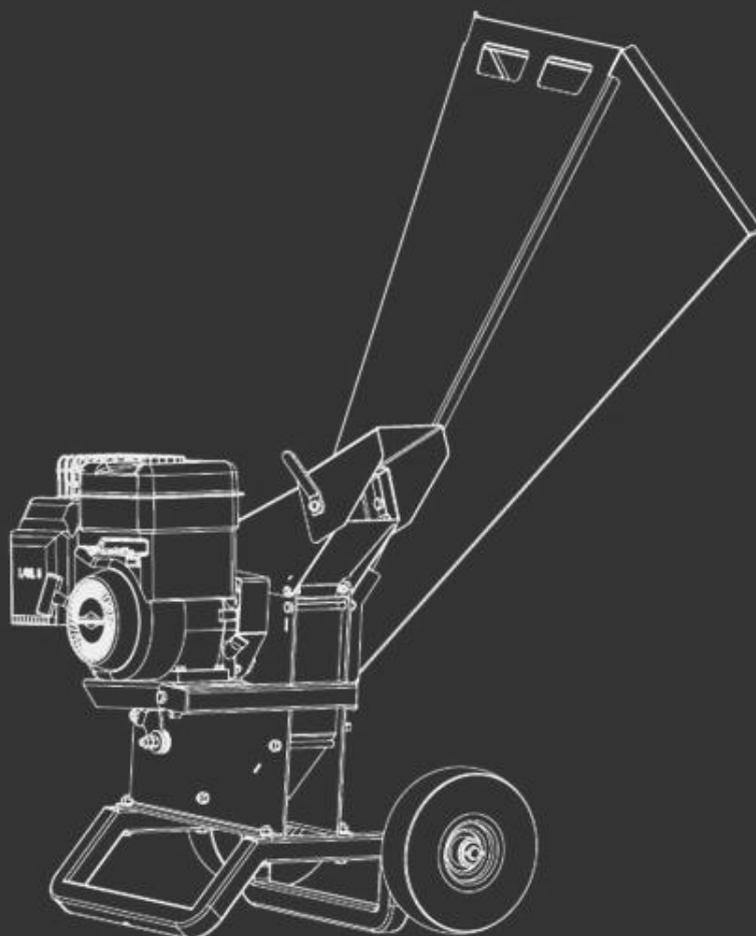


HYUNDAI
POWER PRODUCTS

WOOD CHIPPER HYCH7070

User Manual



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 **NOTE**

Oil has been drained for shipping. Failure to fill engine with oil before starting engine will result in permanent damage and will void engine warranty.

CE

1. SAFETY

1.1. General safety notes.

1.1.1. The operator of the machine is responsible for, and has a duty of care in making sure that the machine is operated safely and in accordance with the instructions in this user manual. Keep the manual safe and pass it on if the machine is loaned/sold to another user.

1.1.2. Please note the following safety points.

1.1.2.1. The machine should NEVER be left it in a condition which would allow an untrained or unauthorised person/s to operate this machine.

1.1.2.1.1. All due care and diligence should be taken by the operator for the safety of, and with regard to, those around whilst using the machine.

1.1.2.1.2. Some or all of the following - warning signs, symbols and/or PPE pictograms may appear throughout this manual. You MUST adhere to their warning/s. Failure to do so may result in personal injury to yourself or those around you.

The FOLLOWING safety notes will help avoid or reduce risk of injury or death.								
 DANGER				 WARNING				 CAUTION
Indicates a hazard, which, if not avoided, could result in serious injury or death.				Indicates a hazard, which, if not avoided, could result in serious injury.				Indicates a hazard which, if not avoided, might result in minor or moderate injury.
 NOTE								
Indicates a situation that could easily result in equipment damage.				READ & Keep the manual safe and pass it on if the machine is loaned/sold to another user.				You MUST fully read instructions to make sure you use and operate machine safely
Appropriate Personal Protective Equipment (PPE) MUST be worn at all times when machine is in use or being repaired.								
 HAND PROTECTION MUST BE WORN	 EYE PROTECTION MUST BE WORN	 PROTECTIVE CLOTHING MUST BE WORN	 HEARING PROTECTION MUST BE WORN	 FOOT PROTECTION MUST BE WORN	 HEAD PROTECTION MUST BE WORN	 RESPIRATOR MUST BE WORN	 FACE SHIELD MUST BE WORN	
ALWAYS keep the working area clear of non-essential people to, include but not limited to, children, the elderly and vulnerable persons. NEVER ALLOW an untrained person to use this machine.								

1.2. Carbon monoxide (where applicable).

1.2.1. Carbon monoxide is a colourless and odourless gas. Inhaling this gas can cause death as well as serious long term health problems such as brain damage.

1.2.2. The symptoms of carbon monoxide poisoning can include but are not limited to the following;

Headaches, dizziness, nausea, breathlessness,
collapsing or loss of consciousness.

1.2.2.1. 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.

1.2.2.2. 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.

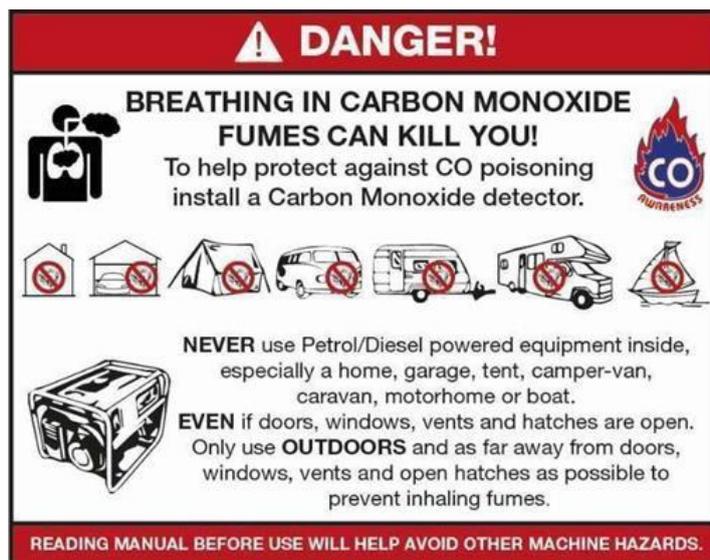
This list is not exhaustive and if you are in any doubt contact your dealer.

1.2.3. If you think you have or someone around you has been affected by carbon monoxide poisoning;

1.2.3.1. 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.

1.2.3.2. Contact a doctor immediately or go to hospital - let them know that you suspect carbon monoxide poisoning.

1.2.4. **DO NOT** use in an enclosed area or a moving vehicle.



1.3. General fuel safety (where applicable).

 **CAUTION** ALL FUELS ARE FLAMMABLE

1.3.1. Fire hazard - keep fuel away from all sources of ignition for example heaters, lamps, sparks from grinding or welding.



Fire Hazard

1.3.2. DO NOT carry out hot work on tanks that have contained fuel it is extremely dangerous

1.3.3. ALWAYS keep work area clean and tidy.

1.3.4. ALWAYS clean up all spills promptly using correct methods i.e. absorbent granules and a lidded bin.

1.3.5. ALWAYS dispose of waste fuels correctly.

1.4. Fuelling/De-fuelling (where applicable).

 **CAUTION** ALL FUELS ARE FLAMMABLE

1.4.1. ALWAYS fuel and defuel in a well-ventilated area outside of buildings.

1.4.2. ALWAYS wear correct, suitable and fit for purpose Personal Protective Equipment (PPE), suggested items are but not limited to safety gloves and overalls.



1.4.3. When fuelling/de-fuelling ALWAYS avoid inhaling fumes

1.4.4. When de-fuelling ALWAYS use a propriety fuel retriever.

1.4.5. ALWAYS carry fuel in the correct and clearly marked container.



Fire Hazard

1.5. Vibrations (where applicable).

1.5.1. 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.

1.5.2. 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 called in the formation of white finger. Note the following to reduce the risk the white finger and carpal tunnel syndrome to reduce:

1.5.2.1. Wear gloves and keep your hands warm

1.5.2.2. Take regular breaks

1.5.3. All of the above precautions may help reduce the risk of white finger disease but not rule out 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.

