

# OPERATOR'S MANUAL & WARRANTY CERTIFICATE



**AGRICULTURAL TRAILER** 



Dear valued customer,

Congratulations on the purchase of your new NIGMER Trailer.

Now, you are a member of our ever-growing family of farmers using NIGMER cutting-edge technology, specially designed to meet your needs. In our success we credit our customers most. With your invaluable input and response we refined our products.

We encourage you to read the Operator's Manual thoroughly and carefully to ensure your safety and productive & hassle-free machine usage. Not following the instructions given here could result in equipment failure or personal injury.

All the information about assembling, adjustments, maintenance, safety, and technical assistance are mentioned here. For clarification and technical issues that are not mentioned in this manual please contact with our dealers or us.

Again, we thank you for choosing NIGMER machines.

#### Sincerely,

NIGMER Agricultural Machinery Co.

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WARRANTY CARD		
Manufacturer: NIGMER MAKİNE TARIM	Dealer:	
İNŞAAT OTOMOTİV İTHALAT İHRACAT		
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Website: www.nigmer.com		
Authorized Person Signature:		
EQUIPMENT		
Trade Mark : NIGMER	Date of Deliver:	
Type : Agricultural Trailer		
Model :	Customer Signature:	
Serial Number: C 511		
FOLIDMENT WARPANTY TERMS AND CONDITIONS		

NIGMER warrants to the original purchaser that goods & equipment of its manufacture are free from defects in material and workmanship under normal use and service for the period of time of two years from the date of delivery to the customer.

#### This warranty is on these further terms and conditions:

- 1. The equipment must be installed (when applicable), operated and maintained in accordance with NIGMER's instructions.
- 2. If any defects in materials and workmanship, technical problem or deficiency associated with the manufacturing process are detected in the products, NIGMER has the responsibility to eliminate the deficiencies and defects of the products. NIGMER will, at its option, repair or replace parts that are found to be defective. All costs (such as part's cost, transportation cost, labor cost) emerging during repair or replacement of defected parts are under responsibility of NIGMER. Labor cost is calculated based on hourly wages of technical staff and total work hours spent for repair and/or replacement of defective parts.
- 3. The equipment will fulfill the function it is designed to perform but due to wide variation in lands and other conditions beyond the equipment manufacturer's control, no specific level of performance is guaranteed.
- 4. The parts those wear and tear under ordinary use are excluded from the warranty. These are rubber and plastic parts, tires, hoses.



- 5. Excluded from the warranty are damages caused by handling and unloading at the place of delivery, erosion or corrosion, force majeur(s), accident(s), repair or attempted repair or adjustments made by persons not authorized by NIGMER, damages caused by misuse, abuse, reckless or improper operation of the equipment by the purchaser or any third party or poor or no servicing of machine.
- 6. NIGMER shall in no event be responsible for any consequential damages of any nature whether special or general, direct or indirect.
- 7. Equipment, parts or accessories manufactured by others and not sold under NIGMER trademark(s) carry the warranty and remedy provided by their manufacturer only. Do not attempt any repair on any of these items if seeking warranty coverage.
- 8. Any warranty or claim, which differs from that herein set out is unauthorized by NIGMER and is the warranty solely of the party making it. NIGMER makes no other warranty express or implied and the original user's sole remedy for breach thereof is as set forth above.

<u>To properly qualify for warranty, all maintenance criteria and service schedules must be followed (including greasing).</u>

As well, the pre-delivery check list and warranty registration forms must also have been completed at the time of product delivery and returned (by mail or e-mail) to us, the manufacturer, for proper record keeping.

Failure to follow and provide any of the above information will void warranty.

Note: Warranty claims will not be approved unless documentation is complete and correct.

Modification of the trailer without the written consent of the Manufacturer is forbidden. In particular, do NOT weld, drill holes in, cut or heat the main structural elements of the trailer, which have a direct impact on the machine operation safety.

#### After Sale Checklist

It is suggested that the following items be completed and then checked sometime prior to operation.

