



# Palazozoğlu



## TRAILER USER'S MANUAL MANURE SPREADER TRAILER SERIES

**TYPE** :  
**VIN** :  
**MODEL YEAR** :  
**DATE** :

## INTRODUCTION

This user manual is an integral part of the trailer you purchased. New and used trailer suppliers must provide in writing that the user manual is handed over with the trailer to the customer.

The information contained herein is valid for the date of publication. As a result of improvement and development efforts, some numerical values and pictures in this manual may not match the actual features of the trailer provided to the end user. The manufacturer reserves the right to make design changes to the trailers without making minor changes to this User's Guide.

This User's Manual, which is an integral part of your trailer, must be carefully read by operators or users before operating, and all recommendations must be obeyed. Thus, the safe operation of the trailer is guaranteed and its problem free usage is ensured. Your trailer is designed to meet mandatory standards, documents and legal regulations in force.

**ALL DRIVERS OF THIS TRAILER MUST UNDERSTAND THE CONTENTS OF THE USER'S MANUAL BEFORE COMMENCING WORK.**

This user manual describes the basic safety rules and operation of the type of "XXXX" trailer.

If the information in the user manual needs to be clarified, the driver should contact the dealer or the manufacturer where his trailer was purchased for assistance.

Please contact us [www.palazoglu.eu/contact](http://www.palazoglu.eu/contact) - [www.palaztrailers.com/contact](http://www.palaztrailers.com/contact)

The legal obligations of the manufacturer, the warranty and the elements indicating the complete and current regulations are specified in the annex of the warranty.

**PALAZOGLU** reserves the right to make changes without prior notice and without undertaking the obligations arising from these changes.

We wish you safe and profitable miles! Best regards

**PALAZOĞLU TARIM ALETLERİ SAN. VE TİC. LTD. ŞTİ.**

**Çubuklubala Mahallesi Bayhan Sokak No : 2**

**İzmit / KOCAELİ – TURKEY**

## INTEND TO USE OF

The trailer is designed for transport of harvested crops and agricultural products as well as loose and bulk materials in the vicinity of the farm and on public roads at a maximum speed of 40 km/h.

The trailer must not be used in any other purposes than that described above.

Using it as intended also involves all actions connected with the safe usage and proper operation and maintenance.

The trailer is unloaded manually or by placing the load back or on the sides.

The trailer is designed for connection with agricultural tractors of different power ratings, equipped with an external power hydraulic system, an electrical outlet for electrical lighting and warning systems, and a braking system of corrugated tractors and a transporting component.

- Do not use this trailer for the transport of fuel, gas cylinders, environmentally hazardous substances and similar loads due to the compatibility requirements for the carriage of hazardous materials. The manufacturer cannot be held responsible for any damages that occurs, as such transports will only be carried out by the user.
- The trailer must only be used by people who have read the instruction manual and have received training on danger and first aid for victims of accident.
- Comply with all applicable laws for accident prevention and all other accepted rules on engineering safety, occupational health and traffic safety.
- The manufacturer cannot be held responsible for any damages resulting from any unauthorized modifications to the design of this trailer.



**THE TRAILER IS NOT DESIGNED FOR TRANSPORTING OF PEOPLE.**

## BASIC EQUIPMENTS

The basic equipment of each trailer includes:

- Instructions for Use's guide;
- Warranty certificate with warranty conditions;
- Bracket for the "slow-moving vehicle" sign;
- Two-line pneumatic brakes with adjustable braking force (optionally, single system and hydraulic system are available);
- Parking brake;
- Lighting installation;
- Pneumatic/Spring suspension system.

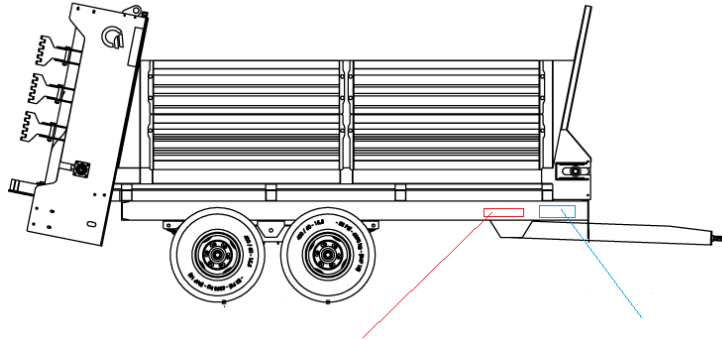
Up on the customer request (and for an additional fee), the manufacturer can equip the trailer with a slow- moving vehicle sign and a reflective warning triangle.

## VEHICLE IDENTITY (VIN No.)

Vehicle consisting of 17 characters and starting with the world manufacturer code (WMI) Chassis No. written by punching or engraving on the chassis arm in the right front corner of the trailer.

Trailer is tracked with Chassis No during the usage.

The Type Label is mounted on the right front-bottom corner of the trailer with rivets or by sticking.



Model Name, Name and Trade Mark Ürün Adı / Model Adı / Ticaret İşareti	Palazoğlu		
Produkt, Bauartgruppe und Kennzeichen no. (Ürün Adı, Grup, Şişme No.)	P16		
Vehicle Type National No. / Araç Tipi Ulusal No.	*2416230113779400		
Vehicle ID No. / Ürün / Araç Şişme Numarası	001000000000000000		
Production No. / Üretim / Araç No. / Ürün Kodu	00		
Country / Üretim Ülkesi / Üretim Yeri / Üretim Bölgesi	...		
Chassis Brand (Lüme) / Şişme İşletme (Lüme)	A1		
Chassis Model (Lüme) / Şişme İşletme (Lüme)	B1		
Chassis Weight (Lüme) / Şişme İşletme (Lüme)	B3		
Brand / Marka	T1	T2	T3
B1			
B2			
B3			
B4			
Phone Number / İletişim / İletişim No. / İletişim / İletişim No. / İletişim No. <a href="http://www.palazoglu.com">www.palazoglu.com</a>			

### VIN Attachment Region

Methods of attachment of VIN: hammering, punching, etching or laser engraving

### Statutory Plate Attachment Region

Methods of attachment of Statutory Plate: Riveting or clinching. Vehicle identification number consist of 17 characters.

## SYMBOLS AND DESCRIPTIONS

### CAUTION!



A safety instruction follows this symbol. Failure to follow this instruction correctly may result in damage to your trailer, injury, and in some cases death.

### INFO!



It symbolizes that it is connected with another information. For example, a link to another document or a useful tip.

### WARNING!



It symbolizes the in case of malfunctions.

### IMPORTANT!!



It symbolizes the need for maintenance, repair and / or cleaning.

Qualified persons who perform the required tasks by always using their education, experience and training, as well as their understanding of standards, definitions, accident prevention regulations and operating conditions; hence they are also capable of identifying and avoiding potential hazards.

Among others, these persons are also required to understand first aid measures for the injured (e.g. by wounding).

The term “**Operation**” includes settings, starting (preparation for use) and operation (starting, commissioning, powering off, etc.).

The term “**Maintenance of Proper Condition**” includes checks and care (control, adjustments), servicing and repairs (troubleshooting).