1.6. Noise (where applicable).

1.6.1. The operating noise of the machine can damage your hearing. Wear hearing 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 hearing protection because your ability to hear alarm warnings will be reduced.

1.6.2. 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.

1.6.3. See CERTIFICATE of CONFORMITY section for Outdoor Noise declaration of conformity.



2. MACHINE SPECIFIC SAFETY

2.1. Introduction.

2.1.1. The wood chipper is a petrol power-driven machine for cutting wood into chips.

2.1.2. Your new wood chipper will more than satisfy your expectations. It has been manufactured under stringent quality standards to meet superior performance criteria. You will find it easy and safe to operate, and with proper care, it will give you many years of dependable service.

2.2. General safety rules.

2.2.1. DO NOT use the machine as a shredder.

2.3. Work area.

2.3.1. NEVER start or run the machine inside a closed area. The exhaust fumes are dangerous, containing carbon monoxide, an odourless and deadly gas. Operate this unit only in a well ventilated outdoor area.

2.4. Personal safety.

- 2.4.1. DO NOT operate the machine while under the influence of drugs, alcohol, or any medication that could affect your ability to use it properly.
- 2.4.2. Dress properly. Wear heavy long trousers, boots and gloves. DO NOT wear loose clothing, short trousers, and jewelery of any kind. Secure long hair so it is above shoulder level. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelery or long hair can be caught in moving parts.
- 2.4.3. Use safety equipment. Wear hearing and eye protection while operating this machine or if you are within 75 feet of this machine. Thrown objects which ricochet can cause serious injury to the eyes.
- 2.4.4. Check your machine before starting it. Keep guards in place and in working order. Make sure all nuts, bolts, etc. are securely tightened.
- 2.4.5. NEVER operate the machine when it is in need of repair or is in poor mechanical condition. Replace damaged, missing or failed parts before using it. Check for fuel leaks. Keep the machine in safe working condition.
- 2.4.6. NEVER remove or tamper with safety device. Check their proper operation regularly.
- 2.4.7. DO NOT use the machine if the engine's switch does not turn it on or off. Any petrol powered machine that cannot be controlled with the engine switch is dangerous and must be replaced.
- 2.4.8. Form a habit of checking to see that keys and adjusting wrenches are removed from machine area before starting it. A wrench or a key that is left attached to a rotating part of the machine may result in personal injury.
- 2.4.9. Stay alert, watch what you are doing and use common sense when operating the machine.
- 2.4.10. DO NOT overreach. DO NOT operate the machine while barefoot or when wearing sandals or similar lightweight footwear. Wear protective footwear that will protect your feet and improve your footing on slippery surfaces. Keep proper footing and balance at all time. This enables better control of the machine in unexpected situations.
- 2.4.11. Avoid accidental starting. Make sure the engine is off before transporting the machine or performing any maintenance or service on the unit. Transporting or performing maintenance or service on a machine with engine on invites accidents.

2.5. Fuel safety

- 2.5.1. Fuel is highly flammable, and its vapours can explode if ignited. Take precautions when using to reduce the chance of serious personal injury.
- 2.5.2. When refilling or draining the fuel tank, use an approved fuel storage container. Always fill & drain fuel whilst in a clean, well-ventilated outdoor. DO NOT smoke, or allow sparks, open flames or other sources of ignition near the area while adding fuel or operating the unit. NEVER fill fuel tank indoors.
- 2.5.3. Keep grounded conductive objects such as tools away from exposed live electrical parts and connections to avoid sparking or arcing. These events could ignite fumes or vapours.
- 2.5.4. 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. DO NOT operate the machine with known leaks on the fuel system.

- 2.5.5. Loosen the fuel tank cap slowly to relieve any pressure in the tank.
- 2.5.6. NEVER over fill fuel tank. Fill tank to no more than 12.5mm (1/2") below the bottom of the filler neck to provide space for expansion as the heat of the engine can cause fuel to expand.
- 2.5.7. Replace all fuel tank and container caps securely and wipe up spilt fuel. NEVER operate the unit without the fuel cap securely in place.
- 2.5.8. NEVER operate the machine without good visibility or light.
- 2.5.9. Avoid creating a source of ignition for spilt fuel. If fuel is spilt, 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 vapours have dissipated.
- 2.5.10. Store fuel in containers specifically designed and approved for this purpose.
- 2.5.11. Store fuel in a cool, well-ventilated area, safely away from sparks, open flames or other sources of ignition.
- 2.5.12. NEVER store fuel or machine with fuel in the tank inside a building where fumes may reach a spark, open flame, or other sources of ignition, such as a water heater, furnace, clothes dryer and the like. Allow the engine to cool before storing in any enclosure.

2.6. Machine use and care.

- 2.6.1. Position the machine in such a way that it cannot move during maintenance, cleaning, adjustment, assembly of accessories or spare parts, as well as under storage.
- 2.6.2. DO NOT force the machine. Use the correct machine for your application. The correct machine will do the job better and safer at the rate for which it is designed.
- 2.6.3. DO NOT change the engine governor settings or over-speed the engine. The governor controls the maximum safe operating speed of the engine.
- 2.6.4. DO NOT run the engine at a high speed when you are not working.
- 2.6.7. DO NOT put hands or feet near rotating parts.
- 2.6.8. This machine has two rotating cutting knives capable of amputating hands and feet and throwing objects. You MUST keep hands and feet out of openings while machine is running. Failure to observe these safety instructions could result in serious injury or death.
- 2.6.9. Avoid contact with hot fuel, oil, exhaust fumes and hot surfaces. DO NOT touch the engine or muffler. These parts get extremely hot from operation. They remain hot for a short time after you turn off the unit. Allow the engine to cool before doing maintenance or making adjustments.
- 2.6.10. If the machine should start to make an unusual noise or vibration, immediately shut off the engine, disconnect the spark plug wire, and check for the cause. Unusual noise or vibration is generally a warning of trouble.
- 2.6.11. Use only attachments and accessories approved by the manufacturer. Failure to do so can result in personal injury.
- 2.6.12. Maintain the machine. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the machine's

operation. If damaged, have the machine repaired before use. Many accidents are caused by poorly maintained equipment.

2.6.13. Keep the engine and muffler free of grass, leaves, excessive grease or carbon build up to reduce the chance of a fire hazard.

2.6.14. NEVER douse or squirt the unit with water or any other liquid. Keep handles dry, clean and free from debris. Clean after each use.

2.6.15. Observe proper disposal laws and regulations for petrol, oil, etc. to protect the environment.

2.6.16. Store idle machine out of the reach of children and DO NOT allow persons unfamiliar with the machine or these instructions to operate it. Machine is dangerous in the hands of untrained users.

2.7. Service.

2.7.1. Before cleaning, repairing, inspecting, or adjusting, shut off the engine and make certain that all moving parts have stopped. Disconnect the spark plug wire, and keep the wire away from the plug to prevent accidental starting.

2.7.2. Have your machine serviced by qualified repair personnel using only identical replacement parts. This will ensure the safety of the machine maintained.

2.8. Identify hazards and risks, and take preventive steps to avoid accidents and minimize risk. Possible hazards include, but are not limited to moving parts, thrown objects, weight of machine and components and the operating environment.

2.9. Work area.

2.9.1. Thoroughly inspect the area to be worked, keep the working area clean and free of debris to prevent tripping. Operate on a flat level ground.

2.9.2. NEVER place any part of your body where it would be in danger if movement should occur during assembly, installation, and operation, maintenance, repairing or moving.

2.9.3. Keep all bystanders, children, and pets at least 23m (75 feet) away. If you are approached, stop the unit immediately.

2.9.4. The operator or user is responsible for accidents or hazards occurring to other people, their property, and themselves.

2.10. Start the engine carefully according to instructions.

2.10.1. Before starting the wood chipper, make sure the feed hopper and cutting housing are empty and free of all debris.

2.10.2. NEVER place your hands, feet, or any part of your body in the chipper hopper, discharge opening, or near or under any moving part while the machine is running. Keep area of discharge clear of people, animals, buildings, glass, or anything else that will obstruct clear discharge, causing injury or damage. Wind can also change discharge direction, so be aware. If it becomes necessary to push materials to the chipper hopper, use a small diameter stick, not your hands.

