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SINGLE-AXLE AGRICULTURAL TRAILER FOR LIVESTOCK TRANSPORT

T-678 (KURIER – 10)

ORIGINAL INSTRUCTIONS FOR USE AND OPERATION

IDENTIFICATION OF THE MACHINE

Symbol/Type	T-678
Symbol KTM	1026-696-357-308
Serial no.

The serial number is stamped on the rating plate and on the front beam of the front beam of the trailer. The rating plate is riveted to the front beam of the load box.

During purchase, check the conformity of the serial number stamped on the trailer with the serial number given in the warranty card, in the sales documents and in the instruction manual.

Quality Control Mark

NOTE!

The manufacturer reserves the right to introduce, in the manufactured machines, structural alterations facilitating servicing and improving the quality of their work. The information on significant design changes are communicated to the user by means of enclosed information (annexes).

Comments and observations about the design and operation of the machine should be sent to the manufacturer. This information will allow objective evaluation of the machine, and serve as guidelines in their further modernization.

Before the operation, the user should be familiar with this manual and follow all recommendations. This will ensure safe maintenance and trouble-free operation of the machine.

If the information contained in the manual will prove to be not fully understood, seek help at the sales point and ask where the machine was purchased or go directly to the manufacturer

Manufacturer's Address:

CynkoMet Sp. z o.o.
ul. Fabryczna 7 W
16-020 Czarna Białostocka
phone: (085) 710 24 56

**INSTRUCTIONS FOR USE AND SERVICE CONSTITUTES BASIC EQUIPMENT
OF THE MACHINE!**

The machine is designed in accordance with the applicable standards, documents and legal regulations currently in force.

DETERMINATION OF DIRECTIONS IN THE MANUAL

Left side - side to the left hand of the observer facing in the forward direction of travel of the machine.

Right side - the right-hand side of the observer facing in the direction of travel of the machine forward.

DECLARATION OF CONFORMITY

CynkoMet sp z o.o.

16-020 Czarna Białostocka ul. Fabryczna 7 Polska
acting as the producer
declare with full responsibility that the machine:

KURIER TRAILER

Type / Model: T-678

Year of production:

Serial number:

BRIEF DESCRIPTION OF THE MACHINE AND ITS FUNCTIONS:

Kurier Trailer. The trailer's chassis consists of the following assemblies: the lower frame, drawbar are welded constructions made from steel sections and sheets. The basic carrying elements are two stringers connected to each other via crossbars. The trailer's load box consists of the upper frame with wooden floor and walls made of water-resistant plywood. The trailer is intended for transport of livestock on farms and on public roads.

To which this declaration relates complies with the requirements:

- Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006 on machinery, and amending Directive 95/16/EC (OJ L157 of 09.06.2006, pages 24-86)
- Regulation of the Minister of Economy of 21 October 2008 on essential requirements for machines (Journal of Laws of 2008 no 199 item 1228)

For the conformity evaluation, the following harmonized standards have been used:

- PN-EN ISO 4254-1 Agricultural machinery – Safety – Part 1: General requirements of 2014.
- PN-ISO 11684:1998P Tractors, machinery for agriculture and forestry, powered lawn and garden equipment – Safety signs and hazard pictorials – General principles of 1998
- PN-EN ISO 12100-1:2012 Safety of machinery – General principles for design – Risk assessment and risk reduction of 2012.
- PN-EN ISO 13857:2010 Safety of machinery – Safety distances to prevent hazard zones being reached by upper and lower limbs of 2010.

Person authorized to prepare technical documentation:

Head of Constructors and Technologists Address: Fabryczna 7, 16-020 Czarna Białostocka, Poland

The declaration loses its validity if the machine is modified or rebuilt without the manufacturer's consent.

Czarna Białostocka Place and date of declaration

The identity and signature of the person authorized
to make declarations


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INSTRUCTIONS FOR USE AND OPERATION

1. INTRODUCTION.

This manual describes the basic principles of safe use and operation of agricultural trailers.

 <p>NOTE!</p>	<p>NOTE!</p> <p>Before using a trailer, user should carefully read the instructions completely. Before running a trailer, it must be checked for operational safety.</p>
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If the information contained herein will prove to be not fully understood, ask the manufacturer or the sales point where it was purchased for help.

Particularly important information and recommendations, the observance of which is absolutely necessary in the text are highlighted in bold or preceded by the word **"CAUTION!"**.

Information, descriptions of threats and precautions as well as commands and orders related to the safety of use are highlighted in the manual with a


sign  and also mentioned in the chapter "SAFETY OF USE".

2. PURPOSE OF THE TRAILER.

The trailer is intended for transport of livestock. During transport, animals are to be secured in a manner disabling their uncontrolled movement during transport. It can be used to transport goods, agricultural crops, construction materials, etc.

The braking, lighting and signaling systems meet the requirements of road traffic regulations.

The trailer is adapted to cooperation with agricultural tractors fitted with a hitch for single-axle trailers.

	<p>NOTE!</p> <p>The trailer must not be used contrary to its purpose, and in particular:</p> <ul style="list-style-type: none">• for transport of humans or animals not secured against uncontrolled movement,• for transporting bulk hazardous toxic materials when there is a possibility of causing environmental contamination,• to transport machinery and equipment, whose center of gravity affects the stability of the trailer,• to carry loads, machines, etc. that affect the unequal load or overload of axles,• for transport of cargo not secured against uncontrolled movement,
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3. SAFETY OF USE.

3.1. GENERAL SAFETY AND ACCIDENT PREVENTION REGULATIONS

- **Before using a trailer, user should carefully read the instructions completely.** During operation, observe all instructions contained in the manual.
- **Before running a trailer, it must be checked for operational safety.**
- Entering the trailer is possible only during absolute motionlessness of the machine and when the engine is switched off.
- The trailer should be combined with tractors meeting the manufacturer's requirements specified in table 2.
- When coupling and decoupling the machine to and from the tractor, you must exercise caution.
- Animals found on the trailer affecting the its center of gravity must be secured by tying to special rails fastened on the side walls and on the front wall,,
- The speed of driving must always be adapted to the environmental conditions. Avoid travel on rough terrain and unexpected turns.
- Exceeding the permissible load can cause accidents on the road and damage to the machine.
- When cornering, you should take into account the inertia of the machine. The trailer may be started only when all protective equipment is engaged.

- Before you start, check if the trailer has any loose parts
- Within additional elements which are force operated (e.g. by hand), there are places of crushing and shearing. NOTE! Caution should be exercised !
- Malfunctioning of the trailer should be removed only when the engine of the tractor is off and the ignition key is pulled out
- No one can stay one between the tractor and the trailer before the vehicle is not be protected against self-running off through the parking brake (hand brake) and wedges under the wheels.
- The permissible transport speed 40 km / h cannot be exceeded.
- It is forbidden to transport humans on the trailer, as well as animals unsecured against uncontrolled movement during transport.
- It is forbidden to enter the cargo box with an unsecured trailer.
- Modifications can be made only with the permission of the manufacturer. The basic condition for safety are original spare parts and components. Using other parts may result in exclusion of liability of the manufacturer for resulting consequences.
- Careless operation and maintenance of the trailer can injure the operator or third parties and damage the tractor-trailer.
- It is forbidden to use the trailer by persons not qualified to drive agricultural tractors, including children and drunken persons.
- It is forbidden to use the trailer contrary to its purposes. Staff operating the machine should be trained in the applicable health and safety regulations and the "Highway Code".
- Prior to each trailer's use check its technical condition, especially the condition of the coupling system, drive system, brakes and signaling lights.
- The machine is marked with information and warning inscriptions in the form of stickers as specified in table 1. The user is obliged to constantly take care of the readability of signs and warning symbols on the machine. In the event of damage or destruction replace them with new ones.
- Labels with inscriptions and symbols are available from the manufacturer.

3.2.COUPLING THE MACHINE.

- The trailer is to be secured against rolling by wedges (item 6 fig. 2).
- The trailer cannot drive in a suspended coupling, only by coupling to the tractor's hitch.

- The trailer is adapted to cooperation with agricultural tractors fitted with a hitch for single-axle trailers.

3.3. TIRES.

- When working with tires, make sure to secure the trailer against rolling using wedges.
- Repair work on the tires and wheels should be performed by trained personnel and using appropriate tools.
- After every installation of a wheel, tighten the nuts after the first 10 working hours, then check their tightening every 50 working hours (tightening torque 270Nm).
- The air pressure is to be checked regularly. Adhere to the recommended air pressure according to table 1.

3.4. PNEUMATIC AND HYDRAULIC SYSTEM.

- Inspect pneumatic connections regularly and replace damaged parts. Hose replacement must comply with the technical requirements of the manufacturer.
- When removing leaks, use the appropriate protective equipment (protective gloves) due to the risk of injury.
- In the event of injury, consult a doctor immediately – risk of infection!

3.5. MAINTENANCE.

- Repair, maintenance and cleaning jobs and the removal of function faults is to be performed with the engine of the tractor stopped and the ignition key taken out.
- Nuts and screws are to be inspected regularly at their fixed positions and tightened.
- During replacement, use the proper tools and gloves.
- Oils and lubricants are to be carefully removed.
- Before electrical, welding and working works on the electrical system, separate the continuous supply of power to the electrical system of the tractor.
- Protective equipment is subject to wear, so it should be adjusted regularly, inspected and replaced at the right time.

- Use the spare parts according to the catalog of spare parts.
- Modifications can be made only with the permission of the manufacturer. The basic condition for safety are original spare parts and components. Using other parts may result in exclusion of liability of the manufacturer for resulting consequences.

3.6. THE PRINCIPLES OF MOVEMENT ON PUBLIC ROADS.

- When driving on public roads, follow road traffic regulations.
- Exceeding the trailer's tolerable load capacity may cause it to be damaged and pose a threat to the safety of road traffic.
- Do not exceed the speed limit.
- While driving on public roads the trailer should be equipped with a certified or approved warning triangle. A triangular plate should be placed on the rear wall for slow-moving vehicles as shown below.

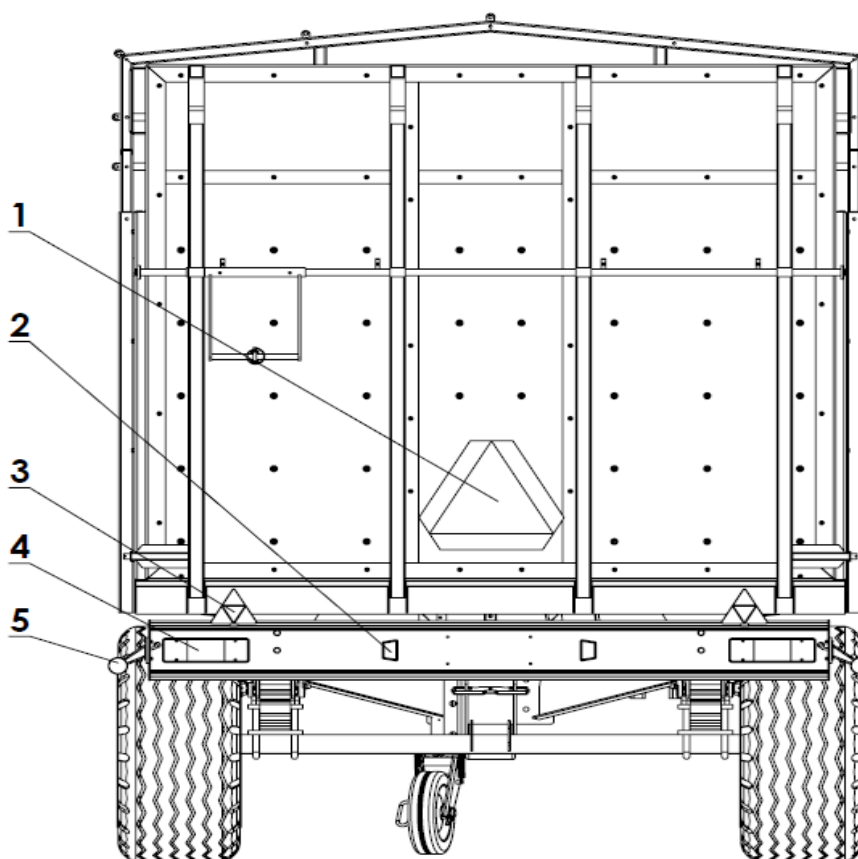


Fig. 1. T-678 trailer (view from rear)

- 1 – warning triangle, 2 – registration plate lighting lamp, 3 – red reflector, 4 – rear cluster lamp, 5 – rear outline lamp

- It is forbidden to park on the slopes with a loaded and unsecured machine. Securing is based on stopping with the service brake, parking brake and planting chocks under the wheels.

3.7. DESCRIPTION OF RESIDUAL RISK.

Although the "CYNKOMET" Czarna Białostocka company takes responsibility for the design and construction in order to eliminate hazards, some elements of risk during operation of the trailer are unavoidable. The residual risk stems from the wrong behavior of the machine operator.

When presenting the residual risk, the trailer is treated as a machine, which until the start of production was designed and manufactured according to the current "state of the art".

The greatest danger occurs when the following prohibited activities are performed:

- use the trailer for purposes other than those described in the manual,
- stay between the trailer and the tractor when the engine is running,
- operate the machine by persons under the influence of alcohol or other drugs,
- stay on the machine during operation,
- clean the machine during operation,

3.8. RESIDUAL RISK ASSESSMENT.

When observing such recommendations as:

- carefully reading the user manual.
- prohibition of placing your hands in inaccessible and forbidden places,
- prohibition on being on the machine during operation,
- maintenance and repair of machines only by trained personnel,
- operating the machine by persons who have been previously trained and familiar with the instructions,
- working with the components and elements with sharp edges you must wear suitable protective clothing (gloves, boots, etc.)
- securing the machine against the access of children,

residual risk can be eliminated by using the machine without risk to humans and the environment






 NOTE!	NOTE! There is residual risk in the event of failure to comply with the set-out recommendations and guidelines.
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Table 1. Placement of informational and warning signs.

Safety symbol (mark) or content of inscription	Meaning of the symbol (sign)	The placement on the machine
	Read instruction manual	Front wall
	Switch off engine and remove the key before starting maintenance or repair	Front wall
Inscription "Coupling only to hitch for single-axle trailers."	-	Front wall
Inscription "Max. load capacity 3700 kg"	-	Left side wall
"475 kPa" "350 kPa"	Air pressure in tires 11.5/80-15.3 14PR 400/60-15,5 14PR	Above the wheels on the trailer's frame
	Designation of lifting points for lifts.	On the longitudinal of the trailer's frame
	Designation of crushing hazard areas for scissor-folding elements.	On rear door from the rear of the trailer

4. INFORMATION REGARDING USE

4.1. TECHNICAL CHARACTERISTICS.

Table 2. Basic technical specifications of the agricultural trailer.

NO.	CONTENT	Unit of measure	KURIER - 6
1	Total length	mm	7500
2	Total width	mm	2420
3	Total height	mm	3050 (3065)
4	Track of wheels	mm	2000 (1970)
5	Interior dimensions of the loading crate: <ul style="list-style-type: none"> • Length • width • height 	mm mm mm	5975 2250 2000
6	Loading surface	m ²	13.5
7	Height of floor from base	mm	980 (995)
8	Vehicle weight	kg	2620 (2680)
9	Allowed payload of the vehicle	kg	5400
10	Wheel disk size	inches	9.00x15.3 (13.00x15.5)
11	Tire size and PR number	inches	11.5/80-15,3 14PR (400/60-15.5 14PR)
12	Tire pressure	kPa	475 (350)
13	Rated voltage	V	12
14	Permissible speed	km/h	40
15	Class of cooperating tractor	KM	60 and above

*Dimensions in parentheses pertain to 400/60-15.5 14PR tires

4.2. DESCRIPTION OF CONSTRUCTION AND OPERATION.

4.2.1. TRAILER CHASSIS.

The chassis of the trailer consists of the following parts shown in figure 2.

