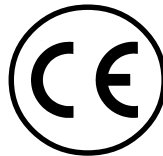


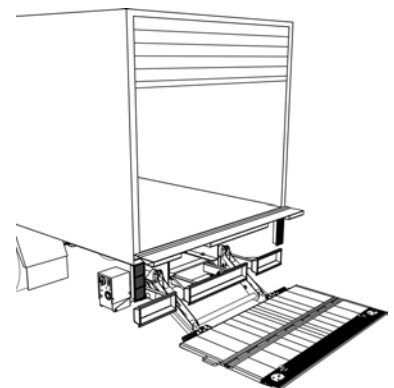
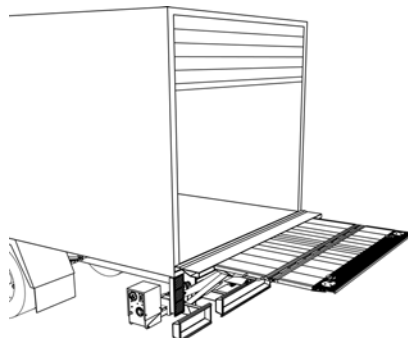
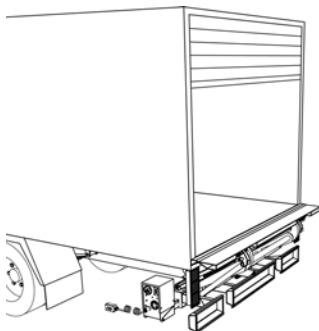
INSTALLER'S MANUAL FOR THE "AHT" TAIL LIFT



ATK-1000ST/AL

with underrun beam

LEFT HAND DRIVER



SERVICE QUALIFICATIONS TO INSTALL THE TAILGATE LOADER

The installer should be well trained in the proper procedure for installing the AHT before beginning the installation.

Carefully read the manual **before starting to install** the AHT tailgate loader.

Only mature adults, age 18 and above, should install the AHT tailgate loader.

Installer should be well qualified for installing hydraulic equipment.

Installer should be well qualified for installing the electrical equipment.

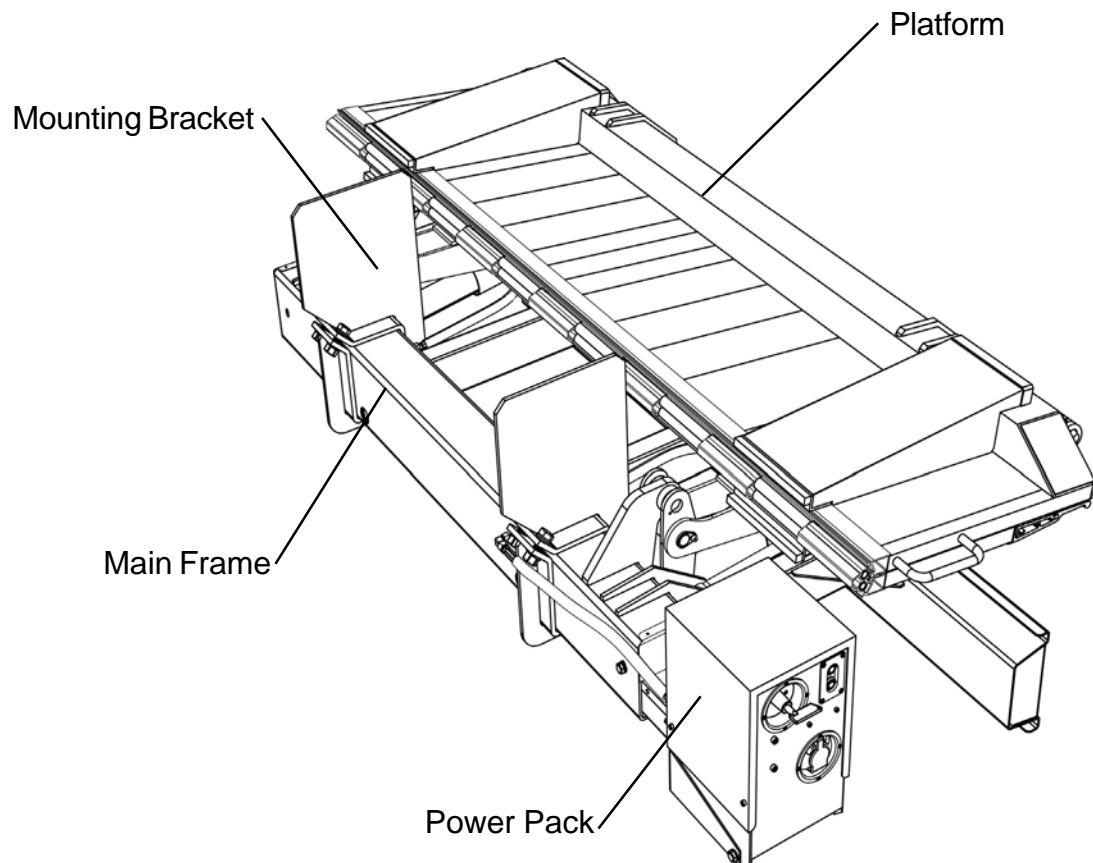
INSTALLATION GUIDELINES

- 1) Remove bumpers, lights, tool box etc. from rear of vehicle if necessary.
- 2) Install the truck floor extension on truck body.
- 3) Cut and shape the body and chassis to fit the tailgate.
- 4) Unfold the platform and place the mounting brackets on each side. Clamp the mainframe onto a floor jack.
- 5) Place the tailgate loader under the truck at its approximate location.
- 6) Energize the Power Pack.
- 7) Raise the platform above the floor jack.
- 8) Install the mounting device.
- 9) Position the main frame and the mounting brackets to its final position.
- 10) Place the mounting brackets on the truck frame and fix it.
- 11) Remove mounting device and tilting lock.
- 12) Adjust the platform level.
- 13) Install a platform lock

UNPACKING THE TAILGATE LOADER

A complete unit will be shipped on one pallet consisting of:

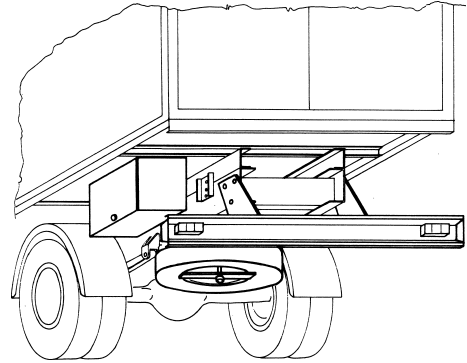
Main frame with lifting arms, cylinders, platform, power pack, mounting brackets, 2 button-remote-control, installation material and installation manual.



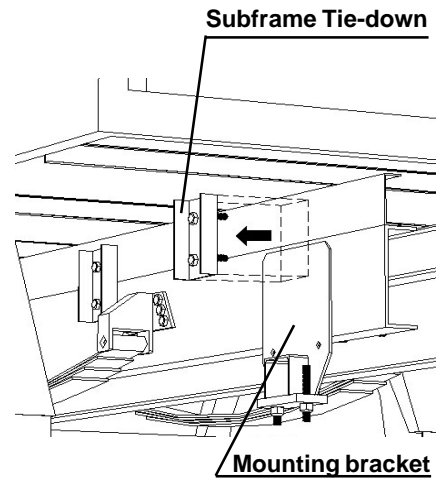
The tailgate loader is completely assembled and ready for use.

PREPARING FOR INSTALLATION

Remove rear lights, bumper, tool box and spare wheel, if necessary.
Disconnect the battery cable to prevent damage to the battery while welding.

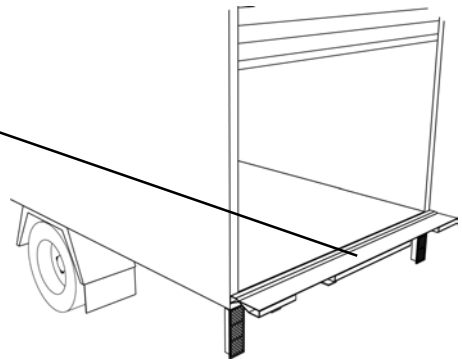


Remove any obstruction attached to the frame of the vehicle that would interfere with the installation. The mounting brackets will cover the mainframe and subframe.



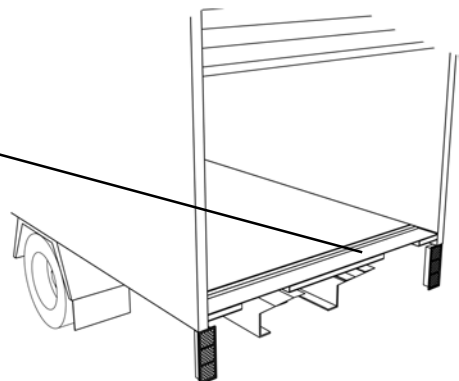
The ATK-Tailgate requires a truck floor extension sheet at the rear of the vehicle. The extension sheet allows the required space for the platform to be stowed.

TRUCK FLOOR
EXTENSION SHEET



The extension sheet can be fitted inside of truck body.

TRUCK FLOOR
EXTENSION SHEET



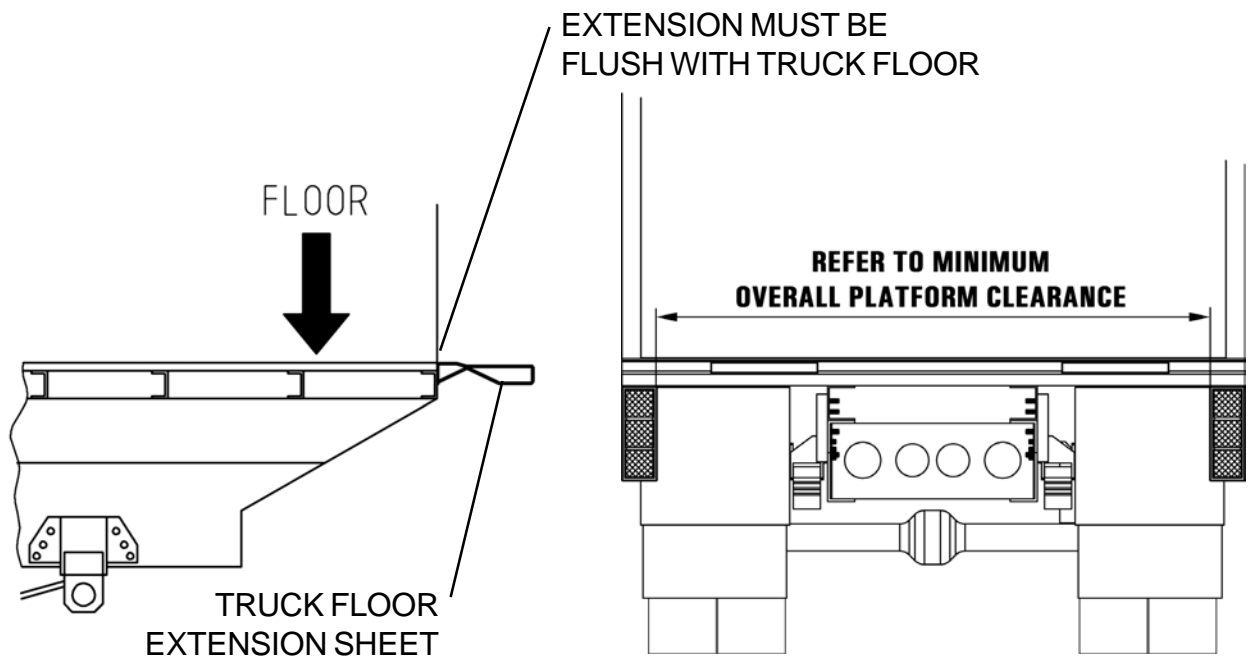
PREPARING FOR INSTALLATION

If truck floor extension sheet is installed at the rear of vehicle:

It's necessary to weld the truck floor extension sheet onto the truck body.

