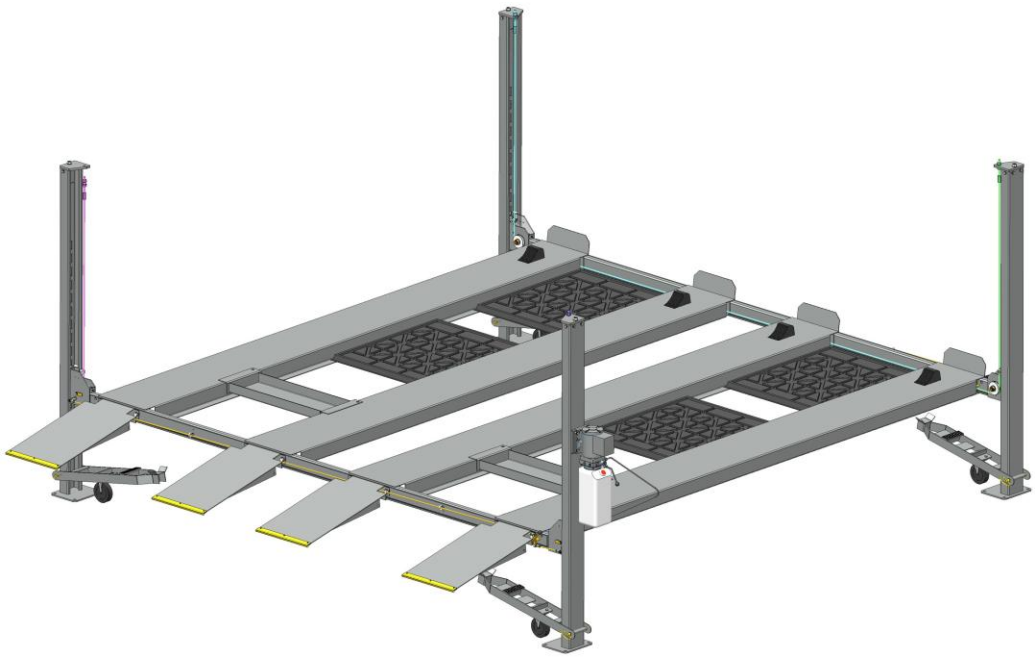
HIGH-LIFT
EQUIPMENT

YL-11FW

Four-Post Double-Deck Parking Storage Car Lift

Installation & Operation Manual



Rated Capacity: 5,000 kg (11,000 lb)

Please read this manual thoroughly before installing, operating or maintaining this lift.

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Chapter 1: Introduction and Special Notes

This manual covers the installation, operation and maintenance of the YL-11FW four-post double-deck parking storage car lift. Please follow these instructions carefully. Installation of the lift typically takes four to five hours; do not rush the job. Take your time, use proper lifting equipment and techniques, and assemble the lift correctly.

Special Notes

- In the event of shipping damage, contact the carrier immediately and lodge a freight claim.
- Read this manual thoroughly before installing, operating or maintaining this lift.
- The power supply requirements are shown on the machine nameplate. Connection must be carried out by a suitably licensed electrician.
- To ensure personal safety and avoid electric shock, make sure all earthing (grounding) points are reliably earthed.
- The manufacturer reserves the right to make improvements to its products without being obliged to update previously supplied units.
- Please locate the warranty card at the rear of this manual, complete it and return it to your dealer for after-sales service records.
- Do not lift loads exceeding the rated capacity of 5,000 kg (11,000 lb).
- Read all warning signs fitted to the machine carefully.

General Attention

- Do not attempt to use the power unit to extend the cylinder. This must be done manually, using compressed air as described in Chapter 6.
- If you are not experienced with electrical wiring, engage a licensed electrician.
- Make sure all cables are correctly seated on their pulleys before operating the lift.
- Always lower the lift onto the safety locks; this protects the power unit. The power unit will not raise a vehicle while the pump is under load from the locks.
- Before using the lift, lubricate the inside of the four columns. A light machine oil or spray silicone lubricant works best.
- Do not over-tighten the hydraulic fittings.

Chapter 2: Important Safety Instructions

Read these safety instructions in full before operating the lift. Failure to read and follow these instructions may result in injury to the operator, to other people in the vicinity of the lift, or damage to vehicles. The manufacturer and supplier accept no responsibility for injury or damage resulting from a failure to carefully read and follow these instructions.

DANGER

Always lock the lift in place before going underneath the vehicle. Never allow anyone to go under the lift while it is being raised or lowered.

Inspect the lift daily. Never operate the lift if it is malfunctioning, or if it has broken or damaged parts. Repairs must be carried out using original equipment parts.

A routine check of the safety latch system is very important. Discovering a device failure before it is needed could save you from expensive property damage, lost production time, serious personal injury or death.

- Operating controls are designed to close (return to neutral) when released. Do not block them open or override them.
- Never overload the lift. The rated capacity is shown on the nameplate fitted to the lift.
- Always know the gross weight of the vehicle being lifted.
- Never use the lift to raise one end or one side of a vehicle only.
- Never raise a vehicle with anyone inside it. No one should be in the lift area during operation.
- Always keep the lift area free of obstructions, grease, oil, rubbish and other debris. Before lowering the lift, make sure tool trays, stands and similar items are removed from under the vehicle. Release locking devices before attempting to lower the lift.
- Provide adequate ventilation when working on internal combustion engines.
- Use only the manufacturer's recommended attachments.
- Keep hands and feet clear of any moving parts, and clear of the lift when lowering. Avoid pinch points.

ELECTRIC SHOCK HAZARD

This lift must be earthed while in use to protect the operator from electric shock. The power unit contains high voltage. Disconnect power at the outlet before carrying out any electrical repairs, and secure the plug so it cannot be accidentally reconnected during servicing.

EXPLOSION RISK

This equipment contains components that may arc or spark internally and must not be exposed to flammable vapours. The lift should not be located in a recessed area or below floor level.

- Maintain the lift with care. Keep it clean for safer and better performance. Follow this manual for correct lubrication and maintenance. Keep control handles and/or buttons dry, clean and free of grease and oil.
- Stay alert. Watch what you are doing and use common sense.
- Check for damaged parts. Check the alignment of moving parts, breakage of parts, or any condition that may affect operation. Do not use the lift if any safety-related component is damaged or missing.

Chapter 3: Packing, Transport and Storage

All packing, lifting, handling, transport and unpacking operations are to be carried out exclusively by experienced personnel familiar with the lift and the contents of this manual.

3.1 Packaging

The base units are packed on a plywood pallet, wrapped in a carton and secured with two straps. The power unit is packed separately in a plywood box, along with other loose items. Optional accessories are available on request to suit individual requirements. The package dimensions are shown below.

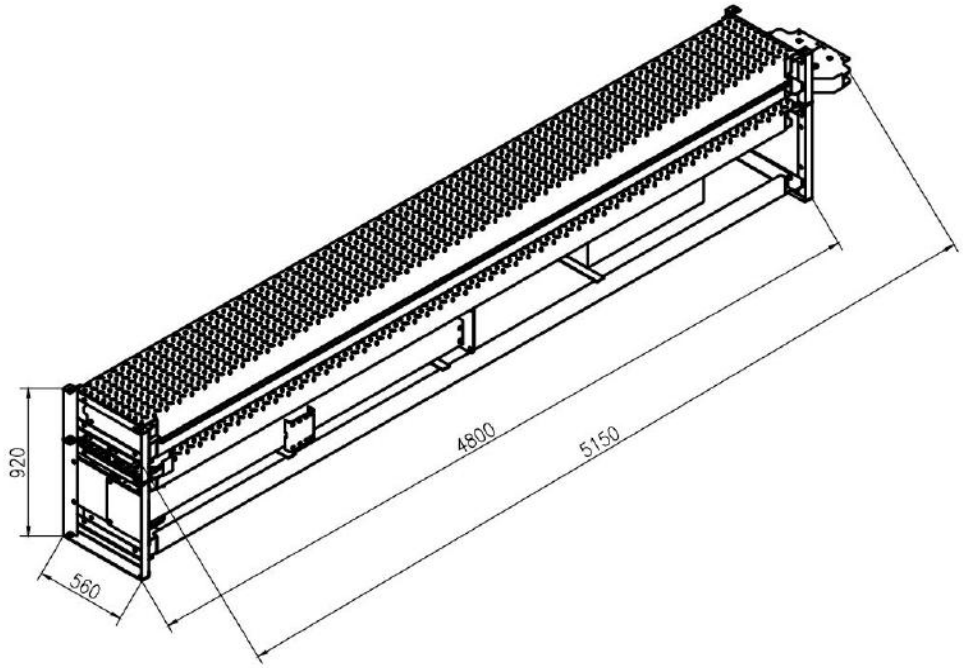


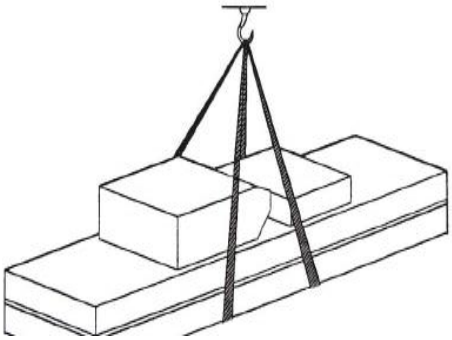
Figure 3.1 — Package dimensions

3.2 Transport

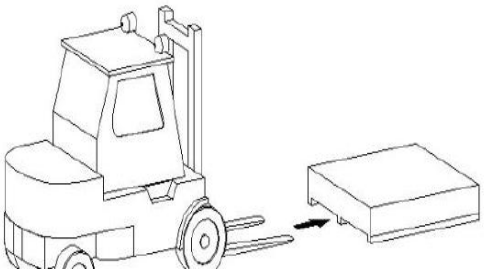
CAUTION

Packages may be lifted or moved by forklift truck, crane or bridge crane. When slinging a load, a second person must always tend the load to prevent dangerous oscillation.

During loading and unloading, goods must be handled using suitable vehicles or equipment. On arrival, verify that all items listed on the delivery note are present. If parts are missing, or if damage has occurred in transit, check the damaged cartons against the packing list to confirm the condition of the goods and any missing parts, and notify the carrier immediately. The lift is a heavy item of machinery — always prioritise safe manual handling, lifting and transport practices over convenience. Loading and unloading must be carried out as shown below.