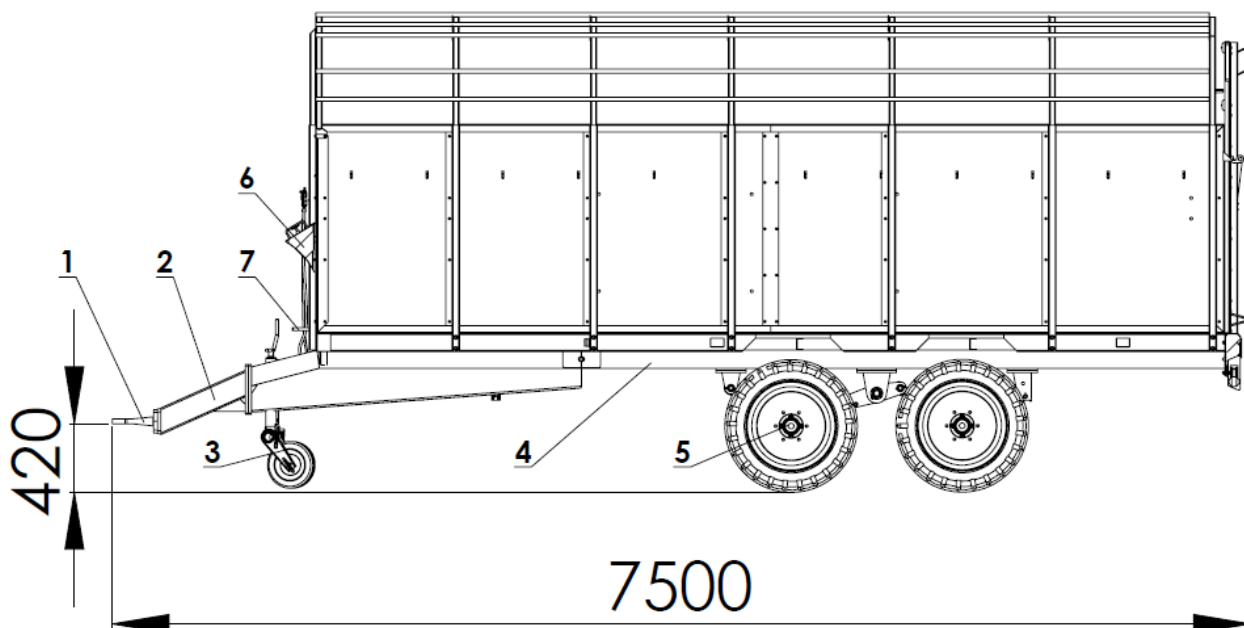


Fig. 2. T-678 trailer (view from side).

1 – drawbar tension member; 2 – adjustable drawbar bracket; 3 – support; 4 – frame; 5 – driving axle with wheels, 6 – driving wedges, 7 – parking brake crank

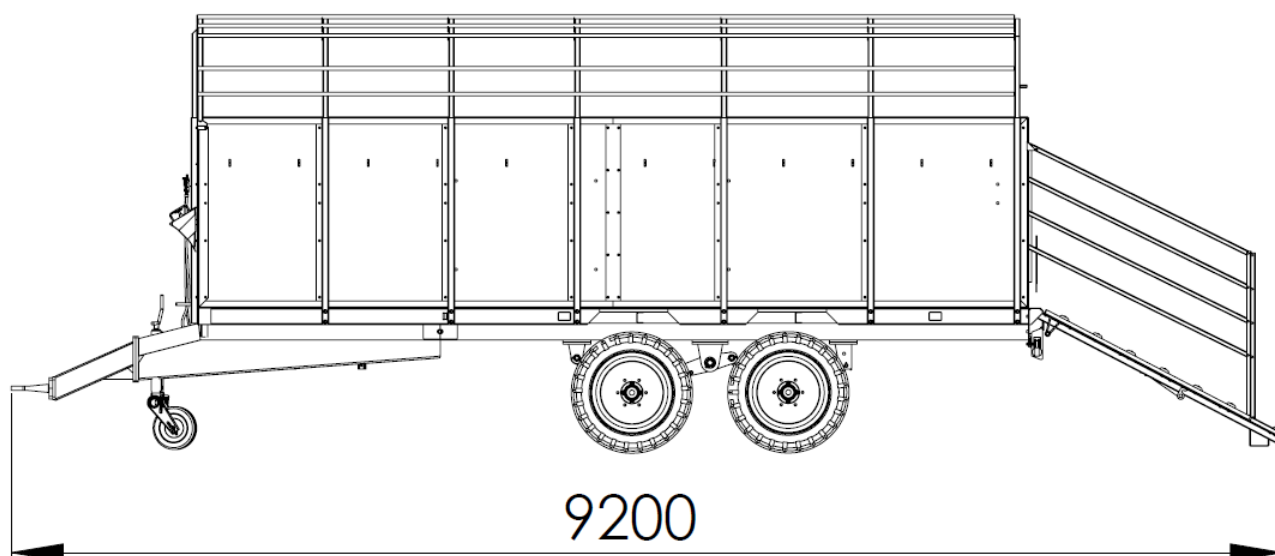


Fig. 3 T-677 trailer with lowered rear wall.

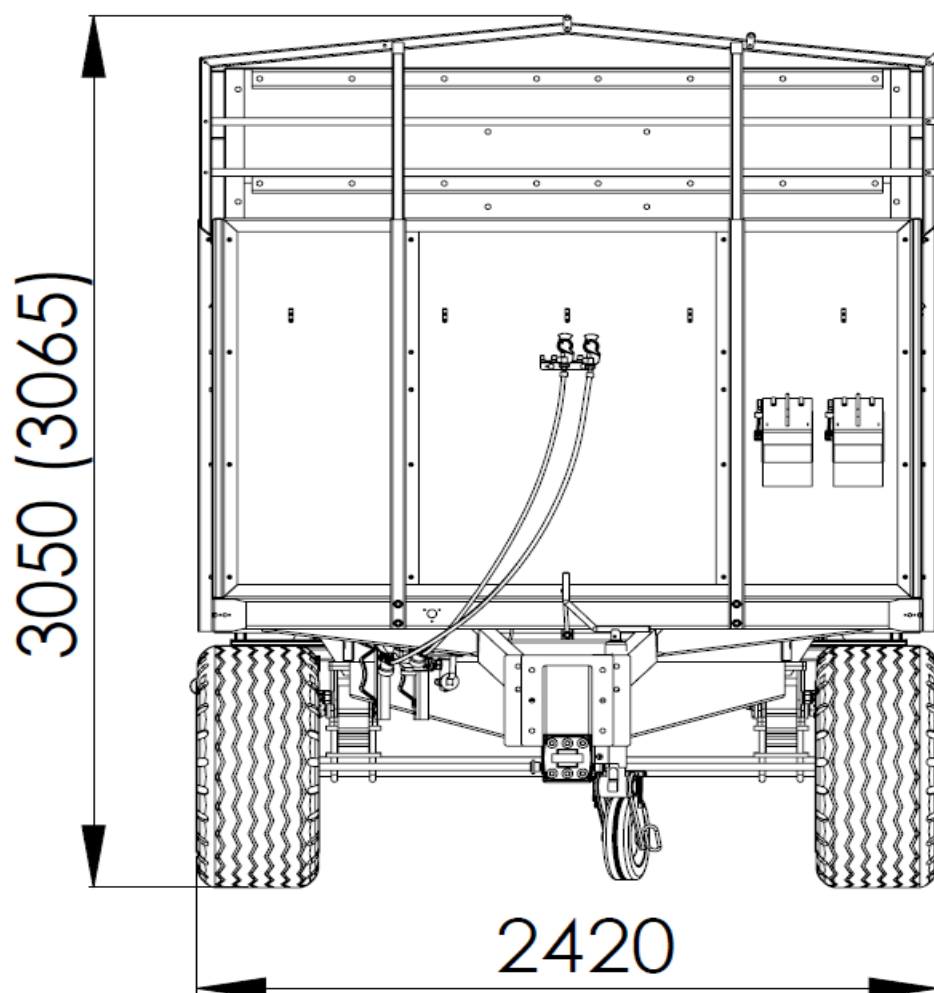


Fig. 4 T-677 trailer (view from the front)

The frame consists of welded steel sections. The basic carrying elements are two stringers connected to each other via crossbars. Elements for fastening the driving axle and elements of the rear lighting unit are located in the rear part of the frame.

The driving axle is made of a square bar ending with pivots, on which tapered roller bearings, and then wheel hubs, are mounted. These are single wheels equipped with shoe brakes activated by mechanical cam expanders. An adjustable drawbar (item 2 fig. 2) and support (item 3 fig. 2) are found in the front part of the frame. Drawbar fastening variants are presented in fig. 2.

4.2.2. LOAD BOX.

The load box (fig. 5) is designed for transport of livestock. It consists of a wooden floor (impregnated boards mounted on the frame), side walls, front wall, rear wall, tarpaulin frame and rails situated near the rear wall. In addition, a tarpaulin and interior partition making it possible to divide the load box are available on order.

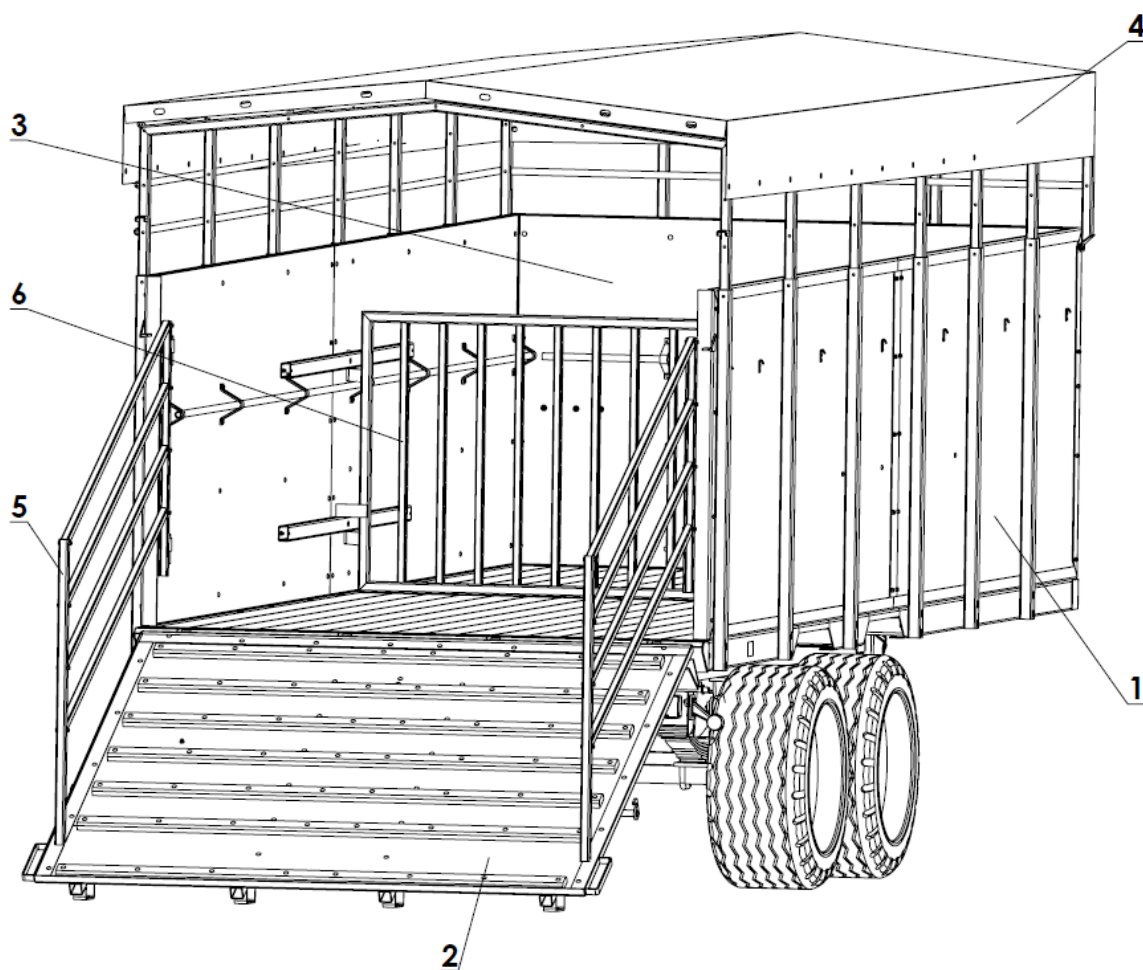


Fig. 5. Load box.

1 – side wall; 2 – dismountable rear wall; 3 – front wall; 4 – frame with tarpaulin; 5 – rail.

4.2.3. BRAKE SYSTEM.

The trailer is equipped with a braking system consisting of:

- working brake, controlled pneumatically or hydraulically depending on the order,
- a parking brake actuated manually by means of a crank mechanism on the front of the trailer,

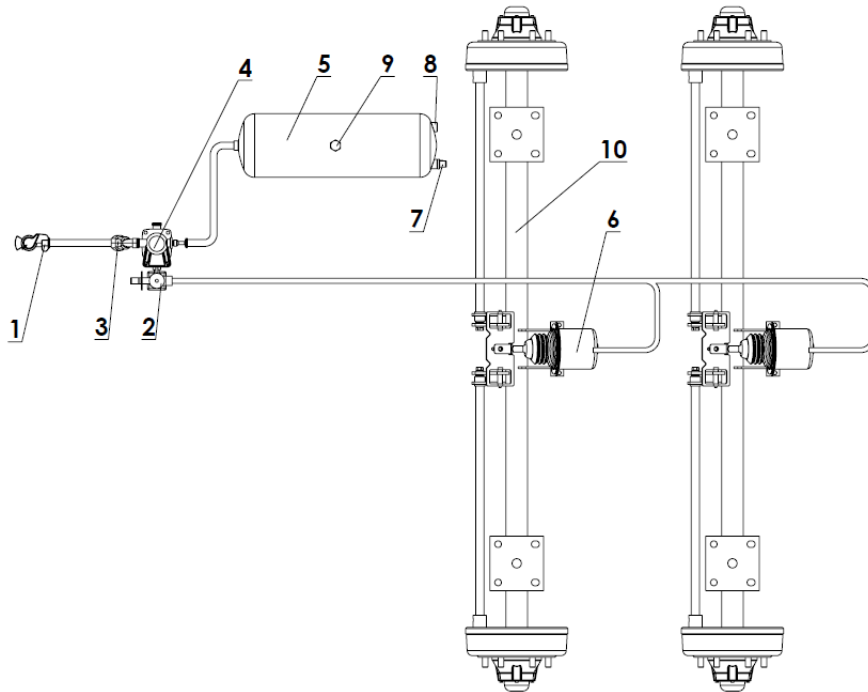


Fig. 6. Diagram of single-hose pneumatic system.

1 – hose connector ; 2 – braking force regulator; 3 – hose filter; 4 – control valve; 5 – 40A air tank; 6 – dia.125 mm pneumatic actuator; 7 – inspection coupling; 8 – cap; 9 – drain valve, 10 – driving axle

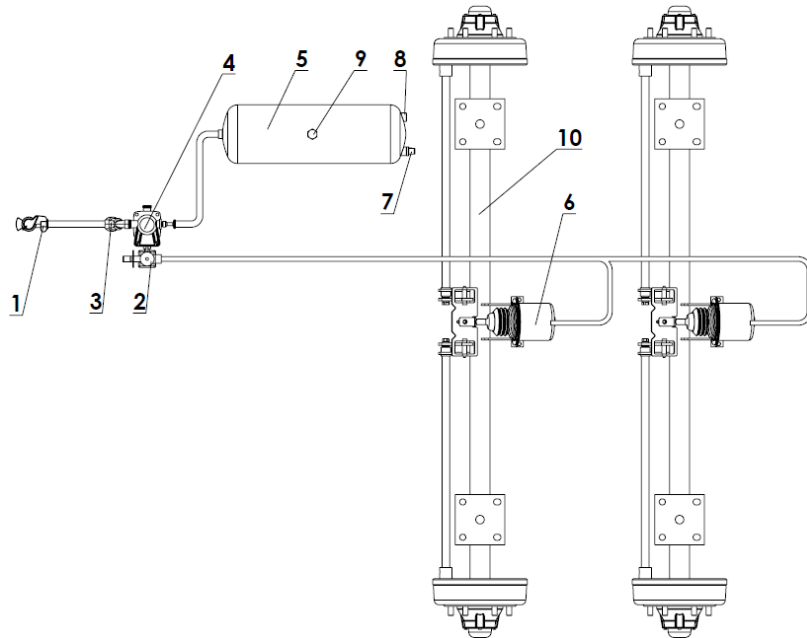


Fig. 7. Diagram of double-hose pneumatic system.