WELDING DETAILS: STITCH WELD ONLY

* Weld 25mm Miss 300mm TOP AND BOTTOM AS REQUIRED



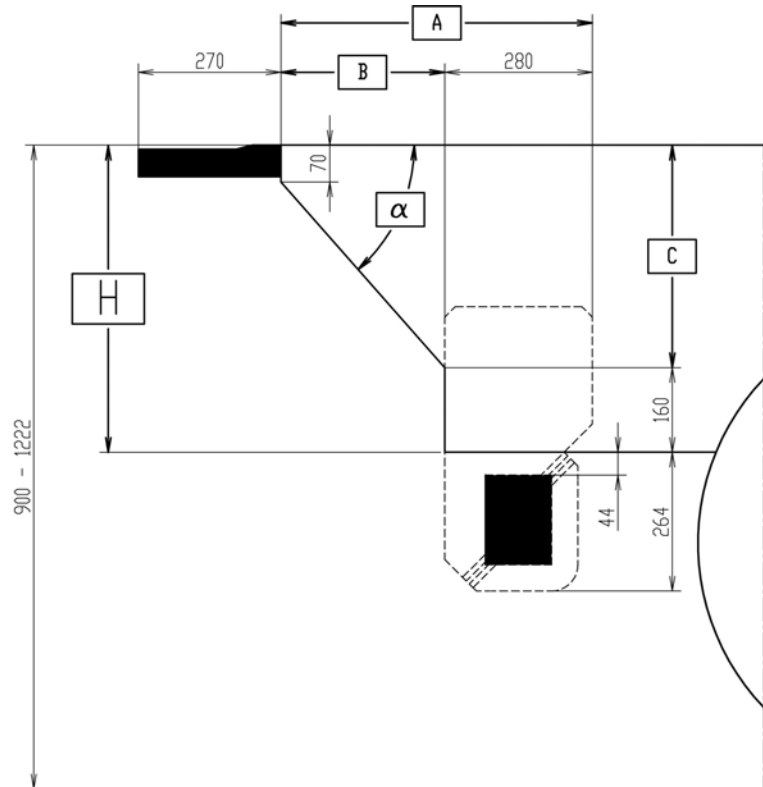
PREPARING FOR INSTALLATION

Cutting and shaping body and chassis to fit the ATK-1000

The diagrams below show the shape the body member must be to fit the folded tailgate.

PLATFORM LENGTH: 1150mm
 LIFT ARM LENGTH : 750mm
 FLOOR TO GROUND : min. 900mm (loaded)
 max. 1222mm (unloaded)

FROM TRUCK FLOOR TO UNDERSIDE OF MAIN FRAME				
H	A	B	C	α
583 ⁻⁸	590	310	423	48.6°
570 ⁺⁵	604	324	410	48.3°
560 ⁺⁵	614	334	400	44.6°
550 ⁺⁵	624	344	390	42.9°
540 ⁺⁵	633	353	380	41.2°
530 ⁺⁵	642	362	370	39.6°
520 ⁺⁵	651	371	360	37.9°
510 ⁺⁵	659	379	350	36.4°
500 ⁺⁵	667	387	340	34.9°
490 ⁺⁵	675	395	330	33.3°
480 ⁺⁵	682	402	320	31.8°
470 ⁺⁵	689	409	310	30.3°
460 ⁺⁵	696	416	300	28.9°
450 ⁺⁵	703	423	290	27.4°
440 ⁺⁵	710	430	280	26.0°
430 ⁺⁵	716	436	270	24.6°
420 ⁺⁵	722	442	260	23.2°
410 ⁺⁵	728	448	250	21.8°
400 ⁺⁵	734	454	240	20.5°
386 ⁺⁹	741	461	226	18.6°

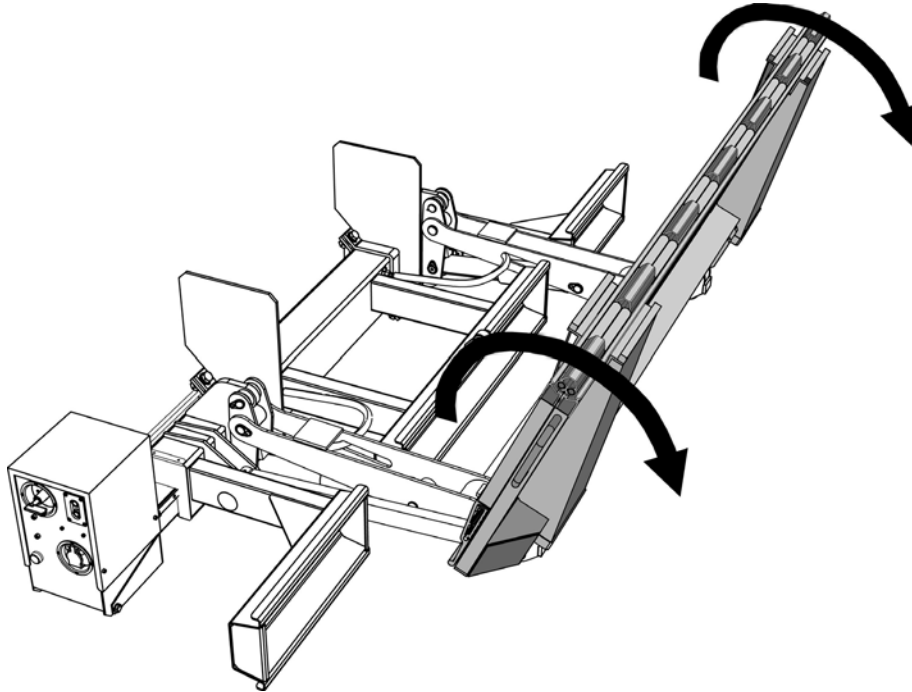


Trim and grind all rough ends after cutting the chassis and the body before painting.

INSTALLATION INSTRUCTIONS

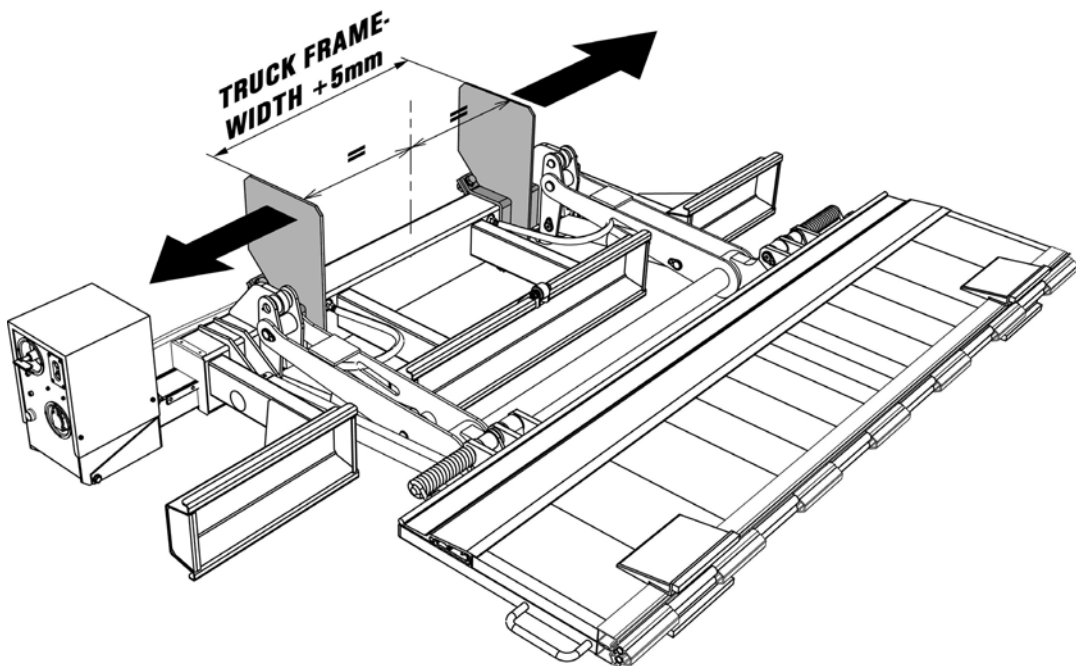
Tailgate Preparation

- Unfold the platform (1 time). NOT COMPLETELY



- Adjust the mounting brackets to the truck frame width + 5mm.

ATTENTION: The 2 mounting brackets must be centric to the main frame.
Don't fasten the screws on the mounting bracket complete.