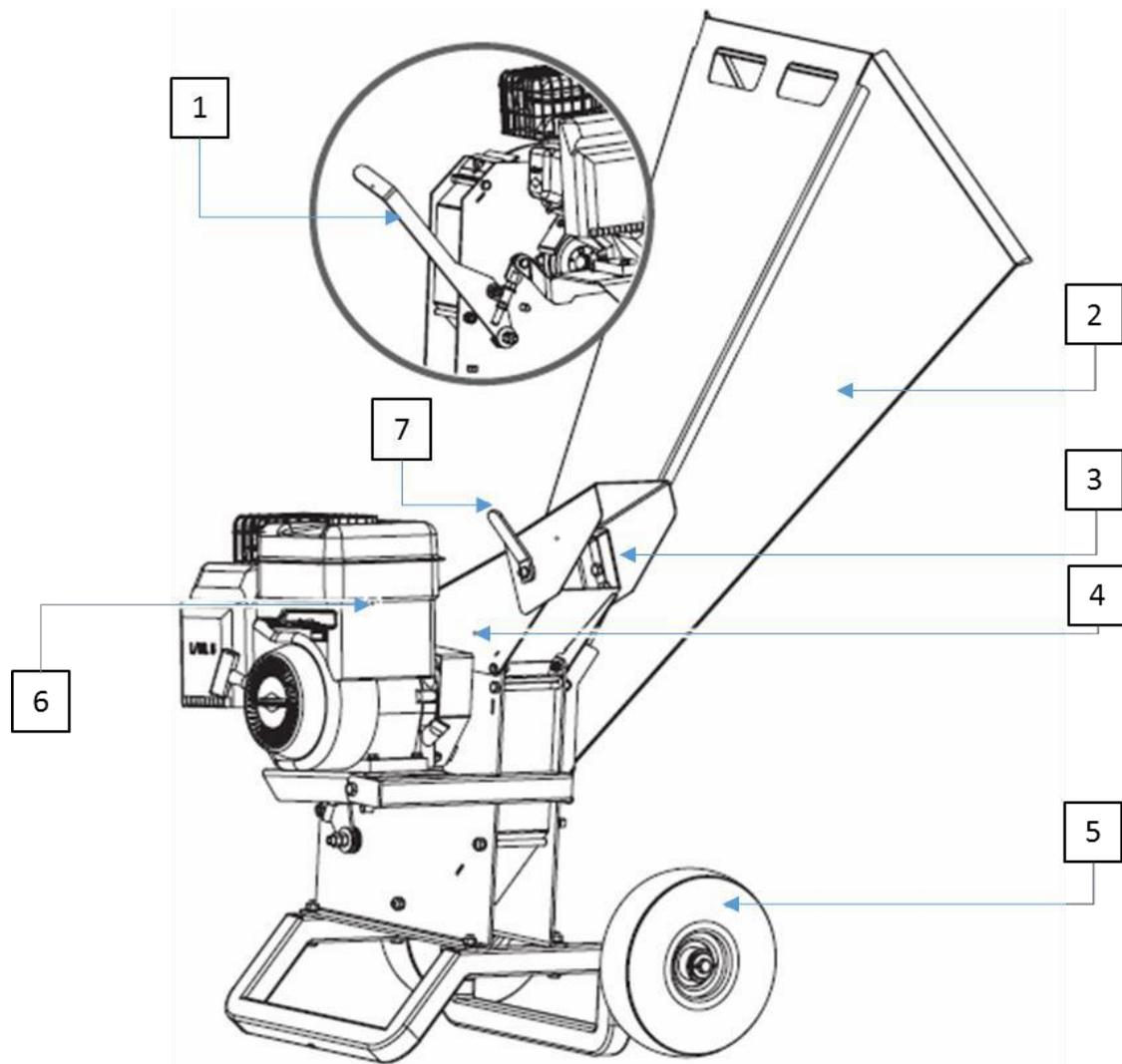
2.10.3. NEVER allow an accumulation of processed material to build up in the discharge area as this will prevent proper discharge and can result in kickback from the chipper hopper.

2.10.4. Keep your face and body back from the chipper hopper and discharge chute to avoid accidental bounce back of any material.

2.10.5. NEVER reach with your hands inside the feed hopper past the rubber flap while operating the machine.

- 2.10.6. NEVER attempt to unclog either the feed hopper or discharge chute while the engine is running. Immediately shut off the engine. Allow the cutting disk to come to a complete stop. Remove the clogged material. Inspect for damage and check for any loose parts for repair or replacement.
- 2.10.7. Whenever you leave the operating position or if you have to remove processed material, leaves or debris from the machine, ALWAYS shut down the engine, disconnect spark plug wires, keeping them away from the spark plugs to prevent accidental starting, and wait for all moving parts to come to a complete stop.
- 2.10.8. DO NOT tilt the machine while the engine is running.
- 2.10.9. ALWAYS stop the engine before moving the machine.
- 2.10.10. ALWAYS make sure that the engine is switched off and that the cutting disk and engine are at a complete standstill and the belt drive is disengaged before opening the cutting disk housing.
- 2.10.11. Keep combustible substances away from the engine when it is hot.
- 2.10.12. NEVER cover the machine while the muffler is still hot.
- 2.10.13. Feed only clean materials into the machine. Foreign matter like soil, sand, grit, stones, pieces of metal, etc. will damage the sharp edge of the cutting knives. Root balls and dead wood will also blunt the blades quickly. Avoid feeding any flax and cabbage tree leaves into the machine as these stringy materials can wrap around the rotor shaft and work their way into the bearing.
- 2.10.14. Avoid feeding short, stubby pieces of wood into the machine, as they tend to bounce and spin in the feed hopper. Feed these short pieces together with longer pieces. After becoming familiar with the machine, prune to suit its capabilities.
- 2.10.15. DO NOT force the branches into this machine. Allow the machine to automatically feed through.
- 2.10.16. NEVER operate the machine on slopes.
- 2.10.17. DO NOT alter or adjust any part of the wood chipper or its engine that is sealed by the manufacturer or distributor. Only a qualified service technician may adjust parts that may increase or decrease governed engine speed.
- 2.10.18. This wood chipper is for off-road use only. NEVER attempt to tow the machine on public highways, roads, or thoroughfares.
- 2.10.19. NEVER operate this machine without feed hopper or discharge chute properly attached to the machine.
- 2.10.20. Move the machine at least 3m away from the refueling point before starting engine.
- 2.10.21. ALWAYS check the oil level of the engine before use.
- 2.10.22. Inspect that all nuts and bolts are tight and well connected to ensure the safety and reliability of this machine prior to any operation.
- 2.10.23. Inspect the air pressure in the tires prior to use and pay attention to sharp objects when moving the machine to prevent the tires from being pierced.
- 2.10.24. Since some parts of the machine are made of plastic or rubber materials, it should be kept away from any chemical article to prevent a chemical reaction from occurring.

3. PARTS LOCATIONS & CONTROLS



1 – Belt tension lever	2 – Feed hopper	3 – Deflector
4 – Discharge chute	5 – Transport wheels	6 – Engine
7 – Deflector lever		

3.1. Fuel valve control.

3.1.1. The fuel valve opens and closes the passage between the fuel tank and the carburetor. The fuel valve lever must be in the ON position for the engine to run. When the engine is not in use, leave the fuel valve lever in the OFF position to prevent carburetor flooding and to reduce the possibility of fuel leakage.

3.2. Throttle control.

3.2.1. The throttle lever controls engine speed. Moving the throttle lever makes the engine run faster or slower.

3.3. Engine switch.

3.3.1. The engine switch enables and disables the ignition system. The engine switch must be in the ON position for the engine to run. Turning the engine switch to the OFF position stops the engine.