Note all other (specially highlighted) indications for transport, assembly, operation, servicing and technical data (in the operating instructions, production records and on the trailer itself). It is all the same essential due to the potential (direct and indirect) hazards and their consequences being severe damage of human health and property.

## OBLIGATORY NOTIFICATION

When the trailer is transferred to another user, the Operating Instructions shall be transferred as well, whereas the receiving user must undergo training according to the instructions.

## GENERAL SAFETY REGULATIONS OF WORK AND USE



**Read this chapter carefully prior to using of the trailer. Always apply the following points of attention in the daily use of the trailer!**

Before each start of work, inspect the trailer for work safety.

- ❖ Aside from the guidelines in these Operating Instructions, follow the general regulations for safety and accident prevention.
- ❖ The affixed information and warning signs and text indicate important guidance for safe operation. Follow for your own safety.
- ❖ Start the trailer only when all required equipment is connected and secured (the hitch and tow bar system, couplings, etc.).
- ❖ Understand all equipment and controls, as well as their functions, before work. It is too late to learn that during work.

The trailer must not be used by persons who are under the influence of alcohol and/or other substances, and/or not trained or suitably licensed to operate motor vehicles.

## BEFORE THE FIRST USE

The manufacturer guarantees that the trailer is fully operational and has been checked according to quality control procedures and is ready for normal use. This does not release the user from an obligation to check the machine's condition after delivery and before first use. The machine is delivered to the user completely assembled.

Before commencing work, machine operator must inspect the technical condition of the trailer and prepare it for the first start-up. The user must carefully read this Operator's Manual and observe all recommendations, understand the design and the principle of machine operation.



**Before hitching to tractor and using the trailer, the user must carefully read this Operator's manual and observe all recommendations**

- Check completeness of machine (standard and optional equipment).
- Check condition of protective paint coat,
- Inspect trailer's individual components for mechanical damage resulting from
- incorrect transport (dents, piercing, bent or broken components).
- Check technical condition of tyres and tyre pressure.
- Check technical condition of elastic hydraulic conduits.
- Check technical condition of pneumatic conduits.
- Check that there are no hydraulic oil leaks.
- Check electric lamps.
- Check tipping ram cylinder for hydraulic oil leaks.
- Check all the trailer's lubrication points, lubricate the machine as needed.
- Check if the nuts and bolts fixing the wheels are properly tightened.
- Drain air tank of the braking system.
- Ensure that pneumatic, hydraulic and electric connections in agricultural tractor are according to the requirements, if not the trailer should not be hitched to the tractor.

If all the above checks have been performed and there is no doubt as to the trailer's good technical condition, it can be connected to tractor. Start the tractor, check all systems and conduct test run of trailer without load (no load in load box). It is recommended that the inspection is conducted by two people, one of which should always remain in the tractor cab. Test drive should be conducted according to the sequence shown below.

- Connect the trailer to appropriate hitch on agricultural tractor.
- Connect conduits of braking, electrical and hydraulic systems.
- Switch on individual lights, check correct operation of electrical system.
- Check hydraulic system if it work properly
- When moving off check if the main brakes operate correctly.
- Perform test drive.

## COUPLING OF TRAILER TO TRACTOR

### **!** Risk of injuring your hand when coupling the trailer to the tractor!

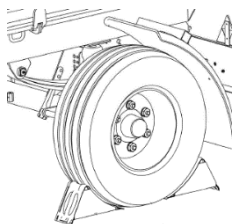
- To couple the trailer to the tractor, do the following:
- Move the tractor in front of the trailer,
- Remove the safety from the hitch pin and then remove the pin, the hitch axis and trailer towing eye axis must be aligned.
- When the tow eye is positioned in the hitch, insert the safety pin and secure it.
- Connect the electrical, hydraulic and pneumatic connections of the trailer.
- Check all the functions of the trailer before moving.
- Take the wheel wedge away.
- Release the trailer parking brake.
- The trailer is ready to be towed.

## DECOUPLING OF TRAILER FROM TRACTOR

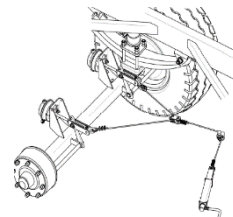
### **!** When removing the trailer from the tractor, make sure that the trailer is secured with chocks!

- Do the following actions to decouple the trailer from the tractor;
- Stop the tractor with the trailer and engage the tractor parking brake;
- Engage the trailer's parking brake;
- If the trailer stands on an uneven or sloping ground, secure it against rolling down by chocking the wheels; Disconnect the electrical, hydraulic and pneumatic lines from the tractor
- Remove the safety from the hitch pin and then remove the pin – this will decouple the tow bar from the hitch. Drive away with the tractor and reinstall the pin in the hitch.

**!** Do not decouple the trailer from the tractor in the following cases:  
Hydraulic damper body is lifted;  
Trailer is not secured against rolling away.



Method of placing chocks



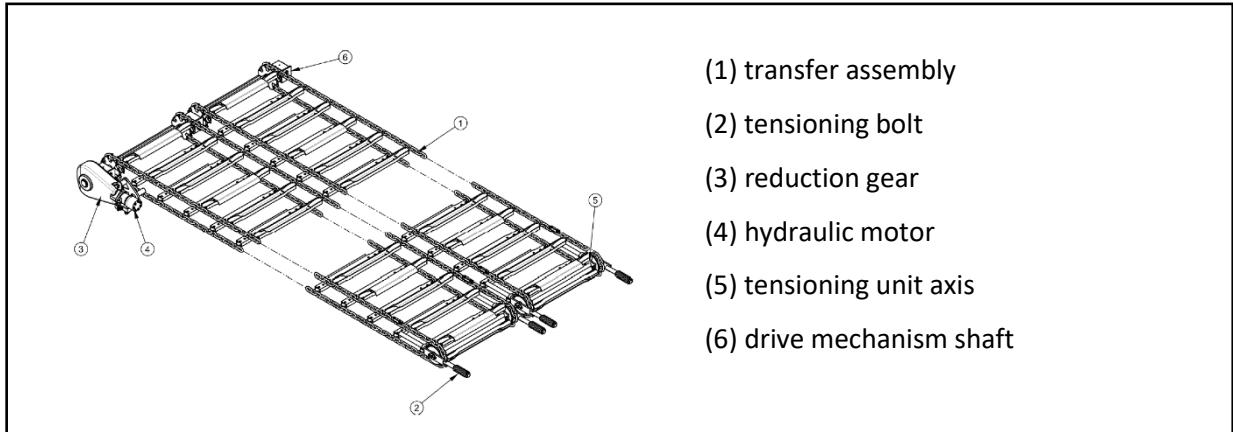
Parking brake

## FEEDING

Feeding mechanism of the manure spreader consists of two transfer assemblies. The transfer assembly consists of two chains and scraper strips. The transfer assemblies are installed in such a manner as to ensure that collecting strips are arranged alternately on the transfer assemblies. This guarantees uniform load distribution and regular unloading of transported material.

