



## T-7 (T-8) Instructions

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In this manual, we have gathered all the information regarding a particular procedure in a single same chapter. As always, safety issues are of the utmost importance and are presented at the start of the instruction manual, along with technical data and dimensional diagrams. The "Installation" chapter contains important information for familiarising yourself with the trailer. The chapter on the use of the trailer, such as coupling/uncoupling, driving and tipping, must be read before you start to use the product, as must the safety aspects and safety devices. Be sure to extend the service life of your product by following the information in the "Service/Maintenance" chapter.

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## INTRODUCTION

High demands are placed on manufacturers regarding conformance to directives that have been drawn up for their products. This product is covered by the Machinery Directive, and the CE marking indicates that it satisfies the requirements in the Directive. On delivery, it is incumbent upon the dealer to provide operating instructions for the product.

### Company presentation

AS FORS MW was established in Estonia in 1992. The company develops, manufactures, markets and sells, via dealers, the three market-leading brands: BIGAB hooklift trailers and dump trailers, FARMA lumber trailers and cranes, and NIAB tractor processors. The company comprises the parent company AS FORS MW, as well as the subsidiary companies Farma Norden AB (Norrköping, Sweden) and Fors MW/China (China). You can read more about both the product you have selected and our 20-year journey on our website, [www.forsmw.com](http://www.forsmw.com), and on our blog, [www.forsmw.blogspot.com](http://www.forsmw.blogspot.com)

### Product presentation

The BIGAB dump trailer is a relatively simple yet robust dump trailer designed to withstand hard use which is just as suitable for contractors as for farmers. The dump trailer has a trailer bed and sides constructed in 100% welded steel with robust reinforcements. The trailer loads 7 tons and has a tipping angle of 66 degrees.

The dump trailer is equipped as standard with 11.5/80 x 15.3 tyres, bolted drawbar and mechanical hung tailgate with side doors. The trailer can be further equipped with 4-wheel drum brakes and hydraulic stabiliser legs. The trailer meets the requirements necessary for operation at 40 km/h (Swedish market) or 30 km/h (Norwegian market).

We understand your curiosity and desire to put your BIGAB dump trailer to work, but we ask you to spend a little time reading through this instruction manual before you start using the machine. If not used correctly, the BIGAB dump trailer can cause unwanted operational stoppages and, in the worst case, it can be dangerous. A little time spent reading this instruction manual could save you both time and money in the future. For your safety, it is extremely important that you follow the instructions presented in this instruction manual.

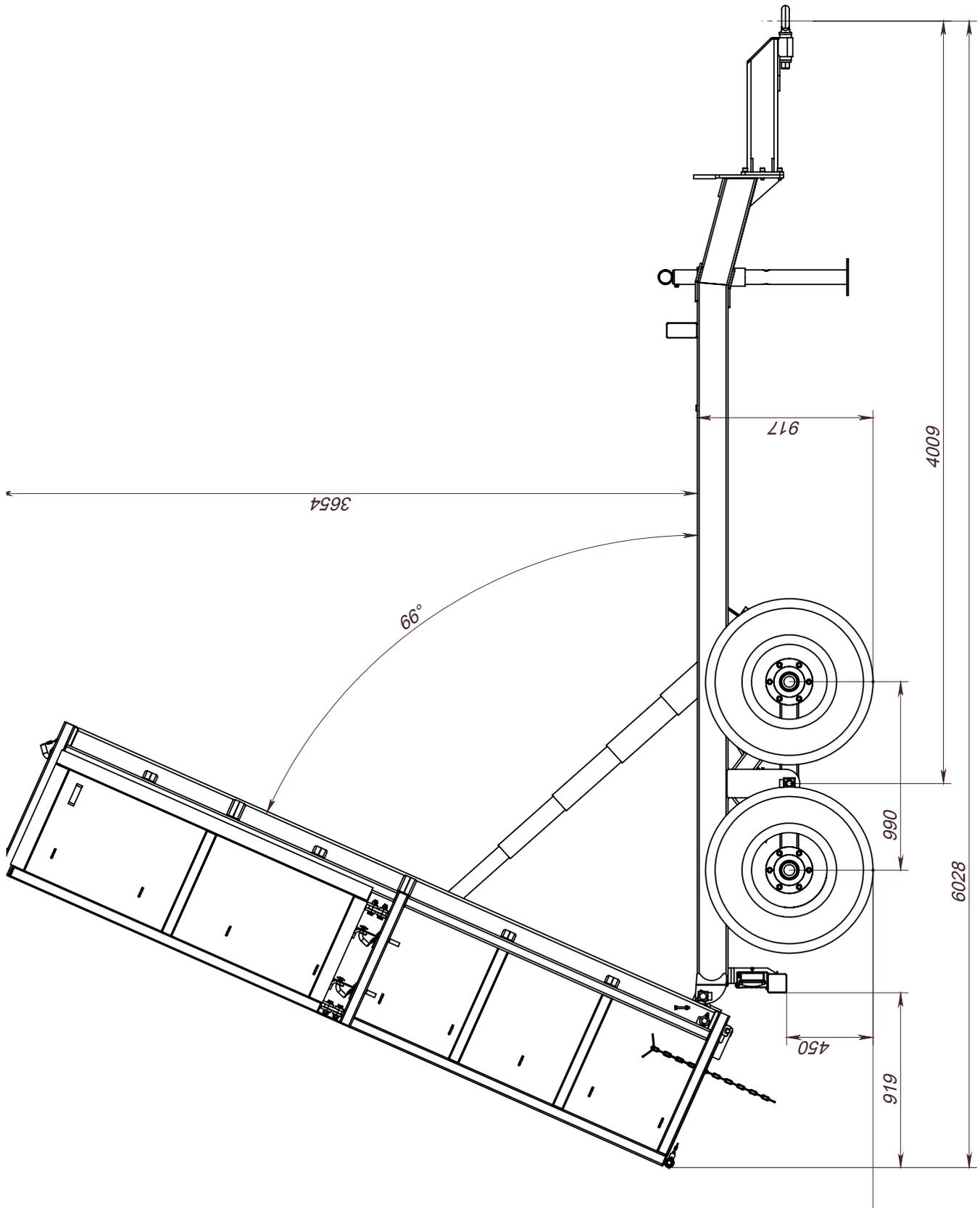


EU declaration of conformity with Directive 2006/42 EC

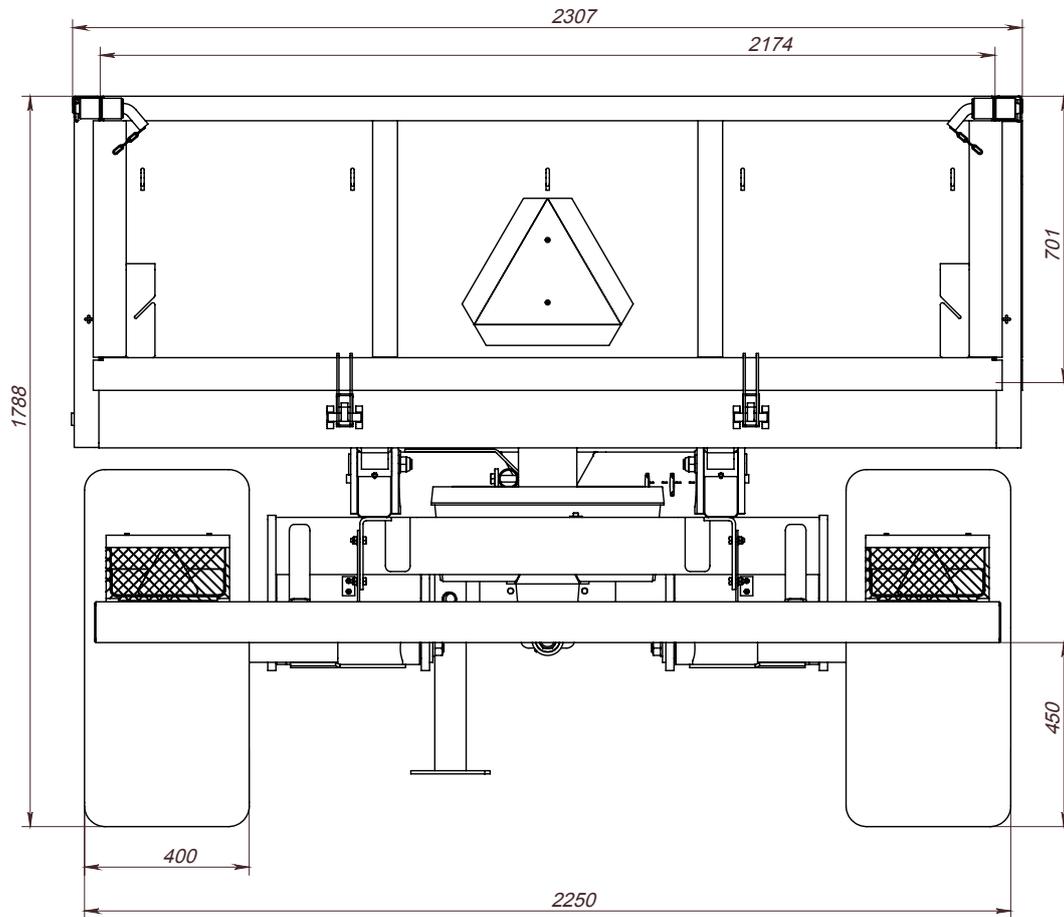
## TECHNICAL SPECIFICATION

Technical data	Dump trailer T-7
Total length	5356 mm
Total width	2300 mm
Height	1790 mm
Internal dimensions of load surface	3.675 x 2.175 x 0.7
Load capacity in m <sup>3</sup>	5.6 m <sup>3</sup>
Panel thickness at bottom/sides	5 mm/3 mm
Trailer dead weight	2020 kg
Max. payload	7000 kg
Total weight with load	9020 kg
Axles	70 x 70
Brakes	4-wheel brakes as optional extra
Brake force requirement	160 bar
Parking brake	-
Max. speed	40km/h
Towing eyelet, vertical/horizontal max.	14,000/2000 kg
Load on towing eyelet, empty trailer	450 kg
Load on towing eyelet, fully loaded trailer	1260 kg
Tipping angle	66°