3.4. Choke lever.

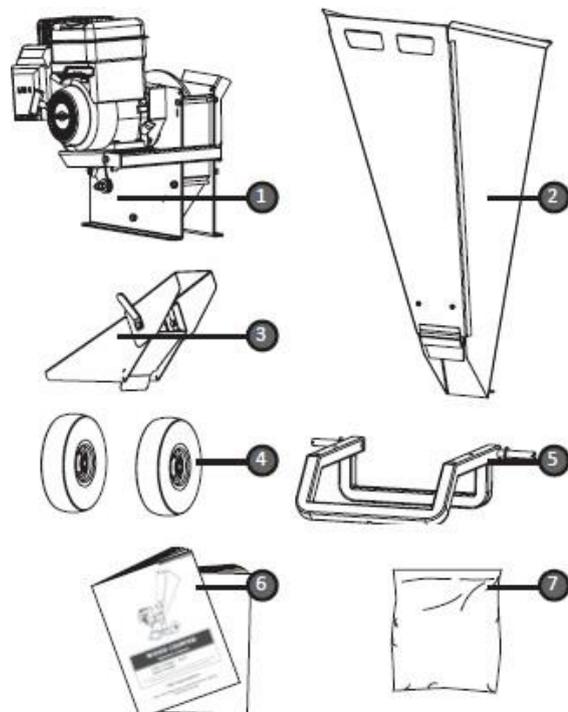
- 3.4.1. The choke lever opens and closes the choke valve in the carburetor. The closed position enriches the fuel mixture for starting a cold engine.
- 3.4.2. The open position provides the correct fuel mixture for operation after starting, and for restarting a warm engine.
- 3.5. Recoil starter grip.
 - 3.5.1. Pulling the starter grip operates the recoil starter to crank the engine.
- 3.6. Feed hopper.
 - 3.6.1. It is the opening into which all materials to be chipped should be fed.
- 3.7. Discharge chute.
 - 3.7.1. Chipped materials are discharged through this opening. Deflector can be attached to the chute.
- 3.8. Transport wheels.
 - 3.8.1. To move the wood chipper, grip the handles to tilt the machine slightly forward and move to the next location.
- 3.9. Belt tension lever.
 - 3.9.1. It is at the back of the housing. Pull it up to engage the belt drive and run the cutting disk. Push it down to disengage the belt drive and stop the cutting disk.
- 3.10. Deflector lever.
 - 3.10.1. Loosen it in the anti-clockwise direction to adjust discharge angle. Tighten it in the clockwise direction.

4. CONTENTS & ASSEMBLY

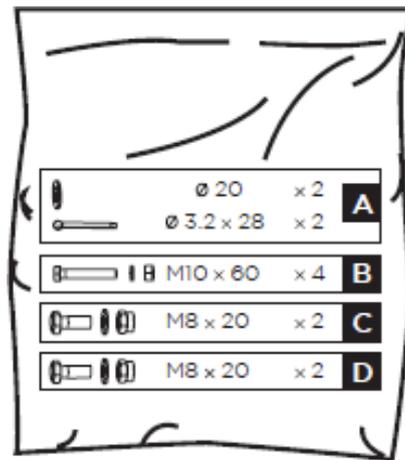
4.1. Contents supplied.

4.1.1. The wood chipper comes partially assembled and is shipped in a carefully packed package. After all the parts have been removed from the package, you should have:

- 1 Main body.
- 2 Feed hopper.
- 3 Discharge chute.
- 4 Transport wheels.
- 5 Mounting stand.
- 6 Operator's manual & engine manual.
- 7 Hardware bag, see 4.1.2. 'Contents of hardware bag'.



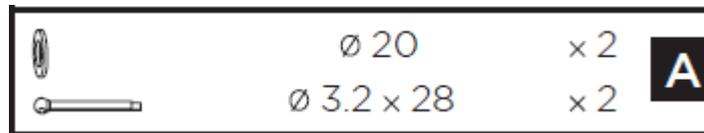
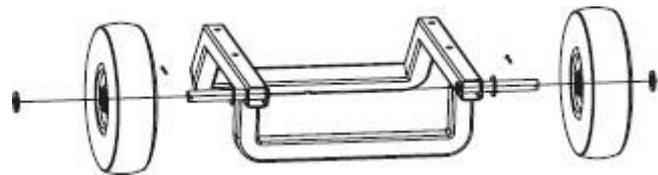
4.1.2. Contents of hardware bag.



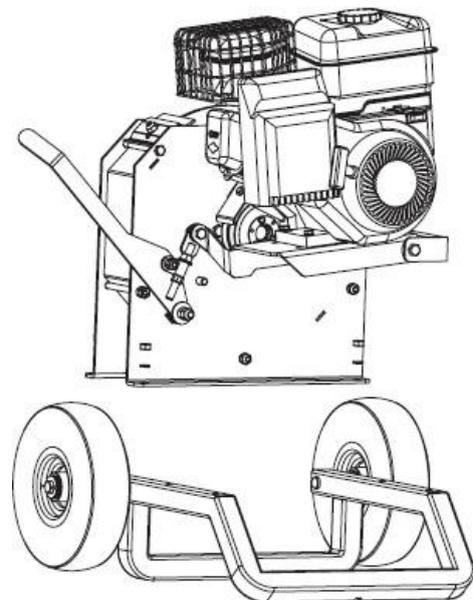
4.2. Assembly.

4.2.1. By following the assembly directions below, you will be able to assemble the machine within a few minutes.

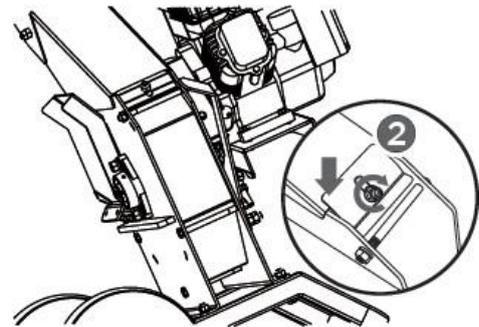
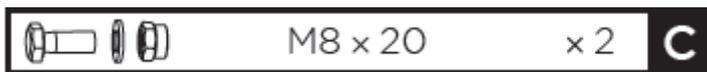
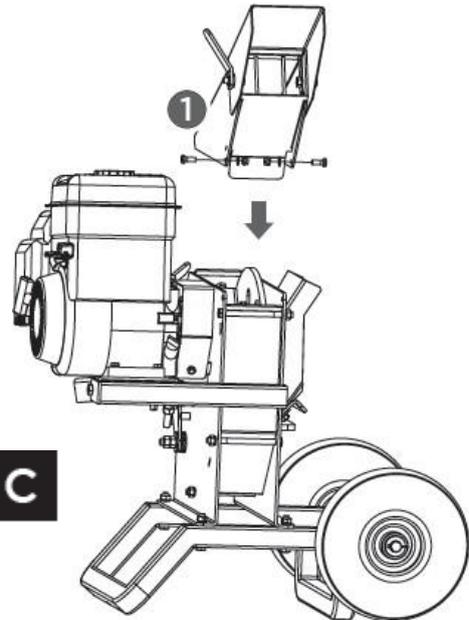
4.2.2. Slide a wheel onto the axle, followed by a washer, and secure with a split pin. Repeat above procedure for the other side.



4.2.3. Place main body onto the mounting stand and secure with bolts, washers and nuts.



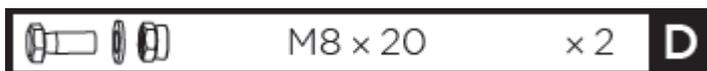
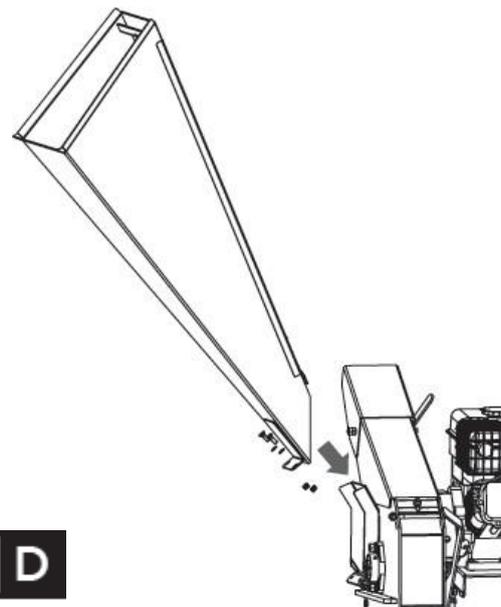
4.2.4. Disengage the belt drive by pushing the lever at the back of the housing down. Loosen the clamp using the lock nut which holds the discharge chute on the machine. Then place the discharge chute onto the machine. Tighten down the bolts, washers and nuts. Slide clamp over the top of the discharge chute and fasten lock nut.