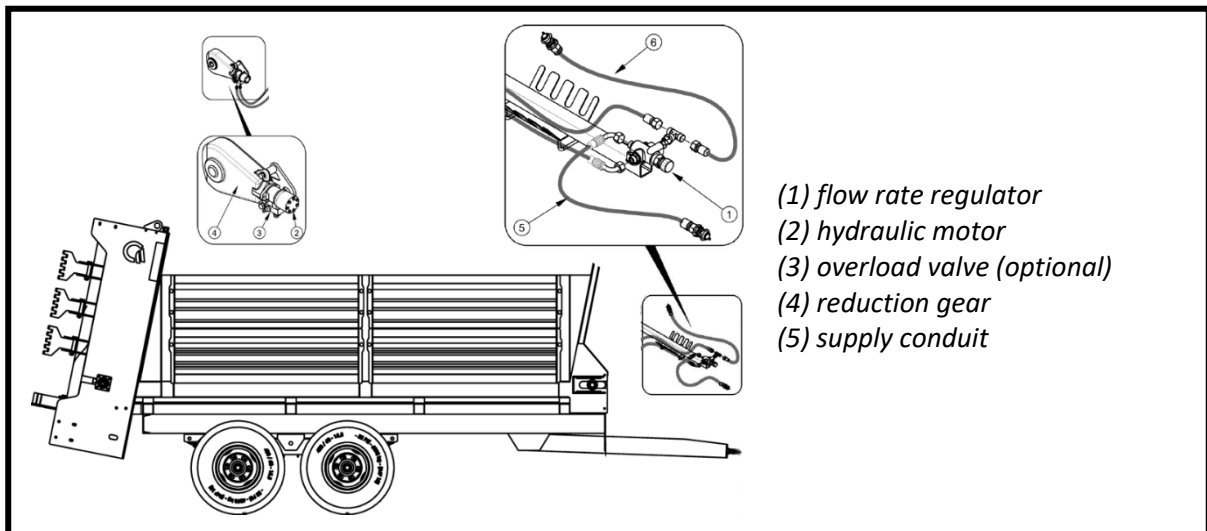
The chains of the transfer assembly are seated on cast iron gear wheels of drive mechanism shaft and on front wheels of the tensioning assembly.

Tension is adjusted using four tensioning bolts with shock absorbing springs. The transfer assemblies are driven by hydraulic motor coupled with reduction gear.



## HYDRAULIC SYSTEM OF FEEDING

Hydraulic system of feeding mechanism is used for controlling the floor conveyor. The system is supplied by the external tractor hydraulic system through the hydraulic conduits (5) and (6). Decals in the form of arrows indicating the direction of hydraulic oil flow are located on conduits, near the connection plugs, in order to identify the conduits. The system is connected to hydraulic motor (2) which drives the floor conveyor. The system is controlled by means of the manifold in the tractor cab. Such a solution enables change of conveyor movement direction and shortens reaction time. The conveyor speed is adjusted using a knob on hydraulic flow regulator (1) within scale from 0 to 10. The flow regulator is installed on the conduit outrigger in the front section of the manure spreader. The maximum flow rate (maximum conveyor speed) is achieved if flow regulator setting is 10, while the minimum flow rate is achieved if flow regulator setting is 0. Design and diagram of hydraulic system of feeding mechanism is shown in figure.



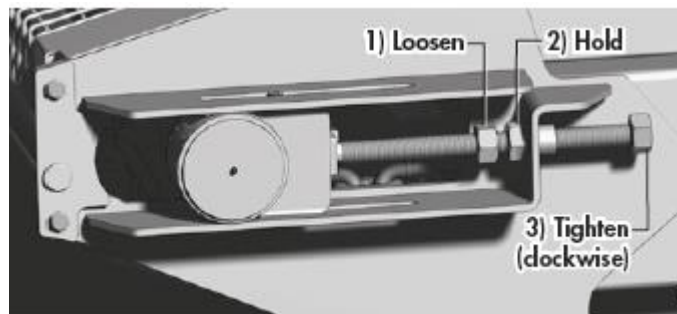


## TENSION OF FLOOR CONVEYOR CHAIN

Tension of floor conveyor chain must be checked daily, in particular, at the beginning of the conveyor's working period. Tension is measured at the front tension mechanism springs of tension wheels at the front of the load box.

If drag chain has slack, tightening is required:

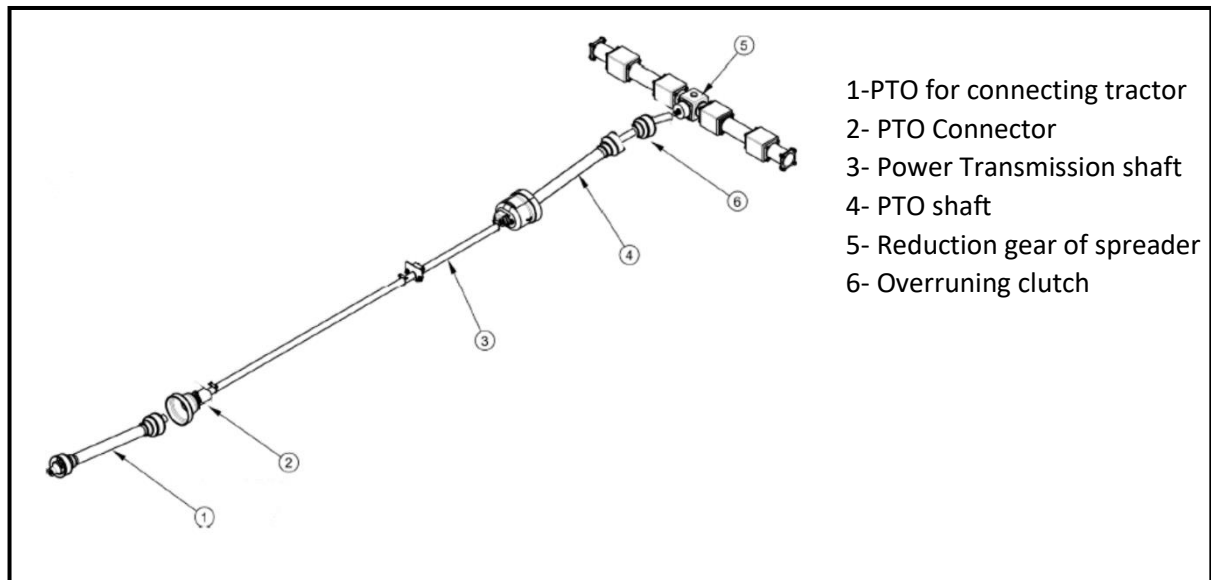
1. Loosen the jam nut. (Both sides of machine)
2. When tightening, hold middle nut with wrench and tighten rod end in a clockwise direction.
3. a) Start on one side and tighten the threaded rod a few turns.  
b) Repeat on opposite side of machine to evenly tighten chain tension.  
c) Repeat this procedure 2-3 times until moderate chain tension is achieved.  
d) After advancing the chain with this procedure, measure the distance from the round capscrew to the end of the slot. Compare this measurement with the opposite side measurement. Ensure the difference is less than 1/2" MAX to prevent excessive skewing of chain slats.
4. Re-tighten jam nut securely against middle nut.
5. Repeat on other side.
6. Re-adjust center support on front conveyor axle.



## DRIVE TRANSMISSION

Two beater spreader unit is driven by the drive transmission. Located on the spreader lower frame faceplate there is a PTO connector terminated with the spline tip, to which the tractor PTO shaft is connected.

