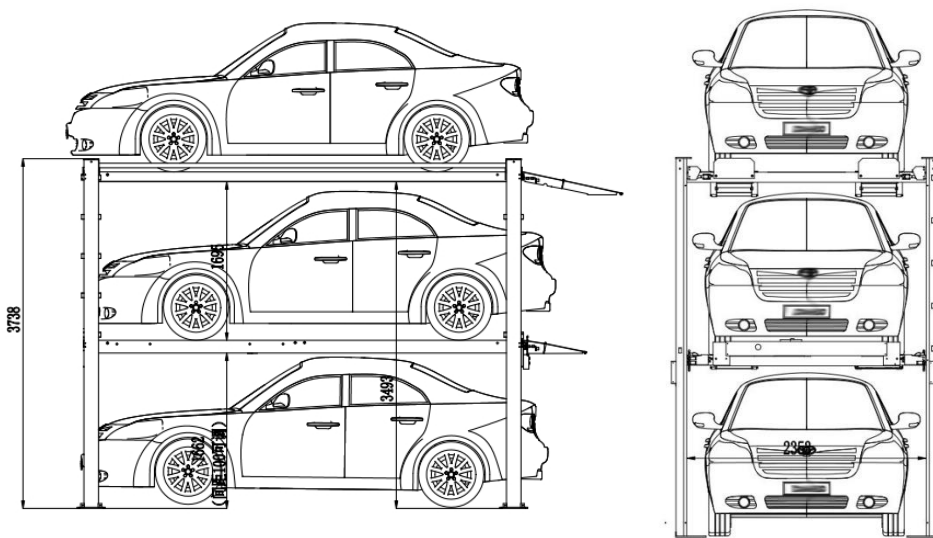




# TR10 TRIPLE STACK

## INSTALLATION MANUAL



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## 1,INTRODUCTION

TR10 triple four post parking lift is used for car storage and parking to save space.

- ☑ Both levels use the same posts. Simple design.
- ☑ There is a locking position for each 100mm distance.
- ☑ You can vary the height of the various parking spaces.
- ☑ It offers a simple and very cost-effective way to create 3 dependent parking spaces on top of each other, suitable for permanent parking, valet parking, car storage, etc.
- ☑ Can be expanded modularly. The posts can be linked together by bolts.



