

Shandong Luoxiang Automobile Manufacturing Co., Ltd. series products

Quality warranty service manual

Prepared by: Marketing Department

Audit: Quality Management Department, After-sales Service Department

User information registration form

Serial Number	Category	User Information	Remarks
1	User units		
2	User address		
3	User name		
4	Subscriber phone number		
5	Contract number		
6	Date of purchase		
7	Vehicle identification code		

- 1、 This information is the basic proof of warranty, please fill it in carefully and keep it properly;
- 2、 This certificate is stamped and valid by the company.

Manufacturer (seal)

Warm Tips

Your vehicle warranty must hold this manual, vehicle license or a copy of the purchase invoice, so please be sure to check whether the above content of this manual is consistent with the actual vehicle when buying a car, if wrong, please contact our customer management department to replace.

Please take good care of this manual.

Delivery service report form

Dear user friend: Hello!

Welcome to buy Luoxiang auto series semi trailer. The existing service personnel of our company will deliver the car service to you. The service personnel will explain and demonstrate according to the following contents. Through the communication, if you have confirmed that nothing is wrong, please mark "√" in the user confirmation box; Otherwise, please click "×".

Client name		Contact number		Vehicle style		Frame number	
Address: Province (county) district (township) Road (village) No						Contract No.	
Service person		Service unit				Service hours	
Explaining, demonstrating content							User confirmation
1	Check the spare parts, tools and documents on board.						
2	Explain the name, main parameters and meaning of the main parts of the vehicle.						
3	According to the "quality warranty Service manual" of the driver's instructions, warranty specifications, work scope and precautions.						
4	Explain the vehicle operation and use specifications, use methods, work scope and precautions.						
5	Explain brake system, vehicle frame maintenance, maintenance and precautions.						
6	Explain the inspection and prevention of early easy loosening parts and easy consumption parts.						
7	Explain after-sales service processing procedures and related regulations.						
Inspection content							
1	Vehicle color						()
2	Trailer style						Goose <input type="checkbox"/> straight <input type="checkbox"/>
3	Whether the aluminum plate is firm and the content is correct						
4	The frame number is consistent with the certificate information						
5	Whether the ladder position is consistent with the contract configuration table						
6	Whether the number of small boxes is correct						
7	Whether the box location and specifications are consistent with the contract configuration sheet						
8	Whether the tool box has spare tire rocker, shaft head wrench, old car frame number (refers to the trade-in contract, and pay attention to the frame number location)						
9	Whether the protective mesh or mesh tool box is consistent with the contract configuration table						
10	Whether the ring brand and specification quantity are consistent with the contract configuration table						
11	Whether the tire brand is consistent with the contract configuration table						
12	Whether the number of spare tire brackets and elevators is consistent with the contract configuration table						
13	Whether the axle model is consistent with the contract configuration table						
14	Whether the leaf spring model is consistent with the contract configuration table						
15	ABS assembly is consistent with the contract configuration table						
16	Whether the type and quantity of reservoir are consistent with the contract configuration table						
17	Whether the cap cover is consistent with the contract configuration table						
18	Whether the rear door style is consistent with the contract configuration sheet						
19	Whether the number of pomace is consistent with the contract configuration table						

20	The number of tie rods is consistent with the contract configuration table	
21	The number of tighteners is consistent with the contract configuration table	
22	Whether the goods and materials on board are consistent with the exit permit	
Vehicle warranty period: from the date of the year and end of the date of the year. (The implementation of warranty regulations and warranty period shall be subject to the provisions in the Quality Warranty Service Manual)		
After our inspection of the vehicle, we are very satisfied with the condition and quality of the vehicle, quality assurance service rules, important statements related content we have read and know, the manufacturer reception has introduced to us in detail the relevant provisions of the warranty service regulations, warranty requirements, contact information, etc., we accept these provisions and requirements.		
User comments:		
User signature (seal) : Year month date		
Evaluation of service personnel (Please mark "√" in "□")	<input type="checkbox"/> Satisfied <input type="checkbox"/> More satisfied <input type="checkbox"/> Dissatisfied	

Product File Card Number:											
Customer name		Contact person		Phone (with area code)		Trailer style		Floral bar style		Trailer color	
Contract number		Frame number		Make/model of locomotive		Date of purchase					
Address: City (county) district (township) Road (village) No											
User Category: <input type="checkbox"/> Individual <input type="checkbox"/> Private <input type="checkbox"/> State-owned <input type="checkbox"/> Three capital <input type="checkbox"/> Other				Object of loading: <input type="checkbox"/> Coal <input type="checkbox"/> Sand and gravel <input type="checkbox"/> Machinery <input type="checkbox"/> Container <input type="checkbox"/> Loose materials <input type="checkbox"/> Steel <input type="checkbox"/> Other				Vehicle warranty period: from date of year to date of year to date of year. (The implementation of warranty regulations and warranty period shall be subject to the provisions in the Quality Warranty Service Manual)			
Handover inspection						Service Provider: (stamp)					

