

N262/2 manure spreader installation

instructions

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1.1 RULES FOR USING THE INSTALLATION INSTRUCTIONS

The information contained in this document is current at the date of publication. As a result of improvement, some measurements and illustrations contained in this publication may not correspond to the actual state of the machine delivered to the user.

The drawings contained in this publication are provided to explain the principles of correct assembly and disassembly of components and may differ from the actual situation. This can not be a reason for any claims for this.

The manufacturer reserves the right to introduce constructional changes in the manufactured machines to facilitate operation and improve the quality of their work, without making any current changes to this publication.

Keep this manual for future reference. If the manual is lost or damaged, contact the seller or the manufacturer for a duplicate.

The installation instructions are intended exclusively for the manufacturer's service personnel and employees of qualified authorised service centres. Therefore, it is not an integral part of the User Manual, which is intended exclusively for the end user, i.e. the machine operator. Personnel undertaking the activities described in this document must be trained by qualified staff of the manufacturer or machine dealer.

1.2 GENERAL INFORMATION - EMPLOYEES

1.2.1 Qualified staff

This document is intended for qualified personnel who have been trained to prepare the machine, about safety during operation, to carry out the required assembly/disassembly operations and have been familiarised with the required tools.

Qualified personnel are a group of people who, as a result of their education, experience and occupation certified by a qualification document, have the knowledge and skills to carry out basic maintenance and repair work on the machine to the extent stipulated by the manufacturer.

The qualified personnel are responsible for the quality of the work carried out and for their own and their colleagues' safety. If bystanders are observed in the vicinity of the work area, they must discontinue work until the bystanders have left the work area.

1.2.2 Bystanders

A bystander is a person who has not been trained in the operation or safety of the machine and who does not possess the necessary knowledge and authorisation to carry out the required work. This may also be a person who accidentally or intentionally comes into the vicinity of the machine without the necessary knowledge of the risks. It is strictly forbidden for a bystander to approach the machine during assembly or disassembly work. Lack of proper knowledge of the hazards can cause serious damage to health or life.

1.3 BASIC SAFETY RULES

1.3.3 General rules

- Protect the manual from damage.
- If the information contained in the User's Manual is difficult to understand, contact a seller who runs an authorized technical service on behalf of the manufacturer, or contact the manufacturer directly.
- Access to the machine is possible only with the machine absolutely still. Secure the machine against unauthorized or accidental start-up.
- Failure to comply with the instructions in this guide poses a risk to the health and life of those working on the machine and those operating the machine.
- Observing the principles of safe and reasonable use should be the basic rule for handling your spreader. Remember that your safety is the most important thing.
- Do not allow persons who are not authorized and unfit to operate the machine to use it, in particular children, people under the influence of alcohol, drugs or other intoxicants, etc.
- Any modification of the spreader is prohibited and exempts Pronar from liability for any damage or injury.
- It is forbidden to remove the seals and change the factory settings on the relief valve and flow regulator.
- During maintenance work, use appropriate, close-fitting protective clothing, gloves, shoes, glasses and the right tools.
- Perform maintenance and repair activities applying the general principles of health and safety at work. In case of injury, wash and disinfect the wound immediately. If you experience more serious injury, seek medical advice.
- Do not install additional devices or accessories that do not comply with the specifications provided by the Manufacturer.
- If it is necessary to replace individual parts, use only original part or those indicated by the Manufacturer. Not complying with these requirements may create a health risk for bystanders or those operating the spreader and may also contribute to damage to the machine.
- After completing work, make sure that no tools or loose spare parts are left inside and that all safety devices and guards are properly attached before starting the machine.
- It is not acceptable to leave loose, tightened or damaged

connections.

- During work, restrict access to the machine only to necessary personnel.
- All work should be carried out when the machine is standing firmly on a hardened horizontal surface.

1.3.4 Carrying of a load

- Hoisting equipment (overhead crane, hoist, etc.) must only be operated by a person with the required authorisation.
- Use only approved and technically feasible lifting equipment to suspend loads.
- Follow the recommendations of the equipment manufacturer.
- Make sure that the load capacity of the sling and crosshead is sufficient.
- Damaged load suspension devices should be taken out of service. Never use a defective accessory.
- Never step under a load that is being lifted. Follow the instructions of the operator or crane when securing the load and during transport.
- Exceeding the load capacity of the crane and attachments designed to suspend the load may cause the load to break.
- Remember that any load has the potential to rock during transport. Control the situation and do not allow such an event to occur.

1.3.5 Test start-up

- A test start-up is performed at the end of the work to check the correct operation of the machine. Only one person should carry out the commissioning of the machine, who will control the work.
- It is strictly forbidden to climb onto the load bed or to take a seat near it while the adapter is in operation.
- The machine may only be started when it is fully operational.
- The spreader operation may be performed only by persons trained for this purpose.
- It is forbidden to start the spreader if the protective covers are not closed or have been removed.
- Do not remove covers or protective devices. When you start working, all safety components must be operational to perform their function.
- Do not touch the rotating or moving parts of the spreader.

1.4 PERSONAL PROTECTIVE EQUIPMENT

1.4.6 General

No rings, chains or other jewellery should be worn while working. Wear properly fitting work clothing that fits tightly to the body. Clothing must have increased tear resistance. Sleeves and legs should fit tight to the body and must not contain protruding straps or other protruding items. They can be caught in machinery and contribute to accidents. If your employer or local regulations require additional PPE, you must follow them. You should be informed of them by your employer during your health and safety training.

1.4.7 Protective shoes

Work shoes should have soles with non-slip tread and an oil-resistant material. The toecaps should be reinforced, providing protection against impact and crushing.

1.4.8 Work gloves

Depending on the activity, work gloves should be selected individually. For heavy work where there is a high risk of scratches, abrasions and cuts, reinforced gloves made of leather should be used.

1.4.9 Industrial protective helmet

The protective helmet is designed to protect the head from head injuries that may be caused by falling parts, ejected material, etc. The helmet should be selected according to the temperature of use, the size of the head. It should have adjustable straps for a correct fit to the head.

1.5 PREPARATION FOR WORK

1.5.10 Basic recommendations

- Before beginning the work, read this manual and, if necessary, the machine's operating instructions.
- Prepare the appropriate tools, plan the sequence, prepare the container for the fasteners, prepare the staging area for the machine components, prepare a suitable working space.
- Secure the machine against rolling by placing security chocks under the wheels. Apply the brake.
- Prepare suitably high approved platforms that have side protection in the form of railings. We do not recommend the use of ladders due to reduced stability.
- Assign one person to be responsible for starting the machine during operation and test start-up.
- If necessary, mark out the work area by using information tapes and warning signs.
- Prepare a powder extinguisher, non-combustible blankets or tarpaulins.

1.6 UNIT CONVERTERS

1.6.11 Convert imperial and metric measurements

Length

$$\text{mm} \times 0.0394 = \text{inch}$$

$$\text{inch} \times 25.4 = \text{mm}$$

$$\text{m} \times 3.281 = \text{foot}$$

$$\text{foot} \times 0.305 = \text{m}$$

$$\text{m} \times 1.094 = \text{yard}$$

$$\text{yard} \times 0.914 = \text{m}$$

Area

$$\text{m}^2 \times 10.77 = \text{sq.ft.}$$

$$\text{sq.ft} \times 0.093 = \text{m}^2$$

$$\text{m}^2 \times 1.197 = \text{sq.yard}$$

$$\text{sq.yard} \times 0.835 = \text{m}^2$$

Weight

$$\text{kg} \times 35.25 = \text{oz.}$$

$$\text{oz.} \times 0.028$$

$$\text{kg} \times 2.203 = \text{lb.}$$

$$\text{lb.} \times 0.454$$

Volume

$$\text{cm}^3 \times 0.061 = \text{Cu.in}$$

$$\text{Cu.in} \times 16.39 = \text{cm}^3$$

$$\text{m}^3 \times 0.035 = \text{Cu.ft}$$

$$\text{Cu.ft} \times 28.36 = \text{m}^3$$

$$\text{m}^3 \times 1.311 = \text{Cu.yard}$$

$$\text{Cu.yard} \times 0.763 = \text{m}^3$$

Pressure

$$\text{bar} \times 14.503 = \text{psi}$$

$$\text{psi} \times 1.379 = \text{bar}$$

Tightening torques

$$\text{Nm} \times 0.737 = \text{lb.ft}$$

$$\text{lb.ft.} \times 1.356 = \text{Nm}$$

Density

$$\text{kg/m}^3 \times 0.062 = \text{lb./cu.ft}$$

$$\text{lb./cu.ft} \times 16.21 = \text{kg/m}^3$$

1.7 TOOLS AND MATERIALS - MINIMUM REQUIREMENTS

- Basic set of machine spanners and hand tools (hammers, screwdrivers, etc.).
- Torque wrench
- Seger ring pliers.
- Steel or copper wire brushes.
- Overhead crane or hoist with sufficient capacity to carry the machine components - component weights are detailed in the “*Technical data*” section.
- Wooden blocks or beams, wood-like boards, rubber sleepers, etc. (for securing the machine assemblies to be deposited).

Table 1.1. Wrench size

Thread diameter	Wrench size [mm]
M6	10
M8	13
M10	17
M12	19
M14	22
M16	24
M18	27
M20	30
M24	36
M27	41
M30	46

Table 1.3. Weights of basic components

Part name	Unit	Nominal value
Standard superstructure	kg	88
Silo superstructure	kg	126
Adapter set with covers	kg	~1,360
Gate valve with cylinders	kg	228
Drawbar	kg	267
Rigid axle	kg	390
Steering axle	kg	536
Suspension spring	kg	50
Hydraulic support	kg	33
Screwed ladder, set	kg	15

Table 1.2. Tightening torques for screw connections

Metric	8.8	10.9
	M [Nm]	
M10	49	72
M12	85	125
M14	135	200
M16	210	310
M20	425	610
M24	730	1,050
M27	1,150	1,650
M30	1,450	2,100

Table 1.4. Tightening torques for the ends of the hydraulic hoses

Thread of nuts	Wire diameter DN (inch)	Tightening torques [Nm]
M10x1 M12x1.5 M14x1.5	6 (1/4")	30÷ 50
M16x1.5 M18x1.5	8 (5/16")	30÷ 50
M18x1.5 M20x1.5 M22x1.5	10 (3/8")	50÷ 70
M22x1 M24x1.5 M26x1.5	13 (1/2")	50÷ 70
M26x1.5 M27x1.5 M27x2	16 (5/8")	70÷ 100
M30x1.5 M30x2 M33x1.5	20 (3/4")	70÷ 100
M38x1.5 M36x2	25 (1")	100÷ 150
M45x1.5	32 (1.1/4")	150÷ 200

1.8 SCOPE OF DELIVERY OF THE SPREADER



CAUTION

The galvanized elements of the machine have been protected with a special anti-corrosion oil during transport in the container. After unloading the machine, remove the grease with an alkaline cleaner.

The spreader for transport in the container has been dismantled and its components protected from damage, packed and placed in the container.

The spreader adapter was placed on a special stand for loading and unloading and for protection during transport. The parts to be assembled were packed in wooden boxes and placed inside the spreader body.

The cargo box of the spreader, and the parts placed on the floor of the container, were secured by means of conveyor belts to the holders in the container.

The empty spaces between the loads were filled using dunnage bags. Two special beams are used for loading and unloading the spreader into the container. The first beam is located in the front section where the drawbar is mounted, while the second beam is mounted in the rear section of the container.

1.8.12 Components of the spreader

1. Spreader cargo box.
2. Spreader adapter.
3. Cargo box 1 - 429-000-000176 (5740x660x745)
 - Left superstructure, standard 1 pc
 - Right superstructure, standard 1 pc
 - Left superstructure, set (500) 1 pc
 - Right superstructure, set (500) 1 pc
 - Post profile 6 pcs
 - Crossbar 2 pcs
 - Rear PTO shaft 7G5N081CE007R09 1 pc
 - Front PTO shaft 7G7R121CEWR8007 1 pc
 - Connecting elements
4. Cargo box 2 - 429-000-000177 (2590x1100x745)
 - Steering axle 1 pc
 - Rigid axle 1 pc
 - Suspension spring 4 pcs
 - Suspension spring pins 2 pcs
 - Swingarm pins 2 pcs
 - Connecting elements
5. Cargo box 3 - 429-000-000178 (2840x340x620)
 - Left mudguard set 1 pc
 - Right mudguard set 1 pc
 - Middle left cover 1 pc

- Middle right cover 1 pc
 - Connecting elements
6. Cargo box 4 - 429-000-000179 (3090x700x745)
- Drawbar 1 pc
 - Hydraulic support 1 pc
 - Pull rod 1 pc
 - Rear drive shaft 1 pc
 - Drawbar spring fastening 2 pc
 - Spring 2 pc
 - Drawbar slide 2 pc
 - Side ladder 1 pc
 - Reducer 1 pc
 - Connecting elements

1.9 UNLOADING OF THE SPREADER FROM THE CONTAINER



CAUTION

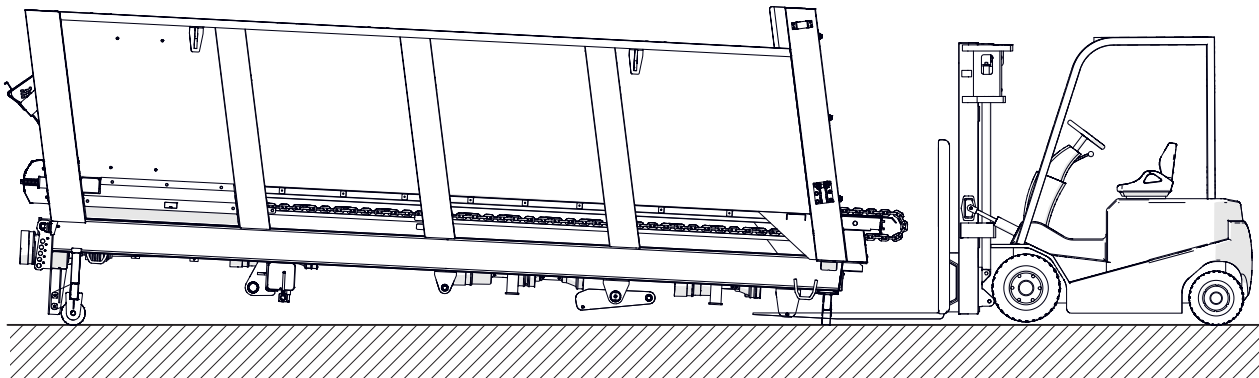
Unloading of the manure spreader from the container should be carried out using a ramp using a suitable forklift that is able to drive completely into the container.

