



PRONAR Sp. z o.o.

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CONTAINER TRAILER

T185

OPERATION & MAINTENANCE MANUAL

Identification of the machine

Symbol /Type:	T185
KTM Symbol:	1026-690-848-706
Serial:

The serial is stamped on the type plate and on the front of the trailer's frame. The type plate is riveted to the load-carrying body.

In the course of purchase check conformity of the serial stamped on the trailer with the serial given in the warranty card, in purchase documents and in the operation manual.

Hydraulic system is filled with HL32 hydraulic oil

Quality Inspection Sign.....

The manual is valid together with the annex No. dated on

The manufacturer reserves the right to introduce design modifications for the purpose of simplified maintenance and improved operation quality.

Remarks and notices about design and operation of the trailer should be submitted to the manufacturer. This information allows us to evaluate objectively manufactured machines and will be used as hints for further modernisation.

Information about major design alterations will be supplied to users in the form of enclosed information leaflets (annexes).

CAUTION!

The operation & maintenance manual is the substantial equipment of the trailer.

The user should read carefully the manual before operation and observe all recommendations given in the manual. This will ensure safe maintenance and failure-free operation of the machine.

The machine has been designed in accordance with generally recognised standards, documents and currently binding legal regulations.

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tel./fax: (085) 681 63 29			
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Symbol/Typ	T185	Masa wł.	3000 kg
Rok prod.		Dop. m. calk.	15000 kg
Nr fabr.			
Nr św. hom.		Ładowność	kg
		Dop. obc. zacz.	25 kN
		Dop. obc. osi	125 kN
			kN

A

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Symbol/Typ	KO 01	Masa wł.	1550 kg
Rok prod.		Dop. m. calk.	12000 kg
Nr fabr.			
Nr św. hom.		Ładowność	10450 kg
		Dop. obc. zacz.	kN
		Dop. obc. osi	kN
			kN

B

FIG. 1. TYPE PLATE
A – TRAILER, B – AGRICULTURAL CONTAINER

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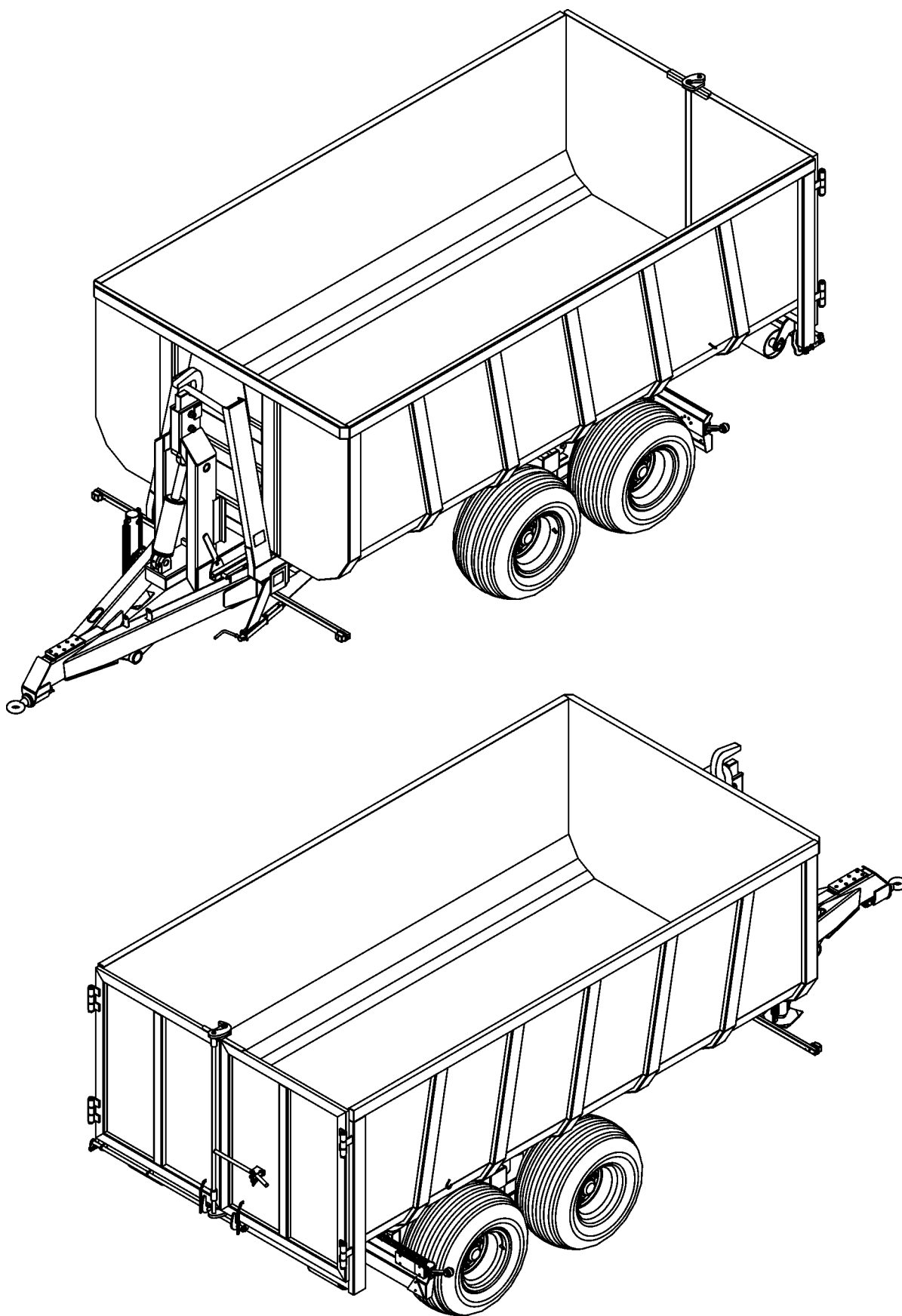


FIG. 2.

CONTAINER TRAILER T185

1. INTRODUCTION

1.1 GENERAL INFORMATION

The manual describes basic rules of safe operation & maintenance of the agricultural trailer. If information contained within the manual will be not comprehensible for the user please do not hesitate to contact your dealer or directly the manufacturer.

Especially important are information and recommendation marked in the text by bold characters or preceded by the word "CAUTION".

Information, descriptions of danger and precautions as well as commands and orders concerning safe operations are marked with following sign:



and mentioned in the chapter „Safe operation “.

1.2 APPLICATION OF THE TRAILER

The container trailer Pronar T185 is designed for widely comprehended container operation i.e. transportation, uploading and unloading of containers through their tilting backwards, unloading of agricultural, building and communal containers. The complex hydraulically-aided uploading & tilt systems make the trailer very reliable during operation. The trailers of this type are recommended everywhere, where the transport logistic is based on containers, and especially in locations, where the truck transport is difficult e.g. boggy fields, forest roads etc. Possibility of application of wide tyres causes that the trailers work very good in hard road conditions.

Brakes, lighting and signalling systems fulfil all requirements of traffic regulations. The trailer is adapted for coupling with agricultural tractors fitted with external hydraulic system and a lower hook of 2500 kG load capacity. The trailer is fitted with a string with an eye of Ø50 mm diameter or – for a special order - with an eye of Ø40 mm diameter

CAUTION



The trailer must not be used contrary to its proper application and especially for transporting of persons & animals.

2. OPERATIONAL SAFETY

2.1 BASIC SAFETY RULES



- The user should read carefully the manual before operation and observe all recommendations given in the manual during operation.
- Prior to each use of the trailer check the machine, if it is properly prepared for operation, especially with regard to safety.
- If information contained within the manual will be not comprehensible for the user please do not hesitate to contact your dealer, who also provides repair & service or directly the manufacturer.
- Climbing on the trailer is allowed only if the trailer is completely stopped and tractor's engine off.
- Careless and improper operation & maintenance of the trailer as well as lack of observation of recommendations given in present manual may endanger human health and life.
- The trailer can be operated only when all guards and other protective elements are efficient and on their places.
- There is the risk of residual danger, thus application of safe operation rules should be the basic principle of trailer's use.
- Persons unauthorised for driving agricultural tractors including children and drunken persons have no right to use the trailer.
- It is prohibited to use the trailer contrary to its purposes. User, who utilise the trailer in other than prescribed manner, takes responsibility for all consequences resulting from trailer's use.
- Any unauthorised modification absolves the PRONAR Narew from responsibility for resulting damage or health detriment.
- Prior to each trailer's use check its technical condition, especially coupling system, drive system, brakes and signalling lights.
- Admissible load must not be exceeded.
- Transportation of persons and animals is prohibited.
- If any operation failure or damage occurs, stop operation of the trailer and repair the damage.
- During trailer's operation use protection gloves and proper tools.

- All maintenance & repair works should be performed with observation of safety regulations. In the case of wound wash and disinfect wounded place immediately. In the case of serious injuries consult a physician.
- The trailer is marked with information / warning stickers as described in the table 1 below. The user should take care of legibility and cleanliness of inscriptions & warnings for all time of trailer's operation. In the case of damage or destruction replace missing stickers with new ones – available at your dealer or manufacturer.
- Match the speed to environment conditions. Avoid driving on rough ground and sharp turns, if possible.
- Do not exceed the admissible speed.

2.2 COUPLING AND UNCOUPLING TO THE TRACTOR

- Take special care while coupling trailer with tractor.
- For coupling with tractor use only hooks for single-axle trailers (lower towing hook). Check safety device.
- In the course of coupling no one is allowed to stand between the trailer and the tractor.
- Disconnected trailer should be braked with the parking brake. If the trailer stands on a slope or an elevation it should be protected additionally with wedges (supplied together with the trailer) placed under wheels.

2.3 PNEUMATIC & HYDRAULIC SYSTEMS

- The hydraulic system is under high pressure during operation
- While connecting hydraulic conduits to a tractor make sure that hydraulic systems of the tractor and the trailer are pressure-free,
- Check regularly all connections and hydraulic & pneumatic conduits.
- In case of any failure of the hydraulic/pneumatic system stop operation and remove the failure.

2.4 TYRES

- During works connected to trailer's tyres make sure to protect the trailer against accidental movement with edges supplied together with the trailer.
- All repairs of tyres should be performed by trained and authorised personnel. Works should be performed with proper tools.
- After each installation of a wheel tighten nuts after first 50 km and then check their tightening each 100 km.
- Check the tyre pressure regularly.

2.5 MAINTENANCE

- All maintenance, preservation and cleaning works should be performed only when the tractor's engine is off and the ignition key removed from the ignition switch.
- Check all screwed connections.
- During work use proper protective clothes and proper tools.
- Prior to welding or electric works disconnect the trailer from power supply.
- Check condition of all protective elements and their fastening.
- During the guarantee period all repairs may be performed only by authorised Manufacturer's service stations.

- If it is necessary to replace an element/part it is recommended to use only original parts or paints recommended by the Manufacturer. Inobservance of this requirements may cause danger to health or life of operators or third persons as well as damage of the machine.

2.6 PRINCIPLES OF USE ON PUBLIC ROADS

- While driving public roads observe traffic regulations.
- Trailer's overload may cause its damage and endanger traffic safety.
- Do not exceed the maximum speed. Adjust the speed to traffic conditions.
- It is prohibited to leave unsecured trailer. Always activate the parking brake.
- While driving public roads the trailer should be equipped with certified or approved warning reflecting triangle.
- Rear wall should be equipped with a triangular plate for slowly moving vehicles, if the trailer is the last vehicle in a set (Fig. 3).

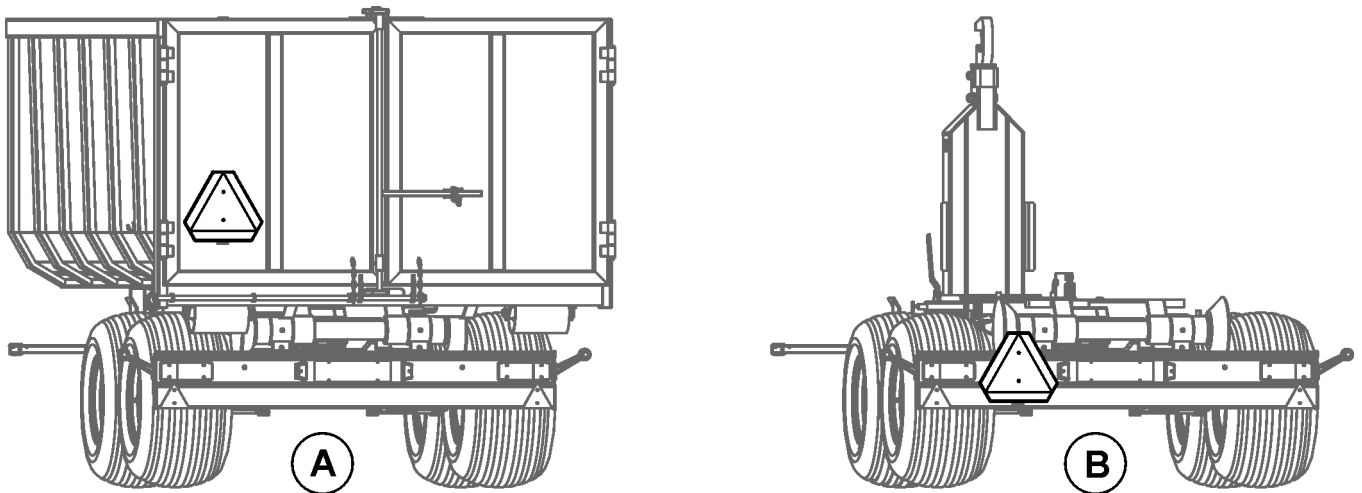


FIG. 3. LOCATION OF A TRIANGULAR PLATE FOR SLOWLY MOVING VEHICLES.
A – TRAILER WITH A CONTAINER, B – TRAILER WITHOUT CONTAINER.

2.7 UPLOADING / UNLOADING OF THE TRAILER

- All uploading / unloading works should be performed by persons experienced with this type of works.
- During uploading / unloading works stop the trailer with the parking brake and lock the rockers
- The load must be distributed uniformly and must not make the driving difficult.
- Do not exceed the admissible load.

2.8 RESIDUAL RISK

The firm Pronar Sp. z o. o. in Narew has made all efforts to eliminate any risk of an accident. However, there is certain residual risk, which may lead to an accident and is connected to actions described below:

- application of the trailer for other purposes than described in the manual
- presence of persons between the tractor and the trailer
- operation with removed or inefficient trailer guards
- operation of the trailer by unauthorised or drunken persons
- presence on the trailer during work
- cleaning, maintenance and inspection of the trailer


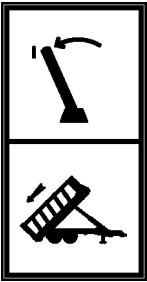
The residual risk can be reduced to minimum if following recommendations will be observed:

- judicious and haste-free operation of the trailer
- observation of hints included in the operation manual
- safe distance from dangerous zones
- prohibition of stay on the machine during its operation
- execution of maintenance works according to safety rules
- use of protective clothes
- protection of the machine against access of unauthorised persons, and especially children

2.9 INFORMATION & WARNING STICKERS

Description of information & warning stickers shows the Table 1, their location on the trailer – the Fig. 4.

Table 1. Information & warning stickers.

No. on the Fig. 4	Sign	Description	Location
1			Container sidewalls
2		Tilt frame lock Position I Container tilt	Tilt frame side

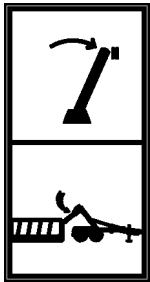
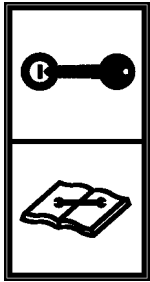
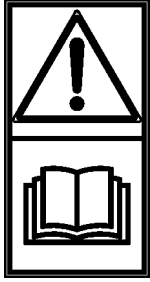




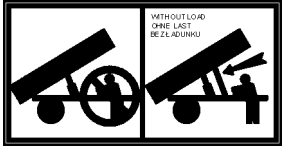

3		Tilt frame unlocked Position II Uncoupling/coupling of the container	Tilt frame side
4		Prior to maintenance & repair stop the engine and remove the ignition key	Tilt frame front
5		Read the operation manual	Tilt frame front

Table 1. Information & warning stickers, continued.

No. on the Fig. 4	Sign	Description	Location
6		Take special precautions while operating near to energetic lines	Container sidewalls
7		Smarować zgodnie z zaleceniami zawartymi w instrukcji obsługi	Tilt frame front

8		Kontrolować stan połączeń śrubowych osi jezdnych	Tilt frame front
9		LEVER blokady. Nie używać podczas operacji rozładunku lub wywrotu kontenera.	Tilt frame
10		Do not perform repair/maintenance works if the container is loaded and/or not supported	Lower frame side
11		Tyre pressure	Rocker beam

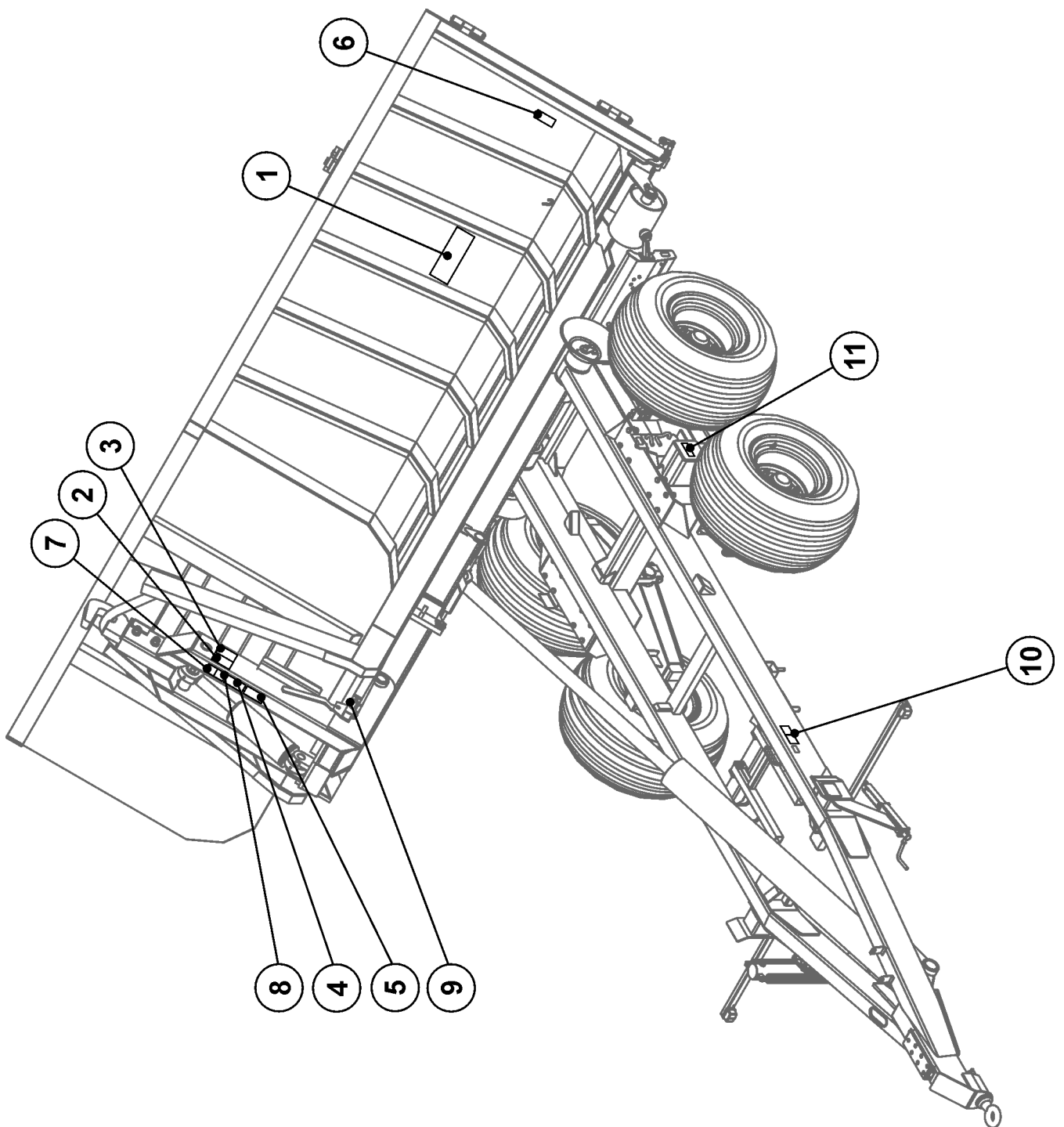


FIG. 4.

LOCATION OF INFORMATION & WARNING STICKERS.

3. ADDITIONAL INFORMATION

3.1 TRAILER EQUIPMENT

Trailer equipment consists of:

- operation & maintenance manual
- warranty card
- wheel wedges

For user's order the trailer may be equipped additionally with:

- warning reflecting triangle
- triangular plate for slowly moving vehicles

3.2 WARRANTY CONDITIONS

"PRONAR" Sp. z o.o. in Narew guarantees efficient operation of the trailer if utilised according to technical & operation conditions described in the manual.

Failures detected within warranty period will be removed by the Warranty Service within no longer than 14 working days from the date of delivery to a repair station or within any other agreed period.

Normally wearing parts i.e. tyres, brake linings as well as mechanical damage, damage resulted from improper use, adjustment or maintenance are not subject of warranty.

Detailed warranty conditions are mentioned in the warranty card supplied together with the newly bought trailer.

CAUTION



Demand your dealer to fill the warranty card and complaint coupons exactly and completely. Lack of e.g. sale date or dealer's stamp may render your possible complaint void.

3.3 DELIVERY

The trailer is delivered for sale fully assembled and requires no package. Packed are only: the manual, the connection cable and – if ordered – the warning triangle.

The trailer is supplied to the user with a truck or the user can take it by himself with his own tractor.

CAUTION



If the user takes the trailer by him he should read present manual and observe all recommendations given in the manual. In the case of transportation with a truck the trailer is fastened on the load crate according to generally recognised safety rules. The truck driver should take special precautions while transporting the trailer, because the gravity centre of the loaded truck is shifted upwards.

3.4 DISPOSAL OF THE TRAILER

If the user decides to dispose the trailer, the complete trailer should be delivered to local scrapyard. Parts removed in the course of e.g. repair should be supplied to a recycling firm.

The certificate from the scrapyard should be submitted while unregistering the trailer.

4. OPERATIONAL INFORMATION

4.1 TECHNICAL DATA

Table 2. Basic technical data of the T185 trailer without container.

Data	URIVET	T185
Load	kg	12000
Empty weight	kg	3000
Admissible total weight	kg	15000
Overall dimensions		
• length	mm	5765
• width	mm	2506
• height	mm	2535
Max. container tilt angle		46°
Wheel base	mm	1790
Tyre size		500/50-17 18RPN
Tyre pressure	kPa	450
Voltage	V	12
Max. speed	km/h	40
Oil capacity	l	38
Nominal pressure within the hydraulic system	MPa	16

Table 3. Basic technical data of the agricultural container KO 01.

Data	URIVET	KO 01
Load	kg	10450
Empty weight	kg	1550
Admissible total weight	kg	12000
Length (external)	mm	5017
Length (internal)	mm	4560
Width (external)	mm	2506
Width (internal)	mm	2395
Wall height	mm	1405
Load volume	m ³	15,1

Table 4. Basic technical data of the building container KO 02.

Data	URIVET	KO 02
Load	kg	10560
Empty weight	kg	1440
Admissible total weight	kg	12000
Length (external)	mm	5004
Length (internal)	mm	4560
Width (external)	mm	2550
Width (internal)	mm	2392
Wall height	mm	700
Load volume	m ³	7,4

4.2 STRUCTURE AND OPERATIONAL PRINCIPLE

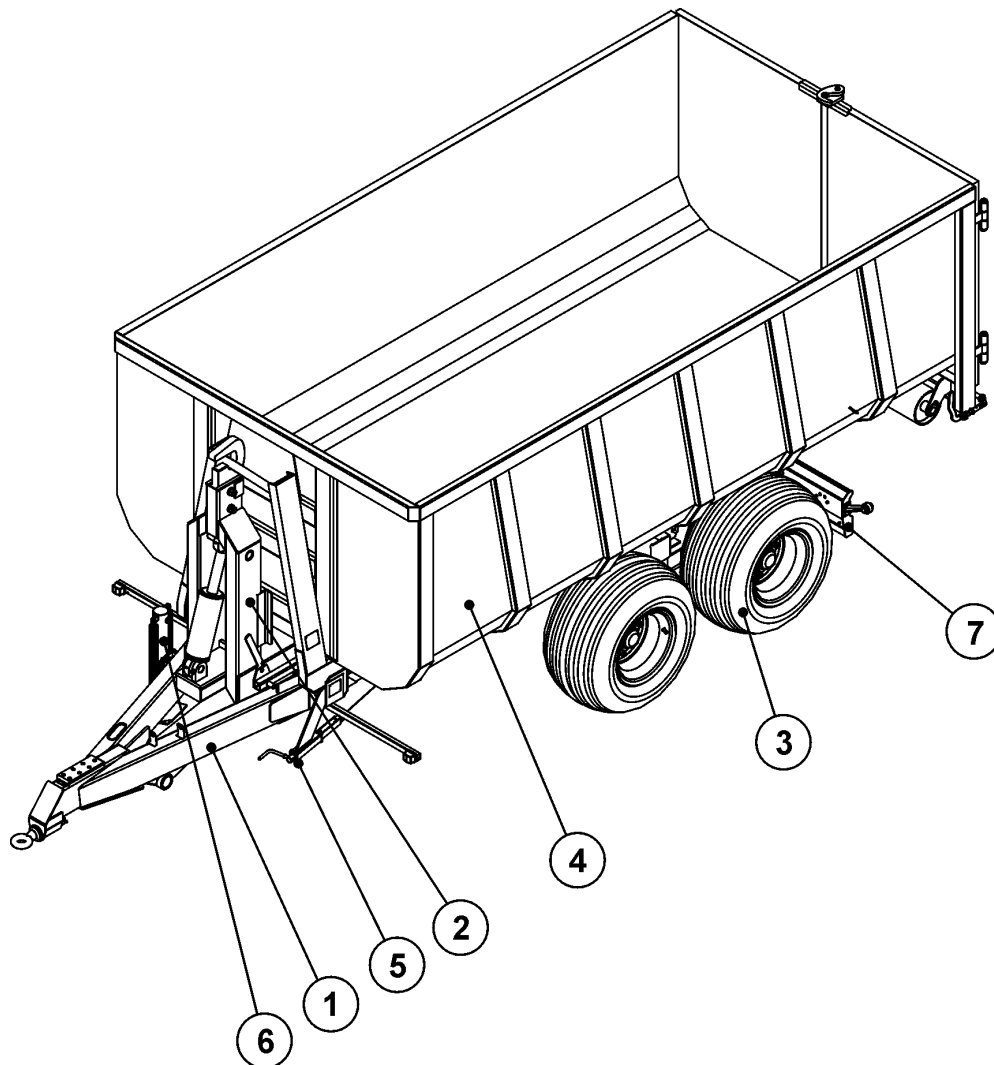


FIG. 5. STRUCTURE OF THE TRAILER WITH A CONTAINER.

1 – LOWER FRAME WITH A DRAUGHT BAR Ø50, 2 – TILT FRAME, 3 – UNDERCARRIAGE, 4 – CONTAINER, 5 – PARKING BRAKE, 6 – HYDRAULIC SUPPORT, 7 – LIGHTING BEAM.

4.2.1 Trailer T185 without container

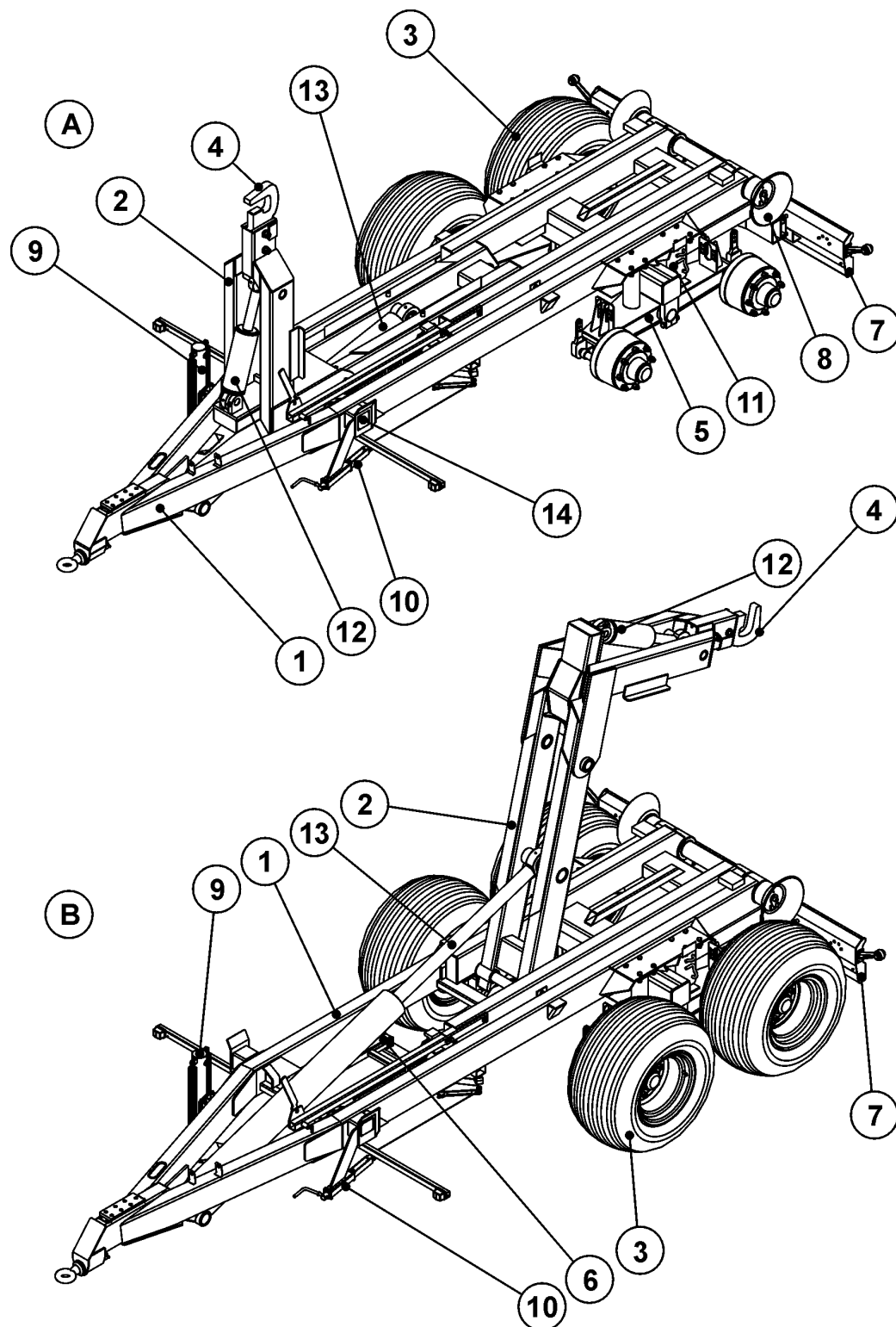


FIG. 6. TRAILER T185.

A – TRAILER T185 WITH FOLDED TILT FRAME
B – TRAILER T185 WITH UNFOLDED TILT FRAME

1 – LOWER FRAME WITH DRAUGHT BAR Ø50, 2 – TILT FRAME, 3 – WHEEL, 4 – HOOK, 5 – ROCKER, 6 – CONTAINER SUPPORT, 7 – LIGHTING BEAM, 8 – GUIDE ROLLER, 9 – HYDRAULIC SUPPORT, 10 – PARKING BRAKE, 11 – HYDRAULIC CYLINDER OF THE ROCKER LOCK, 12 – HYDRAULIC CYLINDER, 13 – HYDRAULIC CYLINDER, 14 – TYPE PLATE.

The container trailer PRONAR T185 is designed for transportation of agricultural, building or communal containers. The undercarriage of the T185 trailer is fitted with a tandem-type suspension and hook-gear for uploading of containers equipped with hydraulic suspension lock during uploading/unloading of the trailer.

Trailer's undercarriage consists of parts shown on the Fig. 6: lower frame (1), tilt frame (2), rockers with wheels (3), (5). The lower frame is a welded structure made of steel profiles. Main carrying elements are two stringers connected each to other with cross-bars. In the front part of the frame on the profil of the draught bar installed is the hydraulic support (9). On the support beam mounted is the support of the container. In the rear part of the frame installed is the tandem-type drive system (3), (5), hydraulic system for rocker lock (11), guide rollers (8) and elements of the lighting system (7). On the lower frame (1) installed is the tilt frame fitted with a hook and two hydraulic cylinders for tilt and unloading of the container.

4.2.2 Agricultural container

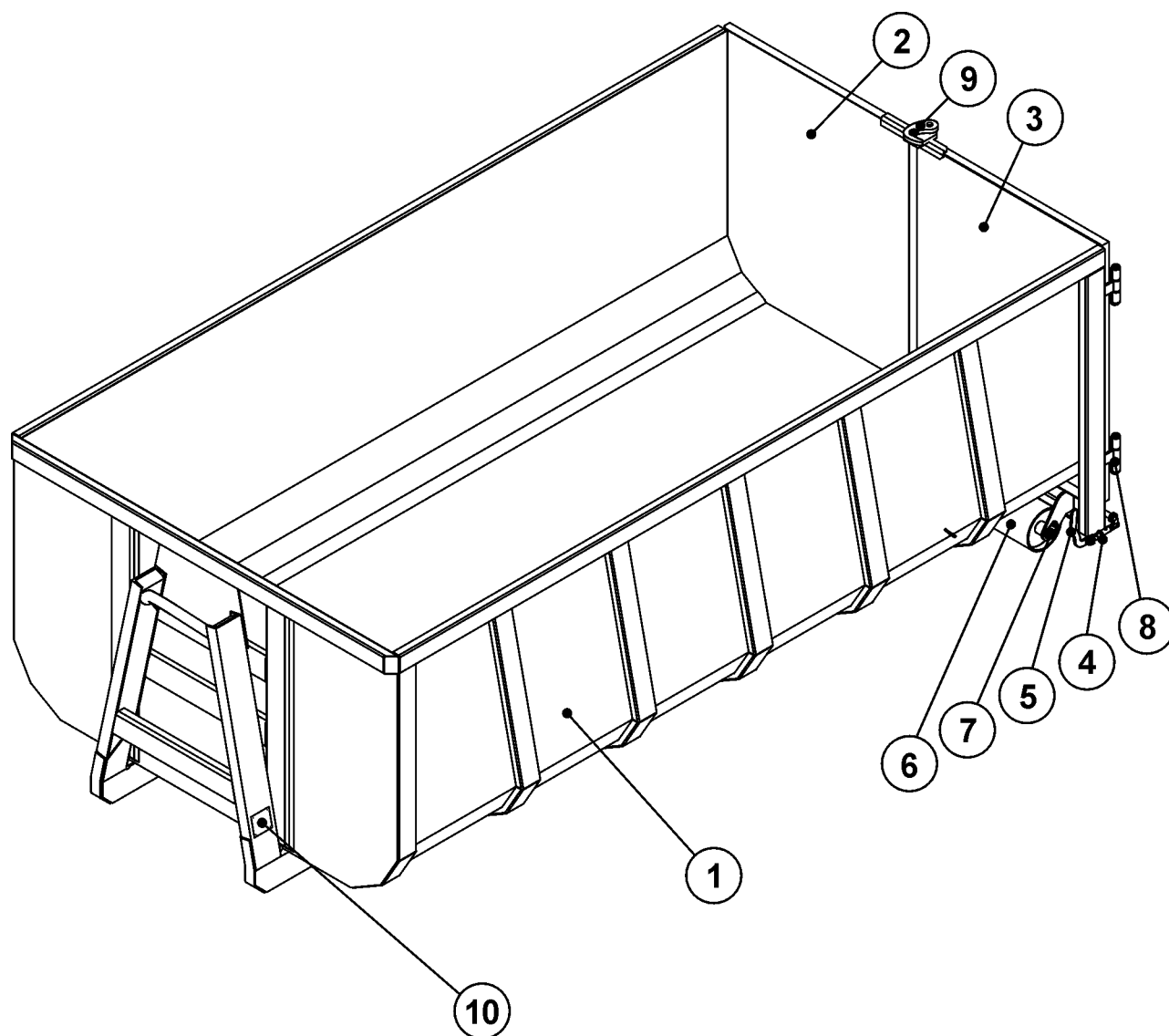


FIG. 7. AGRICULTURAL CONTAINER

1 – CRATE, 2 – LEFT REAR DOOR, 3 – RIGHT REAR DOOR, 4 – STRING, 5 – LEVER, 6 – REAR WHEEL, 7 – REAR WHEEL BOLT, 8 – DOOR BOLT, 9 – LOCKING GEAR, 10 – TYPE PLATE.,

The agricultural container consists of two stringers with the crate welded to them (1). In the front part of the container two channel bars and a catch eye are welded to stringers. In the rear part of the crate there

are two doors (2), (3), which are fastened with hinges to the crate structure. On the left rear door there is a lock (9), which protects the doors against accidental opening. In the rear part of the container there are special wheels (6), which are used during coupling/uncoupling of the container. The structure of the agricultural container is shown on the Fig. 7.

4.2.3 Building container

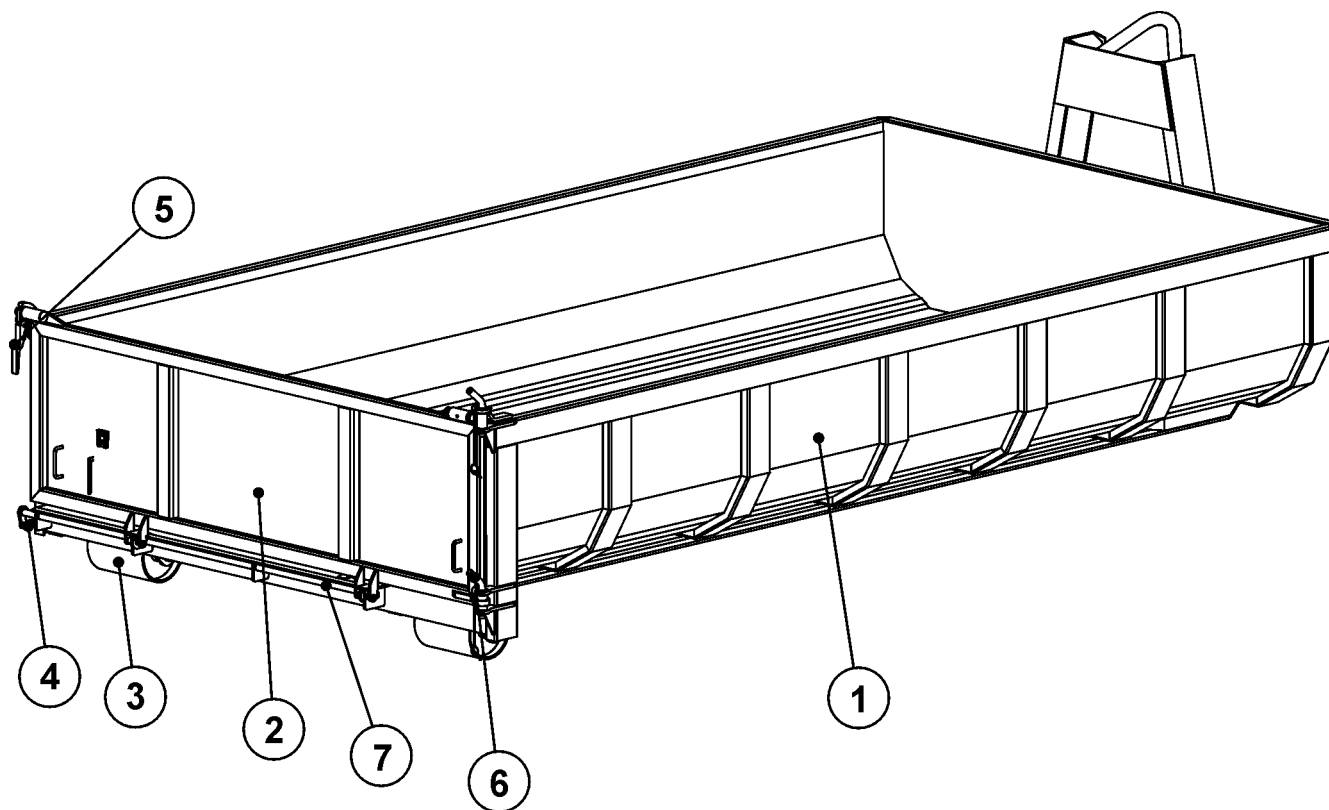


FIG. 8. BUILDING CONTAINER

1 – CRATE, 2 – REAR FLAP, 3 – REAR WHEEL, 4 – STRING, 5 – LOCK, 6 – BOLT, 7 – FLAP LOCK.

