



# Dump Trailer T-10 Instructions

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In this manual, we have gathered all information related to a particular procedure into one chapter. As always, safety concerns take precedence and safety instructions are presented at the front of the manual, along with technical data and dimensional diagrams. The "Installation" chapter contains important information for familiarising yourself with the trailer. The chapter on Trailer Operation provides important information on coupling/uncoupling, driving and tipping and must be read before you use the trailer. It also details 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

Stringent demands are placed on manufacturers to comply with the directives for the product they produce. This product is covered by the Machinery Directive and the CE marking indicates that it meets the requirements of the Directive. On delivery of a product, the dealer is obliged to provide operating instructions for the product.

### Company presentation

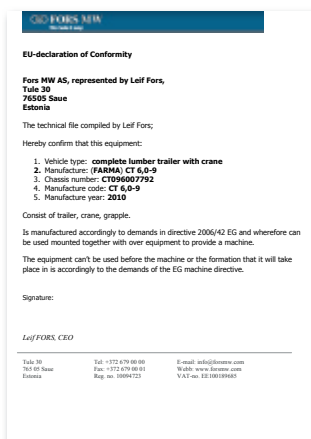
AS FORS MW was established in Estonia in 1992. The company develops, manufactures, markets and sells, via dealers, its three market-leading brands. These are BIGAB hooklift trailers and dump trailers, FARMA lumber trailers and cranes, and NIAB tractor processors. The company comprises the parent company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

### Product presentation

The BIGAB dump trailer is a relatively simple but very sturdy trailer that has been designed for use in demanding situations. Contractors and farmers will find it an indispensable piece of equipment. The trailer bed and sides are made of heavily-reinforced all-welded steel. The trailer is built to carry loads of up to 10 tonnes and has a 56 degree dump angle.

Standard features are 400/60-15.5 tyres, bolted drawbar and combo tailgate. The trailer can be additionally equipped with 4-wheel drum brakes, hydraulic stabiliser legs, frame steering and hydraulically operated tip gate. The trailer meets the 40 km/hour speed requirement for the Swedish market and the 30 km/hour requirement for the Norwegian market.

We understand you are keen to put your BIGAB dump trailer to work, but we would like you to spend some time reading this instruction manual before using your new piece of machinery. If not used correctly, the BIGAB dump trailer can cause unwanted operational stoppages and, in worst cases, can be dangerous. A little time spent reading this instruction manual could save you time and money in the future. For your safety, it is extremely important that you follow the instructions presented in this instruction manual.

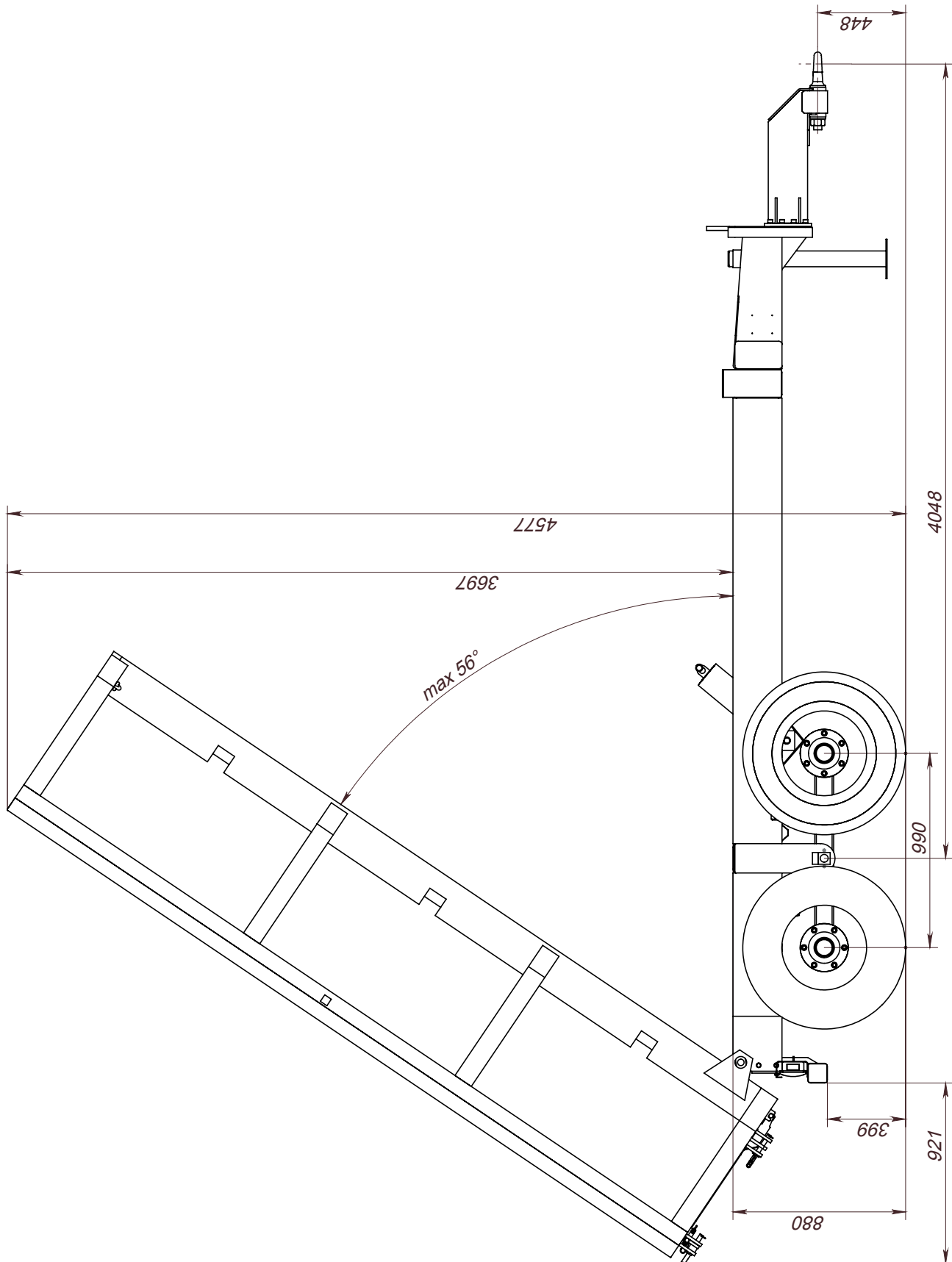


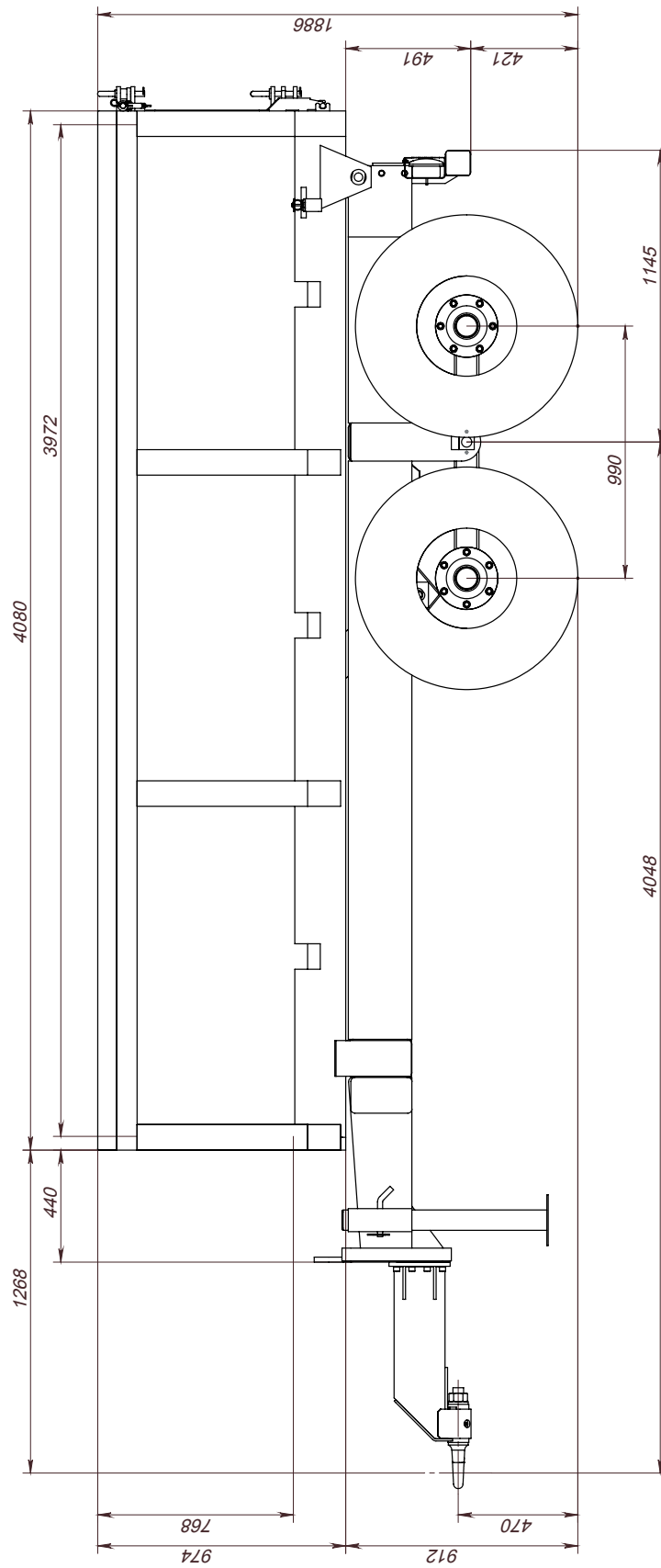
EU declaration of conformity with Directive 2006/42 EC

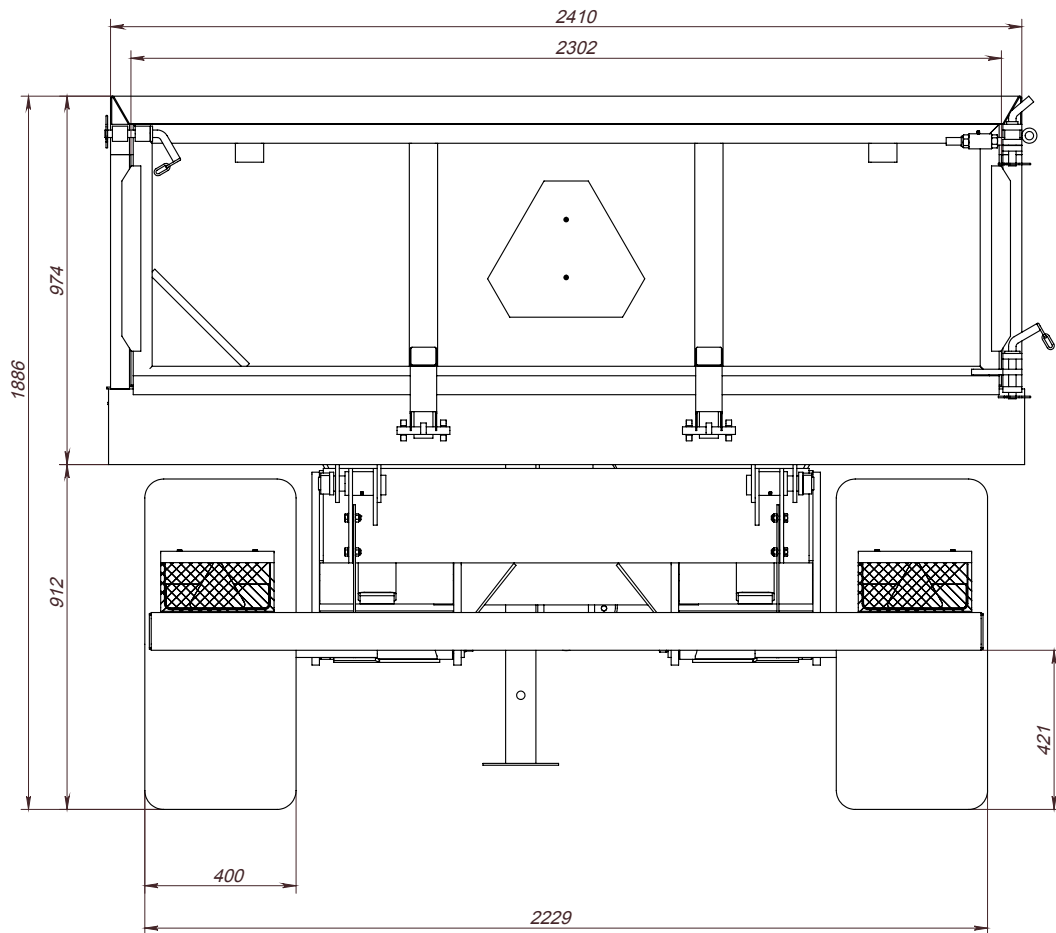
## TECHNICAL SPECIFICATION

Technical data	Dump Trailer T-10
Total length	5,540 mm
Total width	2,550 mm
Height	1,886 mm
Internal dimensions of load surface	4 x 2.31 x 0.7 m
Load capacity in m <sup>3</sup>	6,33 m <sup>3</sup>
Panel thickness at bottom/sides	5 mm/4 mm
The trailer's dead weight	2,400 kg
Max. payload	10 000
Total weight with load	12,400 kg
Axles	70 x 70
Brakes	4-wheel brakes as optional extra
Brake force requirement	160 bar
Parking brake	-
Max. speed	40 km/h
Towing eyelet, vertical/ horizontal max.	17,000/3,000 kg
Load on towing eyelet, empty trailer	500 kg
Load on towing eyelet, full trailer	2,260 kg
Tipping angle	56°

# DIMENSIONAL DIAGRAM









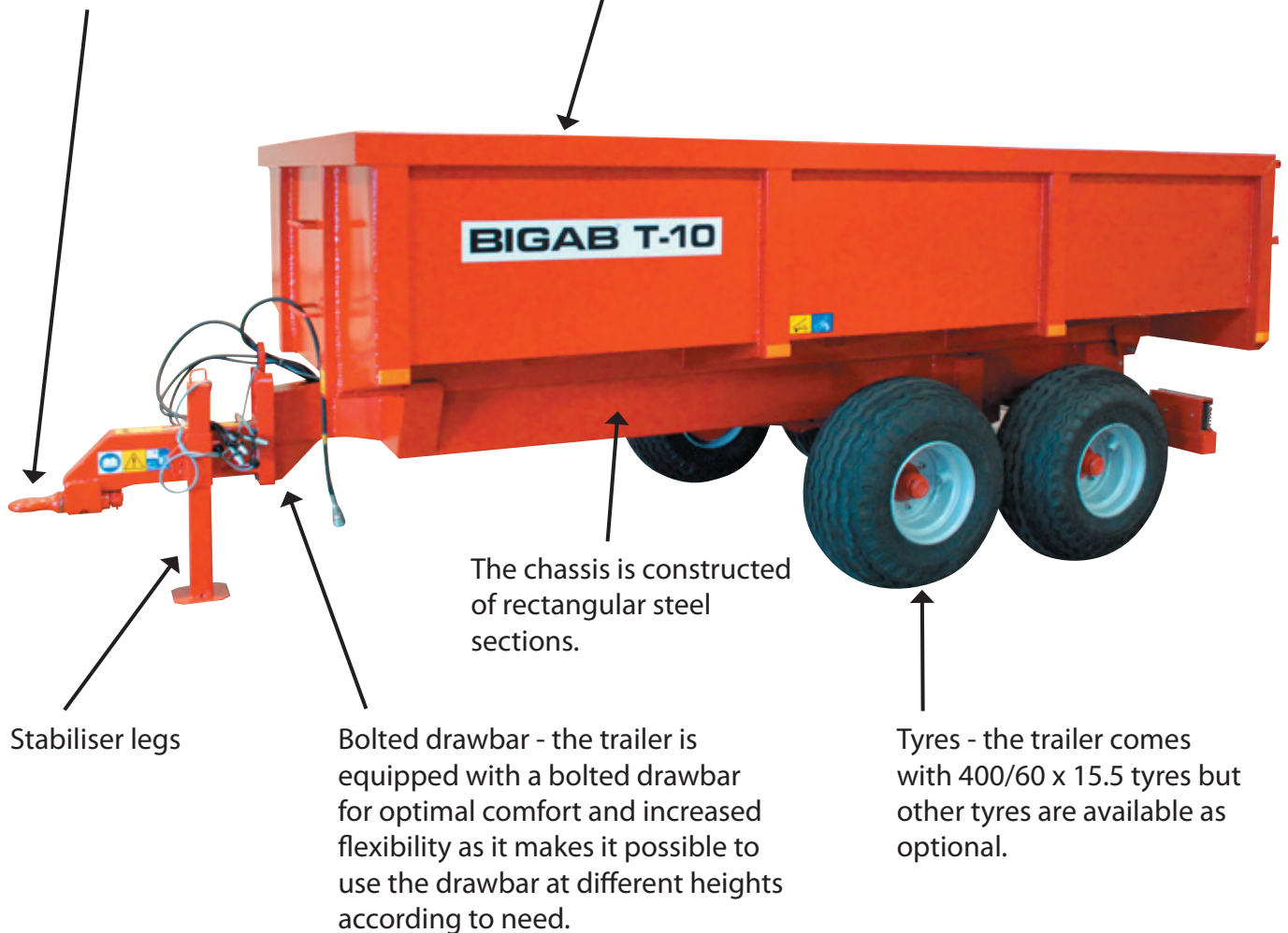
## GENERAL DESCRIPTION

### Principal components and functional devices

The trailer comprises the following principal components and functional devices.

