

SDJK series Dumper Mixer

To user

Thanks to purchase the company

SDJK 350L/400L/500L/600L/800L/1000L series Dumper

For security purposes, as well as the proper use of this product, please read carefully before use of this statement must be. otherwise, the operation may be wrong to cause the accident. Keep to the necessary reference. If not, please contact the sales department or agents of the company.

- The brochure guide you how to use the correct installation of this before use manuals, this product can be assured the best working conditions.
- This statement should be randomly preservation, to see.
- The brochures such as lost or damaged, without delay, to order agents.
- As the products in the continuous improvement and change, the statement referred to the actual content and structure of machines may vary, without notice, please special attention.
- The statement of the main performance parameters are measured in the standard conditions of that due to climate, varieties and the conditions for the impact, the product of the operational efficiency and effectiveness vary, please be understanding.
- When reading the statement on the "black" shows the contents of the word please special attention.
- Please buy three guarantees must be filled out cards, and the entry into force of sealing into unit sales.
- Welcome you will accumulate experience and improvements to announce our company, so as to further improve the product quality.

Safety precautions

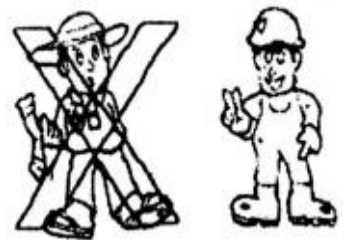
To remind:

1. Safety alert symbols+warning+safety precautions and safety signs are to be observed, otherwise, may result in personal injury or mechanical failure, such as dangerous.
2. The operator must be approved by the training, in order to obtain certification to operate after the dumper, Have one of following cases do not operation:
 - ① Fatigue, illness or ill influence the operators banned operation;
 - ② Drunk banned operation;
 - ③ Banned during pregnancy operation;
 - ④ Under 16 years of age and does not have a dumper operation requirements of operation personnel prohibited;
 - ⑤ Operation not skilled in prohibition against operation.
3. Before use the dumper, the operator must carefully read the instructions, understand and master its contents, and strictly comply with the provisions of safety precautions.
4. Safety signs must be kept clean, if damaged, lost, need to re-order-and-paste.
5. Not allowed to modify the dumper, or likely to cause performance degradation, dumper damage or danger.



Safety workwear

1. Operate in the operation should be tight to wear work clothes appropriate to prohibit the wearing or not tie well jacket and shirt.
2. Headscarf ban on bar, scarf, necktie and towel bar in the waist.
3. Sandal, slippers and so on prohibited



Prohibited fireworks

1. Refueling pyrotechnics is strictly prohibited.
2. To stop the engine when refueling.
3. The fuel or oil spills, the use of clean cloth to clean.
4. The prohibition of smoking in the work area.



Product nameplate

Nameplate products is an important and effective identification of lawn signs, their location in the left side of dumper, receivers of services Service To view this nameplate. Therefore please do not loss of product nameplate and in order to maintain clarity.

Pre-operational inspection

1. Operators around the dumper to confirm no carefully one in the near, issued after the start signal to start the engine.

2. Not meet the security guard is not allowed to start the engine, the engine is not allowed to start after the cover open or remove safety, security should cover damage to the timely maintenance, replacement.



Machine safety signs and the meaning:



1 This safety sign is pasted on the protective cover of the machine. Before using the machine, read the manual carefully, pay special attention to the exclamation mark in the manual, and install, operate, use and maintain in strict accordance with the requirements of the manual. Pay attention to the safe distance to prevent injury.