The building container consists of two stringers with the crate welded to them (1). In the front part of the container two channel bars and a catch eye are welded to stringers. In the rear part of the crate there is a flap (2), which is fastened with hinges to the crate structure. On the left side of the flap there is a lock (5), which protects the flap against accidental opening. In the rear part of the container there are special wheels (3), which are used during coupling/uncoupling of the container. The structure of the building container is shown on the Fig. 8.

4.2.4 Main brake

The container trailer T185 can be equipped with one of three types of main brake:

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

The main pneumatic or hydraulic brake actuated from driver's seat with a brake pedal. In the case of disconnection from tractor's pneumatic system of the brake is actuated automatically. Individual types of the main brake are shown on Figs. 9 and 10.

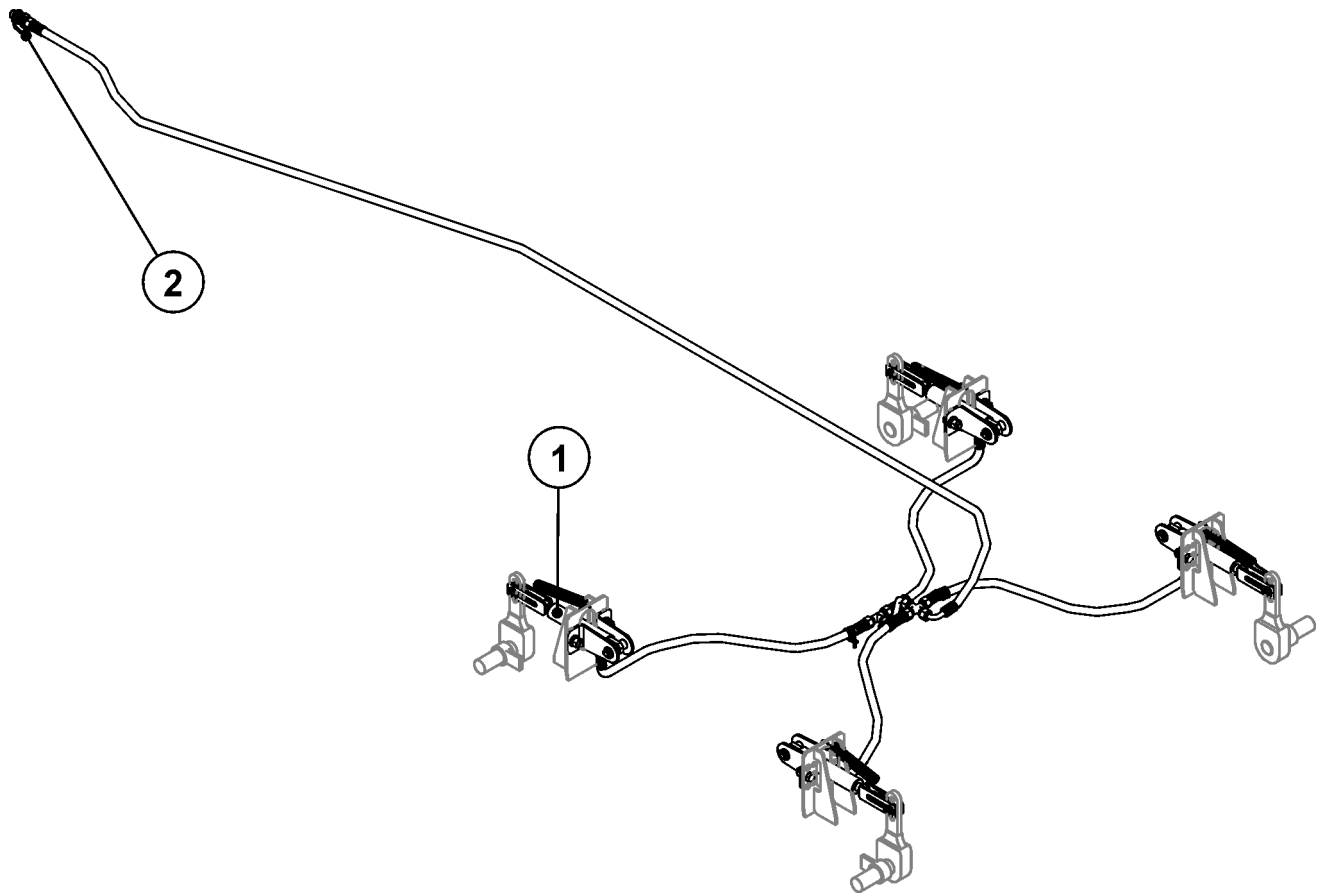


FIG. 9.

HYDRAULIC BRAKE SYSTEM

1 – HYDRAULIC CYLINDER, 2 – PLUG

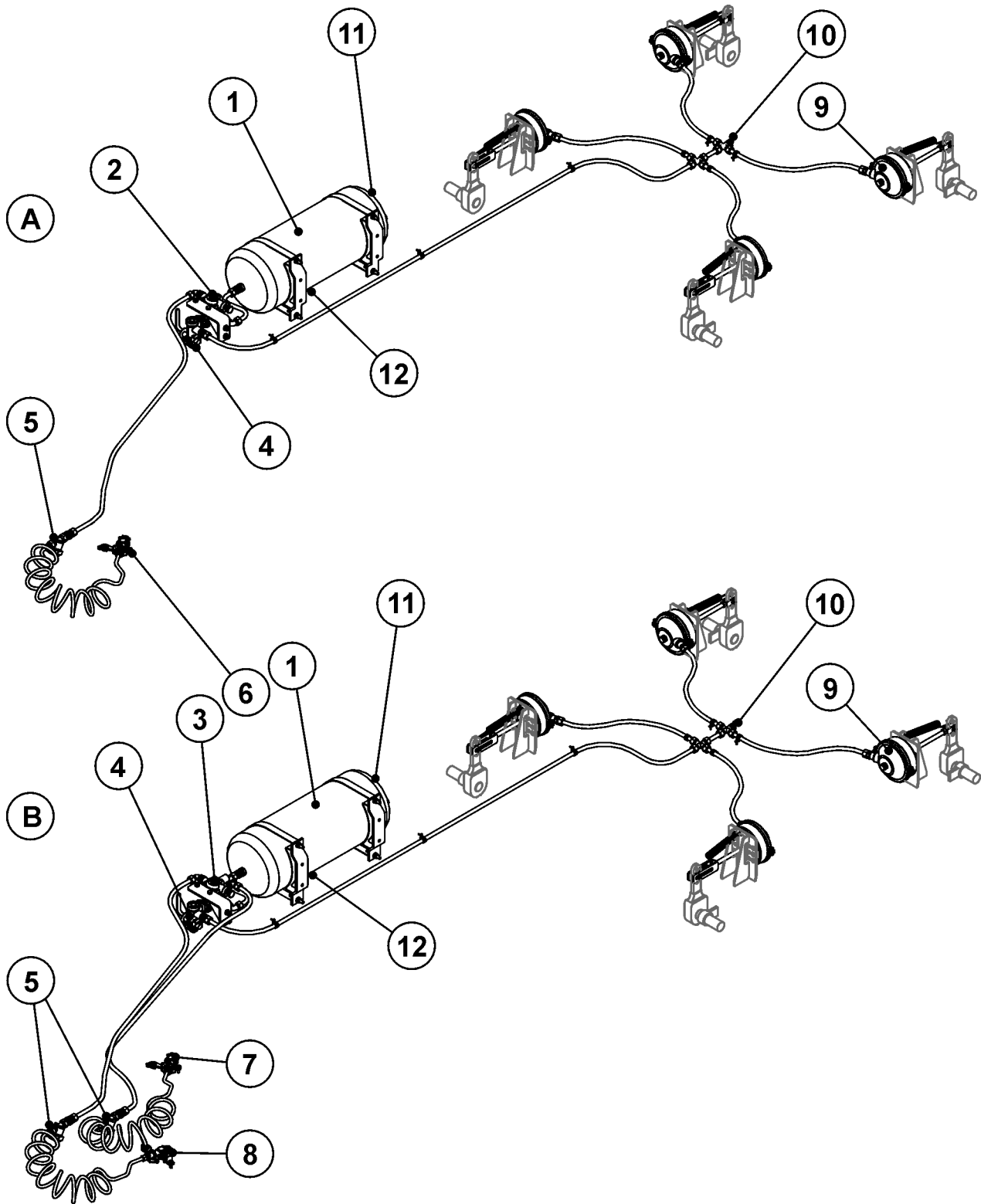


FIG. 10. PNEUMATIC BRAKE SYSTEMS – SINGLE- AND DOUBLE CONDUIT.

A – SINGLE CONDUIT PNEUMATIC BRAKE SYSTEM
 B – DOUBLE CONDUIT PNEUMATIC BRAKE SYSTEM

1 – AIR TANK, 2 – CONTROL VALVE, 3 – CONTROL VALVE, 4 – BRAKE FORCE CONTROLLER, 5 – AIR FILTER, 6 – CONDUIT CONNECTOR, 7 – CONDUIT CONNECTOR, 8 – CONDUIT CONNECTOR, 9 – PNEUMATIC CYLINDER, 10 – CROSS CONNECTOR WITH INSPECTION CONNECTOR, 11 – TANK INSPECTION CONNECTOR, 12 – DRAIN VALVE.

4.2.5 Elements of automatic of the pneumatic system

Depending on version of the pneumatic system the trailer can be fitted with one of two types of control valves shown on the Fig. 11. The purpose of the valve is to activate the trailer brakes simultaneously with activation of tractor brakes. Additionally, in the case of accidental disconnection of the conduit between the trailer and the tractor the control valve activates the trailer brake automatically. Applied valves are fitted with a brake release system (1), used when the trailer is disconnected from the tractor. When the air conduits are connected to the tractor the brake release systems switches over to the position enabling normal operation of brakes.

The three-stage brake force controller used in both single- and double conduit systems matches the brake force to current load of the trailer. Switching to proper working mode is realised manually by the operator with the lever (1) prior to start of driving. The controller has three working positions: „No load”, „Half load”, „Full load”. The structure of the controller is shown on the Fig. 12.

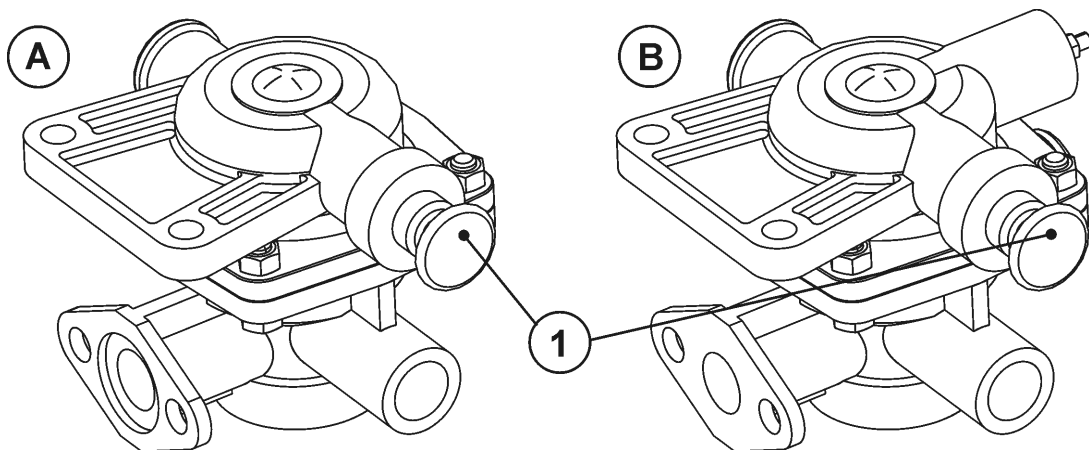


FIG. 11.

CONTROL VALVES

1 – PUSHBUTTON RELEASING TRAILER BRAKES

A – CONTROL VALVE FOR A SINGLE CONDUIT PNEUMATIC SYSTEM

B – CONTROL VALVE FOR A DOUBLE CONDUIT PNEUMATIC SYSTEM

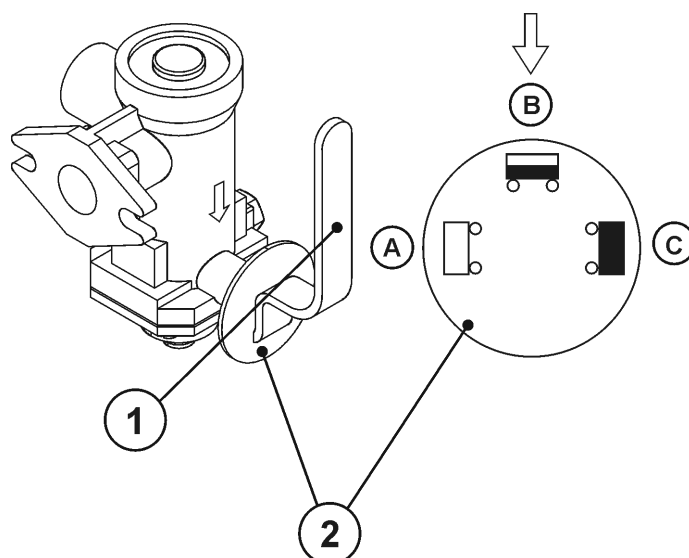


FIG. 12.

THREE-STAGE BRAKE FORCE CONTROLLER

1 – LEVER, 2 – DISC A – POSITION „NO LOAD”, B – POSITION „HALF LOAD”, C – POSITION „FULL LOAD”

4.2.6 Parking brake

The parking brake is designed for immobilisation of the trailer during stops. The structure of the brake system consists of a crank gear actuating the brake and steel cables fastened to the cam shaft lever of the front axle and to the crank gear. Prior to operation make sure that the parking brake is released. The scheme of the parking brake is shown on the Fig. 13.

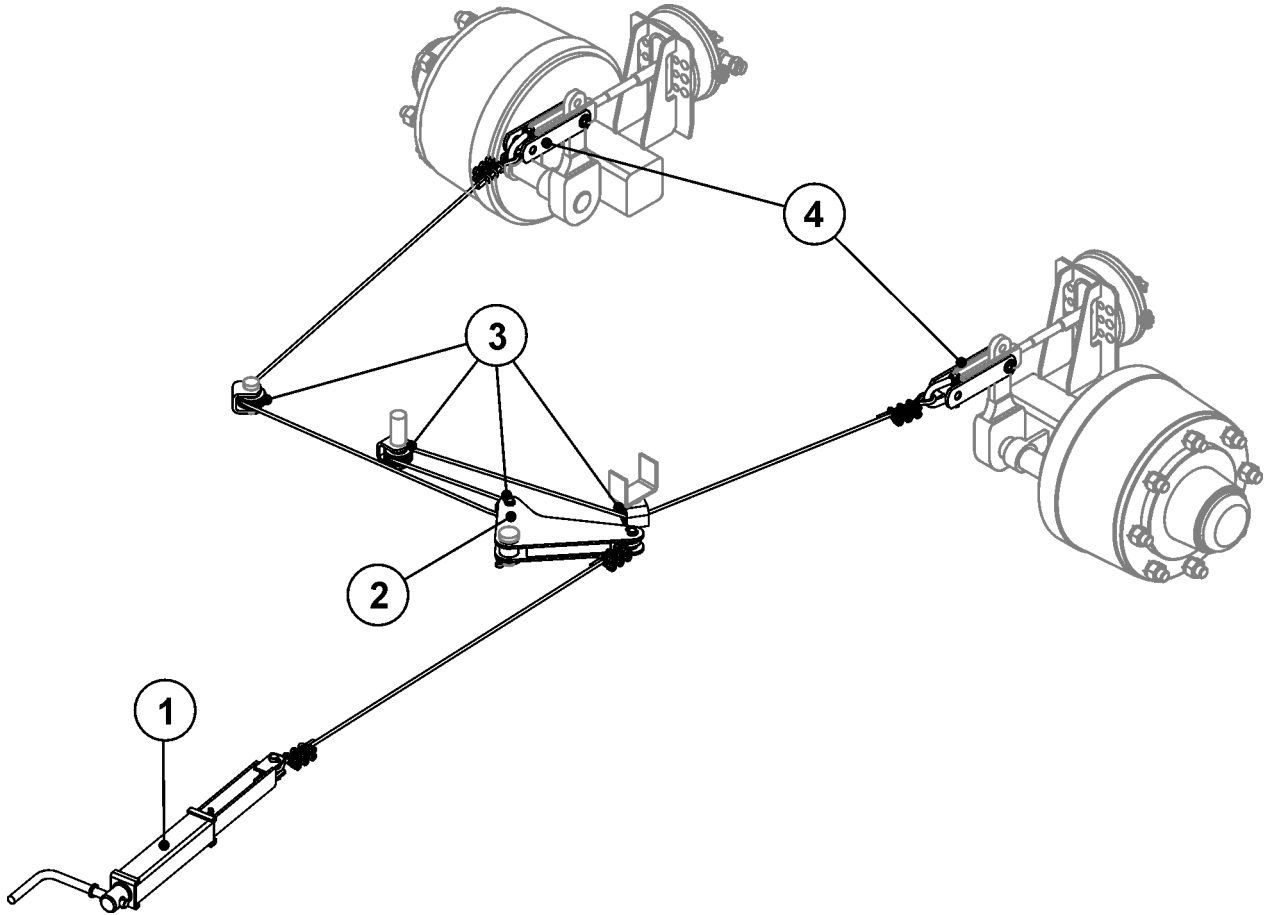


FIG. 13. PARKING BRAKE

1 – CRANK GEAR, 2 – LEVER, 3 – CABLE WHEELS, 4 – CYLINDER FORKS

4.2.7 Wiring, lighting, signalling

The wiring system is adapted for power supply with 12 V DC. The lighting and the signalling systems fulfil requirements of traffic regulations. The wiring diagram is shown on the Fig. 14.

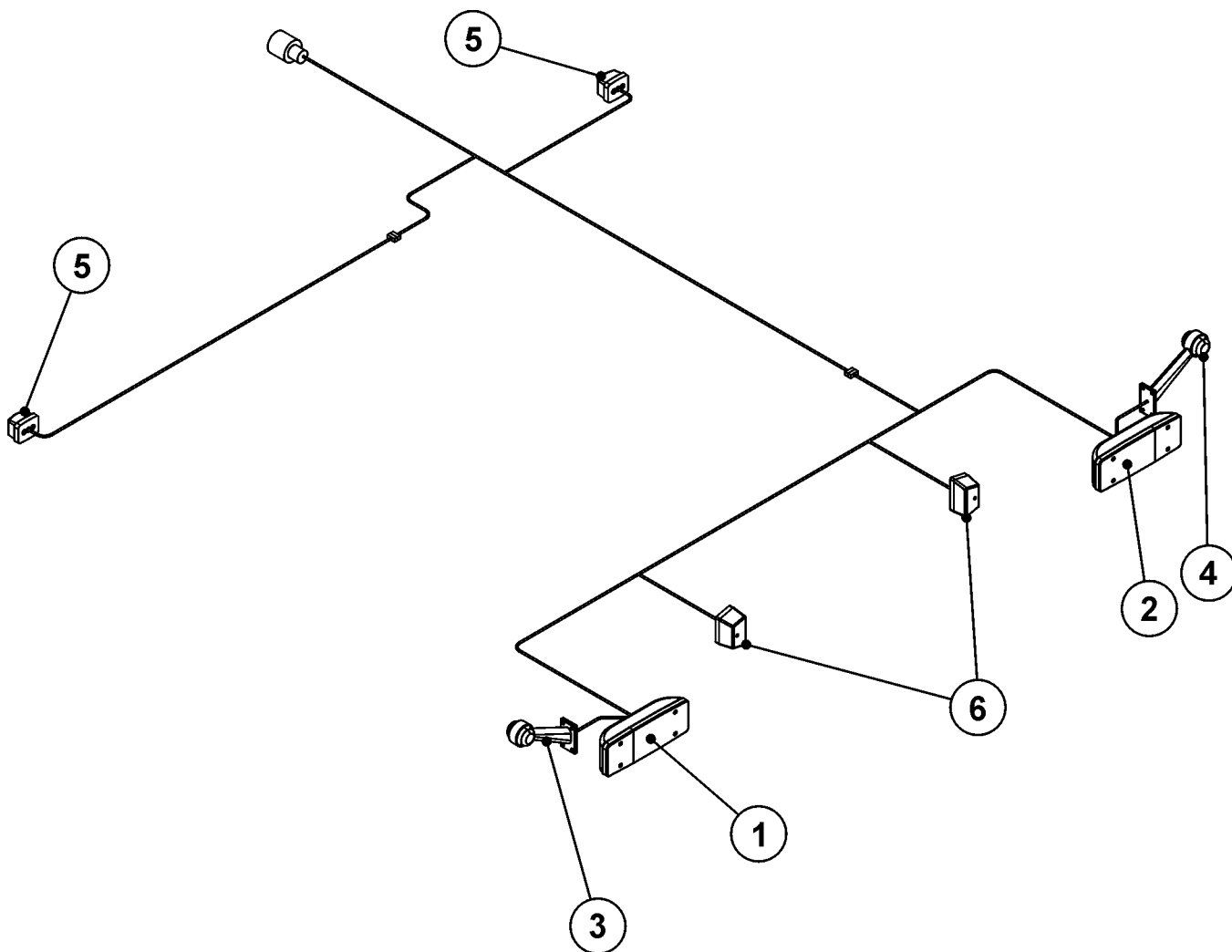


FIG. 14. WIRING DIAGRAM OF THE TRAILER

1 – REAR COMPACT LAMP, LEFT, 2 – REAR COMPACT LAMP, RIGHT, 3 – CONTOUR LAMP, LEFT, 4 – CONTOUR LAMP, RIGHT, 5 – FRONT COMPACT LAMP, 6 – ILLUMINATION OF NUMBER PLATES.

4.2.8 Hydraulic tilt system

Hydraulic tilting system is designed for automated unloading of a container through tilt of the container backwards or for unloading of the container. The hydraulic system is supplied with oil from tractor's hydraulic system. Container unloading is controlled with a distributor of tractor's external hydraulics. The scheme of the hydraulic system for unloading is shown on the Fig. 15. Figs 16 and 17 show subsequent phases of T185 container trailer unloading.

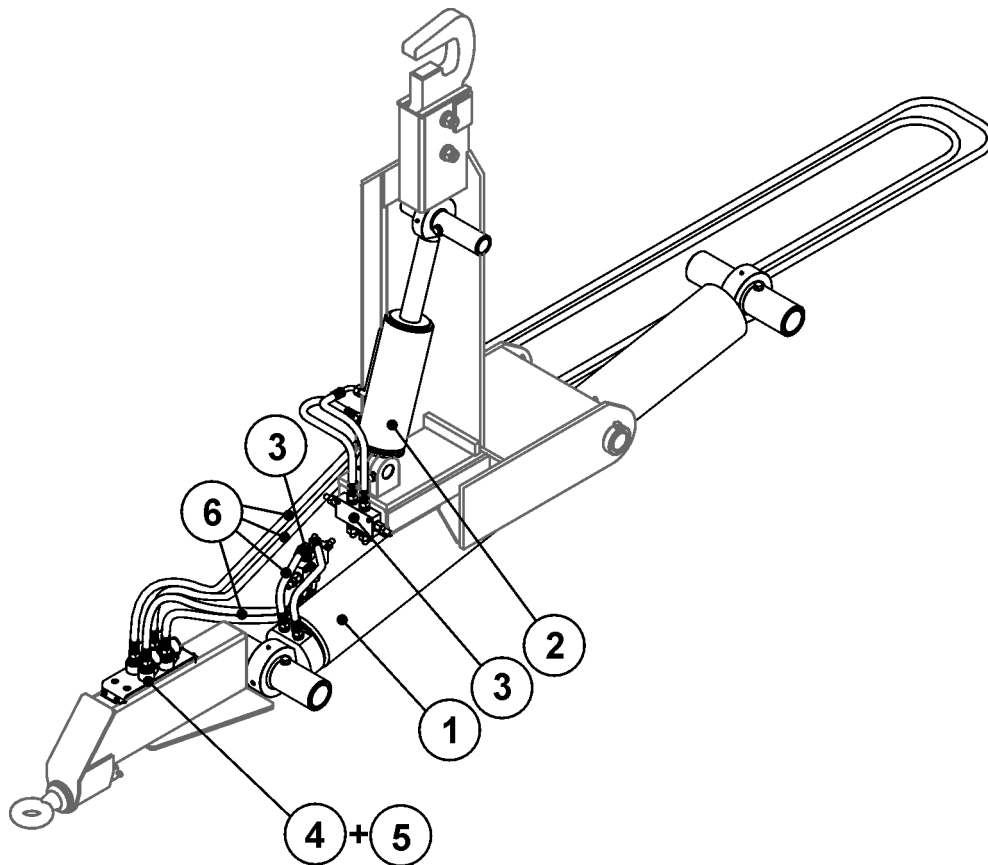


FIG. 15. HYDRAULIC TILT SYSTEM

1 – HYDRAULIC CYLINDER, 2 – HYDRAULIC CYLINDER, 3 - ANTI-SHOCK VALVE, 4 – PLUG, 5 – SOCKET, 6 – HYDRAULIC CONDUITS.

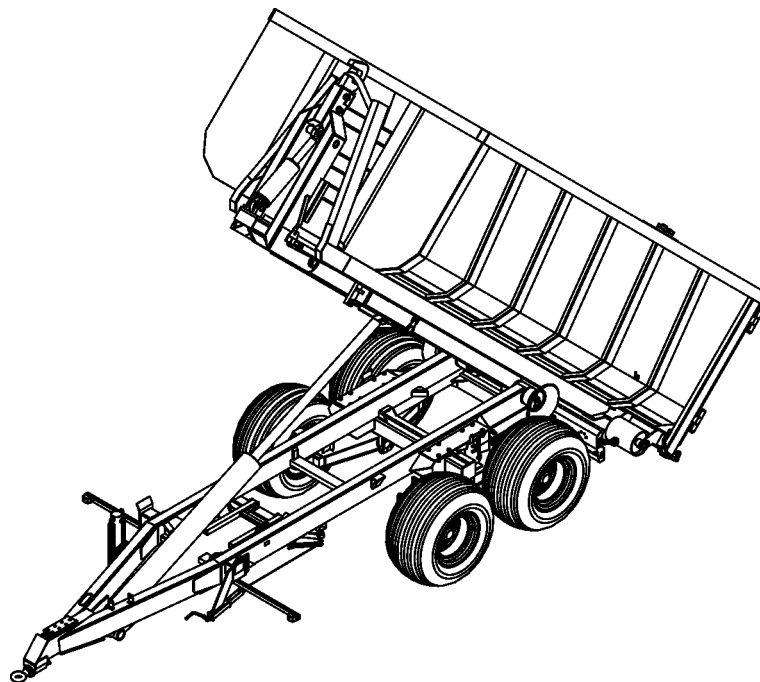


FIG. 16. UNLOADING OF A CONTAINER

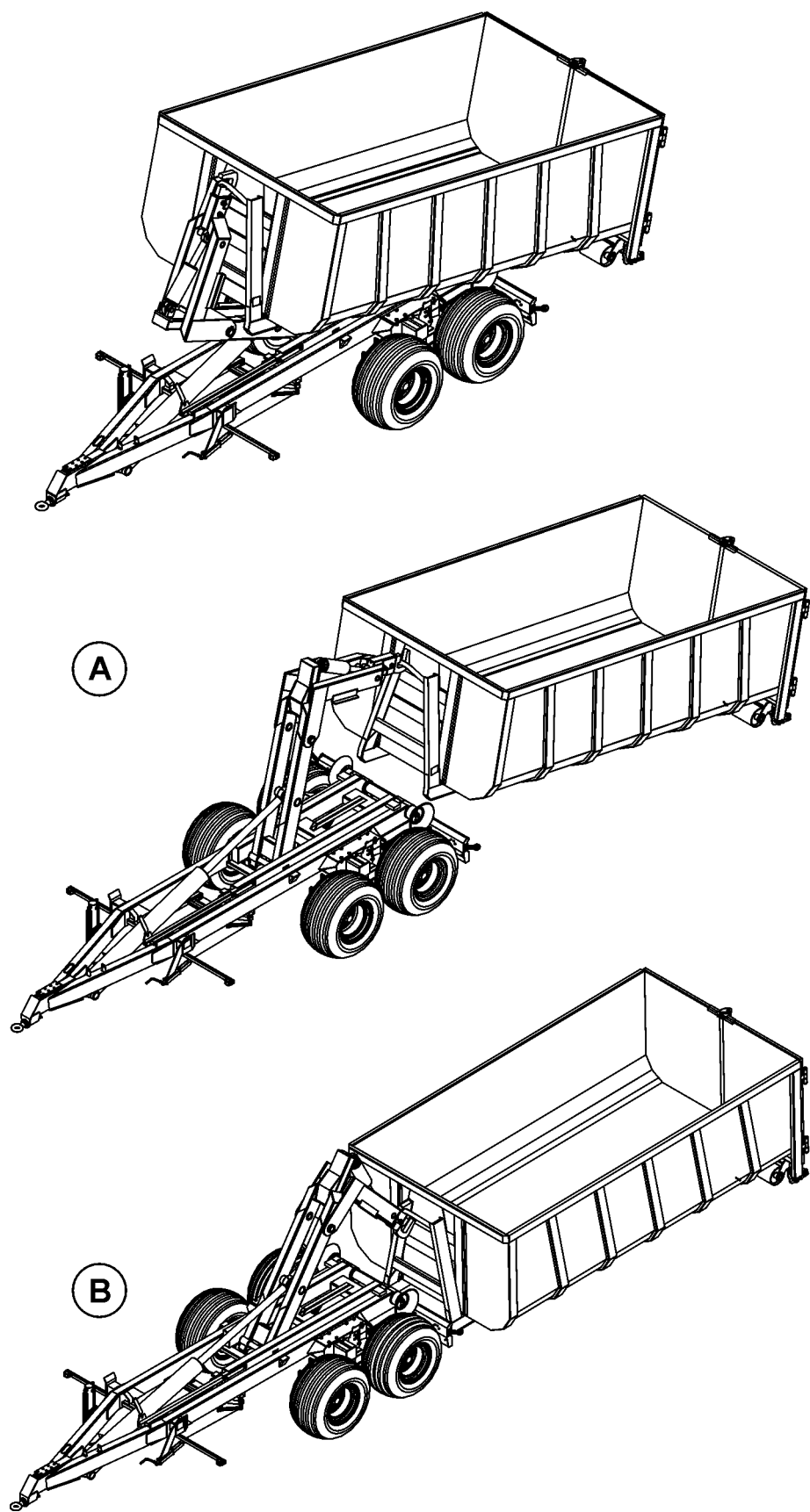


FIG. 17. PHASES OF UNCOUPLING / COUPLING OF A CONTAINER

A – PHASE I
B – PHASE II

4.2.9 Hydraulic system for rockers lock

The purpose of the system is to ensure proper stability of the trailer during unloading as well as coupling/uncoupling of a container. The hydraulic system for rockers lock is supplied with oil from tractor's hydraulic system. The hydraulic system for rockers lock is controlled with a distributor of tractor's external hydraulics. The scheme of the system for rockers lock Fig. 18.

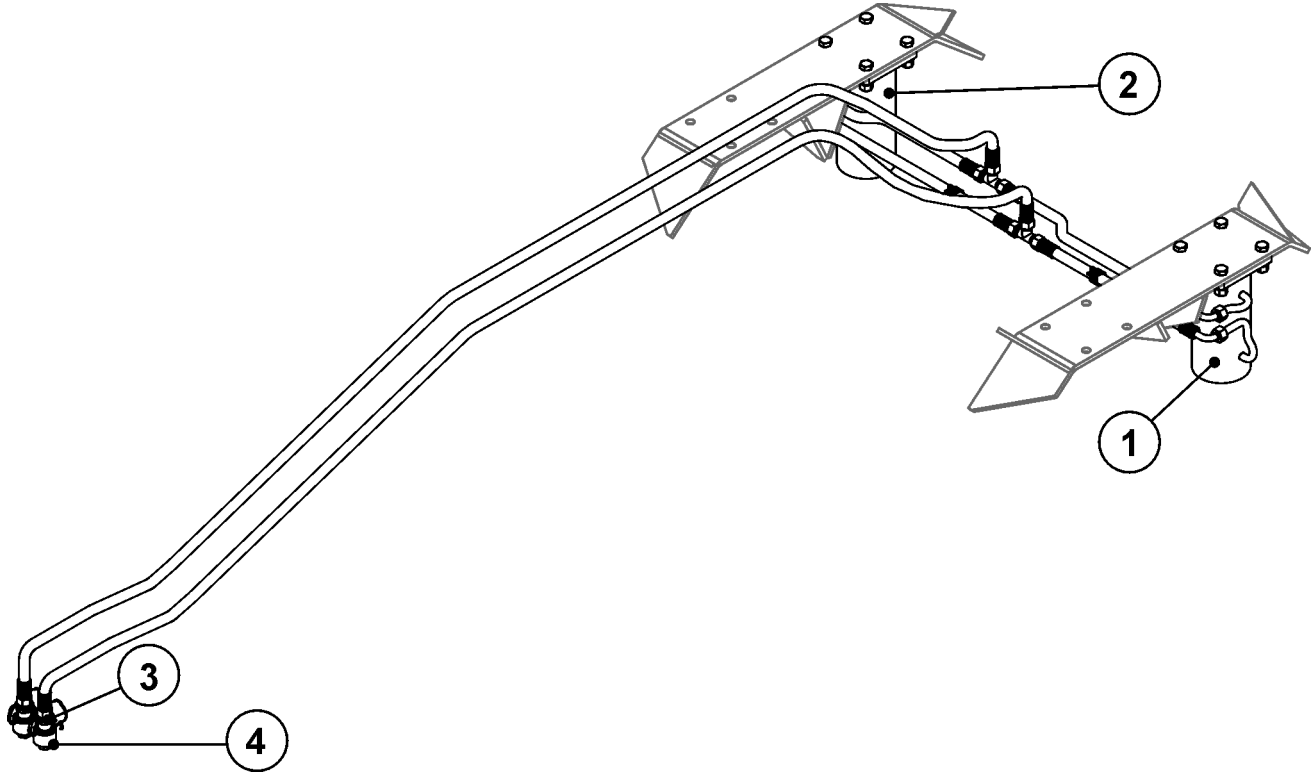


FIG. 18. HYDRAULIC SYSTEM FOR ROCKERS LOCK

1 – HYDRAULIC CYLINDER, 2 – HYDRAULIC CYLINDER, 3 – PLUG, 4 - SOCKET

4.2.10 Driving system

The structure of the driving system is shown on the Fig. 19. The system is mounted to the rear part of the lower frame. The drive half-axle (2), (3) is made of a square rod with pivots on either end; on pivots mounted are conical bearings and on bearings – wheel hubs. The wheels are of single type, fitted with shoe brakes actuated with mechanical brake cams.

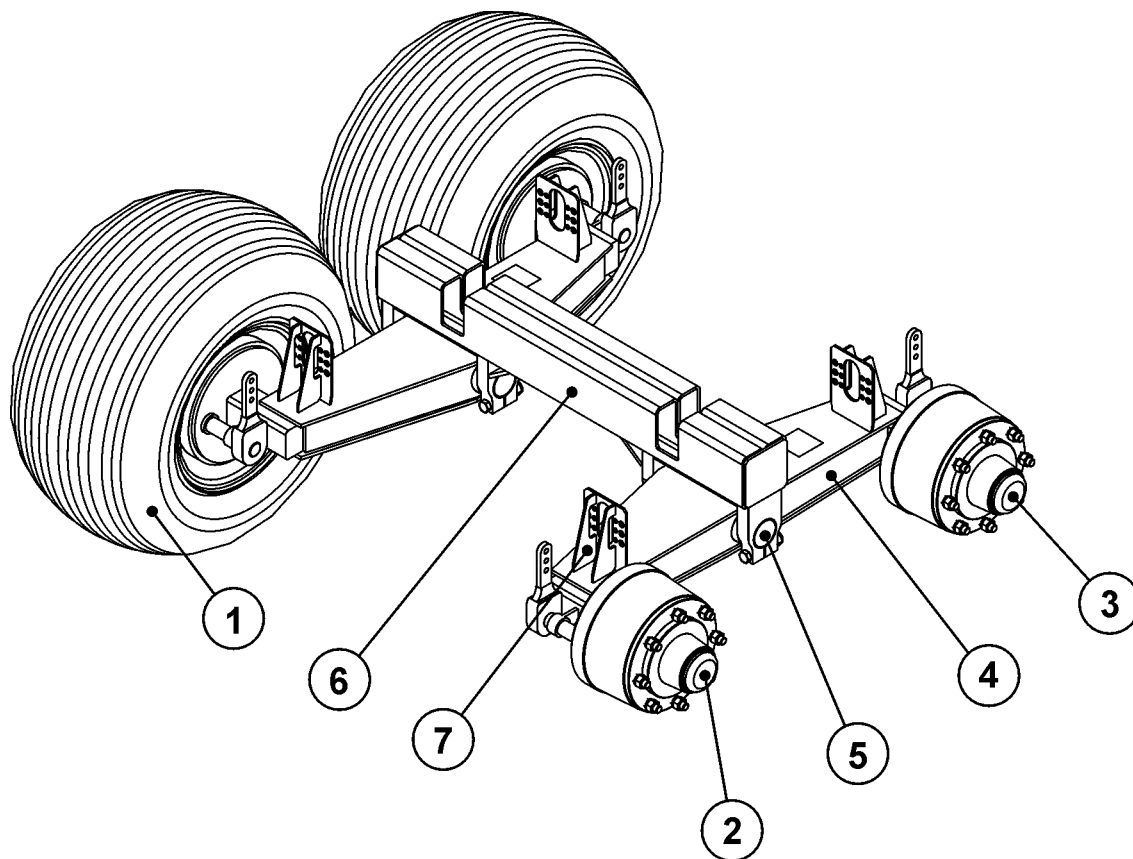


FIG. 19. DRIVING SYSTEM

1 – WHEEL, 2 – LEFT HALF-AXLE, 3 – RIGHT HALF-AXLE, 4 – ROCKER, 5 – ROCKER AXLE, 6 – ROCKER BEAM, 7 – FASTENING SEAT OF CYLINDERS.

