HYUNDAI GRASS TRIMMER Model HYTR2650



User Manual

Licensed by Hyundai Corporation, Korea

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- 1.1. The operator of the machine;
 - 1.1.1. 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.
 - 1.1.2. Should never leave it in a condition which would allow an untrained or unauthorised person/s to operate this machine.
 - 1.1.3. Should take care and show due diligence for the safety of and with regard to those around whilst using the machine, to include but not limited to;
 - 1.1.3.1. Elderly, children, pets, livestock and property.
- 1.2. Some or all of the following PPE, Warning Signs and symbols may appear throughout this manual and you must adhere to their warning/s. Failure to do so may result in personal injury.



| Warning Signs and Symbols | | | | |
|---------------------------|----------|-------------|----------------------|--------------|
| ANGER | | WARNING | | |
| EXPLOSION | КІСКВАСК | HOT SURFACE | Хира SHOCK | MOVING PARTS |
| | FIRE | | TOXIC FUMES | |

Personal Protective clothing (PPE)



- 1.3. Carbon Monoxide
 - 1.3.1. Carbon monoxide is a colourless and odourless, inhaling this gas can cause death as well as serious long term health problems such as brain damage.
 - 1.3.2. The symptoms of Carbon monoxide poisoning can include the following;
 - 1.3.2.1. Headaches, Dizziness, Nausea, Breathlessness, Collapsing or Loss of consciousness.
 - 1.3.2.2. Carbon monoxide symptoms are similar to flu, food poisoning, viral infections and simply tiredness. That's why it's quite common for people to mistake this very dangerous poisoning for something else.
 - 1.3.3. To avoid Carbon monoxide poisoning DO NOT Use Petrol/Diesel powered equipment inside a home or garage even if doors and windows are open.
 - 1.3.4. If you think you or someone around you has been affected by carbon monoxide poisoning;
 - 1.3.4.1. Get fresh air immediately.
 - 1.3.4.2. Open doors and windows, turn off machine and leave the affected area.
 - 1.3.4.3. See your doctor immediately or go to hospital let them know that you suspect carbon monoxide poisoning.
 - 1.3.5. **DO NOT** use in an enclosed area or a moving vehicle.



- 1.4. General fuel safety.
 - 1.4.1. Fuel Safety additional information can be obtained from the Health and Safety Executive (HSE) document SR16.
 - 1.4.2. **CAUTION** All fuels are Flammable.
 - 1.4.3. Keep away from all ignition sources i.e. Heaters, Lamps, sparks from Grinding or welding.
 - 1.4.4. Hot work on tanks that have contained fuel is extremely dangerous and should not be carried out.
 - 1.4.5. Keep work area clean and tidy.
 - 1.4.6. Clean up all spills promptly using correct methods i.e. absorbent granules and a lidded bin.

1.4.7. Dispose of waste fuels correctly.



- 1.5. Petrol safety.
 - 1.5.1.1. Always fuel and defuel in well-ventilated area.
 - 1.5.1.2. Always wear correct, suitable and fit for purpose Personal Protective Equipment (PPE), suggested items are as follows, but are not limited too.
 - 1.5.1.3. Hand protection.



1.5.1.4. Protective clothing.



- 1.5.1.5. Respiratory protective equipment should be used when in an unventilated area.
- 1.5.1.6. When defueling always use a propriety fuel retriever.
- 1.5.1.7. Always carry fuel in the correct and clearly marked container.
- 1.6. Tool safety
- **DANGER** DO NOT modify the unit in any way.
- WARNING Only use the tool for the job for which it is intended.
- Always remove HT lead from spark plug when checking machine or changing parts.
 - 1.6.1. Inspect machine before each use, and replace any damaged parts before operation. Check for fuel leaks and make sure all fasteners are secure and in place. Make sure the safety guard is properly attached.
 - 1.6.2. Replace parts that are cracked, chipped or damaged in any way before using the tool. Make sure the safety guard is properly attached.
 - 1.6.3. Use only recommended accessories and parts, approved by the manufacturer. Non approved attachments may cause damage to the machine or harm to the user, and will also void your machine's warranty.
 - 1.6.4. When replacing the spool line, always use certified replacement sourced from the manufacturer. Only use genuine Hyundai spare parts.

