

Model No. EE-MLH1000

Motorcycle lift, Mid Rise

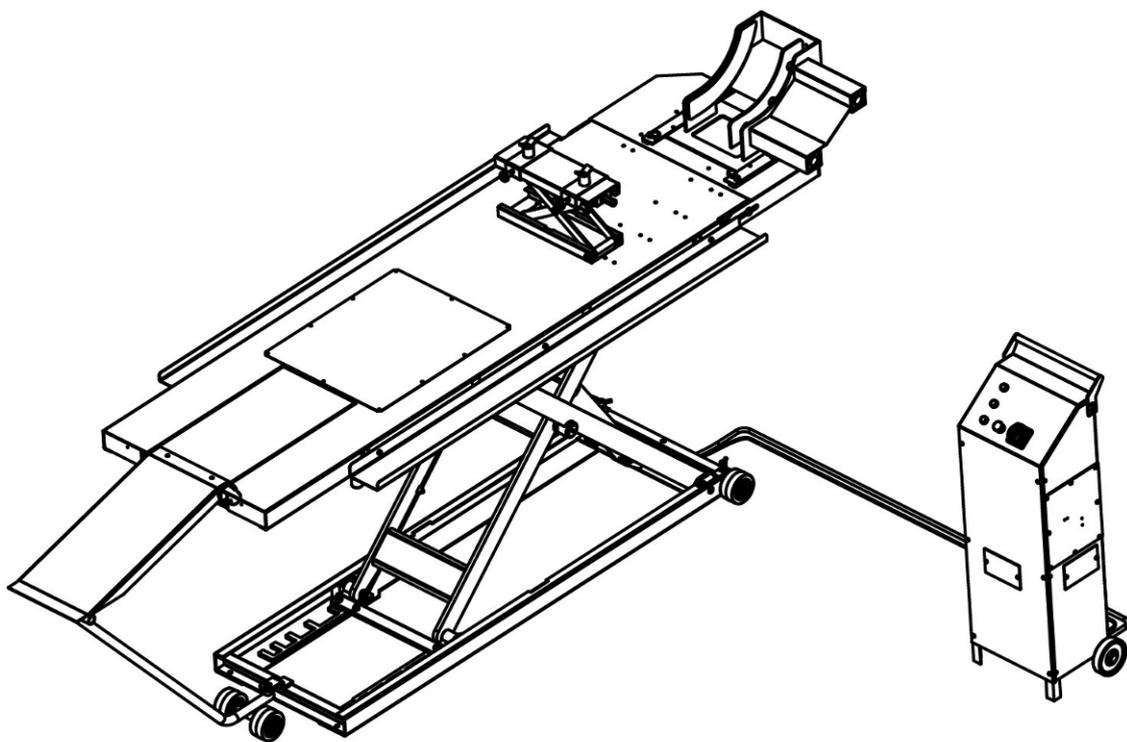
Lifting Capacity, 1000KG

Pneumatic release

**Installation, Operation
and Parts Manual**



EAE



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

07/07/2016

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IMPORTANT NOTES

Before start up, connecting and operating EAE products, it is absolutely essential that the operating instructions/owner's manual and, in particular the safety instructions are studied carefully. By doing so you can eliminate any uncertainties in handling EAE products and thus associated safety risks up front; something which is in the interest of you own safety and will ultimately help avoid damage to the device, When an EAE product is handed over to another person, not only the operating instructions but also the safety instructions and information on its designated use must be handed over to the person.

By using the product you agree the following conditions:

Copy right

The enclosed instructions are the property of EAE or its supplier, and are protected against duplication and reproduction by copyright laws, international agreements, and other domestic legislation. The reproduction or disclosure of instructions or an extract thereof is prohibited and offenders are liable to prosecution; EAE reserves the right or initiates criminal proceedings and asserts claims for damages in the event of infringements.

Warranty

The use of non-approved hardware will result in a modification of our products and thus to the exclusion of any liability or warranty, even if such hardware has been removed again in the interim.

It is not permissible to make any changes to our products and these are not only to be used together with genuine accessories and genuine replacement parts. Otherwise any warranty claims will be invalid.

Liability

The liability of EAE is limit to the amount that the customer has actually paid for this product. This exclusion of liability does not apply to damages caused through willful misconduct or gross negligence on the part of EAE.

SAFETY NOTES

1.1 Operation of lifting platforms

This lift is specially designed for lifting motorcycles. Users are not allowed to use it for any other purposes. The applicable national regulations, laws and directives must be observed. Only users aged 18 or above who have been instructed on how to operate the lifting platform and have proven their ability to do so to the owner are to be entrusted with unsupervised operation of lifting platforms. The task of operating the lifting platforms must be granted in writing. Before loading a vehicle onto the lifting platform, users should study the original operation instructions and familiarize themselves with the operating procedures in several trial runs.

Lift vehicle within the rated load. Don't attempt to raise vehicles with excessive weight.

1.2 Important safety notices

1.2.1 Recommended for indoor use only, DO not expose the lift to rain, snow or excessive moisture.

1.2.2 Only use this lift on a surface that is stable, level and dry and not slippery ,and capable of susutaining the load. Do not install the lift on any asphalt surface.

1.2.3 Read and understand all safety warnings before operating the lift.

1.2.4 Do not leave the controls while the lift is still in motion.

1.2.5 Keep hands and feet away from any moving parts. Keep feet clear of the lift when lowering.

1.2.6 Only these properly trained personnel can operate the lift.

1.2.7 Do not wear unfit clothes such as large clothes with flounces, tires, etc, which could be caught by moving parts of the lift.

1.2.8 To prevent evitable incidents, surrounding areas of the lift must be tidy and with nothing unconcerned.

1.2.9 The lift is simply designed to lift the entire body of vehicles, with its maximum weight within the lifting capacity.

1.2.10 Always insure the safety locks are engaged before any attempt to work near or under the vehicle. Never remove safety related components from the lift. Do not use if safety related components are damaged or missing.

1.2.11 Do not rock the vehicle while on the lift or remove any heavy component from vehicle that may cause excessive weight shift.

1.2.12 Check at any time the parts of the lift to ensure the agility of moving parts and the performance of synchronization. Ensure regular maintenance and if anything abnormal occurs, stop using the lift immediately and contact our dealers for help.

1.2.13 Lower the lift to its lowest position and do remember to cut off the power source when service finishes.

1.2.14 Do not modify any parts of the lift without manufacturer's advice.

1.2.15 If the lift is going to be left unused for a long time, users are required to:

- a. Disconnect the power;
- b. Empty the oil tank;
- c. Lubricate the moving parts with hydraulic oil.

WARNING: the warnings ,cautions and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built

into this product, but must be supplied by the operator.

PRODUCT DESCRIPTIONS

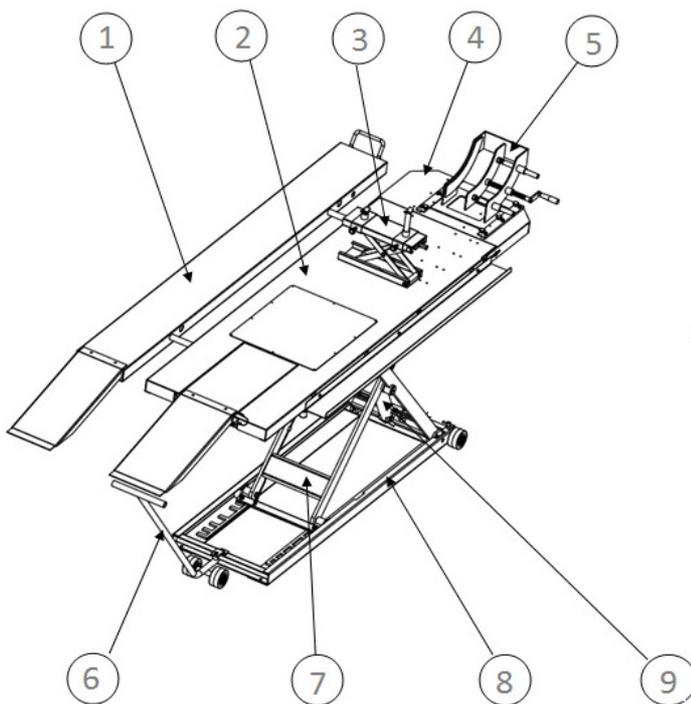
2.1 General descriptions

This lift is designed for lifting motorcycles. It is driven by an electro-hydraulic system. The gear pump delivers hydraulic oil to oil cylinders and pushes upwards their pistons to raise the platforms.

2.2 Technical data

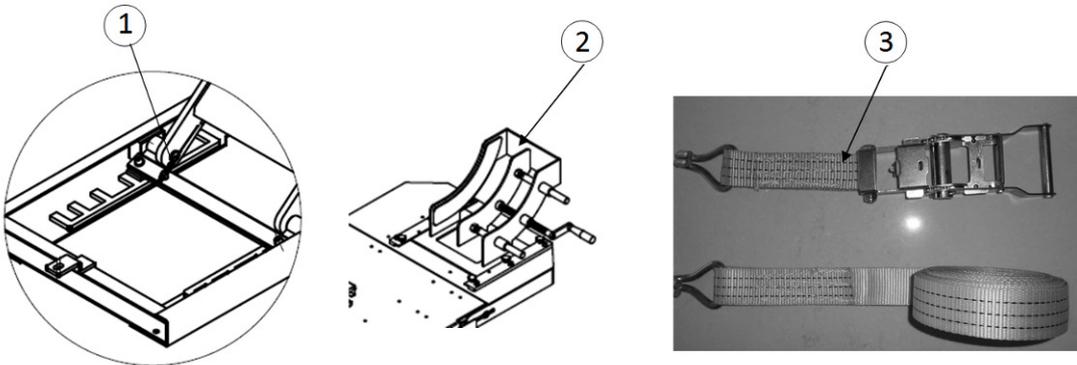
Max lifting capacity	Lifting time	Lifting height	Power supply	Compressed air supply
1000KG	30S	160-1200mm	220V,1PH/380V,3PH	6-8bar

2.3 Construction of the lift



POS.	Name	Notes
1	Secondary platform	Optional
2	Main lifting platform	
3	Manually operated small lifting beam	Optional
4	Front extension platform	Optional
5	Front wheel fixer	Optional
6	Mobile kit	Optional
7	Scissor bracket	
8	Base frame	
9	Hydraulic cylinder	

2.4 Safety device descriptions



① Mechanical safety locks ② Front wheel fixer ③ Fixations rings

INSTALLATION INSTRUCTIONS

3.1 Preparations before installation

3.1.1 Tools and equipments needed

- ✓ Electrical drill
- ✓ Open wrenches
- ✓ Screw drivers
- ✓ Adjustable spanners



3.1.2 List for parts checking ---Annex 1 (Packing list)

Unfold the package and check if any parts missed as per Annex 1. Do not hesitate to contact us in case any parts missed, but if you do not contact us and insist installing upon the lack of some parts, we as well as our dealers will not bear any responsibility for this and will charge for any parts subsequently demanded by the buyer.

