



User Manual for Remote-controlled Lawn Mower and maintenance

(Read this manual thoroughly before use to ensure
correct application)





·Please read the Product Instruction Manual carefully and keep it safe for future reference. ·

catalogue

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Preface and Precautions

This manual is designed for operators and maintenance personnel of remote-controlled lawn mowers to provide relevant technical information during machine operation and maintenance. This booklet is applicable only to machines manufactured by our company.

- **Please read this manual in detail and refer to the corresponding model specifications to obtain accurate product information and guidelines.**

- The information and icons in this booklet are based on the latest product data available at the time of publication. The company reserves the right to make changes at any time without prior notice.

Safety warning signs and heading symbols

The safety warning signs and signal words listed in this manual are intended to alert readers to potential personal injury or machine damage. Therefore, they must be carefully read before use.

- The machine is equipped with yellow and white safety warning signs. When you see these signs, it indicates a potential risk of personal injury. You must strictly follow the safety instructions stated on the warning signs.

- Safety warning signs are also used to alert attention to the weight of components. To avoid injury and damage, please read this manual carefully before use.

- **Important: Minors are prohibited from operating all machine functions (including remote controls)!**

- **Important:** Engine starting is prohibited during loading/unloading operations, on transport vehicles, or during transportation of machinery, as it may cause injuries to operators and adjacent personnel as well as damage to the machinery. Workers are strictly prohibited from standing directly in front of or behind the machinery during operation.



- Important: If a machine encounters obstacles during operation and is unable to move forward or overturns, manual assistance for lifting or pulling must be provided only after disconnecting the power supply and shutting off the engine.

- Important prerequisites for engine startup: 1. Ensure the blade can rotate normally before starting (no foreign objects or obstructions); 2. The operator must be positioned on one side of the machine (at least 10 meters away), while non-operators should remain distant from the machine. No one should be positioned behind the machine when observing its front and rear views before initiating the startup.

For safety reasons, these safety measures must always be strictly followed to prevent major accidents or equipment damage. Operators and maintenance personnel must thoroughly read and understand this manual before operating or servicing the machine. The manual should be stored in a convenient location for easy access, and all personnel involved with the machine should review it regularly. The company reserves the final authority to interpret this manual.



Product Overview

Remote-controlled lawn mower is a modern lawn trimming equipment.

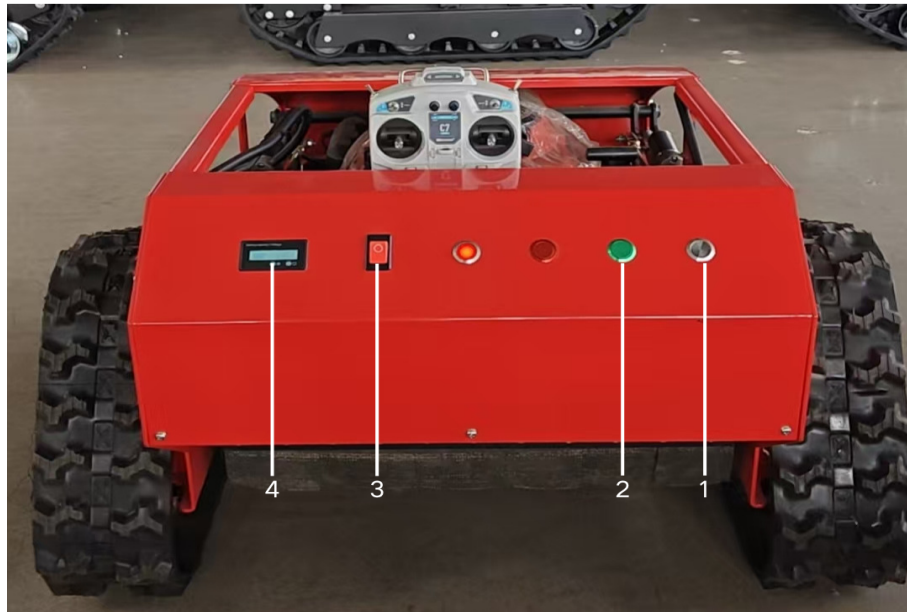
The remote-controlled lawn mower produced by our company mainly consists of cutting blades, propulsion system, power system, and remote control system.

The power system provides energy to the lawn mower blades, enabling them to rotate at high speed and efficiently cut both weeds and green grass.