- O Inspect for loose or missing bolts. O Inspect for broken or damaged parts
- O Review the entire Operator's O Ensure that all safety stickers are in Manual and take safety precautions. place
  - O Run the machine to see if it is functioning properly

#### **SAFETY SIGNS**



**CAUTION!** 

Follow safe operating practices; be alert to the potential for personal injury!



Check tightness of wheel nuts regularly!



Grease the fittings periodically!



Look at tire maintenance section for more details!



Danger of falling!



Danger of hitting when turning!



Do not ride on or in front of the trailer.



Be careful to your surrounding when turning!



Danger of uncontrolled moving!



Danger of hand injury!





Use wheel chocks to keep trailer in steady position!



Be careful when working with walls!



Danger of cylinder lift closing.



Danger of tipped material



Use security post when servicing!



Keep clear of tipping area!



#### 1. INTRODUCTION

It is important, and informative, for the operator to take a few minutes to read and become familiar with this operator's manual. It contains the necessary information to safely and effectively operate this machine, along with the adjustments and settings for varying conditions. Directional terms such as right, left, front or rear in the manual are fully referenced to the trailer's driving direction.

This manual should become a permanent part of your machine and kept within reach, should question arise.



Front isometric view

#### 1.1. General definitions

Right hand

side of the

trailer

This section describes the general safety precautions for the trailer as well as the operating instructions.

#### 1.2. Instructions for use

These operating instructions apply only to single or multi-axle trailers. The documentation provided to the user is very important and must be read with care.

The instructions provided here, important date periods and some suggestions will make your trailer run longer and trouble-free.

All changes regarding the brand and trailer and the changes to be made in the technical specifications are reserved by the manufacturer.

#### 1.3. Format of the manual



All safety recommendations and warnings are written in bold type. Some features specified in the user manual are indicated by \* if they are within the option.

#### 1.4. How to use the user manual

The operating instructions help you to get to know your trailer better and to take advantage of its features.

The notes in the operating instructions are intended to prevent hazards, reduce repair costs, shorten downtime and extend the life of the trailer.

The operating instructions must always be in the vehicle and must be kept readable.

The operating instructions must be read, understood and followed in detail by all persons directly or indirectly interested in the trailer.

#### 1.5. Reference documents

In the instruction manual there are:

- Operating and maintenance instructions for all parts in the trailer,
- Instructions for safe use of vehicles.

Attention should be paid to the notes and safety notes in particular.

If one or more of the reference documents is missing, please contact NIGMER technical service.

#### 1.6. General safety instructions

All of our vehicles are manufactured in accordance with the legal regulations and safety precautions required by the authorities. Nonetheless, there may be situations in which it may cause material or moral damage to the user or third parties.



All warnings indicated by the above sign are of vital importance and maximum attention must be paid.

Any action that is contrary to security measures should be avoided.

Keep all safety-relevant warnings and instructions in a legible state and in safe.

Always keep the owner's manual and reference documents in reach.

In the event of any malfunction in the trailer, stop the vehicle as soon as possible and wait in a safe position until informing the authorized service.

#### 1.7. Intended use

The intended purpose of trailer use is to transport goods. It is not designed for the transport of people, animals or dangerous goods. The trailer must only be used with suitable tractors. The tractor and trailer must be compatible. A special license must be obtained for the use of towing trailers.

#### 1.8. Warranty and other rights



The sales and delivery conditions of our company apply. The rules come into effect immediately after the vehicle is delivered to the customer. The following conditions void manufacturer's warranty:

#### Unintended use of the trailer

Installations, interventions or repairs done by unauthorized persons.

Unsafe operation of the vehicle, unsecured connections or failure to take necessary safety precautions.

Not following the conditions specified in the operating manual or reference list.

Failure to check for worn parts on the trailer.

Repairs by unauthorized persons.

#### 2. GENERAL OPERATION AND STARTUP INSTRUCTIONS

The following information is provided to assist in the set-up of your trailer. Also described are the proper functions and maintenance guidelines.

