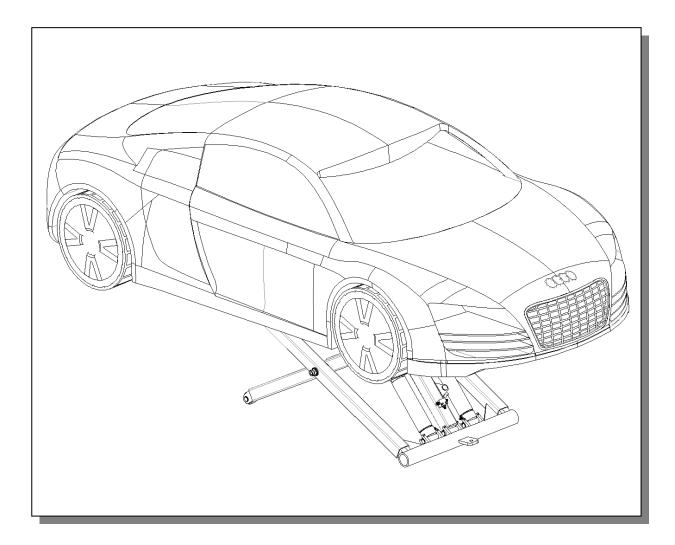
# PL-B30M Low Rise Scissor Lift



# INSTRUCTION & MAINTENANCE MANUAL



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

# 1. Packing, transport and storage



All packing, lifting, handling, transport and unpacking operations are to be performed exclusively by expert personnel.

### 1.1. Packing:

#### Standard equipment:

Accessory box (3# CTN), main and sub beam (1# CTN), control station 2# CTN).

#### **Packing List**

NO.	Name	Accessory name and quantity	
1	Frame	Main beam 1 piece	
2	Accessory box	1 set(Control station)	

Table 1

### 1.2. Transport:



Packing can be lifted or moved by lift trucks, cranes or bridge cranes. In case of slinging, a second person must always take care of the load, in order to avoid dangerous oscillations.

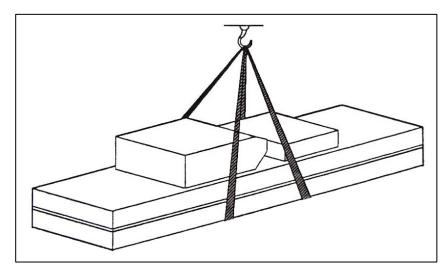
During loading and unloading operation, goods must be handled by vehicles or ships. At the arrival of the goods, verify that all items specified in the delivery notes are included. In case of missing parts possible defects or damage may due to transport operations.

If finding missing parts, possible defects or damage due to transport, one should examine damaged cartons according to **<<Accessories Packing List>>** to verify the condition of damaged goods and missing parts, also the person in charge or the carrier must be immediately informed.



The machine is heavy goods! Don't take manpower load and unload and transporting way into consideration, the safety of working is important.

Furthermore, during loading and unloading operation goods must be handled as shown in the picture. (Picture 1)



Picture 1 (Goods-lifted)

### 1.3.Storage:

-The machine equipment should be stocked in the warehouse, if stocked outside should do the disposal well of waterproof.

-Use box truck in the process of transport, use container storage when shipping.

-The control station should be placed perpendicularly during the transport; and prevent other goods from extrusion.

-The temperature for machine storage : -25°C-- 55°C

# 2. Manual introduction



This manual has been prepared for workshop personnel expert in the use of the lift operator and technicians responsible for routine maintenance fitter.

Workers should read the **<<Instruction & Maintenance Manual>>** carefully before carrying out any operation with the lift. This manual contains important information regarding:

-The personal safety of operators and maintenance workers.

-Lift safety.

-The safety of lifted vehicles.



Several tips should be done by the operator as follow:

1. Well conserving the manual. Manufacturer owns the right to make little change for the manual owing to the improvement of technology.

2.Good disposal the used oil.

3. The machine must be demolished by authorized technicians, just like for assembling

## 3. Description of the machine

### 3.1. Machine Application



Low rise scissor lift can lift each kind of vehicle whose weight is less than 3000kg, suitable for use in vehicle tests, maintenance and caring for automobiles, which is particularly suitable for use in the basement or on the floor, without construction and hole.



Lifts are designed and built to lift vehicles and hold them in the elevated position in an enclosed workshop. All other uses of the lifts are unauthorized. In particular, the lifts are not suitable for: -Washing spray work;

-Use in outdoors;

-Creating raised platforms for personnel or lifting personnel;

-Use as a press for crushing purposes;

-Use as elevator;

-Use as a lift jack for lifting vehicle bodies or changing wheels.



The manufacturer is not liable for any injury to persons or damage to vehicles and other property caused by the incorrect and unauthorized use of the lifts.

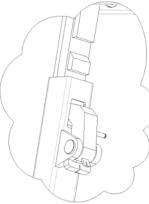
### 3.2. Structure Features

- Direct ground installation with a thin parallel platform structure. There is no need to dig a hole to fix the machine in the ground.

- have double safety fittings, hydraulic lock and mechanical safety clamp, to make falling automatic and safe.

- have safety valve protection from hydraulic pressure failure and over loading.
- Platform works synchronously and smoothly.
- Use good quality hydraulic and electric accessories.