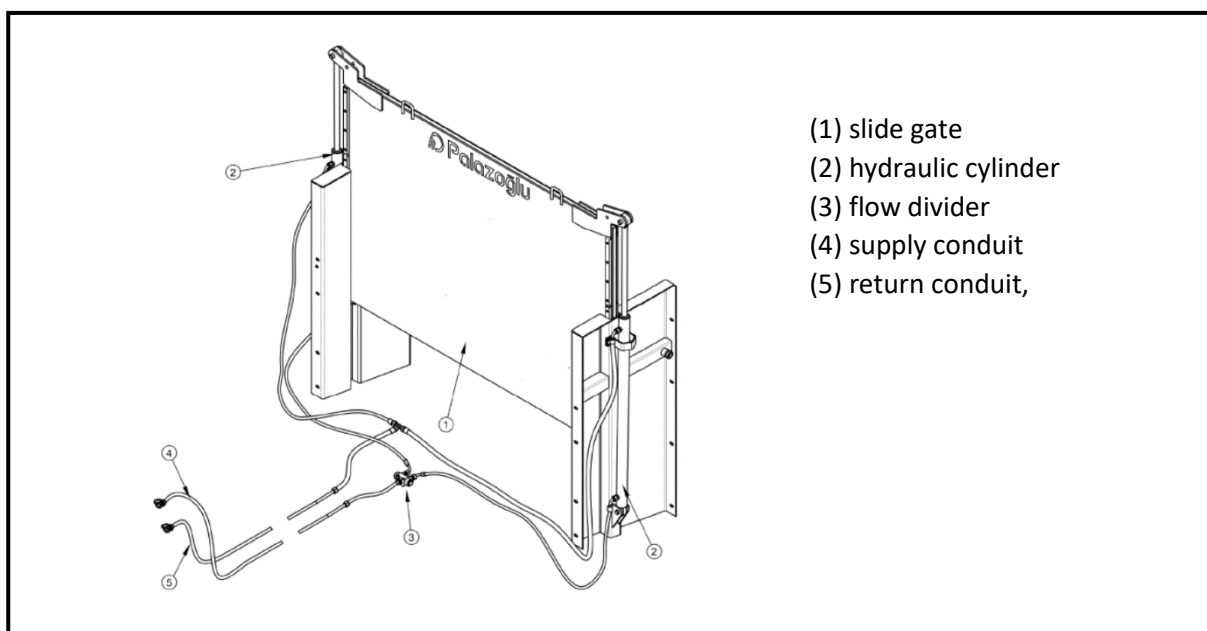
Torque is transmitted from the tractor through articulated shaft, PTO shaft with automatic clutch, power transmission shaft, PTO shaft to the drive gear of the spreader unit.



## SLIDE GATE

The slide gate is mounted in front of the spreader unit and it ensures safe transport of disintegrated materials (e.g. compost, peat) on public roads.

The load box slide gate is controlled hydraulically. The hydraulic system of the slide gate is supplied from the external hydraulic system of the tractor. The hydraulic cylinders opening and closing the slide gate are controlled by means of the manifold in the tractor cab.



## PREPARING TO USE

When preparing the manure spreader for the first use, check the following:

- all lubrication points; lubricate the machine elements as needed according to recommendations
- check if the nuts fixing the following components are properly tightened: (wheels, drawbar hitching eye, spreading mechanism)
- oil level in the spreader unit transmission,
- oil level in the transfer mechanism transmission
- tension of chain conveyor's chain,
- technical condition of PTO shaft, its shields and securing chains
- make sure that the attached PTO shaft may be connected to the tractor (PTO) shaft should be suitable for the tractor.

## STARTING

If all the above activities have been performed and there is no doubt as to the good technical condition of the spreader, the machine should be hitched to tractor according to instructions "Connecting to Tractor"

Start tractor engine, check all systems and perform a test run of the manure spreader without load before beginning work. It is recommended that the inspection is conducted by two people, one of which should always remain in the tractor cab. Test start should be conducted according to the sequence shown below.

- Connect the manure spreader to appropriate hitch on agricultural tractor.
- Connect PTO shaft and secure it in a proper manner.
- Raise the support.
- Connect brake, electrical and hydraulic system conduits.
- Check correct operation of lights and indicators.
- Start tractor.
- When moving off check if the main brakes operate correctly.
- Check if the chain conveyor operates correctly.
- Actuate and check if tailgate control system operates correctly.
- Actuate and check if the slide gate control system (optional equipment) operates correctly.
- Start tractor PTO slowly
- Leave for several minutes working at low RPM, during which check.
- Disconnect PTO drive, turn off tractor engine and unhitch the manure spreader from tractor.

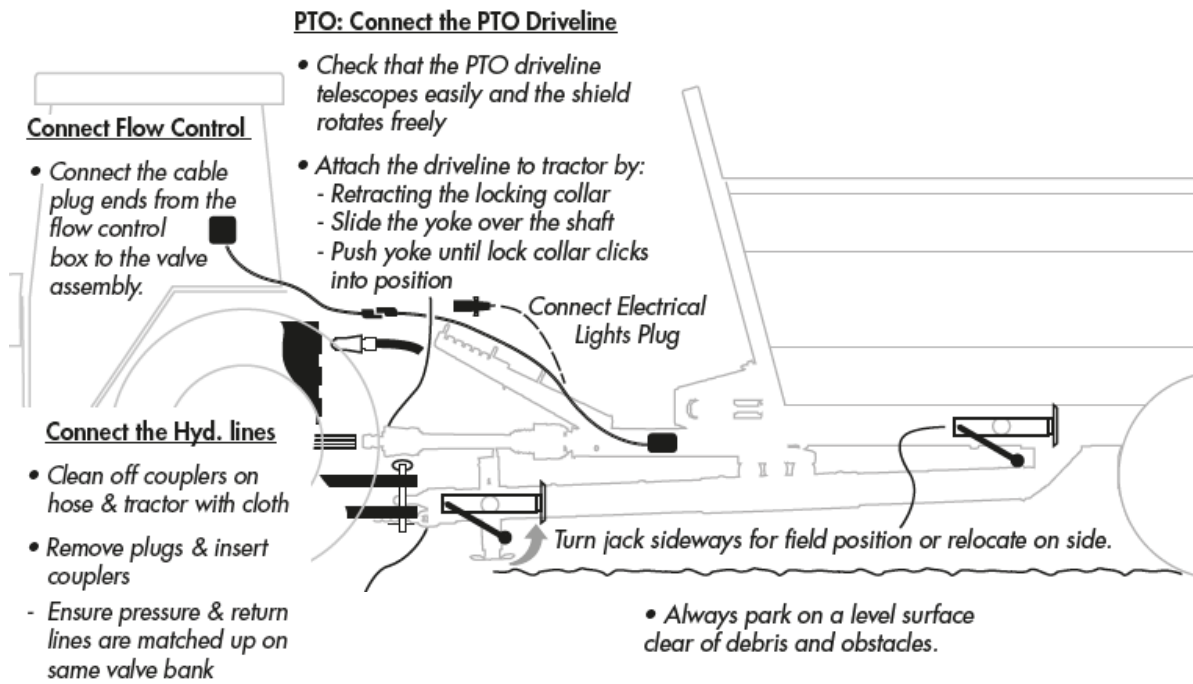


**Do NOT** use PTO rotation speed other than 1,000 rpm. If PTO shaft works at a different speed, rotation speed of disintegrating worm shafts will be insufficient and the drive will be at the risk of **damage**.



