

babcopark

USER MANUAL

FOR INSTALLATION, OPERATION AND MAINTENANCE
OF SINGLE / DOUBLE DECK CAR LIFTS

Applicable Models:

SUBTERRA

Read this entire manual carefully and completely before installation or operation of the lift.

Table of Contents

1. INSTALLATION INSTRUCTIONS.....	3
2. OPERATION MANUAL.....	5
3. MAINTENANCE.....	6

1. INSTALLATION INSTRUCTIONS

1.1 Before you begin:

Installation, adjustments, and testing operations are to be performed by qualified staff only. Operations should be performed by skilled and authorized personnel. Please follow all instructions shown below carefully, to prevent possible damage to the car lift or risk of injury. Always be sure that the operating area is cleared of people.

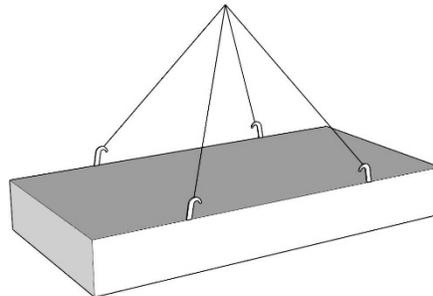
Only skilled technicians appointed by the manufacturer or by authorized dealers, are allowed to install the car lift. Serious injuries to people and damage to the equipment can be caused if this rule is not followed.

Transport: When the lift first arrives, check for possible damage due to transport operations. Also verify that all items specified in the delivery notes are included. In case of missing parts, possible defects, or damage due to transport, the person in charge or the carrier must be immediately informed.

The equipment can be lifted by crane using the 4 factory installed attachment points.

During lifting and placement in the pit, no person is allowed under or within falling distance of the lift.

During unloading operation lift must be handled as shown in the picture.



1.2 Preparation before installation:

The thickness and leveling of the base concrete are essential. The leveling adjustment ability of the lift itself cannot be relied upon for a perfect level.

To install the lift, it is necessary to use a suitable foundation.

The manufacturer is not responsible for damage or incidents/accidents related to the pit construction.

1.3 Start Installation

- 1) Assemble the hydraulic line and electrical connection line from the connection side of the lift where the lines run to the control box.

Make sure the lines do not get trapped under the lift frame in next step.

- 2) Lower the lift into the pit and level the lift as needed.

Use extreme caution not to crush hoses between the lift and the pit.

- 3) Connect the oil hose
See the hydraulic diagram for oil hose connecting. Make sure that no soil or other foreign objects enter the hoses.
- 4) Hydraulic oil tank - pour 16 litres of L-HM32 anti-wear hydraulic oil (provided by user) into oil tank. Dexron III ATF oil can be used.

Any work on electrical must be carried out by qualified personnel only. Ensure system is grounded with effective ground circuit. Electrical system adjustments must be made in accordance with what is featured on nameplate.

Remove all material and personnel around the lift before switching the power on.

5) Now the lift needs to be raised to finish the installation process

Follow the guidelines in Part 5 Operation to safely operate the lift for the first time. Clear obstacles around lift before operation. During lifting or lowering, no person is allowed to stand near the two sides or beneath the machine, and no person is allowed on the platform.

Because this is the first time, you need to make sure that the phase of the current is connected correctly. For this, after having read the operations instruction (all clear area), push the “up” button for a short period only, making sure that the motor is running correctly. If this is the case, the connection is correct, and you may proceed. If this is not the case, rectify immediately or damage will occur.

6) Now you can install the side decks and upper-level deck. Raise the lift far enough, so you can place some support beams under the lift and over the pit, 1 in the front and one in the rear. Lower the lift just enough, so the deck is level just on top of the beams. The side decks can now be prepared with adhesive insulating material and slid into position and bolted tightly. Remove the support beams.

Now install the columns for the second deck and install the second deck.

Pay attention to the numbering of the columns and check the extra height of the lift, now with the second deck installed, when raising the lift.

7) Now, raise the lift to the floor level. For this, read the instructions in the maintenance section Part 6

8) After having secured the lift in the up position proceed with anchoring the lift in the pit with provided anchor bolts.

9) **Adjustment of the limit switches.** After installation, adjust the limit switches as required to ensure that the lift is at the correct height.

10) **Adjustment of the bump stops.** When the lift is in the down position, it should rest fully on the bump stops. Make sure that the bump stops are adjusted at an equal height from the base of the lift.

If this is not done correctly, the lift deck will deform in the down position, and when lifting, damage will occur to the hydraulic system, since lifting will not be equally distributed to all 4 corners.

11) LOADING TEST

DO NOT PLACE ANY VEHICLE ON THE LIFT BEFORE TEST OPERATION. RAISE THE LIFT UP AND DOWN SEVERAL TIMES TO ENSURE AIR IS EXHAUSTED FROM THE CYLINDERS.

