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## **An introduction to your new “AHT”** **All-Aluminum Tailgate Loader**

### **Operator's Manual**

L-Series Heavy Duty Tail Lifts:

Thank you for purchasing the “AHT” steel tailgate loader. It is the finest tailgate loader in the world and will give you many years of good reliable service if you will do just a little preventive maintenance and do it on a regular basis.

This instruction booklet will provide all the information you need for operating and maintaining your new “AHT” tailgate loader.

Please be sure to keep a copy of this manual in the vehicle, so that it will be available when needed for servicing your unit.

The “AHT” tailgate loader was engineered, and built, to give you long life with very few problems.

Generally, your “AHT” requires only periodic maintenance, but if there is a problem, this booklet will be invaluable for servicing the unit.

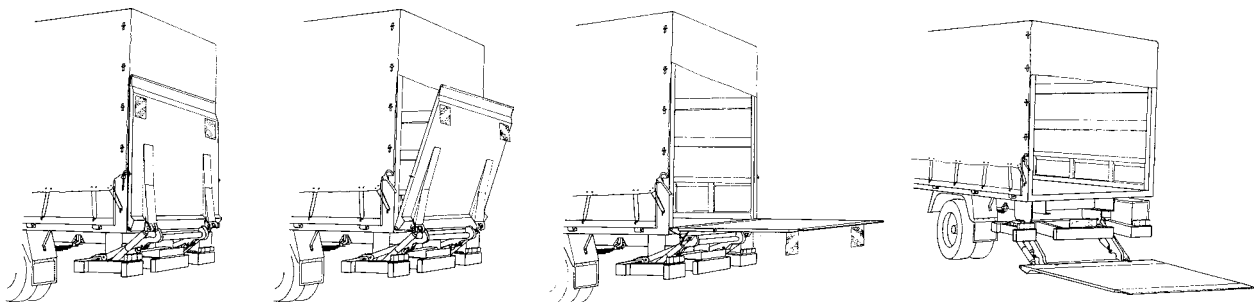
If for any reason, there is a problem, and you have difficulty getting the problem solved, please call the factory and we will be happy to help you find some local help.

Most truck equipment houses that service other types of liftgates can also do any repair work necessary on the “AHT”.

**CAUTION:** When steam cleaning the AHT it is very important to be careful around the electrical control box. DO NOT point the steam directly on the control box as the electrical connections could be damaged. It is also very important to lubricate the entire unit, after washing, as the grease will have been washed away.

**Very Important: We recommend FUCHS RENOLIN AW22 hydraulic oil.**

**Never use Automatic Transmission Oil as it will ruin the seals.**



## HOW TO USE THE “AHT” TAILGATE LOADER

### IT IS NOT PERMITTED TO USE THE “AHT” AS:



- |  |  |
|--|--|
| -A personal lift or elevator down with the load. | Only the operator is permitted to ride up and ride down with the load. |
| -As an extension of another body.                | Do not use to load or unload another vehicle.                          |
| -As a car jack.                                  | It is very unsafe to lift another vehicle with the “AHT”               |
| -As a snow plow.                                 | Heavy damage could be done to your new “AHT”                           |

It is not permitted to overload the platform to a point where the operator does not have enough room to operate the tailgate safely.

### USER QUALIFICATIONS TO OPERATE THE “AHT” TAILGATE LOADER

The driver and/or operator should be well trained in the proper procedure for operating the „AHT” before using the tailgate loader.

Carefully read the manual **before starting to operate** the “AHT” tailgate loader.

Only mature adults, age 18 and above, should operate the “AHT” tailgate loader.

The operator should not be physically handicapped. (Bad eyesight or hearing)

The operator should not be overly tired.

The operator should never be under the influence of alcohol or drugs while operating the “AHT”.

The load **must be** stabilized on the platform to avoid damage.

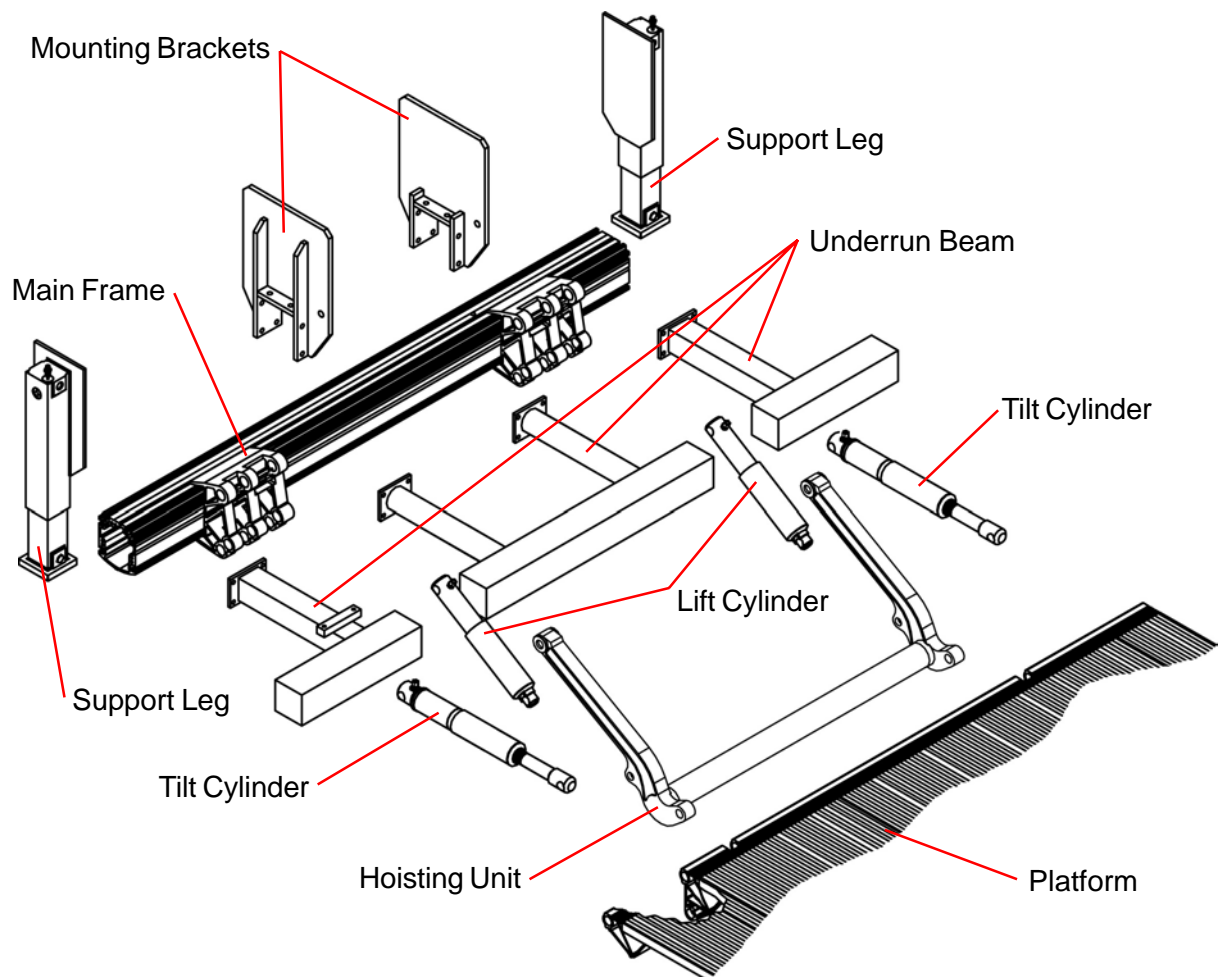
The operator must never load or unload more than the maximum capacity of the “AHT” tailgate loader. **Read the data plate for actual capacity of this AHT.**

Always perform the daily check before using the AHT tailgate loader.

## TECHNICAL DESCRIPTION OF THE “AHT” ALL-ALUMINUM TAILGATE LOADER

The All-Aluminum “AHT” Tailgate Loader has the following components:

- 1) One Lift arm: Made of High Strength „Die Casted“ Treated Aluminum
- 2) One Main frame: Made of High Strength Aluminum Profile
- 3) One Platform: Made of High Strength Aluminum Profiles.
- 4) Two Mounting Brackets: Made of High Strength Aluminum
- 5) Underrun Beam: Made of High Strength Aluminum
- 6) Two Support Legs: Made of High Strength Aluminum and Steel
- 7) Two All Aluminum Lift Cylinder
- 8) Two All Aluminum Tilt Cylinder



The main frame (2) is mounted to the vehicle chassis with the mounting brackets (4).

For lifting the platform and load, we use two single-acting aluminum lift cylinders (7). We also use two single-acting aluminum tilt cylinders (8), with integrated springs, for opening and closing the platform. All four cylinders have ceramic-coated, salt and chemical resistant, piston rods for ultra long life span.

Each of the four aluminum cylinders is equipped with an mechanical hose burst valve, for safety. In case of hydraulic hose failure, the platform cannot fall to the ground, nor can it tilt down. The failure can be repaired and the “AHT” can go back to work.