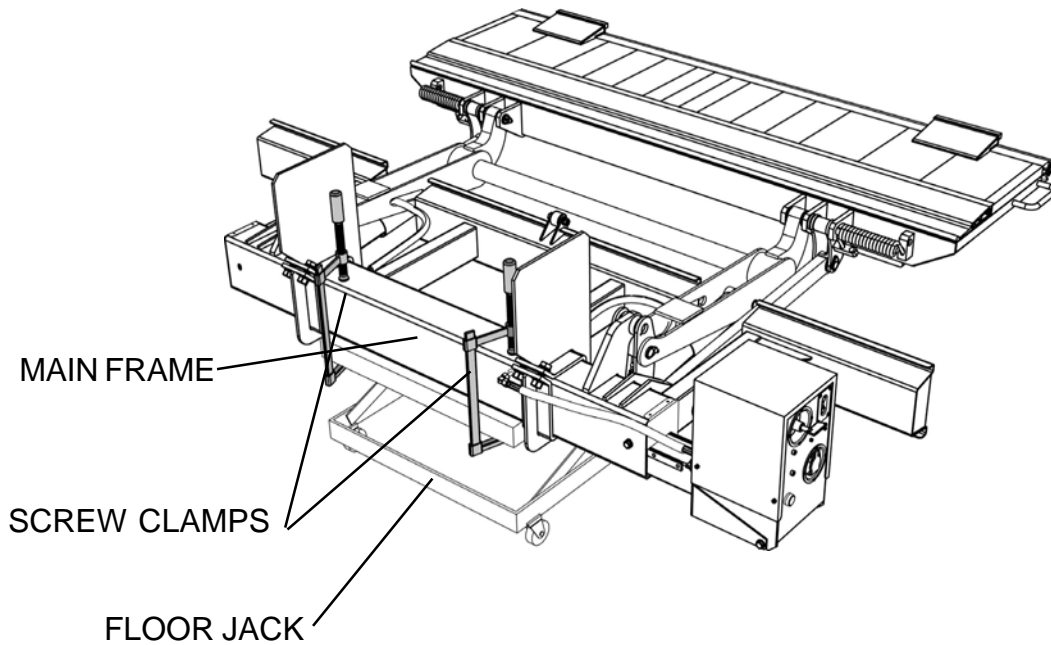


DON'T REMOVE PLATFORM, MOUNTING BRACKETS, PINS OR ANY OTHER PARTS.

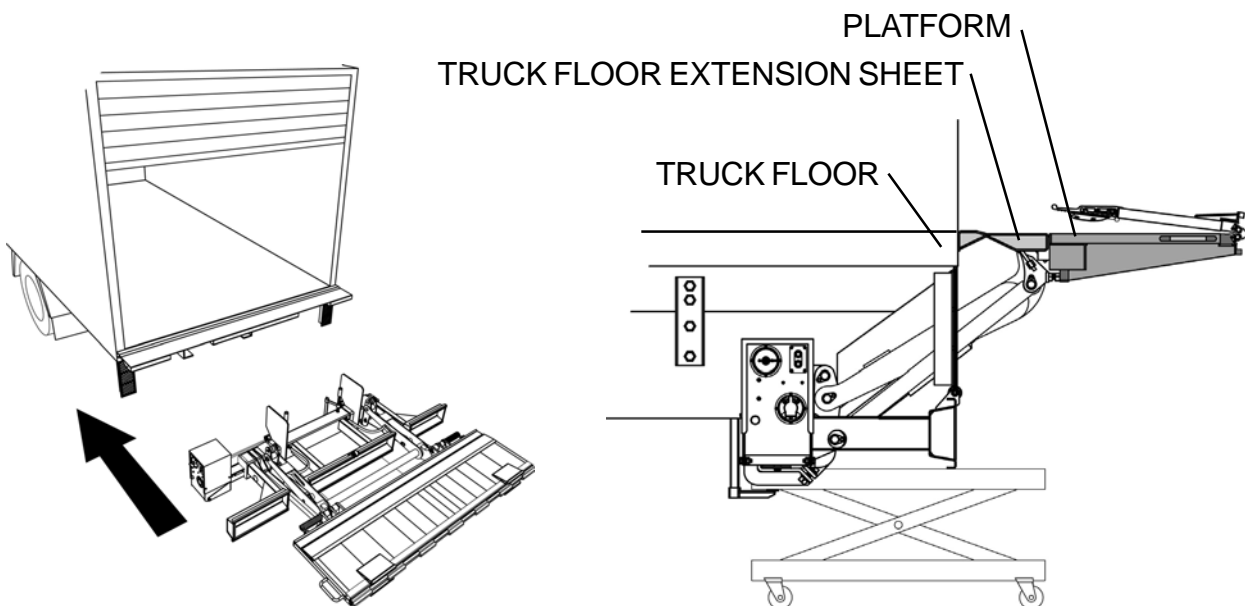
INSTALLATION INSTRUCTIONS

Position the tailgate unit

- Clamp the main frame with 2 screw clamps onto a floor jack.



- Place the complete tailgate unit under the vehicle to the approximately position.



INSTALLATION INSTRUCTIONS

Energize the power pack

**CAUTION: REMOVE TRANSPORT FILLER CAP AND INSERT DIPSTICK:
(There is no air hole in filler cap and the pump or reservoir will be destroyed)**

Be sure the vehicle and the liftgate are of the same current (12V or 24V).

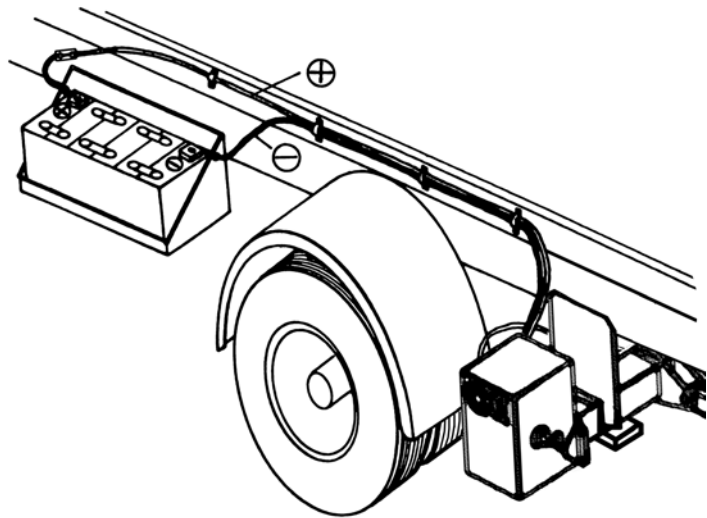
Fuse is in the power pack. (12V = 25 Amp and 24V = 16 Amp).

Connect the **positive cable, directly from the battery, to the starter solenoid.**

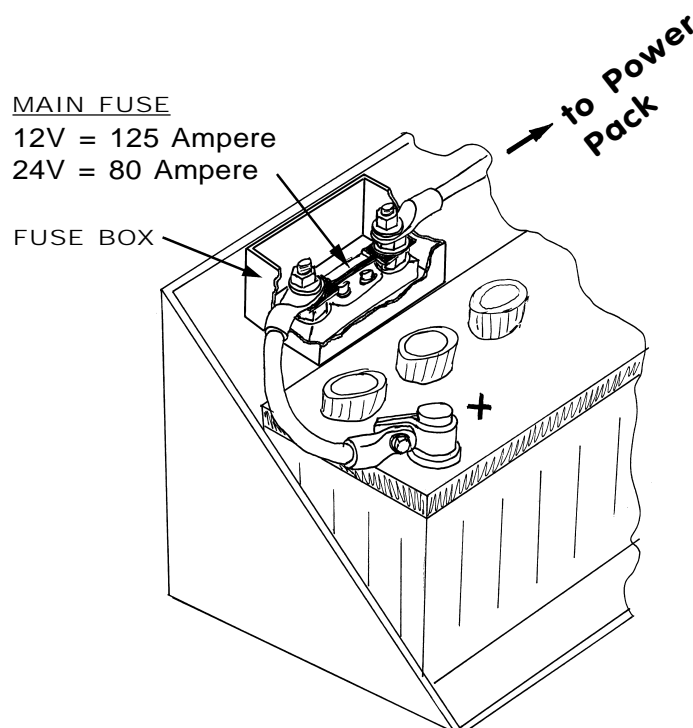
Connect the **negative cable, directly from the battery, to the motor ground.**

Complete all other electrical work. (Connect all control switches)

**CAUTION: REMOVE TRANSPORT FILLER CAP AND INSERT DIPSTICK:
(There is no air hole in transport filler cap and the pump or reservoir will be destroyed)**



- Build in between Battery (+) and (+)-Cable the Main Fuse



MAIN FUSE
12V = 125 Ampere
24V = 80 Ampere

FUSE BOX

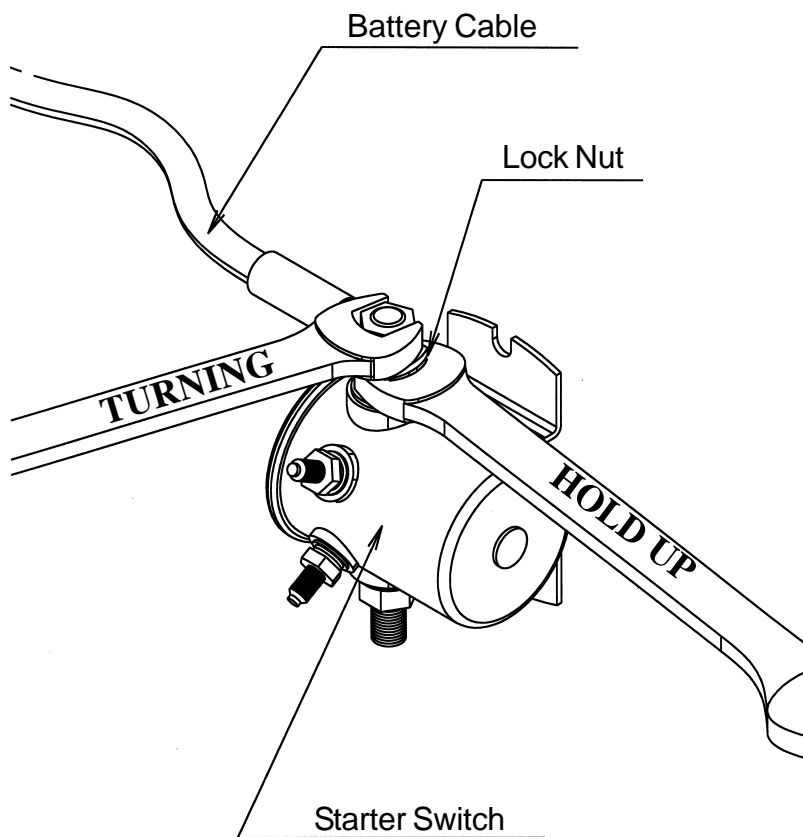
INSTALLATION INSTRUCTIONS

Correct wiring of the Power Pack

NOTE: All battery power leads must have a core area not less than 35mm² and be double insulated.

Connect both battery cables (+ and -) directly from the battery to the power pack.

ATTENTION: By fixing the battery cable on the starter switch, you must hold up the lock nut.

