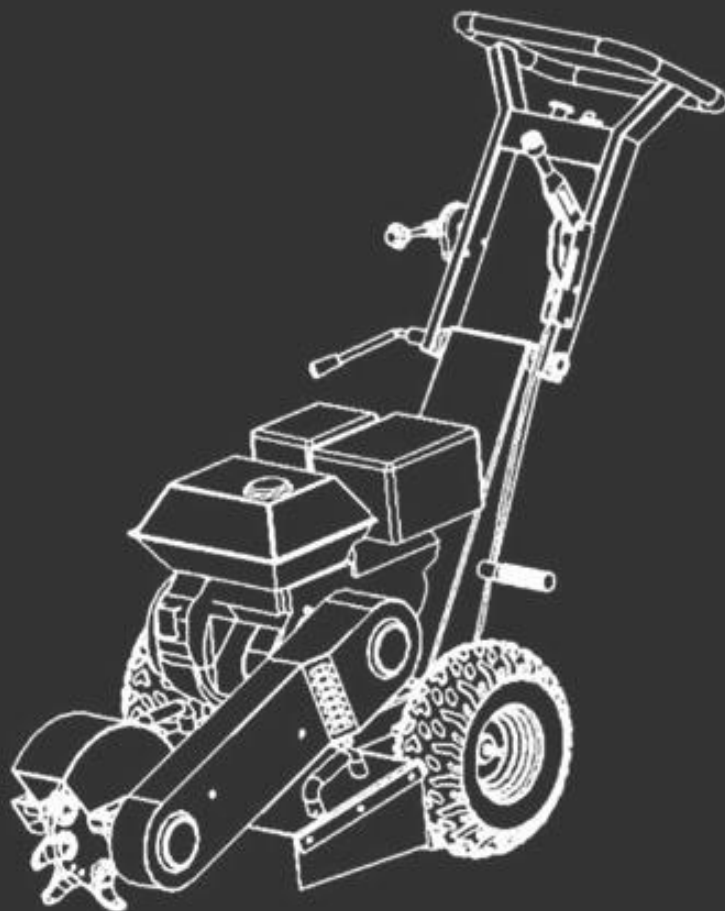


HYUNDAI
POWER PRODUCTS

STUMP GRINDER

HYSG150-2

User Manual



1. ACKNOWLEDGEMENT

THANK YOU for purchasing this Hyundai Stump Grinder. To get the most out of your purchase, please read the manual before using the Stump Grinder.

We ask you to please read this manual carefully before use, in order to familiarize yourself with this product and after reading, please keep this manual for future reference. Failure to follow the proper protocols listed in the manual may cause personal injury to the operator or damage to equipment.

www.hyundaipowerproducts.co.uk

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3. SAFETY

31 GENERAL SAFETY NOTES

- 32 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 or sold to another user.
- 33 Please note the following safety points.
- 34 The machine should never be left in a condition which would allow an untrained or unauthorised person/s to operate this machine.
- 35 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.
- 36 Some or all of the following - warning signs, symbols and/or PPE pictograms may appear throughout this manual. You **MUST** adhere to their warnings. Failure to do so may result in personal injury to yourself or those around you.



DANGER

Indicates a hazard, which, if not avoided, could result in serious injury or death.



WARNING

Indicates a hazard, which, if not avoided, could result in serious injury.



CAUTION

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 and keep the manual safe and pass it on if the machine is loaned or 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



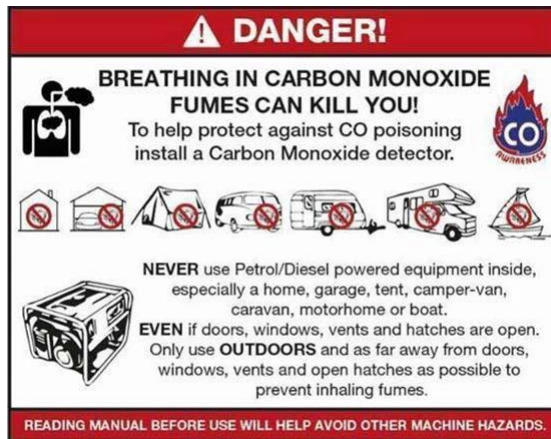
HEAD
PROTECTION
MUST BE WORN





RESPIRATOR
MUST BE WORN



FACE SHIELD
MUST BE WORN



- 38 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.
- 39 The symptoms of carbon monoxide poisoning can include but are not limited to the following;
Headaches, dizziness, nausea, breathlessness, collapsing or loss of consciousness.
- 310 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.
- 311 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.
- 312 If you think you have or someone around you has been affected by carbon monoxide poisoning;
- 313 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.
- 314 Contact a doctor immediately or go to hospital - let them know that you suspect carbon monoxide poisoning.
- 315 **DO NOT** use in an enclosed area or a moving vehicle

- 316 GENERAL FUEL SAFETY *(where applicable)*.
- 317  **CAUTION**
• **ALL FUELS ARE FLAMMABLE**
- 318 Fire hazard - keep fuel away from all sources of ignition for example heaters, lamps, sparks from grinding or welding.
- 319 Pay attention when handling fuel. Petrol is flammable and the vapors are highly explosive.
- 320 Never remove the fuel cap or add fuel with the engine running. Stop the engine and allow to cool before refueling. Never fuel machine indoors or in a confined space. **DO NOT** overfill with petrol – always leave a 15mm gap at the top of the fuel tank.
- 321 **DO NOT** smoke while adding fuel or around machine while operating.
- 322 Fill your engine with SAE10w-30/15w-40 engine oil before use or serious damage will occur.
- 323 Never refuel or store the machine in a place where there is open flame, spark or other forms of open flames or ignition.
- 324 **DO NOT** attempt to start the engine if fuel is spilled. Wipe away the spillage and ensure all fuel has dried before starting the machine.
- 325 **ALWAYS** make sure the fuel cap is securely tightened and replaced before starting.
- 326 If the fuel tank needs to be drained, it should be done outdoors and into an approved container.
- 327  **DO NOT** carry out hot work on tanks that have contained fuel it is extremely dangerous.
- 328 **ALWAYS** keep work area clean and tidy.
- 329 **ALWAYS** clean up all spills promptly using correct methods i.e. absorbent granules and a lidded bin.
- 330 **ALWAYS** dispose of waste fuels correctly.