Handled by crane



Handled by forklift truck

3.3 Storage

- Store the equipment in a warehouse where possible. If stored outdoors, ensure it is adequately weatherproofed.
- Use an enclosed truck for transport, and a shipping container for freight where applicable.
- The control box (power unit) should be kept upright during transport and protected from being crushed by other goods.
- Storage temperature range: −5°C to +40°C.

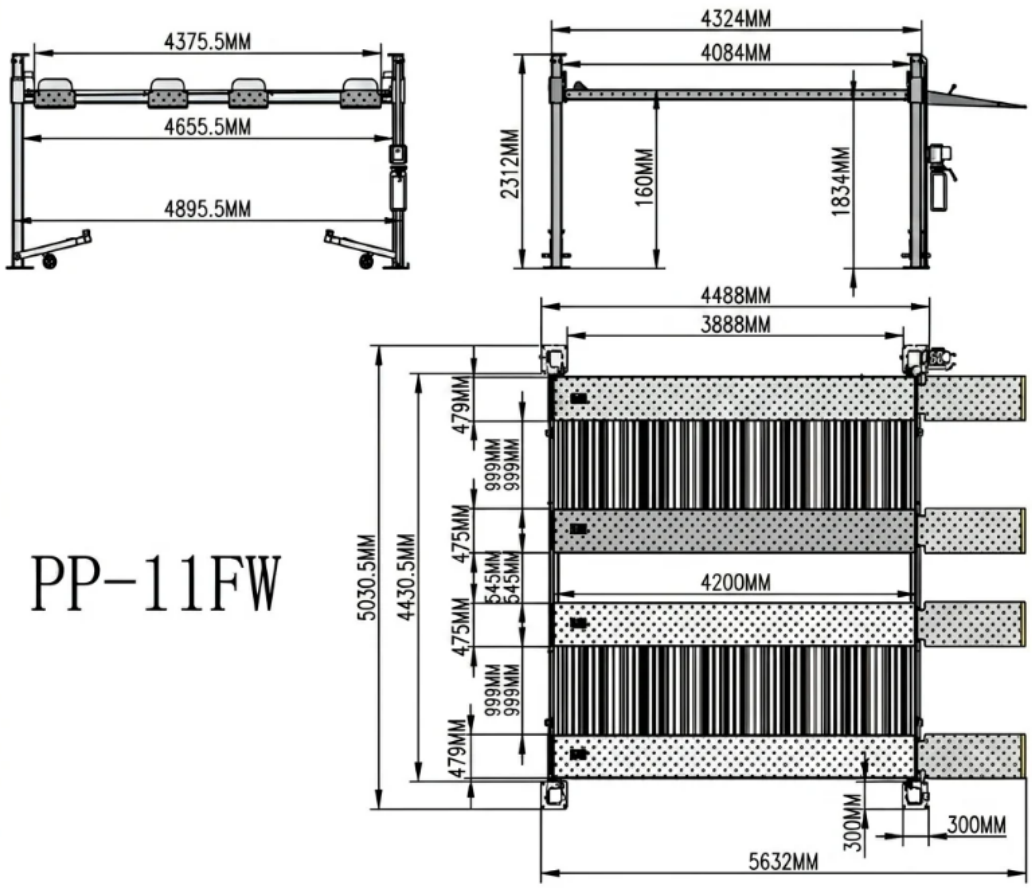
3.4 Opening the Crate

When the crates arrive, check that the machine has not been damaged in transit and that all listed parts are present. Open the crates using appropriate care to avoid damaging the machine or its components, and ensure no parts fall out during unpacking.

Chapter 4: Product Description and Specifications

The YL-11FW is a four-post double-deck parking lift, designed to store two vehicles underneath the runways and up to two further vehicles parked on the runways above. The motor drives an oil pump which powers the hydraulic cylinder, giving quiet operation. A mechanical safety lock can hold the lift at any of a number of preset heights, for safe and reliable operation. The level of the runways in the locked position can be fine-tuned to suit precise wheel-alignment work.

4.1 General Arrangement



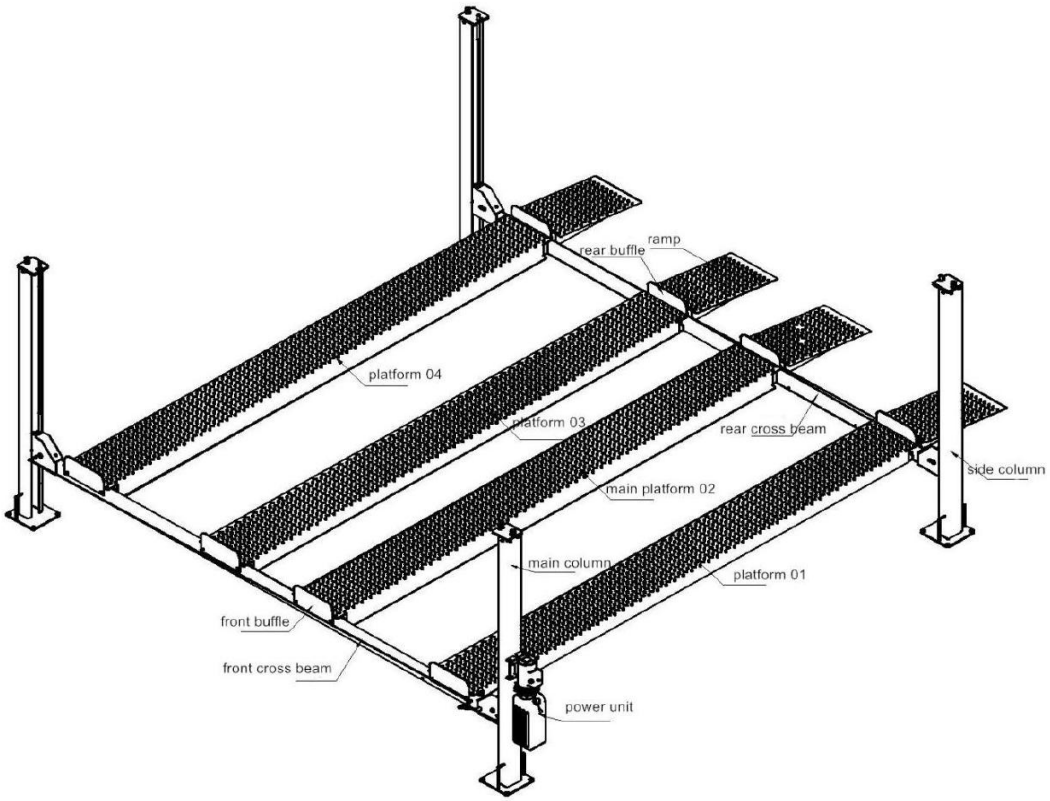


Figure 4.2 — Main components

4.2 Specifications

Specification	Value
Model	YL-11FW
Type	Four-post double-deck parking/storage lift (manual latch, two-vehicle stacking)
Rated capacity	5,000 kg (11,000 lb)
Minimum platform height	160 mm
Maximum raised height	1834mm
Overall lift width (crossbeam span)	4,75.5 mm
Overall length (with ramps)	5,632 mm
Motor power supply	240 V, single-phase, 50 Hz, 2.2 kW (three-phase optional — confirm on nameplate)
Hydraulic oil capacity	10 L (N32 or N46 hydraulic oil, or equivalent AW-32/ISO-32) **note-** in hot areas use 46 grade Hydraulic fluid
Working temperature	0°C to 40°C
Approximate noise level	75 dB(A) at 1 m

Note: specifications are provided as a guide. Always confirm rated capacity and electrical requirements against the nameplate fitted to your lift before use.

4.3 Dimensional Drawing

The overall dimensions of the YL-11FW are shown in Figures 4.3 and 4.4 below, with corresponding values given in Table 4.1.