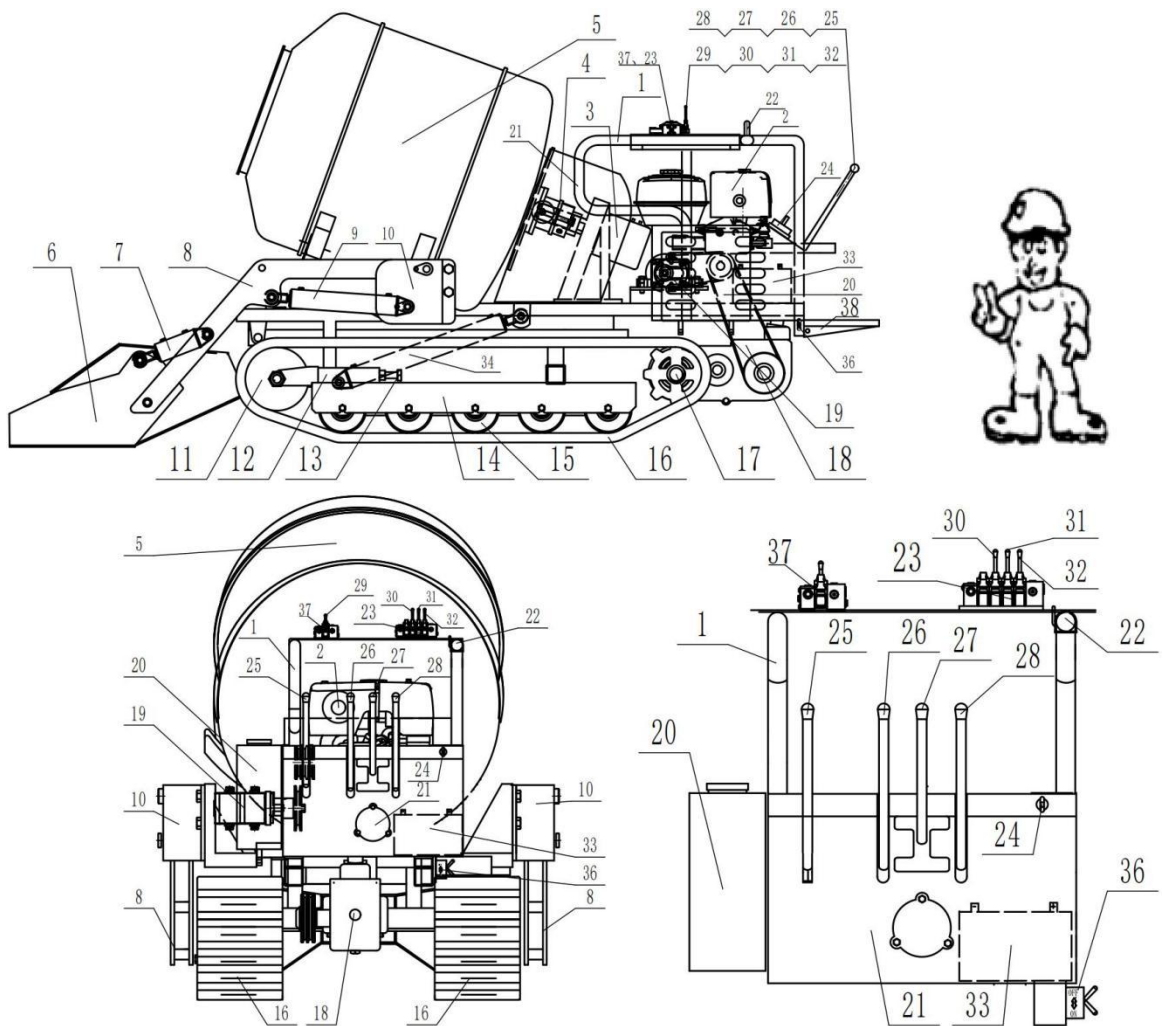


2. One of the safety signs, attached to the machine safety cover, indicates that when the dumper is working, please do not repair and approach it to prevent injury to hands or feet. DANGER! KEEP OFF!

2.Summary of crawler dump truck

2.1 Overview

Simple diagram:

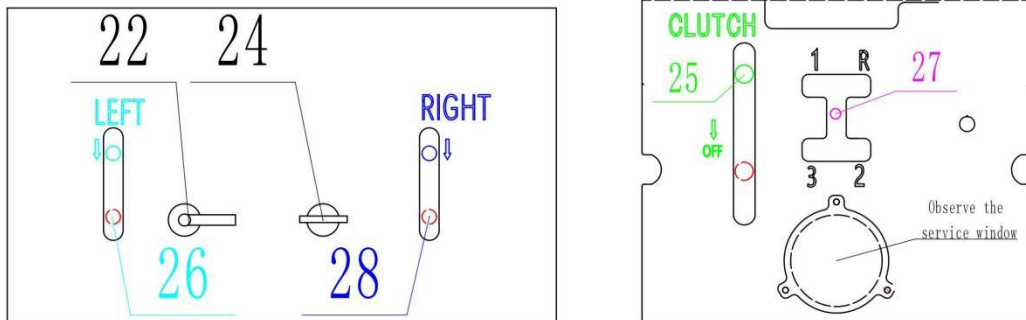


- 1.Handlebar 2.Engine assembly 3.Hydraulic motor 4.Coupling assembly
- 5. mixing bucket 6.shovel 7.Shovel cylinder 8.Lifting arm
- 9.Lifting arm cylinder 10.Lifting arm mount 11.Guide wheel 12.Guide wheel support
- 13.Guide wheel jacking bolt 14.Bearing wheel frame 15.Bearing wheel assembly
- 16.Rubber track 17.Drive wheel 18.Gearbox 19.hydraulic pump 20.Hydraulic oil tank
- 21.Protective cover 22.Engine Throttle 23.3-Manual directional valve
- 24.Electric start switch 25.Clutch operating handle 26.Gear operating handle
- 27.Left steering joystick 28.Right steering joystick 29.Steering lever of nixing tank

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30. Lifting lever of mixing tank 31. Hopper lever 32. Lifting arm lifting lever
33. Battery assembly 34. Lifting cylinder of mixing tank 35. Inlet and outlet of mixing tank
36. power switch 37. Single positioning manual direction valve 38. Foot pedal

The installation positions of the left steering control lever (26) and the right steering control lever (28) of this machine have been changed, as shown in the following figure, and the operation method remains unchanged.