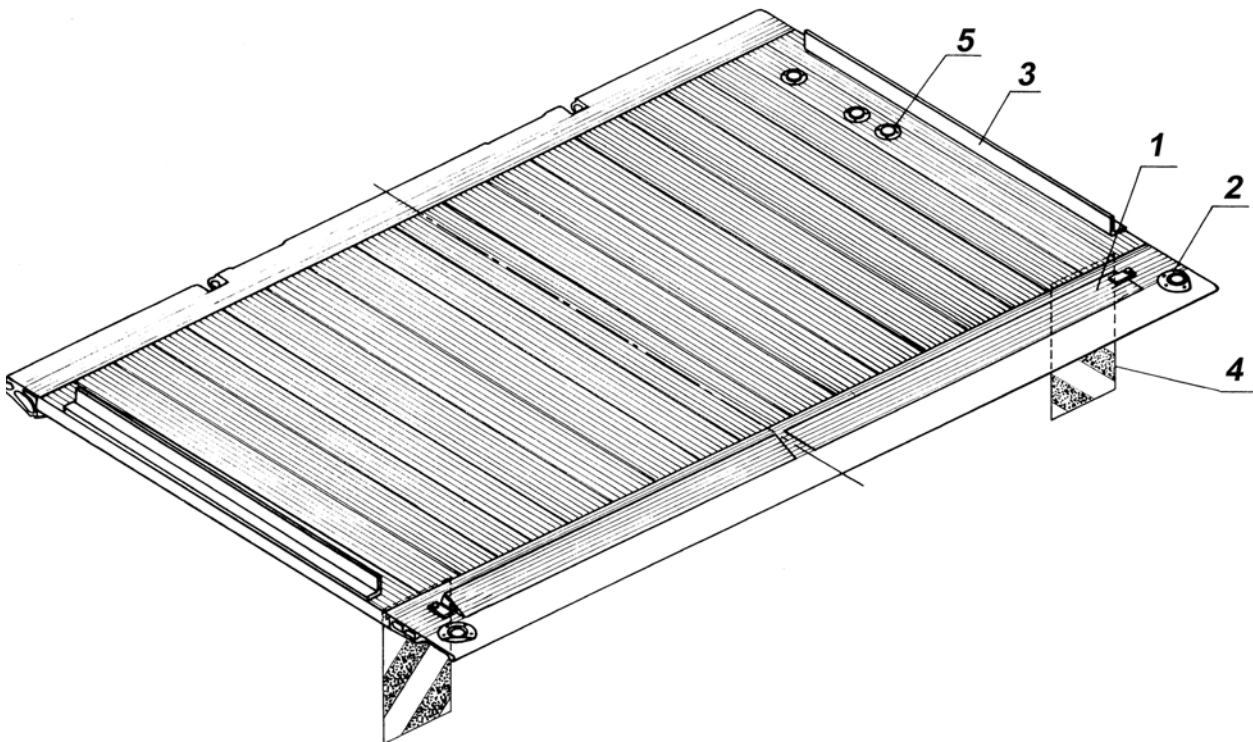
## TECHNICAL DESCRIPTION

### ALUMINUM PLATFORM

The platform is produced from **all-aluminum high strength profiles** and is engineered to properly maintain the load and keep it stabilized for your safety.

Safety options available for the all-aluminum “AHT” platform include:

- 1) Spring Loaded Roll Stops
- 2) Flashing lights, for safety, when the “AHT” is being used.
- 3) Safety rails to keep the load from falling off the side of the platform.
- 4) Safety flags so the platform can be seen, from the rear, while in operation.
- 5) Three (3) button foot control. (OPTION)



## TECHNICAL DESCRIPTION

### MHW POWER PACK

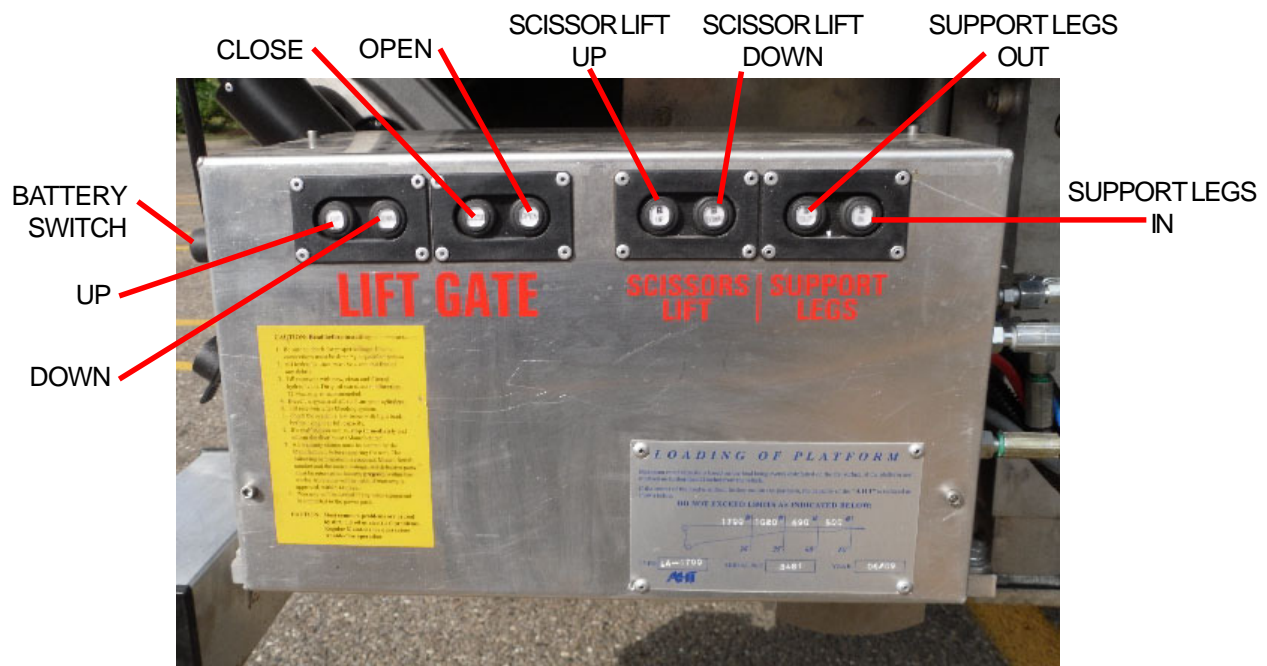
#### The MHW Power Pack:

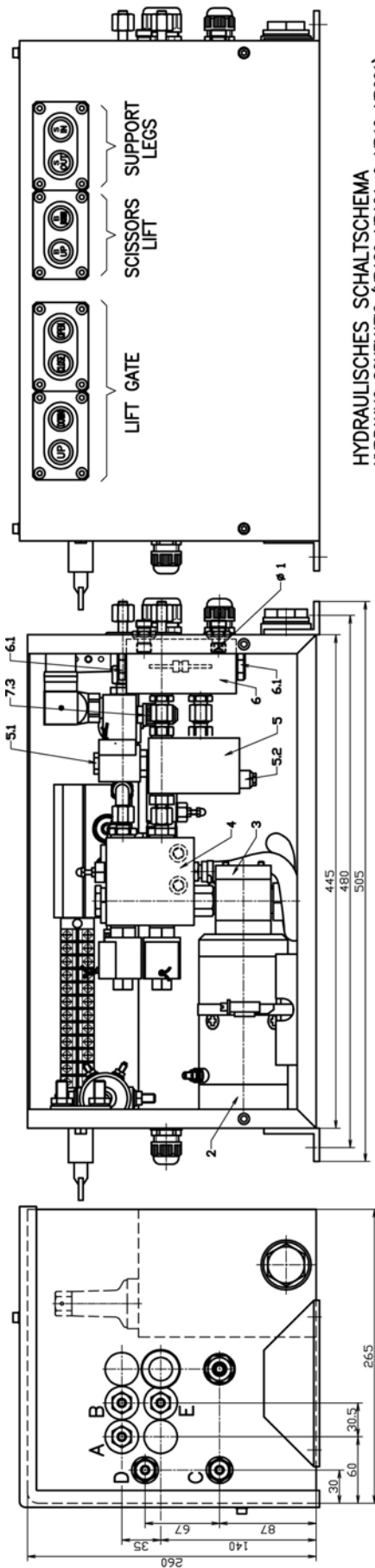
The power pack enclosure, including the built-in oil reservoir, is made of aluminum and is insulated to achieve a very quiet operation. The **noise level** of the power pack is **less than <70dB** (MSV§74).

The power pack is usually located on the curbside of the vehicle and mounted on the bumper bar. The adjustment for the working pressure and lowering/opening speed can only be done inside the power pack enclosure. The control buttons are located on the outside of the power pack cover.

**CAUTION: Never bottom out** the relief valve fully. The power pack and/or the hydraulic system could be damaged. When the “AHT” is steam cleaned, it is very important to be careful around the electrical controls. **Do not point the steam directly at the power pack housing, as the electrical connections are delicate and could be damaged.**

The MHW power pack contains the following components (outside):



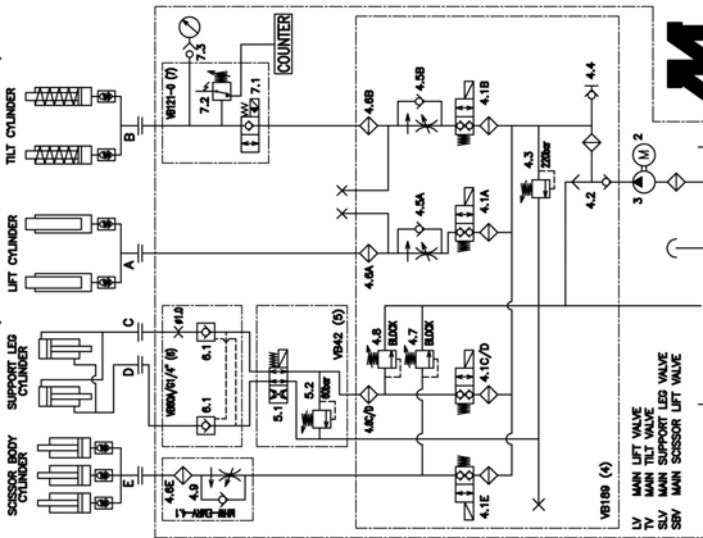


- 1 AGGREGATGEHÄUSE EU-03-1-1/UHS
- 2 MOTOR 0.8kW, 12/24V
- 3 PUMPE 0.75cm<sup>3</sup>/U
- 4 VENTILBLOCK VB189/ARH
- 4.1 2/2-WEGVENTIL MHW-C-30F
- 4.2 2/2-WAY-VALVE
- 4.3 WECHSELVENTIL MHW-WV-1
- 4.3; 4.7; 4.8 SICHERHEITSENTIL MHW-SV7x1
- 4.4 RELIEF VALVE
- 4.4 MESSANSCHLUSS MM8x1
- 4.5 MENGENREGELVENTIL MHW-EMRV-2000-10
- 4.5 FLOW CONTROL VALVE
- 4.5E FLOW CONTROL VALVE
- 4.6A; 4.6B; 4.6E FLOW CONTROL VALVE
- 4.6C/D FLOW CONTROL VALVE
- 4.9 LASTUNABHÄNGIGES ENSTELLBARES MENGENREGELVENTIL MHW-EMRV-4.1
- 5 VENTILBLOCK VB42
- 5.1 4/2-WEGVENTIL MHW-C-70F
- 5.2 4/2-WAY-VALVE
- 5.2 SICHERHEITSENTIL MHW-SV7x1
- 6 VENTILBLOCK VB60A/G1/4"
- 6.1 VENTILBLOCK
- 6.1 RÜCKSCHLAGVENTIL MHW-RSV-6-BG1
- 7 CHECK VALVE
- 7 VENTILBLOCK VB121-0
- 7.1 2/2-WEGVENTIL MHW-C-11
- 7.2 2/2-WAY-VALVE
- 7.2 DRUCKSCHALTER G1/4"
- 7.3 PRESSURE SWITCH
- 7.3 MESSANSCHLUSS MM8x1
- 8 TEST POINT PLUG
- 8 SICHERHEITSSYSTEM "SLS"
- 9 MAGNETSTARTSCHALTER 12-24V
- 10 STARTER SWITCH
- 10 BATTERIETRENNNSCHALTER
- 11 BUZZER FOR SLS
- 11 BUZZER FOR SAFETY LOADING SYSTEM
- 12 ANSAUGFILTER AUUSTAUSCHBAR
- 12 CHANGEABLE SUCTION FILTER

