



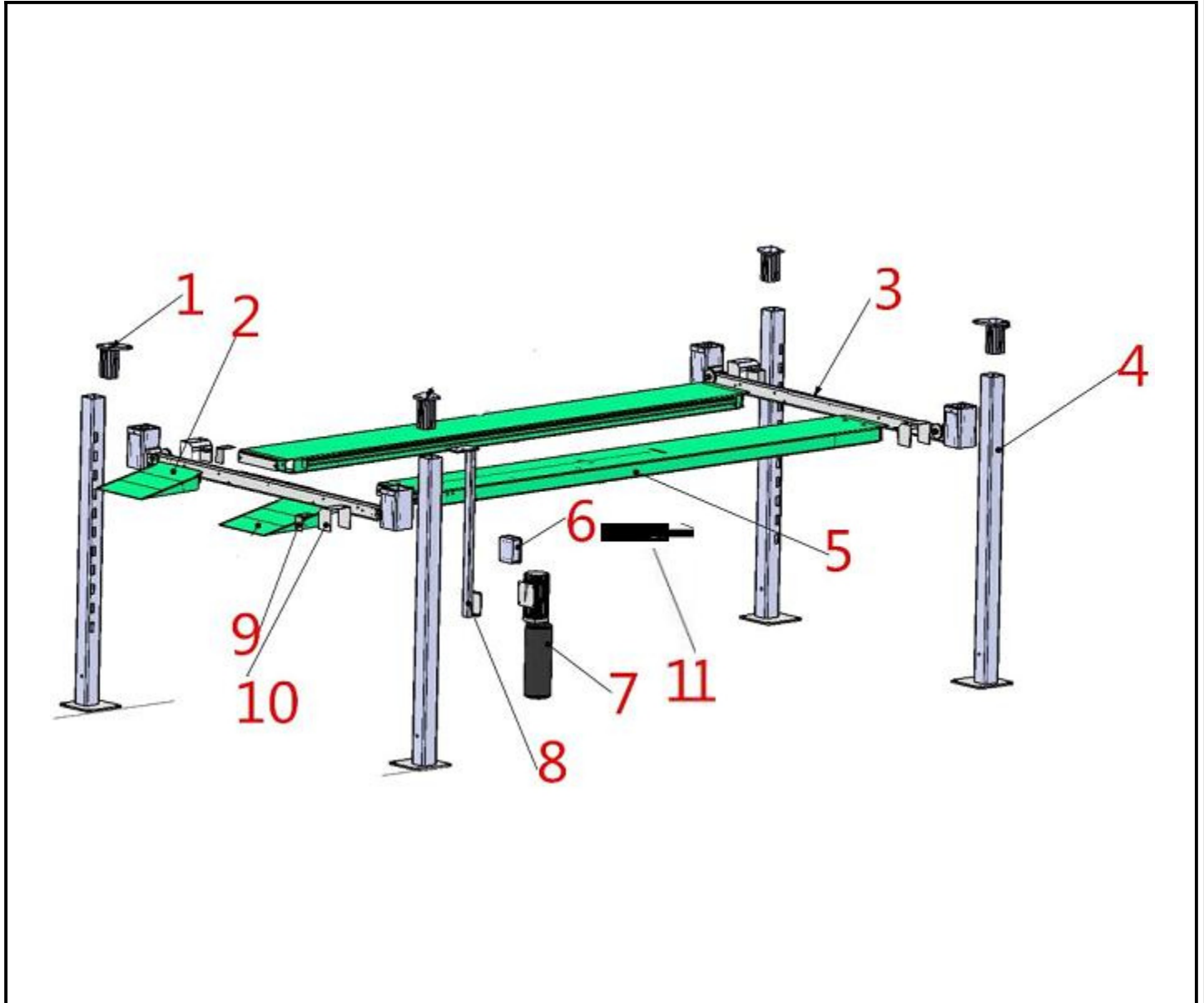
# INSTALLATION MANUAL & OPERATION INSTRUCTIONS

