



HOISTS FOR EVERY SPACE

TL4.00HDI

Installation/Owners Manual

Free Call 1800 88 33 54

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ALL USERS MUST READ THIS MANUAL

PRIOR TO INSTALLATION

The entire contents of this manual must be read prior to 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. Keep this operation manual near the machine at all times. Make sure that ALL USERS read this manual. Do not operate this machine until you read and understand all the dangers, warnings and cautions in this manual.

BE SAFE

Your new lift was designed and built with safety in mind. However, your overall safety can be increased by proper training and thoughtful operation on the part of the operator.

DO NOT operate or repair this equipment without reading this manual and the important safety instructions shown inside.



WARNING SYMBOLS - WATCH FOR THESE SYMBOLS

Read First

Watch for this symbol:
It means read this information first.

Important

Watch for this symbol:
It means the information supplied is important and should not be ignored.

Caution

Watch for this symbol:
It means hazard or unsafe practices which could result in severe personal injury or death.

Warning

Watch for this symbol:
It means hazards or unsafe practices which may result in minor personal injury or product or property damage.

Danger

Watch for this symbol:
It means immediate hazard which will result in severe personal injury or death.

IMPORTANT INFORMATION - INSTALLING THIS LIFT

Do not attempt to install this lift if you have never been trained on basic automotive lift installation procedures.

Never attempt to lift components without proper lifting tools such as forklift or cranes. Stay clear of any moving parts that can fall and cause injury.

These instructions must be followed to ensure proper installation and operation of your lift.

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.

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HOISTS FOR EVERY SPACE

INSTALLER AND OPERATOR NOTES

You must understand these instructions, by proceeding you agree to the following:

YOU MUST UNDERSTAND!

Any freight damage must be noted on the freight bill before signing and reported to the freight carrier with a freight claim established. Identify the components and check for shortages. If shortages are discovered, please contact the Distributor / Sales Rep. in your area for service.

You have visually inspected the site where the lift is to be installed and verified the concrete to be in good condition and free of cracks or other defects.

You understand that installing a lift on cracked or defective concrete could cause lift failure resulting in personal injury or death.

You understand that a level floor is required for proper installation and level lifting. You understand that you are responsible if your floor is of questionable slope and that you will be responsible for all charges related to pouring a new level concrete slab if required.

You will assume full responsibility for the concrete floor and condition thereof, now or later, where the above equipment model(s) are to be installed.

Failure to follow danger warning and caution instructions may lead to serious personal injury or death to operator or bystander or damage to property.

This is a vehicle lift installation/operation manual and no attempt is made or implied herein to instruct the user in lifting methods particular to an individual application. Rather, the contents of this manual are intended as a basis for operation and maintenance of the unit as it stands alone or as it is intended and anticipated to be used in conjunction with other equipment.

Proper application of the equipment described herein is limited to the parameters detailed in the specifications and the uses set forth in the descriptive passages. Any other proposed application of this equipment should be documented and submitted in writing to the factory for examination. The user assumes full responsibility for any equipment damage, personal injury, or alteration of the equipment described in this manual or any subsequent damages.

You understand that Tufflift lifts are designed to be installed in indoor locations only. Failure to follow installation instructions may lead to serious personal injury or death to operator or bystander or damage to property or lift.

OWNER RESPONSIBILITIES

You must understand these instructions, by proceeding you agree to the following:

OWNER:

- To maintain the lift and user safety, it is the responsibility of the Owner / Installer to read and follow responsibilities.
- Make sure installation conforms to all applicable Local, State, and Federal Codes, Rules, and Regulations; such as State & Federal OSHA Regulations and Electrical Codes.
- Shall ensure that lift operators are qualified and that they are trained in the safe use and operation of the lift
- Carefully check the lift for correct initial function.
- Read and follow the safety instructions and procedures. Keep them readily available for the operators.
- Shall establish procedures to periodically inspect the lift in accordance with the lift manufacturer's instructions.
- Shall establish procedures to periodically maintain the lift in accordance with the lift manufacturer's instructions
- Shall maintain the periodic inspection and maintenance records recommended by the manufacturer.
- Shall display the lift manufacturer's operation instructions.
- Shall not modify the lift in any manner without the prior written consent of the manufacturer.
- Keep all instructions permanently with the unit and all decals on the unit clean and visible.

SAFETY WARNINGS

- **READ AND UNDERSTAND** the safety procedures and operating instructions in this manual before operating lift. Keep this manual near lift at all times. Make sure all operators read this manual.
- **CAREFULLY REMOVE** the crating and packing materials. Be careful when cutting steel banding material as items may become loose and fall causing personal harm or injury.
- **LIFT SHOULD BE LOCATED** on a relatively level floor of less than 3 degrees slope. If slope is questionable, consider a survey of the site and/or the possibility of pouring a new level concrete slab.
- **MAKE SURE** you have enough area and ceiling height to install lift. (See Lift Specifications)
- **NEVER RAISE A CAR** until you have double checked all bolts, nuts and hose fittings.
- **ALWAYS LOWER THE LIFT** onto the locks before going under the vehicle.
- **NEVER ALLOW** anyone to go under the lift when raising or lowering
- **CHECK THE VOLTAGE**, phase and proper amperage requirements for the motor shown on the motor plate. Wiring should be performed by a certified electrician
- **CONSIDER** work area environment. Keep area well lit. **DO NOT** expose equipment to rain. **DO NOT** use in damp or wet locations.
- **ONLY TRAINED OPERATORS** should operate this lift. All non-trained personnel should be kept away from work area. Never let non-trained personnel come in contact with, or operate lift.
- **GUARD AGAINST ELECTRIC SHOCK** This lift must be grounded while in use to protect the operator from electric shock. Never connect the green power cord wire to a live terminal. This is for ground only.
- **CAUTION** - the power unit operates at high pressure.
- **DANGER!** The power unit used on this lift contains high voltage. Disconnect power at the receptacle before performing any electrical repairs. Secure plug so that it cannot be accidentally plugged in during service.
- **WARNING! RISK OF EXPLOSION** This equipment has internal arcing or sparking parts which should not be exposed to flammable vapours. This machine should not be located in a recessed area or below floor level.
- **MAINTAIN WITH CARE** Keep lift clean for better and safer performance. Follow manual for proper lubrication and maintenance instructions. Keep control handles and/or buttons dry, clean and free from grease and oil.
- **CHECK FOR DAMAGED PARTS.** Check for alignment of moving parts, breakage of parts or any condition that may affect its operation. Do not use lift if any component is broken or damaged.
- **NEVER REMOVE** Safety related components from the lift. Do not use lift if safety related components are damaged or missing.
- **USE LIFT CORRECTLY.** Use lift in the proper manner. Never use lifting adapters other than what is approved by the manufacturer.

SAFETY PROCEDURES

- **NEVER ALLOW** unauthorised persons to operate lift. Thoroughly train new owners in the use and care of lift.
- **PROHIBIT UNAUTHORISED** persons from being in shop area while lift is in use.
- **REMOVE** passengers before raising vehicle.
- **DO NOT** stand directly in front of the vehicle or in the bay when vehicle is being loaded or driven into position.
- **PAY ATTENTION** when walking under a vehicle that is up on the hydraulic lift **DO NOT** Leave the controls while the lift is still in motion.
- **TOTAL LIFT CAPACITY** is 4 Ton. **DO NOT** exceed maximum weight capacity of lift.
- **PRIOR TO LIFTING VEHICLE**, walk around the lift and check for any objects that might interfere with the operation of lift and safety latches; tools, air hoses, shop equipment.
- **WHEN APPROACHING THE LIFT** with a vehicle, make sure to center the vehicle between the columns so that the tyres will clear the swing arms easily. Slowly drive the vehicle between the columns. It is recommended to have someone outside the vehicle guide the driver.
- **SOME VEHICLE MAINTENANCE** and repair activities may cause the vehicle to shift. Follow the manufacturer's guidelines when performing these operations. The use of jack stands or alternate lift points may be required when completing some repairs.
- **ALWAYS ENSURE** that the safety locks are engaged before any attempt is made to work on or near vehicle.
- **KEEP HANDS AND FEET CLEAR.** Remove hands and feet from any moving parts. Keep feet clear of lift when lowering. Avoid pinch points.
- **ALWAYS LIFT VEHICLE** using all four pads.
- **NEVER USE** lift to raise one end or side of vehicle.
- **ALWAYS RAISE VEHICLE** about 75mm and check stability by rocking vehicle.
- **PRIOR TO LOWERING VEHICLE**, walk around the lift and check for any objects that might interfere with the operation of lift and safety latches; jacks, tools, air hoses, shop equipment.
- **ALWAYS LOWER LIFT** to the lock position before going under vehicle.
- **ALWAYS** lower the vehicle down slowly and smoothly. Make sure everyone is standing at least 2m away.
- **CLEAR AREA** if vehicle is on danger of falling.
- **NEVER ALLOW ANYONE** to go under the lift when raising or lowering.
- **CONDUCT DAILY PRE-OPERATION CHECK** Check for alignment of moving parts, breakage of parts or any condition that may affect its operation. Do not use lift if any component is broken or damaged.
- **DRESS PROPERLY** Non-skid steel-toe footwear is recommended when operating lift.
- **NO RIDERS:** Stay clear of Lift when raising or lowering
- **NEVER OVERRIDE** the Lifts operating and safety controls.
- **DO NOT** override self-closing lift controls.
- **DO NOT** rock the vehicle while on the lift or remove any heavy component from vehicle that may cause excessive weight shift.
- **NEVER** leave the lift in an elevated position unless both safety locks are engaged.
- **ALWAYS** ensure safety locks are engaged before exiting work area.

