

# QJY3.0-D

## Top bar two post lift

### Operating Manual



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**Shanghai Fanbao Auto Maintenance Equipment Co. Ltd.**

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The contents of this edition have been checked with great care. However, errors cannot be fully excluded. Subject to technical change without notice.

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# 1 Safety

## 1.1 Introduction

Thoroughly read this manual before operating the lift and comply with the instructions. Always display the manual in a conspicuous location.

Personal injury and property damage incurred due to non-compliance with these safety instructions are not covered by the product liability regulations.

## 1.2 Symbols

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Failure to comply with instructions could result in personal injury.

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Failure to comply with instructions could result in property damage.

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Important information.

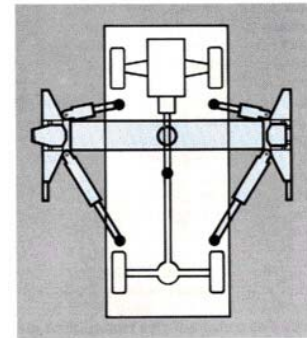
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### 1.3 Intended Use

The lift is designed for the safe lifting of automotive vehicles. Observe the rated load capacity and load distribution of the lift.

	Load Capacity	Load Distribution Front : Rear	
		Minimum	Maximum
QJY3.0-D	3000 kg	2 : 3	3 : 2

In principle, the lift is designed for both approach directions.  
 For a long service life, we recommend to use the short support arms for engaging the engine side of the vehicle.



**Note:**

The manufacturer declines all responsibility for injury to persons or damage to vehicles or objects when any of the above mentioned operations have been performed by unauthorized personnel or when the rack has been subject to abuse.

This manual indicates only the operative and safety aspects that may prove useful to the operator and maintenance works better understanding the structure and operation of the lift and for best use of the lift.

In order to understand the terminology used in this manual, the operator must have specific experience in workshop, service, maintenance and repair activities, the ability to interpret correctly the drawings and descriptions contained in the manual and be acquainted with the general and specific safety rules relevant to the country in which the machine has been installed.

The same applies to the maintenance fitter, who must also possess specific and specialized knowledge (mechanical, engineering) needed to perform the operations described in the manual in complete safety.

The words “operator” and “maintenance fitter” used in this manual are construed as follows:

**OPERATOR:** person authorized to use the lift.

**MAINTENANCE FITTER:** person authorized for routine maintenance of the lift.

The end user can only use the machine in correct way as defined in instruction.

Loose clothes shall not be used protection cap shall also be used for long hair person, etc.

The end user should provide the MSDS (Material Safety Data Sheet) at easy accessible place when providing lubrication.

**WORKING CONDITIONS:**

- 1、 Regarding ambient temperature shall be 5-40°C .
- 2、 Regarding humidity shall be 30-95%.
- 3、 Regarding transportation and storage temperature shall be between 25-55°C , and short period no exceeding 24 hours at up to 70°C .
- 4、 Regarding installation altitude max 1000m.

## 1.4 Safety Instructions for Commissioning

- ⑩ The lift may be installed and commissioned by authorized service personnel only.
- ⑩ The standard lift version may not be installed and commissioned in the vicinity of explosives or flammable liquids, outdoors or in moist rooms (e.g. car wash).

## 1.5 Safety Instructions for Operation

- ⑩ Read the operating manual.
- ⑩ Lift operation by authorized personnel over 18 years only.
- ⑩ Always keep the lift and lift area clean and free of tools, parts, debris etc.
- ⑩ Once the disk adapters contact the lift points, check arm restraints for engagement.
- ⑩ After raising the vehicle briefly, stop and check the disk adapters for secure contact.
- ⑩ Always lift the vehicle using all four adapters.
- ⑩ Make sure the vehicle doors are closed during raising and lowering cycles.
- ⑩ Closely watch the vehicle and the lift during raising and lowering cycles.
- ⑩ Do not allow anyone to stay in lift area during raising and lowering cycles.
- ⑩ Do not allow anyone on lift or inside raised vehicle.
- ⑩ Only use the lift for its intended purpose.
- ⑩ Comply with the applicable accident prevention regulations.
- ⑩ Do not overload the lift. The rated load capacity is indicated on the lift nameplate.
- ⑩ Only use the vehicle manufacturer's recommended lift points.
- ⑩ After positioning the vehicle apply the parking brake.
- ⑩ Use caution when removing or installing heavy components (center-of-gravity displacement).
- ⑩ The main switch serves as emergency switch. In case of emergency turn to position 0.
- ⑩ Protect all parts of the electrical equipment from humidity and moisture.
- ⑩ Protect the lift against unauthorized usage by padlocking the main switch.

## 1.6 Safety Instructions for Servicing

- ⑩ Maintenance or repair work by authorized service personnel only.
- ⑩ Turn off and padlock the main switch before doing any maintenance, or repair work.
- ⑩ Work on pulse generators or proximity switches by authorized service personnel only.
- ⑩ Work on the electrical equipment by certified electricians only.
- ⑩ Ensure that ecologically harmful substances are disposed of only in accordance with the appropriate regulations.
- ⑩ Do not use high pressure / steam jet cleaners or caustic cleaning agents. Risk of damage!
- ⑩ Do not replace or override the safety devices.

**1.7 Safety Features****1.7.1 Dead Man's Type Control**

The operator is required to hold the controls in the engaged position to raise or lower the lift.

**1.7.2 Equalizing System**

The lift is provided with equalizing cables to ensure level movement of both carriages.

**1.7.3 Collision Prevention Switch**

Limit switch is provided for preventing collisions between bar and the top bar.

**1.7.4 Pinch Point Protection**

During lowering cycles the support arms lower down by hold to run, safety bar provided for pinch protection.

**1.7.5 Automatic Arm Restraint**

Once the lift is raised, the arm restraints are locked automatically to avoid any swivel under load.

**1.7.6 Pipe Break Valve**

The hydraulic cylinders are equipped with pipe break valves. They respond in case of rapid pressure drop (line break) to prevent sudden lowering movements.