1 – hose connector A1 (red); 2 – hose connector A2 (yellow); 3 – hose filter; 4 – control valve; 5 – 40A air tank; 6 – dia.125 mm pneumatic actuator; 7 – inspection coupling; 8 – cap; 9 – braking force regulator, 10 – drain valve; 11 – driving axle

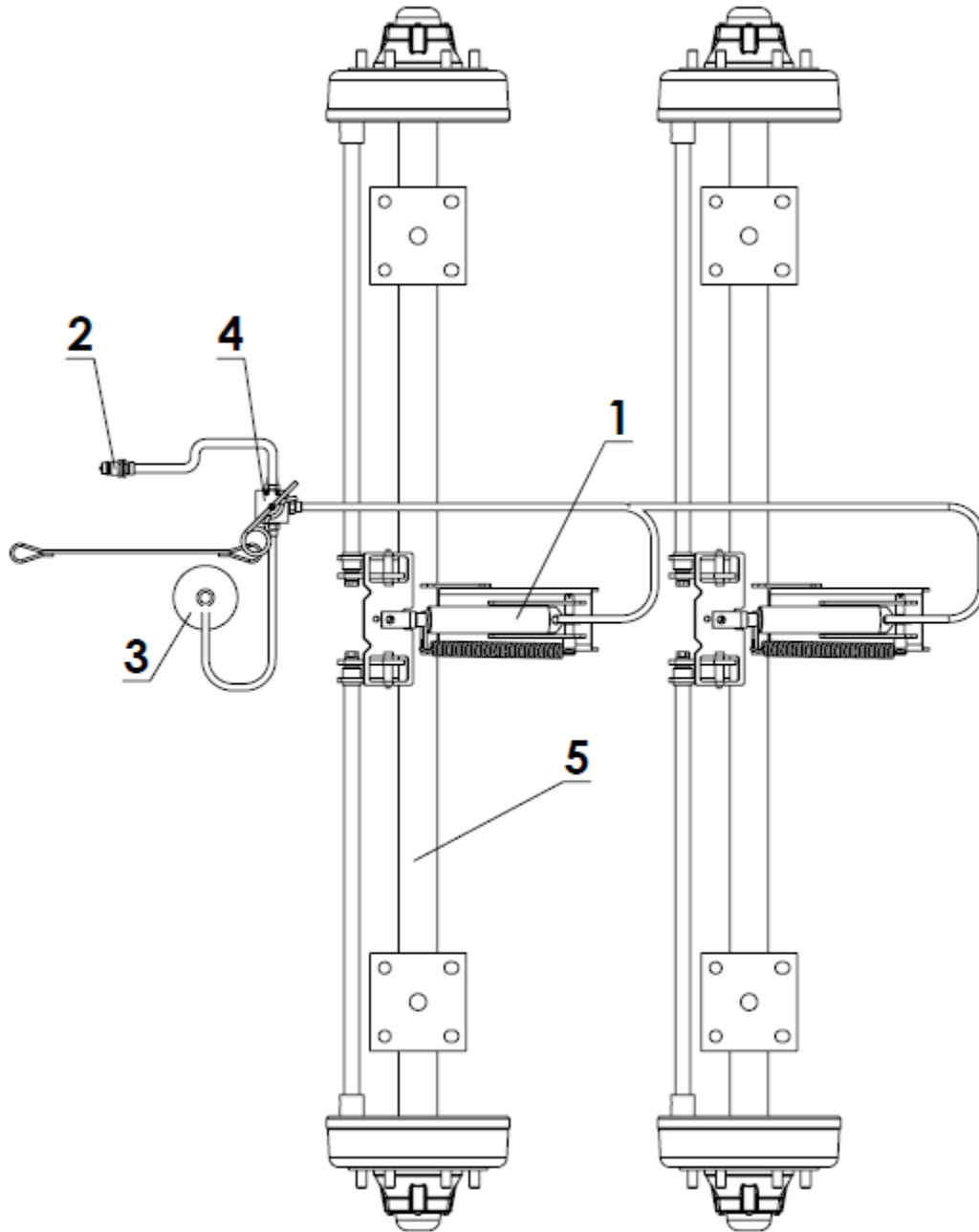


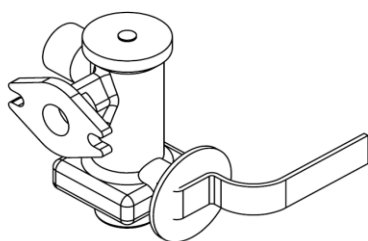
Fig. 8. Diagram of hydraulic system.

1 – hydraulic plunger cylinder; 2 – quick-coupler plug; 3 – hydraulic battery; 4 – safety valve; 5 – driving axle

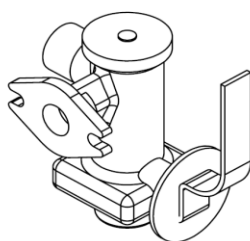
The pneumatic or hydraulic service brake is activated from the workplace of the tractor driver by pressing the brake pedal of the tractor. The construction of this brake provides automatic braking of the driving wheels of the trailer in the event of an unexpected disconnection of tractor's and trailer's pneumatic systems.

The braking force regulator found in the pneumatic system (item 2 fig. 5 and item 9 fig. 6) is controlled manually. Depending on the load of the trailer with cargo, the control lever must be set in one of three positions:

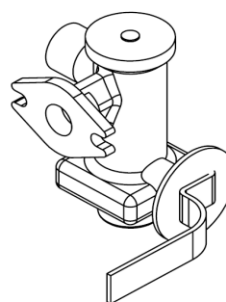
- position "0" - for an unladen trailer,
- position "1" - for the trailer partially loaded,
- position "2" - for the trailer fully loaded.



Poz. 0



Poz. 1



Poz. 2

Fig. 9 Manual braking force regulator of T-677 trailer

4.2.4. ELECTRICAL INSTALLATION, LIGHTING AND SIGNALING

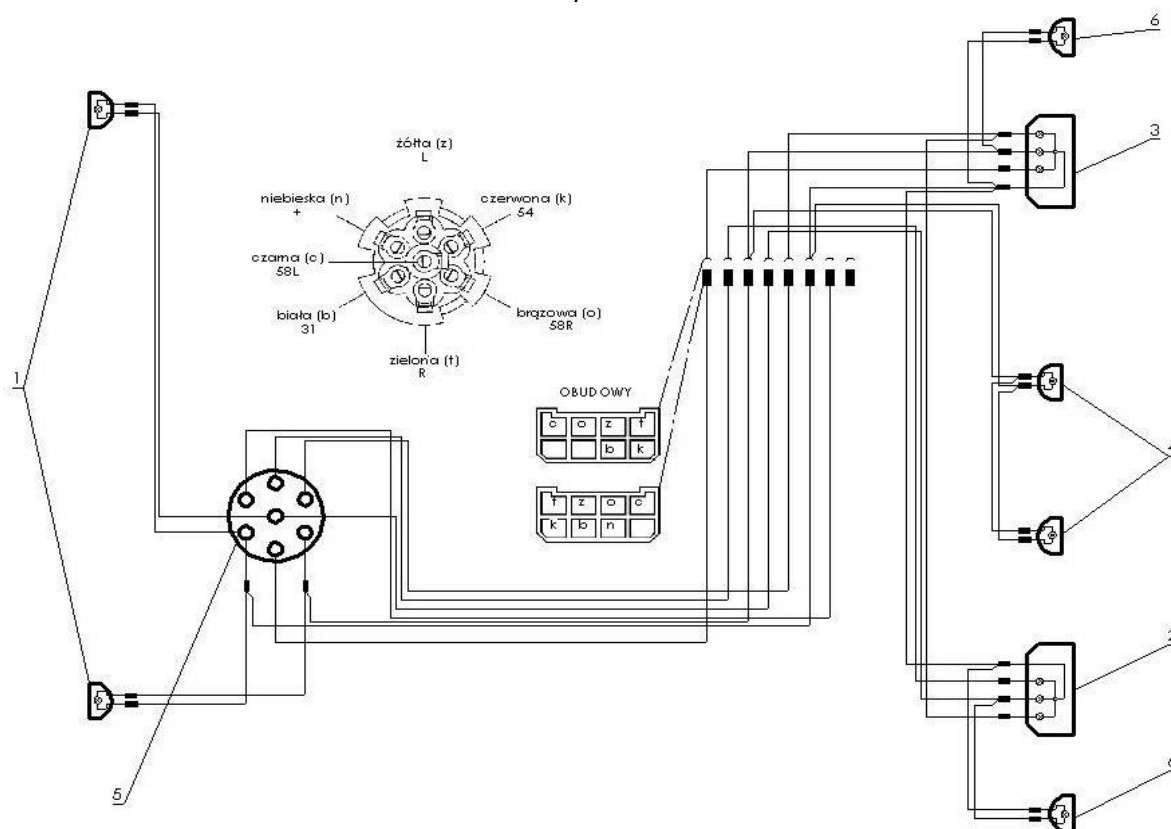


Fig. 10. Wiring diagram of the trailer.

- 1 – outline position lamp; 2 – left cluster lamp; 3 – right rear cluster lamp; 4 – registration plate lighting lamp; 5 – socket connector; 6 – outline lamp; 31 – ground; R(L) – right (left) turn signal; 58R (58L) – right (left) position lamp; 54 – „STOP”; „+” – +12V power.

Electrical installation of the trailer (fig. 10) is designed to be powered from a DC voltage source of 12V. Joining the electrical installation of the trailer of the tractor should be made with a suitable connecting line.

4.3. RULES OF PROPER TRAILER USE.

4.3.1. COUPLING THE TRAILER.

In order to connect the trailer to the tractor, perform the following steps:

1. Prior to coupling with tractor, check if the trailer is braked with the parking brake.
2. Set the drawbar's hitching member at the height of the tractor's hitch (this can be achieved by turning the lever of the support, extending the support wheel).
3. Putting the tractor in reverse, align the eye of the drawbar's hitching member to the tractor's hitch for single-axle trailers.
4. Install and secure the hitch pin against falling out.
5. Using the lever, raise the support wheel and move it to the transport position according to figure 11.
6. Connect the electric and brake installation wiring with the trailer.
7. Release the parking brake of the machine.



NOTE!

NOTE!

At the time of the coupling, there can be no bystanders be between the trailer and the tractor. Coupling the trailer with a hitch other than a hitch for single-axle trailers is unacceptable because it threatens the safety of road traffic.

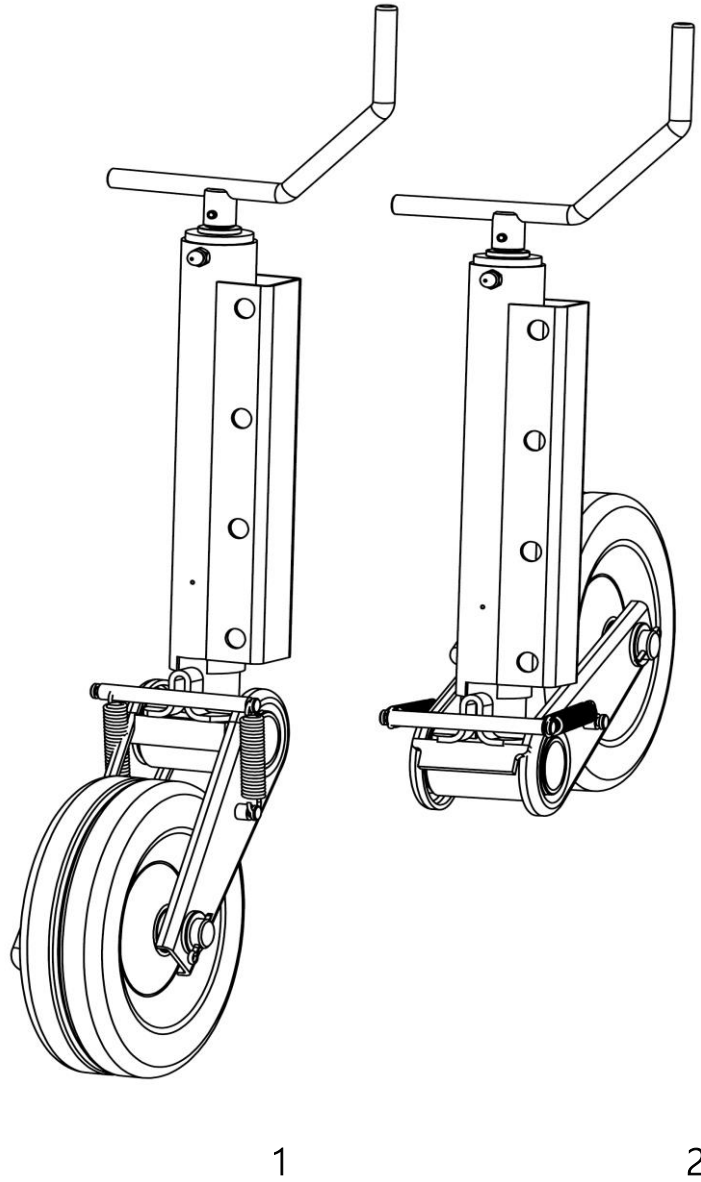





Fig. 11. Support of trailer's drawbar.
1 – drawbar support position, 2 – transport position.

PREPARATION FOR WORK.

 <p>NOTE!</p>	<p>NOTE!</p> <p>In preparation for work, the following should be checked:</p> <ul style="list-style-type: none">• the condition of tires of the driving wheels and the air pressure in the tires,• tightening of nuts fastening wheels and drawbar with 270 Nm torque,• condition of other threaded joints. <p>In addition, after combining the machine with the tractor check:</p> <ul style="list-style-type: none">• the efficiency of the electrical system and lighting system and trailer signaling,• the effectiveness of the brake system.
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4.3.3 TRAILER LOADING.

 <p>NOTE!</p>	<p>Loading of the box can take place only when the trailer is connected to the tractor, set on level ground, and braked.</p> <p>Trailer loading should be performed according to the following steps, in sequence and with special caution:</p> <ul style="list-style-type: none">• brake the tractor and trailer using the parking brake.• open the latch of the rear flap,• unfold the rear flap – ATTENTION – risk of impact or crushing• unfold the protective rails,• lead animals in,• secure animals by fastening them to a special pipe,• fold the protective rails,• close and secure the rear flap.
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 <p>NOTE!</p>	<p>NOTE!</p> <p>It is prohibited to exceed the admissible trailer load, because it threatens the safety of road traffic and causes damage to the machine.</p>
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	It is strictly forbidden to carry people on the trailer.
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4.3.4. TRANSPORT.


- When driving on public roads, follow road traffic regulations;
- It is forbidden to transport people and unsecured animals;
- Exceeding the trailer's tolerable load capacity may cause it to be damaged and pose a threat to the safety of road traffic;
- It is strictly prohibited to exceed the permissible speed of 40 km/h, and the vehicle's speed must be adjusted accordingly to the conditions on the road;
- It is prohibited to leave the trailer unsecured. Securing is based on braking using the parking brake;
- While driving on public roads the trailer should be equipped with a certified or approved reflective triangle;
- A triangular plate for slow-moving vehicles should be placed on the rear wall.

4.3.5. INSTRUCTIONS OF TIRE USE.

- During works related to mounting and dismounting of tires, the trailer is to be secured against movement;
- Tire repair or replacement is to be performed by people trained to do so and with the use of the proper tools;
- After mounting the wheel, tighten fastening nuts after driving the first 50 kilometers, then check their tightening every 100 km (tightening torque should be 270 Nm);
- Inspect the tightening of nuts fastening driving wheels and tire pressure regularly (particularly after a long break in trailer use) according to table 2;
- Do not exceed the trailer's maximum speed;
- Tire pressure should also be checked during day-long work. It should be accounted for that an increase in a tire's temperature may raise pressure even by 1 bar. Either the load or speed must be reduced if a such an increase in temperature and pressure occurs.
- Never reduce pressure by letting off air when it rises due to temperature;

- In order to prevent contaminants from penetrating into valves, they should be secured using the appropriate caps;
- Take 30 minute breaks to cool tires after traveling 50 kilometers or after 120 minutes of continuous driving, depending on which occurs first;
- When driving, avoid potholes, curbs, rapid and sharp maneuvers, and high speeds during turning and reversing.

4.3.6. TRAILER UNLOADING.

 <p>NOTE!</p>	<p>NOTE!</p> <p>Before unloading the trailer, place it on a flat surface, brake the tractor and trailer using the parking brake.</p>
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Trailer unloading should be performed according to the following steps, in sequence and with special caution:

- open the latch of the rear wall;
- unfold the rear flap – ATTENTION – risk of impact or crushing
- unfold the protective rails;
- lead animals out;
- fold the protective rails;
- close and secure the rear flap.

4.3.7. DECOUPLING FROM TRACTOR.

In order to disconnect the trailer from the tractor, perform the following steps:

- After stopping the tractor, brake the trailer with a parking brake.
- Disconnect the electrical and brake system cables of the trailer from the tractor.
- Deflect the support wheel to the drawbar support position, and lower the wheel until it rests on the base using the lever;
- When removing the pin, disconnect the drawbar from the hitch of the tractor and drive the tractor away.

5. EQUIPMENT AND ACCESSORIES.

The equipment of every trailer includes:


- Instruction manual and spare parts catalogue
- 1 pc.

