

YL-140B Two-Post Base Plate Car Hoist

Single-Point Release — Suitable for Thinner Concrete Slabs

Installation and Operation Manual — Plain-English Edition for Australian Customers



Please read this manual in full before installing or operating this hoist.

About This Edition

This is a plain-English version of the YL-140B installation and operation manual, rewritten for Australian customers. The technical content — specifications, dimensions, warnings, installation steps, and troubleshooting information — is unchanged from the manufacturer's original manual. Only the wording has been simplified and reorganised to make it easier to read and follow.

If anything in this document appears to conflict with the original manufacturer's manual, or with Australian workplace health and safety requirements, always follow the more cautious option and contact your supplier for clarification before proceeding.

Before You Start

Please read and understand the following points before accepting delivery, installing, or using your hoist.

1. When your hoist arrives, check the contents against the packing list, and check for any damage that may have occurred during transport, before you accept delivery from the freight company.
2. When unpacking, check the packaging carefully for signs it has come loose in transit. Unpack carefully to avoid damaging the equipment or injuring yourself.
3. Installation should only be carried out by experienced, competent installers using the correct tools. If the hoist is installed by anyone else, you take on responsibility for any resulting injury or damage.
4. Read this manual carefully before operating the hoist, and always operate it strictly according to these instructions. You are responsible for any injury or damage caused by not following this manual.
5. Safety has been built into the design and manufacture of this hoist — but you must also make safety your top priority whenever you operate or maintain it.
6. Anyone operating the hoist must be properly trained and take their responsibilities seriously.
7. Never operate the hoist beyond its rated lifting capacity.
8. When you receive the hoist, complete and return the product warranty card to register your warranty and protect your rights.

Product Warranty

What isn't covered by this warranty

- Any failure resulting from misuse, neglect, or failure to operate, maintain, or service the hoist as described in this manual.
- Any damage caused by using the hoist beyond its rated lifting capacity.
- Routine consumables needed to maintain the product, such as lubricant and oil.
- General wear-and-tear items, such as rubber pads and lifting cables — unless the wear or failure is a direct result of a manufacturing defect in materials or workmanship.
- Any component damaged in shipping, or any failure caused by installing or operating the hoist outside these installation and operation guidelines, or by contact with tools or nearby objects.
- Motor or pump failure caused by rain, excessive humidity, corrosive environments, or other contaminants.
- Rust caused by improper maintenance or a corrosive environment.
- Cosmetic marks or blemishes that don't affect how the product works.
- Damage caused by incorrect voltage or incorrect wiring.
- Any indirect or consequential loss, damage, or expense arising from a defect, failure, or malfunction of the product.
- All electrical components (excluding the power unit) are covered for one year.

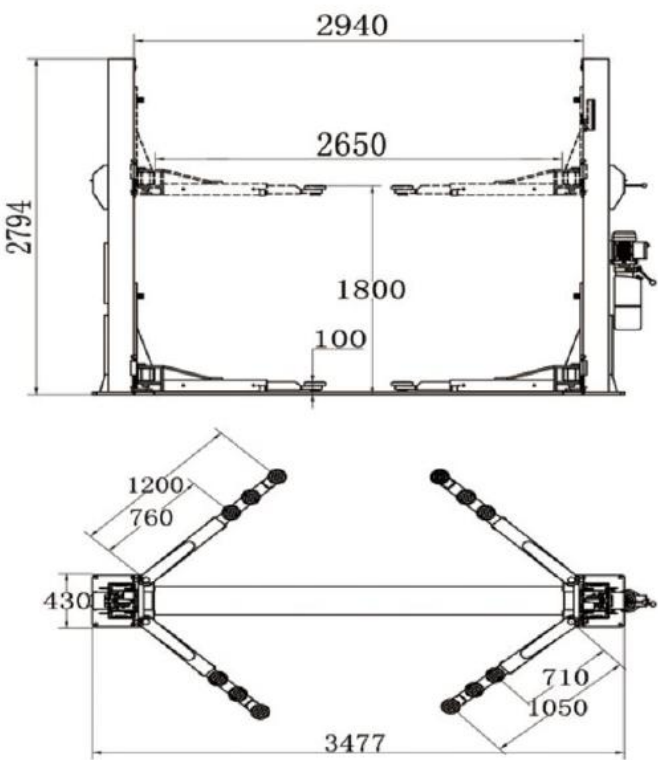
A note on accuracy

We've made every effort to make sure this manual is complete and accurate. However, the product may be updated or revised after this manual is published, and specifications may change without notice. We take no responsibility for typographical errors.

Machine Specifications

- Compact design — fewer wear parts and a lower breakdown rate.
- Dual hydraulic cylinders, designed and manufactured to industry standards.
- Self-lubricating UHMW polyethylene sliders and bronze bushings.
- Single-point safety release, with dual safety-lock design.

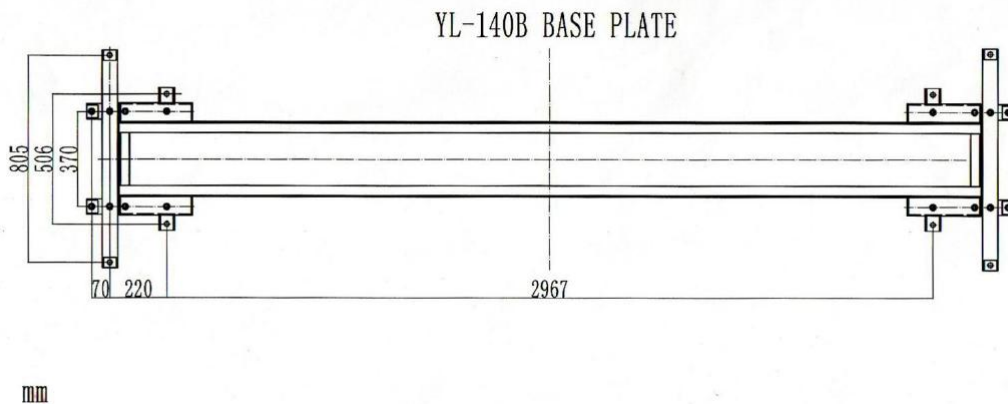
Specification	Details
Model	YL-140B — Two-Post Base Plate Hoist, Single-Point Release
Lift capacity	4,500 kg
Overall height	2,794 mm
Overall width	3,477 mm
Power	2.2 kW
Voltage	240V, 50Hz, single phase



Overall dimensions (mm)

Foundation / Base Plate Dimensions

Use the diagram below to mark out your anchor bolt positions before drilling. All measurements are in millimetres.