ADVICE

The air valve of the dunnage bag is placed on the edge of the bag for easy access. To release the air from the bag, unscrew the spring valve (1).

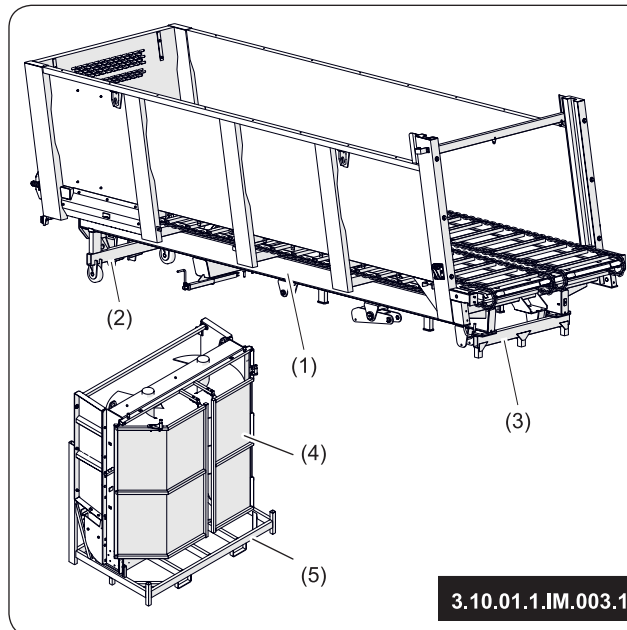


3.10.01.1.IM.001.1



3.10.01.1.IM.002.1

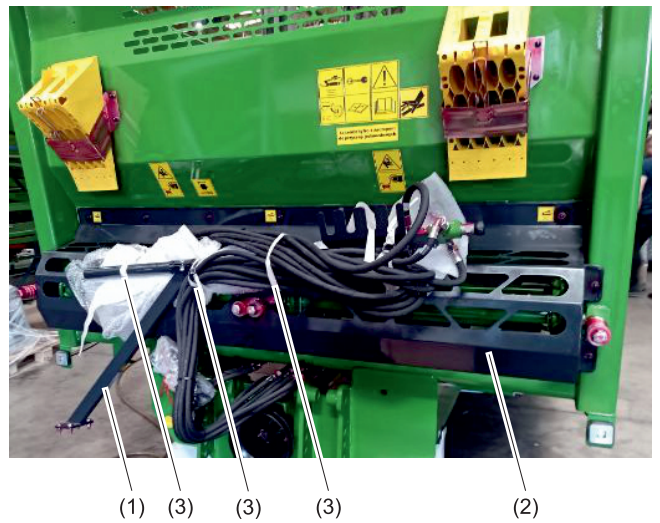
1. Unlock the straps securing the machine in the container.
2. Deflate the dunnage bags.
3. Using a forklift, lift the rear of the manure spreader by supporting the forks under the rear beam (3).
4. Pull the manure spreader out of the container while reversing.
5. Use a forklift to unload the pallet (5) with the adapter (4).
6. Using a crane or overhead crane, unload the wheels, boxes and other elements in the manure spreader's load box.
7. Check the completeness of the delivery according to the chapter "1.7.1 Components of the manure spreader"



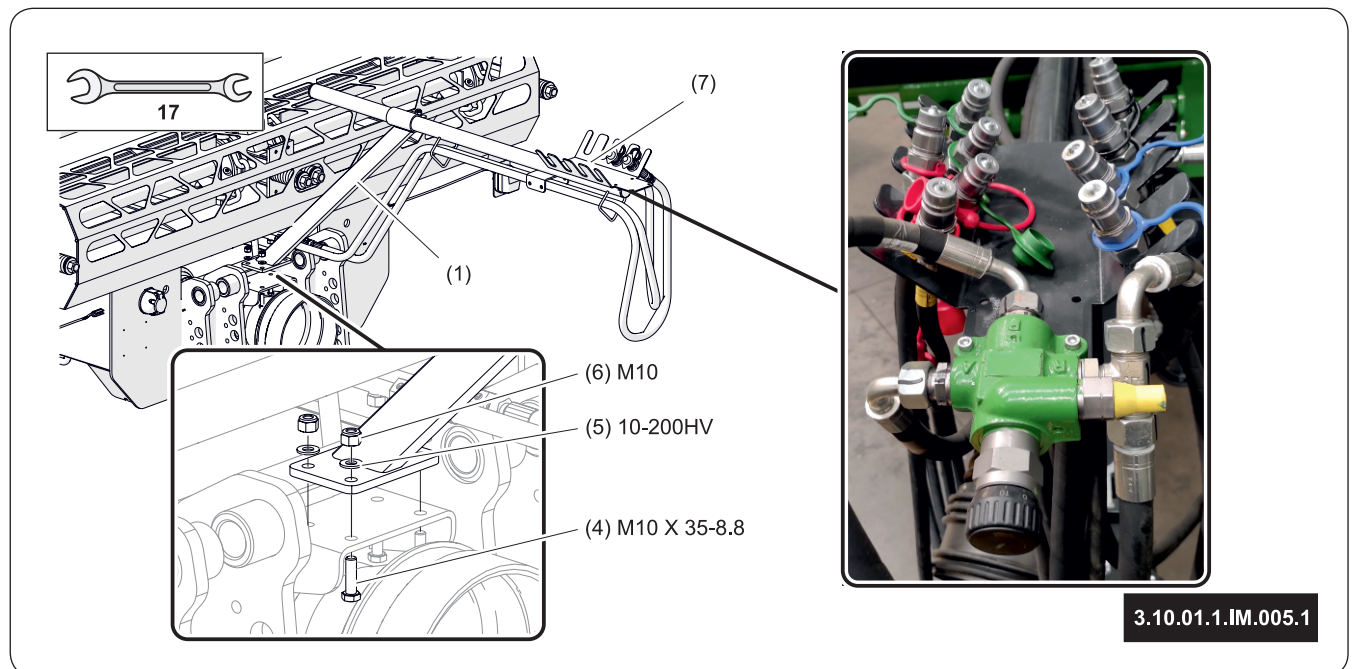
3.10.01.1.IM.003.1

1.10 STEP 1. INSTALLATION OF THE CABLE BRACKET

1. Unlock the straps (3) securing the cable bracket (1) to the front conveyor cover (2).



3.10.01.1.IM.004.1

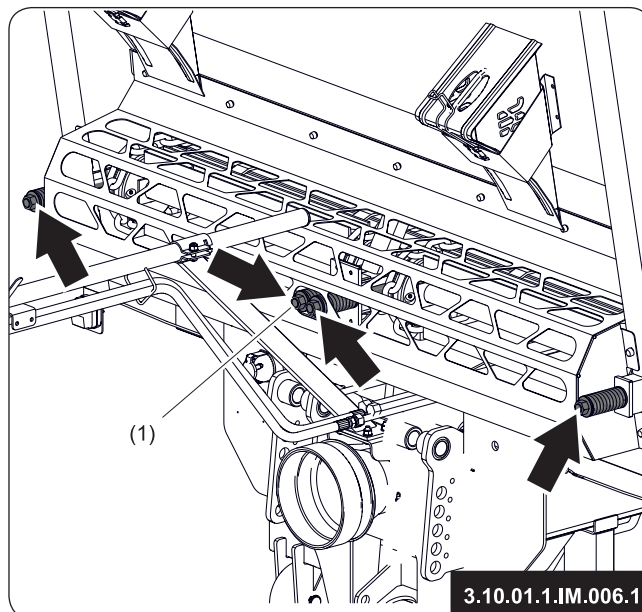


3.10.01.1.IM.005.1

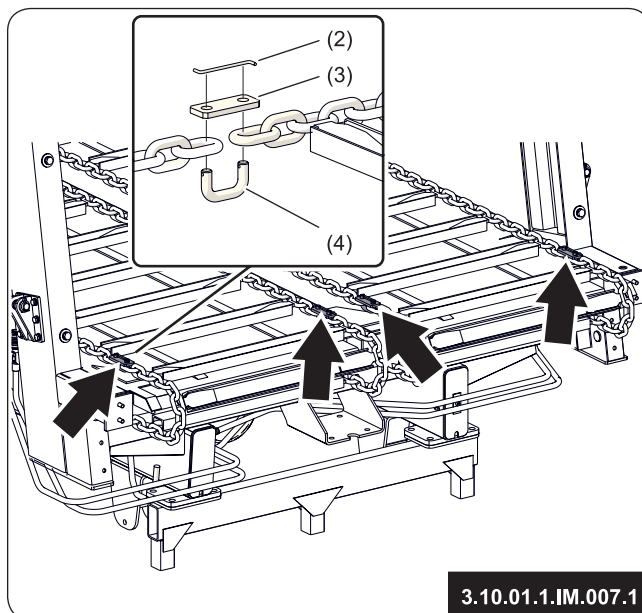
2. Install the bracket (1) with fasteners (4) - (6).
3. Place the hydraulic hoses on the comb (7).

1.11 STEP 2. INSTALLATION OF THE REAR DRIVE SHAFT

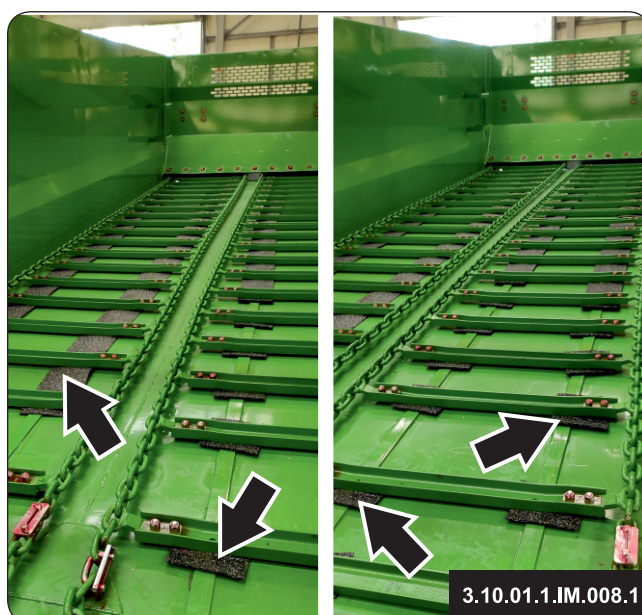
1. Loosen the chains of the floor conveyor by unscrewing the 4 adjustment screws (1) located in the front part of the spreader box.



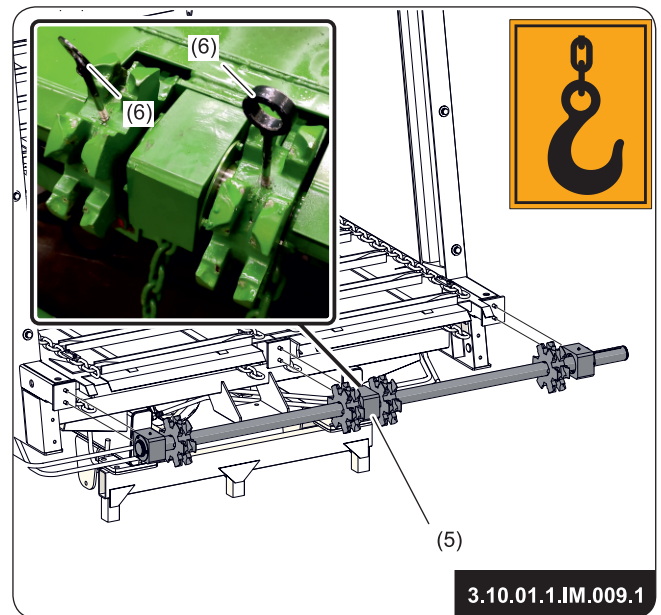
2. Bend back and unlock the chain links (2).
3. Remove the closing plates (3).
4. Remove the links (4)
5. Disconnect the conveyor chains.