- Warrant card - 1 pc.
- Securing wedges blocking wheels - 2 pcs.
- Connecting cable of the electrical system - 1 pc.

At the buyer's request, the manufacturer may deliver the following additional equipment:

- Reflective warning triangle
- Signboard distinguishing slow-moving vehicles
- Tarpaulin
- Interior partition.
- Aluminum tub
- Interior lighting
- Side entry door on the right side of the trailer

6. OPERATING INSTRUCTIONS

 NOTE!	<p>NOTE!</p> <ul style="list-style-type: none">• In the case of noting any irregularities in the operation or damage to systems or assemblies of the trailer, the machine must be taken out of use until repair and removal of the defect.• All maintenance and repair tasks should be performed with the general principles of health and safety. In the case of injury, the wound should immediately be washed and disinfected. In the case of serious injuries, consult a physician.
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6.1. REGULATION OF DRIVING WHEEL BEARINGS BACKLASH.

In a newly purchased machine, after the first 300 km, while during further use - after driving another 1500- -2000 km - check and if necessary adjust the backlash of the wheel bearings.

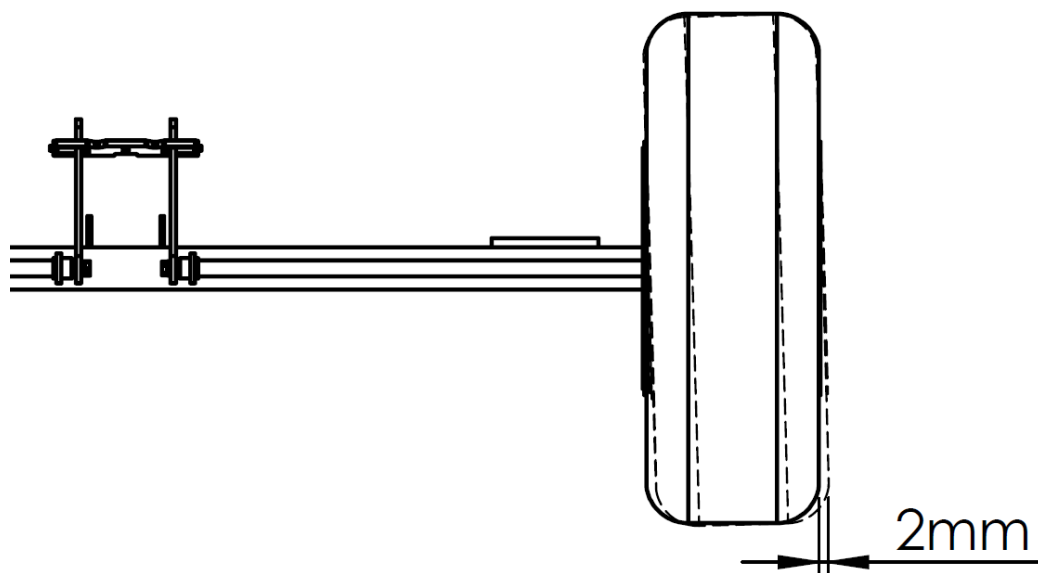


Fig. 12 Checking driving wheel bearing backlash.

To do this you need to:

- couple the machine to the tractor, brake the tractor, place locking wedges under the trailer's wheels, raise wheels one after the other using the proper jack and check clearance. The jack is to be laid under the driving axle between U-bolts fastening the axle to the frame;
- if the wheel displays excessive clearance, i.e. is above 2mm on the extreme exterior surface of the tire (fig. 12) , dismount the hub cover, hub seal and remove the pin of the castellated nut;
- turning the wheel, simultaneously tighten the castellated nut until the wheel stops completely
- unscrew the nut by a 1/3 turn, until alignment of the next groove on the pin with a hole in the pivot;
- secure the nut with a **NEW** cotter pin, and mount the hub cap.

The wheel should turn fluidly, without jerks or noticeable resistance not originating from friction of the brake shoes on the drum. Light grinding of brake shoes on the drum is normal, particularly in a new trailer.

The soundness of bearings backlash has to be finally checked after driving a few kilometers with the trailer controlling the degree of the hubs heat by hand.

6.2.BRAKE ADJUSTMENT.

Brake adjustment (fig. 13) should be carried out when:

- there is excessive clearance between the lining and drum and braking effectiveness decreases due to wear of brake shoe linings,
- the brakes of both wheels brake unevenly and non-simultaneously.

With properly adjusted brakes, braking of both trailer wheels must take place at the same time.

Brake adjustment involves changing the position of expander arm (1) with respect to the expander roller (2). For this purpose, dismantle securing ring (3), then turn the expander arm on the multi-groove in the proper direction, i.e.:

- back - if the brake is too late,
- forward - if the brake is too early.

The adjustment should be conducted separately for each wheel. After proper brake adjustment, at full braking, expander arms should form a 90° angle with the piston of the pneumatic actuator. Parking brake adjustment is to be performed in the event of stretching of the cord or loosening of the cord's clamps. The length of the parking brake cord should be selected so that, during total disengagement of the working and parking brakes, the cord is loose and hangs by 1÷2 cm.

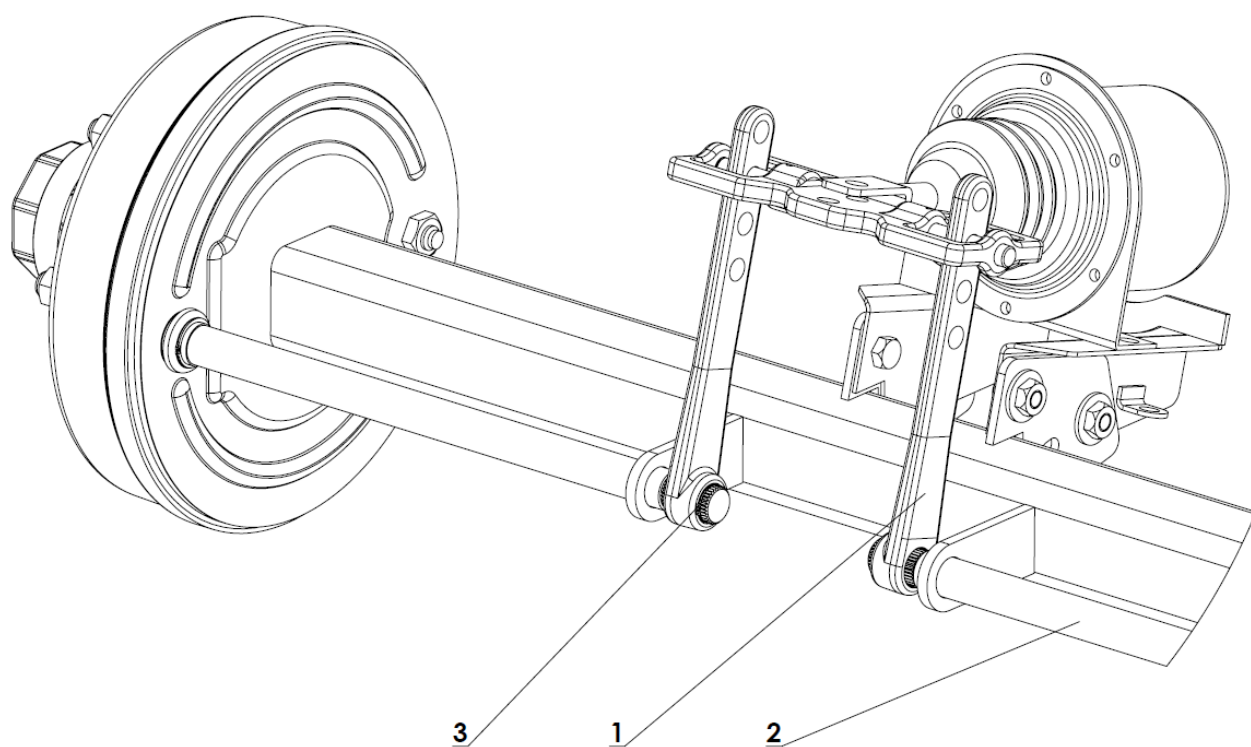



Fig. 13. Brake adjustment elements.

1 - expander arm, 2 - expander shaft, 3 – securing ring.

 <p>NOTE!</p>	<p>NOTE!</p> <p>When brakes are properly adjusted, the trailer's braking force should be at least 27.5 kN during braking with the main brake. When braking with the parking brake, the braking force should be at least 9.2 kN. The difference between braking forces of the left and right wheel may not exceed 30%, with 100% being the greater force. The trailer's braking force is the sum of the braking forces of the trailer's wheels.</p>
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In a new trailer, brakes must unconditionally be inspected and adjusted, if necessary, after driving the first 100 km.


6.3.MAINTENANCE OF THE PNEUMATIC SYSTEM.

As part of the trailer's maintenance, check the tightness of the pneumatic system, paying special attention to the places of all connections. The system's tightness must be checked at a nominal pressure of approx. 600 kPa (6 kg/cm²).

If hoses, seals or other elements of the system are damaged, compressed air will be released to the outside with a characteristic hiss, or in the case of small leaks, in the form of air bubbles (after coating the inspected elements with dishwashing fluid). The damaged seals or conduits causing leaks should be replaced. If air leakage from the actuator is the cause of the leak – replace it.

Pneumatic hoses should be replaced at least every 5 (five) years from their date of manufacture, unless previously found to be damaged and replaced.

Every so often, remove the condensate gathering in the water from the air tank. For this purpose, deflect the mandrel of the drain valve at the bottom of the tank to the side (item 9 fig. 6). The compressed air in the tank will push the water out. After releasing pressure on the mandrel, the valve should automatically close and stop the airflow from the tank.

 <p>NOTE!</p>	<p>NOTE!</p> <p>Once a year, before the winter, unscrew the drain valve and clean off the accumulated dirt.</p>
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6.4. MAINTENANCE OF THE HYDRAULIC BRAKE SYSTEM.

Always follow the principle that the oil in the trailer hydraulic system and the oil in the external tractor hydraulic system are to be of the same type. The use of different types of oil is not permitted. In a new trailer, the system is filled with AGROL U hydraulic transmission oil.

The hydraulic system of the machine should be completely tight. Checking tightness of the hydraulic system consists of connecting the trailer to the tractor, running the hydraulic cylinder and holding it in the position of maximum extension of the plunger for 30 seconds. In the case of noticing oil leaks on connections of hydraulic conduits, you must tighten the connector, if this does not rectify the fault, replace the conduit or the connector with a new one. If the oil leak occurs beyond the connection, the leaking conduit system should be replaced. Replacement of a component with a new one is also required for any damage of mechanical nature.

In the case of noting oiling on the body of the hydraulic cylinder, check the nature of the leak. When fully taking out the cylinder plunger, check for leaks. Minor leaks with symptoms of "sweating" are acceptable, but if you see a leak of a "drip" type, you must stop the operation and repair the failure.

Hydraulic hoses should be replaced at least every 5 (five) years from their date of manufacture (or more often in the case of intensive operation), unless previously found to be damaged and replaced.

 <p>NOTE!</p>	<p>NOTE!</p> <p>Using a trailer with a leaking hydraulic system is unacceptable. Operation of the trailer with a leaking tilting hydraulic system is unacceptable</p>
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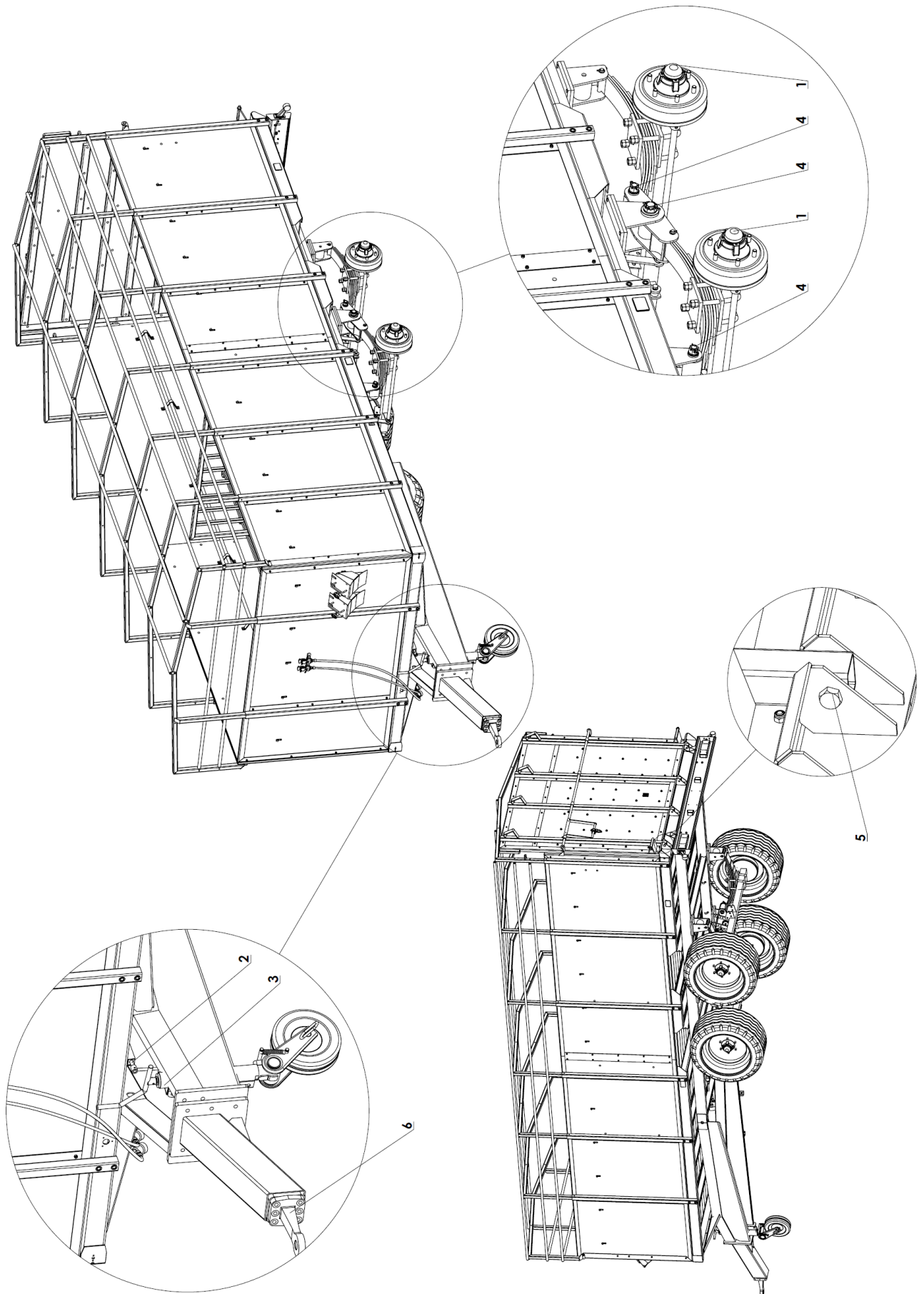
6.5. LUBRICATION.

Lubrication of the trailer should be carried out in the points specified in Figure 14 and listed in Table 3.

Fig. 14. Lubrication points.

Table 3. The frequency and method of lubrication of the trailer mechanisms.

NUMBER IN FIG. 10	PLACE OF LUBRICATION	NUMBER OF LUBRICATION POINTS	GREASE TYPE	FREQUENCY AND METHOD OF LUBRICATION
1	Bearings of driving wheel hubs	2	Solid grease	Replace grease once every 2 years.
2	Screw of the parking brake crank	1	Solid grease	Every 3-4 months.
3	Support bearing and screw	1	Solid grease	Every half year.
4	Brake cord wheel axle	3	Solid grease	Every half year.
5	Hinges of the rear flap	4	Solid grease	Every 3-4 months.
6*	Drawbar's rotating hitching member (in the case of a rotating drawbar)	1	Solid grease	Every 3-4 months.



6.6.STORAGE AND MAINTENANCE.


After ending operation, the trailer must be carefully cleaned and washed, and then left it in a dry and ventilated area. In the event of failure of these actions on the zinc coating, dark and light gray areas (spots) may occur, which do not constitute grounds for complaint if the zinc coating still has the required minimum thickness (PN-EN ISO 1461: 2000). In the case of damage of the external paint coating, the damaged areas must be cleaned of rust and dust, degreased, and painted retaining the same color and uniform thickness of the protective coating. Until painting, the damaged areas should be covered with a thin layer of grease or anticorrosion preparation.

During a long break in the use of the trailer, it is desirable to place it indoors or in a roofed place. It is also advisable that the metal parts not coated with paint are secured with an anti-corrosion preparation of temporary protection or a layer of grease. During long-term storage of the trailer, it is recommended to reduce pressure in tires to approx. 300 kPa or to place it on supports in order to unload axles.

