

## Original



**JA3500T-E** 

Lifting capacity 3500 kg.

Euroline

2 Post "Clear Floor" lift

## Installation, operation and maintenance manual





Read this entire manual carefully and completely before installation or operation of the lift. Reservations are made for printing, writing and spelling errors in this manual.

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### **1. IMPORTANT SAFETY INSTRUCTIONS.**

#### 1.1 Important notices.

Jema Autolifte A/S provides the user with a 1 year warranty on the lift, if there is something wrong with the lift in service conditions, we will repair or replace the product in accordance with the user's requirements. Jema Autolifte A/S assumes no responsibility for incorrect installation and operation, overload operation, improper concrete pad (not conforming to the manual), normal mechanical wear and inadequate maintenance. The warranty will be performed based on the type and serial number of the equipment. Therefore, those obtainable by the users to the manufacturer when this demand.

This 2-post lift is specially designed to lift vehicles weighing less than its maximum lifting capacity. It is not allowed to use it for other purposes. If this is not respected, we will not assume liability to injury, accidental injury or damage to the lift. Read this manual carefully before operating lift. This allows the person or property damage

Without our professional advice. it is not permitted to make changes in mechanics or control unit.

We recommend getting a proffessionel installer to mount and security approve lifts. Before starting.

#### 1.2 Qualified personnel.

- 1.2.1 Only these qualified staff, who have been properly trained, can operate the lift.
- 1.2.2 Electrical installation shall comply with local regulations and a qualified electrician must complete the connection.
- 1.2.3 People who are not trained are not allowed in the lifting area.

#### 1.3 Danger notices.

- 1.3.1 Do not install the lift on an asphalt surface.
- 1.3.2 Read and understand all safety warnings before operating the lift.
- 1.3.3 Outdoor, sandblasting, undercoating and other environments that differ from general immortal auto mechanic tasks.
- 1.3.4 Keep hands and feet away from any moving parts. Keep feet clear of the lift when lowering.
- 1.3.5 Only qualified people, who have been properly trained, can operate the lift.
- 1.3.6 Do not wear unfit clothes such as large clothes with flounces, tirs, etc, which could be caught by moving parts of the lift.
- 1.3.7 To prevent evitable incidents, surrounding areas of the lift must be clean and tidy.
- 1.3.8 The lift is simply designed to lift the entire vehicles, witch has it's maximum weight within the lifting capacity.
- 1.3.9 Always insure the safety proberly managed before any attempt to work near or under the vehicle.
- 1.3.10 Make sure to place the lifting pads to the positions as suggested by vehicle manufactures and when gradually lift the vehicle to the desired height, operators should be certain that the vehicle will not slant, roll-over or slide in lifting process.
- 1.3.11 Check at any time the parts on the lift to ensure the agility of moving parts and the performance of synchronization. Ensure regular maintenance and if anything abnormal occurs, stop using the lift immediately and contact our dealers for help.
- 1.3.12 Lower the lift to its lowest position and do remember to cut off the power source when service finishes.
- 1.3.13 Do not modify any parts of the lift without manufacturer's advice.
- 1.3.14 If the lift is going to be unused for a long time, users are required to: Disconnect the power source and lubricate the moving parts with the correct lubrication.

## Note: To protect the environment, any share disposed of according to current regulations.

#### 1.4 Notice of environment and condition.

In general, this auto lift to be installed on the following terms:

1.4.1 Supply voltage: 0.9-1.1 nominal supply voltage.

1.4.2 Source frequency: 0.99 to 1.01 nominal frequency.

1.4.3 Ambient temperature: 5 ° C - 40 ° C

1.4.4 Height: must be at altitudes of up to 1000 m above sea level.

1.4.5 Humidity: Not to exceed 50% at 40 ° C

1.4.6 Atmosphere: Free from dust, acid fumes, corrosive gases and salt.

1.4.7 Avoid exposure to direct sunlight or heat rays that can alter the environmental temp.

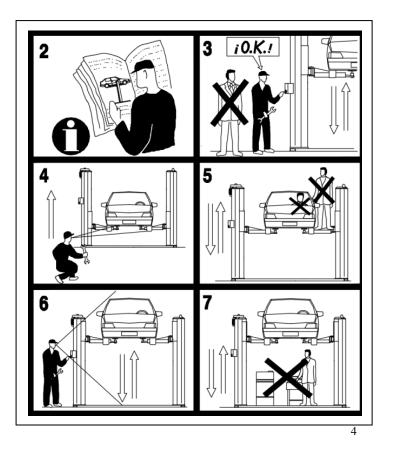
1.4.8 Avoid exposure to abnormal vibrations.