- 1.6.5. Under no circumstances should you ever take the product apart or alter it in any way even if the item is faulty. You may damage or cause further harm by taking the product apart and you will void your warranty in doing so.
- 1.6.6. This grass trimmer is designed exclusively for cutting garden areas in a private domestic setting. Using it for any other purpose other than those intended qualify as improper use. The operator is solely responsible for assuming all risks.
- 1.6.7. Do not overload the machine. It will safer and better when operated within its specified performance range.
- 1.6.8. Keep others away from machine when making carburetor adjustments' or changing spool line

2. MACHINE PARTS



| 1 | Spark Plug | 9 | SafetyTrigger |
|---|-------------------|----|-----------------------|
| 2 | Air Filter | 10 | Throttle Lock |
| 3 | Choke Lever | 11 | Handle |
| 4 | Starter Pull Cord | 12 | Clamp |
| 5 | Primer Bulb | 13 | Spool head |
| 6 | Fuel Tank | 14 | Trimmer guard |
| 7 | Throttle Trigger | 15 | Fuel Mixing Container |
| 8 | Ignition Switch | 16 | Belt/Harness |

Accessories: 1 x Trimmer guard; 1 x Belt/Harness; 1 x Fuel Mixing Container; 1 x Allen key 4mm: 1 x Allen key 5mm & 1 x Open ended wrench.

3. ASSEMBLY PROCEDURE

Anti-vibration systems do not guarantee that you will not sustain white finger disease or carpal tunnel syndrome. Therefore, continual and regular users should monitor closely the condition of their hands and fingers. If any of the above symptoms appear, seek medical advice immediately.

WARNING Remove HT lead from spark plug when assembling the machine or changing parts.

3.1. Handle assembly.

- 3.1.1. Assemble the handles onto the upper shaft.
- 3.1.2. Insert the screw, washer and handle knob.
- 3.1.3. Tighten the handle knob.



- 3.2.1. Press the lock hook and insert the drive shaft, make sure the lock hook goes into the hole on the drive shaft,
- 3.2.2. When the shaft is assembled into place, tighten the clamp knob.







- 3.3. Trimmer guard assembly.
 - 3.3.1. Insert the trimmer guard.
 - 3.3.2. Tighten screw with 5mm Allen key.
- 3.4. Replacing the spool line.
 - 3.4.1. Remove bump head knob by turning anticlockwise.
 - 3.4.2. Remove the spool and spring from spindle.
 - 3.4.3. Measure approximately 26 feet (8 metres) of line, then thread one end through the hole on the spool. Pull the line until the two line lengths are equal.
 - 3.4.4. Wind both line tightly and evenly from side to side and feed the line while turning the spool in the direction of the arrow. Do not allow the lines to get twisted.
 - 3.4.5. When you have about six inches (150mm) of line remaining, press the line into the two notches on the bottom of the spool. This will hold the line on the spool ready for re-assembly.
 - 3.4.6. Install the spring over the spindle.
 - 3.4.7. Insert each end of the cutting line through the eyelets in the cutting head assembly and lower the spool while feeding the line.
 - 3.4.8. Once the spool is in place, apply pressure on the spool compressing the spring. Pull each end of the line sharply to unlock the line from the slots.
 - 3.4.9. Continue to apply pressure to the spool until the knob can be threaded clockwise onto the spindle.
 - 3.4.10. Tighten the knob securely.



Spring

Spool

🕂 NOTE

IE Make sure the line is only sticking out of the metal eyelets on the head.

4. **OPERATING PROCEDURES**

| ANGER | The trimmer is equipped with a two stroke engine. Always run the engine on unleaded fuel mixed with two stroke oil N.B. see specification section. | | |
|---------|--|--|--|
| WARNING | Always carry out fueling processes outside. | | |
| NOTE | Always wear correct Personal Protective Equipment (PPE) when using machine Minimum Recommended PPE. | FACE SHELD MUST BE WORN HEARING PROTECTION MUST BE WORN FOOT PROTECTION NUST BE WORN HANO PROTECTION MUST BE WORN | |

4.1. Fuel.

- 4.1.1. Always use fresh unleaded petrol.
- 4.1.2. Pre-mix 2-stroke oil with fresh unleaded petrol as follows:
 - 4.1.2.1. Synthetic 2-stroke oil: 40:1 (25ml of oil per 1 litre of petrol)
- 4.1.3. Never use multi-grade or waste oils.
- 4.1.4. Always mix fuel and oil in a separate clean container.
- 4.1.5. Start by mixing half of the required fuel with the whole amount of oil, mix (shake) the fuel oil mixture.
- 4.1.6. Add the remainder of the fuel.
- 4.1.7. Re-mix the fuel oil mixture.