## 2, SPECIFICATION

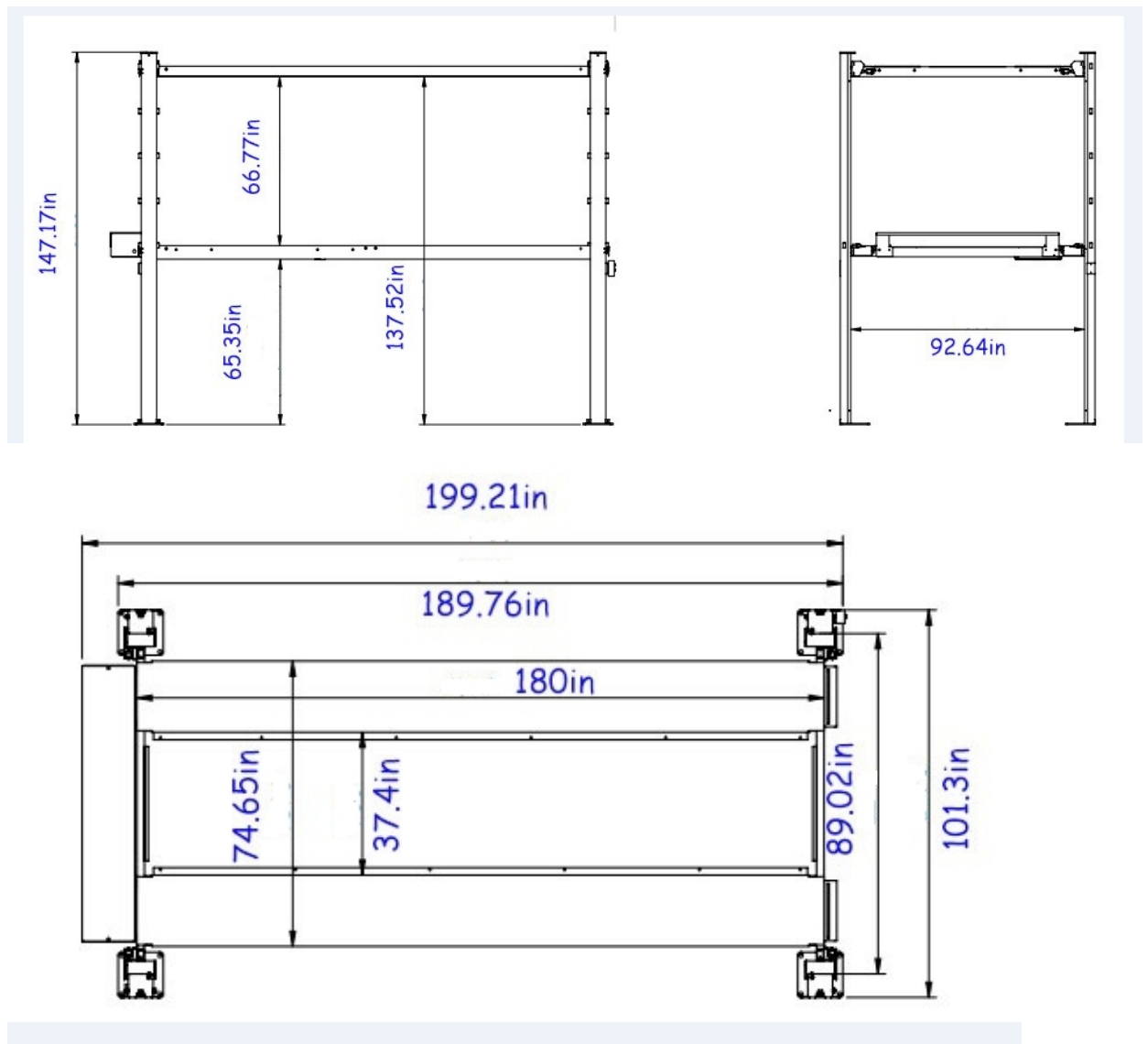
\*Lifting capacity: 5000lbs for each level, totally 10000lbs.

\*Lifting height: lower platform-65.35in, upper platform-137.52in

\*Runway length: 180in

\*Runway width: 18.6in

\*Width between runways: 37.4in



### **3,SAFETY INSTRUCTION**

Do not install, operate, maintain, or repair the unit without reading and understanding this manual and the labels on the unit.

- Follow all installation, operation, and maintenance instructions.
- Make sure product installation conforms to all applicable local, state, and federal codes, rules, and regulations.
- Read and follow all safety instructions; keep them readily available for operators.
- Make sure all operators are properly trained, know how to safely operate the unit, and are properly supervised.
- Do not operate the product until you are certain that all parts are in place and operating correctly.
- Carefully inspect the product on a regular basis and perform all maintenance as specified.
- Service and maintain the unit with approved replacement parts only.
- Keep instructions permanently with the product and make sure all labels are clean and visible.Keep this manual on or near the equipment so that anyone who uses or services it can read it.

Read the entire contents of this manual before using this product.Failure to follow the instructions and safety precautions in this manual can result in serious injury or death. Make sure all other operators also read this manual.

Keep the manual near the product for future reference.

- Use it only for its intended purpose.
- You must wear personal protective equipment at all times when installing, using, maintaining, or repairing the Lift: leather gloves, steel-toed work boots, eye protection, back belts, and hearing protection are mandatory.
- The product may only be operated by authorized, trained persons.
- When the Lift is in use, keep all body parts well away from it.
- Do not make any modifications to the Lift; this voids the warranty and increases the chances of injury or property damage.
- Make sure all operators read and understand this Installation and Operation Manual. Keep the manual near the Lift at all times.
- Make an inspection of the Lift before using it. Check for damaged, worn, or missing parts. Do not use it if you find any of these issues.
- Make a thorough inspection of the product at least once a year.

Replace any damaged or severely worn parts, decals, or warning labels.

Use care when installing, operating, maintaining, or repairing this equipment; failure to do so could result in property damage, product damage, injury, or (in very rare cases) death. Make sure only authorized personnel operate this equipment. All repairs must be performed by an authorized technician. Do not make modifications to the unit; this voids the warranty and increases the chances of injury or property damage. Make sure to read and follow the instructions in this manual and on the labels on the unit.

