

HYUNDAI

POWER PRODUCTS

Original instructions

TONDEUSE THERMIQUE

Model: HTDT46354F



WARNING: Read and understand all instructions and notes

HYUNDAI
32, rue Aristide Bergès - ZI 31270 Cugnaux - France

Licensed by Hyundai Corporation, Korea



Congratulation!

Dear Customer,

The team of HYUNDAI would like to thank you for the choice and for the confidence shown to our product. Our aim is, always to offer an innovative, high-class-strong and prize-adequate product to the customer. We wish you much pleasure in do-it-yourselfers activity, free of friction with this machine.

Your HYUNDAI Team

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SAFETY INSTRUCTIONS

1) General Safety instructions for thermal mowers

Instructions

- a) Read the instructions carefully. Be familiar with the controls and proper use of the equipment.
- b) Never allow children to use this mower. If the mower is given to an other people, also give this manual. Also make sure that this person uses this device only after receiving the necessary instructions. Local laws may restrict the age of the user.
- c) Never mow while people, especially children, or animals are nearby.
- d) Keep in mind that the operator or user is responsible for accidents or risks that may occur to other persons or their properties.

Preparation

- a) During mowing, always wear safety shoes and long pants. Do not use the equipment barefoot or wearing sandals open.
- b) Carefully inspect the area where equipment is being used by removing all objects that may be affected by the machine.
- c) **WARNING** - Gasoline is extremely flammable.
 - Add fuel before starting. Do not remove the fuel tank cap while the machine is running or when it is hot.
 - If the fuel has spilled or leaked, do not attempt to start the machine but move the machine away from the leakage area and avoid creating a source of ignition until the gasoline vapors has dissipated.
 - Refuel only outside and do not smoke during refueling.
 - Store fuel in tanks specifically designated for this purpose.
 - Replace the fuel tank or the defective gasoline plug securely.
- d) Replace defective mufflers.
- e) Before use, always inspect visually that the blades, blade assembly and

blade lock are not worn or damaged. Replace blades and blade assemblies that are not in good condition to maintain balance.

- f) The blades must be balanced to ensure proper operation and to be able to work safely.

Operation

- a) Do not use the machine in a confined space or hazardous carbon monoxide emissions can be collected.
- b) Mow only under daylight or under good artificial light.
- c) Avoid using the equipment on greasy grass, where possible.
- d) Always be sure of your walking on the slopes.
- e) Walk, never run.
- f) For lawn mowers, mow across slopes, never from top to bottom.
- g) Exercise extreme caution when changing direction on slopes.
- h) Stop the blades if the mower is to be tilted during transport when crossing surfaces other than grass, and when transporting the mower due to the area to be mowed.
- i) Do not mow on steep slopes.
- j) Use extreme caution when tipping or pulling the mower towards you.
- k) Never use the mower with defective guards, or without safety devices such as baffles and or collection bins, which are not in place.
- l) Do not change the motor configuration or increase the speed.
- m) For starting, disengage all blades, the gears must be in neutral, the traction control lever must be released. Set foot well away from the blades.
- n) Before starting the engine or starting the engine, carefully read and understand all instructions.
- o) Do not tilt the mower when starting the machine or turn on the engine, unless the mower needs to be tilted for starting. In this case, do not tilt it more than absolutely necessary and lift only the part that is furthest away from the user.
- p) Do not start the machine by standing in front of the ejection.

- q) Do not place hands or feet near or under rotating parts. Keep clean the mouth of the grass extractor.
- r) Never take or carry the mower while the machine is running.
- s) Stop the machine and remove the ignition key, disconnect the spark plug from the spark plug:
 - Before cleaning or unclogging the grass extractor.
 - Before checking, cleaning, and working on the mower.
 - After hitting an object. Inspect the mower for damage and repair before re-using the mower.
 - If the mower begins to vibrate abnormally, stop the engine immediately and check according to previous recommendations.
- t) Stop the engine immediately:
 - Every time you leave the craft.
 - Before refueling.
- u) To stop the engine, reduce the throttle setting, turn off the ignition and release the operator presence grip, close the fuel cock (depending on the equipment).
- v) Move slowly when moving.