## DIMENSIONAL DIAGRAM







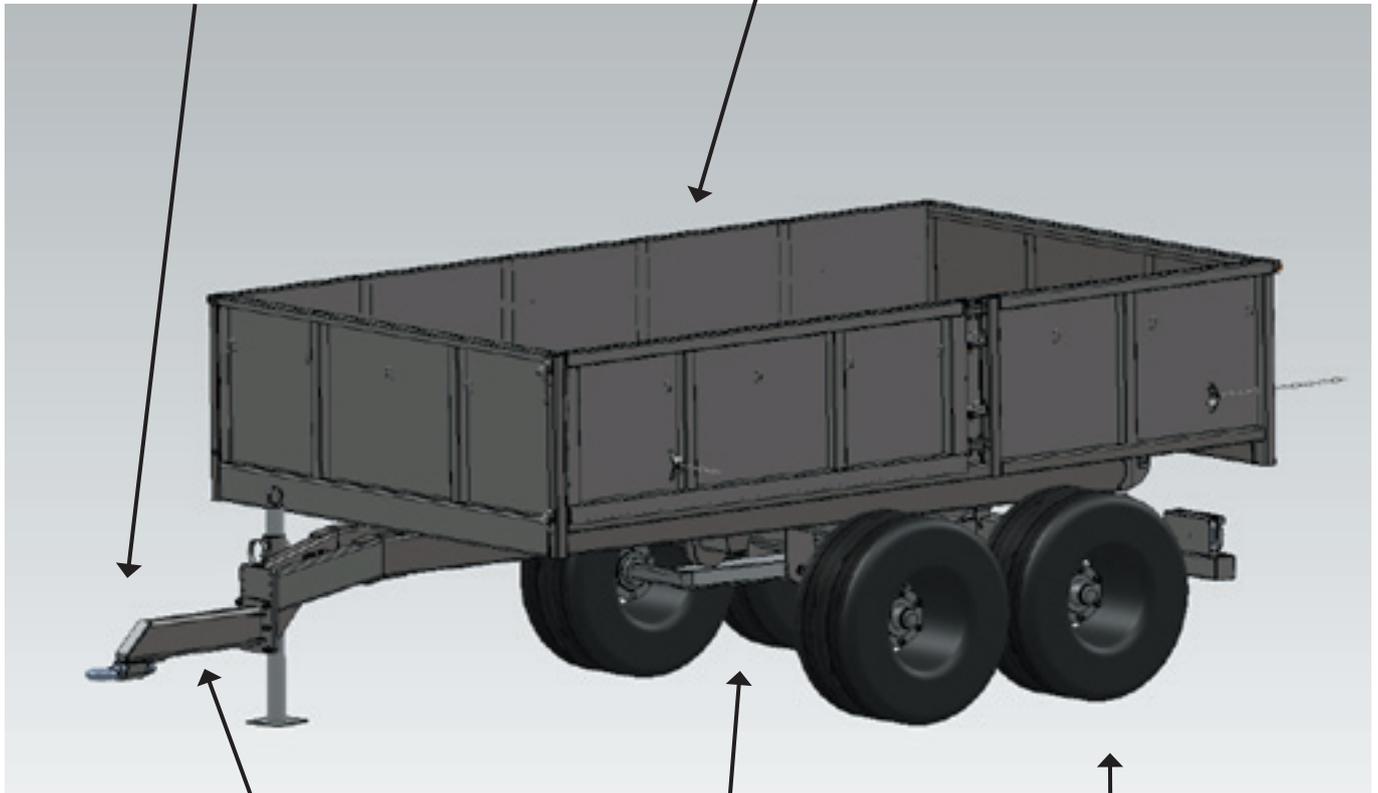
## GENERAL DESCRIPTION

### Principal components and functional devices

The trailer consists of the following principal components and functional devices.

The towing eyelet is suitable for hitch hooks. It is **very** important that the towing eyelet is checked for defects every time the trailer is used. The towing eyelet must be greased regularly. The towing eyelet must be replaced at least once a year.

The trailer bed loads 5.6m<sup>3</sup> with 5 mm plate thickness at the bottom and 3 mm at the sides.



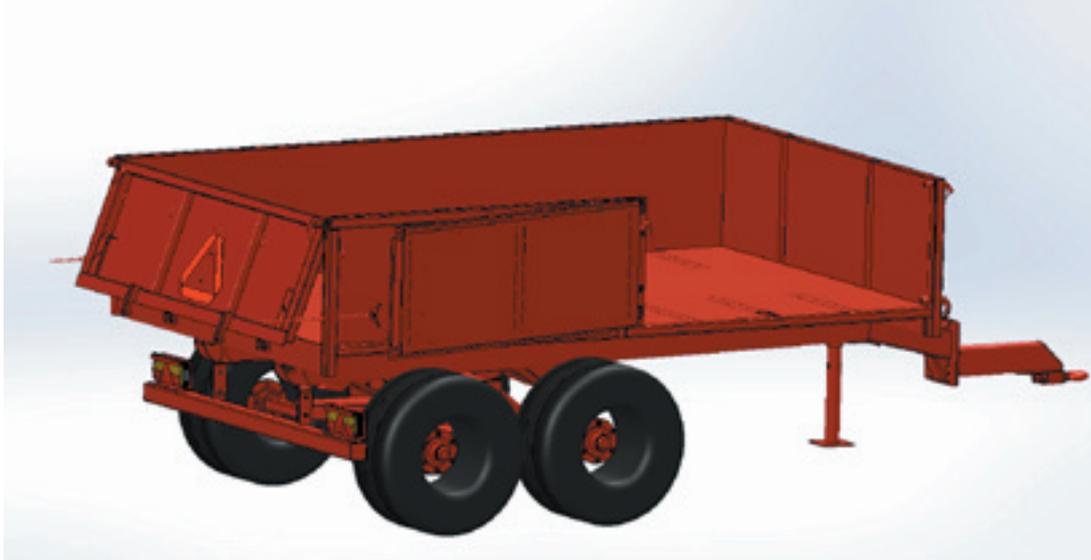
Bolted drawbar – The trailer is equipped with a bolted drawbar for optimum comfort and increased flexibility since it offers the opportunity to use the drawbar at different heights as required.

The chassis is constructed from rectangular steel sections.

Tyres – The trailer is delivered with 11.5/80 x 15.3 tyres, but other tyres are available as optional extras.

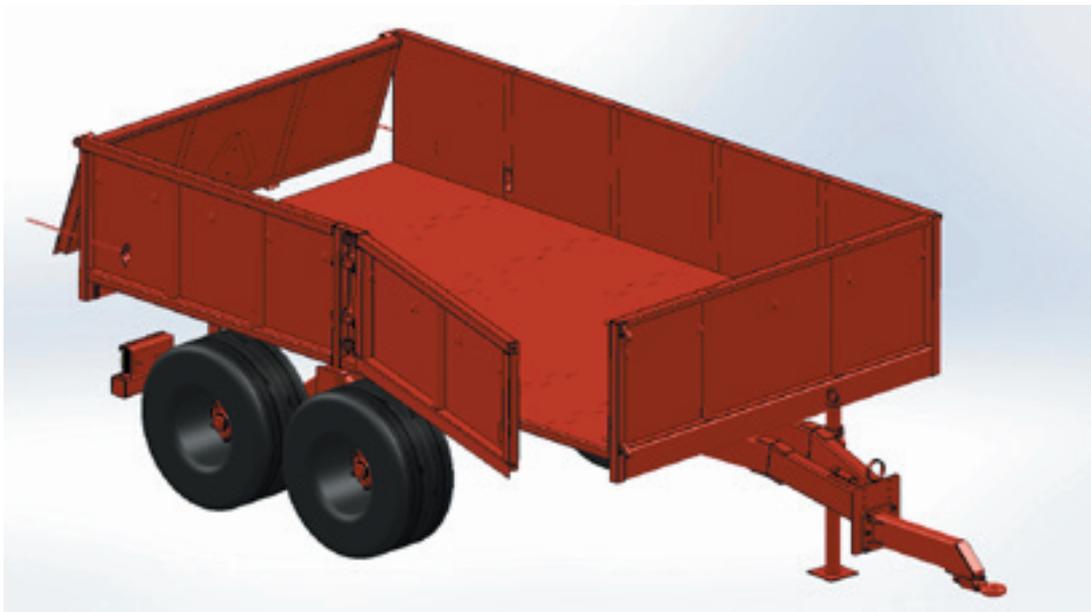
## Tailgate

The trailer is equipped with a mechanical hung tailgate with side doors.