Table 5. Dane techniczne ogumienia

Tyre dimensions (+ PR number)	Load index & speed symbol	Tread	Ring	St. radius [mm]	Load [kg] at speed [kph]			Used pressure [kPa]
					30	40	other	
500/50 – 17 18PR	160 A6 157 A8	AW708	16.00x17	416	4500	4125	-	450

5. OPERATION PRINCIPLES

5.1 PREPARATION FOR WORK

During preparation for work it is necessary to check following items:

- condition of tyres and tyre pressure
- torque of tightening of nuts fixing wheels
- function of lighting & signalling systems
- function of the braking system
- function of the door lock
- function of the hydraulic tilting system
- function of the hydraulic system for rockers lock

5.2 COUPLING WITH A TRACTOR

Prior to coupling with tractor check if the trailer is braked with the parking brake. The tractor should be fitted with a tow hook, which is able to carry min. 25 kN (2500 kg) vertical load.

To couple trailer with tractor it is necessary to perform following operations:

- Position the draught bar eye on suitable level
- Precise adjustment of the draught bar can be achieved with help of the hydraulic support (Fig. 20). For this purpose draw back the tractor and connect the hydraulic support conduit to the tractor; then open the support securing valve and position the draught bar eye
- Draw back the tractor, couple draught bar eye with the upper tow coupling on the tractor and check its fastening
- Raise the support
- Connect electrical, hydraulic (tilt + rockers lock) and brake conduits to the tractor
- Unlock the trailer's parking brake

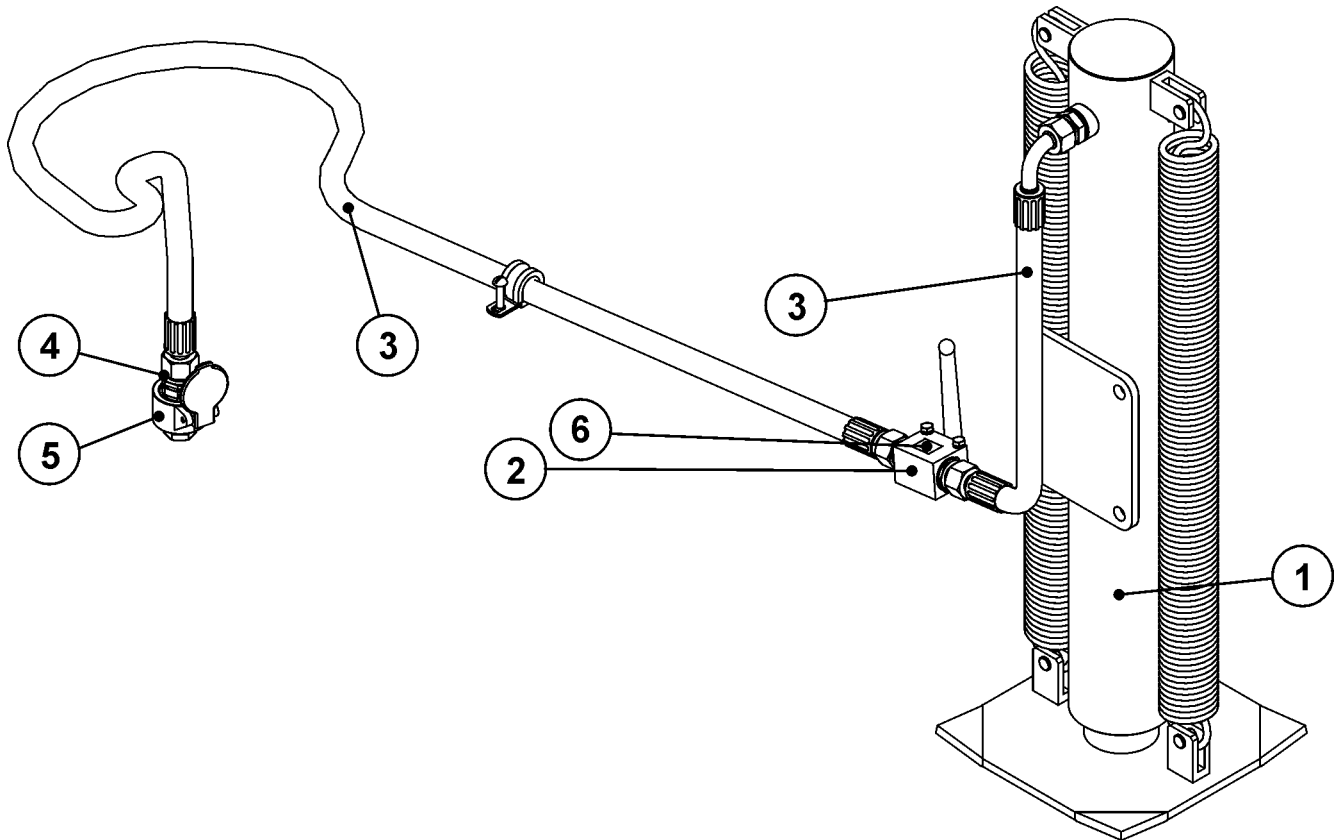


FIG. 20. HYDRAULIC SUPPORT

1 – HYDRAULIC SUPPORT, 2 – HYDRAULIC VALVE, 3 – HYDRAULIC CONDUITS, 4 – PLUG, 5 – SOCKET, 6 – STICKER.



CAUTION!

In the course of coupling no-one is allowed to stand between trailer and tractor.

5.3 UPLOADING OF A CONTAINER

It is recommended to distribute the load within the load crate uniformly.

Prior to uploading check if the rear lock is closed. In the case of objects, which put point pressure use thick boards as separators. The table 6 contains average specific weights of 1 m³ of various materials. **The table shows clearly that – in many cases – it is impossible to use the entire loading volume without exceeding the admissible load.** It is important not to overload the trailer during loading. Lightweight materials of great volume may be loaded above wall height but the load should be properly secured from falling down and polluting the road.

CAUTION



It is prohibited to exceed the admissible trailer load. Overload may endanger traffic safety and damage the trailer.

Table 6. Average weight of 1 m³ of various materials.

Material	Weight [t/m ³]
Concrete	1.8 - 2.8
Clinker brick	1.6 – 1.9
Cement (powder)	1.3 – 2.0
Clay	1.5 – 2.6
Sand	1.4 – 1.65
Lime (powder)	0.9 – 1.3

Material	Weight [t/m ³]
Coal	1.2 – 1.6
Soil	1.2 – 1.6
Gravel	1.8 – 1-85.
Ruddle	1.05
Stone (crushed)	2.2

5.4 TRANSPORT DRIVE

- While driving public roads observe traffic regulations.
- Do not exceed the maximum admissible speed. Adjust the speed to traffic conditions.
- While driving public roads the trailer should be equipped with certified or approved warning reflecting triangle.
- Rear wall should be equipped with a triangular plate for slowly moving vehicles.

5.5 PRINCIPLES OF USE OF TYRES

- During assembly/disassembly of tyres protect the trailer against accidental movements.
- Repair/replacement of tyres should be performed by trained personnel and with proper tools.
- After each installation of a wheel tighten nuts after first 50 km and then check their tightening each 100 km.
- Regularly check the tyre pressure and keep the pressure value according to the manual (especially after longer standstills)
- Tyre pressure should be checked during all-day intensive work. Take into consideration the fact that the temperature increase can raise the pressure even by 1 bar. In the case of such raise of temperature and pressure reduce the load or the speed.
- Never reduce the pressure through venting, if the pressure increase was the result of temperature increase.
- Protect valves with proper caps to avoid penetration of impurities.
- Do not exceed the maximum speed.
- During all-day working cycle check the tyre temperature.
- Avoid holes, quick and variable manoeuvres and high speed during turns.
- Use 30-minute pauses after each 75 km or 150 minutes of drive, depending on what happens first.

5.6 UNLOADING OF A CONTAINER, UNCOUPLING/COUPLING OF A CONTAINER WITH THE TRAILER

5.6.1 Unloading of a container

Unloading of a container is realised through tilting of the container rearwards. Automated unloading of the container should be executed as follows:

- Place the trailer on flat ground, brake the tractor and the trailer with the parking brake. During unloading the tractor should be positioned as for drive forward.
- Lock rockers with the hydraulic locking system.
- Set the control lever to I (Fig. 21).
- Open the rear door and fasten it with protective chains to hooks on side walls.
- Tilt the container together with the tilt frame with hydraulic cylinders.

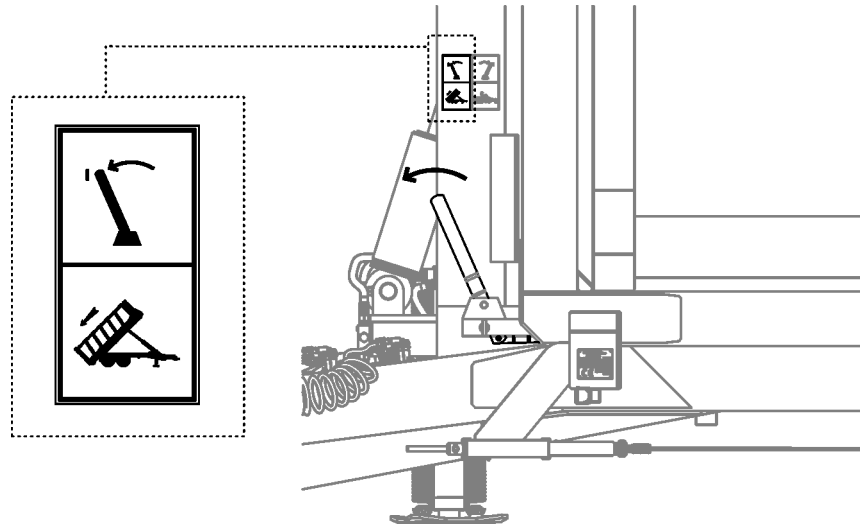


FIG. 21. POSITION OF THE LEVER FOR CONTAINER UNLOADING

CAUTION



- It is allowed to tilt the container only when the trailer stands on hard, flat ground.
- During unloading no-one is allowed to stand in the vicinity of tilted container.
- It is allowed to tilt the container only if the trailer is coupled with a tractor.
- It is prohibited to tilt the container during violent wind gusts.
- Take special precautions while closing rear door for injuries may cause serious loss of health.
- It is prohibited to move forward and drive with raised container and unfolded tilt frame.
- During unloading always lock the rockers.

5.6.2 Uncoupling from the trailer

Uncoupling of the container is realised through tilting of the tilt frame together with the container with hydraulic cylinders. Uncoupling of the container should be performed as follows:

- Place the trailer on flat ground, brake the tractor and the trailer with the parking brake. During unloading the tractor should be positioned as for drive forward.
- Lock rockers with the hydraulic locking system.
- Set the control lever to II (Fig. 22).
- Uncouple the container with the tilt frame and hydraulic cylinders.

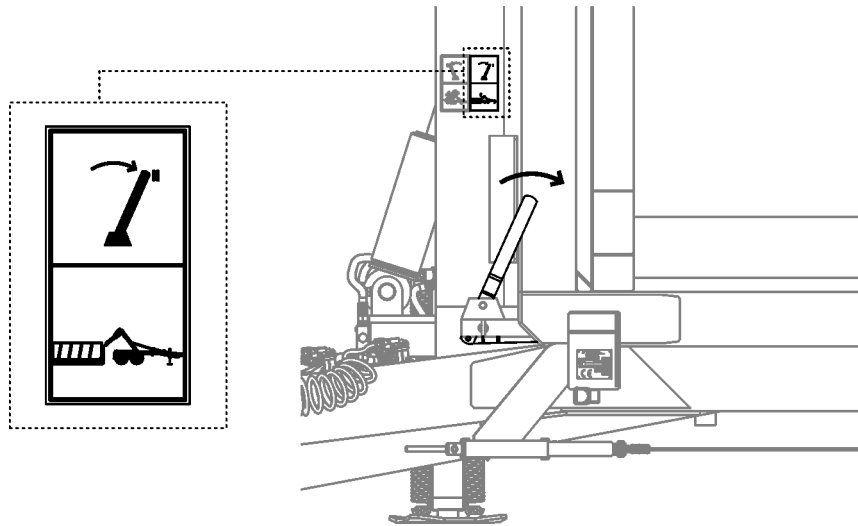


FIG. 22. POSITION OF THE LEVER FOR CONTAINER UNCOUPLING/COUPLING

CAUTION



- It is allowed to uncouple the container only when the trailer stands on hard, flat ground.
- During uncoupling no-one is allowed to stand in the vicinity of tilted container.
- It is allowed to uncouple the container only if the trailer is coupled with a tractor.
- It is prohibited to uncouple the container during violent wind gusts.
- It is prohibited to move forward and drive with raised container and unfolded tilt frame.
- During uncoupling always lock the rockers.

5.6.3 Coupling to the trailer

Coupling of the container is realised through tilting of the tilt frame with hydraulic cylinders and pulling the container onto the trailer with the same cylinders. Coupling of the container should be performed as follows:

- Place the trailer on flat ground. The tractor and the trailer must be placed opposite to the container
- Set the control lever to II (Fig. 22).
- Tilt the tilt frame with hydraulic cylinders and hook the container on the catch hook. Check fastening.
- Lock rockers with the hydraulic locking system.
- Load the container onto the trailer

CAUTION



- It is allowed to couple the container only when the trailer stands on hard, flat ground.
- During coupling no-one is allowed to stand in the vicinity of tilted container.
- It is allowed to couple the container only if the trailer is coupled with a tractor.
- It is prohibited to couple the container during violent wind gusts.
- It is prohibited to move forward and drive with raised container and unfolded tilt frame.
- During coupling always lock the rockers.
- During coupling make sure that the container rests properly on guide rollers.

6. MAINTENANCE

CAUTION



- Once a year make detailed technical inspection of the trailer and check before all: technical condition of the hook system, tilt system, drive system, brake system and signalling system.
 - If any operation failure or damage occurs, stop operation of the trailer and repair the damage/ remove the failure.
 - It is prohibited to carry on maintenance or repairs when the tractor engine is on.
 - All maintenance & repair works should be performed with observation of safety regulations. In the case of wound wash and disinfect wounded place immediately. In the case of serious injuries consult a physician.
-

6.1 ADJUSTMENT OF WHEEL BEARINGS

After first 500 km and after every next 1500-2000 km check and – if necessary – adjust play of wheel bearings.

For this purpose couple the trailer with a tractor, brake the tractor, place locking wedges under trailer wheels and raise each wheel with suitable hoist. Place the hoist under rocker beams. Points of hoist support are shown on the Fig. 24. Check play of bearings.

If the play is too big remove the hub cover (3) and remove the cotter pin (2) of the castellated nut (1). While turning the wheel screw the crown nut tight until the wheel stops. Unscrew the nut by 1/3 turn until the next cotter pin groove will be aligned with the opening in the pivot (Fig. 23).

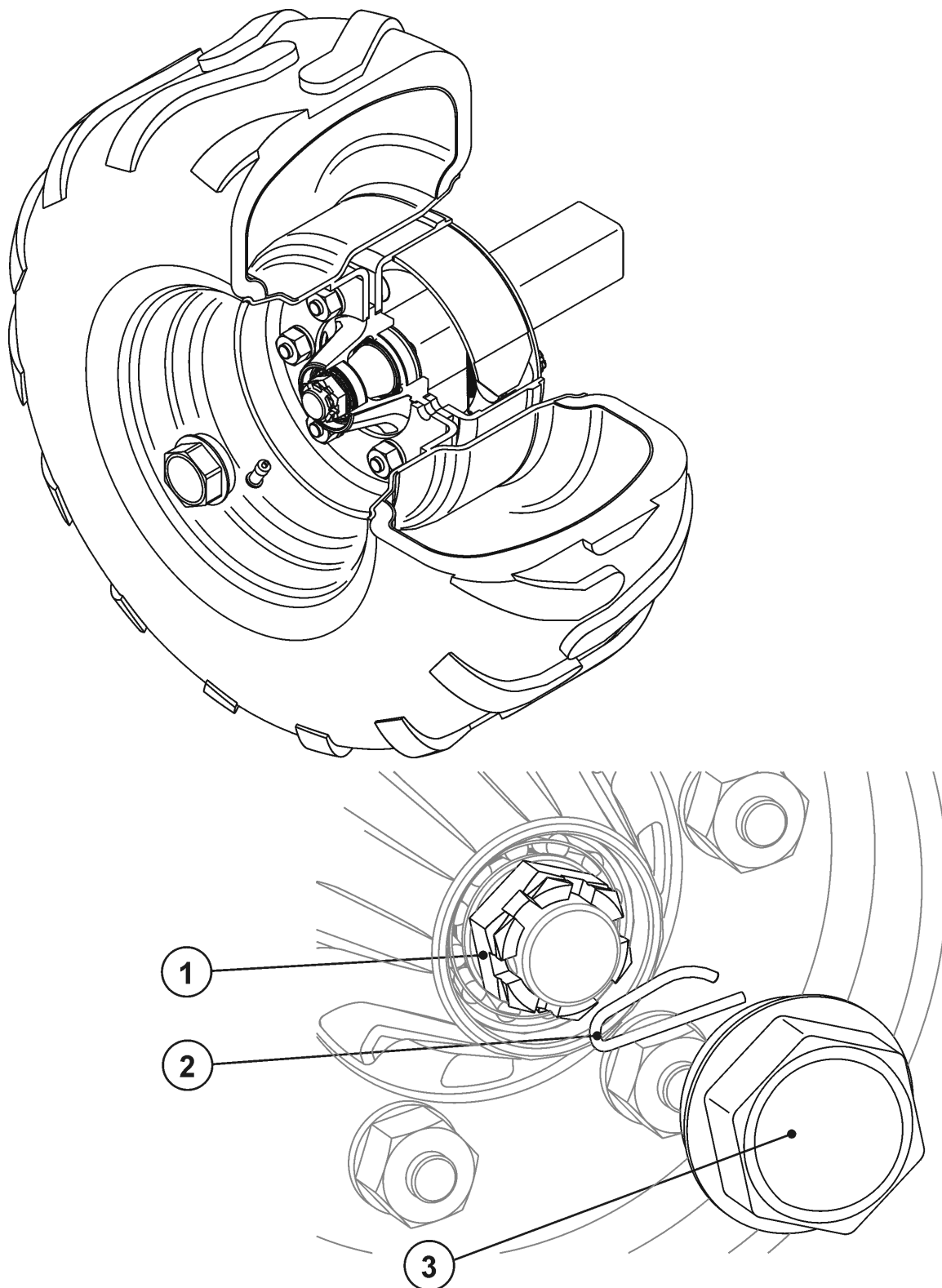


FIG. 23. ADJUSTMENT OF WHEEL BEARINGS REGULACJA ŁOŻYSK KÓŁ JEZDNYCH

1 – CASTELLATED NUT, 2 – COTTER PIN, 3 – HUB COVER

Secure the castellated nut (1) with the cotter pin (2) and mount the hub cover (3). The wheel should turn smooth, without stops and perceptible resistance, which do not result from rubbing between brake shoes and the drum.

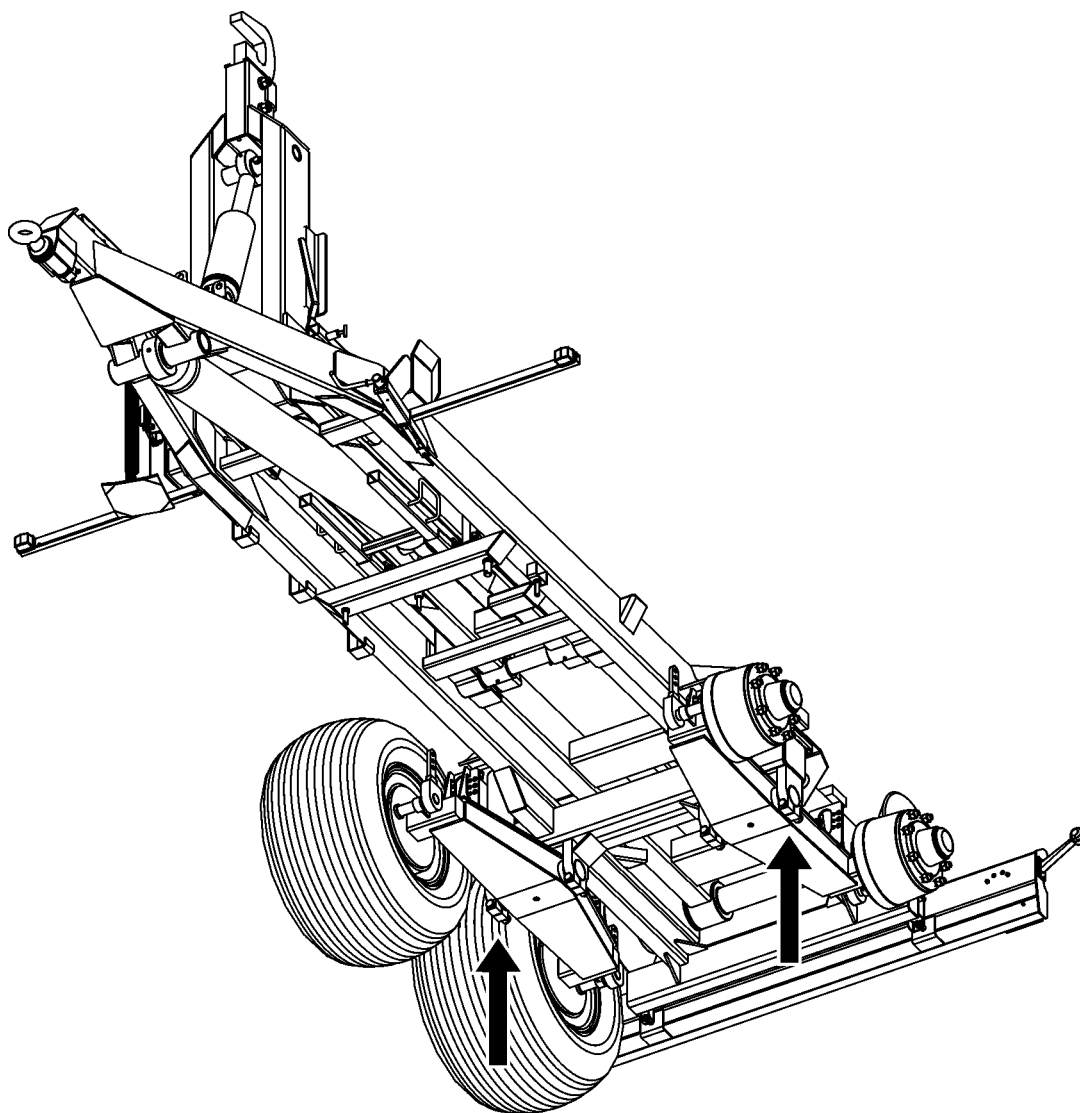


FIG. 24. HOIST SUPPORT POINTS

6.2 ADJUSTMENT OF BRAKES

The brakes should be adjusted if:

- excessive play between shoe and drum appears due to wear of brake shoes; braking efficiency falls down
- brakes operate uneven and not simultaneously.

If brakes are adjusted properly braking of both wheels should take place in the same moment.

Adjustment of brakes consists in adjustment of position of the brake cam arm (2) in relation to the cam shaft (1). For this purpose remove the brake cam lever and shift it towards proper direction:

- A - if the brake brakes to soon
- B - if the brake brakes to late

Perform adjustment separately for each wheel. After proper brake adjustment cam arms should form the angle of ca. 90° in relation to pneumatic cylinder push rod whilst the braking power is greatest.

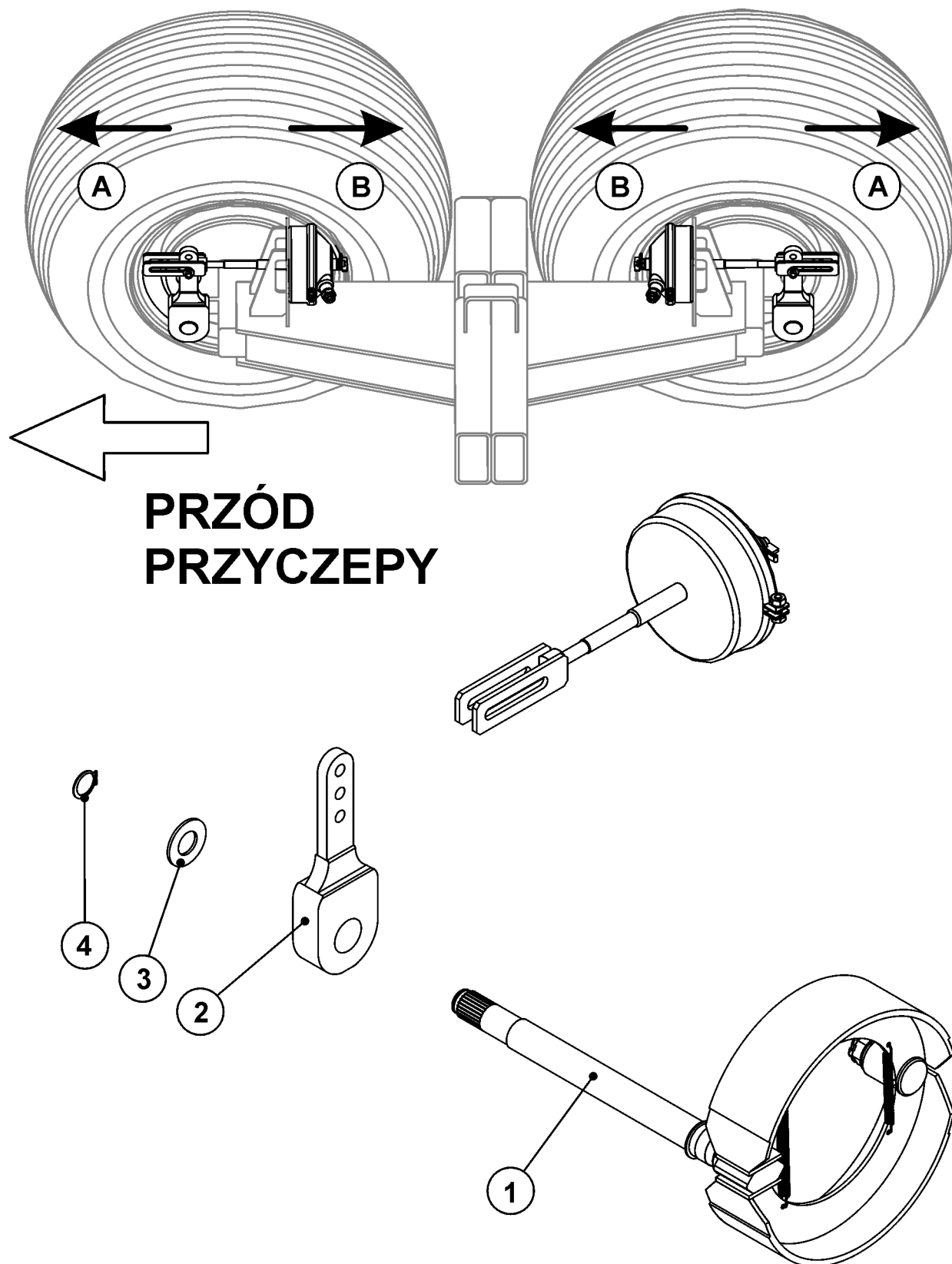


FIG. 25.

BRAKE ADJUSTMENT ELEMENTS

1 – BRAKE CAM SHAFT, 2 – BRAKE CAM ARM, 3 – SPRING RING, 4 - WASHER

A, B – KIERUNEK REGULACJI

Parking brake should be adjusted if the brake cable is excessively stretched or if cable clamps are loosened. Cable length should be matched so that by fully loosened parking and working brakes the cable would be loose and hang down by 1 ÷ 2 cm.

CAUTION



With properly adjusted brakes the braking force should be not lower than values given in the Table 5.

Table 7. Braking force.

Main brake braking force (kN)	Parking brake braking force (kN)
76	27

Difference between left and right wheel braking forces must not exceed 30% with assumption that the “100%” means the greater force.

CAUTION



The trailer braking power is the sum of braking forces of both wheels.

6.3 MAINTENANCE OF THE PNEUMATIC SYSTEM

Within the scope of maintenance operations it is necessary to perform inspection of pneumatic system tightness, especially at all connections. Tightness test should be executed with system pressure rated at ca. 600 kPa (6,0 kg/cm²).

If conduits, sealing or other elements of the system are damaged, air will get out in points of damage with typical hiss or – in the case of small leakage – in the form of small air bubbles. Small leakage can be detected with soap water or washing agent. Damaged sealing or conduits should be replaced with new ones. If the reason of leakage is the damaged pneumatic cylinder – replace it.

Periodically remove condensed water from the air tank. For this purpose pull out the drain valve arbour located in the upper part of the tank. Compressed air will push the water out. After loosening the mandrel the valve should close automatically and stop airflow from the tank.

Once a year just before the winter unscrew the drain valve and clean it from accumulated dirt.

6.4 MAINTENANCE OF THE HYDRAULIC SYSTEM

It is necessary to take as the principle that the oil in the trailer hydraulic system and the oil in the external tractor hydraulic system is of the same type. Application of different oil types is prohibited. **Brand new trailers are filled with HL32 hydraulic oil.** The hydraulic system of the trailer should be absolutely tight. In the end of the manual there is a table containing admissible oil types.

Test of tightness consists in coupling of the trailer with a tractor, activation of the hydraulic cylinder and keeping it in its maximally pulled out position for 30 s. If oil leaks at connections of hydraulic conduits, screw the connection tightly; if leakage persists – replace the conduit or the connector with a new one. If oil leaks between connections, replace the damaged conduit. Each mechanical damage requires replacement of damaged element.

If the body of the hydraulic cylinder is polluted with oil check the reason of leakage. While the cylinders are entirely pulled out check all sealings. Small leakage of “sweating off” type are admissible; if drops of oil are observed – stop the operation and repair the failure.

CAUTION



Operation of the trailer with leaky tilting hydraulic system is prohibited.

Condition of the hydraulic system should be checked all time during trailer's operation.

If the hydraulic system is used very intensively replace hydraulic conduits every 4 years.

6.5 LUBRICATION

The trailer should be lubricated in points shown on Figs 26, 27, 28 and 29 and described in the Tables 8, 9 and 10.

Table 8. Trailer lubrication points.

No. on the Fig. 26, 27	Lubrication point	Number of points	Grease type	Frequency
1	Eyes of tilt cylinders	4	SOLID	every 6 months
2	Rotary string	1	SOLID	every 3-4 months
3	Slide sleeves of guide rollers	4	SOLID	every 1-2 months
4	Slide sleeves of the middle frame	2	SOLID	every 3-4 months
5	Slide sleeves of rockers	2	SOLID	every 3-4 months
6	Wheel bearings	8	SOLID	every 24 months
7	Brake cam shaft sleeves	4	SOLID	every 6 months
8	Bolts of the parking brake lever	2	SOLID	every 3-4 months
9	Parking brake screw	1	SOLID	every 3-4 months
10	Wheel axes	4	SOLID	every 3-4 months

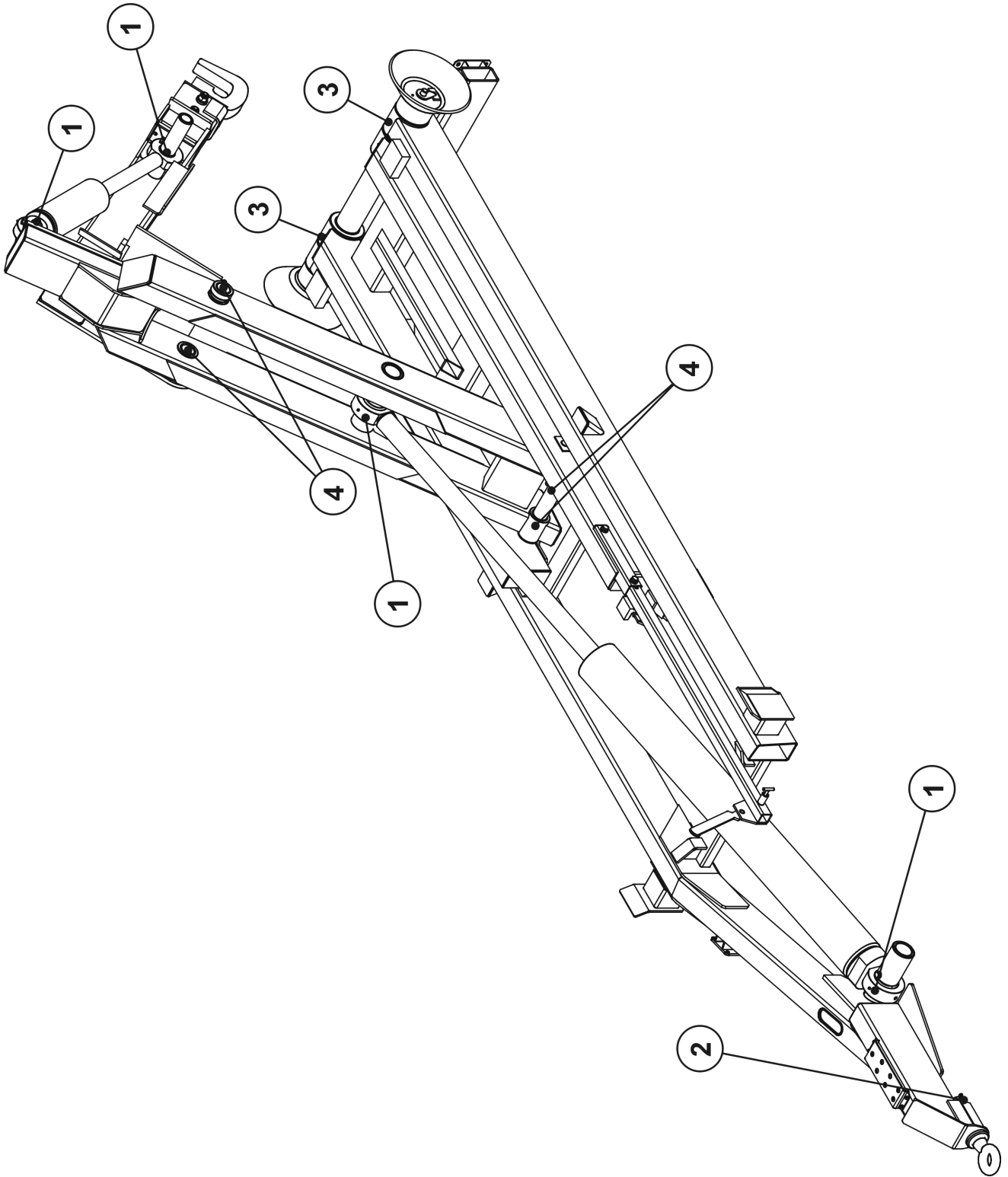


FIG. 26. TRAILER LUBRICATION POINTS

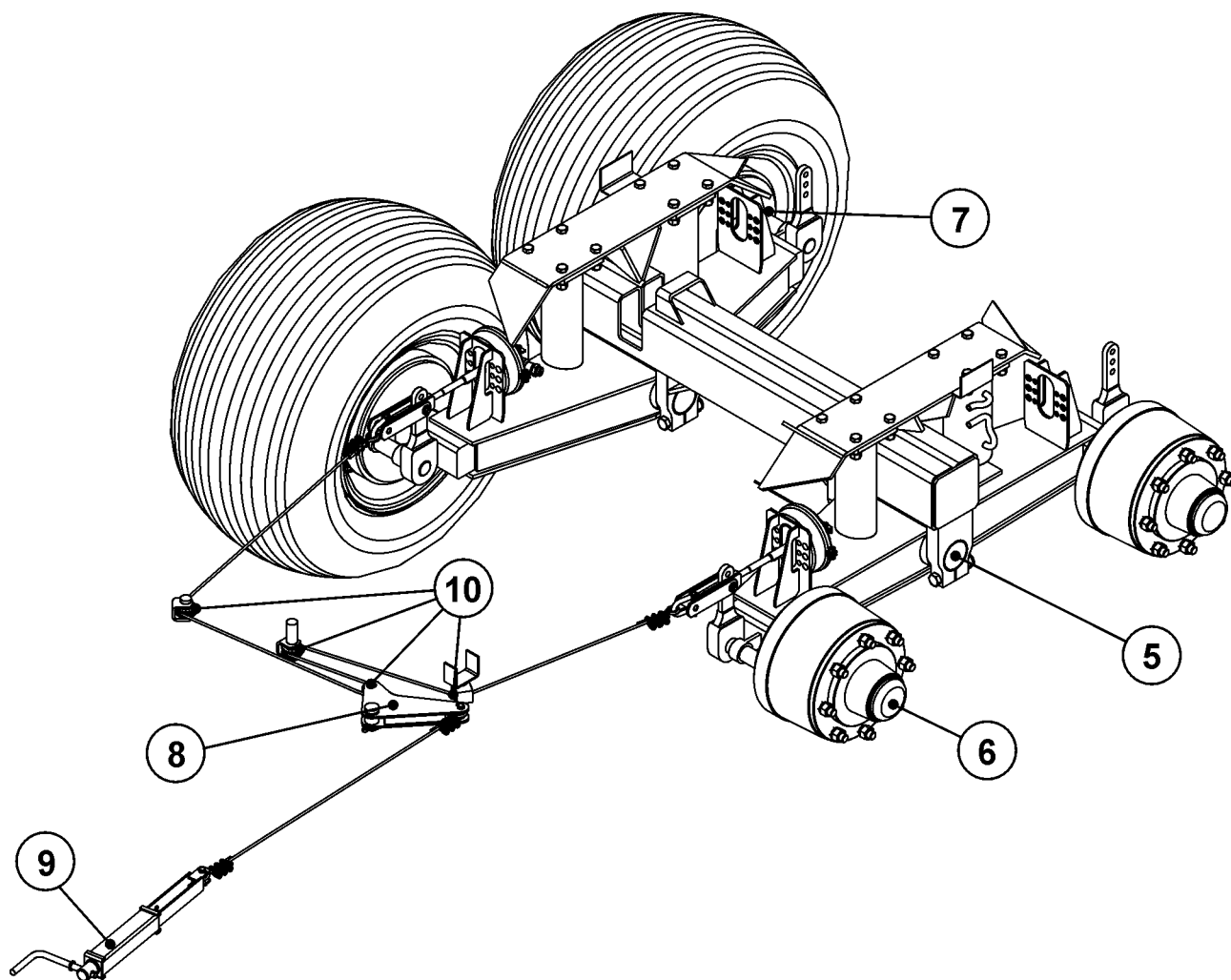


FIG. 27. TRAILER LUBRICATION POINTS

Table 9. Lubrication points of an agricultural container.

