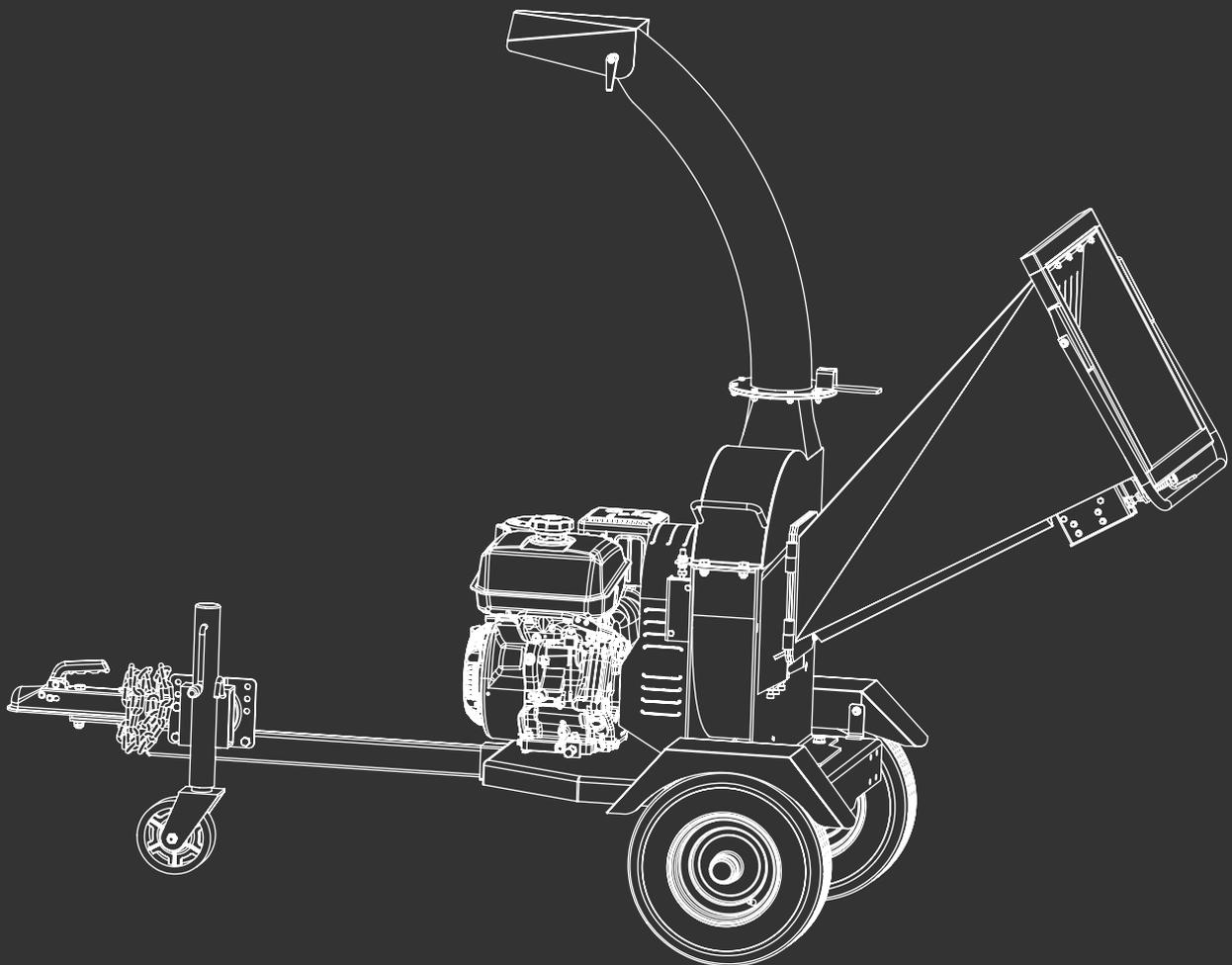


**HYUNDAI**  
POWER PRODUCTS

# **PETROL WOOD CHIPPER HYCH15100TE**

Instruction Manual



## SPECIFICATIONS

<b>Model Number</b>	<b>HYCH15100TE</b>
<b>Engine</b>	<b>Engine Hyundai IC420E</b>
<b>Displacement</b>	<b>420cc</b>
<b>Power</b>	<b>14hp</b>
<b>Chipping capacity</b>	<b>120mm</b>
<b>Weight</b>	<b>260kg</b>
<b>Length</b>	<b>2270mm</b>
<b>Width</b>	<b>1000mm</b>
<b>Height</b>	<b>1655mm</b>
<b>Operating RPM</b>	<b>3600rpm</b>
<b>Type of Fuel</b>	<b>Unleaded Petrol</b>
<b>Starting Method</b>	<b>Recoil/Electric Start</b>
<b>Wheel Tire</b>	<b>4.8" x 8"</b>
<b>Cutting Method</b>	<b>Disc</b>
<b>Diameter</b>	<b>560mm</b>
<b>Thickness</b>	<b>20mm</b>
<b>Bearing</b>	<b>UCF208</b>
<b>Cutter wheel RPM</b>	<b>2000 rpm/min</b>
<b>Knife Numbers</b>	<b>2×knife, 1×anvil</b>
<b>Package Size</b>	<b>105x77x25cm</b>
<b>Gross Weight</b>	<b>270kg</b>
<b>Cutter Disk Drive</b>	<b>Direct Belt Drive 17x900Li Centrifugal Clutch</b>

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## SECTION I - SAFETY



This symbol points out important safety instructions which, if not followed, could endanger the personal safety and/or property of yourself and others. Read and follow all instructions in this manual before attempting to operate your chipper. Failure to comply with these instructions may result in personal injury. When you see this symbol - heed its warning.

**THIS MACHINE IS CAPABLE OF INFLICTING SERIOUS INJURY IF OPERATED IMPROPERLY -- READ WARNINGS & CAUTION LABELS.**

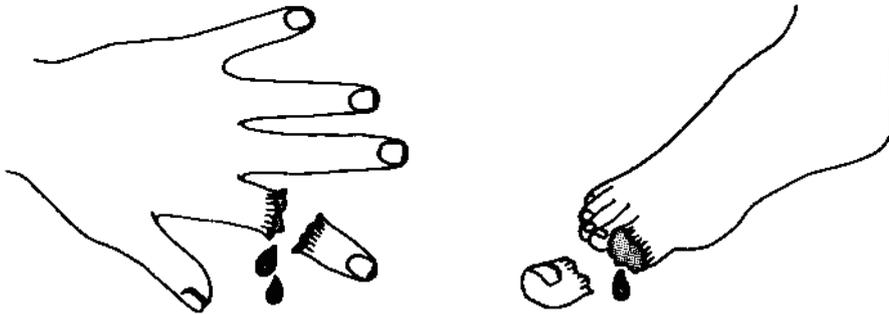
### INTENDED USE

**Never** use your chipper for any other purpose than chipping limbs. It is designed for this use and any other use may cause serious injury.



### **DANGER: Rotating cutting blade.**

Keep hands and feet out of inlet and discharge opening while machine is running.



**DANGER:** This machine can CRUSH, GRIND, CUT, and SEVER parts of your body if they enter the inlet or discharge area of your chipper.



**DANGER:** Your chipper was built to be operated according to the rules for safe operation in this manual. As with any type of power equipment, carelessness or error on the part of the operator can result in serious injury. If you violate any of these rules, you may cause serious injury to yourself or others.



**WARNING:** MAKE CERTAIN THAT ALL SAFETY LABELS ON THIS EQUIPMENT ARE KEPT CLEAN AND IN GOOD CONDITION. IF YOU NEED REPLACEMENT LABELS, ORDER BY PART NUMBER.

**⚠ WARNING ⚠**

**DO NOT FEED ANY MATERIALS INTO THIS EXIT CHUTE.**

**⚠ DANGER ⚠**

**DO NOT OPEN CHIPPER INSPECTION COVER UNTIL THE BLADE HAS STOPPED ROTATING.**

**⚠ WARNING ⚠**

**BATTERY CONNECTION**

Electric Start Model Only

**⚠ DANGER ⚠**

- Read and understand the operator's manual before starting and using unit.
- Keep all shields and guards in place and securely attached.
- Keep hands, feet, face, clothing and long hair out of infeed bin, and discharge chute while the engine is running. Rotating cutting blades inside these openings can cause serious personal injury. Material being processed may bounce back from inlet openings or be thrown from the discharge chute. Long hair or loose clothing may be pulled or sucked into the inlet openings.
- If the chipper jams or becomes clogged, immediately shut off the engine and wait for all moving parts to come to a complete stop before clearing.
- If engine stalls because of a jam, move throttle control lever to stop position or shut off rocker to "0" if equipped before clearing.
- Do not install, remove, adjust, or service the discharge screen or any other part while the engine is running. Blade contact can occur.
- Do not operate on uneven ground where unit is unstable.
- To avoid a fire hazard, keep leaves, grass, and other combustible materials away from hot engine and muffler.
- Keep children and others away from area of operation.
- Wear approved safety glasses, gloves and ear protection.
- Do not operate on pavement, gravel or other hard surfaces since objects can ricochet and cause injury.