Maintenance and storage

- a) Check, check and tighten all bolts, bolts, and screws to ensure that the equipment is in safe operating condition.
- b) Never keep the mower with gasoline in the tank in a building or vapors can cause a bright flame or spark.
- c) Allow the machine to cool before storing it in an enclosed area.
- d) To reduce the risk of fire, keep the machine clean without grass, without grease, the muffler and the engine cools, disconnect the battery if necessary and empty the fuel tank.
- e) Check the grass catcher frequently, its condition or deterioration.
- f) Replace worn and damaged parts for safety.
- g) If the fuel tank is to be drained, it must be made outdoors.

2) **Special safety instructions**

- Always use the mower with its pick-up bag and / or deflector in the intended position.
- Switch off the engine before emptying the pick-up bag or before changing the cutting height.
- While the engine is running, never put your hands or feet under the mower or under the grass ejection area.
- Before mowing, remove all foreign objects from the grass that can be propelled by the machine.
- Keep children and pets at a safe distance while using the mower.
- Never lift the mower when the engine starts.
- Alcohol, drug, as well as illness, fever and fatigue affect your ability to respond. Do not use power tools in such circumstances.
- Never change the rated speed of the motor.
- Never lift or carry the tool while the engine is running.
- Before starting the engine, release the drawbar.
- Before mowing, install the collection bag in its intended position.
- Do not use the mower in the event of rain or when the grass is wet.
- Never lift the rear of the mower when starting the engine and never place your hands or feet under the mower deck or in the rear ejection port while the engine is running.
- Turn off the engine and remove the spark plug cap in the following cases:
 - Before operating under the mower deck or near the ejection opening.
 - Before any maintenance, repair or verification.
 - Before transporting, lifting or storing the mower.
 - If you leave the mower unattended or change the cutting height.
 - To remove and empty the collection bag.
- After striking a foreign object, turn off the engine and carefully inspect the mower for damage. Take the lawnmower to an authorized service center for repair if necessary.

- If the mower vibrates abnormally, try to understand the reason and bring your lawnmower to an authorized repair center.
- Regularly check that the bolts, nuts and screws are properly tightened for safe use of the mower.
- Do not use the tool where there is the possibility of thunderstorms and lightnings.
- The lawnmower should not be used without the grass catcher or its side discharge.
- Prolonged exposure to noise can pose a risk, such as hearing loss. Limit the running time of this tool (for instance, use it for 20 minutes and take a 20-minute break). Always wear hearing protection.
- Watch for exhaust fumes during use. Do not expose others or yourself to exhaust fumes. Wear a protective mask.
- When stopping the tool, make sure that the blade has completely stopped. If the blade goes on rotating after the tool has come to a complete stop, please stop using it and take it to a service agent for inspection.
- Use the tool in daylight or under good lighting. Always keep spectators at a distance.
- Warning: Take extreme precautions when operating the lawnmower on slopes and close to drop points, ditches or slopes. Always be sure of your position and stay alert.
- the safety systems or functions of the lawnmower should not be altered or deactivated;
- the operator should not modify or alter the settings of the engine speed control;
- Before using the tool for the first time, the operator should have received adequate training from experienced personnel.
- Warning: do not use the device if you feel tired or sick or are under the influence of alcohol or other drugs;
- Park the tool safely before leaving it. The tool should be turned off.
- The lawnmower should not be used without the grass catcher or automatic

discharge opening device in place;

- Caution: watch for exhaust fumes. Do not inhale them.
- Wear suitable clothing such as long pants and protective equipment: anti-slip shoes, hearing protection, eye protection and gloves.
- To avoid health problems, limit the running time. Get enough rest. Exposure to noise and vibration can have serious health consequences.