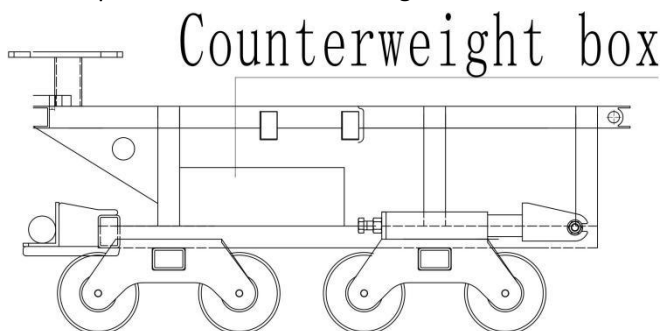


Operation panel diagram

The position of the red circle in the figure is the position after the operation of the clutch operating handle (25), left steering operating handle (26) and right steering operating handle (28), which can realize the functions of clutch separation, left steering and right steering. If emergency braking is required during walking, pull the left steering handle (26) and the right steering handle (28) to the standing direction of the operator at the same time to stop the vehicle. After the clutch is disengaged, the operating lever (27) can be adjusted to the desired gear.

Gear mark: 1-R-3-2

This machine is equipped with a counterweight box. Customers can add counterweight materials to the counterweight box according to their needs, or use the counterweight box as a toolbox. The installation position of the counterweight box is shown in the following figure:



Remove the 4 bolts on the counterweight box cover, add the counterweight material, cover the cover, and tighten it with the bolts.

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SDJK series crawler transport dump / lift dump truck introduces advanced technology from Europe and America, and is equipped with high-quality diesel engine (up to Euro 5 emission standard) or EPA certified gasoline engine, which is environmentally friendly, energy-saving and powerful; Advanced hydraulic lifting system is adopted to make the machine move forward and backward flexibly; The machine adopts high-quality rubber track, which is safe to walk; The steering is controlled by the handle console, which is easy to operate and efficient. This machine is suitable for carrying products and goods in swamp, mountain area, orchard, forest farm and construction site.

The machine is mainly composed of handlebar assembly, diesel engine assembly (gasoline engine assembly), gearbox assembly, driving wheel assembly, Supporting wheel assembly, rubber track assembly, guide wheel assembly, carriage assembly, hydraulic lifting assembly, Concrete mixing assembly, hopper assembly, etc.

2.2 Power take-off type of crawler dump truck.

The power of the carrier is supplied by the gasoline engine or diesel engine. When the power is "closed" through the main clutch device of the gearbox, the clutch drive realizes the rotation between the gear and the drive shaft by controlling the clutch sleeve through the working pull rod, so as to realize the walking operation of the carrier. When there is no need to walk, the clutch fork can be controlled by the walking clutch handle, so as to realize the separation between the clutch and the gear, and then make the transport vehicle stop walking. During walking, pull down the left (26) and right (28) steering operating levers to the standing direction of the operator at the same time, and the vehicle will stop moving in time.

3 Inspection, installation, adjustment, operation.

3.1 installation, inspection, adjustment and operation.

I .First, place the crawler transport tipper dump truck on the flat ground, and put the transmission lever in the neutral position (0).

II . Check whether the diesel engine (gasoline engine) is short of oil (fuel oil and oil), put the power switch(36) in the connected (on) state, and install the power switch(36) under the right protective cover. Please note: considering the transportation situation, the machine has added enough engine oil before leaving the factory. Please change the engine oil according to the relevant requirements in the engine manual.

III. The throttle switch is installed on the right handle; First turn on the engine fuel tank switch, adjust the throttle switch handle (22) to the appropriate position, then turn on the diesel engine pressure reducing switch (gasoline engine switch on position), and finally start the engine ignition switch (24); After the engine starts, release the start key switch (24).

IV . After the engine is started, it can run for 2-3 minutes under no-load condition (special reminder: low temperature in winter, no-load operation is particularly important). After the engine runs normally, it can be carried out.

V . Check whether there is abnormal sound in all parts of the machine. After confirming it is correct, pull the clutch operation handle to the direction of the operator standing. After the

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transmission clutch is completely separated, push the gear handle to 1st gear, release the clutch gradually, start the vehicle and work normally.

VI. It is recommended to use the first gear when the load is running, and the second gear or the third gear can be used when the road is flat.

VII. When the vehicle turns to the left, hold the left steering handle tightly and pull the left steering lever (26) to the direction of the operator's standing until the machine moves to the left. When turning right, the operation mode is the same as that of turning left. When the vehicle is running at high speed, sharp turning is strictly prohibited to prevent accidents caused by track falling off;

VIII. ⚠ In the process of walking, when it is urgent to brake, pull the left (26) and right steering handles (28) to the direction of the operator standing at the same time until the dumper stops.