YL-140B base plate layout (mm)

Safety Precautions — Please Read All of This

These safety points apply every time the hoist is installed, operated, or serviced.

General safety

- Read this manual and understand all safety information before using the hoist.
- Keep your hands and feet clear of moving parts to avoid injury.
- Keep the work area clean and tidy — a cluttered workshop is a safety hazard.
- Only use the hoist indoors, in a dry, well-ventilated space with good lighting. Never expose it to rain or damp conditions.
- Only trained operators should use the hoist. Don't allow untrained people to touch the controls.
- Use only genuine parts. We take no responsibility for problems caused by non-genuine components.
- Look after the safety release mechanism, and check it's working properly before every use.
- Stand well clear while a vehicle is being raised or lowered.
- Make sure there's enough clear space around the hoist so people can move away quickly if needed.
- Always engage the mechanical safety locks before anyone works underneath a raised vehicle.
- Operators should wear appropriate PPE, including steel-capped work boots.

Electrical safety

- Make sure the motor is properly earthed to protect operators from electric shock.
- Warning: the switch may spark during operation, so never use the hoist near flammable gases or vapours.
- Warning: always switch off and isolate power before servicing any electrical components.

Operation and maintenance

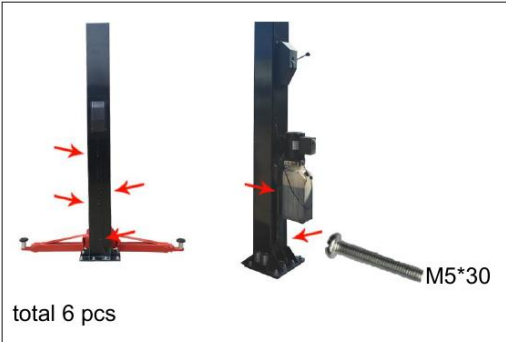
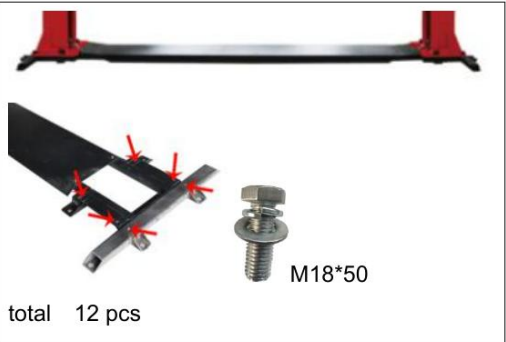
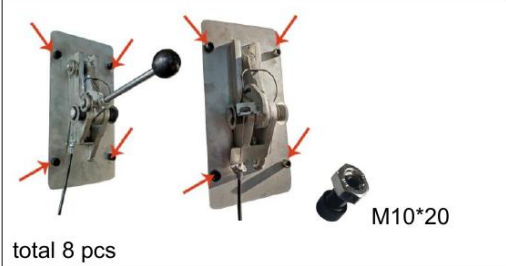
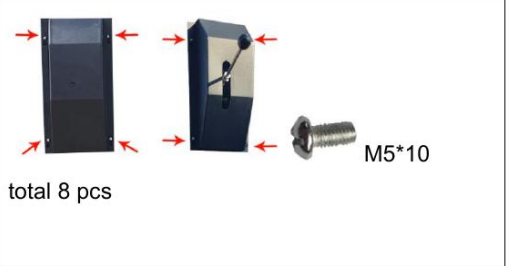
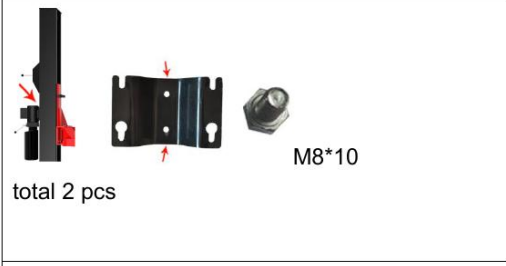
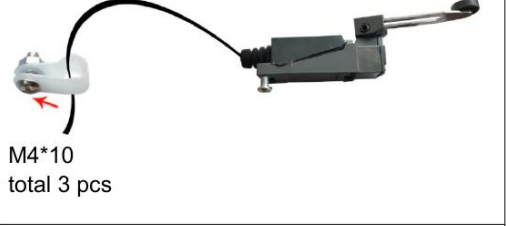
- Keep the hoist clean and well maintained. Regular lubrication and servicing keep it reliable. Keep controls and buttons clean, dry, and free of oil.
- Stay focused and alert while operating the hoist — safety always comes first.
- Regularly check for damaged or worn parts, and make sure both arms rise and fall together evenly. Stop immediately if you notice anything unusual, and have it checked before continuing.
- Never remove or tamper with any safety-related parts. Don't operate the hoist if any have been removed.
- Before each use, check that all components are in good working order — especially that the support pads are correctly positioned and undamaged.
- Never let anything obstruct the arms while the hoist is lowering.
- When the hoist reaches full height, make sure the mechanical safety hook has engaged securely (you should hear it click into place).
- Once the hoist is fully raised, release the 'up' button straight away.

Installation Fastener List

Use this checklist to confirm you have all the fasteners needed before you start assembly.