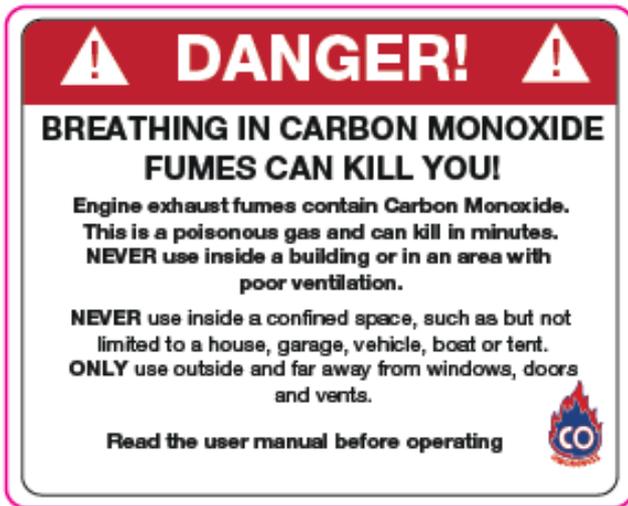
**⚠ WARNING ⚠**

**DO NOT place wood or branches over 12cm in diameter into the infeed bin. The blades may get stuck or jammed.**

**⚠ WARNING: EMERGENCY STOP ⚠**

**REPLACEMENT BELTS**

**! CARBON MONOXIDE**



**! DANGER!**

Engine exhaust fumes contain Carbon Monoxide. This is a poisonous gas and can kill in minutes. NEVER use inside a building or in an area with poor ventilation. NEVER use inside a confined space, such as but not limited to a house, garage, vehicle, boat or tent. ONLY use outside and far away from windows, doors and vents.

**CARBON MONOXIDE IS A COLOURLESS, ODOURLESS GAS. INHALING THIS GAS CAN CAUSE DEATH OR SERIOUS LONG-TERM HEALTH PROBLEMS SUCH AS BRAIN DAMAGE.**

Never operate the engine in a confined space where dangerous carbon monoxide fumes can develop. All ignition operations have to be effected in an open or well-ventilated area. Always remember that exhaust fumes are toxic.

The symptoms of carbon monoxide poisoning can include but are not limited to the following; Headaches, dizziness, nausea, breathlessness, collapsing or loss of consciousness.

Carbon monoxide poisoning symptoms are similar to flu, food poisoning, viral infections and simply tiredness. It is quite common for people to mistake this very dangerous poisoning for something else.

To avoid carbon monoxide poisoning **DO NOT** use Petrol/Diesel powered equipment inside any of the following; Home, garage, tent, camper van, mobile home, caravan or boat. **DO NOT** use in an enclosed area or moving vehicle. This is not exhaustive and if you are in any doubt contact your dealer.

If you think you have or someone around you has been affected by carbon monoxide poisoning; Get them fresh air immediately, by leaving the affected area or by opening doors and windows. If safe and practical to do so make sure that the machine is turned off. **DO NOT** enter a room you suspect of having carbon monoxide present – instead call the emergency services.

Contact a Doctor immediately or go to Hospital – let them know that you suspect carbon monoxide poisoning.

# SAFE OPERATION PRACTICES

## TRAINING

- Read this owner's manual carefully in its entirety before attempting to assemble this machine. Read, understand, and follow all instructions on the machine before operation. **Ensure you are** familiar with the controls and the proper use of the machine before operating it. Keep this manual in a safe place for future and regular reference and for ordering replacement parts.
- Never allow children to operate the unit. Never allow adults to operate the equipment without proper instruction. Only responsible individuals who are familiar with these rules of safe operation should be allowed to use your unit.
- Keep the area of operation clear of all persons, particularly small children and pets. Stop the engine when they are in the vicinity of the unit. Keep work area clean and clear of branches or obstacles, which could cause you to stumble or fall.
- Keep in mind that the operator or user is responsible for accidents or hazards occurring to other people, their property, and themselves.
- Your chipper is a powerful tool, not a plaything. Exercise extreme caution at all times. Your unit has been designed to chip. Do not use it for any other purpose.
- If situations occur which are not covered in this manual, use care and good judgment. Contact your place of purchase for additional assistance.

## PREPARATION

- Thoroughly inspect the area where the equipment is to be used and remove all foreign objects.
- Do not operate the machine without wearing adequate outer garments and safety goggles. Always wear safety glasses or goggles during operation and while performing any adjustment or repair to protect eyes from foreign objects that may be thrown from the machine. Be sure your glasses or goggles fit properly.
- Avoid loose-fitting clothes and use protective footwear that will improve footing on slippery surfaces. Shirt and slacks that cover the arms and legs and steel-toed shoes are recommended. Secure hair above shoulders. Do not wear loose clothes or jewellery that can be caught in moving parts. Never operate a unit in bare feet, sandals or sneakers. Wear gloves when feeding material into the chipper chute. Be sure your gloves fit properly and do not have loose cuffs or drawstring.
- Warning: Fuel is highly flammable and the vapors are explosive. Take the following precautions.
  - Store fuel and oil in approved containers.
  - Keep away from heat and open flame, and out of the reach of children.
  - Refuel outdoors only and do not smoke while refueling.
  - Check and add fuel before starting the engine. Never remove gas cap or add fuel while the engine is running or when the engine is hot. Allow engine to cool before refuelling.
  - If fuel is spilled, do not attempt to start the engine but move the machine away from the area of spillage and avoid creating any source of ignition until fuel vapors have disappeared.
  - Replace all fuel tank and container caps securely.
  - Never store the machine or fuel container inside where there is an open flame or spark, such as a gas hot water heater, space heater, clothes dryer or furnace.
  - To reduce fire hazard, keep engine and muffler free of debris build-up. Clean up fuel and oil spillage. Allow unit to cool at least five minutes before storing.
- Never attempt to make any adjustments while the engine is running.

## ENGINE SAFETY

- This machine is equipped with an internal combustion engine. Do not use on, or near, forest-covered or brush-covered land unless the exhaust system is equipped with a spark arrester meeting applicable local, state, or federal laws.
- A spark arrester, if used, must be maintained in effective working order by the operator
- Never start or run the engine inside a closed area. The exhaust fumes are dangerous containing carbon monoxide, an odorless and deadly gas. Operate this unit only in a well-ventilated outdoor area. (See carbon monoxide safety).
- Do not tamper with the engine in an effort to get it to run at higher speeds. The maximum engine speed is preset by the manufacturer and is within safety limits.
- Keep a fire extinguisher on hand when operating this machine in dry areas as a precautionary measure.
- Never leave the operating position when the engine is running.
- The engine parts get very hot when running, do not touch. Danger of burns.
- Follow the instructions to ignite the engine carefully whilst keeping feet away from moving parts.
- Never incline the machine during ignition. Ignite the machine on a flat surface without obstacles .
- Do not over-rev the engine or change the engine settings.
- Never pick up or carry the machine while the engine is running.
- Stop the engine whenever you leave the machine, or before refuelling, when cleaning or while maintaining. Reduce the throttle setting during engine shut down and, if the engine is provided with a shut-off valve, turn the fuel off at the conclusion of working.
- Do not tilt the machine when starting the engine.

## FUEL SAFETY



CAUTION! ALL FUELS ARE FLAMMABLE AND PETROL VAPOUR IS EXPLOSIVE. TAKE EXTREME CARE WHEN HANDLING FUEL. KEEP FUEL OUT OF REACH OF CHILDREN.

### GENERAL SAFETY

- Do not smoke each time fuel is handled.
- ALWAYS avoid inhaling fumes.
- ALWAYS carry fuel in the correct and clearly marked container.
- ALWAYS wear correct, suitable and fit for purpose Personal Protective Equipment (PPE), suggested items are but not limited to safety gloves and overalls.
- To avoid sparking or arcing, keep grounded conductive objects – such as tools – away from exposed, live electrical parts and connections. These events could ignite fumes or vapors.
- Do not operate the machine with known leaks in the fuel system.
- Fire hazard - keep fuel away from all sources of ignition for example heaters, lamps, sparks from grinding or welding.
- DO NOT carry out hot work on tanks that have contained fuel.
- ALWAYS keep the work area tidy.
- ALWAYS dispose of waste fuels correctly.
- Serious personal injury can occur when petrol is spilled on yourself or your clothes. Rinse your skin and change your clothes immediately.

### SPILLED FUEL

- If you have spilled fuel, make sure you do not attempt to ignite the engine but move the machine away from the area of spilled fuel and avoid creating any source of ignition until the fuel has evaporated and fuel vapours have dissipated.
- When fuel is spilled on yourself or your clothes, wash your skin and change clothes immediately.
- ALWAYS clean up spills promptly using absorbent granules and a lidded bin.

## FUEL SAFETY (CONTINUED)

### FUELING / DE-FUELING

- ALWAYS fuel and de-fuel in a well ventilated area outside of buildings. Use a funnel to add fuel, only outdoors. Do not smoke during this and each time fuel is handled.
- Add fuel before igniting the engine, never remove the fuel tank cap or add fuel whilst the engine is running or when it is hot.
- When de-fueling ALWAYS use a proper fuel retriever.
- Never overfill the fuel tank. Engine heat can cause fuel to expand, never fill the tank to more than 1/2" below the bottom of the filler neck. This will provide space for fuel expansion.
- When refilling or draining the fuel tank, use an approved fuel storage container while in a clean, well-ventilated outdoor area. While adding fuel or operating the unit, do not smoke, and stay away from sparks, open flames, or other sources of ignition near the area of operation.
- Always stop the engine and allow it to cool before filling the fuel tank. Never remove the cap of the fuel tank or add fuel while the engine is running or when the engine is hot.
- Loosen the fuel tank cap slowly to relieve any pressure in the tank.
- ALWAYS keep the handles dry, clean and free of oil and fuel.
- After fueling, ensure to tighten the cap securely.
- Never use the lock-function when filling with fuel.

### STORAGE

- Store fuel in containers specifically designed and approved for fuel storage.
- Store fuel in a cool, well-ventilated area, safely away from sparks, open flames, or other sources of ignition.
- Never store fuel – or a machine with fuel in the tank – inside a building where fumes may reach a spark, open flame, or any other source of ignition (such as a water heater, furnace, or clothes dryer). Allow the engine to cool before storing in any enclosure.
- Replace all fuel tank and container caps securely and wipe up spilled fuel. Never operate the unit without the fuel cap securely in place.