7. TRANSPORT.

The trailer is prepared for sale in a fully assembled state and does not require packing. Only the machine's operation and maintenance documentation is packed, and with regard to additional equipment: connector cable of the electrical installation, tarpaulin, and potentially warning triangle,

Delivery of the trailer to the user is carried out by means of car transport or after coupling with a tractor in independent transport.

 <p>NOTE!</p>	<p>NOTE!</p> <p>During independent transport, the trailer operator should be familiar with the contents of this manual and follow the recommendations contained in it. During road transport, the trailer is mounted on a platform of the transport mean in accordance with the manufacturer's technology. The driver of the car, while transporting the machine, should take extra caution. This is due to the upward movement of the vehicle's center of gravity with a loaded machine.</p>
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8. TRAILER CASSATION.

Should the user make a decision on withdrawal of the machine, you must pass the entire trailer to the scrap depot designated by the Governor or a Starost. The dismantled parts remaining after repair must be submitted to the collection point of recyclable materials.

The certificate obtained from this facility is the basis for the de-registration of the trailer.

9. WARRANTY.

"CYNKOMET" Sp. z o.o. in Czarna Białostocka ensures the smooth operation of the machine according to the technical-operational terms described in the operating manual. **The condition of accepting a complaint is to follow all the recommendations contained in the operating and use manuals.**

TERMS OF THE WARRANTY:

1. The guarantee will be respected after the presentation by the customer of a clearly and correctly filled warranty card of the machine undergoing reclamation.
2. The warranty does not cover parts and assemblies damaged as a result of normal wear.
3. In a written notification claim (mail, fax, e-mail, etc.) you must give the data and contact of the owner of the machine, its name, serial number, purchase date and a description of the complaint (causes, damaged parts, subassemblies).
4. The user must file a claim immediately, within 14 days from the date of failure, at the latest.
5. Parts subject to wear during exploitation are not covered by the warranty e.g. tires, brake linings, lighting, damage caused by external causes, such as: mechanical impacts, improper handling, insufficient tightening of threaded joints, as well as the operation incompatible with the intended purpose.
6. This manual does not allow you to make changes, alterations, modifications to the discretion of the Customer without consulting with the manufacturer.
7. Detailed warranty conditions are mentioned in the warranty card attached to each newly purchased machine.



NOTE!

NOTE!

It is advisable to require from the seller to fill in the warranty card and reclamation coupons. Lack of e.g. the date of sale or point of sale stamp exposes the user to non-recognition of any complaints.

SPARE PARTS CATALOGUE

SPARE PARTS CATALOGUE

1. INTRODUCTION.

The "Spare parts catalog" is, next to the "Instruction manual", the basic operation and maintenance document intended for trailer users.

The catalogue includes:

- drawings of all assemblies and mechanisms of the trailer;
- lists of parts of individual units and mechanisms.

2. HOW TO USE THE CATALOGUE.

For each drawing, there is a text table added, containing the list of parts of the unit or the mechanism.

In order to obtain the part number (KTM symbol), select an assembly or mechanism drawing, which includes the part from the catalogue, read the number of its position, and then on the appropriate plate, find the appropriate position under this name and part symbol.

When ordering please specify:

- the exact address of the contracting authority (recipient of the parts);
- part name compatible with the catalog;
- KTM symbol;
- the number of pieces of the ordered parts;
- year of production and serial number of the machine.

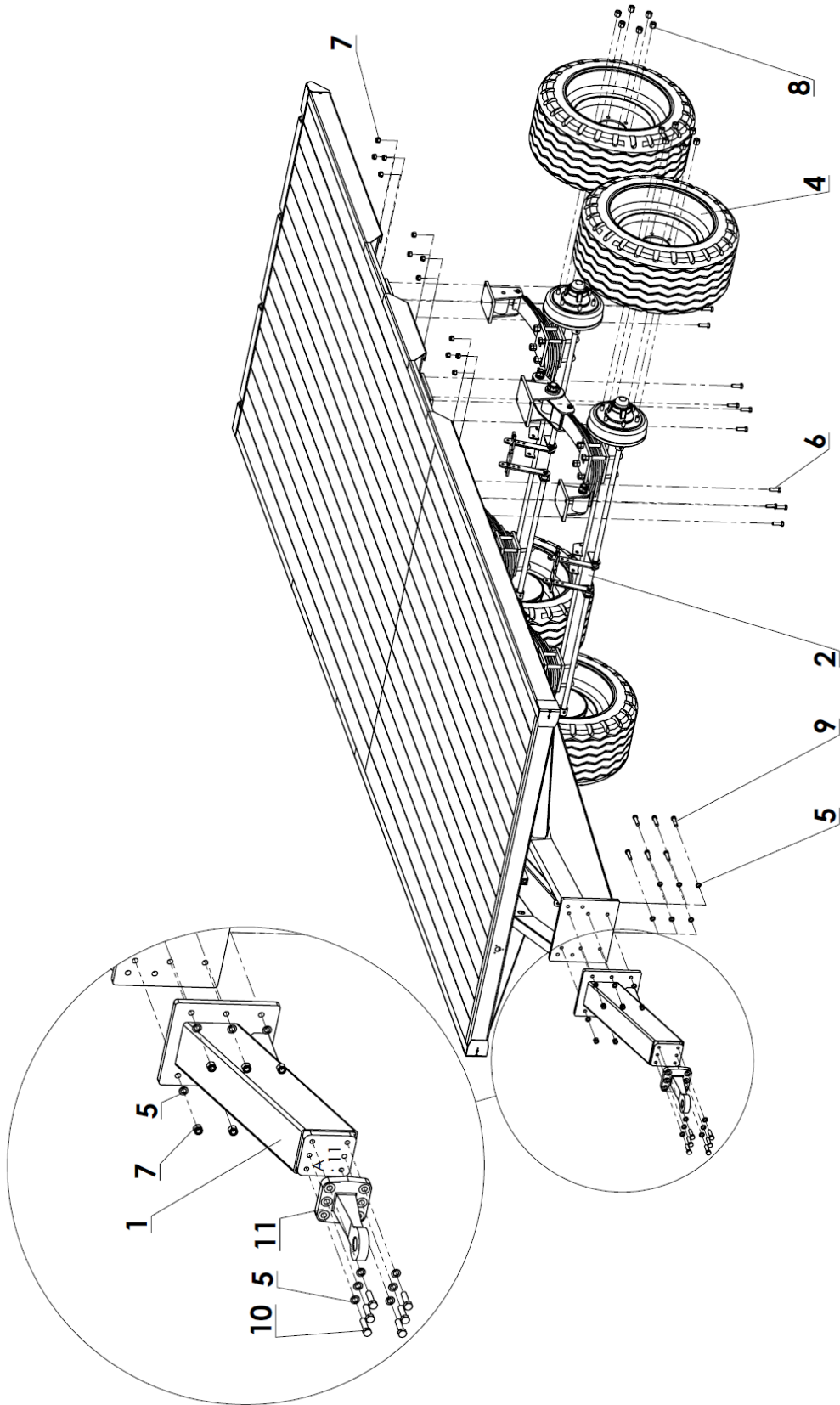


Fig. 15. Chassis

CHASSIS

Table 4

No	Part name	KTM symbol or standard no.	Number of pcs. in unit
1	FRAME WITH FLOOR SET	131/25.00.000	1
2	WHEEL 11.5/80-15.3 14PR 139A8 WHEEL 400/60-15.5 14PR 140A8		2
3	D M18X1.5-10 NUT	PN-88/S-91249/62	12
4	U-BOLT	131/00.00.001	2
5	M20-8-B NUT	PN-75/M-82144	16
6	DRIVING AXLE	131/21.00.000/1	1
7	FASTENED DRAWBAR	131/24.00.000	1
8	FASTENED HITCHING MEMBER		1
9	M16x65-8.8-B SCREW	PN-85/M-82101	6
10	SPRING WASHER n 16.3	PN78 M-82008	12
11	M16x65-8.8-B SCREW	PN-M 82302	6
12	NUT WITH POLYAMIDE INSERT M16-8-B	PN-75/M-82144	6

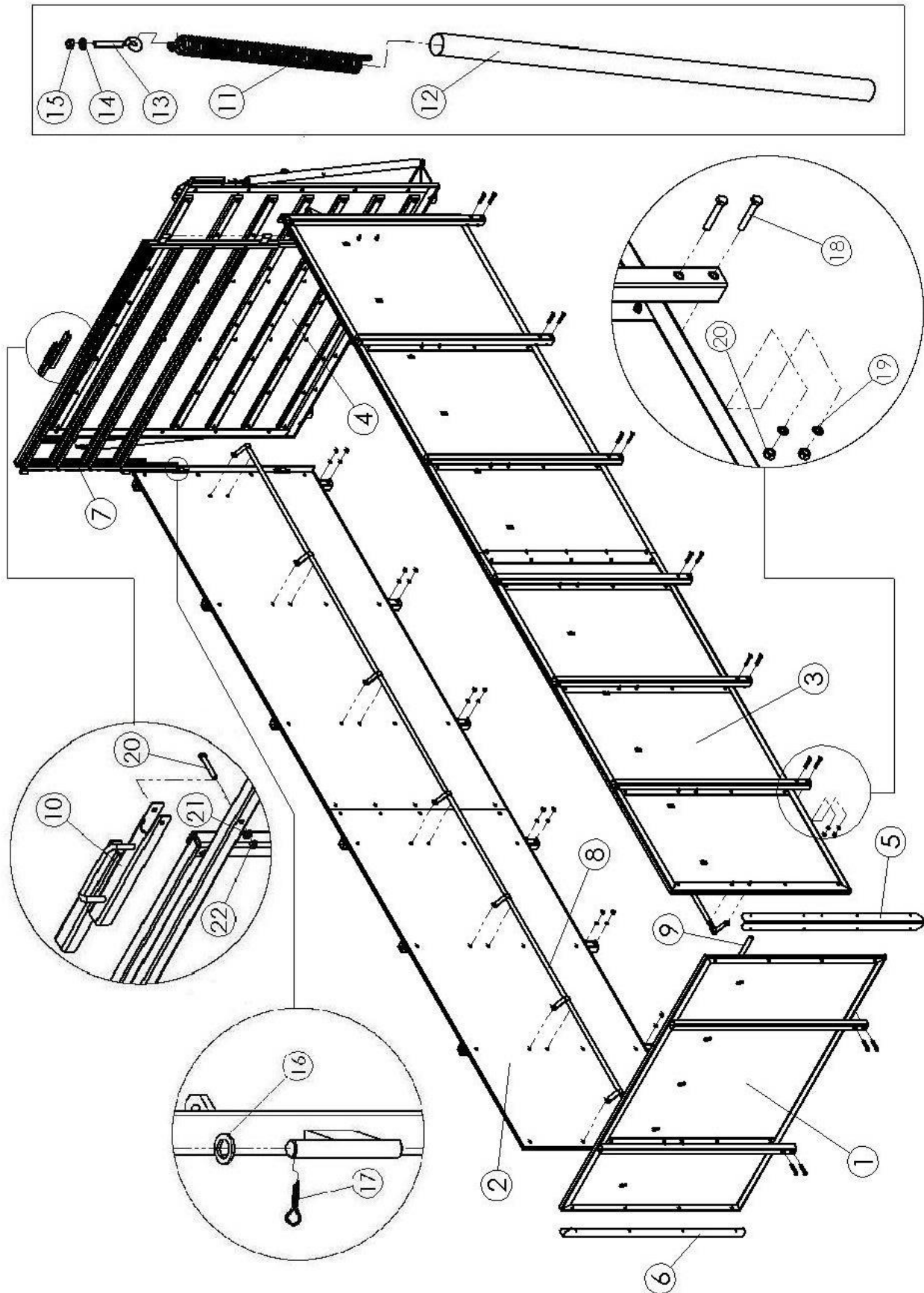


Fig. 16. Walls set

WALLS SET

Table 5

No	Part name	KTM symbol or standard no.	Number of pcs. in unit
1	FRONT WALL	7677/02.03.000	1
2	RIGHT WALL	7677/02.01.000	1
3	LEFT WALL	7677/02.02.000	1
4	REAR WALL	131/05.00.000/1	1
5	LEFT CORNER ANGLE SECTION SET	7677/12.06.000	1
6	RIGHT CORNER ANGLE SECTION	7677/12.07.000	1
7	SET	131/00.02.000	2
8	RAIL	131/00.00.200	2
9	SIDE RAIL	131/00.00.100	1
10	FRONT RAIL	131/00.03.000	1
11	RAIL LATCH	131/00.00.004	2
12	SPRING GUARD (L=1400)	131/00.00.002	2
13	SPRING 30RPN/00.00.002	7076/12.01.002	2
14	EYE BOLT	PN-77/M-82008	2
15	WASHER n 13 Fe/Zn12	PN-86/M-82144	22
16	M12-8-B Fe/Zn12 NUT	PN-78/M-82005	2
17	WASHER FI n Fe/Zn12	PN-76/M-82001	2
18	PIN S-Zn12	PN-85/M-82101	20
19	M12X75 Fe/Zn12 SCREW	PN-77/M-82008	20
20	WASHER n 12.2 Fe/Zn12	PN-85/M-82101	1
21	M8X55-8.8-B Fe/Zn12 SCREW	PN-78/M-82005	1
22	WASHER n 8.4 Fe/Zn12	PN-86/M-82144	1
	M8-8-B Fe/Zn12 NUT		

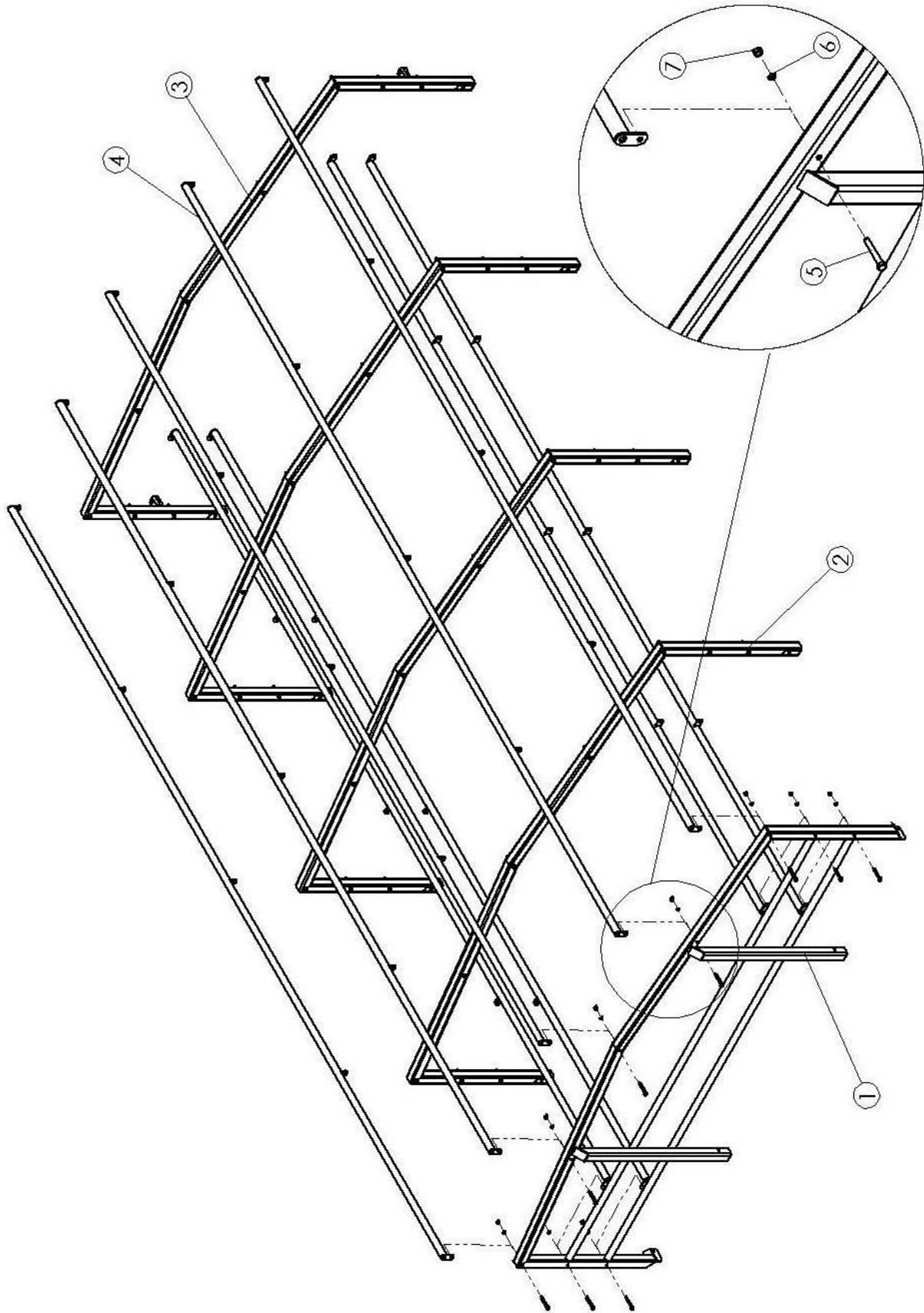


Fig. 17. Frame

FRAME

Table 6

No	Part name	KTM symbol or standard no.	Number of pcs. in unit
1	FRONT CLAMP	7677/13.04.000	1
2	CLAMP	131/07.00.000	3
3	REAR CLAMP	131/07.00.000/1	1
4	FRAME PIPE	131/08.00.000	9
5	M8X55-8.8-B Fe/Zn12 SCREW	PN-85/M-82101	45
6	WASHER n 8.2 Fe/Zn12	PN-77/M-82008	45
7	M8-8-B Fe/Zn12 NUT	PN-86/M-82144	45