### Safety lock structure



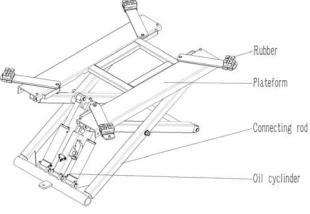
#### Picture 2

### 3.3. Equipment

-Machine frame (The main structure of lift and insurance institution) -Control Station (Machine-controlled part)

### 3.4. Frame

Make of base plate, connecting rod, main lifting platform, hydraulic oil cylinder and loading dock board





### 3.5. Control Station

Under the control station is hydraulic oil tank and hydraulic pump, valve and other control system. On the control station is electrical system.

Function of each valve on the power unit		
Name	Function	
Gear pump	Extract hydraulic oil and provide high pressure.	
Connecting block	Connect the motor and the gear pump.	
Motor	Provide power for the gear pump.	
Overflow valve	Adjust oil pressure.	
Pressure-compensated valve	Control the speed of falling.	
Lowering solenoid valve	Control flow of the hydraulic oil.	
One-way valve	Control the one-way flow of hydraulic oil.	
Ball valve	Debugging and control the returned oil.	

Table 2

# 4. Specifications

### 4.1 Main technical parameter

Machine type	Scissor lift
Drive	Electrical hydraulic
Lifting capacity	3000kg
Machine lift height	980mm
Platform initial height	180mm
Platform length	1600mm
Platform width	1000mm
Lifting time	≤30s
Descent time	≤30s
Whole machine length	1870mm
Whole machine width	1540mm
Power supply	3/N/PE~380V, 50Hz,10A
Whole machine power	2.2kw
Hydraulic oil	6L corresponds to wearable hydraulic oil
Working temperature	<b>5-40</b> ℃
Working humidity	30-95%
Noisy	< 70db
Storage temperature	-25℃~55℃

Table 3

Motor:   Type

#### Pump:

Туре	P1.6
Model	gear pump
Max flux	1.6cc/r
Joint typejoint	overfull valve
Continuous working press	ure210bar
Intermittent working press	ure150~300bar
Inject 6 litters of wearable	e hydraulic oil into the
oil tank.	

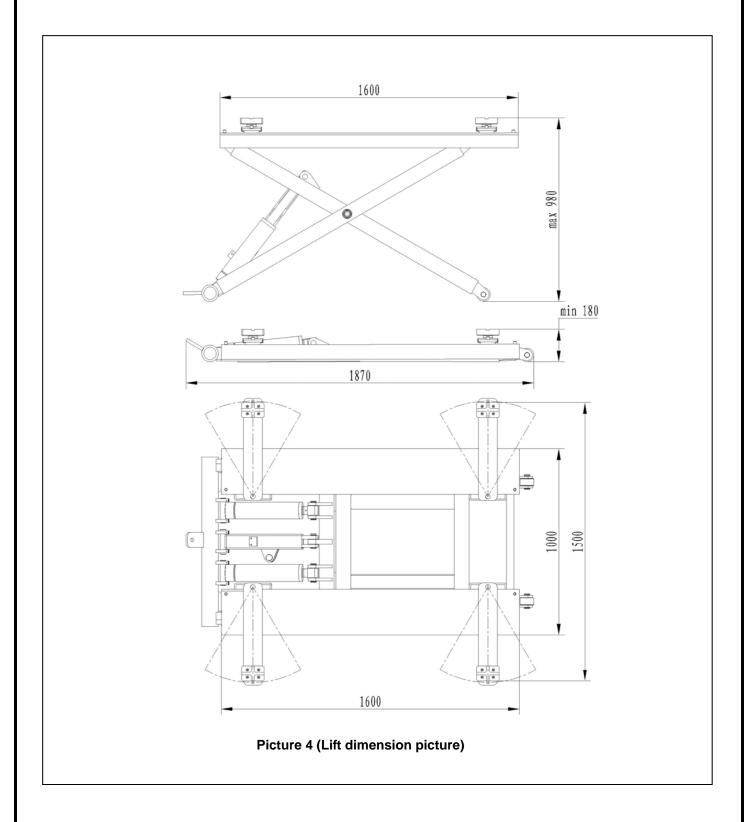
#### Requirements

-Concrete type 425#, the period of desiccation is 15 days -Clean the basic layer, thickness of concrete≥150mm, the levelness of whole length≤10mm

#### Supply at the same time

-Connect to the power supply jack of control Station(400V)

# 4.2 External dimension drawing

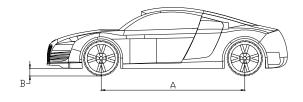


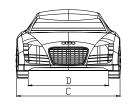
### 4.3. Types of vehicles suitable for

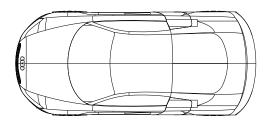
This lift is suitable for virtually all vehicles with total weight and with dimensions not exceeding the below data. **Maximum weight not exceed than 3000kg.** 

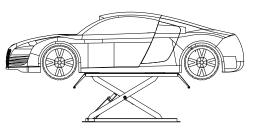
#### The max dimension of vehicle:

The following diagrams illustrate criteria used to define the operating limits of the lift.