4.2. Fueling.

- 4.2.1. Always shut off the engine before fueling.
- 4.2.2. Before fueling make sure the tank cap area is clean. This will prevent dirt and debris entering the tank.
- 4.2.3. Slowly open the fuel tank this will allow any pressure build up to disappear.
- 4.2.4. Fill tank with premixed fuel.
- 4.2.5. Always make sure that the fuel cap is secured tightly.
- 4.2.6. Always move the engine/equipment at least 3 metres (10 feet) away from the fueling area before starting machine.
- 4.3. Starting.
- **CAUTION** Before starting, make sure the cutting attachment does not touch anything
 - 4.3.1. Set the ignition switch (8) to the ON position. Push priming bulb (5) several times so that the fuel flows through the return pipe.
 - 4.3.2. Press safety trigger (9), pull throttle trigger (7) and push throttle lock (10), then slowly release the throttle trigger first, then the safety trigger. This will lock the throttle in the starting position.
 - 4.3.3. Set choke lever (3) to the OFF position.

- 4.3.4. Pull the recoil starter briskly, taking care to keep the handle in your grasp and not allowing it to snap back.
- 4.3.5. When you hear the engine wants to start, return choke lever to ON position. Then briskly pull the recoil starter again.
- **NOTE** If engine does not start repeat procedure from 4.3.2 to 4.3.5.
- 4.3.6. After starting the engine pull throttle trigger to release throttle lock. Then allow engine about 2-3 minutes to warm up before subjecting machine to any load.
- If the engine is warm it may not be necessary to apply the choke.
- Over-choking may cause starting difficulty due to a wet spark plug. In this case dry the plug or replace it. Remove excess fuel by leaving spark plug out and pulling recoil starter several times.

4.4. Cutting.

A cutting attachment can injure while it continues to spin after the engine is stopped or power control is released. When the unit is turned off, make sure the cutting attachment has stopped before the setting the unit down.

If your cutting attachment should strike against stones or other debris, stop the engine and make sure the attachment and related parts are undamaged. When grass or vines wrap around the attachment, stop the engine and remove them.

- 4.4.1. When cutting, operate the engine at over 6500 rpm.
- 4.4.2. Extended use at low rpm's will wear out the clutch prematurely.
- 4.4.3. Cut the grass from right to left.
- 4.4.4. Always wear the harness and keep onlookers out of the working area at least 15 metres (50 feet).



In the event of an emergency press the quick release button or pull the emergency release flap.

4.5. Stopping.

- A cutting attachment can injure while it continues to spin after the engine is stopped or power control is released. When the unit is turned off, make sure the cutting attachment has stopped before the setting the unit down.
 - 4.5.1. Decrease engine speed and run at idle for a few minutes, then turn OFF the ignition switch.

5. <u>MAINTENANCE</u>

DANGER 1 – The cutting attachment may spin during carburetor adjustments
2 – The cutting attachment should under no circumstances rotate when the engine is idling.

3 – Never start the engine without the complete clutch cover and tube assembled! Otherwise the clutch can come loose and cause personal Injury.

- 5.1. Carburetor Idle speed Adjustment.
 - **NOTE** Adjustment must be done by a qualified person, and make sure that after adjustment the standard engine idle speed is 2800 3200 rpm.
 - **NOTE** Fuel is mixed with air inside the carburetor. When the engine is test run at the factory, the carburetor is given a basic adjustment. A further adjustment may be required, according to climate and altitude, the carburetor has one adjuster.



- 5.1.1. Idle speed adjustment.
 - 5.1.1.1. Check that the air filter is clean. When the idle speed is correct, the cutting attachment will not rotate. If adjustment is required, close the idle-screw (clockwise), with the engine running, until the cutting attachment starts to rotate.
 - 5.1.1.2. Open (anti-clockwise) the screw until the cutting attachment stops. You have reached the correct idle speed when the engine runs smoothly in all positions well below the rpm when the cutting attachment starts to rotate.
 - 5.1.1.3. If the cutting attachment still rotates after idle speed adjustment, contact your service workshop.

