HT750履带式搅拌罐

使用维护说明

HT750

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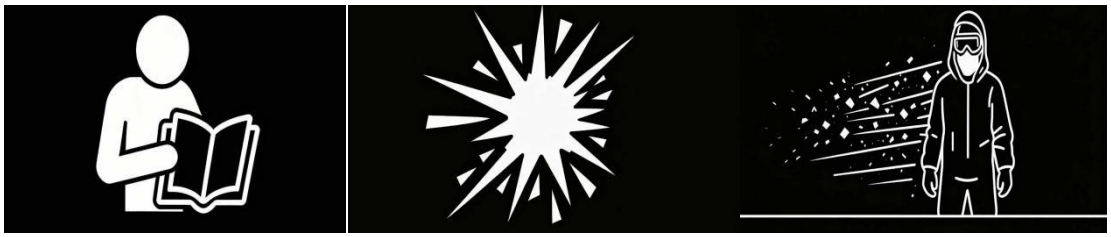
I. Introduction and Important Security Information

Thank you for purchasing this tracked mixing tank. This manual is designed to provide detailed instructions to ensure you operate the equipment correctly and safely, and to maximize its functionality. Before using the equipment, please ensure you have carefully read and understood the contents of this instruction manual.

This manual should be considered an integral part of the machine and should be retained with the machine if it is resold.

（1）To minimize the risk of injury, please read the operating instructions carefully before use.
（2）Operators must wear appropriate personal protective equipment, such as masks, safety helmets, safety shoes, ear protectors, and goggles, when working.
（3）Use oil pipes with a rated working pressure safety factor and ensure all oil pipe connections are secure.
（4）Never use your hands to probe for leaks in oil pipes or joints, as the high-pressure oil jets can puncture your skin and cause injury.
（5）Do not use flammable solvents to clean engine surfaces.
（6）Stay alert—pay attention to what you are doing.
（7）Do not use the product when you are fatigued, under the influence of alcohol or drugs.
（8）Before refueling, let the engine cool down for 2 minutes. If a fuel leak occurs, make sure the area is dry before testing the spark plugs or starting the engine.
（9）During the transfer, transportation, and storage of power stations, it is forbidden to invert the power station to prevent damage to the gasoline engine.
（10）When starting the engine by turning the key switch, if the gasoline engine does not start normally, do not keep it in the START position for a long time. Turn the key switch to OFF, wait 10 seconds and start again. If it fails to start three times in a row, the equipment needs to be repaired to avoid burning out the equipment.



二、Equipment Introduction

（一）Product Overview

The HT - 750 tracked mixing tank is an integrated concrete mixing and transportation machine specially developed for confined construction scenarios. It integrates self-loading, real-time mixing, track walking, and automatic unloading functions. It is suitable for working environments where large tank trucks cannot enter, such as indoor floor renovation, rural infrastructure, tunnels, basements, garden paths, and narrow construction sites. Relying on the rubber tracked chassis, it can travel in all terrains, replacing manual hoppers and small handcarts, greatly improving concrete construction efficiency and reducing labor costs.

（二）Core Structure and Advantages

- terrain rubber track chassis uses widened and thickened rubber tracks, resulting in low ground pressure. It is less prone to slipping on muddy, rough roads, slopes, and brick pavement, and does not damage the ground. The machine body is flexible in steering, can turn on the spot, and can pass smoothly in narrow alleys and indoor corridors, improving the passability by 40% compared to wheeled equipment . The independent hydraulic walking system has strong climbing ability and is stable in operation on construction sites with varying elevations.

Integrated mixing tank The 400L large -capacity rotary mixing tank continuously tumbles throughout the operation, preventing concrete segregation and clumping. The hydraulically driven tank tilts and unloads materials at a large unloading angle with minimal residue. It supports the mixing and transfer of various materials such as cement mortar, fine aggregate concrete, and self-leveling flooring materials, eliminating the need for secondary manual mixing.

• Powerful power system equipped with a high-power diesel engine , with ample total power, capable of simultaneous output of multiple loads including walking, mixing, and hydraulic lifting; stable power output, no attenuation during long-term continuous operation, can be used independently in outdoor scenarios without external power supply, suitable for outdoor civil engineering and emergency repair projects.
• Compact design: The machine is small in size and can be operated by a single person with a handle, making it easy to operate. It comes with a simple feeding mechanism, allowing sand, gravel, and cement to be directly shoveled into the tank for mixing, eliminating the need for transfer and handling. The lightweight structure of the machine body makes it easy to disassemble, assemble, and transport, and it can be transported by a small truck.