3.1.3 Ground conditions

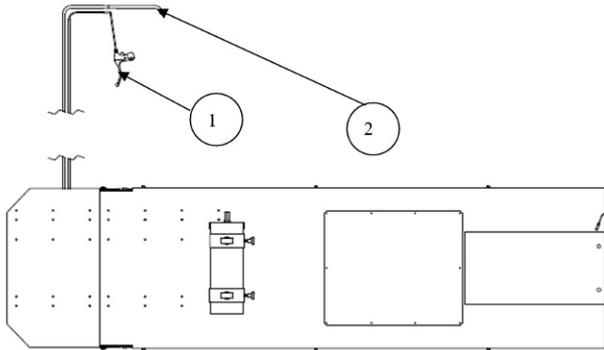
Only use this lift on a surface that is stable, level and dry and not slippery ,and capable of susutaining the load. Do not install the lift on any asphalt surface.

3.2 Installation

Step1: Remove the packaging and take the mechanical and hydraulic assembly to the designated installing place.

Please do read and understand this manual thoroughly before next step.

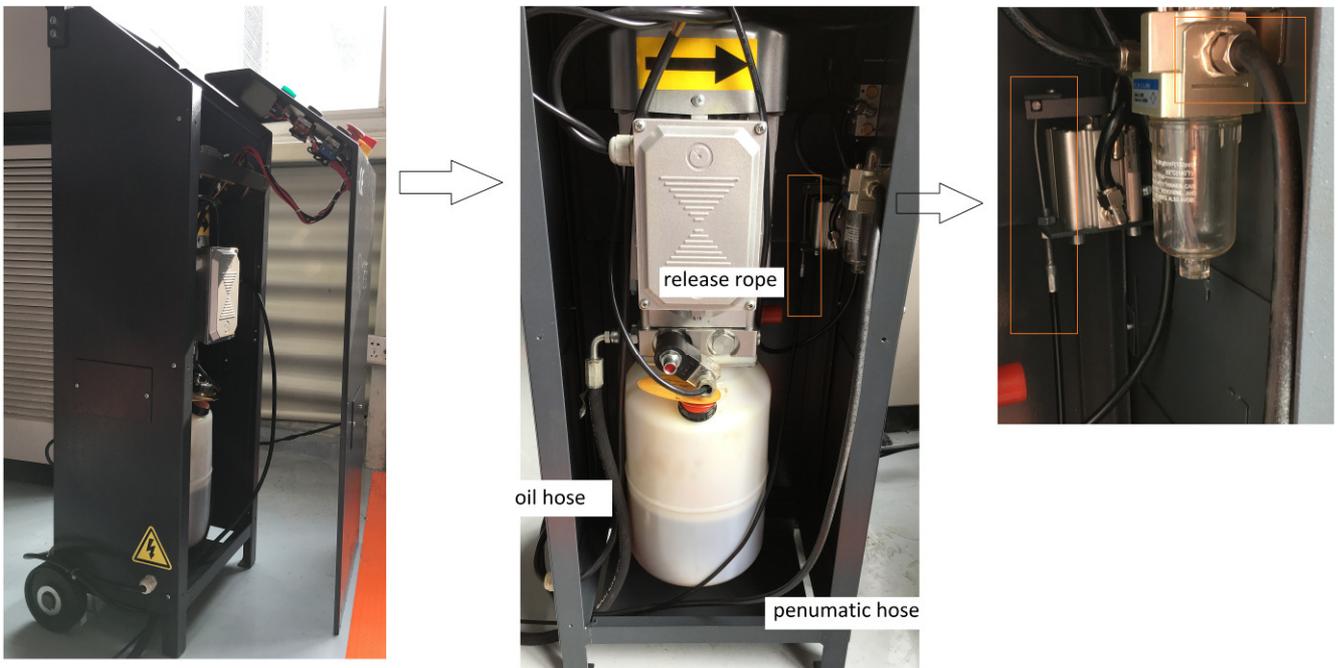
Step2: Sort out lock release rope and oil hose.



① lock release rope ② Oil hose

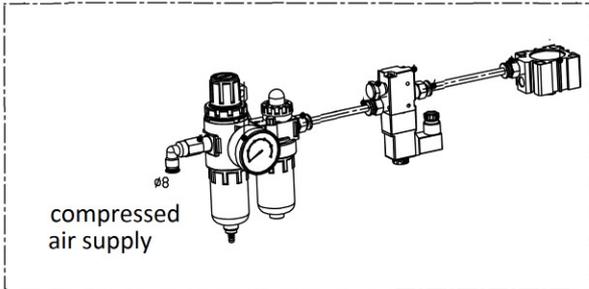
Step3: Connect the oil hose, lock release rope and pneumatic hose.

Open the control cabinet before making the connection.

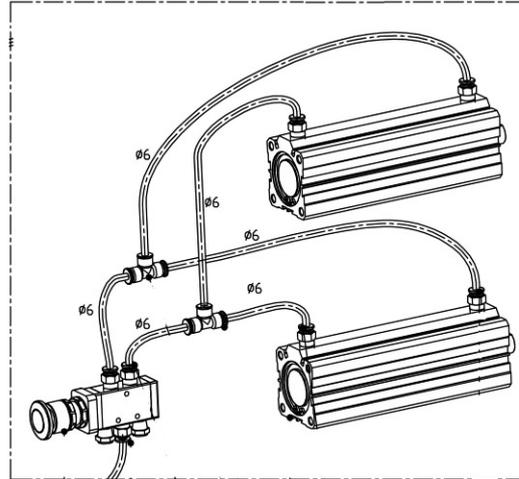


OPEN the control cabinet

Step 4: Connect the pneumatic system.



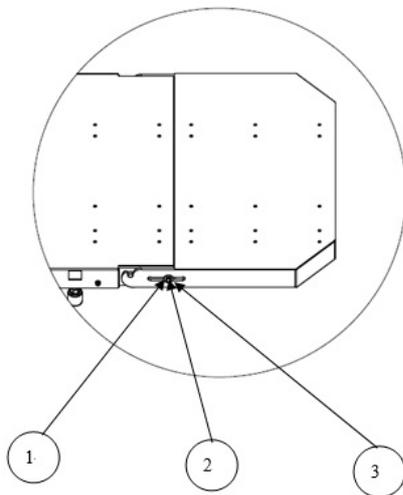
pneumatic system
in the control cabinet



compressed
air supply

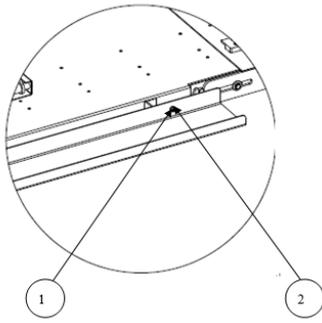
pneumatic system
for wheel fixture

Step 5: Fix front extension platform (optional)



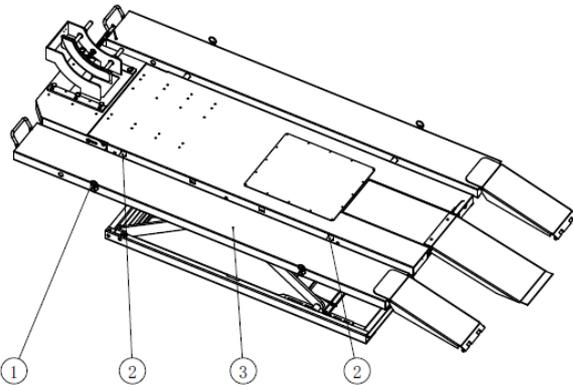
- ① long rod ② flat washer ③ circlip

Step 6: Fix slot bracket for tools

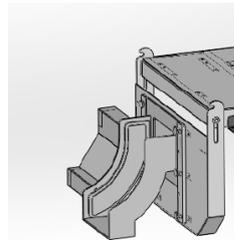


- ① hex socket screw M6*10 ② flatwasher

Step 7: Install width platform extension and wheel clamp

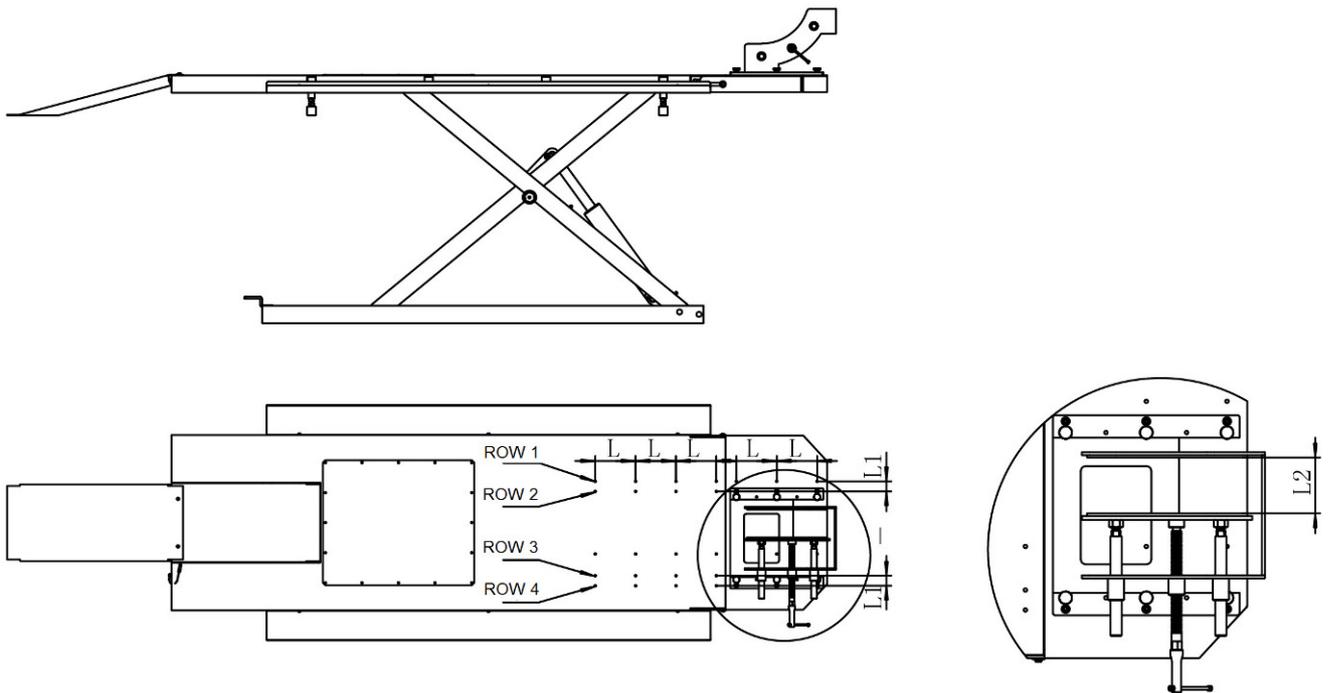


- 1 Pin shaft 2 Round rod 3 Width platform extension



Insert the two round rods into the square holes reserved on the main platform. Hang onto the width platform extension and secure with pin shafts .