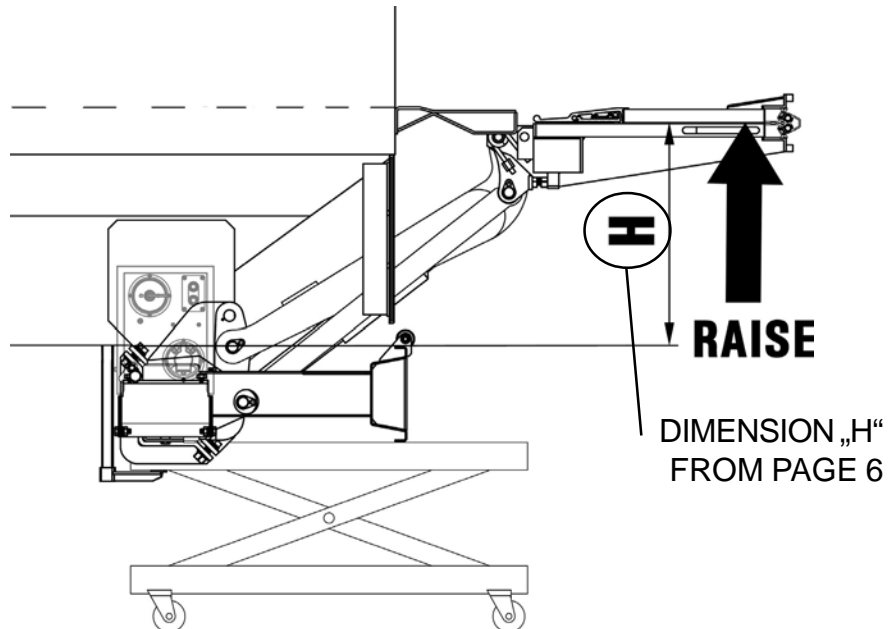


- * Energize the power pack and actuate each of the valves to be sure they are operating properly.
- * Please check the operating temperature regularly. It should not increase by more than -20°C to +70°C.
- * Check a new power pack for leakage after a short period of time. Tighten any fittings that may be leaking.

INSTALLATION INSTRUCTIONS

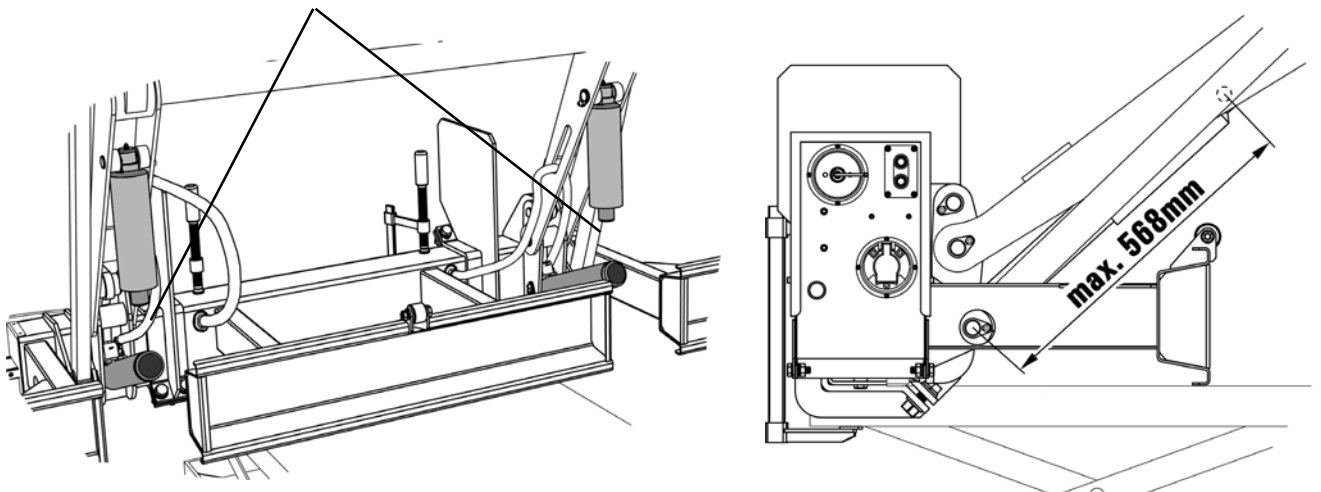
Position the Main Frame

- Press the "RAISE"-Button to raise the platform approximately to the dimension "H". See page 6.



ATTENTION: Don't raise the platform higher than 630mm above the upper side of mainframe - lift cylinders are without end stop!!! Lift cylinder will be damaged!!!

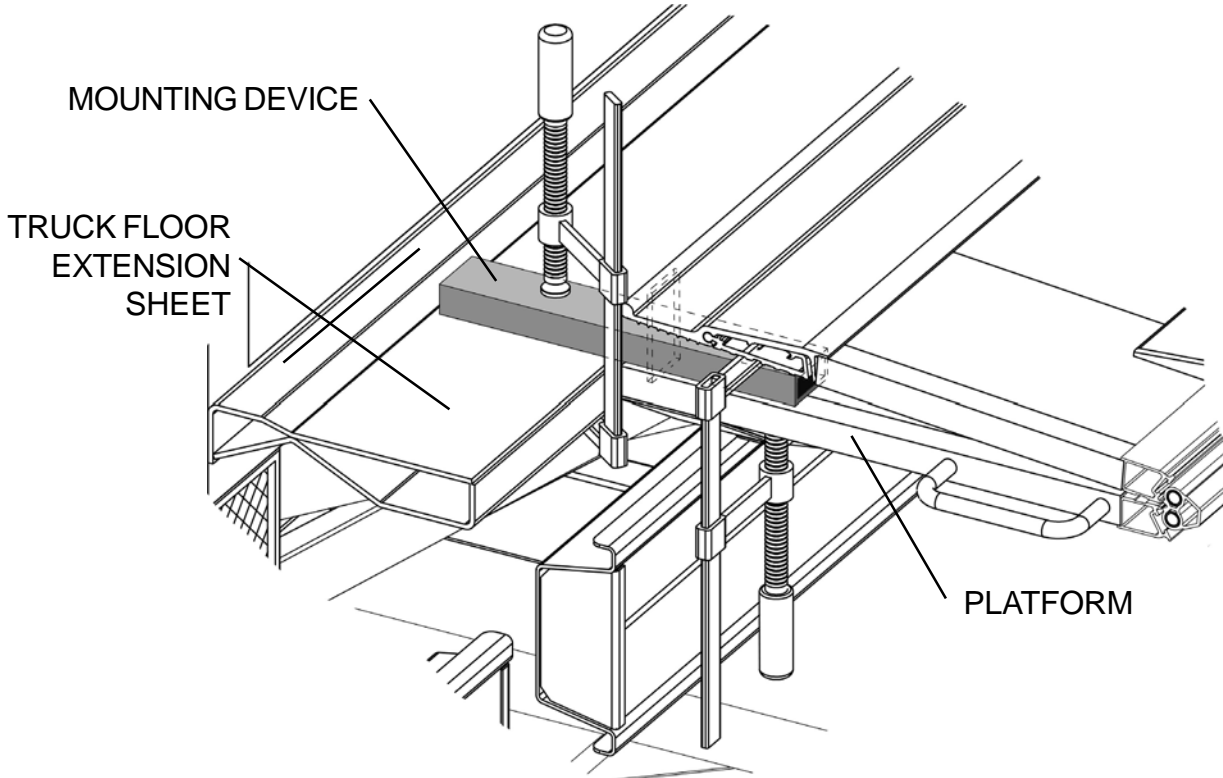
FORBIDDEN



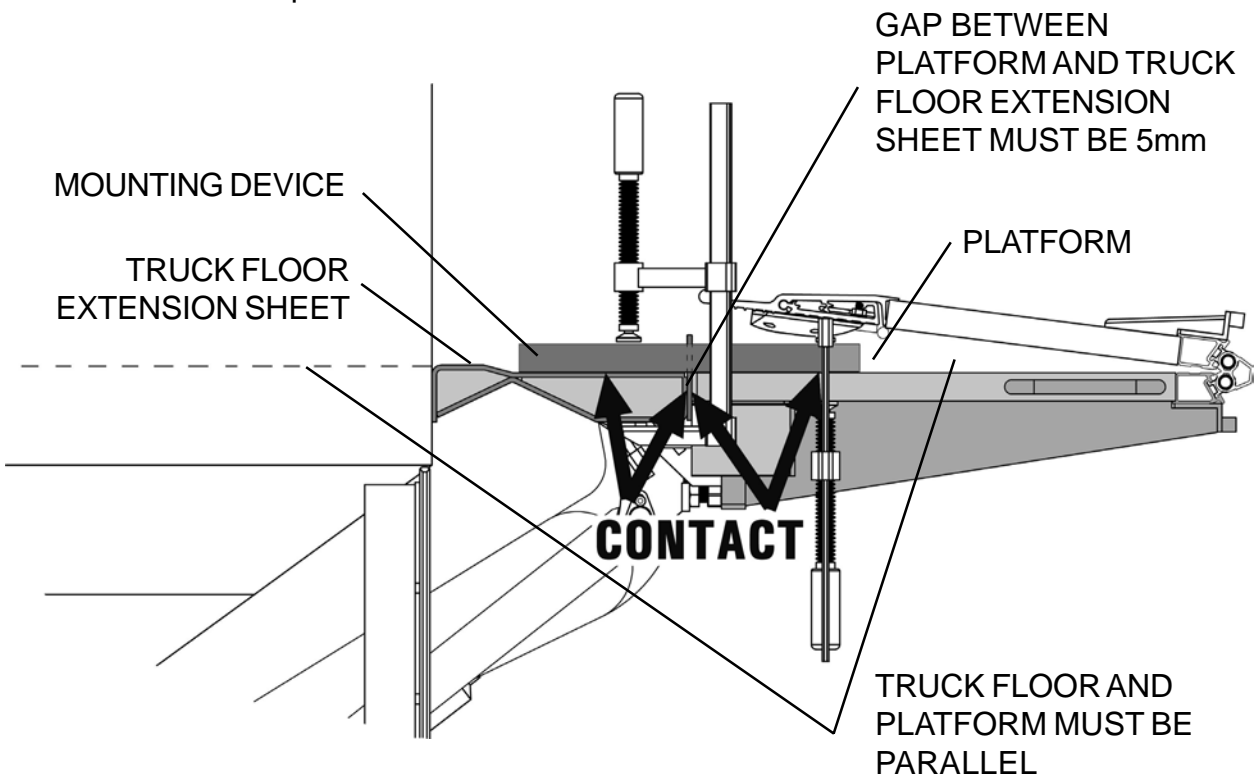
INSTALLATION INSTRUCTIONS

Installing the mounting device

- Install mounting device between platform and truck floor extension sheet with screw clamps.



ATTENTION: The mounting device must make a contact with truck floor extension sheet and platform.