Towing eyelet adapted to hitch. It is **extremely** important that the towing eyelet is inspected for defects every time the trailer is used. The towing eyelet must be lubricated regularly. The towing eyelet must be replaced at least once a year.

The trailer bed loads 6.3 m<sup>3</sup> with a 5 mm plate thickness at the bottom and 4 mm at the sides.



Stabiliser legs

Bolted drawbar - the trailer is equipped with a bolted drawbar for optimal comfort and increased flexibility as it makes it possible to use the drawbar at different heights according to need.

The chassis is constructed of rectangular steel sections.

Tyres - the trailer comes with 400/60 x 15.5 tyres but other tyres are available as optional.



### Three types of tailgate

The trailer can be ordered with three types of rear door. A mechanical combi door and two types of hydraulic rear door.



Hydraulic tailgate.  
The hydraulically operated tailgate opens upwards.



Mechanical combi hung tailgate.



Hydraulic tailgate with drop-down door.  
The tailgate can be side hung.

## Tyres

Standard equipment fitted on the dump trailer:

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

Name	Hose	Tyre tread	Wheel rim dim.	Width mm	Diameter mm	Load Kg	Air pressure Bar
400/60x15.5"		Rib 900	13.00x15.5"	405	875	2725	4,50

The trailer can be fitted with the following additional equipment:

**19.0/45x17" A8. 40 km.**

Name	Hose	Tyre tread	Wheel rim dim.	Width mm	Diameter mm	Load Kg	Air pressure Bar
19.0/45x17	YES	AW-708	16.00x17"	491	866	2800	3,80

## Hydraulic system

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

## Electrical system

The trailer has a 12 volt electrical system.

## Brake system

The trailer can be equipped with a hydraulic brake system. A pneumatic brake system is also available as optional equipment. Note! The hydraulic pressure in the brake lines should not exceed 160 bar. Too much hydraulic pressure can cause the brake arm cam to go over-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 MANUFACTURING 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.

### **HAZARD ZONES**



The dump trailer must only be operated by one person in order to avoid injury when working with the trailer. There should be no one inside the **hazard zone, which is 8 metres** around the trailer.

Never let anyone stand behind or at the side of the trailer when raising the trailer bed.  
Warning - moving parts can crush!

Unauthorised persons must keep well away from the trailer when it is being used or 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 and trouble-free operation and for the warranty to be valid, maintenance must be carried out as described in the chapter on Maintenance/Service. The trailer must be loaded evenly and must be on a level surface when dumping. See the section on "Tipping the trailer" to avoid overturning. The trailer is fitted with lashing loops.

Check the locking pins before tipping.

The tipping cylinder's oil hose must not be removed during tipping.

Estimated coupling load from drawbar to tow hook at max. load and evenly distributed load is 2260 kg.

The towing eyelet is adapted to the hitch on the towing vehicle. It is extremely important that the towing eyelet is inspected 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 the towing eyelet as this will affect the strength of the material.

Note the warning labels.

The trailer is not known to produce noise levels in excess of 70 decibels.

It is expressly forbidden to transport people or animals on the dump trailer.

### **WARNING!**

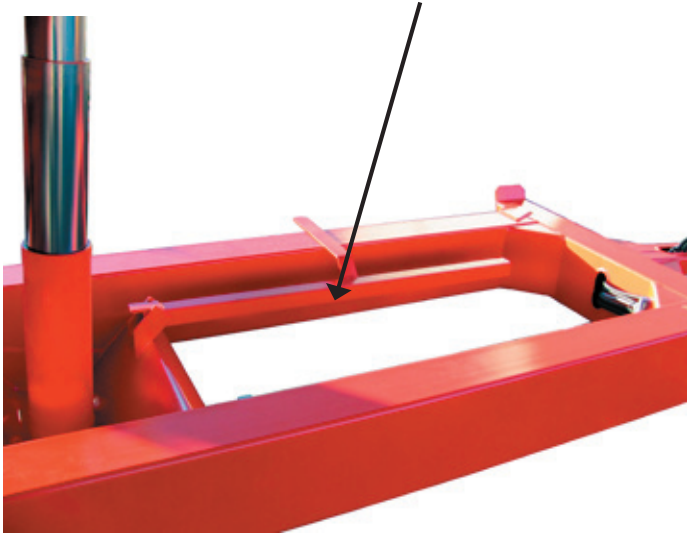


The manufacturer accepts no responsibility for damage that arises as a result of overloading or, in the event of failure of the drawbar, that arises if the trailer becomes detached from the vehicle. Maximum load is shown in the Technical Data section.

## SAFETY DEVICES

### Safety support

Always use the safety support when carrying out service work when the trailer bed is raised. The safety support must not, under any circumstances, be used when the trailer bed is loaded.



*Safety support*

### Location of the decals on the trailer



The trailer is marked with various decals relating to safety and information. Check that all the signs are in the correct positions.

## Presentation of decals

### WARNING!



#### **Warning triangle and instruction manual decal.**

The trailer has a warning triangle next to the instruction manual decal to emphasize the importance of reading the entire instruction manual carefully before using the trailer. Ignoring this can be potentially fatal.

### INFORMATION!



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

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

### DANGER!



#### **Risk of crushing injuries**

There is a risk of trapping and crushing injuries during work and maintenance.

### WARNING!



#### **Hazardous area**

Standing between the trailer and the towing vehicle when the trailer is being driven, moved with frame steering or when other functions are activated between the trailer and towing vehicle, can be potentially fatal. As the driver, you must always ensure that no one is in the area around the machinery.

### WARNING!



#### **It is absolutely forbidden to board the trailer when it is moving.**

Anyone doing so may be at risk of serious or fatal injury.



## WARNING!



### **Warning - It is a hazardous movement if the rear end of the tractor lifts.**

When the rear end of the tractor starts to lift, this is a warning that a hazardous movement has begun.

**Note!** This warning label is included in the delivery of your trailer. It must be attached in a conspicuous position in the tractor cab. If you would like more of these labels, they are available to order, free of charge, from our after sales department. Contact details are printed on the first page in the instruction manual.

## WARNING!



### **Risk of slipping**

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

## DANGER!



### **Hydraulic fluid under pressure**

Hot hydraulic fluid at high pressure levels can occur in the hydraulic system. Take care when connecting. Replace worn or damaged hoses.

## WARNING!



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

The trailer may only be driven in transport position. It must never be driven or tipped with a raised bed. If you drive with a raised bed, there is a risk of driving into bridges, electrical power lines and other obstacles.

## WARNING!



### **Use the safety support during all service operations**

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

## WARNING!



### Max. load

It is absolutely prohibited to load more than the amount your model of trailer is designed to handle. This can result in danger to you and your surroundings. See the technical data for information about your model.

## WARNING!



### Max. pressure on towing eyelet

Do not load so much that the pressure on the towing eyelet exceeds the permitted laws and regulations. The trailer is designed for a maximum pressure of 3000 kg on the towing eyelet. The pressure 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.

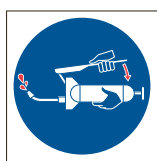
## INFORMATION



### Tyre inspection

The tyres must be tightened and the brakes must be inspected 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-TIPPNING MAX LOAD INCL. BODY TIPPING MAX. GEWICHT INKL. CONTAINER BEI KIPPEN	KG
MAX LAST INKL. FLÄK-FLÄKAVÄLLING 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. STÜTZLAST	KG
 AS FORS MW · TULE 30 76505 SAUE · ESTONIA	

### Data plate

**Tightening torques**

Tightening torques	Thread	Offset - + 30 mm/ over	Quality (st 37) Offset - + 15 mm/ under	Quality (st 52) Offset - + 15 mm/ under
With conical collared nuts and uncollared nuts	M18 x 1.5	310 Nm	330 Nm	460 Nm
	M20 x 1.5	310 Nm	490 Nm	630 Nm
	M22 x 1.5	310 Nm	630 Nm	740 Nm
With flat collared nut with spring washer	M18 x 1.5	210 Nm	270 Nm	360 Nm
	M20 x 1.5	210 Nm	360 Nm	450 Nm
	M22 x 1.5	210 Nm	460 Nm	550 Nm
With flat nut with flat washer	M18 x 1.5		260 Nm	360 Nm
	M20 x 1.5		350 Nm	500 Nm
	M22 x 1.5		450 Nm	650 Nm
Screw-mounted disc for wheel rim with adjustable offset	M18 x 1.5		260-330 Nm	

## INSTALLATION

### Inspection of your new BIGAB dump trailer

#### **You should check the following before using your new trailer:**

It is strictly forbidden to use the trailer if its safety devices are damaged. For more detailed information about safety devices, see the chapter on safety devices.

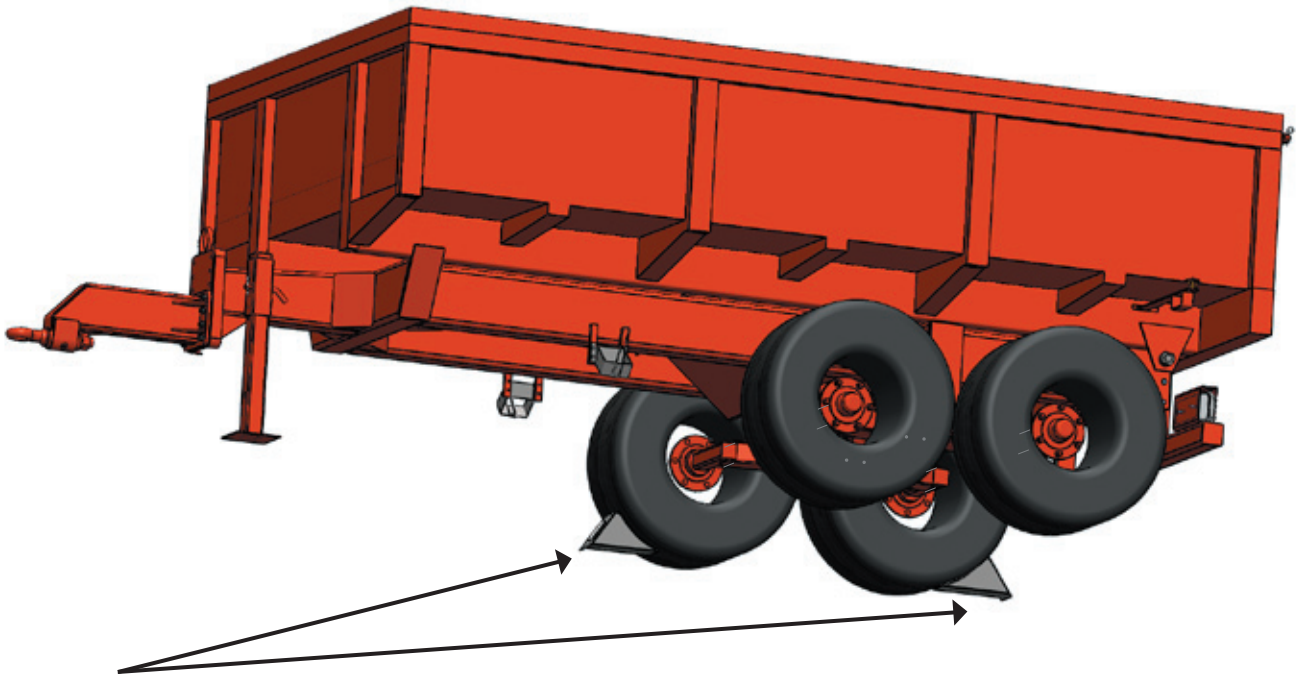
Check that the wheel nuts are tightened. Refer to the tightening torques table. Check the torques again after 2 or 3 hours of use and then 2 to 3 times a year.

Check that the direction indicators, brake lights and tail lights are working. See "Wiring Diagram" for information about the electrical system.

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

Bleed the brakes if they are optional features. See maintenance/service for information on how to do this.

## COUPLING/UNCOUPLING THE TRAILER



Wheel chocks

The illustration shows where wheel chocks should be positioned when coupling/uncoupling and when the trailer is parked.

### Safety aspects when coupling/uncoupling



The following must be checked each time before use;

Inspect the trailer carefully.

Check the air pressure in the tyres. The tyres must always have at least the recommended air pressure. See maintenance/service for more detailed information.

Check that all couplings are correctly connected.

Check that the trailer is locked to the towing vehicle.

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

Check the lights.

Check the brakes by testing them a few times without a load.

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

Check that all hydraulic functions are working.

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

Make absolutely sure that no unauthorised persons are in the working area of the trailer.

Respect the safety distance. The hazard zone is 8 metres.

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

Do not exceed the maximum loading limit for the model of trailer. See Technical Data for more detailed information.

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

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

Study the safety regulations carefully.

### **WARNING!**

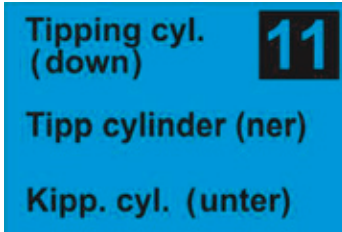


If the trailer is coupled behind another trailer, the load capacity of the first trailer must be reduced. The load capacity must be reduced by a load equal at least to the second trailer's ball coupling pressure on the first trailer.



## Marking hydraulic hoses

All of the hydraulic hoses are marked with coloured labels. See the table below for more detailed information. The functions depend on the configuration of the hydraulic system.



Hydraulic hose label (example tipping cylinder)

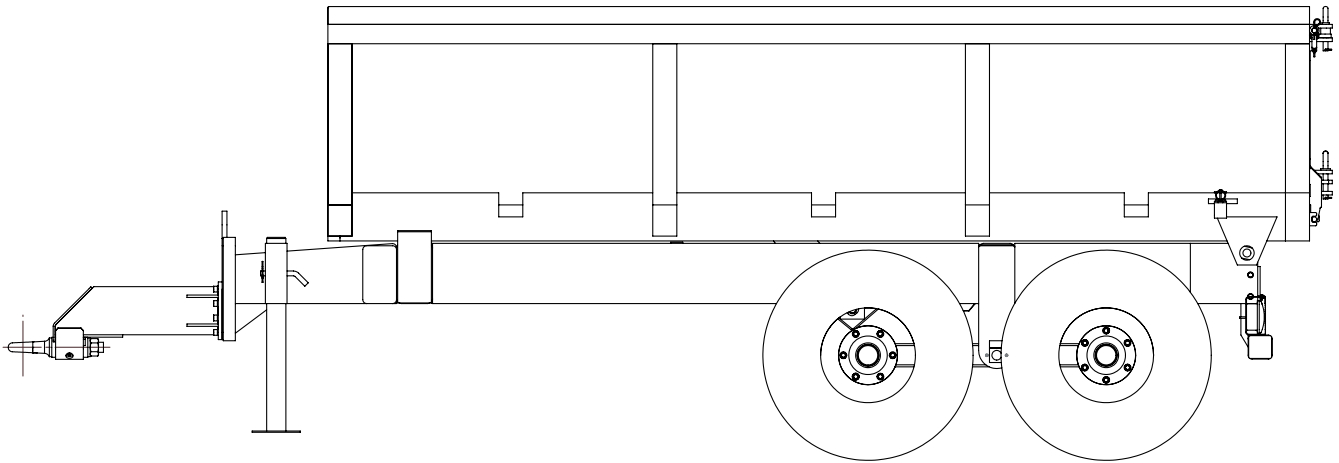
Hose label colours	
Red	Oil from pump
Blue	Oil to tank
Yellow	Brakes

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 responsibility of the user to ensure that a sufficiently powerful and heavy towing vehicle is coupled to the trailer in all situations. The use of a towing vehicle that is too small and insufficiently powerful can be hazardous for the user and the surrounding environment and can cause damage to the vehicle and trailer.