5.2. Air filter.

- 5.2.1. The air filter must be cleaned from dust and dirt in order to avoid:
 - 5.2.1.1. Carburetor malfunctions.
 - 5.2.1.2. Starting problems.
 - 5.2.1.3. Engine power reduction.
 - 5.2.1.4. Unnecessary wear on the engine parts.
 - 5.2.1.5. Abnormal fuel consumption.
 - 5.2.1.6. Clean the air filter daily or more often if working in exceptionally dusty areas.

- 5.3. Cleaning the air filter.
 - 5.3.1. Remove the air filter cover and the filter.
 - 5.3.2. Rinse it in warm soapy water. Check that the filter is dry before reassembly. An air that has been used for some time cannot be cleaned completely.
 - 5.3.3. Therefore, it must regularly be replaced with a new one. A damaged must always be replaced.

5.4. Fuel Filter.

- 5.4.1. Drain all fuel from fuel tank and pull fuel filter line from tank.
- 5.4.2. Pull filter element out of holder assembly.
- 5.4.3. Replace, if it appears to be;
 - 5.4.3.1. Discoloured
 - 5.4.3.2. Hardened from use.



TE The filter has a white, felt-like appearance when new.

- 5.5. Spark plug.
 - 5.5.1. The spark plug condition is influenced by;
 - 5.5.1.1. An incorrect carburetor setting.
 - 5.5.1.2. Wrong fuel mixture.
 - 5.5.1.3. A dirty air filter.
 - 5.5.1.4. Difficult running conditions such as cold weather.



- 5.5.2. These factors cause deposits on the spark plug electrodes, which may result in malfunction and starting difficulties. If the engine is low on power, difficult to start or runs poorly at idling speed, always check the spark plug first. If the spark plug is dirty, clean it and check the electrode gap. Readjust if necessary. The correct gap is 0.6 mm. The spark plug should be replaced after 100 hours of operation or earlier if the electrodes are badly eroded.
- 5.6. Exhaust.

CAUTION Only remove exhaust when the machine has sufficient time to cool down.

- 5.6.1. Remove the exhaust.
- 5.6.2. Clean excess carbon from the exhaust and silencer inlet.
- 5.6.3. Carry this out for every 100 hours of operation.
- 5.7. Cylinder (Engine cooling).



ON Do not operate engine with engine shroud or exhaust guard removed as this will cause overheating and engine damage.

5.7.1. The engine is air cooled.



- 5.7.2. Air must circulate freely around engine and over cooling fins on cylinder head to prevent overheating.
- 5.7.3. Every 100 hours of operation, or once a year (more often if conditions require);
 - 5.7.3.1. Clean fins and external surfaces of engine of dust.
 - 5.7.3.2. Also clean dirt and oil deposits which can contribute to improper cooling.

5.8. Maintenance schedule.

- 5.8.1. Daily;
 - 5.8.1.1. Clean the exterior of the unit.
 - 5.8.1.2. Check the harness is undamaged.
 - 5.8.1.3. Make sure the cutting attachment is properly centralised and without cracks. An offcentralised, cutting attachment induces heavy vibrations and may damage the unit.
 - 5.8.1.4. Make sure the cutting attachment nut is sufficiently tightened.
 - 5.8.1.5. Check that nuts and screws are sufficiently tightened.
- 5.8.2. Weekly;
 - 5.8.2.1. Check the starter.
 - 5.8.2.2. Clean the exterior of the spark plug.
 - 5.8.2.3. Remove the spark plug and check electrode gap. Adjust gap to 0.65 mm, or change spark plug.
 - 5.8.2.4. Clean the cooling fins on the cylinder and make sure air intake is not clogged.
 - 5.8.2.5. Make sure the gear case is filled with grease up to ³/₄ full.
 - 5.8.2.6. Clean the air filter.
- 5.8.3. Monthly;
 - 5.8.3.1. Rinse the fuel tank with unleaded petrol.
 - 5.8.3.2. Clean the exterior of the carburetor and space around it.
 - 5.8.3.3. Clean the fan and the space around it.