1.4.9 Electrical equipment must withstand the effects of transport and storage temperature within a range

of -10 ° C to 55 ° C and for short periods of max. +60 ° C - no more than 24 hours.

#### 1.5 Warning signs.

All safety warning signs attached on the machine are for the purpose of drawing the user's attention to safety operation. The labels must be kept clean and need to be replaced when they are worn-out or fallen off. Read the explanations of the labels carefully and try to memorize them.



1.READ AND UNDERSTAND all safety warning procedures before operating lift.

2. KEEP HANDS AND FEET CLEAR. Remove hands and feet from any moving parts. Keep feet clear of lift when lowering. Avoid pinch points.

3. KEEP WORK AREA CLEAN. Cluttered work areas invite injuries

4. Consider work area environment. Do not expose equipment to rain. DO NOT use in damp or wet locations. Keep area well lighted.

5. ONLY TRAINED OPERATORS should operate this lift. All non-trained personnel should be kept away from work area. Never let non-trained personnel com in contact with, or operate lift.

6. USE LIFT CORRECTLY. Use lift in the proper manner. Never use lifting adapters other than what is approved by the manufacturer.

7. DO NOT override self-closing lift controls.

8. REMAIN CLEAR of lift when raising or lowering vehicle.

9. CLEAR AREA if vehicle is in danger of falling.

10. ALWAYS INSURE that the safeties are engaged before any attempt is made to work on or near vehicle.

11. DRESS PROPERLY. Non-skid steel-toe footwear is recommended when operating lift.

12. GUARD AGAINST ELECTRIC SHOCK. This lift must be grounded while in use to protect the operator from electric shock. Never connect the green power cord wire to a live terminal. This is for ground only.

13. DANGER! The power unit used on this lift contains high voltage. Disconnect power at the receptacle before performing any electrical repairs. Secure plug so that it cannot be accidentally plugged in during service.

14. WARNING! RISK OF EXPLOSION. This equipment has internal arcing or sparking parts which should not be exposed to flammable vapours. This machine should not be located in a recessed area or below floor level.

15. MAINTAIN WITH CARE. Keep lift clean for better and safer performance. Follow manual for proper lubrication and maintenance

instructions. Keep control handles and/or buttons dry, clean and free from grease and oil.

16. STAY ALERT. Watch what you are doing. Use common sense. Be aware.

17. CHECK FOR DAMAGED PARTS. Check for alignment of moving parts, breakage of parts or any condition that may affect its operation. Do not use lift if any component is broken or damaged.

18. NEVER remove safety related components from the lift. Do not use lift if safety related components are damaged or missing.

#### 1.6 Sound Level.

The sound emitted from the lift should not exceed 75DB. For the sake of your health, we suggest putting a noise detector in your working area.

#### <u>1.7 Training.</u>

Only these qualified people, who have been properly trained, can operate the lift. We are quite willing to provide professional training for the users when necessary.

## 2. Overview of the lift.

#### 2.1 General descriptions.

This clear floor two posts lift consists among other things of bars, sleds, lifting arms, spindles and motor, control box, console, etc. The lift runs with spindle and motor. The engines are running by pressing the one of two buttons. It runs around the spindle and the main nut in sleds lift these up and down depending on what way the spindle drive. In the thread nuts in the slides form part of the whole lifting mechanism, so the event of a power failure it would not be possible to have the arms / the slides to run down, electric. Without power you must remove the topprotection and turning the large pulley manually so lift / vehicle goes back down.

#### 2.2 Technical data.

Model	Lifting capacity	Lifting time	Lifting height	Height	Width	Width between posts	Power supply	Noise	Weight
JA3500T-E	3500KG	45 Sec	1900mm	4040mm	3540mm	2795mm	380V/420V, three phase	<75dB	635Kg

## 3. Before installation.

#### **!!!** We recommend getting a professional installer to mount the lift. **!!!**

#### 3.1 Preparations before installation.

#### 3.1.1 Tools and equipments needed.

- Appropriate lifting equipment
- ✓ Rotary Hammer Drill with 16 mm. drill bit.
- ✓ Chalk and tape measure, magnetic plumb.
- ✓ Sockets and a set of open wrenches, a set of inside hex wrenches ,cross and straight screw drivers.
- ✓ Hammer 4 pounds, sharp nose pliers, oil funnel.

#### 3.1.2 List for parts checking

Unfold the package and check if any parts missed.(annex 3) Do not hesitate to contact us in case any parts missed, but if you do not contact us and insist installing upon the lack of some parts, Jema Autolifte A/S as well as our dealers will not bear any responsibility for this and will charge for any parts subsequently demanded by the buyer.