### Safety aspects when driving:



The load in the trailer must be evenly distributed. Loose items and loads that protrude over the back or sides must be secured.

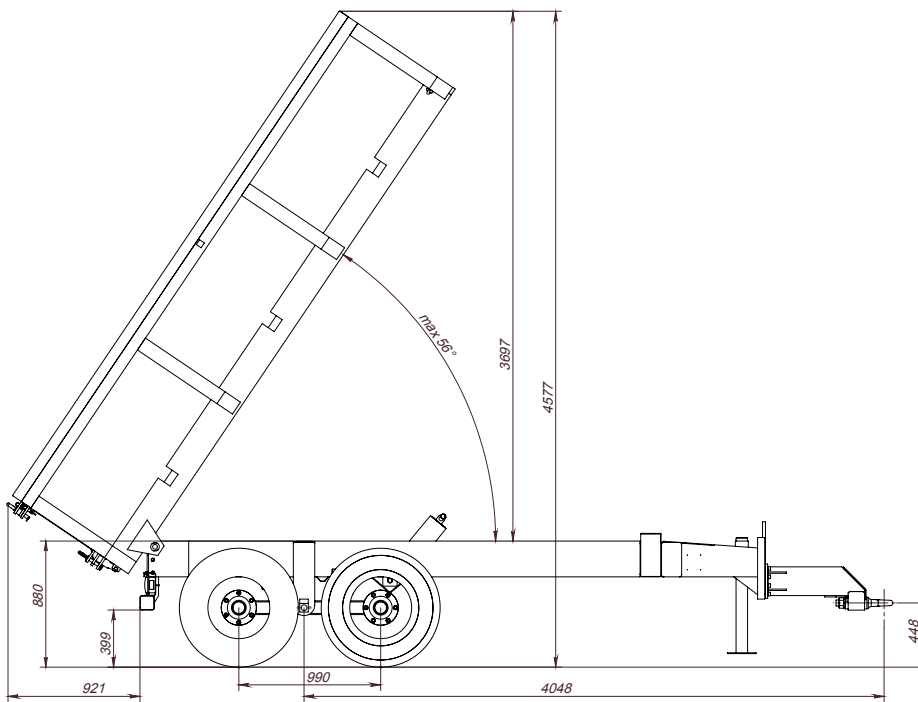
Remember that the weight of the trailer can adversely affect the tractor making it more difficult to manoeuvre.

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

Never make tight turns at high speeds.

Do not exceed the maximum loading limit for the model of trailer.

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



*Raised bed*

## WARNING!



The trailer may only be driven in transport position. It must never be driven with a raised bed. If you drive with a raised bed, there is a risk of driving into bridges, electrical power lines and other obstacles.

## WARNING!



**It is absolutely forbidden to board the trailer when it is moving.** Anyone doing so may be at risk of serious or fatal injury.

## Load on towing eyelet and coupling

Always adapt your driving to the load, road conditions and your level of experience. Do not exceed the maximum speed specified for the trailer. Make sure that you have the correct pressure on the tow hook when you are driving. Do not exceed the intended upward and downward pressures on the trailer's towing eyelet and the coupling to the hitch. The given ideal conditions and theoretical calculations indicate the following maximum load values, and it is recommended that the user observes these load values.

### Table of weights at different loads

Load* (excl. the container's dead weight)					
Load	Kg/m <sup>3</sup>	Full container 7 m <sup>3</sup>	14 m <sup>3</sup>	21 m <sup>3</sup>	27 m <sup>3</sup>
Peas, Wheat, water content 15%	800	5,600 kg	11 200	16 800	21 600
Rye, water content 15%	750	5,250 kg	10 500	15 750	20 250
Barley, water content 15%	680	4,760 kg	9 520	14 280	18 360
Oats, water content 15%	560	3,920 kg	7 840	11 760	15 120
Silage, newly harvested	850	5,950 kg	11 900	17 850	22 950
Tarmac	1 400	9,800 kg	19 600	29 400	37 800
Gravel	1 550	10,850 kg	21 700	32 550	41 850
Clay	1 800	12,600 kg	25 200	37 800	48 600
Wood chips (50% moisture content)	350	2,450 kg	4 900	7 350	9 450

\* The higher the moisture content of the material, the heavier the load. The user must take this 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 specified values are not exact but are only given as examples.

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

#### WARNING!



An incorrectly distributed load can adversely affect the steering of the tractor and trailer making them difficult to manoeuvre.

#### When braking

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

If the trailer is connected to a tractor that does not have a brake valve, the pressure in the trailer's brake system must not exceed 160 bar. The brake system can be damaged at pressures higher than this. If the pressure is greater than 160 bar, the trailer can be fitted with a pressure relief valve.

### **Working under extreme conditions**

The recommended working temperature for a BIGAB dump trailer is –20°C to +40°C. When working in temperatures below the recommended temperature, the trailer should not be loaded as heavily. When working in low temperatures, always allow the oil to circulate freely through the system for a few minutes before starting work. In very hot conditions, you should be aware that the hydraulic oil heats up drastically. At temperatures above +80°C, the oil evaporates and the seals in the system will be damaged.

### **If a DANGEROUS SITUATION ARISES**

If the trailer comes into contact with high voltage electric wires, you should do the following:

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

Do not attempt to get into or close to the trailer. Keep everybody well away from the trailer. Do not touch any part of the trailer.

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

Get out of the vehicle by jumping. Avoid touching any part of the vehicle. Avoid making your body into a channel through which the electricity can flow. Get out of the vehicle by jumping but make sure that your feet do not touch the ground at the same time. An electric field at ground level can cause fatal voltage between the legs. You should be safe at a distance of about 20 metres from the vehicle, but this naturally depends on circumstances.

## TIPPING THE TRAILER

### Safety aspects when tipping



Make sure that the towing vehicle and the trailer are securely coupled together before tipping. The tipping operation must always be controlled from inside the tractor cab.

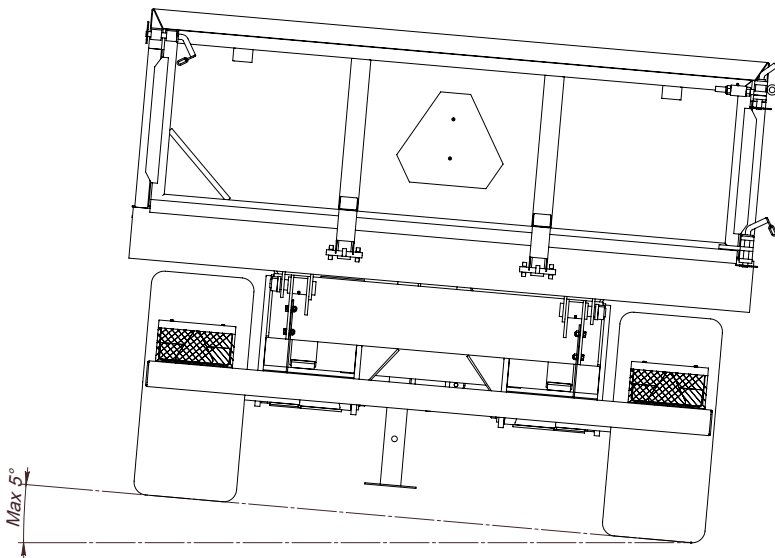
### WARNING!



**It is hazardous if the rear end of the tractor lifts.**

When the rear end of the tractor starts to lift, this is a warning that a hazardous movement has begun.

### Illustration 1

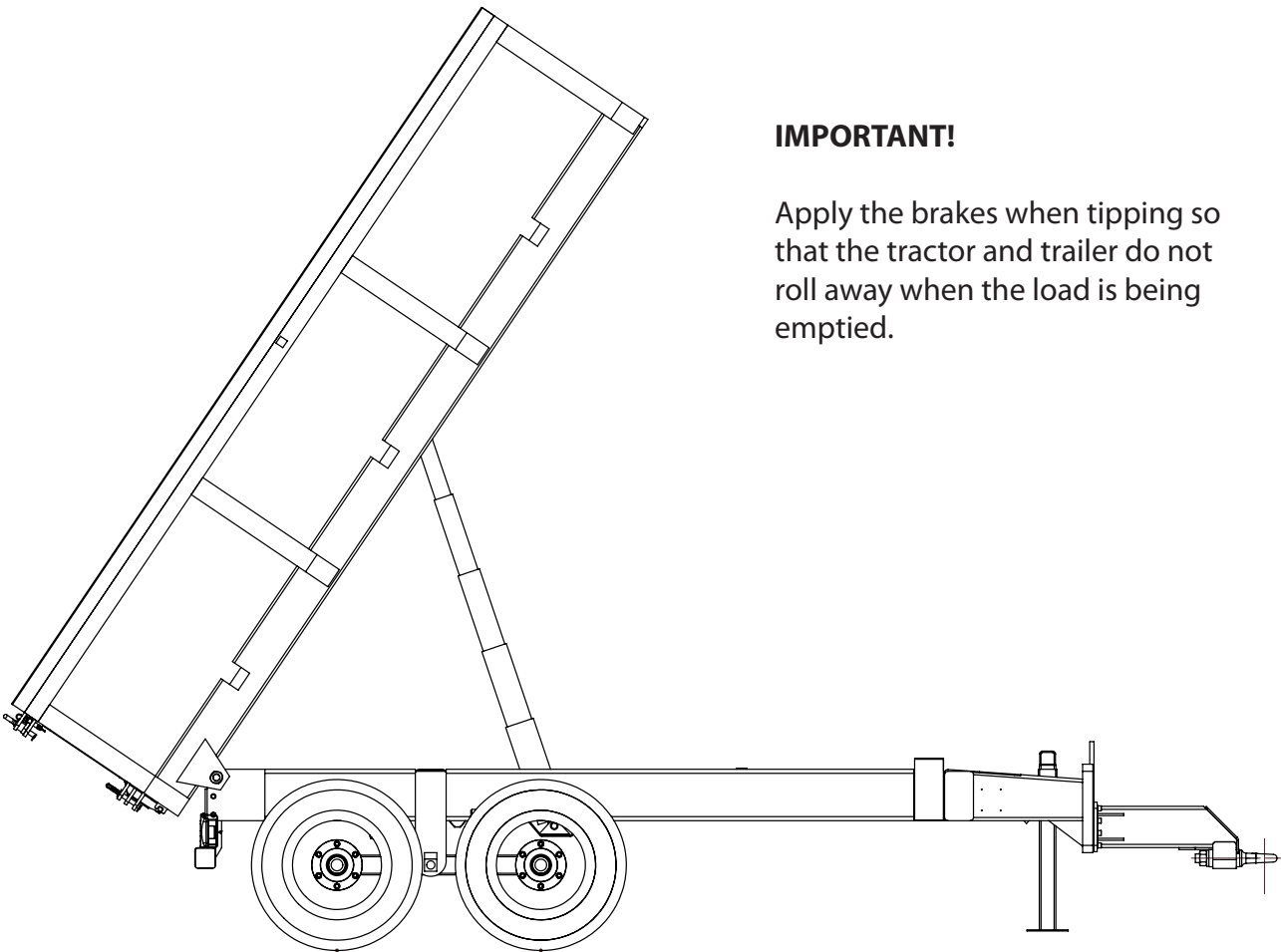


The dump trailer must be standing on a flat surface. It must not be leaning sideways by an angle of more than 5 degrees.



**Illustration 2**

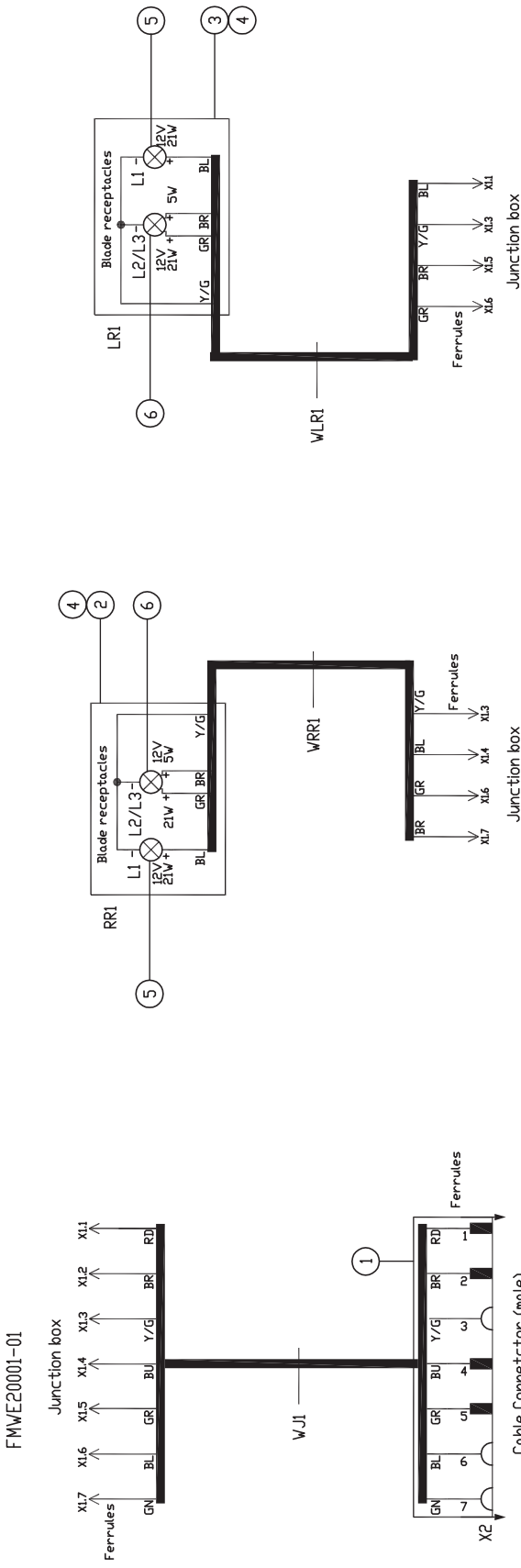
When tipping maximum loads, drive forward slowly until the trailer bed is empty. After tipping, lower the trailer bed fully before driving off. Important! Make sure that the trailer tip bed is locked in its correct position before driving.

**IMPORTANT!**

Apply the brakes when tipping so that the tractor and trailer do not roll away when the load is being emptied.

After tipping, check the tailgate to make sure there is no scrap stuck that might prevent it from shutting properly.