## **FP9K & FP11K**

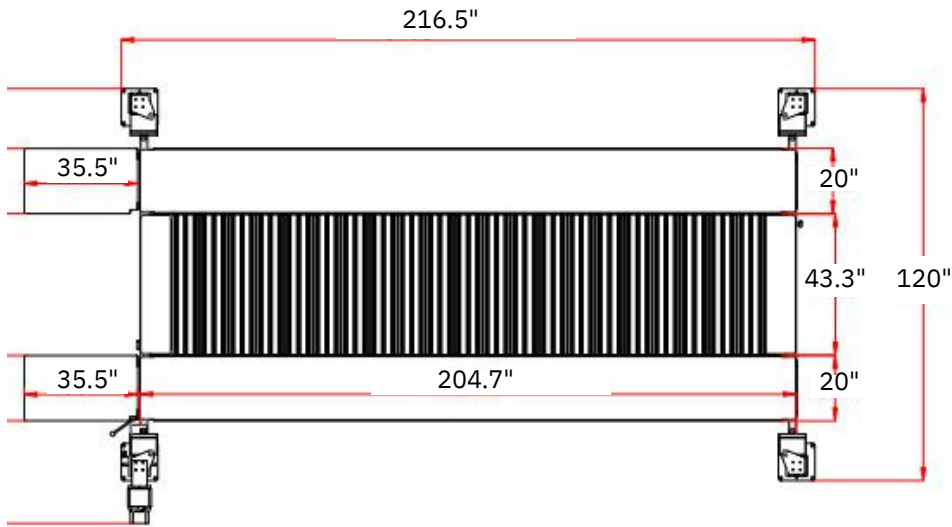
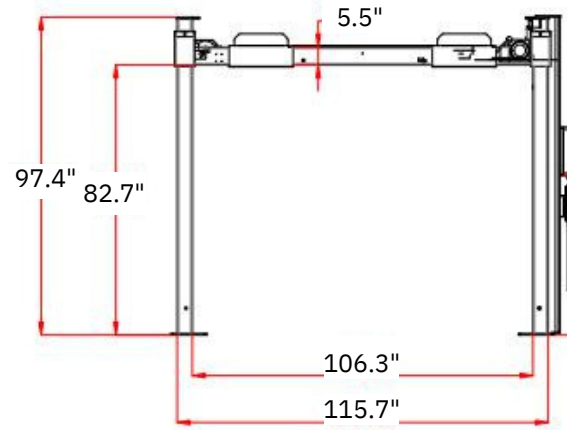
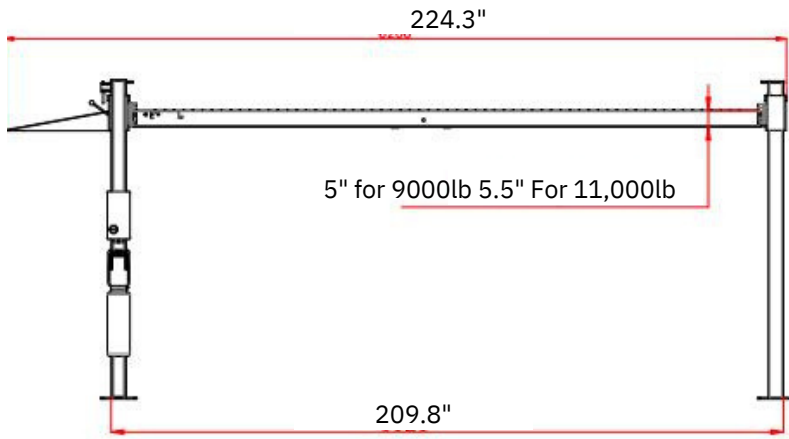
FOUR POST CAR PARKING LIFT