The clamp could be adjusted to accommodate different motorcycle length. Length for each adjustable step is 160mm.
Effective working stroke of the manual fixture is 50-200mm.



L	L1	L2
160	40	50-200

In case wheel width is within 100-200mm, fix it at ROW1 and ROW3.

In case wheel width is within 50-120mm, fix it at ROW2 and ROW4.

Step 8: Connect the power supply.

Read the name plate on the motor and understand the wiring diagram before connecting the power supply.

Step 9: Fill with hydraulic oil.

Lift must be fully lowered before changing or adding hydraulic oil

Recommend to use NO.46 hydraulic oil when average temperature of the location is above 18 degree Celsius and NO.32 hydraulic oil when temperature is below 18 degree Celsius. The volume of oil tank is 6L. To insure the lift work normally, the amount of oil in it should reach 80% of the tank's total volume.

NOTE: Change the oil 3 month after initial use and change once per year thereafter.

3.3 Trial running.

Get familiar with lift controls by running the lift through a few cycles before loading vehicle on lift. This step is of particular importance for it can check if the oil hose is well connected. The connection is qualified when there is no abnormal sound or leakage after having been tested for 5-6 times.

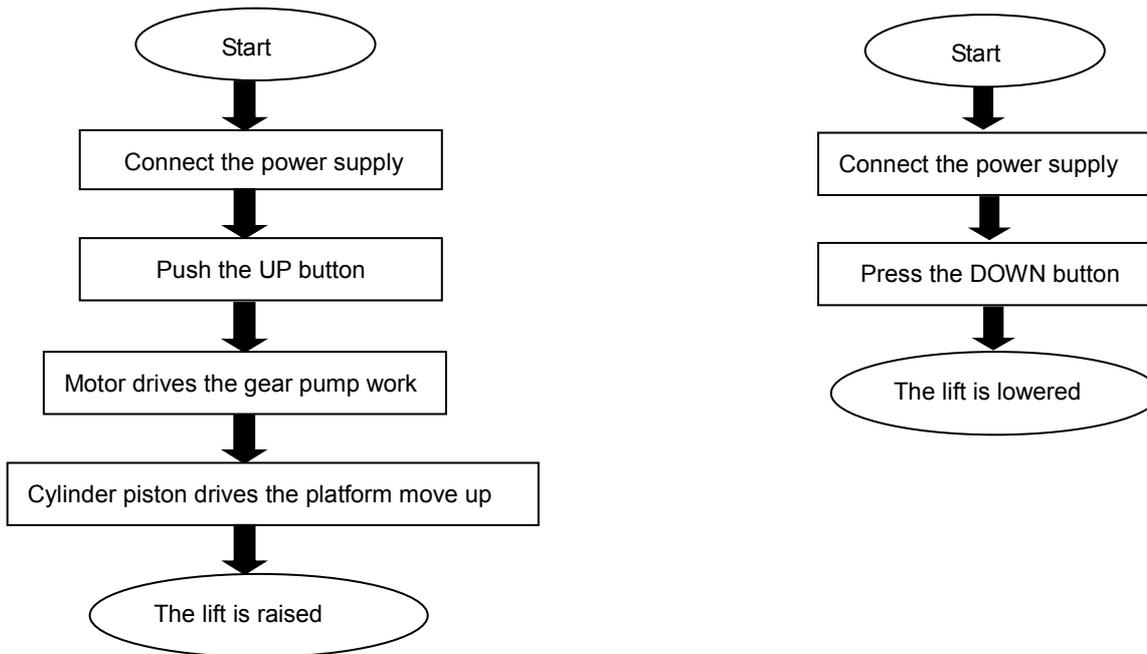
Raise and lower lift several times. The cylinder is self bleeding. After bleeding system, fluid level in power unit reservoir may be down. Add more fluid if necessary to raise lift to full height. It is only necessary to add fluid to raise lift to full height.

OPERATION INSTRUCTIONS

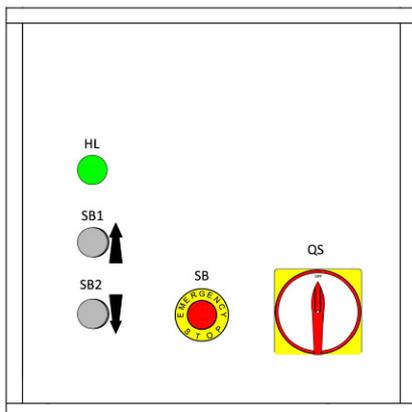
4.1 Precautions

- 4.1.1 Check all the joints of oil hose. Only when there is no leakage, the lift can start work.
- 4.1.2 The lift, if its safety device malfunctions, shall not be used.
- 4.1.3 The machine shall not lift or lower loads if its center of gravity is not positioned midway of the rising platforms. Otherwise, we as well as our dealers will not bear any responsibility for any consequence resulted thereby.
- 4.1.4 Operators and other personnel concerned should stand in a safety area during lifting and lowering process.
- 4.1.5 When platforms rise to the desired height, switch off the power at once to prevent any wrong operation done by unconcerned people.
- 4.1.6. Make sure the safety lock of the lift is engaged before service work and no obstructions beneath the platform during lifting and lowering process.

4.2 Flow chart for operation



4.3 Operation instructions



Pos.	Name	Function
SB1	UP button	Control the rising movement
SB2	DOWN button	Control the lowering movement
SB	Emergency stop	Cut operation power in emergency case
HL	Power indicator	Show if electricity is connected
QS	Power switch	Control main power

To avoid personal injury and/or property damage, permit only trained personel to operate the lift. After reviewing these instructions, get familiar with lift controls by running the lift through a few cycles before loading vehicle on lift.

Raise the lift

Make sure vehicle is neither front nor rear heavy and center of balance should be centered over the lift.

1. Make sure that you have read and understood the operation manual before operation.
2. Push and park the motorcycle onto the lifting platform and fix its front wheel with the fixture reserved in the front side of the lifting platform.
3. Recommend to use strings to fix the body of the motorcycle so as to ensure the stability during service process.
4. Push the UP buton to raise the lifting platform until expected height.
5. Check the stability before service work.

Lower the lift

When lowering the lift pay carefull attention that all personnel and objects are kept clear.

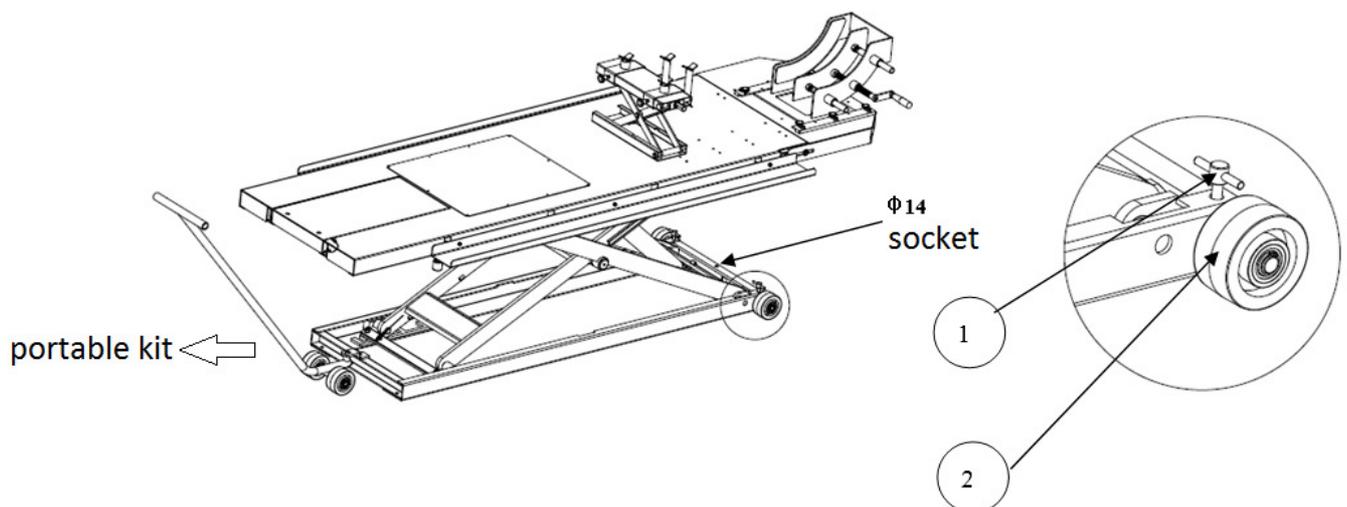
1. Push the DOWN button to lower the platform

USE the pneumatic fixture

Turn on and off the following switch which positioned at the front part of the platform to control the pneumatic fixture.



4.4 Move the lift



①locking handle ②wheel

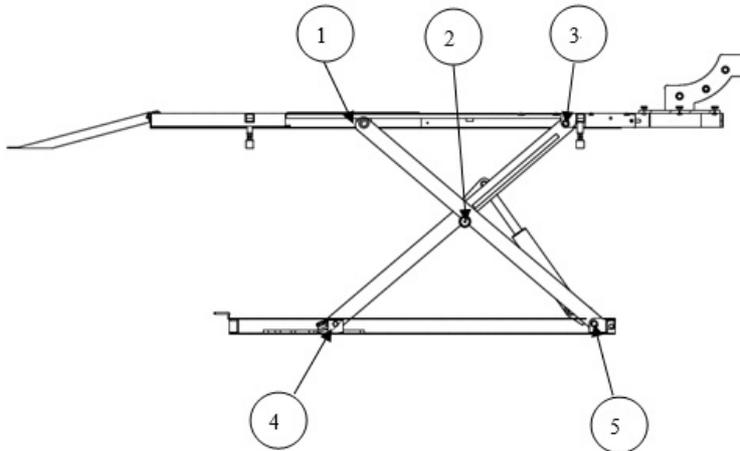
1. Raise the front part on the lift using the protable kit. (Fix it into the $\varnothing 14$ socket)
2. Fix the front wheels
3. Fix the kit to the rear side and press down its handle to move the lifting platform.

