OWNER'S MANUAL

80kg Battery Operated Wheel Lifter

AA48020

July 2024

READ INSTRUCTIONS BEFORE OPERATING

DESCRIPTION

The Alemlube Automotive AA48020 Battery Operated Wheel Lift makes light work of lifting and guiding a heavy wheel & tyre from the workshop floor into position on the vehicle being serviced.
An absolute must in addressing workplace health & safety concerns, the AA48020 80kg, 24V Battery Operated Wheel Lift can potentially operate 150-200 times from a fully charged battery.
Housing a long-life DC motor, the AA48020 has been manufactured with a lightweight aluminum alloy body allowing ease of mobility utilizing its ergonomic handle and multi-directional 4" rear wheels along with universal front locking wheels facilitate accurate positioning and stability.
The wheel bracket completes with safety hook and angle adjustment that moves up and down the primary shaft ensure safe & secure wheel handling and the AA48020 control panel with emergency stop button provides the user with total control.
Quality components throughout, compliant with both Australian standards and manufactured to European CE standards.

SPECIFICATIONS, FEATURES & BENEFITS

- Maximum lifting weight 80kg
- Lifting height 0 to 1.2 metres
- Lifting time 12 to 16 seconds
- Lifting precision of 2mm
- Lifts per charge 150 to 200
- 2 x 12V 12AH batteries
- Wheel bracket angle adjustment
- Control panel with Emergency Stop
- Lightweight aluminium alloy body for ease of mobility
- Safety tyre hook
- Ergonomic handle
- Dimensions: 700mm (W) x 740mm (D) x 1,630mm (H)
- Motor power 200W
- Motor Voltage 24V

SAFETY PROCEDURES

1. Do not expose the wheel lifter to the rain or wet environment.
This might cause a fire or electric shock.
2. Power supply must be turned off during maintenance or repairs.
3. Do not use the lift while on charge.
4. Contact Alemlube for maintenance.
5. Have a clean area to use the lift in.
6. Keep a safe distance from anyone when operating the lift.
7. Do not overload the lift (max load of 80kg)
8. Always use the safety strap on the wheel to stop it falling.
9. Lower the lift to the lowest position and turn off power when lift is not in use.
10. Do not use the lift on unlevel ground. The wheel lifter is mainly used for lifting and transporting of automotive wheels with a load of less than 80kgs.
Also, can be used for approved attachments.

NSW/ACT (02) 9677 1555 **QLD/PNG** (07) 3491 2600 **VIC/TAS** (03) 8787 8288 **www.alemlube.com.au**
WA (08) 9302 4199 **SA/NT** (08) 8241 7111 **NZ** (09) 447 1007 www.alemlube.co.nz

TECHNICAL SPECIFICATIONS

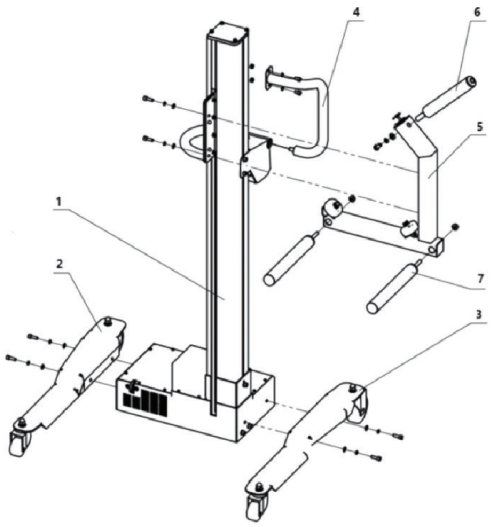
Charging Voltage 240V AC 50Hz
Working Voltage 24V DC
Power 200W
Charging time 4-5 hours
Maximum Load 80kg
Weight 65kg
Maximum Lifting Height 1,200mm

WARRANTY

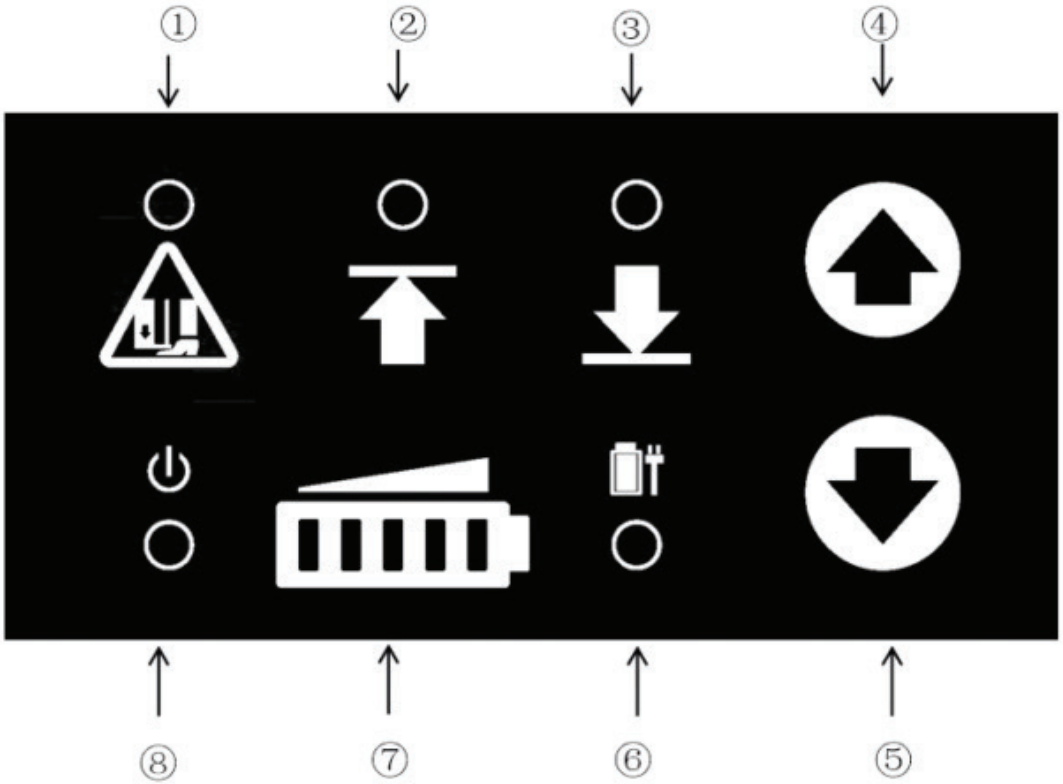
Warranty terms are applied according to the sale contract.
The warranties and liability or material will expire if any of the following points occurs:
1. Misuse
2. Incorrect assembling
3. Maintenance and inspection of equipment not performed correctly.
4. The lift is used when faulty.
5. Instructions regarding the handling, assembly, maintenance, and use are not followed correctly.
6. Part subject to wear and/or deterioration are not replaced.
7. Damage caused by moisture or external natural event.