Enter the Model Number, Serial Number, and the Date of Manufacture from the label on your unit. This information is required for part or warranty issues.

Model: \_\_\_\_\_

Serial: \_\_\_\_\_

Date of Manufacture: \_\_\_\_\_

**3.1.WARRANTY.** 5 years warranty for the main structure and one year for the parts and accessories.

**3.2.RECEIVING.**When receiving the packages,please check the packaging carefully and thoroughly.Contact sales person to verify the causes for any shortages or damages.

**3.3.INSTALLER.**Only trained installers with basic automotive lift installation experience are allowed to install this lift.Do not attempt to lift any structural parts without reliable lifting tools such as chain blocks,forklifts or cranes.

**3.4.PROTECTION.**Installers shall be equipped with necessary personal protective equipment such as durable work clothing,tight fitting gloves,sturdy shoes,safety glasses or goggles.

**3.5.MAINTENANCE.**Regular inspection & maintenance.Make a thorough inspection of the product minimum once a year.

## **4,SITE PLANNING**

**4.1.FLOOR.**Only install the Lift on a flat, concrete floor; do not install on asphalt or any other surface.The surface must be level; do not install if the surface has more than **three degrees** of slope.

Installing your Lift on a surface with more than three degrees of slope could lead to injury or even death; only install the Lift on a level floor. If your floor is not level,consider making the floor level or using a different location.

### **4.2.CLEARANCE.**

Make sure there is enough space for the Lift: front, back, sides, and above.

### **4.3.CONCRETE.**

MUST be installed on 2500 PSI concrete (tension  $\geq 200\text{kg/cm}^2$ , thickness  $\geq 300\text{mm}$ ) . New concrete must be adequately dried by at least 28 days.The concrete floor shall be free from cracks or defects.Installation of equipment on floors 2 or above is prohibited without the approval of the architect.

## **5,INSTALL**

Only use the factory-supplied parts that came with your Lift. If you use parts from a different source, you void your warranty and compromise the safety of everyone who installs or uses the Lift.

## 5.1.Necessary tools.

Non-adjustable spanner-1 set	Forklift with 3T capacity	Some power line	Chalk lines
Adjustable spanner -1 set	Percussion drilling(12*200 aiguille)	hammer	
Allen wrench-1 set	Electric portable drill	Duster cloth	
Screwdrivers(both slotted and phillips types)-1 set	Insulated rubber tape	Grease gun	
Leveling instrument for 1M and 3M	Sealing tape	Tapeline for 5M	

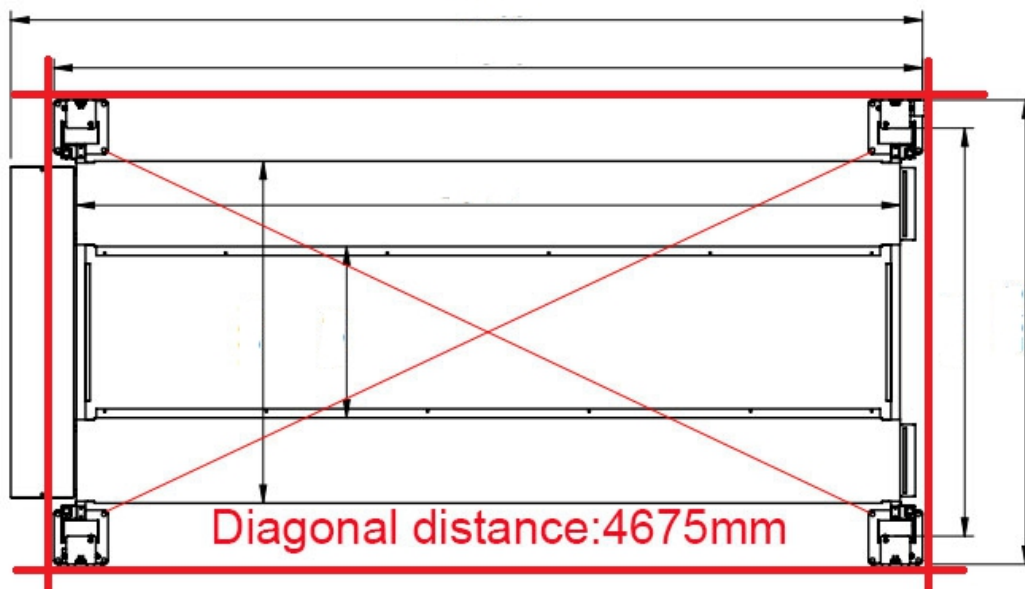
Note:For unloading and goods transportation ,5T forklift or crane is required.

