

4 POST HOIST

AutoLift AL-10000T



4 Post Vehicle Hoist for Domestic & Light Mechanical Operation

3500Kg Maximum Lifting Capacity

Design Registration Approval Number: WAH21804

Design Code: AS1418.9-1996

INSTALLATION MANUAL & OPERATION INSTRUCTIONS



READ FIRST



DO NOT use the machine until you read and understand all the dangers, warnings and cautions in this manual.



- READ THE ENTIRE CONTENTS OF THIS MANUAL BEFORE INSTALLATION AND OPERATION. BY PROCEEDING YOU AGREE THAT YOU FULLY UNDERSTAND AND COMPREHEND THE FULL CONTENTS OF THIS MANUAL. FORWARD THIS MANUAL TO ALL OPERATORS. FAILURE TO OPERATE THIS EQUIPMENT AS DIRECTED MAY CAUSE INJURY OR DEATH.

Specifications subject to change without notice.

Note: While all due care and attention has been taken in the preparation of this document, Advance AutoQuip shall not be liable for any inaccuracies or omissions which may occur therein

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1. Safety

1.1 Introduction

Thoroughly read this manual before operating the hoist 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



Failure to comply with instructions could result in personal injury.



Failure to comply with instructions could result in property damage.



Important information

1.3 Intended Use

The hoist is designed for the safe lifting of automotive vehicles. Observe the rated load capacity below:

Model No.	Rated Load Capacity
AutoLift AL-10000T	3500 kg

1.4 Safety Instructions for Commissioning

The hoist may be installed and commissioned by authorised service personnel only.

The standard hoist 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

- Read the operating manual.
- Hoist operation by authorised personnel over 18 years only.
- Always keep the hoist area clean and free of tools, parts, debris etc.
- Before raising and lowering the hoist, always totally secure the vehicle with wheel chocks.
- Make sure the vehicle doors are closed during raising and lowering cycles.
- Closely watch the vehicle and the hoist during raising and lowering cycles.
- Do not allow anyone to stay in hoist area during raising and lowering cycles.
- Never raise a vehicle on the hoist with passengers inside.
- Only use the hoist for its intended purpose.
- Comply with the applicable accident prevention regulations.
- Do not overload the hoist. The rated load capacity is indicated on the hoist nameplate.
- Do not operate the hoist if potential problems have been identified or hoist malfunctions
- Grease and oil spills on runways and working area must be cleaned up immediately.

- To reduce risk of fire, do not operate equipment in the vicinity of open containers of flammable liquids(gasoline).
- The main switch serves as emergency switch. In case of emergency turn to position 0.
- Protect all parts of the electrical equipment from humidity and moisture.
- Protect the hoist against unauthorised usage by padlocking the main switch.

1.6 Safety Instructions for Servicing

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

1.7 Safety Features

1. Dead Man's Type Control
The operator is required to hold the controls in the engaged position to raise or lower the hoist.
2. Equalising System
The hoist is provided with equalising cables to ensure transmission and level movement.
3. Cable Anti-break device
The hoist is equipped with cable anti-break device.
They respond in case of rapid cable broken to prevent sudden lowering movements.
4. Pressure Relief Valve
A pressure relief valve is used to limit the hydraulic working pressure to a maximum of 150 bar.

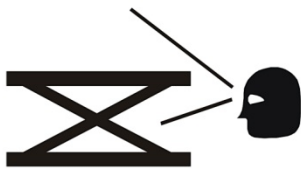
1.8 Caution Labeling



Read operating and safety manual before using hoist.



Hoist to be used by trained operator only!



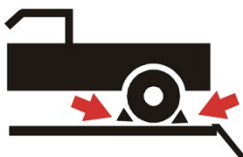
Proper maintenance and inspection is necessary for safe operation.



Do not operate a damaged hoist!



Authorised personnel only in hoist area.



Keep the vehicle in the right place when lifting.



Clear area if vehicle is in danger of falling.



Remain clear of hoist when raising or lowering vehicle.



Do not override self-closing hoist controls.

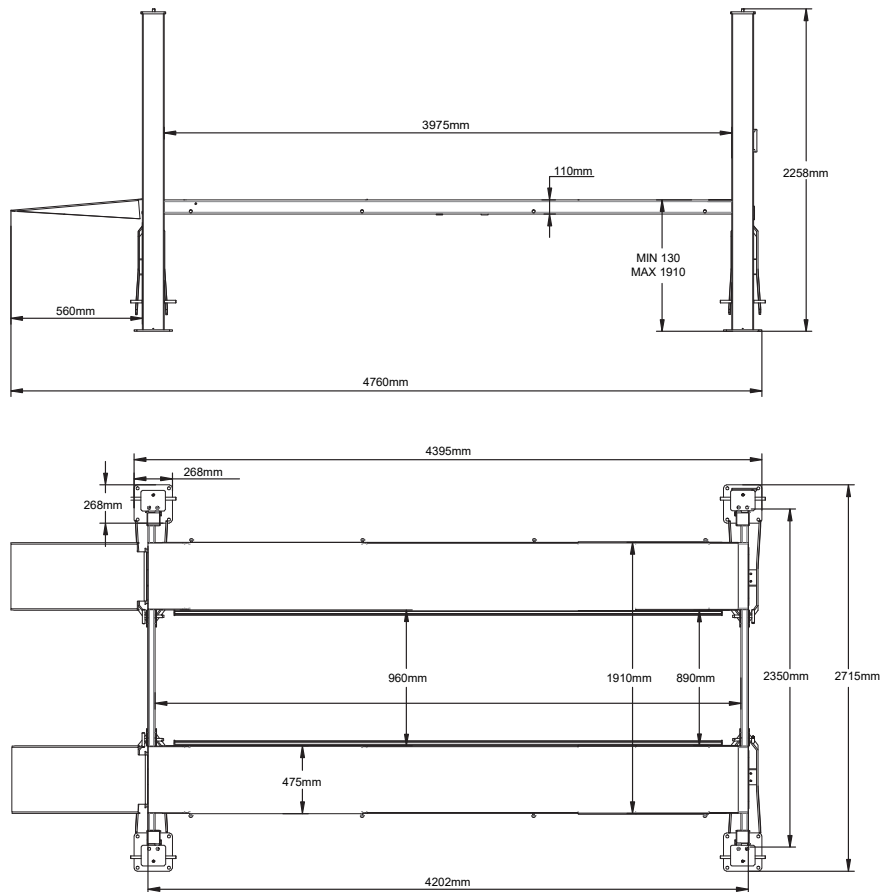


Keep feet clear of hoist while lowering!



Do not stand on hoist while raising or lowering.

2. Specifications



Technical Specifications

SPECIFICATIONS

Lifting Capacity	3500Kg
Power Unit	Single Phase, 240V, 15Amp, 50Hz
Height of Columns (overall height of hoist)	2258mm
Size of columns	153mm x 127mm
Lifting height in top lock position (to top of runway)	1910mm
Length of runway	4200mm
Width of runway	475mm
Length of approach ramp	560mm
Width between runways	960mm
Distance to outside of both runways	1910mm
Clearance between columns	2350mm
Overall length (post to post)	4395mm
Overall width (without motor)	2715mm
Overall width (with motor)	2960mm
Shipping weight	727 Kg
Shipping dimensions	4200 x 540 x 600mm

3. Packing, transport and storage

3.1 Lifting and handling

When loading/unloading or transporting the equipment to the site, be sure to use suitable loading (e.g. cranes, trucks) and hoisting means. When you want to move the hoist, you need to install the traversing carriages on the crossbeams and columns by using the special bolt. Dropping the hoist until the columns depart from the earth, you can move the hoist. Be careful of goods on the hoist throughout the process.

Be sure also to hoist and transport the components securely so that they cannot drop, taking into consideration the package's size, weight and centre of gravity and its fragile parts.

3.2 Storage and stacking of packages

Packages must be stored in a covered place, out of direct sunlight and in low humidity, at a temperature between -10°C and +40°C. Stacking is not recommended: the package's narrow base, as well as its considerable weight and size make it difficult and hazardous.

3.3 Delivery and check of packages

When the hoist is delivered, check for possible damages due to transport and storage; verify that what is specified in the manufacturer's confirmation of order is included. In case of damage in transit, the customer must immediately inform the carrier of the problem.

Packages must be opened paying attention not to cause damage to people (keep a safe distance when opening straps) and parts of the hoist.

4. Installation

4.1 Tools Required

- Rotary Hammer Drill or Similar
- 20mm Masonry Bit
- Hammer
- 1 metre Level
- Open-End Wrench Set: 11mm - 28mm
- Socket and Ratchet Set: 11mm - 28mm
- Hex-Key / Allen Wrench Set
- Large Crescent Wrench
- Large Pipe Wrench
- Crow Bar
- Chalk Line
- Medium Flat Screwdriver
- Tape Measure: 8 metre Minimum
- Needle Nose Pliers

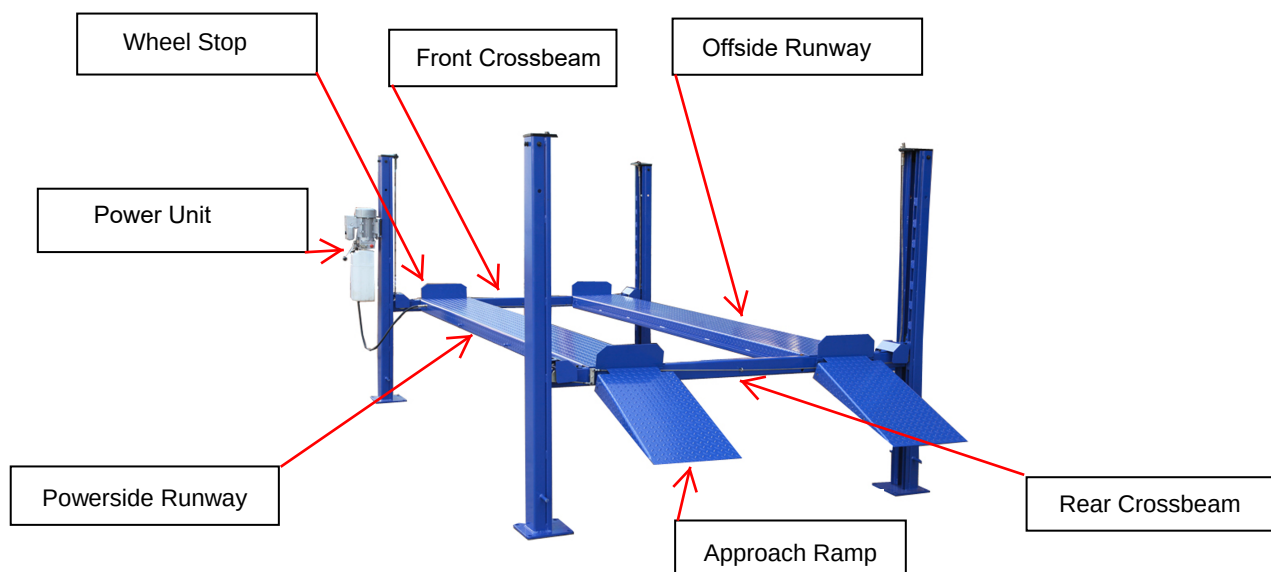
4.2 Floor Requirement

Hoist should only be installed on level concrete floors with no more than 3° of slope and with a minimum of 125 mm and 25 MPa concrete that has been aged a minimum of 30 days. Confirm that the column baseplate locations you have marked are a minimum distance of 150mm from any floor seam (see next page). Do not install if floor has cracks or deterioration that could affect hoist stability. There should be no obstructions in the installation area like floor drains, under floor piping or electrical conduit that could be damaged or prevent safe hoist installation and secure hoist anchoring. Check ceiling for beams or heating ducts and walls for protruding structures, etc.

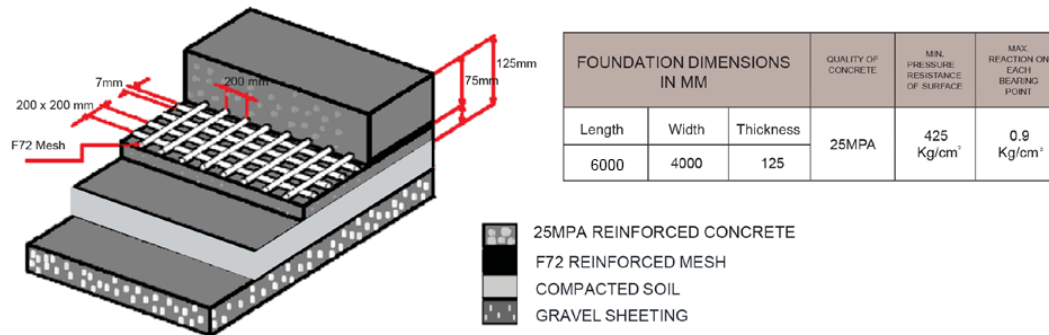


These instructions must be followed to insure proper installation and operation of your hoist. Failure to comply with these instructions can result in serious bodily harm and void product warranty. Manufacturer will assume no liability for loss or damage of any kind, expressed or implied resulting from improper installation or use of this product.