TOOLS - YOU WILL NEED

The installation of the lift is relatively simple and can be accomplished by 2 men in a few hours with the following tools and equipment.

- Hoist or Forklift (Optional)
- Metric Sockets & Open Wrench Set
- Two x 3 - 3.5m Step Ladders
- Vise Grips
- Teflon Tape
- ISO 32 Light Hydraulic Oil - 12 Litres
- Tape Measure: 8m minimum
- One Metre plus Level
- 30mm Socket
- Rotary Hammer Drill
- 20mm Masonry Drill Bit
- Torque Wrench

PROTECTIVE EQUIPMENT

Personal protective equipment helps make installation and operation safer, however, does not take the place of safe operating practices. Always wear durable work clothing during any installation and/or service activity. Shop aprons or shop coats may also be worn, however loose fitting clothing should be avoided. Tight fitting leather gloves are recommended to protect technician hands when handling parts. Sturdy leather work shoes with steel toes and oil resistant soles should be used by all service personnel to help prevent injury during typical installation and operation activities.

Eye protection is essential during installation and operation activities. Safety glasses with side shields, goggles, or face shields are acceptable. Back belts provide support during lifting activities and are also helpful in providing worker protection. Consideration should also be given to the use of hearing protection if service activity is performed in an enclosed area, or if noise levels are high.

TL4.00HDI DESCRIPTION

Motors and all electrical components are not sealed against the weather and moisture. Install this lift in a protected indoor location. Failure by the operator to provide the recommended shelter could result in unsatisfactory lift performance, property damage, or personal injury.

This lift is a 4 Ton capacity, 2-Post Lift. The locking latch system is very similar to an extension ladder. The locking latch is in contact with the latch rack. As the lift rises the locking latch drops into place. The locking latch engages in latch rack in 75mm increments starting at about 400mm from the ground. The locking latches must be manually disengaged for the lift to lower.

The locking latch is released by pulling the Release cables raising the latch up off the latch rack. Once the raise button is pressed, the latch will automatically re-engage after approximately 75mm of travel. Heavy bearings and heavy-duty leaf chains are used throughout the lift. The work is done with the heavy-duty chain connected to a 64mm cylinder, driven by an electric / hydraulic pump.

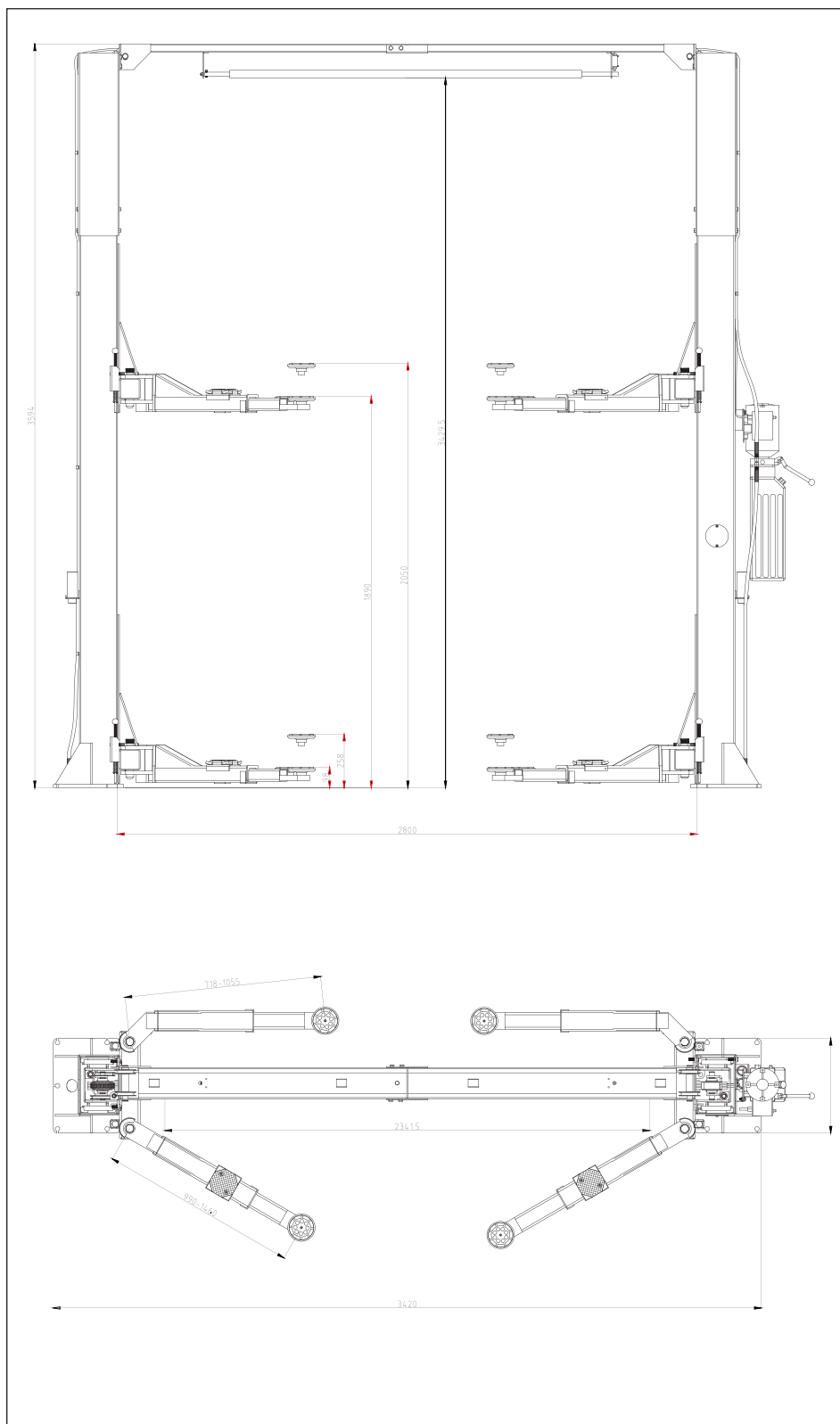
CAUTION

ENSURE THAT ALL CABLE SHEAVES, BEARINGS, AND SHAFTS are sufficiently lubricated. Also, the corners of each column should be lightly greased with quality type lithium grease prior to operating the lift. Lubricate all on an annual basis.

LIFT SPECIFICATIONS	
Model	TL4.00HDI
Capacity	4.0 TON
Lifting Time	50 Seconds
Overall Height	3,594mm
Overall Floor Width	3,420mm
Maximum Lift Height	1,890mm - with adapters 2,050mm - plus height of vehicle
Minimum Pad Height	98mm
Width Between Columns	2,800mm
Column Size	184mm x 283mm
Drive Through Clearance	2,341mm
Motor	2HP, 208-230 VAC, 1PH

Disclaimer: All measurements and diagrams are accurate at the time of publication but are subject to change.