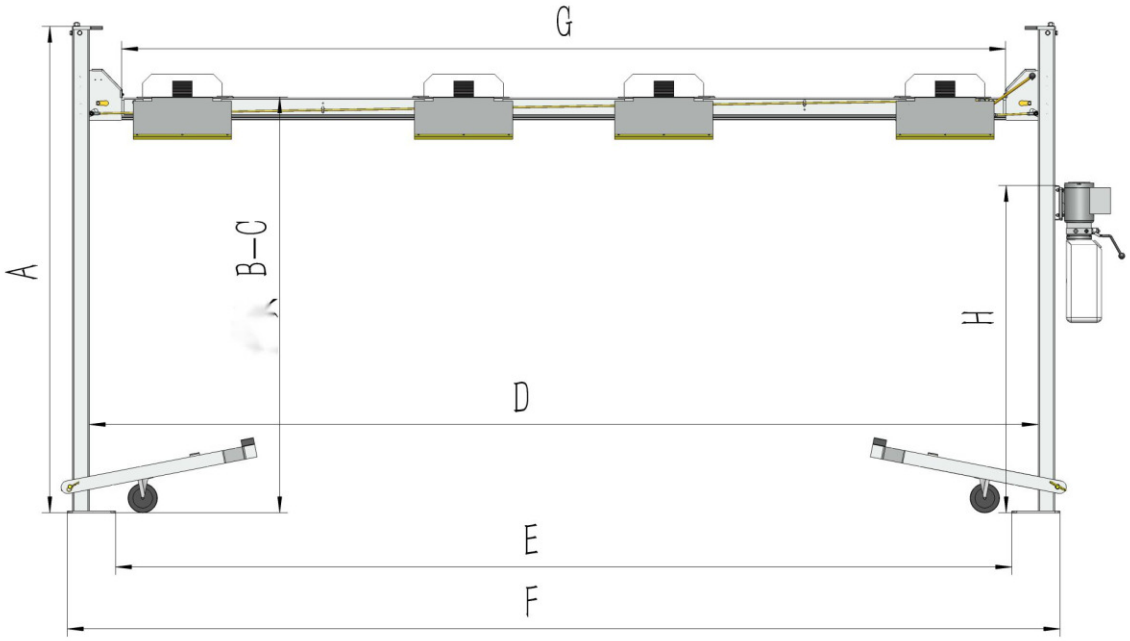


Figure 4.3 — Front/side elevation dimensions

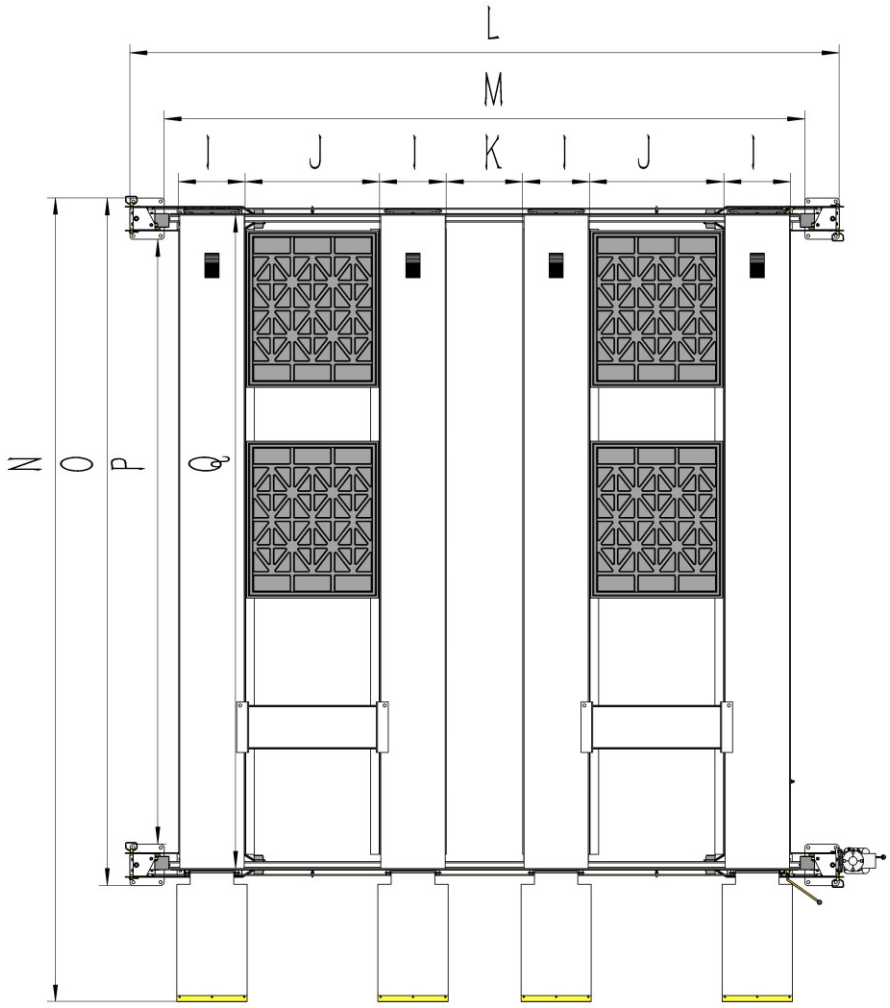


Figure 4.4 — Plan (top) view dimensions

Table 4.1 — Dimensions by Reference Letter (mm)

Ref.	Dimension (mm)	Ref.	Dimension (mm)
A	2,312	K	545
B – C	160 – 1834	L	5030.5
D	4655.5	M	4430.5
E	4,430.5	N	5,632
F	5030.5	O	4,488
G	4,375.5	P	3888
H	160	Q	4324
I	475	Capacity	11,000 lb / 5,000 kg
J	999	Power	240 V, 50 Hz

Chapter 5: Safety

Read this chapter carefully and in full, as it contains important information for the safety of the operator and the person responsible for maintenance.

INTENDED USE

The lift has been designed and built for lifting vehicles and holding them above floor level in an enclosed area. Any other use is forbidden. The manufacturer is not liable for damage to people, vehicles or property resulting from improper or unauthorised use of the lift.

For the safety of the operator and others, a clear area of at least 1 m around the lift must be kept free during raising and lowering. The lift must be operated only from the operator's control position within this safety area. The operator may only go beneath the vehicle while it is lifted and the runways are stationary.

WARNING

Never use the lift when its safety devices are disabled or bypassed. People, the lift itself and any vehicle being lifted can be seriously damaged if these instructions are not followed.

General Warnings

The operator and the person responsible for maintenance must follow the accident-prevention laws and regulations in force in Australia and in the state or territory where the lift is installed, including relevant Work Health and Safety (WHS) requirements. They must also:

- Neither remove nor disconnect any hydraulic, electrical or other safety device.
- Carefully follow the safety indications fitted to the machine and included in this manual, and observe the safety area during lifting.
- Ensure the vehicle's engine is off, a gear is engaged (or park selected) and the park brake is applied before lifting.
- Ensure only authorised vehicles are lifted, without exceeding the maximum lifting capacity.
- Verify that no one is on or near the runways during lifting or lowering.

WARNING

Any use of the lift other than as specified in this manual can cause serious accidents to people in close proximity to the machine.

5.1 Risks to People

All risks that personnel could be exposed to as a result of improper use of the lift are described below.

Crushing Risk

While the runways and vehicles are being lowered, personnel must stay clear of the area covered by the lowering trajectory. The operator must confirm no one is at risk before operating the lift.

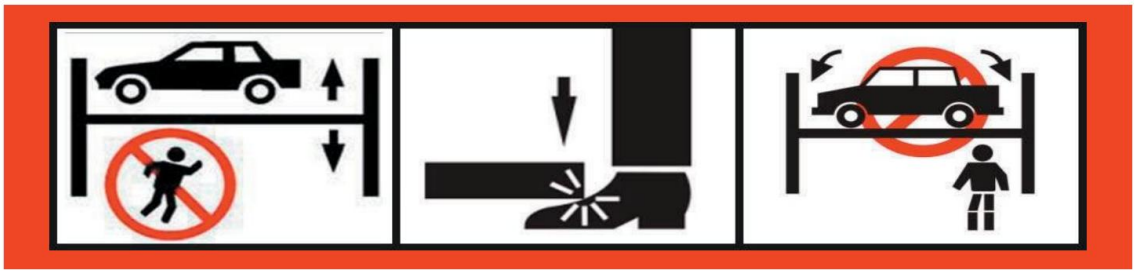


Figure 5.1 — Crushing risk

Risk of the Vehicle Falling from the Lift

A vehicle can fall from the lift if it is incorrectly positioned on the platforms, if its dimensions are incompatible with the lift, or as a result of excessive vehicle movement while on the lift. If this occurs, keep well clear of the working area immediately.

Figure 5.2 — Risk of the vehicle falling from the lift

Slipping Risk

Oil or dirt on the floor near the lift can create a slipping hazard. Keep the area under and around the lift clean and remove all oil spills promptly.

Electrocution Risk

Avoid using water, steam, solvent or varnish sprays in the area of the lift where electrical cables are located, particularly near the electrical panel.

Figure 5.3

Risk from Inadequate Lighting

Ensure all areas around the lift are well and evenly lit, in accordance with local regulations.

Figure 9

Figure 5.4

Risk of Component Failure During Operation

Materials and manufacturing processes suitable for the lift's design parameters have been used to build a safe and reliable product. Operate the lift only for its intended purpose and follow the maintenance schedule set out in Chapter 9.

Figure 10

Figure 5.5

Risks During Vehicle Lifting and Work

To prevent overloading and possible failure during lifting and work, the lift incorporates a maximum pressure relief valve inside the hydraulic unit to prevent excessive load.

DO NOT ADJUST

The maximum pressure valve is preset by the manufacturer to the correct pressure. Do not attempt to adjust it to exceed the rated lifting capacity.

An automatic mechanical safety lock holds the lift in the elevated position, and a slack-cable safety device operates in the event of cable slackening or failure.

DO NOT MODIFY

It is strictly forbidden to modify any safety device. Always confirm that safety devices are functioning correctly before use.

Chapter 6: Installation

Improper installation can cause accelerated wear and, ultimately, catastrophic failure, which may result in property damage and/or bodily injury. The manufacturer and supplier accept no liability for loss or damage of any kind arising from improper installation or use of this product. Read this entire chapter before attempting to install or operate the lift.

6.1 Selecting a Site

Overhead Obstructions

The area where the lift will be located should be free of overhead obstructions such as heaters, building supports, electrical lines and similar hazards.

Floor Requirements

Visually inspect the installation site for cracked or defective concrete. The lift must be installed on a solid, level concrete floor with no more than 2 degrees of slope. A level floor is recommended for correct installation and level lifting. If the floor slope is in question, consider having the site surveyed and, if necessary, pour a new level concrete slab. The lift is designed to be installed on concrete at least 200 mm thick, reinforced with steel and rated to at least 3,000 psi (approximately 20.7 MPa / 2.1 kg/cm²). Do not install the lift on asphalt, timber or any surface other than as described. The lift is only as strong as the foundation it is installed on.

> **NOTE**
> Do not install this lift outdoors unless specific measures have been taken to protect the power unit from the weather.

The power unit may be located at either the front-left or rear-right position of the lift, as preferred.

Unpacking and Layout

Unpack the lift close to the installation site. Mark out a chalk line on the floor following the intended footprint of the lift.

Recommended Tools

- Rotary hammer drill or similar (if anchoring), plus a 19 mm masonry bit
- Hammer, crowbar and chalk line
- 4-foot (1.2 m) spirit level
- Open-end and socket/ratchet spanner sets, 7/16” to 1-1/8” (or metric equivalents)
- Hex-key/Allen key set
- Medium crescent (adjustable) wrench and medium pipe wrench
- Medium flat screwdriver and needle-nose pliers
- Tape measure, 8 m (25 ft) minimum

6.2 Overview of the Installation Sequence

The installation broadly follows these stages, illustrated in detail from section 6.3 onward:

1. Confirm the installation position and site suitability, referring to the foundation and floor requirements above, and check the delivery against the packing list for missing or damaged parts.

2. Install the columns and crossbeams, fit the column cover plates, and seat the safety hooks into the square holes of the safety plates.
3. Install the runways (platforms), cables and guards.
4. Install the power unit and hydraulic tubing.
5. Install the manual unlock (latch release) mechanism.
6. Install the jack tray, boarding plates, stoppers, rubber brake pads and plastic oil-drip trays.
7. Install the moving caster wheel kits (where fitted).
8. Connect the power supply and add hydraulic oil in accordance with the motor nameplate.
9. Raise the lift a small amount and confirm the cables are correctly seated; adjust cable tension so all four corners are consistent.
10. Set the position of the columns relative to the crossbeams, plumb each column against the floor using shims as needed, then drill and fit the anchor bolts.
11. Level the runways: raise to a working height, lock, measure flatness, and adjust as required.
12. Fit and check all warning labels.

6.3 Tracks and Crossrail Installation

First place the main platform in a suitable position; sleepers may be used to raise it for ease of installation. Pull out all the piston rods of the oil cylinders beneath the main platform, then position the front and rear crossbeams to match the main platform. Pass the wire ropes through the front and rear crossbeams as shown. Once correctly positioned, install the sub-platforms onto the crossbeams and secure with M12 screws to tighten the connecting frame and beam to the platform.