#### 3.1.3 Ground conditions.

The lift should be fixed on a smooth and solid concrete ground with its strength more than 3000psi, tolerance of flatness less than 5 mm. and 180 to 200 mm. armed concrete thickness. In addition, newly built concrete ground must undergo more than 28days' hardening.

#### 3.2 Precautions for installation.

3.2.1 Make sure the two posts stand paralleled and are vertical to the ground. No slanting.

3.2.2 All bolts, screws,nuts. Ect. should be firmly fastened.

3.2.3 Do not place any vehicle on the lift in the case of trial running.

## 4. Installation

#### Move the whole unit to desired installation spot with a forklift. (DO NOT MOVE THE LIFT ON THE CARAIGES, SINCE IT CAN DEFORM THE SPINDLES!)

#### 4.1 Installation instructions.

**<u>Step 1</u>**: Remove the packing, engines, arms, tops and accessories. Read and understand this manual thoroughly before the next step.

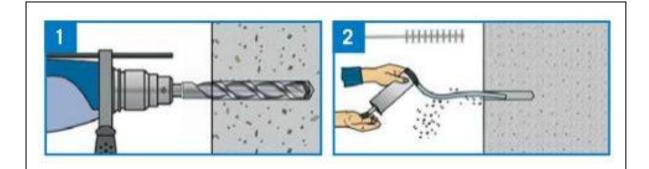
Step 2: Rise of the two columns up and place them vertically with a distance of between 2795.

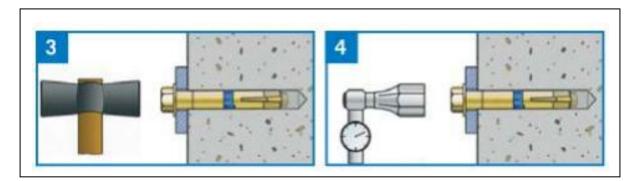
(Measured on the outside of the base plate on the lift leg). (See image T.2 on the next page)

Draw if possible a sketch of the base plate with chalk on the floor and determine the exact placement of the columns.

#### Step 3:

- 1. Drill holes in the floor to the Expansion bolts with a drillhammer. Be sure that the holes are drilled vertically into the concrete floor.
- 2. After the holes are drilled (see picture 1), remove dirt and dust from drilling the holes. Make sure that the columns are where drawn with chalk.
- Expansion bolts knocked down, N.B. Do not tighten yet (see picture 2), bars soldered out of the enclosed sims. (See picture 3)
- 4. Expansion bolts tightened with a torque wrench (12 kg. / 120 Nm.) After Expansion bolts been tightened, check that the pillars are still plumb.







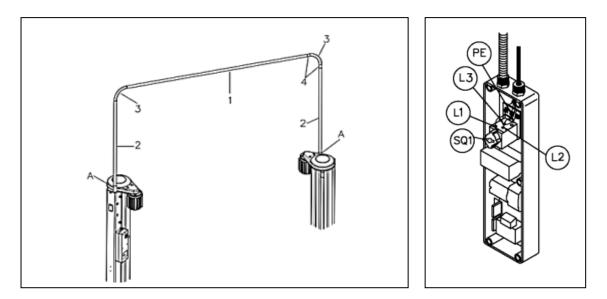


#### Step 4:

#### Install pipe / tube, motor, etc. in slave column.

After installing the posts, run the two electrical cables from the main control box post to the auxiliary post through the conduit tubes, which are made up of three straight sections (1 and 2), two curved ones (3) and two flexible couplings (4). It is recommendable to run the cables through the tubes section by section, as this makes the operation easier. Should this be done after assembling the conduit, a "cable pulling" guide must be used. The tube n°1 must be cut according to the extent necessary, as it is supplied in lengths of 3m (Measure theoretical 2640mm.) Next insert the straight tubes (2) in the holders (A) at the top of the posts, without damaging the electrical cables in the process.

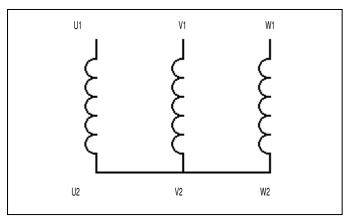
Run the two cables through the hole in the post into the box on the auxiliary post. Connect the power cable (4x1.5) to terminals 1, 3 and 5 on contactor KM3 and the earth wire to the earth terminal (PE). Similarly, connect the control cable wires to strip X1, ensuring that the wire numbers match those of the terminals (see wiring diagram).



Before making any electrical connection please check the electrical supply voltage is the same than lift voltage mentioned in the lift specifications.

Electrical cable A4 x 1.5mm multicore cable (3 F + PE) is recommended. Follow the indications on the electrical diagram. Connect the service cable to terminals L1, L2 and L3 on switch SQ1 inside the control box. Connect the earth wire to the screw marked PE.

