBLEM	SOLUTION
SAW MOTOR STALLS	The pressure on the saw feed cylinder may be too high. It should be approximately 95-110 psi. See Fig. 9. The soft start spring may be set too hard or the saw chain may be dull. Check splitter pressure to make sure it is in correct parameters.
THE SPLITTER STALLS	The pressure may be too low. This should be between 2500-3000 PSI. See Fig. 10.
SAW MOTOR STARTS HESITANTLY OR SLOWLY	The relief valve on the clamp may be set too low. It should be set at 600 psi. See Fig. 9. The aluminum cap on top of the selector valve may need to be cleaned.
SAW LACKS POWER	The relief valve may be set too low on the splitter valve. The aluminum cap on top of the selector valve may need to be cleaned. See Fig.10.
THE SAW BAR DOES NOT CUT ALL THE WAY THROUGH THE LOG	Adjust the sawfeed pressure Replace bar and chain. A worn bar will cause a good chain to bind
THE SAW BAR HITS GUARD WHEN IT RETURNS	The saw bar pivot needs adjustment forward. Check that the softstart plates are even on the top when the sawbar is in the up position. See Fig.11 Adjust the sawfeed cylinder clevis up.
ENGINE STARTS HARD	Use fresh clean fuel. Do not use ethanol type fuels. Check and replace air and fuel filters Check spark plugs(on gas models) Check glow plugs(on diesel models).

#### SC-16 RAPID-SPLIT • SET UP SETTING UP YOUR FIREWOOD PROCESSOR

Read and understand this entire section for proper and safe set up.

To set up the firewood processor conveyor, follow these steps:

1. Lower the conveyor with the electric winch until the conveyor is completely unfolded

- 2. Snap the locks securely into place, see Fig 1.
- 3. Raise the conveyor to a convenient height, see Fig 2.

ANEVER stand underneath the conveyor.

ALWAYS USE SAFETY CHAIN ON CONVEYOR!





### SC-16 RAPID-SPLIT • SET UP CONT'D

Turn the key to the run position.

Wait until the sreen is fully started up, then press and release the center button. The engine will crank and start at this point.

Pressing the increase button once will take it to half throttle. Next press will take it to full RPM.

Pressing the decrease button will decrease the RPM's (2 presses for full range).

E-stop will stop the engine.

The oiler must be turned on at all times to supply oil to the saw bar. You should see a small amount of oil dripping off the chain sprocket. The bar should be getting enough oil to prevent discoloring from overheating. If you get excessive oil, you may experience a spray or mist hitting the operator. This indicates too much oil. The system will automatically apply oil every time the saw bar comes down. You will need to watch the oil level.

<u>THE HYDRAULIC SYSTEM</u> uses 46 weight hydraulic fluid. Keep the oil level checked daily. It should always be in between the high and low marks on the level gauge. The temperature gauge is also on the level. The tank holds 70 gallons of oil. Check the level before you run the machine.

The log decks needs to be lowered before the logs can be placed

on top. Be careful to keep hands away from the hinge points. These are serious pinch points and can cause serious injury, see Fig 3. The legs must be dropped to the ground or set on blocks and pinned into place



#### SC-16 RAPID SPLIT • SET UP CONTD & OPERATION

The logs can now be loaded onto the log deck. Never load logs from the engine side of the machine. It works best to keep the row of logs single without piling them on top of each other. ALWAYS keep out from under the logs on the deck. They could drop and cause serious injurv.

#### **OPERATING THE MACHINE**

The logs can now be advanced toward the in-feed trough and deposited one at a time.

The joystick controls have appropriate instructions for the travel

direction of the chains. See Fig 4. The log is then brought into position to the orange marker. See Fig 5.

Next, pull the lever for the clamp. When it is clamped, the log saw will automatically start and travel through the log. The log will drop into the splitter hopper and the lever must be pushed the opposite direction to raise the saw. The clamp will open when the saw reaches the upper position.