IX. Operation of concrete mixing tank: park the machine in a suitable position and make sure there is no danger.

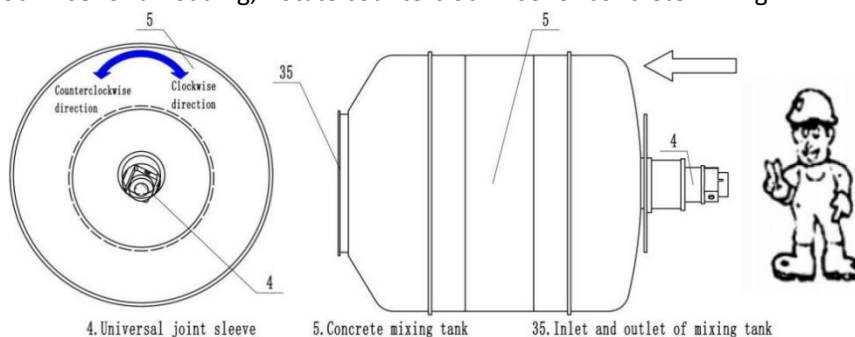
(1) ⚠ Rotation direction of concrete mixing tank (standing position of the operator): when rotating clockwise, the mixed concrete will be unloaded; When rotating counterclockwise, mix the concrete. The mixing tank shall be stopped and started every 2-3 seconds. Remember not to suddenly reverse the operation during high-speed rotation. Due to the large inertia, the universal joint (4) and the hydraulic motor (3) will be damaged.

(2) Use and loading operation of concrete mixing tank: park the machine in a suitable position and ensure that there is no danger between the operator and the machine.

(3) Rotation speed and direction of concrete mixing tank:

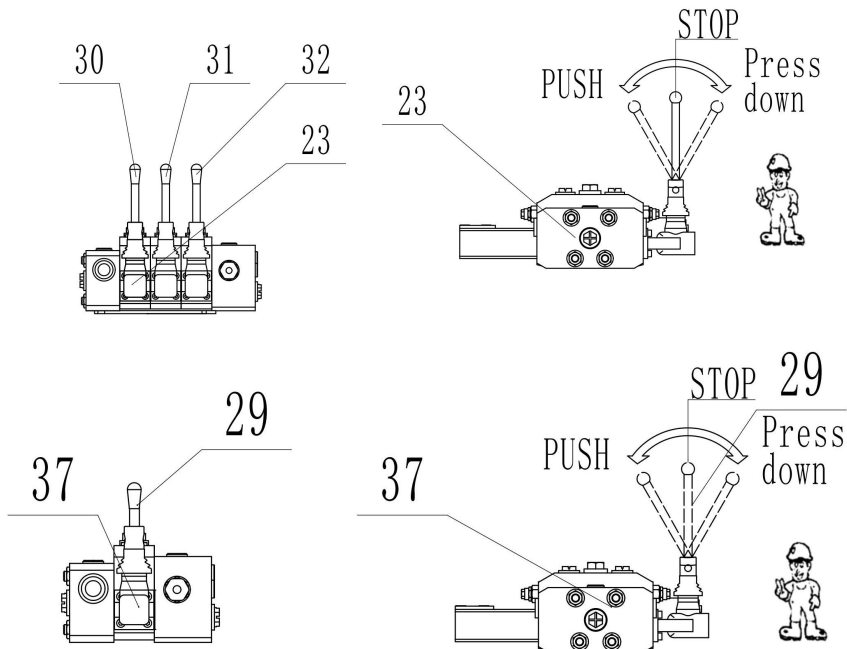
The speed of the mixing tank is controlled below 30 rpm. If the speed is too fast, it is easy to cause damage to the universal joint and hydraulic motor when stopping mixing or unloading. The engine speed can be controlled through the engine throttle (generally controlled at 2300-2600r / min). When the speed of the hydraulic oil pump reaches 2200r / min, the required pressure can be reached.

Rotate clockwise for unloading; Rotate counterclockwise for concrete mixing.



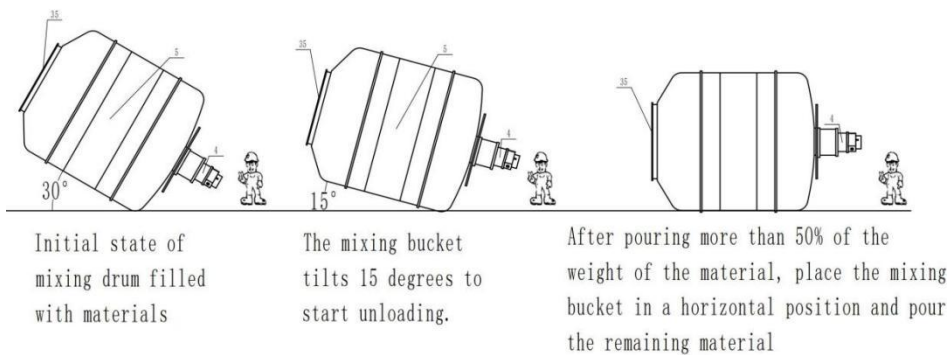
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(4) Push the operating lever (29) on the manual hydraulic control valve (37) forward to achieve counterclockwise rotation of the mixing bucket (5) and start stirring the material; After the materials are mixed evenly, stop the operating rod (29) in the middle position and stop the rotation of the mixing bucket (5); Push the operating lever (30) on the manual valve (23) forward until the mixing bucket (5) is in a horizontal position, then release the operating handle (30); Then press the operating lever (29), rotate the mixing bucket (5) clockwise, and the mixed material can be poured on its own. According to the needs of the operator, the mixing drum (5) can stop rotating at any time. After the material in the mixing drum (5) is discharged, stop the operating rod (29) in the middle position, stop the rotation of the mixing drum (5), and then pull the operating rod (30) backwards until the mixing drum (5) returns to its original position, then release the operating handle (30). Repeat the above steps to achieve continuous stirring and unloading. Remember: When pouring materials, especially when there is sufficient material in the mixing bucket (5), do not quickly place the mixing bucket (5) in a horizontal unloading position. This operation may cause danger due to the weight of the material in the mixing bucket (5) and the vehicle tilting forward; The operator should first tilt the mixing bucket (5) to 15 degrees, wait for a portion of the material to pour out, and then fully place the mixing bucket (5) in a horizontal position until the material is completely poured out.