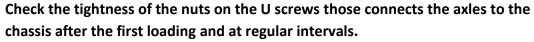
#### 2.1 Before you start to work



Operating a trailer requires a high level of expertise, as well as knowledge about the machine you are using. It is important for you to acquire knowledge and to train with regard to the trailer's behavior.

Practice the movement pattern and always work with smaller loads until you are completely familiar with the trailer. Take care to ensure that nobody is within the safety zone 20m.

After first use of trailer and each wheel mounting tighten the nuts at first 10 operating hours and check their tightening every next 50 operating hours.



- Carefully examine the trailer from front to back and from up to bottom;
- Check all hydraulic connections and fittings. Check for leaks and make sure all hoses are free from damage;



Example Grease fittings

- Check all bolts and nuts for tightness;
- Grease fittings that require greasing;
- Check that the brakes are functioning;
- Be aware that a long trailer needs enough working space and turning area;
- Be sure that nobody is in the working area of the trailer;

#### **Wheel Chocks Use**

• Wheel chocks, should be placed only under one wheel (one in front of the wheel, the second behind the wheel). Do not place chocks under wheels of the front steering axle.

#### **Hand Brake**

Hand brake must be deactivated before driving.



• Hand brake is activated and deactivated manually.

#### **Compressed air lines control**

- Check air hoses and connections for any leaks, cuts, wears, etc. Make sure there is no damage.
- Defects on compressed air line connections may have a negative effect on braking.
- As a recommendation, replace the connection sockets annually.

#### **Electrical connection control**

- Never use the trailer without electrical and brake connections.
- Connect the electrical connector to the tractor and trailer and secure the socket.
- Test the connection.

#### 2.2. Coupling the trailer

- Coupling and uncoupling the trailer may only take place when the machine is immobilized by use of the parking brake.
- If the tractor is equipped with an automatic hitch, make sure that the coupling operation is completed.
- To couple the trailer, use enough long and thick pin and secure it with a lynchpin. Never move the trailer without securing the pin with a lynchpin.
- Connect the tipping and brake hoses to the tractor.
- Be familiar before moving which hydraulic lever on your tractor controls which hose.

#### 2.3. Uncoupling the trailer

• Stop the tractor and the trailer with the parking brake.



## • Do not disconnect trailer or hydraulic hose from the tractor when trailer body is lifted.

- Firmly secure the trailer with the aid of wheel chocks.
- Disconnect electric and hydraulic plugs; protect their ends from dirt.
- Uncouple the hitch pins from the tractor's towing hook and drive away with the tractor

#### 2.4. Driving

- Check tire pressure, the recommended pressure is written on each tire.
- Make sure all reflectors, lights and lamps are in working order on your tractor and trailer.
- The weight of the trailer and its load will add weight to the tractor, which will decrease the tractors stability and maneuverability.
- Please use caution and allow for additional distance when braking or maneuvering around obstacles.
- Do not drive the trailer over 40 km/hr.



- The trailer is designed to operate on slopes up to 8°. Driving trailer on steeper slopes may cause the trailer to tip over as a result of loss of stability.
- Know about other traffic on the road. Keep well over to your side of the road. Pull over, whenever you can, to allow faster traffic to pass.
- Adjust travel speed to maintain control of the trailer and tractor at all times. Never coast down hills.
- Know the overall width and length of the trailer. Be careful when driving on narrow roads and across bridges.
- Never make sharp turns at high travel speed;
- Long trailer needs enough working space and turning area;
- Adjust your driving to the current load, road conditions and your experience.
- Do NOT park trailer on slopes and hilly roads.



Take extra caution to kids behind the trailer when moving back.

#### 2.5. Loading

- The trailer is not designed for transporting people, animals or hazardous materials.
- Loading of trailer may only take place when the machine is positioned on level and hard surface and connected to tractor;
- Before loading, the trailer must be connected to a tractor and secured with the aid of chocks and also immobilized with the parking brake.
- The load must be arranged in such a way that it does not threaten the stability of the trailer, and does not hinder driving.
- Do not exceed maximum designed loading values.