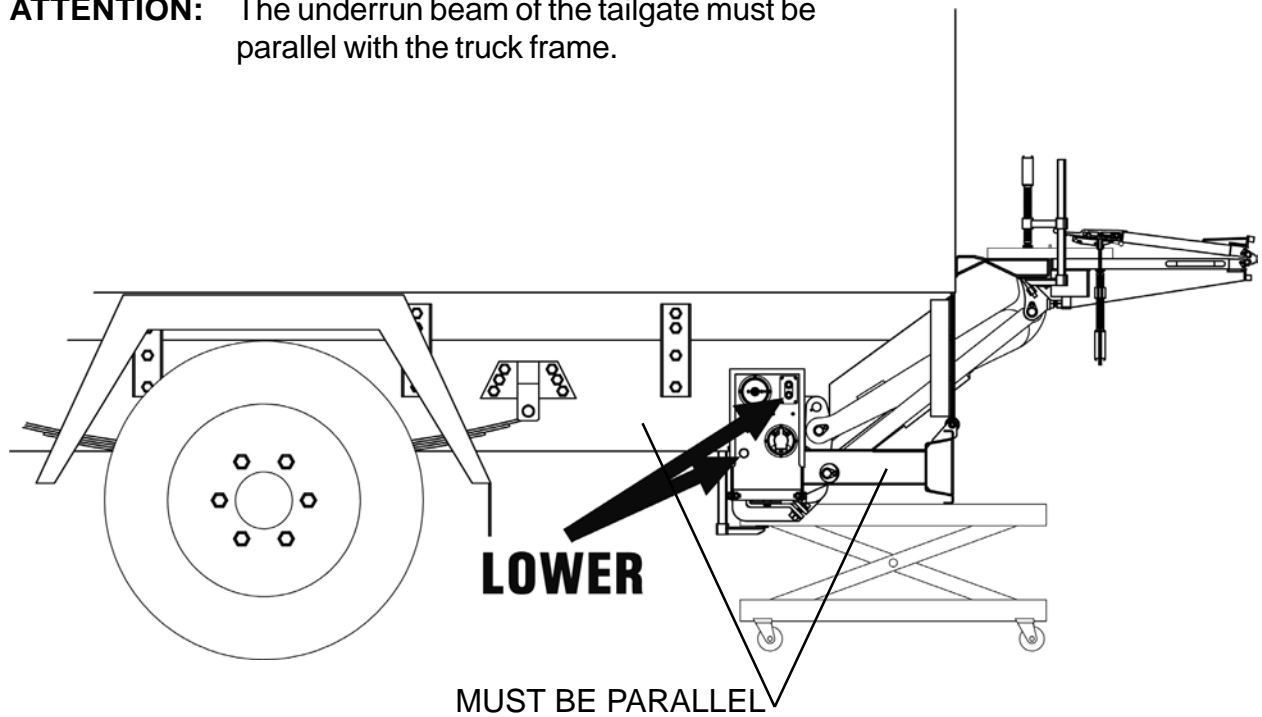


INSTALLATION INSTRUCTIONS

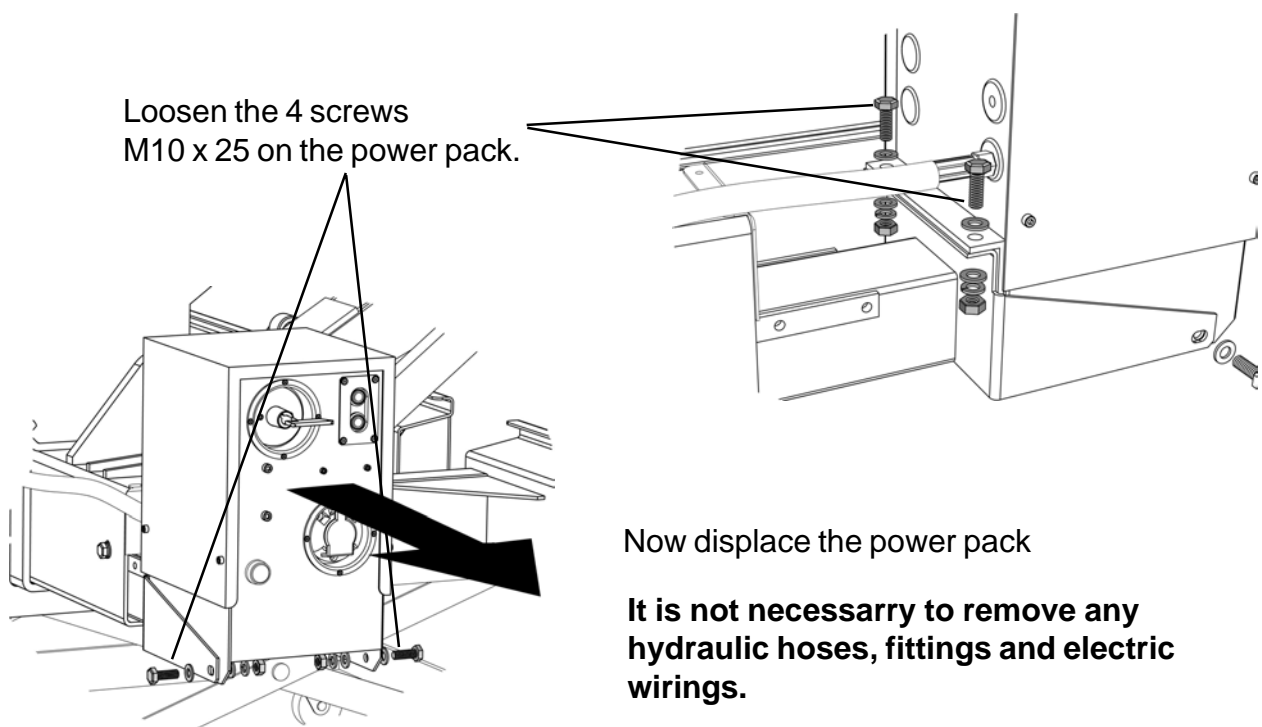
Position the main frame

- Press "Lower" and move the complete tailgate unit with the floor jack at the same time until the main frame is in the right position.

ATTENTION: The underrun beam of the tailgate must be parallel with the truck frame.



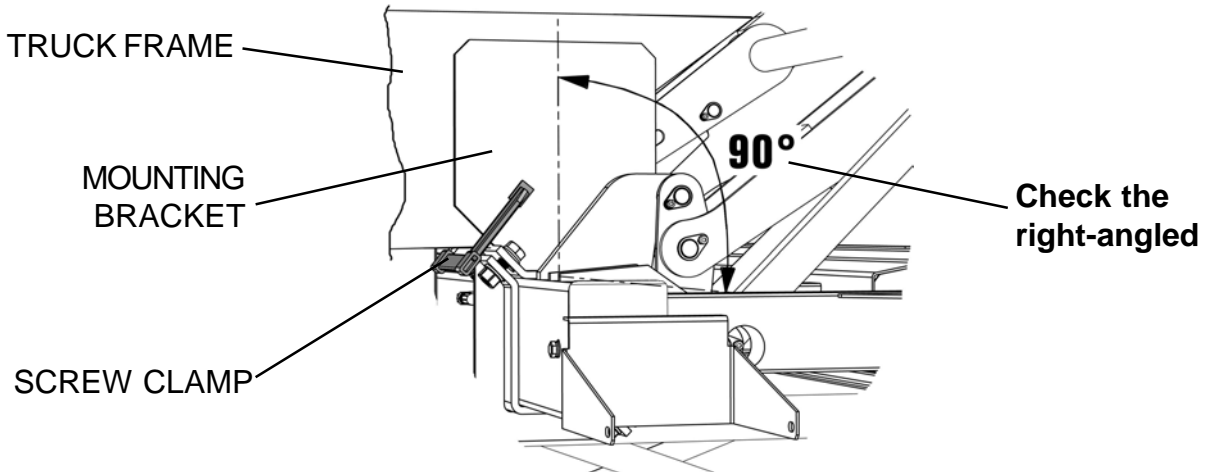
- Place the mounting brackets to its exact final position and fasten all screws.
- Before you can fix the mounting brackets, you have to displace the power pack.



INSTALLATION INSTRUCTIONS

Install mounting brackets

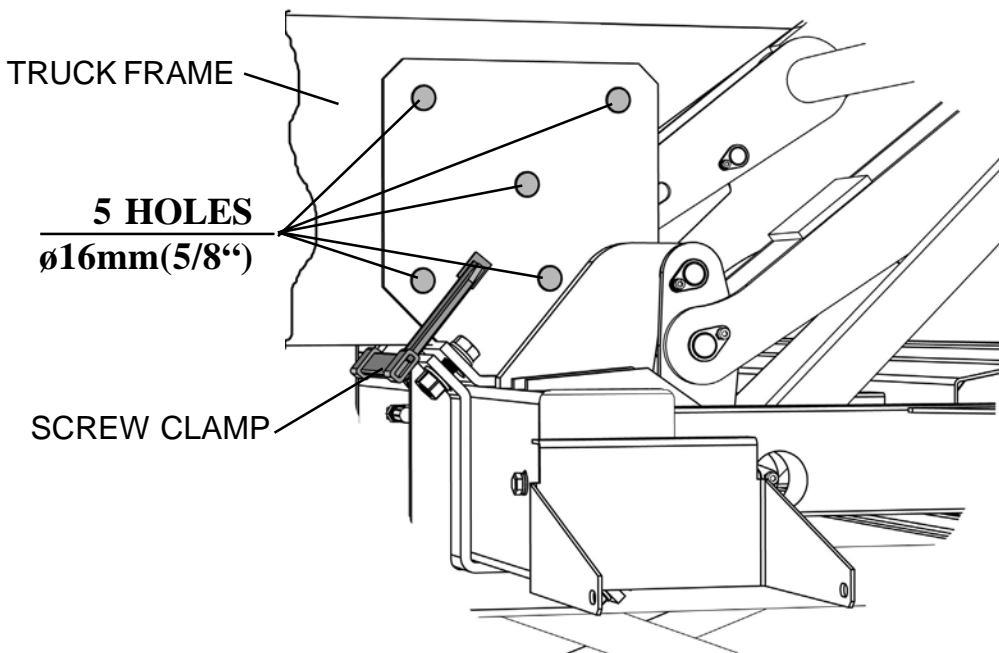
- Clamp the mounting brackets on the truck frame.



- Fix the mounting brackets on the main frame.
- Drill 16mm (5/8") holes into chassis and mounting brackets.

Screw M16 (5/8") is 8.8 Strength (Grade 8) -
Max. Torque 195 Nm (145 ft lbs.)

Drill two holes in each bracket, put a bolt in each one and secure. Then drill the other holes.