**1.7.7 Pressure Relief Valve**

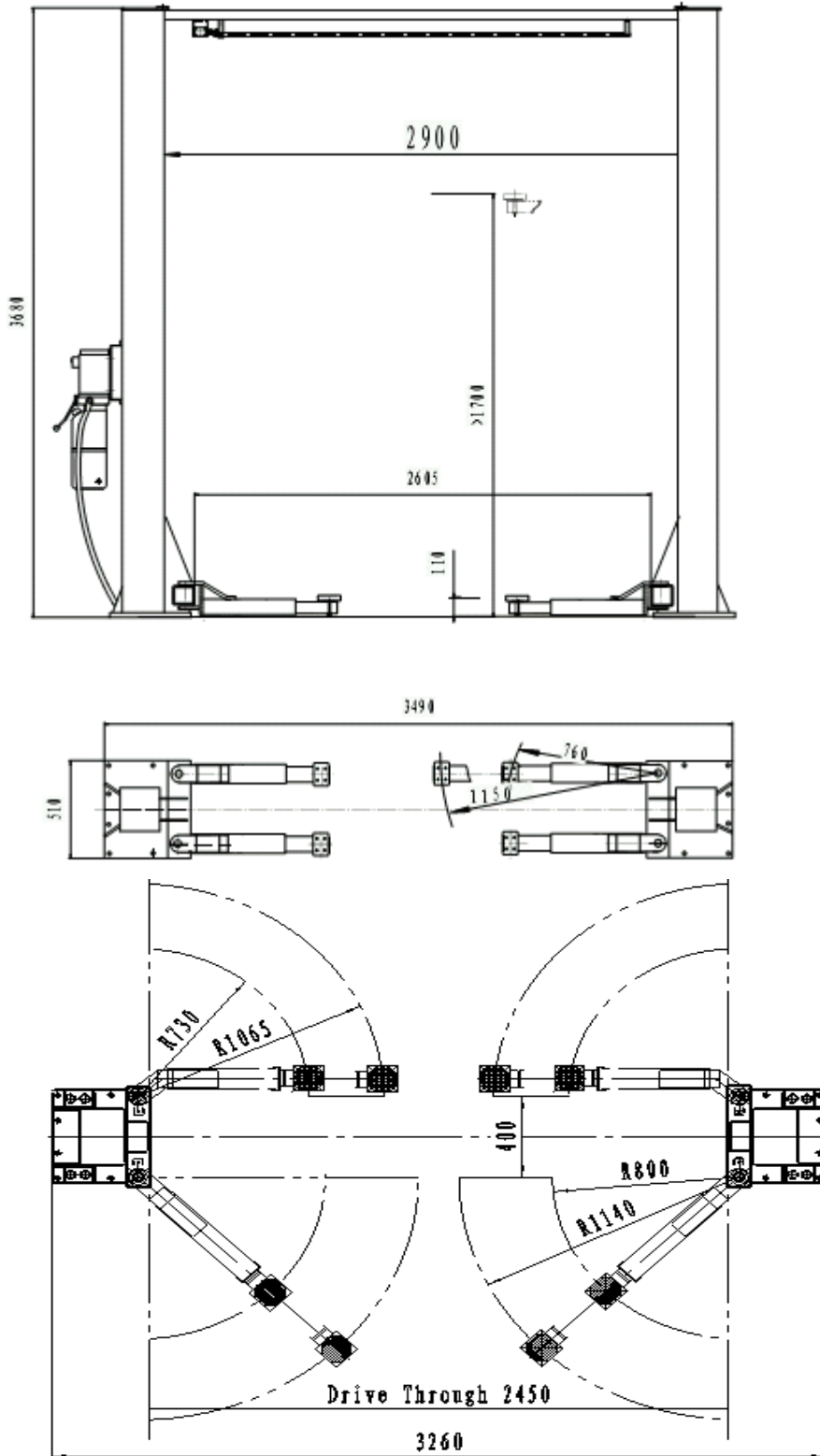
A pressure relief valve is used to limit the hydraulic working pressure to a maximum of 150 bar.

## 2 Specifications

See following pages.



The properties indicated apply to lifts running at operating temperature.



	<b>QJY3.0-D</b>	
Height overall	2770 mm	
Full travel	>1630 mm	
Raising / Lowering time	Approx. 50s	
Lifting height max.	1700 mm	
Lifting height min.	110 mm	
Disk adjustment range	70...164 mm	
Support arm reach	730...1065 mm	
Support arm reach	800...1140 mm	
Inside columns	2720 mm	
Outside columns	3092 mm	
Outside baseplates	3260 mm	
Inside baseplates	2510 mm	
Drive-through clearance max.	2450 mm	
Load capacity	3000 kg	
Net weight	580kg	
Anchoring	M18	
Concrete grade min.	C20/25(DIN 1045:2001-07)	
Motor power	2.2kW	
Rated current	10A	
Power supply	3~400V+N+PE	3~400V+N+PE
Sound pressure level	≤75dB(A)	
Hydraulic pressure	20MPa	



Specifications are subject to change without notice.



### 3 Operation

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Lift operation by authorized personnel over 18 years only.

Apply the parking brake after positioning the vehicle on the lift.  
Do not allow anyone to stay in lift area during raising and lowering cycles.  
Closely watch the vehicle and the lift during raising and lowering cycles.



Observe the rated load capacity and load distribution.

Do not allow anyone to climb on lift or stay inside vehicle.

After raising the vehicle briefly, stop and check adapters for secure contact.

Once the disk adapters contact the lift points, check arm restraints for engagement.  
Make sure the vehicle doors are closed during raising and lowering cycles.

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#### 3.1 Defects / Malfunctions

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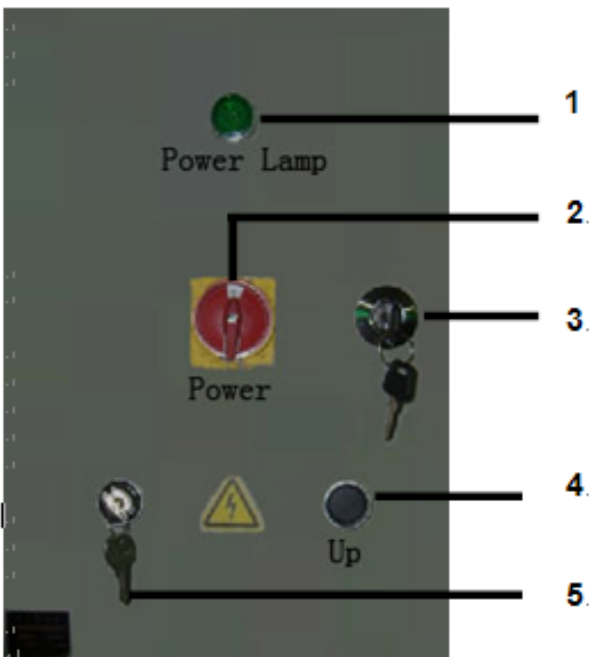


In case of defects or malfunctions such as jerky lift movement or deformation of the superstructure, support or lower the lift immediately.  
Turn off and padlock the main switch. Contact qualified service personnel.