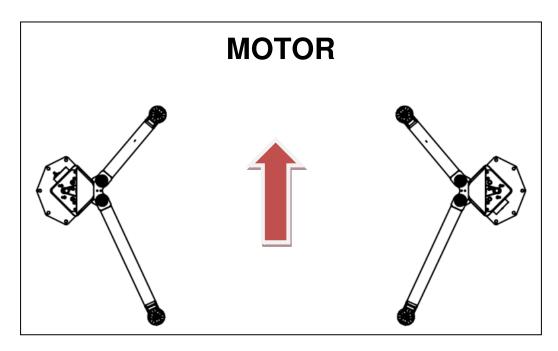
Lifts are supplied ex factory for 400 V operation. If your electrical supply voltage is different, both TC1 transformer connections and motor connections must be changed.



To connect 400V put the terminal-ends together U2-V2-W2 with a terminal stripand connect the mains from the Control box to the engine U1-V1-W1. Any intervention in the electrical circuit, even if it is not important, has to be made by the Official Technical Service of Jema Autolifte.

IMPORTANT: It is recommended the installation of fuses in the power supply.

#### Step 5: Mount the lifting arms on the carriages as shown.

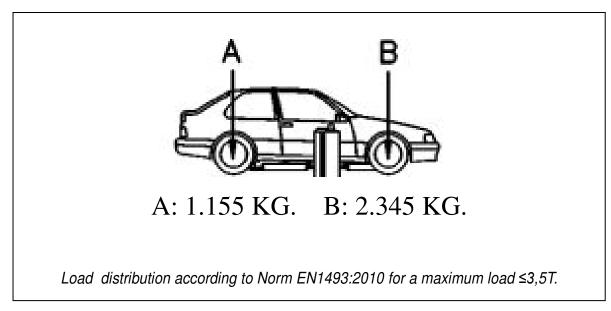


#### Step 6: Operating test / Connection check-up.

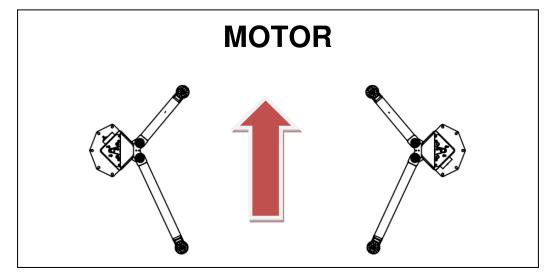
Check carefully to ensure that all electrical connections have been made properly. Do this by pressing the up button momentarily. If the carriages go up, the connections have been made properly. If the carriages go down, a wrong connection has been made if this happens two phases should be switched at the control box. Take care to press the lifting

button for "just a second" when performing this test, because if the connections have not been made properly the carriage may descend to its lowest position, activating the safety stop system and locking the lift in place(E01-E02). If this happens, the carriages must be raised approximately 15cm. by turning the nut on the upper part of the spindles of both posts with a spanner. Before doing this, turn off the mains switch. Once the lift is operating correctly, lower it to its bottom position and check that the display height indicator is at 000.





Before placing the car on the lift, perform one complete service (up & down) without load to verify that upper and lower limit switches are working properly and lift runs smoothly. When placing the car on the lift, ensure that the vehicle weight is distributed as centrally as possible and that the pads are placed at the lifting points recommended by the vehicle manufacturer. Because it is an asymmetric lift, ensure that the heaviest part of the vehicle (engine) is placed on the short lifting arms end.



Before lifting the vehicle, check that the lifting arms are locked. When the car is in position, pushing the up button we will Lift the car until the button is released or until the upper limit switch is activated when maximum height is reached. Once

vehicle is just lifted from the floor, stop the lifting and verify that vehicle lifting points rest on pads in a safe manner.

Only use the lifting points recommended by the vehicle's manufacturer when the down button is pressed, the lift descends to the desired height. If the button is not released, the lower limit switch is activated when the lowest point is reached and stopping the lift. When the carriage arrive at 12cm from the lowest position the lift stops and sound a safety signal, then release and pressed the down button and the lift full down.

#### 4.2 To be checked after installation.

N0.	Check	ok	no
1	Stands columns vertically?		
2	Are arms mounted securely?		
3	Is Bottom Stop, top stop, safety wire contact adjusted?		
4	Is the wiring connectors connected correctly?		
5	Is the rest of the joints tightened correctly?		
6	Are all places that need lubrication, lubricated?		

## 5. Operation instructions.

#### 5.1 Operating Rules.

- 5.1.1 The lift can not lift or lower a vehicle whose center of gravity is not located centrally between the lifting arms. Otherwise, neither Jema AutoLifte A/S or our dealers, be held responsible for accidents.
- 5.1.2 The operator and other persons involved should be in a safe distance during lifting or lowering processes.
- 5.1.3 When the vehicle is lifted to working height, the user must make sure that, if present, is at a safe distance to the lift, to prevent the lift accidentally lowered.