PLAN & ELEVATION VIEW

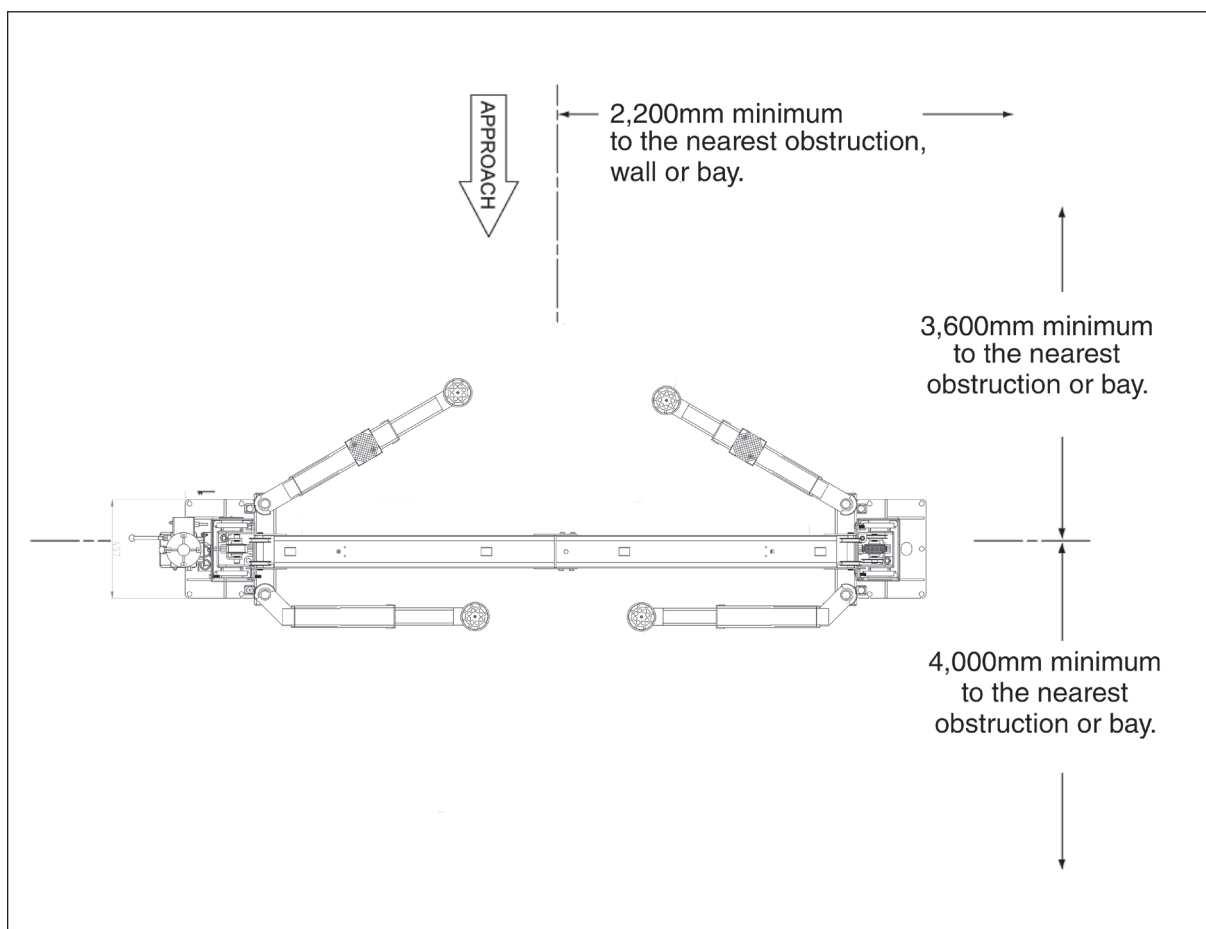


! Danger

WHEN REMOVING THE LIFT from shipping angles pay close attention as the posts can slide and can cause injury. Prior to removing the bolts make sure the posts are held securely by a forklift or some other heavy lifting device.

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LIFT AREA & LAYOUT INFORMATION



Overhead Model (Asymmetrical Arm Configuration)

Power unit can be placed on either side at customer discretion.

However to save operation steps it is recommended that it is placed on passenger side of lift.

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SELECT A SITE

SELECTING A LOCATION FOR YOUR LIFT	
Lift Location	Always use architects plans when available. Check layout dimension against floor plan requirements making sure adequate space is available.
Overhead Obstructions	The area where the lift will be located should be free of overhead obstructions such as heaters, building supports, electrical lines etc. Remember to allow for lifting height plus vehicle height.
Defective Floor	Visually inspect the installation site and check for cracked or defective concrete.
Operating Temperature	Operate lift only between temperatures of 5° - 40° Celsius.
Indoor Installation ONLY	This lift is designed for indoor use only.

Danger

DO NOT install or use this lift on any asphalt surface or any surface other than concrete.

DO NOT install or use this lift on expansion seams or on cracked or defective concrete.

DO NOT install or use this lift on a second / elevated floor without first consulting building architect.

DO NOT install or use this lift outdoors.

Warning

THIS LIFT MUST be installed on a solid level concrete floor with no more than 3-degrees of slope. Failure to do so could cause personal injury or death.

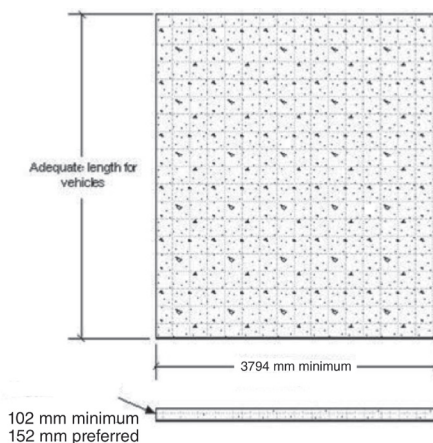
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FLOOR REQUIREMENTS

A level floor is suggested for proper use & installation of level lifting. If a floor is of questionable slope, consider a survey of the site and/or the possibility of pouring a new level concrete slab.

CONCRETE SPECIFICATIONS	
Lift Model	TL4.00HDI
Concrete Requirement	102mm min. thickness / 3000psi min.

- Concrete shall have compression strength of at least 3,000psi and a minimum thickness of 102mm in order to achieve a minimum anchor embedment of 83mm. **NOTE:** When using the standard supplied 19mm x 140mm long anchors; if the top of the anchor exceeds 57mm above the floor grade, you **DO NOT** have enough embedment.
- Maintain a 152mm minimum distance from any slab edge or seam. Hole to hole spacing should be a minimum 165mm in any direction. [Hole depth is to be a minimum of double the bolt length if not all the way through. This is to accommodate a replacement bolt if required and clearance for the bolt to be knocked through if the hoist is ever removed or shifted.]
- CAUTION DO NOT** install on asphalt or other similar unstable surface. Columns are supported only by anchoring in floor.
- Using the horseshoe shims provided, shim each column base as required until each column is plumb. If one column has to be elevated to match the plane of the other column, full size base shim plates should be used. Torque anchors to 115 Nm. Shim thickness **MUST NOT** exceed 13mm when using the 140mm long anchors provided with the lift. Adjust the column extensions plumb
- If a concrete pad is required for a hoist to be fitted due to poor concrete the minimum requirements are 1 metre square x 500mm deep and with reinforcement and draw pins fitted into existing concrete slab.



! Danger

All models must be installed on 3000psi concrete only, conforming to the minimum requirements shown. New concrete must be adequately cured by at least 28 days minimum.