The manure spreader may be used only when all preparatory activities have been completed satisfactorily. If during manure spreader test start worrying symptoms of faults occur such as abnormal noise or sounds, oil leaking pressure drop in brake system immediately cut off oil supply, disconnect tractor PTO drive and identify a fault. If a fault cannot be rectified or the repair could void the warranty, please contact the retailer or directly the manufacturer for additional clarifications or to perform the repair.

## CONNECTING TO TRACTOR



The Manure Spreader should always be parked on a level, dry area that is free of debris and foreign objects. Follow this procedure when attaching:

1. Clear the area of bystanders and remove foreign objects from the machine and working area.
  2. Make sure there is enough room to back the tractor up to the hitch pole.
  3. Start the tractor and slowly back it up to the hitch point.
  4. Stop the tractor engine, place all controls in neutral, set park brake and remove ignition key before is mounting.
  5. Use the hitch pole jack to raise or lower the pole to align with the drawbar.
  6. Install a drawbar pin with provisions for a mechanical retainer such as a Klik pin. Install the retainer.
  7. Connect PTO driveline to tractor.
  8. Connect the Flow Control cable plugs.
  9. Connect the Electrical Light plug.
  10. Connect the hydraulics. To connect, proceed as follows:
    - Use a clean cloth or paper towel to clean the couplers on the ends of the hoses. Also clean the area around the couplers on the tractor.
    - Remove the plastic plugs from the couplers and insert the male ends.
- NOTE: If the direction of motion is wrong, reverse the couplers.
11. Raise the hitch jack and rotate it 90° to place in its stowed position or relocate on jack bushing located on the side frame (see detail below).
  12. When unhooking from the tractor, reverse the above procedure.

## OPERATIONS

Before commencing work check again the technical condition of hydraulic connections and safety guards installed on the manure spreader and PTO shaft. Check if net protection is installed on the front wall. The net protection protects the operator against injury and the tractor against damage by thrown elements, for example, stones.



Operation of the manure spreader without safety guards or with damaged PTO shaft creates a direct threat to health and life of the machine operators



Keep a safe distance from electric power lines.

## PRE OPERATION CHECK LIST

It is important for both personal safety and maintaining the good mechanical condition of the machine that this pre-operational checklist be followed.

Before operating the machine and each time there-after, the following areas should be checked off:

1. Lubricate the machine completely. Refer to the schedule outlined in the “Service & Maintenance Section” of this manual.
2. Use only a tractor of adequate power (180hp minimum) and weight to handle the spreader.
3. Ensure that the machine is properly attached to the tractor using a drawbar pin with provisions for a mechanical retainer. make sure that a retainer such as a Klik pin is installed.
4. Ensure the safety chain on the hitch is installed.
5. Check tires and ensure that they are inflated to the specified pressure: 65 psi (450 kPa) or 58 psi (400 kPa) for large tire option.
6. Check oil level in the tractor hydraulic reservoir. Top up as required.
7. Inspect all hydraulic lines, hoses, fittings and couplers for tightness. Tighten if there are leaks. Use a clean cloth to wipe any accumulated dirt from the couplers before connecting to the tractor’s hydraulic system.
8. Inspect all moving and rotating parts. Remove any debris that has become entangled in them.
9. Make sure that all guards and shields are installed and secured in position.
10. Check the oil level in the gearboxes. Top up as required.
11. Insure that the PTO driveline is securely attached on both ends and can telescope easily. Check that the PTO riveline shield rotates freely.

## OPERATION SAFETY



1. Read and understand the Operator’s Manual and all safety signs before using.
2. Stop tractor engine, place all controls in neutral, set park brake, remove ignition key and wait for all moving parts to stop before servicing, adjusting, repairing or unplugging.
3. Keep hands, feet, hair and clothing away from all moving and/or rotating parts.
4. Do not allow riders on the Manure Spreader or tractor during operation or transporting.
5. Keep all shields and guards in place when operating.
6. Clear the area of all bystanders, especially children, before starting.
7. Be careful when working around or maintaining a high-pressure hydraulic system. Ensure all components are tight and in good repair before starting.
8. Clean all reflectors, lights and the SMV sign (if applicable) before transporting on a highway or public road. Be sure to check with local highway authorities



and comply with their lighting requirements.

9. Stay well back from machine when operating to prevent being hit by flying rocks and debris. Keep others a minimum of 50 m away.

10. Check the oil level in the gearboxes. Top up as required.

11. Insure that the PTO driveline is securely attached on both ends and can telescope easily. Check that the PTO riveline shield rotates freely.

## LOADING OPERATION

Before loading, check that the load box slide gate is closed (if it is included in the manure spreader's equipment) Before loading, position the manure spreader connected properly with the tractor on level and stable surface. Immobilise both machines with parking brake.

When loading the manure spreader, it is recommended to use an appropriate loader or conveyor. If loading is carried out by a loader with bucket forks, the width of bucket forks should not exceed the load box length. Bucket forks should be emptied by tilting when positioned not higher than 1 meter above the load box. Do not compact manure. When loading, pay attention not to overload the manure spreader. Height of loaded manure must not exceed the height of the spreader unit mechanism.

In order to ensure optimum spreading, efforts should be made to evenly distribute the load in the load box. Manure should be loaded starting from the rear and moving towards the front of the manure spreader. Such loading method has positive impact on quality of manure spreading.

- Always check the floor drag chain and slats to make sure they are not frozen to the bottom of the bed. Operating the spreader when the slats or chain are frozen to the bed may cause damage. Also make sure there are no lumps of manure frozen to the floor.
- It is recommended to make sure chains and table floor are operating properly before loading the spreader.
- The moisture content will determine how full it can be loaded. Refer to the Specifications for capacity. Solid manure can generally be loaded level to slightly heaped. High moisture materials are heavier and may limit loading.

## SPREADING OPERATION



**DANGER:** If, at any time, abnormal vibrations occur, **shut down machine**, wait for all moving parts to stop, inspect machine, drivelines, and rear beaters for missing, jammed, or damaged components.

**IMPORTANT:** Ensure all items under Operating Safety are followed and ensure all bystanders are a minimum of 50m away before operating!

1. **Start up the Rear Beaters** - Start the PTO and get the beaters running up to speed.
2. **Fully Open Rear Gate** - Fully extend the cylinders so the gate is fully open all the way to the top.

**NOTE:** Before starting the table, the operator should get the beaters up to speed and fully open the rear gate. This prevents the spreader from overworking itself from material being pulled up against the rear gate.

3. **Start the Table Floor** Turn on power switch on the Control box.
4. **Travel Speed** - A suggested starting speed is between 10-15 km/h. This can be adjusted to operator preference.
5. **Lower Gate as Load Decreases**



**DANGER:** Normally, the load itself blocks manure and loose materials from being thrown towards the front. As the load/pile gets reduced, the rotation of the rear beaters can throw some material forward, therefore it is strongly recommended to lower the rear gate about 1/3 of the way down to prevent debris from being projected towards the front.

