Hand-Push Hydraulic Dump Cart

Model ZX-ST — Instruction Manual

MODEL	LOAD CAPACITY	OVERALL SIZE
ZX-ST	**500KG**	**140*80*100CM**



Please read this manual carefully before operating the machine. Improper operation may cause injury or equipment damage. Keep this manual for future reference.

1 Product Overview



The ZX-ST is an electric self-dumping transport vehicle for farms, breeding plants and construction sites. The hydraulic cylinder tilts the cargo bucket to unload sand, grain, feed or debris quickly without manual labor.

Main applications

- Transporting feed, grain and fertilizer
- Hauling sand, soil and construction debris
- Waste removal in breeding plants
- Unloading by hydraulic tipping

Key features

✓ Hydraulic dump bucket

✓ Walk-behind handle

✓ Hydraulic tipping, unloading in seconds

✓ Emergency stop button cuts all power instantly

✓ Configuration can be customized on request

What's in the box

- Complete machine
- Battery charger
- Instruction manual

2 Specifications

Product name	Hand-Push Hydraulic Dump Cart
Model number	ZX-ST
Lifting height	/
Overall dimensions (L×W×H)	140*80*100CM
Board size	120*80CM
Vehicle body off the ground	/
Load range	500KG
Electric motor	800W
Controller	800W
Battery	48V12A Storage battery
Control method	Throttle Handle Travel + Handle Button Dumping

> All parameters are manually measured and may have slight errors. Please refer to the received product for details. Specifications can be customized — contact the seller for special requirements.

Package list

Complete machine	× 1
Battery charger	× 1
Instruction manual	× 1

Optional configuration

Customizable items	Lifting height / platform size / battery capacity / body color — contact the seller with your requirements before ordering.
Spare parts	Batteries, chargers, controllers, hydraulic seals, wheels / tracks are available from the seller.

3 Before First Use

Complete the following checks before operating a new machine. Do not skip any step.

01 Packaging inspection	Check the package for damage during transport. Unpack carefully with the machine upright.
02 Contents check	Confirm the machine, charger, remote control (if equipped), keys and accessories are complete.
03 Visual inspection	Check for deformation, loose bolts or damaged cables caused by transport. Tighten and repair before use.
04 Battery status	The battery is shipped charged at about 60–80%. Fully charge it before first use (see Chapter 7).
05 Tire / track check	Check tire pressure or track tension. Remove wires, stones or ropes wound on the wheels.
06 Function test	Test travel forward / backward, steering, lifting / lowering (or dumping) at low speed without load.

Site requirements

- Use on firm, flat ground with a slope of no more than 15°; avoid steps, ditches and obstacles.
- Keep bystanders, especially children, at least 3 meters away from the working area.
- Do not operate in heavy rain, thunderstorm or on ground covered with ice or grease.
- Ensure adequate lighting and visibility when working indoors or at night.

4 Operating Instructions

Starting	Turn on the power switch and check the battery indicator before loading.
Loading	Load the bucket evenly and do not exceed the rated load capacity. Keep the load center in the middle of the bucket.
Traveling	Use the throttle handle to drive to the unloading point at low speed, especially on slopes.
Dumping	Press the dump button (or operate the wired control box) to tilt the bucket. Stand clear of the tipping area.
Returning	Lower the bucket until it locks back in place before driving away.
Parking	Turn off the power and lower the bucket fully when parking.

> Never allow untrained persons to operate the machine. The operator must be 16 years or older and in good physical condition.

Working conditions

- Rated load: **500KG**. Overloading is strictly prohibited.
- Maximum climbing ability depends on load and battery level — always climb slowly and straight.
- Stop using the machine immediately if abnormal noise, smoke or smell occurs.

Transport & storage

- Fix the machine with straps during transport; do not lift it by the hoses, cables or guardrails.
- Store indoors in a dry, ventilated place, away from rain, direct sunlight and corrosive materials.
- For long-term storage, fully charge the battery and recharge it at least once a month.
- Lower the platform / bucket completely and turn off the main power before storage.