NUMBER OF SCREWS PER MOUNTING BRACKET: 5 pieces M16x50

INSTALLATION INSTRUCTIONS

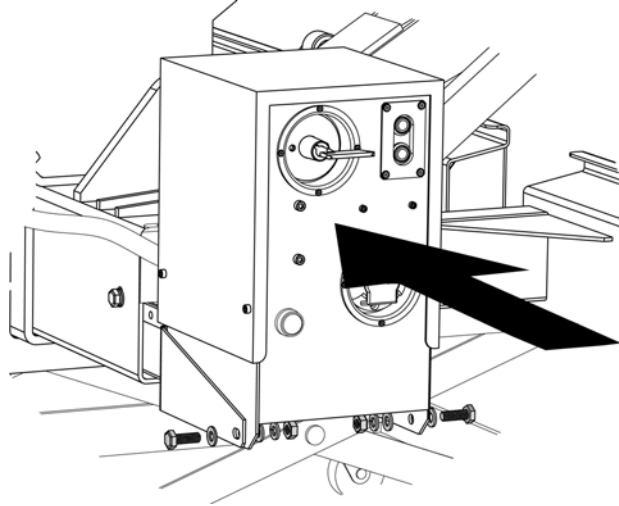
Remove mounting device

- 1) Press the "Raise"-Button short.
- 2) Remove all screw clamps, the mounting devices and the floor jack.

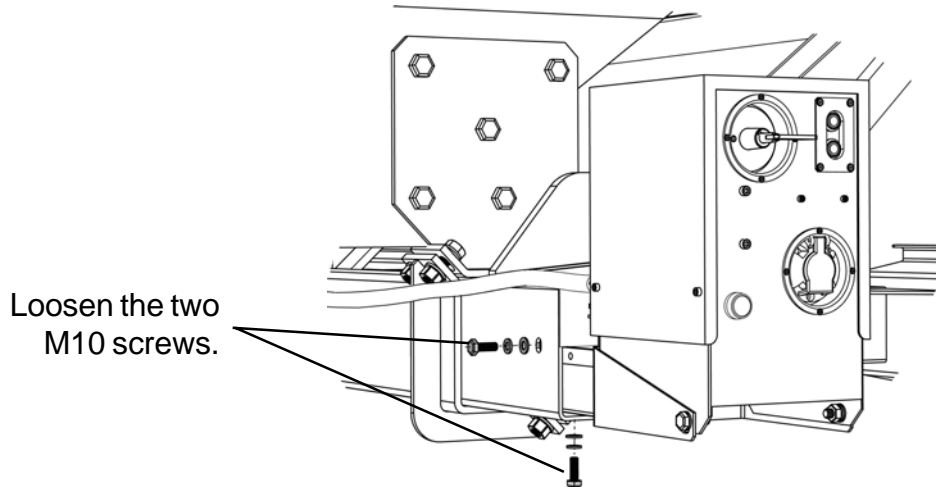
INSTALLATION INSTRUCTIONS

Adjust the position of power pack

- Mount the power pack again. Fasten the 4 screws M10x25.

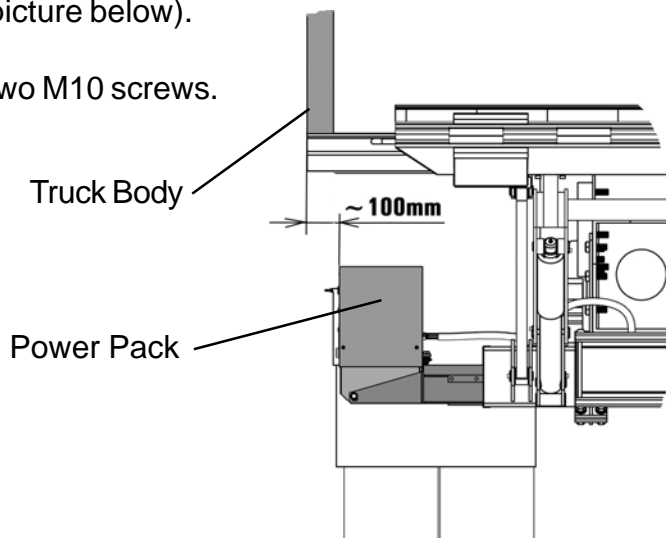


- Adjust the position of power pack.



- Adjust the power pack to the right position (see in the picture below).

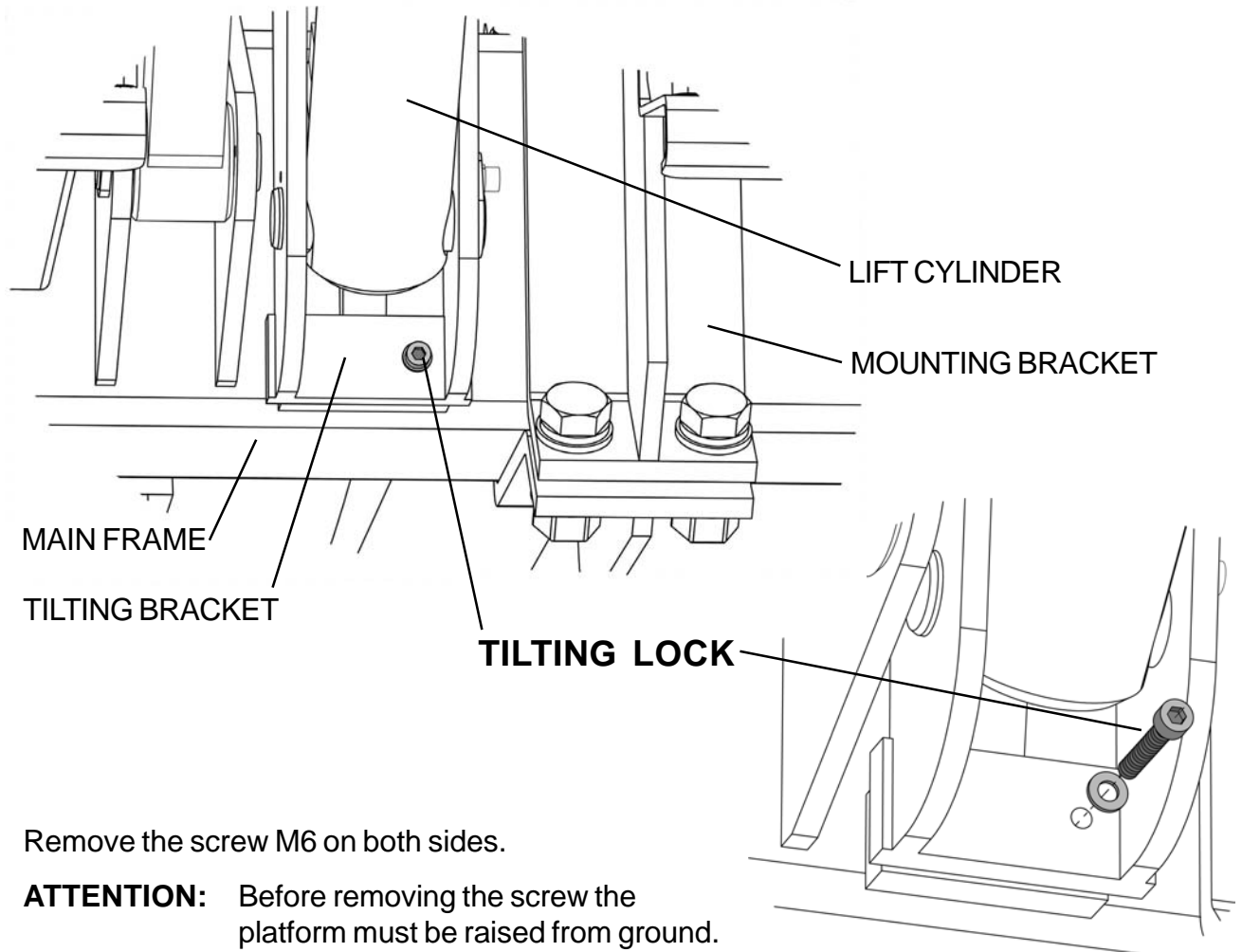
- Fasten the two M10 screws.



INSTALLATION INSTRUCTIONS

Remove Tilting Lock

The tilting lock prevents the automatic leveling from working until the installation is complete. It is the last thing to remove.



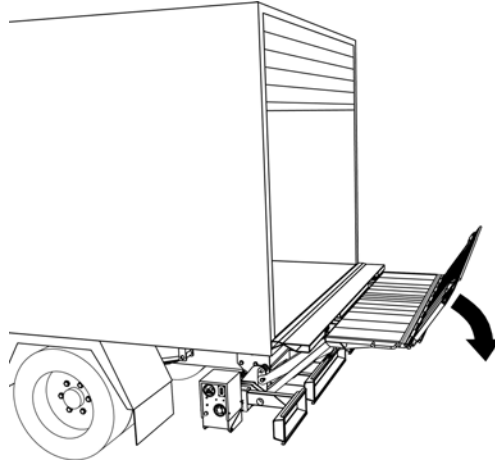
Remove the screw M6 on both sides.

ATTENTION: Before removing the screw the platform must be raised from ground.

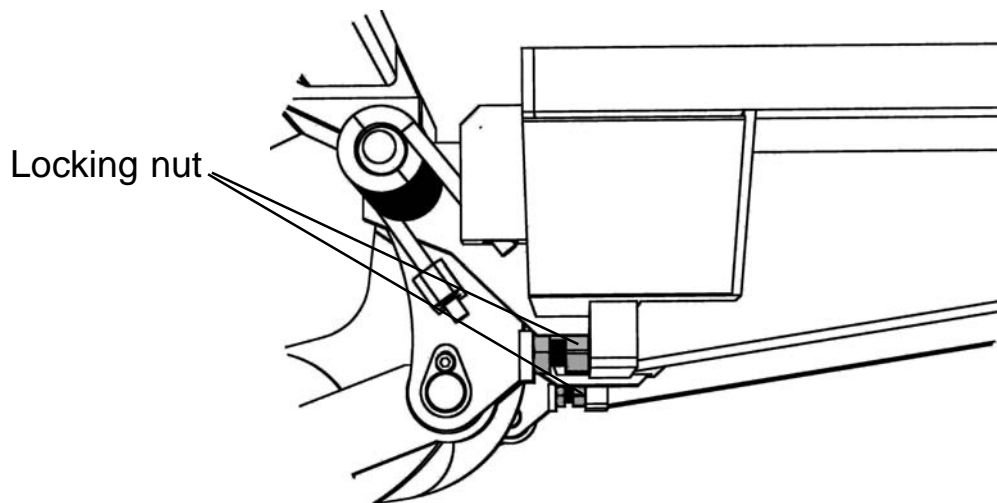
FINISHING THE INSTALLATION

How to adjust the platform level

1) Unfold the platform completely.