The chassis design ensures smooth movement across lawns, while the remote control system stands out as a key feature. Users can operate the mower from a distance using a handheld remote, eliminating the need for manual pushing like traditional models. This innovation not only reduces physical labor intensity but also enhances safety—particularly in complex terrains or obstacle-prone areas, allowing users to stay away from potential hazards.

The remote-controlled lawn mower is adaptable to various terrains, including flat surfaces, slopes, and uneven ground. Its adjustable cutting height allows customization to meet different users' requirements for stubble length, significantly enhancing the convenience of lawn maintenance.

I. Key Introduction



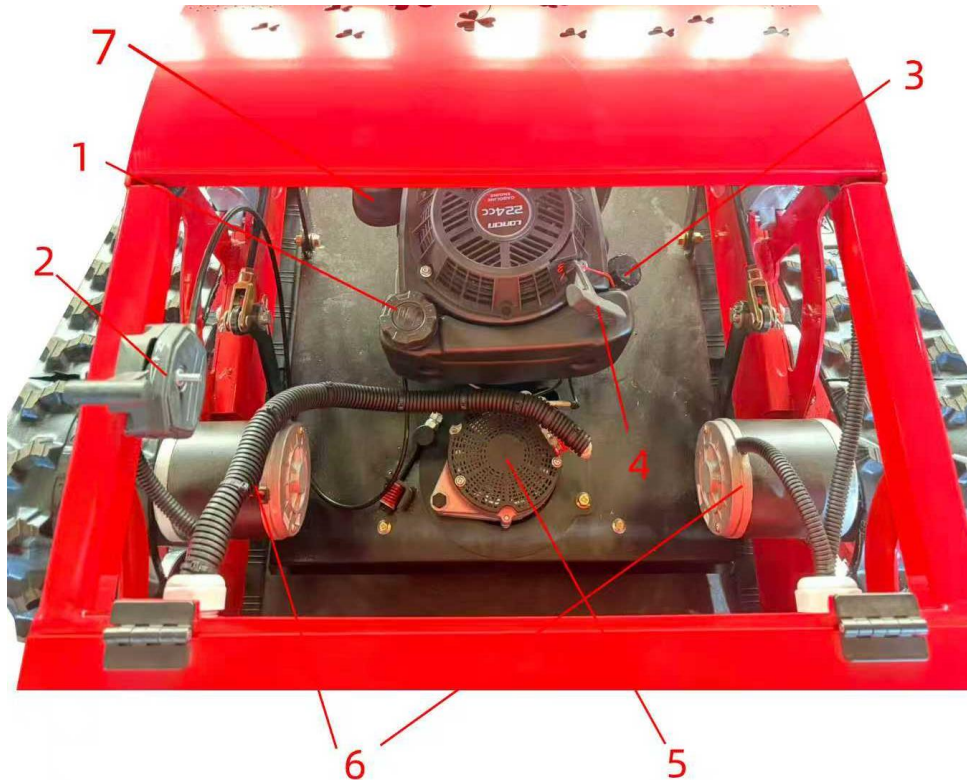
1. Main power switch: Press the switch to power on the entire lawn mower.

2. Generator fault indicator light: The fault indicator light remains off during engine startup; its activation signifies an abnormality in the power generation system.

3. Overvoltage protection switch

4. Battery status indicator: Standard operating voltage ranges from 22-28.9V. If the voltage drops below this range, promptly use the provided 22V charger to recharge. For extended periods of inactivity, perform battery recharging at least every 60 days to prevent deep discharge and battery damage. Do not operate the device when encountering high voltage. Always inspect electrical circuits for short circuits or contact manufacturer support, as excessive voltage may cause equipment failure.

II. Engine Introduction



1. Fuel tank cap: Turn the cap to the left to open it. Refill the tank with 92-octane gasoline only; do not use other types of gasoline or engine oil.

2. Throttle Control: Follow the markings for "Rabbit Gear" and "Turtle Gear." Rabbit Gear indicates maximum throttle opening, while Turtle Gear represents minimum throttle. During initial engine startup, set the throttle to maximum position. This is because 224cc engines feature integrated throttle and air intake valves. When fully opened, the air intake valve simultaneously activates. After engine startup, gradually reduce throttle pressure until reaching maximum RPM for operation. Adjusting back to the inverted triangle position (maximum



throttle setting) ensures proper valve closure for normal functioning. Prolonged valve opening may cause engine stalling, reduced cutting power, or spark plug flooding. Maintain adequate four-stroke gasoline engine oil levels and sufficient fuel in the tank for stable operation. (For 764cc engines with separate air intake valves, use dual throttle wrenches positioned at the rear: left for air intake valve adjustment and right for throttle control. Both valves open simultaneously during startup and close after engine ignition.)