#### 5.2 Description of the control box.

Description	Function		
Monitor	Displays voltage connection etc.		
UP button	Raise the lift.		
DOWN button	Lift lowered.		
Main switch	Turn on or off		

#### 5.3 Operating Instructions.

#### To raise up the lift.

- 1. Make sure you have read and understood the manual before operating lift.
- 2. Park the vehicle between the two colums.
- 3. Adjust the arms to suit the designated lifting points on the vehicle. Make sure that the vehicle's center of gravity is located in the center of the lift.
- 4. Press "UP" button on the control box until the pads on the arms touching the correct locations on the vehicle.
- 5. Continue to raise the vehicle until it is slightly separated from the floor. Check its stability again.
- 6. Raise the vehicle to the desired height. Check stability. sure, if present, is at a safe distance to the lift, and then perform maintenance or repairs under the vehicle.

#### Lowering the lift.

- 1. Press "DOWN"- button.
- 2. After the arms are lowered to their lowest position, turn the away from the vehicle and all obstacles removed.
- 3. Drive the vehicle away from the lift.

#### 5.4 Emergency lowering in case of power failure.

1. Remove the wood on both columns.

2. The large kilremshjul can now be turned by hand on both sides so the sleds slows down. Run any of both sides simultaneously so that the weight is constant and at the risk of the vehicle falling off the lift.

## 6. Troubleshooting.

NOTE: If the problem can not be resolved locally, please do not hesitate to contact us for help. We offer our service as quickly as possible. To quickly solve a problem, we will provide as much information as possible, possibly photos of problem.

PROBLEM	CAUSE	CORRECTIVE
Errors 1 and 2:	Breakage of main nut on one of the columns	Disconnect mains switch. Disassemble damaged column and repair (in both cases, replace main nut and safety nut and spindle).
Errors 7 and 9:	Contactor mechanism KM0, KM1, KM2, KM3 or KM4 damaged.	Disconnect mains switch.Check and replace contactor if damaged.
	nd 9 are shown, the board blocks the lift and th Intil they reach the lower end-of-run stop.	ne Reset function is inoperative. Both columns must be manually
	a) Breakage or loosening of electrical cable to the motors.	a) Disconnect mains switch.Replace cables if necessary. Check connections
Errors 8 and 10	b) Breakdown or overheating of one of the motors.	b) Disconnect mains switch.Leave motor to cool.Check and replace motor if necessary.
	c) Breakdown or damage to the detector in one of the columns	<ul> <li>c) Disconnect mains switch.Check adjustment or change the detector.</li> </ul>
	d) Contactor mechanism KM0, KM1, KM2, KM3 or KM4 damaged	d) Disconnect mains switch. Check and replace contactor if damaged
	a) Breakage or loosening of an electrical cable to the motors.	a) Disconnect mains switch. Replace cables if necessary. Check connections
	b) Breakdown or overheating of one of the motors.	b) Disconnect mains switch. Leave motor to cool. Check and replace motor if necessary
Errors 18 and 20 c) Breakdown or damage to the detector in one of the columns		c) Disconnect mains switch. Check adjustment or change the detector.

Error 23This error is shown when 3 errors from E07 to E20 have been produced, and remains persistentzero (first align the columns manually);or by manually lowering the columns until the lower ends-of-run are activated, witching off and switching the board back on again.This is also applicable to error E22.Errors 24, 26, 28 and 30Failure, breakage or misalignment of upper end-of-run on both columns.Disconnect mains switch. Check, adjust or replace end-of-runErrors 25, 27, 29, 31, 40 and 41Failure, breakage or misalignment of lower end-of-run on both columns.Disconnect mains switch. Check, adjust or replace end-of-run.Internal board communicationsPress the "F" function key. If this error persists, press		d) Obstacle found when lowering.	d) Disconnect mains switch. To clear the obstacle, raise the lift a few centimetres using a wrench on the upper spindle of the blocked column.
f) Contactor mechanism KM0, KM1, KM2, KM3 or KM4 damaged.       f) Disconnect mains switch.Check and replace contactor if damaged.         Note: With errors 8, 10, 18 and 20, if you Reset three times and the error falls to disappear (PROBLEM UNSOLVED), the board blocks the lift to render it inoperative. The vehicle must then be lowered manually, simultaneously lowering both columns. The lift becomes operative again when both ends-of-run touch bottom.         Error 22       Error for column separation over or equal to 10cm       You must reset, and the E22 text will blink faster. Now you will only be able to lower the lift When the lift reaches the lower ends-of-run, the E22 text will blink on and off again slowly. Now press reset, and the display shows the column height.         This error is shown when 3 errors from E07 to E20 have been produced, and remains persistent       The only way to unblock the lift is to re-establish the heights of the columns, which can be done in two ways: by resetting, which returns the column height to zero (first align the columns until the lower ends-of-run are activated, witching off and switching the board back on again.This is also applicable to error E22.         Errors 24, 26, 28 and 30       Failure, breakage or misalignment of upper end-of-run on both columns.       Disconnect mains switch. Check, adjust or replace end-of-run.         Errors 51 and 55       Internal board communications and checksum error       Press the "F" function key. If this error persists, press the key several times to cancel accumulated errors.		e) Loose, broken or deteriorated	e) Disconnect mains switch. Tighten or replace drive
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from the mains supply using the main switch located on the control box. This switch must be locked in	ATTENTION! Refore		
			Control Box. This Switch must be locked in