4.3 Assembly View/Descriptions of Parts/Floor Plan



4.4 Foundation Dimensions / Specifications



Anchoring the posts

The AutoLift AL-10000T is a portable hoist made to function without being anchored to the floor. The hoist however is designed to be anchored to the floor and we ***STRONGLY*** recommend when lifting a vehicle to anchor the hoist to the floor using the provided anchor bolts. Anchoring the hoist will make the hoist more stable, but the hoist will not be portable until the anchors are removed. You will need a rotary hammer drill with a 19mm carbide masonry drill bit (most rental outlets have them for rent.)

Your concrete floor must be at least 125mm thick and a minimum of 25MPA. Drill through 16 holes into the concrete, drilling all the way through the floor. Install the nut and flat washer on the Anchor bolt before putting them into the holes. Be careful not to move the posts when drilling. One way to avoid this is to drill the holes and place the bolts in one at a time after the holes are drilled. Re-check the level of each column and place shims around each anchor and whenever they're needed. If 12mm or more shim is required, either refinish concrete or use steel plates and extra long anchor bolts. Tighten the anchor bolts and recheck for level and plum. Hammer the anchor bolts all the way down. Tighten anchor bolts using a torque wrench to 150 ft. /lbs (203 N.m)

(DO NOT USE AN IMPACT GUN WHEN TIGHTENING THE ANCHOR BOLTS)

Note: 125mm of embedment is the minimum requirement for reinforced concrete.

Recheck the level of the posts. If the posts are off level at this point, loosen the anchors and use a pry bar to tilt the posts and shim as needed. Retighten and check again. When satisfied as to level, tighten all the anchor bolts. **THE PROPER OPERATION OF THE HOIST REQUIRES THAT ANY TIME YOU RAISE A VEHICLE YOU MUST LOWER THE HOIST ONTO THE SAFETY LOCKS.**

This is done by raising the vehicle to the desired height and lowering the hoist by pressing the release valve handle until the hoist stops on the next available lock (check for correct engagement on all locks prior to use)

Note: the power unit is not made to hold the load and may bleed down the locks .

4.5 Column & Cross beam Installation

1. Place a chalk line on the floor according to the floor plan layout. Pay attention to the power Unit location. Locate and stand the columns at their respective locations. **DO NOT BOLT** Columns down at this time. Use caution to prevent the Columns from falling over. (See Fig. 4.1)

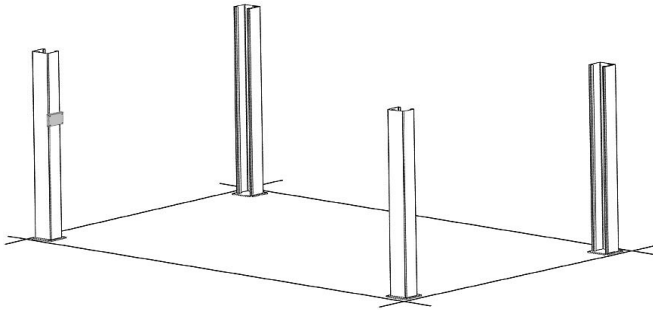


Fig 4.1

2. To estimate the shim requirements, place a target on floor at each Column position and record the readings. Find the highest of the four locations then find the difference between each of the remaining Columns. This difference is the estimated amount of shim thickness that will be required at each Column. (See Fig. 4.2)

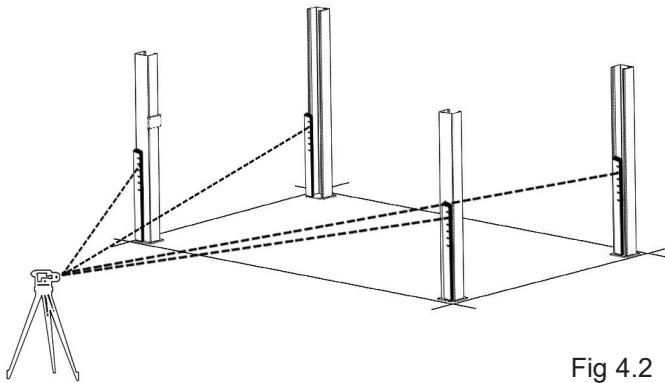


Fig 4.2

Note: The maximum shim thickness recommended by the factory is no more than 12mm per Column using shims and anchors provided with the hoist. A maximum shim thickness of 50mm is possible by ordering optional shim plates. Contact your authorised Advance AutoQuip Distributor for ordering information.

3. Using a forklift or crane, raise the cross beams (making sure the Plastic Slide Blocks are still in position) and drop down into the top of the Columns. NOTE: The Sheave Windows should be positioned inward and adjacent the Power Unit Column. (See Fig. 4.3)

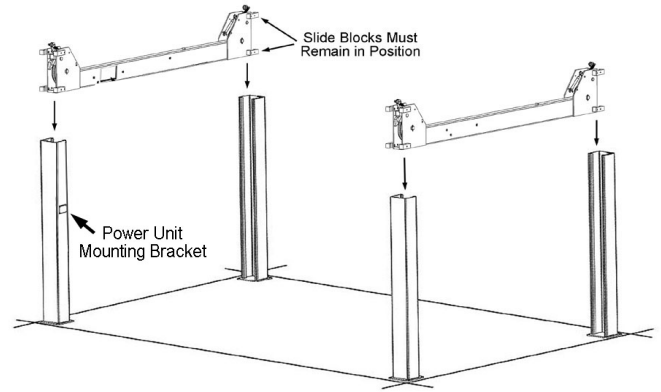
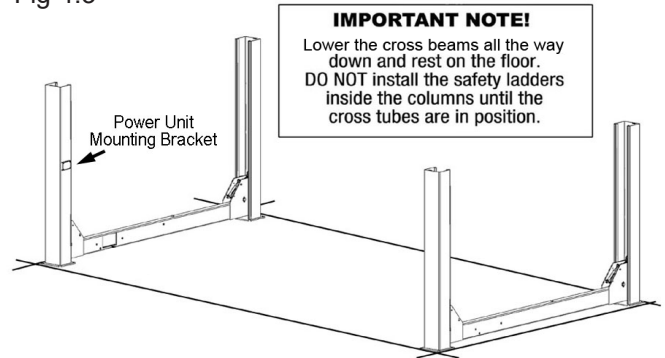
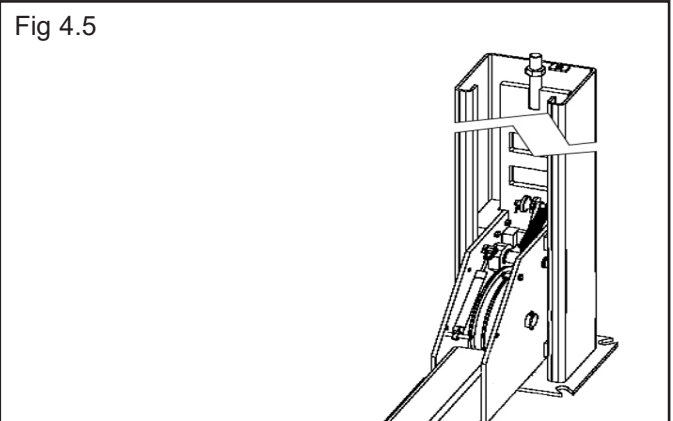
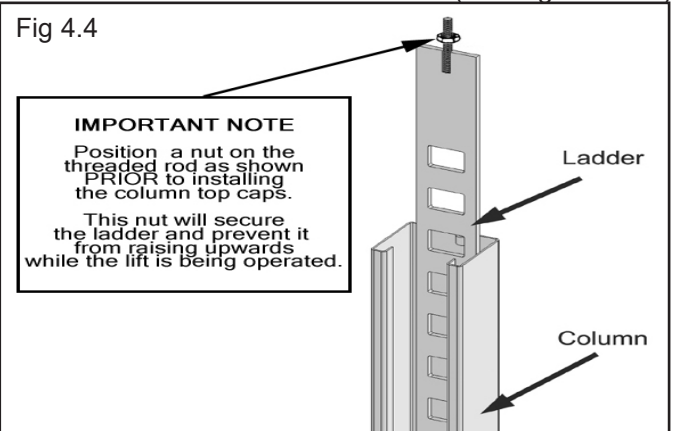


Fig 4.3



4. With the Columns standing and the cross beams in position, install the Safety Ladders. Pass the Ladders through the Column openings and drop down through the Slide Block guide slots on the Cross Beams until the Ladders come to rest on the Base Plates. If bolting, **DO NOT BOLT** Columns down at this time. (See Fig. 4.4 - 4.5)



5. The Columns and Cross Beams will now be in position and spaced properly for the Runways.

6. Install the Column TOP CAPS using the M12 x 2 Hex Bolts, nuts & washers. Install the nut on each Safety Ladder until 12mm of threads are exposed and the Ladder is raised at least 12mm off of the base of the Column.

NOTE: Raise the Ladder at least 12mm off of the base of the Column or damage to the hoist will occur. Be sure to position the cable hole INWARD. (See Fig. 4.6 - 4.7)

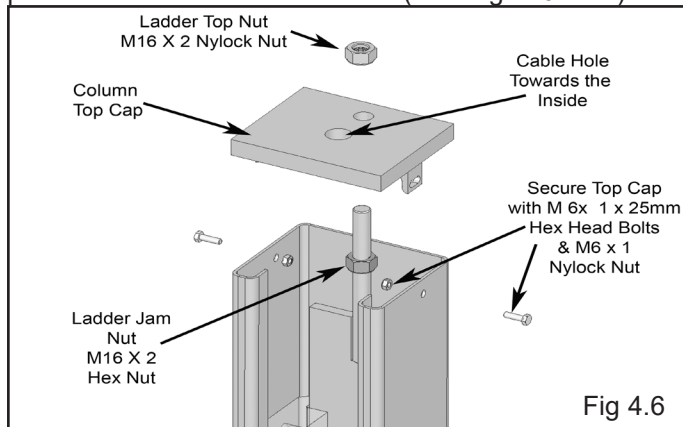


Fig 4.6

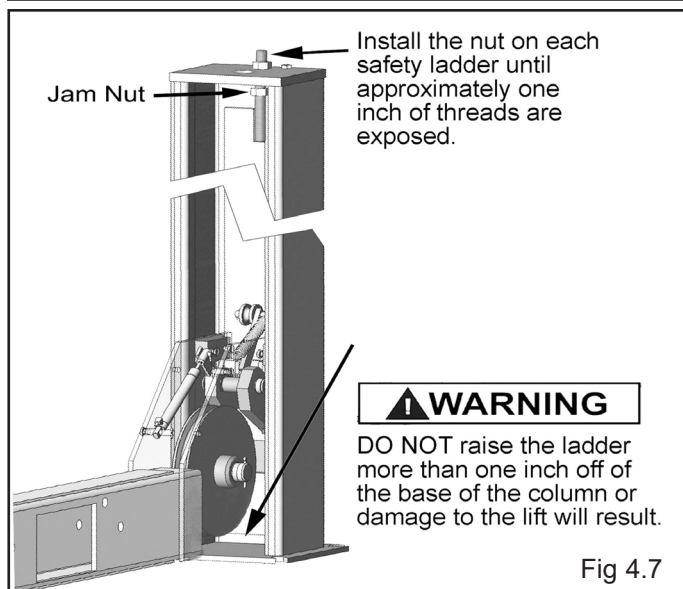


Fig 4.7

4.5 Raising the Crossbeam

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



DANGER

Be careful not to disturb the Columns and Cross beam as they may tip over causing personal injury or harm.

IMPORTANT NOTE

It is important that the SLACK SAFETY LOCK IS CLEARED. The Slack Safety Lock must never rest on the Safety Ladder.