## TECHNICAL DESCRIPTION

### MHW POWER PACK

HYDRAULISCHES SCHALTSCHHEMA  
HYDRAULIC SCHEMATIC (VB189+VB121-0+VB42+VB60A)



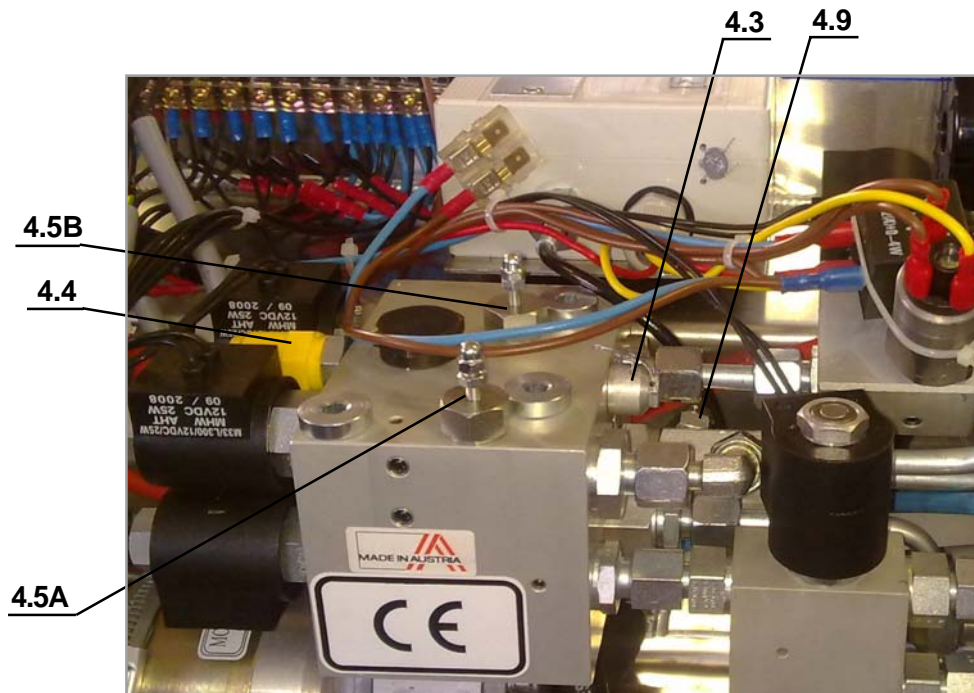
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HYDRAULIKAGGREGAT / POWER PACK E1RM82-SB1 -



## TECHNICAL DESCRIPTION

### POWER PACK



#### **Adjustable flow control valve:**

The Platform Lifting and Closing speed **is not adjustable**.

The Scissor Lifting speed **is not adjustable**.

The Support Legs In and Out speed **is not adjustable**.

**The lowering speed of the platform is adjusted by position 4.5A.**

**The opening speed of the platform is adjusted by position 4.5B.**

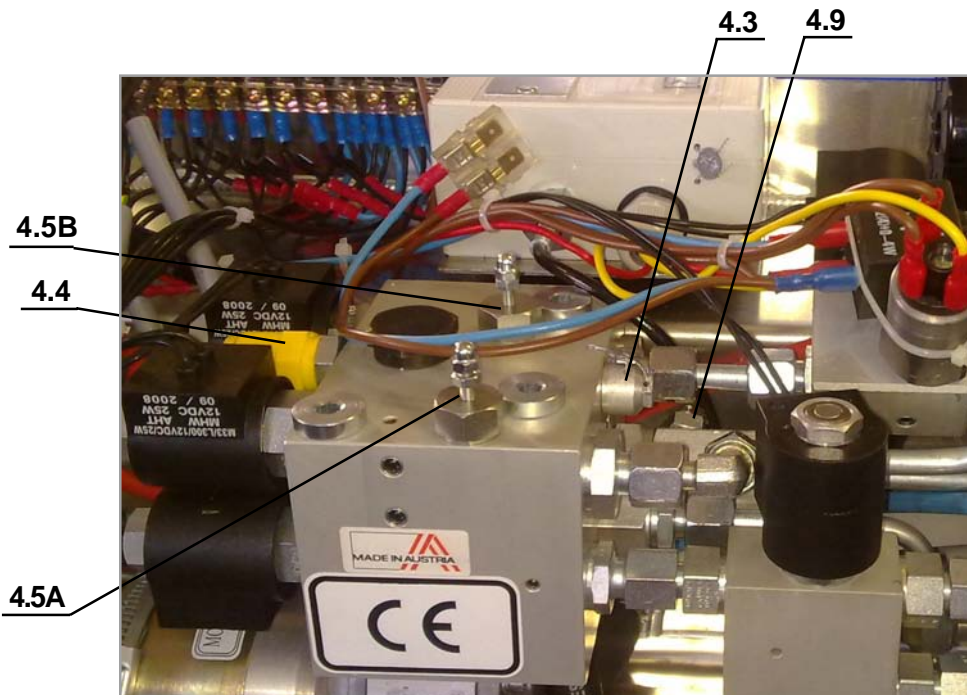
**The lowering speed of the scissor lift is adjusted by position 4.9.**

How to adjust the flow control valves:

- Be sure the adjustable flow control valves are not closed. To regulate the speed, first loosen the M4 (5/16") nut and adjust it carefully until the correct speed is attained. When the speed is correct, hold the screw in one hand, lock the nut with the other.
- The **lowering speed** of the **platform** should be as follows:  
Maximum lowering speed should be 6" (150mm) per second. (Maximum lowering speed is 39" in 7 seconds). (1 m in 7 seconds)
- The **opening speed** of the **platform** should be as follows:  
Maximum opening speed should be 6 degrees per second. (Maximum opening speed is 90 degrees in 15 seconds).
- The **lowering speed** of the **scissor lift** should be as follows:  
Maximum lowering speed should be 1,2" (30mm) per second. (Maximum lowering speed is 11,8" in 10 seconds). (300mm in 10 seconds)

## TECHNICAL DESCRIPTION

### POWER PACK



#### Adjustable relief valve:

The hydraulic pressure is adjusted by position 4.3.

How to adjust the relief valve:

The relief valves are sealed at the factory. The seals **must not** be removed unless authorized by the factory. **Warranty is void if seal is broken.**

**Main Relief valve 4.3 is to adjust the hydraulic pressure. Factory setting is 200 Bar (2900 PSI).**

The relief valves are adjustable from 50-250 Bar (700-3600PSI).

- Adjustment of the relief valve:
  - a) To adjust pressure, **a calibrated pressure gauge is required** and it should be connected at the test point (4.4). **NOTE: 1Bar equals 14.5PSI**
  - b) Remove the seal and cover from the adjusting nut.
  - c) Turn the adjusting screw with a hex wrench, **clockwise (for higher pressure)** or **counter-clockwise (for lower pressure)**. Be sure to keep an eye on the pressure gauge. The maximum pressure should be 200 Bar (2900 PSI).
  - d) When pressure is correct, lock the cap screw and **check the pressure again** to be sure it has not changed. Seal the cover.

**Caution: Never bottom the relief valve. The power pack and/or hydraulic system could be damaged.**



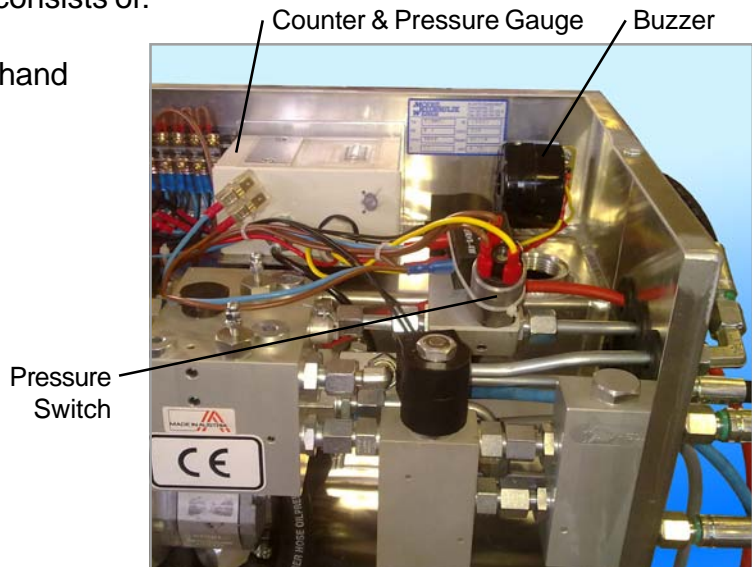
## ADJUSTING THE SAFETY LOADING SYSTEM

### Power Pack with Safety Loading System „SLS“

The Safety Loading System „SLS“ consists of:

- Pressure Switch
- Pressure Gauge with memory hand
- Counter
- Buzzer

The pressure gauge and the counter is installed in a box which is sealed at the factory.

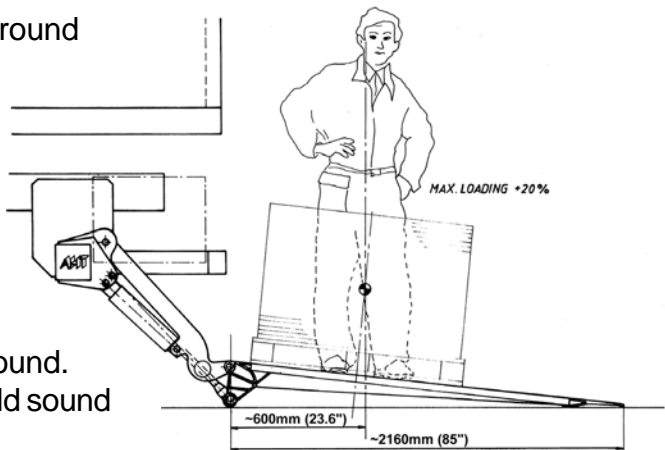


How to adjust the Safety Loading System „SLS“:

- Turn on the Main Switch
- Open the platform and lower to the ground
- Lower the platform tip to the ground
- Load the platform with the maximum

rated load +20% and one person.