MAINTENANCE

Easy and low cost routine maintenance can ensure the lift work normally and safely. Following are requirements for routine maintenance. You may choose the frequency of routine maintenance by consulting your lift's working conditions and time.

The following parts need to be lubricated with No.1 lithium base grease.

POS.	Name	Qty
1	UP slider	2
2	Mid pin shaft	2
3	UP pin shaft	2
4	DOWN slider	2
5	DOWN pin shaft	2



6.1. Daily checking items before operation

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

- Before operation, judge whether the safety lock is engaged by sound.
- Check whether oil hose well connected and whether it leaks or not.
- Check the electrical system.
- Check if safety teeth and safety block matched well or not.

6.2. Weekly checking items

- Check the flexibility of moving parts.
- Check the working conditions of safety parts.
- Check the amount of oil left in the oil tank. Oil is enough if the platforms can be raised to highest position.
Otherwise, oil is insufficient.

6.3. Monthly checking items

- Check the tightness of the hydraulic system and screw firm the joints if it leaks.

6.4. Yearly checking items

- Empty the oil tank and check the quality of hydraulic oil.
- Wash and clean the oil filter.

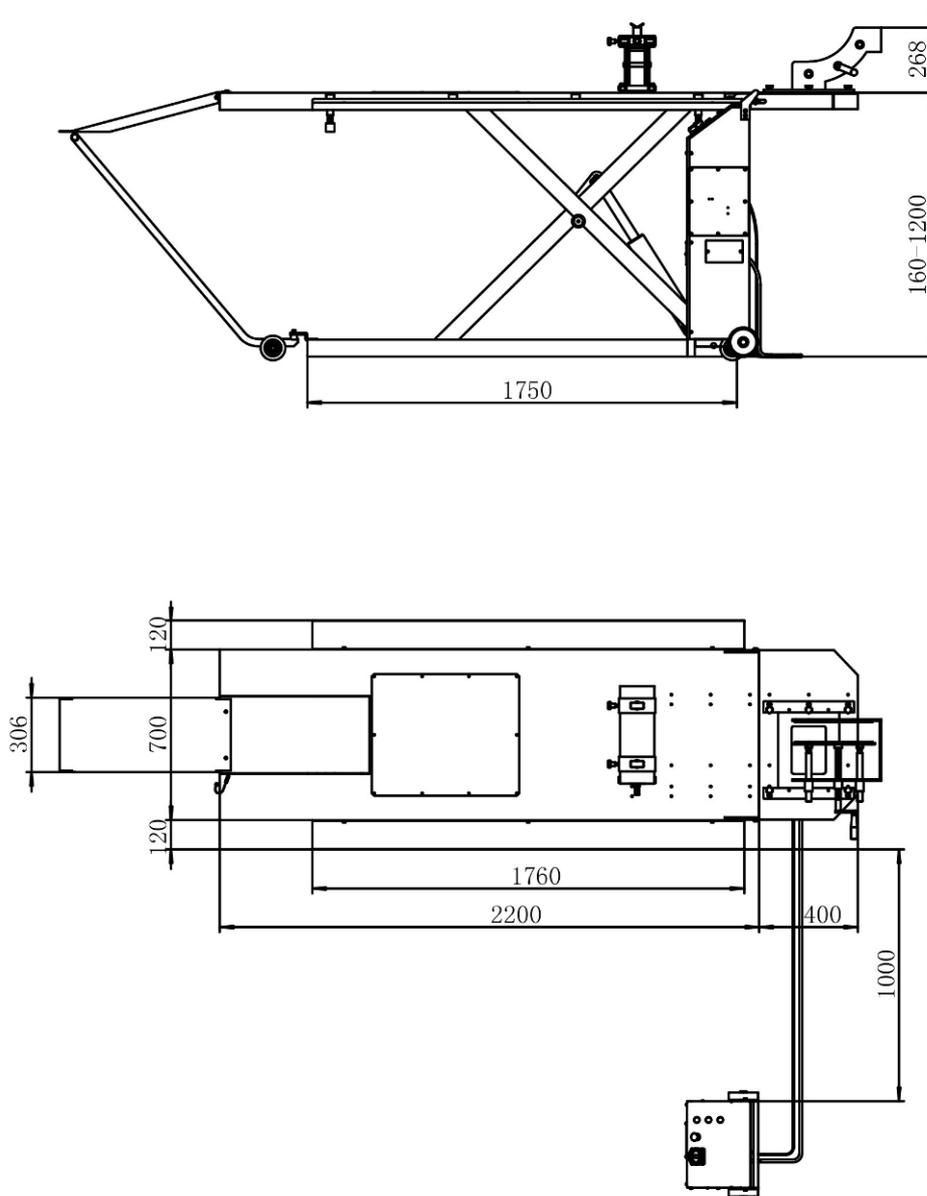
If users strictly follow the above maintenance requirements, the lift will keep in a good working condition and meanwhile accidents could be avoided to a large extent.

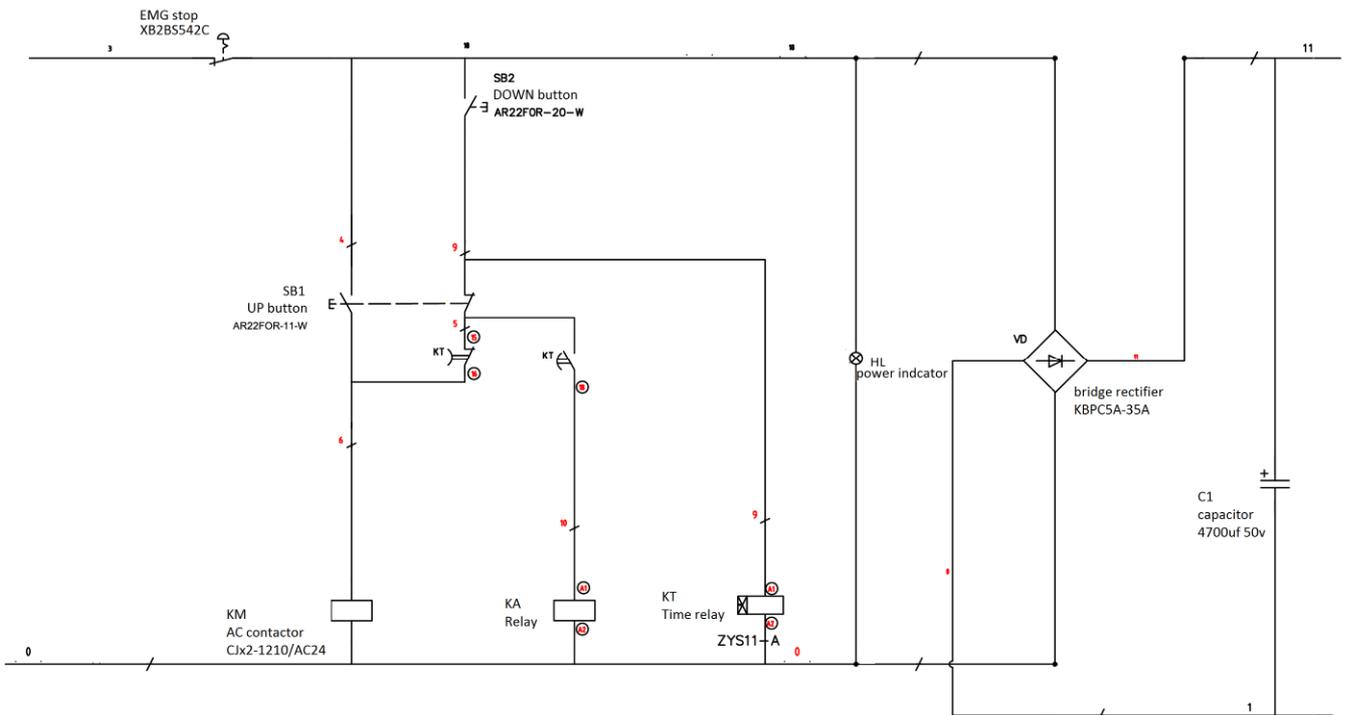
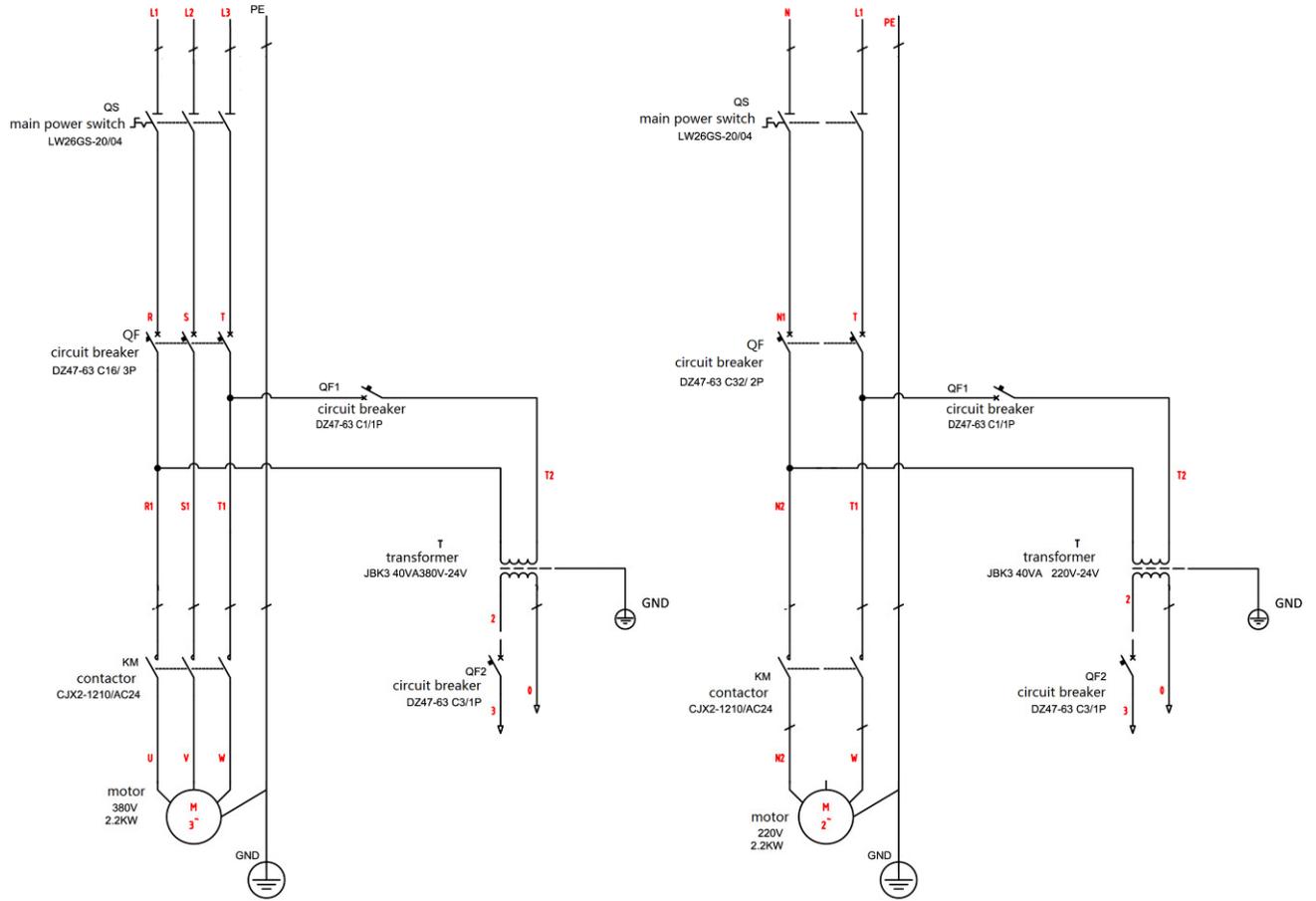
ANNEX