Fastener	Quantity	Used for
M5 × 30	6	Column base cover / power unit cover
M18 × 50	12	Base plate to arm/carriage assembly
M10 × 20	8	Safety release plate assembly
M5 × 10	8	Cover panels
M8 × 10	2	Column bracket
M8 × 16	4	Column bracket
M5 × 10	2	Limit switch assembly
M4 × 10	3	Limit switch clamp
Washer, cotter pin, pulley set	4	Pulley assembly

Model: YL-140B install screw list

 total 6 pcs M5*30	 total 12 pcs M18*50
 total 8 pcs M10*20	 total 8 pcs M5*10
 total 2 pcs M8*10	 total 4 pcs M8*16
 total 2 pcs M5*10	 M4*10 total 3 pcs
 total 4 pcs	

Fastener locations — refer to the arrows for each item's fitting position

Tools You'll Need

- Rotary hammer drill with a 20 mm masonry bit
- Hammer
- 300 mm spirit level
- Ring/open-end spanner set (8–24 mm)
- Adjustable spanner (350 mm)
- Crowbar
- Chalk line and tailor's chalk
- Flat-head and Phillips-head screwdrivers
- 5 m tape measure
- Sharp-nose pliers
- Angle ruler

Rotary Hammer Drill (3/4in /19mm)



Carpenter's Chalk



Hammer



Screw Drivers



Level Bar



Tape Measure [25ft]



Crescent Wrench (12")



Pliers



Ratchet Spanner With Socket (28#)



Allen Head Wrench (6 #)



Wrench set
[10#, 13#, 14#, 15#, 17#, 19#, 24#, 27#]



Vise Grips



Recommended tools for installation

Installation Steps

Step 1: Choose an installation site

Before you install the hoist, check the following:

- Workspace: a solid building structure with enough clear space and no obstructions.
- Environment: the site should be free of rain, damp, or any flammable/explosive materials.
- Foundation: the slab must match the foundation drawing provided later in this manual.

Step 2: Prepare the base and floor

- The concrete slab must be strong enough for the job — an inadequate slab can crack under load, damaging the hoist and risking serious injury or death.
- The slab must be reasonably level — tolerance should not exceed 5 mm (small variations within this range can be corrected with washers/shims).
- Never install the hoist on asphalt, pavers, or any surface other than solid, reliable concrete.
- Don't install on cracked concrete or broken-up slabs.
- Don't install on an upper floor or mezzanine without a structural engineer's or architect's approval.
- Protect the power unit's motor from the weather — don't install the hoist outdoors, where rain could damage the motor.
- Build the slab according to the foundation drawing provided in this manual.
- The hoist must be installed on a concrete slab with a compressive strength of at least 200 kg/cm² (roughly 25 MPa, i.e. 25 MPa / N25 concrete or stronger) and a minimum thickness of 300 mm. Freshly poured concrete must be allowed to cure for at least 28 days before installation.

Note: one of the manufacturer's reference diagrams later in this manual ("Concrete strength") uses imperial units — 3,000 psi and 5 inches. For reference, that's roughly 20.7 MPa and 127 mm. Always follow the stricter metric requirement above (300 mm minimum thickness, 25 MPa minimum strength, 28 days cured), and check with a structural engineer or your local building authority if you're at all unsure about your slab.

Step 3: Plan the layout

1. Confirm where the hoist will sit.
2. Confirm where the power unit will be mounted, and make sure there's enough clearance around that column for it.
3. Mark out the position of each column's base plate with chalk, keeping the layout accurate to within 3 mm so it doesn't affect installation.
4. Once you've confirmed the position, mark the outline of each base plate with chalk (refer to the specifications).
5. Double-check the layout is correct before drilling anything.
6. Place both columns in position first — without fixing them down — so you can check everything lines up. Make sure there's enough clearance around the columns for servicing work later (we recommend at least 4,000 × 7,000 mm of clear space).

Step 4: Install the main column (power-unit side)

1. Before installing, check the column's base plate lines up correctly with your chalk lines.
2. Using the holes in the base plate as a guide, drill the mounting holes into the concrete, keeping the drill perpendicular to the floor. Drill to a depth of about 160 mm — don't let the drill wander or angle sideways.
3. Clear all dust out of the holes, then check the base plate is still sitting within your chalk lines.
4. Tap the anchor bolts into the holes. Screw the nut onto the bolt first and tap the nut down — never strike the bolt or nut directly — until the washer sits firmly against the base plate.
5. If the column isn't sitting perfectly vertical (plumb), use thin shims/washers under the base plate to correct it.
6. Once the column is plumb, tighten the nuts with a spanner — but don't fully torque them down yet.

Step 5: Install the second column

Position the second column on your marked layout lines and install it the same way as the main column. Once both columns are anchored, fully tighten both sets of anchor bolts and re-check that both columns are plumb at the same time. Adjust with shims as needed until both columns meet the vertical tolerance.