III. Main Structural Parameters and Operating Methods

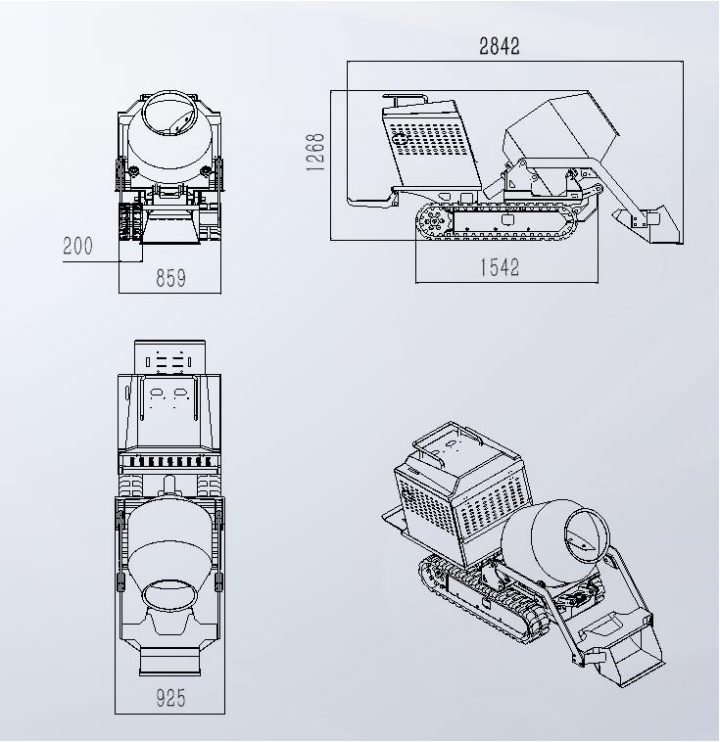
(I) Schematic diagram of the structure and parameters of the HT-750 working part

Working dimensions (mm)	2840	Total outer width of the protective cover	870

		(mm)	
Shipping dimensions (mm)	2000×1000	Track model	Steel wire rubber track
Tracked chassis dimensions (mm)	1370×200×315	Number of support rollers (pieces)	6
Track roller diameter (mm)	95	Discharge angle (°)	57
Feed inlet size (mm)	Φ210	Feeding volume (m^3)	0.03
Silo volume (m^3)	0.5	Engine speed (r/min)	3600
Walking speed (km/h)	0---4	Control method	Handrail
Production capacity (T/D)	2---6	Mixing applicable materials	gravel, sand
Curb weight (kg)	500	Total mass (kg)	700

The operating parameters of this equipment are shown in the table above.

- The nominal reference dimensions of the inner cavity of the rated effective mixing chamber are Φ 2200 mm × 860 mm, with an effective axial working length and a fully circular arc transition mixing zone without dead angles. Under full load of rated material, the radial controllable deformation of the chamber is ≤ 5 mm, and there is no residue or siltation when the material is discharged. The effective volume is 0.5 m^3.
- The entire organization deploys its extreme operation envelope outline 2842 (total length) × 925 mm (total width) × 1268 mm (total height), including the side-mounted hydraulic drive assembly and the maximum extension structure of the unloading chute, with reserved safety interference margins for maintenance and operation on both sides of the equipment.



- The critical passage dimensions for transfer and retraction are 2000 × 905 × 1230 mm , which is suitable for conventional passage boundaries in pits and narrow indoor passages. The minimum inner envelope radius for the whole machine to turn in place is 1500 mm, and it can operate stably on longitudinal slopes and ±20 ° transverse slopes without side rollover interference.
- Effective width of track grounding at the working face of the load-bearing operation Suitable for 900 mm , soft soil and muddy sites without subsidence operation .

（二）HT-750 power unit structure and parameters diagram

This equipment uses a 420 gasoline/diesel engine manufactured by Chongqing Dajiang Power Equipment Manufacturing Co., Ltd. This manual mainly describes the parameter information and power source component identification of the HT -750 equipment driven by this power source. If the owner wishes to obtain relevant warranty information , safety precautions , and emission information for this engine model , please refer to the appendix to the engine instruction manual used in the equipment .