## BATTERIES (WHERE PRESENT)

- Batteries present a risk if they become damaged by the possible leaking of electrolyte. This electrolyte is an acid and can cause serious burn injuries. Care should be taken when working on or near them. NOTE the electrolyte may be in a liquid or gel form.
- Should you come in to contact with electrolyte you should;
  - Remove all clothing contaminated with electrolyte. If you cannot remove then saturate them in water.
  - Get medical assistance as soon as possible.
- You must advise the medical staff of the type of acid
  - Lead/acid battery = dilute sulphuric acid.
  - Nickel/cadmium = potassium hydroxide alkali electrolyte.
- Use fresh running water to wash off excess electrolyte, continue this until medical assistance arrives. Make sure that you do not wash the electrolyte to another part of your body or face.
- If electrolyte comes in to contact with Eyes the electrolyte needs to be immediately washed away with large amounts of water. Make sure that you do not wash the electrolyte to another part of your face or body.
- Gasses from charging batteries are highly flammable and great care should be taken to charge in well ventilated areas.
-  There is an explosion risk if the battery terminals are short circuited, when connecting/disconnecting ALWAYS exercise great care so that the terminals or battery leads are NOT allowed to touch and cause a spark. ALWAYS use suitable insulated tools.

## ELECTRICAL SAFETY (WHERE APPLICABLE)



### **DANGER! ELECTRICITY CAN KILL - NEVER WORK ON LIVE/ENERGISED EQUIPMENT.**

- Prior to carrying out any maintenance work you MUST identify electrical isolation methods and isolate all electrical supplies.
- Prior to use and with all electrical supplies isolated, you MUST check all electrical cables, plugs and connectors for the following:
  - Are intact and have no signs of damage, to include but not limited to bare wires, chaffing, cuts and loose wiring.
  - If there are any signs of damage, the damaged item MUST be taken out of service until the damage has been repaired by an electrically competent person.
  - All trailing cables should be routed so as not to cause any kind of trip hazard.
  - NEVER work on or near electricity with wet hands, wet clothing and wet gloves.

## VIBRATIONS (WHERE APPLICABLE)

- Prolonged use of hand held (operated) machines will cause the user to feel the effects of/from vibrations. These vibrations can lead to white finger (Raynaud's phenomenon) or carpal tunnel syndrome. This condition reduces the ability of the hand to feel and regulate temperature, causing numbness and heat sensations and may cause nerve damage and circulatory tissue death.
- Not all factors that lead to white finger disease are known, but cold weather, smoking and other diseases that affect blood vessels and blood circulation as well as large and long-lasting impact of shocks are considered factors in the formation of white finger. Note the following to reduce the risk of white finger and carpal tunnel syndrome;
  - Wear gloves and keep your hands warm.
  - Take regular breaks.
- All of the above precautions may help reduce the risk of white finger disease but not rule out the carpal tunnel syndrome. Long-term and regular users are therefore recommended to observe the condition of your hands and fingers. Seek medical attention immediately if any of the above symptoms should occur.

## NOISE (WHERE APPLICABLE)

- The operating noise of the machine can damage your hearing. When wearing protection such as earplugs or ear defenders to protect your hearing. Long-term and regular users are advised to have hearing checked regularly. Be especially vigilant and cautious when wearing ear protection because your ability to hear alarm warnings will be reduced.
- Noise emissions for this equipment is unavoidable. Carry out noisy work at approved times and for certain periods. Limit the working time to a minimum. For your personal protection and protection of people working nearby it is also advisable for them to wear hearing protection.
-  See Certificate of Conformity section for Outdoor Noise declaration of conformity.

## INTENDED USE

- The HYCH15100TE is a petrol powered wood chipper from HYUNDAI intended for wood chipping of branches and sticks for personal use in your garden or estate. Only to be towed when off-road. The HYCH15100TE is powered by a 420cc petrol engine. The wood chipper is manufactured according to the latest safety requirements. Every precaution is only effective when it is followed exactly.

## PERSONAL PROTECTIVE EQUIPMENT

**Appropriate Personal Protective Equipment (PPE), MUST be worn at all times when operating or repairing the machine. No protective equipment can ensure 100% protection.**

When selecting PPE, make sure it's CE marked and it suits the user in terms of size, fit, etc. If more than one item of PPE is worn at the same time, make sure they can be used together, e.g. wearing safety glasses may disturb the seal of a respirator, causing air leaks.



### **HAND PROTECTION MUST BE WORN**

Protective electrically non-conductive gloves are highly recommended when working.



### **FOOT PROTECTION MUST BE WORN**

Non-skid heavy duty footwear are highly recommended when working.



### **HEARING PROTECTION MUST BE WORN**

Suitable safety hearing protection is recommended.



### **EYE PROTECTION MUST BE WORN**

Always wear safety glasses/goggles and/or face shields. Everyday eyeglasses have only impact resistant lenses; they are not safety glasses/goggles.



### **PROTECTIVE CLOTHING MUST BE WORN**

Do not wear loose clothing, gloves, scarfs, neckties or jewellery (rings, wrist watches), which can be caught in moving parts.



### **HEAD PROTECTION MUST BE WORN**

Wear a safety helmet with a safety visor.



### **FACE SHIELD MUST BE WORN**

Wear a face shield to protect your face.



### **RESPIRATOR MUST BE WORN**

Wear a respirator.

## OPERATION

- Never place your hands, feet, or any part of your body in the chipper chute, discharge opening, or near or under any moving part while the engine is running. Keep clear of the discharge opening at all times. If it becomes necessary to push material into the chipper chute, use a small diameter stick, NOT YOUR HANDS.
- Keep your face and body back from chipper chute to avoid accidental bounce-back of any material.
- The machine should only be operated on a level surface. Never operate your unit on a slippery, wet, muddy, or icy surface.
- Stay alert for hidden hazards or traffic. Do not carry passengers.
- If the cutting mechanism strikes a foreign object or if your machine should start making an unusual noise or vibration, immediately stop the engine, remove the spark plug wire(s) and wait for all moving parts to come to a complete stop. After the machine has come to a complete stop proceed as follows:
  - Inspect for any damage
  - Repair or replace any damaged parts before restarting and operating the machine.
- Exercise caution to avoid slipping or falling
- If the machine should start to vibrate abnormally, immediately stop the engine, remove the spark plug wire(s) and wait for all moving parts to come to a complete stop and inspect for the cause. Vibration is generally a warning sign of trouble.
- Stop the engine when leaving the operating position, and when making any repairs, adjustments and inspections.
- Take all possible precautions as recommended by the manufacturer when leaving the machine unattended. Stop the engine and remove the key if so equipped.
- Before cleaning, repairing, or inspecting, shut off the engine and make certain the flywheel and all moving parts have come to a complete stop. Disconnect the spark plug wire and keep the wire away from **the** spark plug to prevent accidental starting. Do not use flammable solutions to clean air filter.
- Never run this machine in an enclosed area as the exhaust from the engine contains carbon monoxide, which is an **odourless**, tasteless, and deadly poisonous gas.
- Keep all guards and safety devices in place and operating properly. Do not operate the machine if all safety guards are not in place.
- Do not use the unit with the chipper hopper removed.
- The muffler and engine become hot and can cause a severe burn. Do not touch.
- Keep children and pets away.
  - Tragic accidents can occur if the operator is not alert to the presence of small children.
  - Keep children out of the work area and under the watchful eye of a responsible adult **other than the operator**.
  - Be alert and turn the unit off if a child enters the area.
  - Never allow children to operate the chipper.
- Do not overload or attempt to chip material beyond manufacturers recommendation. **This could result in personal injury or damage to the machine.**
- Never operate the machine at high transport speeds or on hard or slippery surfaces.
- Never allow bystanders near the unit while running.
- Only use accessories approved for this machine by the manufacturer. Read, understand, and follow all the instructions provided with the approved accessory.
- Only operate unit in good daylight. Do not operate unit at night or in dark areas where your vision may be impaired.
- Use extreme caution when reversing or pulling the machine towards you.
- Do not tamper with the engine's governor setting. The governor controls the maximum safe operation speed and protects the engine. Over-speeding the engine is dangerous and will cause damage to the engine and to the other moving parts of the machine. See your **authorised** dealer for engine governor adjustments.
- Start the engine according to the manufacturer's instructions. Keep hands and feet away from inlet and discharge areas.
- Never pick up or carry the machine while the engine is running.
- Do not operate while under the use of alcohol, drugs, or medication. A clear mind is essential for safety.
- Do not allow anyone who is not alert to operate this machine.
- When feeding material into this equipment, be extremely careful that pieces of metal, rocks, or other foreign objects are not included. Personal injury or damage to the machine could result.
- Keep area of discharge clear of people, animals, buildings, glass or anything else that will obstruct clear discharge, cause injury or damage. Wind can also change discharge direction, so be aware.

- Do not allow an accumulation of processed material to build up in the discharge area as this will prevent proper discharge and can result in kick-back from the chipper chute.
- Do not allow any part of the engine, especially around the cooling fans and muffler, to become clogged with processed material, leaves, oil, grease or any other combustible material.
- Do not operate engine if air cleaner or cover over carburetor air-intake is removed, except for adjustment. Removal of such parts could create a fire hazard.
- Do not feed anything into the exit shoot.