#### 2.6. Unloading

Unloading can be performed through tipping the trailer body backwards (or sidewards for some models). Automated unloading should be executed as follows:



- Note! To prevent damage to the lifting system and toppling, the trailer must be completely stopped before raising or lowering the trailer body.
- Tip the trailer body only if the ground is hard enough and the slope is little.
- Tip the trailer body only if the trailer is coupled with a tractor.
- During unloading the tractor should be positioned as to drive forward.
- Place the bolts with grips connecting the trailer body with lower frame on the unloading side
- Use only original bolts with grip. Use of other bolts may result in destruction of the trailer.
- Open lower locks and relevant wall locks (according to unloading direction)



- Take special precautions while opening wall locks due to load pressure on walls
- Ensure that during unloading / loading or raising the trailer body nobody is around the trailer.
- Tip the trailer body with the hydraulic cylinder lift.
- Take special precautions while closing walls to avoid crushing fingers.
- Do NOT tip of the trailer body in windy conditions.
- Unloading of loose materials loaded higher than 1 m may be realized only by tipping the trailer body backwards.
- If the load does not pour from the raised trailer body immediately lower the tipper and cease unloading. The trailer may only be tipped again after removing the problem (sticking, wedging), which prevented the load from pouring.
- Keep a safe distance from overhead electric power lines and other obstacles before trailer body is raised.

#### 2.7. After unloading:

- Lower the trailer body. Do not move and/or drive until the trailer body is in completely lowered position.
- Install and secure bolts connecting trailer body with lower frame.
- Clean wall edges and floor from residues or impurities. Close walls. Close locks to make spontaneous opening impossible.

#### 3. MAINTENANCE

#### 3.1. General Maintenance

- Replace damaged or worn parts to reduce the risk of injuries. Only use spare parts with equal performance to reduce the risk of injuries and breakdowns.
- Carry out maintenance, service and checks in line with recommendations.
- Before starting maintenance, make sure that the trailer is standing on a flat surface;
- Make sure that the trailer can't move; secure the trailer with park brake and wheel chocks to keep it in steady position;
- When lubricating or servicing the trailer, turn off the tractor engine.

It is strictly forbidden to lean underneath the trailer body without using the security support!





Always use the security support in tipping position when servicing. The security support must always be used when carrying out service work in the tipped position. There must not be any load on the trailer when carrying out service work in the tipped position;

#### 3.2. Hydraulic system maintenance

- Never attempt to do maintenance work on the hydraulic and pneumatic system before you are sure there is no pressure.
- Do not tighten or repair leaking hydraulic couplings while the system is pressurized.
- If the body of the hydraulic cylinder is polluted with oil check the reason of leakage.
- Condition of the hydraulic system should be checked all time during trailer's operation.
- Never attempt to localize a leakage from hoses or connections by feeling with your hand. The high pressure oil blaze can penetrate skin and cause serious burns and damages.
- High pressure oil is also highly flammable. Do not smoke when servicing.
- Avoid getting oil into eyes. Use safety goggles and gloves. If oil has got into eyes flush them
  with cool water and immediately contact a doctor.
- If the hydraulic systems is used very intensively (great number of tipping) replace hydraulic conduits every 4 years.

#### 3.3. Compressed air system maintenance

- For air brake systems, periodically drain water from the air tank in the system. During frosts, freezing water may cause damage to the system components.
- Once a year just before the winter unscrew the air system drain valve and clean it from accumulated dirt.