4.2.5. Place feed hopper onto the machine and ensure it is sitting on the wear plate before tightening it with bolts, washers and nuts securely.

NOTE

We recommend that you have someone help you lift the hopper in place and support it until it is secured to the chipper.



4.3. Engine fuel/oil.



Oil has been drained for shipping. Failure to fill engine sump with oil before starting engine will result in permanent damage and will void engine warranty.

Please note that wood chipper is supplied without fuel or oil in the engine.

4.3.1. Add fuel/oil in accordance with the engine manual supplied with your unit.

5. OPERATION

5.1. Adding fuel & oil.

- 5.1.1. Fill the fuel tank as instructed in the separate engine manual packed with the machine.
- 5.1.2. Fill the machine with oil as instructed in the separate engine manual supplied with the machine.



NOTE

Fill tank to no more than 12.5mm (1/2") below the bottom of the filler neck to provide space for expansion.

5.2. Disengaging the belt drive.

- 5.2.1. For easy starting of the engine, disengage the belt drive by pushing the lever at the back of the housing down.

5.3. Starting the engine.

- 5.3.1. Move the fuel valve lever to the ON position.
- 5.3.2. To start a cold engine, move the choke to the CLOSE position. To restart a warm engine, leave the choke lever in the OPEN position.
- 5.3.3. Move the throttle lever to the halfway position.
- 5.3.4. Turn the engine switch to the ON position.
- 5.3.5. Operate the starter.

5.4. Recoil Starter

- 5.4.1. Pull the starter grip lightly until you feel resistance, then pull briskly, return the starter grip gently.
- 5.4.2. If the choke lever has been moved to the CLOSE position to start the engine, gradually move it to the open position as the engine warms up.



NOTE

IMPORTANT: Allow the engine to run with no load until warm (1~5 minutes) after each start-up to stabilise.

5.5. Operating the machine.

- 5.5.1. After engine warms up, pull throttle lever to accelerate engine speed.
- 5.5.2. As the engine is increased slowly to full speed, gradually and slowly pull the belt tension lever as far as it will go to engage the belt drive. This has to be done slowly to allow the cutting disk to pick up speed; otherwise the engine will stall because there is high inertia in the cutting disk.
- 5.5.3. The wood chipper can process a wide variety of dry or green organic materials such as branch, pruning, stalks, vines, leaves, roots, and vegetable matter. The maximum capacity is approximately 50 to 70 mm diameter branches, depending on the type and hardness of wood. Rotating the branch as you feed it into the machine will improve performance.
- 5.5.4. Feed limbs or branches through butt end first, leaving the bushy head on. This helps guide the limb down the feed hopper, and reduces spinning and bouncing of small pieces back up the feed hopper. Some side branches may require pre-cutting so that the branch will "self-feed" more efficiently.
- 5.5.5. It is always advisable to process freshly cut materials, as wooden branches get very hard and springy when dried out and become more awkward to handle by making the knives blunt more quickly.

- 5.5.6. While operating the machine keep a wooden stick handy, approximately 30mm diameter x 600mm long. This stick will be useful to push in short, brushy and very leafy materials and keep the feed hopper clear.
- 5.5.7. DO NOT force material into the machine. If it does not chip well, the chipper knives may need sharpening or replacement, or the gap between the knives and the wear plate needs adjusting.
- 5.5.8. Make sure not to overload the machine by feeding too much material into the feed hopper at one time. If you hear the speed of engine decreasing, immediately stop feeding material into the machine. DO NOT resume feeding material into the machine until the engine has returned to full speed.
- 5.5.9. The wood chipper can clog up with soft, wet or fibrous materials. However, if you feed soft materials intermittently with branches, there should be no problem, as the wood chipper tends to clean out any residue left in the machine.
- 5.5.10. If any stringy material becomes wrapped around the rotor shaft. Turn off the engine's power switch and wait until the cutting disk is completely stopped and the belt drive is disengaged then remove the spark plug lead, then you can remove it before it works its way into the bearing.
- 5.5.11. Should it happen that the wood chipper stalls through overloading or clogging, turn off the engine's power switch and wait until the cutting disk is completely stopped and the belt drive is disengaged. Allow the engine to be completely cool and remove its spark plug. Open the housing cover to clear and remove all the materials from the housing. Lock the housing cover, reinstall the spark plug and start the machine again to resume the operation.
- 5.5.12. As the discharge materials piles up, move the chipper or the processed material to keep the outlet free. Otherwise blocking will occur. DO NOT position the deflector vertically, as it will reduce the airflow, impeding discharge and cause a blockage.

 **NOTE**

Position the machine level and stable to avoid unnecessary vibrations. DO NOT operate on concrete or bitumen. DO NOT open the housing cover unless the engine and cutting disk are completely stopped and the belt drive is disengaged. The engine is fitted with oil alert and will not start if the oil level in the sump is too low. It may also stop if it is operated on a steep slope. To shut down the machine, simply move the throttle control lever at idle speed, turn the engine switch to the OFF position, and it will gradually come to a standstill.

5.6. Idle speed.

5.6.1. To reduce stress on the engine when compaction is not being performed set throttle control lever to its "SLOW" position. Lowering the engine speed to idle the engine will help extend the life of the engine, as well as conserve fuel and reduce the noise level of the machine.

5.7. Stopping engine.

5.8. To stop the engine in an EMERGENCY, simply turn the engine switch to the OFF position. Under normal conditions, use the following procedure.

- 5.8.1. Move the throttle lever to the SLOW position.
- 5.8.2. Let engine idle for one or two minutes.
- 5.8.3. Turn the engine switch to the OFF position.
- 5.8.4. Turn the fuel valve lever to the OFF position.



NOTE

DO NOT move choke control to CLOSE to stop engine. Backfire or engine damage may occur.

- 5.8.5. Wait until the machine completely stops. Allow the engine to completely cool. Remove the engine's spark plug lead. Then clean out the interior of the machine and its discharge chute.



NOTE

DO NOT disengage the belt drive with the machine running, as this will cause friction and vibration on the belt drive.

5.9. Delivering wood chipper to work site

- 5.9.1. The wood chipper is equipped with 2 large pneumatic wheels for moving. To move the wood chipper to the work site, grip the handles to tilt the wood chipper slightly after making sure the oil tank cover is tightened.

6. SPECIFICATIONS

Model	HYCH7070
Engine size – cc/hp	196/6.5
Chipping capacity – mm	70
Disc size - diameter/thickness - mm	400 x 10
Disc speed – rpm	2600
Knives – quantity, size mm	2, 110 x 42 x 9
Infeed throat opening size – mm	150 x 150
Feed hopper opening size – mm	530 x 350
Tyres	Pneumatic 4.00-4
Sound pressure level – dB(A)	83.1
Sound power level – dB (A)	96
Vibration level – m/s²	5.52
Assembled weight – Kg	90

7. MAINTENANCE

- 7.1. Maintaining your wood chipper will ensure long life to the machine and its components.
- 7.2. Preventive maintenance.
- 7.2.1. Turn off engine. Engine must be cool.
- 7.2.2. Keep the engine's throttle lever in its SLOW position, and remove spark plug wire from spark plug and secure.
- 7.2.3. Inspect the general condition of the wood chipper. Check for loose screws, misalignment or binding of moving parts, cracked or broken parts, and any other condition that may affect its safe operation.
- 7.2.4. Remove all debris from the wood chipper with a soft brush, vacuum, or compressed air. Then use a premium quality light weight machine oil to lubricate all moving parts.
- 7.2.5. Replace spark plug wire.



NOTE

NEVER use a "pressure washer" to clean your wood chipper. Water can penetrate tight areas of the unit and cause damage to spindles, pulleys, bearings, or the engine. The use of pressure washers will result in shortened life and reduce serviceability.

Shut down the engine, wait for all moving parts to come to a complete stop, remove plug wire, and then wait for 5 minutes before performing maintenance on the chipper.