Be sure to place the load in the center of platform and center the load at 600mm (23.6") from the vehicle. (Check the vehicle data plate)



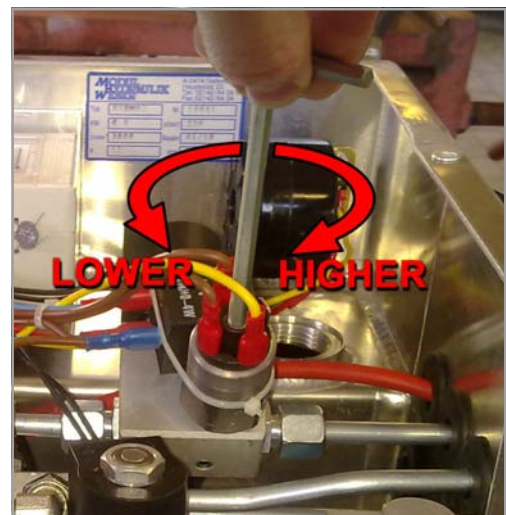
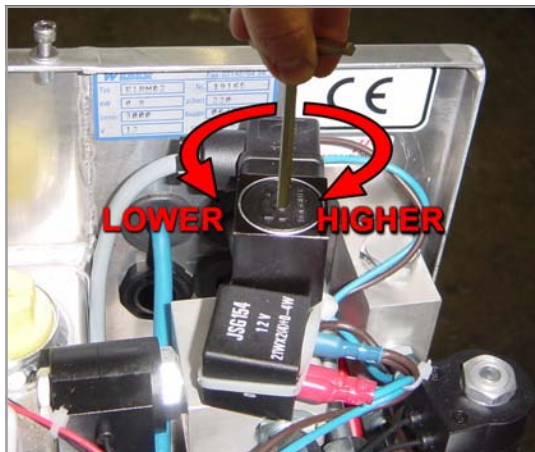
When the platform is loaded and on the ground.

Press the CLOSE button - the buzzer should sound off and the motor should stop.

Continue to press the CLOSE button, while adjusting the pressure switch, until the platform comes to the horizontal position. Adjust the pressure switch with a hex wrench until the buzzer stops.

Pressure Switch: Version 2

Pressure Switch: Version 1



## ADJUSTING THE SAFETY LOADING SYSTEM

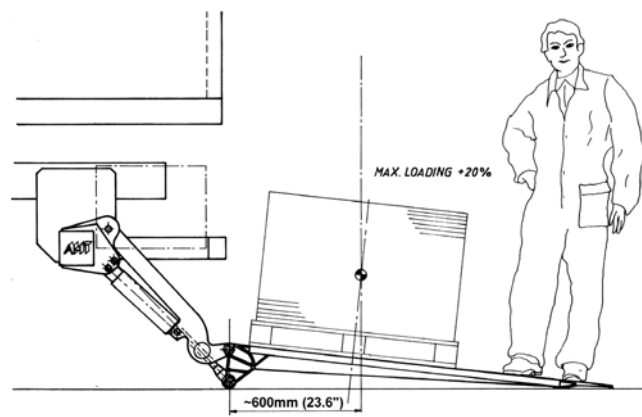
### Power Pack with Safety Loading System „SLS“

If you press the CLOSE button and the buzzer does not sound off or the platform does not raise to horizontal, the relief valve (4.3), is set too low.  
How to adjust the relief valve (see Page 8).

Press the UP button. If the platform does not raise, the relief valve is still set too low. Readjust the relief valve as described.

#### Checking for overloading:

With the platform on the ground, fully loaded, and a person standing on the tip, press the CLOSE button, the buzzer should sound off and the motor should stop.

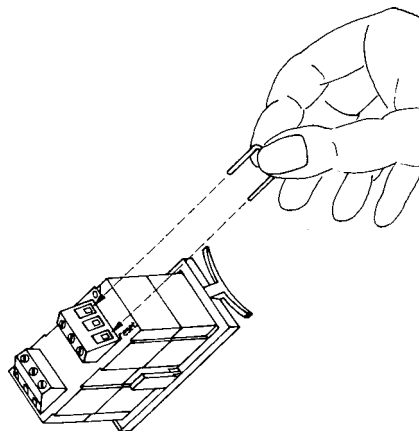


This indicates that the SLS is adjusted correctly.

If the **buzzer does not sound off** and/or if the **motor does not stop**, the adjustable screw of the pressure switch must be turned **counter-clockwise** until the motor stops and the buzzer does sound off.

How to zero the counter: (**Only when authorized by the factory**)

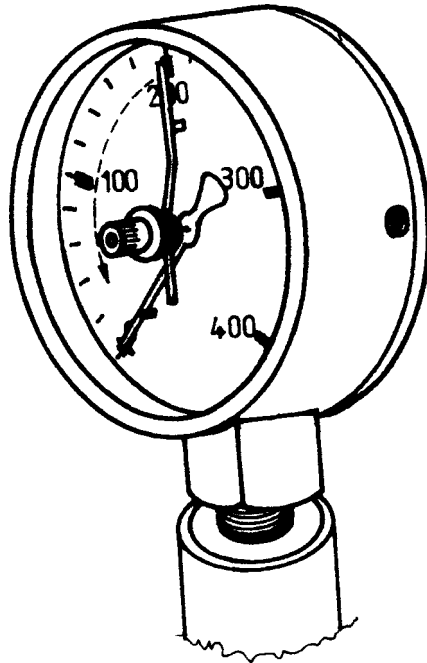
Remove the cover from the SLS box and, with a short jumper, make contact with two connectors as shown below.



## ADJUSTING THE SAFETY LOADING SYSTEM

### Power Pack with Safety Loading System „SLS“

-Zero the memory on the pressure gauge:



Close the SLS box and seal it with a wire tie.

Seal the cover cap of the relief valve.

**CAUTION:** The „O“ Ring can be damaged if the cap is tightened too much.

Turn off the main switch.

The Safety Loading System can be affected by the sun, when the platform is closed, and the main switch is turned **on**. If this happens and the buzzer sounds off, you must press the OPEN button momentarily.

**IMPORTANT:** If the main switch is in the off position, the buzzer will not sound off.

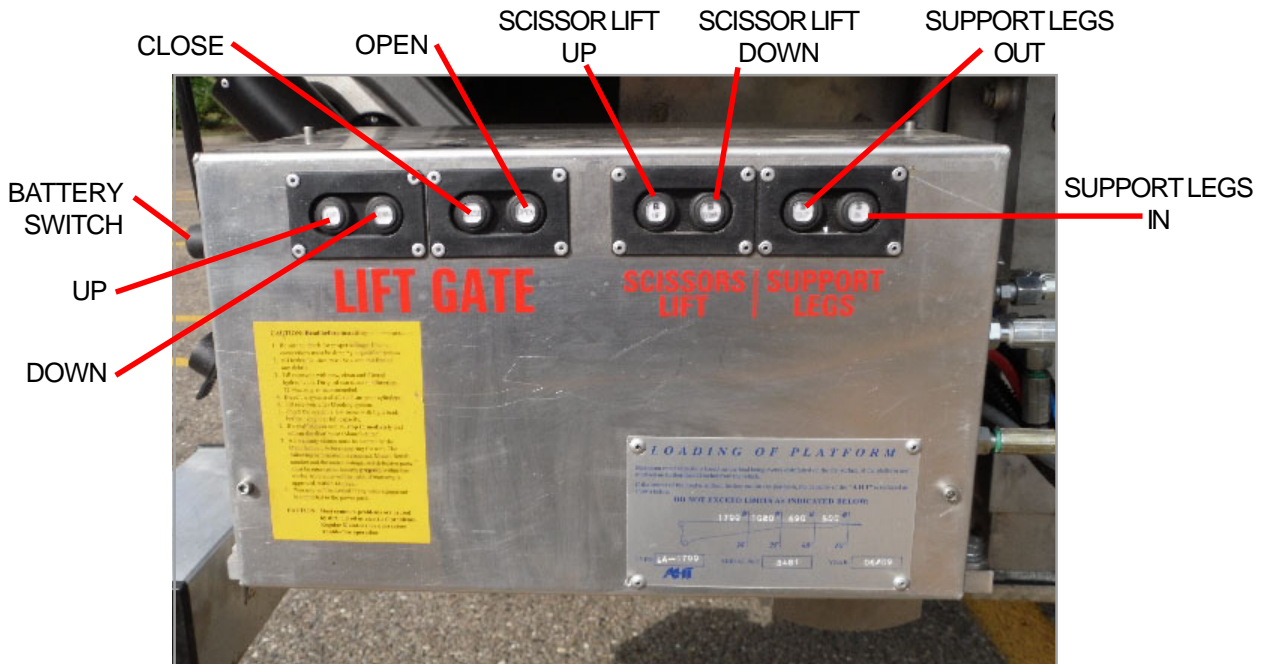
## OPERATING INSTRUCTIONS FOR THE “AHT”

### **CAUTION:**

Be sure there is enough room for the operator to safely operate the “AHT”.

### **CAUTION:**

- Be sure platform is unlocked. If it is difficult to open the platform lock, press the **UP** button and then press the **CLOSE** button. This will allow the platform lock to disengage.
- Normally, the power pack is mounted on the curbside of the vehicle, on the bumper bar.
- All of the control buttons are located on the power pack cover.
- A master switch can be placed in the cab to switch off the current to the control buttons.



- 1) Insert the **RED KEY** into the main switch and turn it clock-wise. This switch could be located in the cab of the vehicle. (In some cases, all of the controls could be located in a water-resistant box, attached to the power pack cover. If so, you must unlock the cover and open it to reveal the controls. Then insert the RED KEY into the switch and turn clockwise.)



For using the support legs: see Page 15

For using the scissor lift: see Page 16

- 2) Unlock the platform lock.

### 3) OPENING THE PLATFORM:

Press the OPEN button to open the platform to the horizontal position.

**CAUTION:** From the closed position, **always OPEN the platform first.**

**(Lowering the platform before opening will damage both tilt cylinders.)**

Always be sure the area behind the vehicle is clean and safe. and be sure no one is standing in or near the platform working area.

**NOTE: Tip of platform should be 2° above level to compensate for the load.**

The platform will maintain this level all the way to the ground.

If you want to change the position of the tip, you must press the OPEN button (to lower) or the CLOSE button (to raise).

If you want to change the opening speed of the platform, you must readjust the flow control valve located in the power pack.