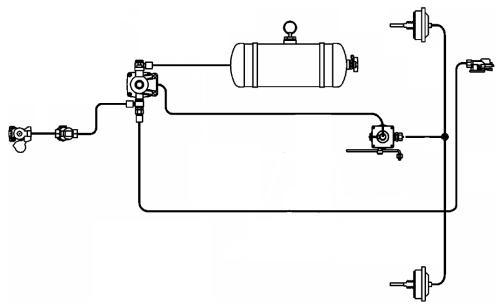


Figure: Air brake system for single-axle trailers

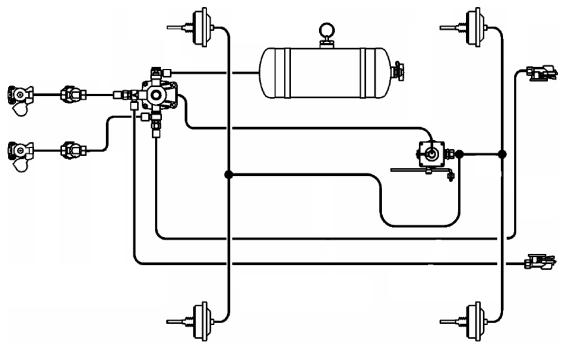


Figure: Air brake system for double-axle and tandem trailers

#### 3.4. Tire maintenance



- During assembly & disassembly of tires protect the trailer against unintended movements.
- Repair or replacement of tires should be performed by trained personnel and with suitable tools.

<u>^</u>

• After first use of trailer and each wheel mounting tighten the nuts after first 10 operating hours and check their tightening every next 50 operating hours.



- Check the tightness of the nuts on the U screws those connects the axles to the chassis after the first loading and at regular intervals.
- Regularly check and preserve proper tire pressure according to the designed tire pressure (especially after longer standstills).
- Check the tire pressure also during intensive daily work. Take into consideration the fact that the increase of tire temperature may cause tire pressure growth dramatically. In the case of such pressure & temperature increases reduce the load and/or speed.
- Never reduce the tire pressure through inflation valves if the pressure has grown due to the temperature.
- Protect tube inflation valves with suitable nuts to avoid penetration of impurities.
- Do not exceed the maximum trailer's speed. The max speed is 40 km/h.
- In the course of daily work make at least one hour lasting pause at noon.



- Make 30 minutes lasting pauses for cooling down the tires after each 75 km or 150 minutes of continuous drive depending on which occurs first.
- Avoid holes, sudden and violent maneuvers and reduce speed during turning.

#### 3.5. Electrical installation

- The electrical system receives 12V DC power from the tractor.
- Replace damaged lamps or cables with materials of the same standard.

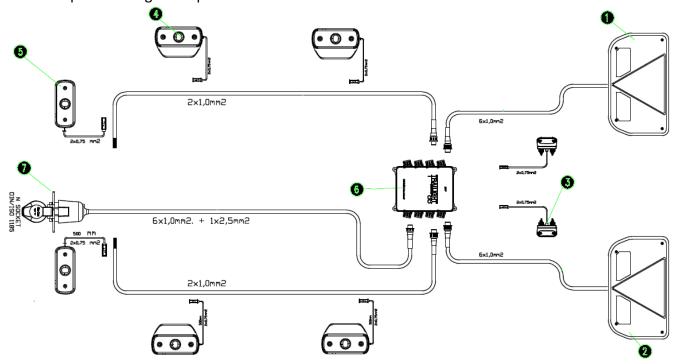


Figure: Electrical diagram for trailers with side and plate lamps.

#### 4. FREQUENTLY ASKED QUESTIONS AND SOLUTIONS

#### Problem (P) & Solution (S)



#### P. The tipping cylinder cannot be opened even though hydraulic oil is pumped.

- S. There is not enough oil in the tractor hydraulic oil tank. Add hydraulic oil.
- S. Incorrect connection or oil leakage. Check connections and hoses.
- S. Tractor oil pump is not running. Contact your tractor's service.

#### P. The tipping cylinder opens very slowly.

- S. The tractor pump cannot pump oil at sufficient pressure. Increase the tractor's RPM.
- S. There is not enough oil in the tractor hydraulic oil tank. Add oil.



#### **AUTHORIZED SERVICE CENTERS:**



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