DO NOT INSTALL on asphalt or other similar unstable surface. Columns are supported only by anchoring to floor

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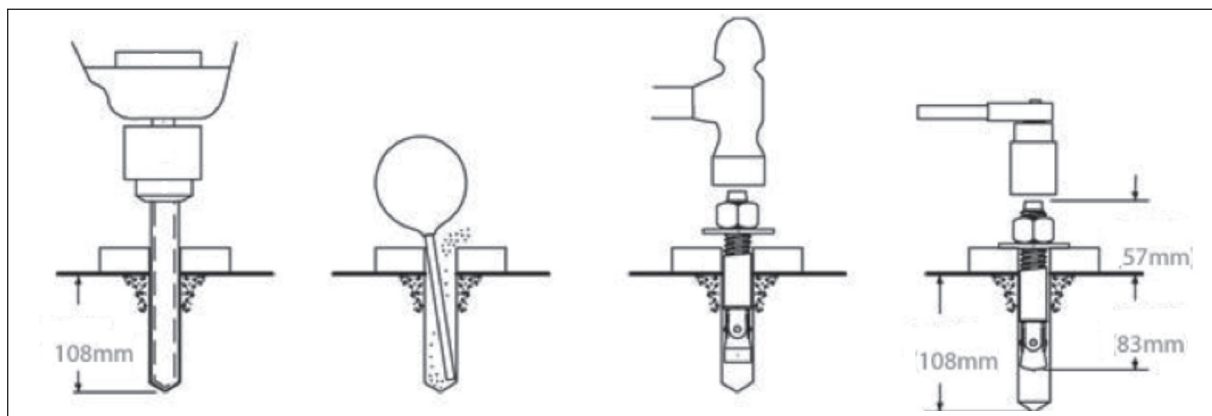
ANCHORING TIPS

1. Use a concrete hammer drill with a masonry tip, solid drill bit the same diameter as the anchor, 20mm diameter. Do not use excessively worn bits or bits which have been incorrectly sharpened.
2. Keep the drill in a perpendicular line while drilling.
3. Let the drill do the work. Do not apply excessive pressure. Lift the drill up and down occasionally to remove residue to reduce binding.
4. Drill the hole to depth equal to double the length of anchor.
NOTE: Drilling through concrete (recommended) will allow the anchor to be driven through the bottom of foundation if the threads are damaged or if the lift will need to be relocated.
5. For better holding power blow dust from the hole. Place a flat washer and hex nut over threaded end of anchor, leaving approximately 12.7mm of thread exposed carefully tap anchor. Do not damage threads. Tap anchor into the concrete until nut and flat washer are against base plate.

DO NOT USE AN IMPACT WRENCH TO TIGHTEN!

Tighten the nut; two or three turns on average concrete (28-day cure).

If the concrete is very hard only one or two turns may be required. Check each anchor bolt with torque wrench set to 115 Nm



Drill holes using 20mm carbide tipped masonry drill bit

Clean Hole

Run nut down just below impact section of bolt. Drive anchor into hole until nut and washer contact base.

Tighten nut with Torque wrench to 115 Nm.

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INSTALLATION STEPS: 1 – 7

STEP 1

After unloading the lift, place it near the intended installation location.

STEP 2

Check for ceiling clearance - (lifting height plus vehicle height) Remove the shipping bands and packing material from the lift. The power unit will be unpacked from the top.

STEP 3

Open the wrapping from the upper column and carefully remove the parts from inside the column from the shipping brackets. Unbolt the up-rights from the columns and assemble it to the column. Loosely fit the tower upright extensions, these will be tightened later in the install. If these are tightened now they will not sit plumb with the rest of the hoist.

Place the tower extension on top of the column. Use the lower and middle holes for the higher (3.6m) setting. Use the middle and upper holes for the lower (3.5m) setting. Attach the tower extension loosely and tighten when column is vertical to ensure correct alignment with column base.

Installing the equalizing cables: for general cable arrangement. Route the first cable as shown on page 19. Tighten locking nuts together. Pull the

other end of cable and run nut on it. Repeat above for second cable.

STEP 4

Remove the packing brackets and bolts holding the two columns together.

STEP 5

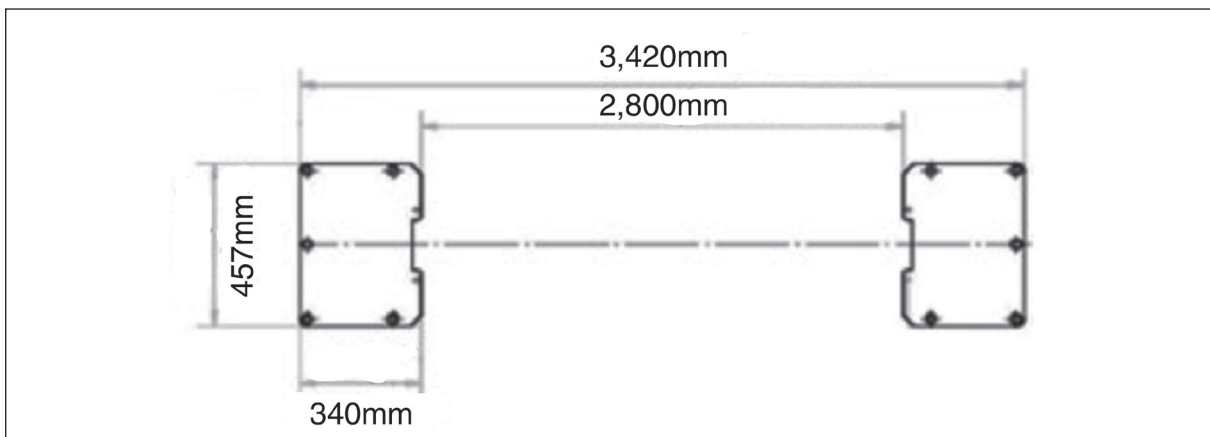
Once the power unit column location is decided, insure that the proper lift placement is observed from walls and obstacles. Also check the ceiling height for clearance in this location. **NOTE:** The power unit column can be located on either side.

STEP 6

Raise the columns to a vertical position. Position the columns facing each other 2724mm inside base plates. Square the columns by measuring diagonally from the corner points on base plates within 6mm.

STEP 7

Use the existing holes in column base plate as a guide for drilling the 20mm diameter holes into the concrete. Drill the anchor holes (See anchoring tips p16) only for ONE column, installing anchors as you go. You will install anchors in second column after the cables, hoses, and crossbeam are installed.



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INSTALLATION STEPS: 8 – 14

STEP 8

Using a level, check column for side-to-side plumb and front-to-back plumb. If needed, use horseshoe shims provided by placing shims underneath the base plate and around the anchor bolt. This will prevent bending the column bottom plates (Shim thickness should not exceed 12mm). Tighten 20mm anchor bolts to 115Nm of torque.

STEP 9

Using a tape measure, now measure from the back corner of the base on main side column to the opposite corner of the offside column to insure legs are square.

STEP 10

Set carriages on the second safety latch engagement. Be sure each carriage is at the same height by measuring from the top of the base to the bottom of the carriage (double check the latches before working under the carriages). This dimension should be within 6mm.

STEP 11

Install the overhead cross beam. This cross beam has two pieces to be connected by five (5) bolts in the centre of the beam. Be sure to bolt them together by installing the bolts from inside the cross beam out. This is to avoid interference with the cable when operating the lift.

STEP 12

Install both the “Overhead Shut-Off Bar” and “Limit Switch” on to the overhead cross beam. Make the electrical hookup to the power unit; 240V 15amp circuit the hoist can be used with a 10 amp socket on a 15 and upward amperage circuit as long and the cable circuit is heavy enough to support demand.

WARNING: – the wiring must comply with local code. Have a certified electrician make the electrical hook-up to the power unit. Protect each circuit with time delay fuse or circuit breaker; 208v-230v single phase 60 Hz 30 amp.

NEXT: – install the cross beam between two columns. Fasten all bolts to extensions. Tighten Top Tower extensions prior to fitting Top Beam

STEP 13

Secure the remaining column by duplicating. (Steps 7+8)

STEP 14

After fastening the cross beam, check and confirm that the remaining column is plumb. All anchor bolts are to be fitted.

IMPORTANT

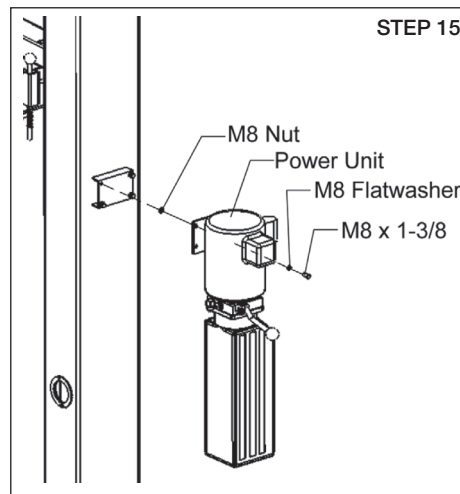
DO NOT tighten cables at this time. Just start them on the threads. Other column will be anchored in later steps.