Using the Power Unit

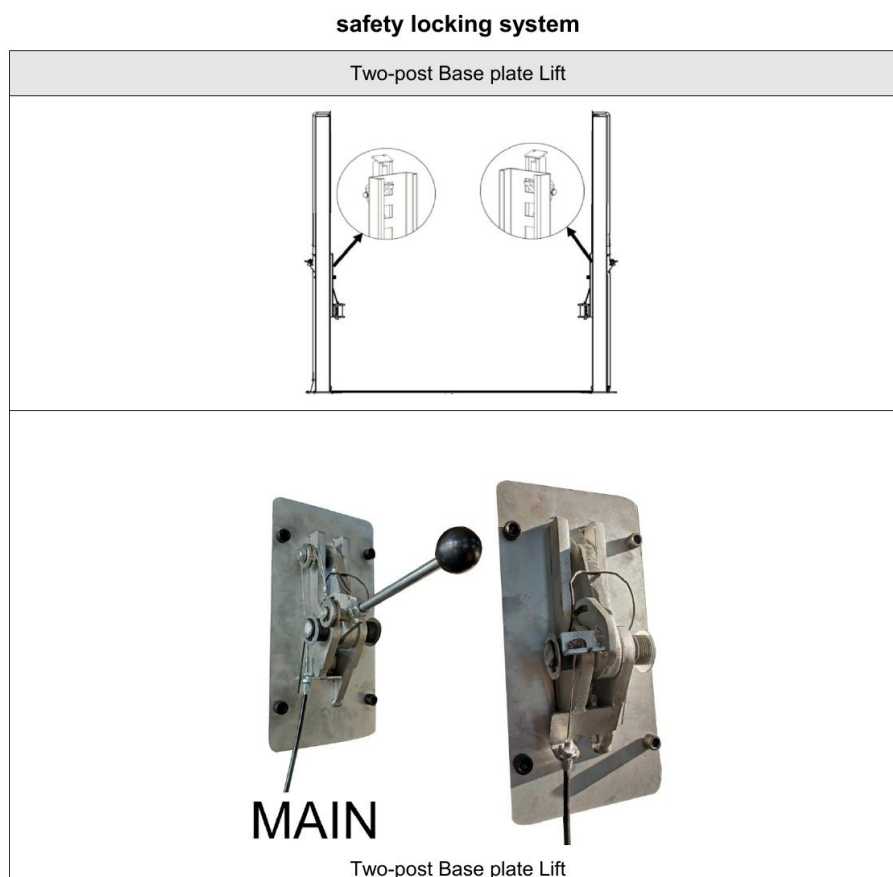
- Never start the pump without oil in it — running it dry will destroy the gear pump.
- Keep all electrical components dry. Damage caused by water, acid, or detergent is not covered by warranty.
- Damage caused by incorrect wiring is not covered by warranty.
- Use a dedicated circuit breaker or fuse for the power unit.
- For 200–240V single phase, use a 25A fuse.
- For 380–440V three phase, use a 15A fuse.

⚠ WARNING

The power unit can spark during start-up, so never operate it in an area where flammable gas may be present.

Safety Locking System

Each column has its own independent mechanical safety lock. The release lever on the power-unit side (marked MAIN) unlocks both sides at the same time via the connecting cable.

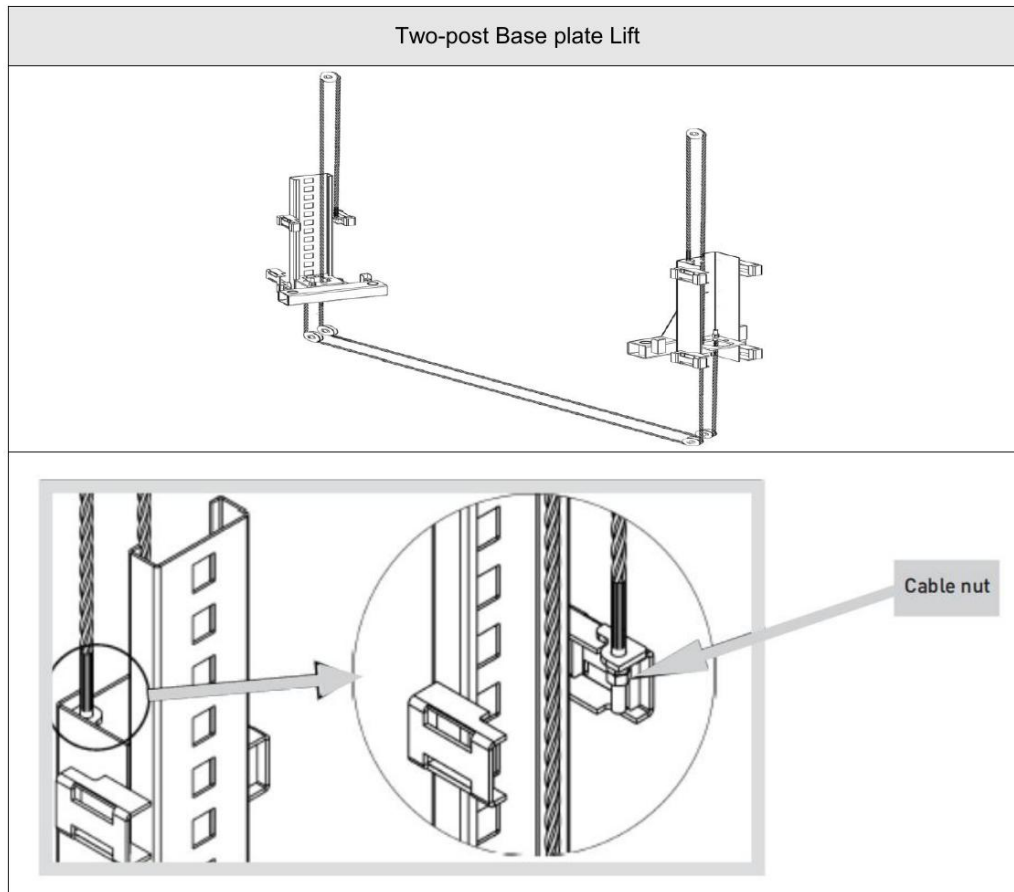


Safety locking system — two-post base plate hoist

Adjusting the Synchronising Cables

Before you start, make sure both carriages are resting on the first set of safety locks. Hold the cable fitting steady with vice grips while you tighten the cable nut with a spanner. Both cables need equal tension so the carriages rise together evenly.