3) **Fuel Handling**

- Use caution when handling fuels. They are flammable and the vapors are explosive.
- Use only an approved container.
- Never remove the fuel cap or add fuel while the machine is on. Turn off the unit and allow the engine and exhaust components to cool down before refueling.
- Do not smoke.
- Never refuel inside a room.
- Never store the tool and the fuel tank indoors where there is a naked flame, such as near a water heater.
- If fuel has spilled, do not attempt to start the machine, but move it away from the spill before starting to use it. Please clean up any spills.
- Replace and tighten the fuel tank cap after refueling.
- Follow strictly the instructions in this manual for filling the tool with fuel.

4) **During maintenance and storage**

- Switch off the tool and wait until it stops completely. Make sure that all moving parts are stopped. The tool must be parked in a safe place.
- Allow the machine to cool before performing inspection, adjustments, maintenance, servicing and storage.
- Store the tool where fuel vapor will not reach a flame or spark.

5) **Residual risks**

Even if you use this product in compliance with all safety requirements, the potential risks of injury and damage remain. The following hazards may arise in the structure and design of this product:

There are adverse health consequences resulting from the emission of vibration if the product is used for long periods of time or not properly managed and properly maintained.

There are risks of injury and property damage due to attachments or broken the sudden impact of hidden objects when using cutting.

Risk of injury to persons and property caused by flying objects.

Prolonged use of this product exposes the operator to vibrations and can produce so-called "white finger" disease. To reduce the risk, wear gloves and keep your hands warm.

If any of the symptoms of "white finger syndrome" occur, seek immediate medical attention. Symptoms of "white finger" include numbness, loss of sensitivity, tingling, tingling, and pain, loss of strength, color changes or skin condition. These symptoms usually appear on the fingers, hands or wrists. Risk increases at low temperatures.

There is a risk of loss hearing in case of prolonged use and when a hearing protection is not worn.

6) Symbols marked on the machine



B.1 Read the instructions manual.

B.2 Beware of projections! Keep spectators away from the work area

B.3 Danger! Keep your hands and feet away from the cutting element!





B.4 Fuel is flammable, keep it away from the fire. Do not add fuel while the machine is running.

B.5 Toxic fumes, do not use the machine inside a room.

B.6 Wear eye and ear protection.

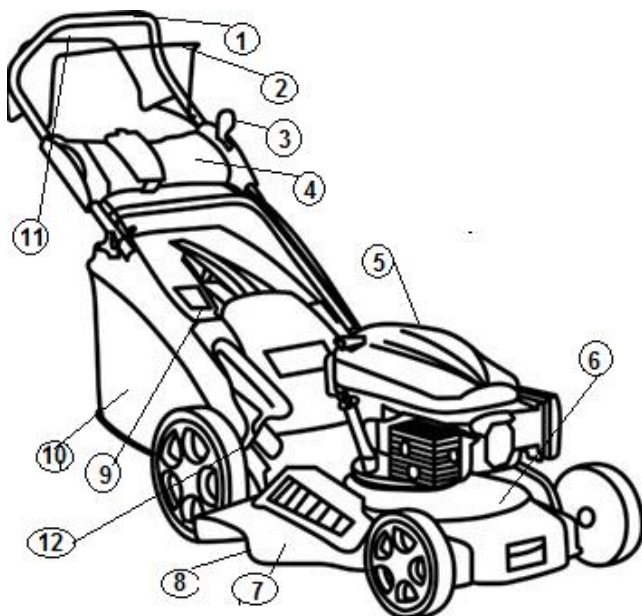
B.7 During repair work, remove the spark plug and repair according to the operating manual.

B.8 Caution ! The tool surfaces may be hot.