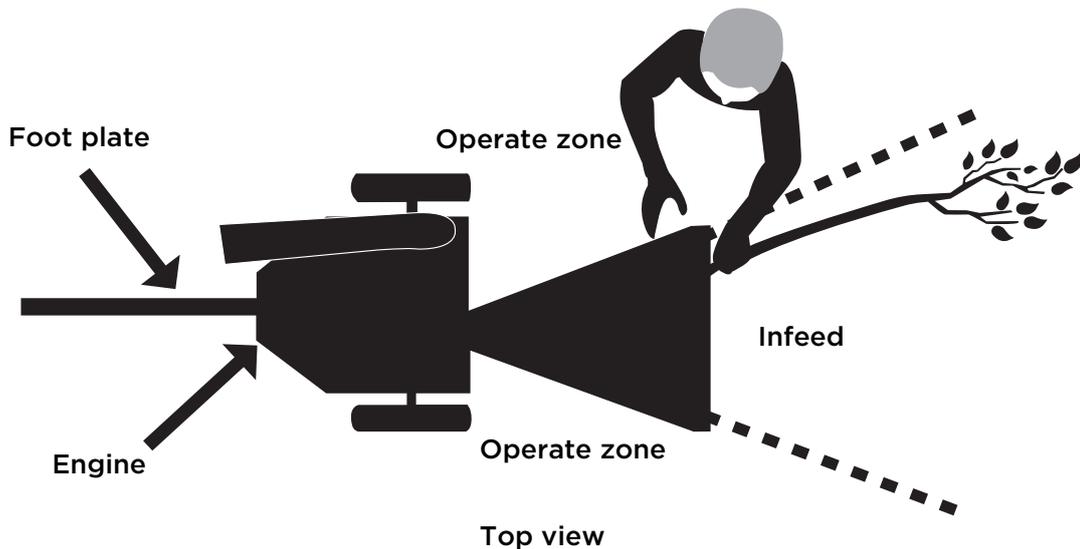
## TOWING

- **For off-road use only**
- Before towing, be certain the chipper is correctly and securely attached to the towing vehicle and the safety chains are in place. Leave slack in the chains to allow for turning.
- Do not allow anyone to sit or ride on the chipper. This can cause serious injury.
- Stay alert for hidden hazards or traffic. Do not carry passengers.
- Never carry any cargo or wood on your chipper. It may fall off and endanger following vehicles. Allow for added length when turning, parking, crossing intersections and in all driving situations.
- **Take** care when backing up; you can easily jackknife your chipper.
- Adjust towing speed for terrain and conditions. Do not exceed **10 MPH** when towing.
- Because there is no suspension on the chipper, it will tend to bounce more on rough roads. Be extra cautious when towing over bumpy or rough terrain including railroad crossings.

## MAINTENANCE AND STORAGE

- Keep machine, attachments and accessories in safe working condition.
- Check engine mounting bolts and other hardware at frequent intervals for proper tightness. Never operate your chipper in poor mechanical condition or when in need of repair. Be sure all safety guards and shields are in proper position. These safety devices are for your protection.
- Never store machine with fuel in the fuel tank inside a building where ignition sources are present, such as hot water and space heaters, clothes dryers and the like. Allow the engine to cool before storing in any enclosure.
- Always refer to the operator's manual for important details if the machine is to be stored for an extended period.
- If the fuel tank is to be drained, do this outdoors.
- Follow the manufacturer's recommendations for safe loading, unloading and storage of machine.
- If it is necessary for any reason to unclog the feed intake or discharge openings or to inspect or repair the machine where a moving part can come in contact with your body or clothing, shut the machine off, allow all moving parts to come to a complete stop, disconnect the spark plug wire(s) and allow the engine to cool before attempting to unclog, inspect or repair.
- Check the knife mounting screws at frequent intervals for proper tightness. Also visually inspect the knife for wear or damage. Replace the knife with parts that meet original equipment specifications.
- Knives should be checked for sharpness and the bolts attaching them to the flywheel for tightness every 8-10 hours of operation.
- Replace the nylock nuts securing the knife every time you replace the knife.
- Check the gap between the knife and wear plate every time you sharpen or replace the knife, or every 8-10 hours of operation.
- Never tamper with safety devices. Check their proper operation regularly.
- Inspect the belt each time you use the unit. Look for damage, worn areas or tears. Do not use the unit if this condition exists.
- Do not tamper with the engine's governor setting. The governor controls the maximum safe operation speed and protects the engine. Over-speeding the engine is dangerous and will cause damage to the engine and to the other moving parts of the machine. See your **authorised** dealer for engine governor adjustments.

- Only operate your chipper from the operator zone.
- Know how to turn your unit off.
- Never move your chipper or leave it unattended with the engine running.
- Follow engine owner's manual for engine maintenance and repair.



## YOUR RESPONSIBILITY

- Restrict the use of this power machine to persons who read, understand and follow the warnings and instructions in this manual and on the machine.

**SAVE THESE INSTRUCTIONS  
FOR FUTURE REFERENCE**



**HAZARD:** This unit is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester applicable to local or state laws (if any). If a spark arrester is used, the operator should maintain it and keep it in effective working order.

## SECTION II - ASSEMBLY INSTRUCTIONS

### PACKAGE CONTENTS

SKID	PARTS BOX	BOLT BAG
CHIPPER	CHIPPER HOPPER	4 EA – 5/16-18 X 3/4" CARRIAGE BOLTS
HITCH ARMS	STAND	4 EA – 5/16-18 NYLOCK NUT
HITCH ASSEMBLY	GLASSES	4 EA – 5/16 USS FLATWASHER
PARTS BOX	OWNER'S MANUAL	2 EA – 1/2-13 X 3" HHCS
	ENGINE MANUAL	4 EA – 1/2-13 X 1 1/4" HHCS
	BOLT BAG	2 EA – 1/2-13 GRIPCO NUT
	WIRE HARNESS	1 EA – 3/16 HAIR COTTER PIN
	10 EA – 14 1/2" CABLE TIES	2 EA – HITCH ARM MOUNTING PLATES
	KNIFE GAUGE	2 EA – ENGINE KEY

### TOOLS REQUIRED FOR ASSEMBLY

- 1/2" Wrench or Socket - 2 required
- 3/4" Wrench or Socket - 2 required

### STEP I - UNPACKING AND CHECKING CONTENTS

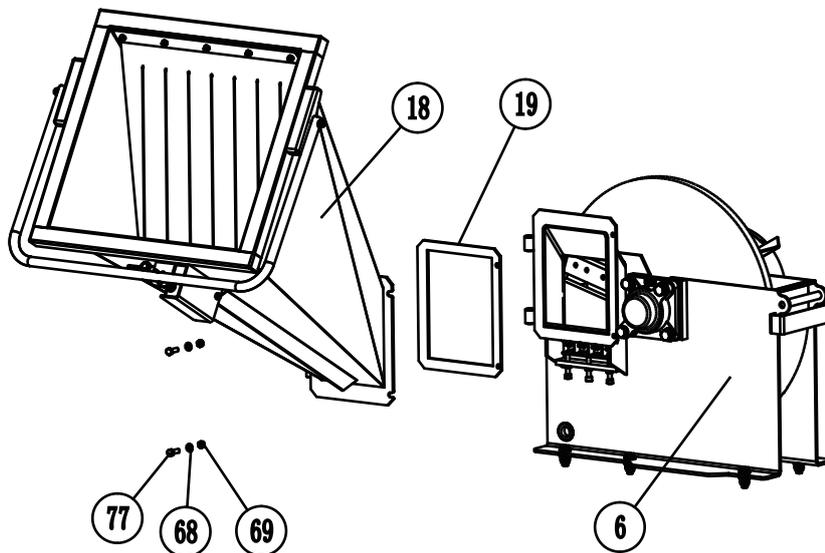
- Remove all the items from the crate.
- After unpacking the crate, compare the contents with the list above.
- If any parts are missing, please contact the supplier directly.
- Assembly should be done on a clean, level surface.

## WOOD CHIPPER ASSEMBLY

Set the shipping crate on a solid flat surface and carefully remove the lid. Use two people and take all parts out of the crate and inspect the components to ensure there are no missing pieces before starting to assemble the log splitter following steps 1 through 3.

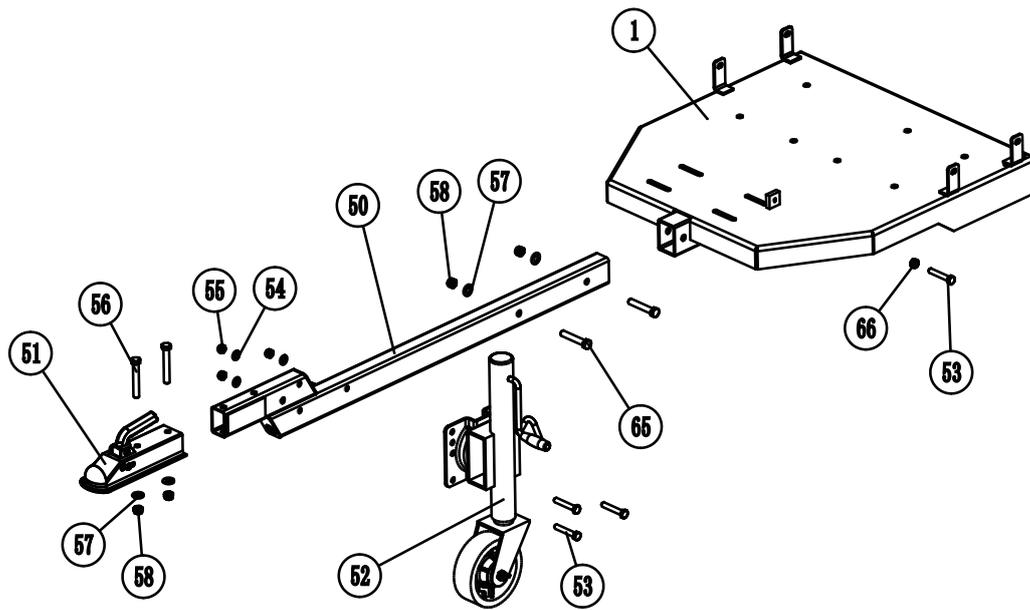
### STEP I - ASSEMBLING THE FEEDING HOPPER

- Assemble feeding hopper (#18) to cutter disk base (#6) using for hex bolt M8x25 (#77), flat washer 8 (#68), and lock nut M8 (#69).
- Put the rubber seal (#19) between the feeding hopper (#18) to cutter disk base (#6).