## 7. Maintenance.

Easy and inexpensive maintenance can ensure that your lift works optimal and safe. The following are requirements for normal maintenance. You can choose the frequency of routine maintenance according to the daily load on the lift.

#### 6.1. Check daily before use

The user should perform daily checks. Daily inspection of the safety interlock system is very important. Discovery of defects before the lift starts up, you can save time and prevent accidents. Check that the expansion bolts are tight.

#### 6.2. weekly check

- $\cdot$  Check the flexibility of moving parts.
- · Check safetyparts mode.
- $\cdot$  Check that the bolts that hold the bars are tight.

#### 6.3. monthly check

 $\cdot$  Check that the bolts that hold the bars are tight.

· Check for lubrication and wear on the spindle and nut, slide, arms and all related parts and replace worn parts with new ones

if necessary for the functionality.

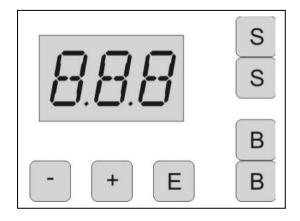
 $\cdot$  Check safety steelwires for lubrication and wear.

If the user carefully follows the above requirements for maintenance, lift kept in good condition and accidents will largely be avoided.

#### 6.4. the different lift functions

When the lift is started, with the control board therefore in operation, the machine immediately displays the lift position height. This height is updated automatically as the lift travels up and down. If the lift is in its lowest position the screen should show three zeros: 000.

Security Stop: When performing a lowering operation, the lift will stop at a height of 12cm. Release the pushbutton at this time and depress again. The lift emits a warning signal until it reaches the floor.



#### SETTING THE PRE-SET HEIGHTS

If you want to set an intermediate stop, perform the following:

- Press "E" key
- Press "+ or -- " keys, until the APr function appears
- Press "E" key to see its value
- Press "+ or -" to change the value required for the stop (0 200 cm.).
- Press "E" again to save and update changes. The function name is then displayed again.

Using the pre-set height control, when the lift reaches its pre-set height on either the up or down runs, it will stop, only travelling up or down again if the key is kept depressed during the stop; or if no key is pressed, it will resume operations after a short delay period.

#### HOW TO ELIMINATE ANY ERROR MESSAGES

When an error condition occurs, the system informs the user by showing a blinking message on the screen. This message is type Exx, where "E" means error and "xx" shows the two-digit code identifying the specific error having occurred.

To stop the on-off error message display, press the "F" key, after which the screen shows the height of the control column.

If the error corresponded to the lift control system, the lift will no longer be operative at this time. To recover operability, the Board must be switched off and back on again. The control can also be reset using the test-mode "RST" function.

E02: security system activated on one of the columns (security contact normally closed but now open) due to breakage of the main nut. lift movement errors.

E18 and E20: lift column movement detector errors.

Note: For errors 8, 10, 18 and 20, if Reset is pressed three times and the error is unsolved, the board blocks the lift, rendering it inoperative, with a text message showing "NO". The vehicle must then be lowered manually, simultaneously lowering both columns. The lift becomes operative again when both ends-of-run touch bottom.

E22 error for column separation over or equal to 10cm. When this error occurs, the lift cannot be moved. You must reset, and the E22 text will blink faster. Now you will only be able to lower the lift. When the lift reaches the lower ends-of-run, the E22 text will blink on and off again slowly. Now press reset, and the display shows the column height.

Note: Excessive slipping of the columns may have serious consequences for the integrity of the lift and the vehicle being raised. All due precautions must be taken.

E23 height measurement error. This error is shown when 3 errors from E07 to E20 have been produced, and remains persistent (it reappears even if the board is switched off and back on). The columns must be aligned manually. Perform a board reset.