7.3. Regular maintenance check list.



NOTE

Consider that the service intervals shown are the maximum under normal operating conditions. Increase frequencies under extremely dirty or dusty conditions.

Procedure	Before each use	Every 8~10 hours	Every 80 hours
Check engine oil level	*		
Check general condition of equipment	*		
Check that cutting disk turns freely (with a long stick only)	*		
Visually inspect knife blades for damage	*		
Check knife blades for wear and sharpness		*	
Check for any loose nuts and bolts		*	
Check knife to wear plate gap		*	
Check belt tension and condition	After 1st hour of run time	*	
Check the tyre pressure			*
Change engine oil	After 5 hours of run time		*
Inspect or replace drive belt			*
Inspect or replace spark plug			*
Inspect or replace air filter and pre-cleaner			*

 **NOTE**

There are two bearings, one outside and the other inside of the housing. The bearings are greased when they are new, however it is a good idea to grease them after a couple of hours use. One or two pumps are sufficient. Be careful not to over grease. Over lubrication can damage the bearings.

If the machine's cutting disk strikes a foreign object, or if the machine begins to make an unusual noise or vibrates excessively, immediately shut off the engine. Allow the cutting disk to come to a complete stop. Remove the spark plug from the engine to avoid any accidental start. Then perform the following steps:

- Inspect for damage.
- Repair or replace damaged parts.
- Check for any loose parts and tighten to ensure continued safe operation.

7.4. Knife and wear plate inspection.

 **NOTE**

Be careful and wear gloves when working near the knives because their edges can cut you if you come in contact with them.

7.4.1. Routine inspection of the knives for sharpness and wear plate for a sharp edge will ensure that wood chipper is operating at full efficiency. Using dull knives or a rounded wear plate will decrease performance and cause excessive vibration that will damage the machine and make chipping difficult for the operator.

7.5. Knife removal and replacement.

7.5.1. This wood chipper is equipped with two pieces of chipper knives mounted on the cutting disk. When the knives get dull or show visible nicks, the machine will lose its self-feeding action and the wood will have to be pushed in. The wood will tend to come out in long strips.

7.5.2. If the knives need to be removed for sharpening, loosen the clamp by unscrewing the locknut to open the discharge chute and remove the feed hopper. With a 13 mm ring spanner loosen the locknut's at the back of the cutting disk. If the bolt head turns, hold it with a 5 mm hexagonal Allan key. DO NOT try to loosen the bolt with the hexagonal Allen key.

7.5.3. Remove the dull or damaged knives and visually inspect the cutting disk slot and knives mounting area and be sure they are clean and that the replacement knives will be able to mount flush against the cutting disk. Remount new or sharpened knives with the knife edges facing up in the reverse procedure, making sure that all mounting surfaces are cleaned beforehand.

 **NOTE**

If the cutting disk surface is not cleaned properly and the knives are not mounted flush on the cutting disk, the knives could crack when the hardware is tightened.

7.5.4. The clearance between the knives and wear plate should be approximately 1mm on the inside closest to the bearing and 3mm on the outside edge of the

cutting disk. They are tapered out slightly to allow for a small amount of movement in the cutting disk as it bites into the wood.

- 7.5.5. Make sure that all locknuts are tightened properly. Then turn the cutting disk with a long wooden stick and check if the cutting disk rotates freely.
- 7.6. Knife re-sharpening.
 - 7.6.1. After removal, the knives should be sharpened on a surface grinder. Be careful and wear gloves to protect hands. It is extremely important to consistently maintain the 38 degree cutting angle for proper performance.
 - 7.6.2. Excessive heat generated during the grinding process will damage the knives and weaken the metal. Make sure that there is plenty of coolant used when grinding to avoid overheat. If you are unable to re-sharpen the knives yourself, take the knives to a professional machine shop for proper re-sharpening.
 - 7.6.3. Normally only a slight touch up is needed. In this way your knives should last for a long period of time.
- 7.7. Wear plate removal and replacement.
 - 7.7.1. The wear plate is case-hardened and reversible. Normally the edges will last for a long time. When the edge is rounded off, it can be reversed. The wear plate cannot be re-sharpened as it will lose its hard edge due to being case-hardened. When both edges are worn, the wear plate should be replaced.
 - 7.7.1.1. Remove the feed hopper.
 - 7.7.1.2. Remove the locknuts and bolts that attach the wear plate to the chipper assembly and then remove the wear plate.
 - 7.7.1.3. Install the new wear plate and secure with the bolts and locknuts.

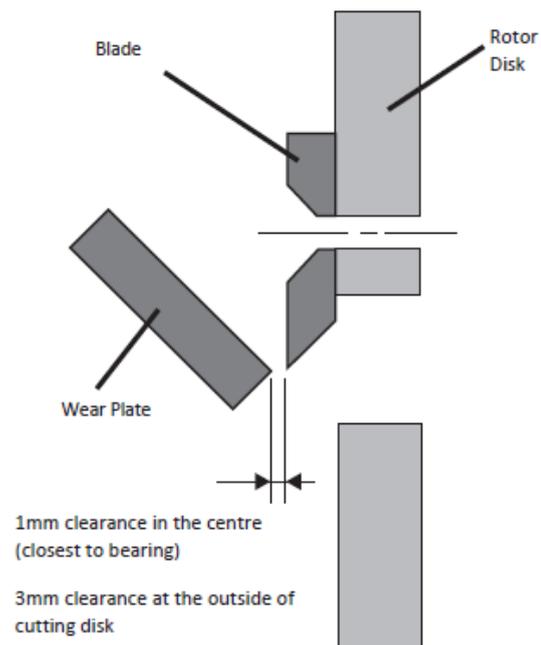


NOTE

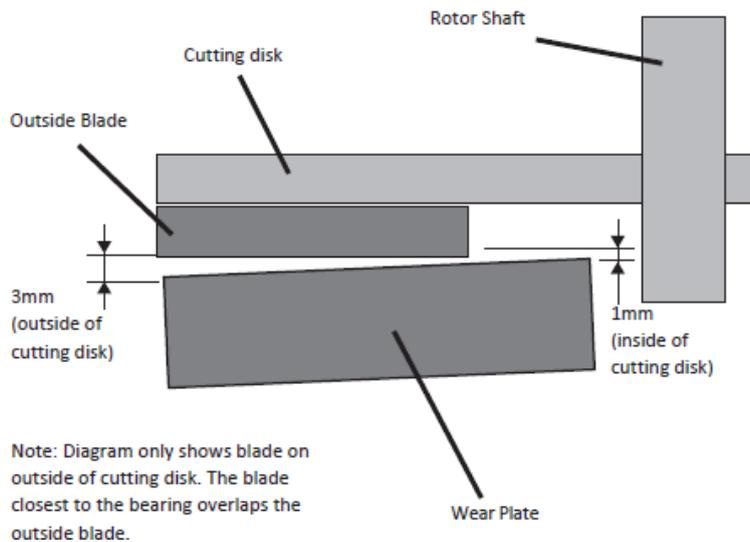
The gap between the knife and wear plate must be adjusted whenever the wear plate is removed.

- 7.8. Wear plate adjustment.
 - 7.8.1. When the knife or wear plate is replaced, it is a must to check and set the clearance between the knife and wear plate.
 - 7.8.2. The clearance between the knives and wear plate should be approximately 1mm on the inside closest to the bearing and 3mm on the outside edge of the cutting disk. Refer to the following diagrams for more details.

Side View: Blade & anvil set-up



Top View: Blade & anvil set-up



- 7.8.3. A piece of cardboard of the right thickness is usually a good gap gauge for resetting the wear plate. The wear plate can be adjusted through the mounting slots. Always make sure these bolts are properly tightened.
- 7.8.4. Remove the feed hopper and use a wooden stick to rotate the cutting disk to make the knives positioned next to the wear plate. Slide the gap gauge in between the knives and wear plate to check the clearance.
 - 7.8.4.1. If the gap gauge slides freely, with no resistance and a lot of extra space, the wear plate must be adjusted.