<p> <input type="checkbox"/> Check whether the vehicle certificate, quality warranty service manual, car accessories, car tools and so on are complete <input type="checkbox"/> Check appearance: vehicle dimensions, exterior parts, welding parts, welding parts, paint, appearance accessories are normal. <input type="checkbox"/> Check chassis suspension, tire specifications, tire pressure is normal. <input type="checkbox"/> Check whether there is air leakage, oil leakage, leakage phenomenon. <input type="checkbox"/> Performance test: Electrical system, brake system, gas circuit is normal. <input type="checkbox"/> In accordance with the "quality warranty Service Manual" driver usage instructions, warranty specifications, work scope and precautions. <input type="checkbox"/> Other parts are in good condition. Check if confirmed, please mark "√" in "□". If there is any problem, please inform the service provider to remove it before handing it over to the user </p>	Telephone (including area code) : Fax:
Vehicle after our inspection, we are very satisfied with the condition and quality of the vehicle, quality assurance service rules, important statements related content we have read and know, service providers have introduced to us in detail the relevant provisions of the warranty service regulations, warranty requirements, contact information, etc., we accept these provisions and requirements. <p style="text-align: right;">User signature (seal) : year month date</p>	

The first return Shandong Luoxiang Automobile Manufacturing Co., LTD. The second service unit archive the third user retention

First maintenance service report number: SBFW-

Dear user friend: Hello!

Thank you for using Luoxiang Auto series semi trailer! The existing service personnel of our company will provide you with the first guarantee service. The service personnel will conduct testing and maintenance according to the following contents.

The Applicant		Department		Date of application		Category of services performed	<input type="checkbox"/> Service station service <input type="checkbox"/> Direct service <input type="checkbox"/> Customer service
Customer name		Contact		Contact		Contact	

		person		number		address	
Contract number		Frame number			Hanging license plate number		Vehicle style
Floral Bar Style			Date of entry			Axle brand/specification	
Service unit					Service personnel		
Service hours					End time		
Inspect, maintain items							Detection effect
1	Check whether the plate spring and screws in each part are loose						<input type="checkbox"/> Yes <input type="checkbox"/> no
2	Check that the wheelbase is working properly						<input type="checkbox"/> Yes <input type="checkbox"/> no
3	Check that the brakes are working properly						<input type="checkbox"/> Yes <input type="checkbox"/> no
4	Check whether there is air leakage in the air line and whether each air pipe is damaged						<input type="checkbox"/> Yes <input type="checkbox"/> No
5	Check the circuit for short circuit or damage						<input type="checkbox"/> Yes <input type="checkbox"/> no
6	Check the wheel base, adjusting arm, tire screws, U-screws, pin tightness						<input type="checkbox"/> Yes <input type="checkbox"/> no
7	Check whether the shaft head cover is loose, butter if necessary, and treat with butter						<input type="checkbox"/> Yes <input type="checkbox"/> No
8	Check that the tire pressure is normal						<input type="checkbox"/> Yes <input type="checkbox"/> no
9	Check whether the welding parts are open or broken						<input type="checkbox"/> Yes <input type="checkbox"/> no
10	Check maintenance traction tray (pin)						<input type="checkbox"/> Yes <input type="checkbox"/> no
11	Tire Positioning						<input type="checkbox"/> Yes <input type="checkbox"/> no
12	Axle Maintenance						<input type="checkbox"/> Yes <input type="checkbox"/> no
Breakdown of initial maintenance costs							
Axle maintenance or not	<input type="checkbox"/> Yes <input type="checkbox"/> no	Man-hour charge		Materials fee		Other fees	Total fees
User Comments:							
User signature (seal) : Year Month day							
Evaluation of service personnel (Please mark "√" in "□")				<input type="checkbox"/> Satisfied <input type="checkbox"/> More satisfied <input type="checkbox"/> Dissatisfied			

The first union returned to Shandong Luoxiang Automobile Manufacturing Co., LTD. The second union service unit archived the third union customer retained the fourth union finance

Service Supplement Agreement Agreement No. : FWXY-

Party A: (Luoxiang Service provider) Party B: (Buyer)

In order to strengthen market services and improve customer satisfaction, Party A and Party B, on the basis of equality and voluntariness, enter into the following supplementary service agreement:

1. Party b in party a purchases a gong automobile manufacturing co., LTD., trailer products (models: _____ hold the contract number: _____ frame number (VIN) yards: _____), Party B has the right to enjoy the warranty in accordance with the service policies stipulated in the Product Warranty Manual.
2. According to the relevant regulations of the state or industry, the following circumstances are not subject to warranty:
 - (1) Party B fails to use, maintain and maintain Luoxiang products according to the instructions for use;
 - (2) Improper use, maintenance or maintenance by Party B, which artificially causes damage to the vehicle or parts;
 - (3) Normal wear parts, consumable parts, fragile parts, oil, liquid, etc., such as brake pads, light bulbs, insurance, lubricating grease, fasteners, etc., shall not be guaranteed;
 - (4) Damage caused by serious overload, over-limit and illegal use of vehicles;
 - (5) **Parts and** parts damage and all problems caused by Party B's private modification, addition, welding or removal of any parts of the vehicle;
 - (6) Vehicles or parts beyond the warranty period;
 - (7) failure of the vehicle, without the consent of the company or its authorized service providers, unauthorized processing or replacement of parts caused by continuing parts and parts damage;
 - (8) **The** failure and loss caused by Party B's use of the designated parts not approved by the company when repairing the vehicle without permission;
 - (9) All kinds of abnormal faults occur in the process of vehicle operation, because Party B does not stop in time to check, troubleshoot, and continue to drive caused by direct parts damage and expand the relevant parts damage;
 - (10) Party B for a variety of reasons to refuse, prevent the company or authorized service providers to carry out normal inspection of the vehicle, analysis and identification and repair, resulting in delay losses;
 - (11) Vehicle losses caused by natural environmental impacts, such as floods, lightning, storms and other irresistible forces;
 - (12) Any maintenance tests and modifications to meet the requirements of local government regulations;
 - (13) Product defects caused by human factors during transportation, such as: body surface scratches, bumps and loss of wearing parts, damage, etc., will not be guaranteed;
 - (14) Damage, failure, paint off, discoloration and other parts caused by longer storage time (factory date more than one year) are not processed according to contract repair;
 - (15) the customer does not according to the requirements of the manufacturer, customize the Qinghai-Tibet version of the model, the use of the Qingzang Line, the quality problem, the manufacturer does not guarantee;
3. The old parts replaced by maintenance products during the warranty period belong to Luoxiang Automobile Manufacturing Co., LTD., and shall be taken back by Party A on behalf of Party B. Party B shall not refuse to return them for any reason, otherwise, Party A has the right to shorten the warranty period.
4. Other matters not mentioned herein shall be subject to the Safety Operation and Maintenance Manual and Product Quality Guarantee Manual of Luoxiang Automobile Manufacturing Co., LTD.
5. Party A is responsible for signing this Supplementary Maintenance Service Agreement with Party B, binding the Agreement together with the Luoxiang Trailer product file card and vehicle delivery service Sheet (Luoxiang Automobile Manufacturing Co., Ltd. deposit), and returning by fax or mail to Luoxiang Automobile Manufacturing Co., Ltd. marketing company within the day after the product is sold for archiving.
6. This agreement is in triplicate, a, b both sides each hold one copy, effective after being signed, the vehicle warranty period is valid from the day of month ____ ____ ____ years to end on ____ ____ ____.
7. The right of interpretation of this agreement belongs to Luo Xiang Automobile Manufacturing Co., LTD.
8. 8. Matters not covered herein or related disputes shall be settled by Party A and Party B through negotiation. If no agreement can be reached through negotiation, the dispute shall be subject to the jurisdiction of the people's court where Luoxiang Automobile Manufacturing Co., LTD is located.

Party A: Party B:

(legal representative signature/stamp) _____ (signature/stamp) _____

(1) Landline: Mobile phone: Landline: Mobile phone:

Id Number: ID number:

Antecedents

Dear Gong Ring Users:

Sincerely thank you for choosing Shandong Luoxiang series products!

According to the product quality requirements, the company has established a rigorous quality management system, strictly control and management of all links related to product quality, established a scientific inspection procedure, and quantified the quality inspection index, responsible to the person, to ensure the company's continuous and stable production of qualified products. The company strictly controls the quality of raw materials and outsourced parts to prevent unqualified products from flowing into the production site.

The company has established regular quality training for employees to learn new knowledge and concepts of quality management, establish the quality awareness of every employee, and standardize their own behavior. The quality assurance Department has established standardized inspection procedures, has perfect testing means, and implements inspection in strict accordance with the inspection procedures to meet the quality requirements of products.

In the process of product use, if there is a quality problem, please call the 24-hour service hotline or service station telephone, we will provide you with the most efficient and fastest quality service. For your comments or suggestions on the after-sales service of Luoxiang trailer products and the quality of the service station, please contact the after-sales service department of Shandong Luoxiang Automobile Manufacturing Co., LTD.

Free service hotline: 400-8671-886

In order to keep your new car in good condition and the best running condition in the future use, please read the "Quality Warranty Service Manual" with the car carefully, and hope that you can follow it.

The right to interpret the content of this manual belongs to Shandong Luoxiang Automobile Manufacturing Co., LTD.

The contents of this manual are subject to change without prior notice.

Wish you a long journey and a safe road!

Driver's notice (before vehicle operation) :

- The spring plate U-bolt must be tightened;
- Must check whether the tire nut, bolt is tight;
- Must check whether the tire pressure is standard;
- There must be an external fastening device to fix the spare tire when the spare tire lifter is used.

General Terms of Service

Shandong Luoxiang Automobile Manufacturing Co., LTD. Main products: rail-type semi-trailer, dump truck, warehouse grid transport semi-trailer, container semi-trailer, van semi-trailer and undertake special vehicle modification, design and other business, semi-trailer and the products are sold all over the country. In line with the concept of mutual trust, mutually beneficial cooperation and common development, the company has always positioned product quality as the core competitiveness of participating in the market.

Service concept: only imperfect products, no picky customers.

Service tenet: We are committed to creating "fast, professional, quality, efficient" customer service.

Service objective: Customer value maximization.

Service standard: three all, Four modernizations, five unification.