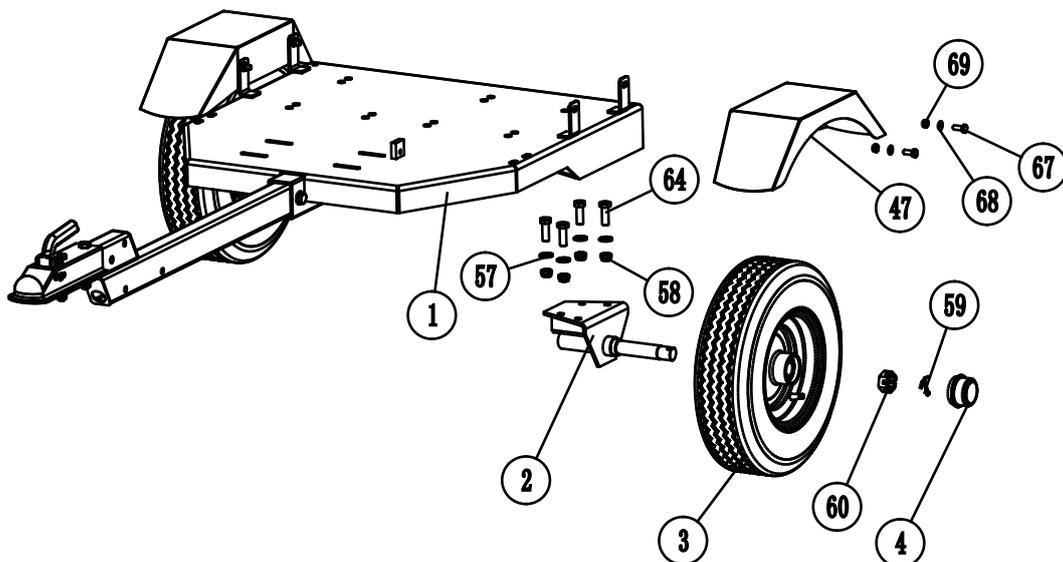
### STEP II - ATTACHING THE HITCH ARMS AND TRAILER HITCH ASSEMBLY

- Attach the coupler (#51) to tow bar (#50), using hex bolt M12x80 (#56), flat washer 12 (#57), and lock nut M12 (#58).
- Attach the tow bar (#50) to chassis (#1), using hex bolt M12x70 (#65), flat washer 12 (#57), and lock nut M12 (#58).
- Attach the jockey wheel (#52) to tow bar (#50), using hex bolt M10x60 (#53), flat washer 12 (#57) and flat washer 10 (#54).



### STEP III - ATTACHING THE TYRE AND TAIL LIGHT FRAME

- Attach the wheel axis (#2) to chassis (#1), using hex bolt M12x70 (#65), flat washer 12 (#57), lock nut M12 (#58).
- On the wheel (#3) to wheel axis (#2), lock the hex slotted nut M24x1.5 (#60) in place using the split pin 4x45 (#59). Install the dust cap (#4) on the end using rubber hammer.
- Attach the fender (#47) to chassis (#1), using hex bolt M8x20 (#67), flat washer 8 (#68), and lock nut M8 (#69).



**BEFORE STARTING ENGINE, ALWAYS CHECK OIL LEVEL!**

**Refer to the engine owner's manual for further details regarding OPERATION AND MAINTENANCE of the engine.**

**NOTE: ENGINE IS SHIPPED WITHOUT OIL! FILL CRANKCASE WITH OIL BEFORE STARTING ENGINE. BE VERY CAREFUL NOT TO ALLOW DIRT TO ENTER THE ENGINE WHEN CHECKING OR ADDING OIL OR FUEL.**

**NOTE: IF YOU START THE ENGINE WITHOUT OIL, THE ENGINE WILL BE DAMAGED BEYOND REPAIR AND WILL NOT BE COVERED UNDER WARRANTY.**

**OIL**

- Use a high quality detergent oil classified "for Service SF, SG, SH, SJ" or higher.
- Do not use special additives.
- Use SAE30 or 15w40 engine oil

## CHECKING AND ADDING OIL

- Check oil level before starting the engine.
- Check level daily, or after every eight hours.
- Keep oil level at FULL mark on dipstick.
- Do not overfill.

**Oil filling procedure:** First add **1100ml** Start and run engine at idle for 30 seconds. Shut engine off and wait 30 seconds. Then add more oil slowly to bring level to 'Full' mark on dipstick.

**Oil checking procedure:** Before starting engine check oil level.

- Place engine level. Clean around oil fill and dipstick.
- Remove dipstick and wipe clean with cloth.
- Push dipstick back in and remove to check oil level.
- Remove oil fill cap. Pour oil slowly.
- Fill to 'Full' line on dipstick - recheck.
- Replace dipstick firmly.

## FUEL

- Use clean, fresh, regular unleaded gasoline with a minimum of 85 octane. Fresh fuel prevents gum from forming in the fuel system or on essential carburetor parts. Purchase fuel in quantity that can be used within 30 days.
- Do not use gasoline which contains Methanol.
- Do not mix oil with gasoline.

**CAUTION:** Some fuels, called oxygenated or reformulated gasoline, are gasoline blended with alcohols or ethers. Excessive amounts of these blends can damage the fuel system or cause performance problems. If any undesirable operating symptoms occur, use gasoline with a lower percentage of alcohol or ether.

## ADDING FUEL

- Fill tank outdoors or in a well-ventilated area, away from sparks, open flames, pilot lights, heat and other ignition sources
- If fuel spills, wait until it evaporates before starting engine.
- Turn engine OFF and let engine cool at least 2 minutes before removing gas cap.
- Remove cap. Fill tank to approximately **25mm** below top of neck to allow for fuel expansion. Be careful not to overfill.
- Replace cap before starting.

## STARTING AND STOPPING

### STARTING AND OPERATING TIPS

- Store and fuel equipment in level position.
- Use fresh fuel.
- Use correct type of oil for expected starting temperature.
- Remove external equipment/engine loads.
- Periodically remove any debris buildup from the machine.
- After engine has started, let it warm up several seconds to several minutes, depending on outside temperature.
- For maximum performance and life, operate engine with choke in RUN and throttle in FAST.

### TO START ENGINE

- Check oil level.
- Open fuel shut-off valve.
- Move choke control to CHOKE position.
- Move throttle to FAST position. Operate engine with throttle in FAST.
- Insert key and turn to START. CAUTION: to prolong starter life, use short starting cycles, 5 seconds maximum, then wait one minute.
- Let engine warm up. Slowly adjust choke control toward RUN position. Wait until engine runs smoothly before each choke adjustment.

### TO STOP ENGINE

- Move throttle to SLOW.
- Turn key to off. Remove key and store out of reach of children.
- Close fuel shut-off valve.

**CAUTION:** Do not stop engine by moving choke control to CHOKE. Backfire, fire or engine damage could occur.

### Operation Notes

- At engine start-up, the engine of your chipper operates under no load until approximately 1200-1400 RPM'S at which speed the centrifugal clutch engages and begins driving the rotor.
- Proper rotor speed is 2400 RPM +/- 200 RPM.
- When viewed from the operator zone, the flywheel turns in a clockwise direction. This rotation pulls branches into the chipper.
- Always wear protective gloves and safety glasses during operation of the chipper.
- If it becomes necessary to push material into the chipper hopper, only use a wood stick, never your hands or anything steel.
- Never assume you know where the knife is. You don't know where it is. Always keep hands out of the chipper hopper.
- Keep area of discharge clear of people, animals, buildings, glass or anything else that will obstruct clear discharge, cause injury or damage. Wind can also change discharge direction, so be aware.

## SECTION IV - CHIPPING

**THIS CHIPPER WAS DESIGNED FOR CHIPPING LIMBS OR BRANCHES. NEVER USE THIS MACHINE FOR ANY OTHER PURPOSE AS IT COULD CAUSE SERIOUS INJURY.**

### SAFETY FIRST

- Always wear protective gloves and safety glasses during operation of the chipper.
- Never allow your hands or any part of your body or clothing inside the chipper hopper or discharge area of the chipper.
- Keep all protective guards and warning labels on the machine and in good working condition.
- Always stand clear of the discharge area when the chipper is running.
- Keep your face and body back from the chipper hopper to avoid being struck by any material that may bounce back.
- Keep proper balance and footing while operating the chipper.
- If it becomes necessary to push material into the chipper hopper, only use a wood stick, never your hands or anything steel.
- Never assume you know where the chipper knife is. You do not know where it is.
- Keep area of discharge clear of people, animals, buildings, glass or anything else that will obstruct clear discharge, cause injury or damage. Wind can also change discharge direction, so be aware.
- Always keep hands out of the chipper hopper.
- Never operate the chipper without the chipper hopper in place.
- Do not transport the chipper while the engine is running.
- Do not refuel the engine while it is hot, warm, or running.
- Do not cover the chipper while the muffler is still hot.

### PROCESSING LIMBS OR BRANCHES

- Your chipper can process dry or green material.
- Remove side limbs, branches or twigs from the main branch.
- Feed the branch into the chipper hopper.
- Keep branch at the same angle as the chipper hopper.
- As the branch becomes short and is inside the chipper hopper, finish processing it by pushing it into the chipper with the next branch.
- If branches are 2" or larger in diameter, feed only one branch at a time into the chipper.
- If branches are smaller than 2", more than one at a time can be fed into the chipper.
- Green branches process quicker and easier than dry branches.
- Soft wood processes easier than hard wood.
- When chipping branches, sometimes a tail will be left at the end of the branch (usually green wood) that will increase in length as you chip. To avoid this, rotate or twist the branch as you feed it into the chute.
- Rotating the branch as you feed it into the machine will improve chipping performance.

- USE COMMON SENSE WHEN USING YOUR CHIPPER.
- LEARN TO RECOGNIZE THE CHANGE IN THE SOUND OF YOUR MACHINE WHEN IT IS OVERLOADED.
- BECOME FAMILIAR WITH SUCCESSFUL OPERATING CONDITIONS AND AVOID THOSE THAT CAN OVERLOAD AND DAMAGE THE MACHINE.
- IF THE MACHINE BECOMES JAMMED BY OVERLOADING OR ANY OTHER CAUSE, STOP THE MACHINE IMMEDIATELY.