2. Manually raise the Cross Beams until the Primary Safety Locks engage and rest on the lock position second down from the top of the Ladder or approximately 700mm off the ground. It is important that the SLACK SAFETY LOCK IS CLEARED. The Slack Safety Lock must never rest on the Safety Ladder. To prevent this, manually hold the Slack Safety in the disengaged position while lowering the crossbeams ends. (See Fig. 5.1)

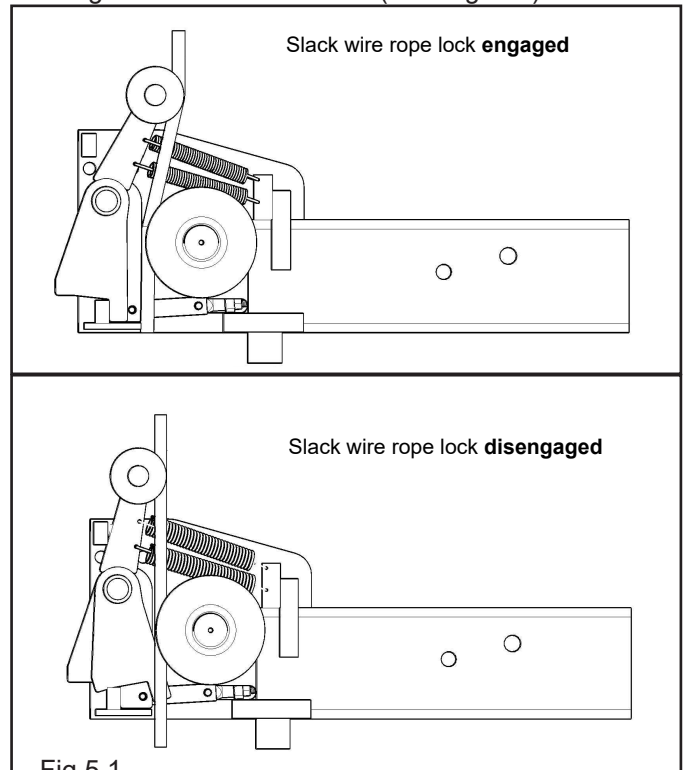


Fig 5.1

3. The Columns and Cross Beams will now be in position and spaced properly for the Runways. Be very careful not to disturb the Columns and Cross Beams at this time as they may tip over causing personal injury or harm. (See Fig. 5.2)

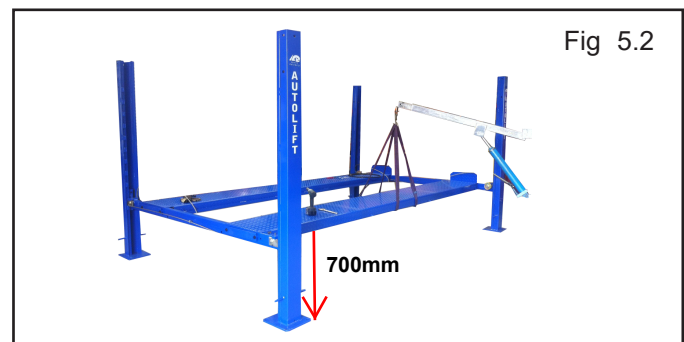
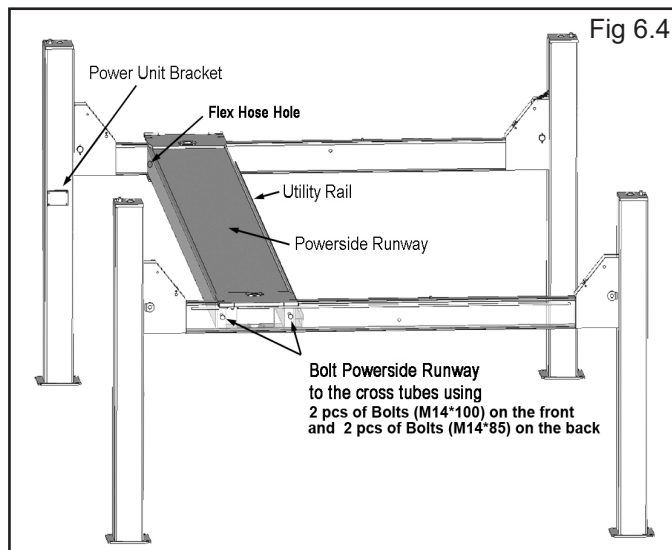
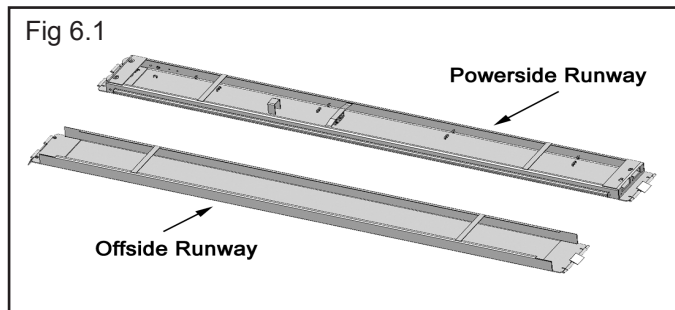


Fig 5.2

4.6. Powerside Runway Installation

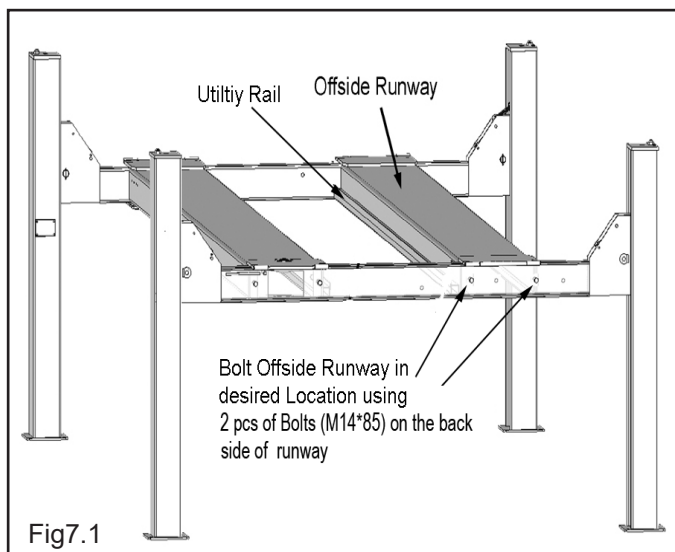
1. Locate the Powerside Runway easily identified by the Cylinder and Sheave roller mounting structures welded on the underside. The Powerside Runway will be positioned on the side of the hoist where the power unit is installed.
(See Fig. 6.1)



2. Position the Powerside Runway on top of the Cross Beams with the utility rail towards the center. The Flex Tube Holes located at the side of the Powerside Runway should be adjacent to the Power Unit Column. Align the holes in the Runway with the holes on the Cross Beams and bolt together the front stop plates using four M12 x 1.75 x 90 Hex Head Bolts and Washers. See notes on Final Assembly 4.11

4.7 Offside Runway Installation

1. Position the Offside Runway on top of the Cross Beams with the Utility Rail located inside. Determine the desired location of the Offside Runway. Align the holes in the Runway with the desired holes on the Cross Beams and bolt together the ramp brackets with Hex Head Bolts and Washers. See notes on Final Assembly 4.11



DANGER

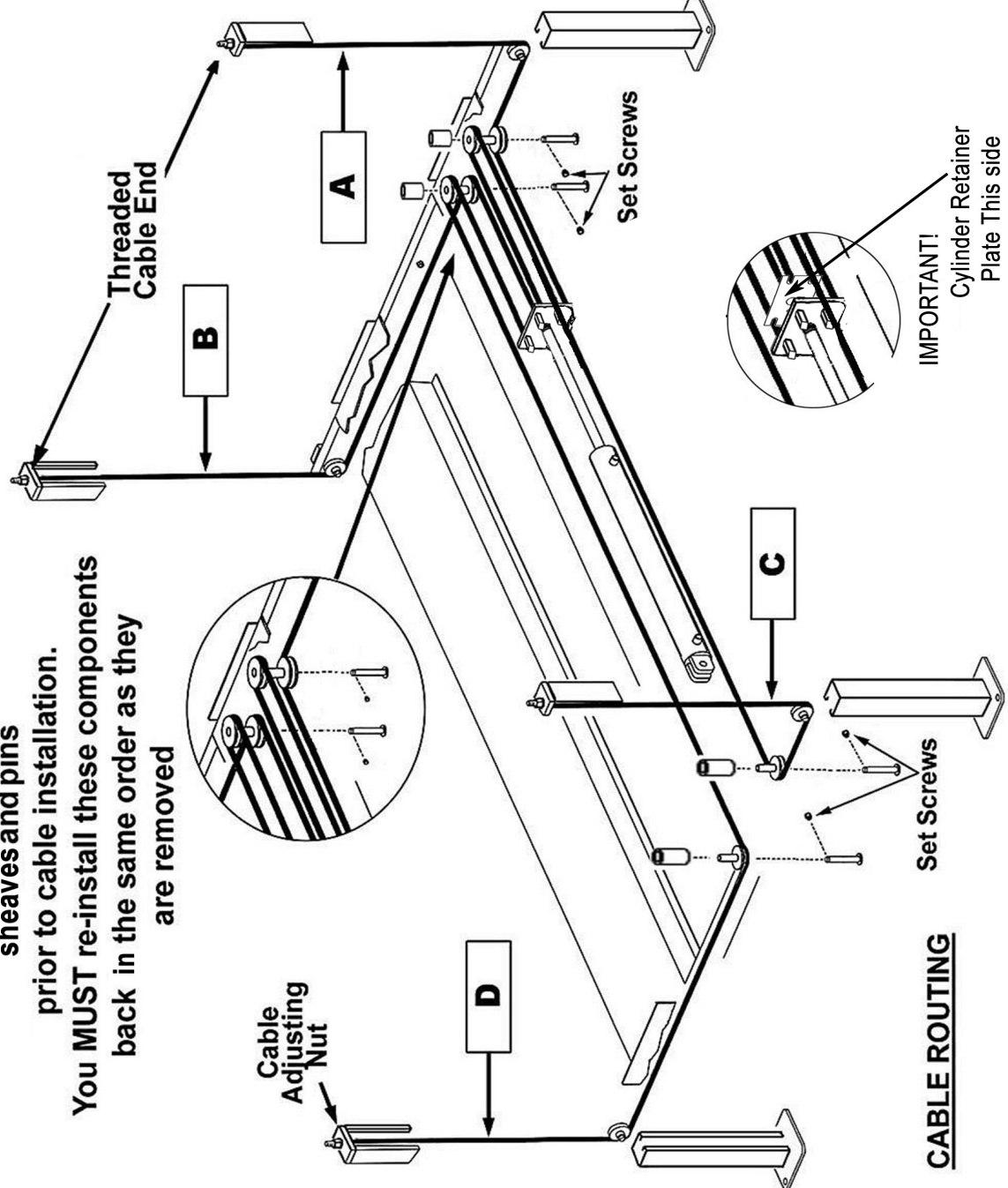
DO NOT PROCEED with Cable installation or go near the hoist work area unless visual confirmation is made of ALL Safety Locks. ALL locks MUST be engaged before proceeding. Failure to comply with these instructions may result in severe personal injury or death.

IMPORTANT

It will be necessary to remove sheaves and pins

prior to cable installation.

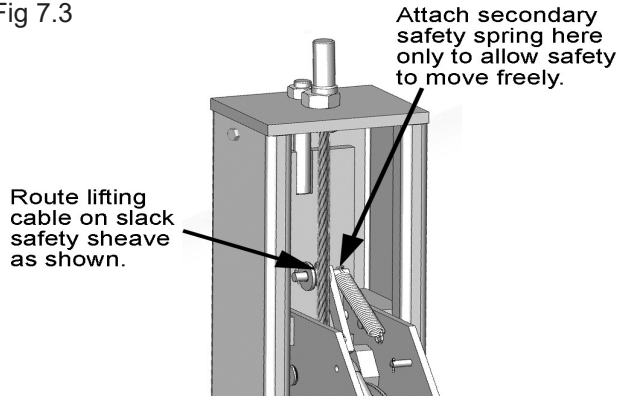
You **MUST** re-install these components back in the same order as they are removed



CAUTION!
Tighten shaft set screws securely after routing cables. Failure to do so may result in injury or damage to lift.

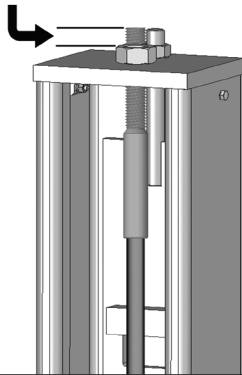
CABLE ROUTING

Fig 7.3



2. Tighten each Nut until there is at least 25mm of threads protruding through the top of the nut. The Cables will remain loose until start up and final Cable adjustments are made. (See Fig. 7.4)

25 mm Minimum

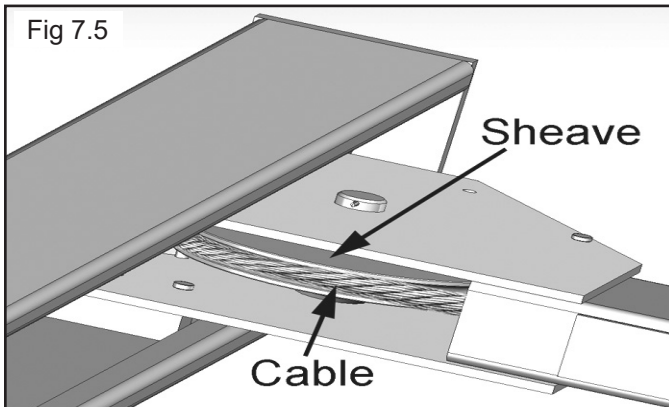


Install each Nut until **25mm** Minimum of threads are exposed.