**(Ask your supervisor for the correct instructions).**

Maximum opening speed, to 90°, is 15 seconds, or (6° per second).



### 4) LOWERING THE PLATFORM:

Press the "DOWN" button to lower the platform.

**CAUTION:** Always consult the data plate, to be sure you are not overloading the platform.

Always consider the weight of the pallet jack, pallet and the person. Load must always be centered on the platform and as close to the truck as possible.

If you want to change the lowering speed of the platform, you must readjust the flow control valve located in the power pack.

**(Ask your supervisor for the correct instructions).**

Maximum lowering speed is 6" per second.





## 5) LIFTING:

Press the UP button to raise the platform.

**CAUTION:** Always consult the data plate, to be sure you are not overloading the platform. Always consider the weight of the pallet jack, pallet and the person. Load must always be centered on the platform and as close to the truck as possible.

**DO NOT STAND ON TIP OF PLATFORM WHILE OPERATING!!!**



## 6) CLOSING:

Press the CLOSE button, to close the platform.

**VERY IMPORTANT:** Always raise the platform to truck floor level before closing. Lock the platform for safe transporting of the “AHT”.



**CAUTION:** Before the truck will be moved be aware, that goods are secured and fork truck and trolleys are protected against movement. When the platform has been closed secure it with twist lock to truck frame.



If you are using the support legs, be sure that both support legs are completely moved in!!!!

If you raised the complete truck body, be sure that the scissor lift for the truck body is completely lowered and locked!!!!

Turn the RED KEY, counterclockwise, and remove it from the switch. This removes all electrical current from the “AHT”. Place the key in a safe place for later use.



## SUPPORT LEGS

The hydraulic support legs are for supporting the rear loading and unloading of truck.

Press the „Out“ button to move out the support legs. Press the button until the support legs discharge the truck suspension.

**Attention:** Be sure that the subsoil is compact and safe.



After loading and unloading the truck press the „In“ button to move in the support legs.

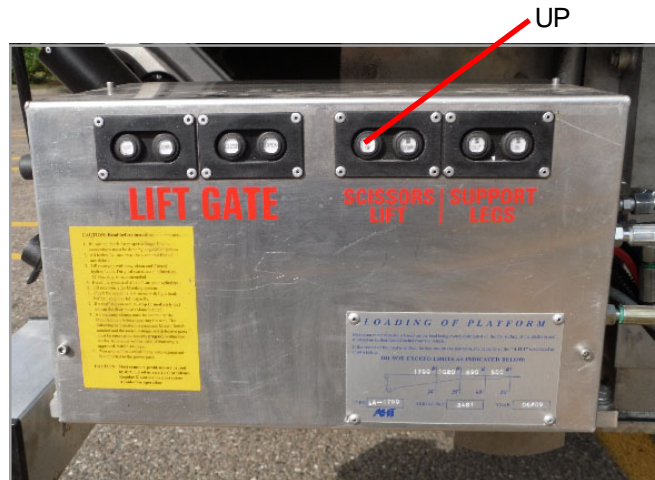


**Attention:** Before the truck will be moved, be aware that the support legs are completely moved in!!!!



## SCISSOR LIFT

Press the „Up“ button to raise the complete truck body. Press the button until the desired loading height is reached.



After loading and unloading the truck press the „Down“ button to lower the truck body.



**Attention: Before the truck will be moved, be aware that the truck body is completely lowered and locked!!!!**

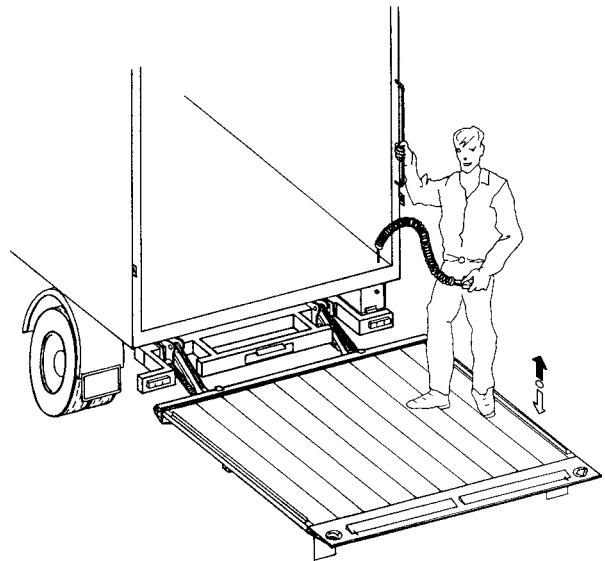


## Using the 4-Button Remote Control: (Without Automatic Leveling)

This remote control is usually mounted on the inside of the van body and is connected to the power pack, by a flexible cable. When using this remote control, the operator can ride the platform with the load, and it is possible to raise, lower, open and close the platform.

### **CAUTION:**

This 4-button remote control should be stored out of the way when not in use. The electrical cord is easily damaged.



### **UP Button:**

For lifting the platform simply press the UP button.

### **DOWN Button:**

You can lower the platform to any desired level or to ground level.

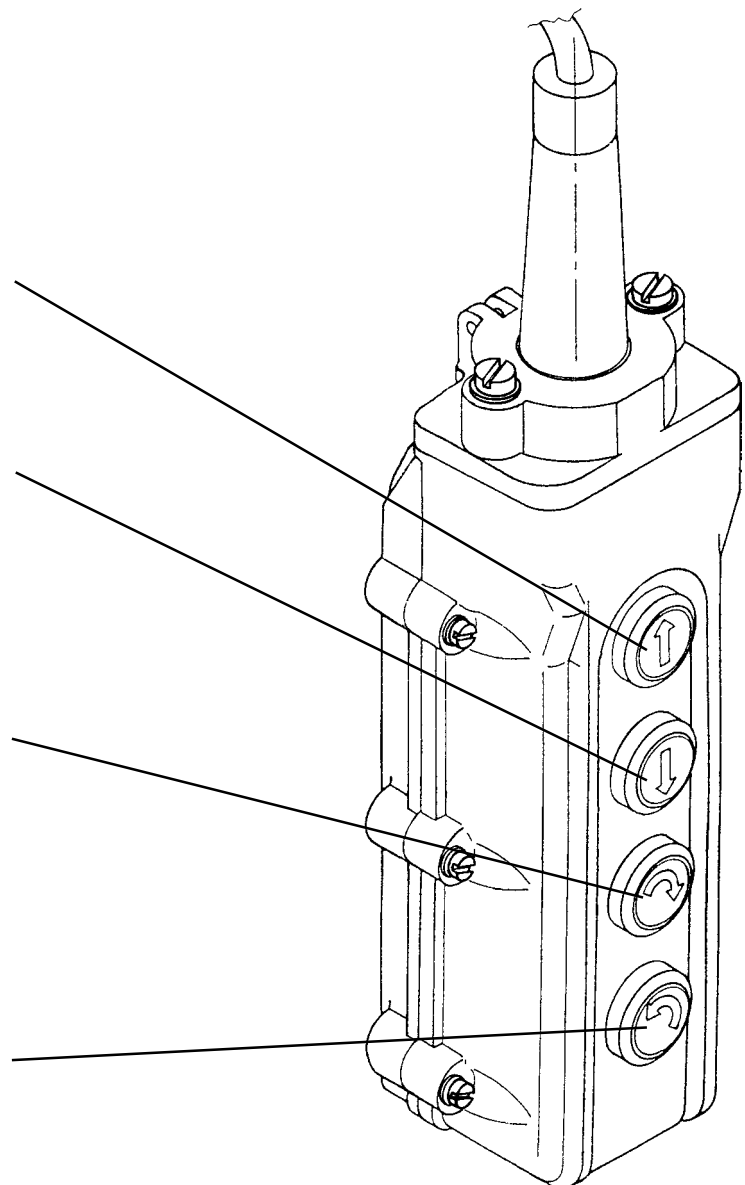
### **CLOSE Button:**

To close the platform, simply press the CLOSE button.

**CAUTION:** Be sure the platform is always at vehicle bed level, before closing platform.

### **OPEN Button:**

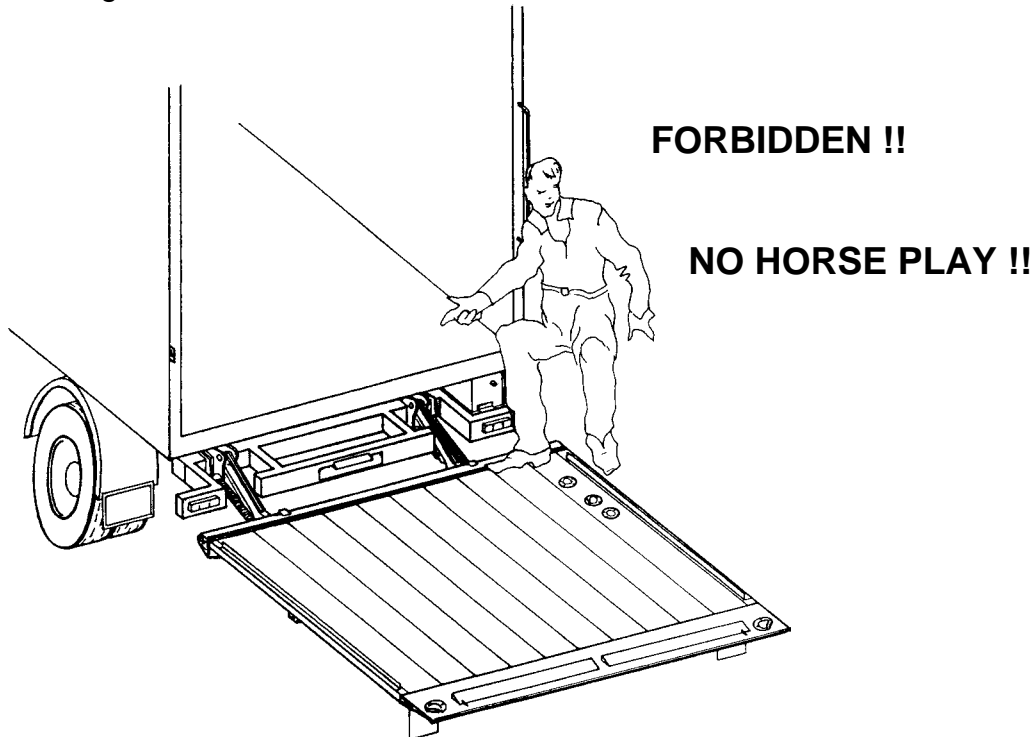
For opening the platform, simply press the OPEN button. The platform will open, come to the horizontal position and you can set the platform angle to your preferred setting.