The log is split using the left manual splitter lever or the auto cycle button on the right joystick. The front button will start the auto cycle, making a

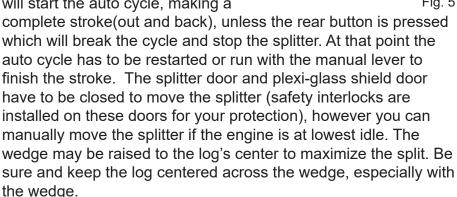




Fig. 4



Fig. 5

#### SC-16 RAPID-SPLIT • OPERATION

**NEVER** split with excess log mass on horizontal wedge wing

only. This causes excess fatigue on the wing and can bend or break it. The warranty on the wedge is voided if this happens.

While the splitter is returning, you may advance the log into position again.

After the wood exits the splitter, it will

push itself out onto the conveyor (if supplied). The conveyor may be turned on by the control knob. See Fig. 6 The speed may also be varied by this valve. The conveyor can be adjusted for height with the electric winch. Always be sure to stay away and out from under the conveyor at all times.

#### HYDRAULIC ADJUSTMENTS

The relief valve pressures always adjust higher by turning clockwise or tight.

The Saw Motor Pressure should read 2800 psi. To test this pressure, check while stalling sawing through a large piece. This is adjusted by the relief valve on the relief valve

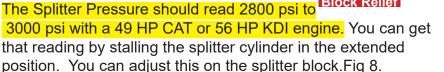
block. See Fig 7.

The Clamp Pressure should be approximately

600 psi. This can be read by completely lowering the clamp at a stall. If this is too low or too high, the saw motor will start softly or hesitantly. The relief valve for this conveyor

is located on the top of the control block. See Fig 13.

Control Fig. 7 Block Relief



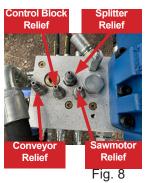




Sawmotor

#### SC-16 RAPID-SPLIT • OPERATION CONT'D







Your machine is equipped with a dedicated oiler system. Fig 11. Flow control for the dedicated oiler is located on the control panel. See Fig 12. Adjusting this knob counterclockwise will increase flow and clockwise will decrease flow.



Fig. 11



#### SC-16 RAPID-SPLIT • MAINTENANCE MAINTENANCE

The Saw Feed Pressure should be set at approximately 90-115

Clamp Relief

psi. If it is adjusted too high, the saw motor will stick and stall. If it is to low it may feed too slowly or it may pulse. Try to adjust it as high as possible without stalling the saw. The

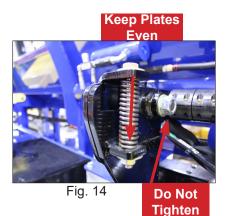
relief valve is a hand knob located on the side of the control block. See Fig 13.

The bearings are sealed bearings and do no need to be greased more



frequently than one pump every 1000 hrs of use. The engine must be maintained according to the instructions of the engine manual. The 404 chain needs to be sharpened or replaced whenever it is dull.

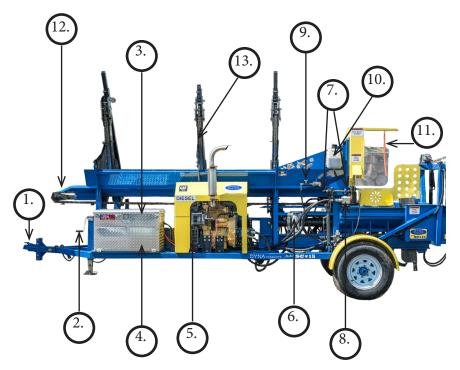
The hydraulic fluid is a standard 46 weight hydraulic fluid. Keep the Soft Start pivot greased daily. See Fig 14. Change the oil and filter every 250 hours of use.