The illustration shows the hung tailgate and that the side doors can be opened fully.

**NOTE!** Do not drive with the side doors open, because the doors will then extend beyond the trailer's normal dimensions. Accidents can occur if the driver is not careful.



The trailer is delivered with hung tailgate with locking catches on the bottom edge. It has notches for spreader chains. The doors are released on the left side by using a mechanical handle.



NOTE! It is important that you check the doors before driving off to make sure they are securely locked after they have been opened. Checking this is the driver's responsibility.

### Tyres

The dump trailer is equipped as standard with:

**11.5/80x15.3 A8. 40 km.**

Name	Hose	Wheel dim	Width mm	Diameter mm	Load Kg	Air pressure Bar
6-161-205 10Pr	YES	9.00x15.3"	297	844	1950	4.6

The trailer can be equipped with optional extras:

**400/60x15.5" A8. 40 km.**

Name	Hose	Tyres pattern	Wheel dim	Width mm	Diameter mm	Load Kg	Air pressure Bar
400/60x15.5"		Rib 900	13.00x15.5"	405	875	2725	4.50

**Hydraulic system**

The trailer is equipped with a hydraulic system for the various work stages.

**Electrical system**

The trailer is manufactured with a 12V electrical system.

**Braking system**

The trailer can be equipped with a hydraulic braking system. A pneumatic braking system is also available as an optional extra. Note! The hydraulic pressure in the brake pipes should not exceed 160 bar. If too high a hydraulic pressure is used, the brake arm cam can go over the centre and lock the brakes.

## SAFETY REGULATIONS

### IMPORTANT!



READ THE ENTIRE INSTRUCTION MANUAL BEFORE USING THE TRAILER. CONSULT THE MANUAL IF YOU ENCOUNTER ANY PROBLEMS. THE TRAILER HAS A DATA PLATE. BEFORE USING THE TRAILER, MAKE SURE THAT THE FACTORY SETTINGS HAVE NOT BEEN CHANGED AND THAT NO PARTS HAVE COME LOOSE DURING TRANSIT. MAKE SURE THAT ALL SAFETY FEATURES AND SIGNS ARE IN PLACE.

### HAZARDOUS AREAS



To avoid injuries or damage while working with the trailer, the dump trailer must be operated by only one person. Do not allow anyone inside the trailer's **hazard zone, which is 8 m** around the trailer.

Never let anyone stand behind or by the side of the trailer when tipping the trailer bed.  
Warning – risk of crushing due to moving parts!

Unauthorised persons are not permitted near the machine when it is in use or being repaired. It is strictly forbidden for anyone under the influence of alcohol or drugs to work with the trailer.

### **Trailer safety**

To ensure the safe use of the product, for trouble-free operation and for the warranty to be valid, maintenance must be carried out in accordance with the service described in the chapter "Maintenance/Service".

The trailer must be loaded evenly and must be on level ground when tipping. Consult the section "Tipping the trailer" to avoid overturning. The trailer is equipped with lashing loops.

Check the locking pins before tipping.

Do not remove the tipping cylinder's oil hose during tipping.

The estimated coupling load from drawbar to tow hook at maximum and evenly distributed load is 1260 kg.

The towing eyelet is adjusted to the tow hitch on the towing vehicle. It is very important that the towing eyelet is checked for defects every time the trailer is used. The towing eyelet must be replaced at least once a year. It is the user's responsibility to ensure that this is done. **Note!** Never weld onto the towing eyelet, as this will change the material's strength.

Pay attention to the warning decals.

The trailer is not known to cause noise exceeding 70 decibels.

Transport of people or animals in the dump trailer is not permitted.

**WARNING!**

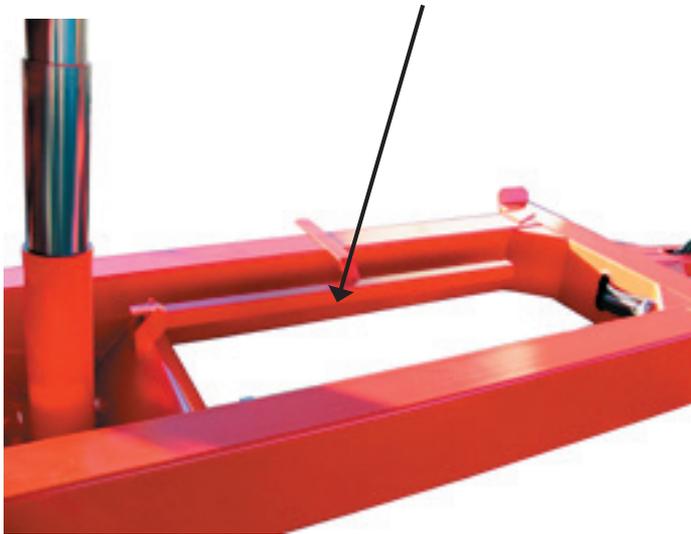


The manufacturer does not accept any liability for damage that is caused by overloading or which arises in the case of drawbar failure if the trailer detaches from the vehicle. The maximum load is stated in the technical data.

## SAFETY DEVICES

### Safety support

Always use the safety support when carrying out service in the tipping position. The safety support must not be used under any circumstances when the trailer bed is loaded.



*Safety support*

### Location of the decals on the trailer



The trailer is equipped with a range of decals for both safety and information. Check that all signs are in the correct position.

## Presentation of decals

### WARNING!



#### Warning triangle and instruction manual decal.

The trailer is supplied with a warning triangle alongside the instruction manual decal in order to emphasise the requirement for the user to read the entire instruction manual carefully before starting to use the trailer. Ignoring this can entail a danger to life.

### INFORMATION!



#### Decal for the use of safety equipment.

These decals encourage the user to use the appropriate safety equipment in order to avoid injury when using the trailer.

### DANGER!



#### Risk of crushing injuries

There is a risk of being trapped or crushed during work and maintenance.

### WARNING!



#### Hazardous area

It is potentially fatal to stand between the trailer and the towing vehicle when the trailer is being driven, moved with frame steering or when other functions are activated between trailer and tractor. As the driver, you must always ensure that the area around the machine is free of people.

### WARNING!



#### It is totally forbidden to board the trailer when it is in motion.

This can potentially be fatal.

## WARNING!



### **Warning – If the rear of the tractor lifts, a hazardous movement has started.**

When the rear of the tractor starts to lift this is a warning that you have started a hazardous movement.

**Note!** One copy of this warning decal is included with your trailer on delivery. It must be placed conspicuously in the tractor's cab. If you would like to more, they can be ordered free of charge from our after-market department. See the first page of the instruction manual for contact details.

## WARNING!



### **Risk of slipping**

There is a risk of slipping as the surfaces of the trailer can be slippery due to precipitation combined with pre-existing oil and/or clay on the surface. The ground around the trailer can also be slippery, because the tyres can tear up the surface and expose clay and soil.

## DANGER!



### **Hydraulic fluid under pressure**

Hot hydraulic fluid at high pressure may occur in the hydraulic system. Take care when connecting, and replace damaged hoses.

## WARNING!



### **Warning – contact with electrical power lines**

The trailer may only be driven in the transport position. Never drive or tip with raised trailer bed. If you drive with the trailer bed raised, you risk colliding with obstacles such as bridges, electrical power lines etc.

## WARNING!



### **Always use the safety support during service.**

It is absolutely prohibited to lean in under the raised frame, unless it is secured with the safety support. Under no circumstances may the trailer be carrying a load or a container when using the safety support.

## WARNING!



### Max. load

It is absolutely forbidden to load more than the amount your model is intended to handle. This can result in danger to you and your surroundings. For information on your model, please consult the technical data.

## WARNING!



### Max. strain on towing eyelet

Ensure that you do not load so the strain on the towing eyelet exceeds that permitted by statute and regulations. The trailer is designed for a maximum strain of 3000 kg on the towing eyelet. The strain is largely determined by the way the load is distributed on the trailer bed, and it is the user's responsibility to ensure that this is not exceeded.

## INFORMATION



### Wheel inspection

The wheels must be tightened and the brakes checked regularly.

## INFORMATION



### Lubrication

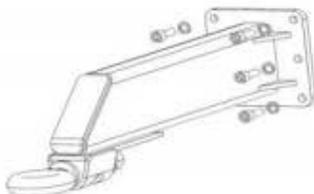
This decal is used to show the importance of regular lubrication of the trailer.