# WIRING DIAGRAM



Left rear lights

Righth rear lights

Cable set with plug

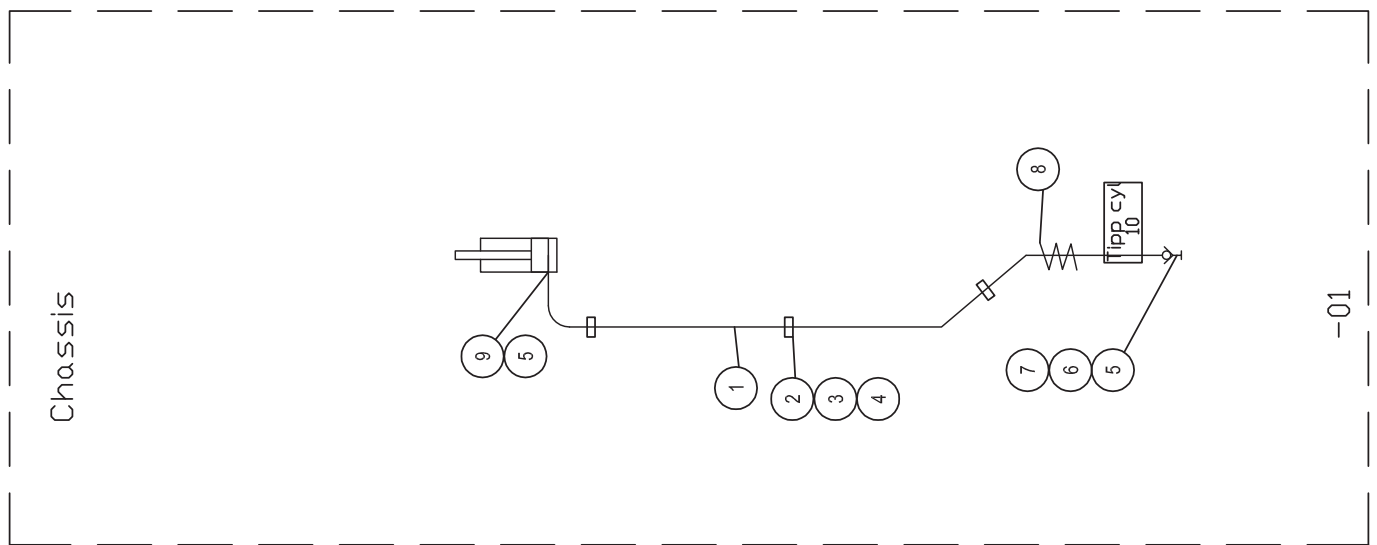
**Spare parts wiring diagram**

Number	Item number	Name	Quantity
1	920695	7-pole junction box (male)	1
2	920764R	Tail lights BIGAB 3 pole, right-hand side	1
3	920764L	Tail lights BIGAB 3 pole, left-hand side	1
4	920764G	Glass cover tail light	2
5	920745	Bulb 12V, 21W	2
6	920768	Bulb 12V 21W p21/5W	2

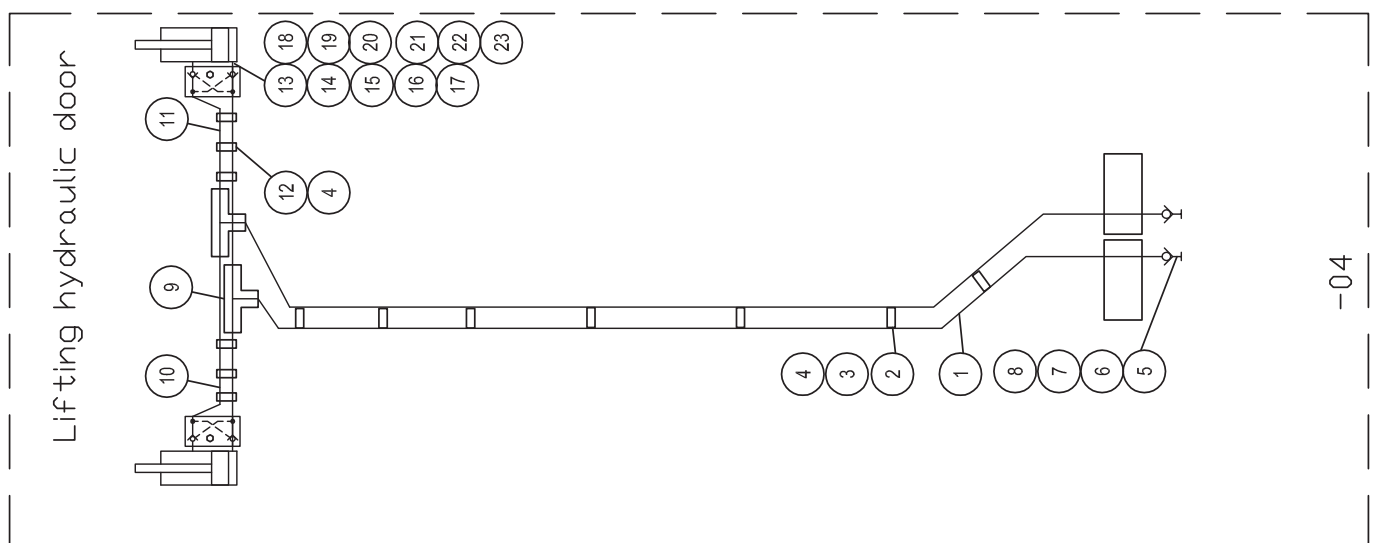
# HYDRAULICS CHART

The hydraulic system is filled with oil and tested before delivery. The hydraulic system consists of a number of different components illustrated below. Technical data and configuration depend on the trailer model (see table 1) The hydraulic system is filled with either VMGZ or SAE100R16 hydraulic oil. The oil is applied as a working fluid for the hydraulic system at continuous outdoor operation at temperatures from -50°C to +60°C.

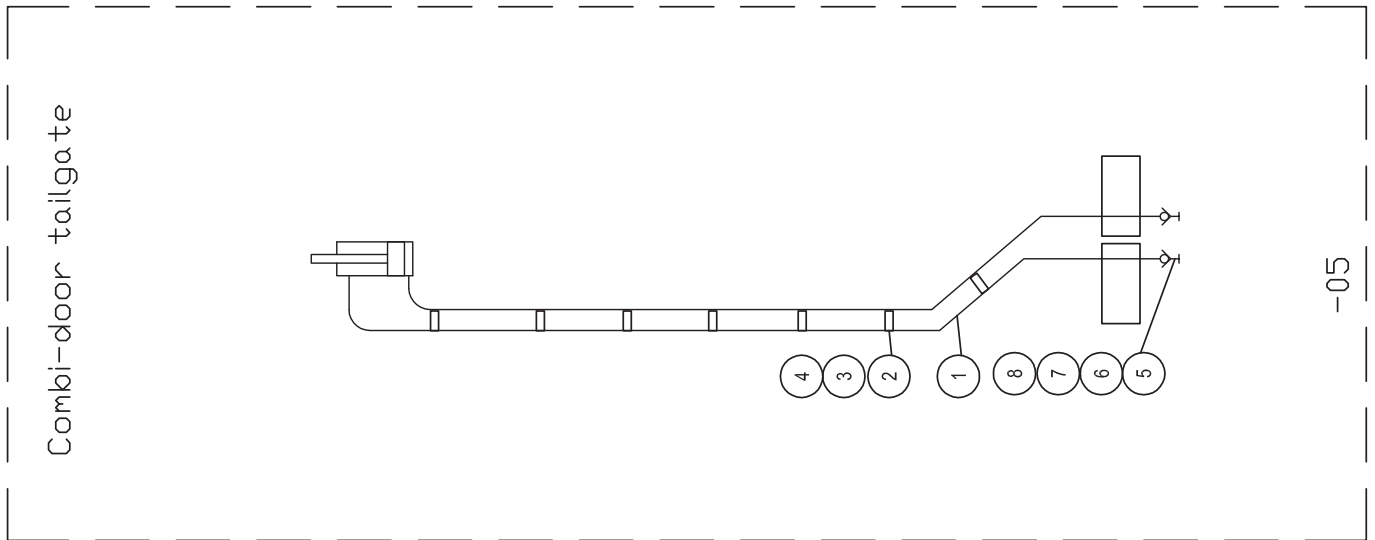
## Hydraulics chart - Chassis



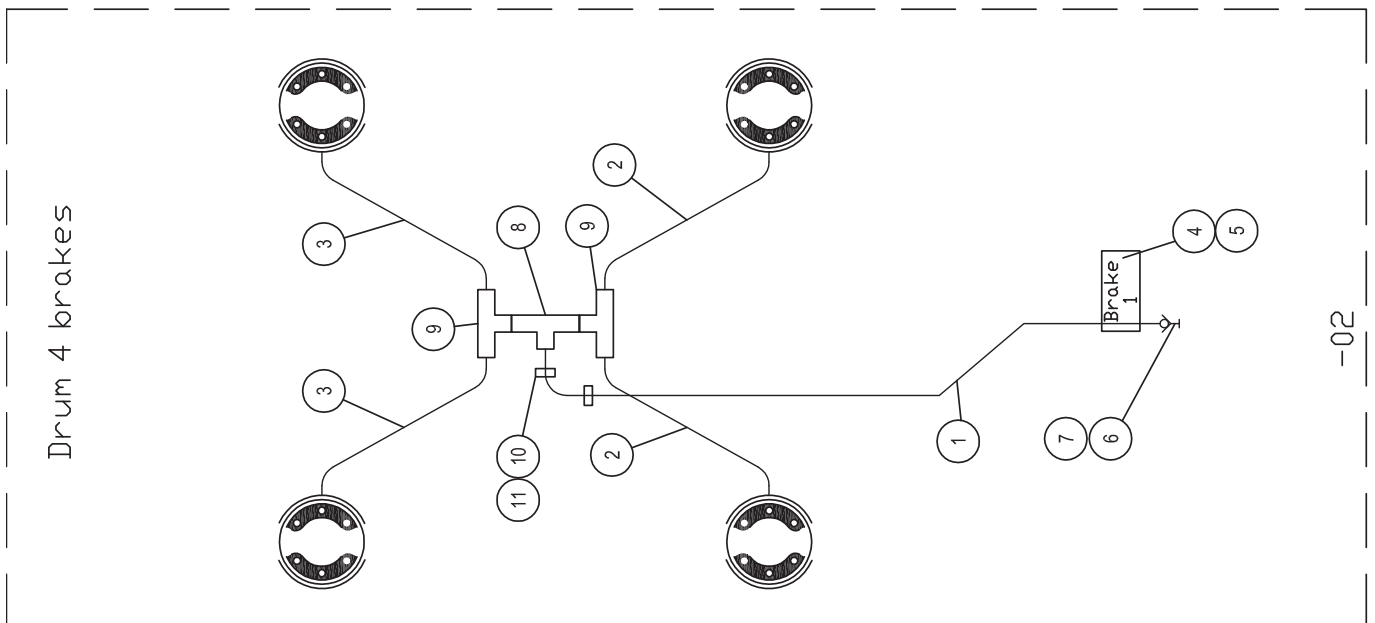
## Hydraulics chart - Hydraulic tailgate



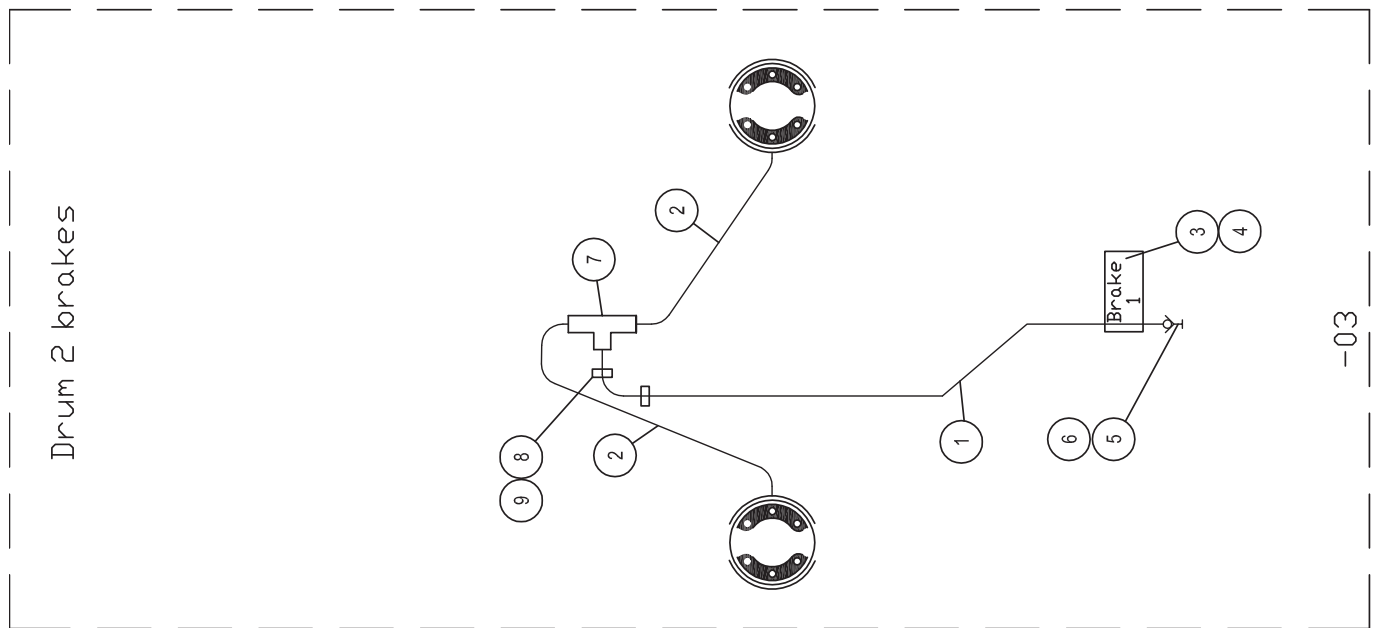
Hydraulics chart - Hydraulic tailgate with drop-down door



Hydraulics chart - Drum brakes 4-wheel



Hydraulics chart – Drum brakes 2-wheel





**Spare parts Hydraulic tailgate FMWH20006-04**

Number	Item number	Name	Quantity
1	FMWH20254	Hose 42010404-1/4(6600)-42010404	2
2	914562	Hose clamp, double 5390-42-14 d14	7
3	914566	Cover plate D 5394-12-01	7
4	906164	Hex bolt M8x35 DIN 933	13
5	9147471	Straight nipple 7019-06-18 R3/8"UFxM18UF	1
6	914584	Rubber seal 5601-01-08 R1/2"	1
7	914570	Quick-release coupling 5550-02-08 M 1/2"	1
8	914579	Dust cover 5550-04-08 Black 1/2"	1
9	914768	T-nipple 7401-04-04 1/4"UFxUFxUFT	2
10	FMWH200255	Hose 42010404-1/4(1210)-42050404	2
11	FMWH200256	Hose 42010404-1/4(1650)-42050404	2
12	914506	Hose clamp, single 5390-03-14 d14	6
13	914301	Straight pipe coupling GE12L-3/8 6003-12-07	4
14	914304	Nut M12L 6150-00-12	4
15	914306	Cutting ring B12 L/S 6149-01-12	4
16	914280	Pipe with banjo adapter fitting 09R1273 L=500	2
17	914284	Pipe with banjo adapter fitting 09R1210 L=85	2
18	914582	Rubber seal 5601-01-06 R3/8"	16
19	914441	Banjo bolt 4280-01-06	4
20	914770	T-nipple 7401-06-06 3/8"UFxUFxUFT	2
21	914716	Straight nipple 7002-06-06	2
22	914750	Cartridge nipple 7090-06-06	2
23	915147-1	Hydraulic check valve VBD-38-SF	2

## Spare parts Hydraulic tailgate with drop-down door FMWH20006-05

Number	Item number	Name	Quantity
1	FMWH20253	Hose 42010404-1/4(6600)-42010404	2
2	914562	Hose clamp, double 5390-42-14 d14	7
3	914566	Cover plate double 5394-12-01	7
4	906164	Hex bolt M8x35 DIN 933	13
5	914712	Straight nipple 7002-04-06 G1/4"UF-G3/8"UF	1
6	914584	Rubber seal 5601-01-08 R1/2"	1
7	914570	Quick-release coupling 5550-02-08 M 1/2"	1
8	914579	Dust cover 5550-04-08 Black 1/2"	1

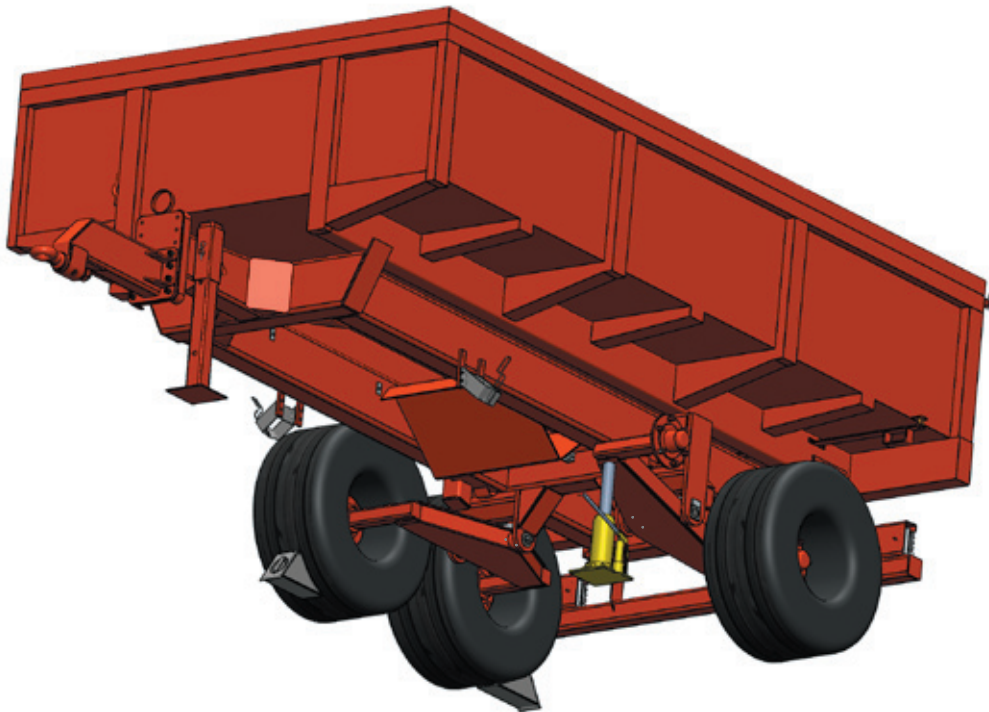
## Spare parts drum brakes 4-wheel FMWH20006-02

Number	Item number	Name	Quantity
1	FMWH20257	Hose 42050606-3/8(4800)-42020606	1
2	FMWH20258	Hose 42010404-1/4(1000)-42010604	2
3	FMWH20259	Hose 42010404-1/4(1000)-42010604	2
4	914582	Rubber seal 5601-01-06 R3/8"	1
5	914640	Brake coupling 3/8" Female ISO5676	1
6	914770	T-nipple 7401-06-06 3/8"UFxUFxUFT	1
7	914784	T-nipple 7403-06-06 3/8" UFxUFxUFT	2
8	906513	Hex bolt M6x25 DIN 912	2
9	914514	Hose clamp, single 5390-03-18 d18	2

## Spare parts drum brakes 2-wheel FMWH20006-03

Number	Item number	Name	Quantity
1	FMWH20257	H-hose 42050606-3/8"(4800)-42020606	1
2	FMWH20258	H-hose 42010404-1/4"(1000)-42010604	2
5	914582	Rubber seal 5601-01-06; R3/8"	1
6	914640	Brake coupling 5551-18-06; 3/8"F ISO5676	1
7	914770	T-nipple 7401-06-06; 3/8" UFxUFxUFT	1
8	906513	Hex bolt M6x25 DIN 912	2
9	914514	Hose clamp, single 5390-03-18 d18 group 3	2

## SERVICE/MAINTENANCE



*Position of jack when carrying out service work*

Place the jack as illustrated when carrying out service and maintenance work, if a jack is required.