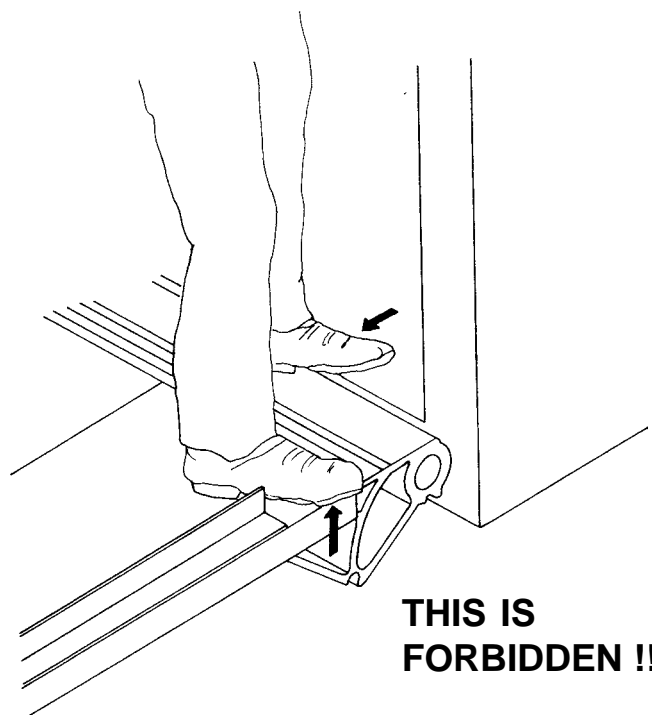
## SAFETY INSTRUCTIONS FOR THE “AHT” TAILGATE LOADER

If you ride on the platform, using the 3-button foot control or the 4-button remote control, you should always be very careful to follow these rules:

- 1) Be sure to wear good shoes. No hard or rubber soles.
- 2) Do not horseplay on the platform. **Always be conscience of your safety.**
- 3) Be sure there is enough room for the operator to safely operate the AHT.
- 4) When operating the AHT and riding on the platform, it is important to hold onto the vehicle to prevent falling.

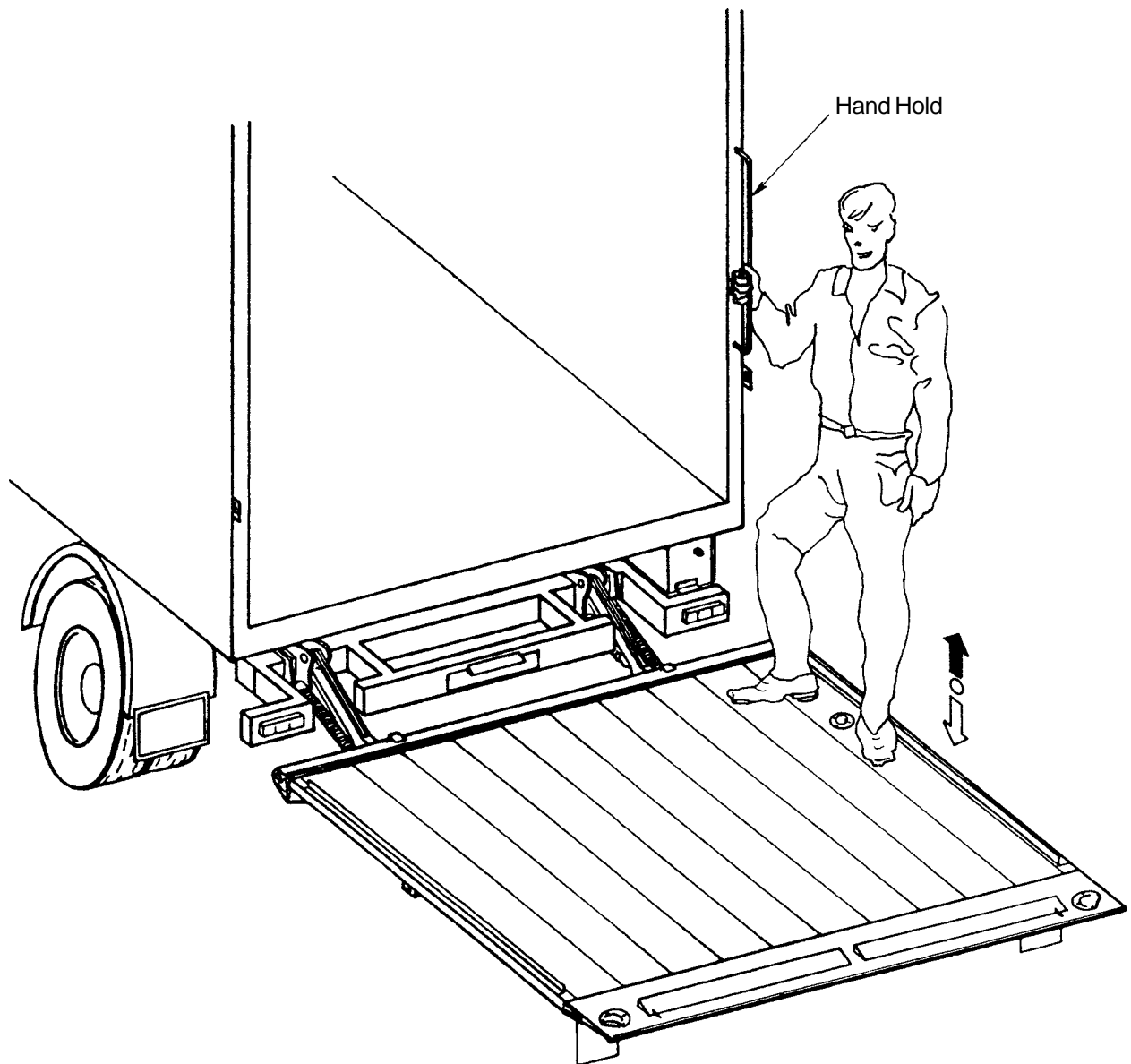


**Never place your foot outside of the platform. Your foot could be crushed.**



## SAFETY INSTRUCTIONS FOR THE “AHT” TAILGATE LOADER

The operator should always hold onto a safety device while riding the platform

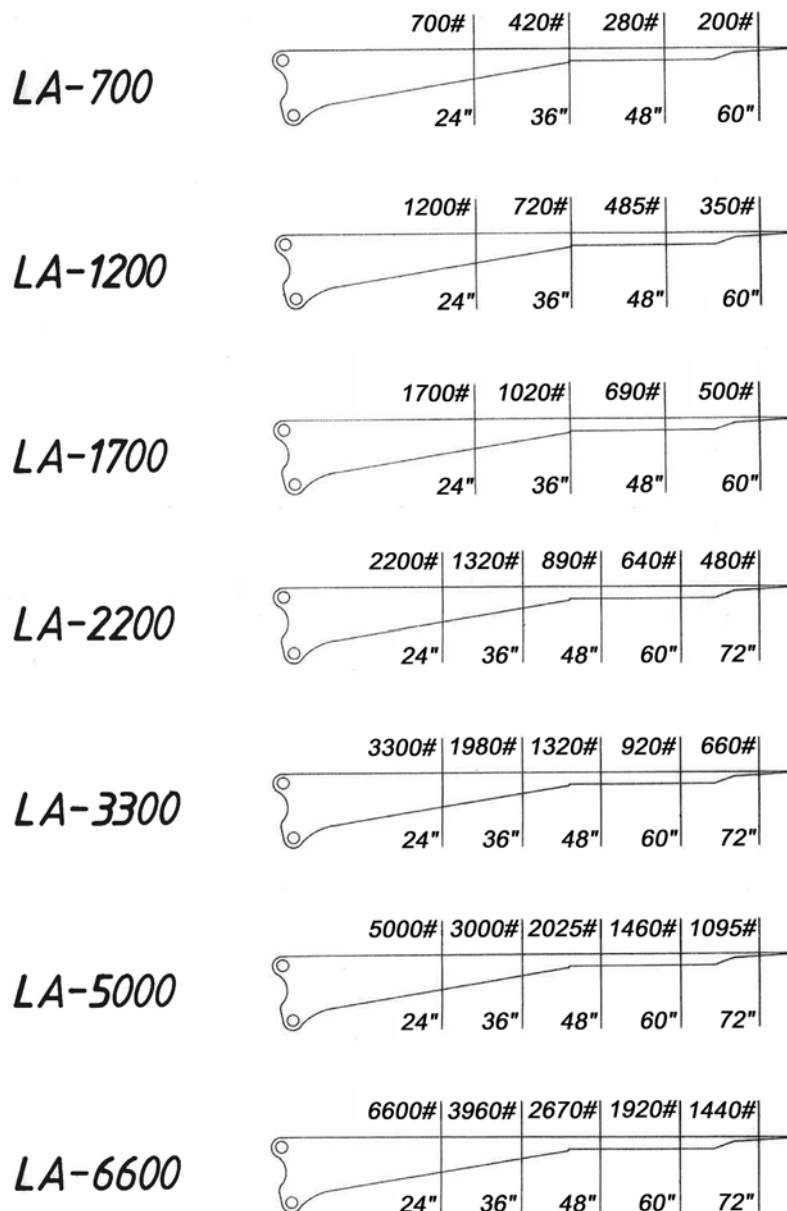


## CENTER OF GRAVITY AND LOADING DIAGRAM

- 1) Be sure driver and/or operator are well trained in the proper procedure before using the "AHT" tailgate loader. A good training session will save a lot of heartaches later.
- 2) Please be conscious of the total lifting capacity of the "AHT"

Product	Pounds	Kilogram
One person	180	90
Pallet Jack	170	80
Pallet	65	30
Product	???	???

- 3) Total weight should be equal to the Lifting Capacity of the "AHT" or less.
- 4) Please consult the data plate on your "AHT" tailgate loader, to be sure the maximum capacity is not exceeded.



**Do not operate the "AHT" until you have read the operator's manual**



## ADJUSTING THE MECHANICAL HOSE BURST VALVE

(Not needed if electrical hose burst valves are installed)

If the platform stops, **while being lowered**, a mechanical hose burst valve could be defective. This could happen in the winter time when it is much colder and the hydraulic oil is heavier.

The mechanical hose burst valve can be adjusted to remedy this situation by simply making the “S” measurement larger. (See diagram below)

The mechanical hose burst valves are screwed into the cylinders and connected to the hoses.