No. on the Fig. 28	Lubrication point	Number of points	Grease type	Frequency
1	Rear door hinges	4	SOLID	every 3-4 months
2	Locking gear sleeves	2	SOLID	every 3-4 months
3	Rear wheel sleeves	4	SOLID	every 1-2 months

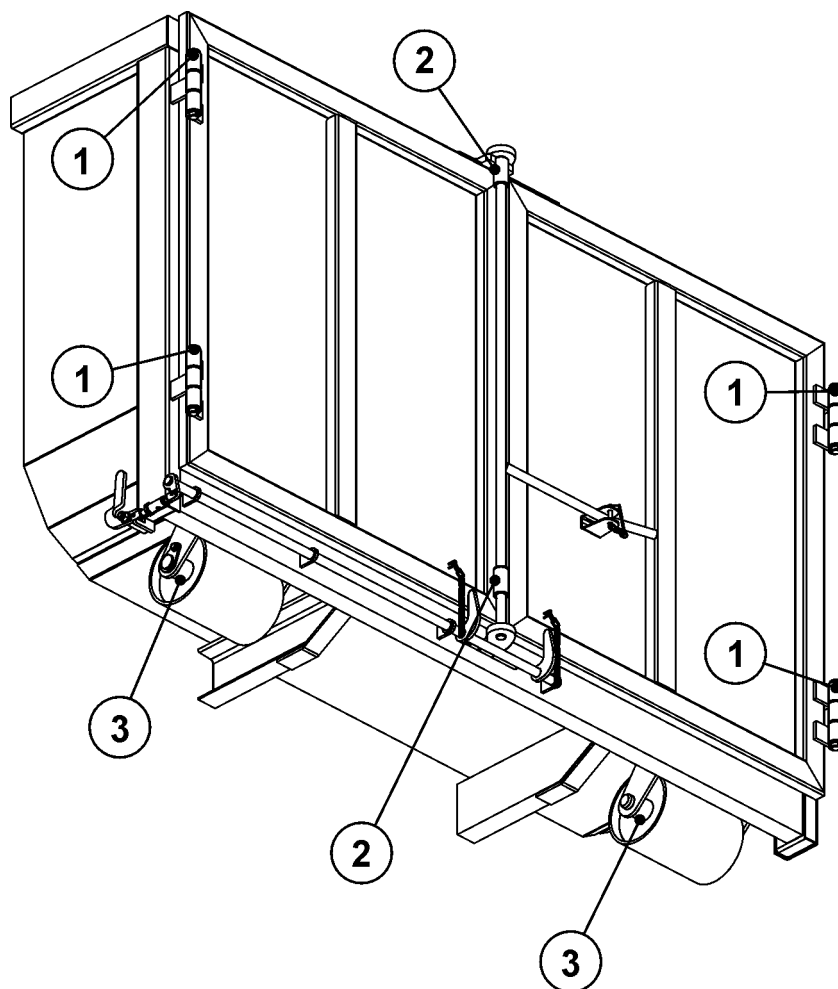


FIG. 28. LUBRICATION POINTS OF AN AGRICULTURAL CONTAINER

Table 10. Lubrication points of a building container.

No. on the Fig. 29	Lubrication point	Number of points	Grease type	Frequency
1	Rear wheel sleeves	4	SOLID	every 1-2 months
2	Upper hinge	1	SOLID	every 3-4 months
3	Lock	1	SOLID	every 3-4 months

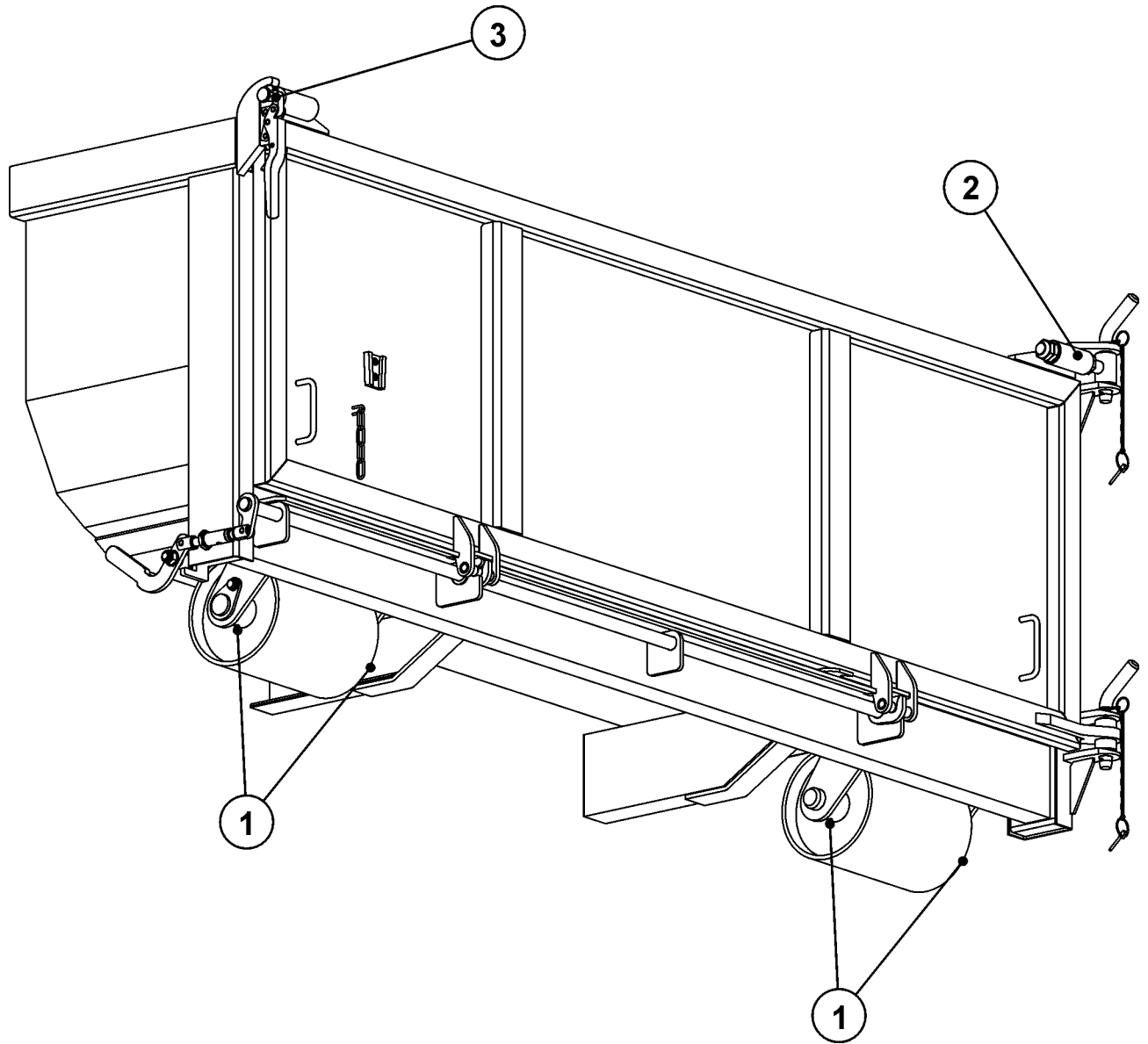


FIG. 29. LUBRICATION POINTS OF A BUILDING CONTAINER

6.6 STORAGE & PRESERVATION

After work clean the trailer and wash with water stream. If the varnish coat is damaged, clean such place from rust and dust, degrease, and paint of the same colour and uniform layer thickness. If damaged places will not be painted immediately, cover them with thin layer of grease or anticorrosion agent.

It is recommended to store the trailer in a closed or roofed storage. If the trailer is stored outdoor for long period protect it from atmospheric influence, especially from agents causing corrosion and ageing of tyres.

NOTES

CONTAINER TRAILER

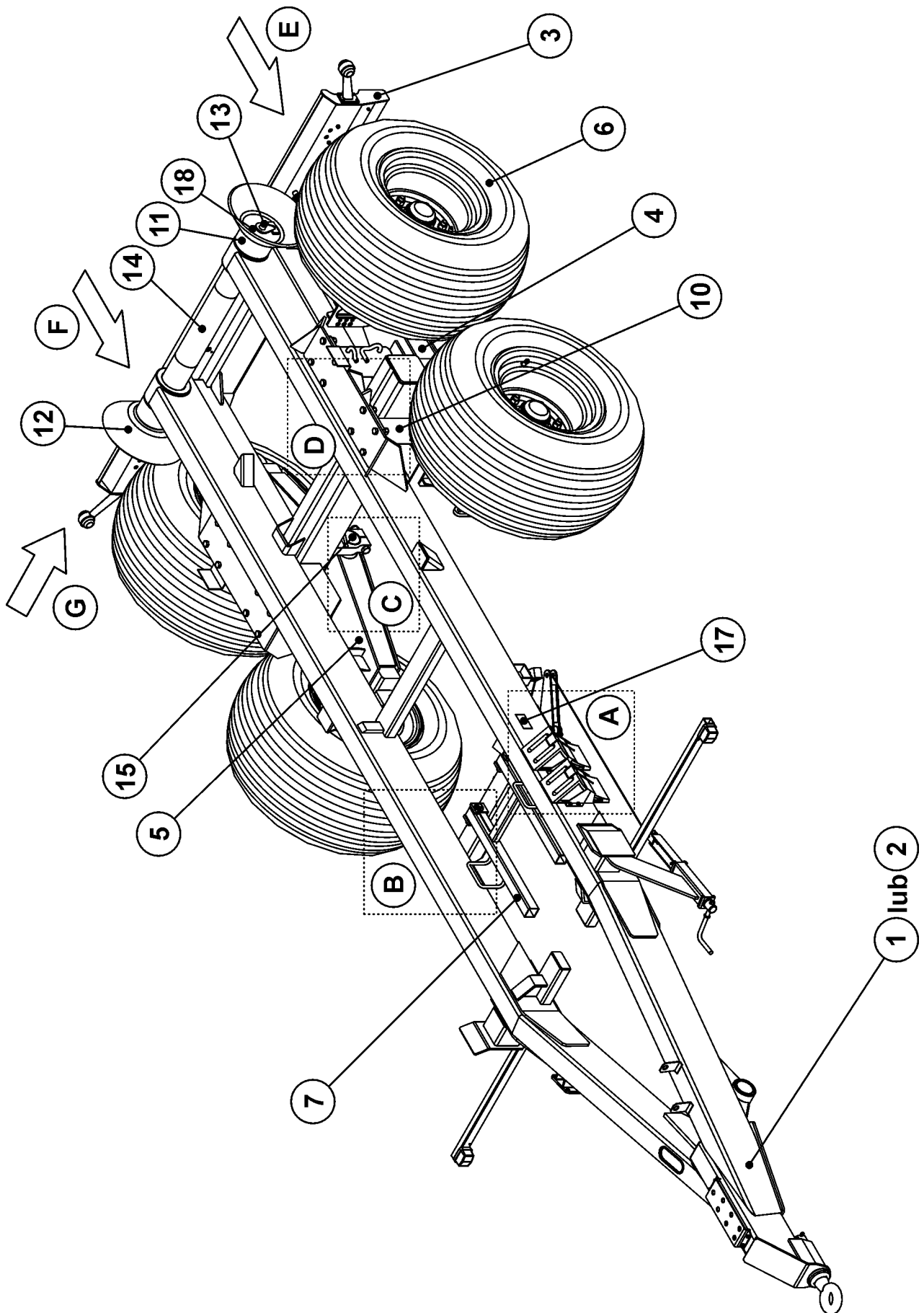
T 185

SPARE PARTS CATALOGUE

P – Polish version

D – German version

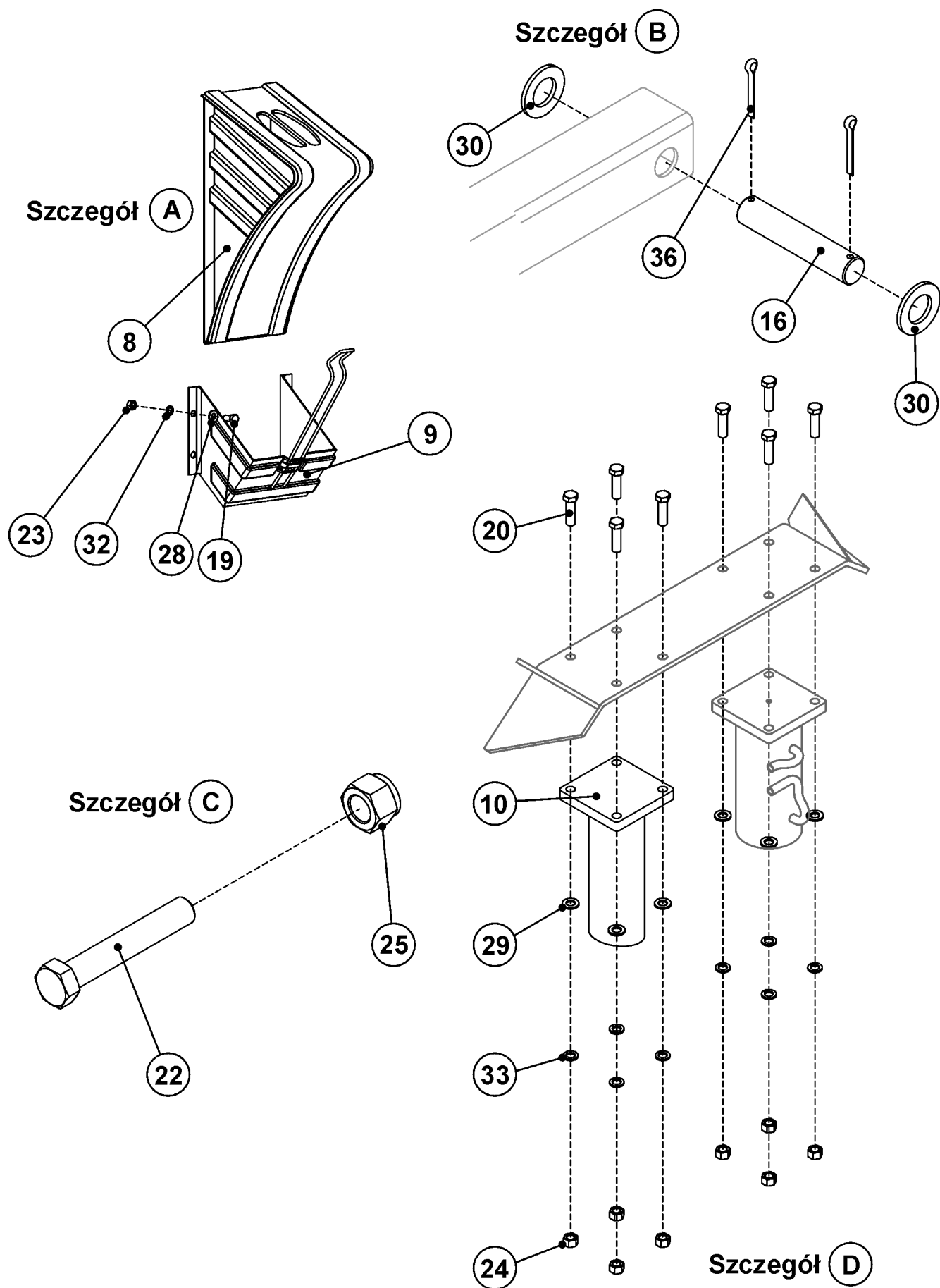
FIG. 1. UNDERCARRIAGE.



Assembly name		Drawings No.	QUANTITY	
Undercarriage		1,2,3		
NO.	PART	DRAWING (STANDARD) NO.	P	D
1	LOWER FRAME	104RPN-01.00.00.00	1	-
2	LOWER FRAME ★	104RPN-01.00.00.00 – D	-	1
3	LIGHTING BEAM CPL.	104RPN-00.07.00.00	1	1
4	ROCKER, LEFT CPL.	104RPN-00.01.00.00	1	1
5	ROCKER, RIGHT CPL.	104RPN-00.02.00.00	1	1
6	WHEEL CPL.	104RPN-00.06.00.00	4	4
7	CRATE SUPPORT	104RPN-00.05.00.00	1	1
8	WHEEL WEDGE AI – Ko	Cat No. 244374	2	2
9	WEDGE GRIP AI – Ko	Cat No. 244377	2	2
10	ROCKER DEFLECTION LIMITER	104RPN-00.00.02.00	2	2
11	GUIDE ROLLER, LEFT	104RPN-00.03.00.00	1	1
12	GUIDE ROLLER, RIGHT	104RPN-00.04.00.00	1	1
13	FASTENING SCREW	104RPN-00.00.01.00	1	1
14	TILT AXLE	104RPN-00.00.00.01	1	1
15	ROCKER AXLE	104RPN-00.00.00.02	2	2
16	CRATE SUPPORT BOLT	58RPN-00.00.005	2	2
17	REFLECTIVE STICKER, RECTANGULAR,	DOB35	6	6
18	NIPPLE M8x1	PN-76/M-82002	6	6
19	SCREW M8x16-8.8-B-Fe/Zn5	PN-85/M-82105	8	8
20	SCREW M16x55-8.8-B-Fe/Zn5	PN-85/M-82105	16	16
21	SCREW M20x50-8.8-B-Fe/Zn	PN-85/M-82105	2	2
22	SCREW M20x120-8.8-B-Fe/Zn	PN-85/M-82105	4	4
23	NUT M8-5-B-Fe/Zn5	PN-86/M-82144	8	8
24	NUT M16-5-B-Fe/Zn5	PN-86/M-82144	16	16
25	NUT M20-5-B-Fe/Zn5	PN-85/M-82175	4	4
26	NUT Z-M24-5-B-Fe/Zn5	PN-86/M-82148	1	1
27	WASHER 6.4-Fe/Zn5	PN-78/M-82005	2	2
28	WASHER 8.4-Fe/Zn5	PN-78/M-82005	8	8
29	WASHER 17-Fe/Zn5	PN-78/M-82005	16	16
30	WASHER 21-Fe/Zn5	PN-78/M-82005	4	4
31	WASHER 25-Fe/Zn5	PN-78/M-82005	1	1
32	WASHER Z 8.2-Fe/Zn5	PN-77/M-82008	8	8
33	WASHER Z 16.3-Fe/Zn5	PN-77/M-82008	16	16
34	WASHER Z 20.5-Fe/Zn5	PN-77/M-82008	2	2
35	RIVET P AI-Fe 5x12	PN-83/M-82971	2	2
36	COTTER PIN S-Zn 4x32	PN-76/M-82001	4	4
37	COTTER PIN S-Zn 5x50	PN-76/M-82001	1	1
38	GRIP OF THE TABLE FOR SLOWLY MOVING VEHICLES	PN/R-36154	1	1
39	TABLE FOR SLOWLY MOVING VEHICLES ★		1	1

★ - FOR SPECIAL ORDER

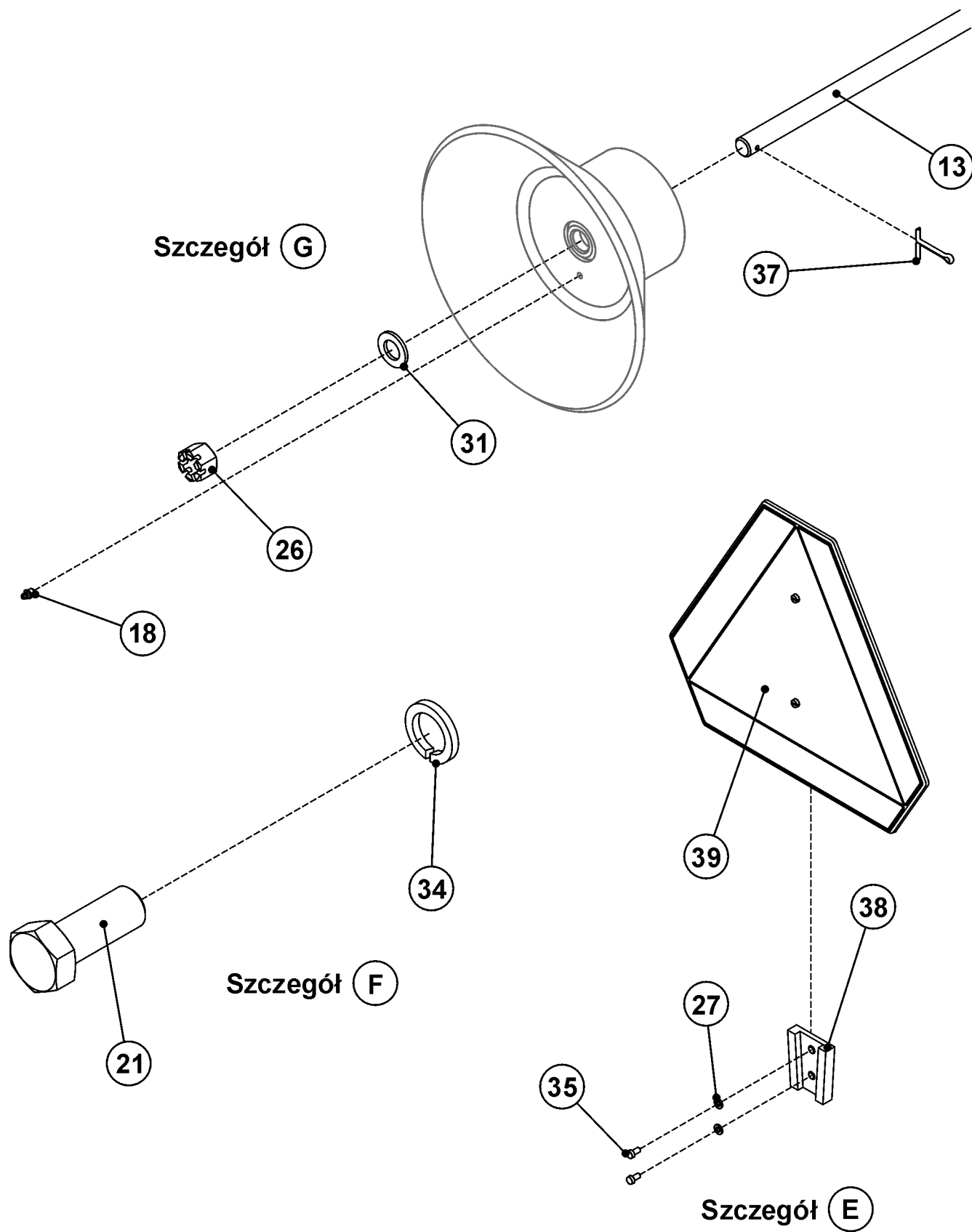
FIG. 2. UNDERCARRIAGE.



Assembly name		Drawings No.	QUANTITY	
Undercarriage		1,2,3		
NO.	PART	DRAWING (STANDARD) NO.	P	D
1	LOWER FRAME	104RPN-01.00.00.00	1	-
2	LOWER FRAME ★	104RPN-01.00.00.00 – D	-	1
3	LIGHTING BEAM CPL.	104RPN-00.07.00.00	1	1
4	ROCKER, LEFT CPL.	104RPN-00.01.00.00	1	1
5	ROCKER, RIGHT CPL.	104RPN-00.02.00.00	1	1
6	WHEEL CPL.	104RPN-00.06.00.00	4	4
7	CRATE SUPPORT	104RPN-00.05.00.00	1	1
8	WHEEL WEDGE AI – Ko	Cat No. 244374	2	2
9	WEDGE GRIP AI – Ko	Cat No. 244377	2	2
10	ROCKER DEFLECTION LIMITER	104RPN-00.00.02.00	2	2
11	ROLKA PROWADZĄCA LEWA	104RPN-00.03.00.00	1	1
12	GUIDE ROLLER, PRAWA	104RPN-00.04.00.00	1	1
13	FASTENING SCREW	104RPN-00.00.01.00	1	1
14	TILT AXLE	104RPN-00.00.00.01	1	1
15	ROCKER AXLE	104RPN-00.00.00.02	2	2
16	CRATE SUPPORT BOLT	58RPN-00.00.005	2	2
17	REFLECTIVE STICKER, RECTANGULAR,	DOB35	6	6
18	NIPPLE M8x1	PN-76/M-82002	6	6
19	SCREW M8x16-8.8-B-Fe/Zn5	PN-85/M-82105	8	8
20	SCREW M16x55-8.8-B-Fe/Zn5	PN-85/M-82105	16	16
21	SCREW M20x50-8.8-B-Fe/Zn	PN-85/M-82105	2	2
22	SCREW M20x120-8.8-B-Fe/Zn	PN-85/M-82105	4	4
23	NUT M8-5-B-Fe/Zn5	PN-86/M-82144	8	8
24	NUT M16-5-B-Fe/Zn5	PN-86/M-82144	16	16
25	NUT M20-5-B-Fe/Zn5	PN-85/M-82175	4	4
26	NUT Z-M24-5-B-Fe/Zn5	PN-86/M-82148	1	1
27	WASHER 6.4-Fe/Zn5	PN-78/M-82005	2	2
28	WASHER 8.4-Fe/Zn5	PN-78/M-82005	8	8
29	WASHER 17-Fe/Zn5	PN-78/M-82005	16	16
30	WASHER 21-Fe/Zn5	PN-78/M-82005	4	4
31	WASHER 25-Fe/Zn5	PN-78/M-82005	1	1
32	WASHER Z 8.2-Fe/Zn5	PN-77/M-82008	8	8
33	WASHER Z 16.3-Fe/Zn5	PN-77/M-82008	16	16
34	WASHER Z 20.5-Fe/Zn5	PN-77/M-82008	2	2
35	RIVET P AI-Fe 5x12	PN-83/M-82971	2	2
36	COTTER PIN S-Zn 4x32	PN-76/M-82001	4	4
37	COTTER PIN S-Zn 5x50	PN-76/M-82001	1	1
38	GRIP OF THE TABLE FOR SLOWLY MOVING VEHICLES	PN/R-36154	1	1
39	TABLE FOR SLOWLY MOVING VEHICLES★		1	1

★ - FOR SPECIAL ORDER

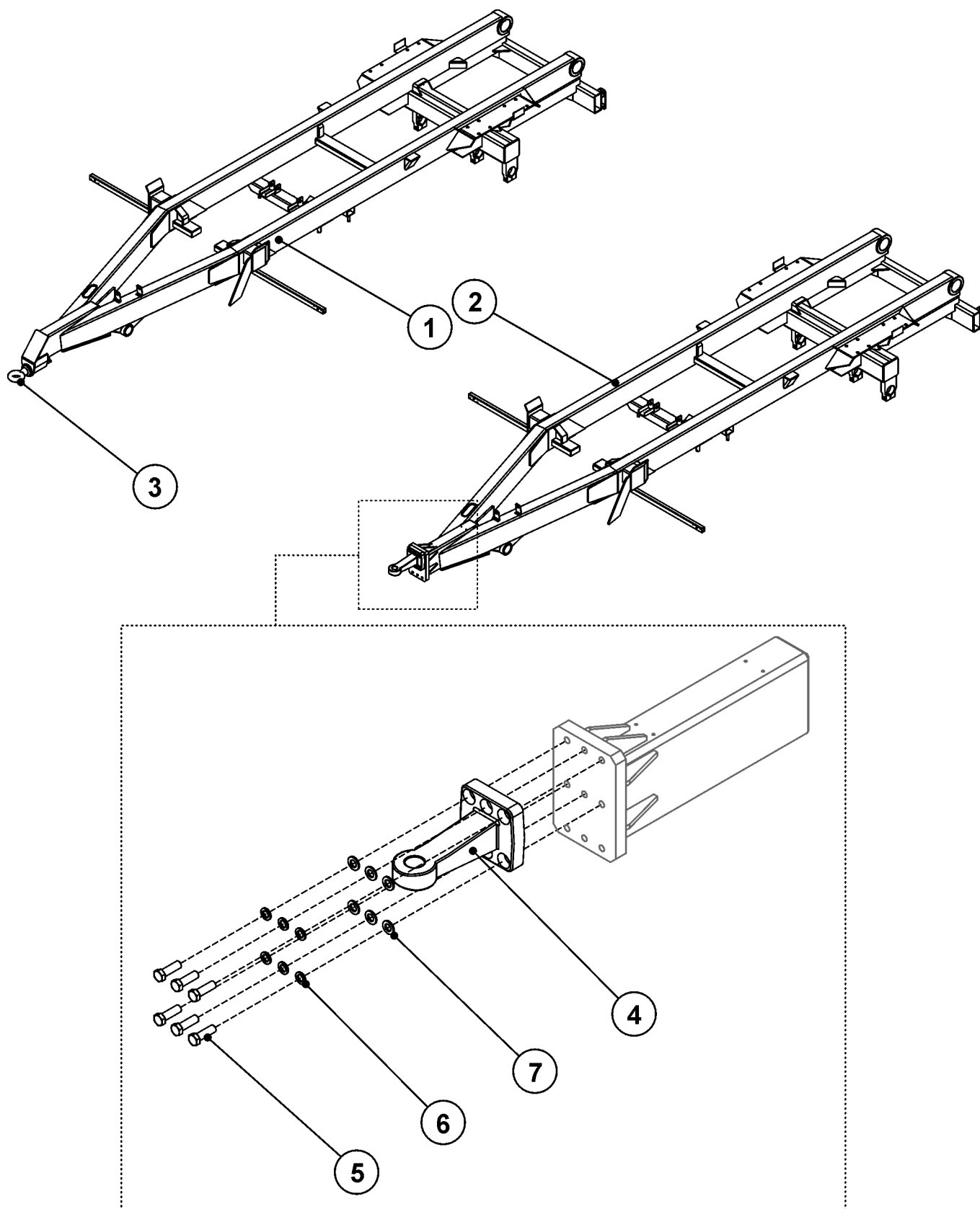
FIG. 3. UNDERCARRIAGE.



Assembly name		Drawings No.	QUANTITY	
Undercarriage		1,2,3		
NO.	PART	DRAWING (STANDARD) NO.	P	D
1	LOWER FRAME	104RPN-01.00.00.00	1	-
2	LOWER FRAME ★	104RPN-01.00.00.00 – D	-	1
3	LIGHTING BEAM CPL.	104RPN-00.07.00.00	1	1
4	ROCKER, LEFT CPL.	104RPN-00.01.00.00	1	1
5	ROCKER, RIGHT CPL.	104RPN-00.02.00.00	1	1
6	WHEEL CPL.	104RPN-00.06.00.00	4	4
7	CRATE SUPPORT	104RPN-00.05.00.00	1	1
8	WHEEL WEDGE AI – Ko	Cat No. 244374	2	2
9	WEDGE GRIP AI – Ko	Cat No. 244377	2	2
10	ROCKER DEFLECTION LIMITER	104RPN-00.00.02.00	2	2
11	ROLKA PROWADZĄCA LEWA	104RPN-00.03.00.00	1	1
12	GUIDE ROLLER, PRAWA	104RPN-00.04.00.00	1	1
13	FASTENING SCREW	104RPN-00.00.01.00	1	1
14	TILT AXLE	104RPN-00.00.00.01	1	1
15	ROCKER AXLE	104RPN-00.00.00.02	2	2
16	CRATE SUPPORT BOLT	58RPN-00.00.005	2	2
17	REFLECTIVE STICKER, RECTANGULAR,	DOB35	6	6
18	NIPPLE M8x1	PN-76/M-82002	6	6
19	SCREW M8x16-8.8-B-Fe/Zn5	PN-85/M-82105	8	8
20	SCREW M16x55-8.8-B-Fe/Zn5	PN-85/M-82105	16	16
21	SCREW M20x50-8.8-B-Fe/Zn	PN-85/M-82105	2	2
22	SCREW M20x120-8.8-B-Fe/Zn	PN-85/M-82105	4	4
23	NUT M8-5-B-Fe/Zn5	PN-86/M-82144	8	8
24	NUT M16-5-B-Fe/Zn5	PN-86/M-82144	16	16
25	NUT M20-5-B-Fe/Zn5	PN-85/M-82175	4	4
26	NUT Z-M24-5-B-Fe/Zn5	PN-86/M-82148	1	1
27	WASHER 6.4-Fe/Zn5	PN-78/M-82005	2	2
28	WASHER 8.4-Fe/Zn5	PN-78/M-82005	8	8
29	WASHER 17-Fe/Zn5	PN-78/M-82005	16	16
30	WASHER 21-Fe/Zn5	PN-78/M-82005	4	4
31	WASHER 25-Fe/Zn5	PN-78/M-82005	1	1
32	WASHER Z 8.2-Fe/Zn5	PN-77/M-82008	8	8
33	WASHER Z 16.3-Fe/Zn5	PN-77/M-82008	16	16
34	WASHER Z 20.5-Fe/Zn5	PN-77/M-82008	2	2
35	RIVET P AI-Fe 5x12	PN-83/M-82971	2	2
36	COTTER PIN S-Zn 4x32	PN-76/M-82001	4	4
37	COTTER PIN S-Zn 5x50	PN-76/M-82001	1	1
38	GRIP OF THE TABLE FOR SLOWLY MOVING VEHICLES	PN/R-36154	1	1
39	TABLE FOR SLOWLY MOVING VEHICLES★		1	1

★ - FOR SPECIAL ORDER

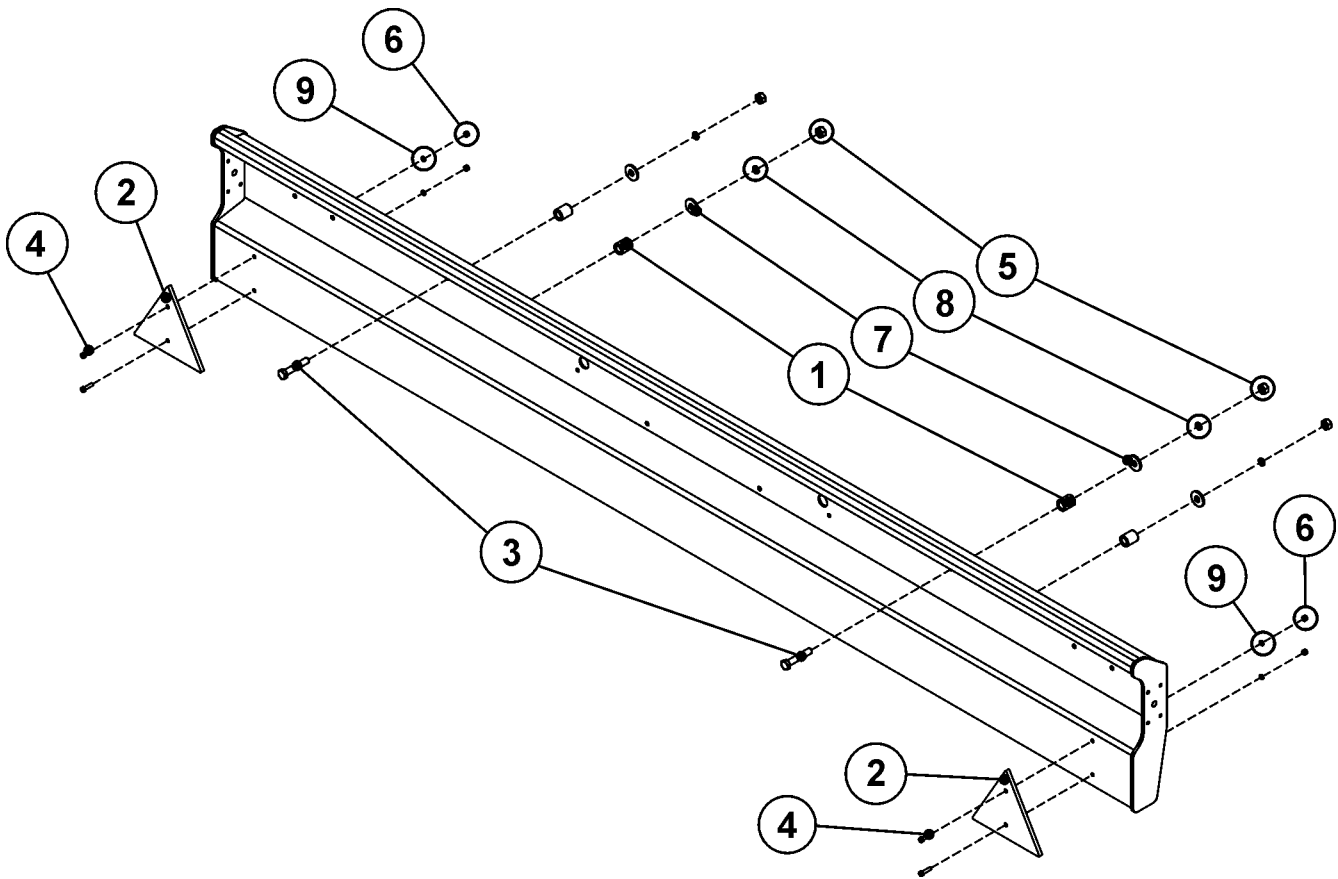
FIG. 4. LOWER FRAME.



Assembly name		Drawings No.	QUANTITY	
LOWER FRAME		4		
NO.	PART	DRAWING (STANDARD) NO.	P	D
1	LOWER FRAME	104RPN-01.00.00.00	1	-
2	LOWER FRAME ★	104RPN-01.00.00.00 – D	-	1
3	ROTARY STRING Ø52	58RPN-08.00.017	1	-
4	STRING ART. 30904 ★	DIN 11026	-	1
5	SCREW M16x50-10.9-B-Fe/Zn5 ★	PN-85/M-82105	-	6
6	WASHER Z16.3-Fe/Zn5 ★	PN-77/M-82008	-	6
7	WASHER 17-Fe/Zn5 ★	PN-76/M-82005	-	6

★ - FOR SPECIAL ORDER

FIG. 5. LIGHTING BEAM CPL.



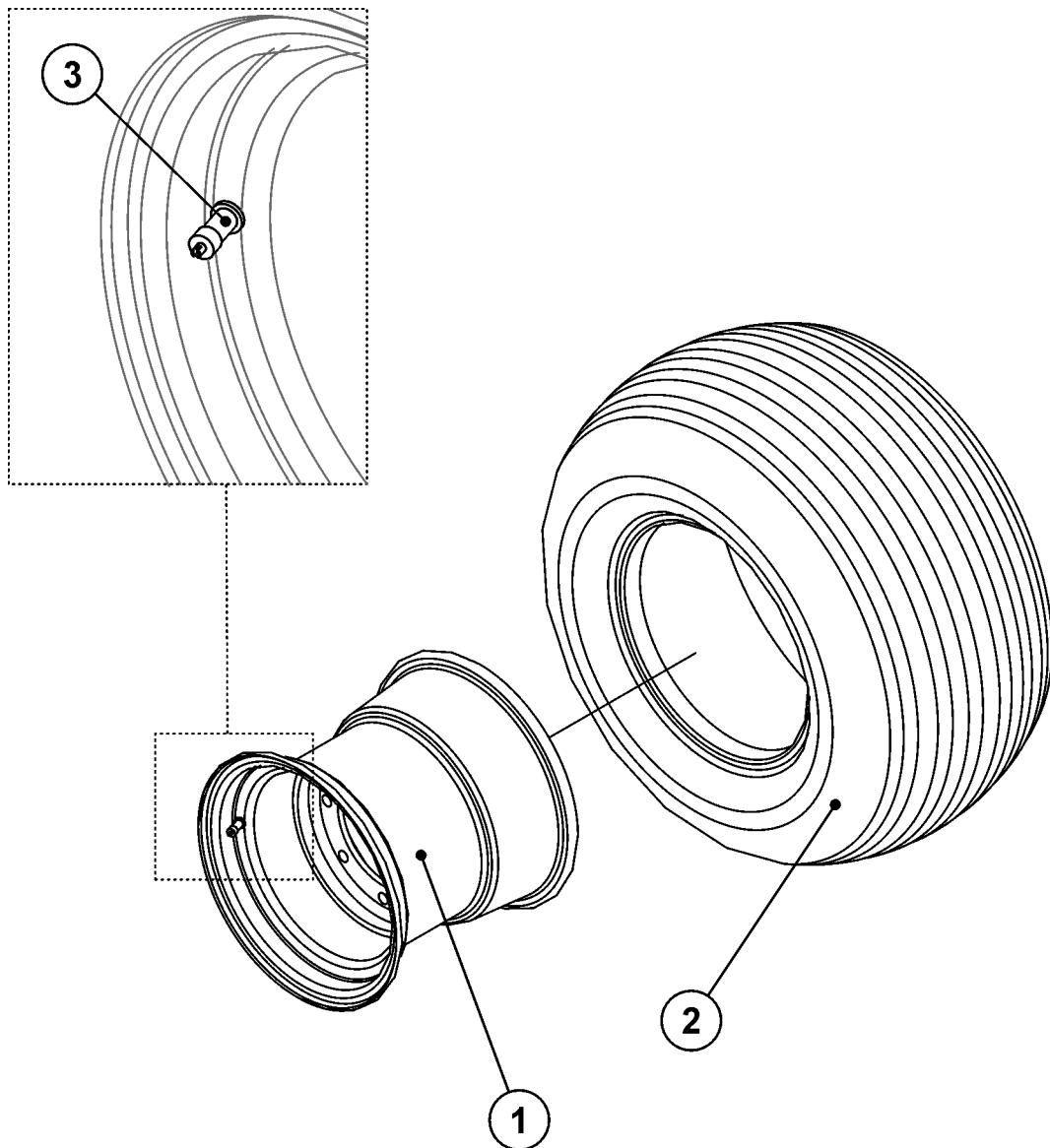
Assembly name		Drawings No.	QUANTITY	
LIGHTING BEAM CPL.		5		
NO.	PART	DRAWING (STANDARD) NO.	P	D

LIGHTING BEAM CPL.