### **Safety aspects related to service and maintenance:**



Clean the trailer thoroughly before carrying out repair work or storage.

The trailer must be standing on a flat surface during maintenance and service work.

Make sure that the trailer cannot move.

When servicing the trailer, turn off the vehicle engine.

Make sure that the trailer cannot move when using a jack or similar equipment - it is essential that the trailer is supported securely when raised.

Always use the safety support when carrying out service work when the trailer bed is raised. The trailer must be empty when carrying out service work when the trailer bed is raised. See illustration below.

Never attempt to carry out any maintenance work on the hydraulic system until you are absolutely certain that there is no hydraulic pressure.

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

Never attempt to locate a leakage from hoses or couplings with 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 do get oil in your eyes, flush them immediately with cold water and seek medical help at once.

### **WARNING!**



**It is absolutely forbidden to lean under a raised trailer bed unless it is secured**

## MAINTENANCE/SERVICE

### **General information:**

Service and maintenance must be carried out regularly in order to guarantee your safety and problem-free use.

Maintenance work can be carried out without any specialist tools. Most of the maintenance operations can be performed by the user.

Locate the problem as well as you can to avoid having to open the system, unless this is absolutely necessary.

Any parts that are dismantled must not come into contact with dirt.

Keep spare parts in their packaging until they are required.

We recommend that adjustment and repair of valves is carried out by trained service personnel.

### **Daily maintenance:**

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

Carefully inspect the towing eyelet's safety features.

Check the hydraulic system for leaks and hoses for damage.

Inspect each feature carefully.

Check the oil level.

### **Weekly maintenance:**

Regularly wash the trailer with a sponge or soft brush and mild soap solution.

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

Inspect the operation of the trailer.

Check the hydraulic pressure.

Check that the brakes are working properly.

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

Check the direction indicators, lamp glass covers, reflectors and lighting.

### **Monthly maintenance:**

Check the air pressure in all tyres.

Make sure there is sufficient lubrication on the sliding surfaces.

Clean the hydraulic cylinders and lubricate their spherical plain bearings

Inspect the hydraulic hoses for damage.

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

### **Changing oil**

Change the oil at the same time as you change the oil in the tractor. Please refer to the tractor's instruction 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 warm water in a high-pressure washer. This dissolves the grease at the bearing points.

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

Clean the hydraulic cylinder piston rod.

Inspect the hydraulic valves. If a leak is detected, replace the damaged valve.

Inspect the hydraulic hoses. Visually inspect the hydraulic hoses and coupling pipe. If a leak or rupture is detected, replace the hose.

If necessary, top up with oil or change the oil.

Check the operation of the device.

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

## Changing seals

Replacement of seals should be carried out by an authorised workshop.

**Note!** Never operate the hydraulic system if the oil level falls below the lowest mark

## Clean and inspect the lighting

Replace the bulb if faulty. If the bulb continues to blow or malfunction, troubleshoot to find out the cause.

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

Check the wire insulation and joints and the insulation sleeving for wear and damage.

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

**Note!** Plug contacts must only be attached or detached with dead circuits.

## Maintenance of the brake system

This trailer can be optionally fitted with a hydraulic brake system.

The brake system must be inspected regularly. Test the brakes at least once a week when the trailer is being used.

Make sure that no grease, lubricant or oil enters the brakes. If any type of oil enters the brakes, there is a risk of it lubricating the brake discs and thereby reducing the friction. This adversely affects brake performance. 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 removing the brake drum 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 noises. The brakes must always be tested after adjustment.

If brake performance is uneven, apply the brakes, tow the trailer slowly for a couple of hundred metres, then test the brakes again by braking the tractor and trailer at normal speed. Repeat if necessary until the brakes work properly. If necessary, contact our service department!

## Maintenance of the pneumatic units (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 at the side of the trailer.

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

Visually inspect the pneumatic hoses and coupling pipe. If a leak or rupture is detected, replace the hose.

Check the operation of the device.

## Maintenance of wheels

Before the trailer is used, check the wheels by making sure the bolt connections are secure and that they are regularly checked and tightened.

Check the air pressure.

Standard equipment fitted on the dump trailer:

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

Name	Hose	Tyre tread	Wheel rim dim.	Width mm	Diameter mm	Load Kg	Air pressure Bar
400/60x15.5"		Rib 900	13.00x15.5"	405	875	2725	4,50

The trailer can be fitted with the following additional equipment:

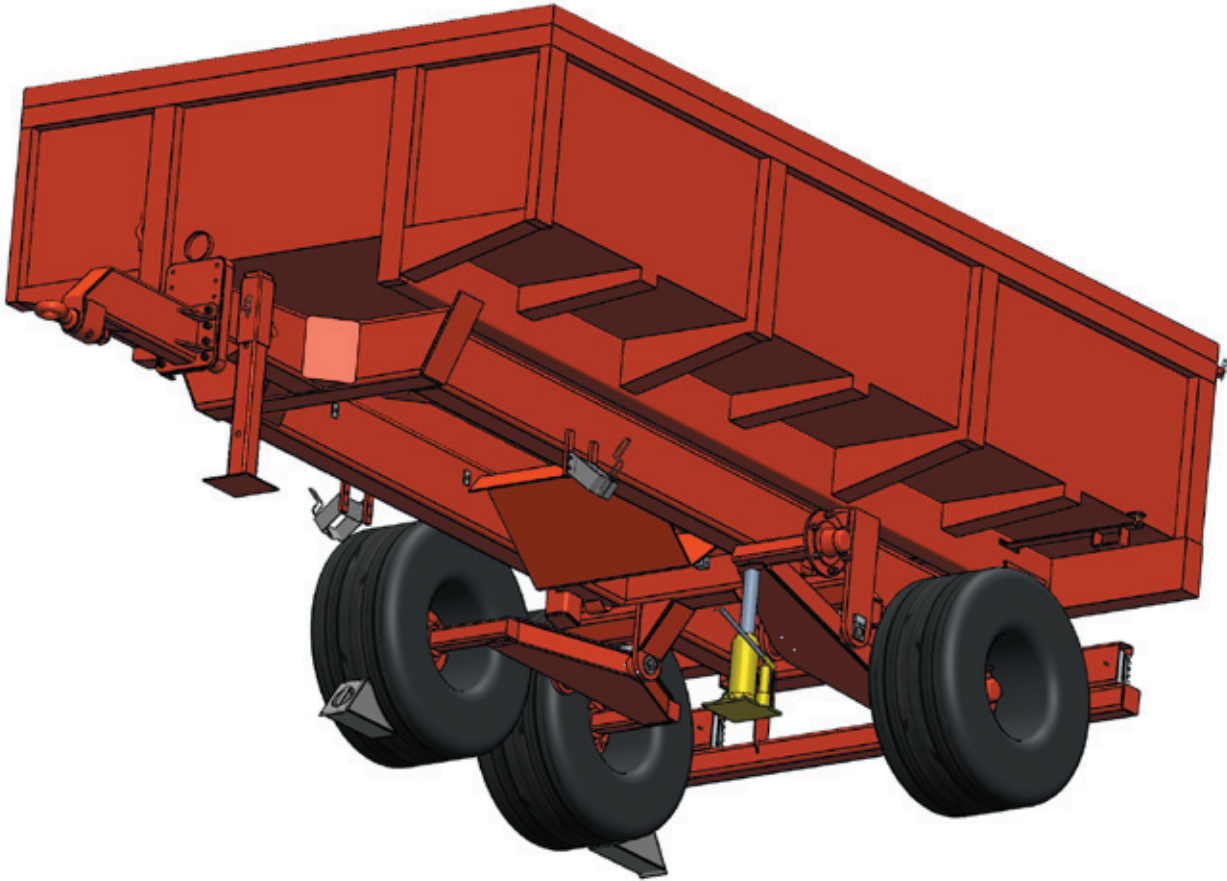
### 19.0/45x17" A8. 40km.

Name	Hose	Tyre tread	Wheel rim dim.	Width mm	Diameter mm	Load Kg	Air pressure Bar
19.0/45x17	YES	AW-708	16.00x17"	491	866	2800	3,80



## Changing tyres

When changing tyres, the jack must be placed as illustrated below:



## Storage

Long term storage in cold and/or damp conditions is not advisable.

All metal parts can be recycled and must be taken to a recycling facility at the end of the trailer's useful life.

## 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 lack of knowledge when welding can result in sudden breaks in the structure.

## Scrapping instructions

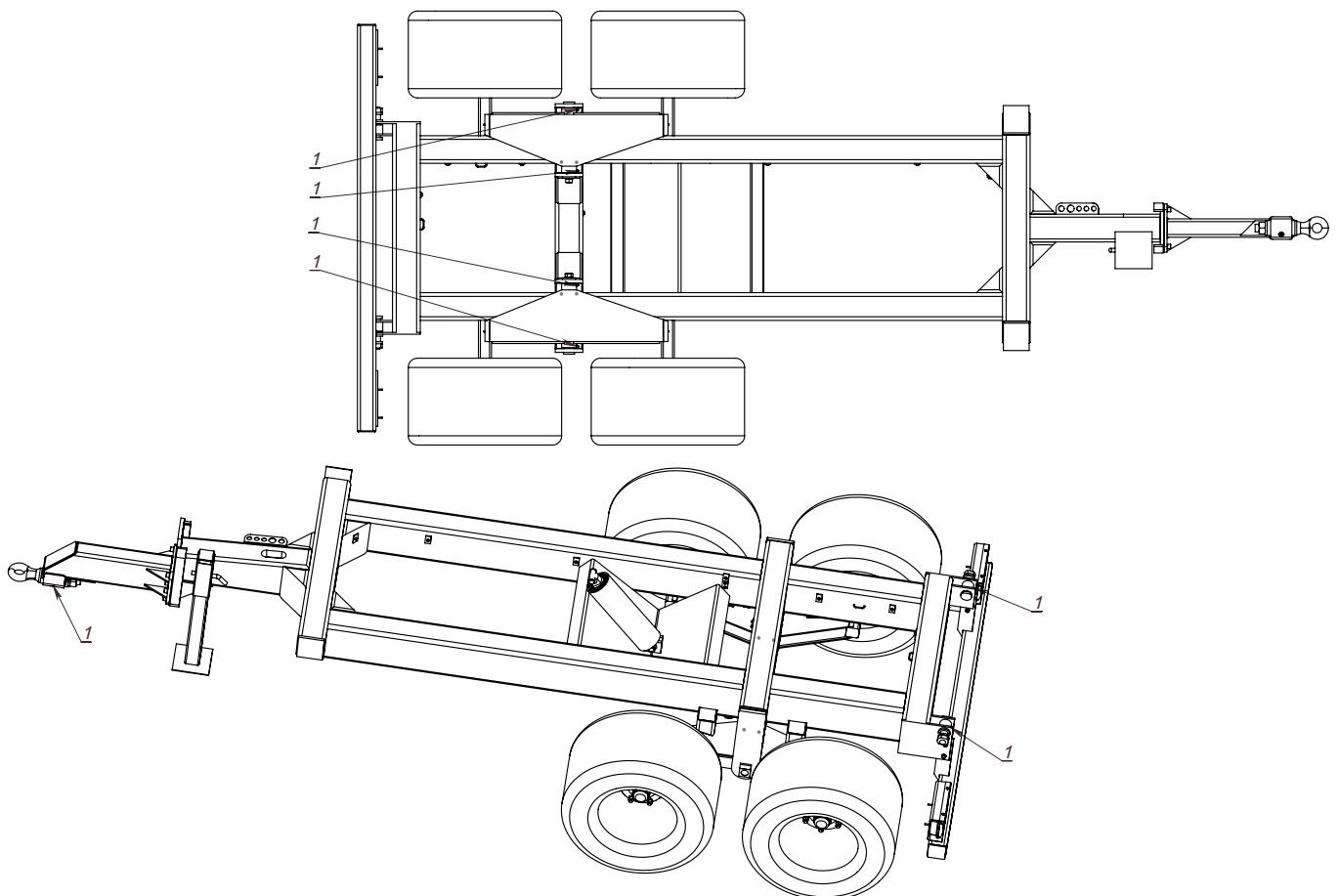
If the machine or its components are to be scrapped, the materials must be dismantled, sorted and taken for recycling or destruction to a local waste facility.