steel cables assemble



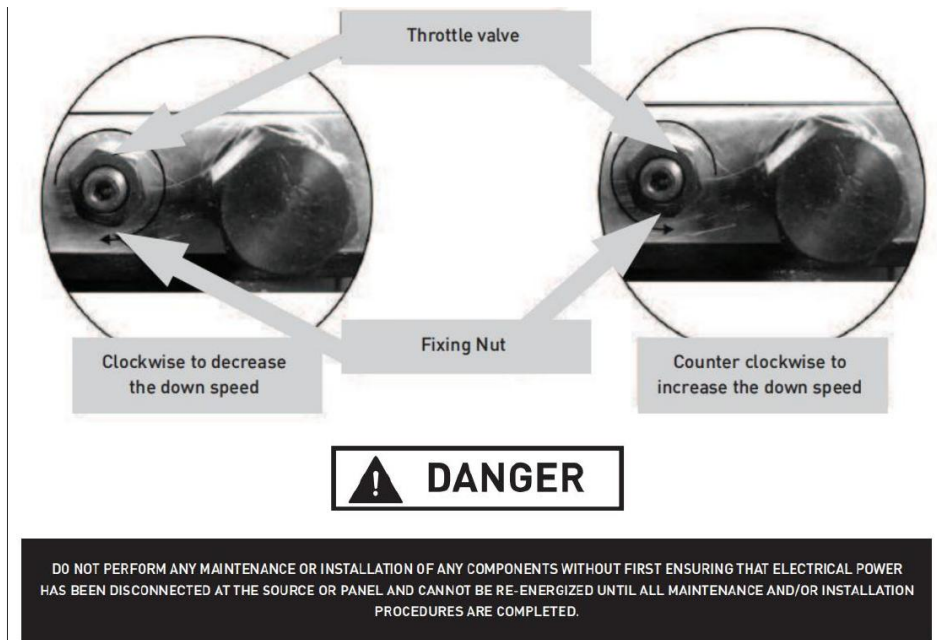
Synchronising cable and cable nut location

If the carriages aren't rising evenly

1. Raise the hoist until the first safety lock on one carriage sits higher than the lock on the column. Lower the hoist until the lower carriage's lock engages with the column.
2. Loosen the cable on the safety lock on the higher side, and release that lock (the lock on the other side should still be engaged). Continue lowering — the lower side stays locked in place while the higher side keeps descending. Keep going until both carriages are level.
3. Loosen the jam nut on the higher carriage's synchronising cable and tighten the tension nut until both cables have equal tension. Then re-tighten the jam nut and the safety cable.

Adjusting the lowering speed

You can adjust how fast the hoist lowers. Loosen the locking nut on the throttle valve, then turn the valve clockwise to slow the descent, or counter-clockwise to speed it up. Re-tighten the locking nut once you're happy with the speed.

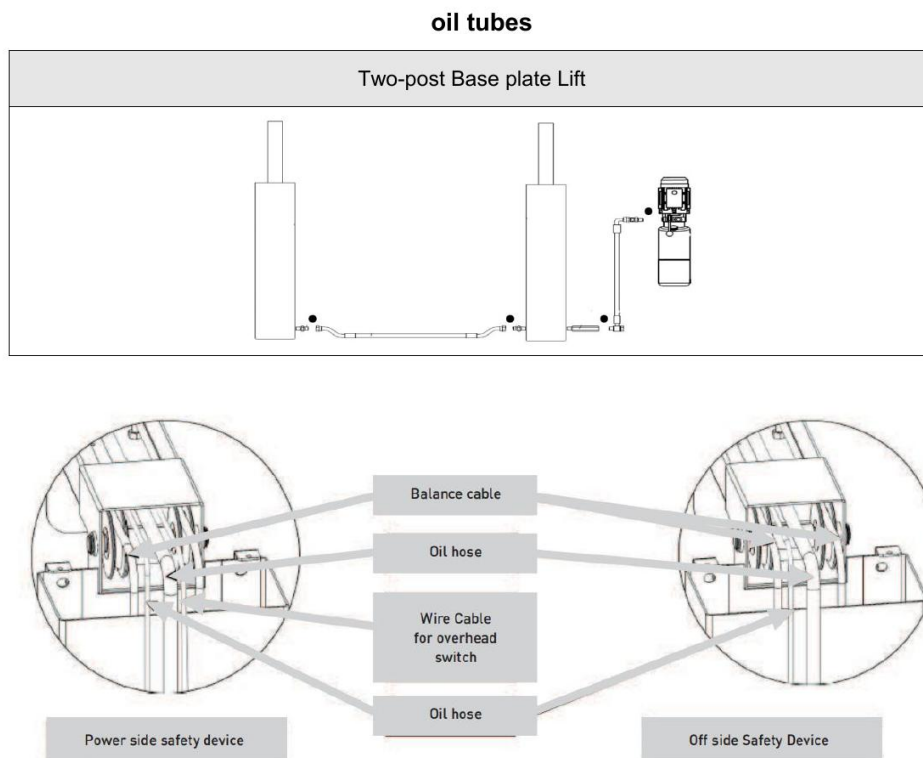


Throttle valve — clockwise to slow down, counter-clockwise to speed up

⚠ DANGER

Do not carry out any maintenance or installation work without first disconnecting electrical power at the source or panel. Don't reconnect power until all work is complete.

Hydraulic Hose and Cable Routing

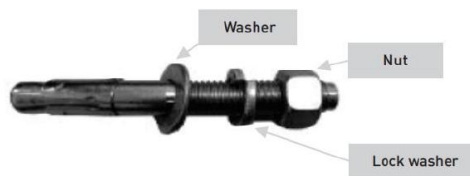
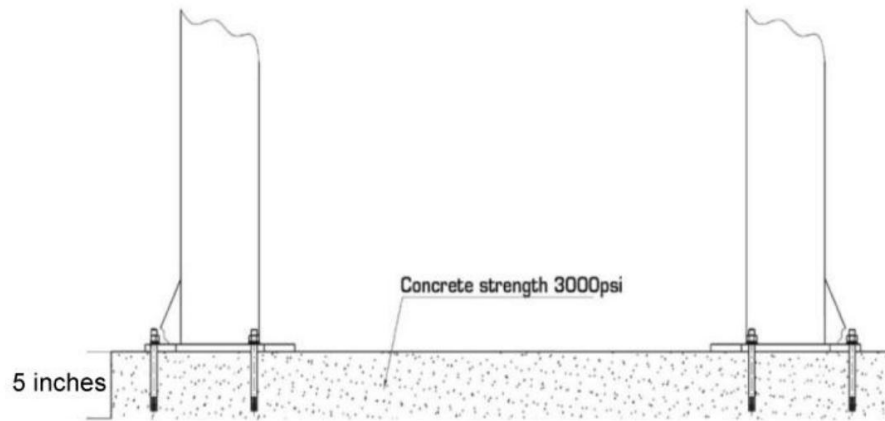


Hydraulic hoses, balance cable, and overhead switch wiring between the power side and off side

Concrete Strength Reference Diagram

This diagram is provided by the manufacturer using imperial units. Please refer to Step 2 (Prepare the base and floor) above for the metric requirement you should build to.