331 **FUELING/DE-FUELING** *(where applicable).*

332  **CAUTION**
• **ALL FUELS ARE FLAMMABLE**


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

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



335 When fueling/de-fueling **ALWAYS** avoid inhaling fumes.

336 When de-fueling **ALWAYS** use a propriety fuel retriever.

337  **ALWAYS** carry fuel in the correct and clearly marked container.

338 **ELECTRICAL SAFETY** *(where applicable).*

339 Electricity can kill - **NEVER** work on LIVE/ENERGISED equipment.


340 Prior to carrying out any maintenance work you **MUST** Identify electrical isolation methods and isolate all electrical supplies,

341 Prior to use and with all electrical supplies isolated You **MUST** check all electrical cables, plugs and connections for the following;

342 Are intact and have no signs of damage, to include but not limited to bare wires, chaffing, cuts and loose wiring.

343 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.

344 All trailing cables should be routed so as not to cause any kind of trip hazard.

345  **NEVER** work on or near electricity with wet hands, wet clothing, and wet gloves.

346 **BATTERIES** (*where present*).

- 347 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 liquid or gel form.
- 348 Should you come into contact with electrolyte you should;
- 349 Remove all clothing contaminated with electrolyte. If you cannot remove then saturate in water.
- 350 Get medical assistance as soon as possible. You must advise the medical staff of the type acid.
- 351 Lead/acid battery = dilute sulphuric acid
- 352 Nickel/cadmium = potassium hydroxide alkali electrolyte.
- 353 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 the face or body.
- 354 If electrolyte comes into 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 the face or body.
- 355 Gasses from charging batteries are highly flammable and great care should be taken to charge in well ventilated areas.
- 356 There is an explosion risk if the battery terminals are shortcircuited, 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.



357 **VIBRATIONS** (*where applicable*).

- 358 RISK OF EXPLOSION 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.
- 359 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 the white finger and carpal tunnel syndrome:
- 360 Wear gloves and keep your hands warm
- 361 Take regular breaks
- 362 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.

363 **NOISE** (where applicable).

364 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.

365 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.

366 See **CERTIFICATE of CONFORMITY** section for Outdoor Noise declaration of conformity.



HEARING
PROTECTION
MUST BE WORN

367 **MACHINE SPECIFIC SAFETY**

368 The stump grinder is only to be used to remove tree stumps. By moving the blade in sweeping movements laterally over the top and front of the stump, you can gradually grind it away. Read the **SAFETY** chapter before you use the machine for the first time.

369 The object of this manual is to help you use your machine safely and to give you information about how to maintain your machine. Please read the manual carefully before attempting to use the machine.

370 If after reading the user manual you are still unsure about the safety risks associated with use of the machine, you should not use the machine. Please contact your dealer for more information.

371 These safety instructions only address the basics for safe use. It would be impossible in the safety instructions to describe all possible risk situations that could arise when using the machine. You can, however, prevent accidents by always using common sense.

372 To obtain extra copies of the user manual, please contact your dealer.

373 **USAGE RESTRICTIONS**

374 The stump grinder can be dangerous if used incorrectly or without due care and can lead to serious accidents, in the worst cases even fatal accidents. It is very important that you read this user manual and understand the instructions before you attempt to use the machine.

375 Under no circumstances may the original design of the machine be modified without written approval from the manufacturer. Such modifications not only affect the performance and durability of the machine but many even pose a safety risk for users and those in the vicinity. Unauthorised modifications to the design of the machine may absolve the manufacturer from liability for any resulting personal injury or property damage. Modifying the machine without written approval from the manufacturer may void the guarantee.

376 Follow all safety instructions. Failure may result in injury to yourself or others.

377 Accident prevention regulations, other general safety regulation, occupational safety rules and traffic regulation must be followed without fail.

378 All users **MUST** be trained in use of the machine. The owner is responsible for training users.

379 You **MUST** use an authorised workshop for all service and repairs not described in this manual.

- 380 You **MUST** learn how to use the machine and its controls safely and learn to recognize the
safely labels.
- 381 Only use the machine for removing tree stumps it is not intended for any other use.
- 382 Check that the machine is in a serviceable condition prior to use.
- 383 Only use the machine in daylight or in other well-lit conditions. Keep the machine a safe
distance from holes or other irregularities in the ground. Pay attention to other all other
possible risks.
- 384 Only allow the machine to be used by adults who are trained in its use.
- 385 **NEVER** allow children or persons not trained in the use of the machine to use or service it
Local by- laws may regulate the age of the user.
- 386 People and animals can distract you causing you to lose control of the machine. For this
reason, you should always concentrate and focus on the task at hand.
- 387 **NEVER** leave the machine unsupervised with the engine running. You **MUST** always disable
machine to stop others using it in your absence.
- 388 You **MUST** make sure that there is always another person in the safe vicinity of your work
area so that help is available should an emergency arise.
- 389 The machine is tested and approved only with the equipment originally provided or
recommended by the manufacturer.
- 390 The engine can become very hot. To avoid being burned, you must turn off the engine and
wait until all parts have sufficiently cooled before touching the engine or exhaust.
- 391 Overexposure to vibration may lead circulatory or nerve damage, particularly in people who
have impaired circulation. Contact your doctor if you experience symptoms that could have
been caused by overexposure to vibration. Examples of common symptoms include
numbness, pain, muscle weakness, change of skin color or an uncomfortable feeling of
tingling. These symptoms appear most frequently in the fingers, hands or wrists.
- 392 **NEVER** use a stump grinder that is damaged or incorrectly adjusted. **NEVER** use the stump
grinder if any component is missing or if it is not properly assembled. **ALWAYS** check that the
cutting tools stop rotating when you fully reduce the throttle. If you find yourself in a situation
where you are not sure what to do, you **MUST** always seek expert assistance. **DO NOT** try to
solve any problem you are not qualified to resolve.
- 393 Before starting work you **MUST** clear the work area of any unnecessary materials, rubbish
etc. that may cause the user to trip, slip or fall or the stump grinder to become entangled.
- 394 You **MUST** always wear appropriate personal protective equipment.
- 395 **SAFETY NOTES**
- 396 The user of this machine **MUST** be over 18 years of age.
- 397 The machine should be positioned on a firm and level surface
- 398 The user **MUST** wear safety gloves, ear-protection and safety goggles - not supplied with
machine.
- 399 When working in a confined area, always make sure there is sufficient space around the

machine to reduce the risk of injury and there is good ventilation from exhaust fumes.