"Three All" refers to a full range, the whole life cycle, the whole process, that is, to fully meet customer service needs;

The "Four modernizations" refers to providing customers with quality services according

to the standards of "standardization, standardization, process and specialization"; The "Five unification" refers to the unity of concept, image, standard, process and accessories to provide customers with standardized services.

Five service commitments

Technical service - Gong Ring Trailer provides lifelong technical service.

All-day service -- to provide you with 24-hour service hotline, to provide customers with quality after-sales service.

Three guarantees service -- for vehicles within the scope of the warranty, the quality warranty period is free three guarantees.

Zero profit service -- for the damage of spare parts outside the warranty period, the cost fee will be charged for the spare parts provided, and the working hour fee will refer to the local working hour standard.

Active service -- regular return visits to customers who buy Luoxiang brand products.

After-sales service -- provide technical guidance within 2 hours after information feedback; Product quality issues, as the case may be.

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First, the relevant provisions of Luoxiang automobile quality warranty

(1) General provisions

The free service during the quality warranty period is an important measure for the company to put quality first, be responsible for customers and maintain the legitimate interests of customers, and is also a continuation of the quality management of products.

1. The products within the warranty period refer to all series of products produced by the factories of Luoxiang Company.

2, warranty content: During the quality warranty period, due to the product design, material, manufacturing, assembly quality reasons, caused by the damage or failure of the vehicle, assembly and parts, the company for free warranty services for users.

3, warranty purpose: in order to do a good job of the company's series of products warranty service work, so that the warranty service work institutionalized and standardized. The purpose of warranty is to correct the defects in the design, material, manufacturing and assembly process of the product, improve user satisfaction and increase the competitiveness of the product. The warranty must use the custom parts of Luoxiang Company or the parts of the specified supporting manufacturers.

(2) Identification of warranty liability

1, whether the product belongs to the warranty responsibility, by the company's service department and technical personnel (including the head office maintenance and after-sales service stations) responsible for identification and confirmation, to give warranty service to ensure the normal use of user vehicles.

2, after the customer maintenance product responsibility identification, the customer management department should issue the corresponding written confirmation, obtain the customer's confirmation. The customer signs and seals the corresponding written confirmation, indicating its confirmation of the product warranty liability identification result.

3. After the customer management department signs the confirmation letter with the customer, the product problems will be fed back to the quality department and relevant departments to facilitate product improvement.

4, the principle of warranty service: Quality warranty service work should adhere to the principle of repair, can not be repaired to replace the corresponding damaged parts.

(3) Quality warranty conditions and scope

1, the user provides a perfect and effective "quality service warranty card", "quality warranty Service manual", and according to the normal use and maintenance of the conditions, can accept the quality warranty requirements, otherwise deemed as the user automatically waive the right to quality warranty.

2. Luoxiang Company only implements quality warranty services for its manufacturing and modification parts.

3. In dealing with the quality warranty business, the company only bears the maintenance costs of assembly or parts, and does not bear the freight, delay, insurance and other costs caused by quality reasons.

(4) The scope of quality warranty service is not covered

1. Failure to use, maintain and maintain the products according to the instructions for use.

2, improper use, maintenance, maintenance, man-made damage to the vehicle or parts.

3, the normal wear parts of the vehicle, consumption parts, fragile parts, oil, liquid, such as brake pads, light bulbs, insurance, lubricating grease, fasteners, etc., will not be guaranteed.

4, serious overload, over limit and damage caused by illegal use.

5. Parts and parts damage and all problems caused by the user's private modification, addition, welding or removal of any parts of the vehicle.

6, beyond the warranty period.

7, failure, without the consent of the company or its subordinate service stations to handle or replace parts caused by the continuity of the parts

And part damage.

8, the maintenance of the vehicle, the use of the specified parts not recognized by the company caused by the failure and loss.

9. Various abnormal faults occur in the operation of the vehicle, and the user does not stop the vehicle in time for inspection and elimination. And forced to continue driving caused by direct damage to the parts and expansion of the relevant damaged parts.

10. The user refuses and prevents the service station from normal inspection, analysis, identification and repair of the vehicle under various excuses, resulting in delays and losses.

11, due to the impact of natural environment, such as floods, lightning, storms and other force majeure caused by vehicle damage.

12, any maintenance debugging and modification to meet the requirements of local government regulations.

Product defects caused by human factors during transportation, such as: body surface bump, scratch and loss of wearing parts, damage and so on will not be guaranteed.

14, due to a long storage time (factory date more than one year) caused by parts damage, failure, rust, paint off, discoloration and other not according to the warranty treatment.

15, the customer does not according to the requirements of the manufacturer, customize the Qinghai-Tibet version of the model, the use of the Qingzang Line, the quality problem, the manufacturer does not guarantee.

(V) Quality warranty specification

1, Luo Xiang semi-trailer frame warranty details

Items	Warranty content	Problem identification	Warranty period	Renewal period
Main beam	Web	Web cracks (W stay perimeter cracks, big stay ends and web weld)	12 months	Not guaranteed for replacement
	Upper and lower wing panels	Deformed, cracked, broken	Lifelong	12 months
Car body construction	Car bottom plate	No warranty due to limited use		

	Beam (W brace), side beam	Cracking	6 months	Not guaranteed for renewal
Paint	Paint finish	Large area shedding	6 months	Not guaranteed for replacement
Other accessory parts and consumable parts are not covered by the warranty				

Important reminder:

All the above warranty requires the user in the case of non-disassembly, modification as required warranty; Disassembly and modification by themselves will not be guaranteed.