## 5.2.Drawing chalk lines.

Create the Chalk Line Guides so that the outside edges of all four Posts fit into the four corners created by the Chalk Line Guides.

5.2.1. Make each line longer than outside posts distance.

5.2.2. Neighboring Chalk Lines must be kept at 90° angles.





### **5.3.Unloading and Unpacking.**

As the Lift includes a number of heavy pieces, the closer you unload them to the installation location, the better off you are. You must have a Forklift or Shop Crane to move them into position. Use care when moving them.Be very careful when removing the Posts and Runways which can shift or even fall. If they fall on a person, they could cause serious injury.

### **5.4.Assembly.**

Your Lift is approved for indoor installation and use only. Outdoor installation is prohibited.

#### **5.4.1.Move the posts into the position.*But do not stand up it.***

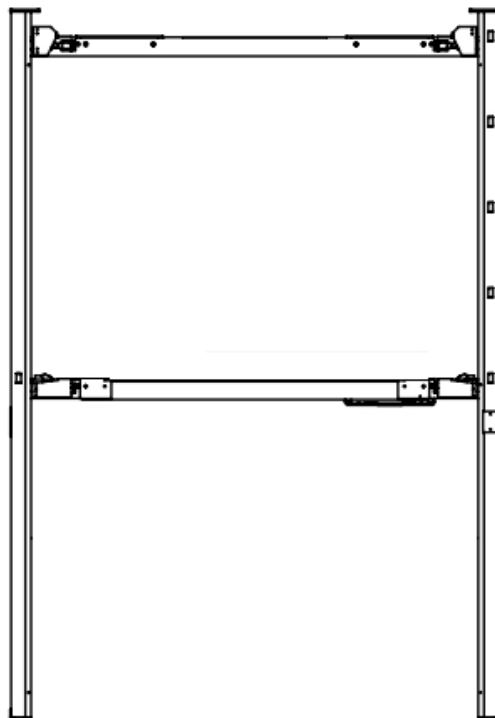
Before moving the Posts into position, measure diagonally to make sure the two diagonal measurements are the same. This ensures your layout is correct.Do not forget to check the diagonals.When you move the Posts into position, put the corners of the Base Plates inside the corners created by the four Chalk Lines.

①Orient the Posts in their required positions, with the Post Brackets facing the inside of the Lift.

②Using a Forklift or Shop Crane, carefully move each Post to the inside corners of the Chalk Line Guides.

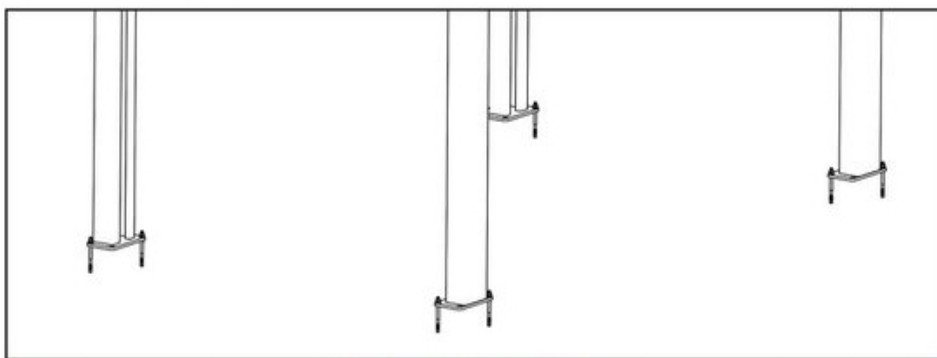
**5.4.2.Lay the posts on ground carefully,and connect the cross beams of both upper and lower platforms.**

Your Lift has a total of four Crossbeams, two per Platform.You need to manually raise the Crossbeam for each Platform, which makes it easier to complete the rest of the installation tasks.The Front and Rear Crossbeam need to be raised the same height, to the same Safety Lock. For example, if the Front Crossbeam of the Upper Platform is raised to the seventh Safety Lock, then the Rear Crossbeam for the Upper Platform also needs to be placed on the seventh Lock.