Picture 5

$\setminus$	Scissor lift	
	Min	Max.
A	2000	4000
В	110	
С	/	1900
D	1000	



The lower parts of the vehicle under-body could interfere with structural parts of the lift. Take particular parts of the sports-car.

The lift will also handle customized or non-standard vehicles provided they are within the maximum specified carrying capacity.

Also the personnel safety zone must be defined in relation to vehicle with unusual dimensions.

Do not use the lift without protection devices or with the protection devices inhibited.

Failure to comply with this regulation can cause serious injury to persons, and irreparable damage to the lift and the vehicle being lifted.

# 5. Safety notes

#### **General precautions**

The operator and the maintenance fitter are required to observe the prescriptions of safety regulation in force in the country of installation of the lift.

Furthermore, the operator and maintenance fitter must:

-Always work in the stations specified and illustrated in this manual;

-Never remove or deactivate the guards and mechanical, electrical, or other types of safety devices;

-Read the safety notices placed on the machine and the safety information in this manual.



#### In the manual all safety notices are shown as follows:

**Warning:** indicates following operations that are unsafe and can cause minor injury to persons and damage the lift, the vehicle or other property.



**Risk of electric shock:** a specific safety notice placed on the lift in areas where the risk of electric shock is particularly high.



#### **Risk and protection devices**

For optimal personal safety and safety of vehicles, observe the following regulations:

-Do not enter the safety and safety of vehicles is being lifted.

-Be sure to lift only approved vehicles, never exceed the specified carrying capacity, maximum height, and projection (vehicle length and width);

-Make sure that there is no person on the platforms during up and down movements and during standing



#### General risks for lifting or descent

The following safety equipments are used to protect over loading or the possibility of engine failure. In the condition of over loading, the over-falling valve will open and directly return oil to the oil tank. Each bottom of oil cylinder is equipped with antiknock and locked valve(**optional**). When the oil pipe is

burst in the circuit of hydraulic pressure, the relevant antiknock and locked valve will work and limit the speediness of platform.

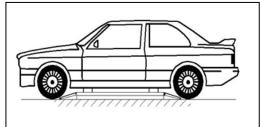
Safety tooth and gear module are parts which guarantee the safety of personnel beneath the machine in failure condition of other protections.

So make sure the integrity of gear module and that the safety tooth has occluded completely. (**Picture 2**) There is nothing abnormal should be left on the safety modules to prevent safety gear from occlude normally.



### Risk for extrusion

During up and down operations, personnel leave the said area without following the rule and instruction. During up and down operations, no person is admitted to work beneath the movable parts of the lift, should work in the safe zone.



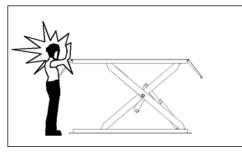
Picture 6

Risk of falling (vehicle)



#### **Risk of impact**

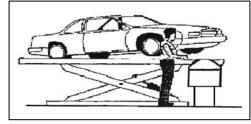
Before the operator begins up and down movements, make sure that there are no personnel inside the danger zone. When, due to operational reasons, the lift is stopped at relatively low elevations (lower than 1.75m above the ground) personnel must be careful to avoid impact with parts of the machine not marked with special colors. (**Picture 7**)



#### Picture 7

This hazard may arise in the case of incorrect positioning of the vehicle on the platforms, overweight of the vehicle, or in the case of vehicles of dimensions that are not compatible with the capacity of the lift. When the platform is being tested, the vehicle engine can not be turned on.

There is nothing should be placed on the lift-lowering area and the movable parts of the lift.

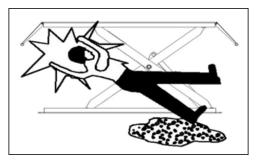


**Picture 8** 



#### **Risk of slipping**

The floor caused by lubricant contamination of around the lift. The area beneath and immediately surrounding the lift and also the platforms must be kept clean. Remove any oil spills immediately.(Picture 9)



Picture 9



### Risk of electric shock

Risk of electric shock in areas of insulated and shattered electric equipments Do not use jets of water, steam solvents or paint next to the lift, and take special care to keep such substances clear of the electrical control panel.



#### **Risks related to appropriate lighting**

The operator and the maintenance fitter must be able to assure that all the areas of the lift are properly

and uniformly illuminate compliance with the laws in force in the place of installation. During up and down operations, the operator should continually observe the lift and can operate it only in the position of operator. When lifting and lowering the vehicle, the cushion needs being put in the bottom of chassis.



The handling of safety devices is strictly forbidden. Never exceed the maximum carrying capacity of the lift, make sure the vehicles to be lifted have no load.

It is therefore essential to adhere scrupulously to all regulations regarding use, maintenance and safety contained in this manual.

# 6. Operation

#### 6.1 Instructions:

- Beside the motor, there is a control station with electric control parts inside.
- For lifting, press the button on the control station.
- For falling, press the falling handle on the control station.
- Control the falling speed by the strength of pressing the falling handle.