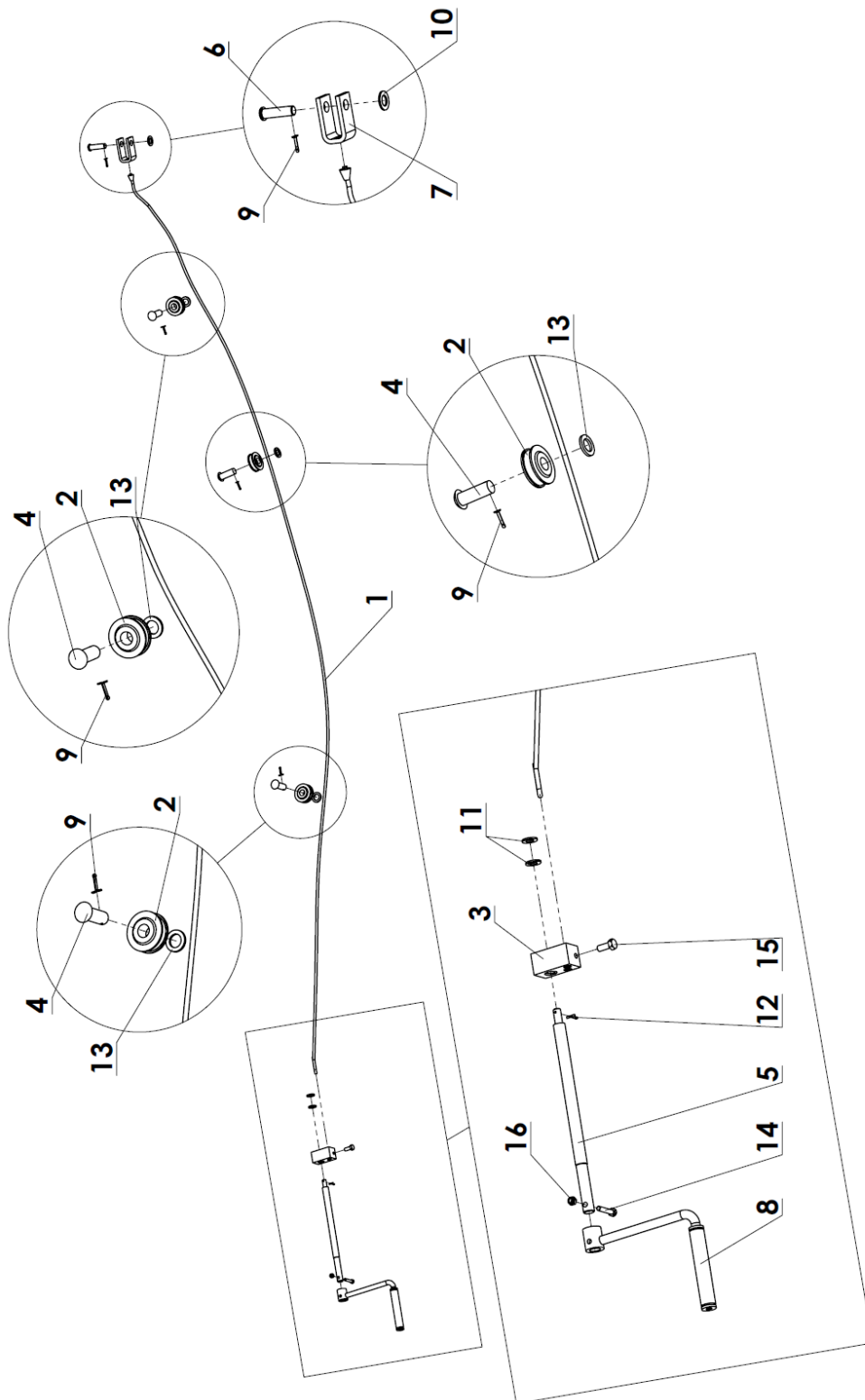


Fig. 18 Hand brake

HAND BRAKE

Table 7

Item no.	Part name	KTM symbol or standard no.	Number of pcs. in unit
1	CORD SET L=2700	131/00.05.100	1
2	HAND BRAKE WHEEL	2208/09.00.006/0	3
3	SPECIAL NUT	2213-03.00.018/7	1
4	SPECIAL RIVET	2213/03.00.011/1	3
5	SCREW	2213/03.00.017/7	1
6	PIN	7105/13.00.001	1
7	CLAMPING RING	7105/13.02.001	1
8	CRANK	70706/28.00.200	1
9	PIN S-ZN 3.2x25	PN-78/M-82001	4
10	ROUND WASHER N 15	PN-78/M-82005	1
11	ROUND WASHER N 10.5	PN-78/M-82030	2
12	PIN S-ZN 2.5X20	PN-82/M-82001	1
13	WASHER N 17	PN-85/M-82005	3
14	M6X35-8.8-B FE/ZN12 SCREW	PN-85/M-82101	1
15	M8X20-8.8-B FE/ZN12 SCREW	PN-85/M-82105	1
16	NUT WITH POLYAMIDE INSERT M6-8-B FE/ZN12	PN-85/M-82175	1

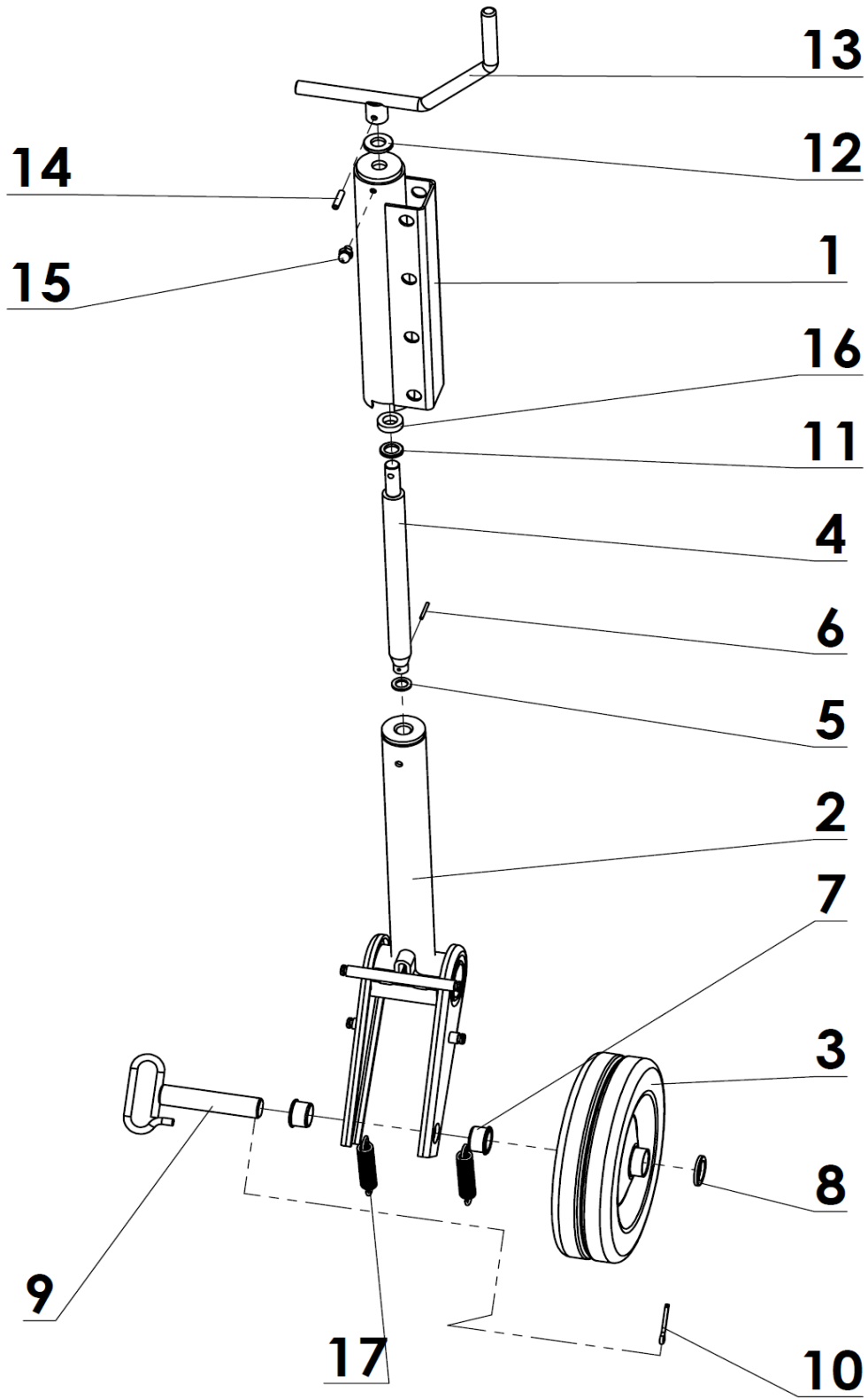


Fig. 19. Support

SUPPORT

Table 8

Item no.	Part name	KTM symbol or standard no.	Number of pcs. in unit
1	PIPE 2 SET	2219-02,05,000-1	1
2	SUPPORT ARM	2219-02,08,000-3	1
3	SUPPORT WHEEL SET	7105-03,03,000-1	1
4	SCREW	2219-02.00.006-2	1
5	WASHER N 21	PN-78/M-82005	1
6	DOWEL PIN 4X35	PN-82/M-85023	1
7	SLEEVE	2219-02.00.004	2
8	WASHER N31	PN-78/M-82005	1
9	WHEEL PIN	2219-02,02,000	1
10	PIN S-ZN-5X45	PN-82/M-85023	1
11	WASHER N 21	PN-78/M-82005	1
12	SPECIAL WASHER	7105-03.00.002-1	1
13	LEVER ARM SET	7105-03,00,100	1
14	DOWEL PIN 8X30	PN-82/M-85023	1
15	M10 GREASE FITTING	PN-76/M-86002	1
16	LONGITUDINAL BALL BEARING 51104	PN-86/M-86260	1
17	SPRING	7105-03.00.001-1	2

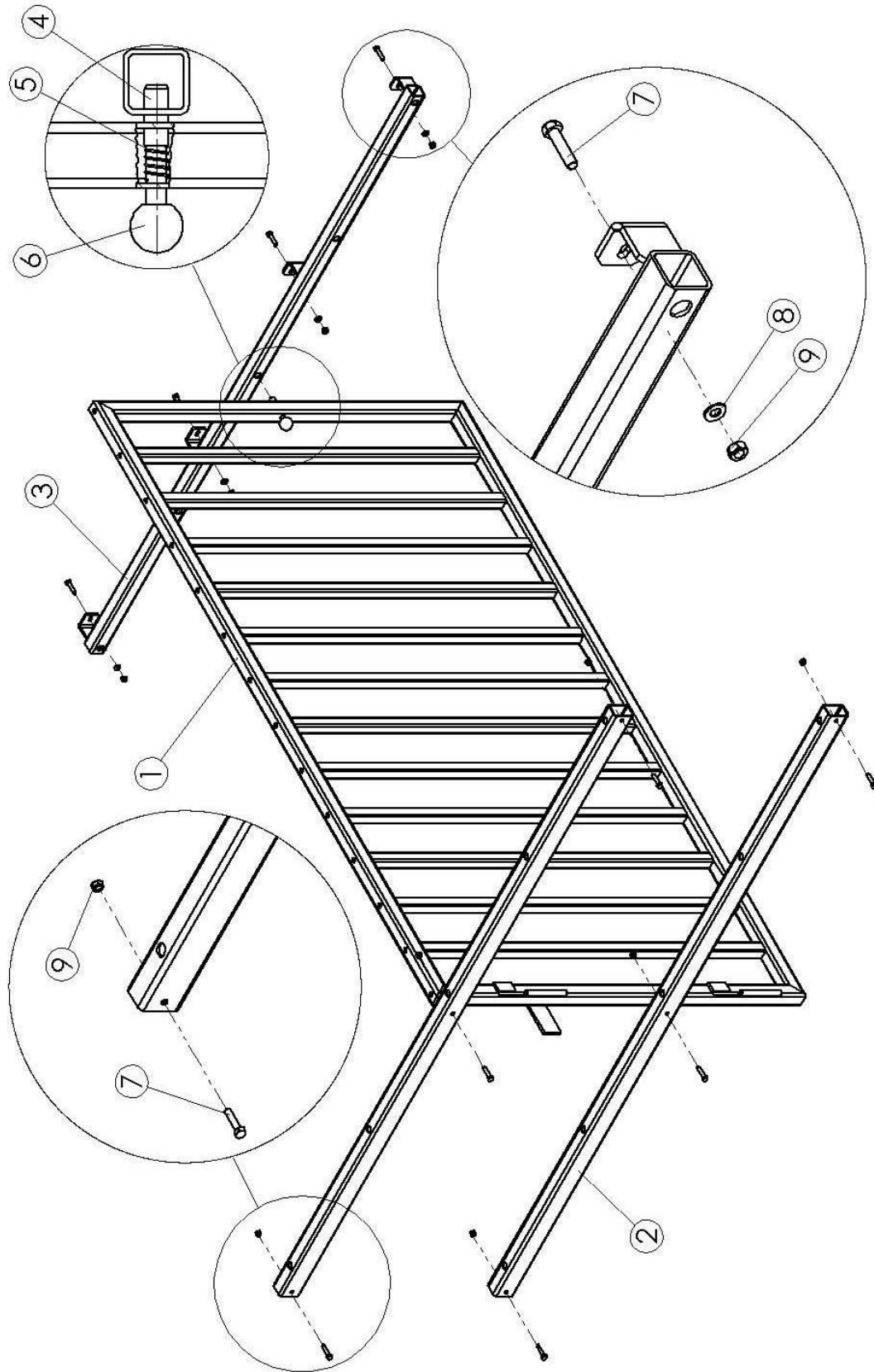


Fig. 20. Interior partition

INTERIOR PARTITION

Table 9

No	Part name	KTM symbol or standard no.	Number of pcs. in unit
1	PARTITION	131/00-04-100	1
2	SUSPENSION BEAM I	131/00-04-001	2
3	SUSPENSION BEAM II	131/00-04-002	1
4	PIN	131/00-04-003	1
5	SPRING	2219/08-09-003	1
6	SPHERICAL KNOB Ø32	PN-63/M-56170	1
7	M8X30-5.6-C SCREW	PN-85/M-82406	10
8	WASHER n 8.5	PN-59/M-82030	4
9	NUT M8-8-B WITH INSERT	PN-86/M-82175	10