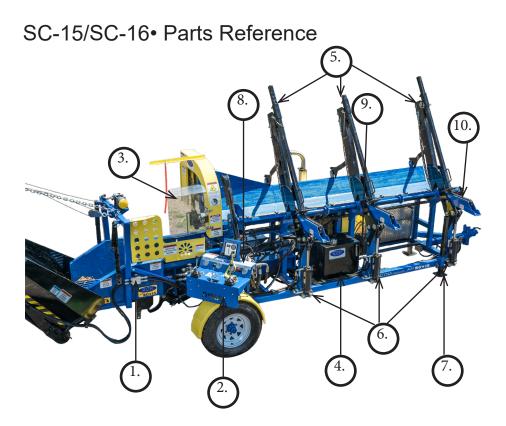
### SC-16 RAPID-SPLIT • TROUBLESHOOTING

PROBLEM	SOLUTION
SAW MOTOR STALLS	The pressure on the saw feed cylinder may be too high. It should be approximately 90- 115 psi. See Fig. 11. The soft start spring may be set too hard. The saw chain may be dull.
THE SPLITTER STALLS	The pressure may be too low. This should be between 2500-3000 psi.
SAW MOTOR STARTS HESITANTLY OR SLOWLY	The relief valve on the clamp may be set too low. It should be set at 600 PSI. See Fig. 11 The engine may not be properly accelerated.
SAW LACKS POWER	The relief valve may be set too low on the splitter valve block.
THE SAW BAR DOES NOT CUT ALL THE WAY THROUGH THE LOG	The saw chain is dull. Check the saw-feed pressure. Make sure it is at 90-115 psi. Replace bar and chain. A worn bar will cause a good chain to bind.
THE SAW BAR HITS GUARD WHEN IT RETURNS	The saw bar pivot needs adjustment forward. Check that the softstart plates are even on the top when the sawbar is in the up position. Adjust the sawfeed cylinder clevis up.
ENGINE STARTS HARD	Check engine glow plugs. Use the block heater in cold weather (if provided). Replace fuel filters. Use fresh, clean, non-bio-diesel fuel
SPLITTER DOES NOT MOVE AT FULL RPM'S	Check the safety doors to make sure they are closed. The splitter will not operate if the doors are open.

SC-15/SC-16• Parts Reference



- 1. Hitch
- 2. Front Jack
- 3. Tool box
- 4. Fuel Tank
- 5. Engine
- 6. Hydraulic Filter
- 7. Saw Motor Assembly
- 8. Saw Motor
- 9. Oil Adjustment Valve
- 10. Bar & Chain Oil Reservoir
- 11. Measurement Bar
- 12. Trough Chain
- 13. Deck Chain #2060 Chain



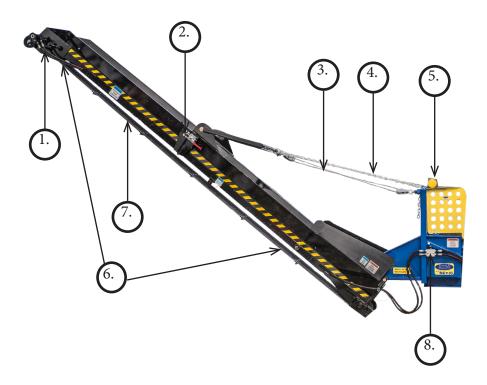
- 1. Conveyor Control
- 2. Control Station
- 3. Safety Shield
- 4. Hydraulic Tank
- 5. Live Deck Legs
- 6. Hydraulic Live Deck Cylinders
- 7. Stabilizer Leg
- 8. Control Block
- 9. Battery
- 10. Deck Chain #2060

#### SC-15/ SC-16• Parts Reference



- 1. Saw Bar
- 2. Clamp
- 3. Wedge
- 4. Splitter
- 5. Wedge Cylinder
- 6. Oiler Pump
- 7. Soft Start
- 8. Selector Valve
- 9. Saw Motor

#### SC-15/ SC-16• Parts Reference



- 1. Conveyor Motor
- 2. Safety Latch
- 3. Winch Cable
- 4. Safety Chain
- 5. Winch
- 6. Transport Safety Bars
- 7. Conveyor Belt
- 8. Conveyor Speed Control

#### Instruction For Sawbar Maintenance

Step 1. First grind the rails on the one side of the sawbar by starting at the tip of the bar (make sure the grinding wheel is in between two teeth of the sprocket) and slowly rotate the saw bar then continue down the sawbar. (Make sure your grinding table is exactly 90 degrees from the grinding wheel.) Check the bar rails for any undercuts in the rails. Grind the bar until all chips or undercuts have disappeared. Flip the bar and do the other side.