ASSEMBLY INSTRUCTIONS

The AA48020 wheel lifter will come in a wooden box:
1. Take the top of the box.
2. Remove the packing straps.
3. Take all the lifter out of the box.
4. Lay the lifter main frame **1** on its side.
5. Then attach your roller leg assembly to either side **2** and **3.**
6. Lock the wheels and stand the lifter up.
7. Attach the moving handle **4** the lifter followed by the parts tray if desired.
8. Now it is time to assemble the fork tynes that the wheel rests on. **5, 6** and **7**

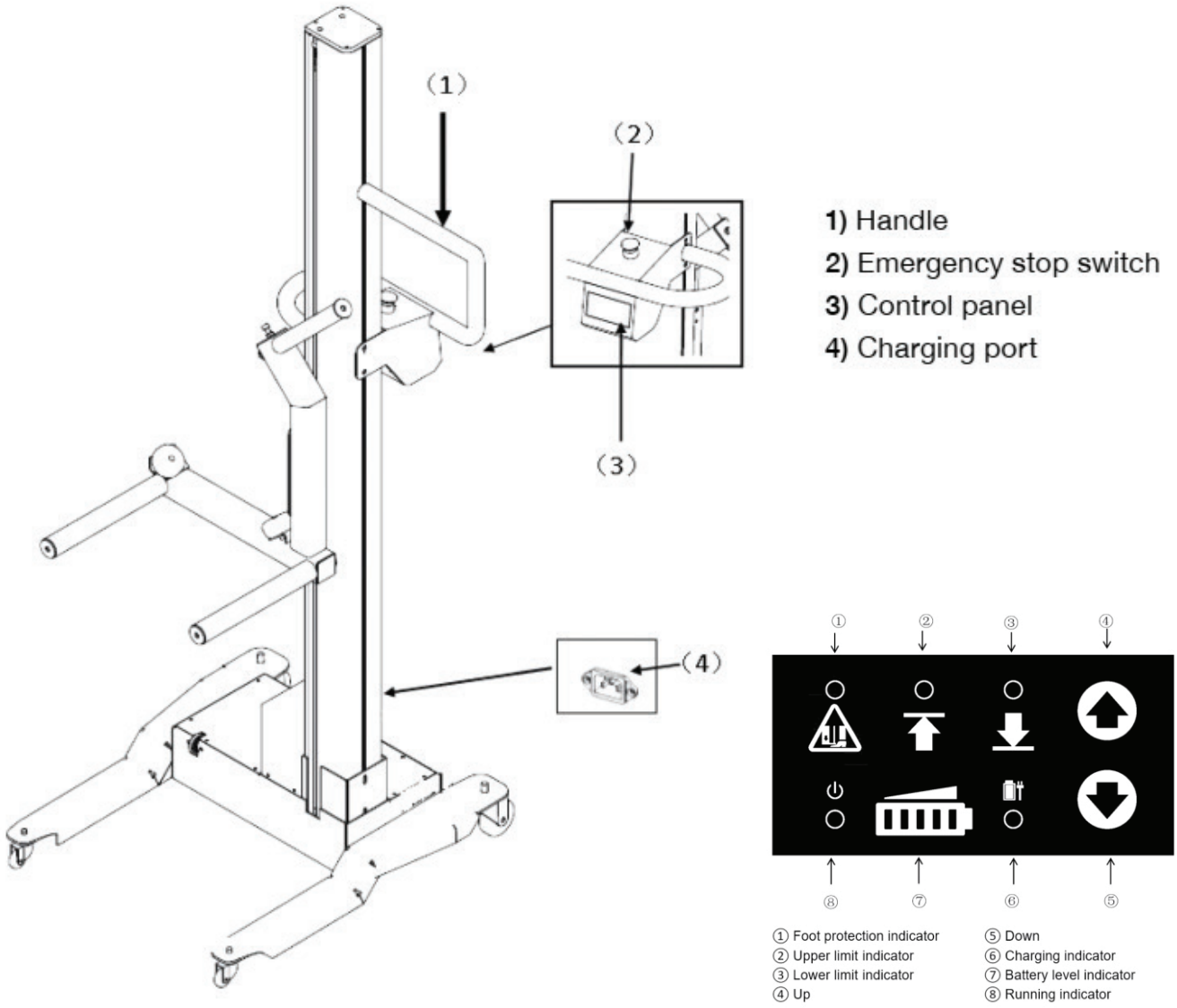


CONTROL PANEL AND FUNCTIONS



① Foot protection indicator
② Upper limit indicator
③ Lower limit indicator
④ Up
⑤ Down
⑥ Charging indicator
⑦ Battery level indicator
⑧ Running indicator