IMPORTANT

Do not use the power unit to extend the cylinder. Make sure both ports on the cylinder are open to allow air to flow freely. Although the cylinder may be difficult to move at first, it usually becomes easier once the first movement is made. If a compressor is available, use compressed air to extend the cylinder — direct air into the back port (the port away from the chrome rod).

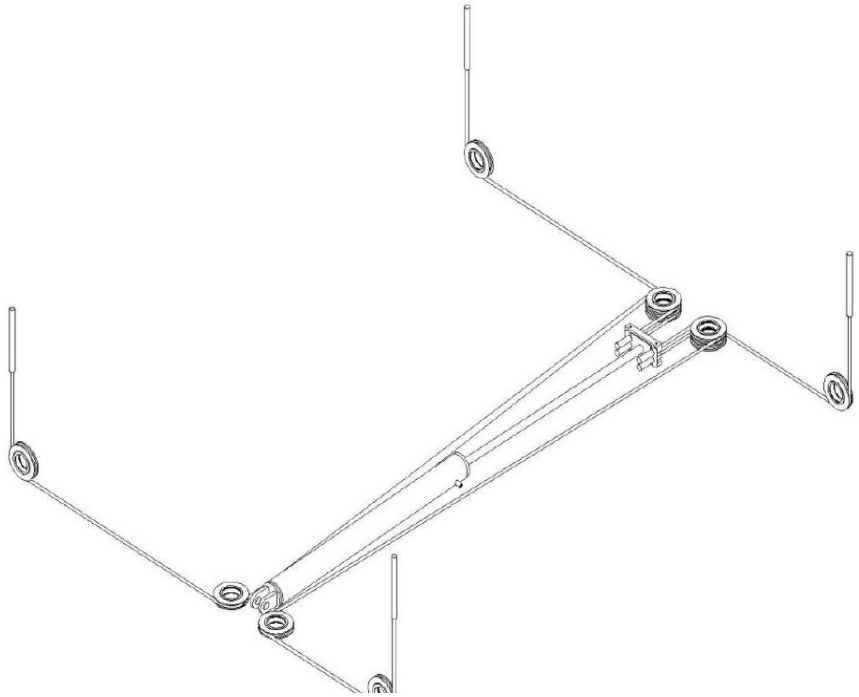


Figure 6.1 — Cylinder linkage

6.4 Column Installation

Move each column into the proper position, fit the lock latches into the column and install on both sides of the crossbeam, then fit the top cover to each column. Connect the lock latches to the column top cover using the M20 screw rod.

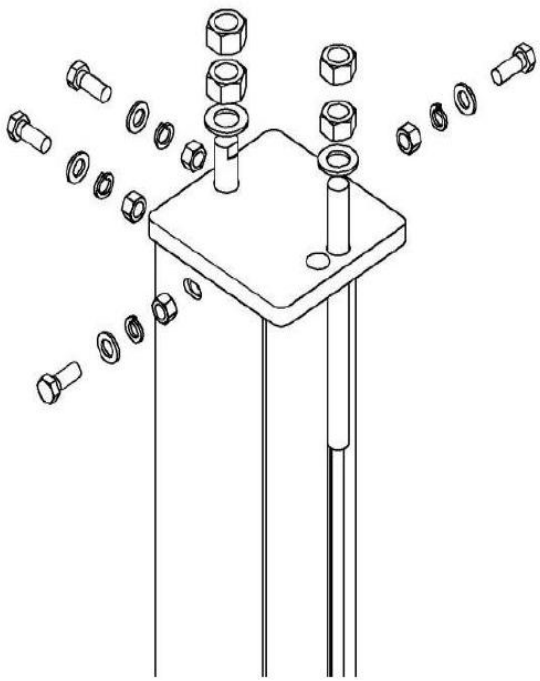


Figure 6.2 — Column cap assembly

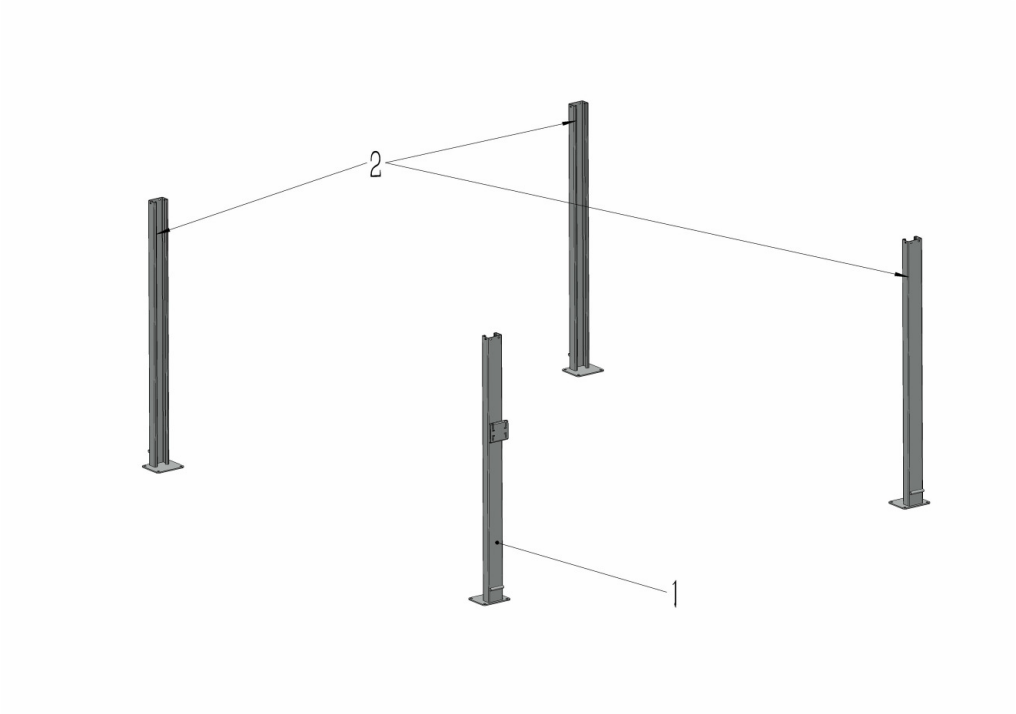


Figure 6.3 — Positioning the four columns

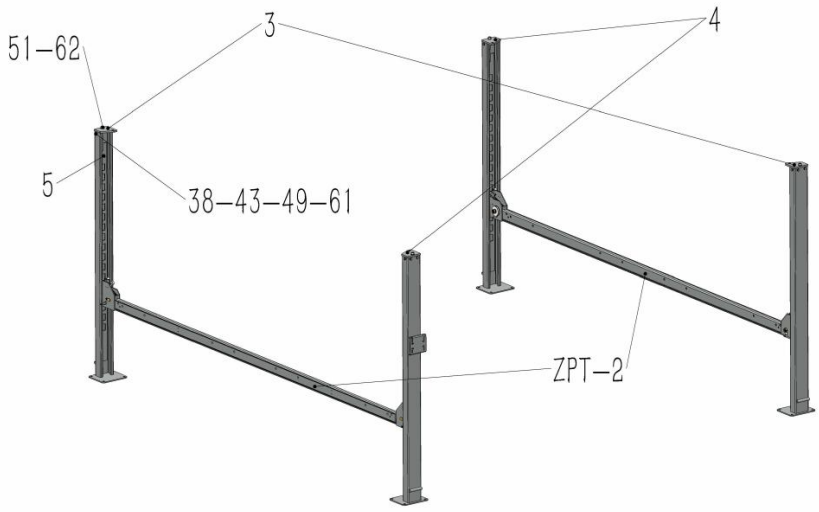


Figure 6.4 — Column top-plate and bracing detail

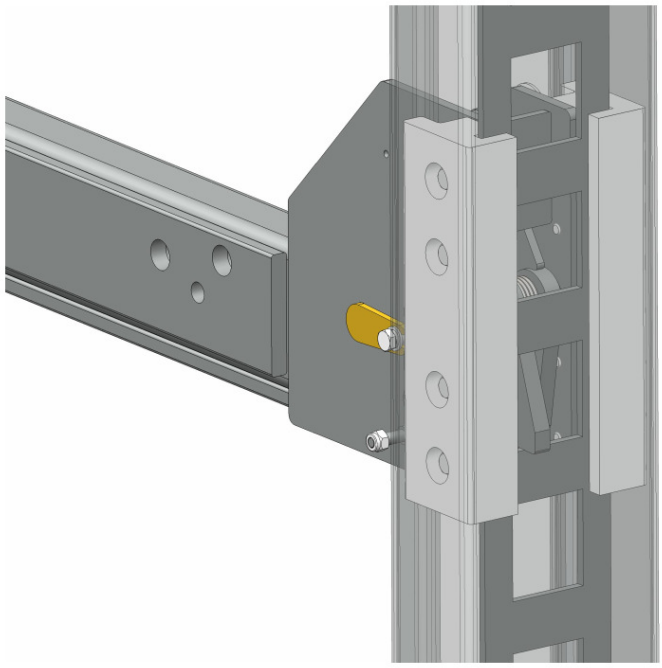


Figure 6.5 — Safety lock and crossbeam mounting to column

6.5 Power Unit Installation

Place a funnel in the vent cap opening and fill the tank with AW-32 or ISO-32 hydraulic oil (equivalent to Mobil DTE 24 or Texaco HD32).

Relocating or substituting components may cause problems — every component in the system must be compatible. All valve, pump and hose connections should be sealed and/or capped until immediately before use, and all parts should be sourced from the original manufacturer. Air hoses may be used to clean fittings and other components; the air supply must be filtered and dry to prevent contamination, as contamination is the most frequent cause of malfunction or failure in hydraulic equipment.