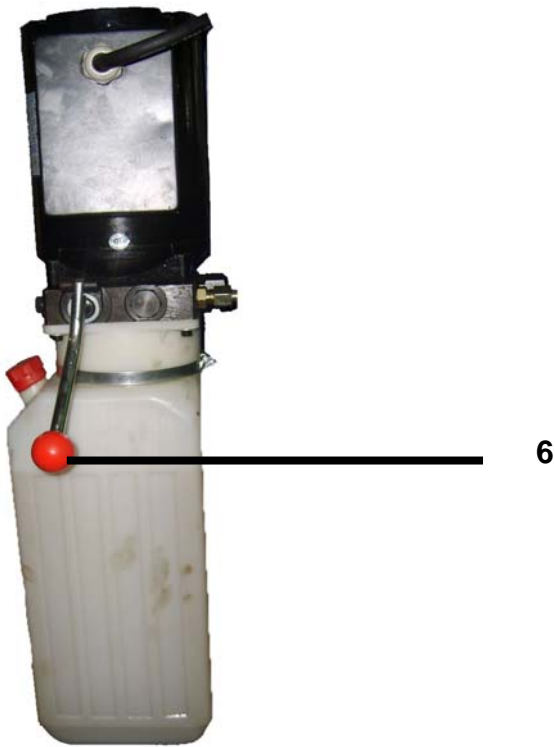
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### 3.2 Controls

#### 3.2.1 Control Unit



1. Power Lamp: Light is on when the power switch is turned
2. Main Switch: Turns 0 and 1
3. Control Box Lock: Lock the Control box
4. Up button: Raise the lift
5. Switch Protection: To protect the switch against unauthorized usage
6. Unloading Handle: Lower the lift or set the lift on mechanical locks



The main switch is used as emergency stop switch. In case of emergency turn it to position 0.

Main switch in position 0: Power supply is interrupted

Main switch in position 1: Lift is ready for operation

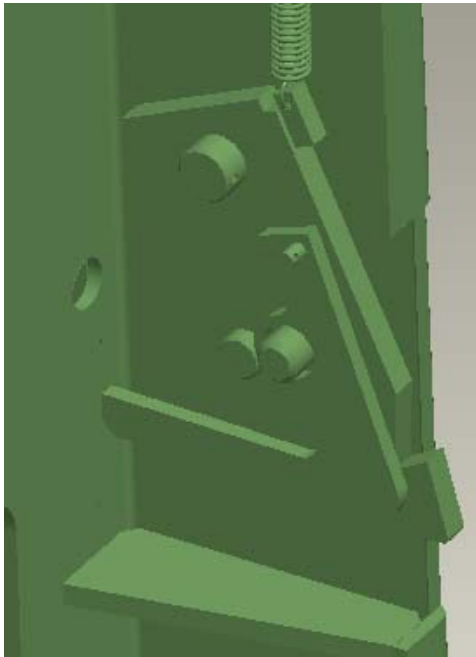


Once any button is actuated, press the Up button, the lift moves until the button is released



When the Up button is released, press the Unloading Handle once to set the lift on the mechanical locks automatic.

Press the Up button once first, insure the safety plate is in disengaged position, press the Unloading Handle to lower the lift



**Engaged Position**



**Disengaged Position**

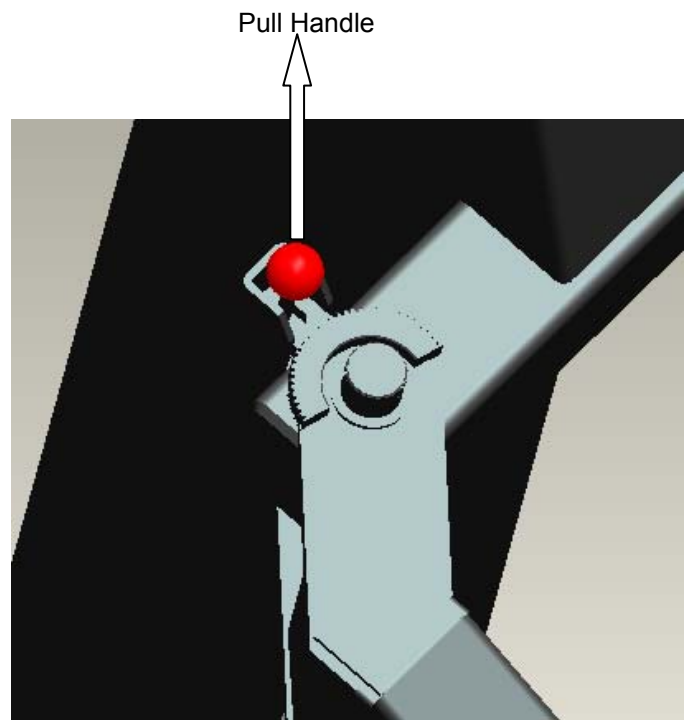
### 3.2.2 Arm Restraint



Once the disk adapters contact the lift points, check arm restraints for engagement. If necessary, slightly move the arms until the gear segments mesh. Never unlatch the arm restraints when the lift is under load.

Each support arm is provided with an automatic arm restraint which unlatches automatically when the lift is in bottom position.