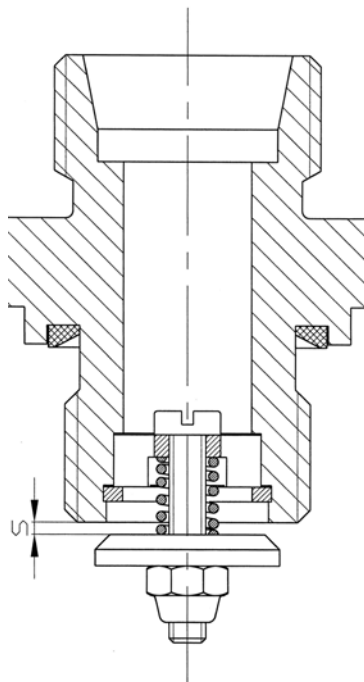
### How to make this adjustment:

- **Lift the platform to floor level**, close it and secure it into place with clamps.
- Press the **DOWN** button, so there is no pressure in the cylinders.
- Remove the **PIN** to the lift cylinder.
- Now you can swing the lift cylinder to the floor. **(Be careful, it will come apart)**
- Remove the high-pressure hose, the elbow fitting and the fitting with the mechanical hose burst valve.
- If you make the measurement “S” larger, the problem will be solved.
- The normal factory adjustment is 0.85 mm (1/30”).
- Hold the hexagon socket head cap screw and turn the locknut M2.5

### **Counter-clockwise.**

**NOTE:** A half turn = 0.45mm (1/56”) gap enlargement

- Install the fitting with the mechanical hose burst valve, elbow fitting and high-pressure hose.
- Reinstall the lift cylinder and energize the hydraulic system.
- Press the **UP** button until the relief valve is bypassed. (Dead-end the cylinder)
- Remove the clamps from the platform and open the platform.
- Press the **DOWN** button until you reach the ground. Then press the **UP** button to cycle the system. (This should be done several times to remove all excess air from the cylinders).



## GENERAL OPERATING AND MAINTENANCE INSTRUCTIONS

Hydraulic equipment is usually a part of another piece of equipment, such as a truck. To ensure a long and trouble free operation, always read the manufacturers instructions carefully.

**Below is a short list of “Do’s” and “Don’ts”**

### **DO’s:**

- When mounting the power pack, make sure it is level to the frame and has easy access for filling the reservoir, doing maintenance, etc.
- The satisfactory functioning, long life, reliability and efficiency of hydraulic equipment is greatly affected by the selection of the most suitable type of hydraulic fluid. We highly recommend FUCHS RENOLIN AW22 or any other good grade of hydraulic oil with 22 viscosity. FUCHS RENOLIN AW22 is a biodegradable oil that is good for us, as individuals, as well as for the environment.
- NEVER USE AUTOMATIC TRANSMISSION FLUID
- In case of very low temperature, less than 0°C (+32°F), use oil with a 10 viscosity.
- Fill the reservoir with a good grade of hydraulic oil. Always use a filtered funnel and clean oil.
- The AHT tailgate loader is the only one in existence to date that will permit the use of a biodegradable oil.

### **DON’T’s:**

- NEVER work on the hydraulic system while it is under pressure.
- NEVER use tape or pipe dope on the hydraulic fittings. They will seal without any outside help.

**VERY IMPORTANT:** If you wish to paint the equipment or weld on it, always mask off all moving parts, flexible connections and nameplates before doing so.

**CAUTION:** When the “AHT” is steam cleaned, it is very important to be careful around the electrical control box. DO NOT point the steam directly on the control box as the electrical connections could be damaged.

It is also very important to lubricate the entire unit, after washing, as the grease has been washed away.

## SERVICING THE AHT TAILGATE LOADER:

Three types of checks need to be made on a regular basis.

- The daily check
- The monthly check
- The annual check

**(Report any defects to your supervisor immediately)**

### **\*THE DAILY CHECK:**

Check all bolts and washers for tightness  
Check for leaks, under the vehicle, and in the hydraulic system  
Check the platform lock for operating properly  
Check all buttons on powerpack and remote control for proper operation  
Check the hydraulic oil level, if leaks are apparent  
The platform must be on the ground, and open all the way, to check the proper oil level

### **\*THE MONTHLY CHECK:**

Complete the daily check, plus the following:  
Pressure wash the entire unit, being careful not to pressure wash inside power pack  
Check all bolts for looseness and tighten if necessary  
Check all welds for cracks and repair if necessary  
Lubricate all grease fittings (12 fittings)  
Replace any worn or broken parts  
Check the opening and lowering speed (Be sure it is safe)  
Check the oil level, and add if necessary (Do not overfill)

### **Procedure for checking oil level:**

- 1) Platform must be on the ground and tilted down to properly check reservoir level.
- 2) Remove power pack cover and the blue filler cap. The dipstick is on the filler cap. Oil level must be kept between the lines on the dipstick at a minimum. (Always leave at least 1" of space in reservoir.
- 3) Replace the dipstick and power pack cover.

### **\*THE ANNUAL CHECK:**

Complete the daily check  
Complete the monthly check, plus the following  
Check all electrical cables for chafing or breaking, repair if necessary  
Check all hydraulic lines for leaks, cracks or chafing, repair if necessary  
Drain the hydraulic reservoir; clean the filter and the reservoir  
Fill reservoir with a good, clean grade of hydraulic oil, ie: FUCHS RENOLIN 22 (10L)  
Check the lifting capacity (Consult the data plate for correct capacity of this unit)  
Check all safety devices (Flags, Roll stops, Edge Guards, etc.) for proper operation  
Check the wear plates and/or rollers and replace, if necessary  
Check all electrical connections for corrosion and tightness. Repair if necessary

**\*\*We recommend FUCHS RENOLIN AW22 hydraulic oil,**

**Note:** Depending on frequency and usage the hydraulic hoses have to be changed after approx. three years.

Only clean hydraulic oil will give you the service that you deserve.

The hydraulic oil must be changed once a year. The power pack requires an oil thickness of 22cst (usage of 10cst oil in very low temperatures under minus 10°C).

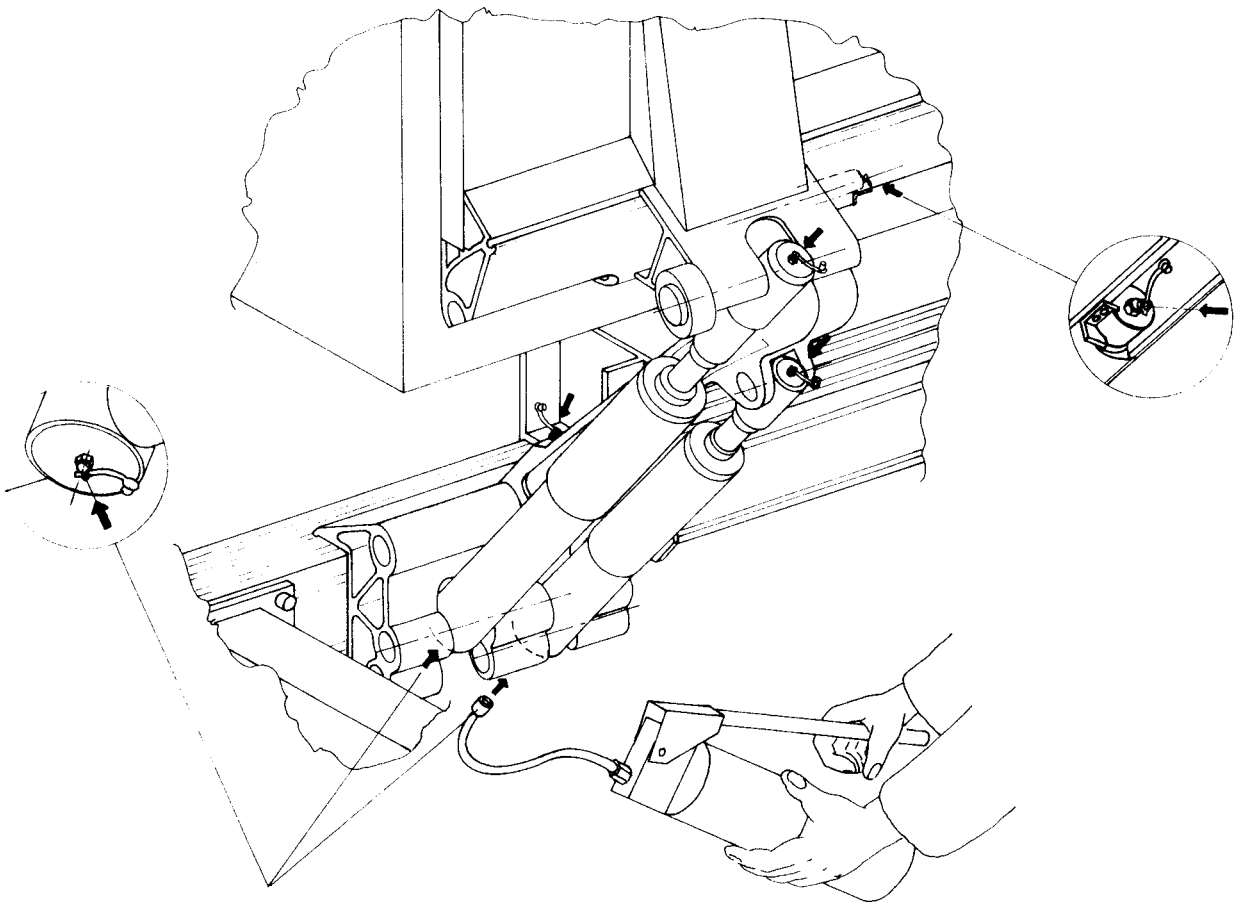
**The following oils, or their equivalent, may also be used:**

TEXACO-HD 22 or HD AZ 22

SHELL-TELLUS 22

## LUBRICATING THE AHT LIFTGATE

After steam cleaning the AHT tailgate loader, it will be necessary to lubricate the 12 grease fittings located on the drawing below.



## SAFETY LOADING SYSTEM “SLS”

Our exclusive patented, Safety Loading System (SLS), provides protection from incorrect loading or overloading of tail lifts.

### VERY IMPORTANT:

“SLS” will automatically interrupt the loading process, and the buzzer will sound, if a 20% overload allowance is exceeded. It will register, and count, the overloads as well as the highest overload. The overload count can be seen, in a window, on the “SLS” box. The platform can only be lowered, **not raised**, when this happens. The loading process can only be continued after the load has been corrected.