## INFORMATION

	
PRODUKTYP PRODUCT TYPE PRODUKTYP	
TILLVERKNINGSÅR YEAR OF PRODUCTION SERIENUMMER	20
TILLVERKNINGSNUMMER SERIAL NUMBER HERSTELLINGSNUMMER	
TOTALVÄGT TOTAL WEIGHT	KG
ZUL. GESÄMTGEWICHT	
MAX. LAST INKL. FLÄK-TIPPING MAX. LOAD INCL. BODY TIPPING MAX. GEWICHT INKL. CONTAINER BEI KIPPEN	KG
MAX. LAST INKL. FLÄK-FLÄKVÄLLING MAX. LOAD INCL. BODY ROLL-OVER/ROLL OFF MAX. GEWICHT INKL. CONTAINER BEI AUF/ABHAKEN	KG
AXEL TRYCK AXLE LOAD ZUL. ACHSLAST	KG
MAX. DRAGBELASTNING KROK MAX. PULL PRESSURE HOOK ZUL. STÖTLAGST	KG
 AS FORS MW · TULE 30 76505 SAUE · ESTONIA	

### Data plate

**Tightening torque - Drawbar bolts**



<i>Thread</i>	<i>Bolt strenght</i>	<i>Tightening torque, Nm</i>
M16x2	12.9	333
M20x2	12.9	649

**Tightening torque - Wheel nuts**



<i>Thread</i>	<i>Nut strenght</i>	<i>Tightening torque, Nm</i>
M18x1,5	10	270 +20 +0
M20x1,5	10	350 +30 +0
M22x1,5	10	450 +60 +0

# INSTALLATION

## Inspection of your new BIGAB dump trailer

### **The following checks must be made before the trailer is taken into use:**

It is strictly prohibited to use the trailer if its safety devices are damaged. For more detailed information about the safety devices, see the chapter "Safety Devices".

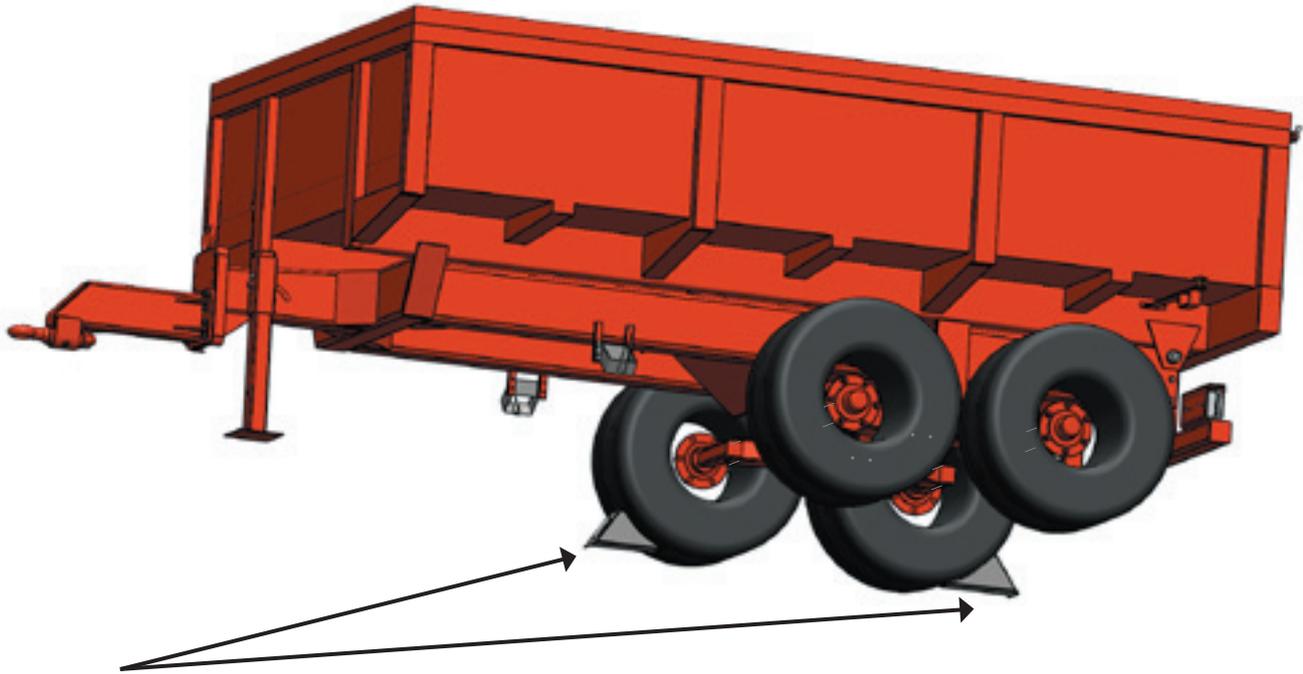
Check that the wheel nuts are tight. See the table for tightening torques. Recheck after 2–3 hours driving and then 2–3 times a year.

Check that the indicators, brake lights and taillights are working. For information on the electrical system, consult the wiring diagram.

Check that the hydraulic connections for tipping and brakes are correctly connected.

Bleed the brakes if the brakes are optional extras. See Maintenance/Service for information on how to do this.

## COUPLING/UNCOUPLING THE TRAILER



*Positioning of parking chocks*

The illustration shows where parking chocks should be placed when coupling/uncoupling the trailer and when parking.

### Safety aspects when coupling/uncoupling



The following must be checked before each use:

Inspect the trailer carefully.

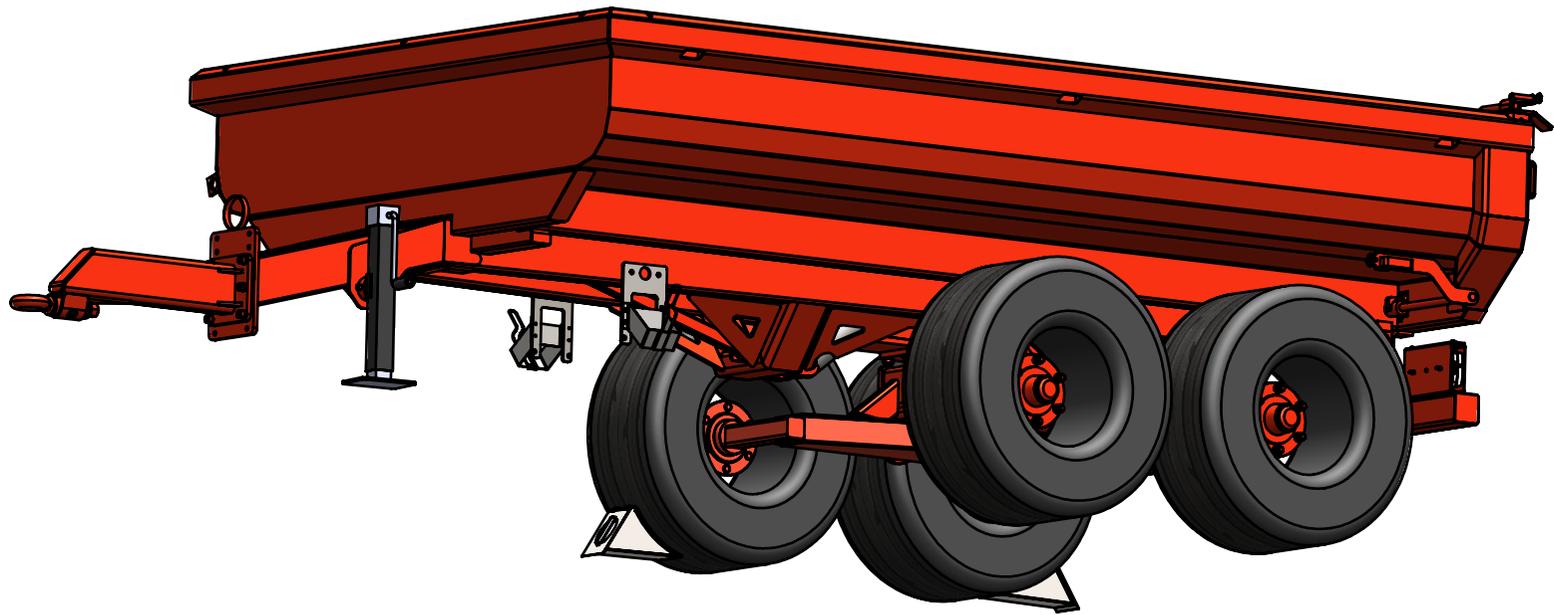
Check the air pressure in the tyres. This must always be at least the recommended pressure. See Maintenance/Service for more detailed information.

Check that all connections are correctly connected.

Check that the trailer is locked to the towing vehicle.

Check the towing eyelet and the coupling device on the tractor.

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Check the lights.

Check the brakes are working, where applicable, by test braking without load several times.

Check that hydraulic hoses and connections are intact and not cracked.

Check that all hydraulic functions are working.

It is absolutely prohibited to use the trailer for any other purpose than as a dump trailer.

Make sure there are no unauthorised persons in the trailer's working area.

Respect the safety distance. The trailer's hazard zone is 8 m.

Never stand by the drawbar when coupling or uncoupling, or while functions between the towing vehicle and trailer are activated.