Engine component identification

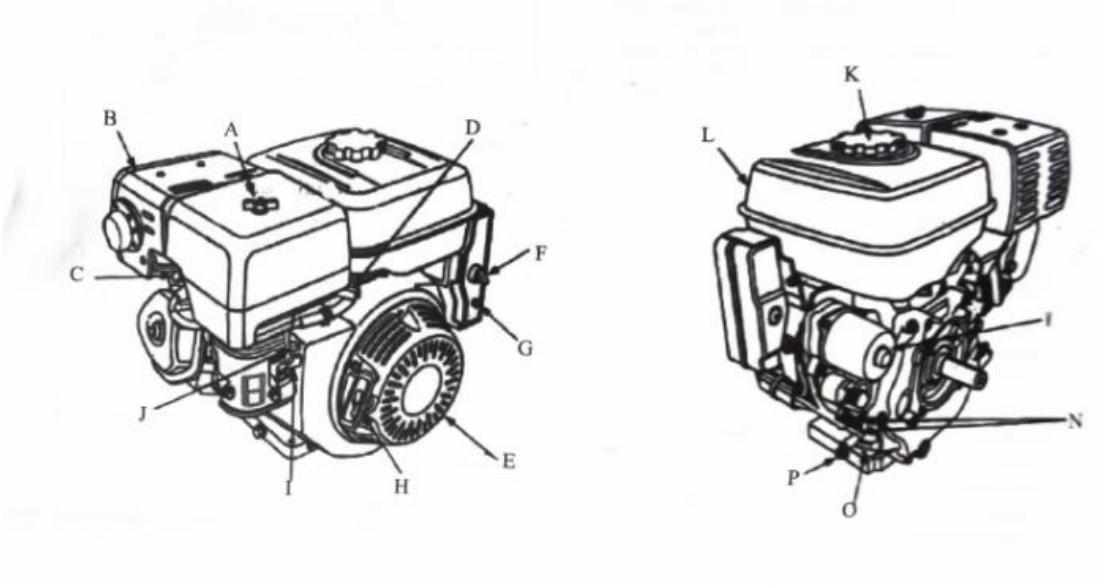
A----Air filter B----Muffler C----Spark plug D----Throttle lever

E----Pull-cord starter F----Engine switch G----Circuit breaker H----Starter handle

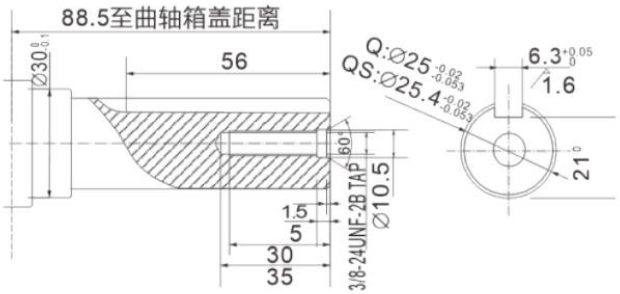
I----Fuel valve J----Cockpit lever K----Fuel filler cap

L----Fuel tank M----Starter motor N----Engine marking

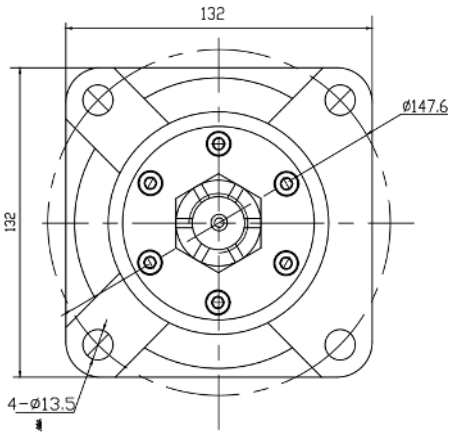
O----Engine oil dipstick P----Drain plug

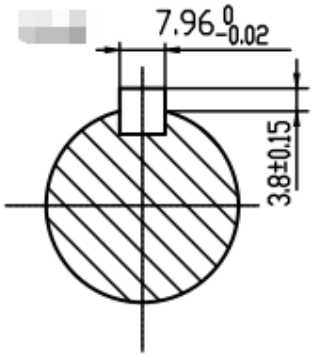


• Engine output shaft dimension drawing (QS)



Hydraulic motor installation parameters diagram





（三）Equipment Start-up and Operation Procedures

1. Engine starting procedure

• Close the main power switch of the vehicle, open the engine choke, and turn the ignition key to start the engine; after the equipment starts, it will automatically enter the work-ready state.

2. Walking and unloading control operation

• The machine's movement and hopper self-unloading actions are all independently controlled by a multi-way reversing valve: moving the movement control handle forward and backward enables the equipment to move forward and backward; moving the corresponding unloading control handle drives the tank to tilt and unload.