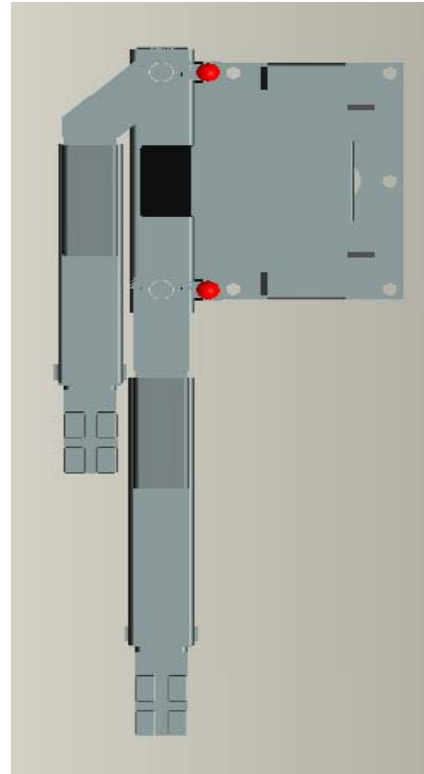
When the carriages are in a raised position, the arm restraint can be disengaged by pulling the Pull Handle



### 3.3 Operation

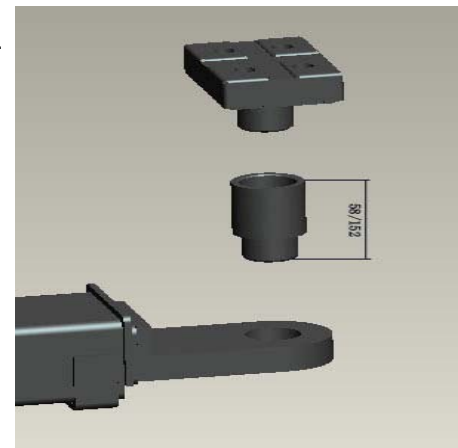
#### 3.3.1 Preparations

- 1 Fully lower the lift and swing the arms to full drive-through position.



⌘ Approach ⌘

- 2 Slowly position vehicle midway between adapters. Apply the parking brake.
- 3 Swing and telescope arms as required to position adapters under vehicle manufacturer's recommended lift points.
- 4 Turn the disk adapters that they evenly contact all four lift points.
- 5 Leave vehicle and remain clear of lift.



**Always lift the vehicle using all four adapters.**

### 3.3.2 Raising



**During raising and lowering cycles: Closely watch the vehicle and the lift, do not allow anyone to stay in lift area and make sure the vehicle doors are closed.**

**Once the disk adapters contact the lift points, check arm restraints for engagement.**

**After raising the vehicle briefly, stop and check adapters for secure contact.**

1 Turn the main switch to position 1.

Ⓜ Lift is ready for operation.



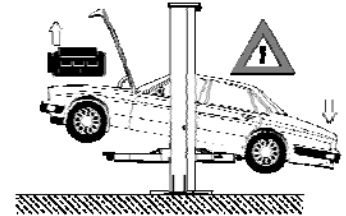
2 Push and hold UP button until lift reaches desired height.

Ⓜ Lift stops once button is released.



### 3.3.3 Vehicle in Raised Position

- ⑩ Observe all accident prevention regulations.
- ⑩ Do not allow unauthorized persons to stay under the raised vehicle.
- ⑩ Avoid rocking of vehicle.
- ⑩ Keep lift free of tools, parts, etc.
  
- ⑩ Fasten the vehicle to the support arms using lashing straps when removing or installing heavy components.



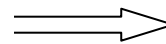
#### Set on Locks

Use the Unloading Handle to set the lift on the mechanical locks.



This way the vehicle can be securely fixed when the vehicle is in a raised position.

Unloading handle





3.3.4 Lowering

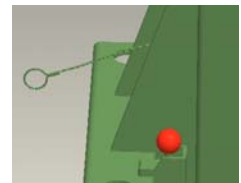


During raising and lowering cycles: Closely watch the vehicle and the lift, do not allow anyone to stay in lift area and make sure the vehicle doors are closed.

- 1 Remove tools, stands or other objects from lift bay.
- 2 Turn the main switch to position 1.
- Ⓜ Lift is ready for operation.
- 3 If the safety plate is in the engaged position, briefly raise the lift before lowering.



- 4 Pull the unlocking steel wire at both columns.



- 5 Press the Unloading Handle until lift reaches desired height.
- Ⓜ Lift stops once Relief Handle is released or downward travel limit is reached. During lowering cycles the support arms automatically stop at a height of 110 mm above bottom position.

Unloading Handle



- 6 To lower the arms completely, release the Unloading Handle
- 7 Swing arms to full drive-through position and drive the vehicle off the lift.

3.4 Protection against Unauthorized Usage

When in position 0, the main switch can be protected against tampering by means of a padlock.

### 3.5 Manual Lowering

In case of motor defect or power failure the lift can be lowered manually.

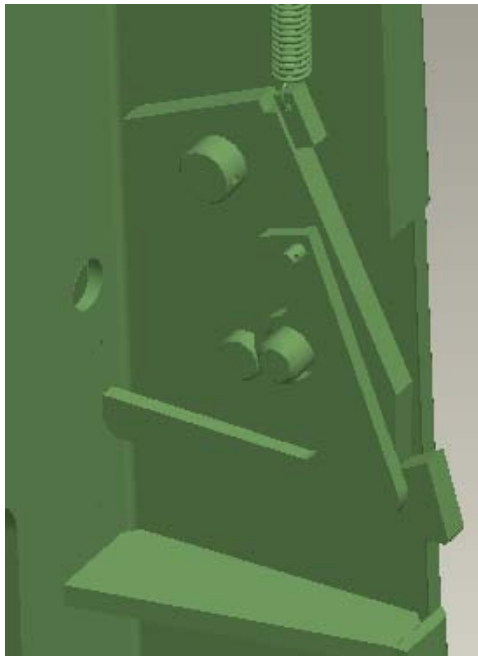


**Authorized personnel only! Do not restart the lift before the error has been remedied.**



If the lift load lies fully on the safety plates, manual lowering is not possible.

Safety Plate in engaged position



Safety Plate in disengaged position



## 4 Maintenance



Turn off and lock the main switch before servicing the lift.



The maintenance intervals indicated below apply to average workshop use. The lift should be inspected more frequently for severe use applications.

### 4.1 Maintenance Schedule

Establish a periodic preventive maintenance procedure to ensure troublefree operation and long service life.

Interval	Maintenance to be performed on	Items
1 week	Support arms / Disk adapters	Ⓢ Check rubber pads for wear.
		Ⓢ Check arm restraints for engagement.
6 months	Greasing points	Ⓢ Check and lubricate as required: - Slide tracks - Arm extensions - Threads of disk adapters
	Nuts of anchor bolts	Ⓢ Check all nuts for correct torque and retighten them as required.
12 months	Hydraulic system	Ⓢ Check fluid level.
		Ⓢ Check tightness of hoses and fittings.