Fig 8.4

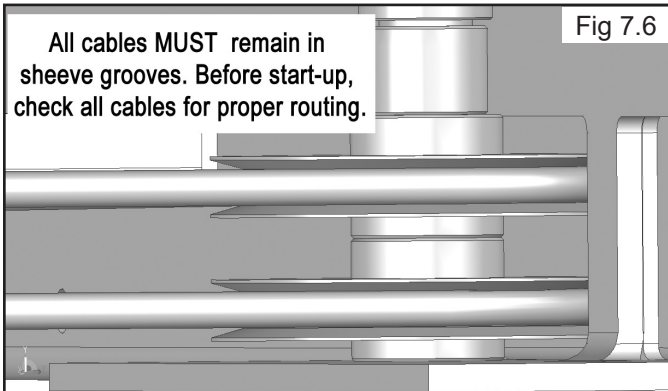
3. After routing the Cables double-check to make sure all are properly positioned and remain within the grooves of ALL Sheaves. (See Fig. 7.5 - 7.6)

Fig 7.5



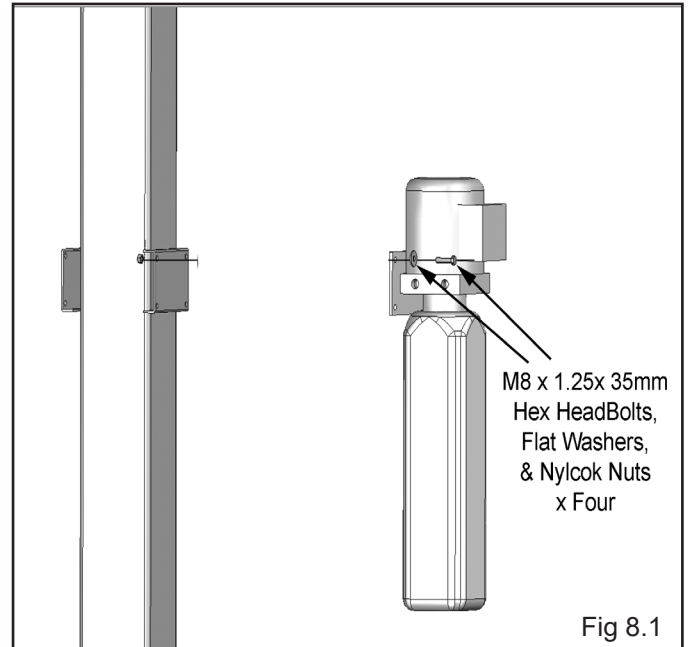
All cables **MUST** remain in sheave grooves. Before start-up, check all cables for proper routing.

Fig 7.6



4.8 Power Unit Installation & Electrical Connections

1. Mount the Power Unit to the Mounting Bracket using the M8 Hex Head Bolts and Nylock Nuts then fill the reservoir with 15 litres of 32 grade hydraulic oil. (See Fig. 8.1)



DANGER

DANGER

ALL WIRING MUST BE PERFORMED BY A LICENSED ELECTRICIAN.



DANGER



DANGER

DO NOT PERFORM ANY MAINTENANCE OR INSTALLATION OF ANY COMPONENTS WITHOUT FIRST ENSURING THAT ELECTRICAL POWER HAS BEEN DISCONNECTED AT THE SOURCE OR PANEL AND CANNOT BE RE-ENERGIZED UNTIL ALL MAINTENANCE AND/OR INSTALLATION PROCEDURES ARE COMPLETED.



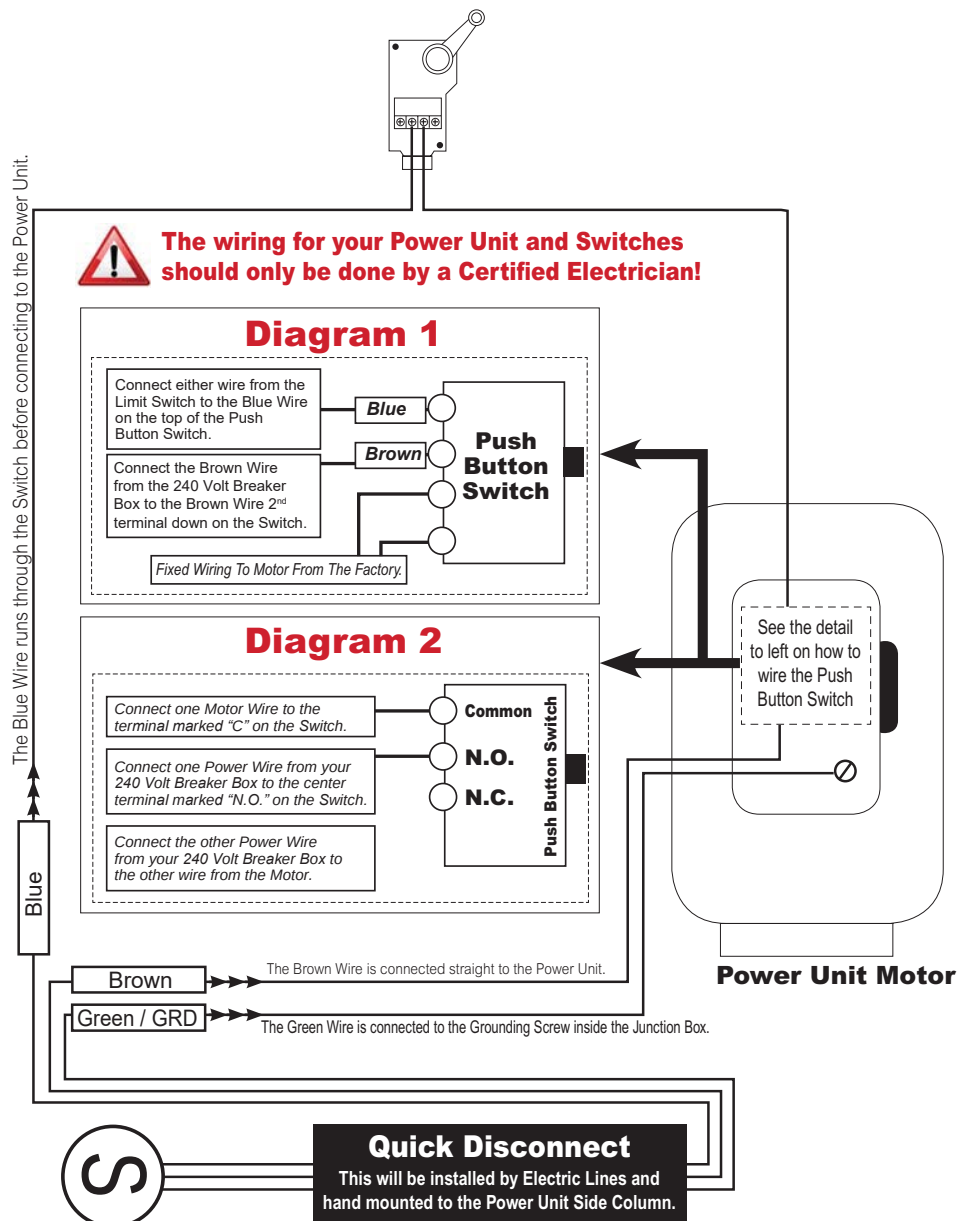
DANGER

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IMPORTANT POWER-UNIT INSTALLATION NOTES

- DO NOT run power unit with no oil. Damage to pump can occur.
- The power unit must be kept dry. Damage to power unit caused by water or other liquids such as detergents, acid etc., is not covered under warranty.
- Improper electrical hook-up can damage motor and will not be covered under warranty.



THIS IS YOUR 240 VOLT AC INCOMING POWER SUPPLY OFF OF A 20 AMP BREAKER.

4.9 Installing the Locking Device

1. Feed the front locking lever handle through the power post crossbeam and connect the joining rod to the threaded tube nuts and lock nuts.
2. Feed the lock lever through the rear crossbeam and connect to the joining rod and lock nuts.
3. Once the locking lever has been installed and all lock nuts have been tightened, then you can install the rod ends to the lever bracket. (See Fig. 9.1).

Note: Check all lock nuts are completely tight prior to operation.

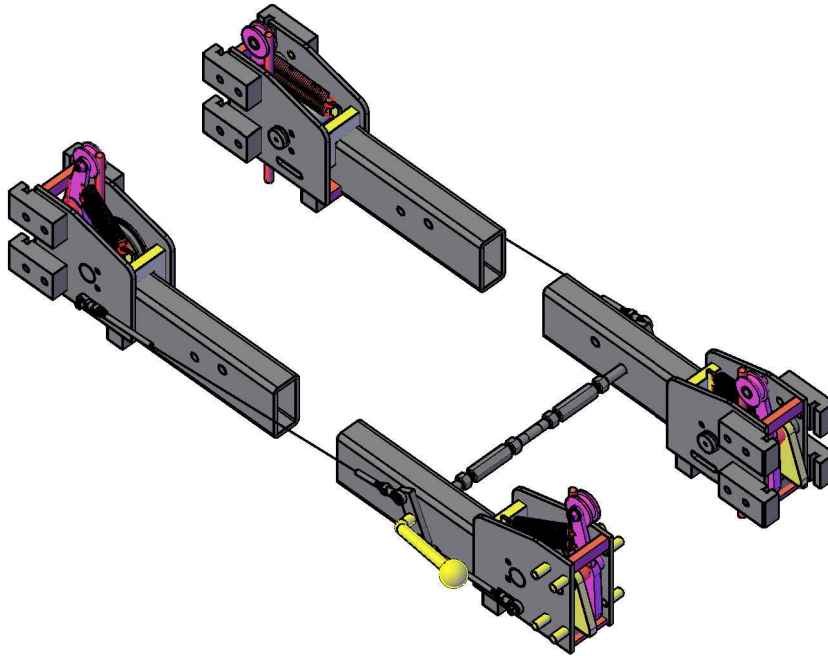


Fig. 9.1

4.10 Anchoring the Columns. *Optional for the AL-10000T. See notes in section 4.4 Foundation Dimensions.*

1. Using the BASE PLATE on each column as a guide, drill each anchor hole completely through the concrete using a rotary hammer drill and 20mm concrete bit.. (See Fig. 10.1)

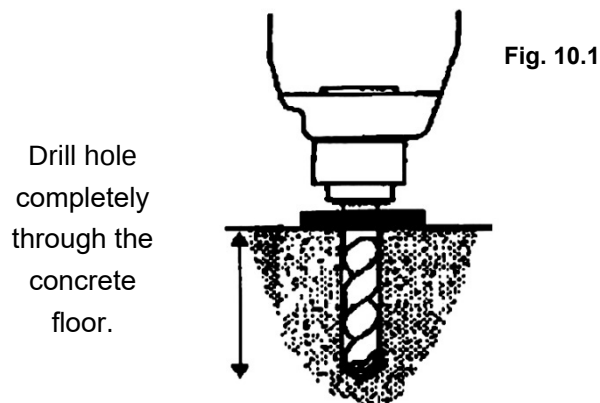
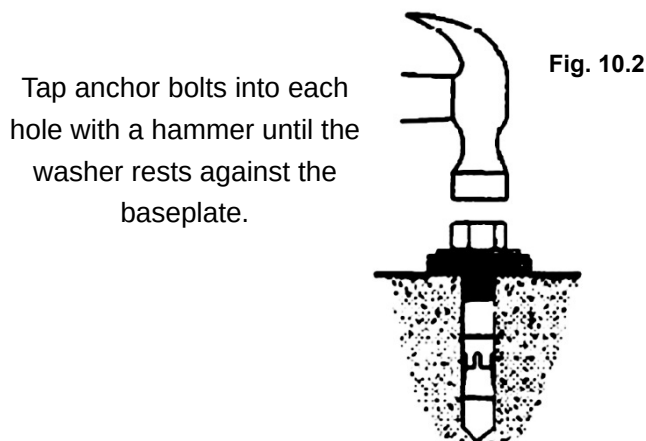
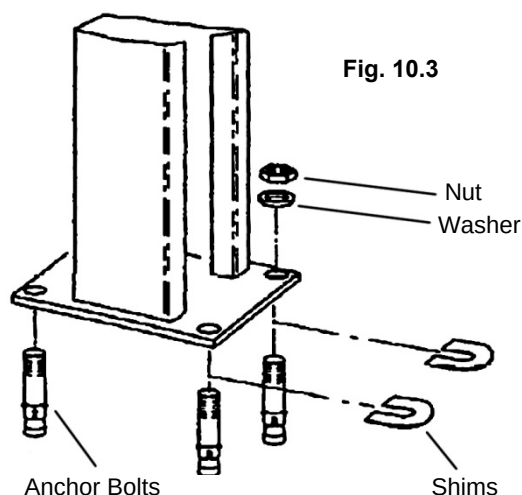


Fig. 10.1

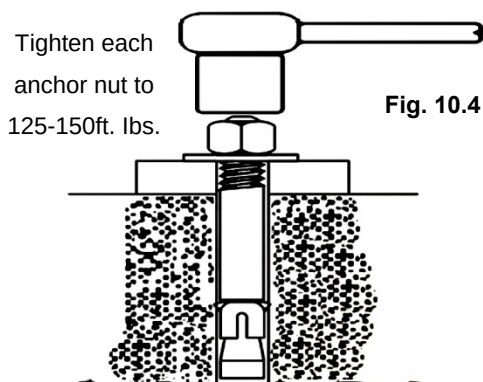
2. After drilling, REMOVE DUST thoroughly from each hole using compressed air and/or bristle brush. Make certain that the columns remain aligned with the chalk line.
3. Assemble the washers and nuts on the anchors then tap into each hole with a hammer until the washer rests against the base plate. Be sure that if shimming is required, enough THREADS ARE LEFT EXPOSED. (See Fig. 10.2)



4. 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. (See Fig. 10.3)