#### 6.2 Maintenance

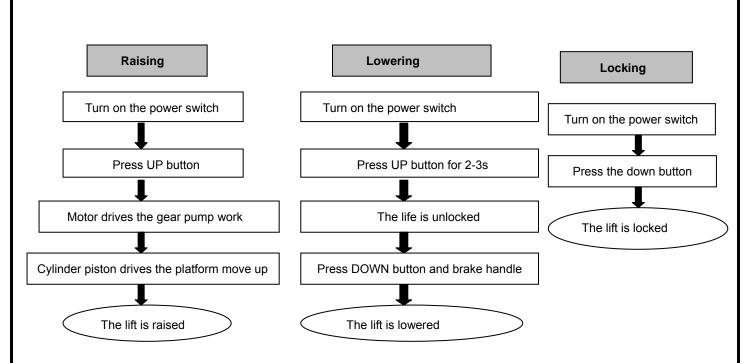
- Keep the base frame clean without any sundries.
- Spray a little lubricating oil to axes periodically.

#### 6.3 Attention

- Check if the voltage (380V or 220V) is correct or not.
- Check if something is blocking the frame poles or not.

#### 6.4 Troubleshooting

- Check if the hydraulic oil runs out or not.
- Check if the AC contact loop burns out or not.
- Check if the button switch fails or not.



#### Emergency manual operation for lowering (power failure)



When lowering through manual operation, should observe the condition of platform at any time because there is vehicle on the platform. If there is anything abnormal, screw down oil loop valve immediately.(refer to **Picture 10**)

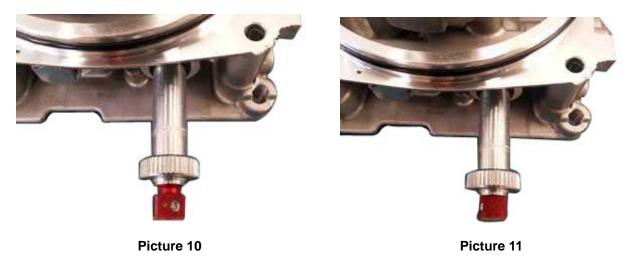
#### The process of manual operation

-Firstly lift safety pawls of platform and use thin iron bar to fill up it.

-Switch off the power button (avoid abruptly incoming electricity). Find the electromagnetic valve A for lowering.

-Loosen manual oil loop stud anticlockwise at the end of lowering electromagnetic valve core, then the platform begins lowering.(**Picture 10**)

-After the machine has been lowered, screw down manual oil loop stud clockwise timely, the process of manual lowering comes to the end.(**Picture 11**)



# 7. Maintenance and care



Skilled personnel only is allowed to perform the operations

#### Daily checking items

The user must perform daily check. Daily check of safety system is very important – the discovery of device failure before action could save your time and prevent you from great loss, injury or casualty.

·Always wipe clean,keep the machine clean.

·Clear barriers and ground oil,keep the working condition clean.

·Check the integrity of each safety devices, ensure the motion is flexible and reliable.

- ·Check the reliability of limit switch motion.
- ·Check whether oil leakage of the machine exist.

#### Weekly checking items

·All bearings and hinges on this machine must be lubricated once a week by using an oiler

 $\cdot \text{Check}$  the working conditions of safety parts.

•Check the amount of oil left in the oil tank. Oil is enough if the carriage can be raised to highest position. Otherwise, oil is insufficient.

·Check whether the expansion bolts well anchored.

#### Monthly checking items

·The safety gear, the upper and lower sliding blocks and other movable parts must be lubricated one month.

·Check whether the foundation bolts well anchored.

·Check the abrasion and leakage of oil hose.

#### Yearly checking items

·The hydraulic oil must be replaced one time each year. The oil level should always be kept at upper limit position.

- ·.Check abrasion and damage of all the active parts.
- ·.Check the lubrication of roller. Lubricate it if drag phenomenon exist.



The machine should be lower to the lowest position when replace hydraulic oil, then let the old oil out, and should be filtering the hydraulic oil.

-Each team checks the agility and reliability of pneumatic safety equipment.

#### Storage after use

When the machine does not use for a long time:

 $\cdot. Cut \mbox{ off the power supply and lubricate all the active parts.}$ 

 $\cdot. Drain the hydraulic oil of oil cylinder, oil hose and oil tank.$ 

·Sheathe the machine with dust-proof cover.

# 8. Trouble shooting table

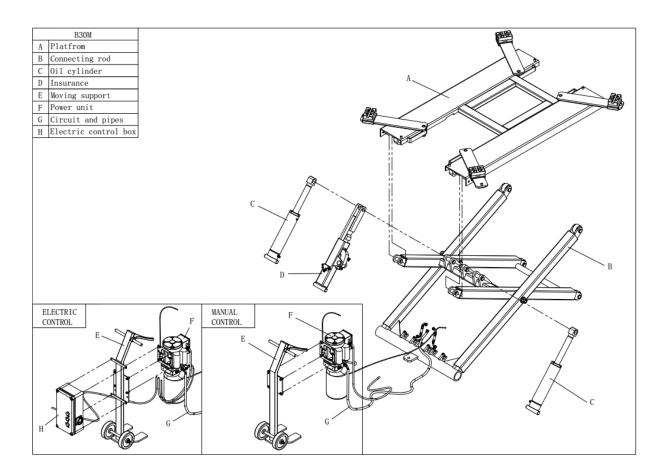


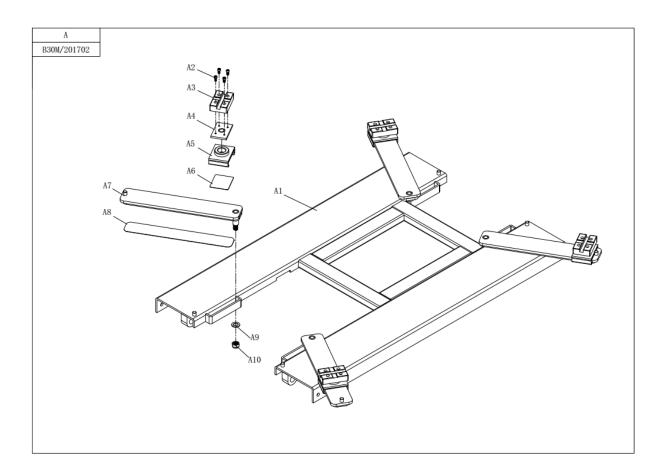
Skilled personnel only is allowed to perform the operations