7.8.4.2. If the gap gauge will not slide down between the knives and wear plate, the wear plate must be adjusted.

7.8.4.3. If the gap gauge slides in between the knives and wear plate with some resistance felt against them both or slides in between with no noticeable space, then the wear plate is properly adjusted.

7.8.5. If the wear plate is not set correctly, excessive vibration will occur when chipping and the knife will seem to be dull. If there is not enough clearance, the knife edges may touch the wear plate through deflection when cutting heavy branches and damage the sharp edge. Too much clearance will allow small twigs and fibrous materials to be dragged through without being cut.

7.9. V-Belt check.

7.9.4. To ensure optimum power transmission from the engine to the rotor shaft, the V-Belts must be in good condition and operate under proper tension.

7.9.5. Turn off engine. Engine must be cool.

7.9.6. Pull up belt tension lever to get the belts tight in working condition.

7.9.7. Remove the top belt guard from the front housing by taking off the fixing bolts.

7.9.8. Check the condition of the V-Belts. If any V-Belt is cracked, frayed, or glazed, it should be replaced as soon as convenient.

7.9.9. Check the V-Belt tension by squeezing them in the centre. The normal deflection on each side should be approximately 3/8" with moderate pressure from your thumb or finger.

7.10. V-Belt tensioning.

7.10.1. Proper belt tension is critical to good performance. Proper adjustment will assure long belt life. Too much or too little belt tension will cause premature belt failure.

7.10.1.1. Turn off engine. Engine must be cool.

7.10.1.2. Pull up belt tension lever to get the belts tight in working condition.

7.10.1.3. Remove the top belt guard from the front housing by taking off the fixing bolts.

7.10.1.4. Loosen two M12 adjustment nuts by turning them in the anti-clockwise direction and move downward to reduce any slack in V-Belts

7.11. When the V-Belt tension is correct, tighten two M12 adjustment nuts by turning them in the clockwise direction. If the V-Belt tension is too tight, loosen it in the reverse procedure by moving upward two M12 adjustment nuts and adjusting sleeve in between two M12 adjustment nuts.

7.12. Install the upper and lower belt guards and secure them with fixing bolts.



NOTE

When adjusting the belt(s), make sure that the engine pulley is in alignment with cutting disk pulley.

7.13. V-Belt replacement.



NOTE

Both V-Belts should be replaced at the same time because they will wear evenly through normal use. Work on one belt at a time.

7.13.1. Turn off engine. Engine must be cool.

- 7.13.2. Push down belt tension lever to release belt tension.
- 7.13.3. Remove the upper belt guard from the front housing and lower belt guard from the engine base by taking off the fixing bolts respectively.
- 7.13.4. Take off 4 engine mount bolts that fix engine on the engine base to slide engine forward away from the housing until the belts are loose enough to remove.
- 7.13.5. Slip the old V-Belts from engine pulley and cutting disk pulley and install the new V-Belts. Align engine pulley and cutting disk pulley by moving cutting disk pulley in or out on the rotor shaft. Do not make the adjustment by attempting to move the engine pulley on the engine shaft.
- 7.13.6. Move the engine back. Adjust the V-belt tension to be correct, and tighten M12 adjustment nuts and the engine mount bolts.
- 7.13.7. Install the upper and lower belt guards and secure them with fixing bolts.



NOTE

When removing or installing the drive belt(s), be careful not to get your fingers caught between the belt and pulley.

7.14. Lubrication.

- 7.14.1. Check oil level every 50 hours of working. Remove the plug and check, with machine horizontal, oil reaches the two notches. If necessary, add the oil. Use portable tool lithium grease.

7.15. Engine oil/fuel.

- 7.15.1. Refer to the engine manual include in your unit for the information on how to check /add oil / fuel for engine and oil / fuel recommendations.

7.16. Engine maintenance.

- 7.16.1. Refer to the engine manual included in your unit for the information on engine maintenance. Your engine manual provides detailed information and a maintenance schedule for performing the tasks.

8. STORAGE

- 8.1. If the wood chipper will not be used for a period longer than 30 days, following the steps below to prepare your unit for storage.
 - 8.1.1. Drain the fuel tank completely. Stored fuel containing ethanol or MTBE can start to go stale in 30 days. Stale fuel has high gum content and can clog the carburetor and restrict fuel flow.
 - 8.1.2. Start the engine and allow it to run until it stops. This ensures no fuel is left in the carburetor. Run the engine until it stops. This helps prevent deposits from forming inside the carburetor and possible engine damage.
 - 8.1.3. While the engine is still warm, drain the oil from the engine. Refill with fresh oil of the grade recommended in the Engine Manual.
 - 8.1.4. Allow the engine to cool. Remove the spark plug and put 60 ml of SAE-30 of high quality engine oil into the cylinder. Pull the starter rope slowly to distribute the oil. Replace the spark plug.

**NOTE**

Remove the spark plug and drain all of the oil from the cylinder before attempting to start the unit after storage.

- 8.1.5. Use clean cloths to clean off the outside of the wood chipper and to keep the air vents free of obstructions.

**NOTE**

DO NOT use strong detergents or petroleum based cleaners when cleaning plastic parts. Chemicals can damage plastics.

- 8.1.6. Store your wood chipper in upright position in a clean, dry building that has good ventilation.

**NOTE**

DO NOT store wood chipper with fuel in a non-ventilated area where fuel fumes may reach flame, sparks, pilot lights or any ignition sources.

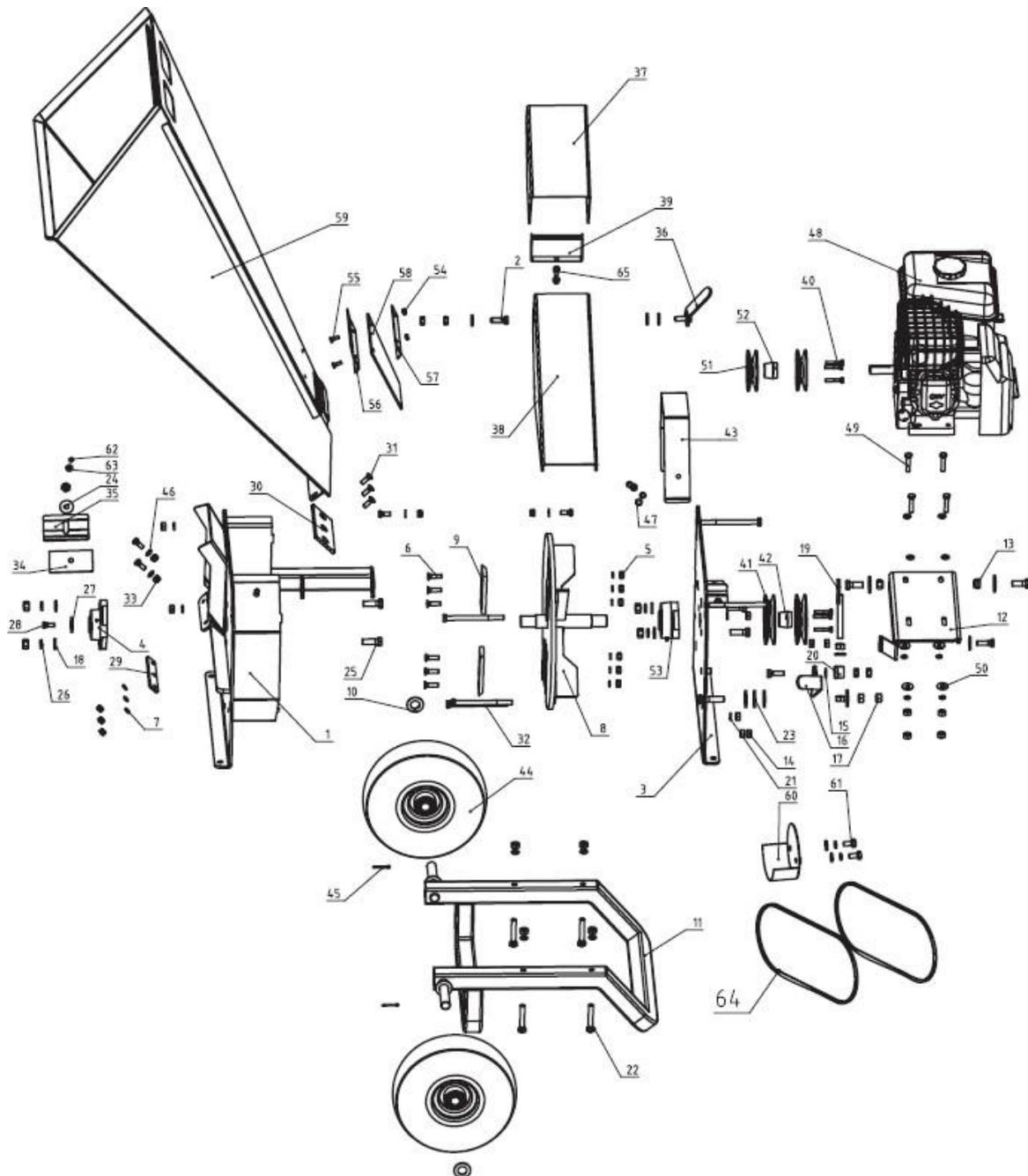
Use only approved fuel containers.