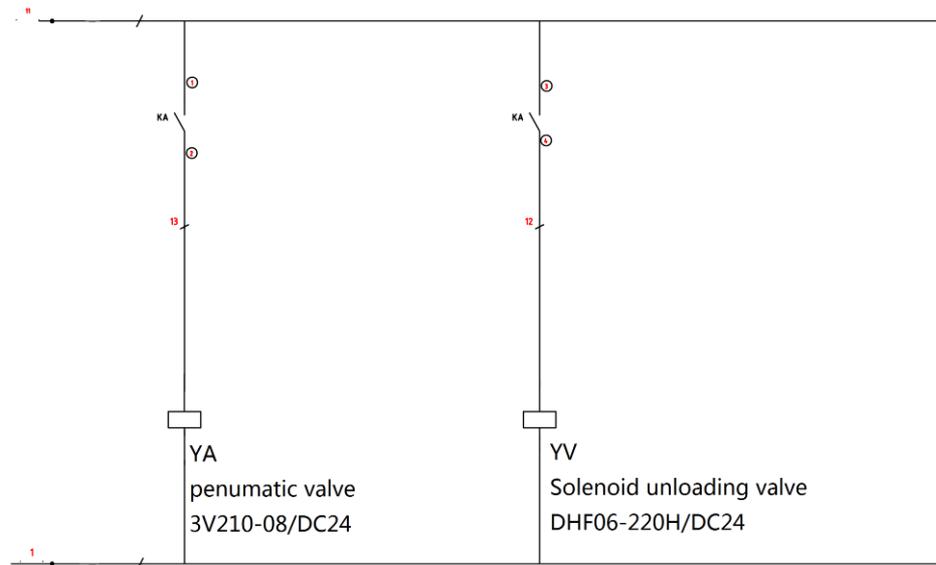
Annex 1, Packing List of the whole lift

S/N	Name	Dimension	Gross weight	Qty
1	MLH1000 Lifting platform	2220*720*270	240	1
2	Portable kit /operation unit/front wheel fixture	540*430*1150	54	1

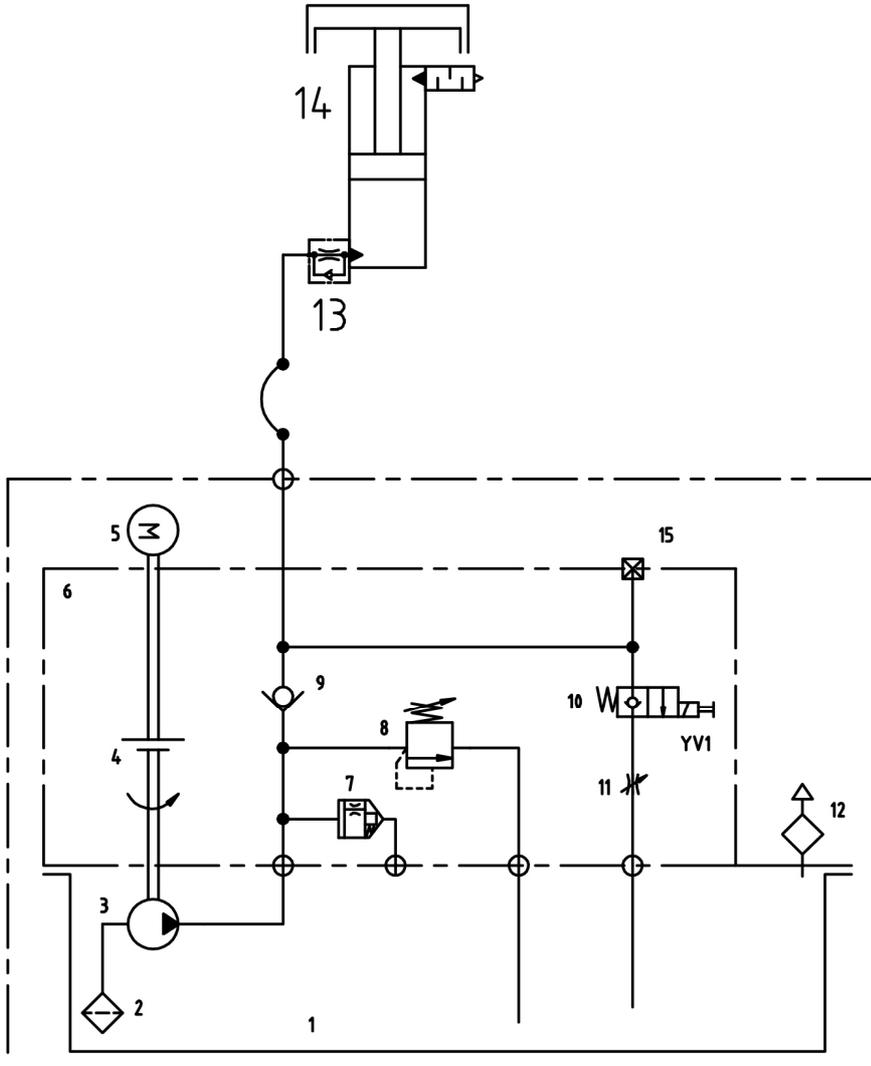
Annex 2, Overall diagram



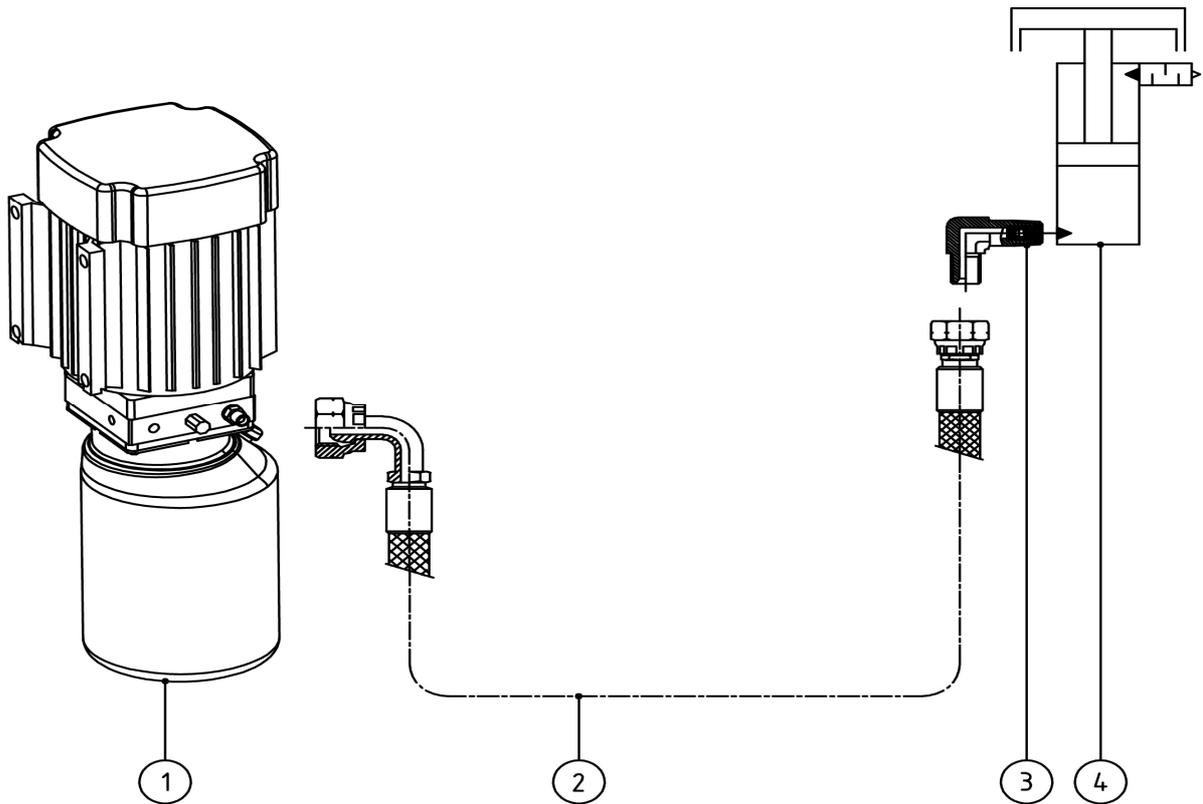
Annex 3, Electrical diagrams and parts list