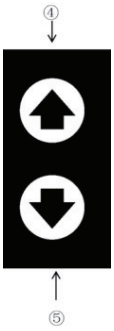
OVERALL APPEARANCE



OPERATING INSTRUCTIONS

Turn on the power switch, the running indicator on the control. Panel flashes and the lifter are ready to use LED **8**
The control panel is located under the handle used for moving the AA48020 wheel lifter around.
To raise the tines up you press the up button **4** and keep pressing the button till you reach your desired height.
When the lift reaches its upper reach, the **2** led light will light up and the lift will stop moving.
To lower the tines down you press the down button **5** and keep your finger on the button to your desired height or till the lift reaches its lower limit switch and stops moving and the **3** led light will light up

WHEEL LIFTING



To lift the tines, press the up button on the control panel **4.**
During lifting make sure that the wheel and or the tines are not going to make contact with anything as this could be dangerous and can cause damage to the lift or whatever part the lift hits.

WHEEL LOWERING

To lower the forks, press the down button on the control panel **5.**
During lowering make sure that the wheel and or the tines are not going to make contact with anything as this could be dangerous and can cause damage to the lift or whatever part, the lift hits.

LOADING & UNLOADING

Lower the tines down until they are on the lowest point and the lift stops moving.
Place the wheel onto the wheel lift with the outside of the rim facing towards the control panel.
Apply the safety strap to secure the wheel to stop it falling off.
Before giving the lifting command, make sure the wheel is properly supported, is stable and cannot fall out easily.
Before moving the lift to transport the wheel, ensure that there are no obstacles on the floor.
Transport the wheel only with the forks fully lowered. Transport the wheel only on flat floors.
The brakes of the two rear wheels should be locked when the wheel lifter is parked to stop it moving.

TROUBLESHOOTING

DETECTED PROBLEM	POSSIBLE CAUSE	SOLUTION
Non-functioning or irregular functioning Ascent/descent	Uncharged batteries	Charge the batteries
	Exceed maximum loading	Remove the loading and test the functioning of the unit
	Fuses	Check the 20A fuse between the two batteries and replace it if necessary
	Engine overheating	Wait for engine cooling down (to shorten the time open engine compartment)
Batteries cannot be charged	Defective battery	Check batteries voltage (2x12V)
	Nonfunctioning battery charger	Check all connections between batteries and control board
	Fuses	Check the 20A fuse between the two batteries and replace it if necessary
		Check the fuse on the power supply plug for battery charging and replace it if necessary
	Batteries are completely exhausted	Replace the batteries

MAINTENANCE

In order to obtain a state of optimum service it is necessary to perform regular maintenance on the lift every 3 months. If the lift operates in dusty environment, it is advisable to perform maintenance more frequently. Before performing any maintenance keep in mind that:

1. All maintenance shall be performed only by qualified person.
2. There must be no load on the lift.
3. The batteries of the lift should not be placed in charge during maintenance.
4. The lift must not be connected to the main supply.
5. During the operations of maintenance and/or replacement of spare parts, the equipment and the spare parts must be displaced in an easily usable way and the lifter in such a way to facilitate intervention without compromising functionality.

Before performing any maintenance operation, press the emergency button and disconnect the batteries to avoid any risk of unexpected activation of the lift.

The following is an illustrative list of the frequency of maintenance operations.

SERVICE / INSPECTION	DAILY	EVERY 3 MONTHS
Battery & charger	X	
Cleaning	X	
Control on power supply cable control for battery charger	X	
Emergency stop button functioning	X	
Transport wheels		X
Check all the nuts and bolts		X
Greasing of the screw		X
Greasing of the Fork rollers		X
Blowing dust of the internal boards		X

CLEANING

Do not use a pressure washer or high-pressure cleaning system. Use standard detergent and dry thoroughly after cleaning.

POWER SUPPLY CABLE

Check that the cable is in good condition and that there are no bare wires and plugs are intact.

EMERGENCY STOP BUTTON

Perform the following tests:

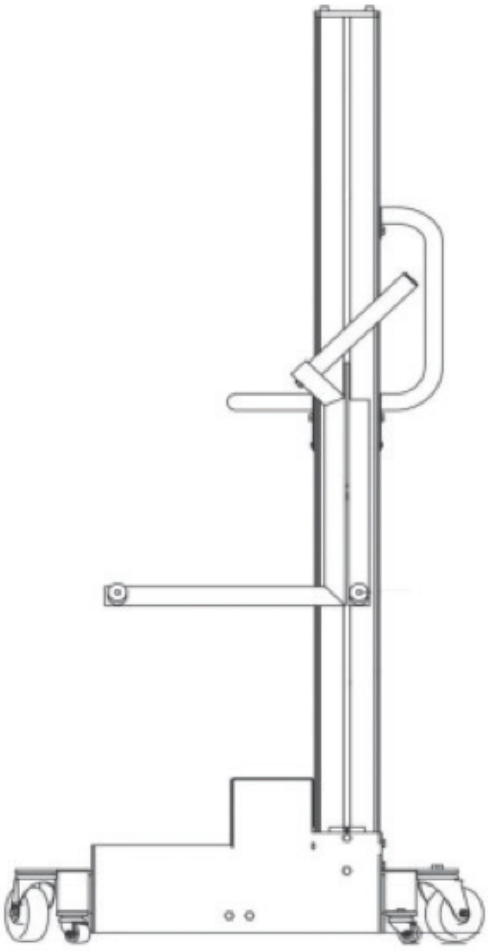
1. Operate the lift and test that it stops when you press the emergency button.
2. Repeat the operation for both the operation during up and down operation.
3. Press the emergency button and make sure that the lift does not move when you press the up button.
4. Press the emergency button and make sure that the lift does not move when you press the down button