2, Luoxiang semi-trailer other items warranty details

Items	Warranty content	Problem identification	Warranty renewal period
Walking gear	BPW, Fuhua and other manufacturers axle to manufacturers three guarantees prevail		
	Huajin axle brake pads: Gansu, Shanxi, Shaanxi, Yunnan mountainous area guarantee 40000 kilometers; Other areas to protect 80,000 kilometers. For other parts, the manufacturer's three guarantees shall prevail.		
Suspension device	Spring plate	Broken at the center screw hole; Other parts are broken or seriously deformed	6 months
	Adjusting the pull rod	Deforming, breaking	6 months
	Suspension	Deformation, breakage	6 months
	Balance beam pin/sleeve	Excessive wear, excessive clearance	12 months
Brake device	Brake valve	Normal use caused by air leakage (winter, rainy season caused by the main car dryer damage or long-term not replaced by water, impurities caused by air leakage should not be three packages)	6 months
	Windpipe	Break under normal use	6 months
	Air chamber	Air leakage or mid-body venting	6 months
	Air reservoir	Air leak or burst	6 months

	ABS	The manufacturer's three packages shall prevail	
Electrical installation	Electrical circuits	Non-human power failure	6 months
	Lamps and lanterns	Malfunctions	6 months
Support device	Support legs	Malfunctions	6 months
Note: Other parts without warranty period are not guaranteed in principle.			

II、 Common fault elimination method

(1) Brake system

Possible failure	Cause analysis	Elimination Method
Unable to disengage the brake or brake disengage slowly	Insufficient air pressure in the reservoir	Examine the cause and rule it out
	The main vehicle control line is faulty	Remove the brake state, check the parking control line , if there is a participating air pressure is the parking cause
	Pipe blockage	Inspection and removal
	Brake air chamber push rod bent	Repair or replace parts
Insensitive braking	Emergency relay valve not working well	Repair or replace
	Brake shoes	Realignment
	A leak in the air brake system causes insufficient air pressure	Check for repairs
	Brake pads are heavily worn and have excessive brake clearance	Replace the brake pads and adjust the brake clearance
Brake automatically during operation or brake lock when braking	The pressure of the braking system does not reach the specified value of 0.6MPa	Check the air pressure in the inflation line
	Air is leaking into the control line when it is not braking	Inspection and maintenance

	The trailer emergency relay valve is not working properly	Repair or replace
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(2) Running device (axle and wheel)

Possible failure	Cause analysis	Elimination Method
Wheel Wobble	Axle bearing damage/rim out of round or deformed	Replacement
	Loose wheel bolts	Tightened
Overheated wheels	Bearing misalignment	Adjusting bearing clearance
	Dry rotation due to lack of oil/improper use of lubricating oil in bearings	Change the lube
	The shaft head nut is too tight	Adjust the axle nut
	There is a hard foreign object entering the bearing	Clear the foreign object or replace the bearing
	Brake lock	Troubleshooting the brakes
Damaged tire bolts	Excessive torque over the recommended value	Tighten to the specified torque
	Bolts improperly installed/not tightened	Reassemble the bolts/tighten properly
Abnormal tire wear	The distance between the center of the traction pin and the center of the two axes of the front axle is not equal, and the wheelbase of the two axes of each bridge is not equal	Adjust each live tie rod so that the wheelbases of each bridge are equal
	Tire pressure does not meet requirements	Inflate as required
	Brake often holds	Servicing the brake system
	Large difference in leaf spring hardness/bent axle	Replace/adjust or replace the rim
	U-bolt nuts loose	Tighten to the specified torque
	The gap between the tie rod pin and the rubber sleeve is too large due to wear	Replace the rubber sleeve

	Loading long-term overload, high load, partial load	Proper loading of cargo
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(3) Suspension device

Possible failure	Cause analysis	Elimination Method
Hanging noise in operation	Loose U-bolt nuts	Heavy loads are tightened according to the specified torque

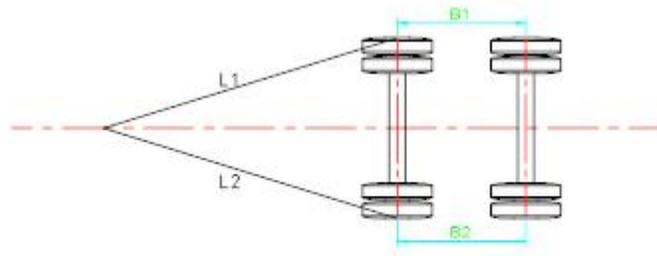
(4) Others

Possible malfunctions	Cause analysis	Elimination Method
Headlights don't work	Plugs, sockets damaged	Repair or replace
	Wire splice break	Connect well
Leg shaking resistance is too large or idling, lifting failure	Poor lubrication	relube
	Gear damaged or misaligned	Replacement or repair
	Screw thread damage	Replacement or repair
	Deformation of inner and outer square cylinder	Correction or replacement
	Rocking off, travel beyond the limit line	Repair or replace , adding padding wood under the leg if necessary
Possible breakdowns	Cause analysis	Elimination Method
The saddle handle is not in place, cannot be pulled open or the traction pin is loose with the self-locking hook	The self-locking hook on the saddle is not in proper condition	Adjust the adjusting screw on the right side of the saddle, clockwise adjust to solve the loose, counterclockwise adjust to solve the handle is not in place, can not be pulled open and adjusted to the appropriate position