Pos.	CODE	Name	Specification	Qty
T	320101004	Transformer-380V-3Ph	JBK3-40VA 380V-24V	1
T	320101001	Transformer-220V-1Ph	JBK3-40VA 220-24V	1
M	320201004	Motor -380V-3Ph	380V-2.2KW -3PH-50HZ-2P	1
M	320201001	Motor -220V-1Ph	220V-2.2KW -1PH-50HZ-2p	1
QS	320304001	Power switch	LW26GS-20/04	1
SB1	320401013	Button	AR22F0R-11-W	1
SB2	320401017	Button	AR22F0R-20-W	1
SB	320402002	Emergency stop	XB2BS542C	1
	320503002	Ground terminals	4p	1
	320505006	Wire terminals	VK-5N(UK-5N)	7
	320505011	Chip	LT-2.5	2
KA	320601026	Relay	NCH8-20/20 AC24V	1
KT	320602009	Time relay	ZYS11-A(AC24, 5S)	1
QF	320802001	Circuit breaker -220V-1Ph	DZ47-63C32/2P	1
QF	320801001	Circuit breaker -380V-3Ph	DZ47-63C16/3P	1
QF1	320803001	Circuit breaker	DZ47-63C1/1P	1
QF2	320803003	Circuit breaker	DZ47-63C3/1P	1
KM	320901001	AC contactor	CJX2-1210/AC24	1
C	321001004	Capacitor	4700UF/50V	1
VD	321002001	Bridge rectifier	KBPC5A-35A	1
HL	321201001	Power indicator	AD17-22G-AC24	1

Annex 4, Hydraulic diagrams and parts list


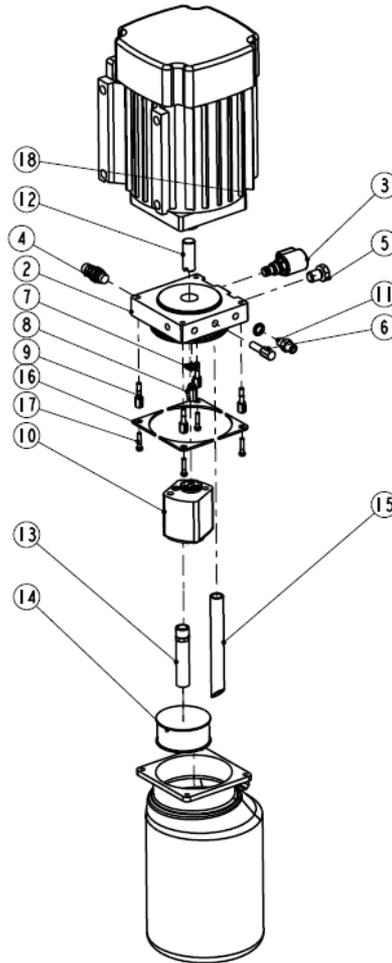
- 1.oil tank
- 2.oil sucking filter
- 3.gear pump
- 4.coupling
- 5.motor
- 6.composite hydraulic block
- 7.cushion valve
- 8.overflow valve
- 9.single way valve
- 10.solenoid unloading valve
- 11.throttle valve
- 12.oil tank cover
- 13.hose connector (with single way throttle valve)
- 14.oil cylinder
- 15.hex socket flat head fitting



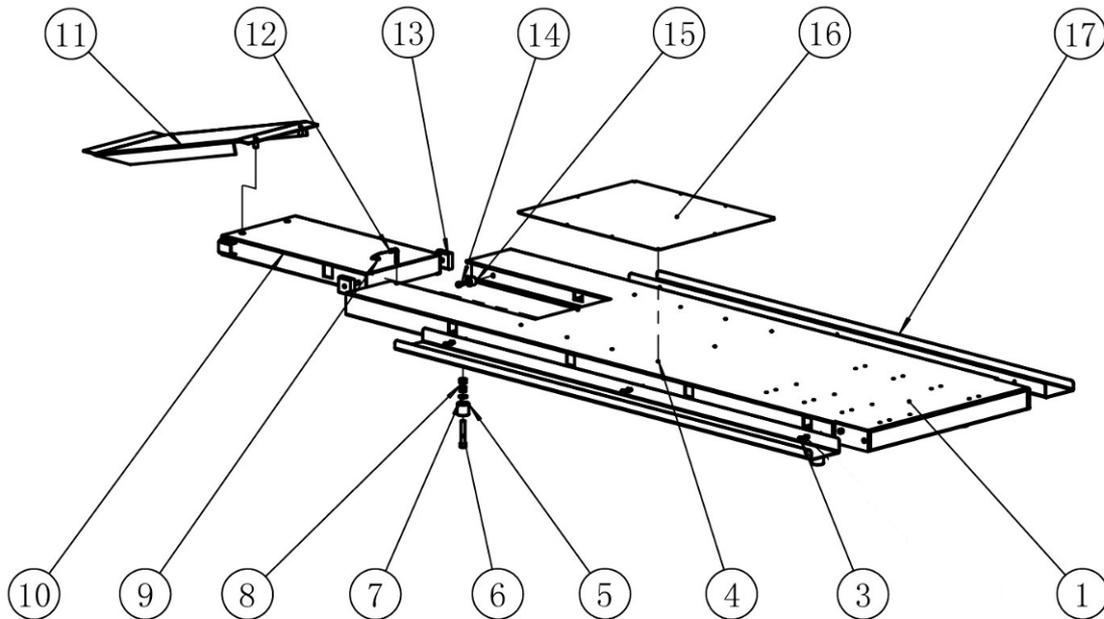
POS.	Code	Name	Specification	Qty
1	610*	Power unit	2.2KW	1
2	624001161	Rubber oil hose	L=2500mm	1
3	615018001	hose connector (with throttle valve)	MR30-A24-B16	1
4	615048001	oil cylinder	MLH1000-A4-B1	1

SEAL RINGS FOR OIL CYLINDER

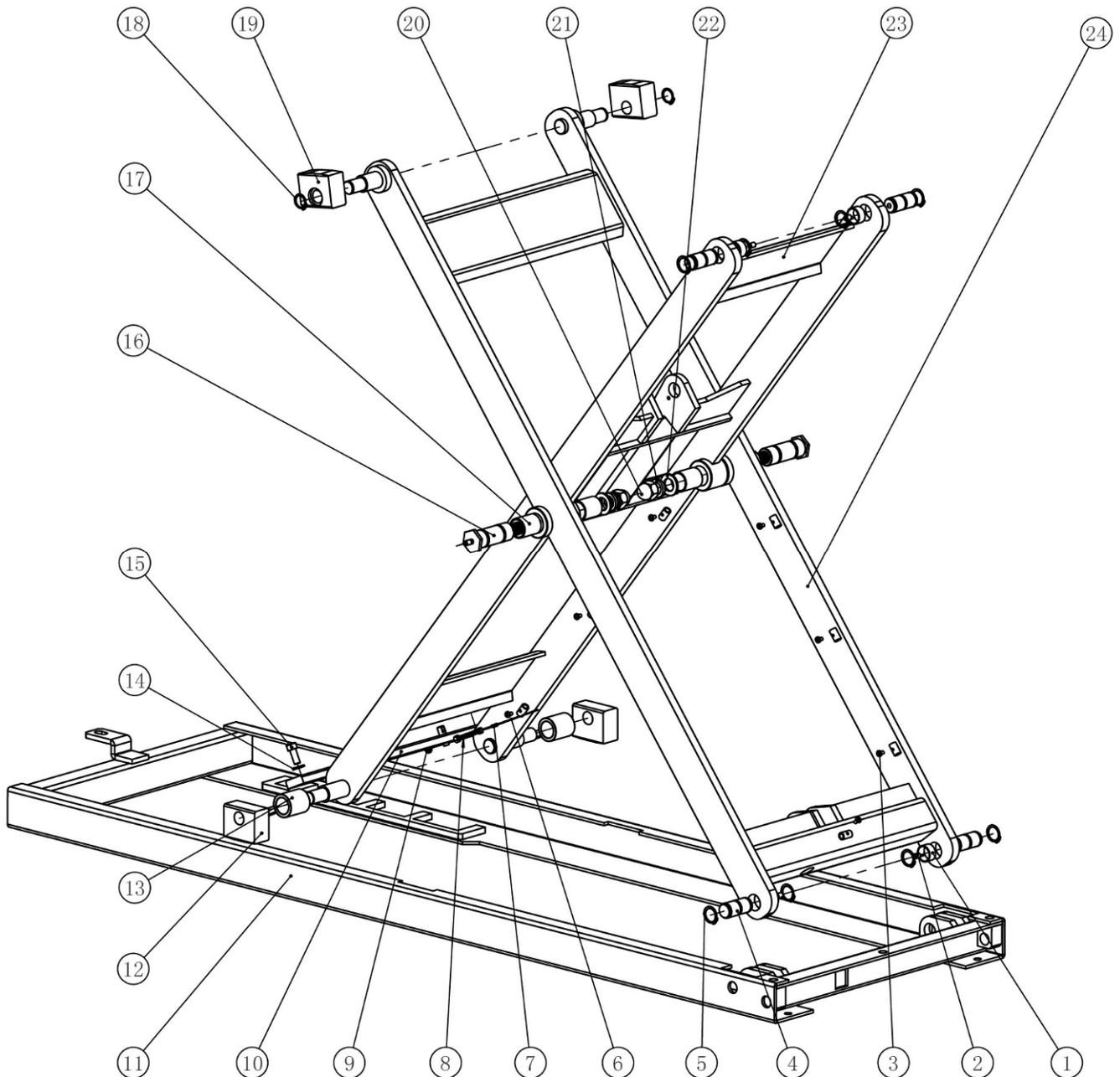
POS.	Code	Name	Specification	Qty
1	207102001	Y seal ring	KD63*48*10	1
2	207105016	dust-proof ring	DH38	1



POS.	Code	Name	Specification	Qty
1	330405013	oil tank	6L	1
2	330101005	composite hydraulic block	YF-2D	1
3	330308006	solenoid unloading valve	DHF06-220H/DC24	1
4	330304001	overflow valve	EYF-C	1
5	330302001	single way valve	DYF-C	1
6	330305002	throttle valve	TC-VF	1
7	207103019	composite washer	M14	2
8	330301001	cushion valve	HZYF-C1	1
9	202109064	screw	M6*30,	4
10	330201003	gear pump	CBK-F210	1
11	310101003	straight connector	M14*1.5,-G1/4	1
12	330404001	coupling	YL-A	1
13	330401001	oil sucking tube	YX-BL-*	1
14	330403001	oil sucking filter	YG-C	1
15	330402001	oil back tube	YH-D	1