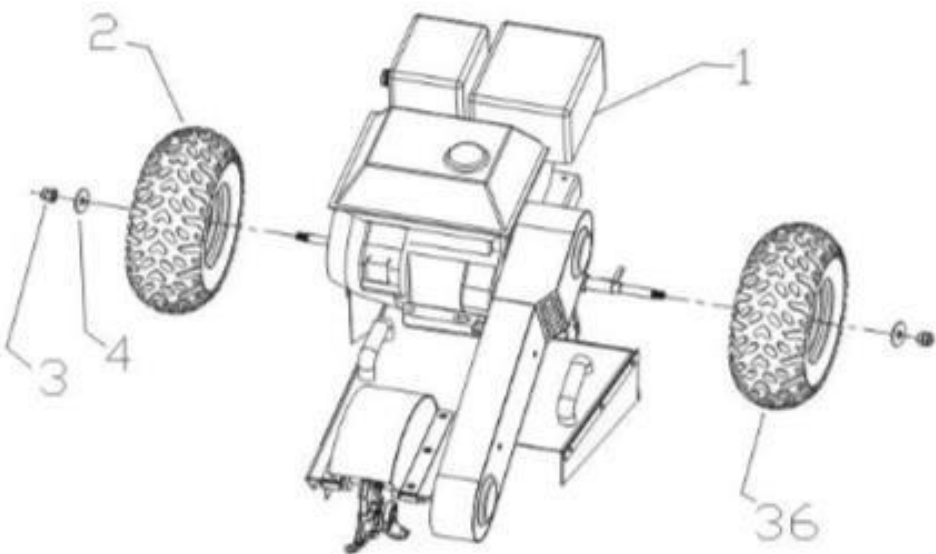
- 3100 Only one person at a time should operate the machine.
- 3101 Pieces jamming the feed hopper can only be removed safely when the engine has been stopped and the spark plug HT lead disconnected.
- 3102 **NEVER** leave the machine running whilst unattended.
- 3103 Use only original parts for maintaining your stump grinder, otherwise the warranty will be void.
- 3104 The stump grinder should **ONLY** be repaired by a skilled dealer / service-point.
- 3105 When in operation the stump grinders noise will exceed 90 dB (A). Therefore all users and onlookers must wear ear-protection.
- 3106 Before use, make sure that the bolts on the blade and fixed blade are tight. After the first one hour of use check that all nuts, bolts and fixing are still secure.
- 3107 Keep the working area clean and free from foreign objects.
- 3108 **DO NOT** operate the stump grinder in the presence of flammable liquids, gas or dust.
- 3109 Keep Children, bystanders and pets away whilst operating the stump grinder. Keep the area free of all distractions.
- 3110 Only responsible, properly instructed individuals should operate this machine.
- 3111 Inexperienced operators must always be supervised by an experienced operator.
- 3112 **DO NOT** expose the stump grinder to rain or wet conditions.
- 3113 Stay alert, watch what you are doing and use common sense when operating the stump grinder. **DO NOT** use a stump grinder while you are tired or under the influence of drugs, alcohol or medications. A moment of inattention while operating this machine may result in serious personal injury.
- 3114 Use proper personal safety equipment. Always wear eye protection. Safety equipment such as dust mask, nonslip safety boots, hard hat, gloves and hearing protection used for appropriate conditions will reduce personal injuries.
- 3115 Dress appropriately. **DO NOT** wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can get caught in moving parts.
- 3116 Always wear earplugs or ear muffs to protect your ears.
- 3117 Do not start the engine until the machine is in the cutting position next to the stump.
- 3118 Do not overreach. Keep a secure footing and balance at all times. This enables better control of the stump grinder in unexpected situations.
- 3119 Check stumps to be removed for embedded nails, wire, metal fence posts and other metallic objects. Also, check for rocks or other buried impediments which may be thrown dangerously or cause unexpected machine movements when hit by the cutting wheel.

- 3120 Make sure that all shields and guards are in place and are in good condition prior to operating the machine. Check cutting wheel for damage or missing teeth and replace as necessary.
- 3121 Ensure that everyone in the vicinity is aware of the danger zone associated with this machine (within 6m / 20'). You must avoid the danger zone at all times when the machine is in operation.
- 3122 Make sure that no-one is working underneath or close to the machine before starting the engine or beginning to move the machine. Make sure that the area is free of personnel.
- 3123 Don't make any alterations or modifications to your stump grinder.
- 3124 Check that there are no buried pipes or electrical cables in the area you intend to operate the machine.