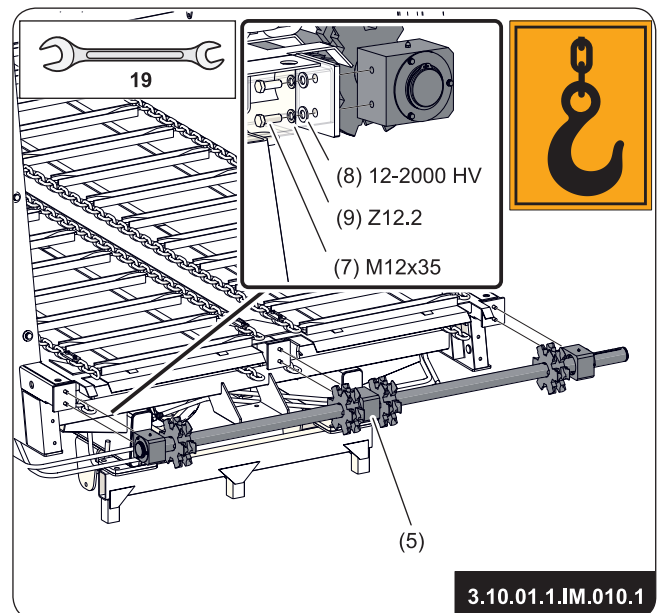
6. Pull out any non-slip mats between the transfer bars and the floor.



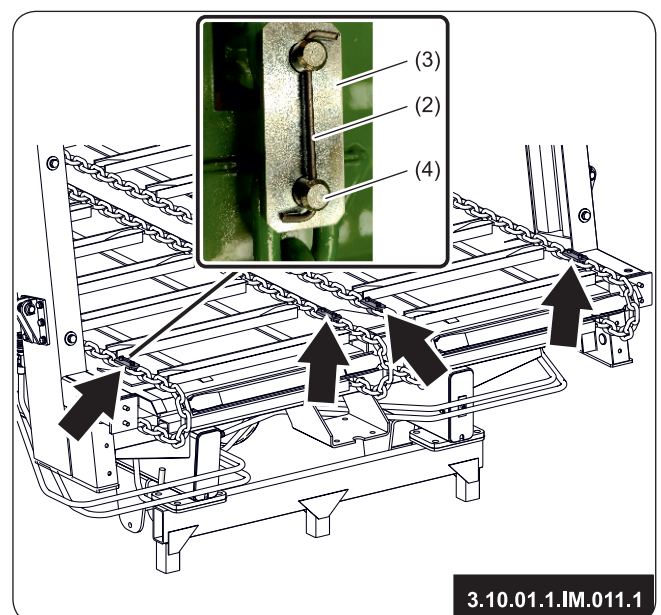
7. Hang the rear propeller shaft (5)
 Use the brackets (6) supplied to suspend
 the drive shaft.



8. Install the rear drive shaft (5) by screwing it to
 the frame using fasteners (7), (8), (9).



9. Connect the conveyor chains with links (4) and
 closing plates (3).
 10. Secure with the clip (2) as shown in the figure.
 Use the new clips supplied in the set to
 secure the chains.



11. Tighten the conveyor chains with the adjusting screws (1).

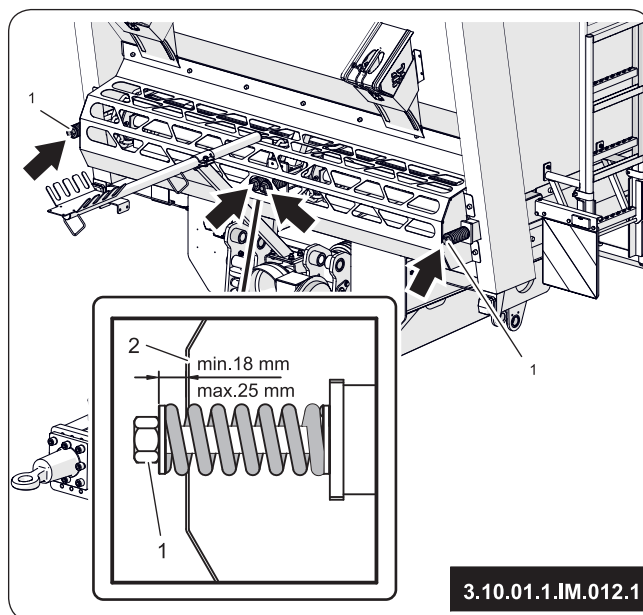


CAUTION

Each conveyor chain must be equally tensioned.

ADVICE

The tension is correct when the distance between the screw washer (1) and the front cover of the conveyor (2) is 18 - 25 mm



1.12 STEP 3. INSTALLATION OF THE FLOOR CONVEYOR GEAR

1. Place the key (2) in the groove of the drive shaft.
2. Install the reducer (1) on the shaft.
3. Install the spacer ring (3).
4. Secure with the Z60 snap ring (4).
5. After installation, check the oil level in the gearbox. The level should be at the halfway point of the sight glass.

ADVICE

At the factory, the gearbox was filled with SAE 90 EP gear oil (API GL-5 SAE 80W/90).

6. Unscrew the hydraulic hoses (6) and hoses (7) connected with a straight coupling (5).



CAUTION

Hoses should not be exposed to collision with moving parts of the machine.

Hoses should not be exposed to rubbing with fixed or moving and vibrating machine parts.

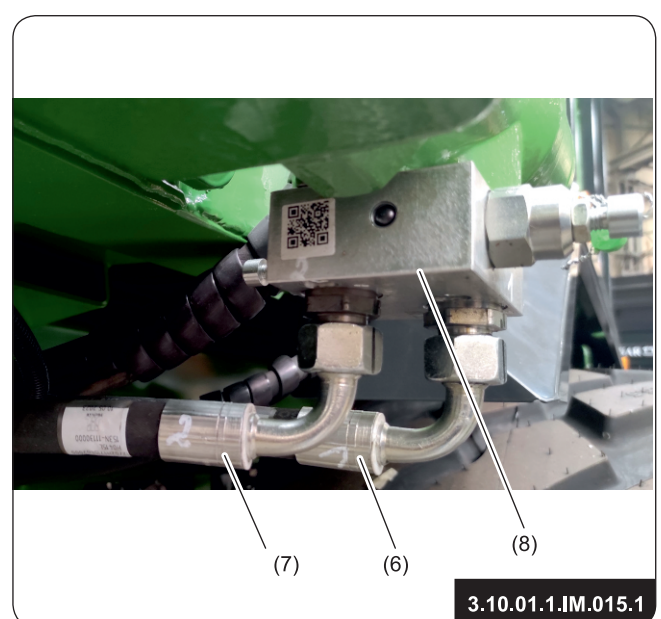
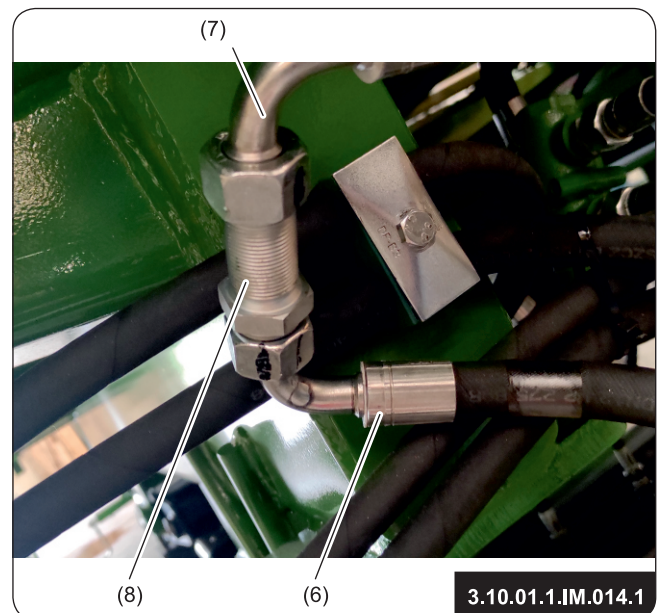
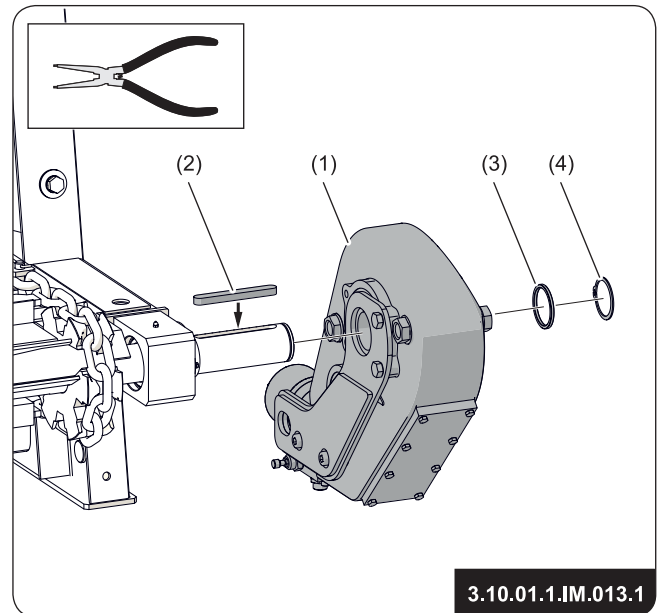
7. Connect the hydraulic hoses (6) and (7) to the overload valve (8).

The correct position of the hoses is marked with numbers on the hose ferrule and valve.



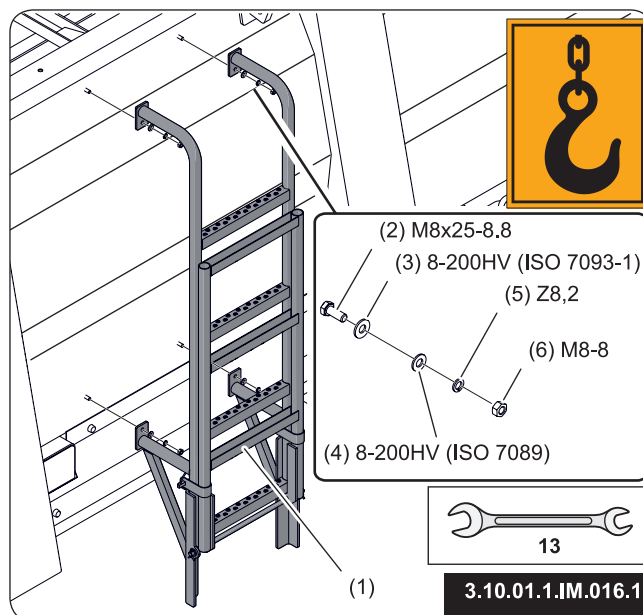
CAUTION

It is forbidden to remove the seals and change the factory settings on the overload valve.



1.13 STEP 4. LADDER ASSEMBLY

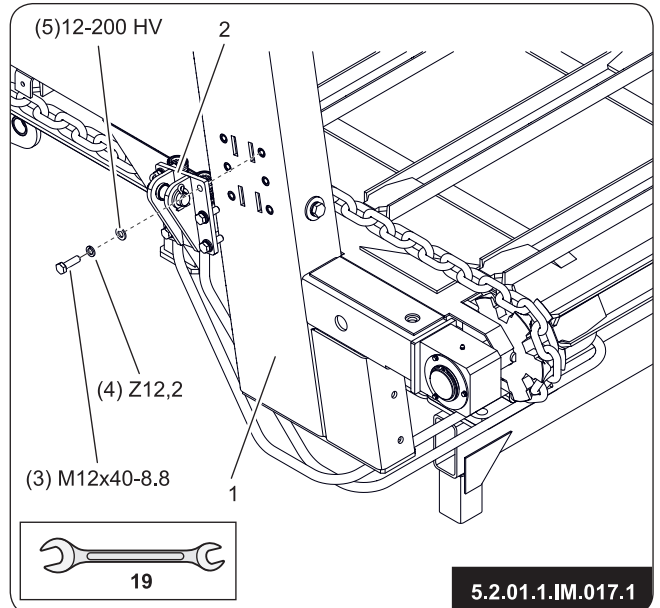
1. Use a crane or overhead crane to hang the ladder.
Use straps for hanging.
2. Screw the ladder to the spreader box with fasteners.