IF YOU JAM THE MACHINE AND DO NOT STOP THE ENGINE, IT CAN:

- BURN THE BELT
- RUIN THE CLUTCH

THIS DAMAGE CAN BE COSTLY AND IT MAY NOT BE COVERED UNDER WARRANTY. FOR THIS REASON, IT IS IMPORTANT THAT YOU IMMEDIATELY SHUT OFF THE MACHINE IF IT BECOMES JAMMED.

- ONLY YOUR OPERATOR EXPERIENCE WILL TELL YOU HOW FAST TO FEED LIMBS.
- CHECK TO SEE THAT THE FLYWHEEL WILL TURN FREELY BEFORE YOU START THE CHIPPER.
- VISUALLY CHECK CHIPPER KNIFE FOR DAMAGE EACH TIME YOU USE YOUR CHIPPER.
- CHECK KNIFE CONDITION, WEAR PLATE CONDITION, GAP SETTING AND THE NUTS AND BOLTS THAT HOLD THE KNIFE IN PLACE FOR TIGHTNESS EVERY 8-10 HOURS OF OPERATION
- DO NOT ALLOW CHIPS TO BUILD UP WITHIN 3" OF DISCHARGE CHUTE OPENING. MOVE CHIPPER OR PILE AS NEEDED. FAILURE TO DO THIS COULD RESULT IN UNNECESSARY JAMMING OF THE MACHINE.
- TO MOVE PILE OF PROCESSED MATERIAL, USE SPADE, RAKE, OR LONG HANDLE TOOL. NEVER USE YOUR HANDS OR FEET!

## TO FREE A JAMMED FLYWHEEL

- Stop the engine.
- Remove the spark plug wire and keep away from the spark plug.
- Disconnect battery at negative terminal (if so equipped).
- Remove any material left in the chipper hopper.
- Remove the deflector.

**NOTE: Never pry against the knife fan blades when removing blockages or at any other time. This will cause damage to the machine.**

- Check to see if deflector is clogged. If it is, clear with a branch.
- With a wooden stick, loosen and remove any material left in the chipping chamber.
- Reinstall the deflector.
- Reconnect the spark plug wire and battery (if so equipped).
- Start machine and let material in chipping chamber discharge through deflector.
- If chamber doesn't clear and the flywheel is still jammed, repeat above process.
- Be certain chipping chamber is clear before trying to process more material into the chipper.

## SECTION V - MAINTENANCE AND STORAGE

**IMPORTANT:** The knife should be checked for sharpness and the nuts and bolts attaching them to the flywheel for tightness every 8-10 hours of operation.

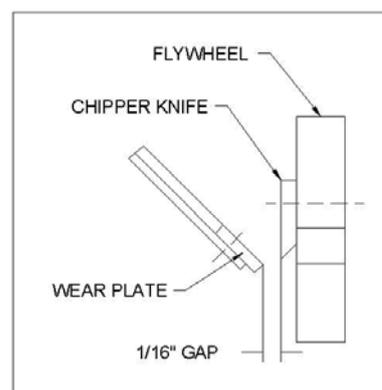
**IMPORTANT:** Every time you perform maintenance or any kind of service or check on the knife, be sure to check the gap between the knife and wear plate for proper setting.

**NOTE:** A knife gauge has been provided with your machine. It is 1/16" thick and should be used to set the correct gap between the knife and wear plate.

If the cutting mechanism strikes any foreign object or if your machine should start making an unusual noise or is vibrating, stop the engine, disconnect spark plug wires from the spark plugs. Allow the engine to cool before you;

- a. Inspect and examine for obvious damage.
- b. Check for loose parts, bolts, and nuts.

1. When not in use, your chipper should be stored out of the reach of children. Be sure there are no gasoline fumes in the storage area. For long periods of storage (over winter), refer to the engine owner's manual.
2. After every 8 hours of operation, lubricate the chipper side and drive side bearings. To do this, wipe all dirt, etc., from the grease fittings with a clean cloth, then apply no more than 3 shots of quality general-purpose grease with a hand-pumped grease gun. Over lubrication can also damage bearings. Also, check the bearing collar set screws regularly to be sure they are tight. If they are loose, reset them with Loctite 243, obtainable at any hardware store.
3. You will find information included referring to operation and maintenance of the chipper engine. Look it over carefully. **BE CERTAIN TO SERVICE THE ENGINE BEFORE YOU START IT.**
4. When the steel chipping knife needs replacing or sharpening, refer to the section on removal, sharpening and re-installation.
5. Care must be exercised when sharpening the knife to maintain the correct bevel and a straight edge. Refer to sharpening directions. When you install a knife, the clearance between the knife and wear plate must be checked and set. This clearance or gap should be set to 1/16" .
6. To adjust this clearance, loosen the four nuts and bolts holding the wear plate in place. The wear plate can be slid up or down (in or out) to achieve the correct gap setting.
7. Take the knife gauge and slide between the knife and wear plate. If the gap is set correctly, the knife gauge will lightly touch both the knife and wear plate. If the gap is too small, you will not be able to get the gauge between the knife and wear plate. If the gap is too large, there will be excess room between knife gauge, knife and wear plate. Tighten the nuts and bolts when the wear plate is in the correct position. Be certain the flywheel rotates without hitting anything before starting the chipper.
8. If the gap between the wear plate and the knife is not set correctly, you will have excessive vibration when chipping and the blade will seem to be dull. This should be checked every 8-10 hours of operation.
9. If at any time it becomes necessary to disassemble the chipper for repairs, the chipper disk must be re-installed in exactly the same position on the rotor shaft.



**NOTE:** Proper gap setting is critical to the proper operation of your machine.

# REMOVAL, SHARPENING AND RE-INSTALLATION OF CHIPPER KNIFE

## HOW TO REMOVE THE KNIFE

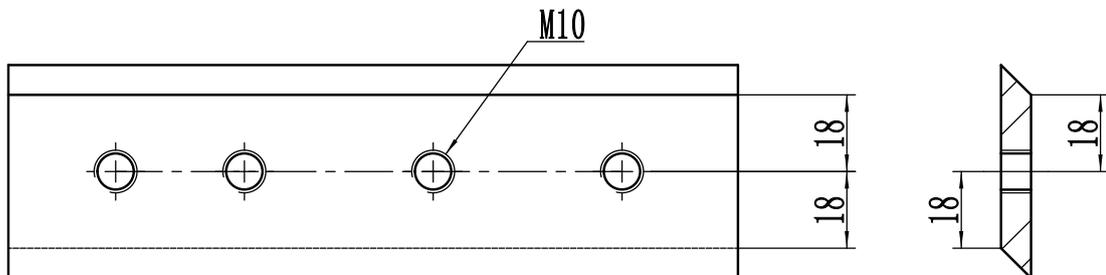
- Stop the engine.
- Open the upper disk housing.
- Rotate the chipper disk until the four countersunk screws and lock nuts attaching the knife to the flywheel are visible through the access doors.
- Remove all four screws and nuts.

## KNIFE SHARPENING

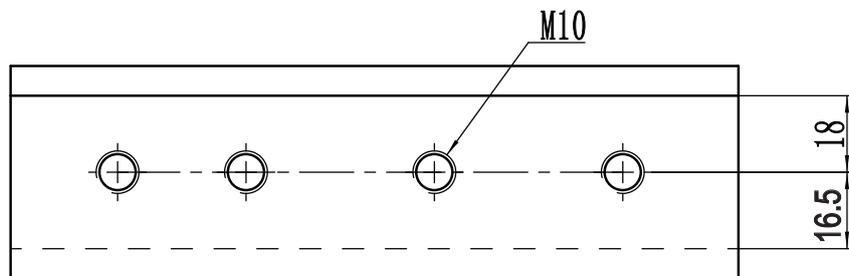
- You should never attempt to sharpen the chipper knife (or knives) freehand.
- It is extremely important that the 45 degree angle be maintained consistently for proper performance.
- The chipper knife should be taken to a machine shop for proper sharpening.
- Excessive heat generated during the sharpening process will damage knives and weaken the metal. Be sure the knife is not overheated.

## KNIFE INFORMATION

- The chipper knife should be checked routinely for sharpness.
- Using a dull knife will decrease performance and cause excessive vibration that will cause damage to the chipper.
- How many times a knife can be sharpened is determined by how much material needs to be taken off to sharpen or to compensate for dents or gouges.
- A new chipper knife has 18mm measurement between the short side bevel edge and the knife mounting holes.



- The knife should never be sharpened to the extent that more than 2.5mm is taken off this measurement.
- Once this measurement is below 16.5mm, the knife should be replaced.
- If you are unable to remove dents or gouges with these guidelines, replace the knife.



## KNIFE INSTALLATION

- Clean chipper disk where knife is going to be attached.
- Visually inspect the chipper disk slot and knife mounting area and be sure they are clean and that the knife will be able to mount flush against the chipper disk.
- Visually inspect and clean the knife.
- Hand tighten the knife to the chipper disk with bolts and nylock locking nuts. If you are installing a new knife, use the new hardware that comes with the knife when attaching it to the chipper disk.
- Tighten the centre nut and bolt.
- Tighten the outer nut and bolt.
- Tighten the inner nut and bolt.
- Double check all four for tightness one more time.

## WEAR PLATE

- The wear plate should have a square, 90-degree edge, and be free of dents or gouges.
- The wear plate can be sharpened by hand, but as with the knife, do not overheat during the sharpening process. This will change the characteristics of the steel and it should be replaced.
- Check the gap between the knife and wear plate every time any adjustments are done to either piece, or every 8-10 hours of operation.