5 Control Method

The throttle handle controls travel, and the button on the handle controls the hydraulic dumping of the bucket.

Control method	Throttle Handle Travel + Handle Button Dumping
Power switch	Main power key switch on the battery box / frame
Emergency stop	Press the red emergency stop button to cut all power instantly
Charging port	Charging socket on the machine body — see Chapter 7

6 Safety Precautions

General

- Read this manual completely before first operation.
- Do not modify the machine or its electrical system by yourself.
- Keep hands, feet and clothing away from the scissor arms, wheels and moving parts.
- Do not operate the machine under the influence of alcohol or medicine.
- Do not carry passengers unless the machine is designed with a seat.
- Keep children and untrained persons away from the machine.

Electrical & battery

- Only use the original charger and correct voltage.
- Keep the battery away from fire, water and metal objects.
- Do not touch exposed wires or the controller with wet hands.
- Turn off the power before cleaning or maintenance.
- Stop charging immediately if the battery heats abnormally or smells.
- Do not use the machine during thunderstorms.

> **WARNING:** Never exceed the rated load, and keep bystanders clear during operation. Failure to follow the safety instructions may cause serious injury.

Emergency handling

- **Machine out of control:** press the emergency stop button immediately and keep away from the machine.
- **Unexpected lifting / tipping:** keep all persons clear of the danger zone; do not try to catch the load by hand.
- **Battery smoke or fire:** cut off the main power and use a dry-powder extinguisher; never use water.
- **Injury:** stop the machine and seek medical help at once; keep the accident scene for after-sales analysis.

7 Battery & Charging

Battery configuration: **48V12A Storage battery**. Follow the rules below to extend battery life.

- Charge the battery after each use. Avoid deep discharge below 20%.
- Charging time is typically 6–10 hours. Disconnect the charger when fully charged.
- Charge in a dry, ventilated place away from flammable materials.
- If the machine is stored for a long time, charge the battery at least once every month.
- Do not replace the battery with a different voltage or capacity without consulting the seller.

8 Maintenance Schedule

Daily	Check tire / track condition, clean the machine, check the power connector.
Weekly	Check and tighten bolts on scissor arms, wheels and guardrail; lubricate pins.
Monthly	Check hydraulic oil level and leakage; test the emergency stop and brakes.
Every 6 months	Replace hydraulic oil if contaminated; have the controller checked by a professional.

> Always turn off the main power and remove the key before any maintenance. Repairs to the hydraulic and electrical systems should be performed by qualified technicians only.

Long-term storage

- Clean the machine and park it indoors on a flat, dry surface.
- Charge the battery fully and disconnect the main power switch.
- Recharge the battery at least once a month to prevent deep discharge damage.
- Check and lubricate all pivot points before using the machine again.

9 Troubleshooting

Bucket does not dump	Battery low / control cable loose — charge the battery and check the dump control wiring.
Dumping is slow	Hydraulic oil low — top up the recommended hydraulic oil.
Bucket does not return	Return spring or hinge jammed — clean and lubricate the hinge.
Machine does not travel	Power off / controller fault — check wiring and contact after-sales.

10 After-sales Service

If the problem cannot be solved with the table above, please contact the seller via AliExpress order message and provide:

- Order number and product model (ZX-ST)
- Photos or a short video of the problem
- Purchase date and a description of how the problem occurred

Spare parts (batteries, chargers, hydraulic seals, controllers, wheels / tracks) are available from the seller. Do not disassemble the core components by yourself, otherwise the warranty may be void.

Warranty & support

- Core components (motor, controller, hydraulic cylinder) are covered by the seller's warranty policy — contact the seller for details.
- Free technical guidance for installation, operation and maintenance via AliExpress order message.
- Consumable parts can be purchased separately at any time.

Thank you for your purchase!

We wish this machine brings you safe and efficient work. Your feedback on AliExpress is highly appreciated.