Test the lift before using. This step is very important to check if there is any leakage of a hydraulic line. Also make sure the base frame is anchored as well and does not move during operation. If there's no abnormal noise or leakage after running two or three times, run with load. **Never exceed the maximum capacity and height specified for the specific model.**

12) Install the top platform (for the Subterra double deck lift)

First: Install 4-post with bolt on lower platform, ensure 4 post is vertical

Second: Install top platform. Due to the way the lift is transported -the upper platform will arrive in 2 halves in the middle. You will need to connect them with the bolts when you get it. Then connect the upper platform with the 4-post with bolts and screws, Please note: top platform **approx 1200KG**, so you will generally need to hire one crane.

Third, Finish installation of top platform, run a few test lifts, then find level by tightening bolt., ensure that the lift is operating smooth and level.

2. OPERATION MANUAL

2.1 BEFORE OPERATION:

Read the entire manual before operation

The lift may only be used by qualified staff, properly trained for the specific use of the machine.

- 1) Check all the pipelines, joints and safety devices are functioning before use. **When malfunctions or leakage is found, have maintenance performed before operating the lift.**
- 2) Ensure that the danger zone as described in the safety section is clear of people and obstacles while the lift is being operated. **Make sure that there are no people on the platforms during up and down movements.**
- 3) **During operation, ensure that the operator remains at the control station and everyone else is away from the lift surroundings.**

Never leave the lift unattended when in the UP position as a person could easily go under the lift.

Before lowering the lift, the operator should check and confirm that no person is under the lift.

- 4) Make sure that the vehicle is positioned correctly according to the parking position schematic in the technical section. Switch off the engine of the vehicle, put in gear (if applicable) and engage the parking brake. Be sure to lift only approved vehicles, never exceeding the specified weight and maximum height, length and width as specified in the technical section.
- 5) Ensure that sufficient lighting is available for good visibility, without any shadows or blind spots.
- 6) Ensure that enough height is available for clearance above the vehicle.
- 7) Always lower the lift to its lowest position after use.

Please use the following checklist for operation:

2.2 CHECKLIST FOR RAISING THE LIFT:

- 1) Check and confirm that nobody is in the vicinity of the lift.
- 2) Check that the lift is free of obstacles, and enough height is available.
- 3) Turn on the key and red master shutoff knob
- 4) Engage the "UP" switch and release. Make sure the lift will stop at the correct height.
- 5) After the lift stops, turn off the master shutoff.
- 6) Turn off and store the key.

2.3 CHECKLIST FOR LOWERING THE LIFT:

- 1) Check correct position and securement of vehicle
- 2) Check and confirm that nobody is in the lift vicinity.
- 3) Check that nobody is under the lift.
- 4) Check that the lift is free of obstacles.

- 5) Turn on the key and red master shutoff knob
- 6) Engage the “down” switch and release. The lift will stop at a safe height.
- 7) When all is safe, press “down” button again to continue lowering, until it reaches the complete resting position.
- 8) After the lift stops, turn off master shutoff.
- 9) Turn off and store the key.

2.4 ABNORMAL/EMERGENCY OPERATION:

2.4.1 EMERGENCY STOP:

When an emergency stop is required, push the red “Master shutoff” knob. All electrical power will be shutoff and the operations stops at the current position.

The system’s response to hydraulic system failure: The hydraulic cylinders will have reduced outflow and the lift will lower slowly to the lowest level.

3. MAINTENANCE

If the machine is not being used any more, owners are suggested to make it unusable by removing the power supply connections, emptying the oil tank, and disposing the liquids the correct way.

If the lift is to be left unused for a long period, proceed as follows:

- 1) Disconnect the power source.
- 2) Empty the control unit tank.
- 3) Grease all moving parts.

The manufacturer warranty is one year on parts. If parts fail within the one-year warranty, replacement parts will be provided.

The manufacturer will not take any responsibility for improper installation and operation, overload running, normal mechanical abrasion, and insufficient maintenance.

Several maintenance operations that are to be carried out are described below: A low operating cost and a long life of the machine can be ensured when using these methods.

The listed maintenance schedules refer to normal operating conditions. They can change according to the kind of service, environment, frequency of use, etc.

1) DAILY PRE-OPERATION CHECK

The user should always perform a daily check as the discovery of a device failure before actual failure could save you from expensive property damage, lost time, serious personal injury and even death.

- Check hydraulic connections, and hoses for leakage.
- Check wiring and switch for damage. Check bolts, nut and screws and tighten.

2) WEEKLY MAINTENANCE

- Check the cleanliness of the mobile parts.
- Check the safety device as previously described.

- Check hydraulic fluid level as follows: let the platform go up completely and in case they do not reach maximum height, add oil.
- Check and tighten bolts, nuts, and screws.

3) MONTHLY MAINTENANCE

- Check the tightening of screws
- Check the hydraulic system seal and tighten the loose connectors, if necessary.
- Check the greasing and the wear condition of pins, rollers, bushings, of structure as well as arms and relevant extensions, if necessary, replace the damaged parts by original spare parts.

4) YEARLY MAINTENANCE

- Empty the tank and check the conditions of the hydraulic fluid. Clear the oil filter.

4. ELECTRICAL DIAGRAM (Double Deck)