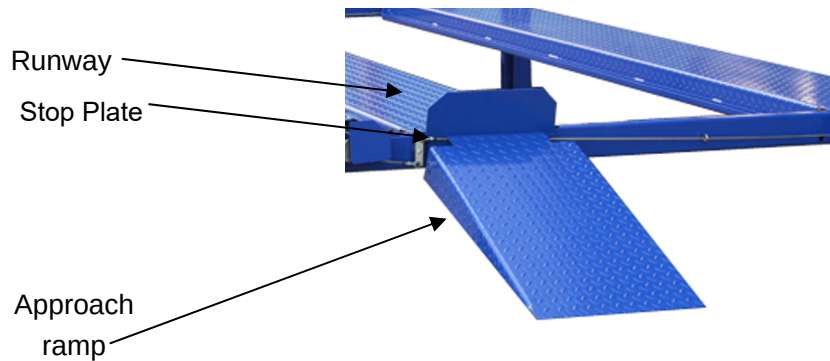


5. After any necessary shims are installed, tighten each anchor nut to 125-150 ft. lbs. **IMPORTANT** - If an anchor bolt does not hold when torqued to required amount, concrete must be replaced. Saw cut and remove 600mm x 600mm square area under each column base then repour with reinforced 3000 PSI concrete to a depth of six inches minimum, keying new concrete under existing floor. (See Fig. 10.4)



4.11 Final Assembly

1. Install the approach ramps on the entry side of the hoist.



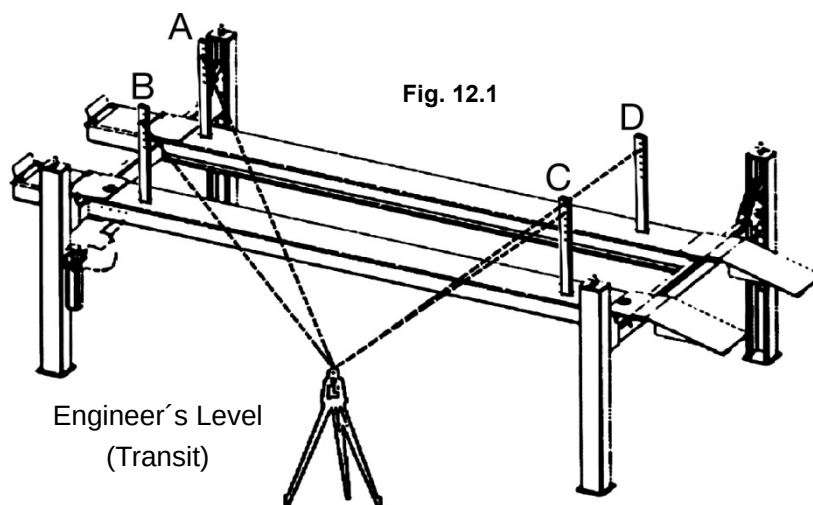
2. Install the front wheel stops at the forward side of the hoist using hex bolts, nuts and washers. Torque to 35-45 PSI.



4.12 Levelling / Synchronising

1. Using an engineer's automatic Level (transit), locate the Level, at a convenient location in the shop that allows an unobstructed view of all four corners of the runways.
2. Follow the Level manufacturer's instructions for proper setup of the Level.
Be sure it is ADJUSTED LEVEL in all directions.
3. Raise the hoist approximately 100mm. Then lower hoist until all locking latches are engaged in each column and the runways are in full down position on locks.
4. Place a Level target on the right/front corner of the runway.
5. Beginning with "A" position, sight the level to the target and mark the number or the graduation on the inch scale of the target that aligns to the cross hairs of the Level,
6. Next, move the target and place it at point "B" on the runway.
7. Rotate the Level and focus on the target scale.
8. Adjust the adjustment nut on the safety ladder bar at the top of the Column at "B" until the cross hair of the Level align to reference mark on the target scale.

9. Repeat steps locating the target assembly at points "C" and "D" and adjusting safety ladders at each corresponding column until the reference mark on the target scale is on the cross hair of the Level. The runways are now level at all four points. (See Fig. 12.1)



10. To complete the leveling procedures, TIGHTEN EACH SAFETY LADDER TOP NUT against the bottom of the Column Top Plate. Torque to 35-45 PSI.
11. Raise the hoist to full height. Listen and watch as the locking latches click in place. SYNCHRONISE BY ADJUSTING THE CABLES so that all four latches click at the same time. Make necessary adjustments to the cables allowing COMPENSATION FOR STRETCH.



Safety locks may not click in at exactly the same time when vehicles are being raised. They should be close. Be sure that all four corners have passed the SAME safety Ladder Bar slot before lowering hoist on the safety locks. NEVER lower hoist on different safety lock position or damage to the hoist may result.

4.13 Bleeding

1. Hoist must be fully lowered before changing or adding fluid.
2. Raise and lower hoist six 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 hoist to full height. It is only necessary to add fluid to allow full height raise.
3. To pressure test, run hoist to full rise and run motor for approximately 3-seconds after hoist stops. This will place pressure on the hydraulic system. Stop and check all fittings and hose connections. Tighten or reseal if required.

5. Operation

5.1 Preparation

- Position vehicle evenly in the center of each Runway.
- Set parking brake or use wheel chock to hold vehicle in position
- Before raising vehicle, be sure all personnel are clear of the hoist and surrounding area. Pay careful attention to overhead clearances.

5.2 Raising



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

1. Turn the main switch to the on position
Hoist is ready for operation.
2. Push and hold UP button on the power unit until hoist reaches desired height.
Hoist stops once button is released.

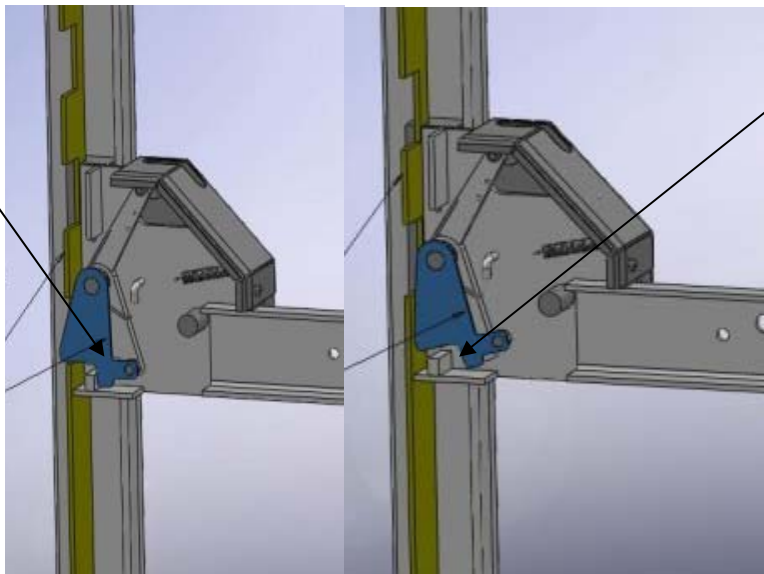
UP



5.3 Locking

After vehicle is raised to the desired height, **Press the lowering lever until the hoist rests on the nearest safety lock.** Do not allow cables to become slack. **ALWAYS INSURE SAFETY LOCKS ARE ENGAGED** before entering work area.

Safety locks engaged
ok to proceed



Safety locks not
engaged **remain clear**

5.4 Vehicle in Raised Position

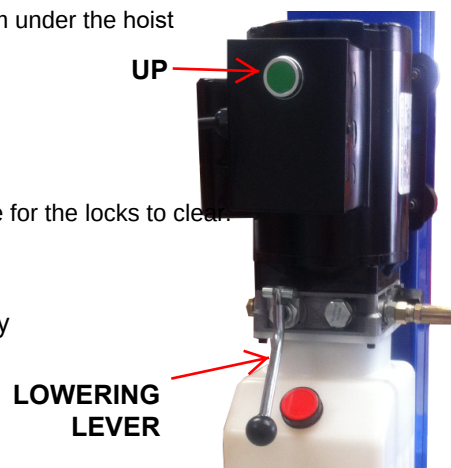
- Observe all accident prevention regulations.
- Do not allow unauthorised persons to stay under the raised vehicle.
- Avoid rocking of vehicle.
- Keep hoist free of tools, parts, etc.

5.5 Lowering



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

- 1 Before lowering vehicle, be sure all personnel are clear of the hoist and surrounding area. Pay careful attention to overhead clearances. Insure all tools and equipment have been cleared from under the hoist
- 2 Turn the main switch to the on position.
Hoist is ready for operation.
- 3 Raise the hoist off the safety locks by pressing the UP button on power unit.
Make sure you raise the hoist by at least 50mm to allow adequate clearance for the locks to clear.
- 4 Push and hold the lowering lever and the locking lever simultaneously until the hoist has descended completely.



When lowering the hoist **PAY CAREFUL ATTENTION** that all personnel and objects are kept clear.

ALWAYS keep a visual line of site on the hoist **AT ALL TIMES**. **ALWAYS** make sure that all **FOUR LOCKS** are disengaged.

If one of the locks inadvertently locks on descent the hoist and/or vehicle may disrupt causing personal injury or death.

5.6 Protection against unauthorised Usage

We recommend the main isolator switch be key lockable.

SAFETY OPERATING PROCEDURES

Vehicle Hoist

DO NOT use this machine unless you have been instructed in its safe use and operation and have been given permission

PERSONAL PROTECTIVE EQUIPMENT



Safety glasses must be worn at all times in work areas.



Long and loose hair must be contained.



Do not stand on hoist whilst hoist is in operation.



Sturdy footwear must be worn at all times in work areas.



Close fitting/protective clothing must be worn.



Rings and jewellery must not be worn.

PRE-OPERATIONAL SAFETY CHECKS

- ✓ Locate and ensure you are familiar with all machine operations and controls.
- ✓ Ensure all guards are fitted, secure and functional. Do not operate if guards are missing or faulty.
- ✓ Ensure the vehicle hoist has operating and maintenance instructions permanently located and clearly visible.
- ✓ Check the capacity of the hoist compared to the weight of the vehicle. If vehicle is too heavy, do not proceed.
- ✓ Ensure the area is clean and clear of grease, oil.
- ✓ Check workspaces and walkways to ensure no slip/trip hazards are present.
- ✓ Check that all safety devices are in good condition.
- ✓ Ensure support arms are capable of being locked in position.
- ✓ Ensure rubber pads are in good condition on all load points.

OPERATIONAL SAFETY CHECKS

- ✓ Centre the vehicle on the hoist, ensuring the weight is evenly distributed to the front and rear.
- ✓ Identify the correct jacking points and place the lifting pads under the vehicle at the front and rear on the jacking points, ensuring contact.
- ✓ Only one person shall operate the hoist at a time.
- ✓ The hoist must not be operated unless it has a current certificate of inspection.
- ✓ Ensure the area is clear of people and equipment before operating.
- ✓ Check vehicle stability by looking at the jacking points.
- ✓ Engage manual lock.

ENDING OPERATIONS AND CLEANING UP

- ✓ Lower the vehicle hoist and switch off machine when work completed.
- ✓ Leave the equipment and work area in a safe, clean and tidy state.

POTENTIAL HAZARDS AND INJURIES

- ⓘ Falling objects.
- ⓘ Trapping hazards.
- ⓘ Crushing hazards.
- ⓘ Hair/clothing getting caught in moving machine parts.

DON'T

- ✗ Do not use faulty equipment. Immediately report suspect equipment.
- ✗ Never leave the machine running unattended.

This SWP does not necessarily cover all possible hazards associated with this equipment and should be used in conjunction with other references. It is designed as a guide to be used to compliment training and as a reminder to users prior to equipment use.

5.8 Operating Instructions

3500kg

4 Post Parking Hoist

OPERATING INSTRUCTIONS

The hoist should only be operated by personnel that have been thoroughly trained in operation and maintenance of the hoist.

1. Park the vehicle evenly on the platforms, turn off the engine and apply the park brake.
2. Ensure all wheel chocks (stops) are in position prior to raising the hoist.
3. Make sure that all personnel are clear and there are no obstructions around the hoist.

TO RAISE THE HOIST

1. Turn on the power to the hoist.
2. Press the “UP” button on the control box until the desired working height is obtained checking for any obstructions.
3. Once the hoist has reached the desired working height, lower the hoist onto the safety locks by means of pushing the lowering lever on the hydraulic power unit.

Note: Check for correct engagement of each lock.

TO LOWER THE HOIST

1. Raise the hoist 50mm or until the locks are clear.
2. Hold down the locking lever and push on the lowering valve at the same time.
3. Check for any obstructions under the hoist when lowering and all personnel are clear of the area.
4. When the hoist has been lowered to the ground, remove the wheel chocks.
5. Switch off power to the hoist.

Please note: this hoist is supplied with movable castor wheels and is only designed to transport the hoist without a vehicle. Do not attempt to maneuver the hoist with a vehicle on it. Doing so may cause injury to personnel.

MODEL: AutoLift AL-10000T	SERIAL NO.:	APPROVAL No. WAH21804
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For service PH: 08 9279 1663

6. Maintenance



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



**The maintenance intervals indicated below apply to average workshop use.
The hoist should be inspected more frequently for high use application.**

6.1 Maintenance Schedule

Establish a periodic preventive maintenance procedure to ensure trouble-free operation and long service life.

DAILY:

- Raise and lower the hoist (with no vehicle) at the beginning of each shift to verify the runways are level and that the hoist is operating properly.
- Check all hydraulic fittings and lines for damage and leaks. Check electrical wiring for damage. Check all moving parts for uneven or excessive wear. Repair or replace all damaged, worn, or broken components immediately.
- Clean all debris from the base frame area
- Remove oil/grease on runways and working area.