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Schematic diagram of material pouring process in mixing bucket



Before pouring the mixed material, please lay the foot pedal (38) flat and increase the counterweight to prevent the entire vehicle from tilting forward and causing accidents.

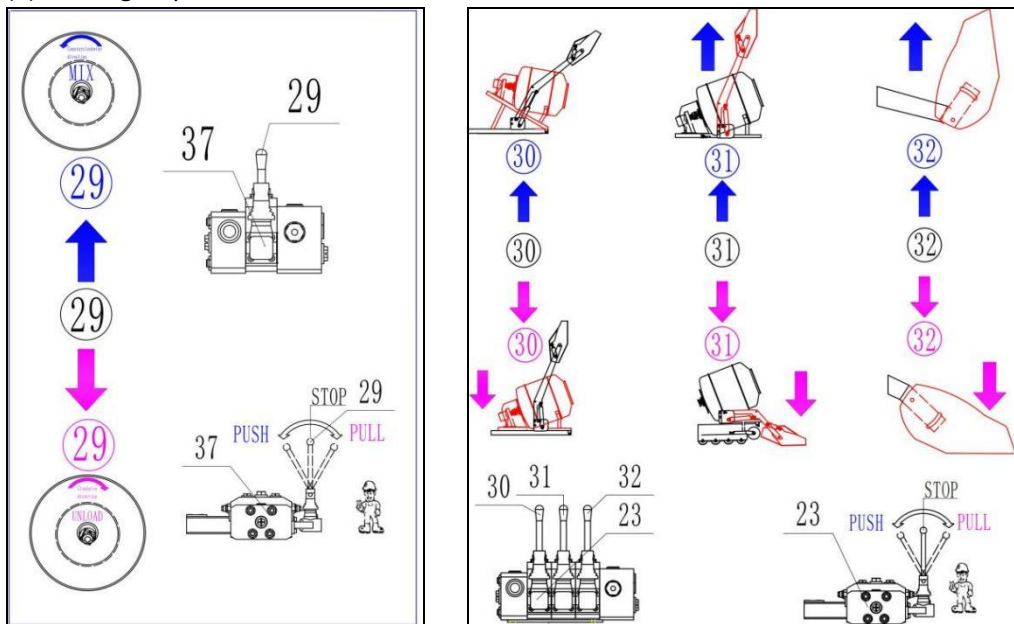
(5) Unloading operation: during this operation, please observe carefully and operate carefully to prevent collision between hopper and tank. After the concrete is mixed, lift the bucket (6) to the highest position, push the operating rod (30) on the manual hydraulic control valve (23) forward, and raise the tank rack to the horizontal position for unloading; After unloading, press the operating lever (30) backward, and the tank rack will fall back to the original position.

X. Feeding operation:

(1) Lay the hopper flat and close to the ground; Push the machine forward to the sand; Stop the crawler stably and load until the hopper is full of sand and gravel;

(2) Before loading, please rotate the mixing tank counterclockwise;