6. TROUBLESHOOTING.

6.1. Engine Troubleshooting - N.B. all corrective actions should be carried out by suitably qualified person/s.

| Problem | Check | Status | Cause | Remedy |
|--------------------------|------------------------------|----------------------------------|---------------------------------|--------------------|
| | | | Fuel filter blocked | Clean or replace. |
| | Fuel at Carburetor | No fuel at Carburetor | Fuel line blocked or clogged | Clean or replace. |
| | | | Carburetor | Contact dealer. |
| | | No Fuel at cylinder | Carburetor | Contact dealer. |
| Engine cranks. | | Exhaust wet with fuel | | Open Choke. |
| | Fuel at Cylinder | | | Clean/replaceair |
| or | | | Fuel mixture too rich | filter. |
| | | | | Adjust carburetor. |
| Starts hard. | | | Stop quitab OFF | Contact dealer. |
| or | | No spark | Stop switch OFF | Turn switch to ON. |
| Does not start | Spark at end of Plug wire | | Electrical problem | Contact dealer. |
| | | | Interlock switch | Contact dealer. |
| | | | Spark gap incorrect | Adjust to 0.65mm. |
| | | | Covered with carbon | Clean or replace. |
| | Spark at Plug | No spark | Fouled with fuel | |
| | | | | Clean or replace. |
| | | | Defectiveplug | |
| | | | | Replace plug. |
| | Air filter | Air filter dirty | Normal wear | Clean or replace. |
| | Fuel filter | Fuel filter dirty | fuel | Replace fuel. |
| Engine runs but | Fuel vent | Fuel vent blocked | Clear vent | Clear or replace. |
| dies or does not | Spark plug | Plug dirty or worn | Normal wear | Clean, adjust or |
| accelerate | | | | replace. |
| properly. | Carburetor | Improper | Vibration | Adjust. |
| | Cooling system | adjustment | Extended operation in | Clean and let |
| | | Excessiveheat | dirty/dustylocations | machine cool down. |
| | Spark arrestor screen | Screen cracked, or perforated | Nerreeluseer | Replace. |
| | | | Normal wear | |
| Engine does not crank | N/A | N/A | Internal engine problem | Contact dealer. |

7. <u>STORAGE</u>

- 7.1. Fuel.
 - 7.1.1. Drain all fuel from the machine, if;
 - 7.1.1.1. The machine is not going to be used for some time i.e. longer than 3 months.
 - 7.1.1.2. Storing machine for the winter.

NOTE Failure to do so may cause corrosion to the carburetor.

8. SPECIFICATION

| | HYTR2650 | |
|---|---|--|
| Engine type | Air cooled, two stroke, single | |
| | cylinder petrol engine | |
| Max output | 1.2W @ 7500 rpm | |
| Displacement | 25.4 cm ³ | |
| Spark Plug | Champion RCJ6Y | |
| Fuel | Unleaded petrol and Two stroke oil mix | |
| Fuel/Oil Ratio | Pre-mix 2-stroke oil with fresh unleaded petrol as follows: Semi -Synthetic 2-stroke oil: 40:1 (25ml of oil per 1 litre of petrol) | |
| Fuel tank capacity | 450 cm ³ | |
| Cutter head | 400-450mm, bump feed string trimmer kit | |
| Mass without fuel, cutting attachment and guard | 6.5 Kg | |
| Maximum spindle speed | 7500 min ⁻¹ | |
| Engine speed (rotational frequency) at | 7500 min ⁻¹ | |
| recommended max, spindle rotational frequency | | |
| Idling speed | 3000 min ⁻¹ | |
| Vibration levels – racing | 5.0 m/s ² | |
| Sound power level LwA | 111 dB (A) | |

9. GENPOWER CONTACT DETAILS

9.1. Postal address;

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

9.2. Telephone contact number; Office +44 (0) 1646 687880

9.3. Email contacts;

Technical <u>service@genpower.co.uk</u>

9.4. Web site; www.hyundaipowerequipment.co.uk

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10. DECLARATIONS of CONFORMITY

- 10.1. Genpower Ltd confirms that these Hyundai products conform to the following CE Directives;
 - 10.1.1. 2006/42/EC Machinery Directive
 - 10.1.2. 2004/108/EC EMC Directive
 - 10.1.3. 2000/14/EC Noise Emissions Directive
 - 10.1.4. 97/68/EC NRMM Emissions Directive



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