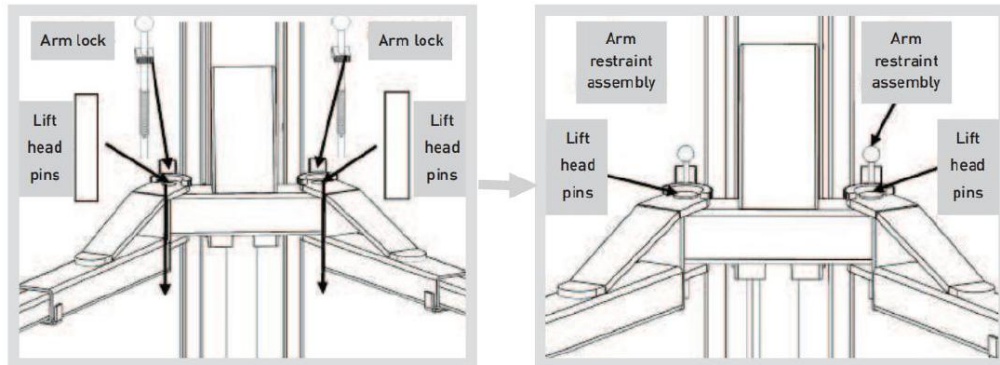
Concrete strength



Reference diagram — 3,000 psi $\approx$ 20.7 MPa; 5 inches $\approx$ 127 mm

Fitting the Lift Arms

1. Fit the correct lift arm assembly into each lift head.
2. Insert the lift head pins through the lift head and the holes in the arm assembly.
3. Each arm restraint gear can be set up for either the left or right side — make sure each arm and restraint gear is fitted in the correct position for its lift head.



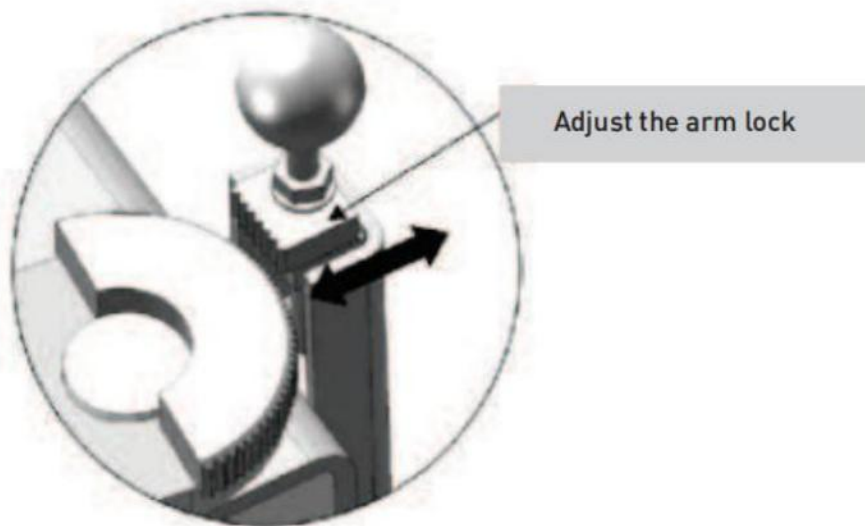
Lift head pins and arm restraint assembly

4. Fit the arm lock assembly to the lift.
5. Insert the arm lock pins.
6. Pull the arm lock rod fully up so it's unlocked, then adjust the nut as shown in the diagram.



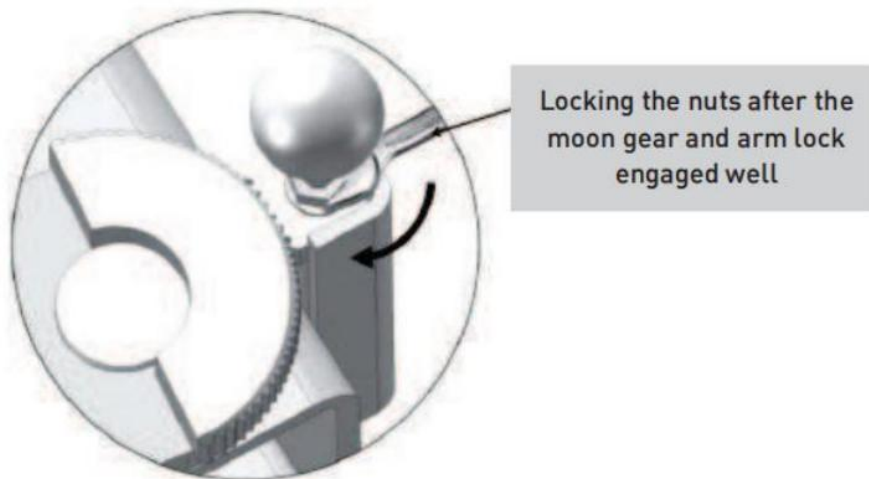
Adjusting the arm lock nut

7. Adjust the arm lock in the direction shown by the arrow.
8. Adjust the arm lock's teeth so they mesh properly with the gear on the lifting arm, then tighten the hex bolts on the arm lock assembly.