If you tighten cables at this time you will pull the column and be unable to properly level/shim it for anchor installation.

INSTALLATION STEPS: 15 – 16

STEP 15

Mount the power unit on the main side leg to the power unit bracket using the four 8mm bolts and nuts. Connect the power unit to the fitting installed on the back of the main column using a short hose supplied.



STEP 15

! IMPORTANT

The cable swage stud that connects to the right corner of the carriage should be connected first by pulling the swage stud through the carriage hole and up where it is easy to be held by locking pliers.

Pull the swage stud back into place after threading at least 12mm of the swage stud past the locknut. Connect the other ends to the rear right corners of the carriage with at least 12mm of thread showing past the lock nut (cables run on the inside of the carriage).

It may be necessary to manually raise both carriages above the cylinder to provide enough space to use the locking pliers. Make sure the carriage is set in the LOCK position.

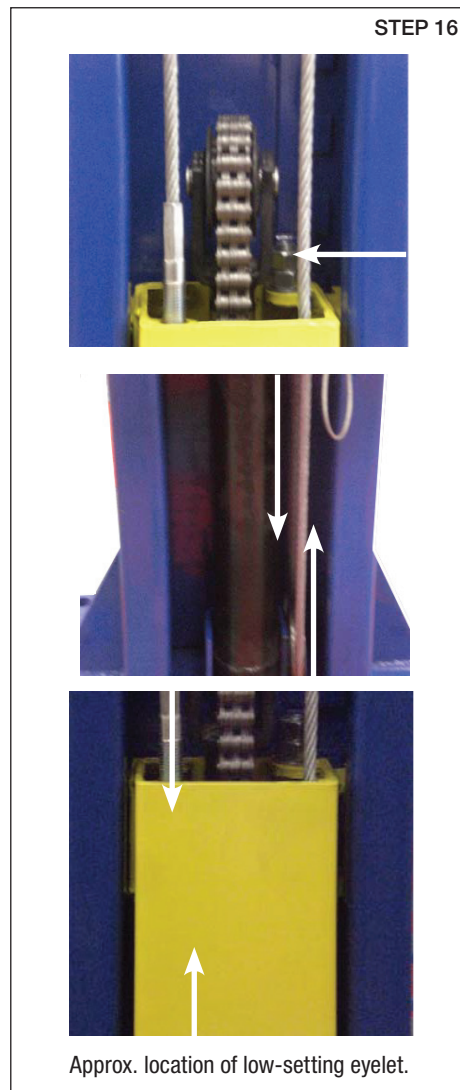
STEP 16

Connect the equalizing cables. **DO NOT** tighten as this stage of assembly.

This is the Power (Motor) Side, carriage. The nuts you see to the right-rear are where the cables start. Both nuts go above the eyelet, one nut acts as a locking nut. The cable will pass down and around the pulley, rear to front, then travel back up and across to the other side.

This is the Non-Powered side carriage. The arrow is where the cable from the Power side comes down. For the Highest setting, use the eyelet at the top, left hand corner. For the low setting, directly below the top eyelet, there is a second eyelet inside the carriage.

Pass the cable through the top eyelet and bolt into the inner, hidden eyelet. Just be sure cables do not cross and do not tighten the cable nuts down until they are run around the pulleys.



STEP 16

Approx. location of low-setting eyelet.


Disclaimer: All measurements and diagrams are accurate at the time of publication but are subject to change.

INSTALLATION STEPS: 17 – 18


STEP 17

Adjust the carriage cable tension. This is accomplished by tightening the carriage adjustment nut on the top of each carriage. The rear carriage adjustment nut adjusts the opposite post carriage height. The left post carriage nut adjusts the right column carriage, and the right column carriage nut adjusts the left column carriage. Adjust each cable to approximately 12mm side-to-side play.

NOTE: – Cylinder centering and chain installation: Make sure the “Tip” on the bottom of the cylinder is properly located into the centre hole on top of the cylinder mount in base. Pull the pre-attached leaf chain in both sides up and over the chain sheave on top of the cylinders.

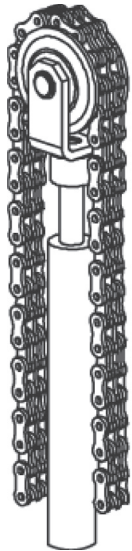


INCORRECT
The chain break lock is activated and the carriage will not lower



CORRECT
When installing the lift, the chain must be in front of the chain break to operate

STEP 17



STEP 18

Connect the Hydraulic Hoses and Fittings.

INSTALLATION STEPS: 19 – 23

STEP 19

Install the swing arms on the carriages using the included 38mm diameter pins. Check for proper engagement of the arm lock – the rack on the lock should fully engage the gear on the arm. **NOTE:** – You may have to loosen the arm lock nuts to get proper engagement and to install the arm pins. **BE SURE TO:** – Re-tighten the lock nuts after the arm pins are installed.

STEP 20

Adjust the carriage cables tension. Adjust each cable to approximately 12mm side-to-side play. Check the latch releases to insure the carriage is still sitting on the appropriate latch.

STEP 21

Remove the vent plug from the power unit and fill the reservoir. Use a Ten Weight (ISO AW32) non-foaming, non-detergent hydraulic fluid (i.e. Texaco HD32 or equal). The unit will hold approximately 11.35 Litres of fluid.

STEP 22

Do not place any vehicle on the lift at this time. Cycle the lift up and down several times to insure latches click together and all air is removed from the system. To lower the lift, both latch releases must be manually released. Latches will automatically reset once the lift ascends approximately 430mm from base. If latches click out of sync, tighten the cable on the one that clicks first.

STEP 23

With lift fully lowered, recheck power unit fluid level. Fill as required.

WARNING

The wiring must comply with local code. Have a certified electrician make the electrical hook-up to the power unit. Protect each circuit with time delay fuse or circuit breaker.

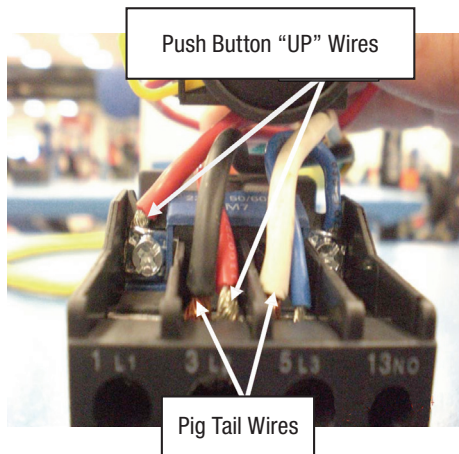
Disclaimer: All measurements and diagrams are accurate at the time of publication but are subject to change.



HOISTS FOR EVERY SPACE

WIRING THE LIMIT SWITCH

STEP 1



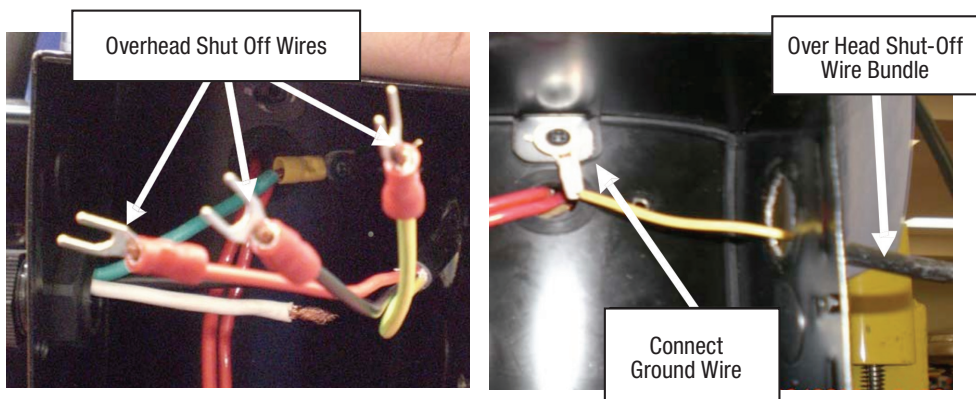
! Danger

**YOU MUST
DISCONNECT
ELECTRICAL
POWER BEFORE
INSTALLATION**

This is the way the hydraulic power unit is wired from the factory. Wire colours may vary. The pre wired "Pig Tail" is on there as a reference point so the electrical contractor knows which terminal to use. DO NOT splice into the "Pig Tail" with extension wire to the breaker box. Remove and discard the "Pig Tail" wires. "Pig Tail" wires are in terminals 3L2 and 5L3.