Do not exceed the maximum loading limit stated for the model. See Technical Data for more information.

Make sure that the trailer's SMV sign is in place and is clean.

Always examine the towing vehicle's parking system before loading. If necessary, place chocks or obstacles in front of the wheels.

Study the safety regulations carefully.

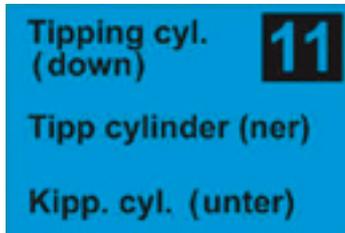
## **WARNING!**



If the trailer is coupled behind another trailer, the load capacity of the first trailer must be reduced. The load capacity must be reduced by a load equal to the second trailer's ball coupling strain on the first trailer.

### Marking of hydraulic hoses

All hoses used for the hydraulic system are marked with coloured labels. For detailed information, see the table below. The functions depend on how the hydraulic system is configured.



Hydraulic hose label (for example, for tipping cylinder)

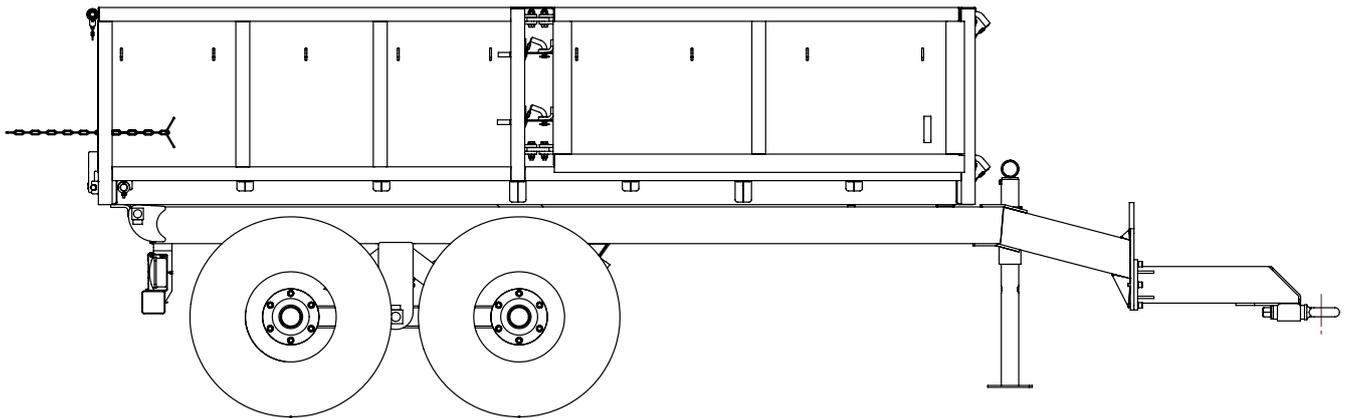
Hose label colours	
Red	Oil from pump
Blue	Oil to tank
Yellow	Brakes

Marking of the hydraulic hoses

No.	Colour	Function
1	Yellow	Brakes
10	Red	Tipping cyl. (up)
24	Red	Drop-down door (a)
25	Blue	Drop-down door (b)
26	Red	Steering (p)
27	Blue	Steering (t)

## DRIVING THE TRAILER

It is the user's responsibility to ensure that a sufficiently powerful and heavy towing vehicle is coupled to the trailer in all situations. Using a towing vehicle that is too small and weak can involve risks for the user and surroundings as well as causing damage to the vehicle and trailer.



### Safety aspects while driving:



The load must be evenly distributed in the trailer. Loose objects and loads protruding over the doors must be secured.

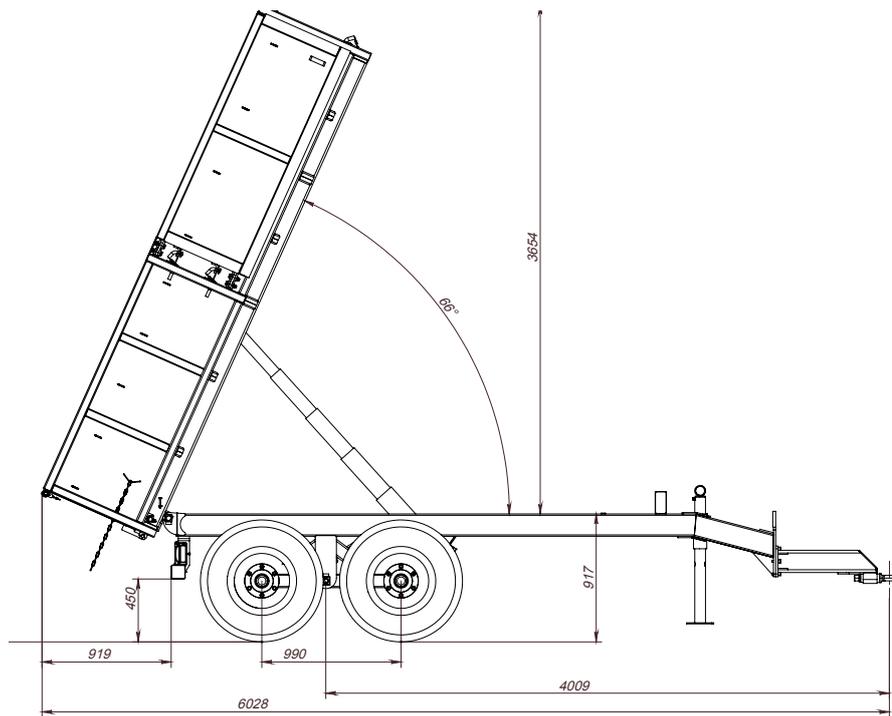
Remember that the tractor's manoeuvrability can be affected negatively by the weight of the trailer.

Do not forget to raise the stabiliser leg before moving off.

Never make tight turns at high speed.

Do not exceed the maximum loading limit stated for each model.

Adapt your driving to the load, road conditions and your experience. The trailer is designed to be driven at a maximum speed of 40km/h.



*Raised trailer bed*

## WARNING!



The trailer may only be driven in the transport position. Never drive with the trailer bed raised. If you drive with the trailer bed raised, you risk colliding with obstacles such as bridges, electrical power lines etc.

## WARNING!



**It is totally forbidden to board the trailer when it is in motion.**  
This can potentially be fatal!

## Loading of towing eyelet and coupling

Always adapt your driving to the load, road conditions and your experience. Do not exceed the trailer's stated maximum speed. Make sure you have the correct strain on the tow hook when you are driving. Make sure you do not exceed the intended upward and downward strain on the trailer's towing eyelet and coupling to the hitch device. Ideal conditions and theoretical calculations give the following maximum values for loads, which the user is recommended to observe.

**Table of load weights**

<b>Load* (excl. container's dead weight)</b>					
<b>Load</b>	<b>Kg/m<sup>3</sup></b>	<b>Full container 7 m<sup>3</sup></b>	<b>14 m<sup>3</sup></b>	<b>21 m<sup>3</sup></b>	<b>27 m<sup>3</sup></b>
Peas, Wheat, water content 15%	800	5600 kg	11,200	16,800	21,600
Rye, water content 15%	750	5250 kg	10,500	15,750	20,250
Barley, water content 15%	680	4760 kg	9520	14,280	18,360
Oats, water content 15%	560	3920 kg	7840	11,760	15,120
Silage, newly harvested	850	5950 kg	11,900	17,850	22,950
Macadam	1400	9800 kg	19,600	29,400	37,800
Gravel	1550	10,850 kg	21,700	32,550	41,850
Clay	1800	12,600 kg	25,200	37,800	48,600
Wood chips (50% moisture content)	350	2450 kg	4900	7350	9450

\*The higher the moisture content of the load, the heavier the load, a fact that the user has to take into consideration. This table is only an approximate estimate of the weights that can occur, and it is the responsibility of the user to ensure that the vehicle's limits and the applicable legislation are not exceeded. The values given are not exact but only an example.

The above table provides information and examples of how much different loads can weigh. This table is only to be considered as a general guide. The manufacturer cannot be held responsible for the measurements or volumes given in the table. The table is only intended as a recommendation.

**WARNING!**


An incorrectly distributed load can affect the steering and manoeuvrability of the entire rig.

**When braking**

If the trailer is equipped with brakes, these should be connected to the tractor with a brake valve. The trailer's brakes are then operated directly by the tractor's brake pedal.

If the trailer is connected to a tractor without a brake valve, the pressure in the trailer's braking system must not exceed 160 bar. The braking system could be damaged at higher pressure. If the pressure exceeds 160 bar, the trailer can be fitted with a pressure relief valve.

### **Working in extreme conditions**

The recommended working temperature of a BIGAB dump trailer is  $-20^{\circ}\text{C}$  to  $+40^{\circ}\text{C}$ . When working at lower than recommended temperatures, do not load the trailer as heavily. Before starting work at low temperature, allow the oil to circulate freely through the system for a few minutes. In extremely hot conditions, be aware that the hydraulic oil heats up drastically. At temperatures above  $+80^{\circ}\text{C}$ , the oil evaporates and the seals are destroyed.