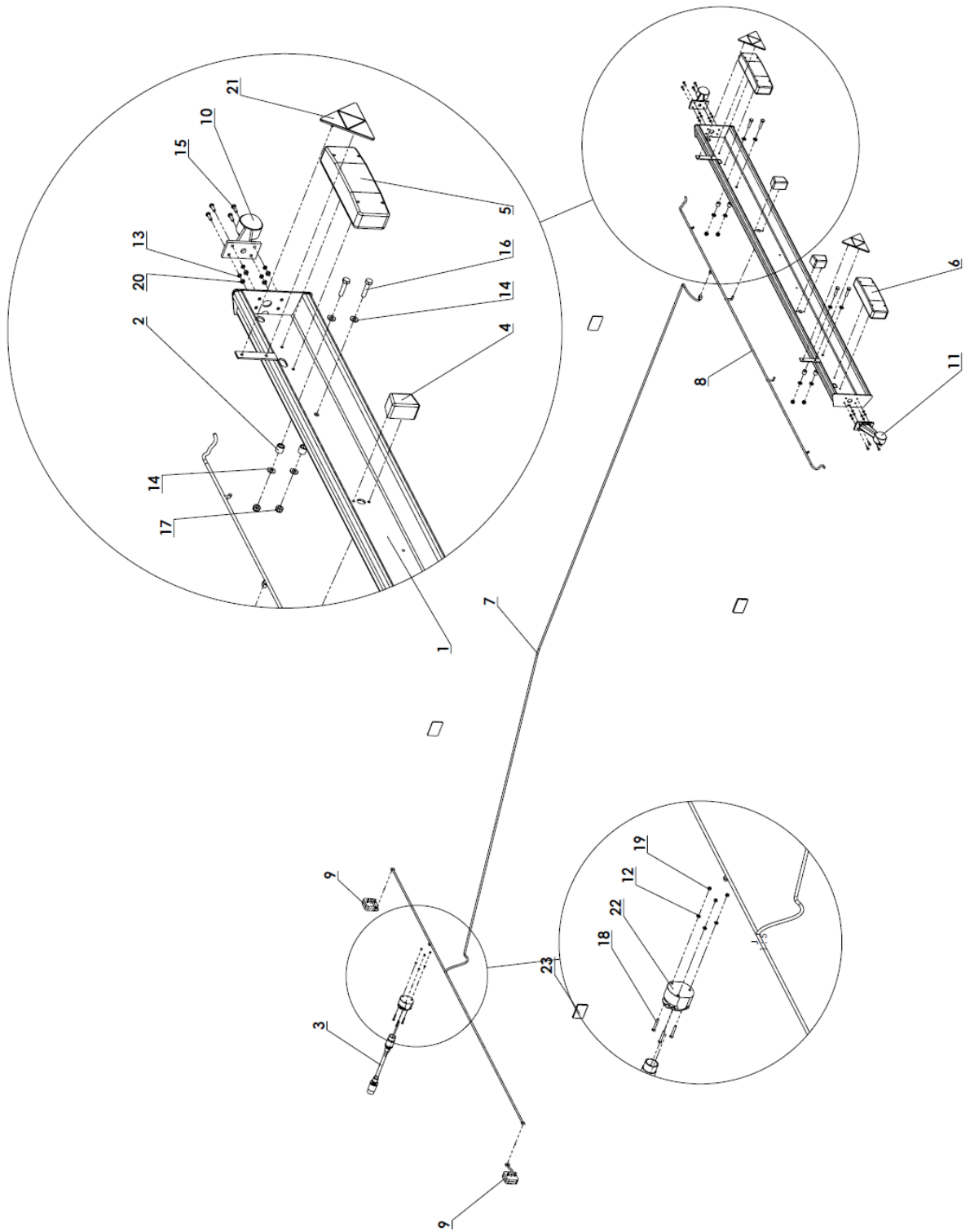


Fig. 21. Electrical installation

ELECTRICAL INSTALLATION

Table 10

Item no.	Part name	KTM symbol or standard number	Number of pcs. in unit
1	LIGHT PROTECTION SET	132/18.02.100/2	1
2	SLEEVE	2213/00.00.027	4
3	CONNECTING CABLE	2235/04.10.003	1
4	REGISTRATION PLATE LIGHTING LAMP	7677/18.10.003	2
5	REAR RIGHT CLUSTER LAMP	7677/18.01.007	1
6	REAR LEFT CLUSTER LAMP	7677/18.01.008	1
7	CENTRAL BEAM WITH FRONT OUTLINE LAMPS	7677/18.10.001	1
8	REAR BEAM	7677/18.10.002	1
9	FRONT OUTLINE LAMP	7677/18.10.003	2
10	RIGHT REAR OUTLINE LAMP	7677/18.10.007	1
11	LEFT REAR OUTLINE LAMP	7677/18.10.008	1
12	SPRING WASHER N 5.1	PN-77/M-82008	3
13	SPRING WASHER N 6.1	PN-77/M-82008	8
14	ROUND WASHER 10.5	PN-78/M-82030	8
15	M6X20-8.8-B SCREW	PN-85/M-82101	8
16	M10X45-8.8-B SCREW	PN-85/M-82105	4
17	SELF-LOCKING NUT M10	PN-85/M-82175	4
18	SCREW M5X35 5.8-B	PN-85/M-82207	3
19	M5-8-B NUT	PN-86/M-82144	3
20	M6-8-B NUT	PN-86/M-82175	8
21	REFLECTIVE TRIANGULAR RED DEVICE UT-150S	PN-90/S-73100	2
22	PLUG-IN SOCKET	PN83/S-76055	1
23	REFLECTIVE YELLOW DEVICE	UP-40R-ŻÓŁTE	4

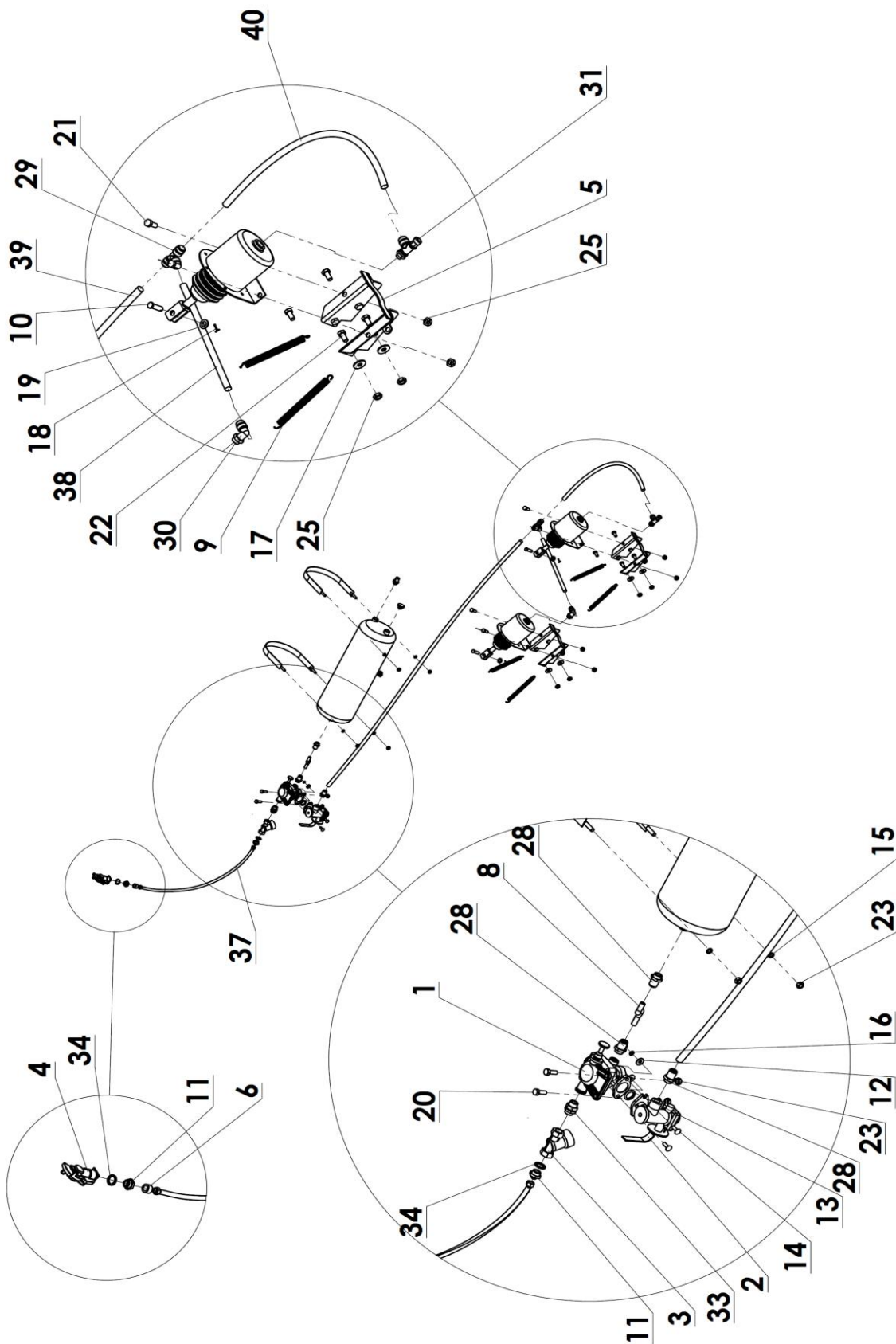
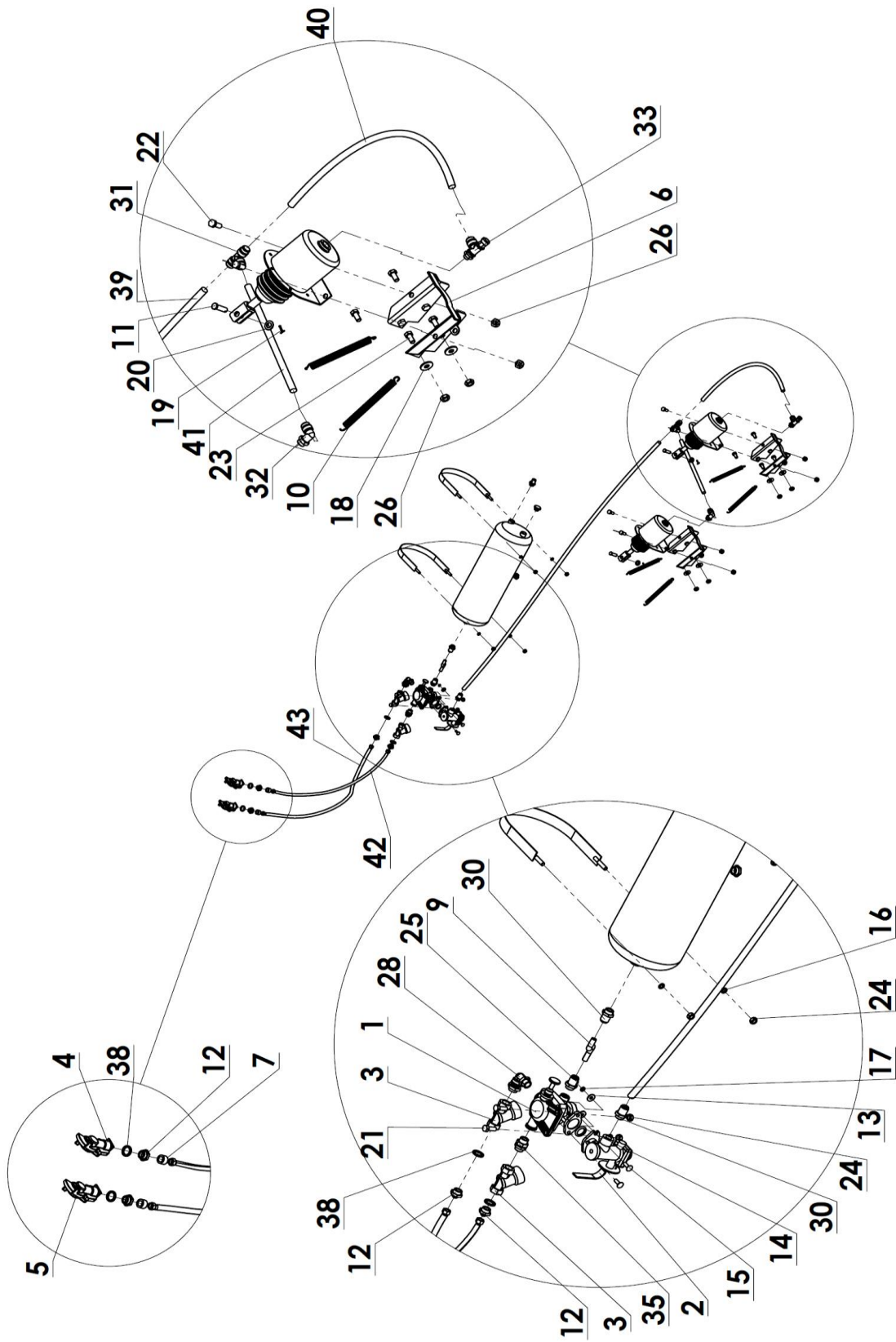


Fig. 22. 1-hose pneumatic brake system.

1-HOSE PNEUMATIC BRAKE SYSTEM

No	Part name	KTM symbol or standard no.	Number of pcs. in unit
1	HZS-4 Control valve	44.12.010.0	1
2	BRAKING FORCE REGULATOR	61.11.013.0	1
3	INLINE FILTER	81.10.010.0	1
4	A1 CABLE CONNECTOR	87.10.020.0	1
5	CYLINDER BASE	131/09.04.000	2
6	RUBBER SLEEVE	2219/15.00.003	1
7	TANK CLAMP	2219/15.01.000/0	2
8	HOSE TEKALAN N15X1.5 L=280	2221/39.00.004	1
9	SPRING	7104/08.00.001	4
10	PIN	7105/13.00.001	2
11	REDUCTION M22X1.5/M22X1.5/F16X1.5	270352215B	2
12	ROUND WASHER 8.5	PN-59/M-82030	2
13	22x5 SEALING RING	PN-64/M-73093	1
14	M8x25-8.8-B SCREW	PN-73/M-82406	2
15	SPRING WASHER Ø10.2	PN-77/M-82008	6
16	SPRING WASHER Ø 8.2	PN-77/M-82008	2
17	WASHER Ø13	PN-77/M-82030	8
18	PIN S-ZN 3.2x25	PN-78/M-82001	2
19	ROUND WASHER ø15	PN-78/M-82005	2
20	M10x30-8.8-B SCREW	PN-85/M-82105	2
21	M12x30--8.8-B SCREW	PN-85/M-82105	4
22	M12x25-8.8-B SCREW	PN-85/M-82105	8
23	M10-8-B NUT	PN-86/M-82144	6
24	M8 - 8 - B NUT	PN-86/M-82144	2
25	Nut with polyamide insert M12-8-B	PN82175	12
26	PLUG ZŁW-KR M22	S111003800 0000	1
27	ZS/M22 DRAIN VALVE	S1110002003800	1
28	ZŁW-15/M22 straight connector	S1110015003800	3
29	15/15/15 Three-way connector	S1110015151500	1
30	15/M22 Elbow connector	S1110015380000	1
31	Three-way connector with control valve HPM16/15/M22	S1113301153800	1
32	CONTROL CONNECTOR ZŁW-PM16/M22	S1113301380000	1
33	THRU CONNECTOR WITH CAP WITH SEAL ZŁW-M22/m22d+NUM M22	S1113838007800	1
34	Metal-rubber seal 1/2 22/30x3	U c 1/2	2
35	AIR ACTUATOR N 125	X53-35-00-A	2
36	AIR TANK 20L.	ZP.20.00.00	1
37	Red spiral connector hose M22X1.5 L=5000		1
38	TEKALAN HOSE	132/16.00.004	1
39	TEKALAN HOSE	132/17.00.001	1
40	TEKALAN HOSE	7104/28.00.002	1

Fig.
23.
2-



hose pneumatic brake system

DOUBLE-CIRCUIT PNEUMATIC BRAKE SYSTEM Table 12

No	Part name	KTM symbol or standard no.	Number of pcs. in unit
1	HZS-4 Control valve	44.12.010.0	1
2	BRAKING FORCE REGULATOR	61.11.013.0	1
3	INLINE FILTER	81.10.010.0	2
4	A1 CABLE CONNECTOR	87.10.020.0	1
5	A2 CABLE CONNECTOR	87.10.030.0	1
6	CYLINDER BASE	131/09.04.000	2
7	RUBBER SLEEVE	2219/15.00.003	2
8	TANK CLAMP	2219/15.01.000/0	2
9	HOSE TEKALAN N15X1.5 L=280	2221/39.00.004	1
10	SPRING	7104/08.00.001	4
11	PIN	7105/13.00.001	2
12	REDUCTION M22X1.5/M22X1.5/F16X1.5	270352215B	4
13	ROUND WASHER 8.5	PN-59/M-82030	2
14	22X5 SEALING RING	PN-64/M-73093	1
15	M8X25 SCREW	PN-73/M-82406	2
16	Spring Washer 10.2	PN-77/M-82008	6
17	SPRING WASHER Ø 8.2	PN-77/M-82008	2
18	WASHER Ø13	PN-77/M-82030	8
19	PIN S-ZN 3.2x25	PN-78/M-82001	2
20	ROUND WASHER 15	PN-78/M-82005	2
21	M10X30 8.8 SCREW	PN-85/M-82105	2
22	M12X30 8.8 B screw	PN-85/M-82105	4
23	M12X25 8.8 B screw	PN-85/M-82105	8
24	M10 NUT	PN-86/M-82144	6
25	M8 - 8 - B NUT	PN-86/M-82144	2
26	Nut with polyamide insert M12	PN82175	12
27	PLUG ZŁW-KR M22	S111003800 0000	1
28	Elbow connector ZŁW-15/M22/M22-KOL	S111003838000	1
29	ZS/M22 DRAIN VALVE	S1110002003800	1
30	ZŁW-15/M22 straight connector	S1110015003800	3
31	15/15/15 Three-way connector	S1110015151500	1
32	15/M22 Elbow connector	S1110015380000	1
33	Three-way connector with control valve HPM16/15/M22	S1113301153800	1
34	CONTROL CONNECTOR ZŁW-HPM16/M22	S1113301380000	1
35	THRU CONNECTOR WITH CAP WITH SEAL ZŁW-M22/M22D+NUM M22	S1113838007800	1
36	AIR TANK 20L.	ZP.20.00.00	1
37	AIR ACTUATOR N 125	X53-35-00-A	2
38	Metal-rubber seal 1/2 22/30X3	U c 1/2	4
39	Hose tekalan N15X1.5	132/17.00.001	1
40	Hose tekalan N15X1.5	7104/28.00.002	1
41	Hose tekalan N15X1.5	132/16.00.004	1
42	Red spiral connector hose M22X1.5 L=5000		1
43	Yellow spiral connecting cable M22X1.5 L=5000		1