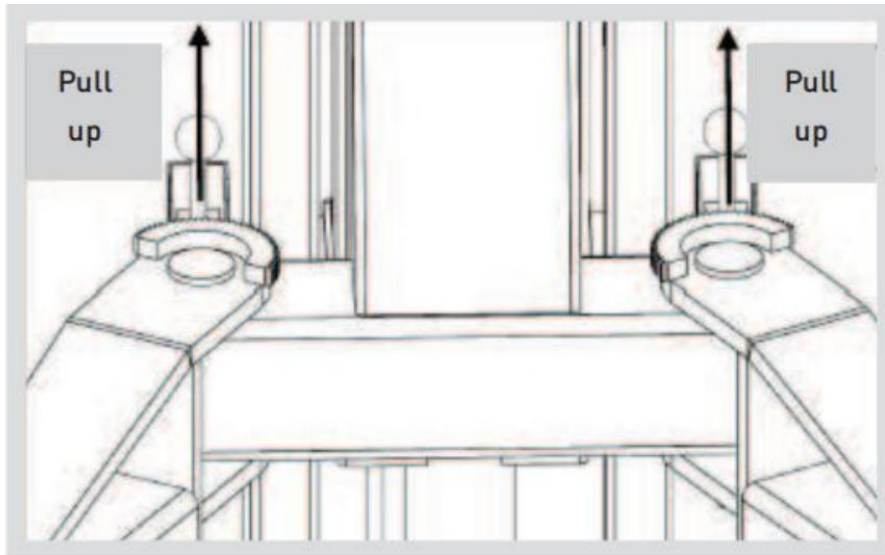
Adjust the depth of arm lock assembly. Make it mesh with the gear on the lifting arm lock assembly.

Adjusting the arm lock — follow the arrow direction

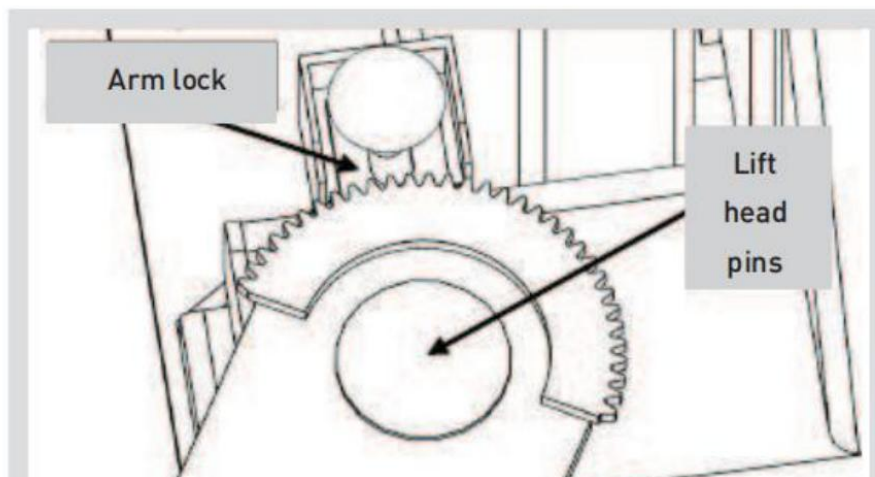


Locking the nuts once the arm lock and gear are properly engaged

9. Check the arm restraints are working: pull up on each restraint assembly, then swing the arms back and forth to test the restraint pin at different positions.
10. The arms shouldn't move when roughly 45 kg (100 lb) of sideways force is applied to them fully extended.



Testing the arm restraint assembly



Arm lock and lift head pins

⚠ DANGER

Inspect every arm restraint assembly before each use of the hoist.

Do not operate the hoist if any of the four arm restraint systems is not working properly.

Operating Warnings

⚠ WARNING — LOWERING THE HOIST

When lowering the hoist, make sure everyone and everything is clear first. Keep the hoist in view the whole time it's moving, and make sure all safety locks are released before lowering. If a lock accidentally engages during descent, the vehicle could drop suddenly, risking serious injury or death.

- Always remove tool trays, stands, and anything else from under the vehicle before lowering.
- Always release the safety locks before attempting to lower the hoist.
- Always position the arms and adapters to leave a clear, unobstructed exit before driving the vehicle off the hoist.

⚠ WARNING — TRAINED OPERATORS ONLY

To avoid personal injury or property damage, only trained personnel should operate this hoist. After reading this manual, practise using the controls by running the hoist through a few empty cycles before loading a vehicle. Always lift using all four adapters — never raise just one end, one corner, or one side of a vehicle.

Loading a vehicle

1. Before loading: lower the hoist fully and clear the bay of people before driving the vehicle in, with the arms swung to the full drive-through position.
2. Loading: swing the arms under the vehicle and position the adapters at the vehicle manufacturer's recommended lift points. Use height extenders or optional frame cradle adapters if needed for good, secure contact.
3. Some vehicles mark their lift points with triangle-shaped symbols on the underbody (see ANSI/SAE J2184-1992), or with a label near the right front door jamb showing the specific lift points.