**AFTER ANY BLADE OR WEAR PLATE MAINTENANCE OR ADJUSTMENT, ROTATE THE CHIPPER DISK BY HAND. WATCH AND LISTEN CAREFULLY FOR ANY UNUSUAL NOISES, CLICKING OR VIBRATION. IF ANY OF THESE ARE DETECTED, INSPECT THE MACHINE FOR DAMAGE, REPAIR OR REPLACE ANY DAMAGED PARTS AND CHECK FOR ANY LOOSE PARTS AND RETIGHTEN.**

**KNIVES MUST BE CHECKED AND MAINTAINED!**

**KNIVES MUST BE SHARP!**

**BE SURE TO REINSTALL THE KNIFE CORRECTLY AND DOUBLE CHECK FOR TIGHTNESS! **ALWAYS USE GLOVES.****

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#### **CHANGING OIL**

- Your chipper is equipped with an oil drain valve to make changing the oil easy.
- The valve is located on the engine, on the towing side of the machine.
- Place engine level.
- Disconnect spark plug wires and keep it away from spark plugs. Disconnect battery (if equipped with electric starter) at negative terminal.
- With engine OFF but still warm, open oil drain valve and drain oil into appropriate receptacle.

Note: To open valve, push in and turn counterclockwise.

- Close oil drain valve.
- Remove oil fill cap (if equipped).
- Fill to FULL mark on dipstick with new oil. Do not overfill.

Note: Engine holds approximately 1200ml of SAE30 or 15w40 engine oil when changing oil and filter.

- Replace oil filler cap and dipstick

# INSTRUCTIONS FOR ADJUSTING OR REPLACING BELT

## BELT ADJUSTMENT

The belt on your chipper should deflect 3/8" under three pounds of pressure as shown in figure 1 below. If it doesn't, adjust per the following directions.

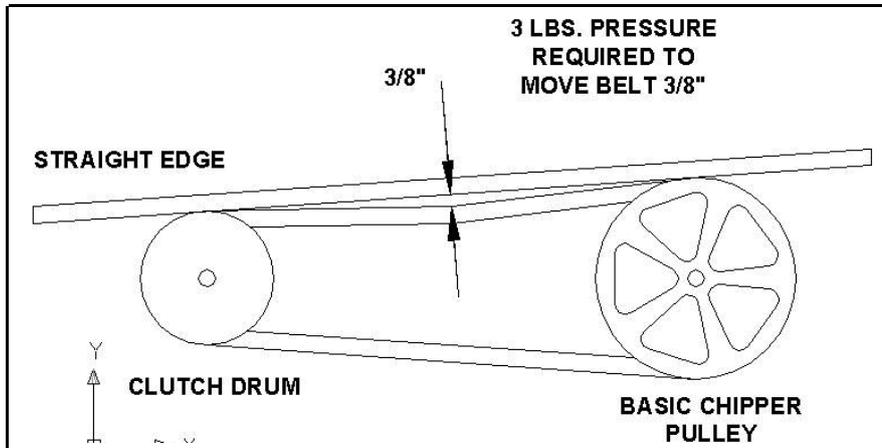


Figure 1

- Remove belt guard.
- Loosen engine bolts.
- Tighten or loosen the nut on the belt tensioner until you have the correct tension as shown in figure 1.
- Retighten engine bolts.
- Check alignment of the clutch (item #47) with the drive pulley (item #22) by placing a straightedge across both faces as shown in figure 2. If adjustment is necessary, correct alignment by moving rotor pulley in or out on the rotor shaft. Do not make adjustment by moving the clutch on the engine shaft.
- Replace belt guard

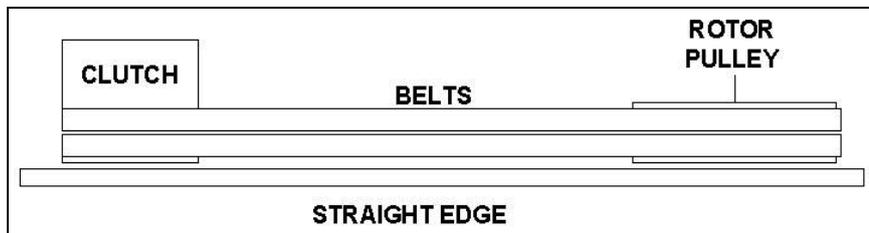


Figure 2

## BELT REPLACEMENT

- To replace the belt, follow the above belt adjustment directions.
- After you have loosened the engine bolts, remove the old belts and replace it with new belts. Always replace both belts as they come in a matched set. This is required for proper operation.
- Set belt tension and alignment per above directions.

**NOTE: Check and re-tighten belts after initial break-in period - one hour of use.**

## CENTRIFUGAL CLUTCH TECH TIPS

**THE SHOES AND SPRINGS ON THE CLUTCH ARE NORMAL WEAR ITEMS. IF YOU NOTICE DECREASED PERFORMANCE OF THE CLUTCH THEY SHOULD BE CHECKED AND REPLACED IF NECESSARY.**

The clutch on your machine is designed for rugged, dependable service. However, it is important to understand the limitations of a clutch. A clutch is designed to provide load-free starting of the engine, and slippage under excessive overloading of the driven application. These features help protect the engine from damages such as broken crankshafts and starters.

The clutch obtains its power from engine RPM's. The lower the engagement speed, and the higher the maintained engine speed, the more torque the clutch can transfer to the driven unit. Do not operate at less than full RPM's.

- At engine start-up, the engine of your chipper operates under no load until approximately 1000-1200 RPM, at which speed the centrifugal clutch engages and begins driving the rotor.
- Proper rotor speed is 2400 RPM +/- 200 RPM.
- Do not tamper with the engine's governor setting. The governor controls the maximum safe operation speed and protects the engine. Over-speeding the engine is dangerous and will cause damage to the engine and to the other moving parts of the machine. See your **authorised** dealer for engine governor adjustments.
- Become familiar with successful operating conditions and avoid those that can overload and damage the machine.
- Do not overload or attempt to chip material beyond manufacturers recommendation. Personal injury or damage to the machine could result.
- Learn to **recognise** the sound of the machine when it is overloaded.
- If the machine becomes jammed by overloading or any other cause, stop the machine immediately.
- If you jam the machine and do not stop the engine, it can:
  - Burn the belt.
  - Ruin the clutch.
- Only your operator experience will tell you how fast you can successfully feed limbs into the machine.
- Clutch damage can be costly and it may not be covered under warranty. For this reason, it is important that you immediately shut off the machine if it becomes jammed.

## **CLUTCH MAINTENANCE**

The centrifugal clutch on this machine is permanently lubricated and does not require oil or grease. If, after long periods of use, the drum wobbles excessively, replace the drum assembly. Always replace shoes and springs in sets. Whenever shoes are changed, replace all springs.

### **CLUTCH REMOVAL**

1. Remove clutch from shaft by removing bolt and washers.
2. Slide clutch off shaft.
3. Remove key from keyway.

### **DISASSEMBLY OF EXISTING CLUTCH**

1. Remove retainer ring and slide off drum assembly.
2. Unhook one spring from its shoe. Use tape wrapped pliers to avoid nicking spring.
3. Carefully note position of shoes. Remove shoes from hub.

### **REASSEMBLE**

1. Locate shoes correctly on hub for rotation required.
2. Place one end of each spring over a shoe pin, stretch spring just enough to clear pin on the other shoe. Use tape wrapped pliers to avoid nicking spring. Avoid over stretching that may damage spring. Repeat for all shoes.
3. Replace washer on hub shaft.
4. Reassemble drum to hub **and** secure with retaining ring.
5. Locate key in keyway of hub.
6. Slide clutch onto crankshaft, then washers.
7. Secure hub by tightening cap screw and allen head set screws.

### **INSTALLATION OF A NEW CLUTCH**

1. Clean shaft and remove any burrs.
2. Apply anti-seize compound to the shaft.
3. Place key in keyway on shaft.
4. Slide clutch onto shaft **and** secure with bolt, flatwasher and lockwasher.
5. Tighten two allen head set screws.

## TROUBLESHOOTING

SYMPTOM	PROBLEM	CORRECTION
Clutch overheats. Belt burns. Flywheel won't turn.	Clutch is slipping or flywheel is jammed or stopped.	<ul style="list-style-type: none"> <li>Immediately stop engine.</li> <li>Remove spark plug wires.</li> <li>Turn flywheel by hand to be sure it turns freely.</li> <li>Check belt tension.</li> <li>Clear chipper chamber.</li> </ul>
Chipping action seems too slow or flywheel stalling.	Engine speed is too slow. Belts are slipping.	<ul style="list-style-type: none"> <li>Run engine at full throttle.</li> <li>Check for loose or missing belt &amp; tighten.</li> </ul>
When chipping, log seems to vibrate excessively & "hammers" hands.	Knife is dull. Gap between knife & wear plate is too great.	<ul style="list-style-type: none"> <li>Remove knife &amp; sharpen - be sure to maintain same bevel of 45 degrees.</li> <li>Adjust gap as per instructions.</li> </ul>
Chipper knife is hitting wear plate.	The gap between the knife and wear plate is set incorrectly.	<ul style="list-style-type: none"> <li>Adjust gap per directions in the front of this section.</li> </ul>
Engine runs but flywheel doesn't rotate.	Inner shoes of clutch worn. Retaining springs weak or broken. Loose drive belt.	<ul style="list-style-type: none"> <li>Replace worn or broken clutch parts.</li> <li>Check belt tension.</li> <li>Clear chipper chamber.</li> </ul>