104RPN-00.07.00.00

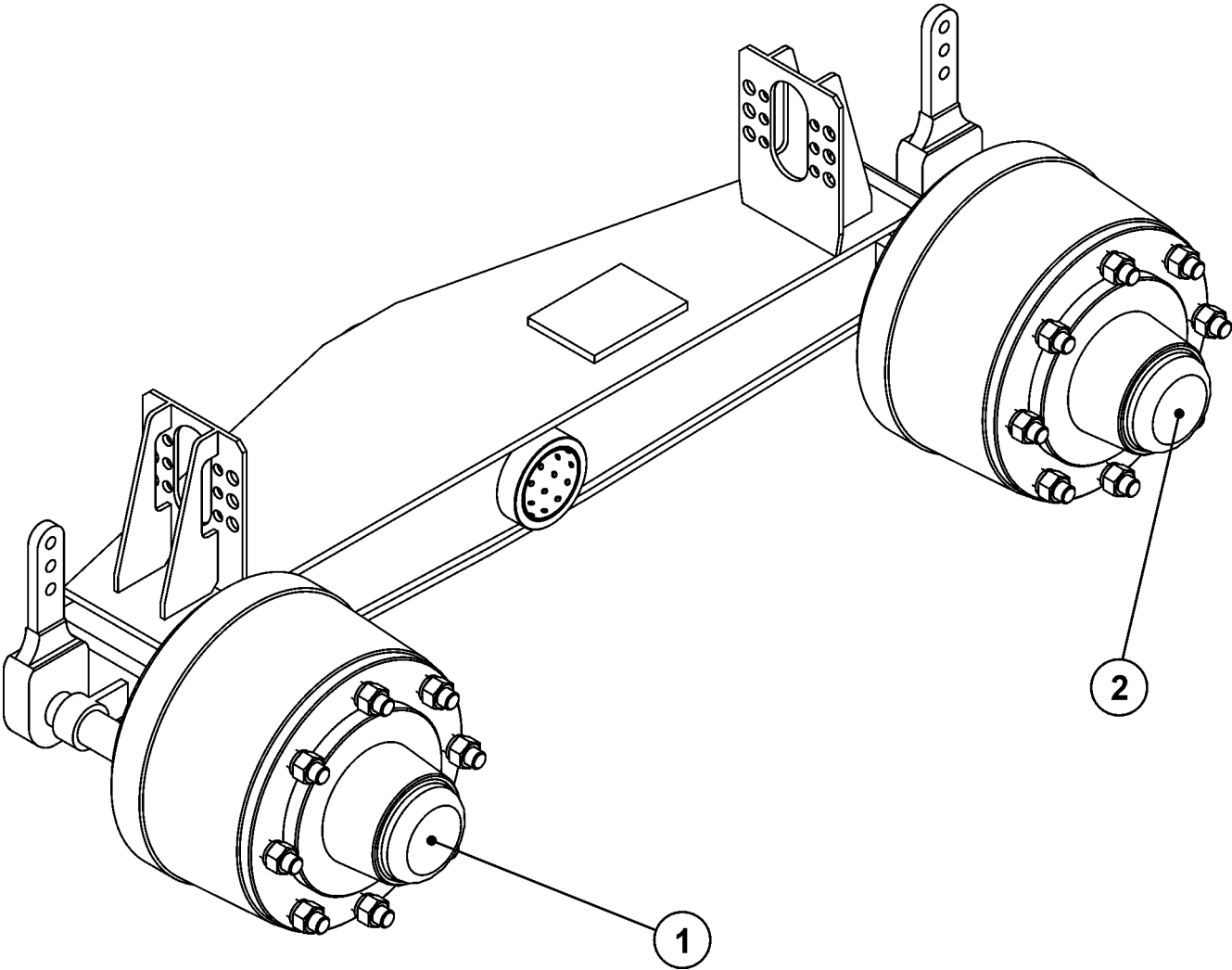
1	LIGHTING BEAM DISTANCE SLEEVE	104RPN-00.07.00.01	4	4
2	REFLECTIVE TRIANGLE DOB31		2	2
3	SCREW M10x55-8.8-B-Fe/Zn5	PN-85/M-82105	4	4
4	SCREW M5x20-4.8-B-Fe/Zn5	PN-85/M-82215	4	4
5	NUT M10-8-B-Fe/Zn5	PN-86/M-82144	4	4
6	NUT M5-5-B-Fe/Zn5	PN-86/M-82144	4	4
7	WASHER 10.5-Fe/Zn5	PN-59/M-82030	4	4
8	WASHER Z10.2 -Fe/Zn5	PN-77/M-82008	4	4
9	WASHER Z5.1-Fe/Zn5	PN-77/M-82008	4	4

FIG. 6. WHEEL CPL.



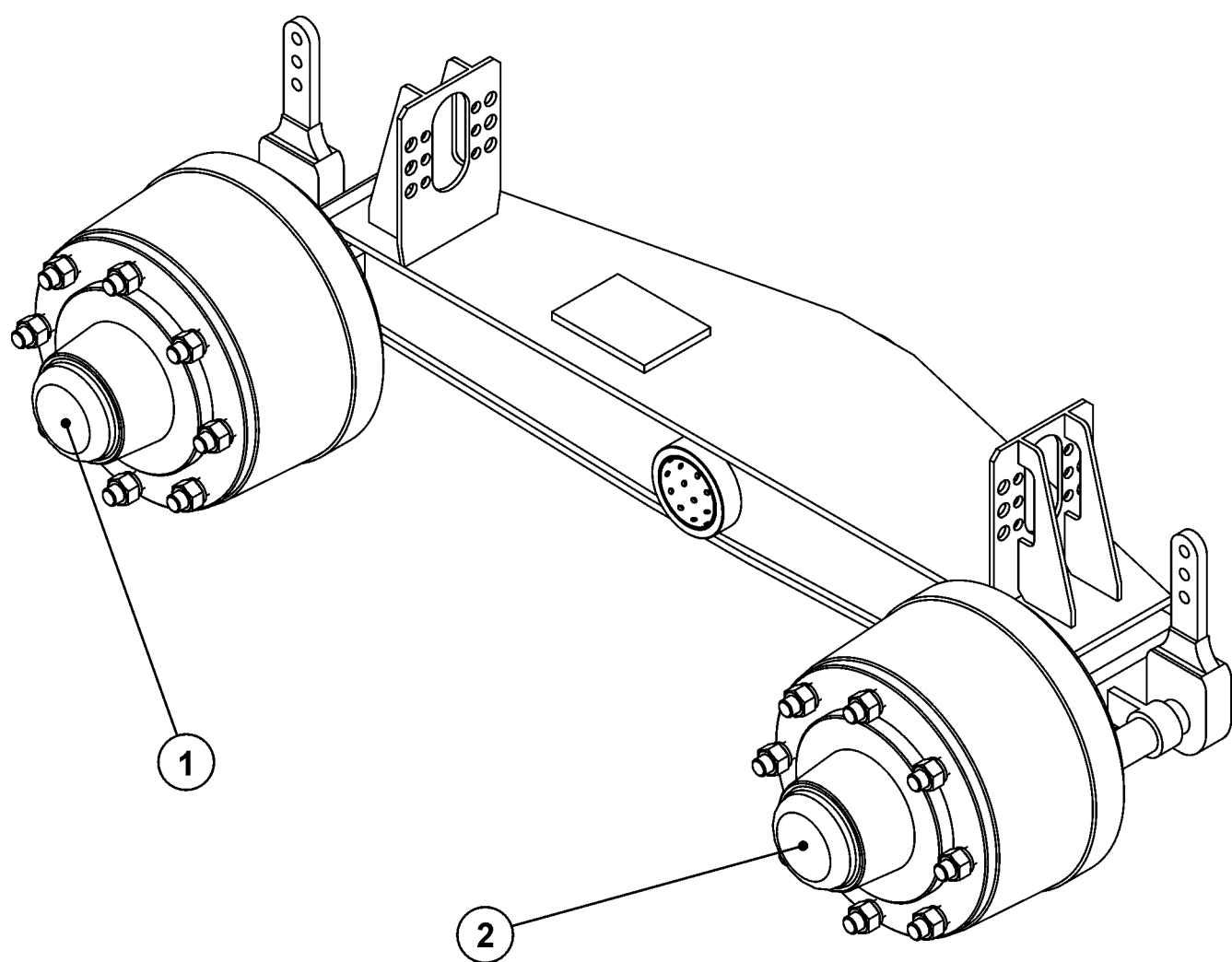
Assembly name		Drawings No.	QUANTITY	
WHEEL CPL.		6		
NO.	PART	DRAWING (STANDARD) NO.	P	D
WHEEL CPL.		104RPN-00.06.00.00		
1	DISC WHEEL 16.00x17"		1	1
2	500/50-17 18PR IMPLEMENT - AW708		1	1
3	VALVE TR 415		1	1

FIG. 7. ROCKER, LEFT CPL.



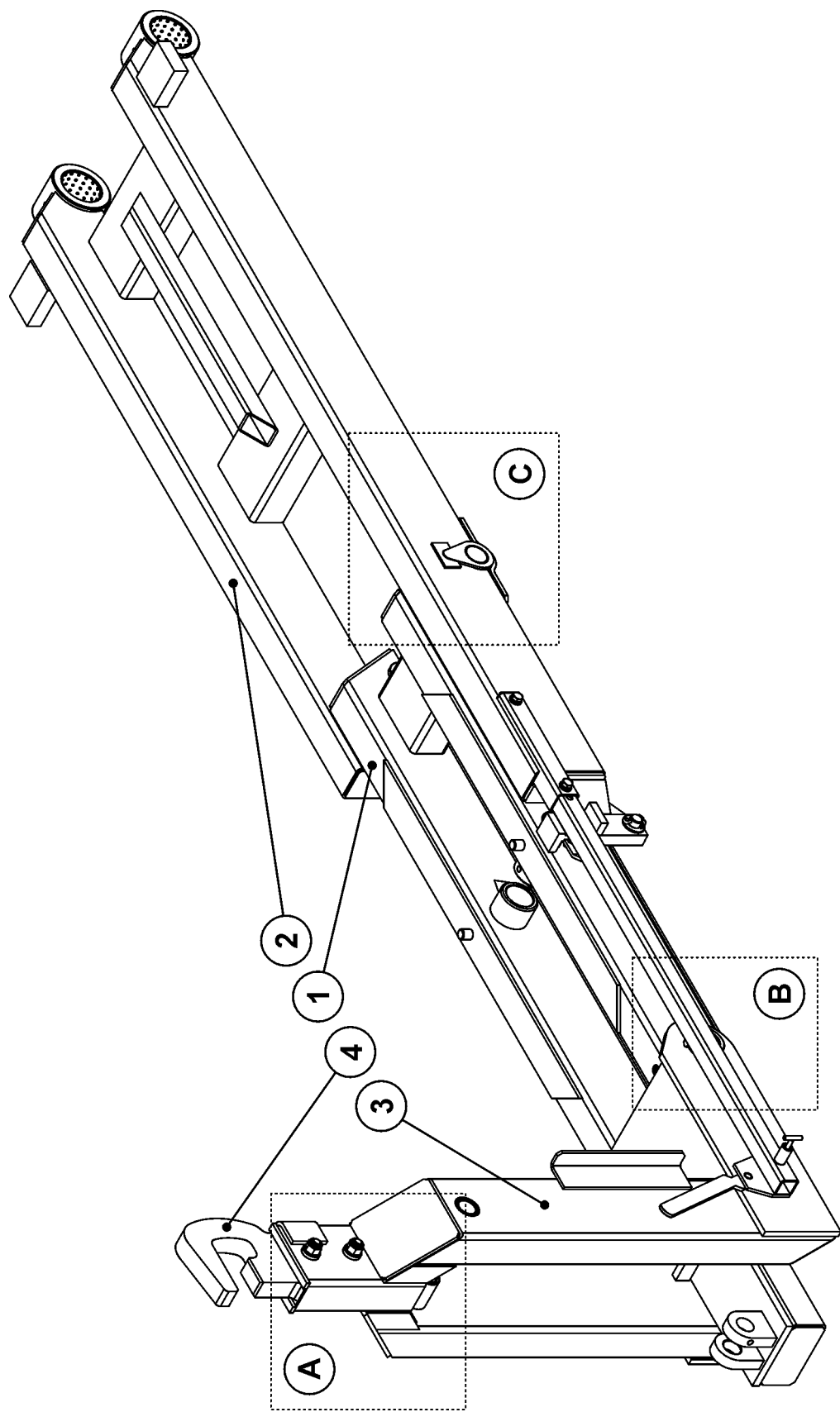
Assembly name		Drawings No.		QUANTITY	
ROCKER, LEFT CPL.		7			
NO.	PART	DRAWING (STANDARD) NO.		P	D
	ROCKER, LEFT CPL.	104RPN-00.01.00.00			
1	HALF-AXLE, LEFT SQ. 90	104RPN-00.01.01.00		1	1
2	HALF-AXLE, RIGHT SQ. 90	104RPN-00.01.02.00		1	1

FIG. 8. ROCKER, RIGHT CPL.



Assembly name		Drawings No.	QUANTITY	
ROCKER, RIGHT CPL.		8		
NO.	PART	DRAWING (STANDARD) NO.	P	D
	ROCKER, RIGHT CPL.	104RPN-00.02.00.00		
1	HALF-AXLE, LEFT SQ. 90	104RPN-00.01.01.00	1	1
2	HALF-AXLE, RIGHT SQ. 90	104RPN-00.01.02.00	1	1

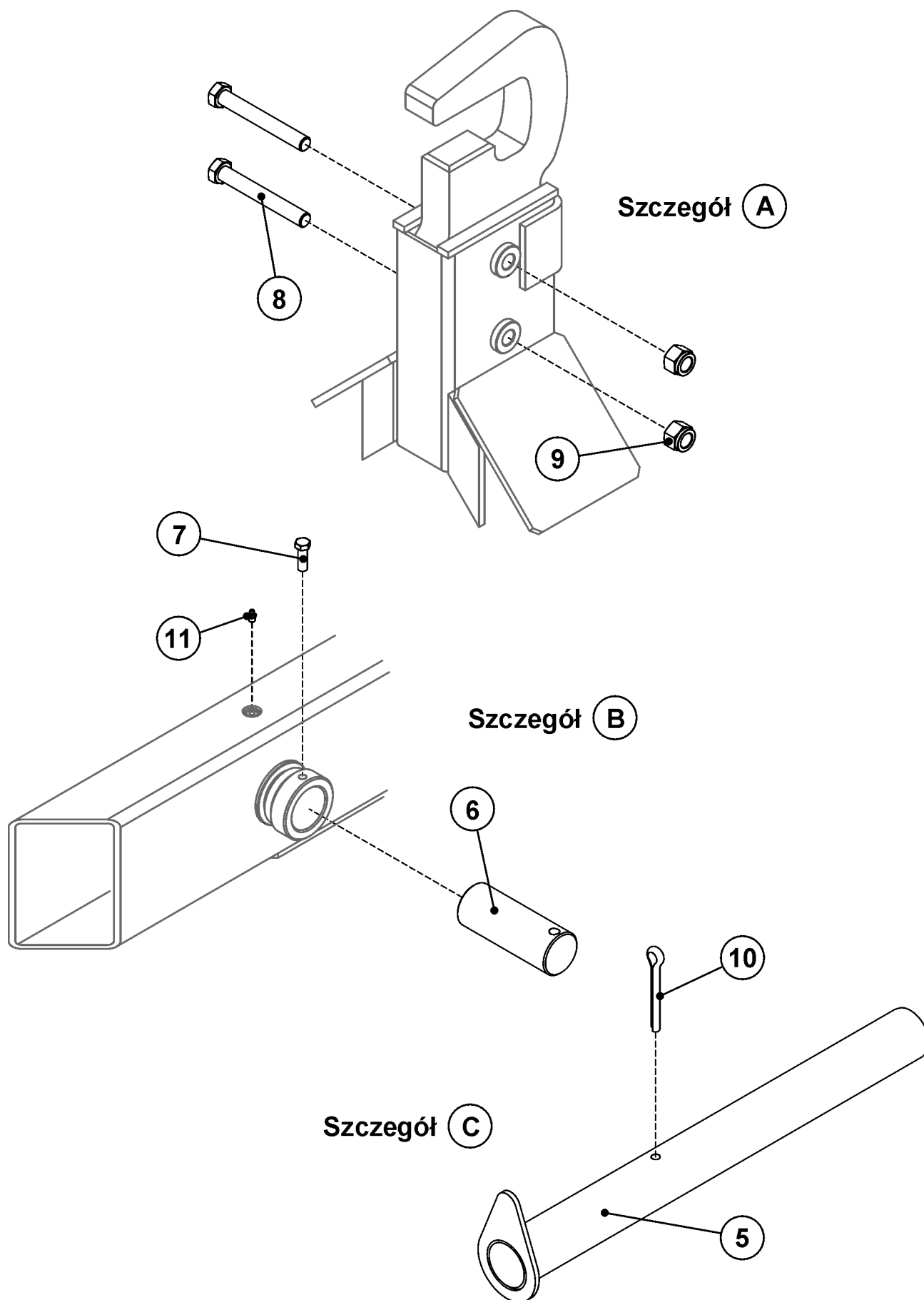
FIG. 9. TILT FRAME CPL.



Assembly name		Drawings No.	QUANTITY	
TILT FRAME CPL.		9, 10		
NO.	PART	DRAWING (STANDARD) NO.	P	D

	TILT FRAME CPL.	104RPN-02.00.00.00		
1	MIDDLE FRAME CPL.	104RPN-02.02.00.00	1	1
2	REAR FRAME	104RPN-02.03.00.00	1	1
3	HOOK FRAME	104RPN-02.01.00.00	1	1
4	HOOK	104RPN-02.00.00.02	1	1
5	BOLT I CPL.	104RPN-02.00.01.00	1	1
6	BOLT II	104RPN-02.00.00.01	2	2
7	SCREW M12x35-8.8-B-Fe/Zn5	PN-85/M-82105	2	2
8	SCREW M20x150-10.9-B-Fe/Zn5	PN-85/M-82101	2	2
9	SELF-LOCKING NUT M20-10-B-Fe/Zn5	PN-85/M-82175	2	2
10	COTTER PIN S-Zn 10x80	PN-76/M-82001	1	1
11	NIPPLE M8x1	PN-76/M-82002	2	2

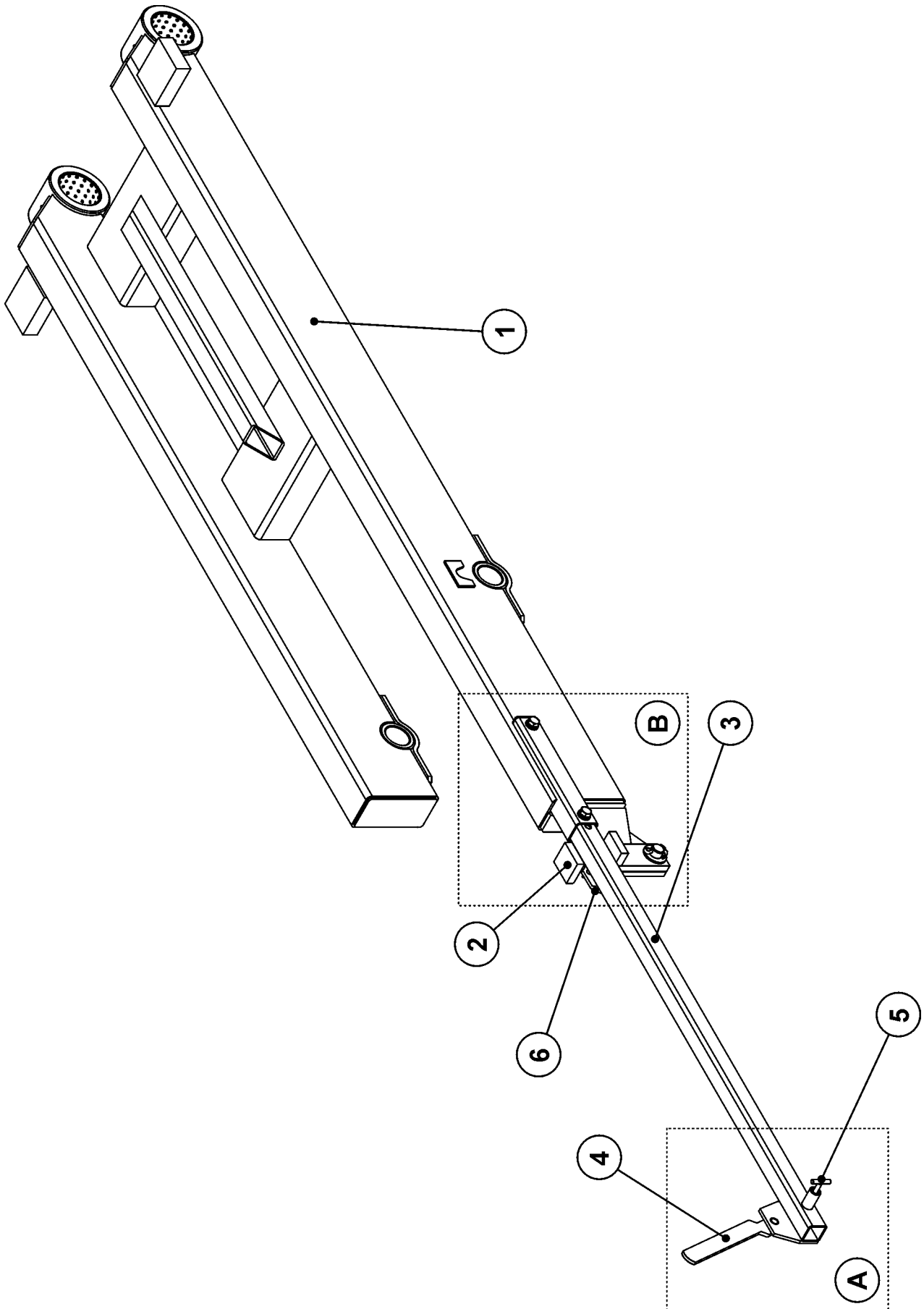
FIG. 10. TILT FRAME CPL.



Assembly name		Drawings No.	QUANTITY	
TILT FRAME CPL.		9, 10		
NO.	PART	DRAWING (STANDARD) NO.	P	D

	TILT FRAME CPL.	104RPN-02.00.00.00		
1	MIDDLE FRAME CPL.	104RPN-02.02.00.00	1	1
2	REAR FRAME	104RPN-02.03.00.00	1	1
3	HOOK FRAME	104RPN-02.01.00.00	1	1
4	HOOK	104RPN-02.00.00.02	1	1
5	BOLT I CPL.	104RPN-02.00.01.00	1	1
6	BOLT II	104RPN-02.00.00.01	2	2
7	SCREW M12x35-8.8-B-Fe/Zn5	PN-85/M-82105	2	2
8	SCREW M20x150-10.9-B-Fe/Zn5	PN-85/M-82101	2	2
9	SELF-LOCKING NUT M20-10-B-Fe/Zn5	PN-85/M-82175	2	2
10	COTTER PIN S-Zn 10x80	PN-76/M-82001	1	1
11	NIPPLE M8x1	PN-76/M-82002	2	2

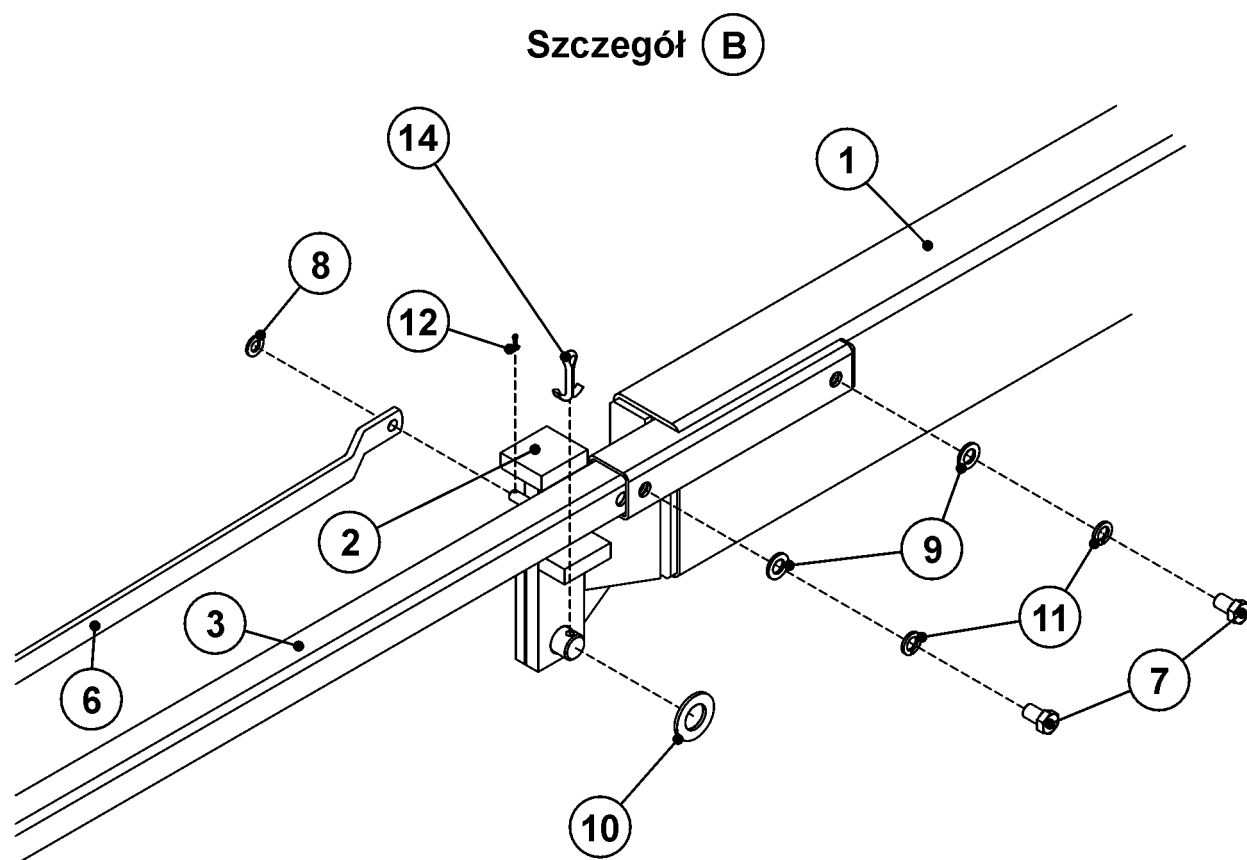
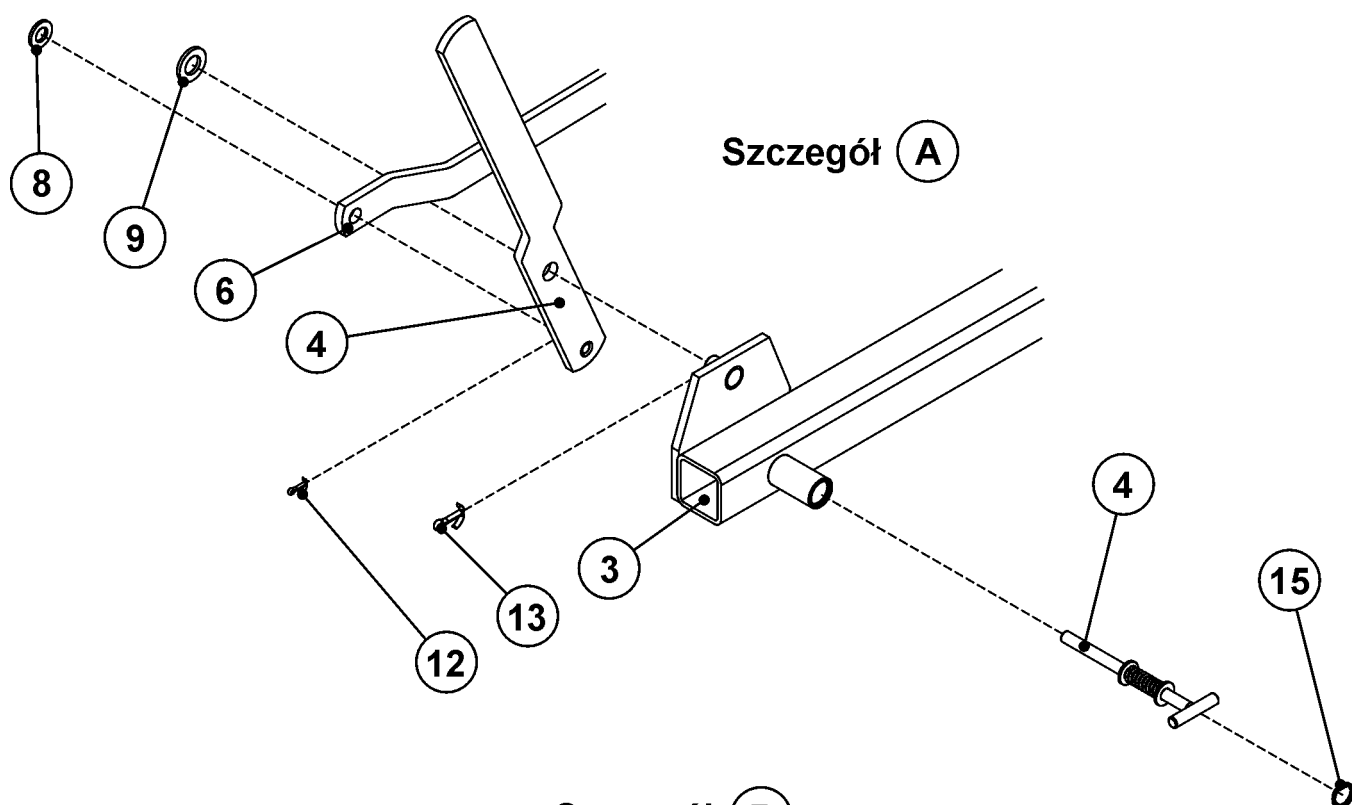
FIG. 11. REAR FRAME.



Assembly name		Drawings No.	QUANTITY	
REAR FRAME		11, 12		
NO.	PART	DRAWING (STANDARD) NO.	P	D

	REAR FRAME	104RPN-02.03.00.00		
1	FRAME	104RPN-02.03.01.00	1	1
2	LOCK	104RPN-02.03.02.00	1	1
3	CONSOLE	104RPN-02.03.03.00	1	1
4	LEVER CPL.	104RPN-02.03.04.00	1	1
5	LOCK BOLT	104RPN-02.03.05.00	1	1
6	STRING	104RPN-02.03.00.01	1	1
7	SCREW M16x30 - 5.8-B-Fe/Zn5	PN-85/M-82105	2	2
8	WASHER 13-Fe/Zn5	PN-78/M-82005	4	4
9	WASHER 17-Fe/Zn5	PN-78/M-82005	3	3
10	WASHER 31-Fe/Zn5	PN-78/M-82005	1	1
11	WASHER Z16.3 Fe/Zn9	PN-77/M-82008	2	2
12	COTTER PIN S-Zn 3.2x16	PN-76/M-82001	2	2
13	COTTER PIN S-Zn 4x25	PN-76/M-82001	1	1
14	COTTER PIN S-Zn 8x45	PN-76/M-82001	1	1
15	RETAINER RING W22	PN-81/M-85111	1	1

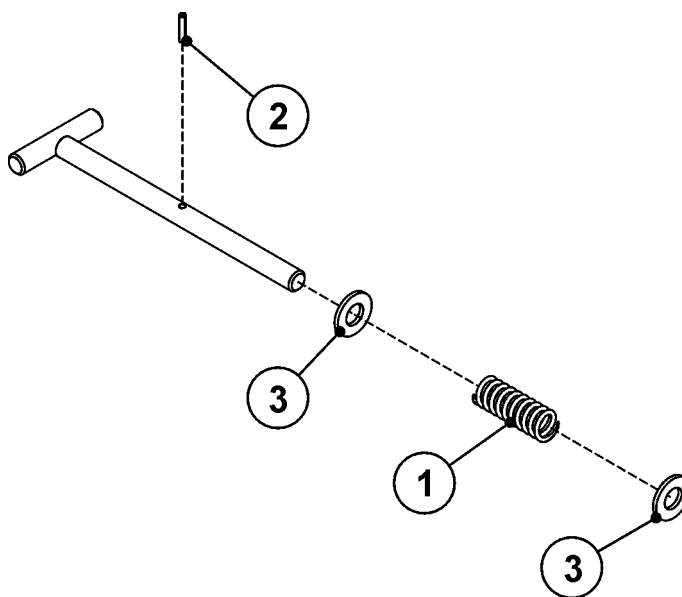
FIG. 12. REAR FRAME.



Assembly name		Drawings No.	QUANTITY	
REAR FRAME		11, 12		
NO.	PART	DRAWING (STANDARD) NO.	P	D

REAR FRAME		104RPN-02.03.00.00		
1	FRAME	104RPN-02.03.01.00	1	1
2	LOCK	104RPN-02.03.02.00	1	1
3	CONSOLE	104RPN-02.03.03.00	1	1
4	LEVER CPL	104RPN-02.03.04.00	1	1
5	LOCK BOLT	104RPN-02.03.05.00	1	1
6	STRING	104RPN-02.03.00.01	1	1
7	SCREW M16x30 - 5.8-B-Fe/Zn5	PN-85/M-82105	2	2
8	WASHER 13-Fe/Zn5	PN-78/M-82005	4	4
9	WASHER 17-Fe/Zn5	PN-78/M-82005	3	3
10	WASHER 31-Fe/Zn5	PN-78/M-82005	1	1
11	WASHER Z16.3-Fe/Zn9	PN-77/M-82008	2	2
12	COTTER PIN S-Zn 3.2x16	PN-76/M-82001	2	2
13	COTTER PIN S-Zn 4x25	PN-76/M-82001	1	1
14	COTTER PIN S-Zn 8x45	PN-76/M-82001	1	1
15	RETAINER RING W22	PN-81/M-85111	1	1

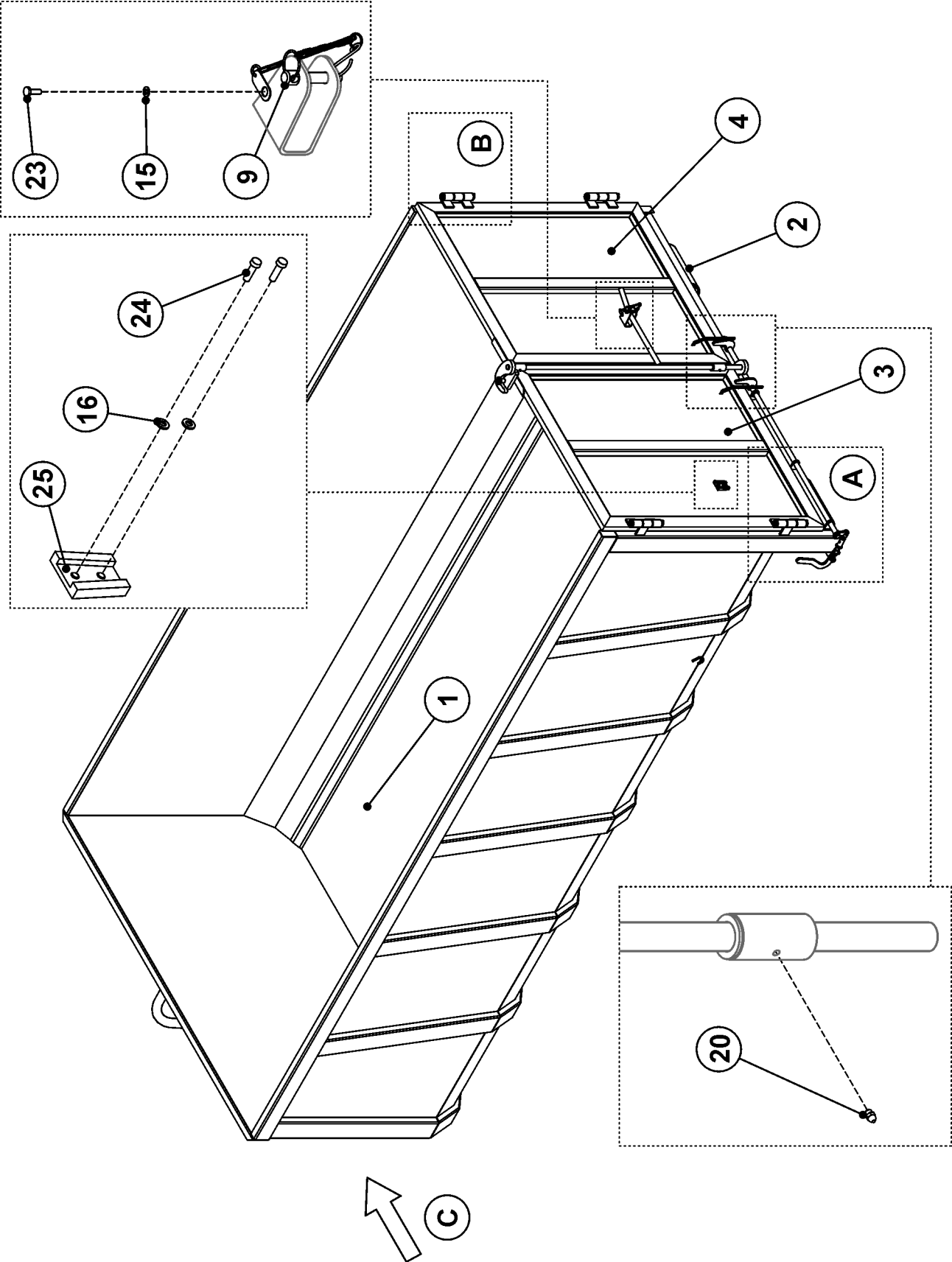
FIG. 13. LOCK BOLT



Assembly name		Drawings No.	QUANTITY	
LOCK BOLT		13		
NO.	PART	DRAWING (STANDARD) NO.	P	D

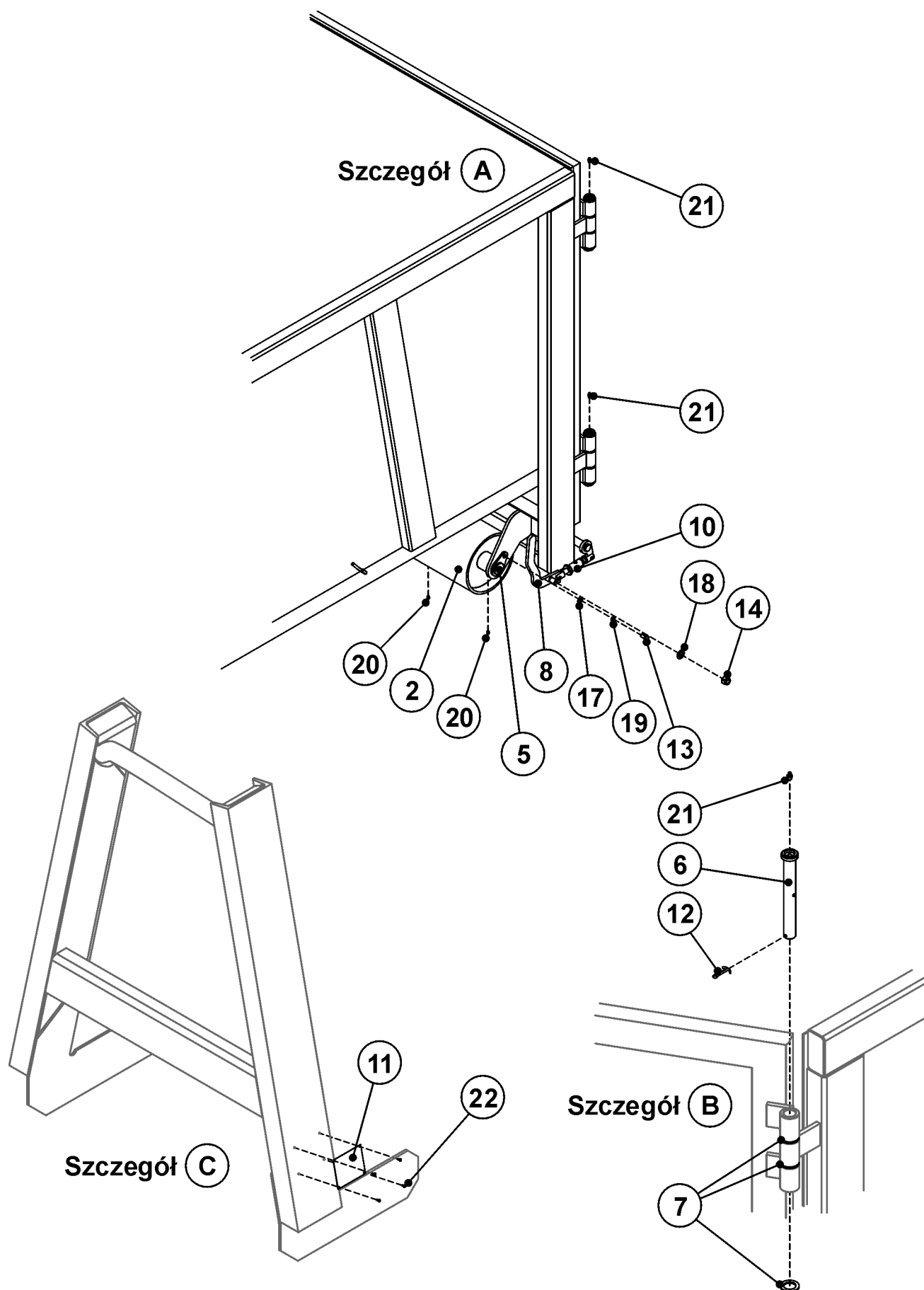
LOCK BOLT				
1	SPRING	C 0600-055-1500M	1	1
2	SPRING PIN 3x14	PN-89/M-85023	1	1
3	FLAT WASHER Ø10.5	PN-78/M-82005	2	2

FIG. 14. AGRICULTURAL CONTAINER.