## **ATTENTION**

The manure spreader may be operated only with the net protection installed on the front wall. Do NOT spread manure near grazing animals.

Do NOT use another manure spreader starting procedure.

The feeding mechanism may be started only if the slide gate is raised.

The use of another manure spreader starting procedure may cause damage to the manure spreader and pose a threat to health and life of the machine operators.

The load can be moved forward only in exceptional situations such as in the case of blocking of disintegrating drums or when the tractor rear wheels lose grip. When moving the load forwards, the load must not touch the front wall because the load box or drive transmission system may be damaged.

Before turning and during transport the tractor PTO drive should be disconnected.

### **After operating for 2 hours:**

1. Retorque wheel bolts.
2. Check torque on the driveline cut-out clutch bolt (taper pin). Tighten to 75 ft-lbf (102 N·m)
3. Check all hardware. Tighten as required.
4. Check all hydraulic system connections. Tighten if any are leaking.
5. Tighten chain.

### **C. After operating for 8 hours:**

1. Repeat Step B.
2. Go to the service schedule as outlined in the "Service & Maintenance" section.

## DISCONNECTING

In order to disconnect the manure spreader from the tractor, proceed as follows:

- Once tractor is stopped, immobilise the spreader using parking brake.
- Place chocks under manure spreader wheel.
- Turn off tractor engine. Ensure that unauthorised persons do not have Access to the tractor cab.
- Using the support, set the machine on the surface, at a proper height.
- Disconnect the hydraulic system conduits and protect plugs of these conduits against soiling using protective caps
- Disconnect electric lead.
- Disconnect pneumatic system conduits (applies to double conduit systems
- Protect conduit ends with covers. Place conduit plugs in appropriate locations.
- Disconnect PTO shaft.
- Disconnect manure spreader drawbar from the tractor's hitch and move the tractor forward.
- Secure PTO shaft.



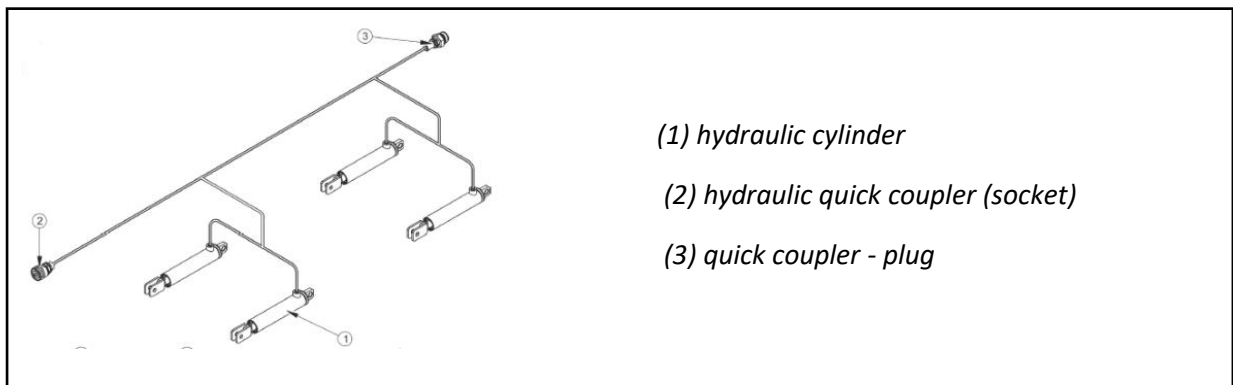
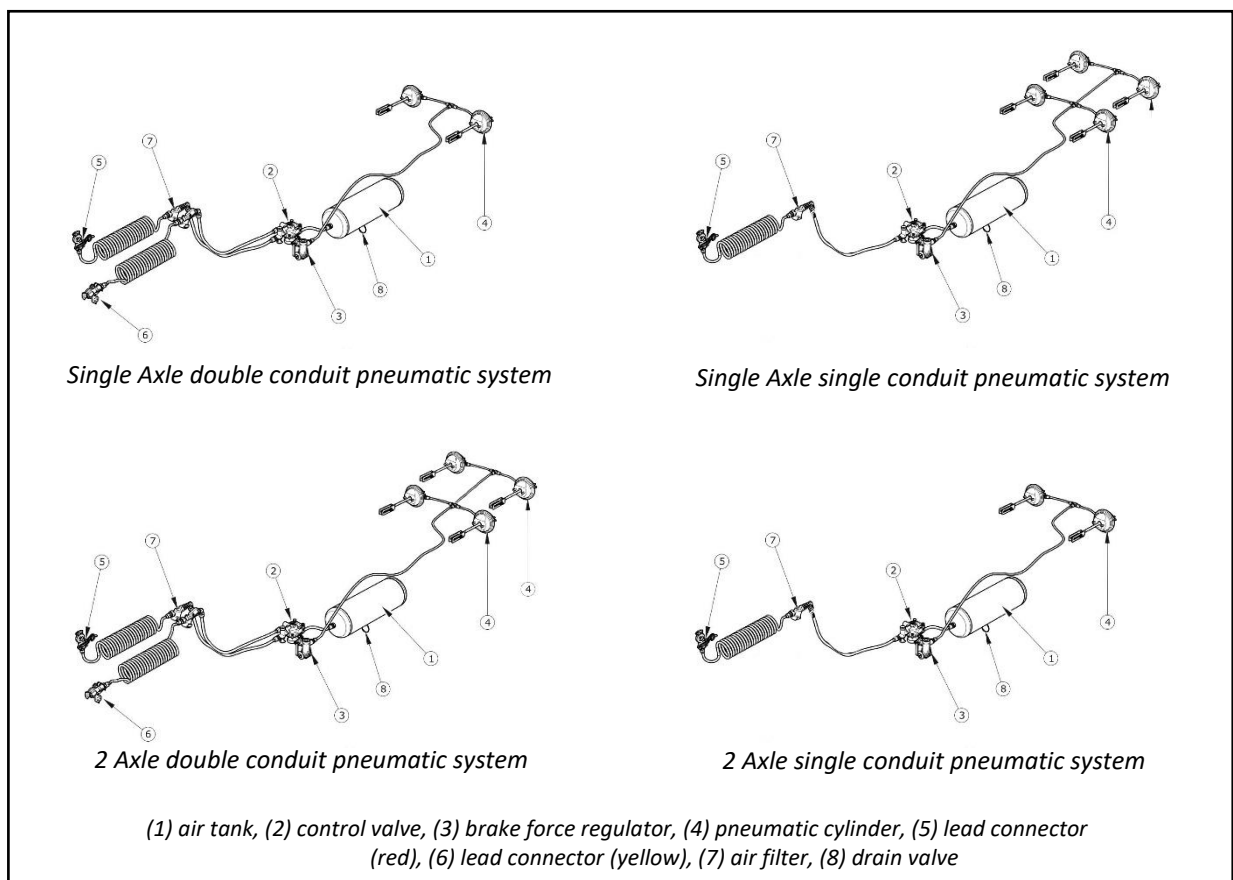
## Brakes

### MAIN BRAKE

The trailer is equipped with one of four types of main brake

- double conduit pneumatic system
- single conduit pneumatic system
- hydraulic brake system