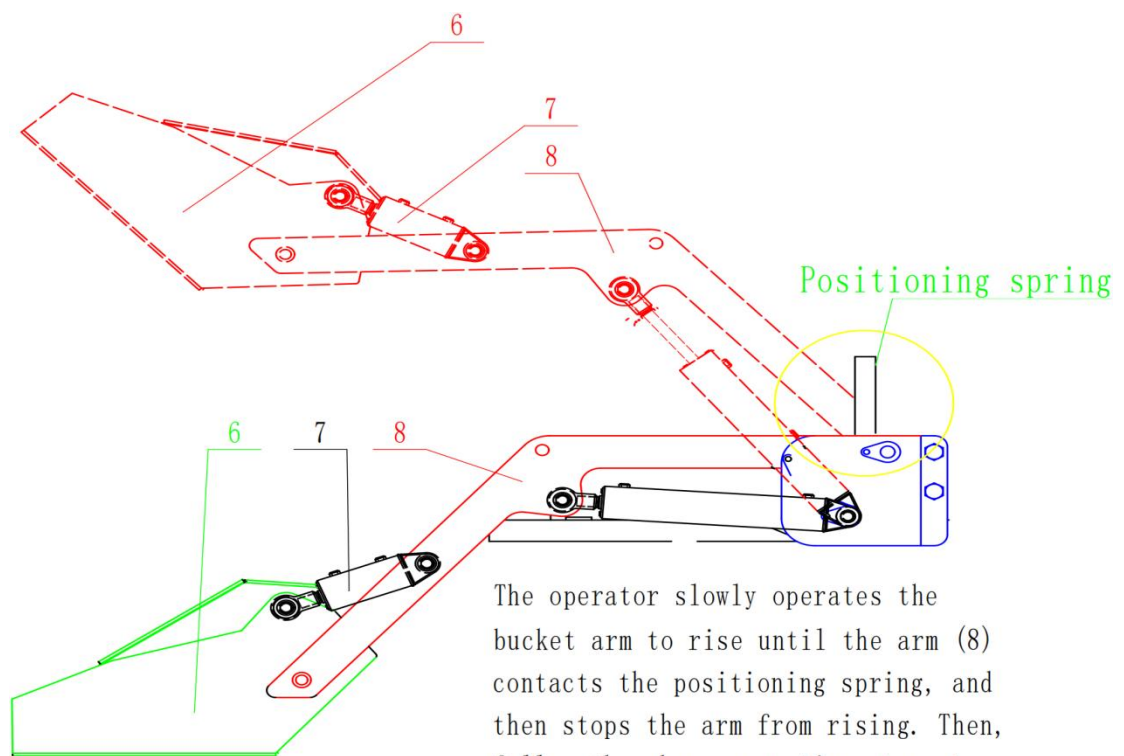
(3) Feeding steps:



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push the operating lever (31) on the manual hydraulic control valve (23) forward, and the lift arm (8) rises under the push of the lift arm oil cylinder (9); When the distance from the ground is about 400-600mm, loosen the operating lever (31), push the operating lever (32) on the manual hydraulic control valve (23) forward to make the hopper (6) horizontal, and then loosen the operating lever (32); Continue to push the operating lever (31) forward, the lifting cylinder (9) pushes the lifting arm (8), the hopper (6) continues to rise to the upper part of the tank inlet and outlet, the upper guard plate of the hopper (6) outlet is basically flush with the tank inlet and outlet, and then release the operating lever (31); Press down the operating lever (32) to make the hopper outlet perpendicular to the tank inlet and outlet, and then release the operating lever (32) to realize the feeding function. If the sand and gravel are too thick, quickly push and pull the operating lever (31) back and forth several times until the sand and gravel in the hopper (6) are completely discharged. Push the operating lever (31) forward until the hopper (6) is horizontal. Release the operating lever (32) and let the operating lever (31) be pressed down. The hopper (6) returns to the ground. After the hopper (6) is adjusted to be horizontal with the ground, continue to shovel. Repeat the above operation several times until the mixing tank is full. (See the picture on the next page)

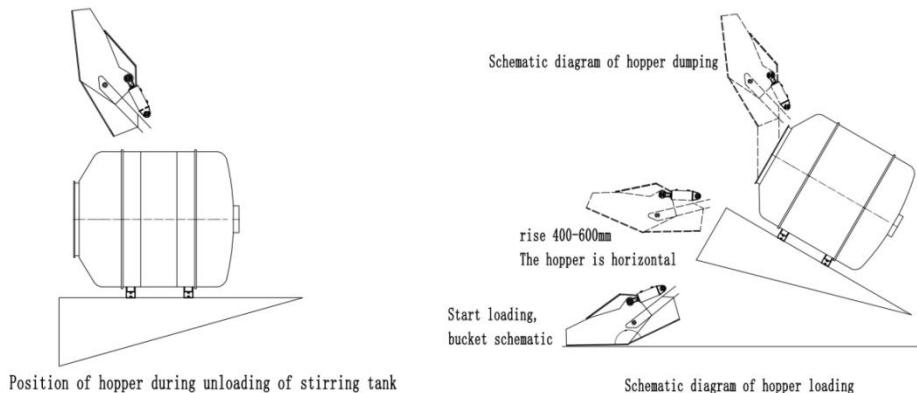
(4) Use of positioning springs.



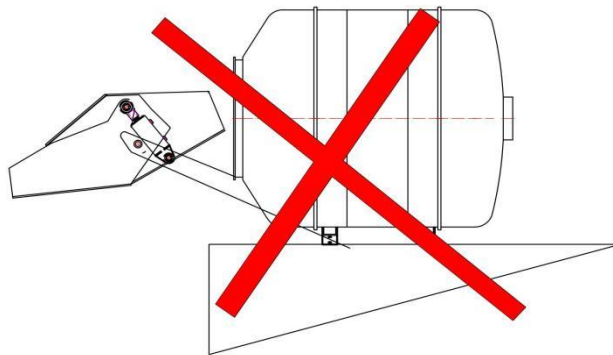
The operator slowly operates the bucket arm to rise until the arm (8) contacts the positioning spring, and then stops the arm from rising. Then, follow the above operation steps to pour the material into the mixing tank.