If the “SLS” seal, on the counter box, has been broken, or if changes have been made to the electrical wiring, on the Safety Loading System, the warranty is void.



## **A H T    WARRANTY CERTIFICATE**

*AHT warrants to the original purchaser, for a period of TWO YEARS all manufactured parts and ONE YEAR for supplier parts, from the date of installation, any new AHT product , including accessories and/or spare parts. These items are warranted against defects in material and/or workmanship. AHT will, at its own descretion, either repair or replace any defective parts with equivalent parts, subject to the conditions listed below.*

Type: \_\_\_\_\_ Serial #: \_\_\_\_\_ Year of Mfg: \_\_\_\_\_  
Customers Name: \_\_\_\_\_ Date of Installation: \_\_\_\_\_

1. Replacement or repair of parts will be provided from the factory, subject to any applicable Federal, State or Local taxes. Labor charges are not covered unless specifically authorized by AHT, prior to the actual repair and subject to our published flat rate schedule.
2. Defective parts must be reported to AHT within 30 days of discovery and must be submitted on an official warranty claim form, or the warranty is void.
3. Warranty is valid only if the Warranty Registration Form is returned, within 15 days of installation, to AHT.
4. Warranty shall not apply if equipment is operated at capacities in excess of factory recommendations.
5. Warranty does not apply to defects caused by accident, misuse, alterations of design, improper installation, poor maintenance practices, or any other cause beyond the control of AHT.
6. Warranty shall not apply to any cargo loss, loss of use, or any other incidental or consequential damages arising out of the use of this product, including travel time.
7. Warranty as provided herein shall be the purchaser's exclusive and limited remedy, and AHT shall not be liable for consequential or other damages.

IT IS EXPRESSLY UNDERSTOOD AND AGREED THAT THERE ARE NO WARRANTIES MADE BY THE MANUFACTURER OR ITS AGENTS, REPRESENTATIVES OR DEALERS, EITHER EXPRESSED, IMPLIED OR IMPLIED BY LAW, EXCEPT THOSE EXPRESSLY STATED HEREIN ABOVE IN THIS STANDARD LIMITED WARRANTY AGAINST DEFECTS IN MATERIAL AND WORKMANSHIP, AND THE MANUFACTURER AND ITS AGENTS. REPRESENTATIVES AND DEALERS SPECIFICALLY DISCLAIM ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.

\_\_\_\_\_  
Customer

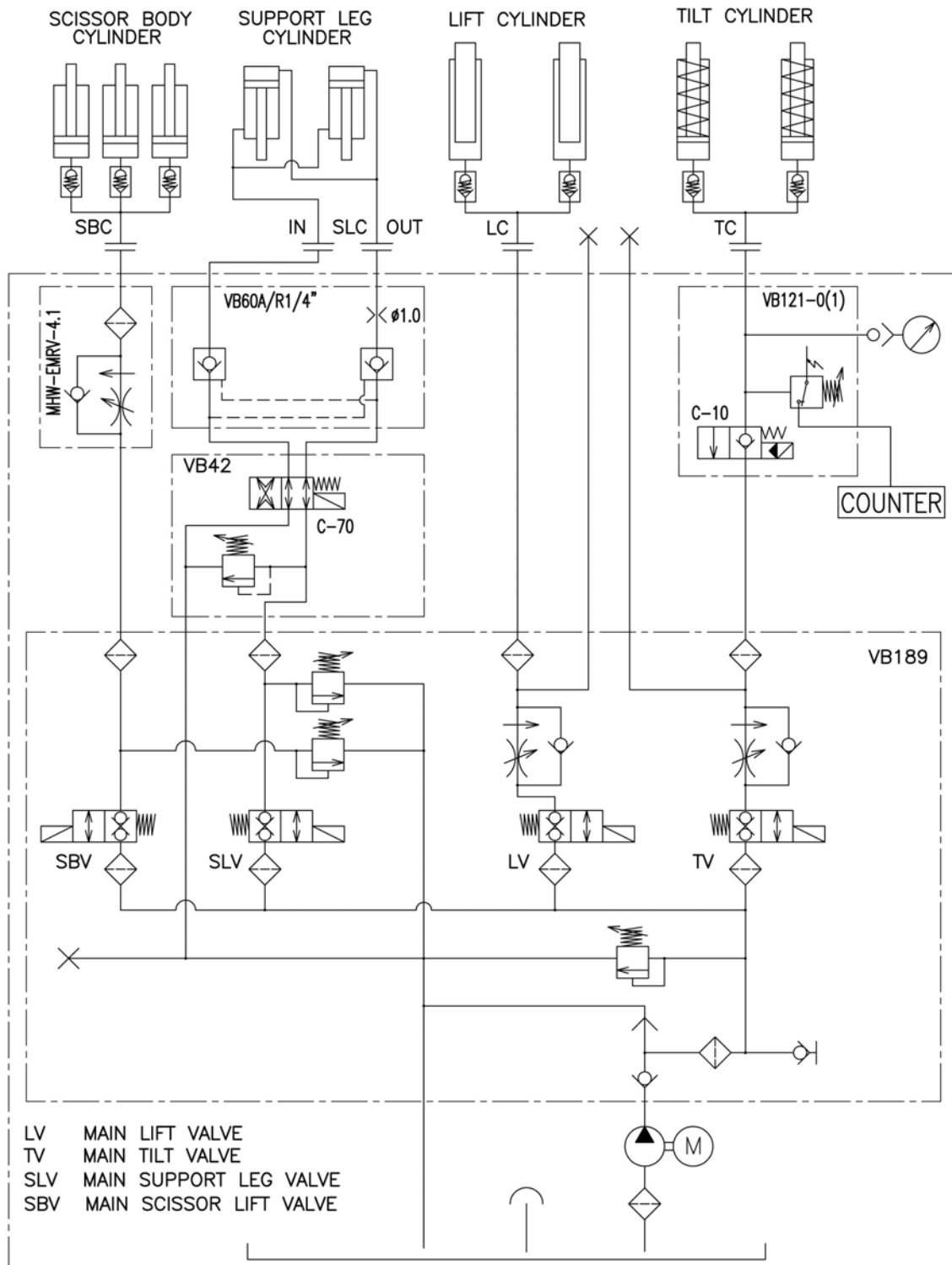
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AHT Representative



# Hydraulic Diagram

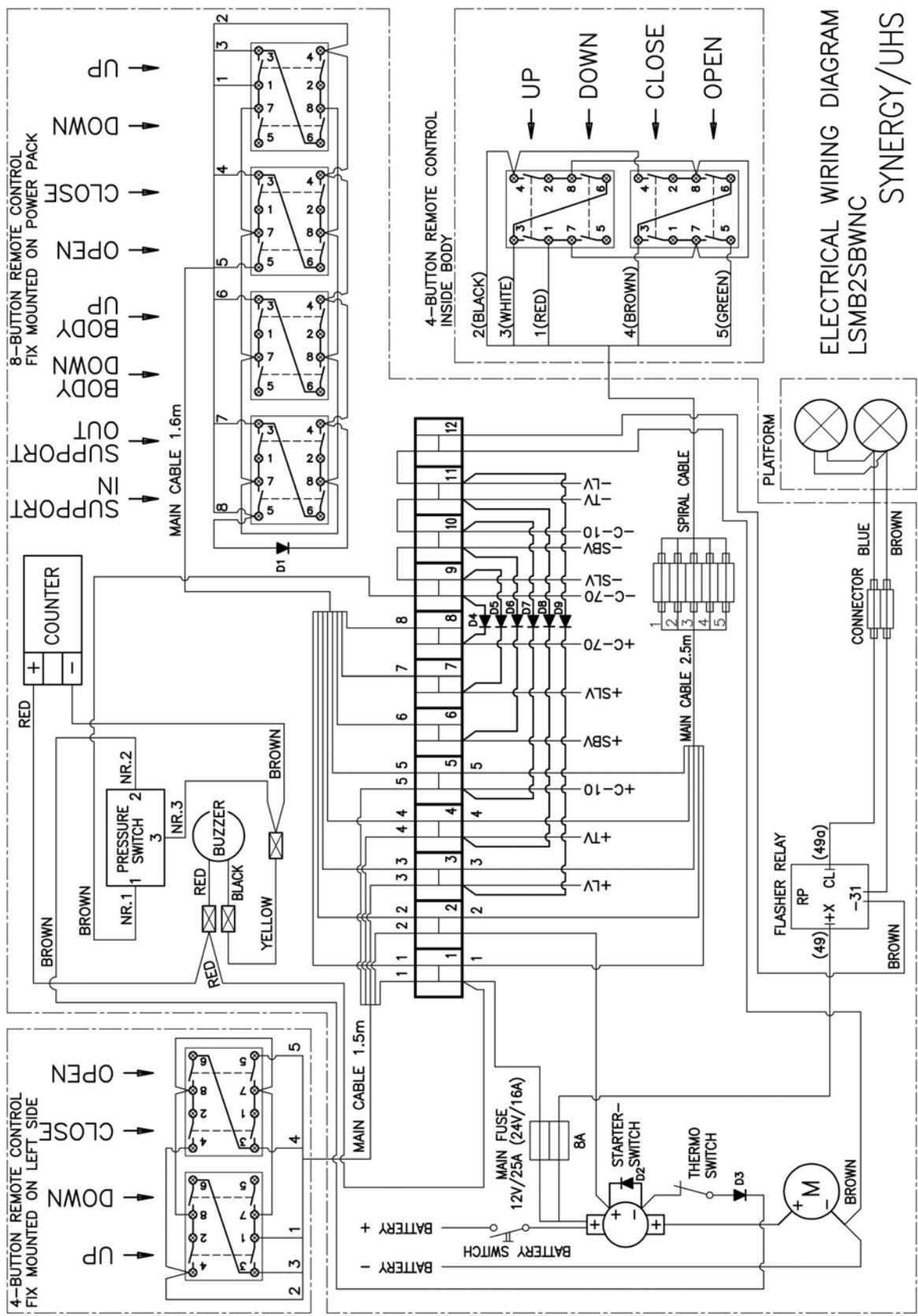
Mechanical Hose Burst Valve  
Safety Loading System

## HYDRAULISCHES SCHALTSCHHEMA HYDRAULIC SCHEMATIC (VB189+VB121-0(1)+VB42+VB60A)



# Electrical Wiring Diagram

Mechanical Hose Burst Valve  
4-Button-Remote-Control  
Safety Loading System



ELECTRICAL WIRING DIAGRAM  
LSMB2SBWNC  
SYNERGY/UHS