



ROADMASTER 4-WHEEL SPECIFICATIONS AND PERFORMANCE



I: MACHINE PERFORMANCE

DAILY DISASSEMBLY	The vehicle features a modular design, allowing all components to be quickly disassembled for easy daily inspection and maintenance.
BODY	Welded from high-strength steel, it features sleek lines, a rugged design, corrosion resistance, and a stylish aesthetic. The structure is sturdy and durable.
BLOWER, FILTER, AND VIBRATOR	Equipped with four fans, four filters, and four vibrators, it boasts enhanced suction capacity and a sweeping width of 2200mm (flexible from 1500 to 2200mm).
TECHNOLOGY	Equipped with internationally advanced sweeping and throwing technology, high-power negative pressure suction achieves a theoretical dust collection rate of 95%.
PERFORMANCE	The brush handle automatically raises and lowers, with an anti-slip feature. Its intelligent design ensures excellent performance, meeting cleaning needs in diverse road conditions. It can sweep up to 5cm in diameter.
BATTERY	Tianneng/Chaowei maintenance-free battery, leak-proof, and zero-emission.
DUST REMOVAL METHODS	Sweeping, dust collection, misting, and vacuuming
LIGHTS AND SIGNALS	Police lights, front and rear turn signals, and taillights Operation warning lights, horn, and rearview camera



III: TECHNICAL PARAMETERS AND PRICING



SERIAL NUMBER	NAME	Specifications
1	PRODUCT NAME	Roadmaster (four-wheel)
2	HOUSING MATERIAL	Reinforced steel sheet metal, spray-coated
3	BRUSH CONFIGURATION	Main brush 790mm*1, side brush 700mm*2, side brush 500mm*2
4	STEERING	Steering wheel
5	BRAKES	Hydraulic dual disc brakes + intelligent electronic brake control for hill
6	POWER SOURCE	48V 203A (8 pieces) Tianneng/Chaowei maintenance-free batteries
7	ELECTRICAL CONTROL CIRCUIT	National standard integrated waterproof wiring harness
8	CONTROL MODE	Fully automatic one-button operation
9	CHARGER	All-aluminum intelligent 25A charger
10	TIRES	400-10 solid tires, 4*4"
11	CLEANING WIDTH	2200mm (1.5-2.2" freely retractable)
12	EFFICIENCY	18,000-20,000 square meters/hour
13	CONTINUOUS OPERATING TIME	8-10 h
14	GRADEABILITY	35%
15	AIR FILTER	Double-coated waterproof four-element filter
16	MAXIMUM SPEED	20 km/h
17	WATER TANK CAPACITY	300 L
18	TRASH BIN CAPACITY	260 L
19	DRIVE POWER	3000 W AC Motor
20	MAIN BRUSH + FAN + SIDE BRUSH + DUST SHAKER POWER	1500W + 600W*4 + 150W*4 + 200W*4
21	LENGTH * WIDTH * HEIGHT	3200mm*2200mm*2700mm
22	HIGH-PRESSURE PUMP POWER	1.5kW
23	MAXIMUM OPERATING FLOW	8L/min
24	MAXIMUM OPERATING PRESSURE	13kPa
25	HIGH-PRESSURE HOSE LENGTH	13m, imported
26	WARNING METHOD	1m flashing warning light
27	VEHICLE GLASS	6mm thickened fully tempered glass with large curved screen printing
28	REVERSING CAMERA	12-inch HD screen + HD camera
29	MACHINE WEIGHT	1600kg
30	FIRE EXTINGUISHING EQUIPMENT	National standard 25kg dry powder fire extinguisher
31	MIST CANNON RANGE	10m



TECHNICAL PARAMETERS

Technical Parameter

SERIAL NUMBER	NAME	UNIT	SPECIFICATIONS
1	Model	/	D20
2	Vehicle Dimensions (Length, Width, and Height)	mm	2100 *2000*2500
3	Drive power	w	2000 rpm AC motor
4	Power source	V/ah	Tianneng 48/153 (6 units) (optional lithium battery)
5	Cleaning Width	mm	2000 (flexible)
6	Vehicle Material	/	Reinforced steel sheet metal with powder coating
7	Steering + Braking Method	/	Steering wheel + hydraulic dual disc brakes with intelligent anti-slip function
8	Electronic control circuit	/	National standard integrated waterproof wiring harness
9	Work efficiency	m ² /h	16000
10	Continuous working time	h	6-8
11	Maximum gradeability	%	30
12	Maximum travel speed	Km/h	12
13	Water tank capacity	L	200
14	Trash bin capacity	L	260
15	Main brush + side brush length	mm	790+500*4
16	Main brush + fan + side brush + dust shaker	w	1500+600*2+150*4+200*2
17	High pressure pump power	w	1500