### **IF DANGER ARISES**

If the trailer comes into contact with high-voltage electrical cables, act as follows:

#### **IF YOU ARE OUTSIDE THE TRAILER**

Do not try to get into the trailer. Keep away from the trailer. Do not touch any part of the trailer.

#### **IF YOU ARE IN THE TOWING VEHICLE**

Get out by jumping. Avoid touching any part of the vehicle. Avoid making your a body a channel through which electricity can flow. Get out of the vehicle by jumping, but avoid putting both feet on the ground at the same time. An electrical field at ground level can cause a fatal voltage between the legs. You should be safe at a distance of 20 metres, but this of course depends on the circumstances.

# TIPPING THE TRAILER

## Safety aspects when tipping



Make sure the towing vehicle and trailer are securely coupled before tipping. Tipping the trailer is always controlled from inside the tractor.

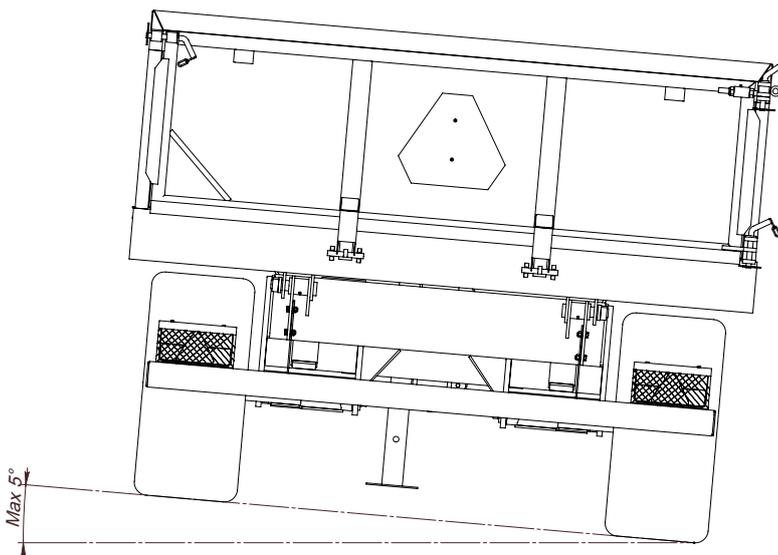
### WARNING!



**If the rear of the tractor lifts, a hazardous movement has started.**

When the rear of the tractor starts to lift this is a warning that you have started a hazardous movement.

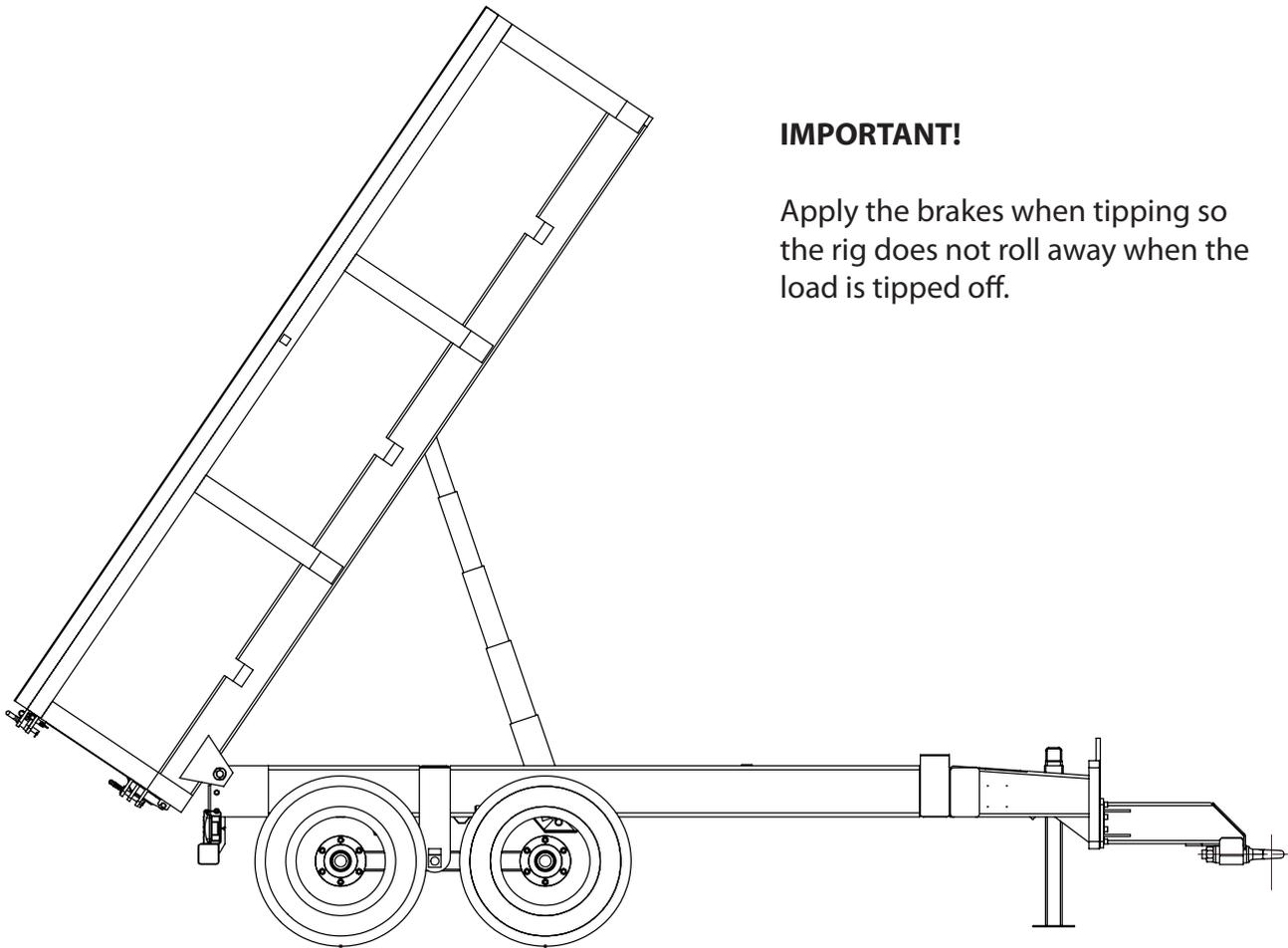
### Illustration 1



Place the dump trailer on a level surface. The sideways gradient must not exceed 5 degrees.

## Illustration 2

At maximum tipping – drive forward slowly until the trailer bed is empty. Lower the trailer bed before driving off. Important! Make sure the trailer bed is locked in the correct position before driving.



### IMPORTANT!

Apply the brakes when tipping so the rig does not roll away when the load is tipped off.

When tipping is finished, check the tailgate to make sure no residues have stuck, since this could prevent it from shutting.

## SERVICE/MAINTENANCE OF THE TRAILER



### *Placing the jack during service*

The illustration shows where to place the jack during service and maintenance, if required.

### **Safety aspects during service and maintenance:**



Clean the trailer thoroughly before repair work or storage.

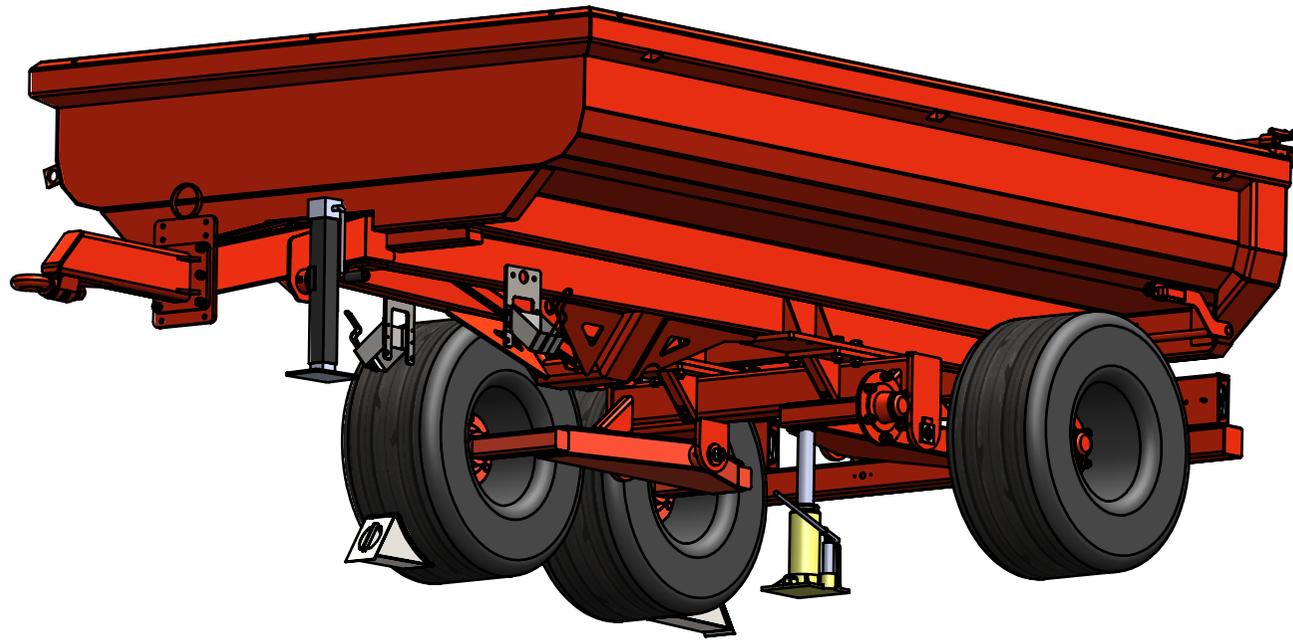
The trailer must always stand on a level surface during service.