### **5.4.3. Stand up the posts.**

Erect the posts and locate them precisely as per the chalk lines. And insert 2 diagonal anchor bolts for each post, but do not tighten at this step. You must have at least two people work together to stand up the Posts; one controlling the Forklift, and the other positioning the Posts.



### **5.4.4. Install runways of both levels.**

Your triple car stacker has two sets of Runways. Use a Forklift or Shop Crane to raise the Runways and move them into position. Pay close attention when moving the Runways into position; they are very heavy and very long, and could shift position or fall, potentially causing serious injury. We recommend to start with the Lower Platform and then continue with the Upper Platform. Do not continue with the installation until you have visually confirmed that all four Safety Locks are engaged on each Platform. If they are not engaged, the Runways could move or fall, possibly causing personal injury or product damage.

#### **5.4.5. Install side beams and wire the steel ropes.**

Connect the front and rear posts with side beams. But do not fasten for now.



#### **5.4.6. Install hydraulic, air line and circuit.**

Fill with standard hydraulic oil. During the subsequent leveling of the lift, the hydraulic oil in the power unit may drop. You need to add hydraulic oil again. When replacing or filling hydraulic oil, the lift must be fully lowered.

Switch on the main power supply. Ensure that each connection is grounded reliably. The input power supply must be set with leakage and overcurrent protection switches. This lift uses 60HZ, 220V ,1 phase power supply.

#### **5.4.7.Adjustment and test for the lift.**

① Check all gas and liquid channels to ensure proper and accurate connection. Turn on the power and turn the power switch on state. Turn on raising, pay attention to the position of the wire rope and make sure it is correct, and whether there are other people or objects to interfere with the raising.

② After the final adjustment and test, drive on a car. After pressing the up button, the lift goes up. During the up process, constant stops, padlocks, drops. Check whether the working locks on the four corners of the lift are working properly.

③ Raise lift to any position (without padlock). Level the wire rope again. (For the leveling of the wire rope under load, the nut should be adjusted after the padlock and leveled step by step)

#### **5.4.8.Anchoring the Posts.**

You must anchor the Lift's four Posts. Install one Anchor Bolt in each corner of each Base Plate, 4 per Post, 16 Anchor Bolts total.

## **6、 EQUIPMENT MAINTENANCE SERVICE**

Per month for regular maintenance, to ensure that the use of safety equipment, prolong use life.

6.1 Check power supply, line, if normal work.

6.2 Check the expansion bolt. If loose, it should be tightened.

6.3 Check the column whether it is deformation, check column whether is perpendicular to the ground, if overload and abnormal use lead to serious deformation of column, should stop operating equipment.

6.4 The column of the slider to add grease.

6.5 Check the unlock devices whether in good condition.

6.6 The balance wire should be checked weekly.

6.7 Check that the trip switch is correct or not.

6.8 Common faults and repair methods.see below.

<b>Phenomenon</b>	<b>Possible cause</b>	<b>Solution</b>
When the motor work, no hydraulic oil leak, sound abnormal, but lifting machine cannot rise.	Plug in tubing or tubing joint	Dredge tubing and joint
	Surrounding environment hydraulic oil curing or hydraulic oil viscosity too large, the temperature is too low.	Discharge hydraulic oil and replenish qualified hydraulic oil.
	Load overweight	Check and confirm that the lifting weight is less than the rated load.
Oil connection leak	joint lossening	Set up the joint
	Joint broken	Change the joint
Cylinder oil leak	Oil cylinder sealing ring was damaged	Change the cylinder sealing ring
Motor does not work	Motor burned	Replace the motor and confirm that the power supply is correct
	The voltage is too low	Check and confirm that the voltage is stable
The lift cannot fall	The break limit switch is not closed	Adjust the deflector position
	The hydraulic oil viscosity is too big	Replace the qualified hydraulic oil, or consult the local hydraulic oil producers
	Power unit of the rotary valve block	Open the valve to clean (pay attention to dust)
	Tubing or tubing joints blocked	Dredge tubing and tubing joints
Motor reversal	Wrong wiring	Rewind according to the circuit diagram