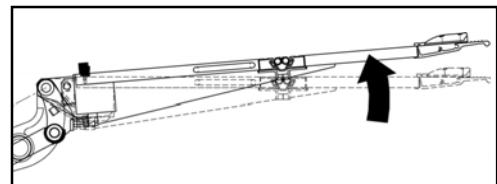
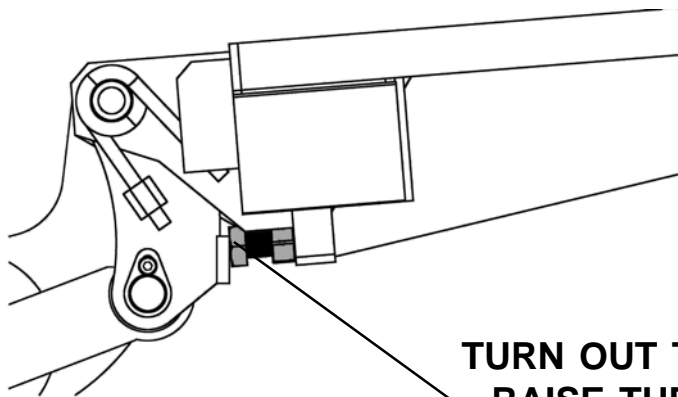


2) Loosen the locking nuts on the platform.



3) Adjust the platform:

Turn the screw anti-clockwise for raise the platform tip. (on both sides)



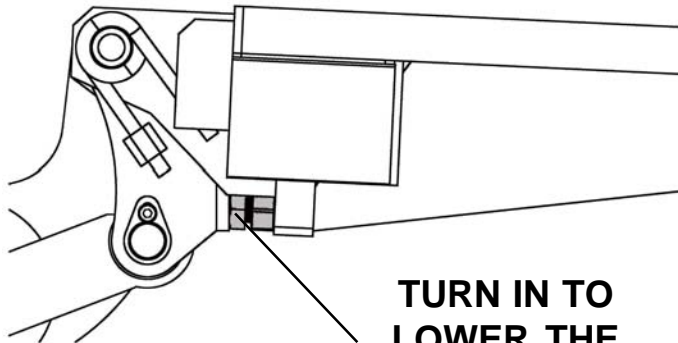
**TURN OUT TO
RAISE THE
PLATFORM TIP**

FINISHING THE INSTALLATION

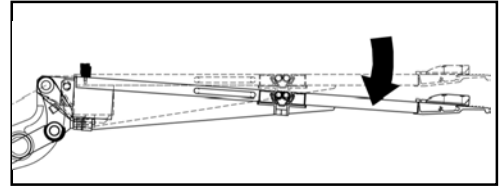
How to adjust the platform level

3) Adjust the platform:

Turn the screw clockwise to lower the platform tip. (on both sides)



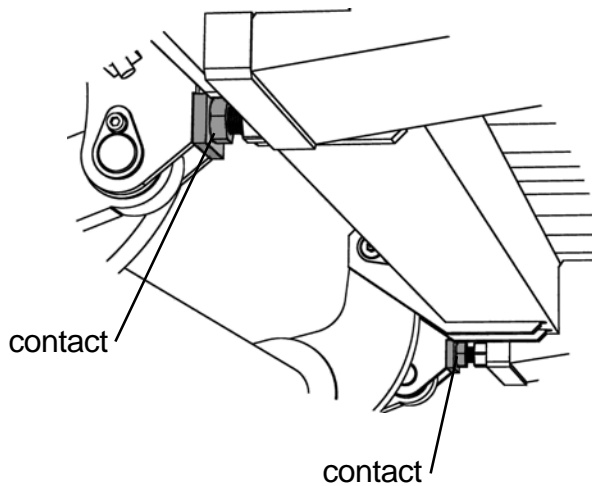
**TURN IN TO
LOWER THE
PLATFORM TIP**



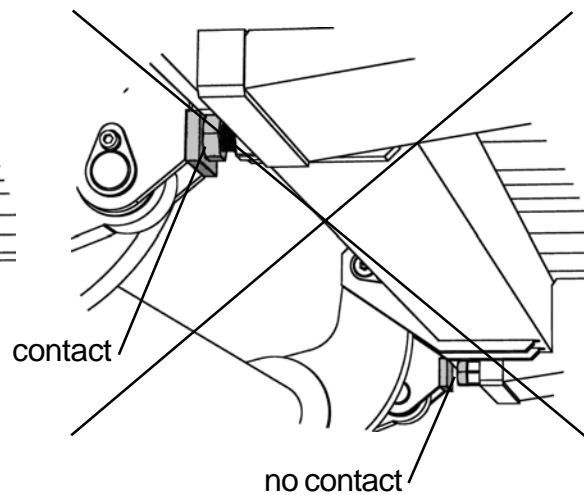
4) Check the correct adjustment of the adjusting screws

On lower position, the both adjusting screws must have contact with the joint plate.

OK



WRONG

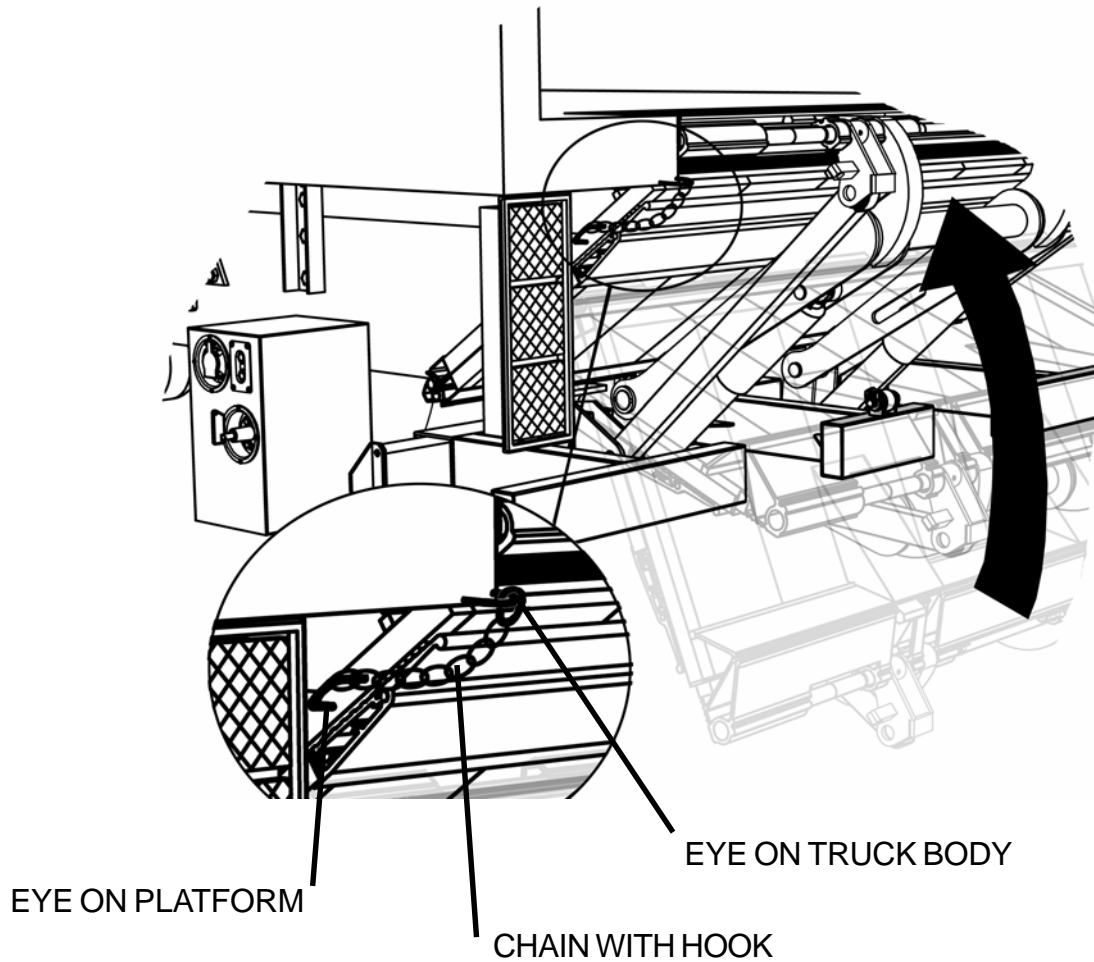


5) If the platform level is correct, fasten the locking nuts.

FINISHING THE INSTALLATION

Install a platform lock

Mount a mechanical platform lock according to the picture below.