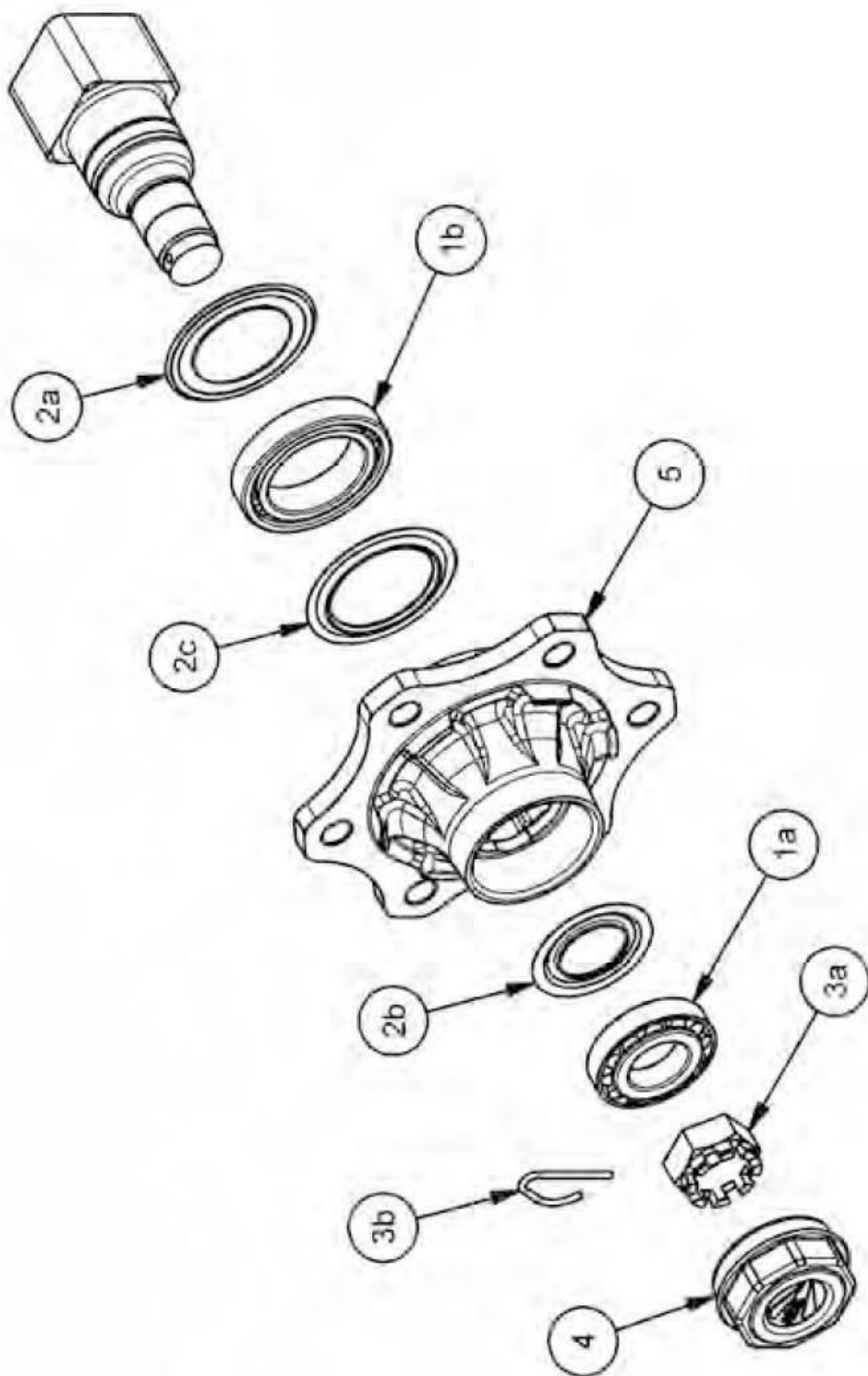


Fig. 24. Bearings of drive axle.

BEARINGS OF DRIVE AXLE FROM ADR COMPANY

Table 13

No	Part name	KTM symbol or standard number	Repair kit	Number of pcs. in unit
1a	BEARING 30208	59130208	9RCMA	1
1b	BEARING 32013X	59132013X		1
2a	OIL SEALING	5411002	9RNMA	1
2b	GUARD OF BEARING 30208	5510801		1
2c	GUARD OF BEARING 32013X	5510991		1
3a	CASTELLATED NUT	57539B1	9RDF3950	1
3b	PIN	58205		1
4	CAP	56108003	9RT80	1
5	HUB	61L6LA001	61L6LA001	1

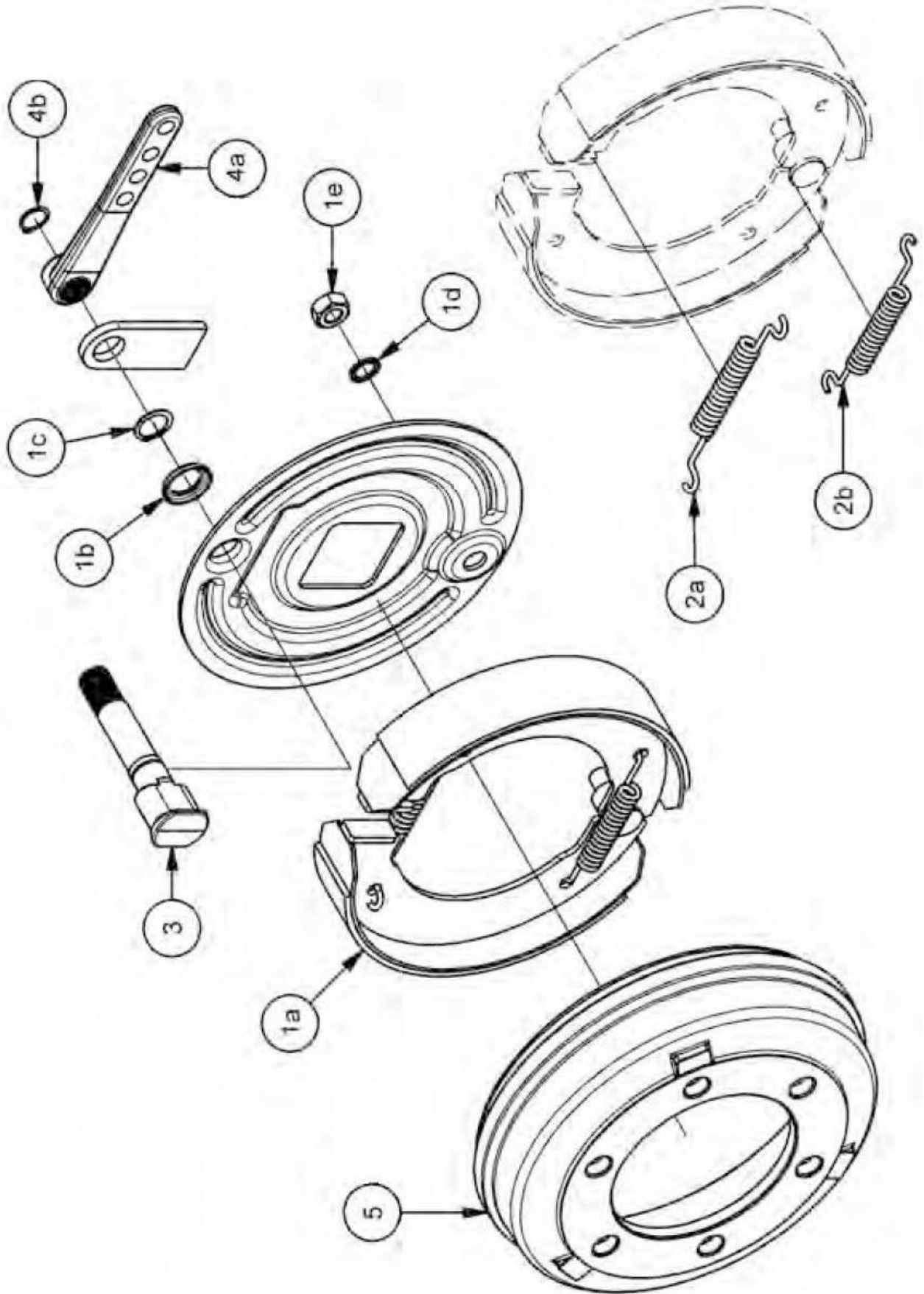


Fig. 25. Brake of drive axle.

BRAKE OF DRIVE AXLE FROM ADR COMPANY

Table 14

Item no.	Part name	KTM symbol or standard number	Repair kit	Number of pcs. in unit
1a	COMPLETE BRAKE	731FD01	9RE0008	1
1b	ADAPTER	73F02		1
1c	SEATING RING	58509		1
1d	WASHER	9800161		1
1e	NUT	97116D1		1
2a	SPRING	738108	9RK0003	2
2b	SPRING	738107		2
3	EXPANDER	7522631...	7522631...	1
4a	EXPANDER LEVER	7611304	9RQ002	1
4b	SEATING RING	58507		1
5	DRUM	66LFG0602	66LFG0602	1

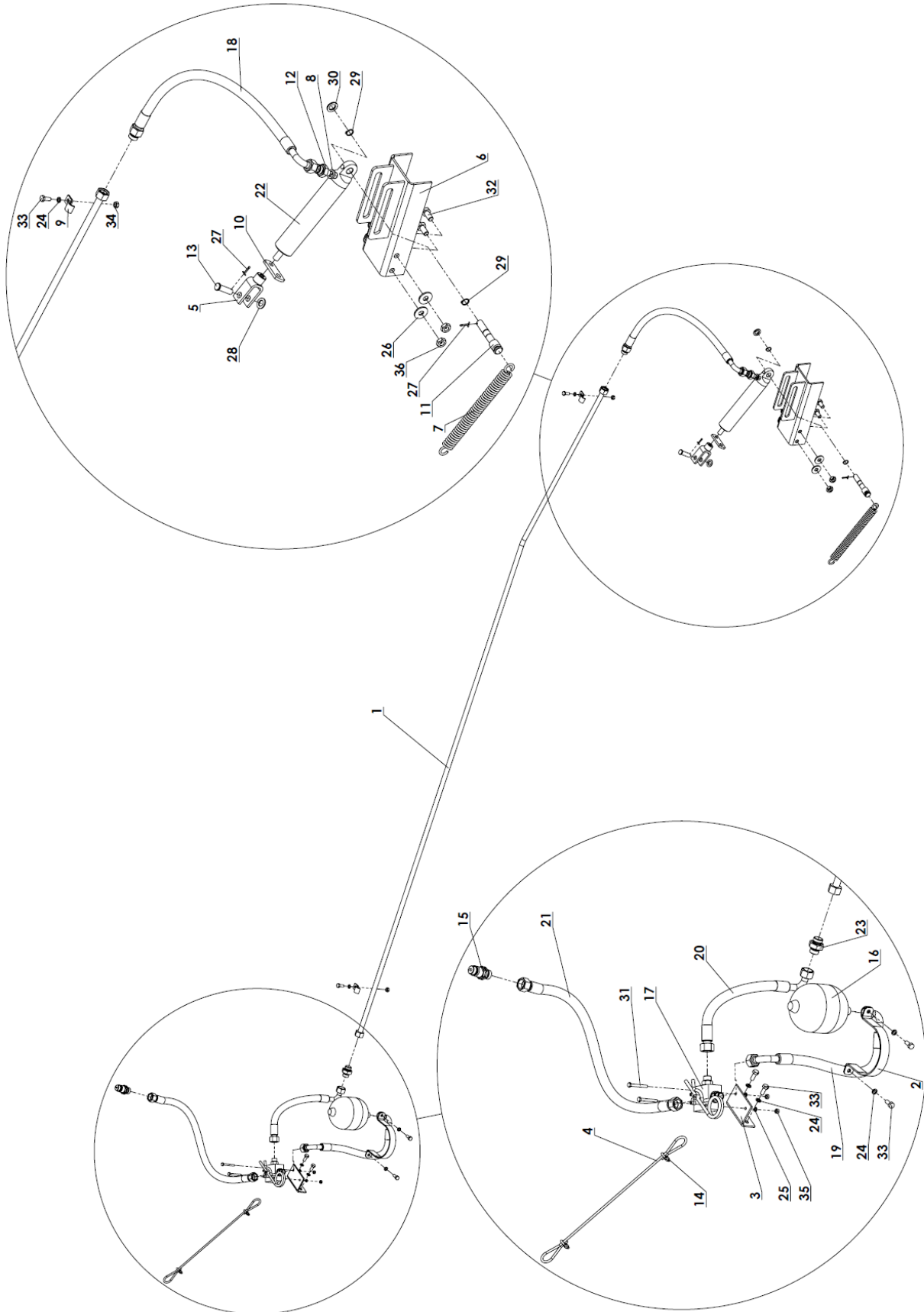


Fig. 26. Hydraulic brake installation.

HYDRAULIC BRAKE INSTALLATION

Table 15

No	Part name	KTM symbol or standard no.	Number of pcs. in unit
1	TUBE L=3900	132/15.00.001	1
	TUBE L=900	132/15.002	
2	Battery clamp 1.4L	132/15.00.003	1
3	Valve bracket	131/15.00.003	1
4	Emergency valve cord L=1000	131/15.00.004	1
5	Clamp set.	131/15.00.100	1
6	Actuator bracket	131/15.02.000	1
7	SPRING	7104/08.00.001	4
8	Washer I	7074/04.00.003	1
9	Clamp II	7074/04.00.006	2
10	PLATE	7076/36.00.005	1
11	PIN	7076/36.00.006/1	1
12	CONNECTOR	7079/12.00.002	1
13	PIN	7105/13.00.001	1
14	Terminal clip 3	15359/4.12	2
15	QUICK-COUPLER	21001462	1
16	HYDRAULIC ACCUMULATOR 0.7L	21002247	1
17	Emergency valve set	21003208	1
18	AB-16-550-13/13 FLEXIBLE HOSE	BN-87/1903-01	1
19	AA-16-350-13/13 FLEXIBLE HOSE	BN-87/1903-01	1
20	AA-16-250-13/13 FLEXIBLE HOSE	BN-87/1903-01	1
21	Flexible connecting hose AA-16-1400-13/13	BN-87/1903-01	1
22	Hydraulic plunger cylinder	CN2E-16-550-13/13	1
23	Straight connector	GM 3/4 - 22x1.5	1
24	16-13 JAMMING RING	PN-65/M-73137	4
25	16-13 NUT	PN-65/M-73139	4
26	SPRING WASHER Ø 8.2	PN-77/M-82008	6
27	SPRING WASHER 6.1	PN-77/M-82008	2
28	WASHER Ø13	PN-77/M-82030	4
29	PIN S-ZN 3.2X25	PN-78/M-82001	2
30	ROUND WASHER 15	PN-78/M-82005	1

31	External mounting ring Z16	PN-81/M-85111	4
32	WASHER 17	PN-85/M-82005	1
33	M6X50 SCREW	PN-85/M-82101	2
34	M12X25 8.8 B screw	PN-85/M-82105	4
35	M8X20-8.8-B SCREW	PN-85/M-82105	6
36	M8 - 8 - B NUT	PN-86/M-82144	2
37	M6 NUT	PN-86/M-82175	2
38	Nut with polyamide insert M12	PN82175	4

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