1.14 STEP 5. GATE VALVE ASSEMBLY

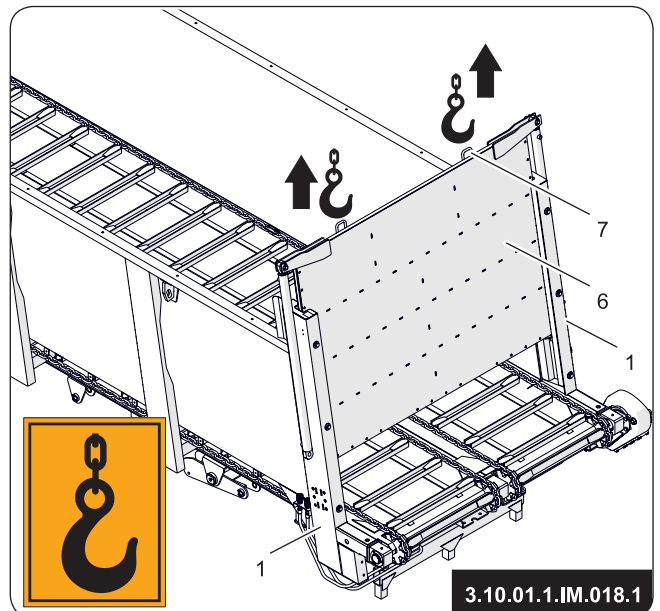
1. Screw the cylinder attachments (2) to the rear pillars (1) on both sides of the cargo box.

Do not use impact wrenches for tightening.

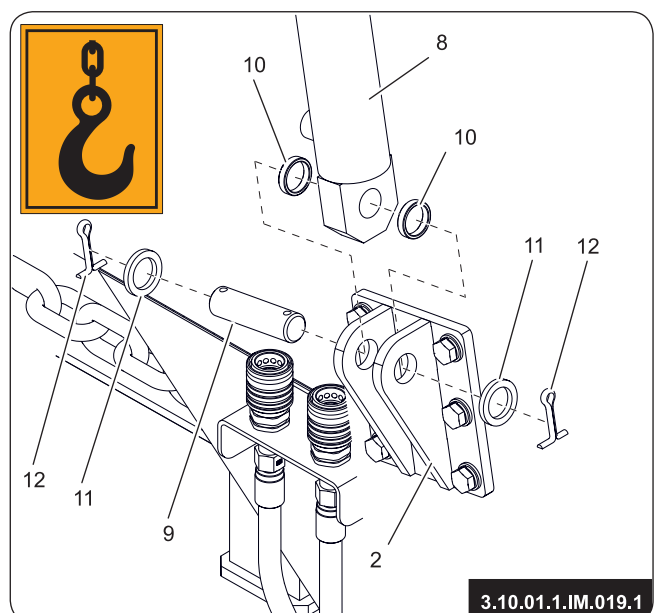


2. Check that the gate guides (3) are covered with a layer of grease. If necessary, apply grease to the surfaces where the valve is to move.
3. Use a crane or overhead crane to suspend the latch (6).

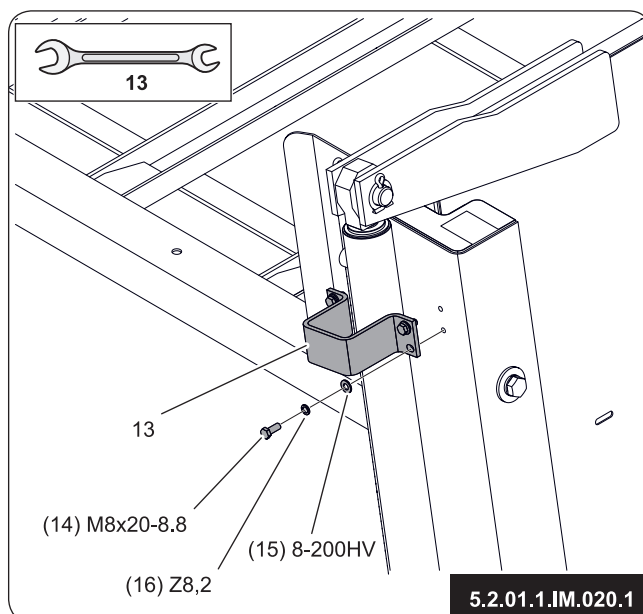
Use the lugs (7) for hanging.



4. Slowly lowering the gate valve, set it in such a position that you can connect the actuator (8) with the mounting (2) using the pin (9).
5. Position the spacer sleeves (10) and install the pin (9).
6. Install washers (11) and secure with cotter pins (12).
7. Repeat the steps on the other side of the machine.



8. Install the cylinder clamps (13) on both sides of the cargo box.

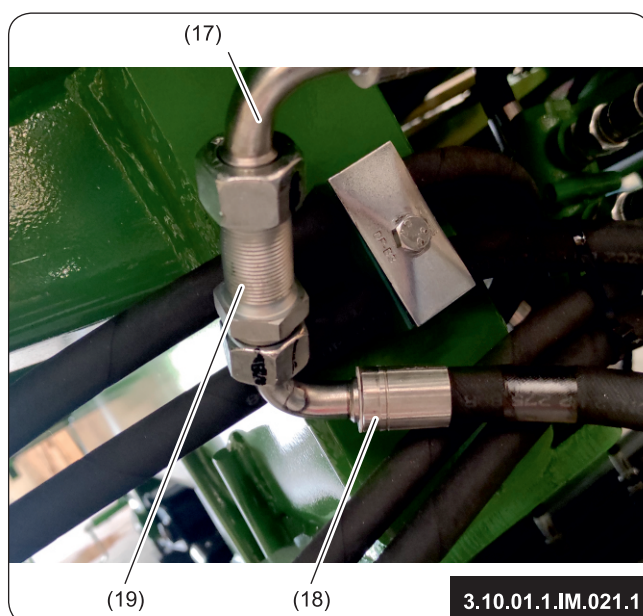


9. Disconnect the hydraulic hoses for feeding the gate valve cylinders on the left side pos. (17) and pos. (18) connected by a fitting (19).

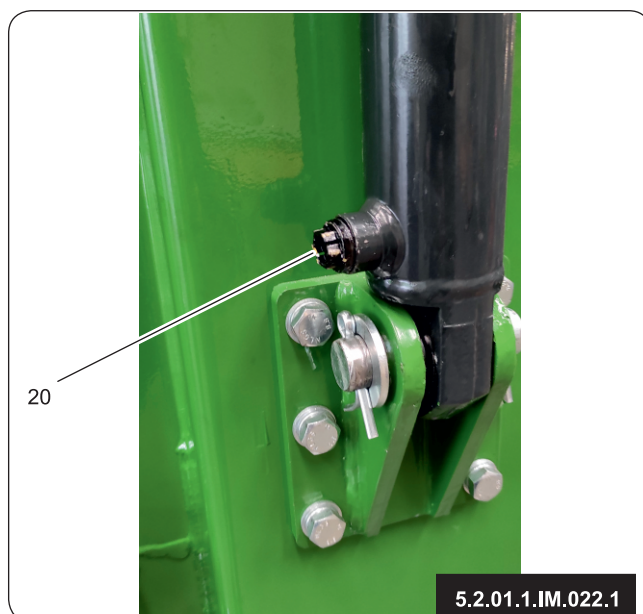
10. Disconnect the hydraulic hoses to the right side gate valve cylinders.

ADVICE

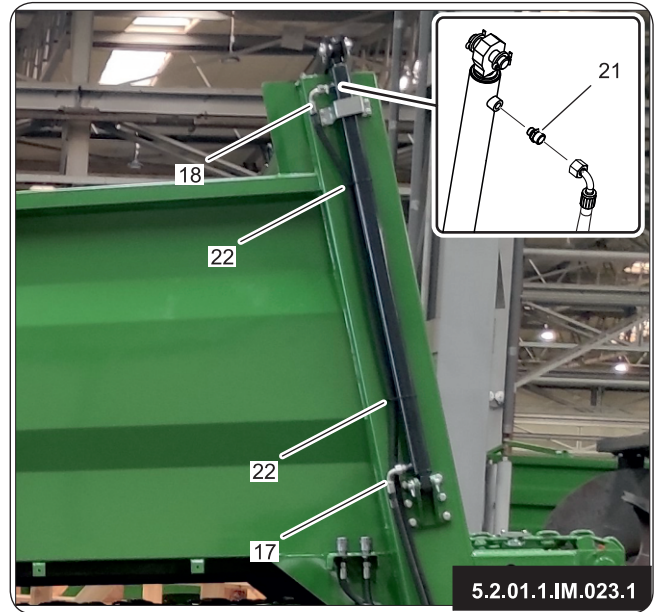
For identification purposes, the hydraulic hoses are marked with a code on a sticker. e.g. **10/02H1712L-99999H0215LA99999A**.



11. Remove the protective plugs (20) located in the cylinder connections on both sides of the manure spreader.

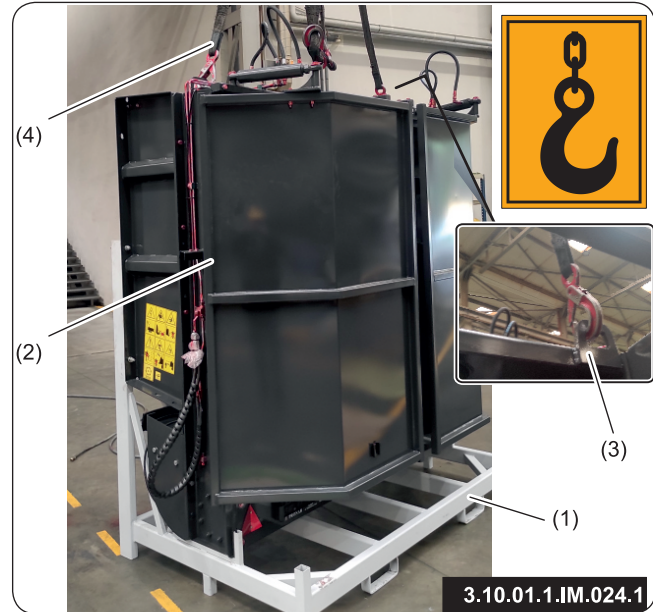


12. Screw the attached hydraulic couplings (21) (GE15LM16X1,5EDOMDCF) to the cylinders in the place of the plugs.
13. Connect the hydraulic hoses to the left gate cylinder. Left side down (17) - (12/02H1715L02000H0215L), left side up (18) - (12/02H1715L03400H1715L).
14. Connect the hydraulic hoses to the right gate actuator. Right side down (12/02H1715L02250H0215L) right side up (12/02H1715L03700H0215L).
15. Secure the hydraulic hoses on both sides to the cylinders with cable ties (22).

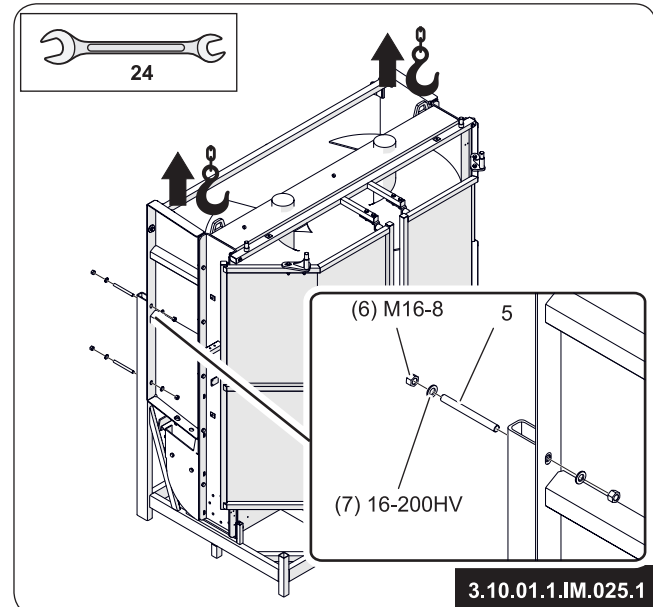


1.15 STEP 6. ADAPTER ASSEMBLY

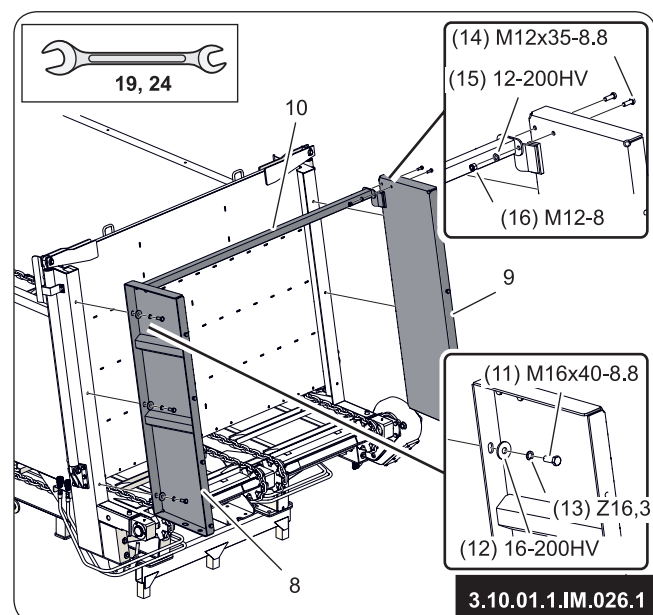
1. Unload the pallet (1) with the adapter (2) attached to it using a forklift.
2. Use a hoist or an overhead crane to attach the slings (4) to the transport hooks (3) and slightly tighten the slings' belts.