3. Oil Addition Port: To ensure oil quality, replace the oil with SJ, SL10W-30, or 15W-40 four-stroke gasoline engine oil, adding an equal amount as specified. Oil Injection Port: For 224cc engines, use four-stroke gasoline engine oil suitable for local conditions (consult local oil distributors for specific models). The recommended oil quantity should be approximately 1.0 liters per addition. For 608cc/764cc engines, use about 2.3 liters; for 452cc engines, about 1.8 liters.

Insufficient oil affects engine lubrication and cooling, potentially causing damage and voiding warranty coverage. Excessive oil may lead to difficult starts or smoke emission. Always follow the oil dipstick and recommended dosage, and drain the old oil before adding new oil.



4. Hand-pulled engine starter: First gently pull the starter rope until resistance is felt, then apply a quick and steady pull. After the engine starts, slowly release the rope without sudden jerking motions.

5. Generator: Inspect the terminal connections for looseness and burn marks every 50 hours; clean internal debris to prevent jamming and overheating.

6. Lawn mower walking motor: The core power component of intelligent lawn mowers, responsible for driving the entire machine forward, backward, and steering. The mainstream type is brushless DC (BLDC) reduction motor, compatible with various models and terrains.

7. Air filter switch: Turn it to the left to remove the plastic cover and inspect the air filter's condition. Depending on operating environment, perform daily checks on the air filter's usage status. If dust accumulation is detected, clean it promptly. The air filter outlet serves as the engine's intake port during startup. Blockage in this area may cause difficulties in engine ignition and other related issues.

III. Introduction to C7 Remote Control

Instructions for remote control functions



1. High and low speeds indicate the machine's movement speed: upward movement indicates high-speed advancement, while downward movement indicates low-speed advancement. (Note: Deviations during high or low-speed operation are normal due to motor speed variations, with lower-speed deviations being more pronounced. Normal operation occurs at high speeds. Adjust the left/right push rods for fine-tuning to



ensure linear movement.)

2. Tool holder lifting mechanism for machine representation: Raise the tool holder to increase its height above the ground, or lower it accordingly. The tool holder remains stationary in the central position during machine operation, which corresponds to the neutral state. This function is absent in basic lawn mowers.

3. Starting/Extinguishing: Pulling upward activates the engine, while pulling downward for an extended duration extinguishes it. Essential conditions for engine startup include: (1) No obstructions beneath the machine; (2) Strict prohibition of minor operation; (3) Ensure complete clearance under the machine; (4) Avoid starting the engine directly in front or behind it; (5) Replace damaged blades, cutter discs, or other components promptly; (6) Maintain normal cutter holder rotation, as it rotates during startup, with any resulting damage or injuries being the customer's responsibility; (7) Ensure the engine contains standard four-stroke gasoline engine oil with fuel flow through the fuel ports and the air valve open.

4: Cruise control button: When the machine is moving forward or backward, lift the button upward to maintain the current movement mode (forward/backward) with RF lights



flashing. Repeat the action to disengage cruise control, and the RF lights will turn off.

5. Forward/Backward Push Rod: Controls the machine's forward and backward movement

6. Left/right push rod: Controls the left/right steering of the machine. Continuous pressing causes the machine to rotate 360 degrees in place.

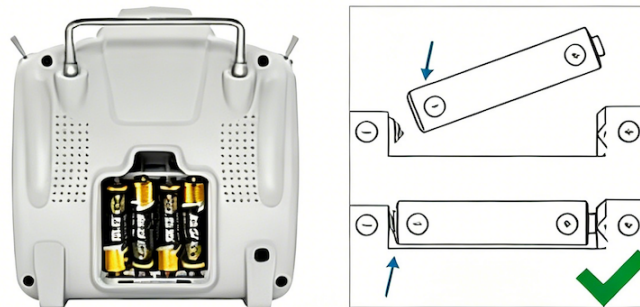
7. Power button on the remote control: Long press to turn the remote on or off. When the battery level is low, the remote will continuously emit a 'beep-beep' sound while the POWER indicator light flashes, indicating the need to replace four AA batteries (Nanfu batteries perform better).