	Symbol for reporting a warning, information
	Do not use in the rain
	The blades continue rotating after the engine has stopped.
	Guaranteed noise emission level

THE TOOL

1) Description of the tool



1. Upper handlebar	9. Deflector
2. Engine control bar	10. Grass box
3. STARTER lever	11. Propeller bar
4. Panel	12. Height adjustment lever
5. Engine	
6. Carter	
7. Side protection	
8. Fall opening	

2) Technical Information

MODEL	HTDT46354F
Nominal power (kW)	2.4
Displacement (cm ³)	135
Nominal speed (min ⁻¹)	2850
Max. torque (Nm)	6,5
Cutting height range (mm)	25-65
Number of heights of cut	5
Blade thickness (mm)	2,5
Cutting width (mm)	460
Cutting height adjustment	Central adjustment
Collection bag volume (L)	55
Weight (kg)	32
Engine type	4 strokes
Type of engine cooling	Air cooling
Start-up mode	Recoil launcher
Driving system	Auto-traction
Fuel tank capacity (L)	1,3
Oil tank capacity (L)	0,6
Max. allowed slope (°)	20
Guaranteed sound pressure level at the user's position (In accordance with EN ISO 5395-1 Annex F and EN ISO 5395-2, EN ISO 4871)	80 dB(A) (K = 3 dB(A))
Measured sound power level Guaranteed sound power level (In accordance with 2000/14/EC)	95,37 dB(A) K = 3dB(A) 96 dB(A)
Vibrations (In accordance with EN ISO 5395-1 Annex G and EN ISO 5395-2)	3.89 m/s ² K = 1,5 m/s ²

ASSEMBLY

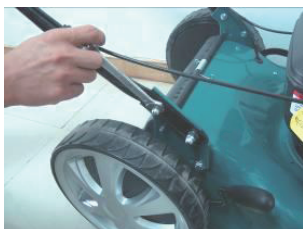
This model of thermal mower is designed for mowing natural grass. Any other use is prohibited.

It is only suitable for private use in a garden or plot. Mowers designed for private plots or gardens are those used for the maintenance of private grassy areas and lawns and should not be used in public areas, parks, sports, agricultural or forestry areas.

1) Assembly guide

a. Folding handle

Attach the lower handlebar to the tool body with a suitable wrench.
(Picture 1A)



(picture 1A)

Release the upper handlebar to unfold it.

Turn the tightening rotary selector to lock the handlebars in the intended position.
(Picture 1B)



Locking
lever

(picture 1B)

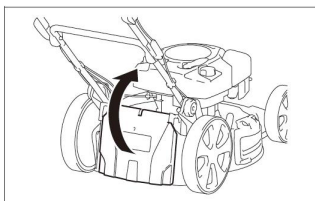
Adjust the tension by turning the locking nut with a suitable wrench.
Install the cable clamp in the indicated position and attach the cable to it.
(Picture 1C)



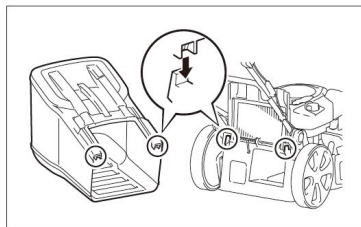
(img. 1C)

b. Assemble/dismantle the collection bag

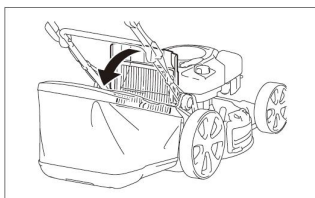
- To install it: Lift the deflector and hang the collection bag on the back of the mower. (Picture 2A/2B/2C).
- To remove it: hold the deflector and lift it up, then remove the collection bag.



Picture 2A



Picture 2B



Picture 2C

USE

1) Filling the tank

The fuel should meet the following criteria:

- Clean, new and unleaded gasoline.
- A minimum octane number of 87/87 AKI (91 RON). For high altitude use, see below.
- Gasoline containing up to 10% ethanol is acceptable.

CAUTION: Do not use non-approved gasoline, such as E15 and E85. Do not mix oil with gasoline or modify the engine to run on alternative fuels. The use of unapproved fuels shall damage the engine components and **void the engine warranty.**

To protect the fuel system from scale formation, add a fuel stabilizer to the fuel.

Not all fuels are the same. If start-up or performance problems occur, change supplier or fuel brand. This engine is certified to run on gasoline. Emissions control for this engine is done through the EM (Engine Modifications) system.