Three, wheelbase adjustment method

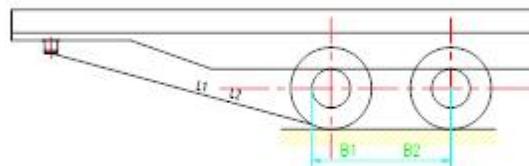
1. The vehicle skew mainly because the distance between the traction pin center and the corresponding

point on both sides of the first axle varies, and the two axles are not parallel, as shown in the figure, the difference between L1 and L2 is not greater than 1.5mm, and the difference between B1 and B2 is not greater than 2mm, if it is out of tolerance, it may cause abnormal tire wear. The detection method and size deviation for the production process and technical requirements, please the user to the finished car according to the following methods of detection and adjustment.



2, the adjustment method (see the figure below, in order to operate) :

- (1) Stop on the road with the best levelness without braking.
- (2) Remove the outer tire and the dustproof cap of the axle.



(3) Take the inner surface of the front side of the wheel hub as a vertical line to the ground (take a point on both sides of the front axle).

(4) Take the center of the traction pin as the benchmark, measure the distance to the above two points, requiring the difference between the two values L1 and L2 to be no more than 1.5mm. If it is beyond, adjust the front axle live tie rod until it meets the requirements.

(5) Measure the corresponding points of the front and rear axle hubs, the difference between the measured value B1 and B2 is not more than 2mm. If the difference is excessive, adjust the live rod on the rear axle to make it parallel until the deviation meets the requirements.

(6) Tighten the fastening bolts on the front and back living rod.

(7) After adjustment, stop at the same place without braking for about one kilometer, review the above dimensions, if it does not conform to the required dimensions, adjust and try again according to the above-mentioned methods, so that there is no change after installing tires, dust caps, etc.

3. Precautions:

(1) The adjustment process should make the rod in working condition, that is, a rotation of the rod axle moves, the rod adjustment function is normal.

(2) Check once a month.

(3) The parameter requirements are very strict, although adjusted before the factory, but due to the use of complex road conditions and very working conditions, the rod rubber sleeve is easy to damage, other parts are also easy to deform, which will cause the vehicle skew, tire abnormal wear, which is a common fault, users should often check and adjust with this method, otherwise, The company will not be responsible for the loss caused.

4, water shower installation requirements note:

(1) When installing the water sprinkler, it is strictly prohibited to move or cut off any parts on the longitudinal beam of the semi-trailer.

(2) The water sprinkler must be installed on the fixed hole reserved above the longitudinal beam of the semi-trailer, and it is strictly prohibited to drill, cut or weld the hole above the longitudinal beam.

(3) The pressure resistance of the water sprinkler pipeline (gas pipe, water pipe) should reach 0.6Mpa and above.

(4) The sprinkler needs to be equipped with a pressure reducing valve, and the maximum output pressure of the pressure reducing valve is not more than 0.2Mpa.

(5) The connection between the hose and the tee and the sprinkler head need to be fitted with a clamping clamp.

(6) After the installation of the sprinkler, the 0.4Mpa pressure sealing test must be carried out on the joints to ensure that there is no air leakage at the joints.

(7) In the process of driving, if it is found that the water sprinkler leaks, the brake system pressure decreases or the brake drum temperature rises abnormally, it must be stopped immediately for inspection, and the fault can be removed before continuing to drive.

Fourth, regular vehicle inspection

1, the new car running

The correct closing of the new car, to extend the service life of the car, give full play to the power and economy of the car has a great relationship, the new closing period of the semi-trailer is 1000 kilometers, in the closing period, should be implemented to reduce the load (loading quality does not exceed half of the maximum loading quality of the factory) and the speed limit.

2, regular inspection

Please follow the table below for regular inspection and maintenance

Regular vehicle inspection list:

Items to check			Check the time			Judging criteria	Remarks
			Daily	Monthly	Per year		
Brakes	Gas path system	Air pressure state	√			Working air pressure 0.6-0.75MPa	Traction state
		Seal status of each component of the system	√			No air leakage is allowed	Traction status
		Brake chamber push rod stroke		√		Standard value 30-35mm extreme value 50mm	Traction status
		Emergency relay valve function	√			Should work properly	Traction condition
		Brake chamber function			√	Should function properly	

	Dual safety brake mechanism	√			When the air pressure of the inflation line drops below 0.4MPa, it brakes itself	
	Parking brake effect	√			Works properly	

Vehicle Inspection Form 1:

Items to check		Check the time			Judging criteria	Remarks
		Daily	Monthly	Per year		
Brakes	Brake CAM			√	There must be no excessive wear or welts	
	Brake drum and brake friction sheet	Gap between brake drum and friction plate		√	The maximum gap should be within 0.5-0.7mm	It should be adjusted beyond the standard
		Friction plate wear			√	Replace when worn to the limit
	Brake drum wear			√	Over the limit to replace	
Circuit system	Headlight device	Action	√		Should work properly	
		Black and damaged	√		No dirt or damage is allowed	
	Wiring	Slack connecting wire ends		√		There must be no relaxation
Trac	Handle	Retractable	√		It is not allowed to have	

tion seat	s	into place and flexible				the phenomenon that it is not in place or cannot be pulled open	
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Vehicle inspection Form 2:

Items to check			Check the time			Judging criteria	Remarks
			Daily	Monthly	Per year		
Axle	Tires and wheels	Tire pressure	√			Standard value $\pm 20\text{KPa}$	
		Tire damage	√			Replace if severe	
		Wheel bolts and nuts are loose	√			The tightening torque of the wheel nuts is 600-630N.m	
		Tire wear	√				Timely adjustments
		Loose wheels		√		Tire lateral swing no more than 5mm	Adjust bearing clearance
		Oil seal			√	Aged or damaged to replace	
	Axles	Cracks, damage, deformation		√			Repair and replacement
		The axles should be parallel to each other		√		The tires are abnormally worn	Adjusting the pull rod
Suspension	Leaf springs	With or without segments	√			Replace when you have a fragment	

on	ngs							
		Part of conn ecti on	U-bolt		√		Press 450-500N.m to tighten the nut	
			Pull rod shake		√		Replace the rubber sleeve when it fails	
			Balance arm rocking		√		The balance arm sleeve should not be worn too much	Oversize replacement
Spring plate offset			√		Not offset			

Vehicle Checklist 3:

Items to check		Check the time			Judging criteria	Remarks
		Daily	Monthly	Per year		
Support gear	Work function	√			Should function properly	
	Damage to inner and outer cylinder		√		There must be no crack damage	
	Loose installation site		√		There must be no slack	
Other	Traction pin		√		There must be no cracks, loosening; The maximum diameter of 50# traction pin Φ48mm; 90# traction pin uses an extreme diameter of Φ86mm	
	Frame		√		There should be no cracks and large deformation	

Spin lock	Action		√		Should work properly and complete	
Lubricated parts	Lubrication condition		√		Should be good	

Five, check the maintenance essentials

In order to make the inspection items can be smoothly inspected, the following provisions and methods should be implemented. The inspection of ABS brake system shall refer to its special instruction manual.

Note that the inspection is carried out in an empty state unless specified.

(1) Inspection of the brake device

1. Check whether the pipes and connecting parts are cracked or damaged, and whether there is gas leakage.

2. Check the function of emergency relay valve

a. If the tractor is equipped with a separation switch, the tractor's separation switch should be turned off first, and then the quick connector connected to the semitrailer inflation pipeline on the tractor is removed, and the brake is checked. If it cannot be automatically braking, the emergency relay valve is faulty.

b. Then connect the quick connector of the inflation tube. If the tractor is equipped with a separation switch, open the separation switch and check whether the brake brake is automatically lifted.

c. Check whether exhaust gas is discharged from the exhaust port when the brake is released. If so, it is normal.

d. If the action is not flexible, check whether the quick release valve (if there is) is faulty, otherwise the emergency relay valve or quick release valve (if there is) should be replaced.

Special reminder:

In the winter season, too much water in the vehicle brake system is easy to form the brake valve body (relay valve, ABS valve) ice blocking or freezing, seriously affecting the braking effect or causing the valve body to misoperate, the formation of brake stagnation, resulting in the vehicle can not run normally, serious cause vehicle damage or cause traffic accidents!

a. In the winter season, it is recommended to discharge the water in the air storage tank of the semi-trailer every day to minimize the water volume of the braking system!

b. Check the effectiveness of the tractor air dryer, such as the desiccant loss effect in time to replace the drying cylinder to ensure that the brake air is dry!

3. Check the brake air chamber

a. Check whether the brake chamber push rod is flexible and mobile, and whether it is within the specified travel range (standard working travel is 30-35mm). The specific value refers to the axle manual, and if the travel exceeds 50mm, it should be readjust. In order

to make the left and right wheel have the same braking effect, the left and right brake air chamber push rod stroke should be as far as possible to minimize the difference, not more than 5mm.

b. Check whether the brake chamber is leaky under the braking state, check whether the bleed hole is leaky, and replace the rubber diaphragm if it is leaky. Check the outside for cracks and damage, and replace the brake air chamber if necessary.

4. Check the air reservoir

a. After the vehicle stops running, be sure to pull the drain valve at the bottom of the air reservoir to drain water.

b. The drainage will discharge the internal gas at the same time, such as excessive exhaust and emergency relay valve action, should be replenishment of gas, so that the gas in the gas reservoir to maintain its prescribed pressure.

5. Adjust the brake

Special reminder:

a. Check the rotation state of the wheel after adjustment, the wheel must be free to rotate.

b. Because each wheel brake adjustment is not easy to ensure the same clearance, so the test brake after adjustment is subject to the wheel does not run off.

c. If the semi-trailer is installed with automatic brake gap adjusting arm, it is not necessary to calibrate the adjusting arm.