Make sure the trailer is stationary.

During service, turn off the vehicle's engine.

Make sure the trailer cannot move when using a jack or similar equipment – ensure it is securely supported by blocks.

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The safety support must be used at all times when service is carried out in the tipping position. The trailer must be empty when carrying out service in the tipping position. See the illustration below.

Never carry out maintenance on the trailer's hydraulic system before you are certain that there is no hydraulic pressure.

Do not attempt to seal or repair leaking hydraulic couplings while there is still pressure in the system.

Never attempt to locate a hose or coupling leak using your hands. The high pressure oil in the system can penetrate the skin and cause serious injuries, such as burns and blood poisoning. High pressure oil is highly flammable.

Avoid getting oil in your eyes. Wear safety goggles and safety gloves. If you should get oil in your eyes, flush them immediately with cold water and seek medical help without delay.

#### **WARNING!**



**It is absolutely prohibited to lean in under the raised trailer bed unless it is secured.**

## MAINTENANCE/SERVICE

### **General:**

Maintenance must be performed at regular intervals for your safety and trouble free use.

Maintenance can be carried out without any special tools. Most of the steps can be done by the user.

Localise the problem as clearly as possible to avoid opening the system if this is not absolutely necessary.

Dismantled parts should not come into contact with dirt.

Keep spare parts in their packaging until they are needed for installation.

We recommend trained service personnel carry out the adjustment and repair of valves.

### **Daily maintenance:**

Visually inspect the load equipment. Note any defects that could affect your safety. Repair any defects.

Check the towing eyelet's safety features carefully.

Check to ensure there are no leaks in the hydraulic system and that there are no damaged hoses.

Work through each function.

Check the oil level.

### **Weekly maintenance:**

Wash the trailer regularly with a sponge or soft brush and mild soap solution.

Never wash with high-pressure hot water. This dissolves the grease at the bearing points.

Check the trailer's operation.

Check the hydraulic pressure.

Check the brakes are working reliably.

Tighten all wheel nuts after a few hours and check them regularly.

Check direction indicators, lamp glass covers, reflectors and lights.

### **Monthly maintenance:**

Check the air pressure in all tyres.

Check to make sure there is sufficient lubrication on sliding surfaces.

Clean the hydraulic cylinders and lubricate their spherical plain bearings.

Check the hydraulic hoses for any damage.

For recommended lubricating greases, see Requirements and Test methods SS 15 54 70  
<http://www.sp.se/km/grease>

### **Oil change**

Change the oil at the same time as you change the oil in the tractor. Please refer to the tractor's operating manual for oil change intervals.

### **Surface cleaning**

Remove accumulated dirt and dust. Painted external surfaces should be cleaned regularly with a sponge or soft brush and soap. When cleaning, never use hot water from a high-pressure washer. This dissolves the grease at the bearing points.

### **Maintenance of the hydraulic units**

Clean the piston in the hydraulic cylinder.

Check the hydraulic valves. In the case of leaks, replace the damaged valve.

Check the hydraulic hoses. Visually inspect the hydraulic hoses and the coupling pipe. In the case of leaks and ruptures, replace the hose.

When necessary, top up or change the oil.

Check the function of the device.

Always use original parts when replacing hydraulic components, such as hoses, seals etc. This will ensure safe and reliable operation. Be sure to remove all dirt before starting any work on hydraulic components.

### **Changing seals**

Seals should be replaced by an authorised workshop.

**Note!** Never use the hydraulic system when the oil level is below the lowest mark.

### **Clean and check the lights.**

Replace faulty bulbs. If the bulb continues to blow, troubleshoot.

Check the electrical connector clamps. Clean off any dirt and dust.

Check the wires' insulation, joints and the insulation sleeving for wear and tear.

Protect the wiring from oil and fuel, which will damage the insulation. Clean dirty wiring.

**Note!** Only connect or disconnect plug contacts when the circuits are dead.

### **Maintenance of the brake system**

This trailer can be equipped with a hydraulic brake system as an optional extra.

Check the brake system regularly. Test the brakes at least once a working week.

Make sure bearing grease oil does not penetrate the brakes. Regardless of the type of oil that penetrates the brakes, this risks lubricating the brake discs and thus reducing the friction. This will adversely affect the braking action. Should this happen, remove the brake drums, wash the brake pads with petrol or similar and leave them to dry.

Always check the play after the brake drum has been removed, and adjust if necessary.

To adjust the brakes, lift the bogie frame off the ground and adjust the brakes by spinning the wheel while adjusting. The brakes are correctly adjusted when the wheel spins freely without any scraping sound from the drum. The brakes must always be tested after adjustment.

In the case of uneven braking action, apply the brakes, tow the trailer at low speed for a few hundred metres and test again by braking the rig at normal speed. Repeat, if necessary, until the brakes work properly. If necessary, contact our service department!

### Maintenance of pneumatic components (optional equipment)

Clean and lubricate the piston rods on the pneumatic cylinders.

Empty the water trap. Condensed water must be removed from the air tank located on the side of the trailer.

Check the pneumatic valves by listening to them when they are working. If there is a leak, replace the faulty valve.

Check the pneumatic hoses by visual inspection of the pneumatic hoses and coupling pipe. In the case of leaks and ruptures, replace the hose.

Check the function of the device.

### Maintenance of wheels

Check the wheels before using the trailer by making sure the bolted joints are secure and that they are regularly checked and tightened.

Check the air pressure.

The dump trailer is equipped as standard with:

#### 11.5/80x15.3 A8. 40 km.

Name	Hose	Wheel dim	Width mm	Diameter mm	Load Kg	Air-pressure Bar
6-161-205 10Pr	YES	9.00x15.3"	297	844	1950	4.6

The trailer can be equipped with optional extras:

#### 400/60x15.5" A8. 40 km.

Name	Hose	Tyres pattern	Wheel dim	Width mm	Diameter mm	Load Kg	Air-pressure Bar
400/60x15.5"		Rib 900	13.00x15.5"	405	875	2725	4.50

## Changing tyres

When changing tyres, it is important that the jack is placed as shown below:



## Storage

Long-term storage in cold and/or damp conditions is not advisable.  
All metal parts are recyclable and, when the time arrives, should be handed in for recycling.

## Repair welding

If repairs or modifications require welding work, you must first contact your dealer, who will provide you with the necessary welding instructions. Incorrect welding or ignorance during welding can result in sudden breaks in the structure.

## Scrapping instructions

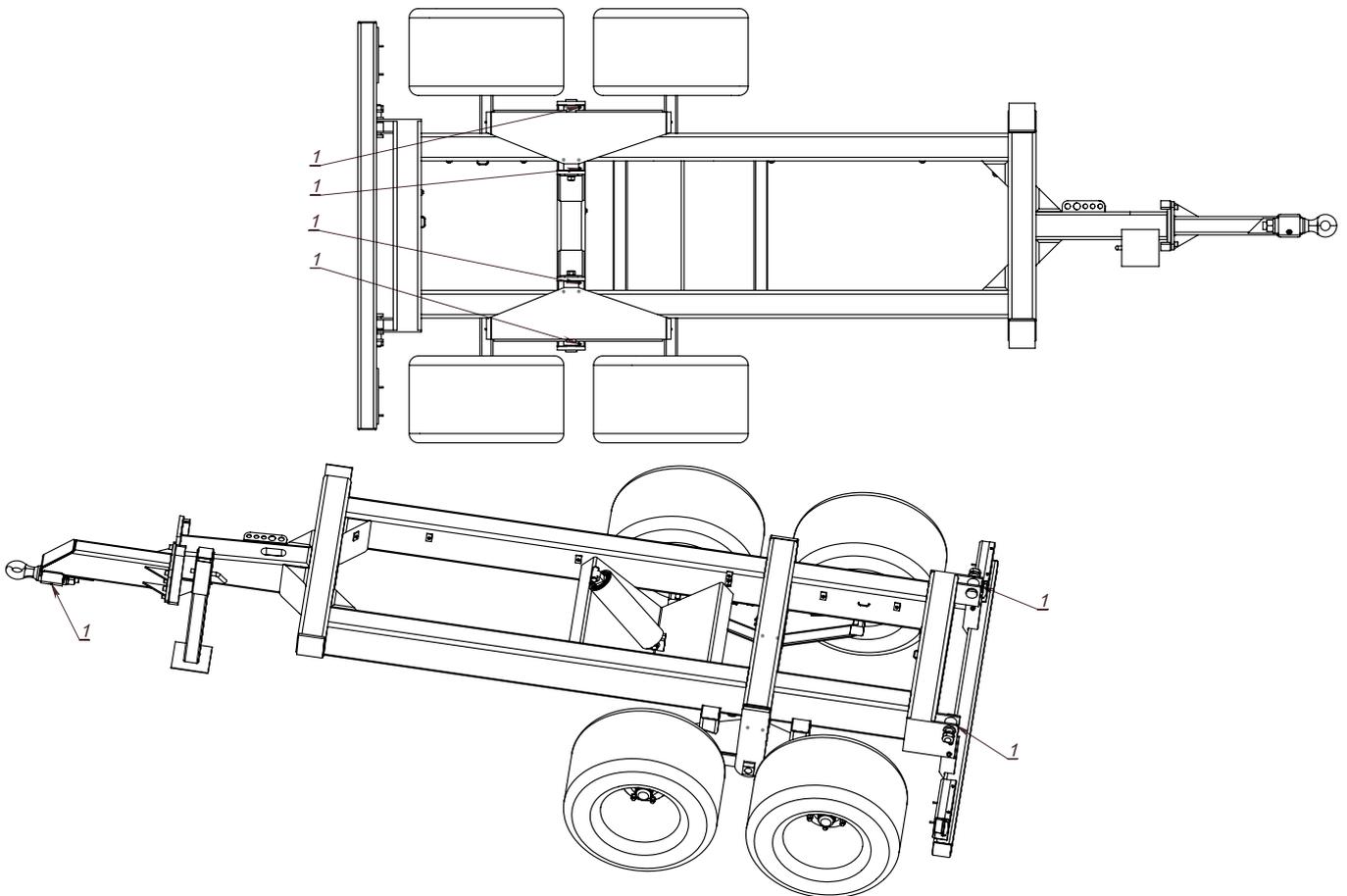
If the machine or its components are to be scrapped, the materials must be dismantled, sorted and handed in for recycling or destruction at a location designated for this purpose by the municipality.