A. Installation method and precautions for remote control battery:

Detailed Instructions

Power Supply:

DC4.5-9V, 4 AA batteries can be installed into the battery compartment as shown below,



Attention!!



B.Remote control precautions:

Before using the remote control, carefully read the following precautions!

1. This product is not a toy and is not suitable for children under 18 years of age. Adults should keep this product out of reach of children and exercise caution when operating it in the presence of children.



2. Do not use under adverse weather conditions such as nighttime, thunderstorms, snowfall, low visibility, or similar hazardous environments.

3. Do not use in rainy, snowy, or wet environments. If rainwater enters the remote control, it may cause a short circuit and render the device inoperable.

4. Signal interference may lead to loss of control of the remote control; areas with significant interference effects include the following:
A. Near mobile phone signal transmission towers
B. Near high-voltage power lines and communication broadcast antennas
C. Near military radar transmission towers
D. Complex wireless communication systems and commercial roads with human activity
E. Navigation waters

5. Do not use this product when the user is feeling fatigued, unwell, after consuming alcohol, or after taking anesthetics or stimulants, as this may result in severe harm to oneself or others.

6.2.4 The 2.4GHz wireless frequency band is entirely distinct from the low-frequency radio bands previously used. When operating, ensure the model aircraft remains within your line of sight. Large obstacles may block wireless signals, potentially causing loss of control over both the remote controller and the model.

7. Before use, ensure the remote control and model are properly installed, and that all steering mechanisms align with the control



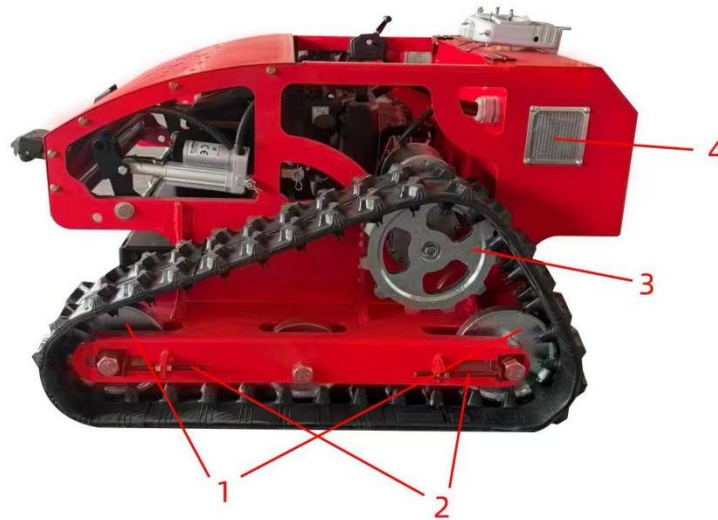
direction; otherwise, the model may sustain severe damage.

8. When the remote control distance remains excessively long, there is a potential risk of losing control. It is advisable to shorten the control distance appropriately. Insufficient battery voltage in the remote control or lack of signal transmission from the transmitter may lead to loss of control. Therefore, if the remote control displays a "POWER" flashing indicator with an alarm, replace the battery promptly.

9. When discontinuing remote control operation, ensure to disconnect the receiver power supply before turning off the remote control. If the remote control power is disconnected first while the receiver remains operational, it may lead to model loss of control or engine continued operation, resulting in severe accidents.

10. Improper use of the remote control may cause severe injuries or even fatalities to the operator or others. To ensure your safety, the safety of others, and the equipment, please carefully read this manual and follow the instructions. 11. The remote control and receiver required for our company's 2.4G wireless transmission system must be used in pairs. Products from other manufacturers cannot be compatible with our system.

IV. Chassis Introduction:



1. Support wheels of the lawn mower: Used to bear the weight of the lawn mower and work in conjunction with the tracks to enable normal machine operation.

2. Guide wheels: Tension adjustment of the tracks is achieved through 55 tension screws. Tension screws: By adjusting the tension screws, the tightness of the tracks can be controlled. When the machine is not in operation, the upward pulling range of the tracks should be maintained at 2-3 cm. The tracks should neither be too tight nor too loose. Over-tightness may damage motor gears, while excessive looseness can lead to track detachment.