## Description and Technical Data

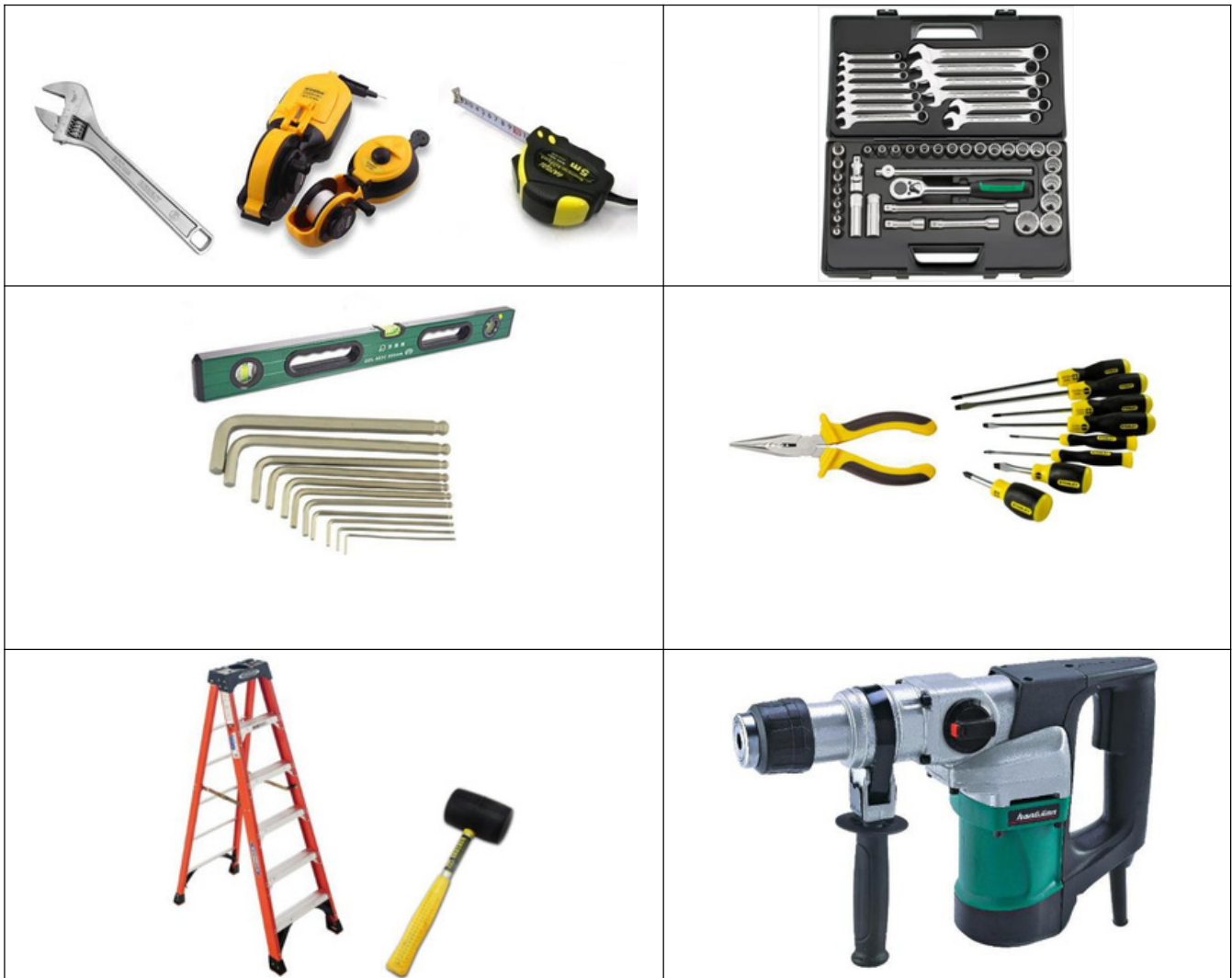


1.Top cap	2.Ramp	3.Rear beam	4.column
5.platform runway	6.Electric control box	7.Motor/power unit	8.Control arm
9. lock	10. lock cover	11.Single stage dualcylinder	