## Lubrication schedule

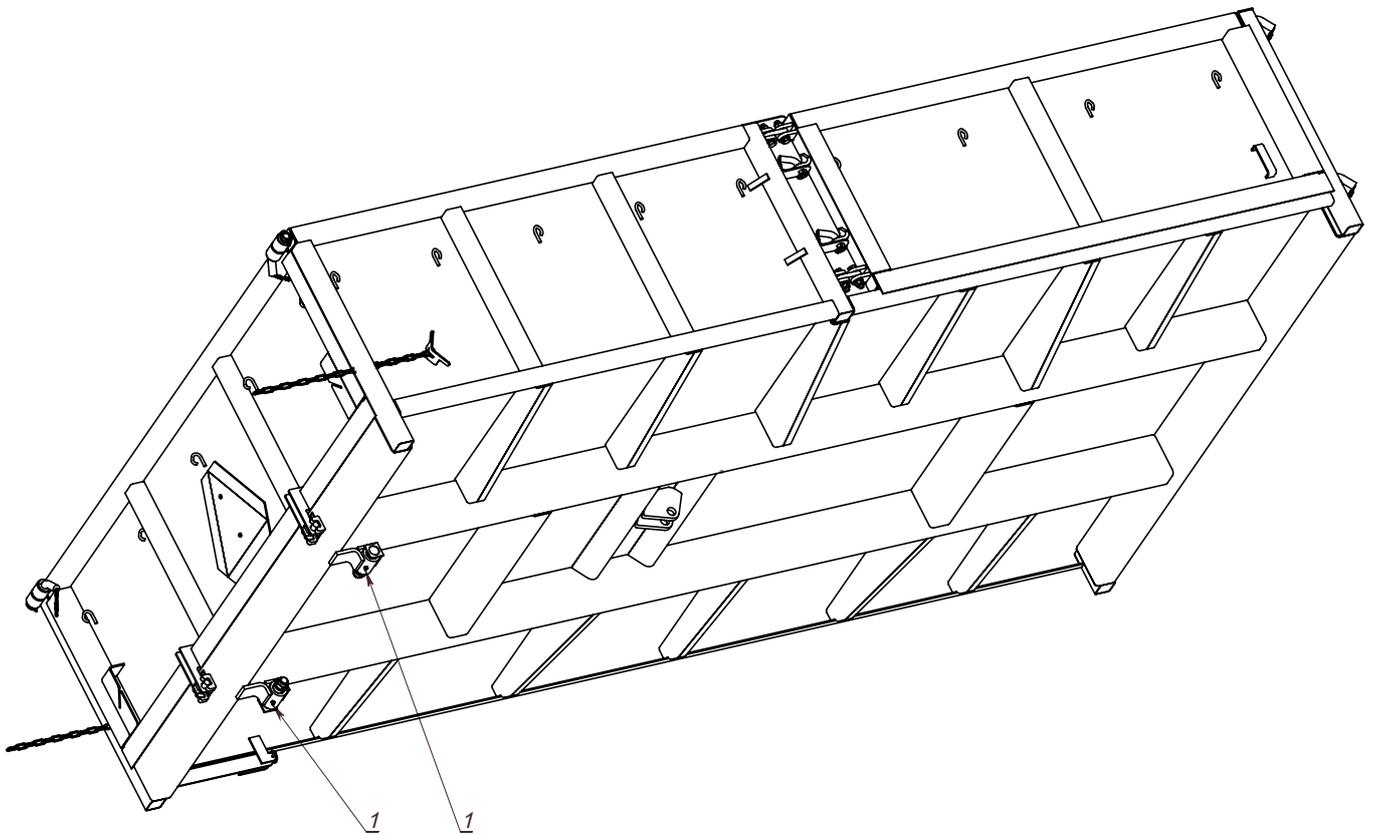
The wheel hubs must be lubricated twice a year with multi-purpose lubricant. The inner bearing in the braked hub must be lubricated carefully to prevent grease penetrating to the brake plate or brake linings. Other points that must be lubricated 4-6 times per year are:

Bogie boxes	Use multi-purpose lubricant
Tipping pins	Use multi-purpose lubricant on right/left side
Tipping piston bracket	Use multi-purpose lubricant on upper and front brackets
Tipping piston	Always keep the protruding top section oiled
Towing eyelet	Use multi-purpose lubricant
Door locks	Lubricate with thin oil

## Lubrication schedule, trailer



**Lubrication schedule, container**



## TROUBLESHOOTING

These troubleshooting instructions are intended to help you determine the cause of breakdown.

### Problems when driving

Fault symptom	Reason and action
The trailer runs abnormally heavily	The brakes may be on or the wheel bearings may be worn. Adjust the brakes and/or replace the wheel bearings.
The trailer runs abnormally heavily	Low air pressure. Fill with air.
Trailer rocks a lot while moving	Low air pressure. Fill the tyres with air.

### Problems with electrical equipment

Fault symptom	Reason and action
Problem with lights	The light stops working. Replace bulb.
	Check and clean the electrical connections.
Wire damaged or broken.	Check and repair the fault.

### Problems with the hydraulic equipment

Fault symptom	Reason and action
Air in the hydraulic system	Locate the leak and eliminate the defect. Check the oil level. Check the quick release couplings between the towing vehicle and trailer.
Low oil pressure.	Adjust the oil level.
The hydraulic cylinder's piston seal leaks.	Contact an authorised workshop.
Noise from the hydraulic system.	Air has entered the system. Locate where the air is entering and eliminate the defect.
Oil leak	Replace faulty hose. Adjust/tighten the hose couplings.

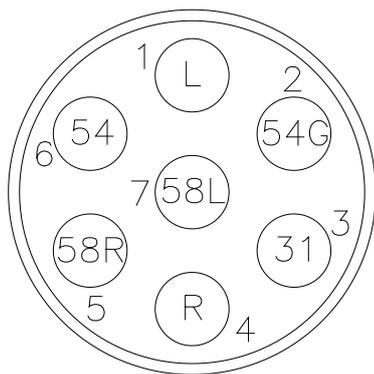
**Problem with braking system**

Fault symptom	Reason and action
Poor brake function Oil on brake linings or worn brake pads.	Replace the brake shoes.
	Check the play in the brake arm and adjust if necessary.

## IMPORTANT INFORMATION! FARMA AND BIGAB TRAILERS

### Electrical cable connection for rear lights with round 7 pin cable plug Colours according to Fors MW, type 12N

No.	Colour	Function
1	Red (RD)	Left flash
2	Grey (GY)	Fog or reverse light
3	White (WH)	"-" Ground
4	Brown	Right flash
5	Blue (BU)	Right tail light/side marker
6	Black (BK)	Stop light
7	Yellow/green (YEGN)	Left tail light/ side marker



### Electrical cable connection for rear lights with round 7 pin cable plug Colours according to ISO 1724

No.		Colour	Function
1	L	Yellow (YE)	Left turn signal
2	54G	Blue (BU)	Fog or reverse light
3	31	White (WH)	"-" Ground
4	R	Green (GN)	Right turn signal
5	58R	Brown (BN)	Right tail light/side marker
6	54	RED (RD)	Stop light
7	58L	Black (BK)	Left tail light/ side marker