3. Standard procedure for scheduled shutdown

the vehicle reaches the work site, first reduce the throttle to the lowest idle speed position, then reset the multi-way valve control handle to cut off the hydraulic power output for smooth parking .

4. Multi-way valve operating linkage diagram

1-----Left track walking motion 2-----Self-loading hopper tilting motion 3-----Mixing tank rotation motion
4-----Discharging action of mixing tank 5-----Tracking action of right track

IV. Equipment Maintenance and Transportation

The HT-750 tracked mixing tank (mixing volume 0.4 cubic meters) weighs approximately [weight missing]. Items weighing 700KG , with a width exceeding 2m and a height exceeding 1.5m, are strictly prohibited from being driven on roads . They must be transported by low-flatbed trailers, with two separate procedures for short-distance intra-site relocation and long-distance inter-regional transport. Relocation is permitted only within the construction site's muddy areas and dirt roads, and must not be carried out on municipal roads.

1. Empty all concrete, sand, and water from the mixing tank, and clean any residue from the hopper;
2. Collapse the hopper and level the mixing drum;
3. It can travel at low speeds on its own tracks and can traverse paved roads.
4. For distances exceeding 500 meters, requiring access to paved roads/rural roads, a trailer is necessary.

HT -750 Tracked Mixing Tank

(a) Mixing tank and feeding mechanism

1. Thoroughly clean the inside of the tank, hopper, and discharge chute of concrete residue, rinse with clean water, and promptly remove any clumps to prevent solidification, which could increase the load and jam the blades.
2. Check the mixing drum for deformation and weld cracks; replace the sealing strip promptly if there is grout leakage.

3. Check the lifting cylinder pins and lugs of the hopper for looseness or cracks, and add grease to the pins.
4. The oil level in the mixer reducer was checked; there was no oil leakage or abnormal noise.

(ii) Tracked chassis

1. Clean the gaps between track plates, track rollers, and guide rollers, removing sand, gravel, and cement lumps. Hard objects can break the track rubber blocks.
2. Check track tension: a sag of 1 cm is ideal; too loose and it is easy to derail, too tight and wear will be accelerated.
3. Check the track rollers and carrier rollers for oil leaks and jamming, and check the rubber tracks for cracks, delamination, and missing teeth.
4. Check the wear condition of the drive teeth; replace them promptly if they are missing teeth or severely worn.

(III) Hydraulic System

1. Check the hydraulic oil level in the tank. If the oil level is between the upper and lower limits of the scale and the oil is white or cloudy, it indicates that water has entered the tank.
2. Check all oil lines, joints, and cylinders for oil leaks or bursts. If there is a minor leak, tighten the joints immediately. Replace aged seals directly.
3. Check if the operating handle returns to its original position smoothly without any jamming, and ensure there is no external leakage from the valve block.
4. After finishing work, all cylinders should be completely retracted to prevent piston rods from being exposed and corroding for a long time.

(iv) Power engine (diesel version)

1. Check the engine oil level, coolant level, and diesel fuel level; replenish with the same type of oil if necessary.
2. The air filter housing is undamaged, and the external dust has been blown away.

3. Clean the radiators and water tanks of cement dust and willow catkins to prevent them from overheating and boiling over.
4. The battery terminals are secure, with no oxidation or leakage, and the switch disconnects power normally.

(V) Key points for inspecting vulnerable parts (pay attention to these points daily)

1. Mixing system: liner, mixing blades, sealing strips, wear-resistant plate for discharge chute, oil seal
2. Hydraulics: oil pipes, cylinder seals, filters, relief valves
3. Chassis: rubber tracks, drive sprockets, track rollers, guide rollers, tension springs
4. Engine: Filter, water pipes, battery

(vi) Prohibited Operations (to Reduce Failures)

1. Do not run the mixing tank empty for extended periods with dry materials, as this will accelerate wear on the lining.
2. Overloading and dumping large stones directly into the hopper are prohibited, as they may damage the hopper and blades.
3. Do not spray high-pressure water directly onto the engine wiring plugs;
4. Tracks should not be turned in place for extended periods, as this will cause severe wear on one side.
5. If the hydraulic system is low on oil or the engine is overheating, stop the machine immediately and do not operate it while it is malfunctioning.

This manual comprehensively covers the structural specifications, safe operation, transportation regulations, and tiered maintenance of the HT-750 tracked mixing tank. Operators and equipment managers are requested to keep this manual safe and ensure it is delivered with the equipment upon resale or transfer. Strict adherence to safe operating procedures and standardized, regular maintenance are essential for achieving efficient, long-term, and safe operation of the equipment.