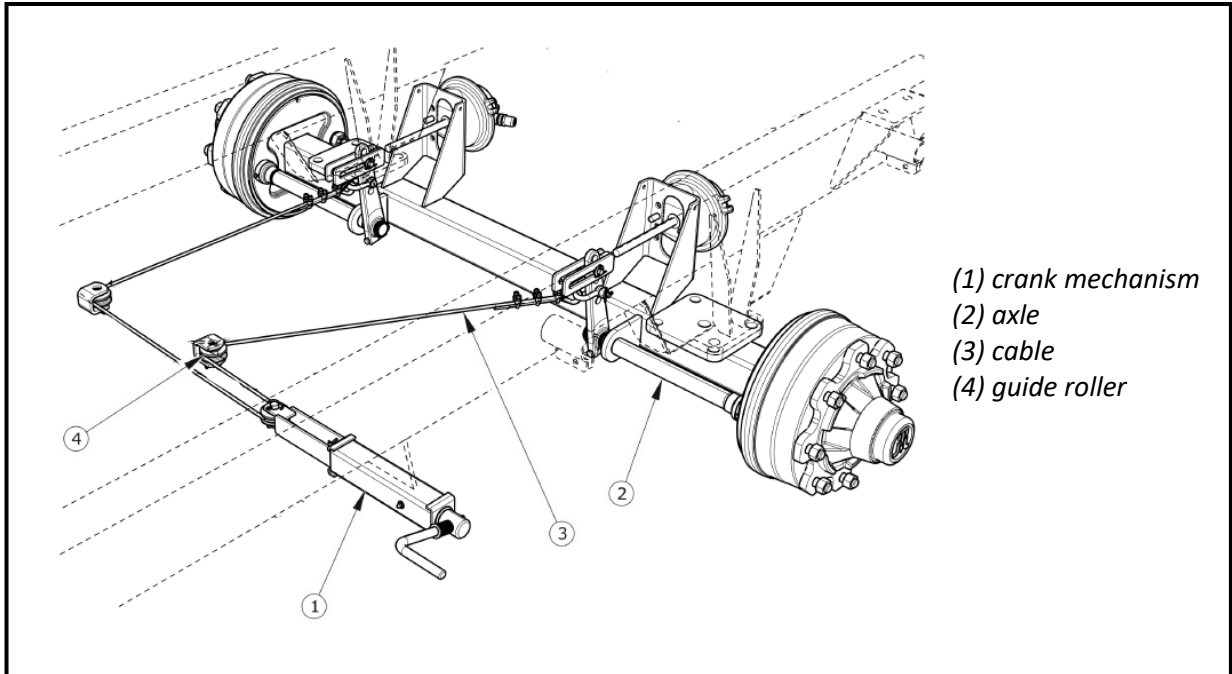
The main brake (pneumatic or hydraulic brake) is activated from the tractor driver's cab by depressing the brake pedal. The function of the control valve (2), is to activate the trailer's brakes simultaneously with the tractor's brakes. Furthermore, in case of an inadvertent disconnection of the conduit between the trailer and the tractor, the control valve will automatically activate the trailer's brakes. The valve is equipped with a brake applying button to be used when the trailer is disconnected from the tractor. When compressed air conduit is connected to the tractor, the device automatically applying the brakes changes its position to allow normal brake operation.



*Hydraulic Brake System*

## PARKING BRAKE

The parking brake is for immobilising product while standing motionless. Brake crank mechanism body (1) is welded to the left longitudinal member of the lower frame. Steel cable (3), routed through two guide rollers (4), is connected with expanded levers of axle (2) by crank mechanism. Tightening the cable (turning the crank lockwise) causes tilting of the expander lever, which parts the jaws of the brake shoes immobilising the slurry product.



## Brake Adjustment

When servicing the trailer, check the condition and connections of the braking system, and periodically inspect the lubrication of control elements.

Adjust the brakes when the following occurs:

- There is an excessive clearance between the shoes and the drum wear, resulting in decreased braking performance;
- Brakes work unevenly and out of sync.

With the properly adjusted brakes, the braking force (i.e. the total of braking forces at the circumference of the wheels) shall be at least 25% of the permissible total weight of the trailer when decelerating with the service brake;

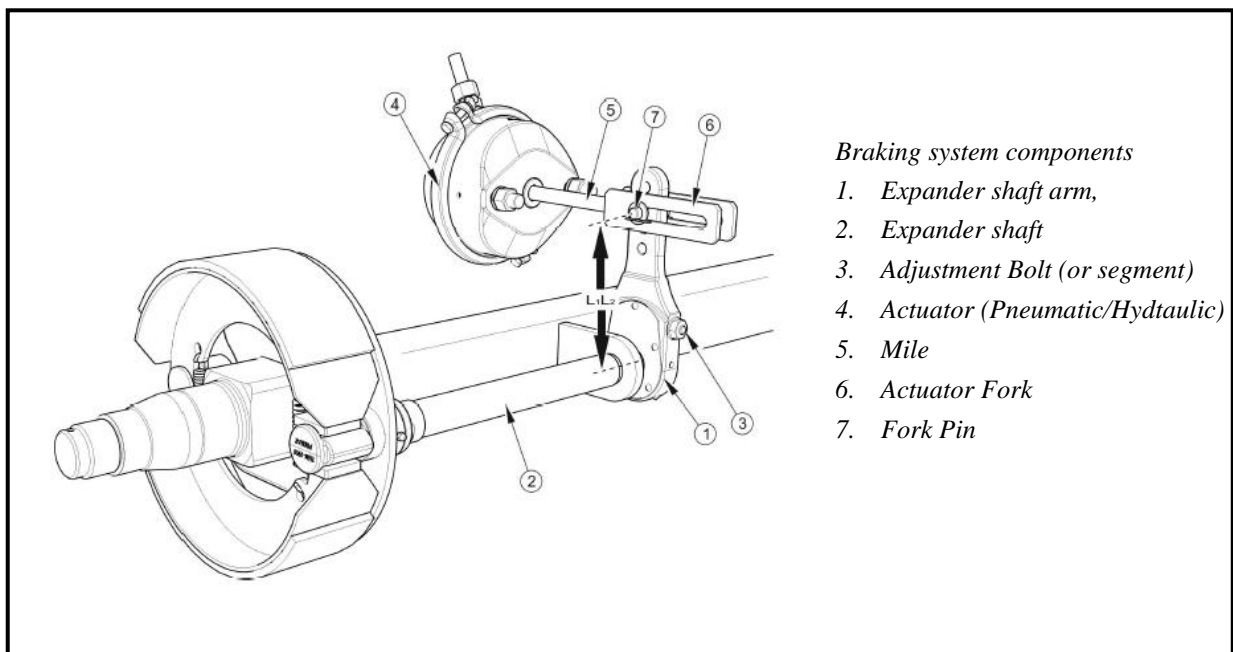
(The minimum legal requirement for trailer brakes on the highway is 25% braking efficiency at a maximum speed of 20 mph (32kph). On trailers above this speed (dual-circuit hydraulic or air braking) braking performance should have 45% braking efficiency).