The installation of this lift is relatively simple and can be accomplished by two qualified technicians in a few hours. The following tools and equipment are needed:

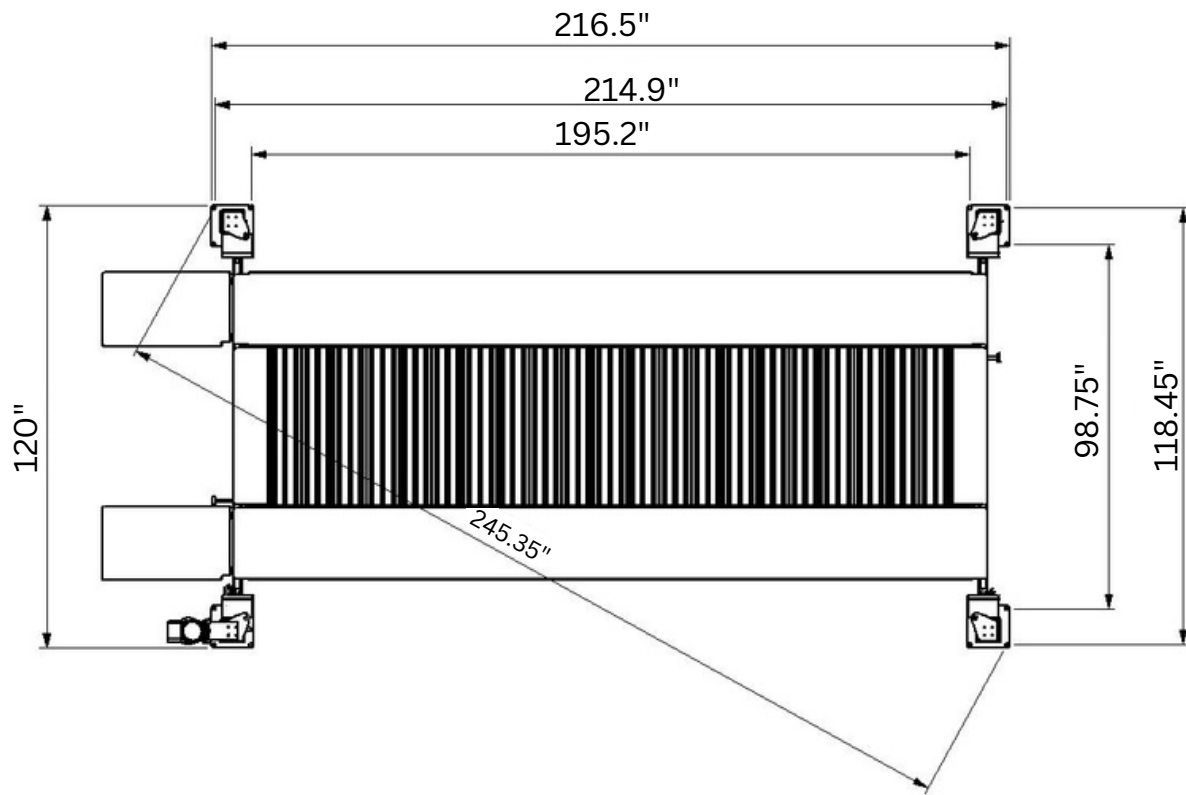
- Appropriate lifting equipment such as crane /Hoist / fork lift
- Chalk line / marking string and measuring tape.
- Concrete Rotary Hammer Drill with M18 drill bit.
- Open – End Metric Wrench set
- Metric Socket and Ratchet Set
- Torque Wrench, Screwdrivers, Needle Nose Pliers.
- Vise Grips, Teflon Tape and rubber Hammer.
- Step Ladder, Bubble Leveler, Tape Measure.
- Rando HD 46 ,ISO-32 , AW-32 or AW-46 hydraulic oil , 12 Liters



## INSTALLATION STEPS

STEP 1(Selecting Site): before installing your new lift, check the following.