## 4.2 Annual Inspection

We recommend to have the lift inspected by qualified service personnel every 12 months.

## 4.3 Maintenance by the Operator

### 4.3.1 Hydraulic System

- 1 Once a year check the fluid level (see below) with the lift fully lowered and add fluid as required.
- 2 Visually check all hydraulic hoses for tightness.

Power Unit



**The hydraulic fluid must be replaced periodically depending on aging, soiling and water absorption. It is recommended to replace the pressure hoses as required, but after six years at the latest.**

**Checking the Fluid Level**

The fluid level can be read through the transparent reservoir at the power unit.  
With the lift fully lowered, the fluid level must reach above the min level.

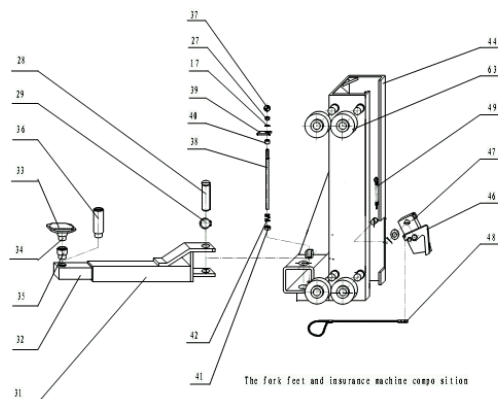


**4.3.2 Greasing Points**  
**Slide Tracks**



The slide tracks inside the columns should be greased every six months (or more frequently in case of noise generation).

- 1 Slightly grease the slide tracks over their whole length using a brush.



**4.3.2.1 Arm Extensions**

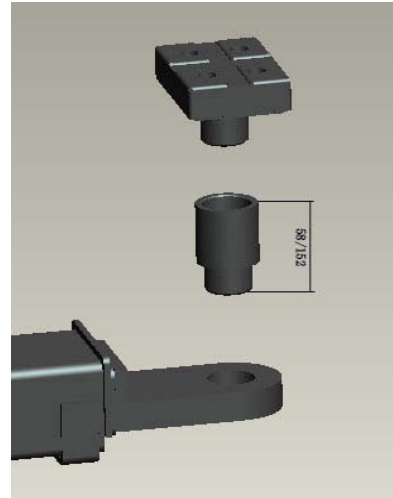
- 1 Every six months check the support arm extensions for smooth operation.
- 2 Grease as required.



**4.3.3 Operational and Wear Checks**

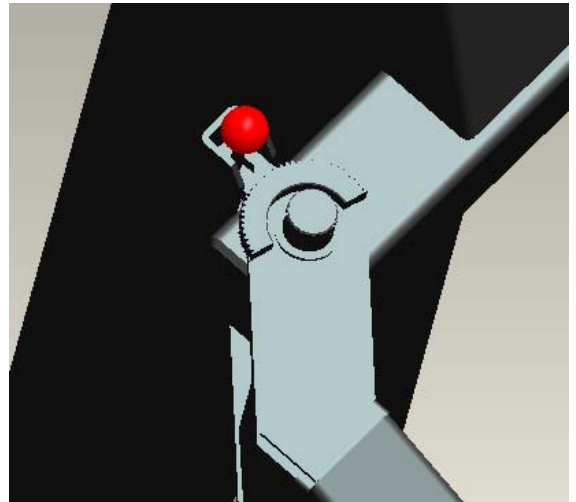
**4.3.3.1 Rubber Pads of Disk Adapters**

- 1 Weekly check the rubber pads for wear.
- 2 Replace them as required.

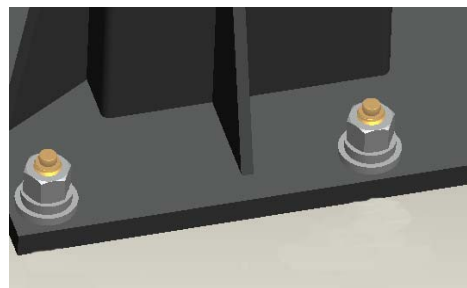
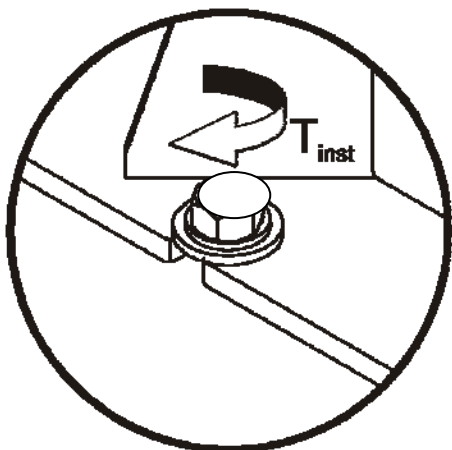


**4.3.3.2 Arm Restraints**

- 1 Weekly check the arm restraints for secure engagement.



#### 4.3.4 Lift Stability



- 1 Every six months check the nuts of all anchor bolts for correct installation torque  $T_{inst}$ .
- 2 Retighten them as required.

	Installation Torque $T_{inst}$
QJY3.0-D	80 Nm

#### 4.4 Cleaning



**Do not use high pressure / steam jet cleaners or caustic cleaning agents.  
Risk of damage!**

- 1 Periodically wash off aggressive substances and treat the lift with oil or wax spray.
- 2 Repair damage to the paintwork immediately to prevent corrosion. The RAL number is available through the manufacturer.



## 4.5 Troubleshooting

Trouble	Diagnosis	Remedy
Lift does not respond.	Main switch off.	Turn on main switch.
	Mains fuse defective.	Replace mains fuse.
Motor starts up, pressure build-up insufficient to raise load.	Lowering screw open.	Close lowering screw.
	Lowering valve permanently open.	Contact service.
	Hydraulic system leakage.	Remove leakage.
	Low fluid level.	Check fluid level, add fluid as required.
	Load on lift too heavy.	Reduce load, observe rated load capacity.
Level difference between carriages too big.	Equalizing cables maladjusted.	Contact service.
Lift cannot be lowered.	Latch release defective.	Contact service.