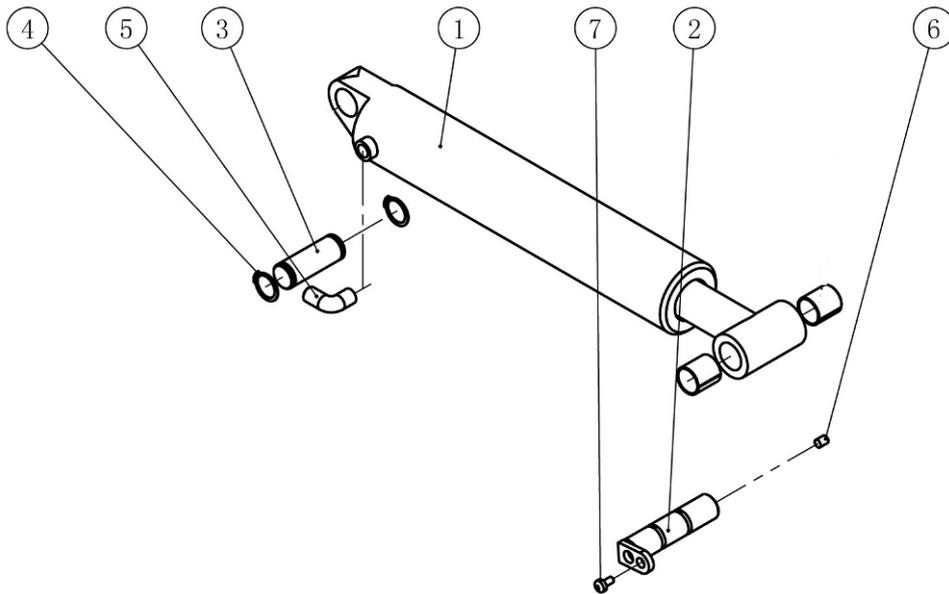
Annex 5, Exploded mechanical drawings and parts list


Pos.	Code	Name	Specification	Qty
1	614048008	Lifting platform	MLH1000-A2-B1	4
3	202110003	Hex socket button head screw M6*12	M6*12	7
4	208107007	Fixation screw	Standard	4
5	420480020B	Pad	MLH1000-A2-B3	8
6	202109099	Hex socket cylinder head screw M12*80	Standard	1
7	204101007	Flat washer 12	Standard	1
8	203101007	Hex nut M12	Standard	1
9	202101021	Cross socket cap head screw M5*10	Standard	2
10	614048029	Rear platform	MLH1000-A2-B7	1
11	614048010	Mid plate	MLH1000-A2-B9	1
12	410480611	Bolt	MLH1000-A2-B5	2
13	420480030C	Slider	MLH1000-A2-B4	2
14	202109029	Hex socket cylinder head screw M8*20	Standard	2
15	410480620	Retain sheath	MLH1000-A2-B8	2
16	410480990	Anti-sliding plate	MLH1000-A2-B2	2
17	410481003	Support bracket	MLH1000-A2-B6	4



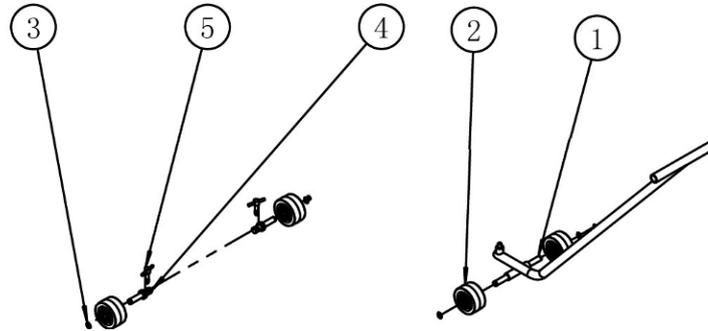
Pos.	Code	Name	Specification	Qty
1	205101097	Bearing 2515	Standard	4
2	208106002	Oil cup 8	Standard	6
3	202101021	Cross socket cap head screw M5*10	Standard	7
4	410480161B	UP bolt	MLH1000-A3-B4	4
5	204301009	Circlip	Standard	8
6	410480560B	Brake	Standard	1
7	410480790	Steel rope connector	Standard	1
8	410481311	Sdjustable bolt	MLH1000-A3-B8	1
9	203101004	Hex nut M6	Standard	2
10	614048014	Connection plate	MLH1000-A3-B7	1

Pos.	Code	Name	Specification	Qty
11	614048015	Base frame	MLH1000-A6	1
12	420480040C	DOWN slider	MLH1000-A3-B2	2
13	612048013	Claw	MLH1000-A3-B6	2
14	204101006	Flat washer 10	Standard	2
15	202109042	Hex socket cylinder head screw M10*25	Standard	2
16	410480151C	Mid pin shaft	MLH1000-A3-B3	2
17	205101055	Bearing 3040	Standard	4
18	204301008	Circlip 22	Standard	2
19	420480090C	UP slider	MLH1000-A3-B9	2
20	203201003	Cover shaped nut M20	Standard	2
21	204201009	Spring washer 20	Standard	2
22	204101011	Flat washer 20	Standard	2
23	614048011	Support bracket 2	MLH1000-A3-B1	1
24	614048012	Support bracket 1	MLH1000-A3-B5	1

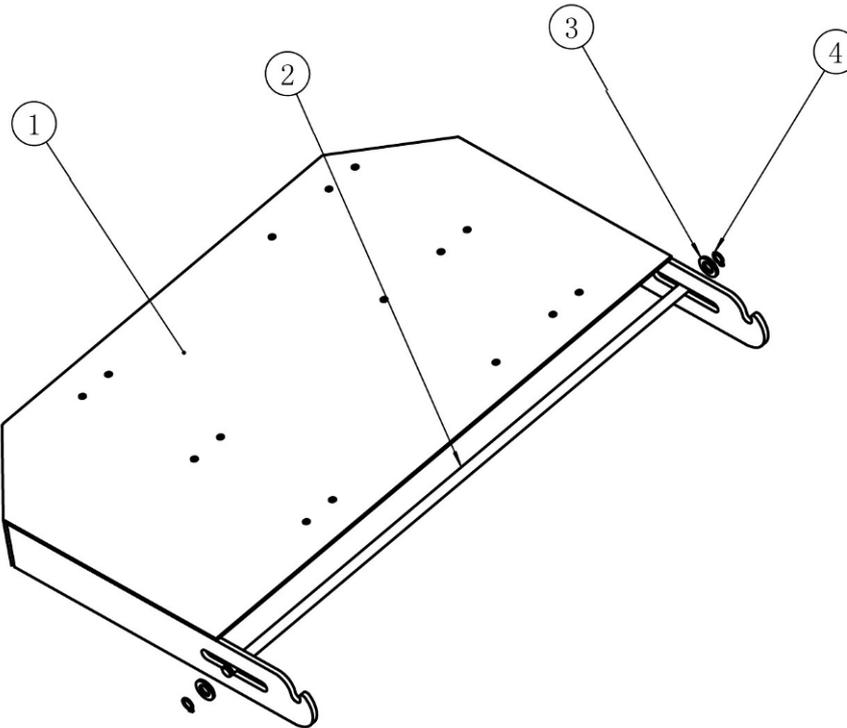


Pos.	Code	Name	Specification	Qty
1	615048001	Oil cylinder	MLH1000-A4-B1	1
2	612048021	UP shaft assembly	MLH1000-A4-B2	1
3	410480191B	DOWN shaft	MLH1000-A4-B3	1
4	204301009	Circlip 25	Standard	2
5	615018001	Right angle throttle lobe	MR30-A24-B16	1
6	208106002	Oil cup	Standard	1
7	202110004	Hex socket button head screw M8*12	Standard	1

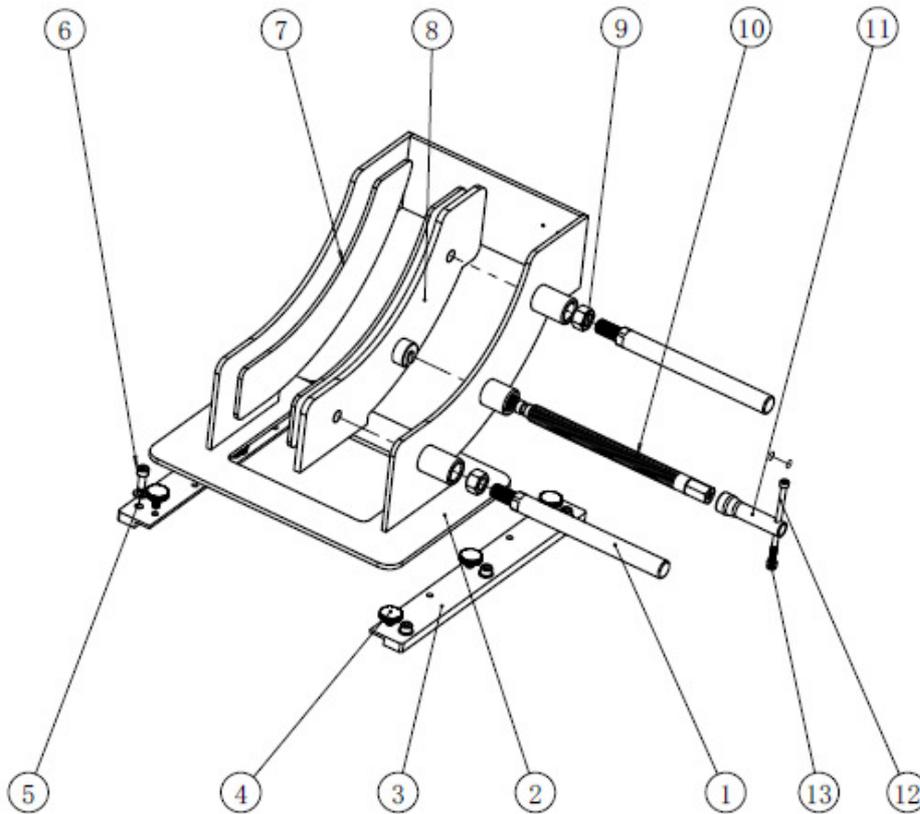
Annex 6, Exploded drawings and parts list for optional parts