Step 2. Make sure chain oil ports in the sawbar are open. A thin wire (i.e. welding wire) and an air nozzle work well if they are plugged.

Step 3. Take a light sanding disc (an angle die grinder works well, but a palm sander or something similar would also work) and sand the edges of the bar to remove all the burs.

Step 4. Take a bar cleaner tool (a Leatherman® multi-tool also works well for this) and clean all the debris out of the bar rails. Now take a spray cleaner (Sprayon® CR757 citrus degreaser or Transtar Autobody Technology®'s Acry Solvent work well) and spray it into the the saw bar rails and sprocket. Now take an air nozzle and blow into the rails and sprocket to remove any metal particles. (If left in the bar, these metal particles will act like sandpaper which would cause damage to your bar, sprocket and chain) The sprocket should turn if you blow onto it with your air nozzle, if it doesn't you should spray more cleaner on the sprocket and work it in a little. The sprocket should now turn freely if you blow onto it. Step 5. Now pour some oil (bar & chain oil or air tool oil both work well) it to the sprocket and along the rails on both sides of the saw bar.

#### CHAIN MAINTENANCE/SHARPENING

• Always set the clamp assembly at 35° for the left-hand side and right-hand side

Always set the grinding head assembly at 60°

• Always use the 3/16 grinding wheel. It will come along with your grinder(Optional diamond grinding wheels are available. Though more expensive it is faster and decreases risk of burning the tooth.)

• Dress your vitrified grinding wheel often to maintain correct shape. (use the dressing brick that will come with your grinder, also use the gauge to check if it is the right shape )(this procedure is not needed with a diamond grinding wheel)

• Always be sure you do not burn the saw-chain tooth. This will weaken the tooth and it will lose its sharpness very quickly. To avoid burning the tooth, use light, intermittent strokes.

#### Continued Chain Maintenance/Sharpening

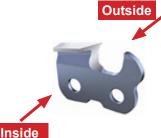
• Sharpen damaged teeth back to undamaged part. Sharpen rest of teeth to the same length.

• Always sharpen the side with the shortest teeth first. To determine this,hold the saw-chain with your left hand, now take hold of the bottom of the chain with your right hand, next bring your right hand up to your left hand, compare the left-hand tooth to the right-hand tooth. Now find the shortest or most damaged tooth on the shortest side. Sharpen this tooth, then sharpen the rest at the same length.

• Always keep cutters at the same length. Due to inaccuracy of your grinder you will need to check your chain after you sharpen the first tooth of the second side. Check to see if it is the same length as the first side by using the procedure noted in above section.

• Setting the depth gauge. Sharpen the tooth before filing the depth gauge. Use an .050 Oregon® depth gauge tool for .404 18HX saw-chain. Check your chain every 3-4 sharpening. Place the tool on top of the saw-chain so that one depth gauge protrudes through the slot in the tool. If the depth gauge extends above the slot, file it down level with the tool with a flat hand file or the intended grinding wheel (included with the grinder). File from the inside of the round ground saw-chain teeth to the outside. See in Fig 1





Notes				

For more information, contact your nearest Dealer or DYNA Products at:

## **DYNA Products**

8440 State Rd Millington MI 48746 USA 888-820-3962 Toll Free 231-734-4433 Local Phone 231-734-3681 Fax dynaparts@dyna-products.com



Model #	
Serial #	
Date Purchased	
Purchased By	