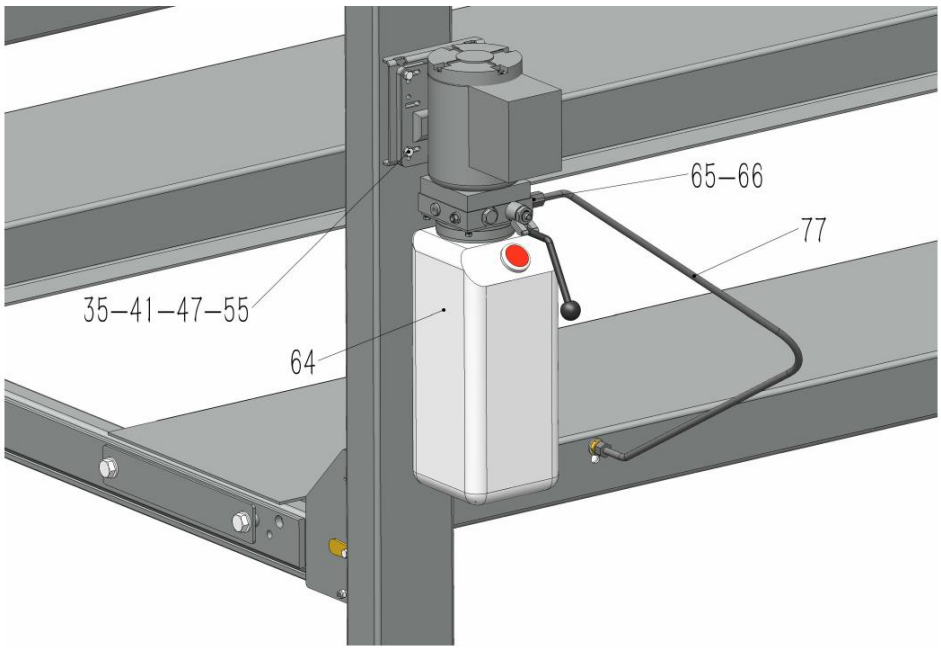


Figure 6.6 — Power unit mounting and hydraulic tubing

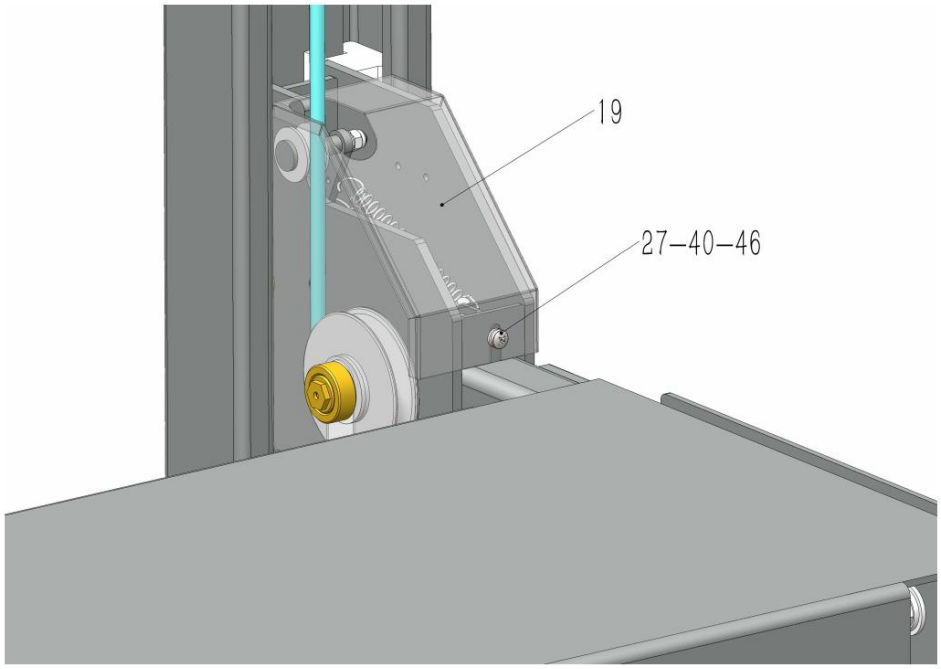


Figure 6.7 — Cable pulley and guard at column head

Check the Pulley Cover and Lock Collars

Before proceeding, double-check that the locking shaft collars for the crossrail cable pulleys are tight and secure. Check the pulley cover (two right-hand and two left-hand) over the shaft located on the pulley side of each crossrail — confirm the pulley and cover sit firmly against the locking shaft collar already in place, and that the additional lock collar on the outside of the shaft is tight and secure.

> **IMPORTANT**
> To prevent personal injury or death, crossrail lock collars must be kept tight at all times. If they are ever removed, always ensure the locking shaft collars are refitted tight and secure.

Check the crossrail locking assembly before use, and confirm all bolts and collars are tight. This assembly is pre-installed at the factory, but parts may work loose during shipping.

6.6 Slide Block Installation

Raise the platform to approximately 1 m without load, install the slide block from underneath the beam as shown, and secure it in place.

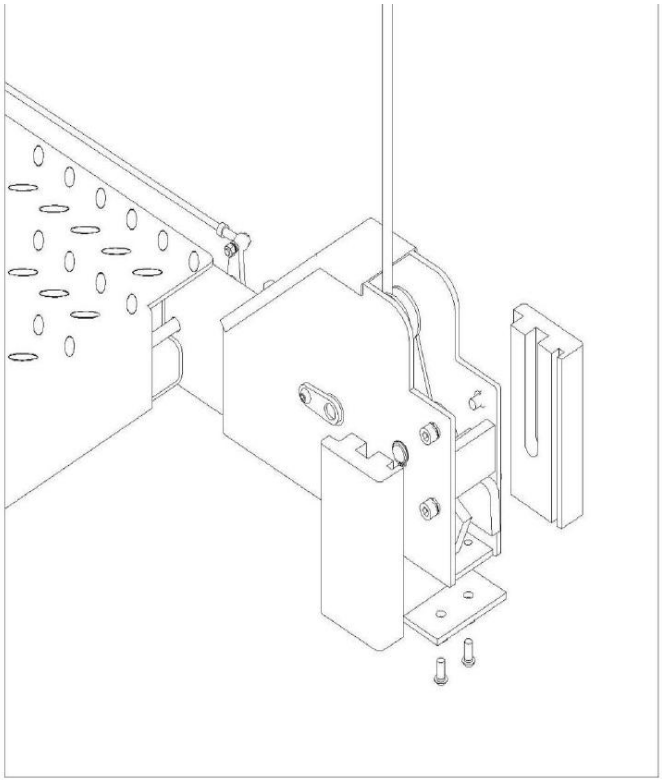


Figure 6.8 — Slide block assembly

6.7 Manual Unlock (Latch Release) Installation

Install the manual unlock lever and linkage as shown below. This mechanism is used in normal operation to release the mechanical safety latches before lowering the lift (see Chapter 8).

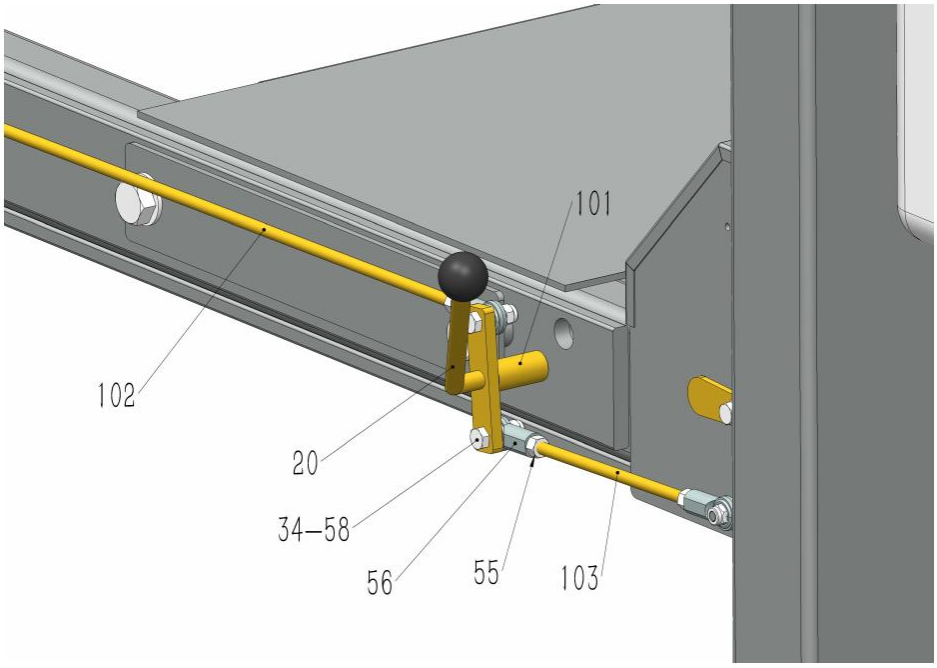


Figure 6.9 — Manual unlock (latch release) rod and handle

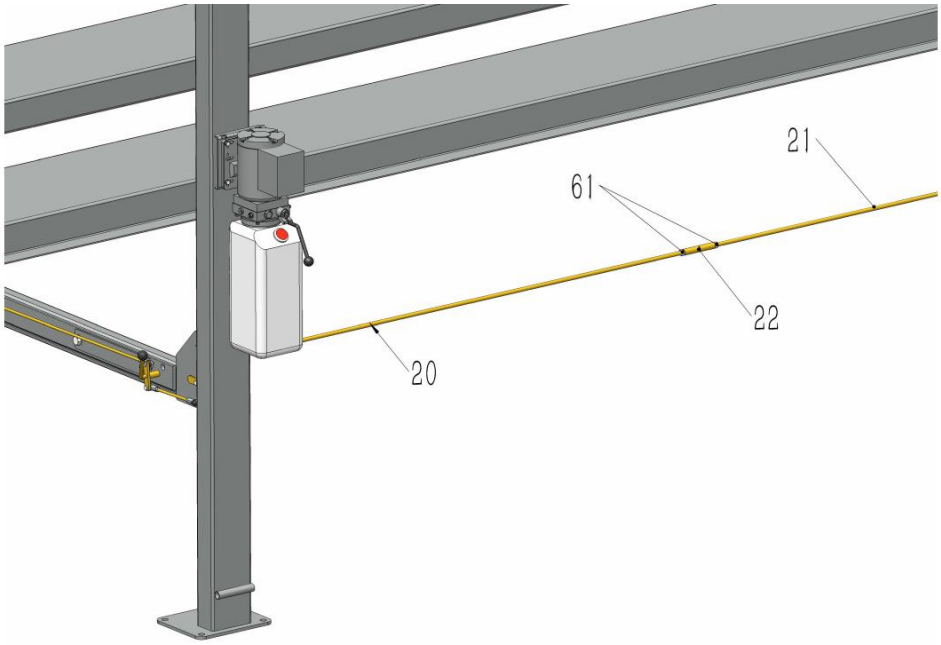


Figure 6.10 — Safety handle and release cable routing

6.8 Ramps, Casters and Accessories

Install the approach ramps, baffles/stop bumpers, decorative covers, jack trays and, where fitted, the moving caster wheel kits.