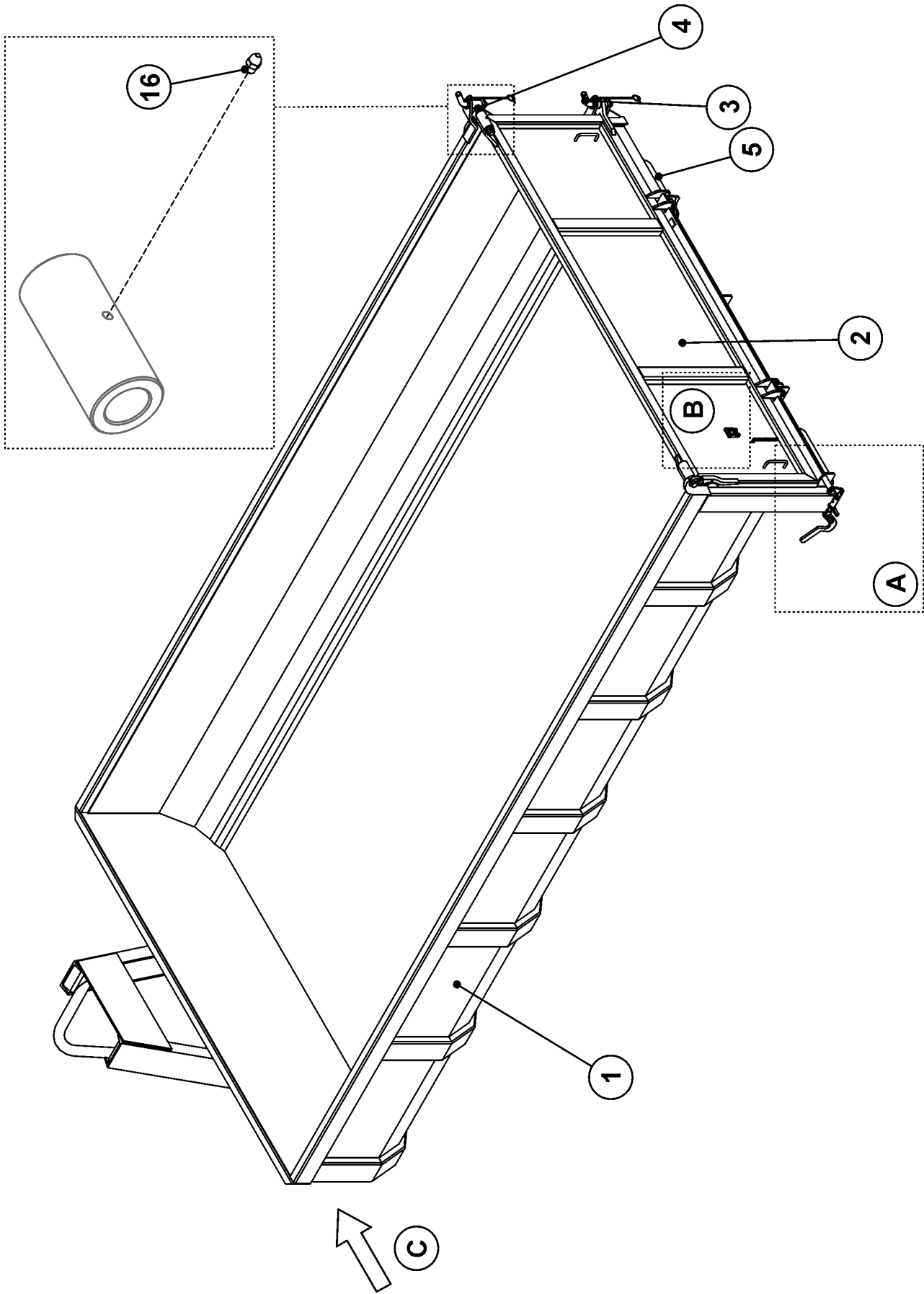
Assembly name		Drawings No.	QUANTITY	
AGRICULTURAL CONTAINER		14, 15		
NO.	PART	DRAWING (STANDARD) NO.	P	D
	AGRICULTURAL CONTAINER	104RPN-03.00.00.00	1	1
1	CRATE CPL.	104RPN-03.01.00.00	1	1
2	REAR WHEEL CPL.	104RPN-03.02.00.00	2	2
3	REAR DOOR, LEFT CPL.	104RPN-03.03.00.00	1	1
4	REAR DOOR, RIGHT CPL.	104RPN-03.04.00.00	1	1
5	REAR WHEEL BOLT	104RPN-03.00.01.00	2	2
6	DOOR BOLT	104RPN-03.00.00.01	4	4
7	WASHER	104RPN-03.00.00.02	12	12
8	LEVER	104RPN-03.00.00.03	1	1
9	COTTER PIN CPL.	30RPN-00.00.500	1	1
10	STRING CPL.	29RPN-00.00.300	1	1
11	TYPE PLATE I	29RPN-00.00.025	1	1
12	COTTER PIN S-Zn 5x45	PN-76/M-82001	4	4
13	SCREW M10x20-8.8-B-Fe/Zn5	PN-85/M-82105	2	2
14	SELF-LOCKING NUT M16-6-B-Fe/Zn5	PN-85/M-82175	1	1
15	WASHER 5.3-Fe/Zn5	PN-78/M-82005	1	1
16	WASHER 6.4-Fe/Zn5	PN-78/M-82005	2	2
17	WASHER 10.5-Fe/Zn5	PN-78/M-82005	2	2
18	WASHER 17-FeZn5	PN-78/M-82005	1	1
19	WASHER Z10.2-Fe/Zn5	PN-77/M-82008	2	2
20	NIPPLE M6	PN-76/M-82002	6	6
21	NIPPLE M8x1	PN-76/M-82002	4	4
22	RIVET P Al/Fe 3x8	PN-83/M-82971	4	4
23	RIVET P Al/Fe 5x12	PN-83/M-82971	1	1
24	RIVET P Al/Fe 5x16	PN-83/M-82971	2	2
25	GRIP OF THE TABLE FOR SLOWLY...	PN/R-36154	1	1

FIG. 15. AGRICULTURAL CONTAINER.



Assembly name		Drawings No.	QUANTITY	
AGRICULTURAL CONTAINER		14, 15		
NO.	PART	DRAWING (STANDARD) NO.	P	D
	AGRICULTURAL CONTAINER	104RPN-03.00.00.00	1	1
1	CRATE CPL.	104RPN-03.01.00.00	1	1
2	REAR WHEEL CPL.	104RPN-03.02.00.00	2	2
3	REAR DOOR, LEFT CPL.	104RPN-03.03.00.00	1	1
4	REAR DOOR, RIGHT CPL.	104RPN-03.04.00.00	1	1
5	REAR WHEEL BOLT	104RPN-03.00.01.00	2	2
6	DOOR BOLT	104RPN-03.00.00.01	4	4
7	WASHER	104RPN-03.00.00.02	12	12
8	LEVER	104RPN-03.00.00.03	1	1
9	COTTER PIN CPL.	30RPN-00.00.500	1	1
10	STRING CPL.	29RPN-00.00.300	1	1
11	TYPE PLATE I	29RPN-00.00.025	1	1
12	COTTER PIN S-Zn 5x45	PN-76/M-82001	4	4
13	SCREW M10x20-8.8-B-Fe/Zn5	PN-85/M-82105	2	2
14	SELF-LOCKING NUT M16-6-B Fe/Zn5	PN-85/M-82175	1	1
15	WASHER 5.3-Fe/Zn5	PN-78/M-82005	1	1
16	WASHER 6.4-Fe/Zn5	PN-78/M-82005	2	2
17	WASHER 10.5-Fe/Zn5	PN-78/M-82005	2	2
18	WASHER 17-FeZn5	PN-78/M-82005	1	1
19	WASHER Z10.2-Fe/Zn5	PN-77/M-82008	2	2
20	NIPPLE M6	PN-76/M-82002	6	6
21	NIPPLE M8x1	PN-76/M-82002	4	4
22	RIVET P Al/Fe 3x8	PN-83/M-82971	4	4
23	RIVET P Al/Fe 5x12	PN-83/M-82971	1	1
24	RIVET P Al/Fe 5x16	PN-83/M-82971	2	2
25	GRIP OF THE TABLE FOR SLOWLY...	PN/R-36154	1	1

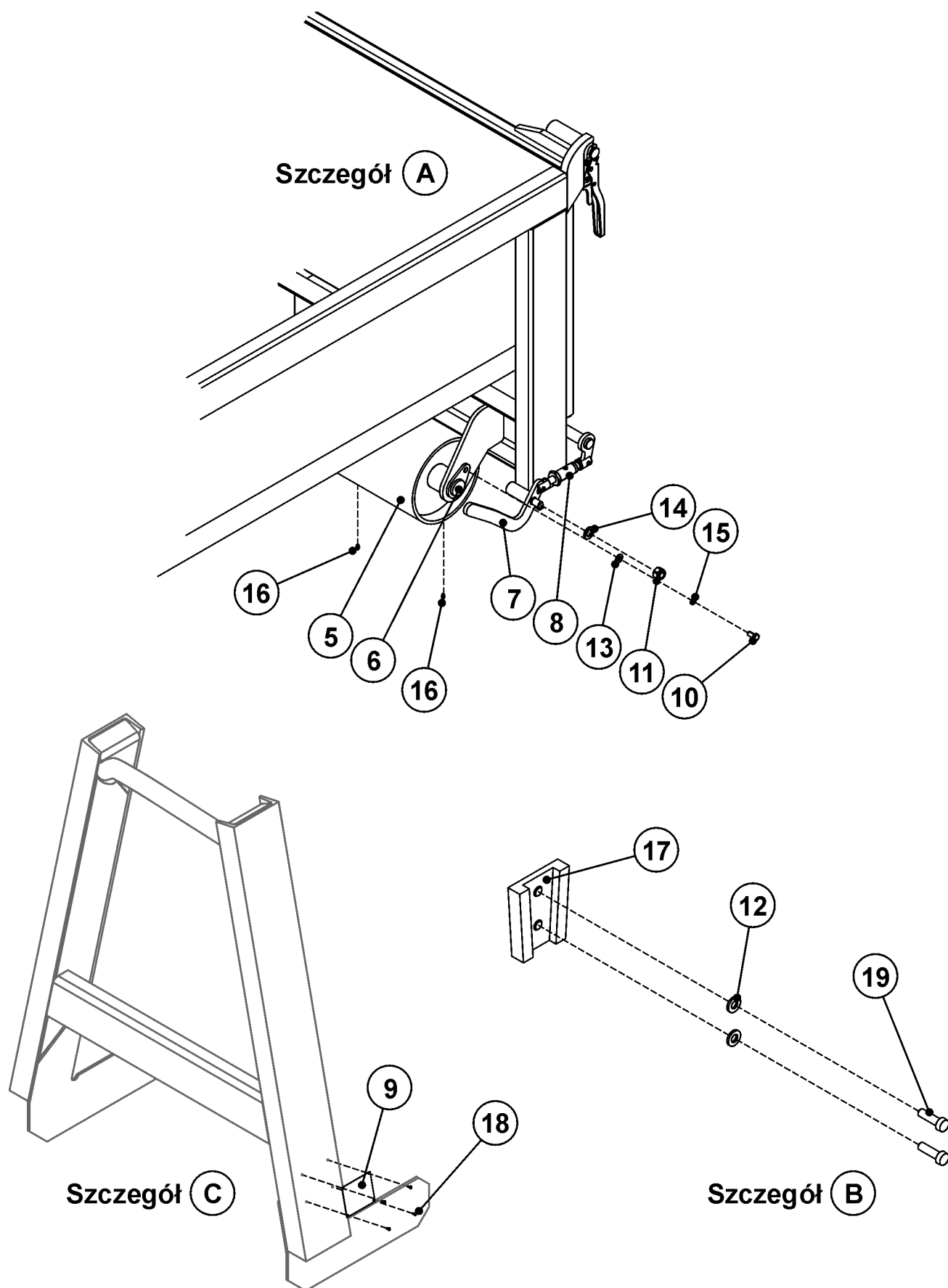
FIG. 16. BUILDING CONTAINER.



Assembly name		Drawings No.	QUANTITY	
BUILDING CONTAINER 700		16, 17		
NO.	PART	DRAWING (STANDARD) NO.	P	D

	BUILDING CONTAINER 700	104RPN-12.00.00.00		
1	CRATE CPL.	104RPN-12.01.00.00	1	1
2	REAR FLAP	104RPN-12.02.00.00	1	1
3	BOLT CPL.	104RPN-12.03.00.00	2	2
4	UPPER HINGE	104RPN-12.00.01.00	1	1
5	REAR WHEEL CPL.	104RPN-03.02.00.00	2	2
6	REAR WHEEL BOLT	104RPN-03.00.01.00	2	2
7	LEVER	104RPN-03.00.00.03	1	1
8	STRING CPL.	29RPN-00.00.300	1	1
9	TYPE PLATE I	29RPN-00.00.025	1	1
10	SCREW M10x20-8.8-B-Fe/Zn5	PN-85/M-82105	2	2
11	SELF-LOCKING NUT M16-6-B Fe/Zn5	PN-85/M-82175	1	1
12	WASHER 6.4--Fe/Zn5	PN-78/M-82005	2	2
13	WASHER 10.5-Fe/Zn5	PN-78/M-82005	2	2
14	WASHER 17-Fe/Zn5	PN-78/M-82005	1	1
15	WASHER Z10.2-Fe/Zn5	PN-77/M-82008	2	2
16	NIPPLE M6	PN-76/M-82002	5	5
17	GRIP OF THE TABLE FOR SLOWLY...	PN/R-36154	1	1
18	RIVET P Al/Fe 3x8	PN-83/M-82971	4	4
19	RIVET P Al/Fe 5x16	PN-83/M-82971	2	2

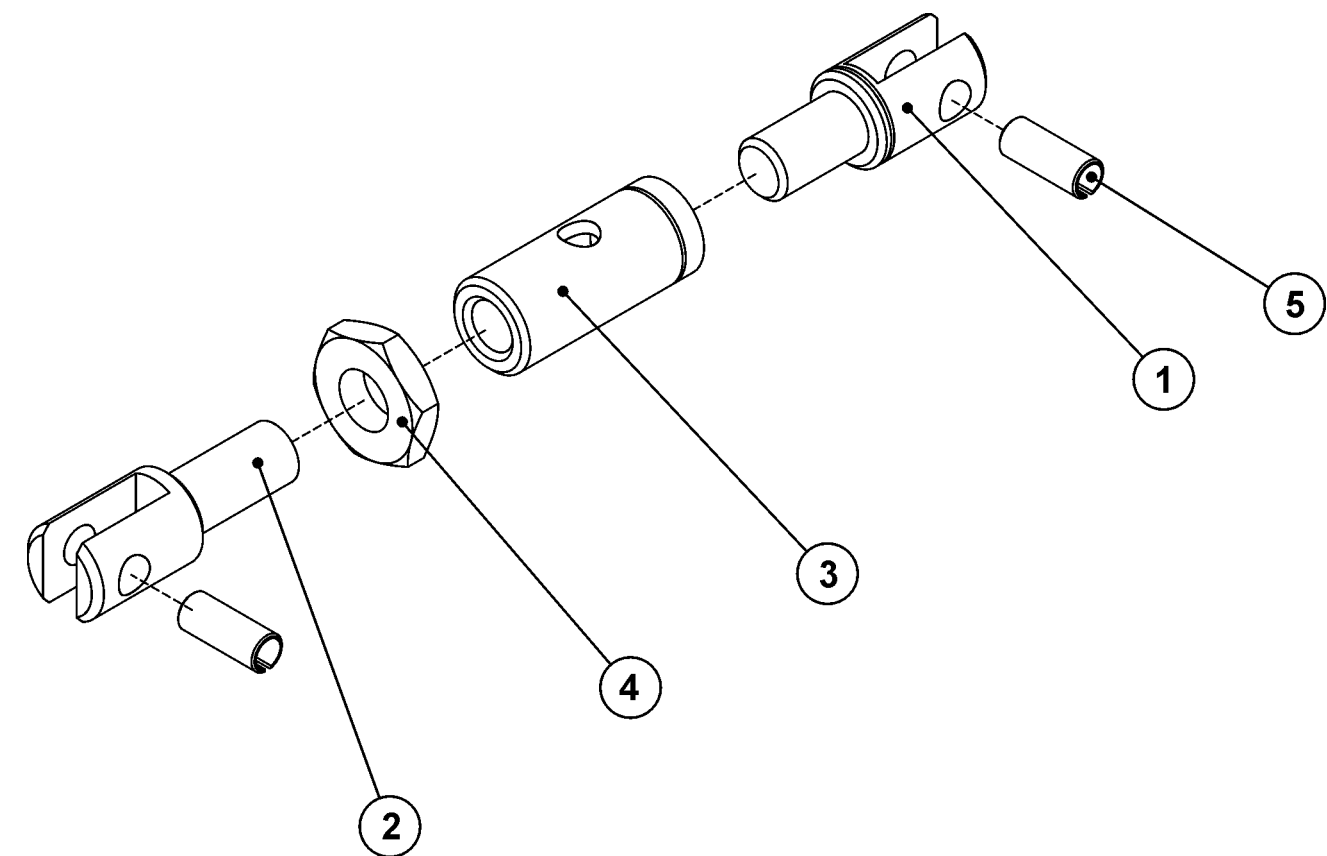
FIG. 17. BUILDING CONTAINER.



Assembly name		Drawings No.	QUANTITY	
BUILDING CONTAINER		16, 17		
NO.	PART	DRAWING (STANDARD) NO.	P	D

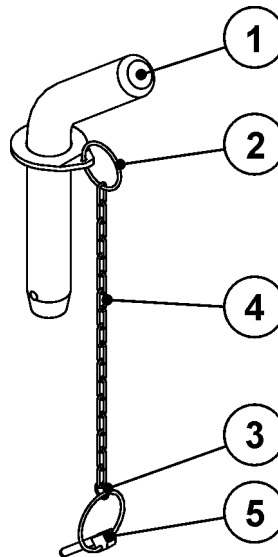
	BUILDING CONTAINER 700	104RPN-12.00.00.00		
1	CRATE CPL.	104RPN-12.01.00.00	1	1
2	REAR FLAP	104RPN-12.02.00.00	1	1
3	BOLT CPL.	104RPN-12.03.00.00	2	2
4	UPPER HINGE	104RPN-12.00.01.00	1	1
5	REAR WHEEL CPL.	104RPN-03.02.00.00	2	2
6	REAR WHEEL BOLT	104RPN-03.00.01.00	2	2
7	LEVER	104RPN-03.00.00.03	1	1
8	STRING CPL.	29RPN-00.00.300	1	1
9	TYPE PLATE I	29RPN-00.00.025	1	1
10	SCREW M10x20-8.8-B-Fe/Zn5	PN-85/M-82105	2	2
11	SELF-LOCKING NUT M16-6-B Fe/Zn5	PN-85/M-82175	1	1
12	WASHER 6.4-Fe/Zn5	PN-78/M-82005	2	2
13	WASHER 10.5-Fe/Zn5	PN-78/M-82005	2	2
14	WASHER 17-Fe/Zn5	PN-78/M-82005	1	1
15	WASHER Z10.2-Fe/Zn5	PN-77/M-82008	2	2
16	NIPPLE M6	PN-76/M-82002	5	5
17	GRIP OF THE TABLE FOR SLOWLY...	PN/R-36154	1	1
18	RIVET P Al/Fe 3x8	PN-83/M-82971	4	4
19	RIVET P Al/Fe 5x16	PN-83/M-82971	2	2

FIG. 18. STRING CPL.



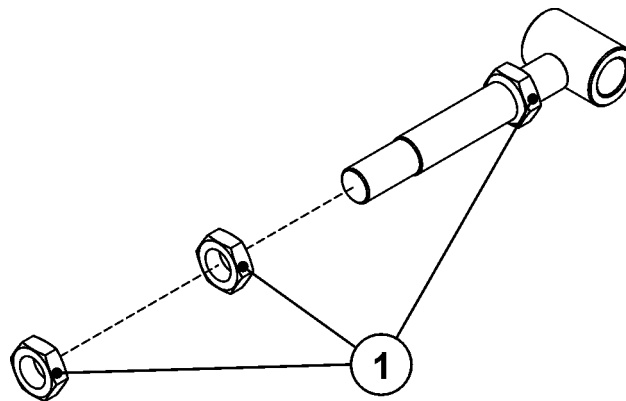
Assembly name		Drawings No.	QUANTITY	
STRING CPL.		18		
NO.	PART	DRAWING (STANDARD) NO.	P	D
	STRING CPL.	29RPN-00.00.300		
1	SCREW, LEFT	29RPN-00.00.301	1	1
2	SCREW, RIGHT	29RPN-00.00.302	1	1
3	THREADED SLEEVE	29RPN-00.00.303	1	1
4	NUT M16-5-B-Fe/Zn5	PN-86/M-82153	1	1
5	SPRING PIN 10x25	PN-89/M-85023	2	2

FIG. 19. BOLT CPL.



Assembly name		Drawings No.	QUANTITY	
BOLT CPL.		19		
NO.	PART	DRAWING (STANDARD) NO.	P	D
	BOLT CPL.	104RPN-12.03.00.00		
1	BOLT	104RPN-12.03.01.00	1	1
2	WHEEL I	29RPN-14.06.203	1	1
3	WHEEL II	29RPN-14.06.204	1	1
4	SANITARY CHAIN		1	1
5	PIN S.3545		1	1

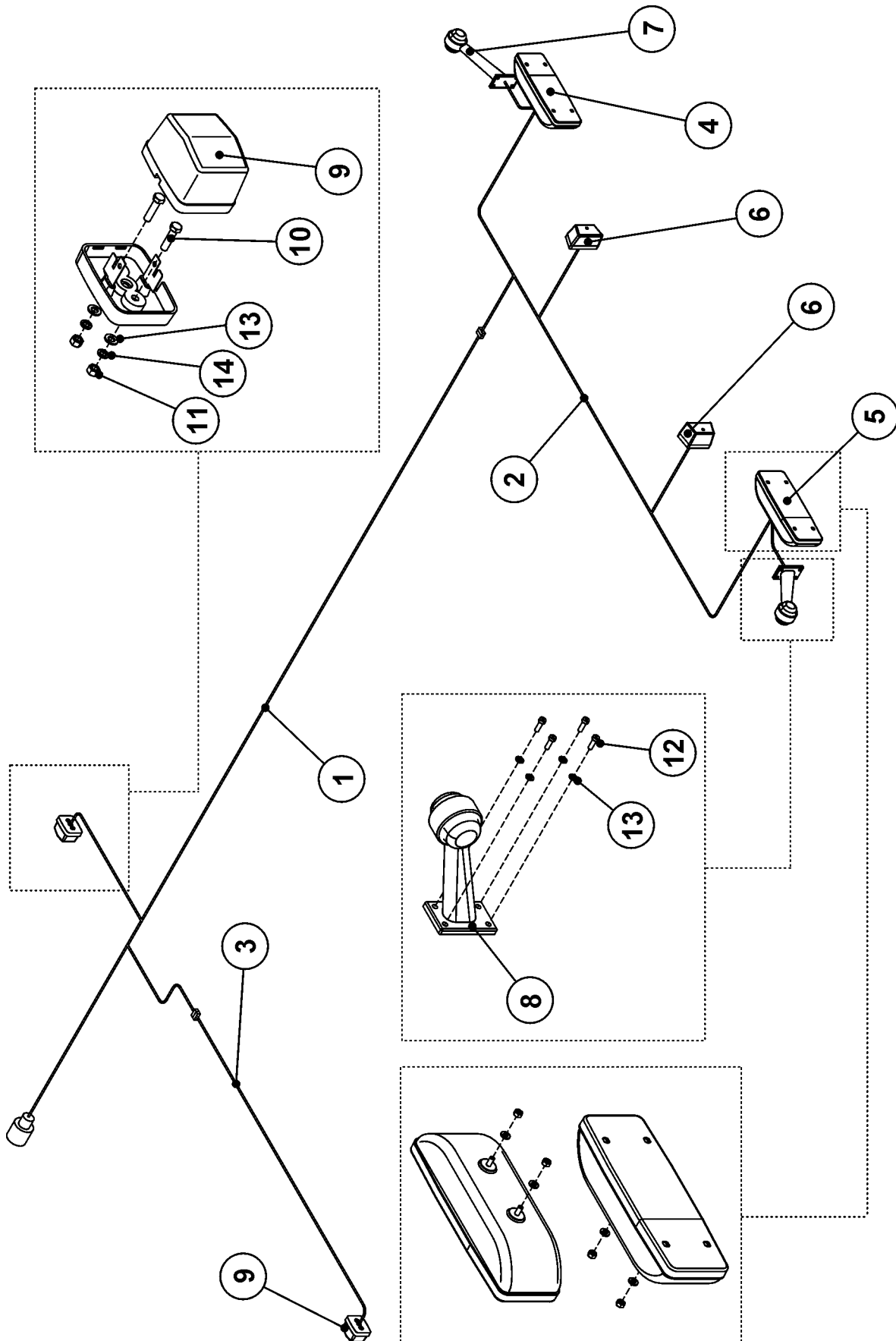
FIG. 20. UPPER HINGE.



Assembly name		Drawings No.	QUANTITY	
UPPER HINGE		20		
NO.	PART	DRAWING (STANDARD) NO.	P	D
	UPPER HINGE	104RPN-12.00.01.00		
1	NUT, LOW M24	PN-86/M-82153	3	3

FIG. 21.

WIRING.



Assembly name		Drawings No.	QUANTITY	
WIRING		21		
NO.	PART	DRAWING (STANDARD) NO.	P	D

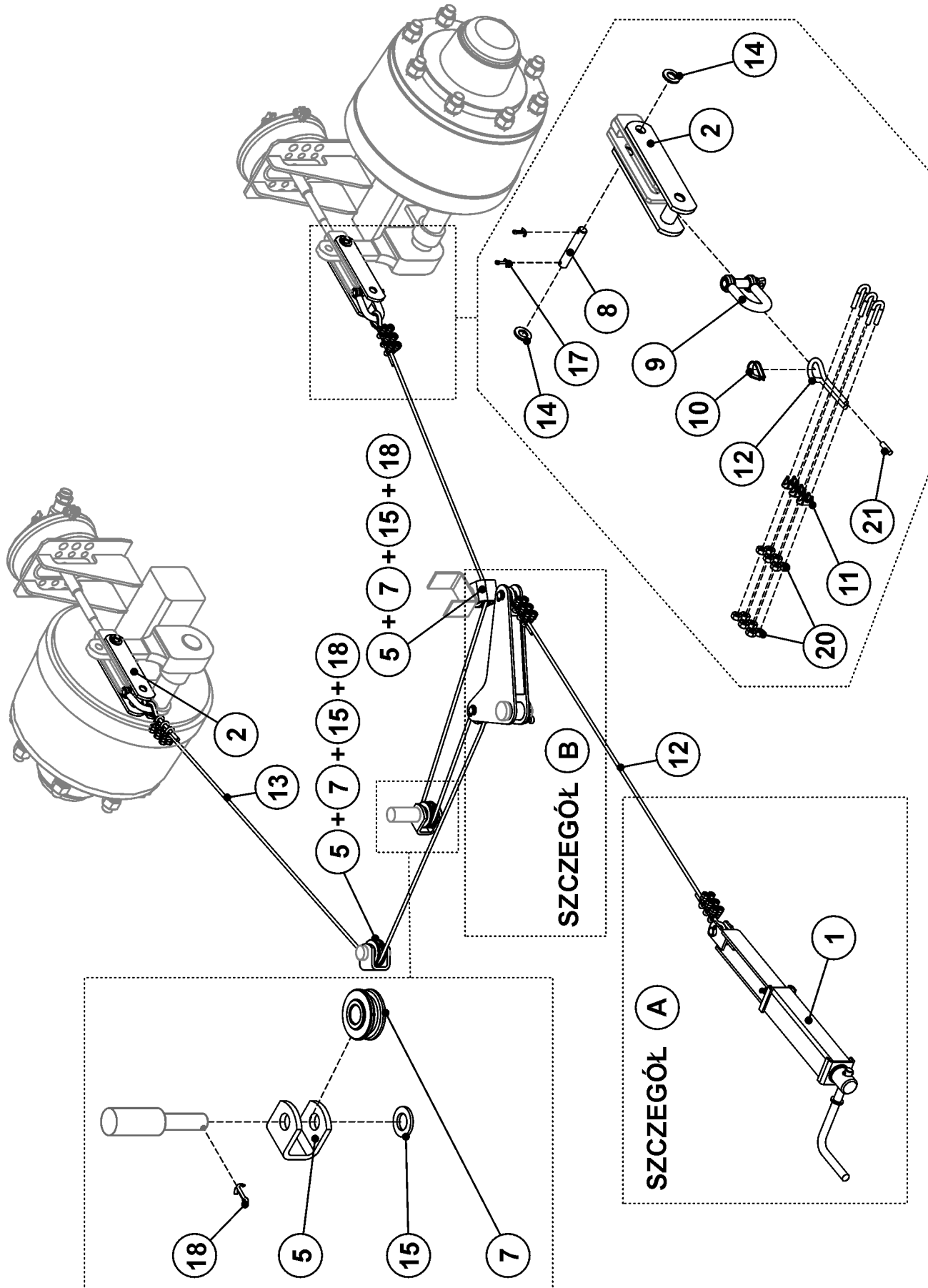
	WIRING	104RPN-10.00.00.00		
1	CENTRAL BUNDLE	104RPN-10.01.00.00	1	1
2	REAR BUNDLE	62RPN-10.03.00.00	1	1
3	FRONT BUNDLE	104RPN-10.02.00.00	1	1
4	REAR COMPACT LAMP WE 549P	04	1	1
5	REAR COMPACT LAMP WE 549L	03	1	1
6	ILLUMINATION OF THE NUMBER PLATE LT-120		2	2
7	CONTOUR LAMP, RIGHT	127 023 00 00	1	1
8	CONTOUR LAMP, LEFT	127 022 00 00	1	1
9	FRONT COMPACT LAMP W 17 D	104k	2	2
10	SCREW M5x25-B-5,8 Fe/Zn5	PN-EN ISO 4017:2002	4	4
11	NUT M5-8-Fe/Zn5	PN-EN ISO 4032:2002	4	4
12	SCREW M5x16-B-Fe/Zn5	PN/M-82201	8	8
13	WASHER 5.3-Fe/Zn5	PN-EN ISO 7091:2003	12	12
14	SPRING WASHER 5,1-Fe/Zn9	PN/M-82008	4	4
15	RUBBER PASSAGE Ø18 ★			

★ - NOT SHOWN ON THE DRAWING.

Assembly name		Drawings No.	QUANTITY (FOR ONE LAMP)	
List of bulbs		-		
NO.	PART	BULB TYPE	P	D

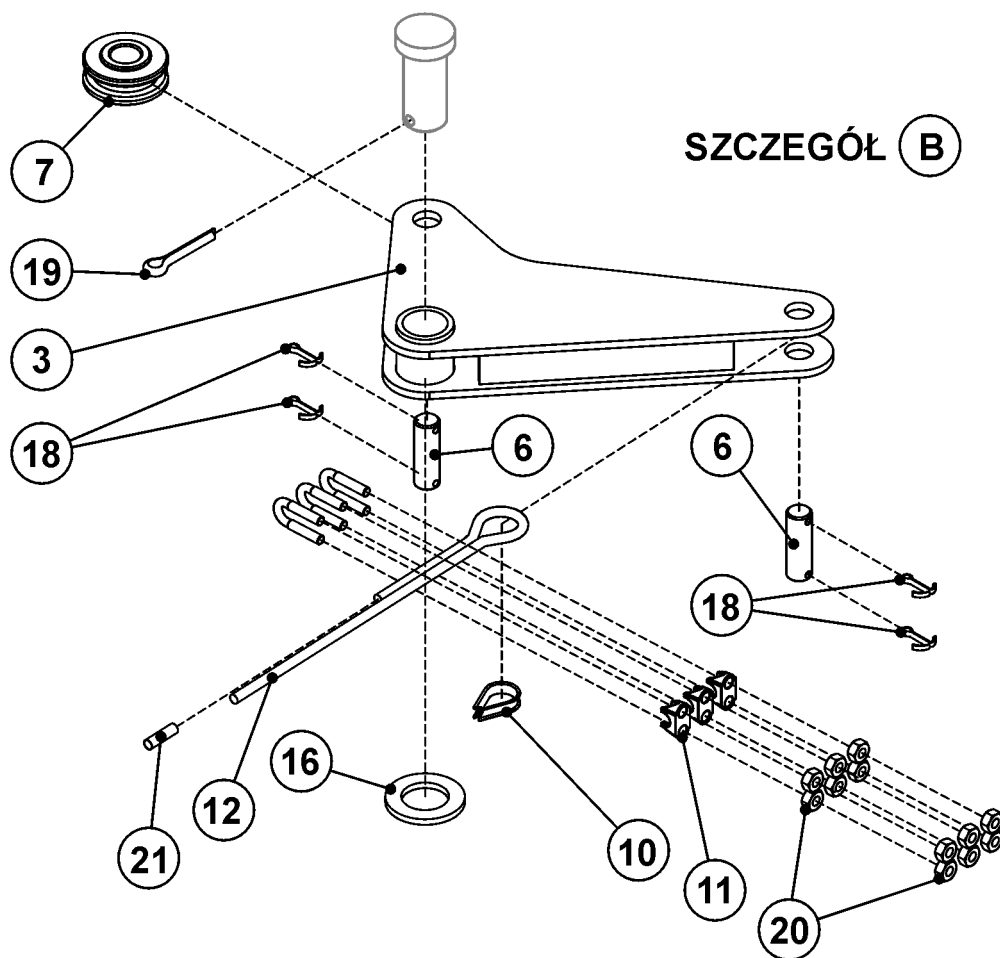
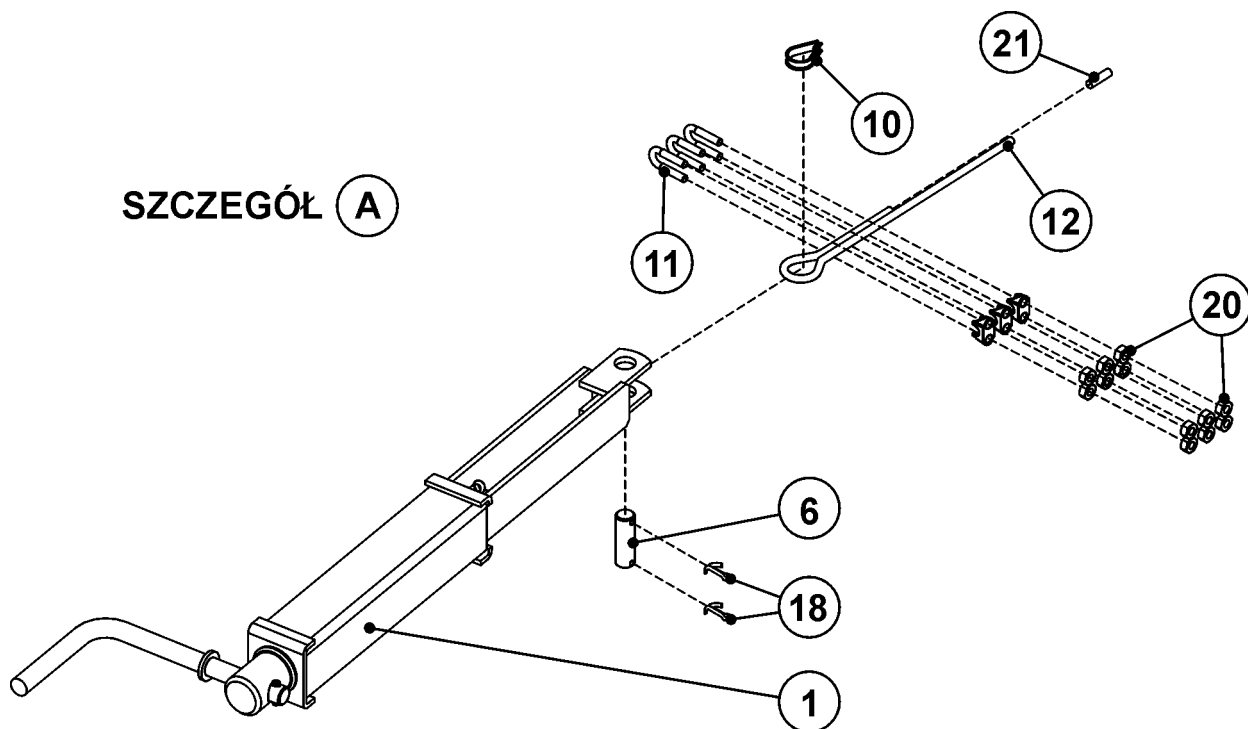
1	REAR COMPACT LAMP RIGHT (LEFT)	P21W	1	1
2	REAR COMPACT LAMP RIGHT (LEFT)	P21/5W	1	1
3	REAR COMPACT LAMP RIGHT (LEFT)	R5W	1	1
4	ILLUMINATION OF THE NUMBER PLATE LT-120	C5W-SV 8.5	1	1
5	CONTOUR LAMP, RIGHT (LEFT)	R5W	1	1

PARKING BRAKE.