GREASING THE SCREW

To grease the screw and sliding surfaces:

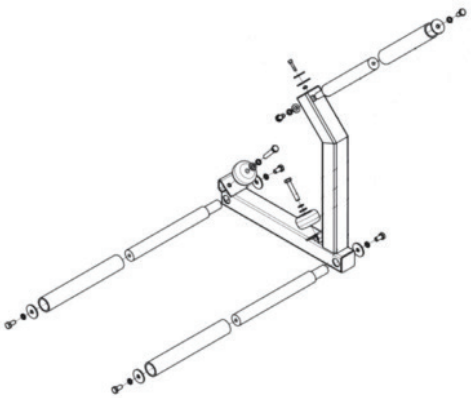
1. Lift the forks at about the halfway point (60-65 cm from the floor)
2. Press the emergency button.
3. Make sure the power cord is disconnected.
4. Open the top cover and disconnect the batteries.
5. Grease the screw and sliding surfaces of the skates accessing from the slot on the side of the forks. Put the oil both above and below the forks, at the points A and B as shown in figure.
6. Connect the batteries and close the top cover.
7. Release the emergency button.
8. Make a few complete runs of the fork to allow the grease to spread evenly.

Use Valvoline Valplex EP Grease



GREASING OF THE FORK ROLLERS

To ensure a smooth rotation of the wheel, rollers must be greased periodically.
Unscrew the locking screw's, take the washers & roller off & grease the shaft.
Then reinstall all the parts that were removed in the reverse order.
Replace the roller, washers & then replace the screws making sure the screws are tight.