18	Maximum operating flow rate	L/min	8
19	Maximum operating pressure	Kpa	13
20	High-pressure hose	m	13
21	Mist cannon range	m	10
22	Charger + mode	/	All-aluminum intelligent 20A automatic charger
23	Fire extinguisher	ml	500
24	Reversing camera	/	12-inch HD screen + HD camera
25	Tires	/	400-8 solid tires*3
26	Working control mode	/	Fully automatic one-button control
27	Maximum inhaled particle diameter	mm	50
28	Vehicle weight	kg	1200

REAL VEHICLE SCENE Vehicle reality



VEHICLE HIGHLIGHTS Vehicle highlights

- ★ 《Dust Sweeping and Dust Suppression Function》 Efficiently and easily eliminate dust in one sweep.
- ★ 《Dual Blowers and Dual Vibrators》 Clean and quiet sweeping.
- ★ 《260L Dust Bin》 Extends single-pass operation.
- ★ 《2000W AC motor》 High efficiency and reliable operation.
- ★ 《Engineering solid, enlarged, and widened tires》 More stable and safe driving, eliminating the need for complicated tasks like tire repairs and replacements.
- ★ 《Hydraulic disc brake system》 More stable and safe braking.
- ★ 《Full-vehicle spray-coated finish》 A smoother, brighter, and longer-lasting color.
- ★ 《Reversing Image》 Ultra-clear display for safer and more convenient reversing.
- ★ 《Curved front glass》 Improves driving visibility and enhances driving safety.
- ★ 《20AH smart charger》 automatically cuts off power.



REVERSING CAMERA



SOLID TIRES



ROTATING FOG CANNON



CHAIN-TYPE DUAL
ELECTRIC BRAKES



200L LARGE-CAPACITY
WATER TANK



SMALL DRY POWDER FIRE
EXTINGUISHER

FUNCTION INTRODUCTION

Function Introduction



01 : Front side brush

02 : Rear side brush

03 : Fender

04 : Rear tire

05 : Charging port

06 : LED light

07 : Promotional screen

08 : Reflector

09 : Steering wheel

10 : Water spray switch

11 : Main brush

12 : Dust bin wheel

13 : Flushing exhaust

14 : Dust bin

15 : Rear turn signal

16 : High-pressure water hose connection

17 : Mist cannon

18 : Side brush height adjustment

19 : Side brush motor

20 : Side brush height adjustment

Vacuum Cleaner User Manual

Operation Guide | Daily Maintenance | Frequently Asked Questions



1. Operation Instructions:

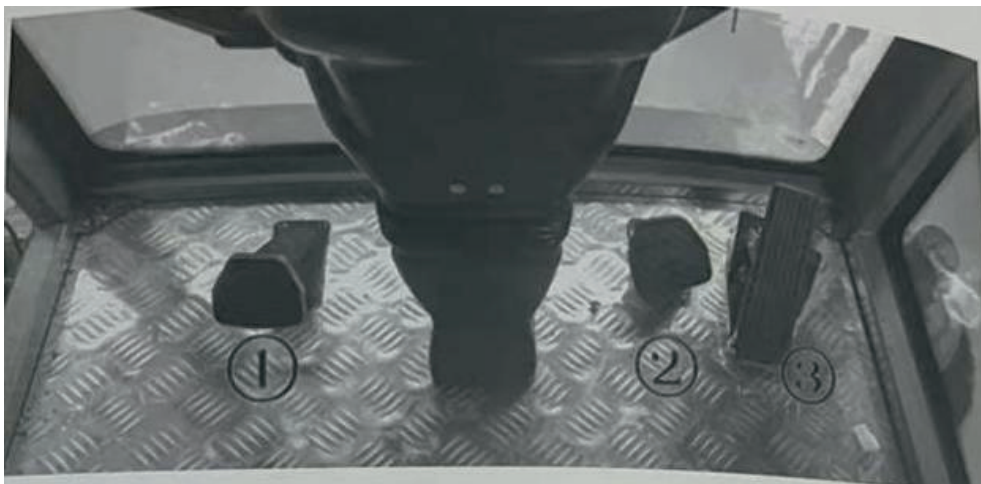
1. Panel Control Description:



mains switch

- 1、 horn switch
- 2、 dust switch
- 3、 sprinkler switch
- 4、 Clean the switch
- 5、 switching up
- 6、 Forward and Reverse Switch
- 7、 turn

2. Walk the Accelerator, Brake, and Lift the Leather Pedal:



① Elevating pedal: Press the elevating pedal when encountering obstacles or large objects during normal walking.