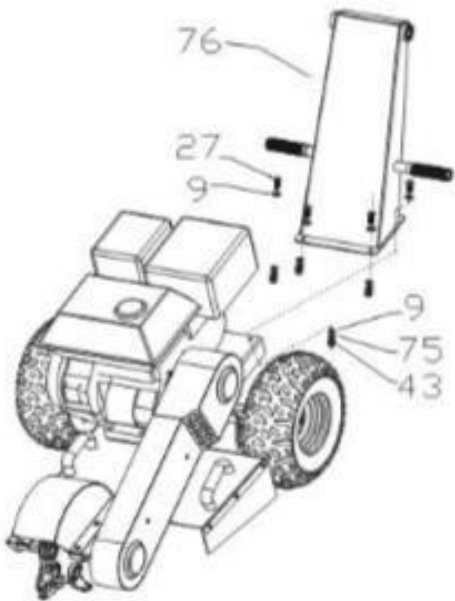
4. ASSEMBLY

4.1

Assembling



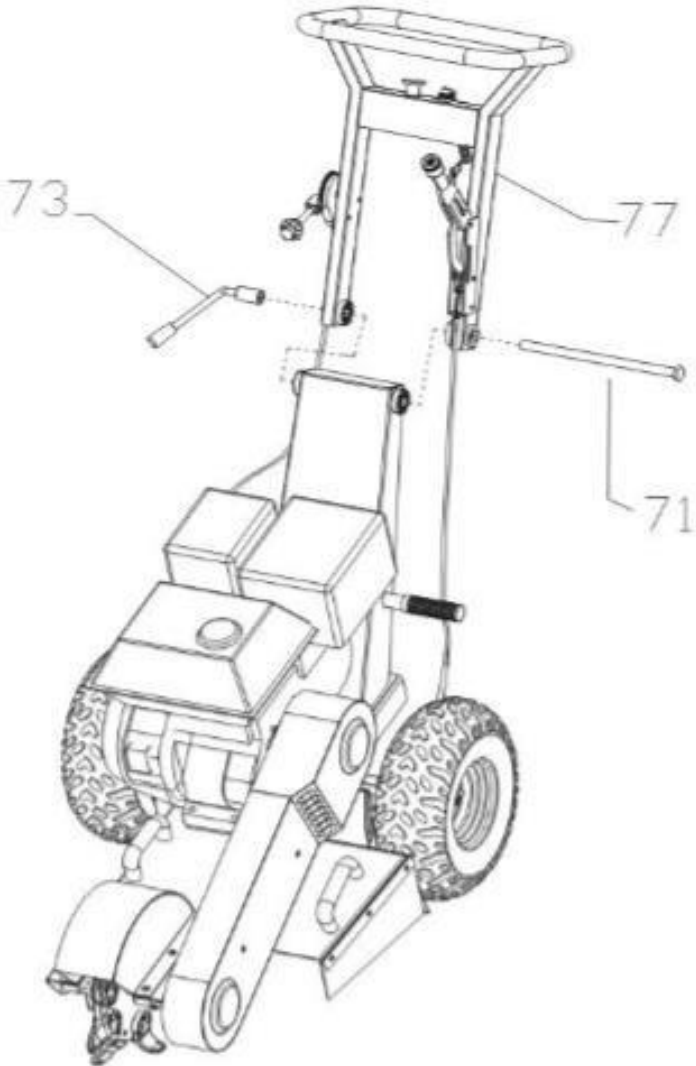
| | | | | |
|--------|-------|----------------------|-------------|-------|
| 1 | 2 | 3 | 4 | 36 |
| engine | wheel | Nylon anti loose nut | flat washer | wheel |



| | | | | |
|-------------|----------------------|----------------------|---------------|-------------|
| 9 | 27 | 43 | 75 | 76 |
| flat washer | outer six angle bolt | Nylon anti loose nut | spring washer | rear handle |

4.2

Assembling

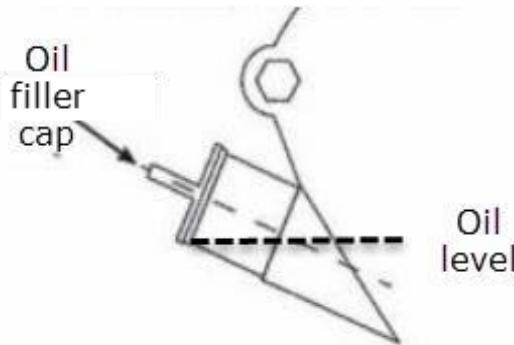


| | | |
|-------------------------|--------------------------|--------|
| 71 | 73 | 77 |
| outer six angle bolt | Adjustable handle bar | handle |

5. OPERATION

ADDING OIL & PETROL TO THE ENGINE

- 51 Only fill the fuel to a level 15mm lower than the top of the fuel tank. **DO NOT OVERFILL.**
- 52 Use the dipstick to check the oil level. Use SAE10w30 or 15w40 engine oil. Fill to the correct level before use.



- 53 The Engine is shipped without oil. Fill to the top of the oil filler neck before use. Operating the engine with no oil or oil at low level will cause serious internal damage to the engine, this is not covered under warranty
- 54 **DO NOT** use the machine on slopes greater than 10°.
- 55 **DO NOT** use the machine if you are tired, consumed alcohol, or if you are taking other drugs or medication that can affect your vision, judgement or coordination.
- 56 **NEVER** use the machine indoors or in spaces lacking proper ventilation.
- 57 Make sure you have a proper foothold when using the machine, particularly when walking backwards (which you should avoid). Walk, don't run. **NEVER** work on wet grass. Poor traction may cause you to slip, trip or fall.
- 58 Keep your hands and feet away from moving parts and working tools. **DO NOT** use your feet or other parts of your body to gain greater bearing pressure against the stump.
- 59 Naked flames or sparks in the vicinity of the machine are strictly forbidden. Petrol is extremely flammable and carelessness in handling can result in personal injury or fire.
- 510 **NEVER** use a machine with a defective exhaust/muffler.
- 511 In very warm and dry climates, stump grinder operation will pose a greater risk of starting fires.
- 512 Stop and inspect the equipment if you run over or into anything. If any damage has occurred you **MUST** make all necessary repairs before starting work again.
- 513 Whatever happens, you should always park the machine on even ground, disengage the drive, activate the parking brake, turn off the engine and wait until all moving parts have stopped before leaving the machine.
- 514 Beware of thrown objects, rotating cutters, **DO NOT** smoke in the vicinity of the machine.



Thrown objects

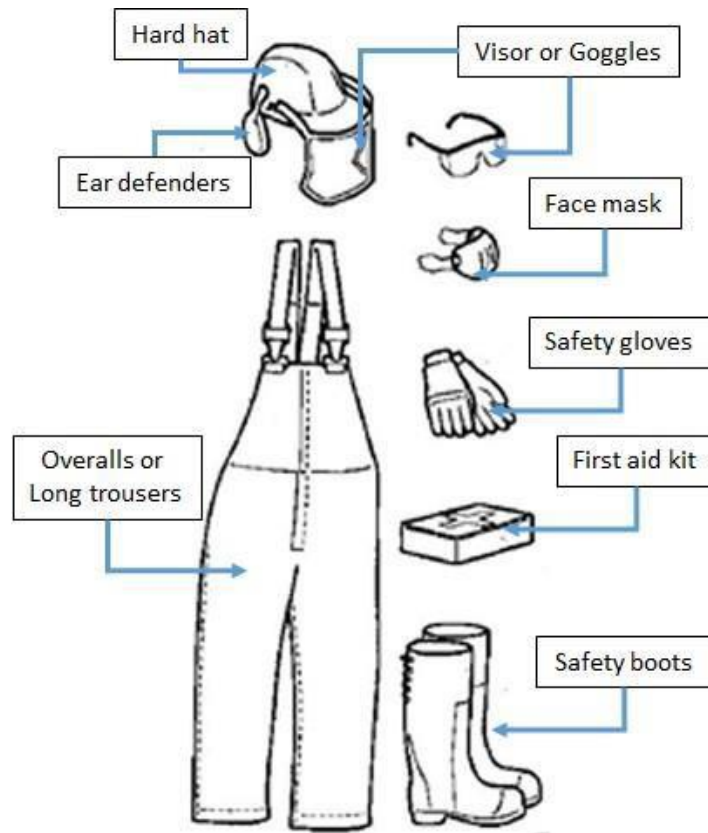


Rotating cutters



NO Smoking

515 Always use approved protective clothing and approved protective equipment when using the machine. Protective clothing and protective equipment cannot eliminate the risk of accident, but wearing proper clothing and the correct equipment will reduce the degree of injury should an accident occur. Ask your dealer about approved protective clothing and approved protective equipment recommended.