1. **LIFT LOCATION:** Always use architects plans when available. Check layout dimension against floor plan requirements making sure that adequate space is available.



2. **OVERHEAD OBSTRUCTIONS:** The area where the lift will be located should be free of overhead obstructions such as heaters, building supports, electrical lines etc.

3. **DEFECTIVE FLOOR:** Visually inspect the site where the lift is to be installed and check for cracked or defective concrete.

### **CAUTION!!**

DO NOT install or use this lift on any asphalt surface or any surface other than concrete.

DO NOT install or use this lift on expansion seams or on cracked or defective concrete.

DO NOT install or use this lift on a second/elevated floor without first consulting building architect.

DO NOT install or use this lift outdoors unless special consideration has been made to protect the power unit from weather conditions.

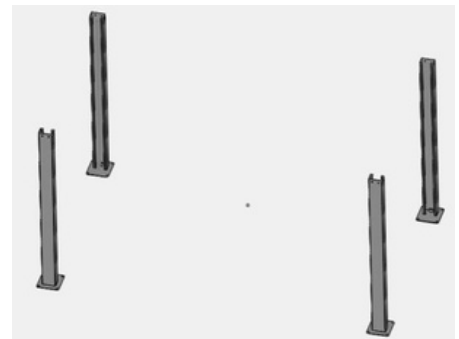
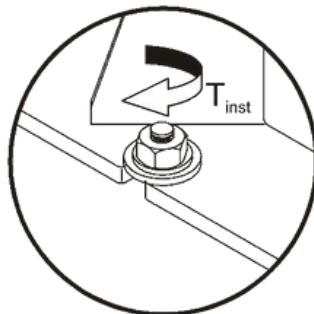
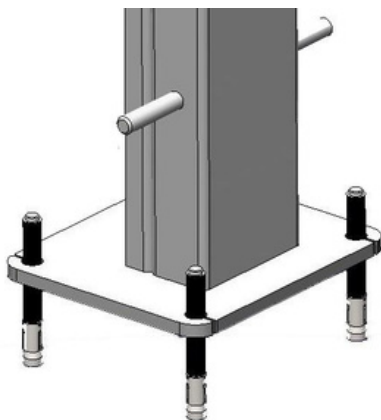
## STEP 2 (Floor Requirements):

Visually inspect the site where the lift is to be installed and check for cracked or defective concrete. This lift must be installed on a solid level concrete floor with no more than 1 degrees of slope. A level floor is suggested for proper installation and level lifting. If a floor is of questionable slope, consider a survey of the site and/or the possibility of pouring a new level concrete slab. This lift is designed to be installed on a minimum of 40cm (31/2") thick, 3500 psi, and reinforced concrete. Do not install this lift on asphalt, wood, or any other surface other than described. This lift is only as strong as the foundation on which it is installed.



## STEP 3 (Install inside 4 post car parking unit):

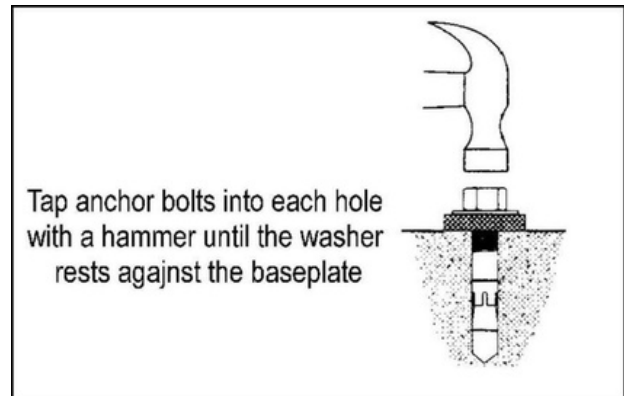
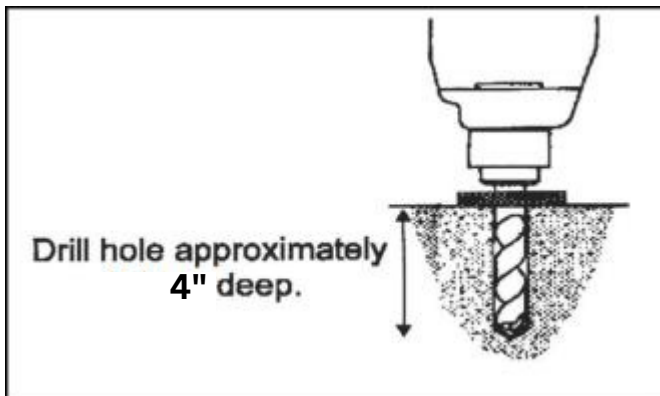
1. Locate the 4 columns at their respective locations according to the chalk line layout. Pay attention to the power unit location. DO NOT BOLT columns down at this time. Use caution to prevent columns from falling over.