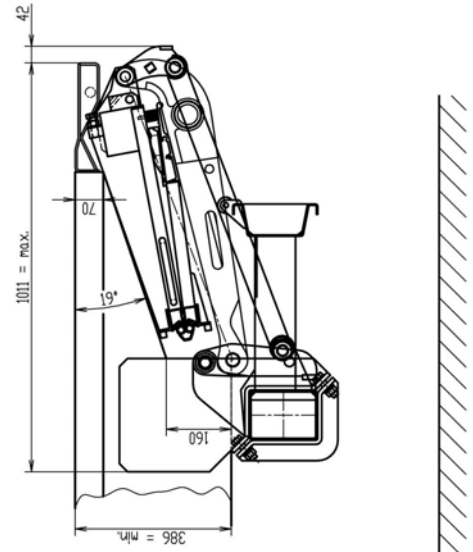
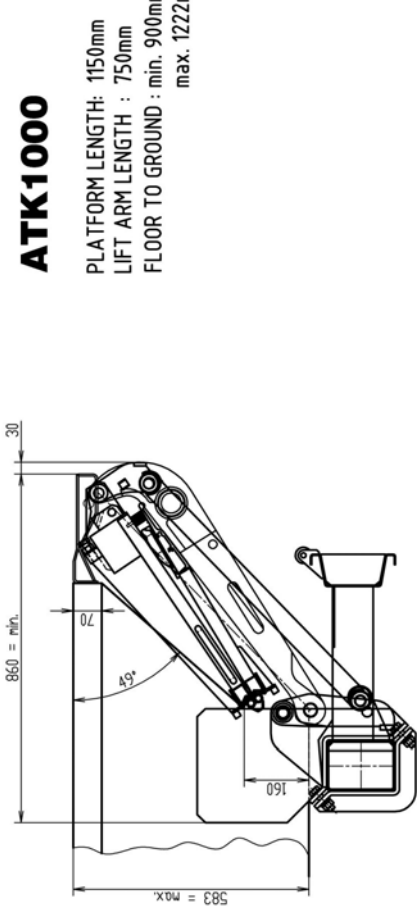
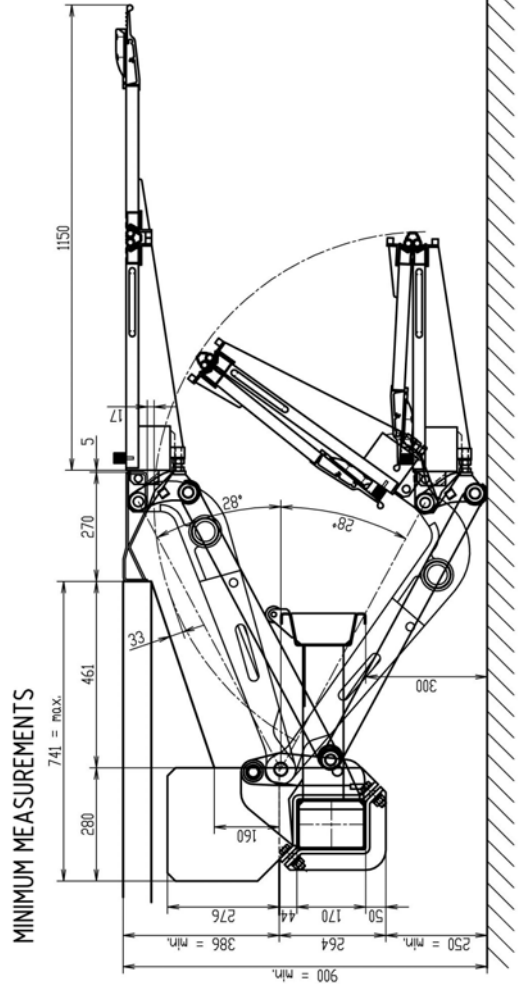
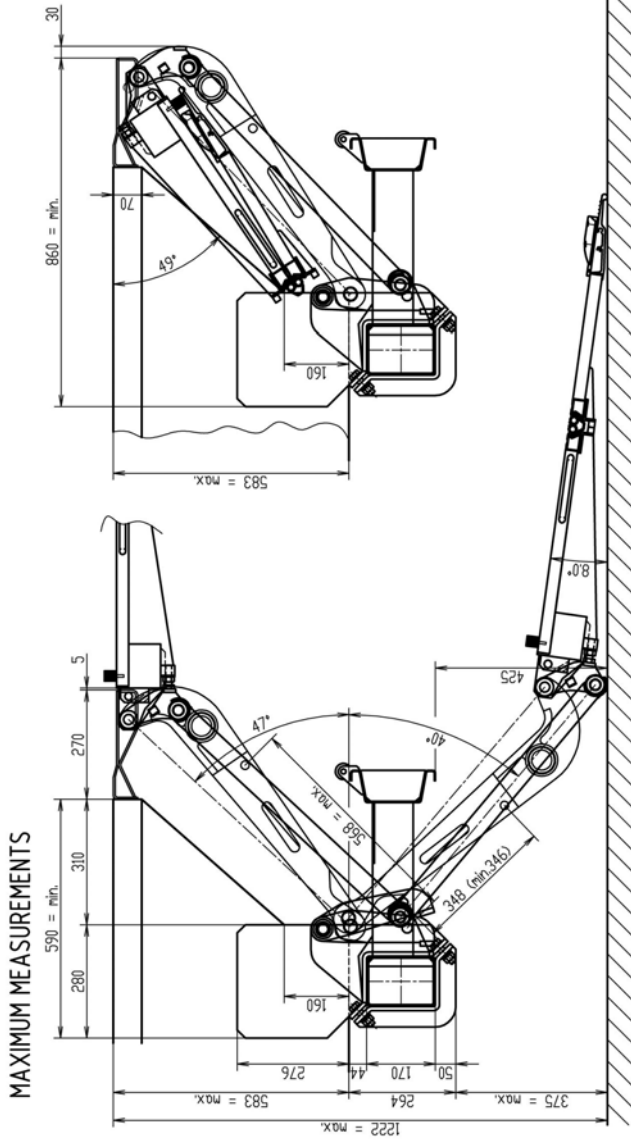
It's also possible to mount other forms of platform lock to prevent the tailgate against abnormal lowering.

ATK1000

PLATFORM LENGTH: 1150mm

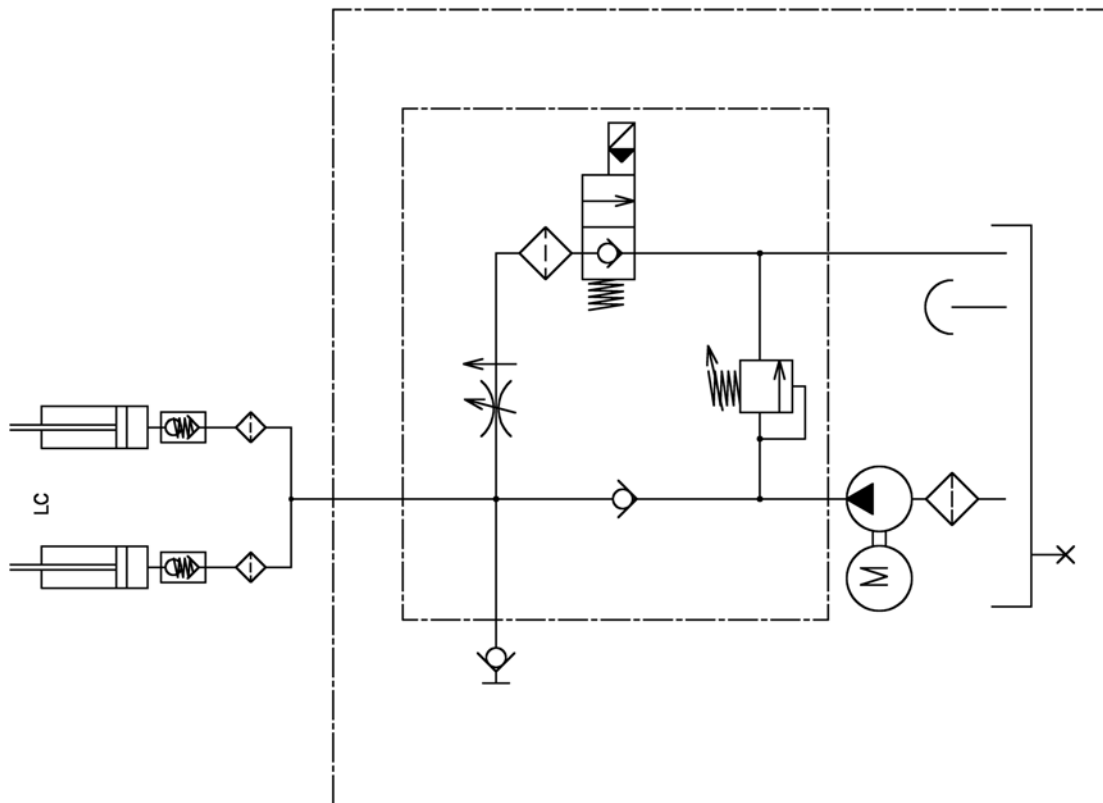
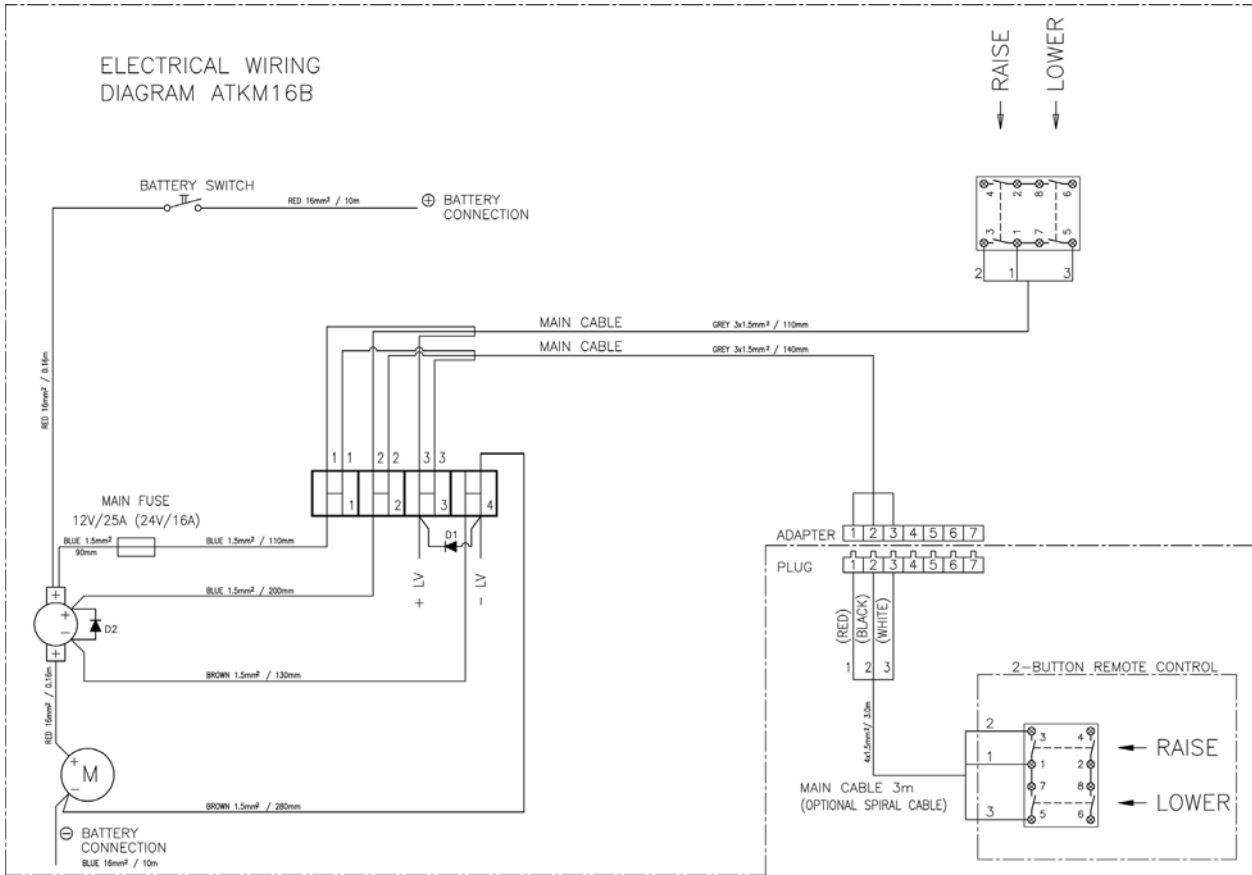
LIFT ARM LENGTH : 750mm

FLOOR TO GROUND : min. 900mm (loaded)
max. 1222mm (unloaded)



ELECTRIC AND HYDRAULIC DIAGRAM

with electr. hose burst valve
with 2-Button-Remote-Control
with 2-Button-Hand-Control



I N D E X

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