DO NOT remove the Push Button "UP" wire on 3L2 at this time. The power unit is Alternating Current so crossing the wires from the breaker box to the terminals will not create an issue. Be sure that the new wires go into 3L2 & 5L3.

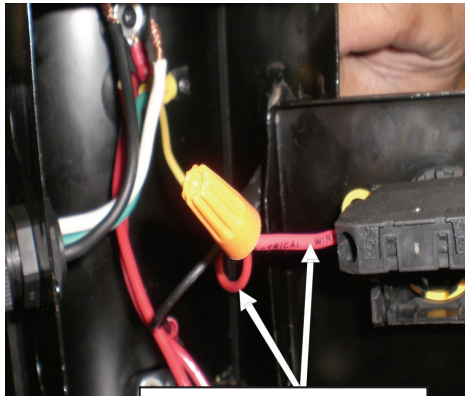
STEP 2



Now you are ready to connect the Push Button "UP" wire to one of the 2 wires remaining in the overhead shut off wire bundle. Remove Push Button "UP" wire from terminal 3L2. Wire the Push Button "UP" wire to one of the 2 remaining over head shut off wires.

WIRING THE LIMIT SWITCH

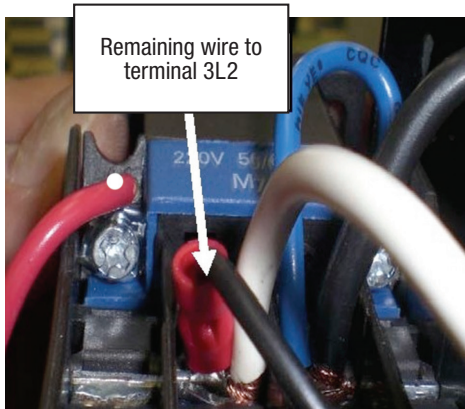
STEP 3



Connect these two wires

Connect these 2 wires.

STEP 4



Remaining wire to terminal 3L2

Now connect the remaining wire to terminal 3L2.

! Danger

**YOU MUST
DISCONNECT
ELECTRICAL
POWER BEFORE
INSTALLATION**

LIFT LOCKOUT / TAGOUT PROCEDURE

PURPOSE

This procedure establishes the minimum requirements for the lockout of energy that could cause injury to personnel by the operation of lifts in need of repair or being serviced. All operator/s shall comply with this procedure.

RESPONSIBILITY

The responsibility for assuring that this procedure is followed is binding upon all operator/s and service personnel from outside service companies

(i.e., Authorised Installers, contractors, etc.). All operator/s shall be instructed in the safety significance of the lockout procedure by the facility owner/manager. Each new or transferred employee along with visiting outside service personnel shall be instructed by the owner/manager (or assigned designer) in the purpose and use of the lockout procedure.

PREPARATION

Employees authorised to perform lockout shall ensure that the appropriate energy isolating device (i.e. circuit breaker, fuse, disconnect, etc.) is identified for the lift being locked out. Other such devices for other equipment may be located in close proximity of the appropriate energy isolating device. If the identity of the device is in question, see the shop supervisor for resolution. Assure that proper authorisation is received prior to performing the lockout procedure.

SEQUENCE OF LOCKOUT PROCEDURE

1. Notify all affected employees that a lockout is being performed and the reason for it.
2. Unload the subject lift. Shut it down and assure the disconnect switch is "OFF" if one is provided on the lift.
3. The authorised lockout person operates the main energy isolation device removing power to the subject lift.
4. If this is a lockable device, the authorised lockout person places the assigned padlock on the device to prevent its unintentional reactivation. An appropriate tag is applied stating the person's name, at least 76 x 152mm in size, an easily noticeably colour, and states not to operate device or remove tag.
5. If this device is a non-lockable circuit breaker or fuse, replace with a "dummy" device and tag it appropriately as mentioned above.
6. Attempt to operate lift to assure the lockout is working. Be sure to return any switches to the "OFF" position.
7. The equipment is now locked out and ready for the required maintenance or service.

RESTORING EQUIPMENT TO SERVICE

Assure the work on the lift is complete and the area is clear of tools, vehicles, and personnel.

At this point, the authorised person can remove the lock (or dummy circuit breaker or fuse) and tag and activate the energy isolating device so that the lift may again be placed into operation.

RULES FOR USING LOCKOUT PROCEDURE

Use the Lockout Procedure whenever the lift is being repaired or serviced, waiting for repair when current operation could cause possible injury to personnel, or for any other situation when unintentional operation could injure personnel. No attempt shall be made to operate the lift when the energy isolating device is locked out.

OPERATING CONDITIONS

Lift is not intended for outdoor use and has an operating ambient temperature range of (5°- 40°C).

LIFT OPERATION SAFETY

- **NEVER** allow unauthorised persons to operate lift. Thoroughly train new operator in the use care of lift.
- **PROHIBIT** unauthorised persons from being in shop area while lift is in use.
- **REMOVE** passengers before raising vehicle.
- **IT'S IMPORTANT** that you know the load limit. Be careful that you do not overload the lift . If you are unsure what the load limit is, check the data plate found on one of the lift columns or contact the manufacturer.
- **TOTAL LIFT** capacity is 4.0 Ton.
- **THE CENTER** of gravity should be followed closely to what the manufacturer recommends.
- **ALWAYS** make sure you have proper overhead clearance. Additionally, check that attachments, (Vehicle signs, campers antennas, etc.) are not in the way.
- **BE SURE** that prior to the vehicle being raised, the doors, boot, and bonnet are closed securely prior to being raised, make sure there is no one standing closer than two metres from the lift.
- **DOUBLE CHECK** Put pads and or adaptors in the right position under the contact points as per vehicle manufacturers recommendations.
- **THE LIFT SHOULD** be raised just until the vehicle's wheels are approximately 300mm off the ground. If contact with the vehicle is uneven or it appears that the vehicle is not sitting secure, carefully lower the lift and readjust.
- **ALWAYS CONSIDER** potential problems that might cause a vehicle to slip, i.e., heavy cargo, undercoating, etc.
- **ALWAYS LIFT** vehicle using all four arms. Never use lift to raise one end or one side of vehicle
- **PRIOR TO LIFT** vehicle, walk around the lift and check for any object that might interfere with the operation of lift and safety latches; tools, air hoses, shop equipment.
- **WHEN APPROACHING** the lift with a vehicle, center the vehicle between the columns so that the tyres will clear the swing arms easily. Slowly drive the vehicle up between the posts. Have someone outside the vehicle guide the driver.
- **RAISE VEHICLES** about 1m and check stability by gently rocking.
- **NEVER RAISE** a car until you have double checked all bolts, nuts and hose fittings.
- **PRIOR TO** lowering vehicle, walk around the lift and check for any objects that might interfere with the operation of lift and safety latches; tools, air hoses, shop equipment, Swing the arms out of the path and slowly drive the vehicle out. Have someone outside the vehicle guide the driver.
- **ALWAYS LOWER** the lift onto the locks before going under the vehicle.
- **NEVER ALLOW** anyone to go under the lift when raising or lowering.

TRAINING NEW OPERATORS

Automotive and truck lifts are critical to the operation and profitability of your business.

The safe use of this and other lifts in your shop is critical in preventing operators injuries and damage to customer's vehicles. By operating lifts safely you can ensure that your shop is profitable, productive and safe. Safe operation of automotive lifts requires that only trained operators should be allowed to use the lift.

TRAINING SHOULD INCLUDE, BUT NOT LIMITED TO:

- Proper positioning of the vehicle on the runway. (See manufacturers minimise wheel base loading requirements.)
- Use of the operating controls.
- Understanding the lift capacity.
- Proper use of jack stands or other load supporting devices.
- Proper use, understanding and visual identification of safety lock devices and their operation.
- Reviewing the safety rules.
- Proper housekeeping procedures (lift area should be free of grease, oil, tools, equipment, trash, and other debris)
- A daily inspection of the lift should be completed prior to its use. Safety devices, operating controls, lift arms and other critical parts should be inspected prior to using the lift.
- All maintenance and repairs of the lift should be completed by following the manufacturer's requirements.
- Parts should meet or exceed OEM specifications. Repairs should only be completed by a qualified lift technician.
- The vehicle manufacturer's recommendations should be used for spotting and lifting the vehicle.