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(5) During the feeding process, if you want to add water, cement and other ingredients, be sure to stop the rotation of the mixing tank to ensure personal safety.



⚠ In particular, the following behaviors are wrong:



When the mixing tank is in the horizontal position, do not lift the shovel hopper to prevent collision and damage to the mixing tank and shovel hopper.

⚠ When the mixing tank is full, the operation of quickly changing the rotation direction of the mixing tank will damage the connecting shaft.

⚠ When the equipment is running, the behavior of touching the engine belt with hands may cause danger.

⚠ When using high speed reverse gear without knowing the road environment, this operation may cause accidents.

⚠ Add fuel without stopping the engine.

3.2 maintain

Before each use, please maintain the equipment as required. For the first time, the crawler transport tipper dump truck needs to run in for more than 6 hours, and the operator can only engage in load operation after fully understanding the operation performance of the vehicle.

(1) Before each use, all the parts that need to be lubricated, such as Supporting wheels and guide wheels, should be checked comprehensively, and the lubricating grease should be added as required.

(2) According to the ambient temperature, engine oil and fuel oil with proper viscosity should be used; Add high quality grease to the lubricating parts.

(3) Clean engine oil, fuel oil and grease shall be used, and the filling and storage containers of fuel oil, engine oil or grease shall be kept clean, and impurities shall not be mixed into the oil and grease.

(4) After changing the oil or engine filter element, carefully check whether there are metal chips and impurities in the replaced oil and filter element. If a large number of metal chips or impurities are found, they should be cleaned thoroughly in time.

(5) Maintenance after 250 hours of use:

① Check the transmission oil level and change the lubricating oil


② Check the engine oil level and change the oil

③ Check the battery electrolyte level. This machine adopts maintenance free battery. Please charge the battery in time to prolong its service life

④ Check the track tightness and adjust it in time

⑤ Check the tightness of all bolts and nuts

⑥ Check all pins for wear and replace them.

(6)  Every 500 hours of maintenance:

① change engine oil and oil filter element.

② Replace the engine fuel element.

③ Check the height of the lubricating oil in the transmission and add lubricating oil. Replace lubricating oil

④ Clean and check radiator plate and oil cooler plate every 1000 hours.

⑤ Check the tightness of hydraulic system, replace hydraulic oil

⑥ check the transmission belt and replace it.

(7) Maintenance of rubber track

① Always check the tightness of the track. According to the requirements of the operation manual, it is not too tight, but loose.

② Remove mud, grass, stones and foreign matters on the track at any time.

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③ The rubber track shall not be stained by oil, especially when filling fuel or lubricating the transmission chain with engine oil. Protective measures shall be taken for the rubber track, such as covering the track with plastic cloth.

④ It is the basic condition for the normal operation of the crawler to ensure the normal operation of the auxiliary parts between the crawlers, and to replace the worn parts in time.

⑤ When the track is stored for a long time, it should be washed and dried to store the track overhead.

(8) Correct replacement and installation of rubber track

When installing the track, jack up the frame of the transport vehicle, loosen the tension bolt, put the track into the walking mechanism composed of driving wheel, supporting wheel, balance wheel and guide wheel, and then tension the track. When tensioning the track, you must master the tightness of the track. If the track is too tight, the power loss of the transport vehicle will be large, the wear of the track will be intensified, and the track pitch will be enlarged, which will easily cause the belt cracking. It will affect the service life of the track; if the track is too loose, there will be tooth skipping, steering failure, and the track is easy to fall off, which will affect the normal work of the transport vehicle.

(9) In the process of using, the operator should take corresponding protective measures according to the ground conditions and working conditions to prevent the damage of rubber track. Special attention shall be paid to whether there are steps or obstacles, sharp objects, etc. on both sides of the track when turning, and obstacles shall be avoided in time.

(10) There are steel wires and steel blocks embedded in the rubber track. When walking on the cement ground or the road with sharp stones, it will press on some irregular hard objects, resulting in a sharp increase in the pressure on the track. When the bonding strength of the rubber and steel wire or steel block of the rubber track is less than the pressure, it will cause the rubber and steel wire to peel off, and the rubber after stripping the steel wire is easily broken by impact. Especially when walking with load, try to avoid rough and hard objects; When the vehicle is transferred, it is better to use a special vehicle when it is more than 2 km. When transferring in short distance, try to choose flat soil ground or grassland, and avoid rough and hard objects.

(11) In the process of use, it is forbidden to turn sharply on concrete ground, sand and gravel road or hard road, otherwise it will cause wear of track core, distortion of belt body and crack of track. When crossing the ridge, it must be at right angles to the ridge and move forward at low speed. When the ridge is higher than 20 cm, the support plate must be used, otherwise the track will fall off and be damaged.

(12) Less work in deep mud paddy field. Because the mud is stained with weeds, it is easy to roll on the track, causing weeds to wrap around the space in the track, which makes the track expand, deform and elongate, causing the track slip and affecting the normal work. If there is serious grass entanglement in the track, it should be eliminated in time. Moreover, if the track is trapped in the deep mud, it will fall off due to the loose track when turning

sharply.