9. TROUBLESHOOTING

Problem	Cause	Remedy
Engine fails to start	Spark plug wire disconnected	Attach spark plug wire securely to spark plug
	Out of fuel or stale fuel	Fill with clean, fresh gasoline
	Fuel valve not in ON position	Fuel valve must be in ON position
	Choke lever not in CLOSE position	Choke level must be in CLOSE position for a cold start
	Blocked fuel line	Clean the fuel line
	Fouled spark plug	Clean, adjust gap, or replace
	Engine flooding	Wait a few minutes to restart, but do not prime
Engine runs erratically	Spark plug wire loose	Connect and tighten spark plug wire
	Unit running with Choke lever in CLOSE position	Move choke lever to OPEN position
	Blocked fuel line or stale fuel	Clean fuel line. Fill tank with clean, fresh gasoline
	Vent plugged	Clear vent
	Water or dirt in fuel system	Drain fuel tank. Refill with fresh fuel
	Dirty air cleaner	Clean or replace air cleaner
	Improper carburetor adjustment	Refer to Engine Manual
Engine overheats	Engine oil level low	Fill crankcase with correct oil
	Dirty air cleaner	Clean air cleaner
	Air flow restricted	Remove housing and clean
	Carburetor not adjusted properly	Refer to Engine Manual
Chipping action seems too slow, or cutting disk stalls, or no material is discharged when engine is running	The engine speed is too slow causing belt to slip	Run the engine at full throttle
	Drive Belt loose or damaged	Tighten or replace drive belt
	Knives dull or damaged	Sharpen or replace knives
	Cutting disk jammed by debris from the feed hopper and discharge chute	Remove any built-up debris and turn cutting disk with a wooden stick to be sure it turns freely
	Discharge chute clogged	Clean out debris
The belt frays or rolls over the pulley	The rotor drive pulley groove may be nicked	Check the drive belts for wear and hard spots. File off any nicks on the pulley
	The drive belts may be stretched	Replace the drive belts
	The pulleys may be misaligned	Adjust the pulleys
When chipping, branch seems to vibrate and move about excessively with unusual noise	Knives dull or damaged	Sharpen or replace knives
	Knives is not properly seated on the cutting disk	Loosen the knives mounting screws, reset the knives and tighten the screws
	The gap between the knives and wear plate is too large	Adjust the gap
	Rotor overloaded with material	Allow unit to clear itself before adding more material to the hopper
Chipper Knives are hitting the wear plate	The gap between the knives and wear plate is set incorrectly.	Adjust the gap.
The machine's wheels track left or right while being towed	Low tyre pressure	Inflate tyres

10. PARTS

10.1. Schedule



10.2.

No.	Description	Q'ty
1	Front Housing	1
2	Bolt M10x30	3
3	Rear Housing	1
4	Bearing UCFLU205	1
5	Nut M8	13
6	Bolt M8x30	6
7	Elastic Washer 8	15
8	Cutting disk	1
9	Knife	2
10	Washer 20	2
11	Mounting Stand	1
12	Engine Seat	1
13	Lock Nut M12	2
14	Nut M10	16
15	Washer 10	3
16	Belt Tension Lever	1
17	Nut M12	9
18	Washer 12	5
19	Threaded Rod	1
20	Adjusting Sleeve	1
21	Elastic Washer 10	10
22	Bolt M10x60	4
23	Big Washer 12	7
24	Big Washer 10	4
25	Bolt M10x30	6
26	Elastic Washer 12	4
27	Washer	1
28	Bolt M8x20	5
29	Binder Plate	1
30	Wear Plate	1
31	Bolt M8x25	3
32	Bolt M10x130	5
33	Lock Nut M8	4
34	Shim	1
35	Clamp	1

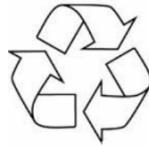
No.	Description	Q'ty
36	Lever	1
37	Defletor	1
38	Discharge Chute	1
39	Grille	1
40	Bolt M6X35	6
41	Cutting Disk Pulley 95A	2
42	Taper Sleeve 1#	1
43	Belt Guard-Upper	1
44	Wheel	2
45	Cotter Pin	2
46	Washer 8	8
47	Bolt M8x16	2
48	Engine	1
49	Bolt M8x40	4
50	Big Washer 8	4
51	Engine Pulley 75A	2
52	Taper Sleeve 3/4#	1
53	Bearing UCFLU206	1
54	Nut M6	2
55	Bolt M6X16	2
56	Fixing Plate I	1
57	Fixing Plate II	1
58	Rubber Flap	1
59	Feed Hopper	1
60	Belt Guard-Lower	1
61	Bolt M10x20	2
62	Screw M5X10	1
63	Big Washer 5	1
64	Drive Belt	2
65	Screw M8X16	1

11. PRODUCT DISPOSAL

- 11.1. Should it become necessary to dispose of your machine please contact your local authority for the disposal advice, or take unit to your local recycling centre.
- 11.2. You MUST make sure that all unused oil, fuel and batteries are disposed of correctly either beforehand or at amenity centre.
- 11.3. Waste Electrical Electronic Equipment (WEEE). Certain products contain waste which should not be disposed of in your domestic waste. You MUST recycle WEEE in accordance with your local authority or recycling centre.
- 11.4. The following symbol means that you should NOT place items with this symbol on the product into your domestic waste.



- 11.5. Unwanted packaging materials should be sorted and taken to a recycling centre to be disposed of in a manner which is compatible with the environment.
- 11.6. The following symbol means that you should Reduce – Reuse – Recycle.



- 11.7. Should you pass this product onto another user either sold or loaned you MUST pass on this user manual. This will make sure that all other users can use and maintain the machine safely.



12. DECLARATIONS of CONFORMITY

- | | | | |
|-------|-------------|---|---|
| 12.1. | 97/68/EC | – | Non Road Mobile Machinery Directive – Emissions – engine manufacturer |
| 12.2. | 2000/14/EC | – | Outdoor Noise Directive |
| 12.3. | 2004/108/EC | – | Electro Magnetic Compatibility Directive |
| 12.4. | 2006/42/EC | – | Machinery Directive |

13. CONTACT DETAILS

- | | | |
|-------|------------------|---|
| 13.1. | POSTAL ADDRESS | Genpower Ltd, Isaac Way,
London Road, Pembroke Dock,
Pembrokeshire, SA72 4RW. UK. |
| 13.2. | TELEPHONE | +44 (0) 1646 687880 |
| 13.3. | FAX | +44 (0) 1646 686198 |
| 13.4. | TECHNICAL E-MAIL | service@genpower.co.uk |
| 13.5. | WEBSITE | www.hyundaipowerequipment.co.uk |

14. MANUAL UPDATES

- 14.1. Our manuals are constantly being reviewed and updated. However if should you find an error, omission or something you find unclear please contact your dealer for assistance.
- 14.2. Our latest manuals are also placed online.
- 14.3. We reserve the right to make any modifications without prior notice whenever necessary.

15. WARRANTY

15.0 To register your product for the manufacturer's warranty, please visit:

<https://hyundaipowerequipment.co.uk/warranty>

HYUNDAI
POWER PRODUCTS

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