Failure Phenomena	Cause and Phenomena	Resolutions
The motor does not run in lifting operation.	①Connection of power supply wires is not correct.	Check and correct wire connection
	②The AC contactor in the circuit of the motor does not pick up.	If the motor operates when forcing the contactor down with an isolation rod, check the control circuit. If the voltage at two ends of the contactor coil is normal, replace the contactor.
In lifting operation, the	①The motor turns reverse.	Change the phases of the power supply wires.
motor runs, but there is no lifting movement.	②Lifting with light load is normal but no lifting with heavy load.	Lift is overloaded and is unable to carry the load being attempted. Carefully lower and remove vehicle from lift. The spool of the lowering solenoid valve is stuck by dirt. Clean the spool.
	③The amount of hydraulic oil is not enough.	Add hydraulic oil.
	④The "operation stop valve" is not closed.	Screw down the "Operation stop valve"
When press "DOWN" button, the machine is	①The safety pawl are not released form the safety teeth.	First lift a little and then lowering
not lowered.	②The safety pawl is not lifted.	The pressure is not enough, the safety pawl is stuck or the line is broken off, adjust pressure, check the line and replace it.
	④The lowering solenoid valve is energized but does not work.	Check the plug and coil of the lowering solenoid valve and check the right turn tightness of its end copper nut and so on.
	⑤The "antiknock valve" is blocked.	Remove the "antiknock valve" from the oil supply hole at the bottom of the oil cylinder, and clean the "antiknock valve".
The machine lowers① The hydraulic oil has too highextremely slowly underviscosity or frozen, deteriorated (innormal loads.Winter).		Replace with hydraulic oil in accordance with the instruction book.
Noisy lifting and owering.	①Lubrication is not enough.	Lubricate all hinges and motion parts (including piston rod) with machine oil
	② The base or the machine is twisted.	Adjust again the levelness of the machine, and fill or pad the base.