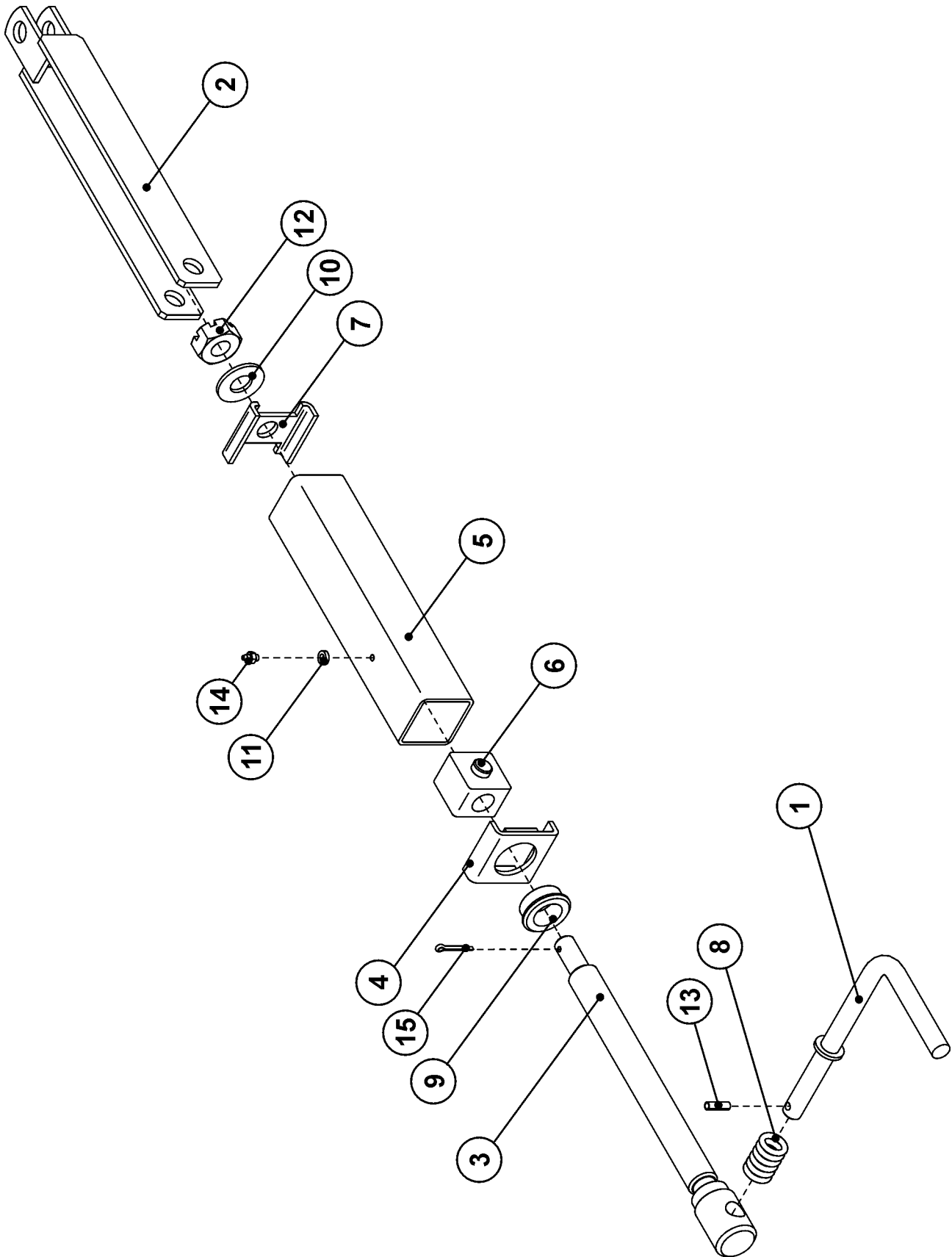
Assembly name		Drawings No.	QUANTITY	
PARKING BRAKE		22, 23		
NO.	PART	DRAWING (STANDARD) NO.	P	D
	PARKING BRAKE	104RPN-04.00.00.00		
1	BRAKE GEAR	29RPN-12.01.000	1	1
2	PARKING BRAKE GUY	45RPN-22.01.000	2	2
3	LEVER	58RPN-09.00.100	1	1
4	CYLINDER FORK	70RPN-09.00.01.00	2	2
5	CABLE CATCH	29RPN-01.00.018	3	3
6	BOLT	29RPN-12.00.001	3	3
7	CABLE WHEEL	29RPN-13.00.001	4	4
8	BRAKE BOLT	45RPN-22.00.002	2	2
9	SCREW SHACKLE S.2768		2	2
10	THIMBLE A6 OC	PN-66/M-80247	4	4
11	BOW CLAMP 6.5 OC	PN-73/M-80241	12	12
12	CABLE Ø6 6x19+P+p l=1200		1	1
13	CABLE Ø6 6x19+P+p l=3500		1	1
14	WASHER 13-Fe/Zn5	PN-78/M-82005	4	4
15	WASHER 17-Fe/Zn 5	PN-78/M-82005	3	3
16	WASHER 28-Fe/Zn5	PN-90/M-82004	1	1
17	COTTER PIN S-Zn-3.2x25	PN-76/M-82001	4	4
18	COTTER PIN S-Zn-4x40	PN-76/M-82001	9	9
19	COTTER PIN S-Zn-6.3x45	PN-76/M-82001	1	1
20	NUT M5-5-B-Fe/Zn5	PN-86/M-82144	24	24
21	THERMO-SHRINKABLE TUBE PBF 12/6 l=60	BN-89/C-89209	4	4

FIG. 23. PARKING BRAKE.



Assembly name		Drawings No.	QUANTITY	
PARKING BRAKE		22, 23		
NO.	PART	DRAWING (STANDARD) NO.	P	D
	PARKING BRAKE	104RPN-04.00.00.00		
1	BRAKE GEAR	29RPN-12.01.000	1	1
2	PARKING BRAKE GUY	45RPN-22.01.000	2	2
3	LEVER	58RPN-09.00.100	1	1
4	CYLINDER FORK	70RPN-09.00.01.00	2	2
5	CABLE CATCH	29RPN-01.00.018	3	3
6	BOLT	29RPN-12.00.001	3	3
7	CABLE WHEEL	29RPN-13.00.001	4	4
8	BRAKE BOLT	45RPN-22.00.002	2	2
9	SCREW SHACKLE S.2768		2	2
10	THIMBLE A6 OC	PN-66/M-80247	4	4
11	BOW CLAMP 6.5 OC	PN-73/M-80241	12	12
12	CABLE Ø6 6x19+P+p l=1200		1	1
13	CABLE Ø6 6x19+P+p l=3500		1	1
14	WASHER 13-Fe/Zn5	PN-78/M-82005	4	4
15	WASHER 17-Fe/Zn 5	PN-78/M-82005	3	3
16	WASHER 28-Fe/Zn5	PN-90/M-82004	1	1
17	COTTER PIN S-Zn-3.2x25	PN-76/M-82001	4	4
18	COTTER PIN S-Zn-4x40	PN-76/M-82001	9	9
19	COTTER PIN S-Zn-6.3x45	PN-76/M-82001	1	1
20	NUT M5-5-B-Fe/Zn5	PN-86/M-82144	24	24
21	THERMO-SHRINKABLE TUBE PBF 12/6 l=60	BN-89/C-89209	4	4

FIG. 24. PARKING BRAKE GEAR.



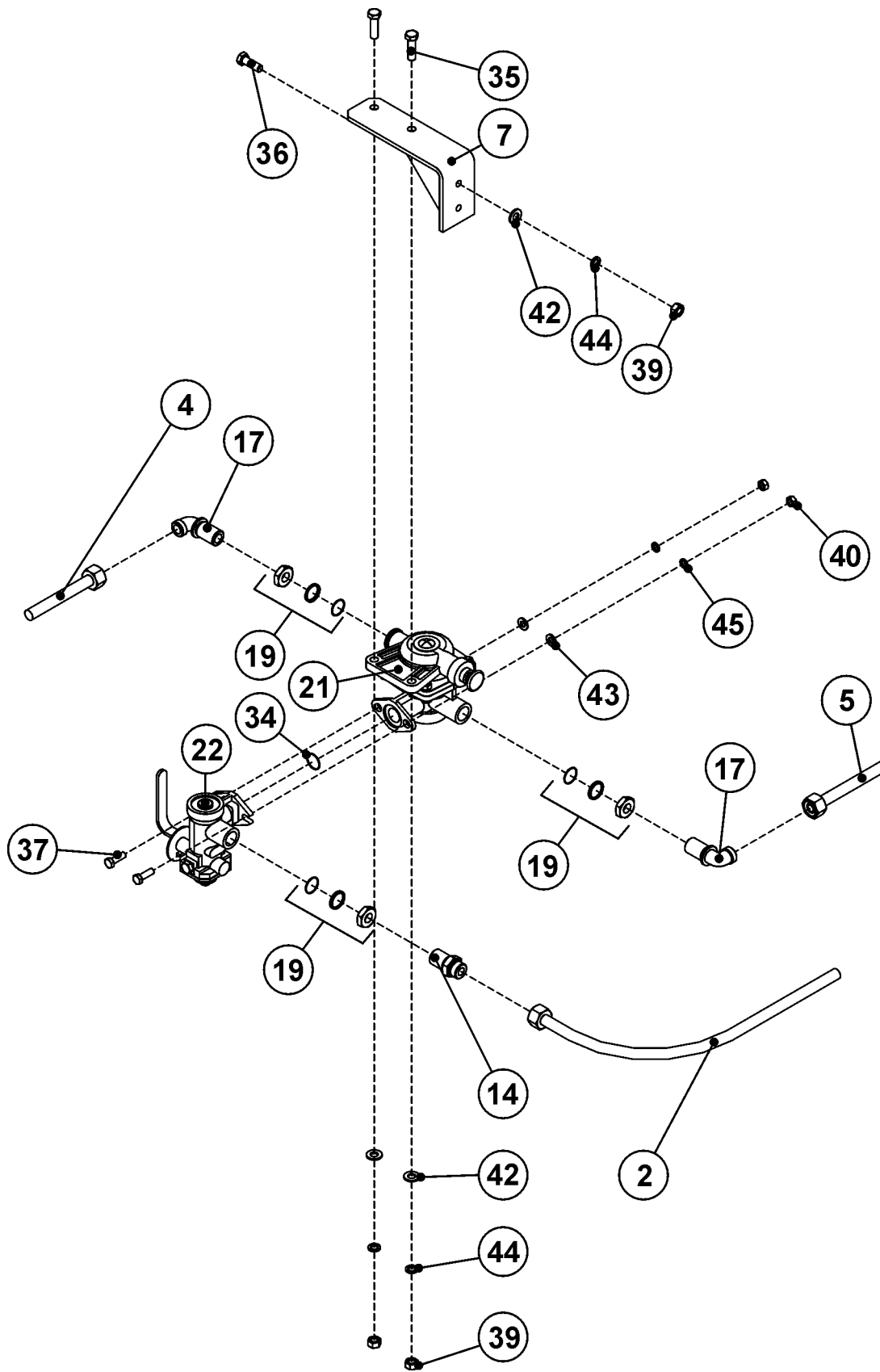
Assembly name		Drawings No.	QUANTITY	
PARKING BRAKE GEAR		24		
NO.	PART	DRAWING (STANDARD) NO.	P	D
	BRAKE GEAR	29RPN-12.01.000		
1	CRANK CPL.	29RPN-12.01.100	1	1
2	STRING CPL.	29RPN-12.01.200	1	1
3	SCREW CPL.	29RPN-12.01.300	1	1
4	STOPPER	29RPN-12.01.400	1	1
5	HOUSING	29RPN-12.01.001	1	1
6	NUT	29RPN-12.01.002	1	1
7	STOPPER	29RPN-12.01.003	1	1
8	SPRING	29RPN-12.01.004	1	1
9	SLEEVE	29RPN-12.01.005	1	1
10	WASHER 17-Fe/Zn5	PN-78/M-82005	1	1
11	WASHER 6.4-Fe/Zn5	PN-78/M-82005	1	1
12	CASTELLATED NUT M16-5-C-Fe/Zn5	PN-86/M-82148	1	1
13	SPRING PIN 6x24	PN-89/M-85023	1	1
14	NIPPLE M6	PN-76/M-86002	1	1
15	COTTER PIN	PN-76/M-82001	1	1

SINGLE CONDUIT BRAKE SYSTEM.



Assembly name		Drawings No.	QUANTITY	
SINGLE CONDUIT BRAKE SYSTEM		25, 26, 27		
NO.	PART	DRAWING (STANDARD) NO.	P	D
1	CONDUIT BŁH W-W 70	104RPN-05.01.00.00	1	1
2	CONDUIT BŁH W-W 2700	104RPN-05.02.00.00	1	1
3	CONDUIT BŁH W-W 700	64RPN-15.08.000	4	4
4	CONDUIT BŁH W-W 1900	67RPN-03.05.00.00	1	1
5	CONDUIT BŁH W-W 300	67RPN-03.08.00.00	1	1
6	AIR TANK Ø276 40 I	110RPN-02.01.00.00	1	1
7	VALVE CONSOLE CPL.	67RPN-00.00.04.00	1	1
8	AIR TANK CONSOLE CPL.	64RPN-15.00.100	2	2
9	AIR TANK BAND	45RPN-00.13.000	2	2
10	FORK	70RPN-14.00.00.01	2	2
11	PLUG	29RPN-11.00.002	1	1
12	BOLT	29RPN-11.00.004	2	2
13	SENSOR STOPPER BD	13RPN-03.01.02	4	4
14	CONNECTOR STRAIGHT LONG M22x1.5	77RPN-03.00.00.02	3	3
15	SIŁOWNIK 16" WABCO 423 104 900 0		4	4
16	CROSSPIECE WITH COUNTER-CONNECTOR		1	1
17	CONNECTOR, ELBOW BŁH 063 206 054		2	2
18	CONNECTOR, STRAIGHTBŁH M22x1.5/M16x1.5		4	4
19	SEALING SET KMPL M22x1.5		5	5
20	SPIRAL HOSE	WS-7 POSICZ	1	1
21	CONTROL VALVE 44.11.011.0		1	1
22	BRAKING FORCE CONTROLLER 61.11.012.0		1	1
23	CONDUIT CONNECTOR 87.10.030.0		1	1
24	DRAIN VALVE 83.10.012.0		1	1
25	INSPECTION CONNECTOR M22x1.5 88.10.011.0		1	1
26	AIR FILTER 81.01.010.0		1	1
27	CONNECTOR CATCH Art-331000 FLIEGL		1	1
28	BAND RIBENCLIP 16		8	8
29	SELF-TAPPING SCREW Ø5.5x19	DIN-7504-K	8	8
30	COPPER WASHER 27/22/2		3	3
31	COPPER WASHER 22/17/2	F80-3407114	16	16
32	CROSS-PIECE HOUSING K15L CFX	„PARKER”	1	1
33	COTTER PIN S-Zn-3.2x25	PN-76/M-82001	4	4
34	SEALING RING, ROUND Ø20x5	PN-64/M-73093	1	1
35	SCREW M10x35-5.8-B-Fe/Zn5	PN-85/M-82105	2	2
36	SCREW M10x30-5.8-B-Fe/Zn5	PN-85/M-82105	6	6
37	SCREW M8x25-5.8-B-Fe/Zn5	PN-85/M-82105	4	4
38	NUT M22x1.5-5-B-Fe/Zn5	PN-85/M-82144	1	1
39	NUT M10-5-B-Fe/Zn5	PN-85/M-82144	12	12
40	NUT M8-5-B-Fe/Zn5	PN-85/M-82144	2	2
41	WASHER 13-Fe/Zn5	PN-78/M-82005	4	4
42	WASHER 10.5-Fe/Zn5	PN-78/M-82005	2	2
43	WASHER 8.4-Fe/Zn5	PN-78/M-82005	6	6
44	WASHER Z10.2-Fe/Zn5	PN-77/M-82008	12	12
45	WASHER Z8.2-Fe/Zn5	PN-77/M-82008	4	4
46	SPRING	45RPN-05.00.002	4	4

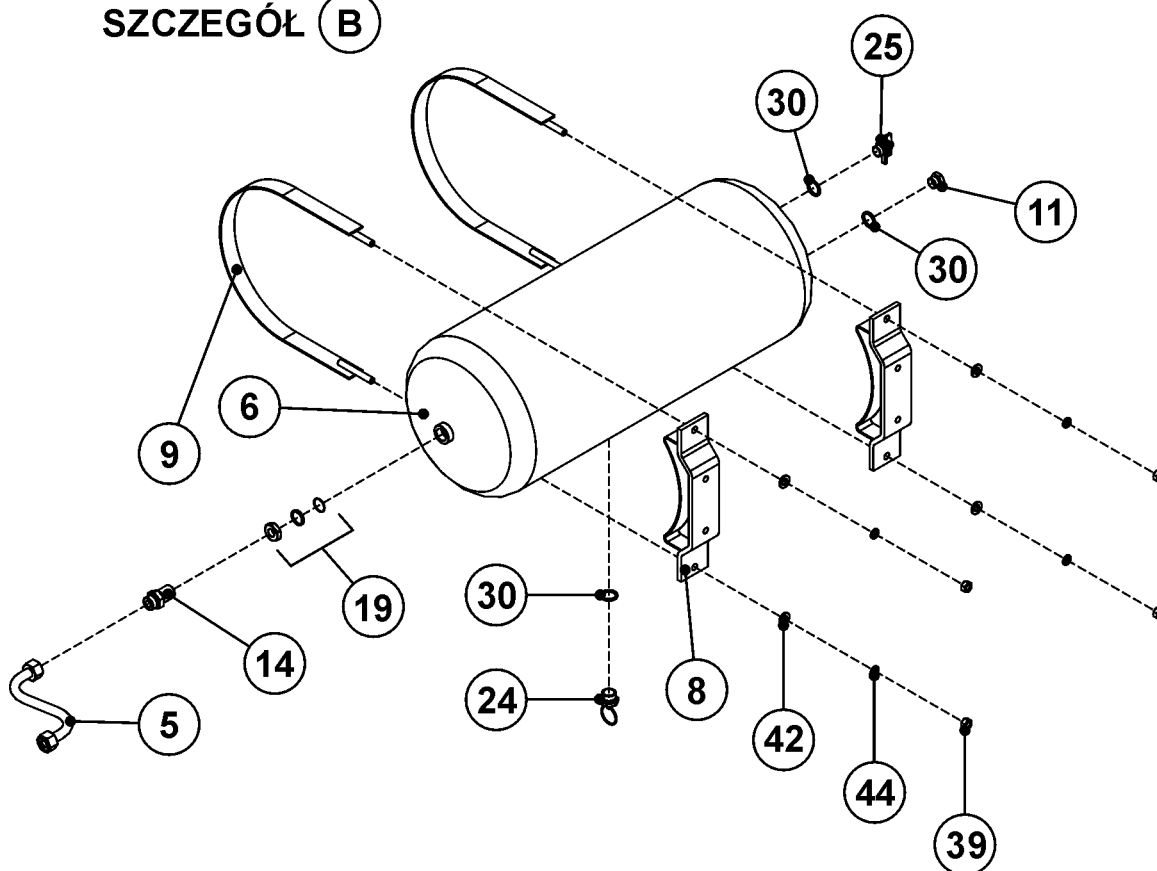
FIG. 26. SINGLE CONDUIT BRAKE SYSTEM.



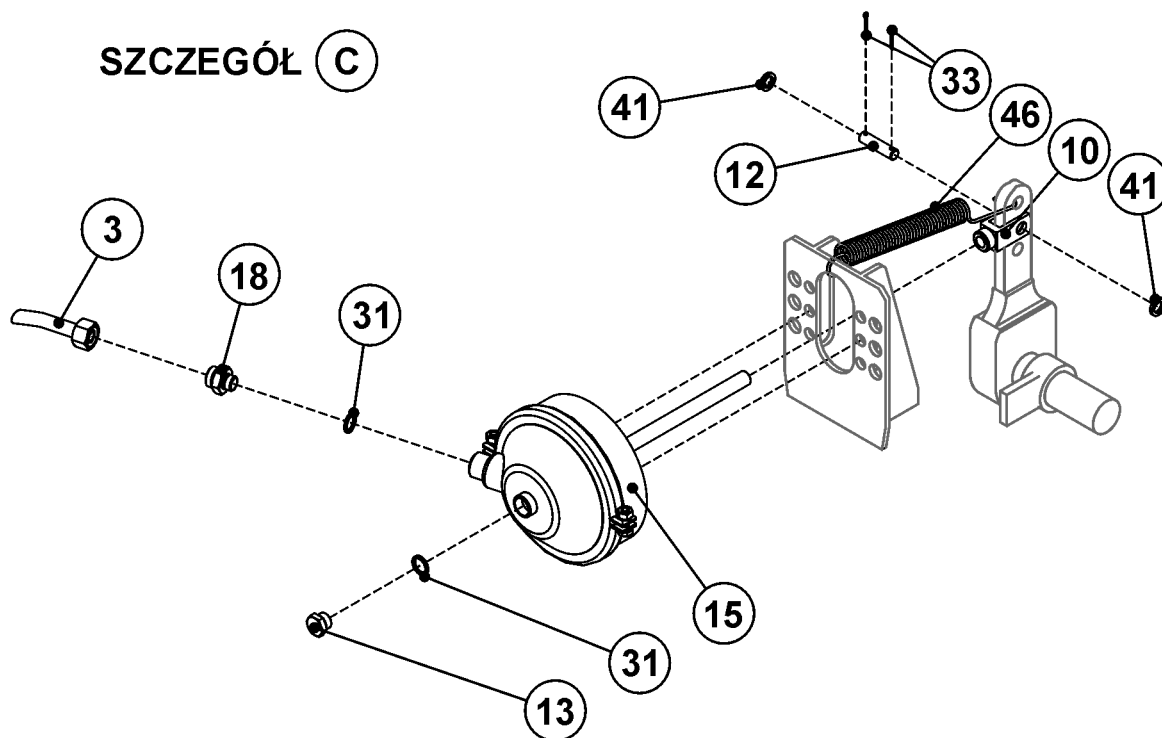
Assembly name		Drawings No.	QUANTITY	
SINGLE CONDUIT BRAKE SYSTEM		25, 26, 27		
NO.	PART	DRAWING (STANDARD) NO.	P	D
1	CONDUIT BŁH W-W 70	104RPN-05.01.00.00	1	1
2	CONDUIT BŁH W-W 2700	104RPN-05.02.00.00	1	1
3	CONDUIT BŁH W-W 700	64RPN-15.08.000	4	4
4	CONDUIT BŁH W-W 1900	67RPN-03.05.00.00	1	1
5	CONDUIT BŁH W-W 300	67RPN-03.08.00.00	1	1
6	AIR TANK Ø276 40 I	110RPN-02.01.00.00	1	1
7	VALVE CONSOLE CPL.	67RPN-00.00.04.00	1	1
8	AIR TANK CONSOLE CPL.	64RPN-15.00.100	2	2
9	AIR TANK BAND	45RPN-00.13.000	2	2
10	FORK	70RPN-14.00.00.01	2	2
11	PLUG	29RPN-11.00.002	1	1
12	BOLT	29RPN-11.00.004	2	2
13	SENSOR STOPPER BD	13RPN-03.01.02	4	4
14	CONNECTOR STRAIGHT LONG M22x1.5	77RPN-03.00.00.02	3	3
15	SIŁOWNIK 16" WABCO 423 104 900 0		4	4
16	CROSSPIECE WITH COUNTER-CONNECTOR		1	1
17	CONNECTOR, ELBOW BŁH 063 206 054		2	2
18	CONNECTOR, STRAIGHTBŁH M22x1.5/M16x1.5		4	4
19	SEALING SET KMPL M22x1.5		5	5
20	SPIRAL HOSE	WS-7 POSICZ	1	1
21	CONTROL VALVE 44.11.011.0		1	1
22	BRAKING FORCE CONTROLLER 61.11.012.0		1	1
23	CONDUIT CONNECTOR 87.10.030.0		1	1
24	DRAIN VALVE 83.10.012.0		1	1
25	INSPECTION CONNECTOR M22x1.5 88.10.011.0		1	1
26	AIR FILTER 81.01.010.0		1	1
27	CONNECTOR CATCH Art-331000 FLIEGL		1	1
28	BAND RIBENCLIP 16		8	8
29	SELF-TAPPING SCREW Ø5.5x19	DIN-7504-K	8	8
30	COPPER WASHER 27/22/2		3	3
31	COPPER WASHER 22/17/2	F80-3407114	16	16
32	CROSS-PIECE HOUSING K15L CFX	„PARKER”	1	1
33	COTTER PIN S-Zn-3.2x25	PN-76/M-82001	4	4
34	SEALING RING, ROUND Ø20x5	PN-64/M-73093	1	1
35	SCREW M10x35-5.8-B-Fe/Zn5	PN-85/M-82105	2	2
36	SCREW M10x30-5.8-B-Fe/Zn5	PN-85/M-82105	6	6
37	SCREW M8x25-5.8-B-Fe/Zn5	PN-85/M-82105	4	4
38	NUT M22x1.5-5-B-Fe/Zn5	PN-85/M-82144	1	1
39	NUT M10-5-B-Fe/Zn5	PN-85/M-82144	12	12
40	NUT M8-5-B-Fe/Zn5	PN-85/M-82144	2	2
41	WASHER 13-Fe/Zn5	PN-78/M-82005	4	4
42	WASHER 10.5-Fe/Zn5	PN-78/M-82005	2	2
43	WASHER 8.4-Fe/Zn5	PN-78/M-82005	6	6
44	WASHER Z10.2-Fe/Zn5	PN-77/M-82008	12	12
45	WASHER Z8.2-Fe/Zn5	PN-77/M-82008	4	4
46	SPRING	45RPN-05.00.002	4	4

FIG. 27. SINGLE CONDUIT BRAKE SYSTEM.

SZCZEGÓŁ (B)



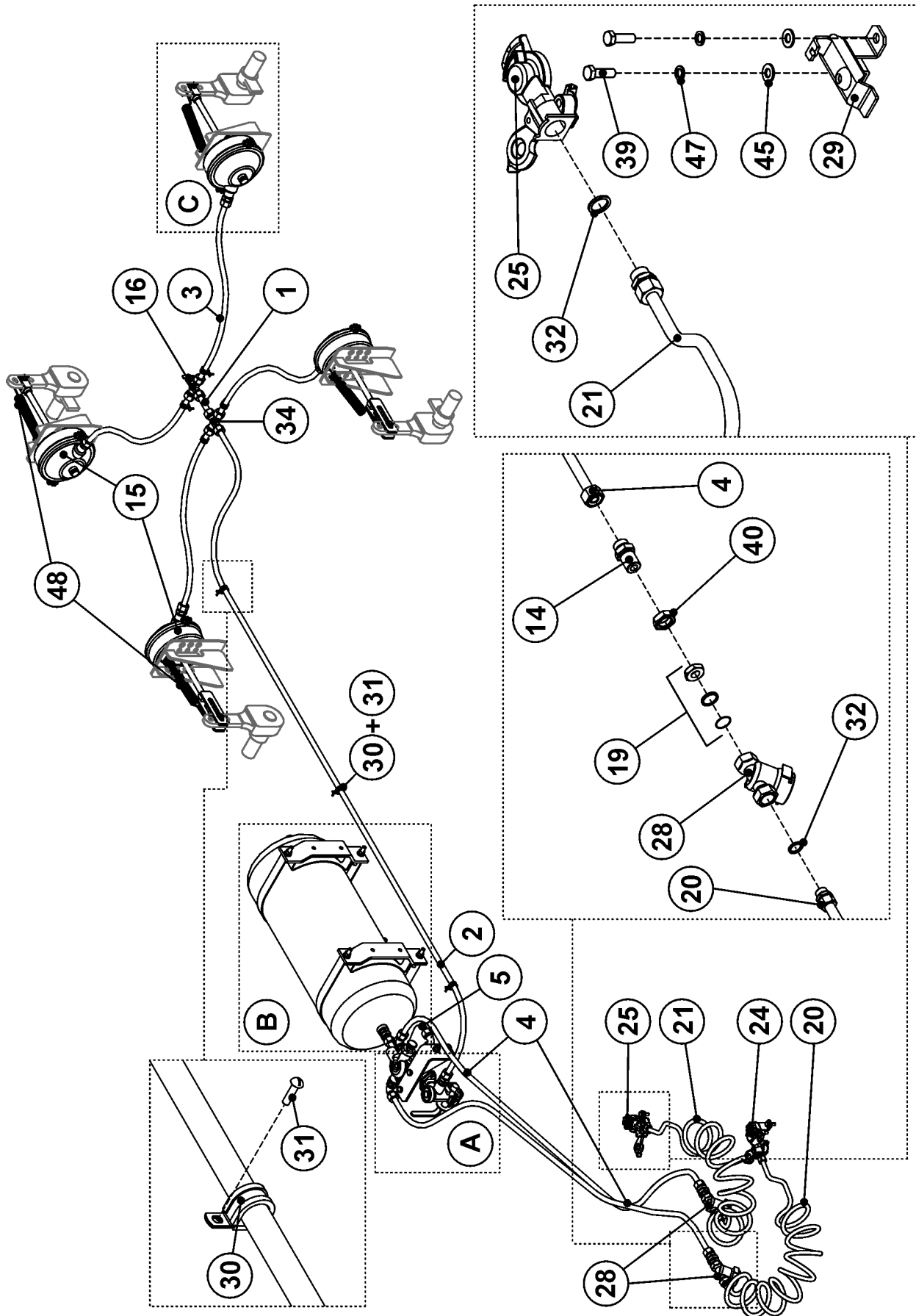
SZCZEGÓŁ (C)



Assembly name		Drawings No.	QUANTITY	
SINGLE CONDUIT BRAKE SYSTEM		25, 26, 27		
NO.	PART	DRAWING (STANDARD) NO.	P	D
1	CONDUIT BŁH W-W 70	104RPN-05.01.00.00	1	1
2	CONDUIT BŁH W-W 2700	104RPN-05.02.00.00	1	1
3	CONDUIT BŁH W-W 700	64RPN-15.08.000	4	4
4	CONDUIT BŁH W-W 1900	67RPN-03.05.00.00	1	1
5	CONDUIT BŁH W-W 300	67RPN-03.08.00.00	1	1
6	AIR TANK Ø276 40 I	110RPN-02.01.00.00	1	1
7	VALVE CONSOLE CPL.	67RPN-00.00.04.00	1	1
8	AIR TANK CONSOLE CPL.	64RPN-15.00.100	2	2
9	AIR TANK BAND	45RPN-00.13.000	2	2
10	FORK	70RPN-14.00.00.01	2	2
11	PLUG	29RPN-11.00.002	1	1
12	BOLT	29RPN-11.00.004	2	2
13	SENSOR STOPPER BD	13RPN-03.01.02	4	4
14	CONNECTOR STRAIGHT LONG M22x1.5	77RPN-03.00.00.02	3	3
15	SIŁOWNIK 16" WABCO 423 104 900 0		4	4
16	CROSSPIECE WITH COUNTER-CONNECTOR		1	1
17	CONNECTOR, ELBOW BŁH 063 206 054		2	2
18	CONNECTOR, STRAIGHTBŁH M22x1.5/M16x1.5		4	4
19	SEALING SET KMPL M22x1.5		5	5
20	SPIRAL HOSE	WS-7 POSICZ	1	1
21	CONTROL VALVE 44.11.011.0		1	1
22	BRAKING FORCE CONTROLLER 61.11.012.0		1	1
23	CONDUIT CONNECTOR 87.10.030.0		1	1
24	DRAIN VALVE 83.10.012.0		1	1
25	INSPECTION CONNECTOR M22x1.5 88.10.011.0		1	1
26	AIR FILTER 81.01.010.0		1	1
27	CONNECTOR CATCH Art-331000 FLIEGL		1	1
28	BAND RIBENCLIP 16		8	8
29	SELF-TAPPING SCREW Ø5.5x19	DIN-7504-K	8	8
30	COPPER WASHER 27/22/2		3	3
31	COPPER WASHER 22/17/2	F80-3407114	16	16
32	CROSS-PIECE HOUSING K15L CFX	„PARKER”	1	1
33	COTTER PIN S-Zn-3.2x25	PN-76/M-82001	4	4
34	SEALING RING, ROUND Ø20x5	PN-64/M-73093	1	1
35	SCREW M10x35-5.8-B-Fe/Zn5	PN-85/M-82105	2	2
36	SCREW M10x30-5.8-B-Fe/Zn5	PN-85/M-82105	6	6
37	SCREW M8x25-5.8-B-Fe/Zn5	PN-85/M-82105	4	4
38	NUT M22x1.5-5-B-Fe/Zn5	PN-85/M-82144	1	1
39	NUT M10-5-B-Fe/Zn5	PN-85/M-82144	12	12
40	NUT M8-5-B-Fe/Zn5	PN-85/M-82144	2	2
41	WASHER 13-Fe/Zn5	PN-78/M-82005	4	4
42	WASHER 10.5-Fe/Zn5	PN-78/M-82005	2	2
43	WASHER 8.4-Fe/Zn5	PN-78/M-82005	6	6
44	WASHER Z10.2-Fe/Zn5	PN-77/M-82008	12	12
45	WASHER Z8.2-Fe/Zn5	PN-77/M-82008	4	4
46	SPRING	45RPN-05.00.002	4	4

FIG. 28.

DOUBLE CONDUIT BRAKE SYSTEM.

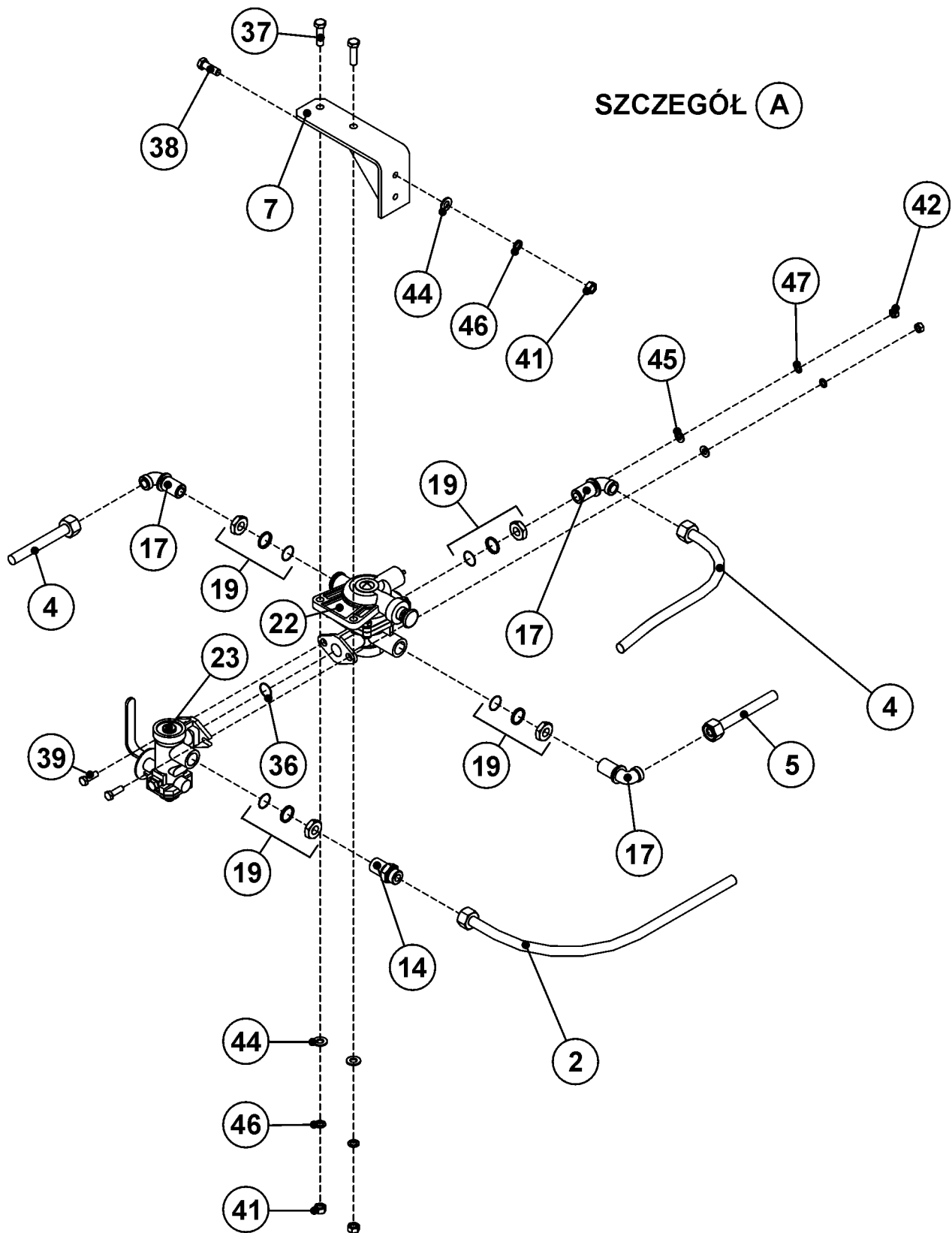


Assembly name		Drawings No.	QUANTITY	
DOUBLE CONDUIT BRAKE SYSTEM ★		28, 29, 30		
NO.	PART	DRAWING (STANDARD) NO.	P	D
1	CONDUIT BŁH W-W 70	104RPN-05.01.00.00	1	1
2	CONDUIT BŁH W-W 2700	104RPN-05.02.00.00	1	1
3	CONDUIT BŁH W-W 700	64RPN-15.08.000	4	4
4	CONDUIT BŁH W-W 1900	67RPN-03.05.00.00	2	2
5	CONDUIT BŁH W-W 300	67RPN-03.08.00.00	1	1
6	AIR TANK Ø276 40 I	110RPN-02.01.00.00	1	1
7	VALVE CONSOLE CPL.	67RPN-00.00.04.00	1	1
8	AIR TANK CONSOLE CPL.	64RPN-15.00.100	2	2
9	AIR TANK BAND	45RPN-00.13.000	2	2
10	FORK	70RPN-14.00.00.01	2	2
11	PLUG	29RPN-11.00.002	1	1
12	BOLT	29RPN-11.00.004	2	2
13	SENSOR STOPPER BD	13RPN-03.01.02	4	4
14	CONNECTOR STRAIGHT LONG M22x1.5	77RPN-03.00.00.02	4	4
15	SIŁOWNIK 16" WABCO 423 104 900 0		4	4
16	CROSSPIECE WITH COUNTER-CONNECTOR		1	1
17	CONNECTOR, ELBOW BŁH 063 206 054		3	3
18	CONNECTOR, STRAIGHTBŁH M22x1.5/M16x1.5		4	4
19	SEALING SET KMPL M22x1.5		7	7
20	SPIRAL HOSE 12x1.5/4500/2xM22x1.5/ŻÓŁTY	WS-8 POSICZ	1	1
21	SPIRAL HOSE	WS-7 POSICZ	1	1
22	CONTROL VALVE 44.12.010.0		1	1
23	BRAKING FORCE CONTROLLER 61.11.012.0		1	1
24	CONDUIT CONNECTOR 87.10.030.0		1	1
25	CONDUIT CONNECTOR 87.10.020.0		1	1
26	DRAIN VALVE 83.10.012.0		1	1
27	INSPECTION CONNECTOR M22x1.5 88.10.011.0		1	1
28	AIR FILTER 81.01.010.0		2	2
29	CONNECTOR CATCH Art-331000 FLIEGL		2	2
30	BAND RIBENCLIP 16		9	9
31	SELF-TAPPING SCREW Ø5.5x19	DIN-7504-K	9	9
32	COPPER WASHER 27/22/2		3	3
33	COPPER WASHER 22/17/2	F80-3407114	16	16
34	CROSS-PIECE HOUSING 1613	PN-66/M-73149	1	1
35	COTTER PIN S-Zn-3.2x25	PN-76/M-82001	4	4
36	SEALING RING, ROUND Ø20x5	PN-64/M-73093	1	1
37	SCREW M10x35-5.8-B-Fe/Zn5	PN-85/M-82105	2	2
38	SCREW M10x30-5.8-B-Fe/Zn5	PN-85/M-82105	6	6
39	SCREW M8x25-5.8-B-Fe/Zn5	PN-85/M-82105	6	6
40	NUT M22x1.5-5-B-Fe/Zn5	PN-85/M-82144	2	2
41	NUT M10-5-B-Fe/Zn5	PN-85/M-82144	12	12
42	NUT M8-5-B-Fe/Zn5	PN-85/M-82144	2	2
43	WASHER 13-Fe/Zn5	PN-78/M-82005	4	4
44	WASHER 10.5-Fe/Zn5	PN-78/M-82005	2	2
45	WASHER 8.4-Fe/Zn5	PN-78/M-82005	6	6
46	WASHER Z10.2-Fe/Zn5	PN-77/M-82008	12	12
47	WASHER Z8.2-Fe/Zn5	PN-77/M-82008	6	6
48	SPRING	45RPN-05.00.002	4	4

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FIG. 29.