(13) If stones and other foreign matters enter the clearance between the track and the underframe, the operation shall be stopped immediately, and the work can be started only after the stones or foreign matters are removed.

(14) Adjustment of transmission clutch (refer to the operation manual of transmission)

The clutch is adjusted for the first time before leaving the factory. After working for a period of time, it will be adjusted according to the degree of release lever. After that, it will be checked and adjusted regularly.

A. adjustment requirements

a: When adjusting the clutch, the clearance between the release lever head and the release bearing shall be kept at 0.3-0.5mm.

b: The clutch should be combined reliably and separated thoroughly.

B. Adjustment method

a: When the clutch and control lever are in free state, adjust the joint to make the release claw reach a certain angle, and then lock the female.

B: then adjust the separation interval, loosen the double nut mechanism of the clutch three, rotate the adjusting nut, insert the thin gauge into the separation lever head and the separation shaft, adjust the clearance, lock the nut and the adjusting nut, and pull out the thick gauge. The clearance between the heads of the three release levers and the release bearing should be equal.

(15) Before use, please carefully check the connecting parts and bearing wheels of the mixing tank; After the mixing tank is used, please brush it with clean water in time.

(16) Replace hydraulic oil (This operation is very important)

After 15 hours of use, the hydraulic oil must be replaced; After the initial replacement, use for 50-75 hours and perform a second replacement; After 150 hours of use, perform the third replacement; Based on the frequency of use in the future. Replace the hydraulic oil every 400-500 hours.

4. Operation safety regulations

(1) Before using the machine for the first time, read the instructions in detail, and then carry out various operations. Check the safety of the machine before each use in the future.

(2) When using the carrier, you should hold the handle with both hands, open the medium speed accelerator and move forward at a constant speed, which can save fuel consumption and improve work efficiency; Pay attention to safety when operating the machine on the pedal.

(3) The start of the operation should be stable, so that the power of the machine can meet the working requirements before the work.

Warning:


When the machine is moving, no one shall stay in front of the vehicle; When dumping goods, other personnel except operators shall stay away from the machine; When cleaning the foreign matters in the track, the vehicle must be parked in a stable place. After cutting off all power supplies, clean the foreign matters; Do not reach between the drive wheel and the track.

 **Do not use high speed for reverse gear.**


When using reverse gear to avoid foot injury and body.

Don' t touch the belt with the hand after the engine is started

When loading with shovel hopper, other people except operators shall be more than 1.5m away from the equipment to prevent rollover and safety accidents.

 **Special warning:**

When troubleshooting, shut down the engine and do not operate for maintenance.

 **Crawler dump truck is only used in fields, orchards, construction sites and other areas. It is strictly forbidden to drive for a long time on the road which is forbidden by the state.**

5. Long term storage of crawler truck

When the tracked vehicle needs to be stored for a long time, in order to prevent corrosion, the following measures should be taken:

(1) **Store the engine according to the engine instruction. Remove the negative terminal of the battery(33).**

(2) Clean the dust and dirt on the surface.

(3) Drain the lubricating oil in the gearbox and inject new oil. Before storage, fill up the fuel tank, lubricate all parts, change the hydraulic oil and engine oil, and apply a thin layer of grease on the exposed metal surface of the piston rod of the hydraulic cylinder.

(4) Apply antirust oil on the unpainted parts of non aluminum alloy surface.

(5) Store the machine in a well ventilated, dry and safe place. If it can only be stored outdoors, the machine should be parked on the cement floor with good drainage.

(6) Properly keep the attached tools, product certificates and instructions.

6. List of attachments

- | | |
|--------------------------------|--------|
| (1) Vehicle Operation Manual | a copy |
| (2) Engine User Manual | a copy |
| (3) Transmission manual | a copy |
| (4) Tool | a set |

7. After sales service

The company implements three guarantees service for the crawler carrier products within the period of validity according to relevant national regulations

The three guarantees period of validity of the whole machine: 12 months (except for vulnerable parts such as V-belts), including the three guarantees period of validity of main parts: 6 months, and the name of main parts: gearbox assembly, rubber track, engine, hydraulic cylinder and gear pump

The period of validity of the three guarantees shall be calculated from the date of purchase.

For the following cases, we will not implement the "Three Guarantees" policy, but implement reasonable charges:

- (1) Early wear and failure caused by improper use, maintenance and repair.
- (2) The failure caused by the parts and parts that are not allowed to be adjusted and disassembled according to the manual.
- (3) There is no San Bao certificate and valid invoice, and it can not prove that the products purchased are products with San Bao validity period.
- (4) The product specifications and models on the Three Guarantees certificate or invoice are inconsistent with or altered.
- (5) Failure to maintain the original state of damage after failure, or failure to make technical identification for the cause of failure without the consent of the seller or repairer.
- (6) Failures caused by drivers and operators who have not been trained according to law to obtain driving operation license.
- (7) Damage caused by force majeure.

The product is continuously updated, and no further notice will be given for replaced parts. Please read this manual carefully before use.

Thank you for reading!