3. Drive wheel: The largest wheel on the lawn mower, powered by an electric motor. It drives the tracks through its internal gears, enabling the machine to move forward.

4. Heat dissipation vent of the control box: When the



power supply is turned on, the fan rotates to dissipate heat from the control box and ensure normal operation of the circuit protection system.

V. Introduction to the Bottom Cutting Disk:



1. Blades: For proper engine operation, ensure both blades remain undamaged. Immediately shut down the engine and replace any damaged blades. Starting the engine with fractured blades may cause imbalance during rotation, excessive vibration, or even muffler damage. If the blades hit hard objects, promptly shut down the engine and inspect the blade assembly's integrity. Keep the blades sharp and exercise caution during installation.

2. Blade screws: Minimum strength rating 8.8. Since the blade holder features threaded components, a nut must be tightened to ensure proper blade rotation. The same applies to screws; immediate replacement is required upon wear or deformation to prevent accidental injuries. Wear between the lawnmower blade and ground surface during high-speed operation is a normal phenomenon, necessitating prompt replacement of worn parts.

3. Engine center shaft screws: Inspect promptly if the screws hit



hard objects or become loose. Center shaft screws are non-standard British-style screws. During disassembly, handle them as conventional screws (with right-hand threads). Before installing the screws, apply a drop of high-strength screw adhesive for optimal performance.

4. Tool holder: The tool holder has a relatively low failure rate. If the center shaft screws are not inspected and maintained promptly, gaps may form between the tool holder and the engine connection, leading to potential cracking of the tool holder head.

5. Bottom shell: The protective cutter disc functions normally.



VI. Maintenance of Gasoline Engines

Warning: For initial maintenance, replace the engine oil every 15-20 hours. Thereafter, change the oil every 100 hours or less. Use four-stroke gasoline engine oil according to the engine model specifications. The recommended fuel quantity is specified above.

Before performing any maintenance, please turn off the engine and use genuine original factory engine parts. Using inferior substitutes may damage the engine. To maintain optimal engine performance, regular inspections and adjustments are essential. Routine maintenance also ensures long-term service life.

Clean the air filter daily or periodically based on the machine's operating environment. Replace it promptly if cleaning is no longer feasible due to usage cycles. Refer to the additional engine manual for specific instructions.



VII. Machine Inspection and Precautions

Precautions for Daily Use of Remote-controlled Lawn Mower

1. Upon encountering hard objects during machine operation, immediately stop the machine to inspect whether the cutter head assembly is functioning properly before resuming work. Conduct daily inspections of all machine screws at the end of each shift, with particular attention to the position of the tool holder, to prevent screw loosening or detachment that may lead to operational failure.

2. Lawn mowers must not make circular turns in place (if you are unfamiliar with the terrain, hard objects such as bricks, stones, or tree roots on one side of the tracks may get caught, potentially causing track detachment and disrupting normal operation).



VIII. Common Fault Troubleshooting

Engine won't start	Engine startup requirements include: 1) No obstructions at the blade assembly position; 2) Ensure fuel supply by removing carburetor screws to check fuel flow and performing regular oil changes with air filter cleaning; 3) For electric start models, verify battery charge level remains above 60%; 4) Inspect spark plugs for ignition functionality. Contact manufacturer service personnel if ignition fails.
The engine vibrates intensely after starting.	Shut off the engine promptly and inspect the cutter head section to check for blade integrity. Replace any broken blades immediately.
The engine is emitting black smoke.	If the engine oil quality is poor or excessive oil is replaced, the troubleshooting method involves adding oil according to the corresponding model specifications. Any excess oil must be drained, or if the machine is transported or operates with excessive tilt angle, the issue will resolve automatically after approximately one minute of normal operation.
The device and remote control do not match	Check that both the machine and remote control have power. Neither can be missing.
Remote control malfunction or autonomous movement of the device	When the remote control is in cruise mode, the machine cannot be operated for forward or backward movement and will continue moving continuously. If this occurs, immediately turn off the main power supply. To resolve the issue, press the cruise button again to cancel the cruise mode. After turning on both the machine and the remote control, the machine will resume automatic operation. Check whether the remote control's push rod is centered.
remarks	Troubleshooting is for novice operators. If you have any questions, please contact the factory after-sales team directly. Thank you for your support.