DOUBLE CONDUIT BRAKE SYSTEM.

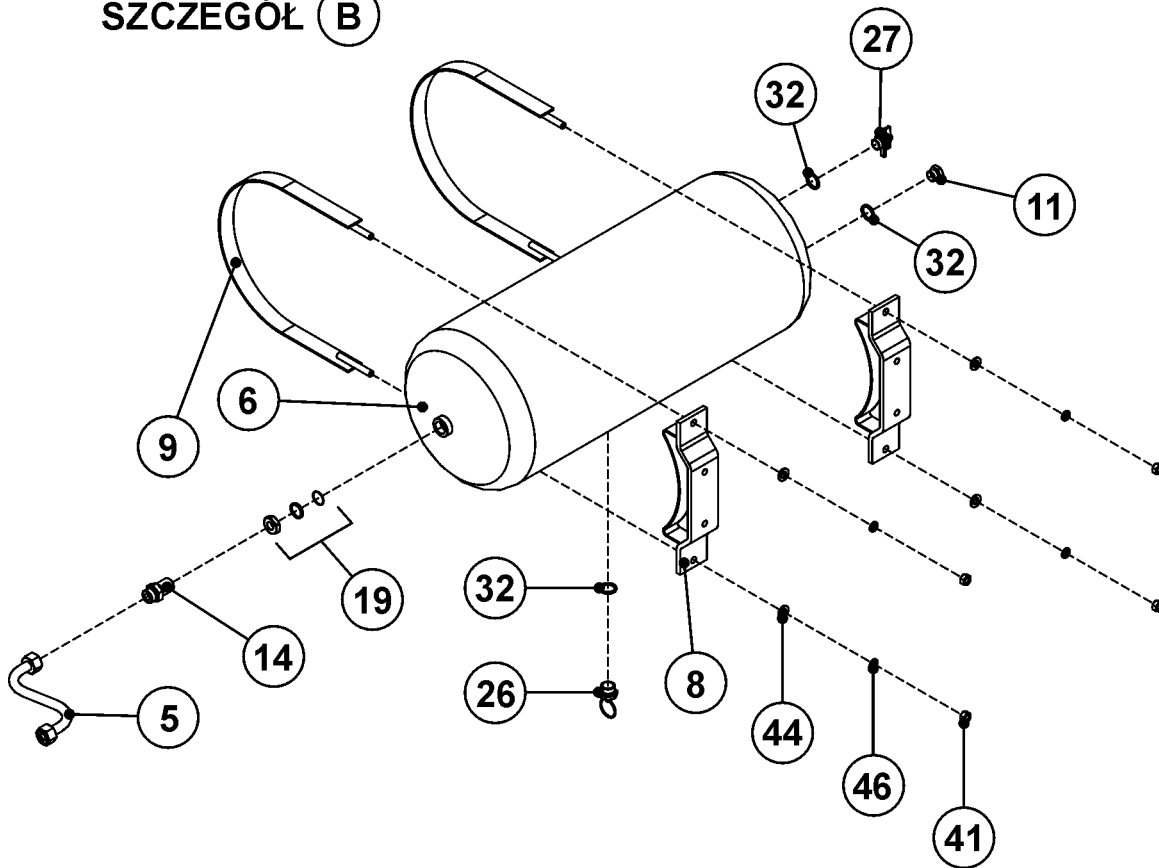


Assembly name		Drawings No.	QUANTITY	
DOUBLE CONDUIT BRAKE SYSTEM ★		28, 29, 30		
NO.	PART	DRAWING (STANDARD) NO.	P	D
1	CONDUIT BŁH W-W 70	104RPN-05.01.00.00	1	1
2	CONDUIT BŁH W-W 2700	104RPN-05.02.00.00	1	1
3	CONDUIT BŁH W-W 700	64RPN-15.08.000	4	4
4	CONDUIT BŁH W-W 1900	67RPN-03.05.00.00	2	2
5	CONDUIT BŁH W-W 300	67RPN-03.08.00.00	1	1
6	AIR TANK Ø276 40 I	110RPN-02.01.00.00	1	1
7	VALVE CONSOLE CPL.	67RPN-00.00.04.00	1	1
8	AIR TANK CONSOLE CPL.	64RPN-15.00.100	2	2
9	AIR TANK BAND	45RPN-00.13.000	2	2
10	FORK	70RPN-14.00.00.01	2	2
11	PLUG	29RPN-11.00.002	1	1
12	BOLT	29RPN-11.00.004	2	2
13	SENSOR STOPPER BD	13RPN-03.01.02	4	4
14	CONNECTOR STRAIGHT LONG M22x1.5	77RPN-03.00.00.02	4	4
15	SIŁOWNIK 16" WABCO 423 104 900 0		4	4
16	CROSSPIECE WITH COUNTER-CONNECTOR		1	1
17	CONNECTOR, ELBOW BŁH 063 206 054		3	3
18	CONNECTOR, STRAIGHTBŁH M22x1.5/M16x1.5		4	4
19	SEALING SET KMPL M22x1.5		7	7
20	SPIRAL HOSE 12x1.5/4500/2xM22x1.5/ŻÓŁTY	WS-8 POSICZ	1	1
21	SPIRAL HOSE	WS-7 POSICZ	1	1
22	CONTROL VALVE 44.12.010.0		1	1
23	BRAKING FORCE CONTROLLER 61.11.012.0		1	1
24	CONDUIT CONNECTOR 87.10.030.0		1	1
25	CONDUIT CONNECTOR 87.10.020.0		1	1
26	DRAIN VALVE 83.10.012.0		1	1
27	INSPECTION CONNECTOR M22x1.5 88.10.011.0		1	1
28	AIR FILTER 81.01.010.0		2	2
29	CONNECTOR CATCH Art-331000 FLIEGL		2	2
30	BAND RIBENCLIP 16		9	9
31	SELF-TAPPING SCREW Ø5.5x19	DIN-7504-K	9	9
32	COPPER WASHER 27/22/2		3	3
33	COPPER WASHER 22/17/2	F80-3407114	16	16
34	CROSS-PIECE HOUSING 1613	PN-66/M-73149	1	1
35	COTTER PIN S-Zn-3.2x25	PN-76/M-82001	4	4
36	SEALING RING, ROUND Ø20x5	PN-64/M-73093	1	1
37	SCREW M10x35-5.8-B-Fe/Zn5	PN-85/M-82105	2	2
38	SCREW M10x30-5.8-B-Fe/Zn5	PN-85/M-82105	6	6
39	SCREW M8x25-5.8-B-Fe/Zn5	PN-85/M-82105	6	6
40	NUT M22x1.5-5-B-Fe/Zn5	PN-85/M-82144	2	2
41	NUT M10-5-B-Fe/Zn5	PN-85/M-82144	12	12
42	NUT M8-5-B-Fe/Zn5	PN-85/M-82144	2	2
43	WASHER 13-Fe/Zn5	PN-78/M-82005	4	4
44	WASHER 10.5-Fe/Zn5	PN-78/M-82005	2	2
45	WASHER 8.4-Fe/Zn5	PN-78/M-82005	6	6
46	WASHER Z10.2-Fe/Zn5	PN-77/M-82008	12	12
47	WASHER Z8.2-Fe/Zn5	PN-77/M-82008	6	6
48	SPRING	45RPN-05.00.002	4	4

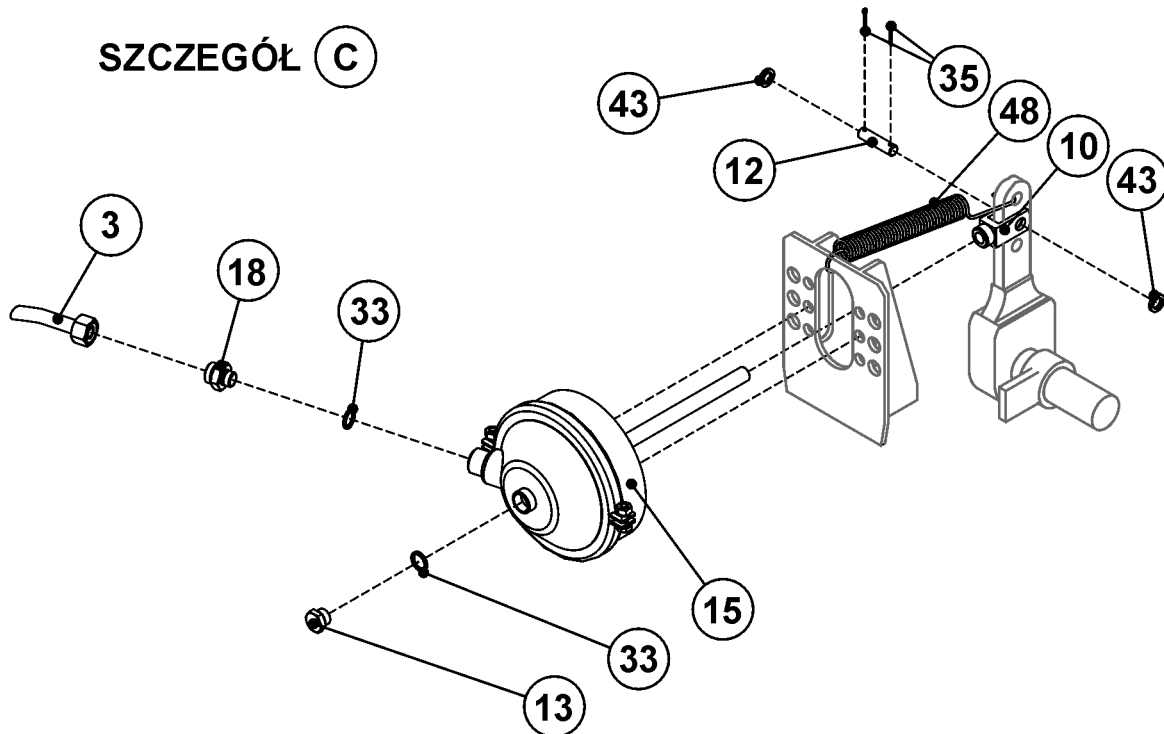
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FIG. 30. DOUBLE CONDUIT BRAKE SYSTEM.

SZCZEGÓŁ (B)



SZCZEGÓŁ (C)



Assembly name		Drawings No.	QUANTITY	
DOUBLE CONDUIT BRAKE SYSTEM ★		28, 29, 30		
NO.	PART	DRAWING (STANDARD) NO.	P	D
1	CONDUIT BŁH W-W 70	104RPN-05.01.00.00	1	1
2	CONDUIT BŁH W-W 2700	104RPN-05.02.00.00	1	1
3	CONDUIT BŁH W-W 700	64RPN-15.08.000	4	4
4	CONDUIT BŁH W-W 1900	67RPN-03.05.00.00	2	2
5	CONDUIT BŁH W-W 300	67RPN-03.08.00.00	1	1
6	AIR TANK Ø276 40 I	110RPN-02.01.00.00	1	1
7	VALVE CONSOLE CPL.	67RPN-00.00.04.00	1	1
8	AIR TANK CONSOLE CPL.	64RPN-15.00.100	2	2
9	AIR TANK BAND	45RPN-00.13.000	2	2
10	FORK	70RPN-14.00.00.01	2	2
11	PLUG	29RPN-11.00.002	1	1
12	BOLT	29RPN-11.00.004	2	2
13	SENSOR STOPPER BD	13RPN-03.01.02	4	4
14	CONNECTOR STRAIGHT LONG M22x1.5	77RPN-03.00.00.02	4	4
15	SIŁOWNIK 16" WABCO 423 104 900 0		4	4
16	CROSSPIECE WITH COUNTER-CONNECTOR		1	1
17	CONNECTOR, ELBOW BŁH 063 206 054		3	3
18	CONNECTOR, STRAIGHTBŁH M22x1.5/M16x1.5		4	4
19	SEALING SET KMPL M22x1.5		7	7
20	SPIRAL HOSE 12x1.5/4500/2xM22x1.5/ŻÓŁTY	WS-8 POSICZ	1	1
21	SPIRAL HOSE	WS-7 POSICZ	1	1
22	CONTROL VALVE 44.12.010.0		1	1
23	BRAKING FORCE CONTROLLER 61.11.012.0		1	1
24	CONDUIT CONNECTOR 87.10.030.0		1	1
25	CONDUIT CONNECTOR 87.10.020.0		1	1
26	DRAIN VALVE 83.10.012.0		1	1
27	INSPECTION CONNECTOR M22x1.5 88.10.011.0		1	1
28	AIR FILTER 81.01.010.0		2	2
29	CONNECTOR CATCH Art-331000 FLIEGL		2	2
30	BAND RIBENCLIP 16		9	9
31	SELF-TAPPING SCREW Ø5.5x19	DIN-7504-K	9	9
32	COPPER WASHER 27/22/2		3	3
33	COPPER WASHER 22/17/2	F80-3407114	16	16
34	CROSS-PIECE HOUSING 1613	PN-66/M-73149	1	1
35	COTTER PIN S-Zn-3.2x25	PN-76/M-82001	4	4
36	SEALING RING, ROUND Ø20x5	PN-64/M-73093	1	1
37	SCREW M10x35-5.8-B-Fe/Zn5	PN-85/M-82105	2	2
38	SCREW M10x30-5.8-B-Fe/Zn5	PN-85/M-82105	6	6
39	SCREW M8x25-5.8-B-Fe/Zn5	PN-85/M-82105	6	6
40	NUT M22x1.5-5-B-Fe/Zn5	PN-85/M-82144	2	2
41	NUT M10-5-B-Fe/Zn5	PN-85/M-82144	12	12
42	NUT M8-5-B-Fe/Zn5	PN-85/M-82144	2	2
43	WASHER 13-Fe/Zn5	PN-78/M-82005	4	4
44	WASHER 10.5-Fe/Zn5	PN-78/M-82005	2	2
45	WASHER 8.4-Fe/Zn5	PN-78/M-82005	6	6
46	WASHER Z10.2-Fe/Zn5	PN-77/M-82008	12	12
47	WASHER Z8.2-Fe/Zn5	PN-77/M-82008	6	6
48	SPRING	45RPN-05.00.002	4	4

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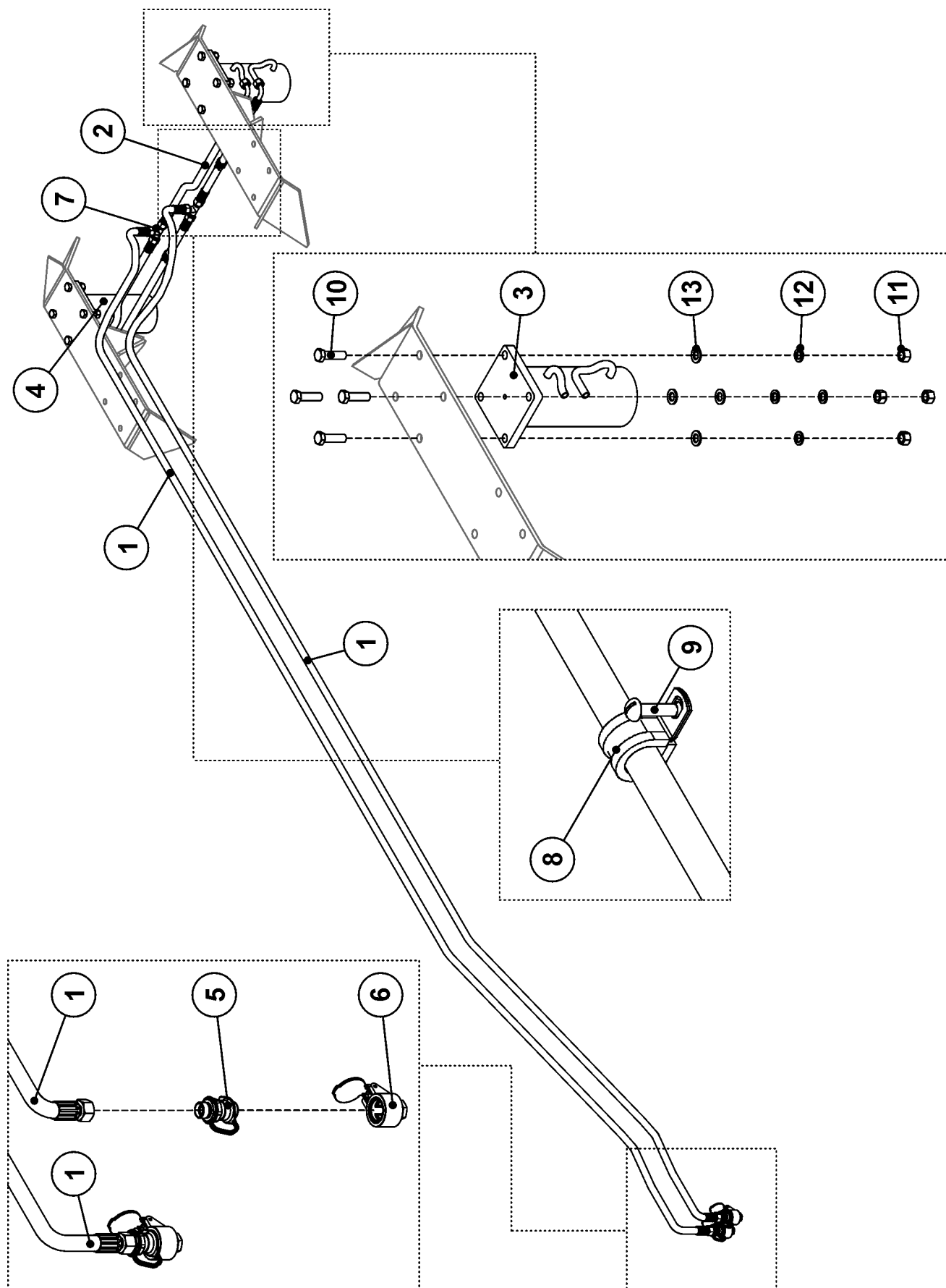
HYDRAULIC BRAKE SYSTEM.



Assembly name		Drawings No.	QUANTITY	
HYDRAULIC BRAKE SYSTEM ★		31		
NO.	PART	DRAWING (STANDARD) NO.	P	D
1	CONDUIT DN13 H17.8 H2.12 6000	104RPN-09.01.00.00	1	1
2	CONDUIT DN13 H17.8 H2.12 800	104RPN-07.02.00.00	4	4
3	TUBE CPL.	104RPN-09.00.01.00	1	1
4	BRAKE CYLINDER CONSOLE CPL.	58RPN-20.03.000	4	4
5	FORK-SHAPED END	37RPN-19.02.000	4	4
6	CONNECTOR	51RPN-06.00.001	4	4
7	CYLINDER BOLT	45RPN-12.00.001	4	4
8	SPRING	45RPN-05.00.002	4	4
9	BOLT	29RPN-11.00.004	2	2
10	QUICK-RELEASE CONNECTOR - PLUG ISO 12,5	SZ12-W06L	1	1
11	PLUNGER CYLINDER 25/140	33RPN-00.14.00.00	4	4
12	T-CONNECTOR HOUSING 1613	PN-66/M-73147	1	1
13	CROSS-PIECE HOUSING 1613	PN-66/M-73149	1	1
14	BAND RIBENCLIP 22		6	6
15	SEALING RING 11,3x2,4	PN-60/M-86961	4	4
16	COTTER PIN S-Zn-4x32	PN-76/M-82001	8	8
17	COTTER PIN S-Zn-3.2x25	PN-76/M-82001	4	4
18	SELF-TAPPING SCREW Ø5.5x19	DIN-7504-K	4	4
19	SCREW M16x35-8.8-B-Fe/Zn5	PN-85/M-82105	8	8
20	NUT M16-8-B-Fe/Zn5	PN-86/M-82144	8	8
21	WASHER 17-Fe/Zn5	PN-78/M-82005	16	16
22	WASHER 12.5 -Fe/Zn5	PN-78/M-82005	4	4
23	WASHER Z16.3-Fe/Zn5	PN-77/M-82008	8	8
24	SOCKET ISO		1	1

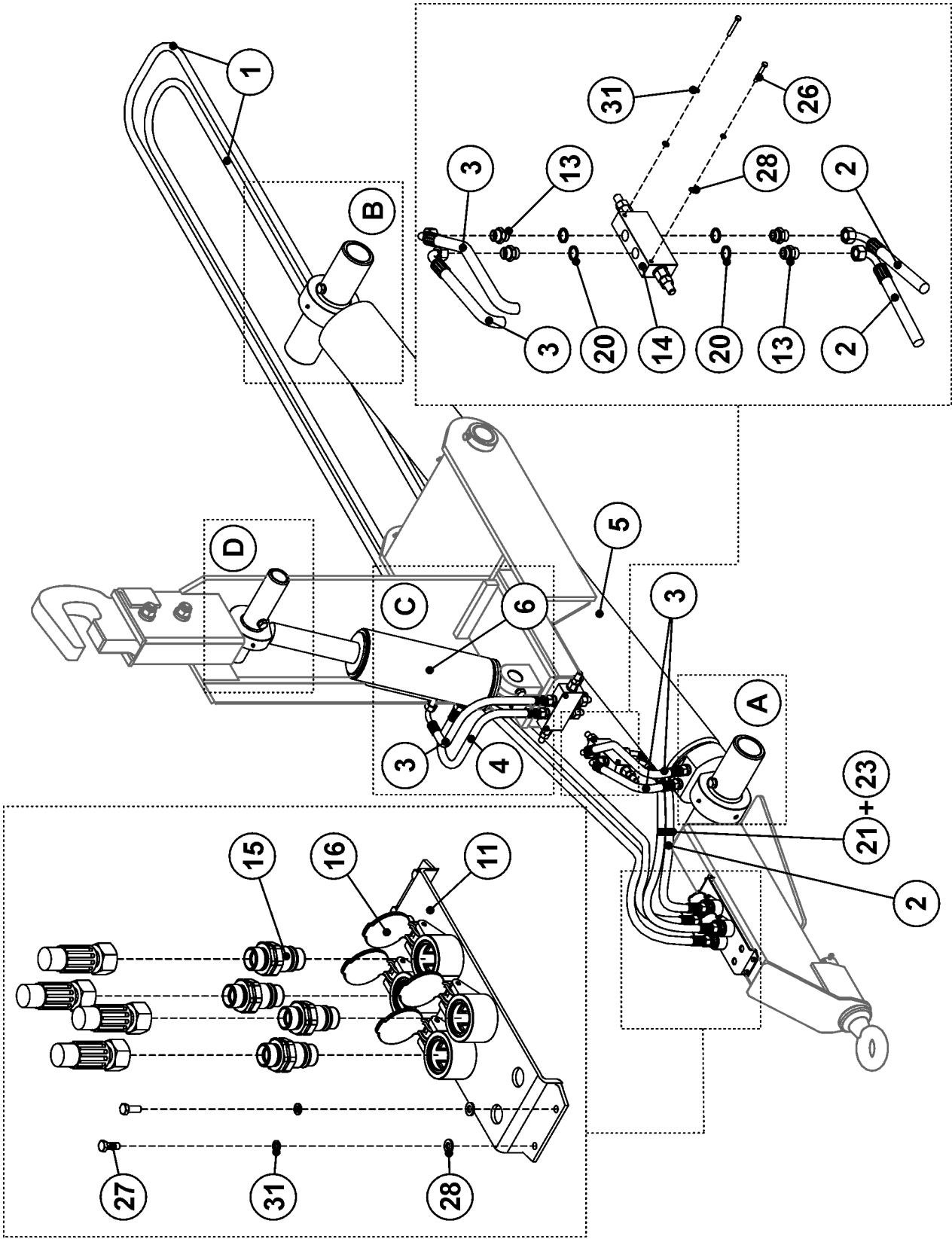
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FIG. 32. HYDRAULIC SYSTEM FOR ROCKERS LOCK.



Assembly name		Drawings No.	QUANTITY	
HYDRAULIC SYSTEM FOR ROCKERS LOCK		32		
NO.	PART	DRAWING (STANDARD) NO.	P	D
1	CONDUIT DN13 H2.12 H2.12 5900	104RPN-07.01.00.00	2	2
2	CONDUIT DN13 H17.8 H2.12 800	104RPN-07.02.00.00	4	4
3	CYLINDER 100sj60D-60m5b16	33RPN-11.03.00.00 L	1	1
4	CYLINDER 100sj60D-60m5b16	33RPN-11.03.00.00 P	1	1
5	QUICK-RELEASE CONNECTOR - PLUG SZ12-		2	2
6	SOCKET ISO		2	2
7	T-CONNECTOR HOUSING 1613	PN-66/M-73147	2	2
8	BAND RIBENCLIP 22		4	4
9	SELF-TAPPING SCREW Ø5.5x19	DIN-7504-K	4	4
10	SCREW M16x55-8.8-B	PN-EN ISO 4017:2002	8	8
11	NUT M16-5-B-Fe/Zn5	PN-86/M-82144	8	8
12	WASHER 17-Fe/Zn5	PN-78/M-82005	8	8
13	WASHER 16.3-Fe/Zn5	PN-77/M-82008	8	8

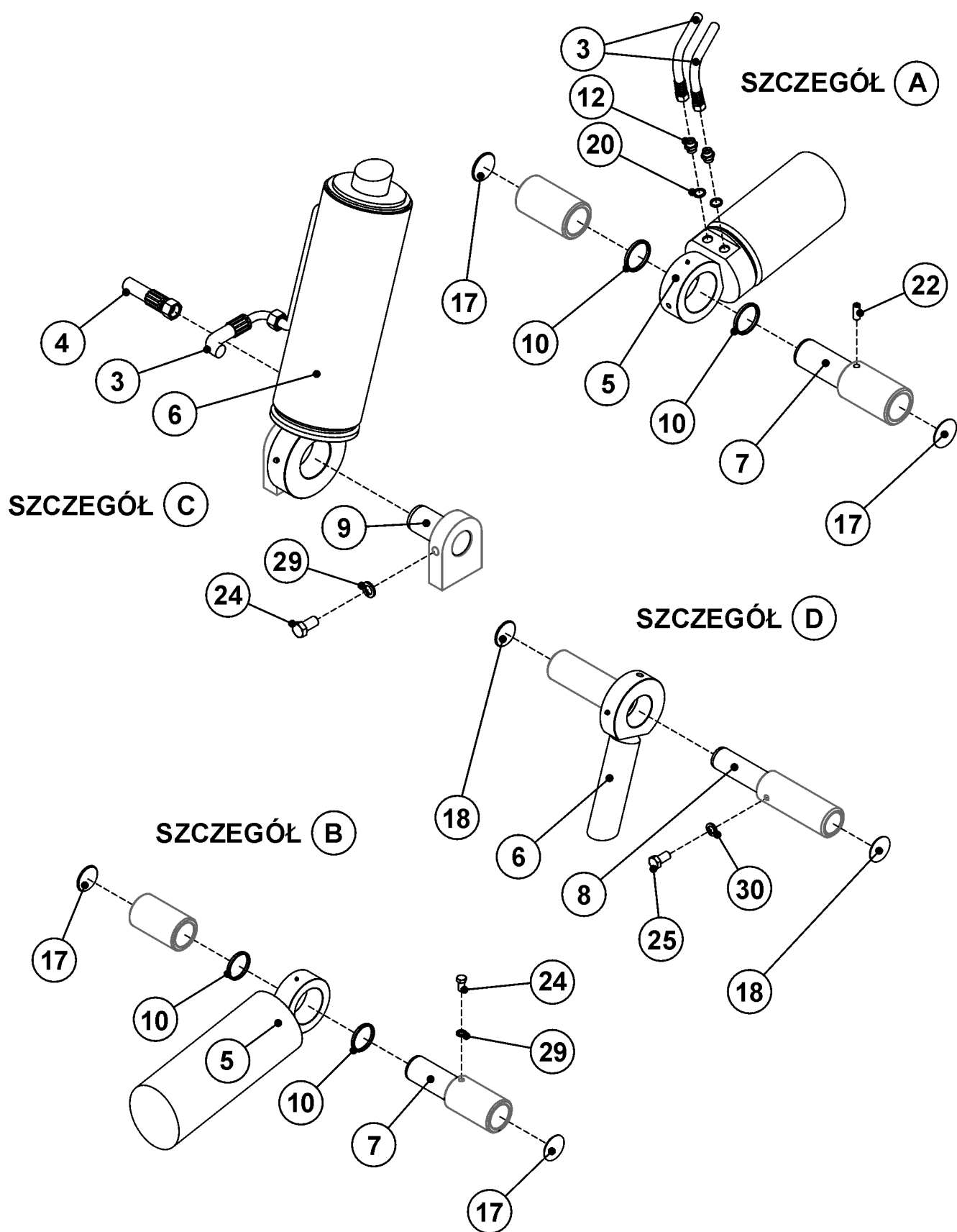
FIG. 33.



Assembly name		Drawings No.	QUANTITY	
HYDRAULIC TILT SYSTEM		33, 34		
NO.	PART	DRAWING (STANDARD) NO.	P	D
1	CONDUIT DN13 H17.8 H2.12 10900	104RPN-06.01.00.00	2	2
2	CONDUIT DN13 H17.8 H2.12 2100	104RPN-06.02.00.00	2	2
3	CONDUIT DN13 H17.8 H2.12 450	104RPN-06.03.00.00	3	3
4	CONDUIT DN13 H2.12 H2.12 450	45RPN-12.10.000	1	1
5	CYLINDER 160sj80A-1565m4a16	33RPN-13.01.00.00	1	1
6	CYLINDER 125sj60B-250m5a16	33RPN-09.03.00.00	1	1
7	CYLINDER BOLT	104RPN-06.00.00.01	2	2
8	UPPER BOLT	104RPN-06.00.00.02	1	1
9	LOWER BOLT	104RPN-06.00.00.03	1	1
10	DISTANCE SLEEVE	104RPN-06.00.00.04	4	4
11	SEAT CONSOLE	104RPN-06.00.00.05	1	1
12	CONNECTOR HOUSING	13RPN-24.05.05	2	2
13	CONNECTOR HOUSING	12RPN-18.00.01	8	8
14	ANTI-SHOCK VALVE VBCD120		2	2
15	QUICK-RELEASE CONNECTOR SZ12-W06		4	4
16	SOCKET ISO		4	4
17	STOPPER ART. NR 0550700000003		4	4
18	STOPPER ART. NR 0550458000003		2	2
19	SPIRAL HOSE - SPIRAL GUARD SGX-50 I=1000		2	2
20	COPPER WASHER 28/21/2		10	10
21	BAND RIBENCLIP 22		2	2
22	PRESSURE SCREW M16x30	DIN551	1	1
23	SELF-TAPPING SCREW Ø5.5x19	DIN-7504-K	1	1
24	SCREW M16x30-5.8-B	PN-EN ISO 4017:2002	2	2
25	SCREW M12x25-5.8-B	PN-EN ISO 4017:2002	1	1
26	SCREW M6x50-8.8-B	PN-EN ISO 4014:2002	4	4
27	SCREW M6x16-5.8-B	PN-EN ISO 4017:2002	4	4
28	WASHER 6.4-Fe/Zn5	PN-EN ISO 7091:2003	8	8
29	WASHER 16.3-Fe/Zn5	PN-77/M-82008	2	2
30	WASHER 12.2-Fe/Zn5	PN-77/M-82008	1	1
31	WASHER 6.1-Fe/Zn5	PN-77/M-82008	8	8

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FIG. 34. HYDRAULIC TILT SYSTEM.



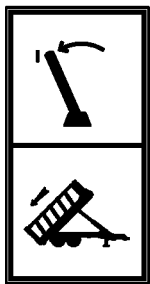
Assembly name		Drawings No.	QUANTITY	
HYDRAULIC TILT SYSTEM		33, 34		
NO.	PART	DRAWING (STANDARD) NO.	P	D
1	CONDUIT DN13 H17.8 H2.12 10900	104RPN-06.01.00.00	2	2
2	CONDUIT DN13 H17.8 H2.12 2100	104RPN-06.02.00.00	2	2
3	CONDUIT DN13 H17.8 H2.12 450	104RPN-06.03.00.00	3	3
4	CONDUIT DN13 H2.12 H2.12 450	45RPN-12.10.000	1	1
5	CYLINDER 160sj80A-1565m4a16	33RPN-13.01.00.00	1	1
6	CYLINDER 125sj60B-250m5a16	33RPN-09.03.00.00	1	1
7	CYLINDER BOLT	104RPN-06.00.00.01	2	2
8	UPPER BOLT	104RPN-06.00.00.02	1	1
9	LOWER BOLT	104RPN-06.00.00.03	1	1
10	DISTANCE SLEEVE	104RPN-06.00.00.04	4	4
11	SEAT CONSOLE	104RPN-06.00.00.05	1	1
12	CONNECTOR HOUSING	13RPN-24.05.05	2	2
13	CONNECTOR HOUSING	12RPN-18.00.01	8	8
14	ANTI-SHOCK VALVE VBCD120		2	2
15	QUICK-RELEASE CONNECTOR SZ12-W06		4	4
16	SOCKET ISO		4	4
17	STOPPER ART. NR 055070000003		4	4
18	STOPPER ART. NR 055045800003		2	2
19	SPIRAL HOSE - SPIRAL GUARD SGX-50 I=1000		2	2
20	COPPER WASHER 28/21/2		10	10
21	BAND RIBENCLIP 22		2	2
22	PRESSURE SCREW M16x30	DIN551	1	1
23	SELF-TAPPING SCREW Ø5.5x19	DIN-7504-K	1	1
24	SCREW M16x30-5.8-B	PN-EN ISO 4017:2002	2	2
25	SCREW M12x25-5.8-B	PN-EN ISO 4017:2002	1	1
26	SCREW M6x50-8.8-B	PN-EN ISO 4014:2002	4	4
27	SCREW M6x16-5.8-B	PN-EN ISO 4017:2002	4	4
28	WASHER 6.4-Fe/Zn5	PN-EN ISO 7091:2003	8	8
29	WASHER 16.3-Fe/Zn5	PN-77/M-82008	2	2
30	WASHER 12.2-Fe/Zn5	PN-77/M-82008	1	1
31	WASHER 6.1-Fe/Zn5	PN-77/M-82008	8	8

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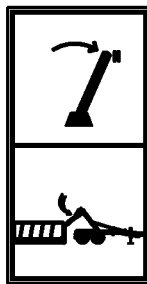
Assembly name		Drawings No.	QUANTITY	
HYDRAULIC SUPPORT CPL.		35		
NO.	PART	DRAWING (STANDARD) NO.	P	D
1	CONDUIT DN13 H2.12 H2.12 2100	104RPN-08.01.00.00	1	1
2	CONDUIT DN13 H17.8 H2.12 350	64RPN-17.02.000	1	1
3	HYDRAULIC SUPPORT	45RPN-26.01.000	1	1
4	HYDRAULIC VALVE	45RPN-26.00.001	1	1
5	STICKER OPEN/CLOSE	45RPN-26.00.002	1	1
6	CONNECTOR HOUSING	12RPN-18.00.002	1	1
7	QUICK-RELEASE CONNECTOR - PLUG ISO12.5	SZ12-W06	1	1
8	SOCKET ISO		1	1
9	BAND RIBENCLIP 22		2	2
10	SELF-TAPPING SCREW Ø5.5x19	DIN-7504-K	2	2
11	SCREW M12x35-8.8-B-Fe/Zn	PN-EN ISO 4017:2002	4	4
12	SCREW M6x50-5.8-B-Fe/Zn5	PN-EN ISO 4017:2002	2	2
13	NUT M12-5-B-Fe/Zn5	PN-86/M-82144	4	4
14	COPPER WASHER 27/22/2		1	1
15	WASHER Z12.2-Fe/Zn5	PN-76/M-82008	4	4
16	WASHER Z6.1-Fe/Zn5	PN-77/M-82008	2	2

FIG. 36. STICKERS

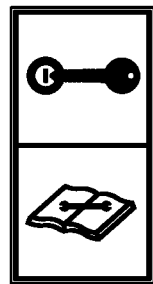
T185 PRONAR



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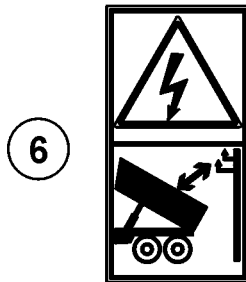
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6

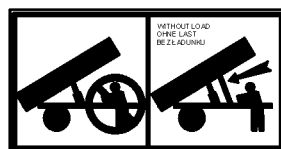
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8



9



10

350 kPa

11

Assembly name		Drawings No.	QUANTITY	
STICKERS		36		
NO.	PART	DRAWING (STANDARD) NO.	P	D
1	STICKER T185	104RPN-00.00.00.09	2	2
2	INFORMATION STICKER III	104RPN-00.00.00.07	1	1
3	INFORMATION STICKER IV	104RPN-00.00.00.08	1	1
4	WARNING STICKERIII	70RPN-00.00.00.05	1	1
5	WARNING STICKERII	70RPN-00.00.00.04	1	1
6	WARNING STICKERIII	58RPN-00.00.20	2	2
7	STICKER „LUBRICATION”	104RPN-00.00.00.04	1	1
8	INFORMATION STICKER II	104RPN-00.00.00.06	1	1
9	INFORMATION STICKER I	104RPN-00.00.00.05	1	1
10	WARNING STICKERI	104RPN-00.00.00.03	2	2
11	STICKER 350 kPa	45RPN-00.00.005	2	2

NOTES