## 4.6 Disposal

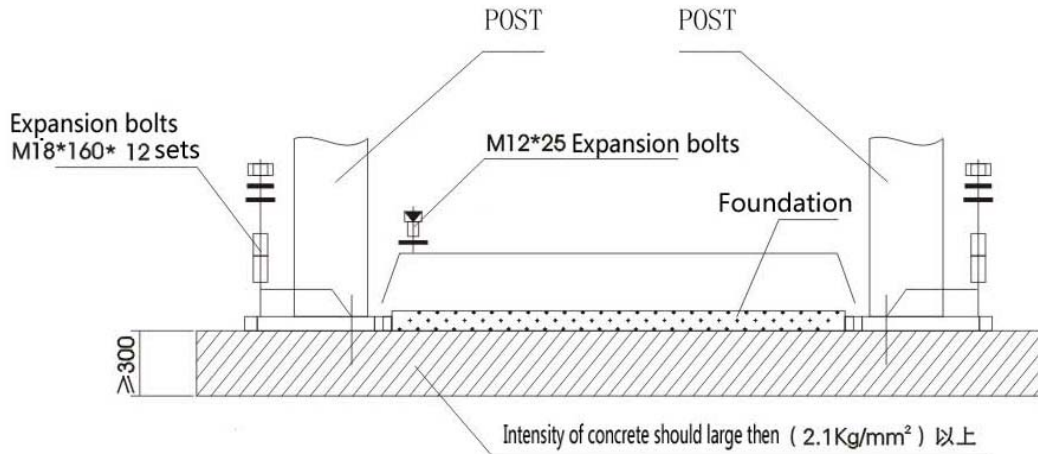
For disposal at end of working life, drain hydraulic fluid and dispose of fluid and other components through the normal industrial scrap route. No hazardous materials are used.

## 4.7 Installation

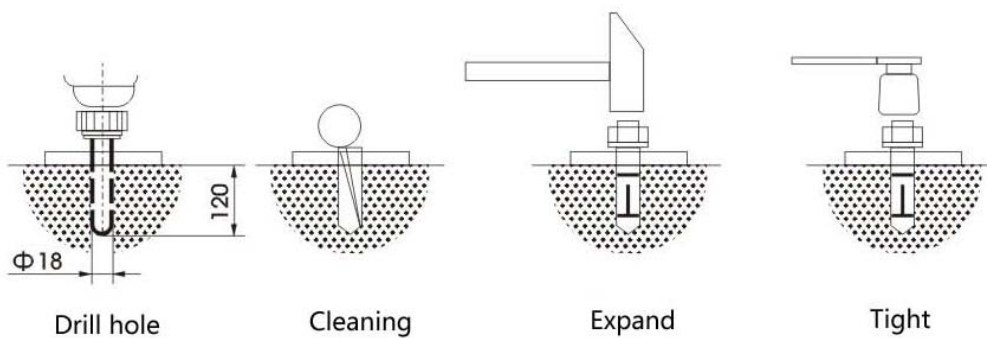
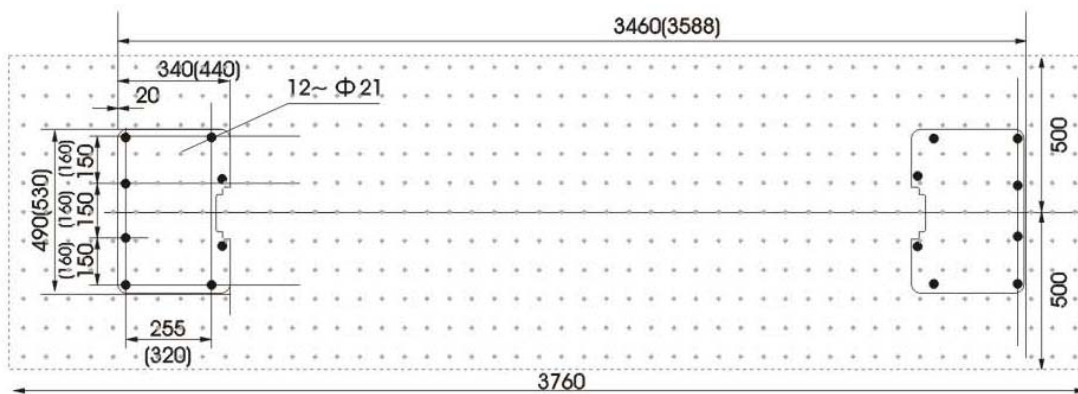
### 4.7.1 Space required

The lift must be installed on a level concrete floor, having minimum thickness of 20cm and an extension of at least 1.5m from anchoring points.

The lift installation concrete surface must be perfectly smooth.



If used spwcial foundation ,the intensity of concrete should large then 2200PSI ( 1.54Kg/mm<sup>2</sup> ) 以上。



### 4.7.2 INSTALLATION

#### STEP ONE: (determine location and marks with chalk on the floor.)

1. Determine which side is the approach side and on which side the power unit to be mounted.
2. Once the location is selected, use a chalk line to layout a grid for the post locations and make an outline of the posts on the floor at each location.
3. Before proceeding, double check measurements and make certain that the bases of each column are square and aligned with the chalk line.

#### STEP TWO: (Mounting two columns)

1. Drill each anchor hole in the concrete using a rotary hammer drill. To assure full holding power, do not ream the hole or allow drill to wobble.
2. After drilling, remove dust thoroughly from each hole and make certain that the column remains aligned with the chalk line during this process.
3. 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.
4. With the shims and anchor bolts in place, tighten by securing the nut to the base then turning 2 -3 full turns clockwise. DO NOT use an impact wrench for this procedure.
5. Position the other column at the designated chalk locations and secure to the floor following the same procedures as outlined in step 1, 2, 3, 4.

#### STEP THREE: (Routing the Equalizer cables)

1. Raise and lock each carriage approximately 800mm high above the ground.
2. Make sure that the safety locks on each column are fully engaged before attempting to route equalizer cables.  
Carriages must be equal height from the floor before proceeding.
3. With the carriages in equal position from the floor, route the equalizer cables as shown below.
4. After the equalizer cables have been routed, adjust each cable so that they are equal tension.