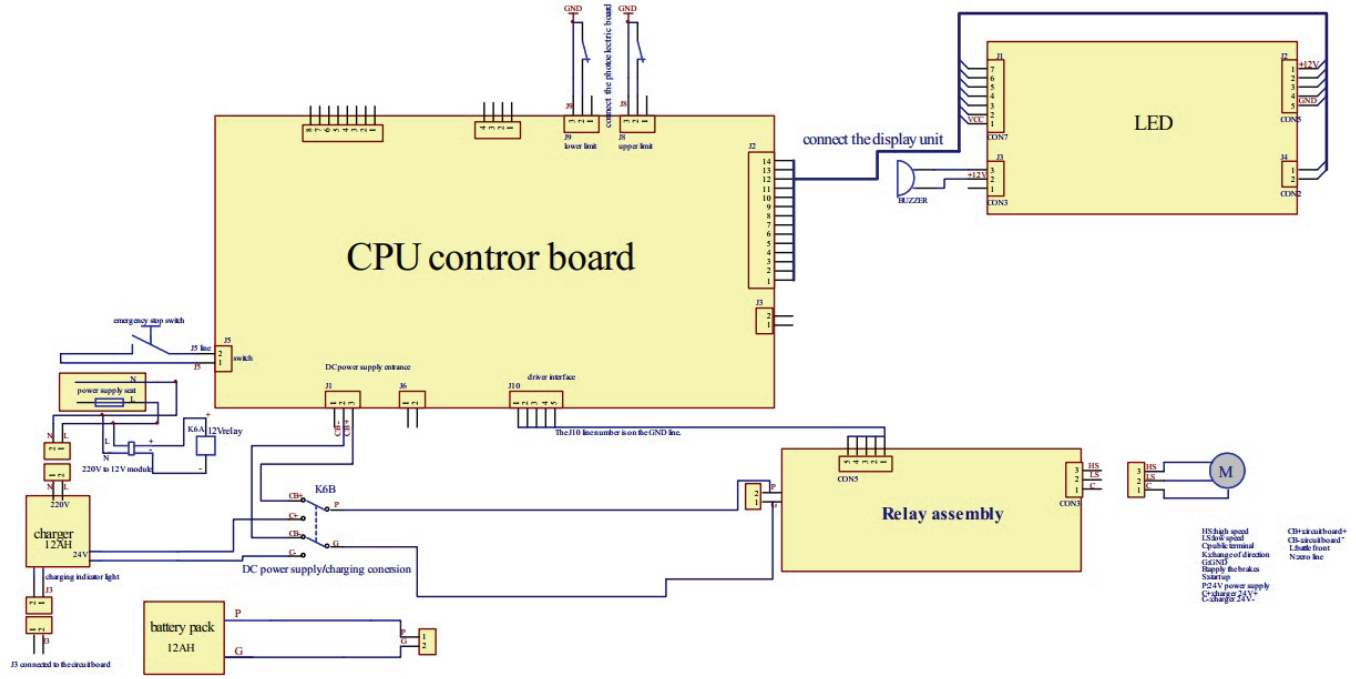


BATTERY USE & MAINTENANCE

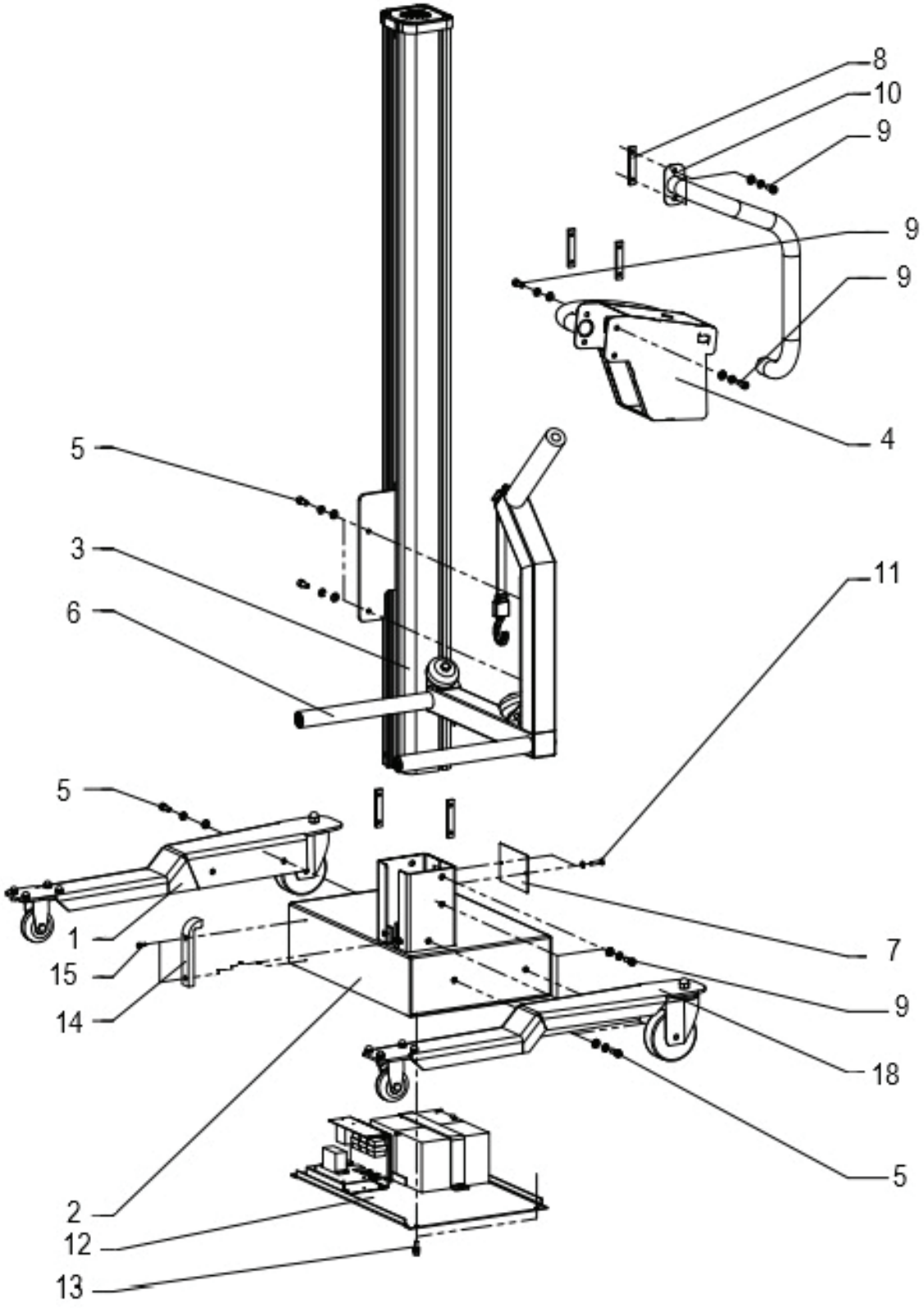
Regular testing and inspection will help to maximise battery life. A routine inspection at least once a month is recommended to maintain optimum performance.
Use the following as a guide when examining your battery:

1. The battery's state of charge. A reliable way to check is with a voltmeter to determine the stabilised Voltage. A charged battery will have a stabilised voltage above 12.5 volts and an SG reading above 1.240.
2. Ensure the battery top is clean, dry, free of dirt and grime. A dirty battery can discharge across the grime on top of the battery casing.
3. Inspect the terminals, clamps and cables for breakage, damage, or loose connections. These should be clean, tight, and free of corrosion.
4. Apply a thin coating of high temperature grease to posts and cable connections for added protection.
5. Inspect the battery case for obvious signs of physical damage or warpage. This usually indicates the battery has been overheated or has been overcharged.
6. When servicing a sealed maintenance free (SMF) battery, check the State of Charge. This gives you a snapshot of the battery's condition and whether the battery needs to be charged or replaced. It is important that the battery is replaced as the electrolyte levels may be below the plates which can lead to an internal explosion.
7. For batteries used in seasonal applications and stored long term, fully recharge the battery prior to storing. Check the state of charge or voltage regularly. Should the voltage drop below 12.5V, recharge the battery. It is important to check the battery completely before reconnecting to electrical devices.