## Lubrication schedule

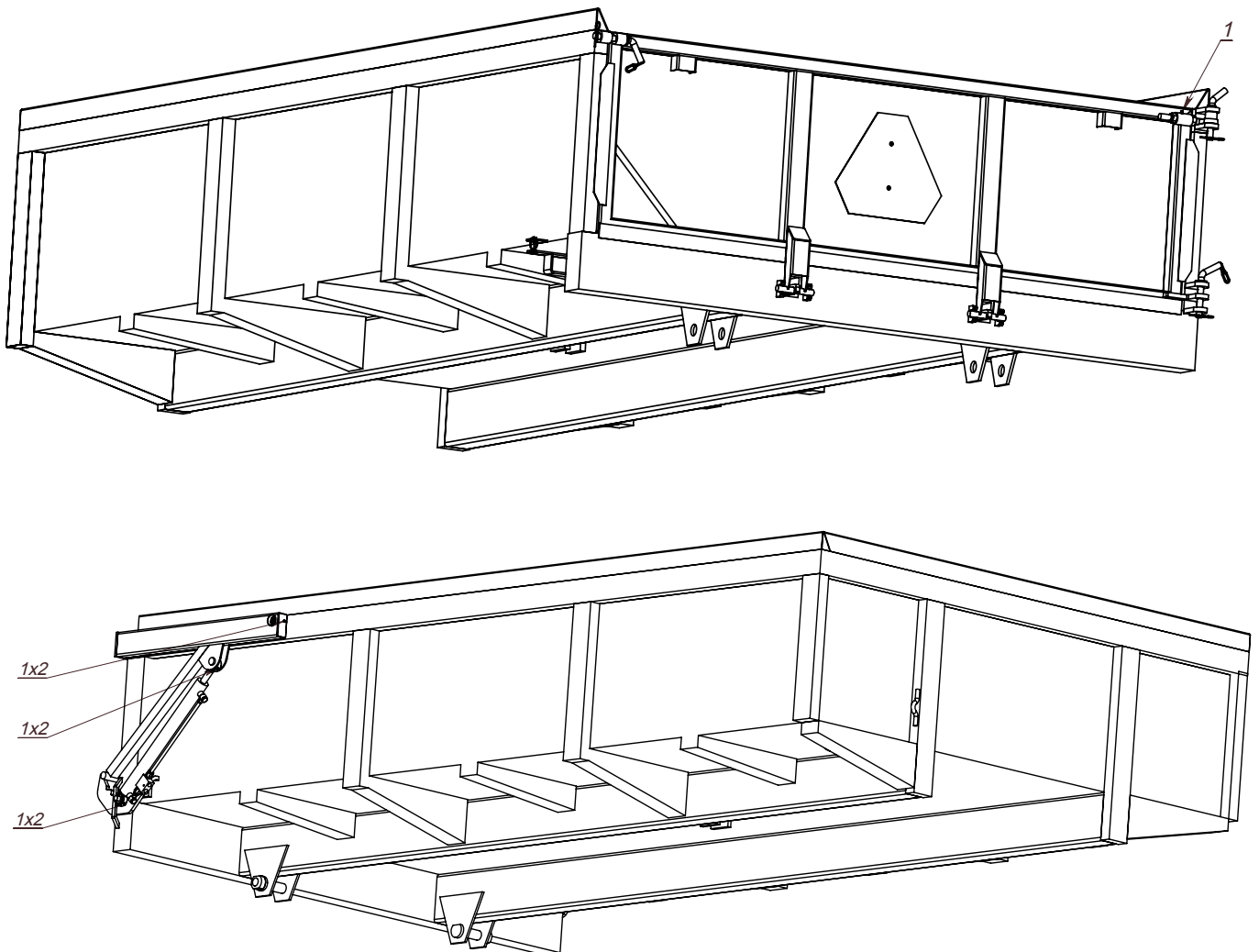
The wheel hubs must be lubricated twice a year with multi-purpose lubricant. Lubricate the inside bearing in the hub carefully to make sure that no lubricant enters the brake plate or brake linings. Other parts that must be lubricated 4 to 6 times a year:

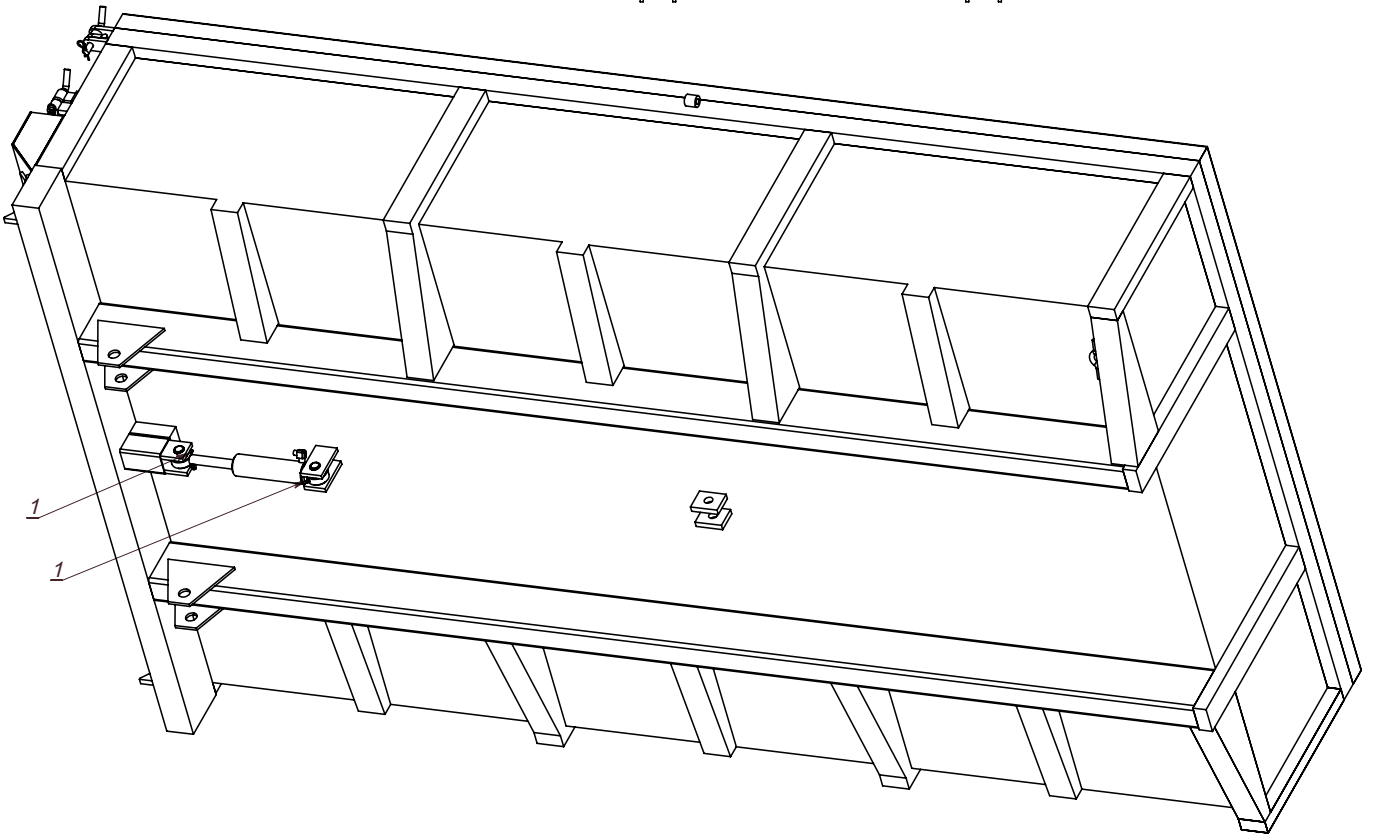
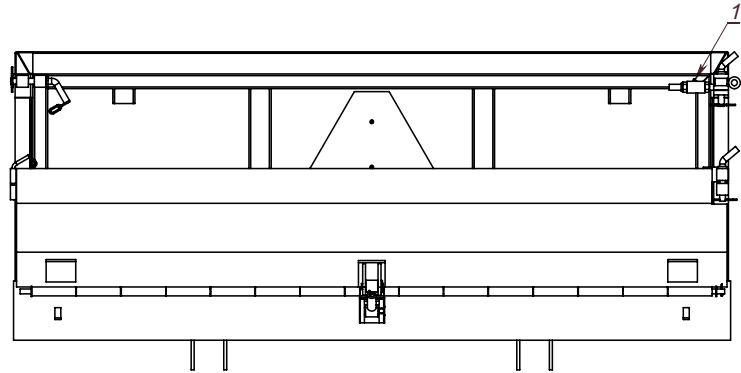
Bogie boxes	Use multi-purpose lubricant
Tipping pins	Use multi-purpose lubricant on right/left side
Tipping piston bracket	Use multi-purpose lubricant on upper and front brackets
Tipping piston	Always keep the upper protruding section oiled
Towing eyelet	Use multi-purpose lubricant
Tailgate door locks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

## Lubrication schedule trailer



**Lubrication schedule Container**





## TROUBLESHOOTING

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

### Problem when driving

Fault symptoms	Reason and action
The trailer moves more heavily than normal	The brakes may be on or the wheel bearings may be worn. Adjust the brakes and/or replace the wheel bearings.
The trailer moves more heavily than normal	Low air pressure. Fill with air.
Trailer rocks from side to side a lot when moving	Low air pressure. Fill tyres with air.

### Problems with the electrical equipment

Fault symptoms	Reason and action
Problem with lights	Bulb not working. Replace the bulb.
	Check and clean the electrical connectors.
Wire damaged or broken.	Check and repair the wire.

### Problems with the hydraulic equipment

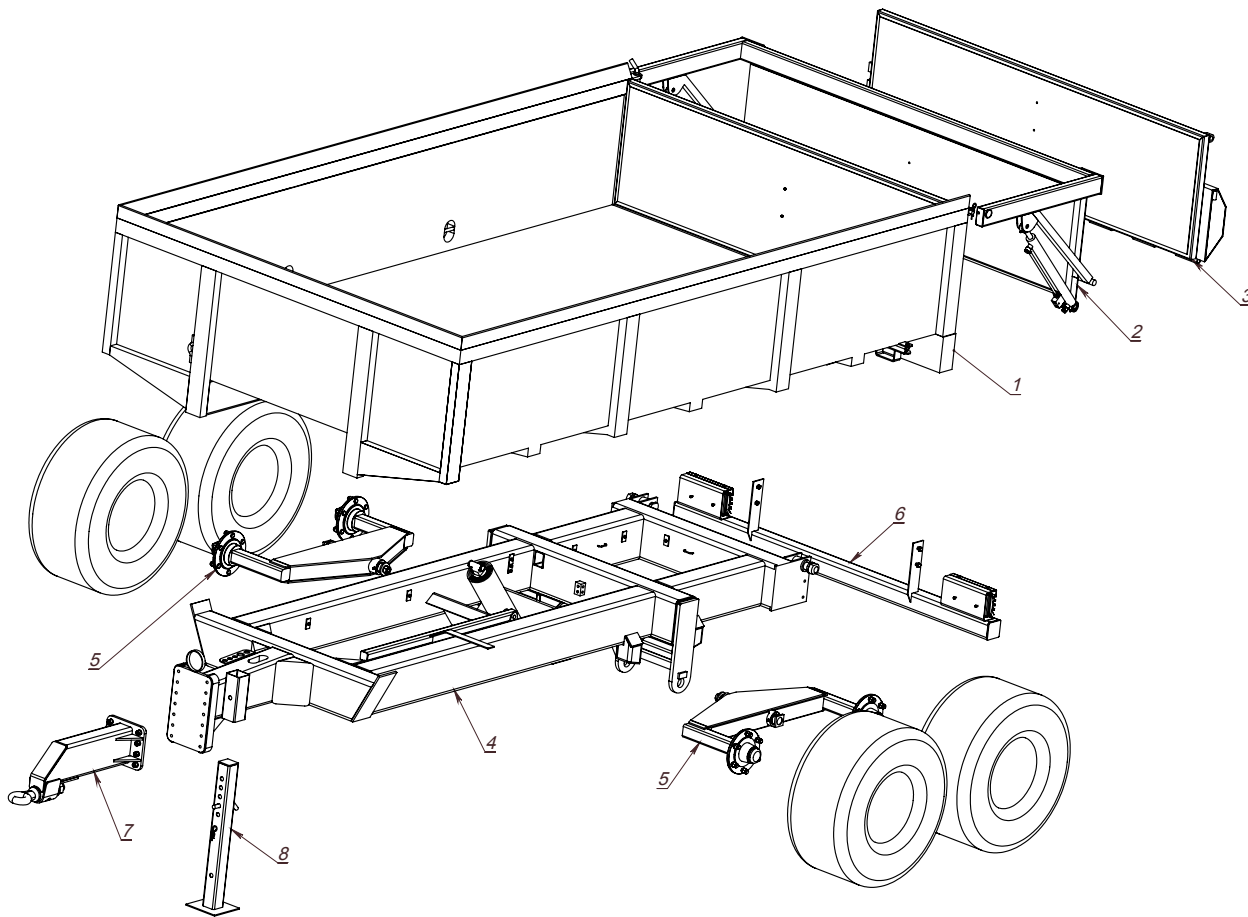
Fault symptoms	Reason and action
Air in the hydraulic system	Locate the leaky point and eliminate the fault. Check the oil level. Check the quick release couplings between the tractor and trailer
Low oil pressure.	Adjust the oil level.
Hydraulic cylinder piston seal leaking.	Contact an authorised workshop.
Noise coming from the hydraulic system.	Air has entered the system. Locate where the air is entering and eliminate the fault.
Oil leak	Replace ruptured hose. Adjust/tighten the hose connections.

**Problem with brake system**

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

## SPARE PARTS

### Exploded view of the BIGAB T 10 Dump Trailer

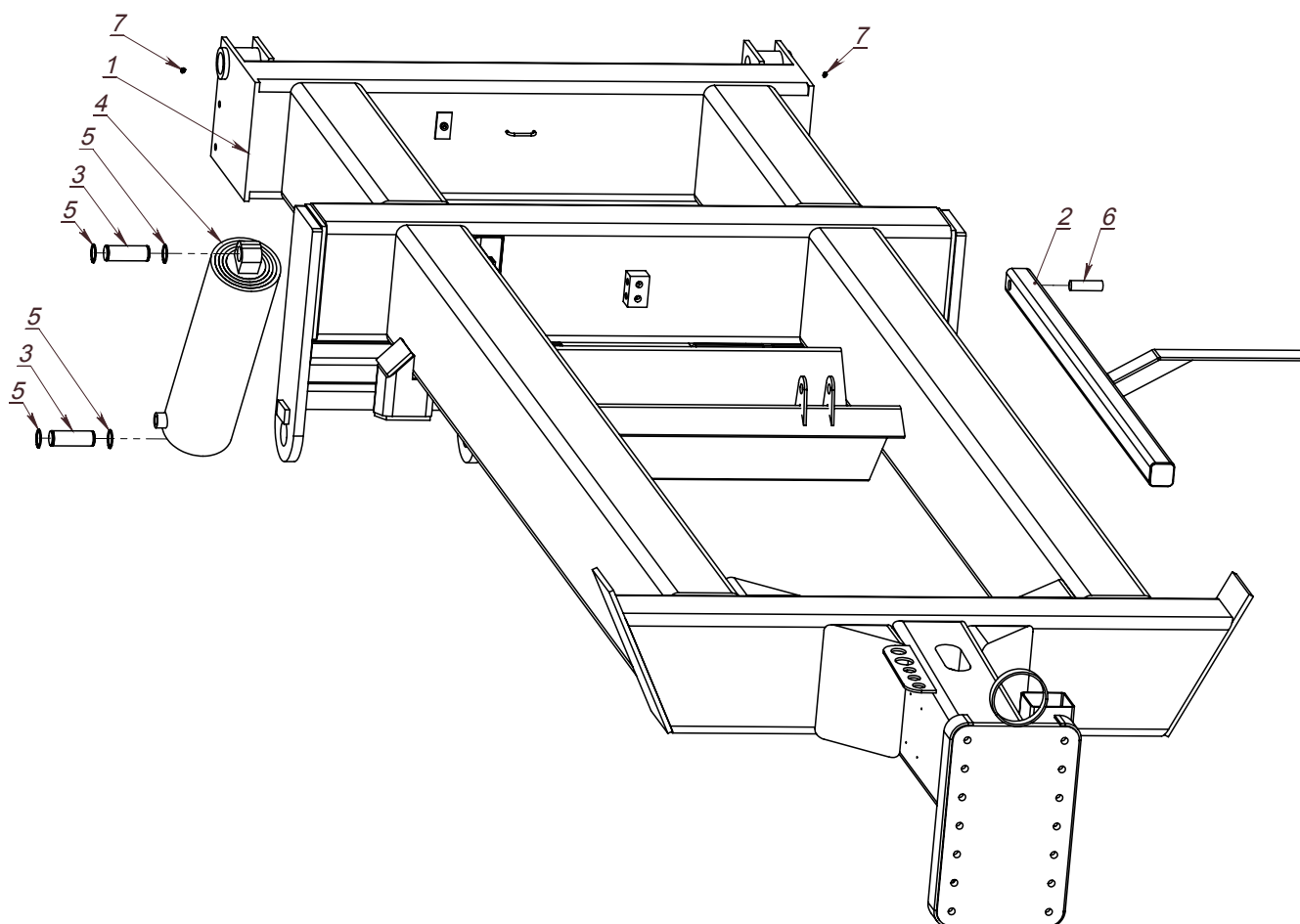


### Complete spare parts list for Dumper Trailer FMWA20095

#### Bigab T10 FMWA20095

Number	Name	Quantity
1	Mechanical tailgate Bigab T10	1
2	Hydraulic tailgate with drop-down door Bigab T10	1
3	Hydraulic tailgate Bigab T10	1
4	Chassis frame Bigab T10	1
5	Bogie sides T7-T12/T10	2
6	Rear frame Bigab T10	1
7	Drawbar 8-12 - 14-17	1
8	Stabiliser legs Bigab T10	1
9	Electrical system T10	1