## LUBRICATION AND MAINTENANCE

OPERATION TIME	PROCEDURE	COMMENTS
BREAK IN	<ul style="list-style-type: none"> <li>• Change engine oil and filter after first five hours.</li> <li>• Check belt tension.</li> <li>• Check all nuts and bolts for tightness.</li> </ul>	<ul style="list-style-type: none"> <li>• Follow oil recommendations per the engine &amp; owner's manual.</li> <li>• Adjust per directions.</li> <li>• Tighten if necessary.</li> </ul>
8 HOURS	<ul style="list-style-type: none"> <li>• Check engine oil.</li> <li>• Check chipper knife for sharpness.</li> <li>• Check knife and wear plate gap.</li> <li>• Clean air filter.</li> <li>• Grease bearings in basic chipper. *</li> </ul>	<ul style="list-style-type: none"> <li>• Per recommendations. Do not overfill.</li> <li>• See knife information.</li> <li>• See gap setting information.</li> <li>• Per engine recommendations.</li> <li>• Use high quality multipurpose lithium grease.</li> </ul>
40 HOURS	<ul style="list-style-type: none"> <li>• Change engine oil. **</li> <li>• Check tire pressure.</li> <li>• Remove and sharpen or replace chipper knife.</li> <li>• Sharpen wear plate.</li> </ul>	<ul style="list-style-type: none"> <li>• Per recommendations. Do not overfill.</li> <li>• Add or adjust as required.</li> <li>• See knife information.</li> <li>• See wear plate information.</li> </ul>
100 HOURS	<ul style="list-style-type: none"> <li>• Replace belt.</li> <li>• Change engine oil.</li> </ul>	<ul style="list-style-type: none"> <li>• Order replacement belts.</li> <li>• Per recommendations. Do not overfill.</li> </ul>
200 HOURS	<ul style="list-style-type: none"> <li>• Change engine oil</li> <li>• Clean and adjust, or replace spark plugs.</li> </ul>	<ul style="list-style-type: none"> <li>• Per recommendations in engine manual.</li> </ul>

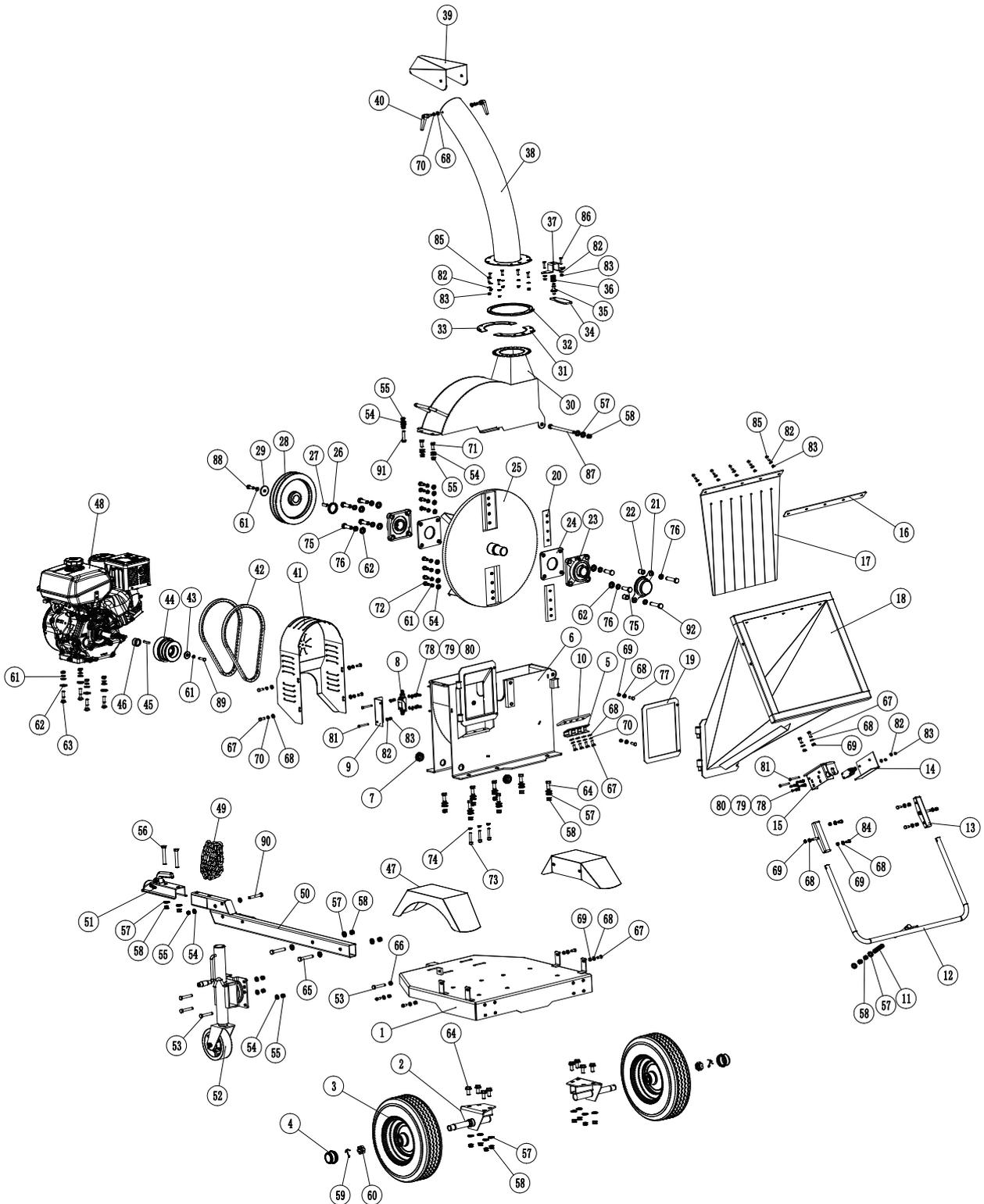
\* No more than 3 shots from a hand grease gun. Do not over-grease as this may damage the bearing.

\*\* Lubrication schedule may vary depending on working environment. Overly dirty and dusty situations will require more frequent oil changes to protect the engine.

## PARTS LIST

No.	Description	Qty.	No.	Description	Qty.
1	Chassis	1	47	Fenders	2
2	Wheel axis	2	48	Hyundai IC420E Engine	1
3	Wheel	2	49	Safety chain	2
4	Dust cap	2	50	Tow bar	1
5	Anvil adjusting plate	1	51	Coupler	1
6	Cutter disk base	1	52	Jockey wheel	1
7	Protective ring	2	53	Hex bolt M10x60	4
8	Switch	2	54	Flat washer 10	23
9	Switch cover	1	55	Lock nut M10	12
10	Anvil	1	56	Hex bolt M12x80	2
11	Spring	1	57	Flat washer 12	30
12	Emergency stop lever	1	58	Lock nut M12	22
13	Stop lever support	2	59	Split pin 4x45	2
14	Switch cover	1	60	Hex slotted nut M24x1.5	2
15	Switch base	1	61	Spring washer 10	14
16	Rubber mounting plate	1	62	Flat washer 14	10
17	Rubber chip baffle	1	63	Carriage bolt M10x45	4
18	Feeding hopper	1	64	Hex bolt M12x30	15
19	In-feed to frame rubber	1	65	Hex bolt M12x70	2
20	Blades	2	66	Hex nut M10	1
21	Bearing cover	1	67	Hex bolt M8x20	14
22	Locating bush	2	68	Flat washer 8	24
23	UCFU208 bearing	2	69	Lock nut M8	14
24	Bearing base	2	70	Spring washer 8	10
25	Chipper disk	1	71	Hex bolt M10x25	2
26	Locating bush	1	72	Hex bolt M10x20	8
27	Flat key	1	73	Hex socket screw M8x45	3
28	Pulley	1	74	Hex nut M8	3
29	Pulley gasket	1	75	Hex bolt M14x45	6
30	Disk cover	1	76	Spring washer 14	8
31	Junction plate 1	1	77	Hex bolt M8x25	2
32	Rotating plate	1	78	Hex bolt M5x12	8
33	Junction plate 2	1	79	Spring washer 5	8
34	Handle	1	80	Flat washer 5	8
35	Handle shaft	1	81	Hex bolt M6x50	4
36	Spring	1	82	Flat washer 6	17
37	Handle support	1	83	Lock nut M6	17
38	Discharge chute	1	84	Hex bolt M8x16	4
39	Deflector	1	85	Hex bolt M6x20	11
40	Clamp handle	2	86	Hex bolt M6x25	2
41	Belt cover	1	87	Hex bolt M12x165	1
42	Belt	2	88	Hex bolt M10x30	1
43	Clutch gasket	1	89	Hex bolt 3/8-24x1	1
44	Clutch	1	90	Hex bolt M10x70	1
45	Engine flat key	1	91	Hex bolt M10x45	1
46	Locating bush	1	92	Hex bolt M14x65	2

# PARTS DIAGRAM



# DECLARATION OF CONFORMITY

## EC Declaration of Conformity

We hereby declare that the machine detailed in this declaration complies to all the relevant provisions of the following EC directives.

- 2006/42/EC The Machinery Directive
- 2014/30/EU Annex II Electromagnetic Compatibility Directive
- 2016/1628/EC The Emission of Gaseous and Particulate Pollutants from internal Combustion engines
- 2000/14/EC Noise Emissions in the Environment by Equipment for use Outdoors.

And is in conformity with the applicable requirements of the following documents:

- EN ISO 12100:2010, EN ISO 14120:2015
- EN ISO 14982:2009
- EN ISO 11688-1:2009

Declaration for 2000/14/EC Noise Emissions in the Environment by Equipment for use Outdoors.

Model	Type	Engine size	Measured Sound Power	Guaranteed Sound Power	Engine speed (rpm)
HYCH15100TE	Petrol wood chipper	420cc	94.3dB(A)	112dB(A)	3400

### Product Details

Brand: Hyundai

Model: HYCH15100TE

Description: Petrol woodchipper

### Name and address of technical documentation holder and EU distributor:

Genpower Ltd, Isaac Way, Pembroke Dock, Pembrokeshire, SA72 4RW, UK.

Signed by:



Roland Llewellyn, Managing Director

Date: 05/01/2021

## CONTACT US

**Our friendly aftersales team will be more than happy to help you.**



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