② brake pedal

③ acceleration pedal

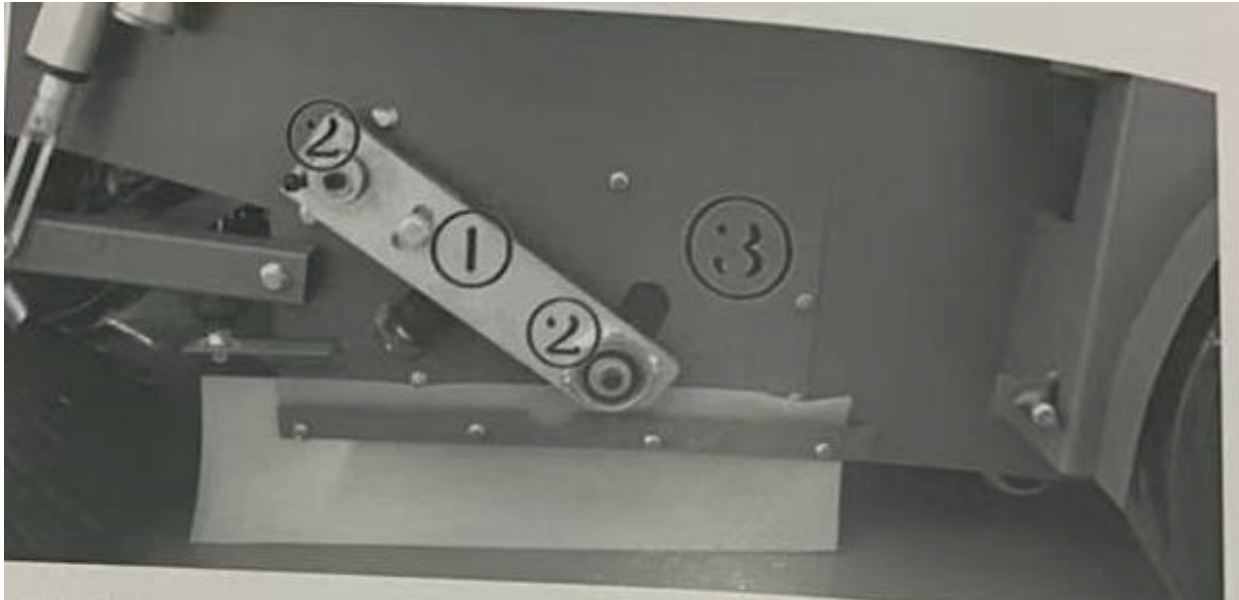
3. Disassembly and Installation of the Trash Can:



To empty the trash, first pull the lid upward, then slide the handle backward to detach the bin from the sweeper. After emptying, align the bin opening with the sweeper's position, push it forward gently until fully extended, then press the lid down to secure it in place.

2. Routine Maintenance and Replacement of Wear-Prone Parts:

1. Replacement of the Main Brush



① main brush connection plate

② Main brush connection plate fixing screw

③ main brush side baffle

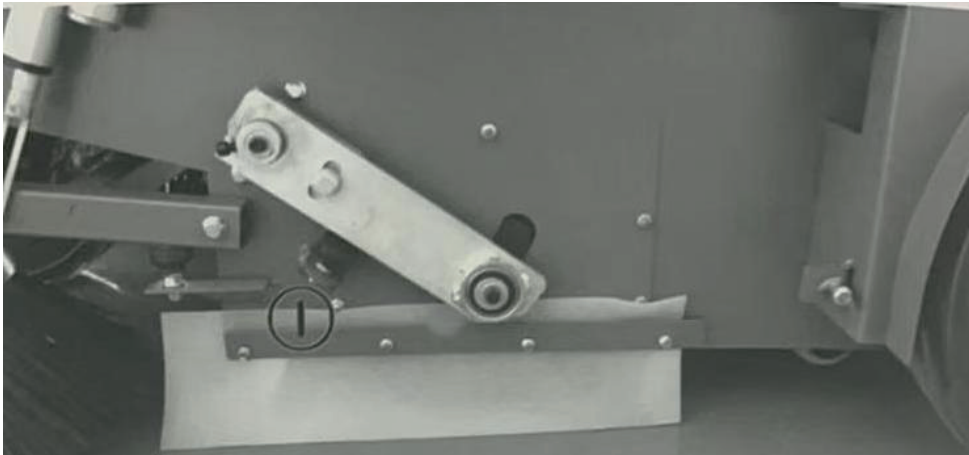
To replace or clean the main brush, first open the left compartment. Loosen the fixing screws on the brush mounting plate and pull it out. Then, loosen the screws on the brush side guard and remove it to extract the brush. After cleaning or replacement, reinstall the brush in the reverse order.