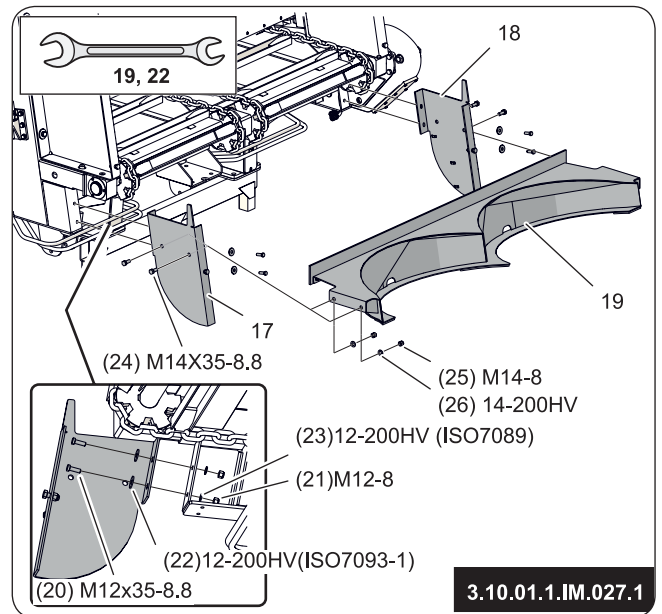
3. Unscrew the nuts (6) and remove the bars (5) securing the adapter to the pallet.
4. Repeat the steps on the other side of the adapter.
5. Lift the adapter and remove it from the pallet.
6. Place the adapter on the wooden beams and secure it against tipping over.



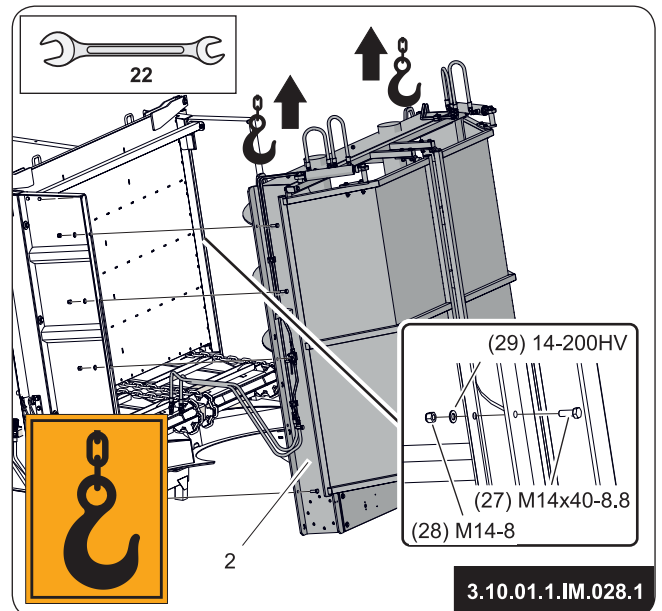
7. Remove the left side panel (8), the right side panel (9) and the connecting beam (10) from the adapter.
8. Install the side panels and the connecting beam to the spreader's load box.



9. Remove the lower left (17) and right (18) bottom panels and the disc cover (19).
10. Install the lower left (17) and right (18) side panels to the load box.
11. Install the disc cover (19).

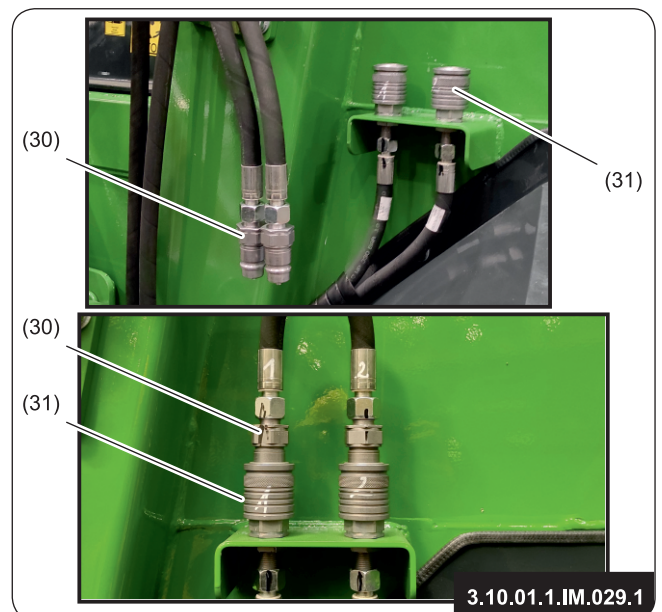


12. Use a hoist or overhead crane to lift and install the adapter (2).
13. Screw the adapter to the sides.



14. Connect the hydraulic plugs (30) of the tailgate control to the connectors (31).

The correct connection position is marked with numbers on the hydraulic hose fitting and on the nipple.

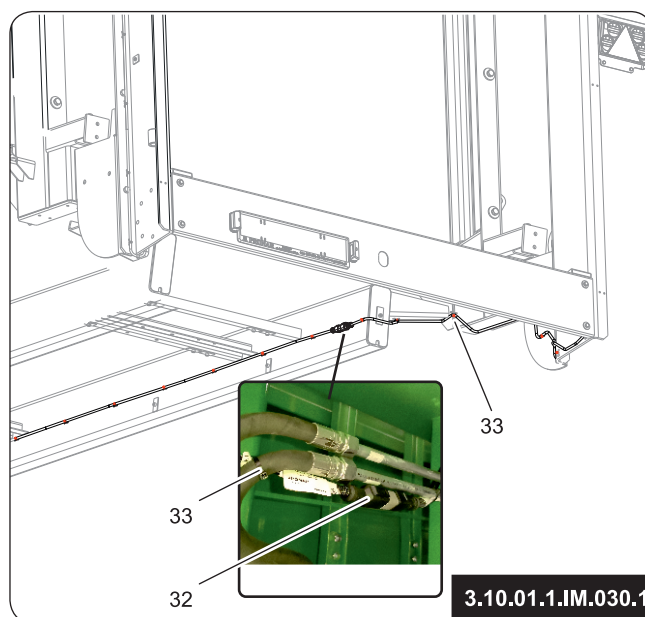


15. Connect the wiring harness plug (32).
16. Fasten the electric harness with cable ties (33) to the welded plates on the frame or adapter and to the hydraulic pipes and hoses.



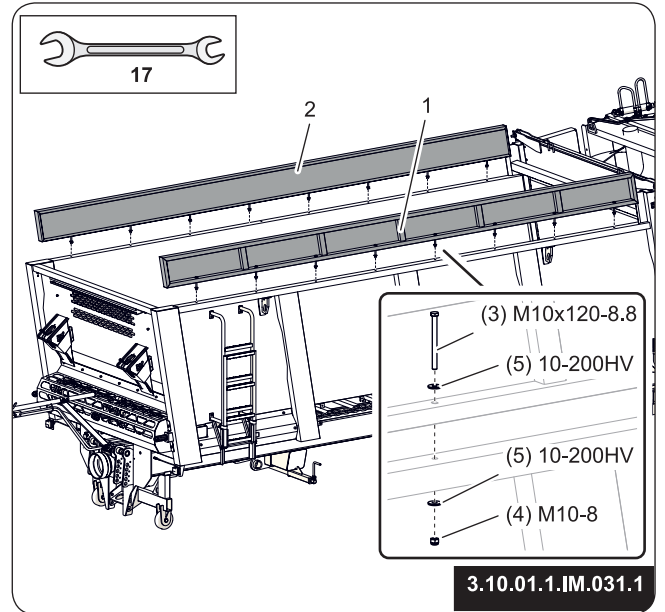
CAUTION

Installation of the PTO shaft can also be done after assembling the suspension and installing the road wheels.



1.16 STEP 7. INSTALLATION OF STANDARD SUPERSTRUCTURES

1. Unpack all items from the box 1 (429-000-000176).
2. Install the left superstructure (1).
3. Install the right superstructure (2).

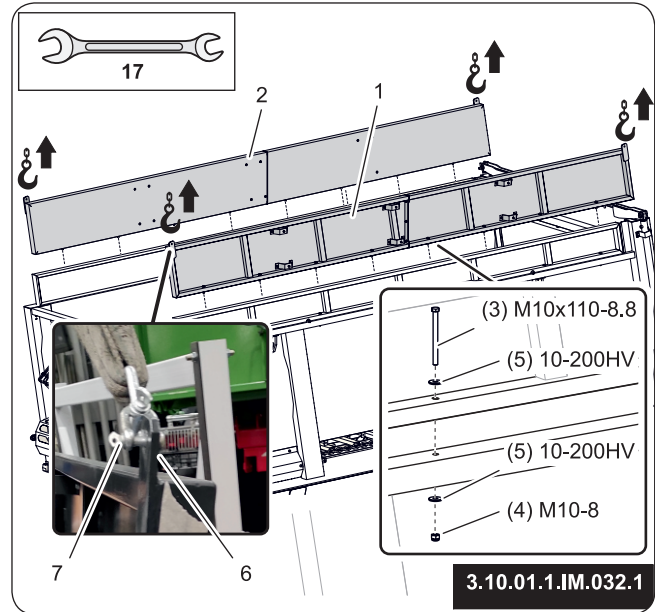


1.17 STEP 8. INSTALLATION OF SUPERSTRUCTURES (500)

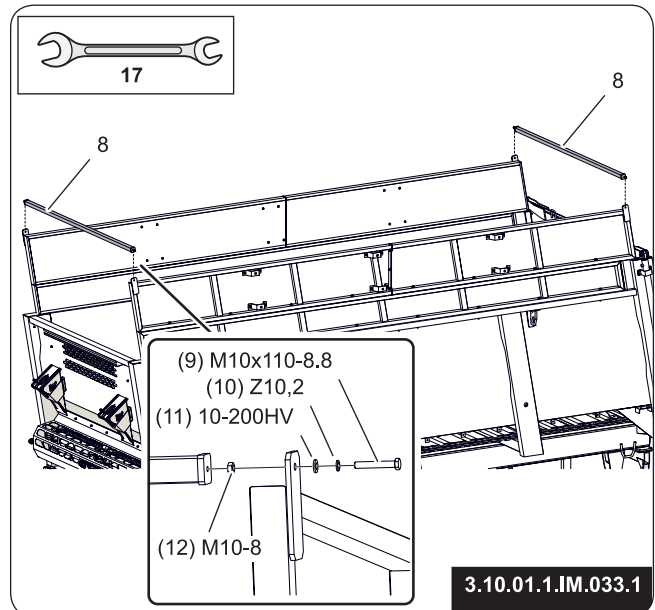
1. Use a hoist or overhead travelling crane to attach the slings to the attachments of the superstructure.

Use the plate (6) to hang the superstructures. You can use shackles (7) to connect the belt to the plate.

2. Install the left superstructure (1).
3. Install the right superstructure (2).

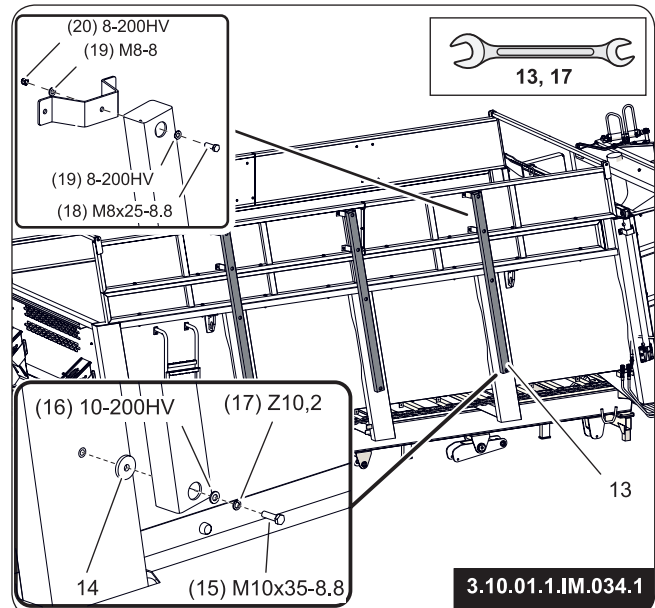


4. Install the crossbars (8) between the left and right superstructures.



5. Install three post profiles (9) to the cargo box and superstructure.

Install spacers (14) between the post profiles and the cargo box.

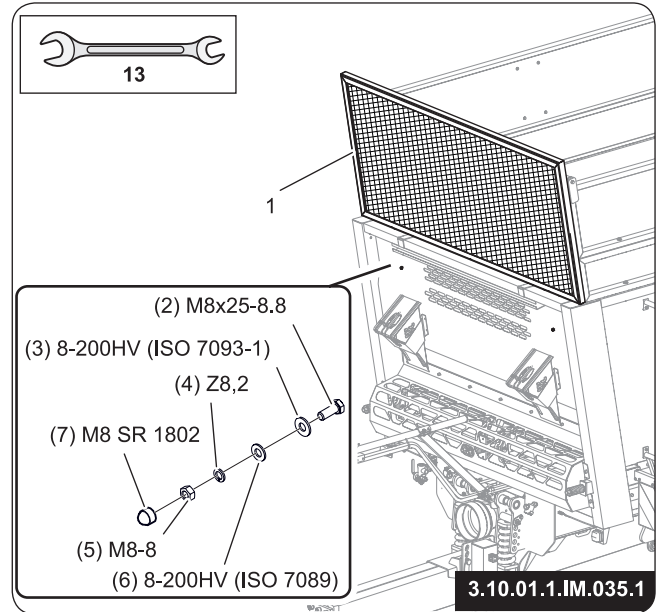


CAUTION

Do not use impact wrenches to tighten the bolts.
Use tightening torques for screw connections according to table 1.2.