WEEKLY:

- Check hydraulic fluid in console reservoir and top up if required.
- Check safety lock adjustment.

MONTHLY:

- Check that all anchor bolts are torqued to 75 ft-lbs (102Nm).
- Clean and lubricate moving parts (see diagram #4 for grease fitting locations)

EVERY YEAR:

- Have a certified hoist technician inspect and certify all aspects of the hoist.

EVERY TWO YEARS:

- Change and replace hydraulic oil in cylinders and console reservoir.

Lubrication Specifications:

- where grease is required use a multi-purpose lithium grease
- where lubricating oil is required use a SAE 30 oil
- where hydraulic oil is required use ISO 32 hydraulic oil (10W non detergent)

6.2 Maintenance By the Operator

Hydraulic System

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



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 hoist fully lowered, the fluid level must reach above the min level.

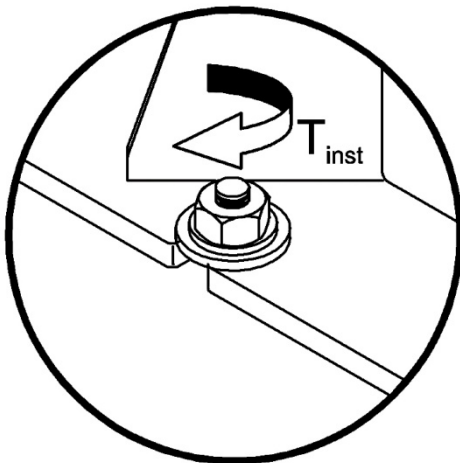


3. Greasing Points
Slide Tracks



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

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



HOIST STABILITY

- 1 Every six months check the nuts of all anchor bolts for correct installation torque T
- 2 Retighten them as required.

	Installation Torque T
AutoLift AL-10000T	80 Nm

6.3 Troubleshooting Guide

The following are suggestions to consider if you have problems with the hoist. Please call a qualified hoist technician and/or a qualified electrician for further clarification and information.

HOIST WILL NOT RAISE

POSSIBLE CAUSE	REMEDY	INSTRUCTION
1. Air in oil, (1,2,8,13)	1. Check for proper oil level	The oil level should be up to the bleed screw in the
2. Cylinder binding, (9)	2. Bleed cylinders	See Installation Manual
3. Cylinder leaks internally, (9)	3. Flush- Release valve to get rid of possible contamination.	Hold release handle down and start unit allowing it to run for 15 seconds.
4. Motor run backward under pressure, (11)	4. Dirty oil	Replace oil with clean Dexron ATF
5. Lowering valve leaks, (3,4,6,10,11)	5. Tighten all fasteners	Tighten fasteners to recommended torques.
6. Motor runs backwards, (7,14,11)	6. Check for free movement of release	If handle does not move freely, replace bracket or
7. Pump damaged, (10,11)	7. Check motor is wired correctly.	Compare wiring of motor to electrical diagram on drawing.
8. Pump won't prime, (1,8,13,14,3,12,10,11)	8. Oil seal damaged or cocked	Replace oil seal around pump shaft.
9. Relief valve leaks, (10,11)	9. See Installation Manual	Consult Hoist Manufacturer
10. Voltage to motor incorrect, (7,14,11)	10. Replace with new part	Replace with new part
	11. Return unit for repair	Return unit for repair
	12. Check pump-mounting bolts	Bolts should be 15 to 18 ft. lbs.
	13. Inlet screen clogged	Clean inlet screen or replace
	14. Check wall outlet voltages and wiring	Make sure unit and wall outlet are wired properly.

MOTOR WILL NOT RUN

POSSIBLE CAUSE	REMEDY	INSTRUCTION
1. Fuse blown, (5,2,1,3,4) 2. Limit switch burned out, (1,2,3,4) 3. Microswitch burned out, (1,2,3,4) 4. Motor burned out, (1,2,3,4,6) 5. Voltage to motor incorrect, (2,1,8)	1. Check for correct voltage	Compare supply voltage with voltage on motor name plate. Check that the wire is sized correctly. Requires 18 Amp Circuit Breaker .
	2. Check motor is wired correctly	Compare wiring of motor to electrical diagram on drawing.
	3. Don't use extension cords	According to AS/NZS : “ The size of the conductors...should be such that the voltage drop would not exceed 3% to the farthest outlet for power...” Do not run motor at 115 VAC – damage to the motor will occur.
	4. Replace with new part	Replace with new part
	5. Reset circuit breaker/fuse	Reset circuit breaker/fuse
	6. Return unit for repair	Return unit for repair
	7. See Installation Manual	See Installation Manual
	8. Check wall outlet voltage and wiring	Make sure unit and wall outlet is wired properly. Motor must run at 240V single phase.

HOIST WILL NOT STAY UP

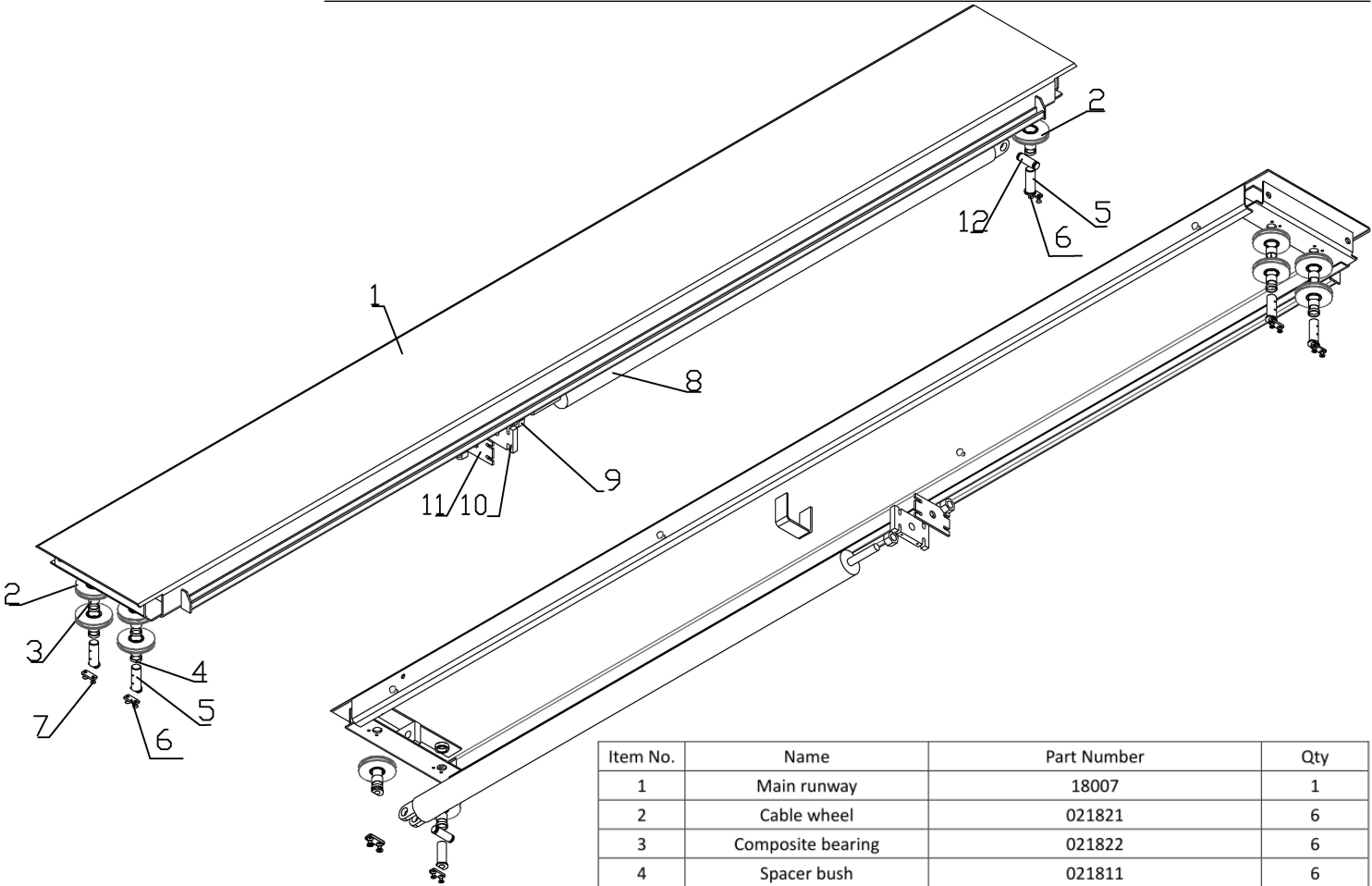
POSSIBLE CAUSE	REMEDY	INSTRUCTION
1. Air in oil, (1,2,3)	1. Check oil level	The oil level should be up to bleed screw with hoist down.
2. Check valve leaks, (6)	2. Oil seal damaged and cocked	Replaced oil seal around pump shaft.
3. Cylinders leak internally, (7)	3. Bleed cylinder	Refer to Installation Manual
4. Lowering valve leaks, (4,5,1,7,6)	4. Flush release valve	Hold release handle down and start unit allowing it to run for 15 seconds.
5. Leaking fittings, (8)	5. Replace with new valve	Replace with new valve
	6. Return unit for repair	Return unit for repair
	7. See Installation Manual	Consult Hoist Manufacturer
	8. Check complete hydraulic system for leaks	

HOIST WILL NOT RAISE

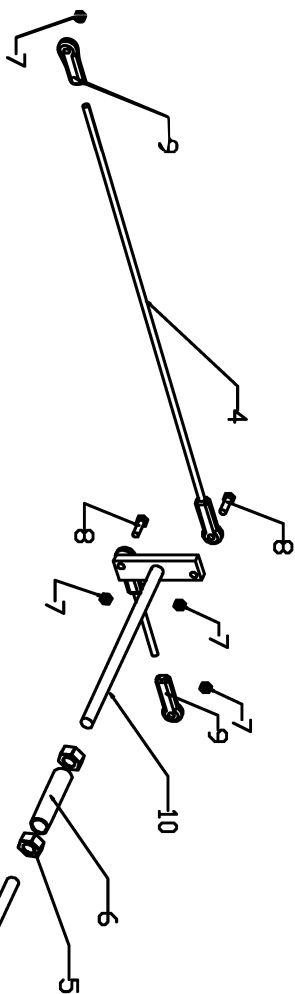
POSSIBLE CAUSE	REMEDY	INSTRUCTION
1. Air in oil, (1,2,3,4)	1. Check oil level	The oil level should be up to the bleed screw in the reservoir with the hoist all the way down.
2. Cylinder binding, (5)	2. Check/Tighten inlet tubes	Replace inlet hose assembly.
3. Cylinder leaks internally, (5)	3. Oil seal damaged or cocked	Replace oil seal and install
4. Hoist overloaded, (6,5)	4. Bleed cylinders	See Installation Manual
5. Lowering valve leaks, (7,8,1,5,9)	5. See Installation Manual	Consult Hoist Manufacturer
6. Motor runs backwards, (10,12,9)	6. Check vehicle weight	Compare weight of vehicle to weight limit of the hoist.
7. Pump damaged, (5,9)	7. Flush release valve	Hold release handle down and start unit allowing it to run for 15 seconds.
8. Pump won't prime, (1,2,3,4,5,11,9)	8. Replace with new part	Replace with new part
9. Relief valve leaks, (8,5,9)	9. Return unit for repair	Return unit for repair
10. Voltage to motor incorrect, (10,12,5)	10. Check motor is wired correctly	Compare wiring of motor to electrical diagram on unit drawing
	11. Inlet screen clogged	Clean inlet screen or replace.
	12. Check wall outlet voltage and wiring	Make sure unit and wall outlet is wired properly.