**NOTE: The equalizer cables should be checked weekly for equal tension. Failure to do this will cause uneven lifting. The cables should always be adjusted so that they are equal tension when resting on the safety locks.**

#### STEP FOUR: (Mounting the power unit.)

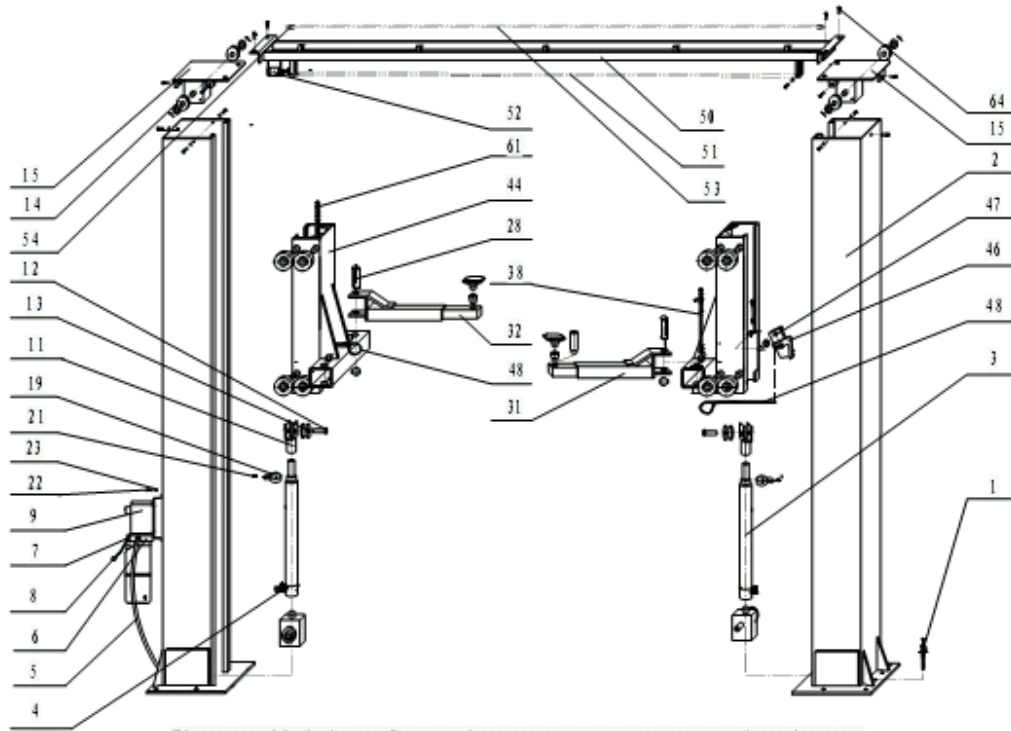
Attach the power unit to the POWERSIDE COLUMN with supplied tools and parts. Fill the reservoir with hydraulic oil.



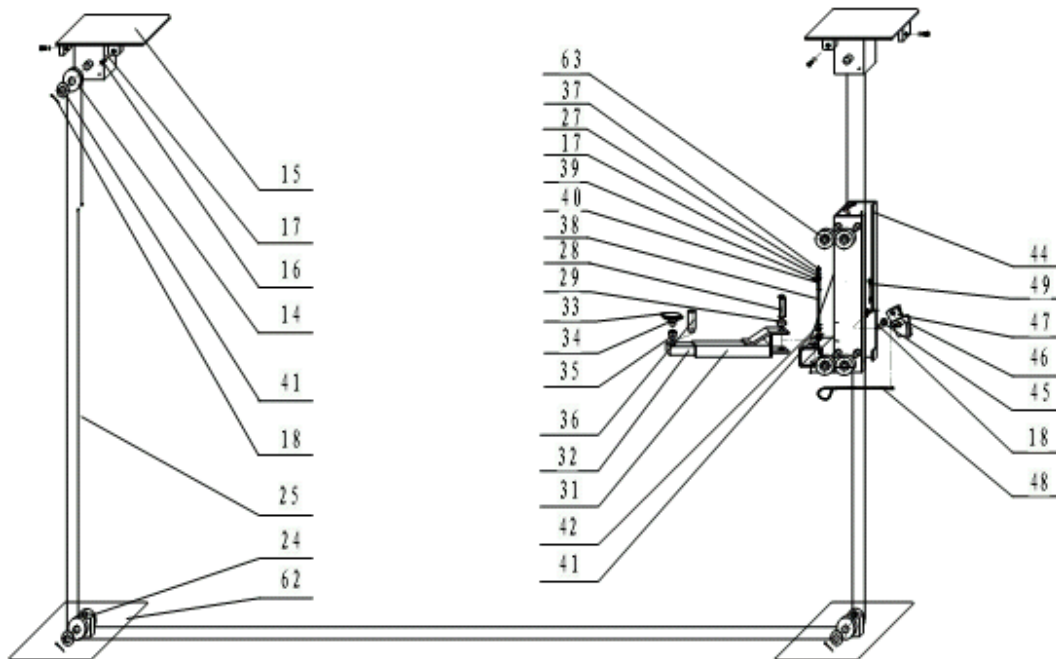
**Make sure the funnel used to fill the power unit is clean  
In summer and winter you should change the oil**