At altitudes above 1524 m, a gasoline with a minimum octane number of 85/85 AKI (89 RON) is acceptable. To remain compliant with emissions, a high-altitude setting is required. Use without this setting shall reduce performance, increase fuel consumption and emissions levels.

The use of the engine at altitudes below 762 m with the high-altitude setting is not recommended.

1. Remove the fuel tank cap.
2. Add fuel.

Do not overfill. Wipe off any fuel that has overflowed before starting the

engine.

Fuel tank capacity: 1.2 L (Picture3A)

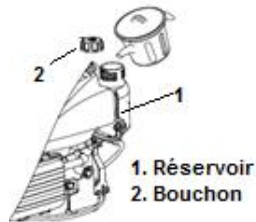


Image 3A

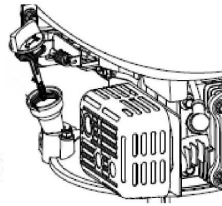
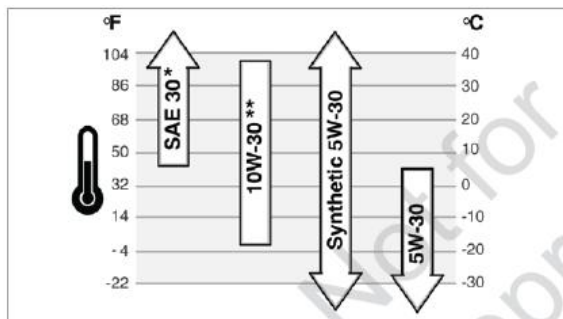


Image 3B

2) Engine oil

Recommended oil: We recommend the use of a high-quality detergent oil classified for SF, SG, SH, SJ or higher. Do not use special additives.

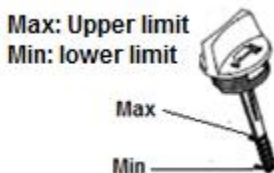
External temperatures determine the proper viscosity of the oil for the engine. Use the table to choose the best viscosity for the expected outdoor temperature range.



- Below 4°C, the use of SAE 30 oil causes difficult starts.
- Above 27°C, the use of 10W-30 oil can increase oil consumption. Check the oil level regularly.

Checking the oil level

1. Check the oil level once the engine is switched off and lays horizontally.



2. Remove the dipstick/gauge from the oil tank and wipe it off.
3. Insert the oil tank dipstick/gauge into the tank neck as shown, without screwing it back in, then remove it to check the oil level.
4. If the oil level is close or below the lower limit of the dipstick, remove the dipstick/gauge and fill the recommended oil tank to the upper limit of the dipstick (lower edge of the neck). Do not overfill.
5. Replace the oil tank dipstick/gauge.

Oil tank capacity (L): 0,6L.



WARNING ! Gasoline is extremely flammable.

Store fuel in specially designed containers.

Fill the fuel tank only outdoors and before starting the engine. Do not smoke when filling the fuel tank or handling fuel.

Never open the fuel tank cap and never add fuel when the engine is running or hot.

If fuel has overflowed, never start the engine, move the tool away from where the fuel was spilled and be careful not to create sparks or flames until the fuel vapours have dissipated.

Fully close all fuel tank and container caps.

Before tilting the mower to maintain the blade or drain the oil, empty the fuel tank.

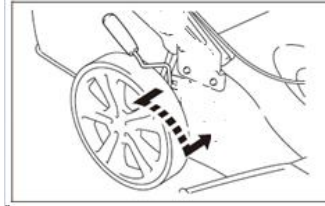


WARNING: Never fill the fuel tank indoors, while the engine is

running or before the engine has cooled down for at least 15 minutes after use.