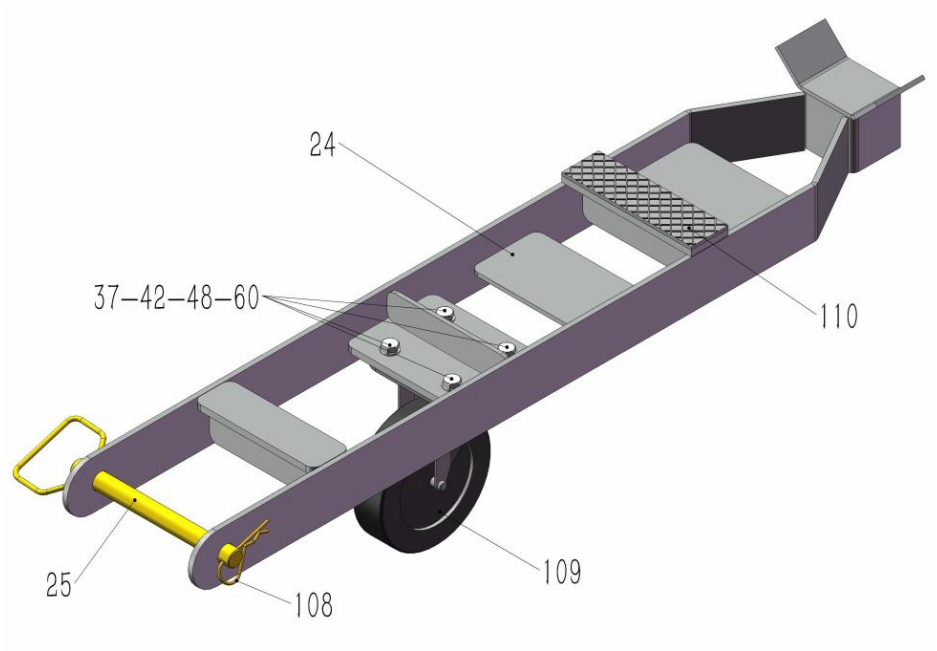


Figure 6.11 — Caster wheel kit and platform end assembly

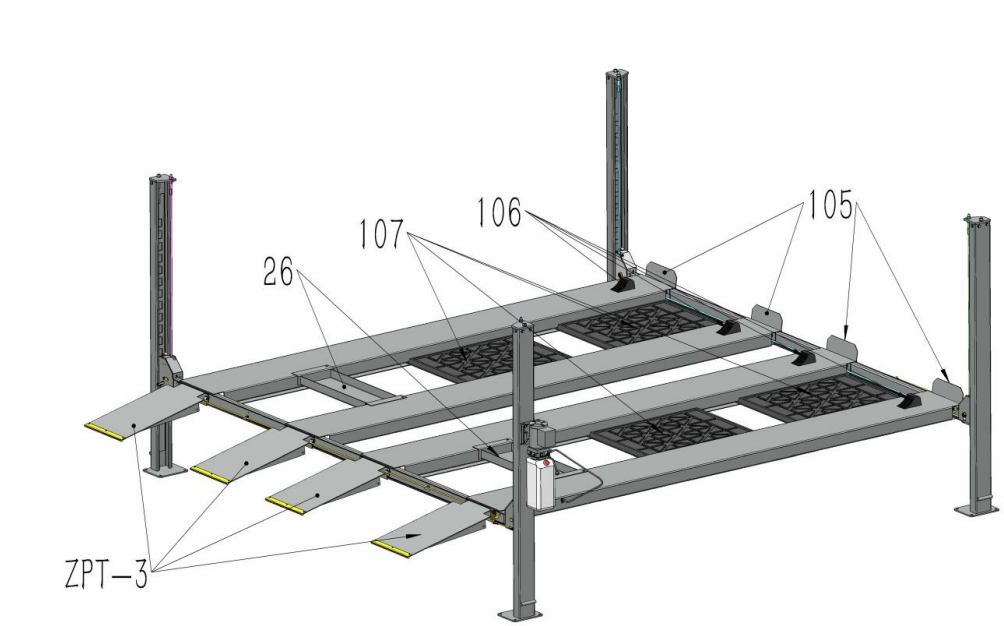


Figure 6.12 — Approach ramps and stop bumpers fitted

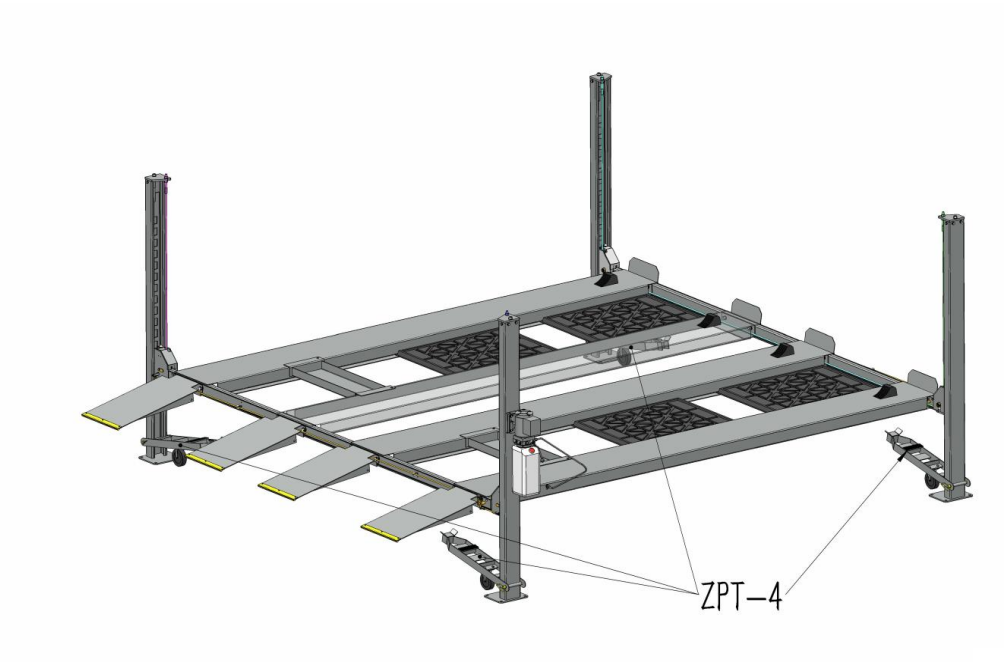


Figure 6.13 — Fully assembled lift

6.9 Anchor Bolt Installation

1. After confirming column position, raise and lower the lift without load.
2. Once the column is confirmed stable, measure the verticality (plumb) of the column.
3. After confirming correct installation, drill the anchor bolt holes. The drill bit must not be allowed to deflect.
4. After drilling, blow away all dust from the hole.

5. During drilling, make sure the column base plate remains aligned with the marked line.
6. If the base plate needs adjustment to achieve level, insert an appropriate number of shims so the column is perpendicular to the floor once the anchor bolts are tightened.
7. After fitting the shims, tighten the anchor bolts fully.

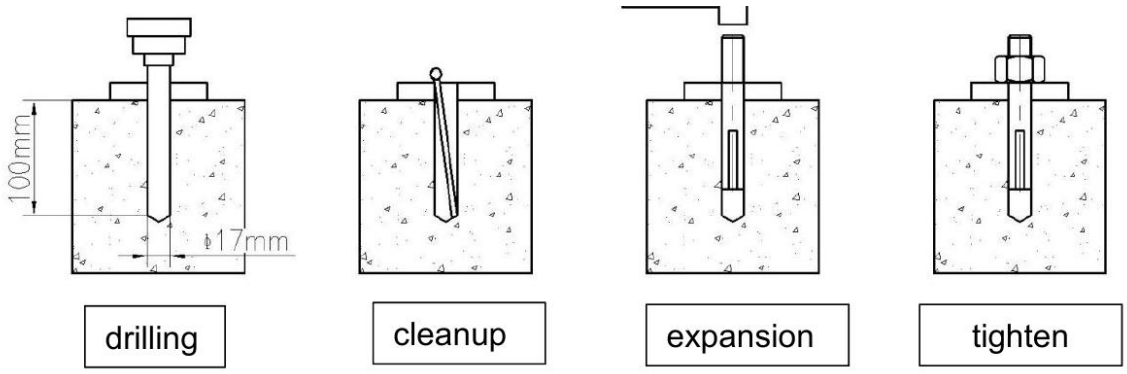


Figure 6.14 — Anchor bolt installation sequence: drilling, cleanup, expansion, tightening

6.10 Other Accessories

Install approach ramps, baffles and decorative covers as required.

Chapter 7: Start-Up and Debugging

Before starting up, make sure the power unit reservoir is full of hydraulic oil, and spray the inside of the columns where the slide blocks glide with a light lubricant.

If you are not experienced with electrical connections, engage a licensed electrician. Check inside the switch box to confirm the correct coloured wire is used for the earth (ground) connection, and check the rating plate to confirm the motor voltage matches your power supply.

7.1 Warning Signs

Read all warning signs fitted to the lift carefully. The pressure of the overflow (relief) valve is adjusted before the lift leaves the factory. The user must not adjust this valve; the user bears full responsibility for any consequences of doing so.

7.2 Preparation Before Start-Up

1. Add approximately 10 L of hydraulic oil to the power unit tank — use L-HM32 in cooler weather or L-HM64 in warmer weather (or the equivalent grade recommended for your climate).
2. Check that the motor power supply is connected correctly.
3. Check that all connecting bolts are fully tightened.

7.3 Adjusting the Columns

Measure the height of the four columns with a spirit level and adjust with shims as required. Once each column is at the correct height, check the verticality of all four columns, tighten the anchor bolts, and fine-tune the shims so all four columns remain upright.

7.4 Adjusting the Wire Ropes

Raise the four-post platform so the lock blocks disengage from the latches, then adjust the nuts on the four wire ropes at the column so the height at all four corners is consistent. Tighten the nuts to fix the wire rope height.

7.5 No-Load Test

Before placing the lift into service, check the following:

- Listen for any unusual or strange noise.
- Confirm all nuts are tight.
- Confirm no cables are coming out of their pulleys.
- Confirm the lock latches are working correctly.
- Confirm the columns are not shaking and remain vertical.

Run the lift up and down several times to confirm the safety latches engage uniformly and that the safety latch release functions properly. Re-adjust as necessary.

> **IF THE LIFT DOES NOT RISE**
>
> Check the hose connections — fluid should be pumping freely through the hose. Also check the hydraulic fluid level in the tank.

WHEN LOWERING THE LIFT

Pay careful attention and always confirm that all four safety latches are disengaged before lowering. If one latch locks on descent, stop immediately, raise the lift until it clears the stop, then adjust the height on that latch before continuing.