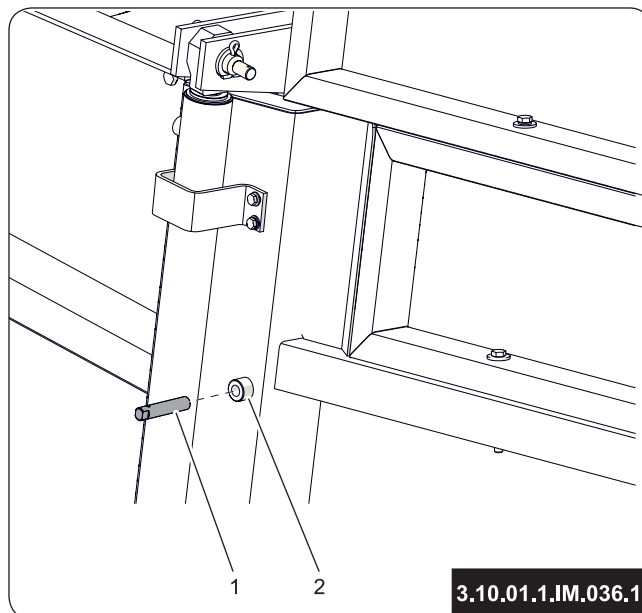
1.18 STEP 9. INSTALLATION OF THE PROTECTIVE MESH

1. Unpack the protective mesh.
2. Install the mesh (1) to the front wall of the cargo box.

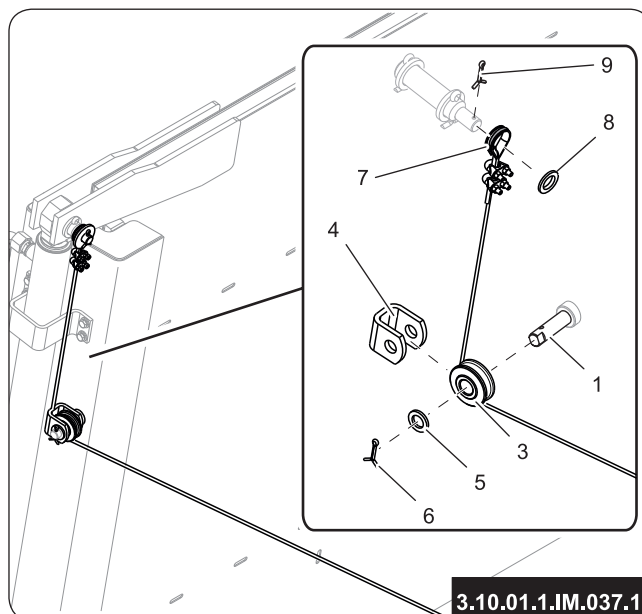


1.19 STEP 10. INSTALLATION OF THE GATE LIFTING MECHANISM

1. Screw the wheel axle (1) into the sleeve (2) located in the rear part of the cargo box.

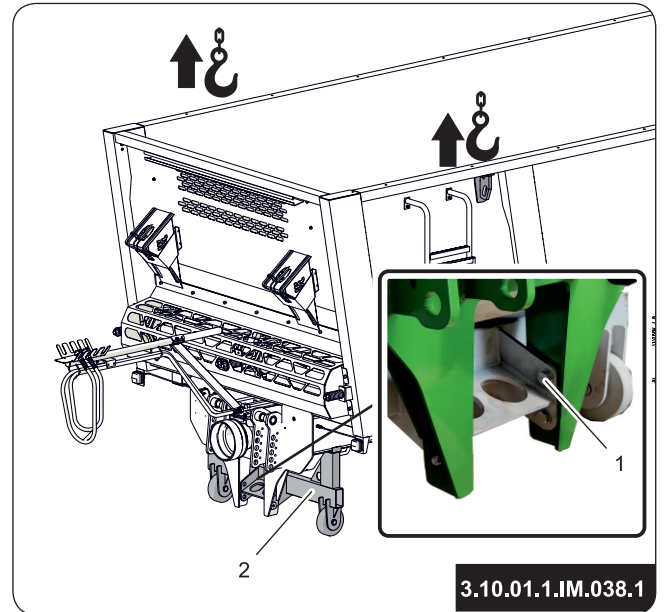


2. Install the wheel (3) on the axle (1), attach the cable (4), put on the washer (5) and secure it with the cotter pin (6).
3. Install the end of the cable (7) on the latch pin, put on the washer (8) and secure with the cotter pin (9).

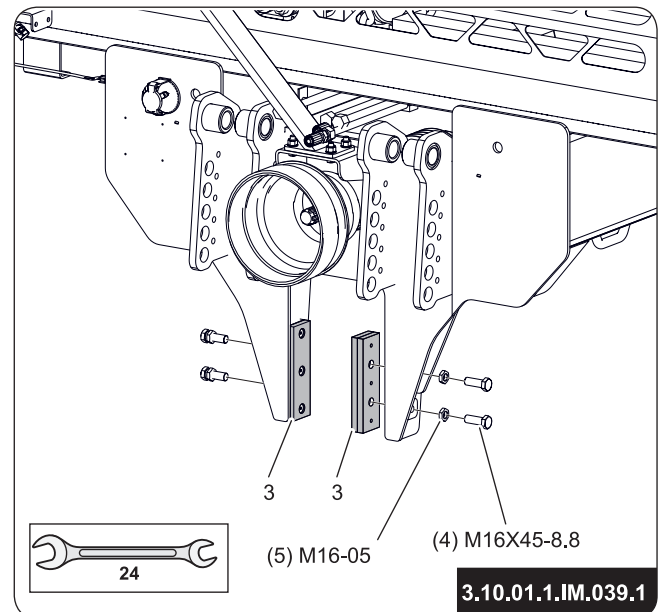


1.20 STEP 11. DRAWBAR ASSEMBLY

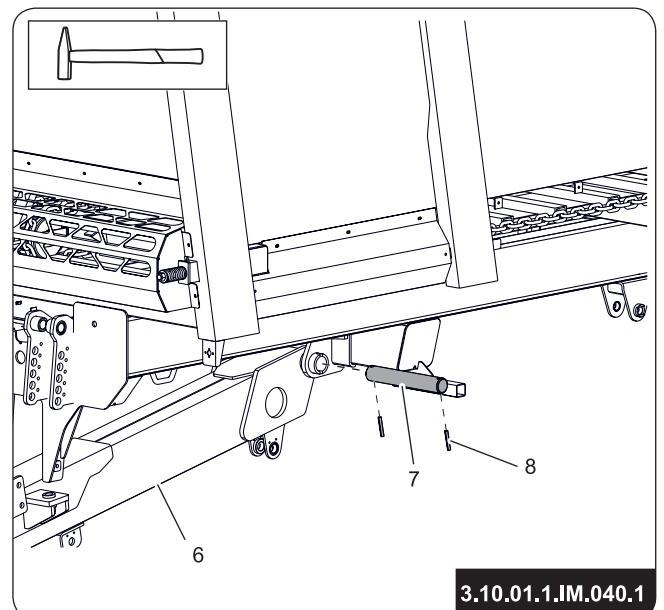
1. Prepare the drawbar and other elements in box 4 (429-000-000179).
2. Using a hoist or overhead crane, attach the slings to the front hooks of the cargo box.
3. Remove the 4 screws (1) securing the front beam (2).
4. Raise the box slightly upwards and remove the beam (2).



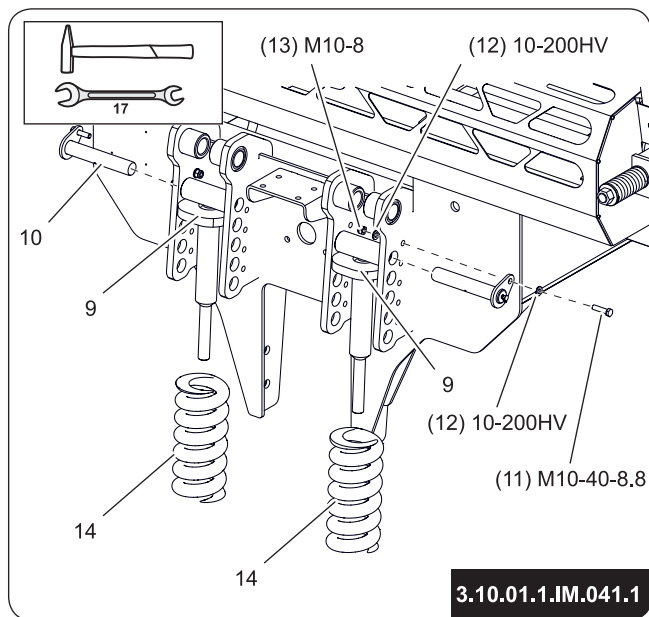
5. Install the sliders (3).



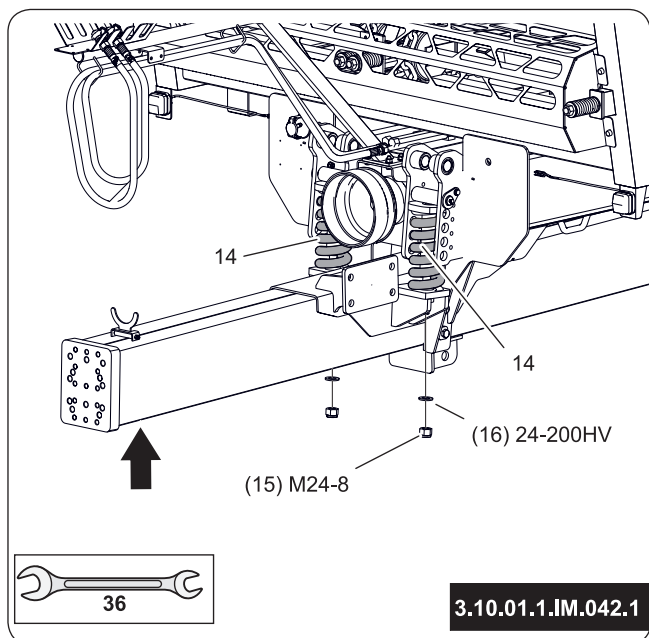
6. Place the drawbar (6) under the spreader box.
7. Install the drawbar pin (7) and secure with pins (8).



8. Install the spring mounts (9) to the frame guides by inserting the pins (10).
9. Secure the pins with fasteners (10) - (13).

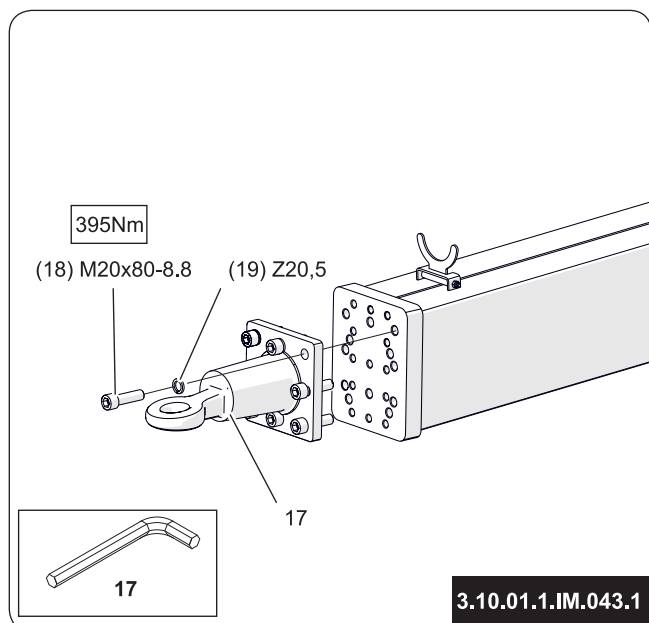


10. Compress the springs (14) when lifting the drawbar. Install the washer and tighten the nuts (15).
11. Place wooden beams under the drawbar.



12. Install the drawbar eye (17).
13. Tighten the screws (18) to 395Nm.

Tighten the screws diagonally with a torque wrench.