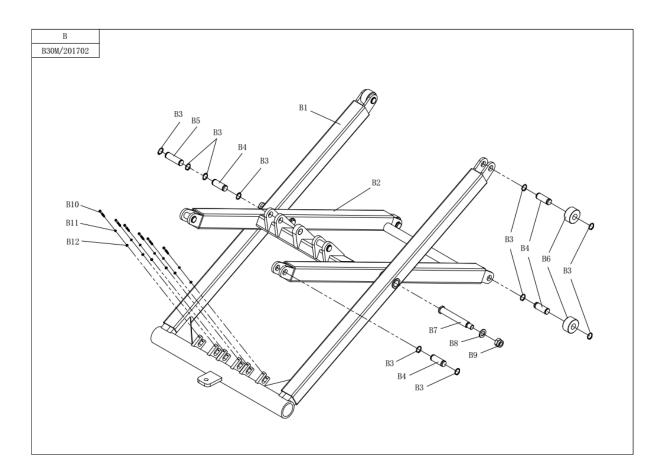
Table 4

# 9. Explosion drawing

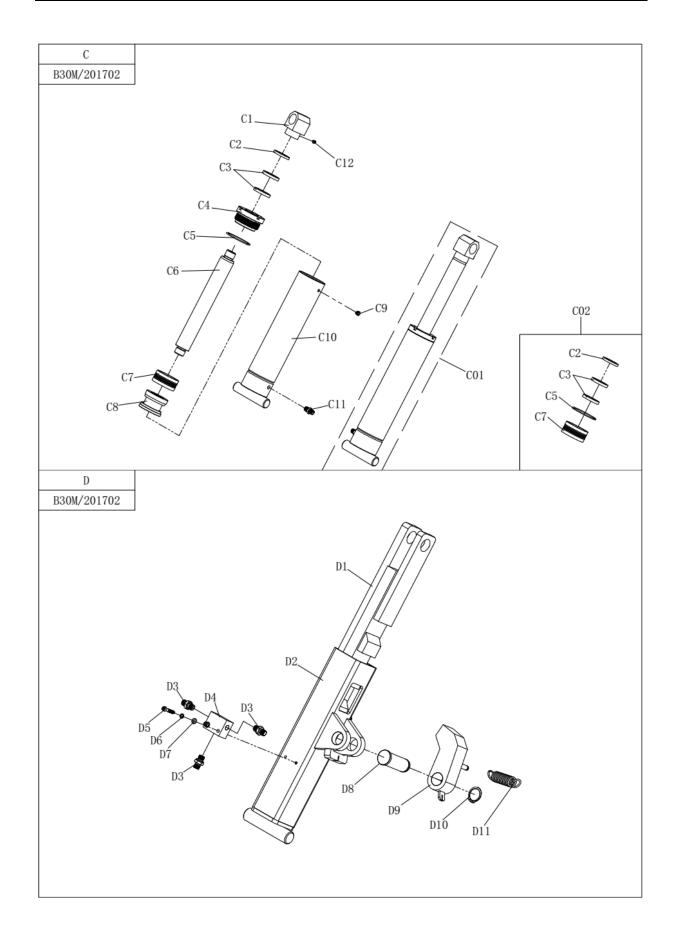




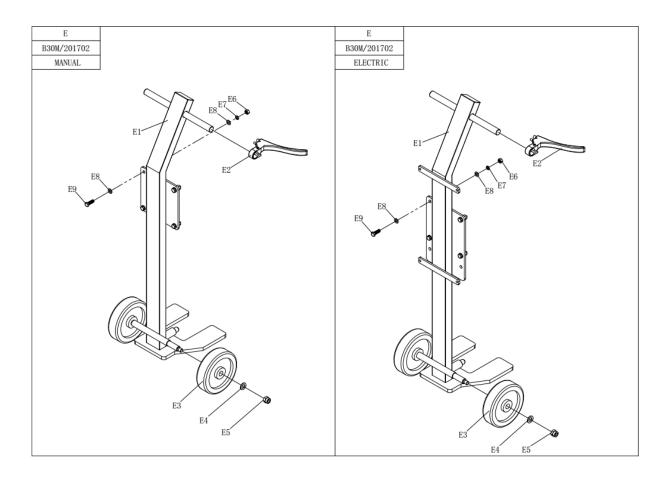
A1	SZ-UBM-030000-Z	top plate assembly
A2	B-010-080161-0	hex socket head cap screw
A3	SG-302-000300-0	cushion block
A4	SX-UBM-060000-Z	rubber mat support assembly
A5	SX-UBM-050000-Z	movable support assembly
A6	SG-UBM-000500-0	movable support rubber mat
A7	SZ-UBM-040000-Z	lifting arm assembly
A8	SG-UBM-000600-0	lifting arm rubber mat
A9	B-040-223730-1	flat washer Ø20
A10	B-004-200001-2	hex locking nut M20



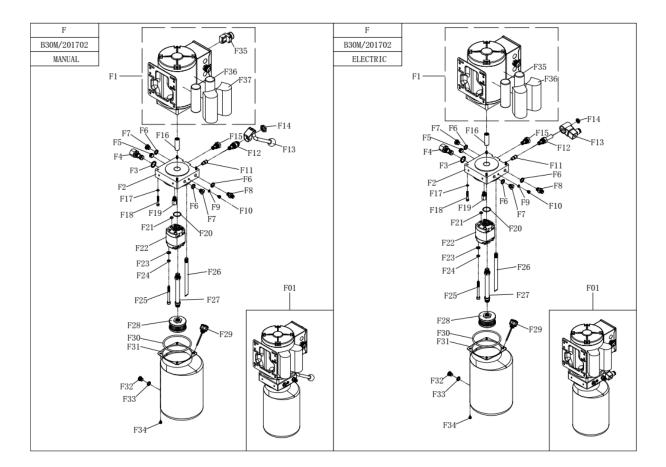
B1	SZ-UBM-010000-Z	outer connecting rod assembly
B2	SZ-UBM-020000-Z	inner connecting rod assembly
B3	B-055-300001-0	shaft snap ring Ø30
B4	SX-300-000600-0	connecting shaft 2
B5	SX-UBM-000100-0	oil cylinder upper pin
B6	SX-UBM-000300-0	roller
B7	SX-UBM-000200-0	center shaft
B8	B-040-264440-1	flat washer Ø24
B9	B-004-240001-1	hex locking nut M24
B10	B-010-060551-0	hex socket head cap screw M6×55
B11	B-050-060000-0	spring washer Ø6
B12	B-040-061216-1	flat washer



C1	XZ-3B1-110400-0	oil cylinder support block
C2	S-005-053065-0	dust-proof ring Ø45×53×6.5
C3	S-045-008025-1	wear ring Ø45×8×2.5
C4	SZ-20P-060200-0	oil cylinder cover
C5	S-000-075004-0	O-ring Ø75×4
C6	SG-UBM-110100-0	piston rod
C7	S-007-055224-0	combined seal ring Ø75×55×22.4
C8	XZ-3B1-110100-0	main oil cylinder piston
C9	S-023-010800-0	muffler
C10	SZ-UBM-110100-Z	oil cylinder welding assembly
C11	S-011-010400-10	oil pipe straight union inner coneG1/4R1/4
C12	B-007-080121-0	hex socket set screws with cone point M8×12
C01	SA-170-000004-0	oil cylinder 75/255
C02	SA-210-302000-W	oil cylinder seal kit
D1	SZ-UBM-080000-Z	insurance strip assembly
D2	SZ-UBM-070000-Z	insurance base assembly
D3	S-011-010400-10	oil pipe straight union inner cone G1/4end face G1/4
D4	SX-UBM-000400-0	three-way block
D5	B-010-060351-1	hex socket head cap screw M6×35
D6	B-050-060000-0	spring washer Ø6
D7	B-040-061216-1	flat washer Ø6
D8	DX-3S4-000400-0	oil cylinder stationary shaft
D9	SX-UBM-090000-Z	insurance claw assembly
D10	B-055-300001-0	shaft snap ring Ø30
D11	S-011-000011-2	side sliding plate spring