WIRING DIAGRAM

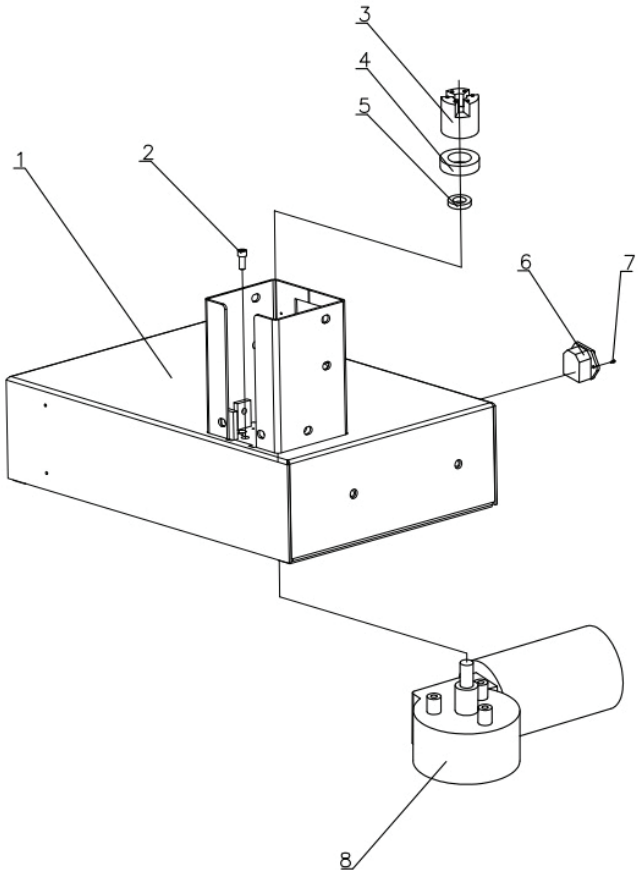


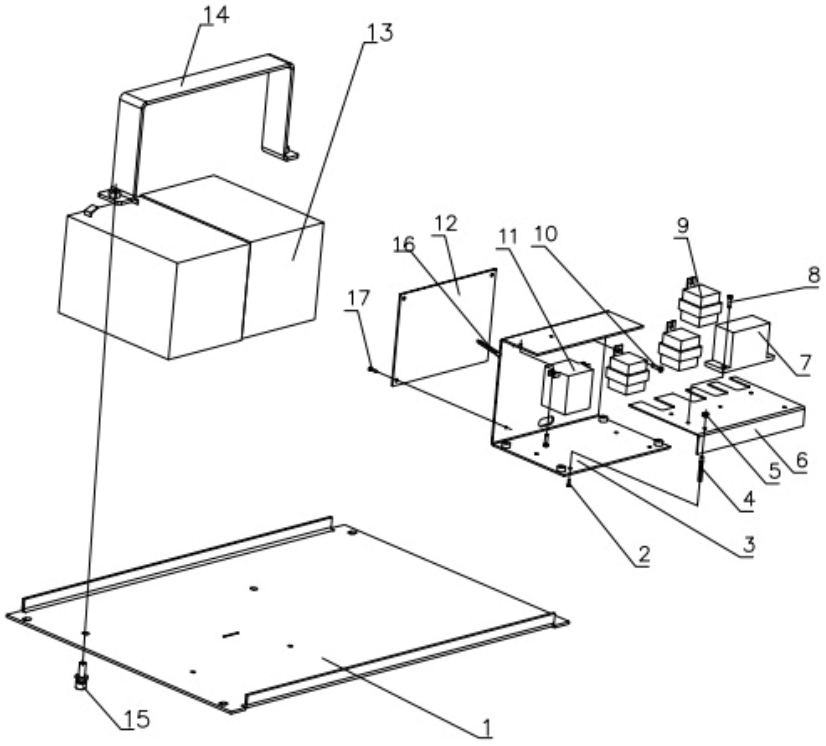
PARTS BREAKDOWN FOR AA48020



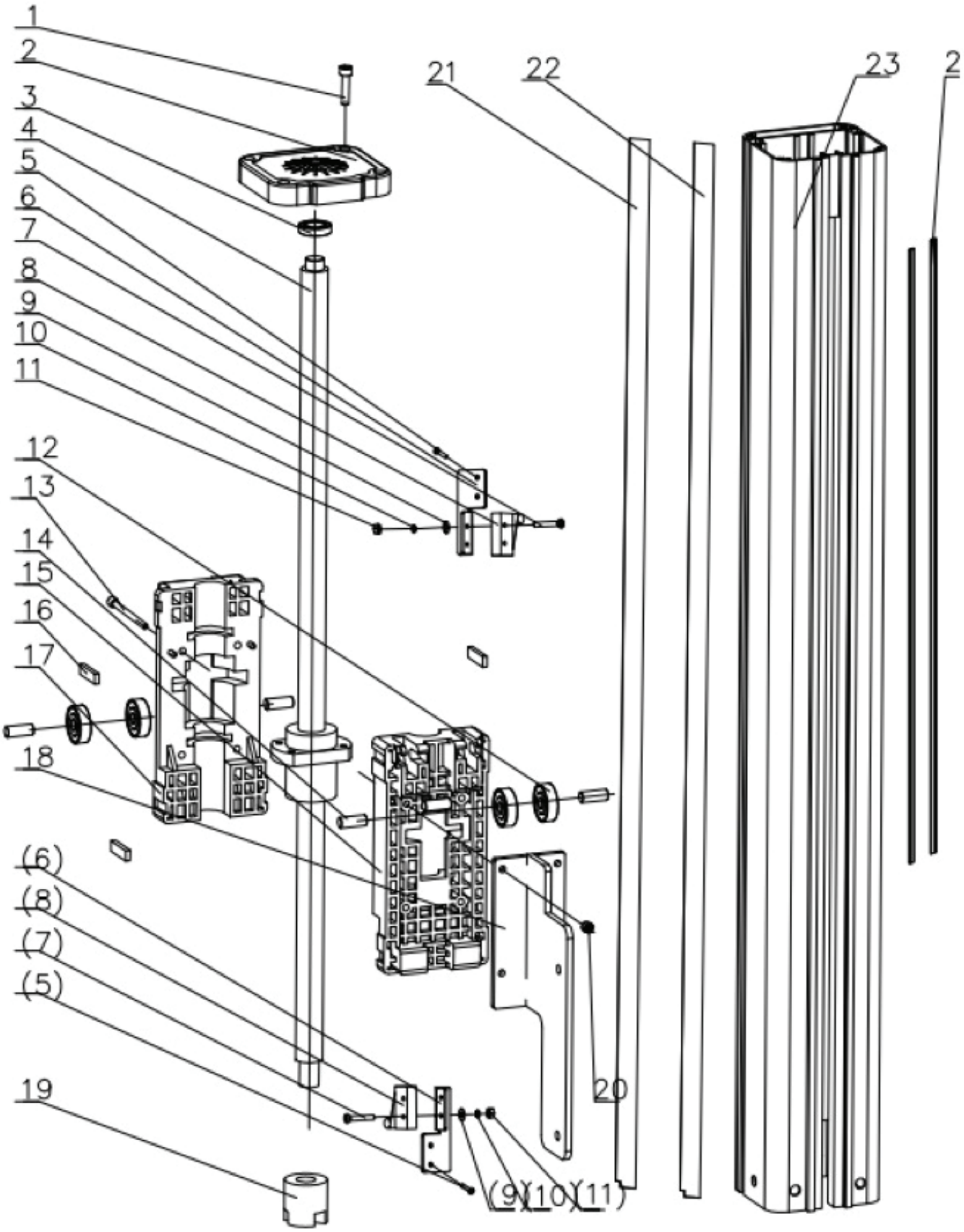
No on Drawing	Alemlube part No	Description
1	AA48020-01	Right Leg Assembly
2	AA48020-02	Base Assembly
3	AA48020-03	Column Assembly
4	AA48020-04	Control Box Assembly
5	AA48020-05	M8 x 25mm Screw
6	AA48020-17	Falk roller Assembly
7	AA48020-61	Rear Cover
8	AA48020-08	M8 Nutsert
9	AA48020-09	M8 x 12mm Screw
10	AA48020-10	Handle
11		M3 x 6mm Screw
12	AA48020-62	Bottom Plate Assembly
13		M5 x 16mm Screw
14	AA48020-33	Protection slider
15		M4 x 14mm Screw
18	AA48020-18	Left leg Assembly