LIFT OPERATING INSTRUCTIONS

VEHICLE LOADING

- Position vehicle for proper weight distribution (centre of gravity should be midway between lift pads).
- Swing arms under vehicle to allow adapters to contact at the manufacturer's recommended pick up points.
- Use caution before lifting pickup trucks, suv's and other framed vehicles. The individual axle weight capacity should not exceed 1/2 of lift capacity.
- Make sure vehicle is neither front nor rear heavy.
- Make sure the lifting pads are in a proper and safe position to support the vehicle.
- (Refer: Lifting Points Guide below and decal on main side column for typical arm positioning)

RAISING LIFT

- Push Up switch to raise lift (make sure arm restraints engage or stop and slightly move arm to allow gear to mesh) until tyres clear floor.
- Stop and check for secure contact on adapters and vehicle weight distribution. If secure raise to desired height.
- ALWAYS lower the lift into the nearest lock position by pressing the lower lever to relieve the hydraulic pressure and let the latch set right in a lock position.
- Never work under a lift that is not in the locked position.
- Note it is normal of an empty lift to lower slowly - it may be necessary to add weight.

LOWERING LIFT

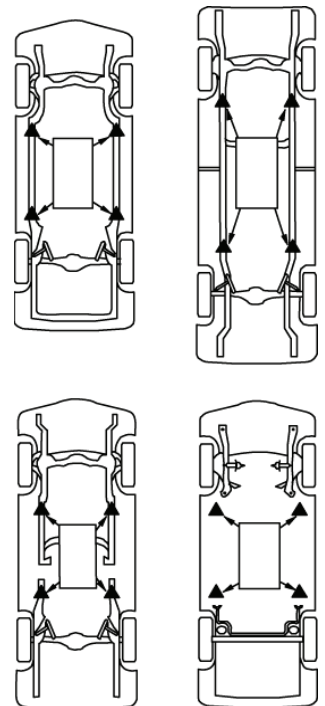
- Clear all obstacles from under lift and vehicle and ensure only the lift operator is in the lift area.
- Stay clear of lift and raise the lift off the safety locks.
- Pull safety latch release and press the lower lever to begin descent.
- Unload lift by first completely lowering lift, then swinging arms to drive-through position before moving vehicle.

! IMPORTANT

LIFT POINTS

NOTE: Refer to the manufacturer's specific vehicle lifting points. Some vehicles display these points on a label inside the right front door lock-face or are identified by triangle shape marks on the vehicle's undercarriage, reference SAE J2184

LIFT POINTS



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DAILY / WEEKLY MAINTENANCE SCHEDULE

The periodic Preventive Maintenance Schedule given is the suggested minimum requirements and minimum intervals; accumulated hours or monthly period, which ever comes sooner. Periodic maintenance is to be performed on a daily, weekly, and yearly basis as given in the following paragraphs.

DAILY PRE-OPERATION CHECK (8 HRS)

1. Check safety lock audibly and visually while in operation
2. Check safety latches for free movement and full engagement with rack.
3. Check hydraulic connections, and hoses for leakage.
4. Check chain connections - bends, cracks and loose links.
5. Check cable connections- bends, cracks and looseness.
6. Check for frayed cables in both raised and lowered position.
7. Check snap rings at all rollers and sheaves.
8. Check bolts, nuts, and screws and tighten if needed.
9. Check wiring & switches for damage.
10. Keep base plate free of dirt, grease or any other corrosive substances.
11. Check floor for stress cracks near anchor bolts.
12. Check swing arm restraints.

WEEKLY MAINTENANCE (EVERY 40 HRS)

- Check anchor bolts torque to 115 Nm for the 20mm anchor bolts. Do not use an impact wrench to tighten anchor bolts.
- Check floor for stress cracks near anchor bolts.
- Check hydraulic oil level.
- Check and tighten bolts, nuts, and screws.
- Check cylinder pulley assembly for free movement or excessive wear on cylinder yoke or pulley pin.
- Check cable pulley for free movement and excessive wear.

WARNING

OH&S and the relevant Australian Standards AS1418.9-1996 requires users to inspect lifting equipment at the start of every shift.

Failure to perform the daily pre-operational check can result in expensive property damage, lost production time, serious personal injury, and even death. The safety latch system must be checked and working properly before the lift is put to use.

Failure to heed this warning can result in death or serious injury, or damage to equipment. If you hear a noise not associated with normal lift operation, or, if there is any indications of impending lift failure

CEASE OPERATION IMMEDIATELY!

Inspect, correct and/ or replace parts as required.

PREVENTIVE MAINTENANCE SCHEDULE

YEARLY MAINTENANCE

- Lubricate chains
- Grease rub blocks and column surface contacting rub blocks
- Change the hydraulic fluid - good maintenance procedure makes it mandatory to keep hydraulic fluid clean. No hard fast rules can be established; - operating temperature, type of service, contamination levels, filtration, and chemical composition of fluid should be considered. If operating in dusty environment shorter interval may be required.

SPECIAL YEARLY MAINTENANCE TASKS

- **NOTE:** The following items should only be performed by a trained maintenance expert:
- Replacement of hydraulic hoses.
- Replacement of chains and rollers.
- Replacement of cables and sheaves.
- Replacement or rebuilding air and hydraulic cylinders as required.
- Replacement or rebuilding pumps / motors as required.
- Checking of hydraulic cylinder rod and rod end (threads) for deformation or damage.

CAUTION

Relocating or changing components may cause problems. Each component in the system must be compatible; an undersized or restricted line will cause a drop in pressure. All valve, pump, and hose connections should be sealed and/or capped until just prior to use. Air hoses can be used to clean fittings and other components. However, the air supply must be filtered and dry to prevent contamination. Most important is cleanliness; Contamination is the most frequent cause of malfunction or failure of hydraulic equipment

CABLE INSPECTION & MAINTENANCE

Levelling cables should be replaced every three - five years or when visible signs of damage are apparent. **DO NOT USE LIFT WITH DEFECTIVE / WORN CABLES.**

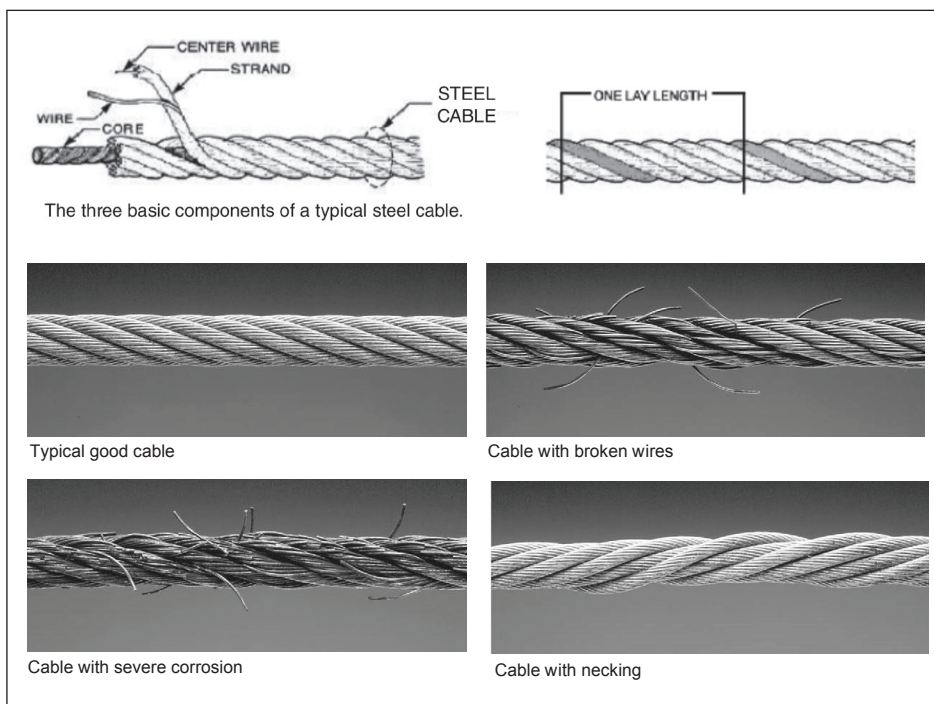
Levelling cables should be maintained in a well-lubricated condition at all times. Steel cable is only fully protected when each wire strand is lubricated both internal and external. Excessive wear will shorten the life of the steel cable. The factory suggested steel cable lubricant that penetrates to the core of the rope and provides long-term lubrication between each individual strand is 90-WT gear oil wire or steel cable lubricant. In order to make sure that the inner layers of the cable remain well lubricated, lubrication should be carried out at intervals not exceeding three months during operation.