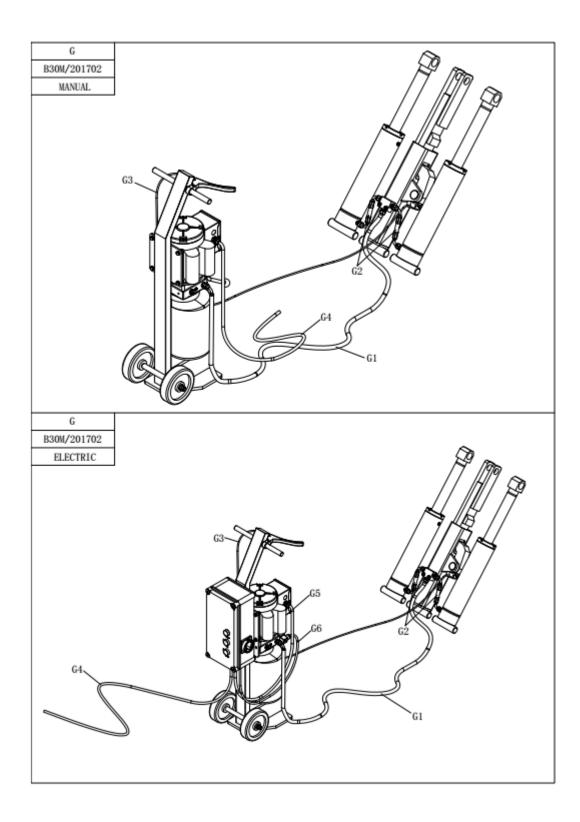


E1(manual)	SZ-UBM-100000-Z	manual unloading moving support assembly
E2	S-037-005000-0	electric car right brake handle
E3	S-037-150450-0	nylon caster 6203
E4	B-050-120000-0	flat washer Ø12
E5	B-004-120001-2	hex locking nut M12
E6	B-004-080001-1	hex nut M8
E7	B-050-080000-0	spring washer Ø8
E8	B-040-091616-1	flat washer Ø8
E9	B-014-080251-1	outer hex head bolt M8×25
E1(electric)	SZ-UBM-100000-Z	electric unloading moving support assembly
E2	S-037-005000-0	electric car right brake handle
E3	S-037-150450-0	nylon caster 6203
E4	B-050-120000-0	flat washer Ø12
E5	B-004-120001-2	hex locking nut M12
E6	B-004-080001-1	hex nut M8
E7	B-050-080000-0	spring washer Ø8
E8	B-040-091616-1	flat washer Ø8
E9	B-014-080251-1	outer hex head bolt M8×25