2. To estimate the shim requirements, place a target on floor at each Column position and record the readings. Find the highest of the four locations then find the difference between each of the remaining columns. This difference is the estimated amount of shim thickness that will be required at each column.
3. Lay the columns down, and slide the cross tube / beam into the columns (making sure the polyethylene sliding blocks are still in position) and drop down into the top of the columns.
4. Tilt up the Column and Cross Tube assemblies, lining the base plates up with the chalk lines made earlier.
5. The columns and cross beams will now be in vertical position and spaced properly for the runways.

#### STEP 4 (Anchoring the Columns):

1. Before proceeding, double check the measurements and make certain that the bases of each column are square and aligned with the chalk line.
2. Using the base plate on each column as a guide, drill each anchor hole approximately 4" deep using a rotary hammer drill and 3/4" concrete bit.



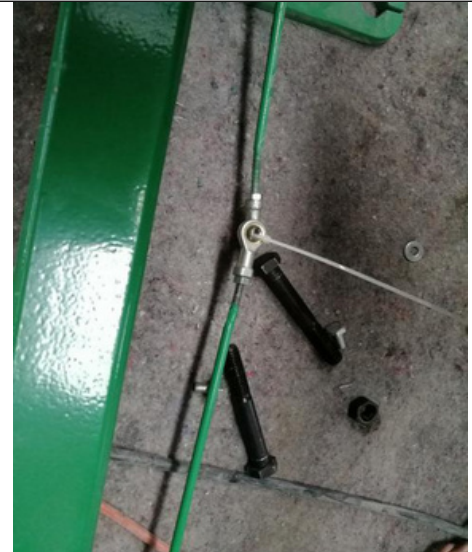
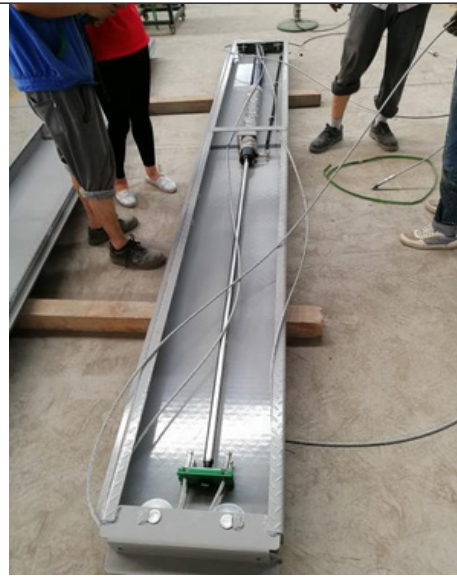
- 3 After drilling, remove dust thoroughly from each hole using compressed air and/or wire brush. Make certain that the columns remain aligned with the chalk line. Always wear safety gloves.
  - . Assemble the washers and nuts on the anchors then tap into each hole with a hammer until the washer rests against the base plate. Be sure that if shimming is required, enough threads are left
- 4 exposed.
  - . If shimming is required, insert the shims as necessary under the base plate so that when the anchor bolts are tightened, the columns will be plumb.