**STEP FIVE: (Installing Hydraulic Lines.)**

1. Install the hydraulic lines as shown right, paying careful attention to keep the hoses clean and free of debris.



The parallel bars Dtype-dragon gate structure sketch map



The steel wire spreads to move sketch map

## 2. Control box

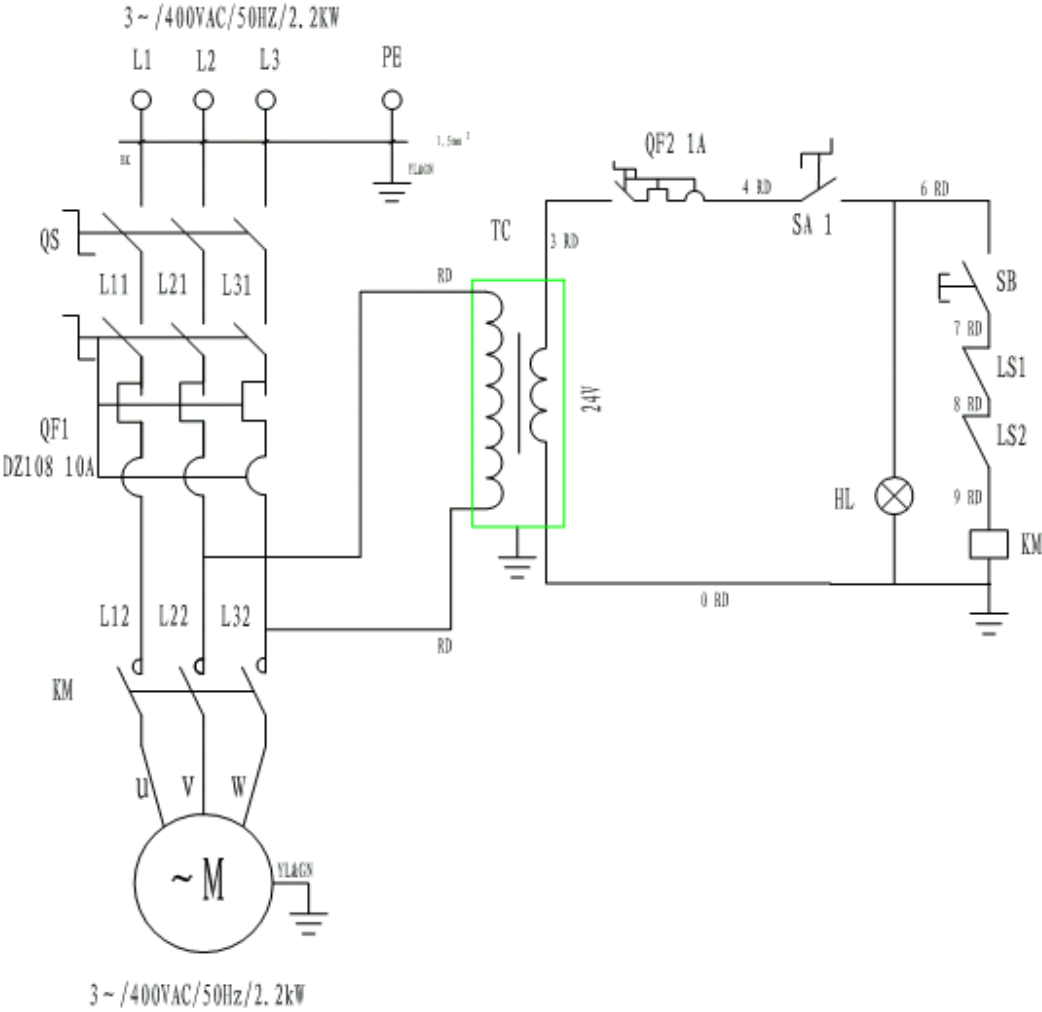
When you want to control the lift up or down,  
Please look the control box.  
Please lock it, when the lift is not operated. Cut the  
Power off, and close up the key.



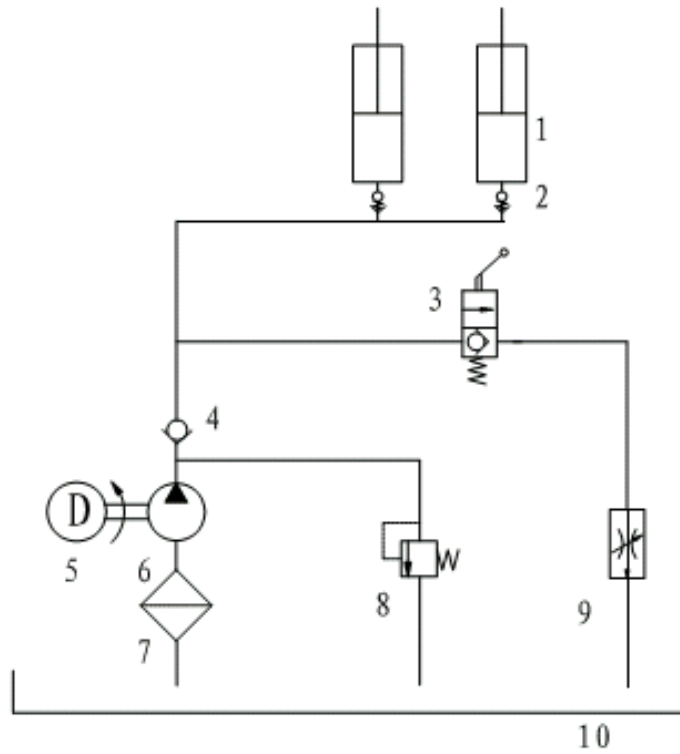
**STEP SIX: (Lifting arms)**  
Install the arms as right picture showing.



5. Electrical Drawing



6. Hydraulic Drawing



QJY3.0-D Two Post Hydraulic Lift

- 1、 Operating Cylinder with simple effect
- 2、 Lock valve
- 3、 Manual valve
- 4、 Check valve
- 5、 Motor
- 6、 Pump
- 7、 Filter
- 8、 Pressure relief valve
- 9、 Flow control valve
- 10、 Tank

## Declaration of conformity

The equipment which accompanies this declaration is in conformity with EU Directive(s):

*98/37/EC Machinery Directive  
2006/95/EC Low Voltage Directive  
2004/108/EC Electromagnetic Compatibility Directive*

### Manufacturer Name/Address:

*Shanghai Fanbao Auto Maintenance Equipment Co., Ltd.  
No.1 bridge, xupan road jading district, shanghai city, 201809, P.R.china  
Tel: (086)021-59949570, (086)021-59945850, Fax: (086)021-59949566  
Internet: <http://www.shfanbao.com>, E-mail: [webmaster@shfanbao.com](mailto:webmaster@shfanbao.com)*

### A copy of the Technical file for this equipment is available from:

*CCQS UK Ltd*

*A sample of this machinery has been presented to Notified Body number 1105.  
CCQS UK Ltd., Suite B Regal Court, 112 London Road, Headington, Oxford OX3 9AW UK  
Who have issued an EC type-examination certificate, Number CE-C-0225-08-11-05-5A, dated 2009.03  
The equipment in respect of which this declaration is made conforms to the example to which that certificate relates,  
and that certificate remains valid.*

### Description of Equipment:

**Product:** *top bar two post hydraulic lift*  
**Type designation/trademark:** *QJY3.0-D gantry lift*  
**Series number:** *090106*

### The following harmonised standards have been used:

*EN60204-1:2006 Electrical Equipment of Industrial machines  
EN1493:1998 vehicle lift*

### Authorised signatory of manufacturer/authorised EU representative:

Signature:   
Name of signatory: Fan minghua  
Position in company: General Manager  
Place and Date: Yingkou/China/2009.03.15