No on Drawing	Alemlube part No	Description
1	AA48020-23	Bass Box
2	AA48020-26	M8 x 20mm SHC Screw
3	AA48020-69	Coupling
4	AA48020-68	Thrust Bearing Seat 51105
5		Washer
6	AA48020-22	240V IEC Connector
7	AA48020-21	M3 x 10mm Screw
8	AA48020-67	Two speed Motor





No on Drawing	Alemlube part No	Description
1	AA48020-23	Bass Box
2	AA48020-27	M3 x 8mm Screw
3	AA48020-69	Electrical Base plate
4		M3 Stud
5		M3 Nut
6	AA48020-70	Cover plate
7		Relay
8	AA48020-67	M4 x 12mm Screw
9		Automotive Relay
10		M4 x 6mm Screw
11		Relay
12	AA48020-38	CPU Board
13	AA48020-BA	12V 12ah Battery
14	AA48020-19	Battery plate
15	AA48020	M6 x 25mm Screw
16		M3 Stud
17	AA48020-27	M3 x 8mm Screw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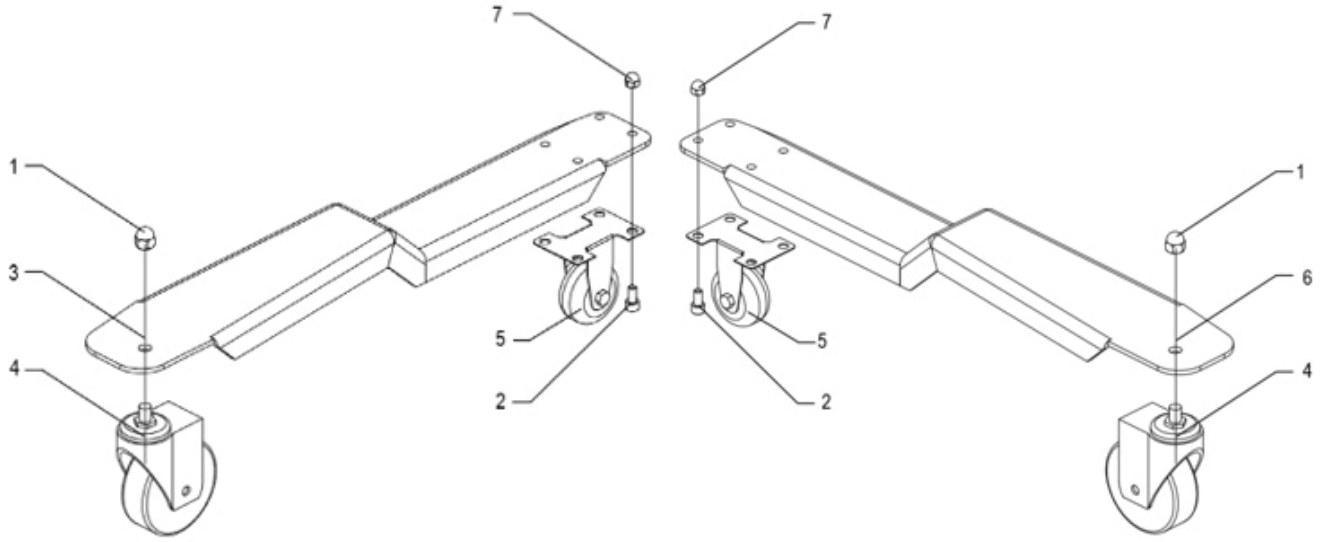
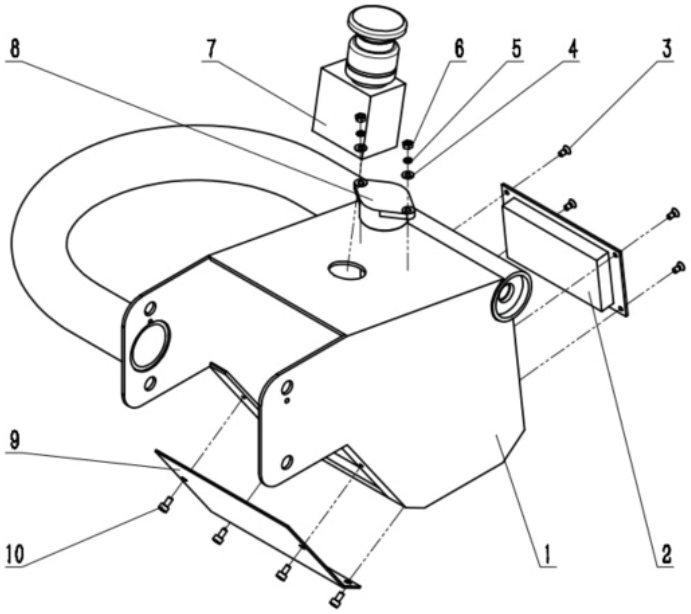
No on Drawing	Alemlube part No	Description
1	AA48020-71	M6 x 25mm Screw
2	AA48020-72	Top Plate Cap
3	61903-2Z	Top Bearing
4	AA408020-73	Main Lift Screw
5		M3 x 8mm Screw
6	AA48020-74	Switch Bracket
7		M2 x 12mm Screw
8	AA48020-SWITCH	Micro switch
9		M2 flat washer
10		M2 spring Washer
11		M2 Nut
12	6300-2Z	Gide Bearing
13		M6 x 55mm Bolt
14	AA48020-19	M10 x 25
15	AA48020-75	Rear Bearing Housing
16	AA48020-76	Guide
17	AA48020-77	Front Bearing Housing
18	AA48020-78	Support plate
19	AA48020-79	Drive coupling
20		M6 Nut
21	AA48020-80	Guide Strip 1
22	AA48020-81	Guide Strip 2
23	AA48020-82	Main Post
24	AA48020-83	20mm Brush