#### ·STEP 5 (Raising the Cross Tubes):

1. Before proceeding it will be necessary to first raise the Cross Tubes/ beams off the ground to facilitate Cable routing and final assembly.









Conection way of lock release bar for manual lock release type



Manual Lock release hand bar



**ELECTROMAGNETIC UNLOCK for electric lock release type**



#### STEP 7 (Cable Installation):

### **IMPORTANT!!**

1. Be careful not to damage the chrome cylinder rod during this operation.
2. Inspect cables to insure proper lengths. All cables should have ID tags showing proper cable lengths and path no to columns 1, 2, 3 & 4.
3. In order to install the cables, it is necessary to first extend the hydraulic cylinder. Remove cylinder port plug then use an air blow gun to extend the cylinder.
4. Install cables to each post as below pictures & diagram and fix cable with M16 nuts.
5. You **MUST** install spring washer & two nuts at the end of each cable. These are used to secure the main nut.
6. Be sure to tighten both nuts securely together to prevent the main nut from loosening.
7. Tighten until there is at least 1/4" of threads through the end of the double-nut nut. The cables will remain loose until startup.



caster



rolling jack

**⚠ DANGER**

**RISK OF EXPLOSION!**

This equipment has internal arcing or parts that may spark and should not be exposed to flammable vapors. Motor should not be located in a recessed area or below floor level. NEVER expose motor to rain or other damp environments. DAMAGE TO MOTOR CAUSED BY WATER IS NOT COVERED UNDER WARRANTY.

**IMPORTANT NOTE:**

DO NOT USE 110 VOLT POWER SUPPLY for this power unit. Damage to motor will occur which is not covered under warranty. You must use a separate circuit breaker for each lift.

STEP 11 (Lift Start Up):

- 1 Make sure the power unit reservoir is full with 12 L of 10-WT hydraulic oil.
- 2 Spray the inside of the columns where the slide blocks glide with a light lubricant or WD-40

3. Test the power unit by depressing the push-button switch. If the motor sounds like it is operating properly, raise lift and check oil hose connections for leaks. IF MOTOR GETS HOT OR SOUNDS PECULIAR, STOP IMMEDIATELY AND RE-CHECK ELECTRICAL CONNECTIONS.
- 4 Continue raising the lift slowly until reaching upper lock hole position.
- 5 ADJUST EACH CABLE SO THAT THE SAFETY LOCKS REST ABOVE THE TOP SAFETY LOCK HOLE POSITION. It may be necessary to tighten or loosen each cable to reach the proper height. The cable nuts **MUST** be tightened on each end until there is at least 1/4" of threads through the end of the nut.



## 6.2 To raise the lift

- Positioning the vehicle between columns.
- Raise the lift by pressing the lifting button until the lifting adaptors contact underside of the vehicle. Make sure the vehicle is secured.
- Raise the lift by pushing the lifting button until reaching the desire height.
- Press the safety button to engage the safety.
- Always ensure that the safety in each column is engaged before any attempt is made to work on or near the vehicle.

## 6.3 To lower the lift

- In case that the lift safety is engaged, push the lifting button to rise the lift a little bit to clear of safety at first;
- Lower the vehicle by pressing the lowering button: the lift will take seconds to release the safety and then begin to lower under the weight of the load lifted;
- Before removing vehicle from the lift area, position the lift to and pads to provide an obstructed exit.

### NOTE:

1. There will be some initial stretching of the cables in the beginning. It will be necessary to re-adjust the cables a week after first use, then every three to six months thereafter.
2. Run the lift up and down a few times to ensure that the locks are engaging uniformly and that the safety release mechanisms are functioning properly. Re-adjust if necessary.
3. Install the tire stoppers on the end of runways.
4. Install the approach ramps on the front side of the lift. Drive a vehicle on to the lift making sure to set the emergency before exiting the vehicle.
5. Run the lift up and down two times with a vehicle to ensure that the locks are engaging uniformly and that the safety release mechanisms are functioning properly. Re-adjust if necessary.