3) Cutting height

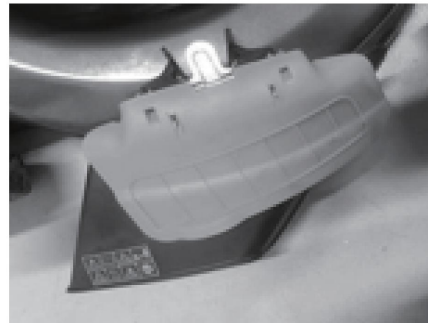
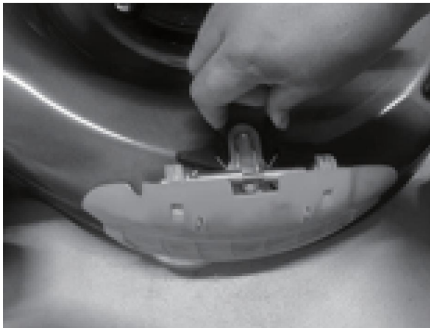
Push the lever outwards to release it from the housing. Move it forward or backward to adjust the height. (Picture 3)



Picture 3

4) Mounting the side discharge deflector

- Push the flap locking device, so that it can be lifted.
Hold the flap then hook the side discharge.



NOTE: Before installing the side discharge, remove the grass catcher. The two functions can not be used together at the same time.

5) Collection box

Before working on the grass catcher, switch off the engine and wait for the blade to fully stop.

When you see the grass scattering underneath the mower, empty the grass catcher.

When the mower is not used with the collection box, the cut grass will be

ejected downward.

6) **Start-up**

- The tool is equipped with a rubber cap located above the spark plug. Make sure the metal loop at the end of the spark plug cable (in the rubber cap) is tightened around the metal end of the spark plug.
- To start the cold engine, turn the choke to the "START" position. (Start-up) (Picture 4A).
- To start the warm engine and during operation, turn the choke to the "RUN" position (Operation). (Picture 4B)
- While standing behind the tool, bring the engine control bar back to the upper handlebar as shown in Figure 4C.
- Take control of the recoil starter. Pull it with a sharp movement. Gently return it to the mower once the engine has started.
- Release the engine control bar to stop the engine and blade (Picture 4D).



Picture 4A



Picture 4B



Picture 4C



Picture 4D

- Carefully start the engine according to the instructions and keep your feet

away from the blade.

- Do not tilt the mower when starting the engine. Start the mower on a horizontal surface, free from tall grass and obstacles.
- Keep hands and feet away from rotating parts.

7) Traction of the mower

Once the engine has started, return the wheel clutch lever to the handlebar and hold it in this position.

The mower starts moving forward.

To stop the mower, release the lever.

MAINTENANCE AND STORAGE



WARNING: Turn off the engine and remove the spark plug before servicing.

- Check that all nuts, bolts and screws are still tight to keep the mower in a safe operating condition.
- Never store the mower with its tank filled with fuel in a closed room where gasoline vapours may come into contact with a strong heat source or flame. Allow the engine to cool before storing your mower in its storage area.
- To reduce the risk of fire, clean the mower, especially the engine, muffler and fuel tank. Remove all traces of grass, leaves or excess fat.
- Check the condition of the baffle and collection bag frequently. Replace them if they are damaged.
- If you need to empty the oil tank before winter, carry out this operation outdoors.
- Wear thick gloves before mounting or sharpening the blade. Make sure the blade is still well balanced.

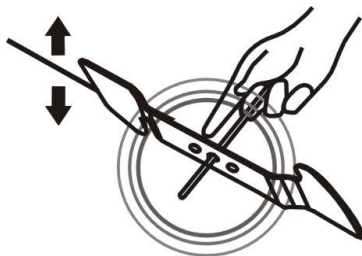


WARNING: Stop the engine and unplug the spark plug before any repairing or maintenance.

- Check regularly the oil level and add some oil or replace it if necessary.
- Frequently check the lawn mower and make sure that all grass deposits are removed from beneath the deck.
- Lubricate regularly the wheel (10) axle and the bearing with grease.
- Check often the blade, in order to obtain a clean work the blade should always be sharp and well balanced.
- At regularly intervals check the tightening of all bolts and screws. Wear off or badly tightening nuts and bolts can involve some important damages to the engine or to the frame.
- If the blade hits violently and obstacle, stop the lawn mower and bring it to an authorized service point.