The braking force (i.e. the total of braking forces at the circumference of the wheels) when actuating the parking brake shall be at least 16% of the permissible total weight of the trailer.

Both wheels on the same axle should be stopped evenly; the brake force differential between the left and right trailer side shall not exceed 30%.

Park the trailer so that the rear wheels turn freely. Remove the segment (3) so that the lever (1) can move freely against the shaft (2) so that the brake shoes can rub gently against the brake drum while turning the wheel freely.

After the correct adjustment of friction components, the wheel should rotate smoothly, without cogging or evident resistance (other than caused by rubbing of the brake shoes to the drum). It is normal for the shoes to slightly rub against the drum, especially on a brand new trailer or after changing the brake shoes.



**Before driving, periodically inspect all braking components for proper operation, tightness and clearance. Adjust or repair as necessary.**

## OBLIGATORY NOTIFICATION

When the trailer is transferred to another user, the Operating Instructions shall be transferred as well, whereas the receiving user must undergo training according to the instructions.

## GENERAL SAFETY REGULATIONS OF WORK AND USE



**Read this chapter carefully prior to using of the trailer. Always apply the following points of attention in the daily use of the trailer!**

- ❖ Aside from the guidelines in these Operating Instructions, follow the general regulations for safety and accident prevention.
- ❖ The affixed information and warning signs and text indicate important guidance for safe operation. Follow for your own safety.
- ❖ Start the trailer only when all required equipment is connected and secured (the hitch and tow bar system, couplings, etc.).
- ❖ Understand all equipment and controls, as well as their functions, before work. It is too late to learn that during work.

The trailer must not be used by persons who are under the influence of alcohol and/or other substances, and/or not trained or suitably licensed to operate motor vehicles.

## TRAVELLING ON PUBLIC ROADS














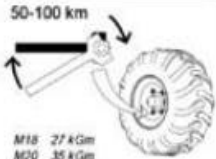







Before driving, check that the trailer lighting is working and that the trailer identification is complete.

Follow the traffic code regulations when travelling on public roads.

1. Exceeding the permissible payload and driving speed may damage the trailer and compromise traffic safety.
2. Do not exceed the driving speed of regulated speed.
3. The trailer is designed for operation at a maximum grade of 8°.
4. When travelling on public roads, the trailer must feature a reflective warning triangle, and the slow-moving vehicle sign in the trailer bracket located on the chassis frame rear crosspiece (included with the trailer).
5. Do not leave the loaded trailer on slopes and when it is not secured against rolling. Secure the trailer by engaging the parking brake and chocking the wheels. Also bind the transported load with transport straps.

## WARNING/INFORMATION SIGNS AND LABELS OF TRAILER

The warning signs and labels on the trailer must not be removed. They are intended for safe handling of the trailer. If any information label is damaged or removed, order a spare one. Text and symbol label stickers are available from service agents or the trailer's manufacturer.

1	<b>WARNING! CAUTION!</b>			
2	<b>DANGER OF FALLING!</b>			
3	<b>DANGER OF COLLISION WHEN TURNING!</b>			
4	<b>DANGER OF MOVEMENT!</b>			
5	<b>KEEP A DISTANCE FROM POWER LINE!</b>			
6	<b>DANGER OF HAND INJURY!</b>			
7	<b>READ THE MANUAL!</b>			
8	<b>DO NOT RIDE ON OR IN FRONT OF THE TRAILER!</b>			
9	<b>DANGER AT TURNING!</b>			
10	<b>KEEP DISTANCE!</b>			
11	<b>USE TYRE WEDGE!</b>			
12	<b>LUBRICATE PERIODICALLY!</b>			
13	<b>JACKING/LIFTING POINT!</b>			
14	<b>CHECK THE TIGHTNESS OF THE WHEEL NUTS!</b>	 50-100 km M18 27 kGm M20 35 kGm M22 45 kGm		
15	<b>REMOVE IGNITION KEY BEFORE SERVICING!</b>			
16		 <b>DANGER</b> KEEP CLEAR OF TIPPING AREA 		
17		 <b>DANGER</b> USE SECURITY POST WHEN SERVICING 		
18		 <b>DANGER</b> VEHICLE FREQUENTLY REVERSING 		

## STORAGE

Protect the trailer against direct exposure to sunlight and rain. Park it with its land wheels chocked on a hard-paved ground (reduce tyre pressure and cover the tyres if there is a risk of exposure to sunlight).

If the trailer is exposed to weather, periodically check for rainwater accumulation in the trailer. Note all damage to the paint coat. Clean and degrease spots of damaged paint. Next, repaint with the same colour and coat thickness.

Long-term storage is allowed in sheltered rooms only.

## SALE

- The buyer collects the trailer from the manufacturer or the sales representative on their own, or arranges the delivery with the manufacturer.
- The trailer is sold as fully assembled and ready for operation, complete with the basic equipment listed in Section 1.2 of this manual. Optional equipment is available for extra charge.
- The sales representative personnel is required to introduce the buyer to the design and operation of the trailer, along with safety requirements and warranty conditions.
- The buyer shall verify the following:
  - The trailer is complete, undamaged and with all essential equipment;
  - The nameplate located on the chassis front cross-piece has the serial number stamped that matches the data in the warranty card;

The warranty card has been properly filled out with the identification data on the nameplate

## DESCRIPTION OF RESIDUAL RISKS

**PALAZOĞLU** is liable for the design and build in order to eliminate all hazards, some partial risk is unavoidable in operation of the trailer.

The residual risk stems mostly from improper behaviour of the operator caused by lack of knowledge or attention.

Avoid the following dangerous and prohibited actions:

- Trailer should not be used by unauthorized persons or persons who do not have a license to use a tractor or do not know the instructions for use..
- Trailer cannot be used by people who are alcoholic or other intoxicating or under the influence of drugs.
- Trailer cannot be used for different purposes other than specified in the manual.
- No one should be between the tractor and trailer while the tractor engine is running.
- Surrounding viewers, especially children, should not be located near the working trailer.
- The trailer is not cleaned while working.
- Avoid manipulations caused by the drive units on the tractor or the moving elements of the trailer..
- Do not check the technical condition while the trailer is running.

## RESIDUAL RISK ASSESSMENT

**Residual risks arise when the prescribed rules and indications are not obeyed!**

Follow these below guidelines:

1. Always follow the safety instructions described in the user manual.
2. Read the user manual and understand it completely.
3. Keep your hands away from dangerous areas.
4. It is forbidden to operate the trailer in the presence of bystanders, this applies in particular to children.
5. Maintenance and repairs of the trailer shall only be performed by trained personnel.
6. The trailer shall only be operated by persons who have been trained and have familiarised themselves with the Operating Instructions.
7. The trailer is protected against access by children.

Only then can you eliminate the residual risks to people and the environment when using this trailer.



**Palazođlu Tarım Aletleri San. Ve Tic. Ltd. Şti.**

İzmit / KOCAELİ - TURKEY

tel.: +90 262 361 60 82                      +90 262 361 63 04  
          +90 262 361 62 59                      +90 533 235 0970  
fax:     +90 262 361 62 96

[www.palaztrailers.com](http://www.palaztrailers.com)

**Read the trailer thoroughly before use!**

**Keep the trailer longer usage life!**