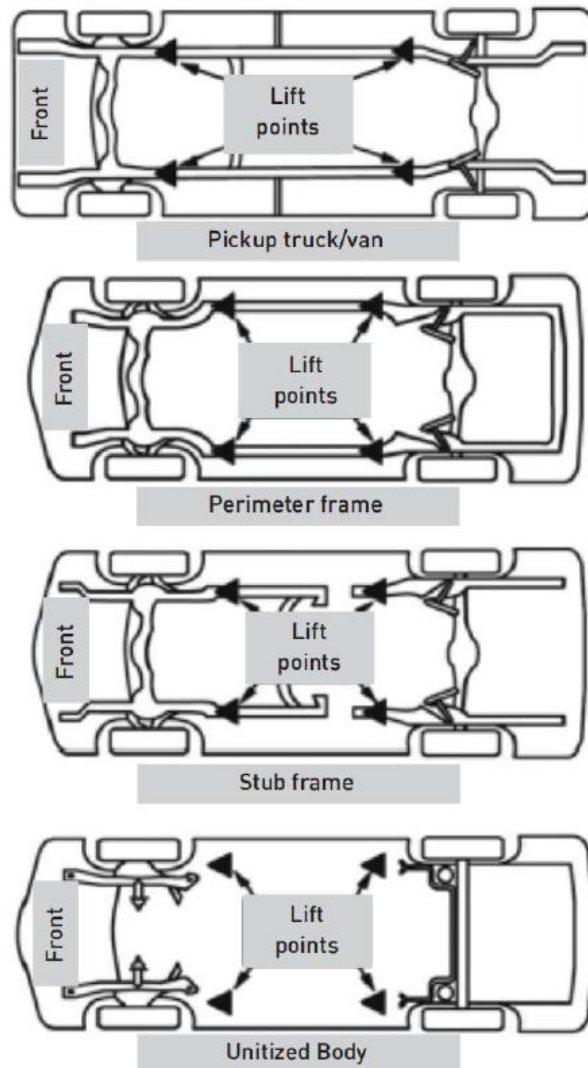
⚠ WARNING — SPECIALTY AND MODIFIED VEHICLES

Many specialty or modified vehicles cannot be safely raised on a two-post frame-engaging hoist. Contact the vehicle manufacturer for the correct raising or jacking method before attempting to lift them.

- Position the vehicle for even weight distribution, with the arms positioned so the adapters contact the manufacturer's recommended pick-up points.

Typical lifting points

TYPICAL LIFTING POINTS



Typical lifting points by vehicle type

Raising a vehicle

- Push the RAISE button, or turn the control switch on the power unit.

⚠ NOTE

Allow at least 2 seconds between motor starts. Starting the motor too often in quick succession may cause it to burn out.

- Stop as soon as the adapters make contact with the vehicle. Check that the arm restraint pins are engaged; if needed, move the arm slightly so the restraint gear and pawl mesh properly. Do not hammer the restraint pin down, as this will damage the restraint gear teeth.
- Raise the vehicle until the tyres clear the floor.
- Stop and check that all adapters are making secure contact at the manufacturer's recommended lift points.

- Only continue raising to your desired height once you've confirmed the vehicle is secure on the hoist.
- Do not go near or under a raised vehicle unless all four adapters are in secure contact at the manufacturer's recommended lift points.
- Repeat the loading and raising steps if required.
- Lower the hoist onto the safety locks before working underneath the vehicle.

Testing After Installation

Once installation is complete, you'll need to bleed the hydraulic system and test the hoist before it's used for the first time.

1. Fill the oil tank with hydraulic oil (don't overfill it). Connect the power and press the up button — the hoist should rise as the hydraulic cylinders start working.
2. Let the hoist rise all the way to its highest position, then stop pressing the button. Continuing to hold the button after it's reached full height can damage the power unit.
3. Leave the hoist at full height for about 10 seconds.
4. Pull out the lock-release cable and press the down lever on the power unit to lower the hoist.
5. If the hoist judders, or the two sides aren't level as it lowers, adjust the balance (synchronising) cable and repeat until it lowers smoothly and evenly. Only drive a vehicle onto the hoist once you've confirmed it's properly balanced.
6. Start the motor and use the up/down button to raise the hoist again — a slight 'jump' from the cylinder at the start is normal.

Maintenance Schedule

Frequency	What to check
Every shift	Support arms move freely and operate normally.
Every shift	Bolts and hinge pins aren't loose — tighten if needed.
Every shift	Safety devices are working reliably.
Every shift	Telescoping arms move smoothly and reliably.
Weekly	Lubricate the column sliders and the full chain assembly (adjust frequency based on how often the hoist is used).
Regularly	Foundation (anchor) bolts aren't loose — tighten if needed.
Regularly	Columns aren't damaged or deformed, and are still plumb (vertical).
Regularly	Support pads for wear — replace if worn.
Every 500 operating hours	Change the hydraulic oil. If the hoist is used lightly or rarely, change the oil every 1–1.5 years instead.

Troubleshooting

The hoist doesn't work at all

Possible cause	What to do
Air trapped in the hydraulic oil	Bleed the system — see “Testing After Installation”.
Oil viscosity too high (oil has thickened, or it's too cold)	Drain the thick oil and refill with the correct grade.
Hydraulic oil is leaking	Check all pipe connections are tight; check the cylinder oil seal for damage or wear.
Motor wired in reverse	Check the wiring against the circuit diagram.
Motor isn't working	Check for a missing phase, a faulty line, or incorrect voltage; check the fuse hasn't blown; the motor itself may need replacing.

The hoist doesn't work under load

Possible cause	What to do
Hydraulic oil is leaking	Tighten any loose pipe connections; replace the cylinder if the oil seal has failed.
Wrong motor voltage	Install a voltage regulation system.
Load exceeds the hoist's rated capacity	Check you're within the rated lifting capacity — never exceed it.

The hoist won't lift off, or lifts very slowly

Possible cause	What to do
Hoist is locked	Raise the hoist, release the lock, then press the down button.
Hydraulic oil viscosity too high	Change to the correct grade of oil.
Insert valve is blocked	Take the valve apart and clean it.
Pipe is blocked	Disconnect the pipe fitting, check for and clear any blockage.

Oil is leaking

Possible cause	What to do
Loose pipe connector	Retighten the connector.
Oil leaking from the air vent	The hydraulic cylinder seal has failed — replace it.
Too much oil in the tank	Reduce the oil level.

There's an unusual noise

Possible cause	What to do
Air in the oil	Bleed the system as described in “Testing After Installation”.
Overloaded	Check you're within the rated lifting capacity.
Loose motor mounting bolts	Tighten the bolts.
Insufficient lubricant on moving/rolling parts	Top up the lubricant.