6. STARTING PROCEDURE

61 START THE ENGINE

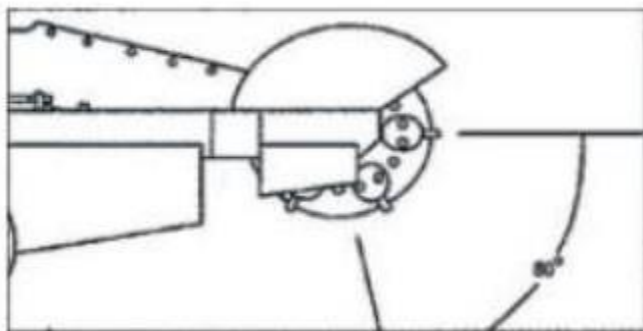
- Lock travel wheel by pulling brake lever fully back
- Turn fuel tap to ON
- Turn engine ON/OFF switch to ON.
- Make sure throttle is in slow speed position.
- If the engine is cold, move the choke lever to the closed/start position.
- Raise the cutter wheel 4 to 5 inches off the ground by pushing downwards on the handle bar, hold it in that position.
- Pull the starter rope lightly until resistance is felt then pull briskly. Do not allow the pull cord to snap back, return it by hand to prevent damage to the starter. This may cause the cutter wheel to rotate, keep everyone away.
- When engine starts, or fires, move the choke lever to the open/run position.
- If the engine is cold, allow the engine to tick over (throttle set to slow speed) for a few minutes before cutting, increase engine rpm to high speed setting before use. Please note that the centrifugal clutch may slip which will cause excessive wear if the machine is used at speeds below half throttle.

7. REMOVING STUMPS

- 7.1 Remove all loose pieces of wood, stones, wire and other debris from the area before beginning stump removal.



- 7.2 Wind direction should be considered, as it influences the direction in which dust and wood chips are directed.
- 7.3 Dig away the earth and remove any stones near the tree stump that may interfere with your work. Check that the ground is free of foreign objects, such as electrical cables, barbed wire, etc.
- 7.4 Cut or trim the stump as low to ground as required using a power saw.
- 7.5 Never operate the stump grinder after dark. There will not be adequate lighting for the operator to use the machine safely.
- 7.6 Always allow a cold engine time to warm up before use.
- 7.7 For best results, only the portion of cutting wheel within the 80-degree area shown below should be in contact with the stump.



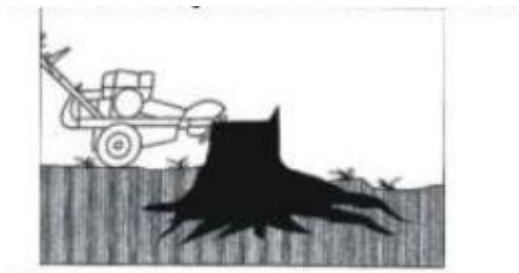
- 7.8 Never leave controls when the cutting wheel is rotating and stop the engine when machine is left unattended.

8. REMOVING STUMPS – OPERATION TIPS

- 81 Use smooth, comfortable side to side movements while operating, pivoting the arc on the locked left hand wheel.
- 82 When it is desired to cut smaller roots, it may be more effective to do so before rather than after cutting the main stump.
- 83 Should the chip build-up become excessive when cutting, stop the engine, wait for the cutting wheel to stop rotating, retract the machine from the stump and rake away the chips.
- 84 In order to prevent the wheels becoming stuck in the hole. Move the grinder to the other side of the stump to continue removal or by filling the hole with chips before continuing.

PREPARE THE GRINDER AT THE STUMP

- 85 Place the stump grinder into position with the cutting wheel near the top edge of the stump.



REMOVING ROOTS

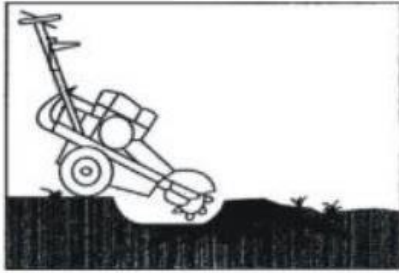
- 86 Make sure the throttle is set to high speed, the cutter wheel will accelerate to cutting speed
- 87 Swing the cutting wheel to one side, then lower it into the nearest roots that are buried at the foot of the stump.
- 88 Swing the cutting wheel before each sweep, until the roots are sufficiently removed.



- 89 Raise the cutting wheel until the center of the cutting wheel is just above the top of the stump.
- 810 Allow the cutter wheel to stop, release the brake and reposition the machine.
- 811 Lock the brake again.

CUTTING THE FULL STUMP

- 812 Make sure the throttle is set to high speed. The cutter wheel will accelerate to cutting speed
- 813 Direct the cutter wheel against the stump, beginning with the nearest top corner of the stump, and steadily sweep it across the stump left and right, cutting away 1/2 inch/ 13mm of wood with each sweep.
- 814 Raise and lower the cutter wheel between sweeps by lowering and raising the control handle.



- 815 Roll the machine forward and back, by pushing and pulling on the control handle. To do this, release the park brake. Relock it when the machine has been repositioned and continue cutting.

CONTINUE WITH FINAL ROOT REMOVAL

- 816 Cut the remaining roots as described 1.166 until satisfactorily removed

SHUTTING OFF THE GRINDER

- 817 When stopping the machine after normal operation. Lower engine speed to slow, and push the emergency switch.
- 818 Set park brake before leaving the controls
- 819 Shut off the engine by turning the ON/OFF switch to OFF.