**Chassis frame**



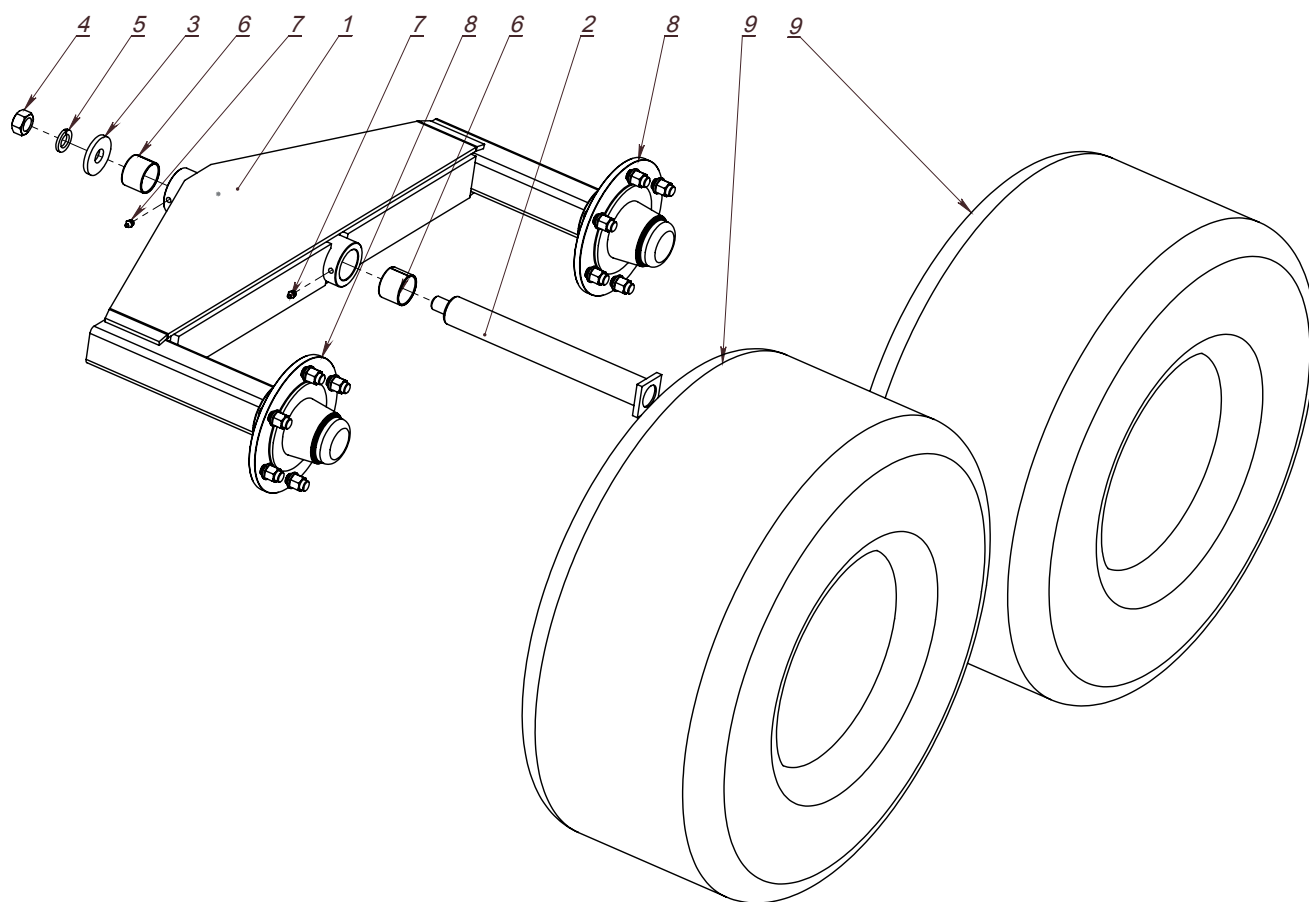
**Spare parts list chassis frame FMWS20104**

**Bigab T10 FMWS20104**

Number	Item number	Name	Quantity
1	FMWS20104	Chassis frame Bigab T 10	1
2	FMWS20165	Safety support Bigab T10	1
3	FMWP02386	Pin Grnd30-88	2
4	313210	Hydraulic cylinder 142/80x1540	1
5	911260	Locking ring 30x1.5 SGA30, DIN471	1
6	FMWP03008	Pin Rnd20-65	1
7	930107	Lubricating nipple M6x1.0 DIN 71412	2
	FMWH20006-01	Hydraulics chart chassis	1



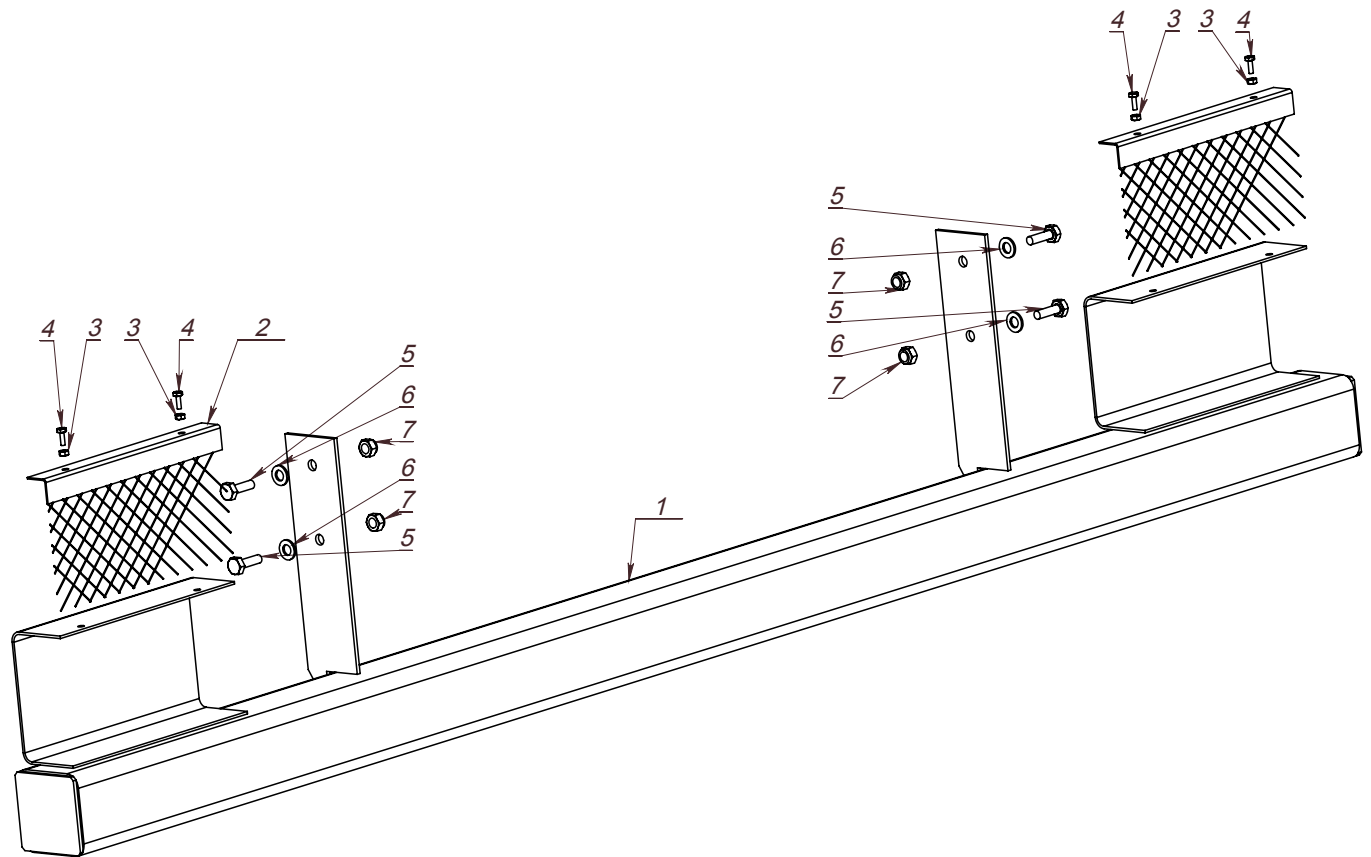
## Bogie sides



## Spare parts list, bogie sides

Number	Item number	Name	Quantity
1	FMWA00074	Bogie sides T7-T12/T10	2
2	FMWS00021-030	Axle Grnd50 - 438(393)	2
3	FMWP00080	Washer Ø70/Ø25x8	2
4	907255	Nut M24 fzb DIN 934	2
5	908640	M24 Spring washer DIN 127	2
6	909150	Slide bearing 50-55-40 P	4
7	930105	Lubricating nipple 1/8" DIN 71412	4
8	916115	Stub axle 70x400 6M18	4
9	916515	Tyre 400/60-15.5	4

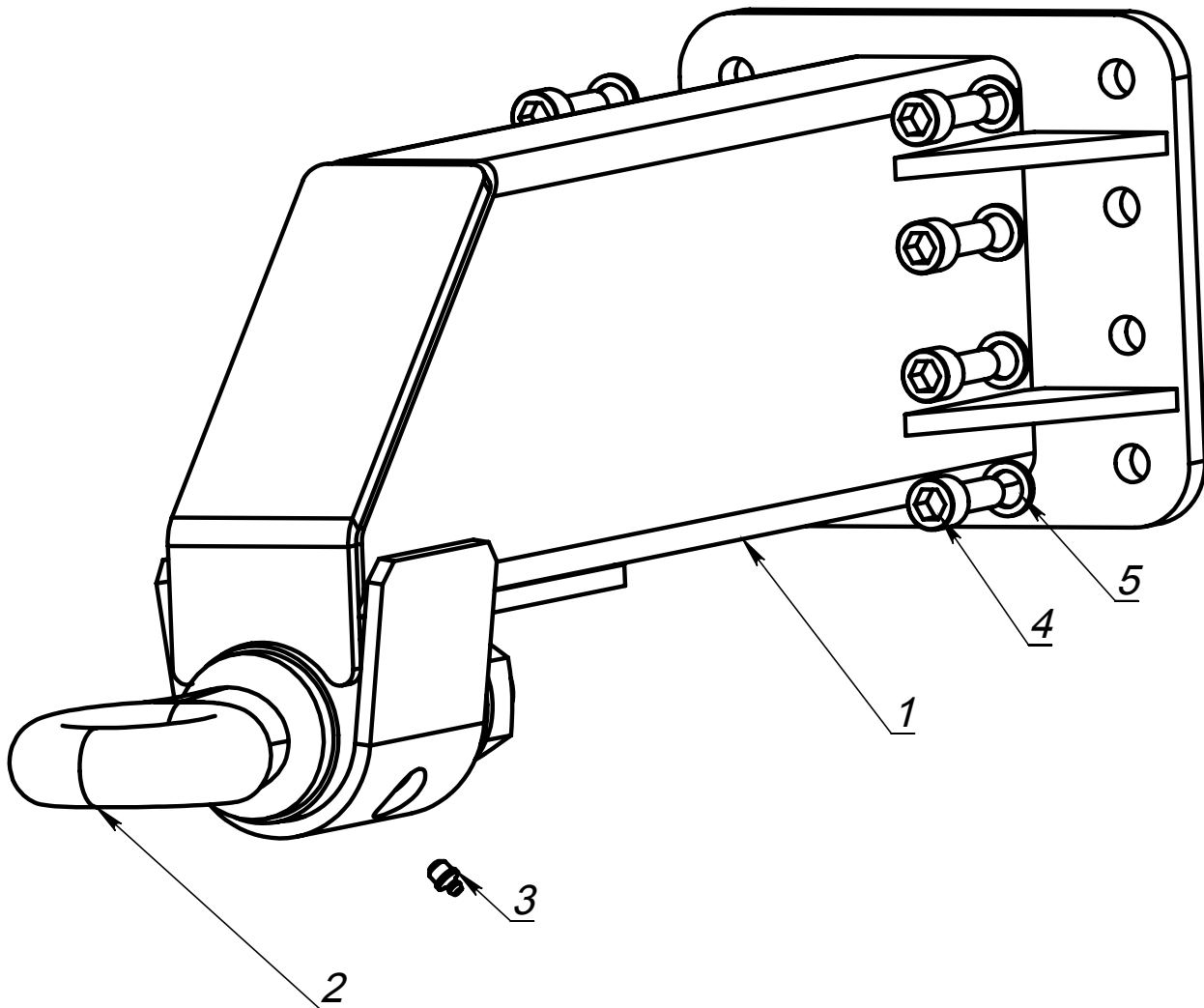
## Rear frame



### Spare parts list Rear frame FMWA20098

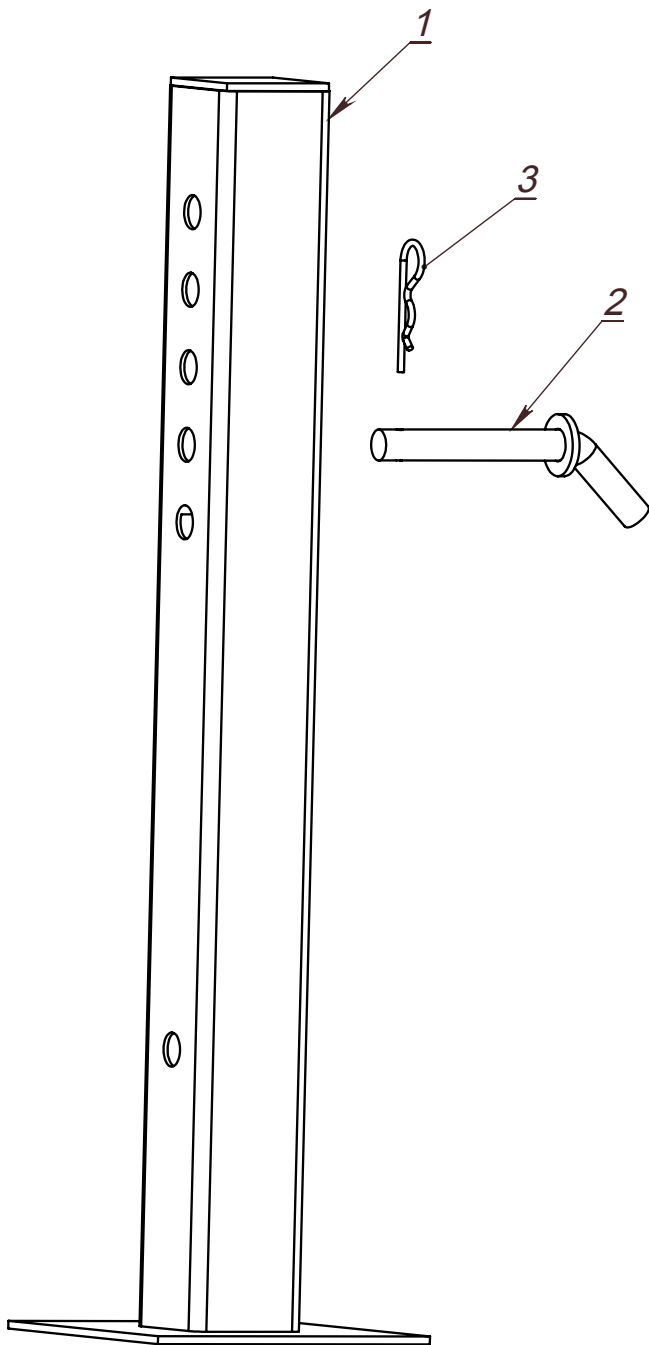
#### Bigab T10 FMWA20098

Number	Item number	Name	Quantity
1	FMWS200162	Rear frame Bigab T10	1
2	FMWS20137	Metal cover for tail lights Bigab T10	1
3	907116	Nut M6 DIN 934	4
4	906140	Hex bolt M6x16 fzb DIN 933	4
5	906198	Hex bolt M12x35 DIN 933	4
6	908229	Flat washer M12 DIN 125	4
7	907228	Nylock locking nut M12 DIN 985	4

**Drawbar**

**Spare parts list, drawbar**

Number	Item number	Name	Quantity
1	FMWS20093	Drawbar 812-1417	1
2	920111	Towing eyelet ISO 5692	1
3	930105	Grease nipple 1/8" DIN 71412	1
4	906538	Hex bolt M16x45 DIN 912	8
5	906539	Nord-Lock washer M16 DIN 25201	8