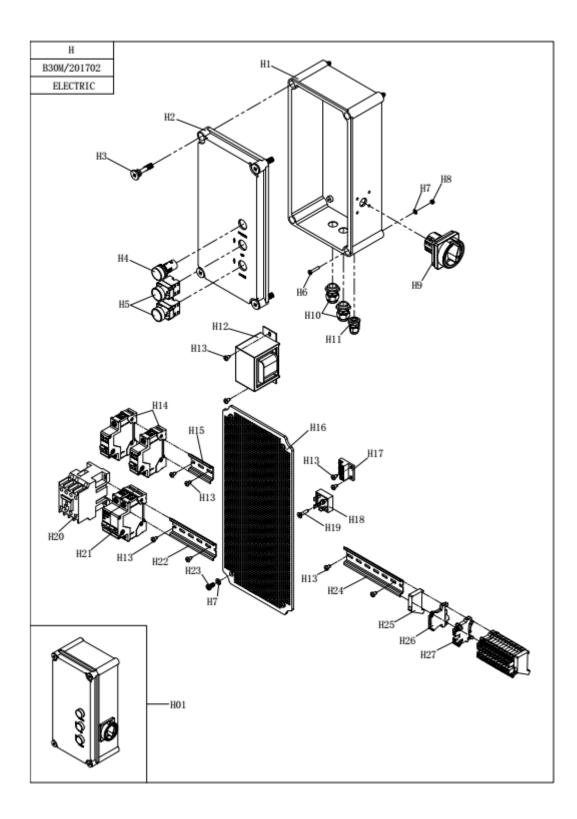


F1(manual)	S-048-220501-2	1ph motor
F1( optional)	S-048-380503-1	3ph motor
F2	S-048-000012-6	center valve block
F3	S-048-000025-G	combined seal ring Ø20
F4	S-048-000004-Z	overflow valve
F5	S-048-000026-G	plug G3/8
F6	B-042-220001-0	combined seal ring Ø14
F7	S-048-000022-G	plug G1/4
F8	S-011-010400-12	oil pipe straight union inner cone G1/4end face G1/4
F9	B-042-080001-0	O-ring Ø6.5×1.5
F10	S-048-000027-G	plug M8×1
F11	S-047-000200-0	pressure-compensated valve
F12	S-048-000003-Z	unloading valve
F13	S-048-000028-G	manual down handle
F14	S-048-000029-G	hex thin nut
F15	S-048-000005-Z	one-way valve
F16	S-048-000019-G	coupling
F17	B-050-060000-0	spring washer Ø6
F18	B-010-060351-1	hex socket head cap screw M6×35
F19	S-048-000020-G	cushion valve
F20	S-048-000030-G	O-ring Ø32×2.4
F21	S-048-000031-G	rectangle seal ring Ø9.5×1.7
F22	S-048-000032-G	gear pump 1.6C.C
F23	B-040-091616-1	flat washer Ø8
F24	B-050-080000-0	spring washer Ø8
F25	B-010-080751-0	hex socket head cap screw M8×75
F26	S-048-000024-G	return tube
F27	S-048-000023-G	suction tube
F28	S-048-000010-G	filter
F29	S-304-060400-0	oil tank cover
F30	S-048-000033-G	O-ring Ø109×5.3
F31	S-056-380000-Н	oil tank
F32	S-048-000034-G	plug M12
F33	B-042-120001-0	combined seal ring Ø12
F34	S-048-000035-G	hex flang screw
F35	S-060-150011-0	lift button switch 1NO
F36	D-021-526214-0	capacitance
F37	D-021-526214-1	capacitance protective cap
F01	S-053-220000-M	power unit assembly

F1(electric)	S-048-220501-2	1ph motor
F1( optional)	S-048-380503-2	3ph motor
F2	S-048-000012-6	center valve block
F3	S-048-000025-G	combined seal ring Ø20
F4	S-048-000004-Z	overflow valve
F5	S-048-000026-G	plug G3/8
F6	B-042-220001-0	combined seal ring Ø14
F7	S-048-000022-G	plug G1/4
F8	S-011-010400-12	oil pipe straight union inner cone G1/4end face G1/4
F9	B-042-080001-0	O-ring Ø6.5×1.5
F10	S-048-000027-G	plug M8×1
F11	S-047-000200-0	pressure-compensated valve
F12	S-048-000003-Z	normally closed solenoid valve spool
F13	S-048-000003-G	normally closed solenoid valve coil
F14	S-048-000029-G	hex thin nut M12
F15	S-048-000005-G	one-way valve
F16	S-048-000019-G	coupling
F17	B-050-060000-0	spring washer Ø6
F18	B-010-060351-1	hex socket head cap screw M6×35
F19	S-048-000020-G	cushion valve
F20	S-048-000030-G	O-ring Ø32×2.4
F21	S-048-000031-G	rectangle seal ring Ø9.5×1.7
F22	S-048-000032-G	gear pump 1.6C.C
F23	B-040-091616-1	flat washer Ø8
F24	B-050-080000-0	spring washer Ø8
F25	B-010-080751-0	hex socket head cap screw M8×75
F26	S-048-000024-G	return tube
F27	S-048-000023-G	suction tube
F28	S-048-000010-G	filter
F29	S-304-060400-0	oil tank cover
F30	S-048-000033-G	O-ring Ø109×5.3
F31	S-056-380000-Н	oil tank
F32	S-048-000034-G	plug M12
F33	B-042-120001-0	combined seal ring Ø12
F34	S-048-000035-G	hex flang screw
F35	D-021-526214-0	capacitance
F36	D-021-526214-1	capacitance protective cap
F01	S-053-220050-M	power unit assembly



r	1	
G1(manual)	Q-001-000350-0	high-pressure oil pipe 3500mm
G2	Q-001-000110-0	high-pressure oil pipe 85mm
G3	S-037-004000-0	wirerope
G4	D-078-020150-3	single phase power supply wire
G4(optional)	D-078-030150-CE	three-phase power supply wire
G1(electric)	Q-001-000350-0	high-pressure oil pipe 3500mm
G2	Q-001-000110-0	high-pressure oil pipe 85mm
G3	S-037-004000-0	wirerope
G4	D-078-020150-3	single phase power wire
G4(optional)	D-078-030150-CE	three-phase power wire
G5	D-078-020150-3	motor cable
G6	D-078-020050-2	electromagnetic drop cable



H1	TG-40E-001300-2	control box body
H2	/	control box cover
H3	/	locking screw
H4	D-090-024022-0	signal
H5	S-060-130020-0	button switch 2NO
H6	B-024-050251-0	cross pan head screw M5×25
H7	B-040-051010-1	flat washer Ø5
H8	B-004-050001-1	hex nut M5
H9	S-060-262004-1	power switch
H10	D-036-000135-0	cable screw joint
H11	D-036-000009-0	cable screw joint
H12	D-038-000380-5	transformer
H13	B-021-040010-0	self tapping screw
H14	D-100-C021P0-0	circuit breaker
H15	D-101-091000-0	lead rail
H16	/	power panel
H17	D-073-010203-0	grounding strip
H18	H-030-200013-5	rectifier bridge
H19	B-019-420161-0	self tapping screw
H20	H-030-050011-2	AC contactor
H21	D-100-C252P0-0	circuit breaker 1phase
H21(optional)	D-100-C202P0-0	circuit breaker 3phase
H22	D-101-091000-0	lead rail
H23	B-024-050101-0	cross pan head screw M4×10
H24	D-101-091000-0	lead rail
H25	D-073-UK25B0-D	fixed terminal
H26	D-073-SV1250-5	earth terminal
H27	D-073-UK25B0-0	phoenix terminal
H01	/	control box complete