7.6 (Commissioning Checklist)

- Fill the power unit tank with hydraulic oil (N32 or N46, or equivalent).
- Press the rise button to raise the runways and remove the support frame used during installation. Pay particular attention to whether the cables are correctly seated in their wheel grooves.
- Press the lower button to bring the lift onto its locks in the normal locked state, and observe whether the lock block enters the square hole of the lift bar correctly.
- Lower the runway to its lowest position and adjust the nuts on the four wire ropes so tension is equal.
- Run the lift up and down twice without load, and confirm every part is working normally. Check the reliability of the runway lock, repeating several times, and confirm the hydraulic system is working correctly.

SPECIAL NOTE

Vehicles parked on the runway must have their brakes applied and wheels chocked with wedges. During lifting and lowering, keep people and objects well clear of the lift. All four columns must be installed perpendicular to the floor, or the lift will be unsafe to use. Before lowering, always click the rise button briefly first so the lock block clears the square hole in the lift bar — otherwise damage to the control mechanism may result.

Chapter 8: Vehicle Loading Operation

Do not use this lift unless you are familiar with its correct operation, its safety devices, and the hazards involved.

1. Drive the vehicle onto the lift platform. Apply the vehicle's park brake and leave the transmission in park or in gear. Chock the vehicle's wheels.
2. Stand clear. Press the UP button to raise the vehicle to the desired height. Use the rod handle on the power unit to open the release valve and lower the runways until they stop on the safety locks, then check all four latches for full engagement in the rack on each leg.
3. To lower: press the UP button briefly to raise the lift slightly, rotate the latch release rod handle and hold it, then operate the rod handle on the power unit to lower the lift. Warning: confirm all four latches have released — if any latch does not release, stop and raise the lift higher until that latch is clear.
4. Any hydraulic oil leak, unusual noise or excessive wear must be corrected before the lift is used again.

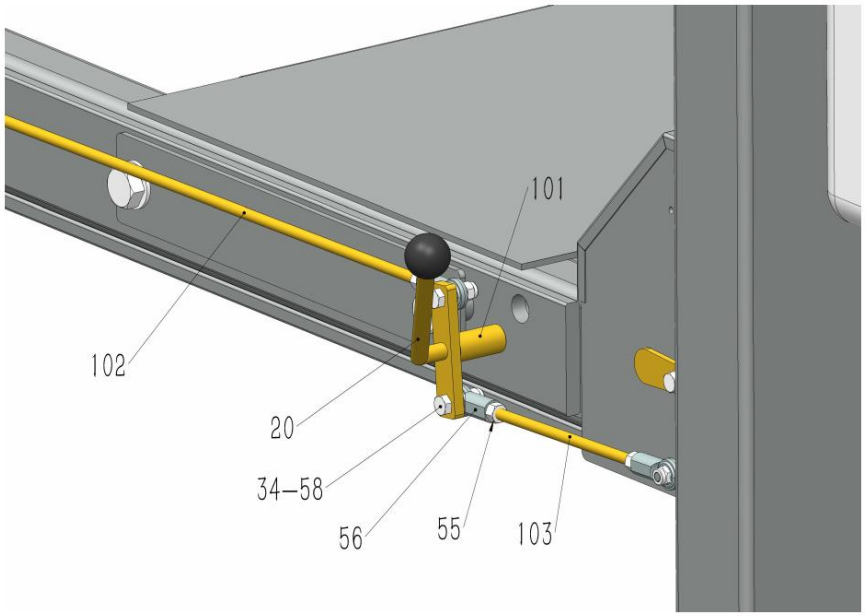


Figure 8.1 — Latch release rod and handle

8.1 Pre-Operation Check

The operator should carry out the following checks daily. A daily check of the safety latch system is very important — discovering a device failure before it is needed could save you from expensive property damage, lost production time, serious personal injury or death.

1. Check the safety latches move freely and engage fully with the rack.
2. Check hydraulic connections and hoses for leaks.
3. Check cables for damage, and confirm they sit correctly in the groove of the cable sheave.
4. Check the lock collars at all rollers and sheaves.
5. Check bolts, nuts and screws, and tighten as required.
6. Check wiring and switches for damage.
7. Keep the base plate free of dirt, grease or other corrosive substances.

Chapter 9: Maintenance and Inspection

9.1 Keeping the Lift Clean

Wipe the machine down with a dry cloth regularly to keep it clean. Disconnect the power supply before cleaning, to ensure safety. Keep the working environment around the lift clean; a dusty environment will accelerate wear on the parking components and reduce the service life of the equipment.

9.2 Daily Pre-Operation Checks

1. Check the safety lock audibly and visually while in operation.
2. Check safety latches for free movement and full engagement with the rack.
3. Check hydraulic connections and hoses for leaks.
4. Check cable connections for bends, cracks and loose fittings.
5. Check for frayed cables in both the raised and lowered positions.
6. Check snap rings at all rollers and sheaves.
7. Check and tighten bolts, nuts and screws as needed.
8. Check wiring and switches for damage.
9. Check the floor for stress cracks near the columns.
10. Check lubrication of the cable sheaves and shafts.
11. Check that the wire rope connections are secure and not loose.
12. Check hydraulic connections are tight and free of leaks at every fitting.
13. Check for looseness in any threaded connection.

9.3 Weekly Maintenance

1. If the lift is anchored to the floor, check the anchor bolts and tighten immediately if loose.
2. Check the floor for stress cracks near the columns.
3. Check the hydraulic oil level.
4. Check and tighten bolts, nuts and screws.
5. Check all cable sheave assemblies for free movement or excessive wear on the sheave shaft.

9.4 Monthly Maintenance

1. Re-tighten the anchor bolts.
2. Lubricate the wire ropes.

9.5 Six-Monthly Maintenance

1. Inspect for wear, interference or damage that may have developed while the lift was not in use.
2. Check the lubrication of all pulleys. If a pulley drags during lifting, add suitable lubricating oil to the axle.
3. Check and adjust the tension of the steel wire ropes to ensure the lift rises evenly.

9.6 Yearly Maintenance

1. Lubricate the cable sheave shafts using a grease gun, at least once a year while the lift is in service.
2. Change the hydraulic fluid. Good maintenance practice makes it essential to keep the hydraulic fluid clean.
3. Check for excessive wear on the cables and replace if necessary.

9.7 Hydraulic System Maintenance

After the first six months in service, the hydraulic oil tank should be cleaned and the hydraulic oil replaced. Thereafter, clean and replace the hydraulic system fluid once a year.

If hydraulic oil leakage is found after a period in service, investigate carefully. If the leak is caused by wear of the sealing material, replace the affected seals promptly, using the original specifications.

Chapter 10: Storage and Disposal

10.1 Long-Term Storage

If the equipment needs to be stored for an extended period:

- Switch off and isolate the power supply.
- Lubricate all parts requiring lubrication: the inner wall of the columns, wire ropes, pulleys and similar components.
- Drain all hydraulic oil.
- Cover the equipment with plastic sheeting.

10.2 Disposal

When the equipment is damaged beyond repair and can no longer be used, switch off and isolate the power supply, drain all fluids, and dispose of the equipment responsibly in accordance with local council and Australian state/territory regulations, including any requirements for the disposal of hydraulic oil and other fluids.

Chapter 11: Troubleshooting

If the lift develops a fault, isolate the power supply before investigating unless a check specifically requires power to be on. If in doubt, contact a qualified technician or your dealer.

Fault	Possible Cause	Solution
Motor does not run	Burnt-out circuit breaker or fuse	Replace the circuit breaker or fuse
	Supply voltage does not match the motor voltage	Provide the correct voltage for the motor
	Incorrect electrical wiring	Rewire correctly according to the electrical schematic
	Limit switch burnt out	Replace the limit switch
	Motor coil burnt out	Replace the motor
	UP button burnt out	Replace the motor switch/button
Motor runs but the lift does not rise	Motor running in reverse	Swap two motor supply leads to reverse rotation
	Lowering valve open	Repair or replace the lowering valve
	Hydraulic pump drawing in air	Tighten all suction pipe joints
	Short suction pipe disconnected from the pump	Replace the short suction tube
	Low oil level	Fill the oil tank
Motor runs, lifts with no load, but will not lift a vehicle	Supply voltage lower than motor rating	Provide the correct power supply
	Debris in the hydraulic pipeline	Clear debris from the hydraulic pipeline
	Relief (safety) valve incorrectly adjusted	Have the relief valve pressure adjusted by a qualified technician
	Lift overloaded	Reduce load to below rated capacity
Lift slowly descends by itself	Debris in the one-way (check) valve	Clean the one-way valve
	External oil leak	Repair the oil leak
	Impurities in the unloading valve	Clean the unloading valve
Lift rises slowly, or oil flows from the filler cap	Unsuitable hydraulic oil	Change to the specified hydraulic oil
	Pump drawing in air while sucking oil	Tighten all suction pipe joints

Fault	Possible Cause	Solution
	Oil return pipe loose	Re-fit the return pipe correctly
Uneven rise	Wire ropes unbalanced	Re-adjust the wire ropes
	Floor/foundation not level	Level by adjusting shims
Anchor bolts loosening	Anchor bolt hole oversized	Fill with fast-setting concrete and re-install the anchor bolts
	Insufficient concrete strength or thickness	Improve the foundation
Lift will not rise fully, or vibrates while rising	Air trapped in the cylinder or oil circuit	Bleed air through the cylinder air-bleed port
	Insufficient hydraulic oil	Top up hydraulic oil
Safety lock will not open or reset	Lock plate is stuck	Check whether movement of the lock plate is being restricted, and free it
Motor rotates, no pressure builds in the oil	Suction pipe in the tank has come adrift	Check and reseat the suction pipe
Electrical fault	Wiring or component failure	Isolate power immediately; have a licensed electrician check, repair or replace as required