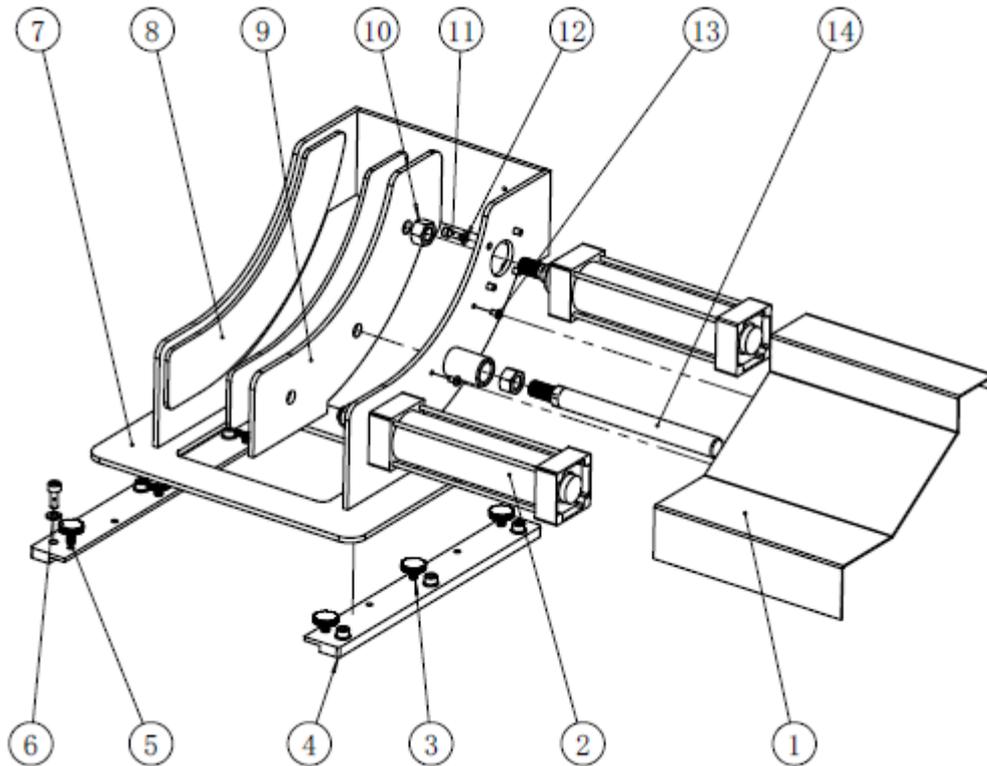
Pos.	Code	Name	Specification	Qty
	615048008	Portable Kit	MLH1000-A5	
1	614048016	Pull rod	MLH1000-A5-B1	1
2	420480100	Wheel	M4-4-929	4
3	204301006	Circlip	Standard	4
4	410481481	Wheel shaft	MLH1000-A5-B2	2
5	612048017	Locking handle	MLH1000-A5-B3	2



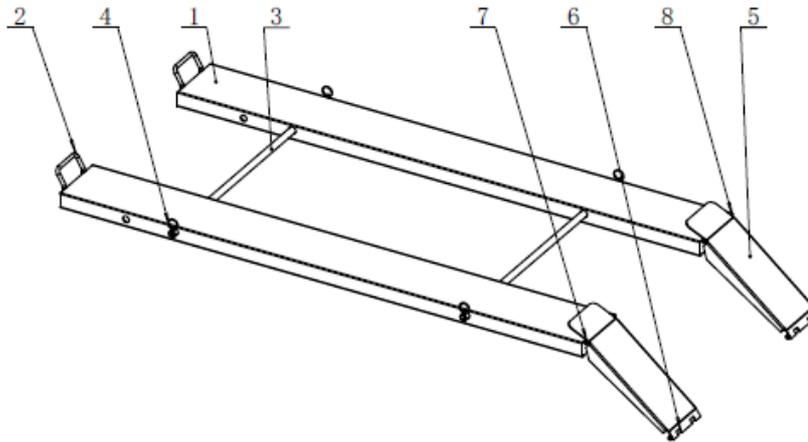
Pos.	Code	Name	Specification	Qty
	615048009	Lengthwise Platform Extension	MLH1000-A7	
1	614048018	Front platform	MLH1000-A7-B1	1
2	410481551	Long shaft	MLH1000-A7-B2	1
3	204101007	Flat washer 12	Standard	2
4	204301002	Circlip 12	Standard	2



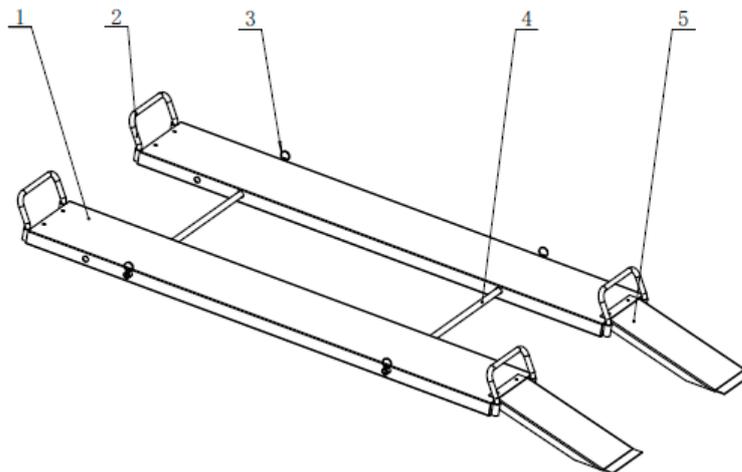
Pos.	Code	Name	Specification	Qty
	615048010	Manual Wheel Fixture	MLH1000-A10	
1	410481671	Guiding rod	MLH1000-A10-B4	2
2	611048019	Fixure bracket	MLH1000-A10-B1	1
3	410481683	Track	MLH1000-A10-B7	2
4	208109004	Threaded handle	M8*20	6
5	204101005	Flat washer 8	Standard	6
6	202109029	Hex socket cylinder head screw M8*20	Standard	6
7	420480070	Rubber pad	Standard	2
8	614048021	Top plate	MLH1000-A10-B3	1
9	203103020	Nut M16*1.5	Standard	2
10	612048020	Screwed Rod	MLH1000-A10-B2	1
11	910104103	Handle	M19*85	1
12	202109100	Hex socket cylinder head screw M6*100	Standard	1
13	203103005	Hex locking nut M6	Standard	1



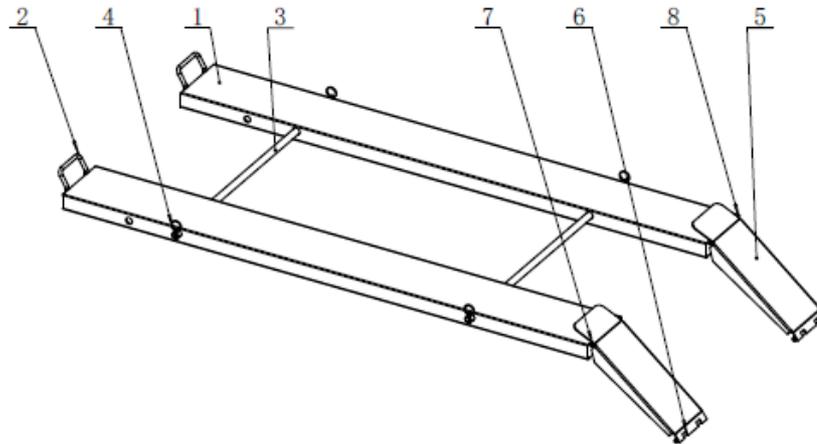
Pos.	Code	Name	Specification	Qty
	615048011	Pneumatic wheel clamp assembly	MLH1000-A1	
1	614048023	Protective cover	MLH1000-A1-B2	1
2	310501014	Pneumatic cylinder		2
3	410480111	Small handle	MLH1000-A10-B6	6
4	410480683	Guiding track	MLH1000-A10-B6	2
5	204101005	Flat washer 8	Standard	6
6	202109029	Hex socket cylinder head screw M8*20	Standard	6
7	614048022	Clamping bracket	MLH1000-A1-B1	1
8	420480070	Rubber pad	MLH1000-A10-B5	2
9	410481993	Top plate	MLH1000-A10-B3-C2	1
10	203103020	Nut M16*1.5	Standard	2
11	202109020	Hex socket cylinder head screw M6*15	Standard	8
12	204101004	Flat washer 6	Standard	8
13	202101021	Cross socket cap head screw M5*10	Standard	2
14	410481671	Guiding rod	MLH1000-A10-B4	1



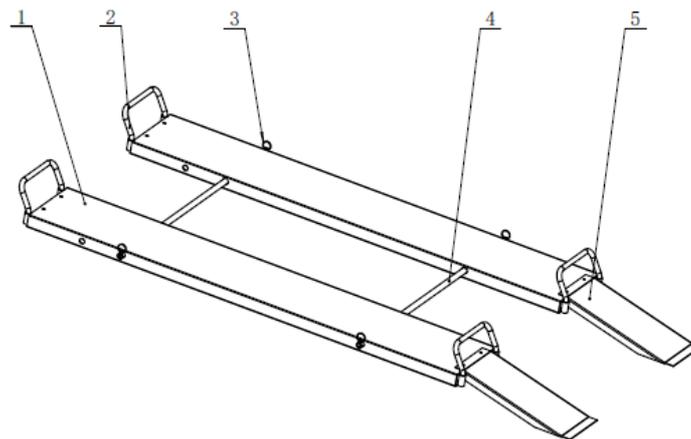
Pos.	Code	Name	Specification	Qty
	615048012	Lateral Platform Extension	MLH1000-A11	
1	614048024	Left side board	MLH1000-A11-B1	2
2	410480520B	Retain rod	MLH1000-A11-B4	2
3	410481663	Cross rod	MLH1000-A11-B5	2
4	206101100	Safety pin	10*45	4
5	614048026C	Drive-on ramp	MLH1000-A11-B3	2
6	420480110	Wheel	MLH1000-A11-B6	4
7	410481921	Pin shaft	MLH1000-A11-B7	4
8	204301002	Circlip	12	8



Pos.	Code	Name	Specification	Qty
	615048013	Wider Lateral Platform Extension	MLH1000-A12	
1	614048027	Side board	MLH1000-A12-B1	2
2	410480630C	Retain rod	MLH1000-A12-B2	4
3	206101100	Safety pin	10*45	4
4	410481793	Cross rod	MLH1000-A12-B3	2
5	614048010	Mid drive-on ramp	MLH1000-A2-B9	2



Pos.	Code	Name	Specification	Qty
	615048014	Wider Lateral Platform Extension	MLH1000-A13	
1	614048028	Left side board	MLH1000-A13-B1	2
2	410480520B	Retain rod	MLH1000-A11-B4	2
3	410481663	Cross rod	MLH1000-A11-B5	2
4	206101100	Safety pin	10*45	4
5	614048026C	Drive-on ramp	MLH1000-A11-B3	2
6	420480110	Wheel	MLH1000-A11-B6	4
7	410481921	Pin shaft	MLH1000-A11-B7	4
8	204301002	Circlip	12	8



Pos.	Code	Name	Specification	Qty
	615048015	Lateral Platform Extension	MLH1000-A14	
1	614048031	Side board	MLH1000-A14-B1	2
2	410480630C	Retain rod	MLH1000-A12-B2	4
3	206101100	Safety pin	10*45	4
4	410481793	Cross rod	MLH1000-A12-B3	2
5	614048010	Mid drive-on ramp	MLH1000-A2-B9	2