2. Replacement of the Brush



To replace the side brush, lower the lift lever, unscrew the mounting nut, and remove the brush for replacement.

3. Height Adjustment for the Main Brush and Side Brushes



① limiting screw of main brush

When cleaning efficiency is suboptimal, adjust the left and right limit screws of the main brush downward synchronously to position the side brush close to the ground (standard height: 2/3 of the side brush touching the ground, with the main brush pressing 0.5 cm down).

If the left and right limit screws of the main brush are not adjusted synchronously, the brush will exhibit excessive jumping, which compromises cleaning efficiency.

III. Precautions:

Ensure the emergency power-off button is pressed when leaving (without interrupting charging).

This vacuum cleaner is strictly prohibited for non-professionals to operate.

Strictly prohibit the sweeping of filamentous or ribbon-like objects.

Deep discharge is strictly prohibited.

It is forbidden to park the vehicle on the slope.

It is strictly prohibited to use this vacuum cleaner on rainy days.

Do not use when the battery is low. Charge promptly if the voltage drops below 31.5V.

The cleaning effect was affected by the excessive wetness of the environment.

IV. Common Phenomena and Management Approaches

1、 Do Not Walk Association

The components include a controller, fuse, air switch, accelerator, drive wheel, battery terminals, connectors, and wires. Any damage or poor contact of these components can cause the vehicle to fail to move. Replacing the damaged components will restore normal operation.

2、 Not Cleared

Each set of side brush and main brush are driven by the corresponding drive motor to achieve the working effect.

If one brush fails to function, it indicates a damaged drive motor, which can be replaced. If all brushes in the vehicle fail, check the relay in the rear panel circuit board for damage, or inspect the air switch for tripping, and examine the operation buttons on the control panel for damage.

3、 Do Not Water

Key components of the sprinkler system: water tank, pump, pipes, valves, nozzles, relays, switches, and control circuits. Common issues include tank leaks, pipe ruptures, loose connections, clogged nozzles, pump failures, and electrical faults. To fix a leaky joint, loosen the connection, wrap it with adhesive tape, and resecure it firmly.

4、 Do Not Raise

The vehicle is equipped with four lifting rods. If any brush fails to lift, it indicates a faulty motor in the corresponding lifting rod, which can be replaced. If all brushes fail to lift, check the control switch for damage, inspect the terminal connections for looseness, or examine the relay in the circuit board for damage, and replace it accordingly.

5、 No Dust Shaking

Check if the dust-extraction motor is damaged, whether the filter element is loose against the flange, if the filter element has reached its maximum working limit, if the filter element's retaining ring is movable, and if the switch button functions properly. Replace any damaged components.

6、 Leaky Ash

Common causes of dust leakage: ① Air filter clogging due to delayed vibration cleaning; ② Sealing strip detachment or damage in the trash bin; ③ Fan motor malfunction; ④ Front cover damage; ⑤ Main brush entanglement with thread-like debris or incorrect installation orientation; ⑥ Loose or detached trash bin latch; ⑦ Excessive cleaning speed.

7、 Not Cleaned Properly

Common causes: ① Excessive cleaning speed; ② The edge brush and main brush are positioned too high or too low from the ground (normal height: edge brush 2/3 contact with ground, main brush 0.5 cm pressure on ground); ③ The bristles are too stiff.

If you encounter any unresolved issues, please contact our after-sales service. We will provide you with a solution as quickly as possible.

Important Notice (right-aligned, Song font, small four-point, italic): This machine can clean powders, sand, gravel, leaves, casting dust, and household waste. However, it cannot handle fibrous or strip-like materials, as they may get tangled in the main brush.