7. Explosion Diagrams and Parts List

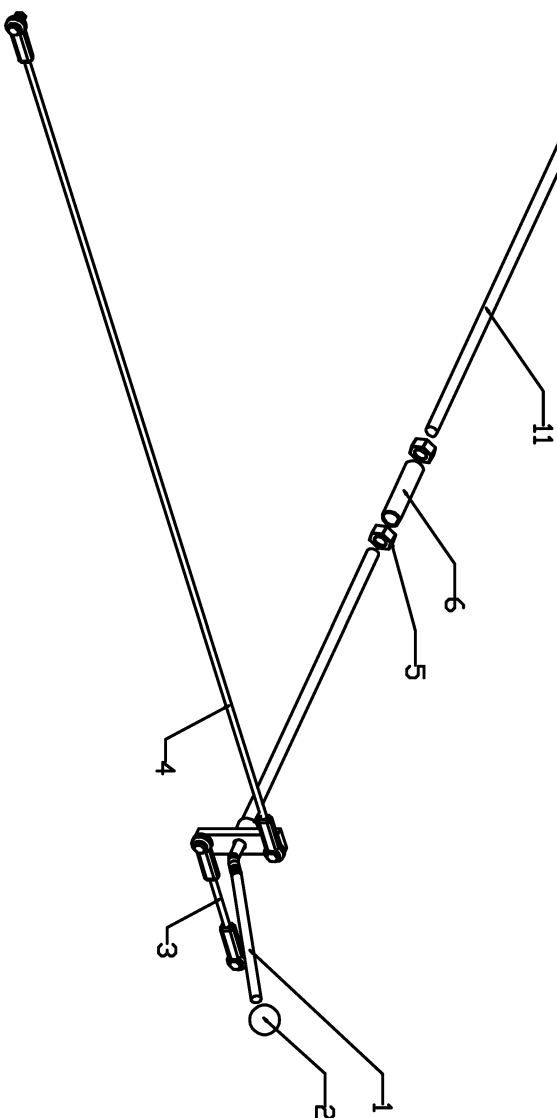
7.1 Explosion Diagrams

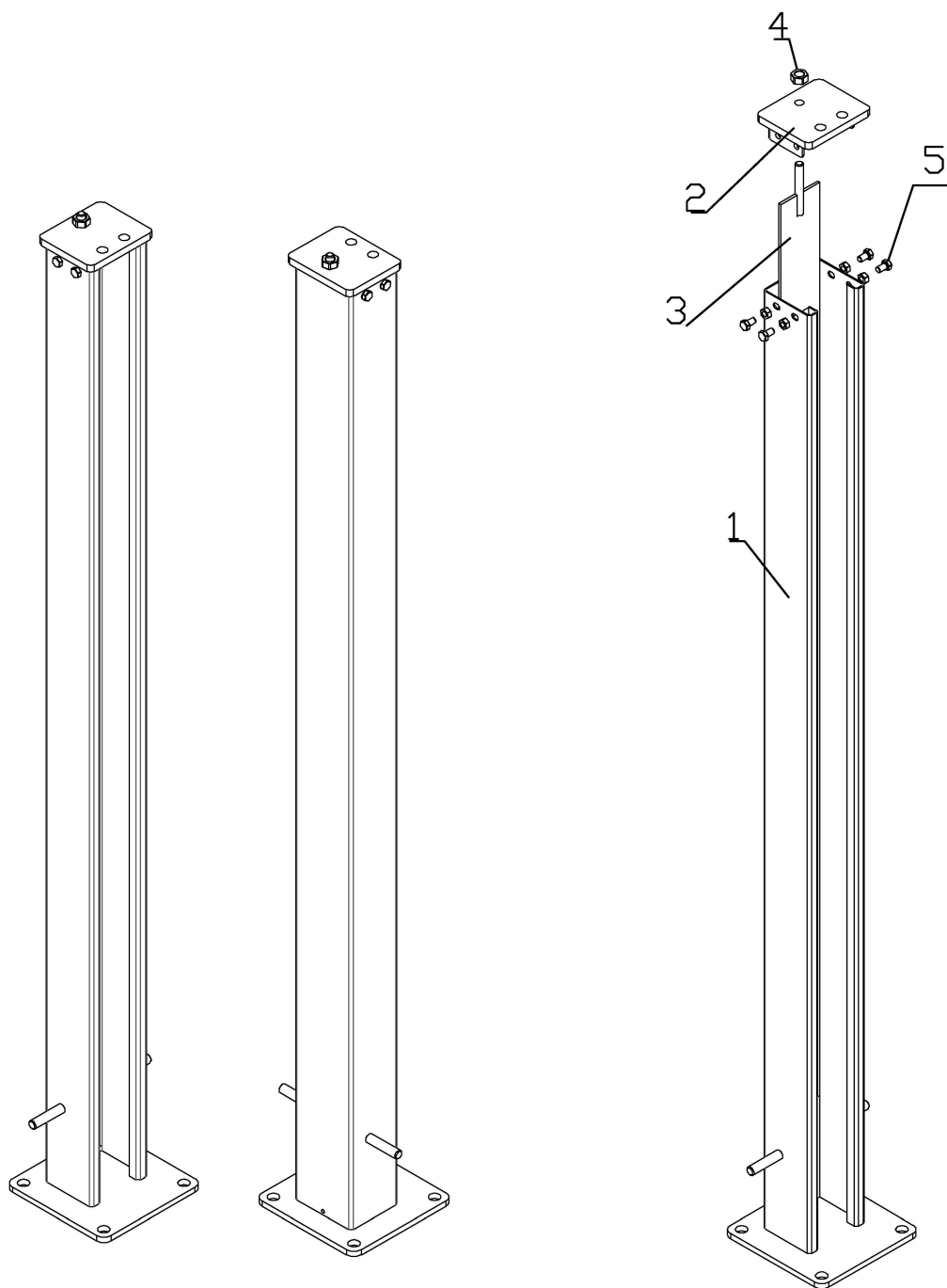


Item No.	Name	Part Number	Qty
1	Main runway	18007	1
2	Cable wheel	021821	6
3	Composite bearing	021822	6
4	Spacer bush	021811	6
5	Wheel shaft pin	01Y1805-1	4
6	Fixing board	01B1842	4
7	Bolt(M8*15)	031091	8
8	Cylinder	021813	1
9	Nut(M27)	031601	2
10	Stop plate 1	01B1841	1
11	Stop plate 2	021812	1
12	Cylinder fixing shaft pin	01Y1804	1



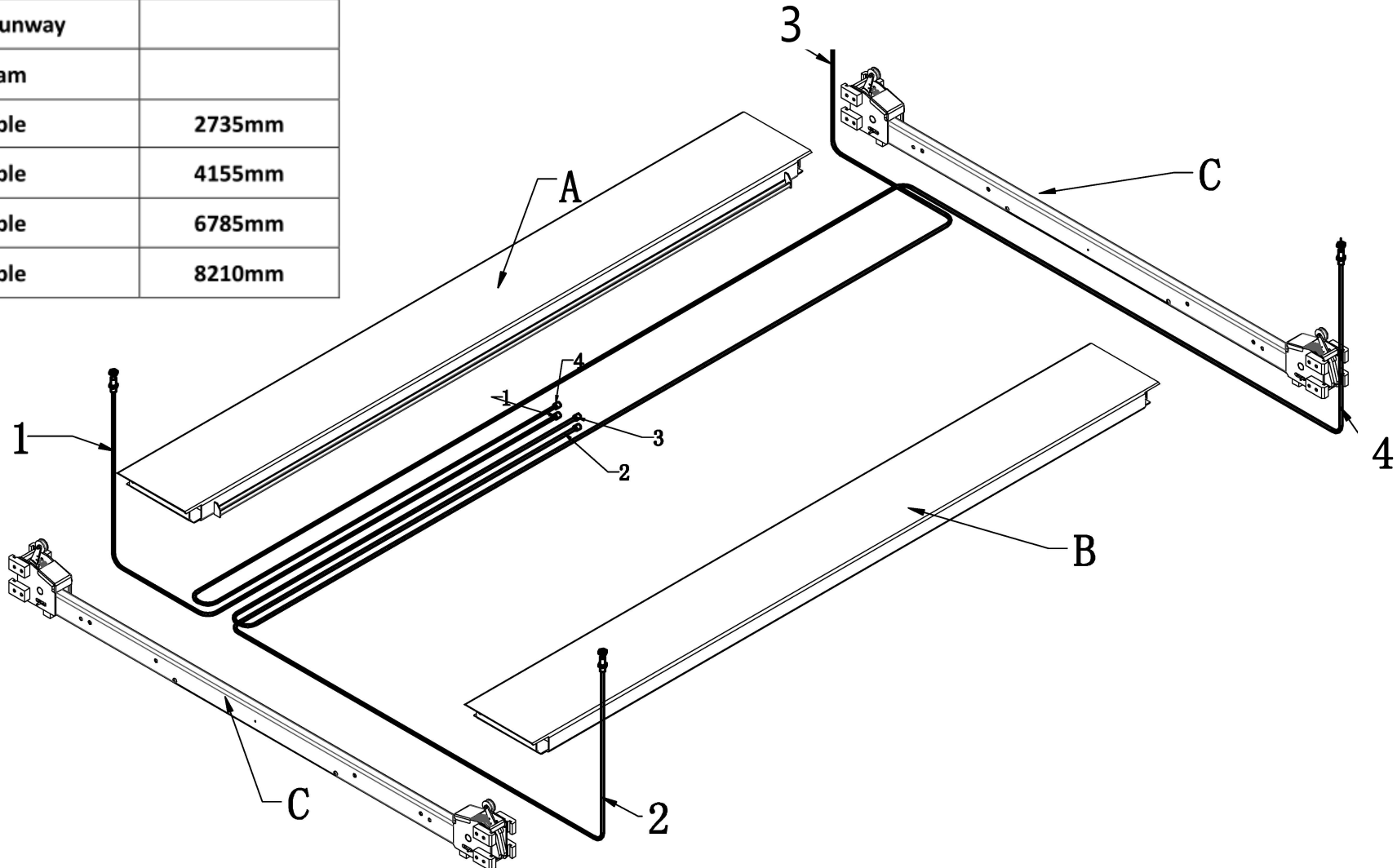
Item No.	Name	Part Number	Qty
1	Handle	50019	1
2	Handle ball	021008-1	1
3	Short locking rod	025039-2	2
4	Long locking rod	025039-1	2
5	Nut (M12)	031204	4
6	Bush	025036	2
7	Nut (M6)	031064	8
8	Bolt(M6*30)	031068	4
9	Joint bearing(M6)	025055	8
10	Locking connection rod	50018	1
11	Locking connection rod(Middle)	025032-3	1