Chapter 12: Hydraulic System and Electrical Components

12.1 Hydraulic Power Unit — Overview

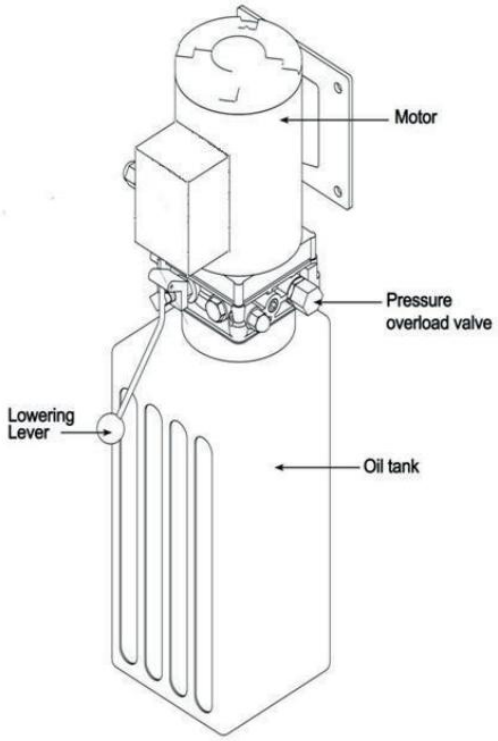


Figure 12.1 — Hydraulic power unit

12.2 Hydraulic Station — Exploded View

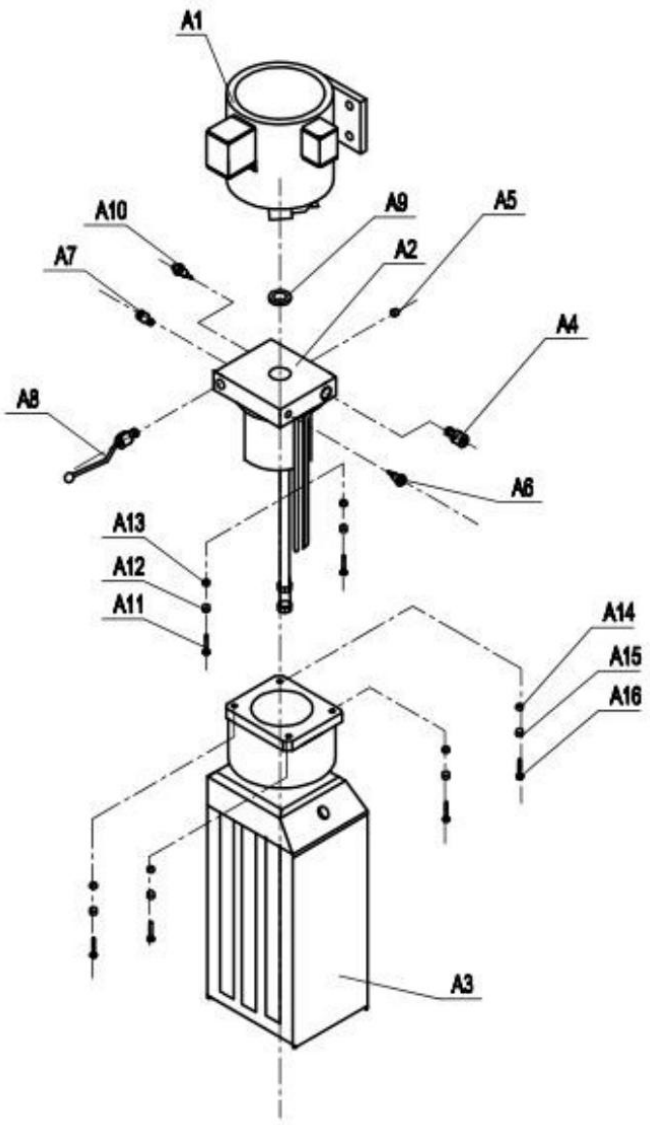


Figure 12.2 — Hydraulic station, exploded view

No.	Name	Qty	No.	Name	Qty
A1	Motor	1	A9	Sealing gasket	1
A2	Valve core	1	A10	Stuffing/seal	1
A3	Fuel (oil) tank	1	A11	M5×40 hexagon screw	4
A4	Drop speed control valve	1	A12	Ø5 flat washer	4
A5	Stuffing/seal	1	A13	Ø5 spring washer	4
A6	Oil outlet	1	A14	M6×20 hexagon screw	4
A7	Oil outlet	1	A15	Ø6 flat washer	4
A8	Hand wrench (manual release) valve	1	A16	Ø6 spring washer	4

12.3 Hydraulic Schematic and Components

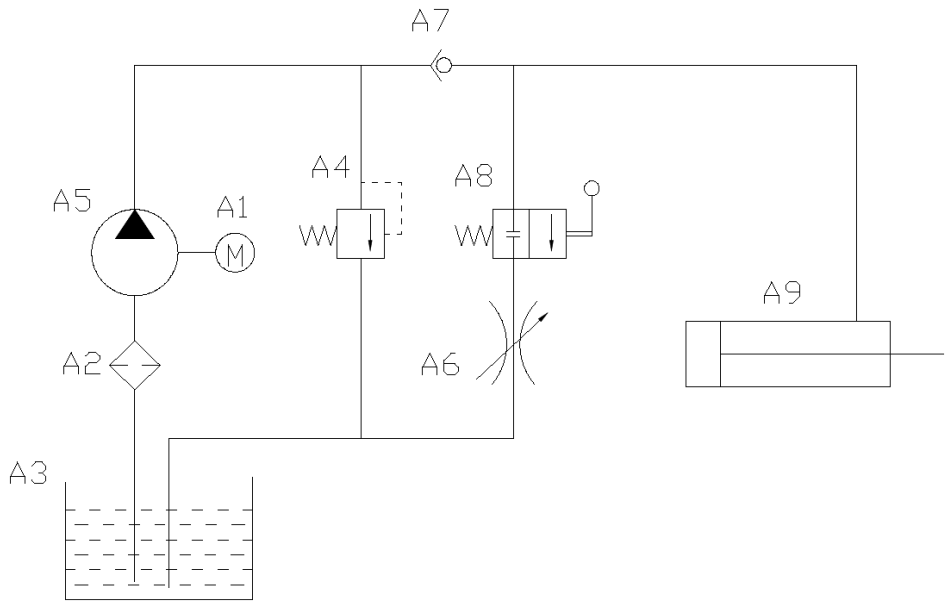


Figure 12.3 — Hydraulic schematic diagram

Ref.	Name	Specification	Qty	Remarks
A9	Oil tank	—	1	Volume 10 litres
A8	Solenoid valve	—	1	
A7	One-way (check) valve	—	1	
A6	Down (drop) throttle	—	1	
A5	Oil pump	—	1	
A4	Relief valve	—	1	
A3	Fuel tank	—	1	Volume 10 litres
A2	Filter	—	1	
A1	Motor	240 V, 50 Hz, 2.2 kW	1	Three-phase optional

How the Hydraulic System Works

When the start button on the hydraulic station is pressed, the motor starts and drives the oil pump, drawing pressurised oil from the tank and delivering it to the cylinder (A9), moving the piston rod. At this point the relief valve (A4) is closed, as its pressure has been set at the factory to meet the rated lifting load. If system pressure exceeds this set limit, the relief valve automatically opens to release the excess oil. Releasing the start button stops the oil supply and the lift holds its position. To lower, first press the rise button briefly to release the mechanical safety lock, then press the manual valve (A8) to begin lowering.

12.4 Electrical Plan (Single-Phase)

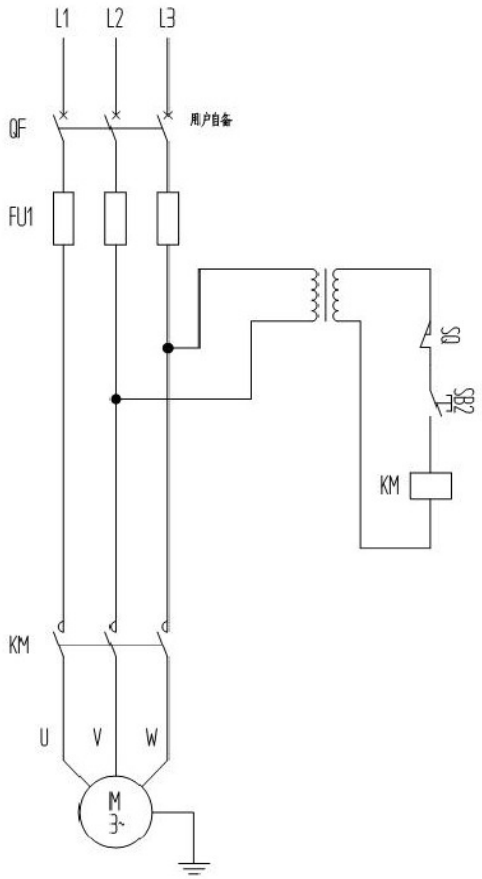


Figure 12.4 — Electrical plan, single-phase

No.	Item	Qty	No.	Item	Qty
SB1	Emergency stop	1	YA	Limit switch	1
SB2	UP button	1	YV	Lock electromagnet	1
SB3	DOWN button	1	HL	Power indicator	1
SB4	Lock button	1	QF	Power switch	1
KM	AC contactor	1	FU1	Fuse protector 1	1
KT	Time relay	1	FU2	Fuse protector 2	1
SQ	Limit switch	1	TC	Transformer	1

12.5 Electrical Schematic (Three-Phase)

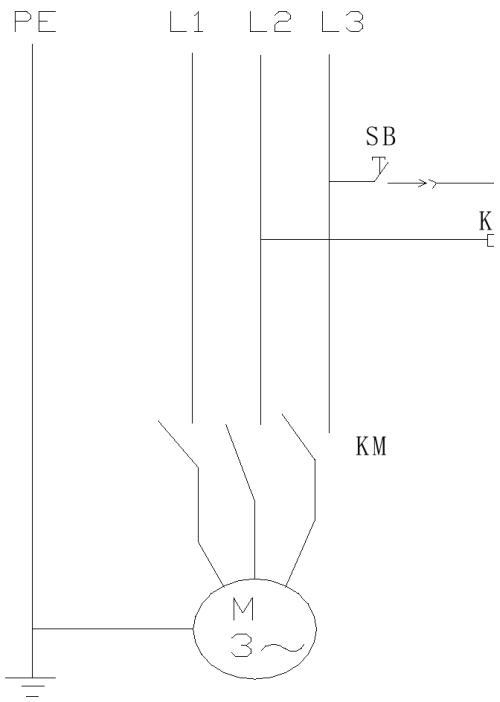


Figure 12.5 — Electrical schematic, three-phase motor connection

IMPORTANT

When installing, always wire strictly according to the schematic diagram to ensure every earth (ground) connection is reliable. The incoming power supply must be fitted with earth-leakage (RCD) and overcurrent protection in accordance with AS/NZS wiring rules.

Chapter 16: Warranty and Service Record

Please complete the details below at the time of installation and retain this manual for future reference. Refer any warranty enquiries to your dealer, quoting the model and serial number shown on the lift's nameplate.

Field	Details
Model	YL-11FW
Serial number	
Date of installation	
Installed by	
Dealer / supplier	
Purchaser	
Installation address	

Service Record

Date	Service Performed	Performed By