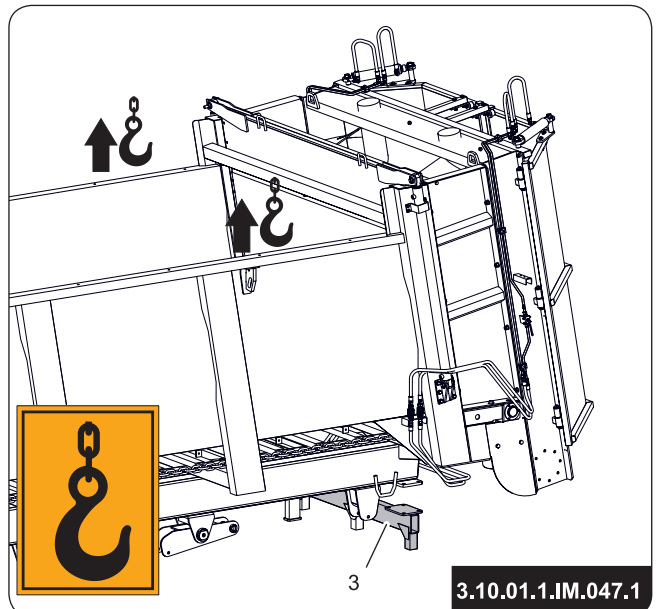


1.21 STEP 12. SUSPENSION ASSEMBLY

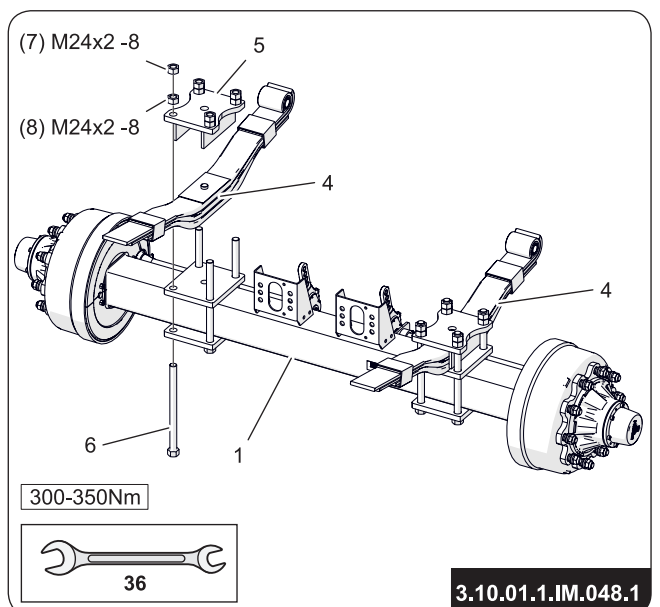
1. Use a hoist or an overhead crane to pull out the axles that are in box 2 (429-000-000177).



2. Use a hoist or overhead crane to attach the slings to the rear hooks of the cargo box and lift the back of the box.
3. Unscrew the fastening screws and dismantle the rear beam (3).

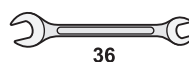


4. Unscrew the locknuts (7) and the nuts (8).
5. Remove the top plate (5).
6. Install the springs (4) to the thru axle (1).
7. Install the top plate (5) onto the spring (4).
8. Tighten the nuts (8) diagonally to the specified torque.
9. Tighten the locknuts (7) diagonally to the specified torque.
10. Repeat steps (4 - 9) for the steering axle (2).



CAUTION

Tighten the nuts diagonally using a torque wrench to a torque of 300-350 Nm.

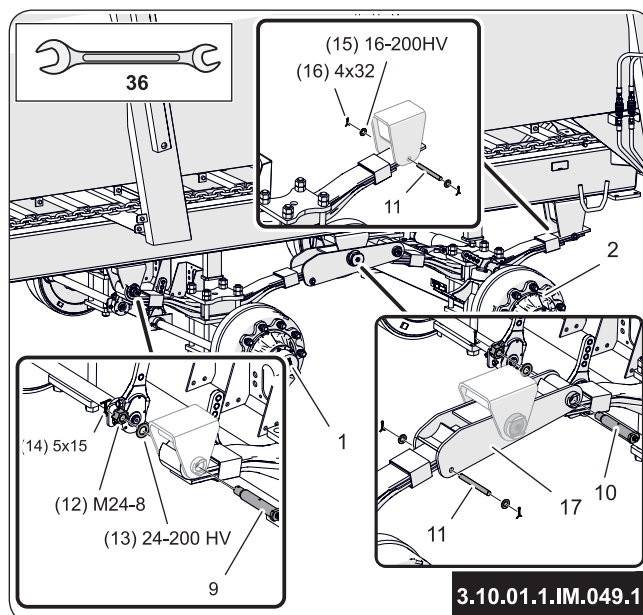


11. Install the rigid axle (1) assembled with springs to the front suspension.

Pins (9) (green colour) shall be mounted to the rigid axle.

12. Install the steering axle (2) assembled with springs in the rear part of the suspension.

Mount the pins (10) (black) to the steering axle and to the rocker arm (17).



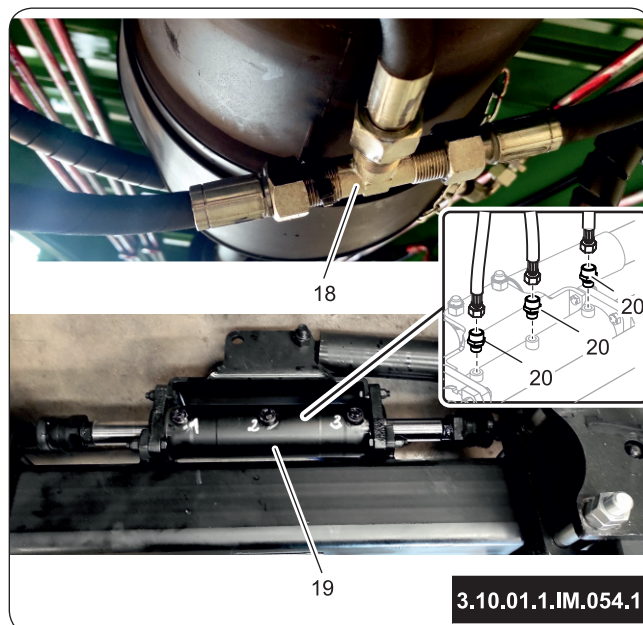
13. Disconnect the 3 hydraulic hoses of the rear axle lock control connected by a tee (18).

14. Remove the protective caps from the cylinder ports (19).

15. Screw the attached hydraulic couplings (20) GE15LM16X1,5EDOMDCF to the cylinder connections in the place of the plugs.

16. Connect the 3 wires to the cylinder (19) of the rear axle.

The correct position of the cables is marked with numbers (1), (2), (2) on the cable crimps and on the cylinder body.



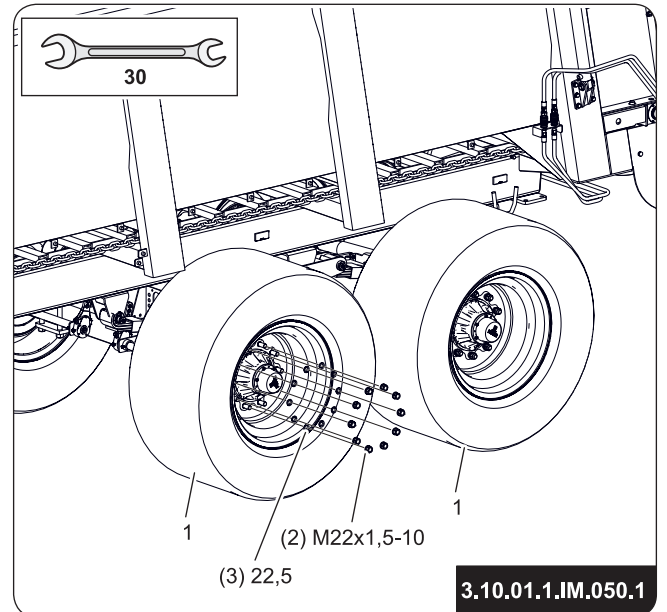
1.22 STEP 13. INSTALLATION OF ROAD WHEELS

1. Use a hoist or overhead crane to attach the slings to the rear hooks of the cargo box and lift the back of the box.
2. Install the wheel, put on the washers (3) and nuts (2) tighten with a torque of 450 -510 Nm.



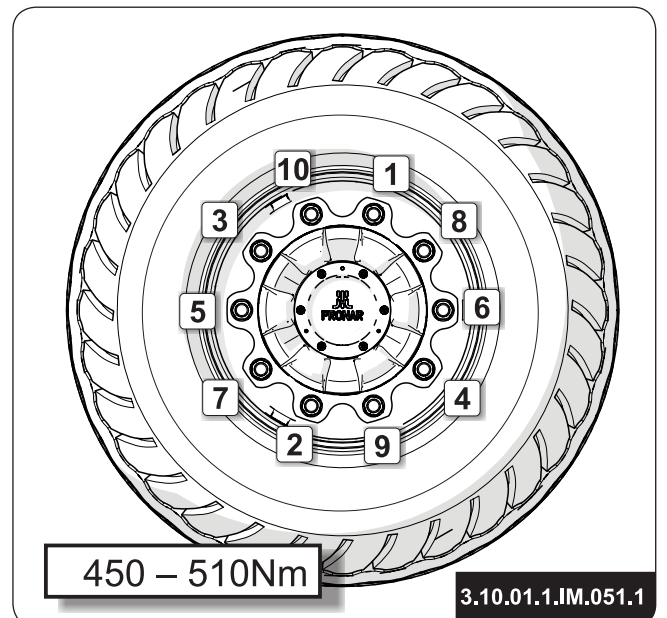
CAUTION

Wheel nuts must not be tightened with impact wrenches, due to the danger of exceeding the permissible tightening torque, which may result in breaking the connection thread or breaking the hub pin.



3. Wheel nuts should be tightened in accordance with the sequence shown in the figure (1-10).

The wheel nuts be tightened gradually diagonally (in several stages until the required tightening torque is achieved), using a torque wrench.



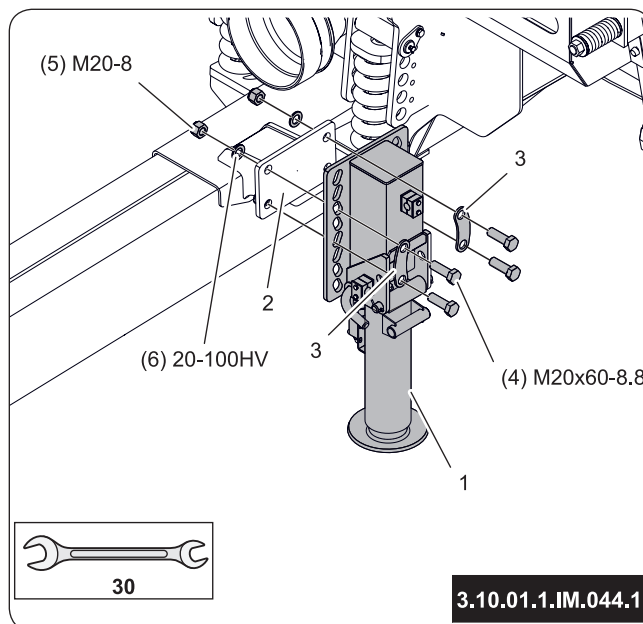
1.23 STEP 14. INSTALLATION OF THE HYDRAULIC SUPPORT

1. Install the hydraulic support (1) to the mounting plate (2).

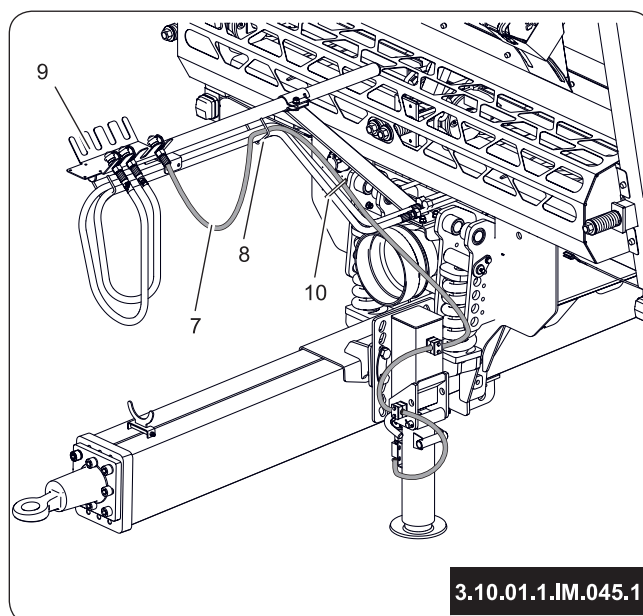


CAUTION

Screw the support to the drawbar as high as possible, remember that it should raise the drawbar at least 50mm above the level when fully extended.

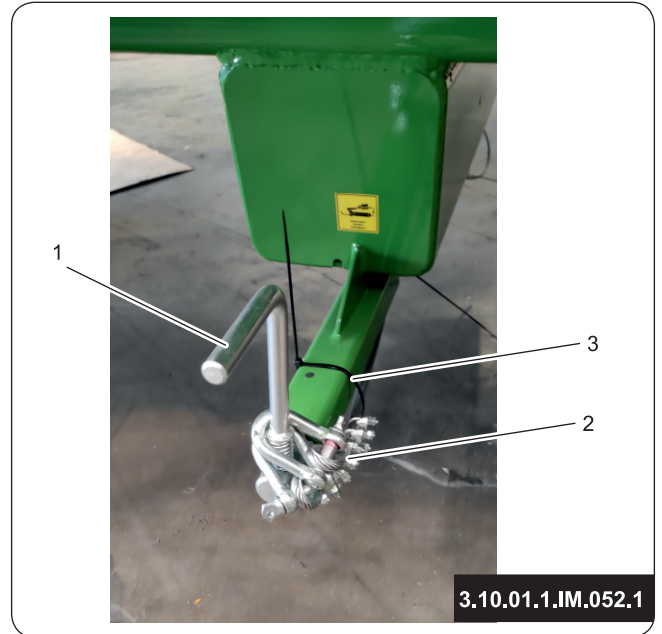


2. Put the hydraulic hose (7) through the clamp (8). Place the plug on the bracket (9).
3. Secure the hose with cable ties (10) to other hydraulic hoses.