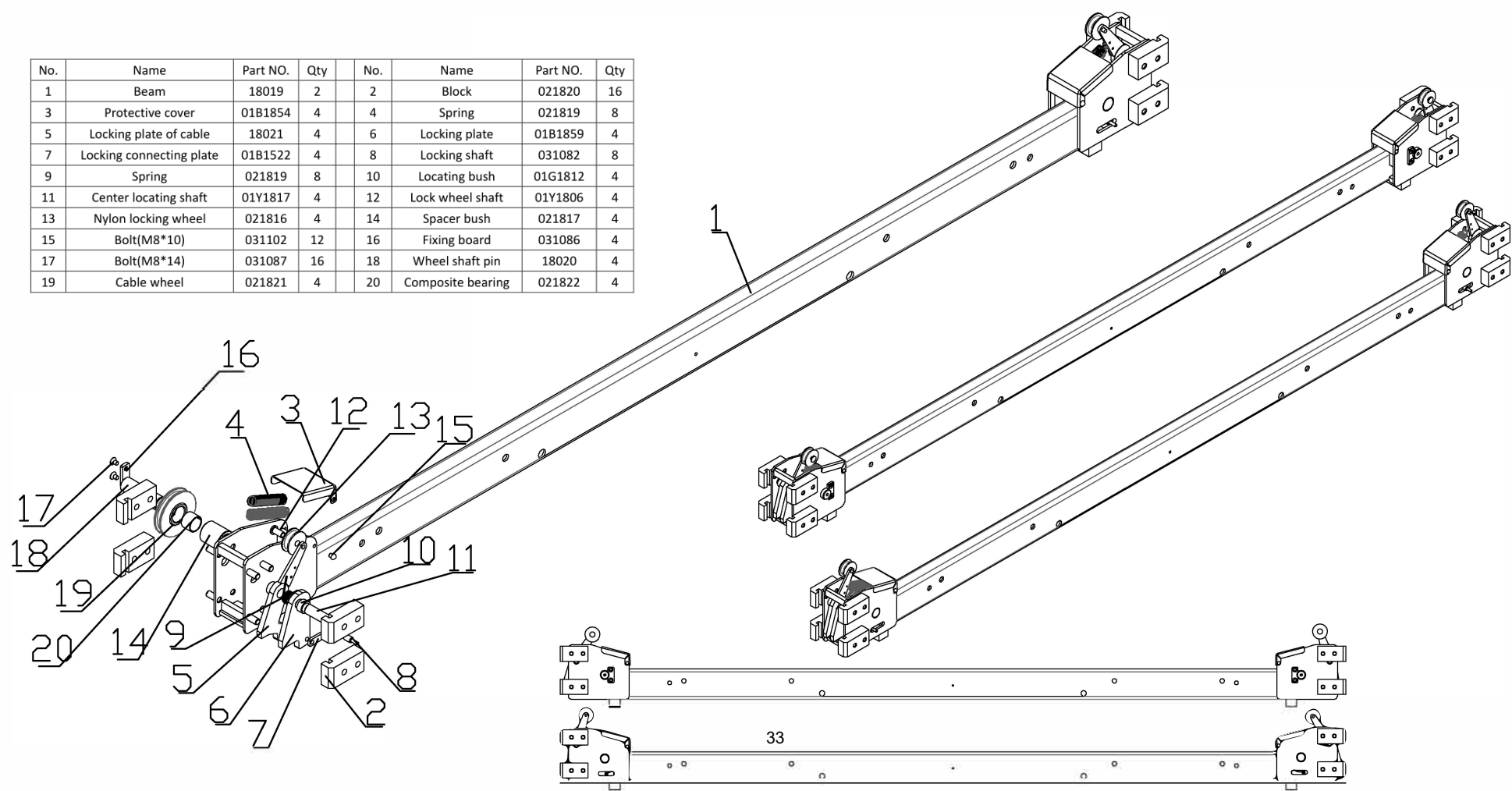


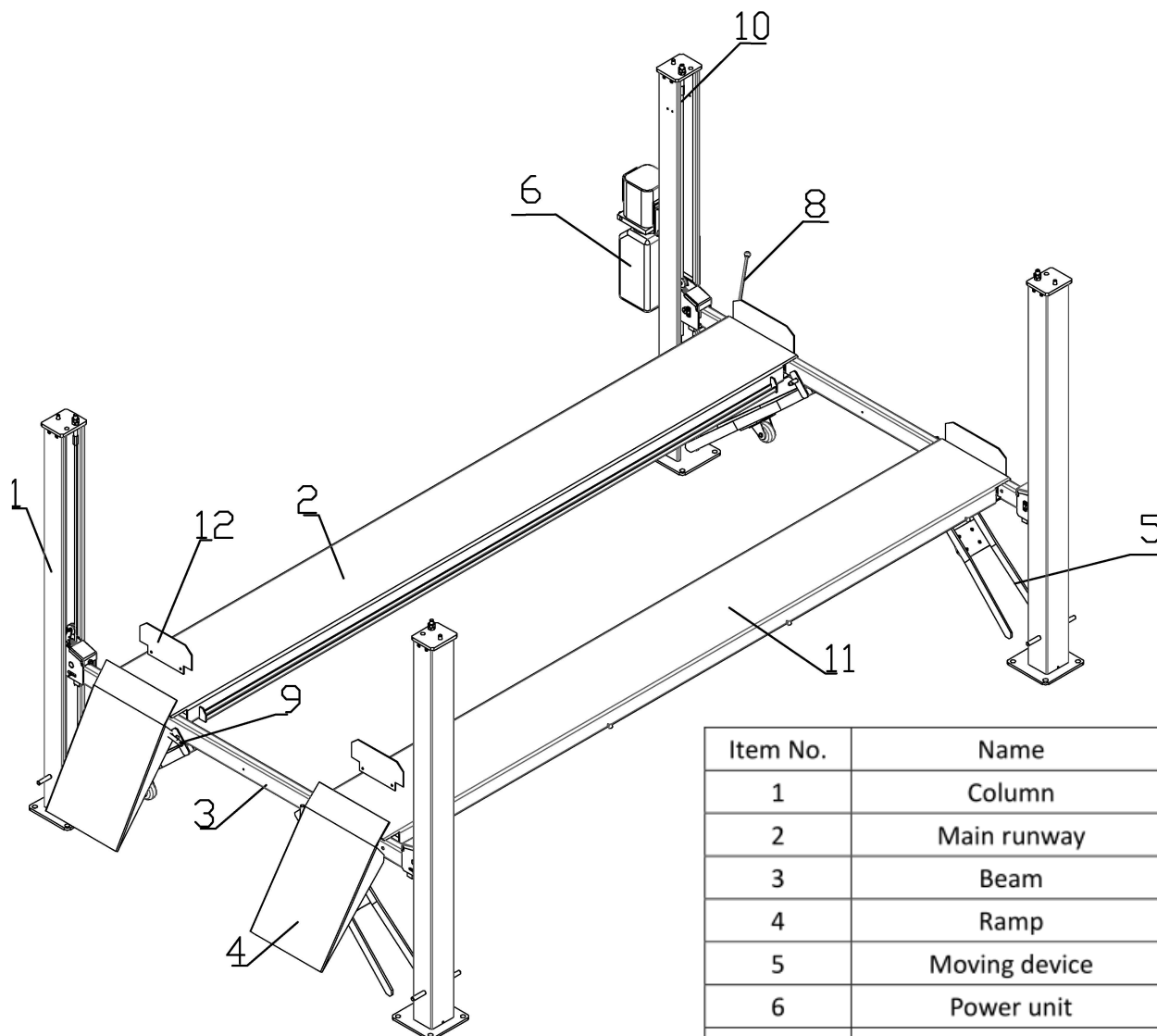
Item No.	Name	Part Number	Qty
1	Column	18001	4
2	Column cover	18003	4
3	Locking bar	18002	4
4	Nut(M16)	031404	1
5	Bolt(M12*30)	031201	1

No.	Name	Length
A	Main runway	
B	Slave runway	
C	Beam	
1	Cable	2735mm
2	Cable	4155mm
3	Cable	6785mm
4	Cable	8210mm



No.	Name	Part NO.	Qty	No.	Name	Part NO.	Qty
1	Beam	18019	2	2	Block	021820	16
3	Protective cover	01B1854	4	4	Spring	021819	8
5	Locking plate of cable	18021	4	6	Locking plate	01B1859	4
7	Locking connecting plate	01B1522	4	8	Locking shaft	031082	8
9	Spring	021819	8	10	Locating bush	01G1812	4
11	Center locating shaft	01Y1817	4	12	Lock wheel shaft	01Y1806	4
13	Nylon locking wheel	021816	4	14	Spacer bush	021817	4
15	Bolt(M8*10)	031102	12	16	Fixing board	031086	4
17	Bolt(M8*14)	031087	16	18	Wheel shaft pin	18020	4
19	Cable wheel	021821	4	20	Composite bearing	021822	4





Item No.	Name	Part Number	Qty
1	Column	18000-1	4
2	Main runway	18000-2	1
3	Beam	18000-4	2
4	Ramp	18017	2
5	Moving device	031301	4
6	Power unit	031001	1
8	Locking handle	031304	1
9	Guiding plate shaft	01Y1803	4
10	Balance cable	18018	4
11	Slave runway	18000-3	1
12	Rear stop plate	01B5026	2

3500_{kg}

4 Post Parking Hoist

OPERATING INSTRUCTIONS

The hoist should only be operated by personnel that have been thoroughly trained in operation and maintenance of the hoist.

1. Park the vehicle evenly on the platforms, turn off the engine and apply the park brake.
2. Ensure all wheel chocks (stops) are in position prior to raising the hoist.
3. Make sure that all personnel are clear and there are no obstructions around the hoist.

TO RAISE THE HOIST

1. Turn on the power to the hoist.
2. Press the "UP" button on the control box until the desired working height is obtained checking for any obstructions.
3. Once the hoist has reached the desired working height, lower the hoist onto the safety locks by means of pushing the lowering lever on the hydraulic power unit.

Note: Check for correct engagement of each lock.

TO LOWER THE HOIST

1. Raise the hoist 50mm or until the locks are clear.
2. Hold down the locking lever and push on the lowering valve at the same time.
3. Check for any obstructions under the hoist when lowering and all personnel are clear of the area.
4. When the hoist has been lowered to the ground, remove the wheel chocks.
5. Switch off power to the hoist.

Please note: this hoist is supplied with movable castor wheels and is only designed to transport the hoist without a vehicle. Do not attempt to maneuver the hoist with a vehicle on it. Doing so may cause injury to personnel.

MODEL: AutoLift AL-10000T	SERIAL NO.:	APPROVAL No. WAH21804
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www.aag.net.au

For service PH: 08 9279 1663

8. Warranty



Advance AutoQuip

2 McDonald Crescent | Bassendean WA 6054

P. 08 9279 1663 | F. 08 9279 1667

W. www.aaq.net.au | E. sales@aaq.net.au

ADVANCE AUTOQUIP WARRANTY

GENERAL WARRANTY INFORMATION:

ADVANCE AUTOQUIP'S OBLIGATION UNDER THIS WARRANTY IS LIMITED TO REPAIRING OR REPLACING ANY PART OR PARTS RETURNED TO THIS FACTORY, TRANSPORTATION CHARGES PREPAID, WHICH PROVE UPON INSPECTION TO BE DEFECTIVE AND WHICH HAVE NOT BEEN MISUSED. DAMAGE OR FAILURE TO ANY PART DUE TO FREIGHT DAMAGE OR FAULTY MAINTENANCE IS NOT COVERED UNDER THIS WARRANTY. ADVANCE AUTOQUIP RESERVES THE RIGHT TO DECLINE RESPONSIBILITY WHEN REPAIRS HAVE BEEN MADE OR ATTEMPTED BY OTHERS. THIS WARRANTY DOES NOT COVER DOWNTIME EXPENSES INCURRED WHEN UNIT IS IN REPAIR. THE MODEL NAME AND SERIAL NUMBER OF THE EQUIPMENT MUST BE PROVIDED WITH ALL WARRANTY CLAIMS. THIS WARRANTY STATEMENT CONTAINS THE ENTIRE AGREEMENT BETWEEN ADVANCE AUTOQUIP AND THE PURCHASER UNLESS OTHERWISE SPECIFICALLY EXPRESSED IN WRITING. THIS NON-TRANSFERABLE WARRANTY APPLIES TO THE ORIGINAL PURCHASER ONLY. THIS WARRANTY IS APPLICABLE TO UNITS LOCATED ONLY IN AUSTRALIA. CONTACT ADVANCE AUTOQUIP FOR SPECIFIC WARRANTY PROVISIONS FOR UNITS LOCATED OUTSIDE OF THESE COUNTRIES.

STRUCTURAL COMPONENTS:

ALL STRUCTURAL AND MECHANICAL COMPONENTS OF THIS UNIT ARE GUARANTEED FOR A PERIOD OF FIVE YEARS, FROM THE DATE OF INVOICE, AGAINST DEFECTS IN WORKMANSHIP AND/OR MATERIALS WHEN HOIST IS INSTALLED AND USED ACCORDING TO RECOMMENDATIONS.

POWER UNIT:

POWER UNIT COMPONENTS (PUMP AND RESERVOIR) ARE GUARANTEED A PERIOD OF TWO YEARS, FROM THE DATE OF INVOICE, AGAINST DEFECTS IN WORKMANSHIP AND/OR MATERIALS WHEN THE HOIST IS INSTALLED AND USED ACCORDING TO RECOMMENDATIONS.

ELECTRICAL COMPONENTS:

ALL ELECTRICAL COMPONENTS (INCLUDING MOTOR) ARE GUARANTEED A PERIOD OF ONE YEAR FOR PARTS ONLY (EXCLUDING LABOR), FROM THE DATE OF INVOICE, AGAINST DEFECTS IN WORKMANSHIP AND/OR MATERIALS WHEN THE HOIST IS INSTALLED AND USED ACCORDING TO RECOMMENDATIONS.

PNEUMATIC (AIR) COMPONENTS:

ALL PNEUMATIC (AIR) COMPONENTS (I.E. AIR CYLINDERS AND POPPET AIR VALVES) ARE GUARANTEED FOR ONE YEAR FOR PARTS ONLY (EXCLUDING LABOR), FROM THE DATE OF INVOICE, AGAINST DEFECTS IN WORKMANSHIP AND/OR MATERIALS WHEN THE HOIST IS INSTALLED AND USED ACCORDING TO RECOMMENDATIONS.

EXCLUSIONS:

WARRANTY DOES NOT INCLUDE CONSUMABLE ITEMS SUCH AS HYDRAULIC OIL, LIFTING PADS, OIL SEALS, VEE BELTS AND SLIDING BLOCKS.

THIS WARRANTY SUPERSEDES ALL OTHER WARRANTY POLICIES PREVIOUSLY STATED AND IN ALL OTHER ADVANCE AUTOQUIP'S PRODUCT SPECIFIC LITERATURE.

COMMISSIONING REPORT

1. Details of Customer		 2 McDonald Crescent Bassendean WA 6054 P: 08 9279 1663 E: sales@aaq.net.au			
Customer Name:					
Installation Address:					
2. Hoist Details					
Model No:					
Hoist Type:					
Installation Date:					
3. Commissioning Report		Yes	No	N/A	Comments
Safety Devices					
Safety devices incorporated into the design of the vehicle to AS/NZS 1418.9					
Welds					
Visual check all welds completed and comply to requirement of AS/NZS 1554					
Hydraulic Equipment and Controls					
Visual check carried out for leaks					
Pneumatic Equipment and Controls					
Visual check carried out for leaks					
Safety Locks					
Safety locks tested for correct operation					
Support Pads					
Checked for good working order					
Wheel Stops					
Supplied with the hoist and in good working order					
Hoist Motion Limits					
Checked for correct operation					
Load Test and Speed Check					
Hoist checked with load for correct operation and speed control tested					
Wire Ropes					
Checked wire ropes for correct installation and tension					
Concrete Floor					
Concrete floor is a suitable depth for installation					

COMMISSIONING REPORT

Location of Vehicle Hoist & Vehicle Clearances				
Vehicle hoist or any part of the load is positioned no less than 600mm away from any fixed structure				
Provisions have been made for effective clearances above the vehicle when the hoist is in its fully raised position.				
Markings - Hoist Checked for Relevant Marking Including:				
Make & Model Number				
Serial number				
Rated Capacity				
Reference to maintenance				
Operation instructions				
Screw and Nut Gaps				
Hoist compliance plate showing design registration				
Functional Test				
Vehicle hoist has been tested and all safety devices, limit switches and control function interlocks have been tested for correct operation.				
Demonstration				
The installer has demonstrated the operation of the vehicle hoist to the owner or operator				
Electrical Equipment and Controls				
Lock off isolating switch installed				
Emergency stop button installed				
3. Details of Electrical Contractor				
Trading Name:	EC Licence Number:			
Address:	Telephone Number:			
4. Signature				
		Name:		
		Date:		
I, being the person responsible for completing the commissioning report have exercised reasonable skill and competency when completing the report and hereby certify that the vehicle hoist has been commissioned fit for use as per the Australian / New Zealand Standard 1418.9:1996 Vehicle Hoists.				