Note: After an E23 has occurred, the board interprets that the measurements given for the Column heights is incorrect, and so it blocks operations. The only way to unblock the lift is to re-establish the heights of the columns, which can be done in two ways: by resetting, which returns the column height to zero (first align the columns manually) ;or by manually lowering the columns until the lower ends-of-run are activated, switching off and switching the board back on again. This is also applicable to error E22.

E24 to E31: end-of-run errors. Check the end-of-run connections, switch off board and switch back on again (or perform a reset).

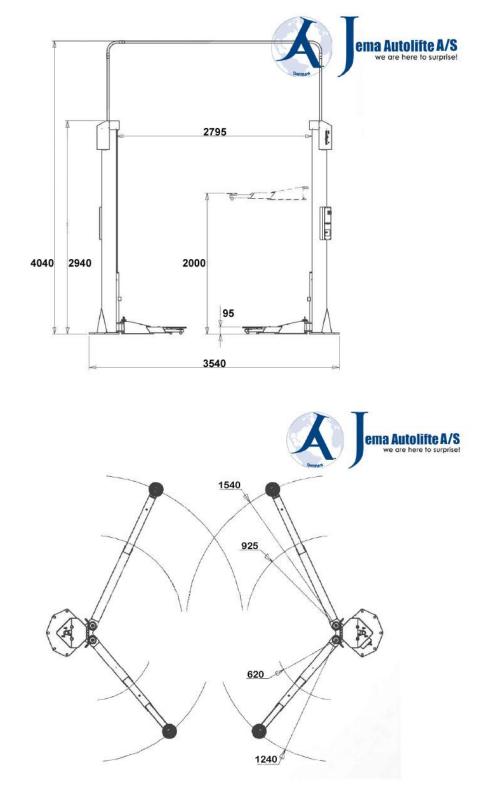
E51 and E55: internal board communications and checksum error. Press the "F" function key. If this error persists, press the key several times to cancel accumulated errors.

Thanks to the control electronics, the system incorporates a counter that monitors the number of services the lift performs. This control ticks up one unit every time the lift reaches its lowest point and activates the lower end of run stop. When the services counter reaches 1.000 services, the display shows an intermittent "INS" message, warning the user that a lift maintenance inspection must be performed.

This message disappears after 30 seconds, but it is shown again when the lift reaches its lower end of run or each time the lift electronics board is started. When it reaches 15.000 services, the display shows an intermittent "REV" message, warning the user that it is imperative to perform a general lift overhaul

This message is persistent, and only disappears when the lift is travelling, reappearing 5 seconds after the lift stops. It is also shown when the lift reaches its lower end of run or each time the lift electronics board is started. In all cases, the inspection and overhaul alarms are merely informative messages and do not affect lift operability.





#### Annex 2, CE certificate.

# CE

Hereby declares under its sole responsibility that the product

Description: 2 Post mechanical lift Model: JA3500T-E / 4EC1800 Serial no.:

fulfils all the relevant provisions of the following European Directives

2006/42/CE Machine Directive

2006/95/CE Low Voltage Equipment

and Harmonized Standards and technical specifications used in (where applicable)

EN 1493:2011 VehicleLifts

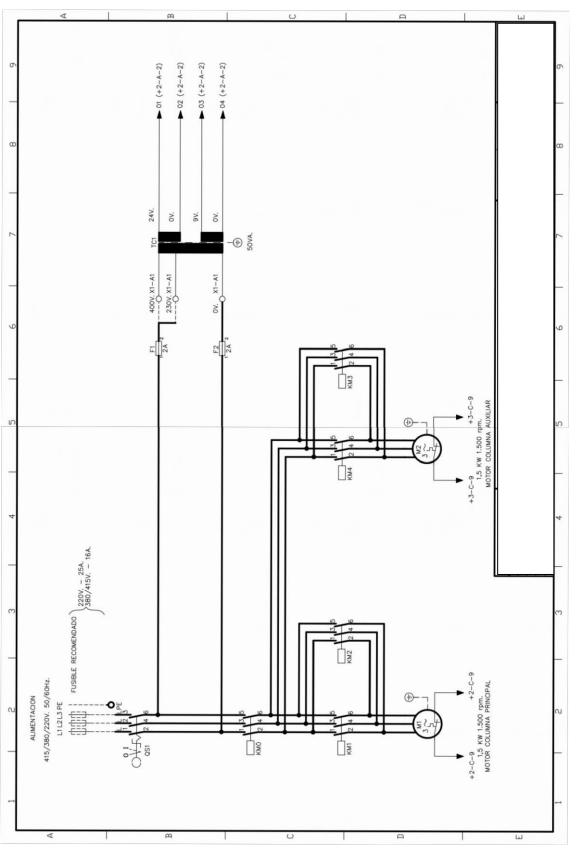
EN 12100: 2012 Safety of machinery - General principles for design - Risk assessment and risk reduction.