(2) Circuit check

We should often check whether the connector is reliable, whether the lamp signal is normal, whether the lamp is damaged, if there is timely maintenance and replacement.

(3) Axle inspection

1. Check the axle for cracks, damage and deformation, and repair or replace it if necessary.

2. Adjustment of axle clearance (subject to axle instruction manual)

a. Use the jack to lift the semi-trailer.

b. Rotate the hub, tighten the nut with 350–400N.m of torque, and then reverse 1/8 to 1/6 RPM.

c. Rotate the hub, gently beat the hub (bearing position) with a hand hammer, check whether the smooth rotation, such as resistance is large, you can slightly relax the lock nut, until the hub can rotate freely without obvious swing is appropriate, and then plug in the cotter pin, lock the lock nut.

d. Apply sealant on the hub cap and install the hub cap.

3、Always check the tightness of the wheel nuts. If they are loose, tighten them with 600–630N.m tightening torque.

(4) Check the tire pressure and wear

1, due to the different load, road conditions and system state, tire wear is different, should be in accordance with the prescribed order of the wheel transposition.

2, tire pressure has a great impact on tire life, to maintain the specified pressure (specific tire pressure standards see the side of the tire).

Special reminder:

Insufficient inflation pressure will result in:

- a. Shortened tire life;
- b. Accelerated tire wear, especially abnormal wear on the shoulder;
- c. The curtain layer is cut and separated from the rubber, and the shoulder will break;
- d. Increased fuel consumption;
- e. When driving at high speed (more than 100km/h), due to the action of centrifugal force, the tread pattern is broken.

When the inflation pressure is too large, it will lead to:

- a. Side slip;
- b. cut or blow a tire;
- c. Accelerated wear of the tread center;

3. Check abnormal tire wear in daily use of semi-trailer:

- a. Check whether the nut is loose every day;
- b. After the first heavy load operation of the semi-trailer, customers should self-check whether there is abnormal wear of the tire;

c. The wheelbase of the new car must be adjusted once within 2 months of driving, and the tightness of the wheelbase and U-bolts must be checked once a month thereafter;

(5) suspension inspection

Always check whether the leaf spring is broken, if it is found broken, it must be replaced, pay attention to the flexure of the left and right spring after replacement must be the same, the nut on the U-bolt after heavy duty driving, the tightening torque is 450-500N.m.

To often check the bolts on the tie rod, loose to tighten; And to check whether the rubber sleeve at both ends is intact, damaged to replace.

(6) Check the supporting device

It is necessary to check whether the supporting device is working normally, and whether there is deformation and damage inside and outside the cylinder. If there is, it must be repaired or replaced.

(seven) Check the traction pin assembly

1, to often check the traction pin for scars, premature wear, cracks and other defects, if the wear is too large (50# traction pin working diameter below $\Phi 48\text{mm}$, 90# traction pin working diameter below $\Phi 86\text{mm}$) or cracks, abnormal damage to replace.

2, check the traction pin plate for scars, distortion and sand and other debris, if necessary to repair.

(8) Frame inspection

Every once in a while to check the various parts of the frame, if found cracks and deformation is too large, to be repaired.

Six, lubrication table

In order to extend the service life of the semi-trailer safely, it is necessary to regularly supplement the lubricating oil to the devices, and attention should be paid to the supplementation of oil:

1. The filling container and oil cup should be clean to prevent dust or debris.
- 2, when the oil cup can not be injected with grease, it should be replaced by checking the reason.
3. Special reminder: After the new car is lifted back, the grease on the saddle and traction pin plate should be thoroughly removed after driving 500km. Re-apply clean grease, and check the friction between the saddle and the traction pin plate.
4. Lubrication table of each component:

Lubrication parts	Interval time			Lubricant name and specification
	Daily	Monthl y	Per year	
Traction pin and traction board	√			Calcium base grease 2G-4
Supporting device		√		Calcium base grease 2G-4
Brake adjuster arm		√		Automotive General purpose Lithium Base Grease No. 2
Brake adjuster arm connection	√			Calcium base grease 2G-4
Balance arm kingpin		√		Calcium base grease 2G-4
Leaf spring pin	√			Calcium base grease 2G-4
Sliding surfaces at both ends of steel spring			√	Calcium base grease 2G-4
Brake CAM holder	√			Calcium base grease 2G-4
Pull rod pin		√		Calcium base grease 2G-4
Parking roller and lead screw		√		Calcium base grease 2G-4
Brake rolling pin and retaining pin		√		# 4 High temperature Grease ZN6-4

Axle bearings			√	Automotive general purpose lithium base grease No. 2
Spare tire rack lifter		√		Automotive general purpose lithium grease No. 2
Brake camshaft rotation pay	√			Automotive general purpose lithium base grease No. 2
Turn Lock	√			Calcium base grease 2G-4

Seven, service network address book

Note: Our service network is constantly changing, please contact our company often telephone consultation, in order to provide you with the latest address and contact information of the service station.

Note:

1, product service warranty standards in strict accordance with the "quality warranty Service manual" related management provisions;

2, the warranty period in strict accordance with the "user information registration" standard implementation.