1) Blade

WARNING: Wear gloves, stop the engine and unplug the spark plug before proceeding these operations.

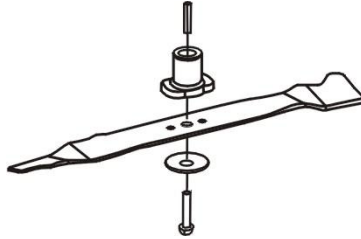


The blade is made of pressed steel, in order to obtain a clean work sharpen the blade frequently, about every 25 hours of work. Be sure that the blade is

always well balanced.

Insert a small iron pin (2 or 3 mm in diameter) into the hole in the middle of the blade: it must remain horizontal. If the blade does not stay horizontal, balance it by sharpening it further on the side where it is leaning.

WARNING: use only original spare parts. Poor quality spare parts can cause significant damage to your mower and affect your safety.



To remove the blade, loosen the screw, check the blade holder and replace all parts if they are worn or damaged.

To sharpen the blade, place it in a vise and file the sharp edges evenly, checking the blade balance.

When raising the blade, make sure that the cutting edges are in the same direction as the direction of rotation of the engine. The tightening torque of the blade screw should be $3.7 \text{ kg} \cdot \text{m/s}^2$ (37 Nm) and can be checked with a torque wrench.

PROTECTION OF THE ENVIRONMENT



Selective collection of electrical and electronic equipment waste.

Electrical products should not be disposed of with household products. According to the European Directive 2012/19/UE for electrical and electronic equipment waste and its implementation in national law, used electrical products should be collected separately and disposed of at collection points provided for this purpose. Consult with your local authorities or your dealer for advice on recycling.

HYUNDAI

POWER PRODUCTS

Declaration **CE** of conformity

BUILDER

32, rue Aristide Bergès –Z1 31270 Cugnaux - France

Tel.: +33 (0)5.34.502.502 Fax: +33 (0)5.34.502.503

Declares that the machinery designated below:

TONDEUSE THERMIQUE

HTDT46354F

Serial number: 20181205316-20181205555

Complies with the provisions of the Directive “ machinery ” 2006/42/EC and national laws transposing it:

Machinery Directive 2006/42/EC

EMC Directive 2014/30/EU

Emissions Directive 97/68 / EC and 2012/46 / EU

Noise directive 2000/14/EC+ Annex VI & 2005/88/EC

Measured sound power level: 95,37 dB(A)

Guaranteed sound power level: 96 dB(A)

The noise certification has been issued by Notified Body (No 0359): Intertek
Testing & Certification Ltd.

Intertek Testing & Certification Ltd. Davy Avenue, Knowlhill, Milton Keynes, MK5

8NL Telephone: +44 (0)1908 857777 Fax: +44 (0)1908 857830 Web

Applicable harmonized standards:

EN ISO 5395-1 :2013

EN ISO 5395-2: 2013+A1 :2016+A2:2017

EN ISO 14982: 2009

Cugnaux, 01/11/2018

Philippe MARIE / PDG

Warranty



We guarantee that HYUNDAI appliances are in accordance with statutory / country-specific regulations (proof and purchase by invoice or delivery note). The warranty is not valid for consumables and accessories which partly belong to the scope of supplies.

The warranty cannot be invoked in the following cases:

1. Normal wear of mechanisms and assemblies which have a limited life;
2. Maintenance and replacement of hardware that wears quickly (carbon brushes, cutting tools, gearwheels);
3. Overloads or loads which are too extensive and lead to:
 - simultaneous failure of one or more hardware parts and assemblies functionally connected with the system;
 - burning, charring, melting due to excessive internal temperatures of the hardware (heating elements, switches, wiring, housings);
4. Mechanical damage, presence of foreign objects in the appliance;
5. Commercial use;
6. Use of purposes not mentioned in this instruction manual;
7. Dismantling and repair work not carried out by HYUNDAI specialist.