9. SHUTDOWN PROCEDURE

- 91 In consideration of your own safety and that of others, you should always use the following normal shutdown procedures before departing from the controls for any reason including cleaning, servicing, transporting or inspecting the stump grinder. Never deviate from this procedure unless so instructed in this manual or in an emergency that requires it. A rotating cutting wheel is very dangerous. Stand at controls and ensure that the cutting wheel comes to a complete stop before doing anything else.
- 92 Move the engine throttle to the slow position.
- 93 Push the emergency (on/off) switch to stop the engine.
- 94 Set park brake before leaving controls.

EMERGENCY SHUTDOWN PROCEDURE

- 95 Immediately push the emergency (on/off) switch to stop the engine.
- 96 Be sure to allow all moving parts to come to a complete stop.
- 97 Pull the brake lever to engage the brake.
- 98 Rectify the emergency situation and return to normal operation.

10. MAINTENANCE

WARNING

Always stop the engine and unplug the spark plug before doing any repairs or maintenance.

Never touch the rotating blade.

Check and maintain fuel level regularly, and check engine oil daily.

At regular intervals, check the tightness of all nuts, bolts and screws.

If the blade hits an obstacle check for damage and if the machine vibrates badly stop the machine and take it to a service dealer.

CAUTION

Always refuel in a well-ventilated area with the engine off.

Whilst carrying out maintenance you must wear appropriate Personal Protective Equipment (PPE). Suggested PPE Sturdy footwear, work gloves and long trousers.

CAUTION

NEVER use a “pressure washer” to clean your stump grinder. Water can penetrate 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 H.T lead, and then wait for 5 minutes before performing maintenance on the machine.

| | | Each use | 1st Month or 20 hours | Every 50 hours | Every 6 months or 100 hours | Every year or 300 hours |
|---|----------------|--|--------------------------|-------------------|-----------------------------------|-------------------------------|
| Engine oil | Oil Check | * | | | | |
| | Replace | | * | | * | |
| Air Filter | Check | * | | | | |
| | Clean | | | * | * | |
| Air filter Carburetor Float bowl Spark plug | Replace | | | | | * |
| | Clean | | | | * | |
| | Clean / Adjust | | | | * | |
| Carburettor Float bowl | Replace | | | | | * |
| Spark arrester | Clean | | | | * | |
| Idle speed | Check / adjust | | | | | *# |
| Valve clearance | Check / adjust | | | | | *# |
| Fuel filter | Clean | | | | | * |
| Fuel tank | Clean | | | | | * |
| Fuel lines | Check | Check every 2 years – replace as required. | | | | |
| Cylinder head | Clean | Every 500 hours # | | | | |
| #- Unless you are mechanically proficient and have the correct tools we recommend that these service items are carried out by an authorised service dealer. | | | | | | |

- 101 Make sure all nuts, bolts and screws are tight.
- 102 Never store the equipment with petrol in the tank inside a building where fumes can reach an open flame or spark. Allow the engine to cool before moving the grinder.
- 103 To reduce fire hazards, keep the engine and petrol storage area free of grass, dirt and excessive grease.
- 104 Replace worn or damaged parts for safety. If the fuel tank has to be drained, this should be done outdoors.
- 105 Check the oil level daily and add engine oil if required. Change engine oil every 100 hours of use or every year, whichever comes first.
- 106 Frequently check the grinder and ensure to ensure all wood, bark and dirt deposits are removed from beneath the deck.
- 107 Grease the main cutting blade shaft bearings every 20 hours of use. There is a grease nipple on each bearing.



- 108 Check the tightening of all bolts and screws at regularly intervals.
- 109 If the grinder hits an obstacle violently, stop the grinder and take it to a specialist for inspection.

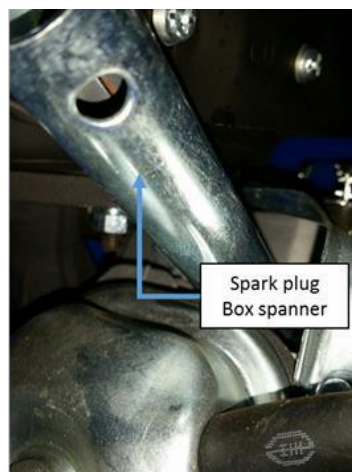
11. AIR FILTER

- 11.1 Never let the engine run without the air filter being fitted. A dirty air filter element affects the engine performance, increase fuel consumption and makes it difficult to start. If you notice a loss of engine power, check the air filter. You **MUST** make sure that the housing is free of dust and debris **DO NOT** allow any dust or debris to enter the carburetor.
- 11.2 Remove the air filter cover by unscrewing the air filter cover wingnut in an anti-clockwise direction, carefully remove the cover.
- 11.3 Once the air filter cover has been removed you can undo the air filter wingnut. Undo the air filter wingnut and remove the Paper/Foam filter element. If it is damaged replace it. Otherwise tap the filter to remove dust particles. Blow the remaining debris from the filter using a low pressure airline. Blow from inside the filter outwards. Wash the foam part in detergent and allow to dry. To reinstate the filter assembly reverse the above process.



12. SPARK PLUG

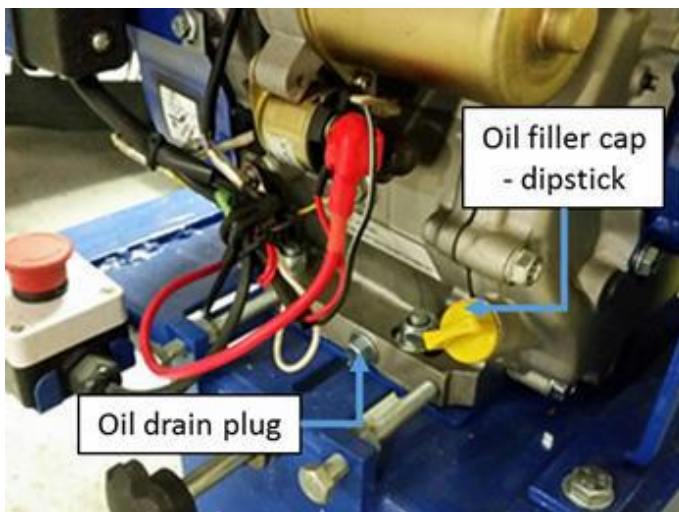
- 121 The spark plug **MUST** be fully tightened otherwise the engine will overheat causing damage. Always complete the following steps after the engine has been turned off and allowed to cool down
- 122 To make sure the engine runs correctly a spark plug gap of 0.6 - 0.7 mm must be maintained and the spark plug must be free of carbon deposits.
- 123 To remove the spark plug, pull off the HT lead and then undo the spark plug using the supplied box spanner / T bar in an anti-clockwise direction.
- 124 Once the plug has been removed check it for visual damage, electrode wear and carbon deposits. Replace a damaged or badly worn spark plug. Clean off any carbon deposits by using a soft brass brush.
- 125 Check the gap with a feeler gauge and adjust electrode to the correct gap of 0.6 - 0.7mm.
- 126 Check the spark plug washer for damage and replace if required.
- 127 Refit the spark plug by hand to make sure it does not cross thread, tighten the spark plug to a torque of 12/15Nm.