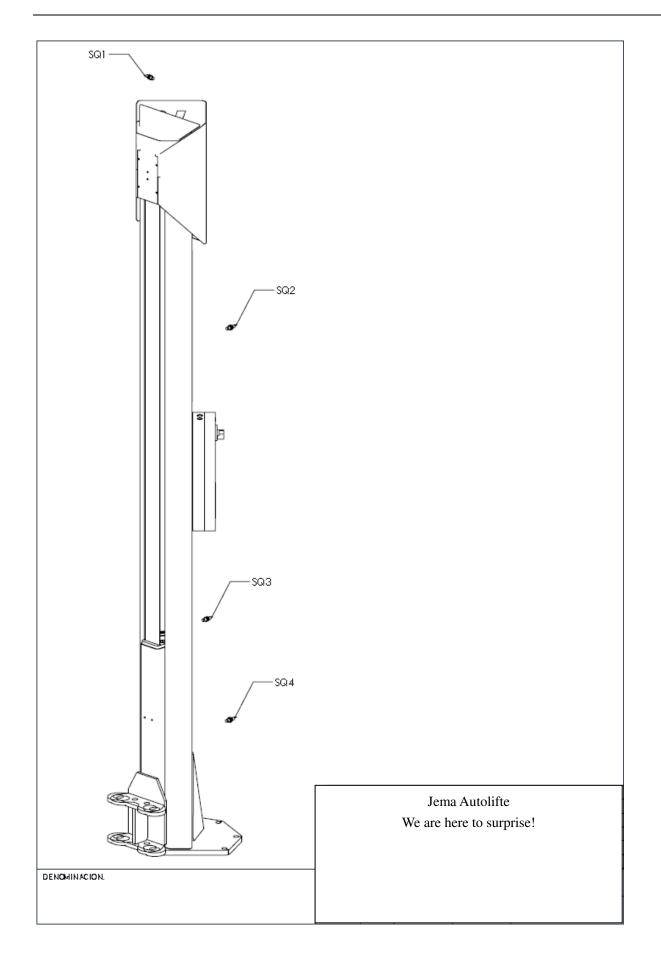
EN 60204 -1:2007 Safety of machinery. Electrical equipment of machines. General requirements

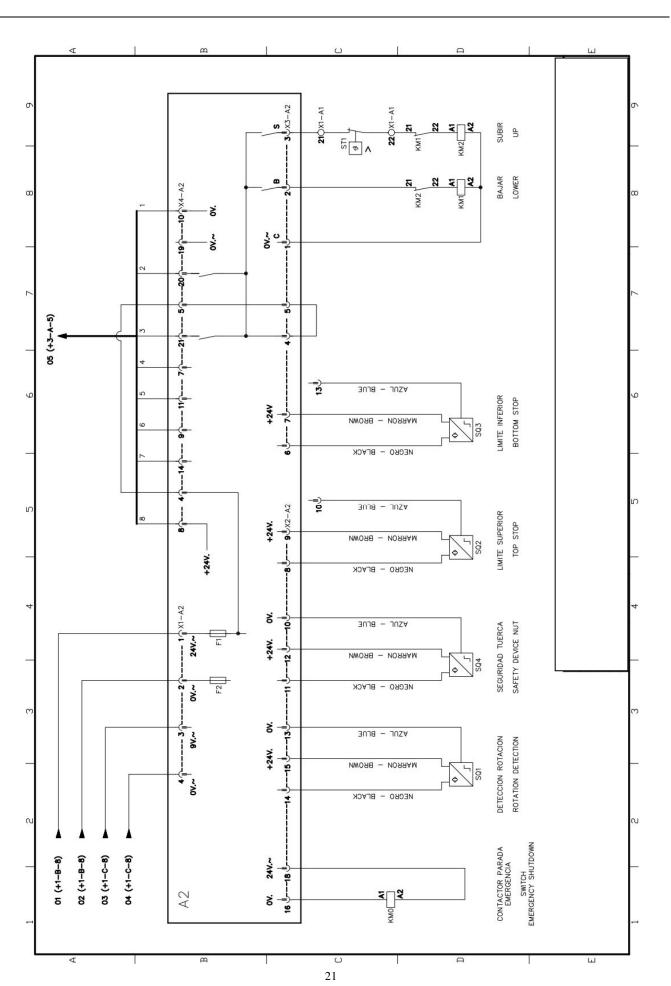
Firma/Signature:

Responsable:

Bilag 3, Electric wire diagram







#### Bilag 4, Spare part list