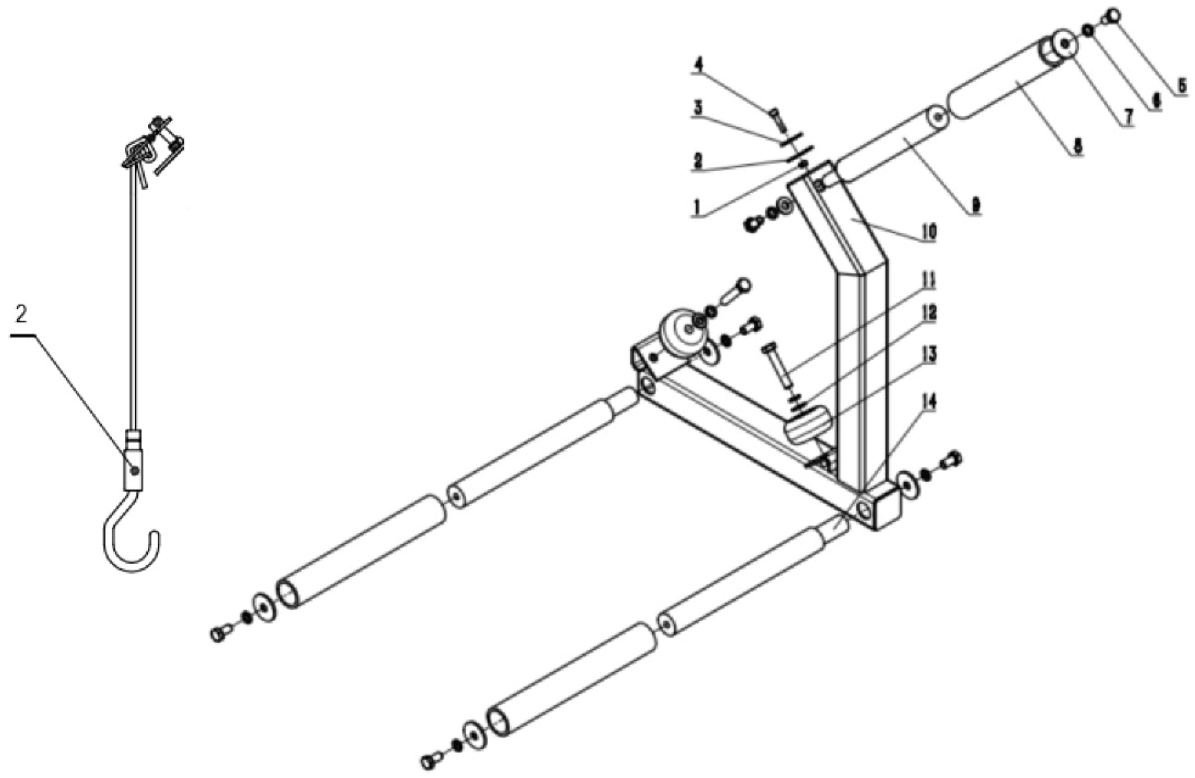
Part No	Part No	Description
1	AA48020-53	M12 Dome Nut
2	AA48020-54	M8 x 16mm Bolt
3	AA48020-55	Right Base Leg
4	AA48020-56	100mm Caster Wheel
5	AA48020-57	65mm Wheel
6	AA48020-58	Left Base Leg
7	AA48020-63	M6 Hex Nut

SPARE PARTS BREAKDOWN



Part No	Part No	Description
1	AA48020-58	Control Box
2	AA48020-59	Display Board
3	AA48020-60	M3 x 6mm Screw
4	AA48020-61	M3 Washer
5	AA48020-62	M3 Spring Washer
6	AA48020-63	M3 Nut
7	AA48020-64	Stop Switch Assembly
8	AA48020-65	24v DC3 Buzzer
9	AA48020-66	Backing plate
10	AA48020-60	M3 x 6mm Screw

SPARE PARTS BREAKDOWN



Part No	Part No	Description
1	AA48020-39	M6 Nut
2	AA48020-40	Safety Strap
3	AA48020-41	M6 Flat Washer
4	AA48020-42	M6 x 25mm Bolt
5	AA48020-43	M10 x 20mm bolt
6	AA48020-44	M10 Spring Washer
7	AA48020-45	M10 Washer
8	AA48020-46	Top Wheel Guide Shaft
9	AA48020-47	Top Wheel Guide Roller
10	AA48020-48	Tyne Bracket
11	AA48020-49	M10 x 55mm Bolt
12	AA48020-50	M10 Washer
13	AA48020-51	Roller 62mm x 32mm x 11mm
14	AA48020-52	Tyne Roller Assembly