13. ENGINE OIL

- 131 Risk of burn from HOT engine and HOT oil – allow engine and engine oil to cool down before topping up or replacing oil.
- 132 Drain the used oil while the engine is warm. Warm oil drains quickly.
- 133 Remove the filler cap/dipstick and the drain plug, then place a suitable container under the oil drain plug and tilt the machine to catch the used oil.
- 134 Wait until all of the oil has drained from the engine. Once all oil is drained check the drain plug washer and replace if damaged. Replace the drain plug by hand to prevent cross threading then fully tighten.
- 135 **DO NOT** dispose of used motor oil in a manner that is incompatible with the environment. We suggest you take used oil in a sealed container to your local recycling center or service station for reclamation. Do not throw it in the domestic waste, pour it on the ground or down a drain.
- 136 With engine/machine on level ground fill to the upper edge of the oil filler neck with SAE15W40 oil. **DO NOT** overfill.
- 137 Screw the filler cap / dipstick in securely.
- 138 Clean up any spilt oil.



14. STORAGE

- 14.1 If you do not follow these steps, deposits may arise in the carburetor. This will cause starting difficulties and may cause permanent damage.
- 14.2 Perform all the general maintenance that the maintenance section of your 'User Manual' is recommended.
- 14.3 Clean the outside of the machine.
- 14.4 Remove all fuel from the fuel tank by tipping the content into a suitable container. **DO NOT** use stale fuel in the next season.
- 14.5 Turn OFF the fuel tap.
- 14.6 After all the fuel has been removed from the fuel tank. Start the engine. Allow the engine to run in idle until engine stops alone. This allows the remaining fuel to be emptied from the carburetor.
- 14.7 Allow the engine to cool down for about five minutes.
- 14.8 Remove the spark plug and pour 1 teaspoon of clean engine oil into the combustion chamber. Slowly pull the starter rope several times to coat internal components. Re place the spark plug.
- 14.9 Store the machine in a cool, dry place away from any source of ignition such as an oil burner, water heater etc.
- 14.10 Disconnect the battery and store in a cool dry place. During storage we advise you charge the battery at least once every month.

15. TRANSPORTATION

- 15.1 The stump grinder is designed to be transported via a van or small trailer. The machine is equipped with grab bars that are to be used for both lifting the machine, and strapping it down. This machine weighs approximately 110kg and should be lifted using correct apparatus or an adequate number of people working at a team.
- 15.2 When transporting the machine make sure that no fuel is allowed to leak out, ensure petrol ON / OFF is in the OFF position.

16. TROUBLESHOOTING

- 161 If troubleshooting does not solve the problem, contact your dealer or the manufacturer directly. Use only original parts approved by the manufacturer, otherwise a hazard risk arises.

ENGINE WILL NOT START **FUEL SYSTEM**

162 **POSSIBLE CAUSES**

- 1) Fuel valve is in CLOSED position.
- 2) Choke OPEN.
- 3) Fuel tank empty.
- 4) Machine stored incorrectly with regards to emptying fuel system.
- 5) Water or ice in fuel system.
- 6) Carburetor problem.

POSSIBLE CORRECTIVE ACTIONS

- 1) Move fuel valve to OPEN position.
- 2) Move choke lever to CLOSED position.
- 3) Check and fill with fuel.
- 4/5) Check and clean fuel tank of sludge, fuel lines & carburetor. Refill with fresh fuel.
- 6) Contact your dealer.

SPARK PLUG

163 **POSSIBLE CAUSES**

- 1) Incorrect spark plug.
- 2) Dirt or carbon build up on electrodes.
- 3) Spark plug short circuit.
- 4) Incorrect gap.
- 5) Petrol/oil on spark plug.

POSSIBLE CORRECTIVE ACTIONS

- 1) Replace with correct spark plug.
- 2) Clean and check spark plug gap, replace as required.
- 3) Replace with correct plug.
- 4) Check and re-gap plug to 0.6mm to 0.7mm.
- 5) Clean the spark plug, allow any excess fuel to evaporate. Start with full throttle.

NO SPARK AFTER SERVICE

164

POSSIBLE CAUSE

- 1) Faulty engine switch.

POSSIBLE CORRECTIVE ACTION

- 1) Contact your dealer.

165

LOW COMPRESSION

POSSIBLE CAUSE

- 1) Serious internal engine damage or faulty valves.

POSSIBLE CORRECTIVE ACTION

- 1) Contact your dealer.

ENGINE LACKS POWER OR RUNS UNEVENLY **AIR FILTER**

166

POSSIBLE CAUSE

- 1) Clogged Air Filter.

POSSIBLE CORRECTIVE ACTION

- 1) Clean and or replace as required.

FUEL SYSTEM

167

POSSIBLE CAUSE

- 1) Machine stored incorrectly with regards to emptying fuel system.

POSSIBLE CORRECTIVE ACTION

- 1) Check and clean fuel tank of sludge, fuel lines and carburetor. Refill with fresh fuel.

BLUE EXHAUST **LOTS OF BLUE/WHITE EXHAUST SMOKE**

168

POSSIBLE CAUSE

- 1) Tank filled with 2 stroke oil fuel mixture. Tank filled with diesel.

POSSIBLE CORRECTIVE ACTION

- 1) Clean tank, sludge reservoir and empty carburetor. Fill the tank with proper fuel. Open choke valve. Clean or replace the air filter.

169

BLACK EXHAUST **BLACK SMOKE**

POSSIBLE CAUSES

- 1) Choke left ON.
- 2) Blocked air filter.
- 3) Carburetor problem.