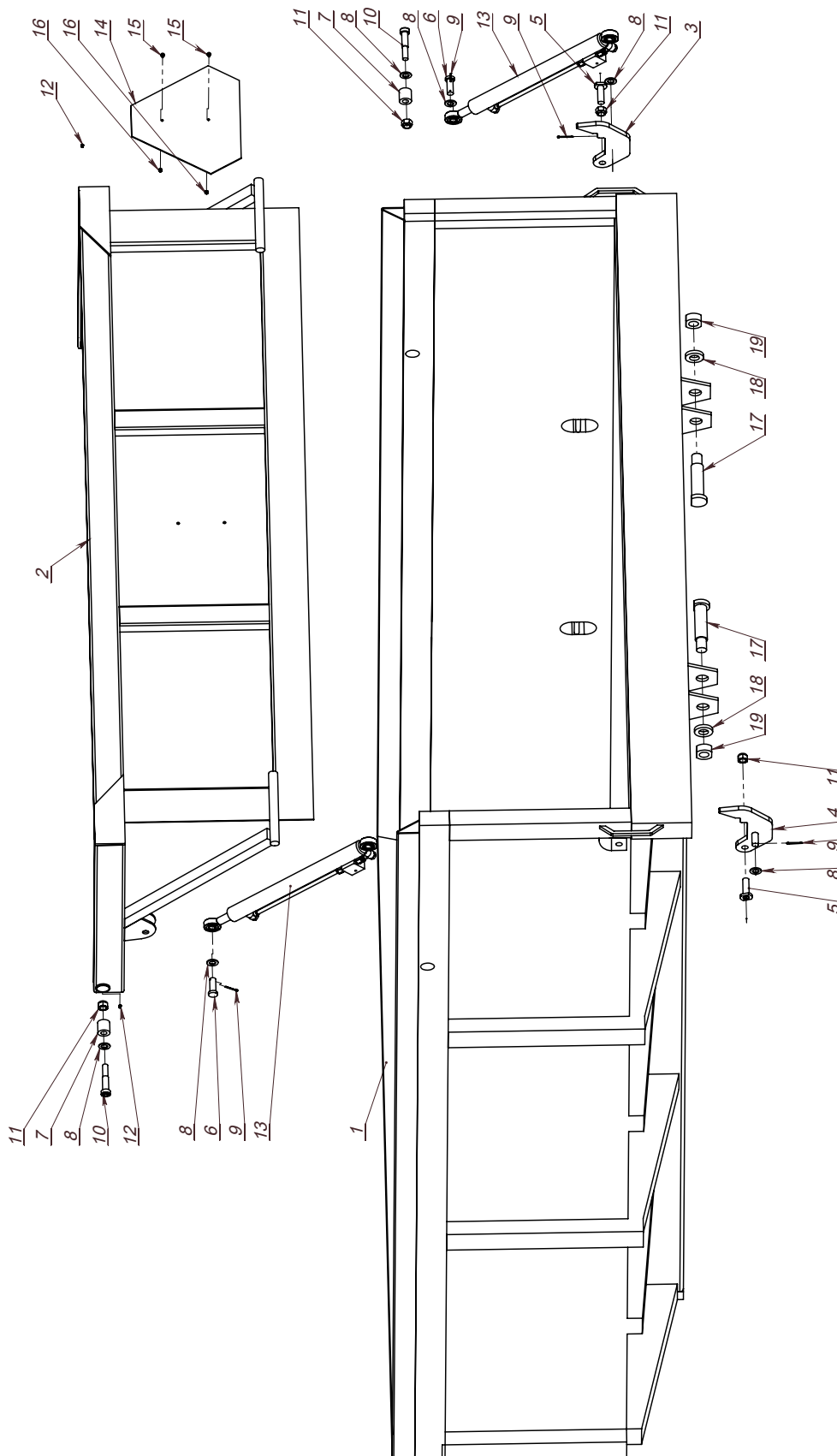
**Stabiliser legs**



**Spare parts list stabiliser legs FMWA20125**

Bigab T10 FMWA20125

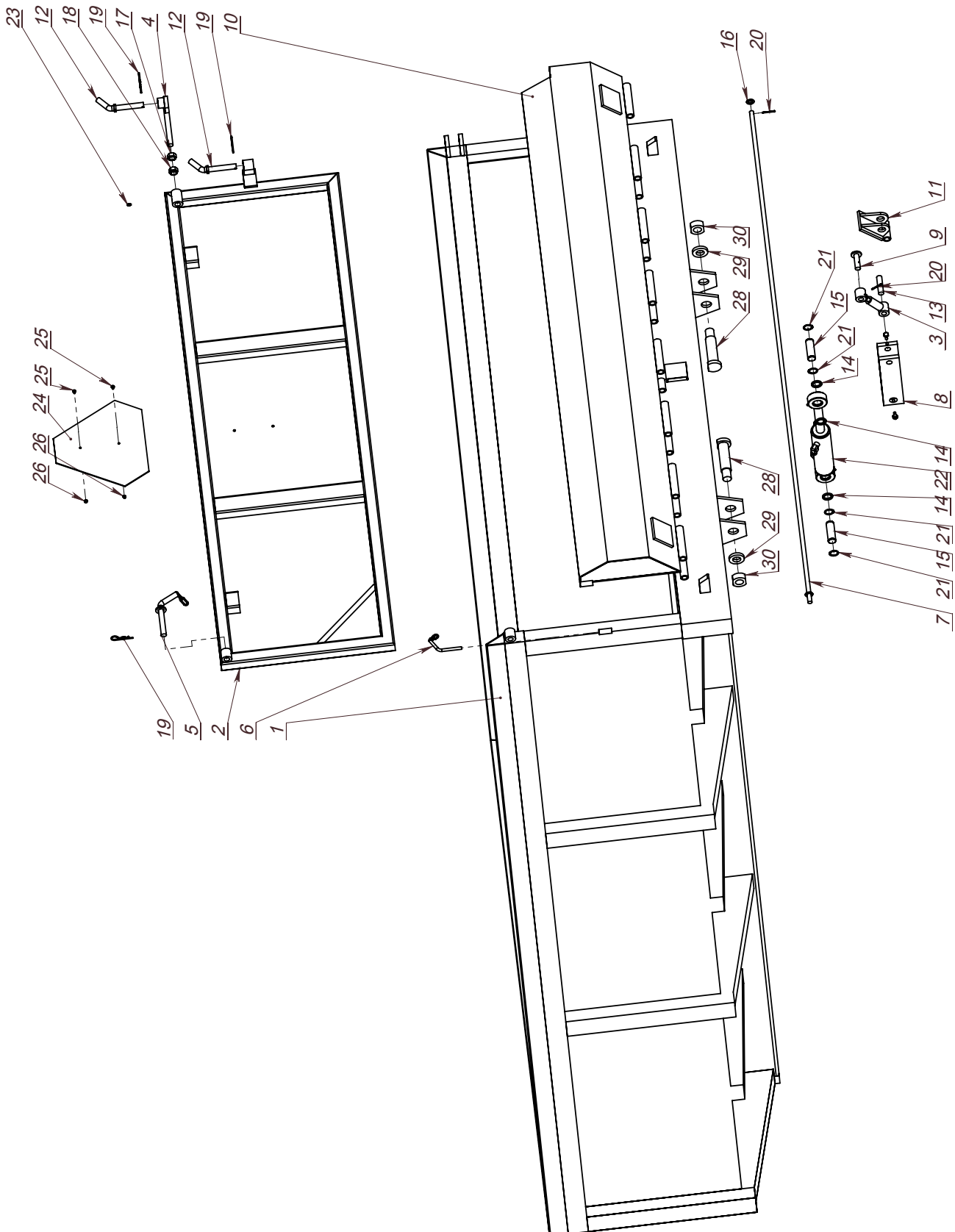
Number	Item number	Name	Quantity
1	FMWS20105	Stabiliser legs Bigab T10	1
2	FMWS20163	Locking shaft for stabiliser legs Bigab T10	1
3	920231	Spring pin, single Ø4-72 DIN 11024	1

**Hydraulic tailgate**


**Spare parts hydraulic tailgate FMWA20105**

Hydraulic tailgate Bigab T10 FMWA20105

Number	Item number	Name	Quantity
1	FMWS20131	Container with hydraulic tailgate Bigab T10	1
2	FMWS20133	Hydraulic tailgate Bigab T10	1
3	FMWS20134	Locking arm Bigab T10	1
4	FMWS20134-01	Locking arm Bigab T10	1
5	FMWS20135	Axle Grnd20-70(62	2
6	FMWP02774	Pin Rnd30-60	2
7	FMWP02775	Bushing HB45/20-40	2
8	908270	Flat washer M20 DIN 125	6
9	908102	Split pin 3.2x40 DIN 94	4
10	906260	Low head hex bolt M20x100 DIN 6912	2
11	907246	Nylock locking nut M20 DIN 985	4
12	930107	Lubricating nipple M6x1.0 DIN 71412	2
13	313166	Hydraulic cylinder 40/25x500	2
14	920150	SMV sign	1
15	906138	Phillips screw M6x12 DIN 7985H	2
16	907210	Locking nut. Nylock M6 DIN 985	2
17	FMWP02752	Axle Grnd60-178	2
18	FMWP02753	Washer Grnd60-11	2
19	FMWP02754	Nut Grnd80-23	2
	FMWH20006-04	Hydraulic chart - hydraulic tailgate	1

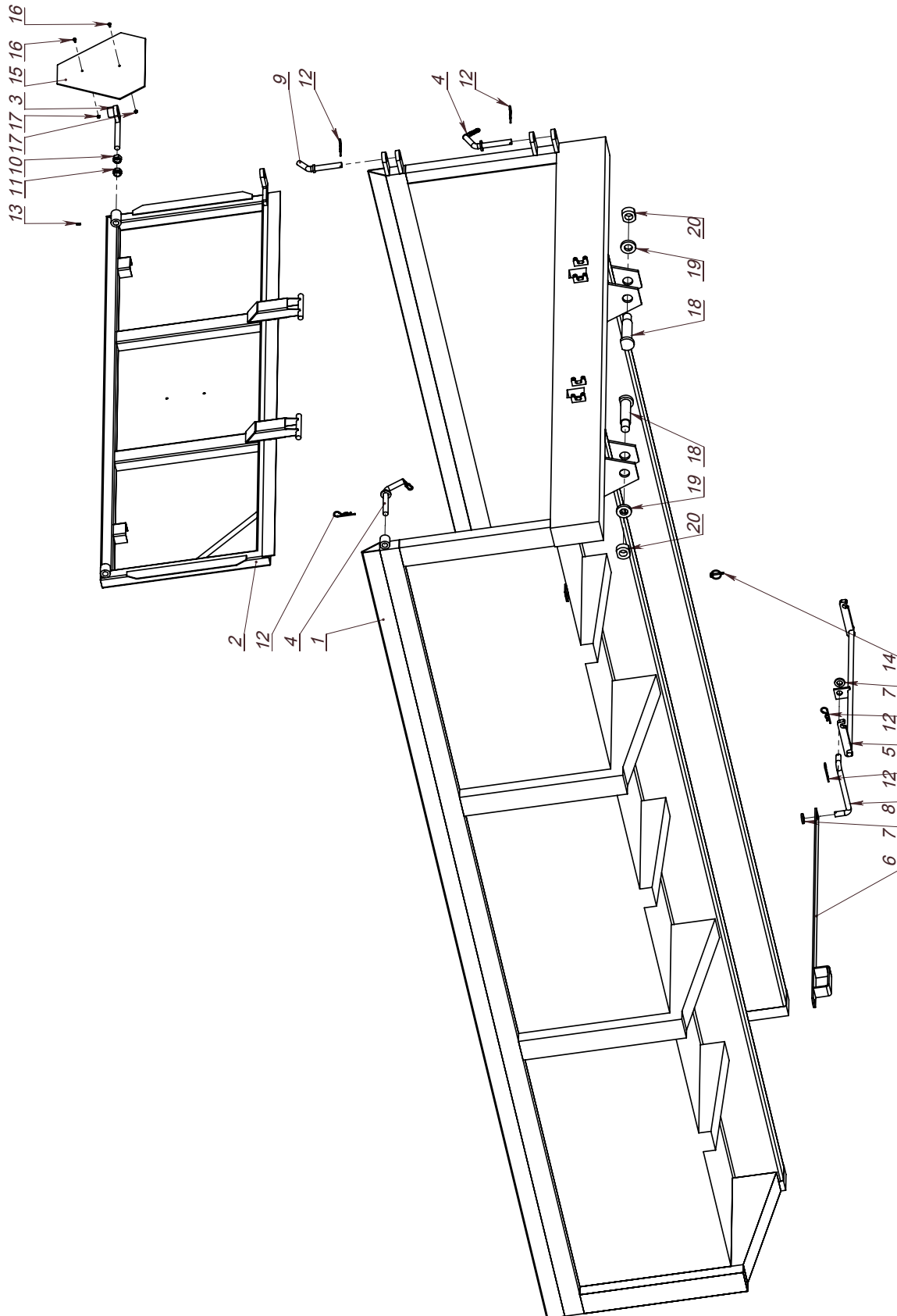
**Hydraulic tailgate with drop-down door**


## Spare parts lists tailgate with drop-down door FMWA20116

### Hydraulic tailgate with drop-down door FMWA20116

Number	Item number	Name	Quantity
1	FMWS20125	Container - T10 Hydraulic tailgate with drop-down door	1
2	FMWS20126	Rear door Bigab T10	1
3	FMWA20117	Link Bigab T10	1
4	FMWS20120	Hinge for door Bigab T10	1
5	FMWS20121	Hinge bolt Rnd20-230	1
6	FMWS20128	Hinge bolt Rnd10-150	1
7	FMWS20127	Axle Rnd16-2380	1
8	FMWS20129	Link Bigab T10	1
9	FMWS20132	Axle Grnd20-74(66)	1
10	FMWS20124	Hydraulic tailgate Bigab T10	1
11	FMWS20166	Support drop-down door Bigab T10	1
12	FMWP02763	Hinge bolt Rnd20-199	2
13	FMWP02773	Pin Rnd20-80	1
14	FMWP02779	Bushing HB45/20-5	4
15	FMWP02386	Pin Grnd30-88	2
16	908267	Flat washer M16 DIN 125	1
17	907243	Nut M20 DIN 934	1
18	907246	Nylock locking nut M20 DIN 985	1
19	920231	Spring pin, single Ø4-72 DIN 11024	3
20	908102	Split pin 3.2x40 DIN 94	2
21	911260	Locking ring 30x1.5 SGA30, DIN 471	4
22	313116	Hydraulic cylinder 63/32x160	1
23	930107	Lubricating nipple M6x1.0 DIN 71412	1
24	920150	SMV sign	1
25	906138	Phillips screw M6x12 DIN 7985H	2
26	907210	Nylock locking nut M6 DIN 985	2
27	906173	Hex bolt M10x25 DIN 933	1
28	FMWP02752	Axle Grnd60-178	2
29	FMWP02753	Washer Grnd60-11	2
30	FMWP02754	Nut Grnd80-23	2
	FMWH20006-05	Hydraulics chart - drop-down door	1



**Mechanical tailgate**


## Spare parts list mechanical tailgate FMWA20097

## Bigab T10 FMWA20097

Number	Item number	Name	Quantity
1	FMWS20119	Container mechanical combi hung tailgate Bigab T10	1
2	FMWS20118	Mechanical combi hung tailgate Bigab T10	1
3	FMWS20120	Hinge for door Bigab T10	1
4	FMWS20121	Hinge bolt Rnd20-230	2
5	FMWS20122	Link Bigab T10	1
6	FMWS20123	Lever Bigab T10	1
7	FMWP02764	Washer PLT6-40x40	2
8	FMWP02769	Link Rnd20-353	1
9	FMWP02763	Hinge bolt Rnd20-199	1
10	907243	Nut M20 DIN 934	1
11	907246	Nylock locking nut M20 DIN 985	1
12	920231	Spring pin, single Ø4-72 DIN 11024	5
13	930107	Lubricating nipple M6x1.0 DIN 71412	1
14	920230	Ring pin 6x32x45 DIN 11023	1
15	920150	SMV sign	1
16	906138	Phillips screw M6x12 DIN 7985H	2
17	907210	Nylock locking nut M6 DIN 985	2
18	FMWP02752	Axle Grnd60-178	2
19	FMWP02753	Washer Grnd60-11	2
20	FMWP02754	Nut Grnd80-23	2