1.24 STEP 15. CONNECTING OF THE HANDBRAKE CABLE

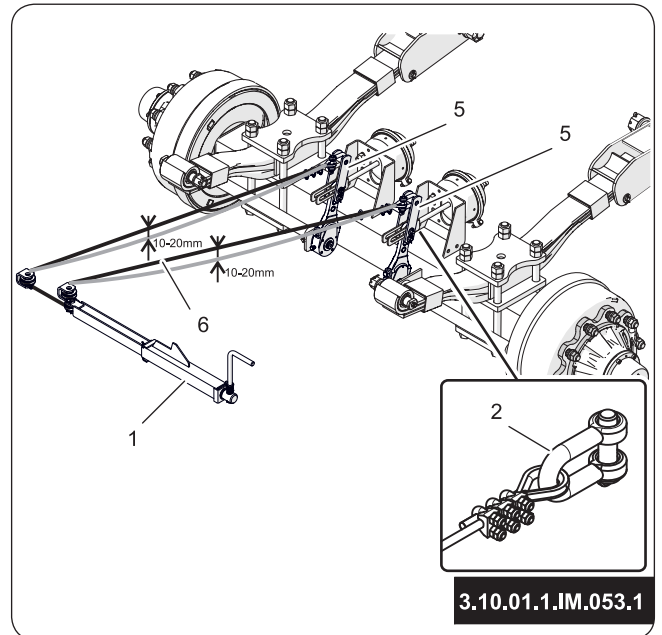
1. On the body of the handbrake mechanism (1), release the clamp (3) and remove the cable with shackles (2).



2. Mount the shackles (2) to the arms (5) of the axle brake lever.
3. Apply the parking brake by turning the crank of the brake mechanism (1) to the right.
4. Check the cable tension (6).

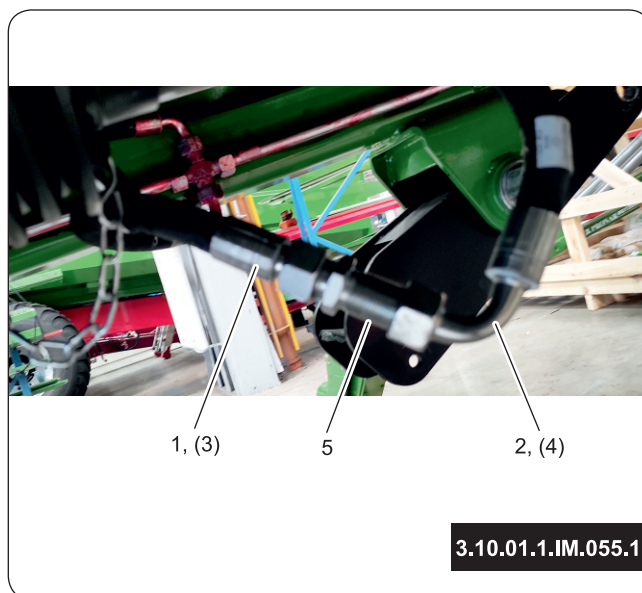
ADVICE

When the mechanism screw is completely removed, the cable should hang about 10 to 20 mm.

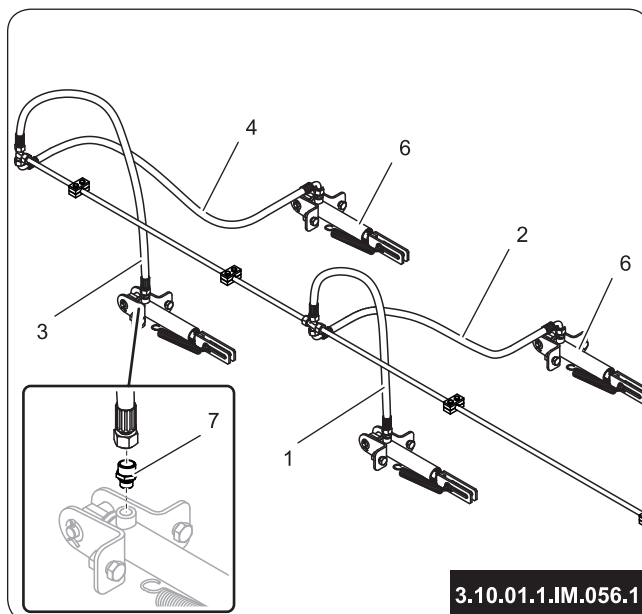


1.25 STEP 16. CONNECTING OF THE HYDRAULIC BRAKES

1. Disconnect the hydraulic conduits (1) - 12/02H1715L00970H1715LD and (2) - 12/02H1715L00520H0215L of the front axle brakes connected with the coupling (5).
2. Disconnect the hydraulic conduits (3) - 12/02H1715L01050H1715LX and (4)-12/02H1715L01800H1715LD of the rear axle brakes connected with the coupling (5).

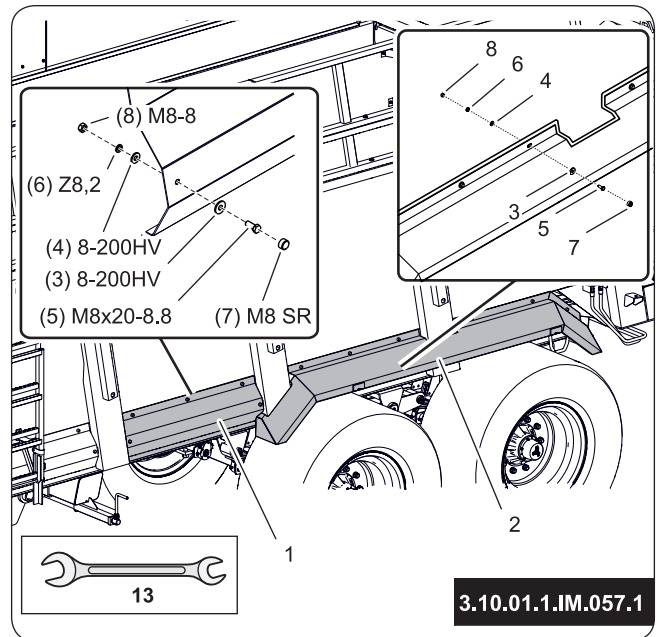


3. Screw in the fittings (7) - GE15LR3/8EDOMDCF.
4. Connect the hoses (1) and (2) to the cylinders (6) of the front axle.
5. Connect the hoses (3) and (4) to the cylinders (6) of the rear axle.



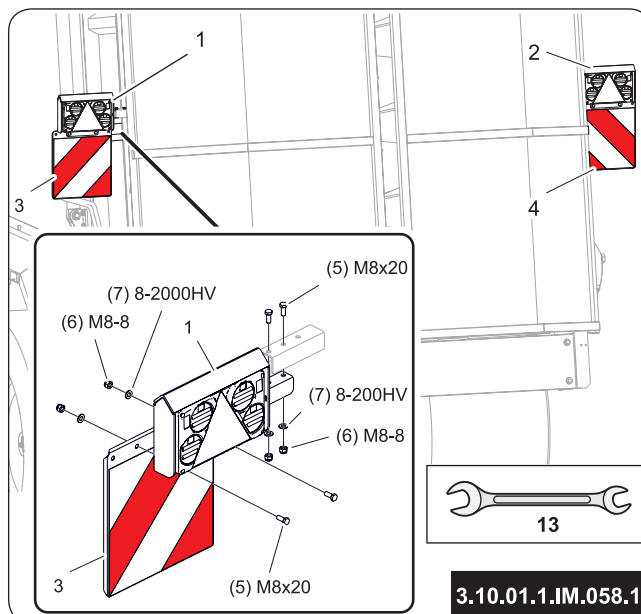
1.26 STEP 17. INSTALLATION OF SIDE COVERS

1. Install the left cover (1).
2. Install the left mudguard (2).
3. Repeat the same steps for the guard and fender on the right side of the spreader.

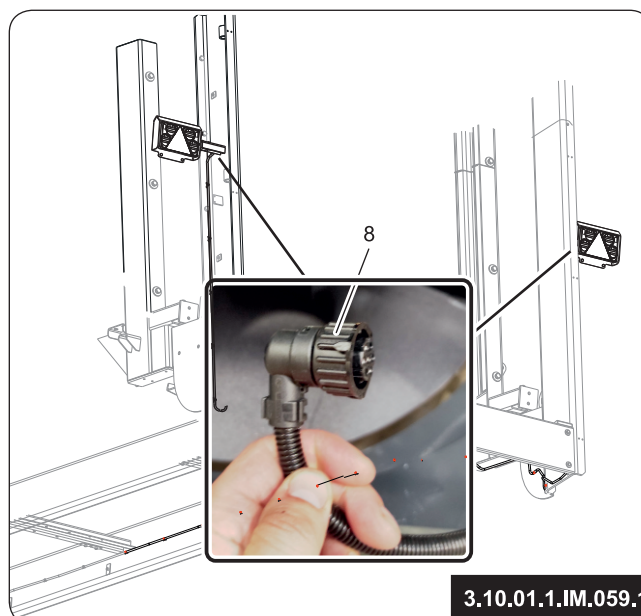


1.27 STEP 18. INSTALLATION OF LAMPS AND WARNING SIGNS

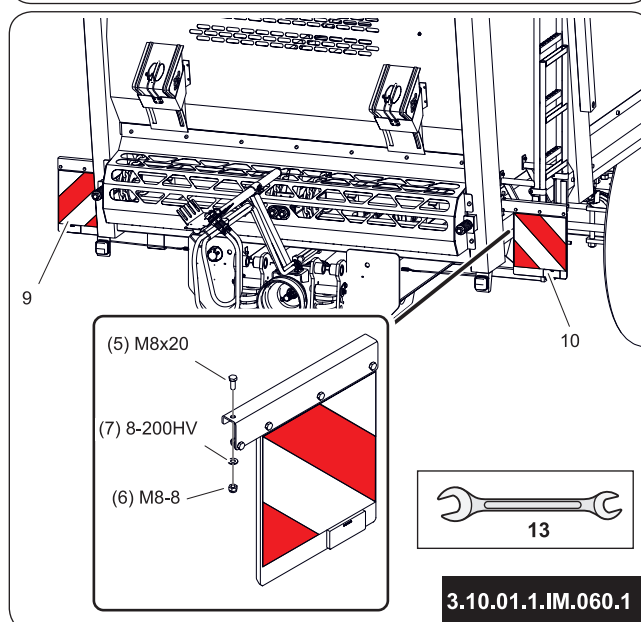
1. Install the left (1) and right (2) brackets to the mounts on the adapter frame.
2. Install the warning plates (3) and (4) to the brackets.



3. Connect the connectors (8) of the electric harness to the left and right rear lamps.
4. Fasten the harness with the zip ties.

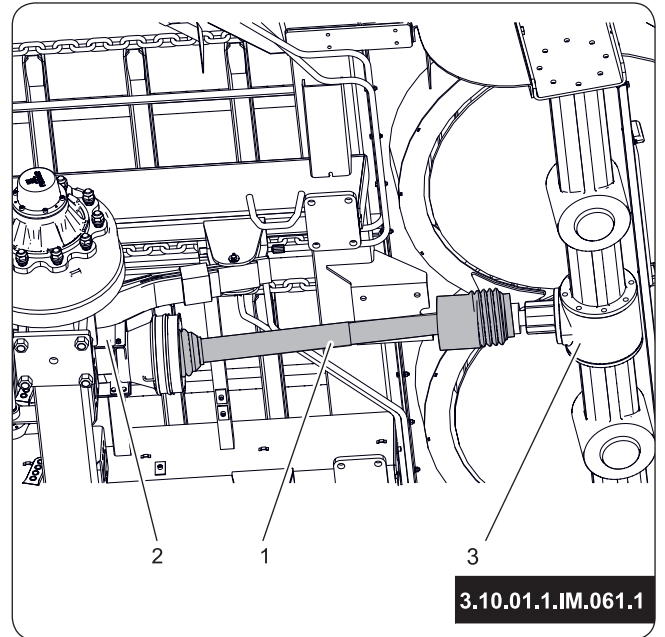


5. Install the front warning plates (9) and (10).



1.28 STEP 19. INSTALLATION OF PTO SHAFTS

1. Install the rear PTO shaft (1)-7G5N081CE007R09 between the PTO housing (2) and the adapter gear (3).



2. Connect the PTO shaft (4)-7G7R121CEWR8007 to the adapter (5).
3. Place the shaft on the support (6).