POSSIBLE CORRECTIVE ACTIONS

- 1) Move choke to correct position.
- 2) Clean air filter.
- 3) Clean carburetor.

BELT COMING OFF

16.10

POSSIBLE CAUSES

- 1) Pulleys not aligned.
- 2) Incorrect belt tension.

POSSIBLE CORRECTIVE ACTIONS

- 1) Align the pulleys.
- 2) Re-tension the belt.

ENGAGES LATE

16.11

POSSIBLE CAUSES

- 1) Loose belt.
- 2) Incorrect cutting depth.

POSSIBLE CORRECTIVE ACTIONS

- 1) Tighten the belt
- 2) Reduce cutting depth

DOES NOT STAY TIGHT

16.12

POSSIBLE CAUSE

- 1) Damage to axle, pulley or key.

POSSIBLE CORRECTIVE ACTION

- 1) Repair or replace axle, pulley or key. Make sure that the set screws are correctly tightened.

CUTTING WHEEL DOES NOT ROTATE

16.13

POSSIBLE CAUSES

- 1) Insufficient speed.
- 2) Incorrect belt tension.
- 3) Faulty clutch or clutch parts.

POSSIBLE CORRECTIVE ACTIONS

- 1) Speed up the engine.
- 2) Re-tension belt.
- 3) Replace clutch shoes, springs and/or clutch bearings.

CUTTING WHEEL DOES NOT ROTATE

16.14

POSSIBLE CAUSES

- 1) Disconnected throttle cable.
- 2) Damaged throttle cable.
- 3) Throttle cable incorrectly mounted onto throttle valve.
- 4) Incorrect clutch shoe tension.

POSSIBLE CORRECTIVE ACTIONS

- 1) Connect throttle cable.
- 2) Replace throttle cable.
- 3) Correctly mount throttle cable onto throttle valve.
- 4) Re-tension clutch shoes or replaces springs and clutch shoes.

16.15

PARKING BRAKE SLIPPING

POSSIBLE CAUSES

- 1) Incorrect brake lever tension.
- 2) Brake plunger loose.

POSSIBLE CORRECTIVE ACTIONS

- 1) Re-tension brake lever.
- 2) Re-fix brake plunger.

17. SPECIFICATION

| HYSG150-2 | | |
|-----------|-----------------------------|--|
| | Engine type | 4-stroke OHV |
| | Maximum output – hp | 14 |
| | Displacement - cc | 420 |
| | Ignition system | CDI |
| | Start method | Recoil / Electric |
| | Fuel type/tank capacity - L | Unleaded Petrol / 6 Litres |
| | Engine oil capacity - ml | 1200 |
| | Engine oil | SAE10W30 or 15W40 |
| | Brake | Drum Brake |
| | Drive | 2PCS v Belt |
| | Clutch | Centrifugal |
| | Cutters | 9 Blades with Tungsten Carbide tips (3x left, 3x right, 3x middle) |
| | Cutting depth – inches | 12 |
| | Net weight - kg | 110 |

18. DECLARATIONS OF CONFORMITY

18.1 Genpower Ltd confirms that these Hyundai products conform to the following CE Directives;

2006/42/EC Machinery Directive

2004/108/EC EMC Directive

97/68/EC_2010/26/EC NRMM Emissions Directive

19. RECYCLING & PRODUCT DISPOSAL

19.1 We do not offer a takeback scheme for the recovery of Waste Electrical Electronic Equipment (WEEE) & Batteries instead the responsibility to dispose of WEEE and or Batteries is passed onto you by us. So when it becomes necessary to dispose of your machine you must take it to your local Civic Amenity Site. For further information please contact your Local Authority for disposal advice.

19.2 You **MUST** make sure that all unused oil and fuel is disposed of correctly either beforehand or at your local Civic Amenity Site. Under **NO** circumstance must any oil and fuel be put down any drains.

19.3 Waste Electrical Electronic Equipment (WEEE) recycling.



19.4 Certain products contain WEEE waste which should not be disposed of in your domestic waste

19.5 You **MUST** recycle WEEE in accordance with your local authority or recycling centre.

19.6 Battery recycling, certain products contain batteries which should not be disposed of in your domestic waste.



19.7 You **MUST** recycle batteries in accordance with your local authority or recycling centre.

19.8 Unwanted packaging materials should be sorted and taken to a recycling centre so it can be disposed of in a manner which is compatible with the environment.

19.9 The following symbol means that you should 'Reduce – Reuse – Recycle'.



19.10 We are a Member of the VALPAK National Compliance scheme and our registration number is RM08660.

19.11 For further information about disposal please contact your Local Authority.

19.12 You can also get more advice and guidance about recycling at the following website
<http://www.recycle-more.co.uk>

19.13 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.

20. CONTACT DETAILS

- 20.1 POST**
Genpower Ltd, Isaac Way, London Road, Pembroke Dock, Pembrokeshire, SA72 4RW. UK
- TELEPHONE**
+44 (0) 1646 687 880
- FAX**
+44 (0) 1646 686 198
- TECHNICAL EMAIL**
aftersales@genpower.co.uk
- WEBSITE**
www.hyundaipowerproducts.co.uk

21. MANUAL UPDATES

- 21.1 Our manuals are constantly being reviewed and updated. Should you find an error, omission or something you find unclear please contact your dealer for assistance. E&OE.
- 21.2 Our latest manuals are also placed online at www.hyundapowerproducts.co.uk.
- 21.3 We reserve the right to make any modifications without prior notice whenever necessary.

22. WARRANTY

- 22.1 Warranty cover does not include damage caused by normal wear and tear, accidents, misuse, lack of maintenance, neglect, natural disaster, or other external causes; to damage caused by operating the equipment in a manner outside that described in the instructions. The warranty is considered void if the item has been modified, altered or tampered with. Belts, seals, blades, recoil start assemblies, bearings, wheels, tyres, brake shoes, cables etc are not covered under this warranty. Please see full warranty terms and conditions on www.hyundaipowerproducts.co.uk

Domestic Use: 1st year parts & labour, 2nd & 3rd years, parts only.

Commercial Use: 1 year parts & labour.

Rental Use: 3 months parts and labour.

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

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

NOTES

HYUNDAI

POWER PRODUCTS

For Inquiries, Please Contact:

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