All sheaves and guide rollers in contact with the moving cable should be given regular visual checks for surface wear and lubricated to make sure that they run freely. This operation should be carried out at appropriate intervals generally not exceeding three months during operation. For all sheave axles, the factory recommends standard wheel bearing grease. For all sheaves and/or guide rollers, the factory recommends 90-WT gear oil or similar heavy lubricant applied by any method including pump / spray dispensing, brush, hand and/or swabbing.

Warning

When the cable adjusting nuts bottom out on the threaded end of the cable connection and there is still slack in the cables. The cables have stretched beyond the safe useful length and need to be replaced with Factory Approved Cable Assemblies.

DO NOT PLACE WASHERS, SPACERS OR OTHER DEVICES to "Shorten" the effective cable length as damage to the lift or injury to persons may occur.



Danger

FAILURE TO READ, understand and follow these instructions may cause death or serious injury.

HOW OFTEN TO INSPECT Levelling cables should be visually inspected at least once each day when in use. Any levelling cables that have not met the criteria must be immediately replaced.

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BROKEN CABLES - REPLACING STEEL CABLE

HOW TO FIND BROKEN CABLES

- The first step is to relax your rope to a stationary position and move the pick-up points off the sheaves. Clean the surface of the rope with a cloth, a wire brush, if necessary; so you can see any breaks.
- Flex the rope to expose any broken cables hidden in the valleys between the strands.
- Visually check for any broken cables. One way to check for crown breaks is to run a cloth along the rope to check for possible snags.
- With an awl, probe between cables and strands and lift any cables that appear loose. Evidence of internal broken cables may require a more extensive examination.

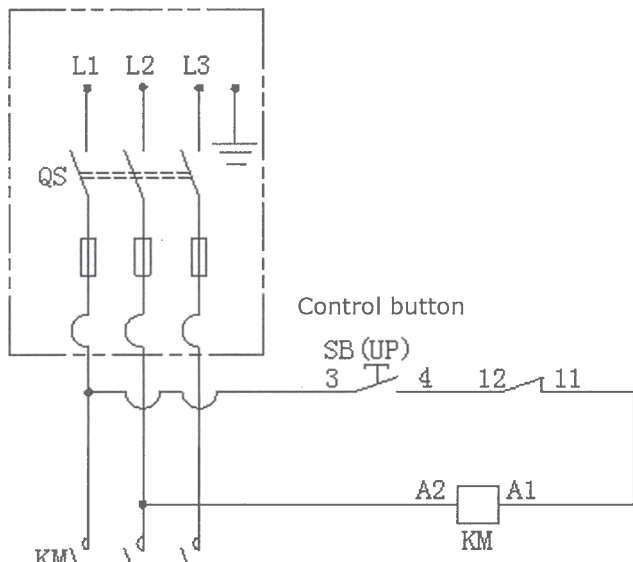
OTHER REASONS TO REPLACE LEVELLING CABLES

- Corrosion that pits the cables and/or connectors.
- Evidence of kinking, crushing, cutting, bird-caging or a popped core.
- Wear that exceeds 10% of a wire's original diameter
- Evidence of heat damage.

WHEN TO REPLACE LIFTING CABLE DUE TO BROKEN CABLES

- Levelling cables should be removed from service when you see six randomly distributed broken wires within any one lay length, or three broken wires in one strand within one lay length.

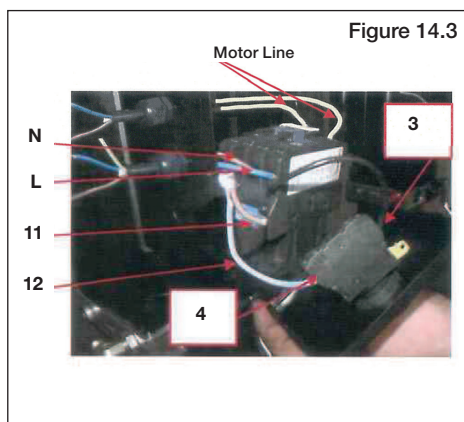
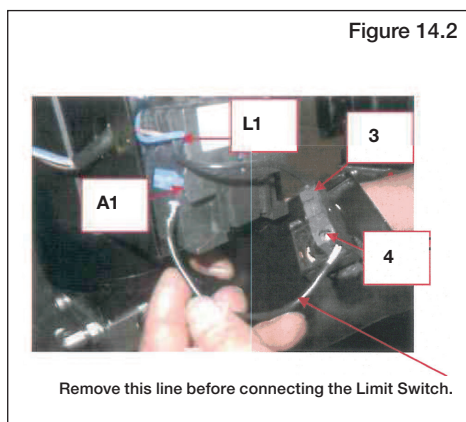
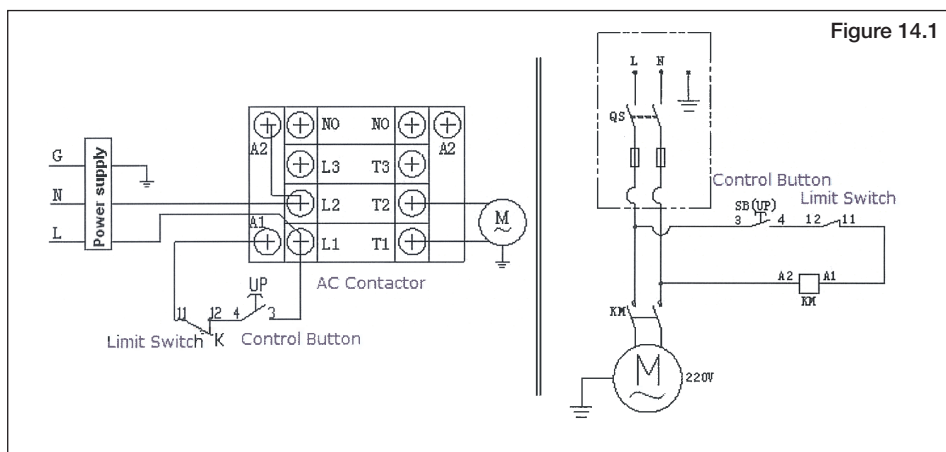
INSTALL ELECTRICAL SYSTEM



Warning

For the safety of operators, the power wiring must contact the floor well.

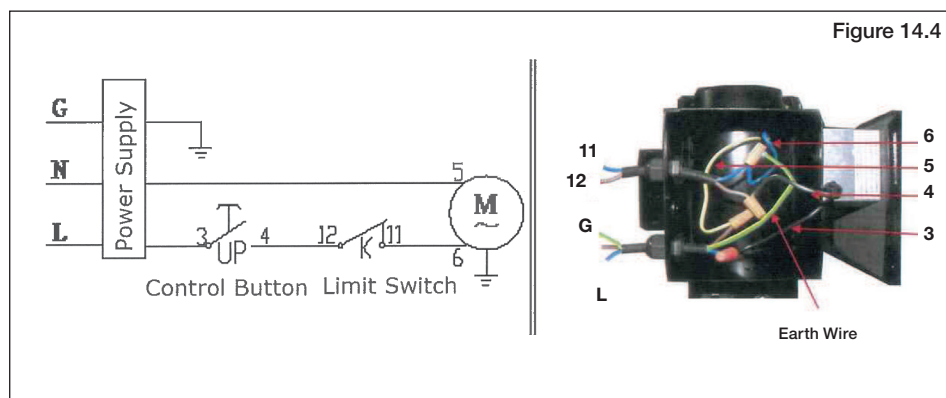
Pay attention to the direction of rotations when using 380V, three phase motors.



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SPX SINGLE PHASE MOTOR

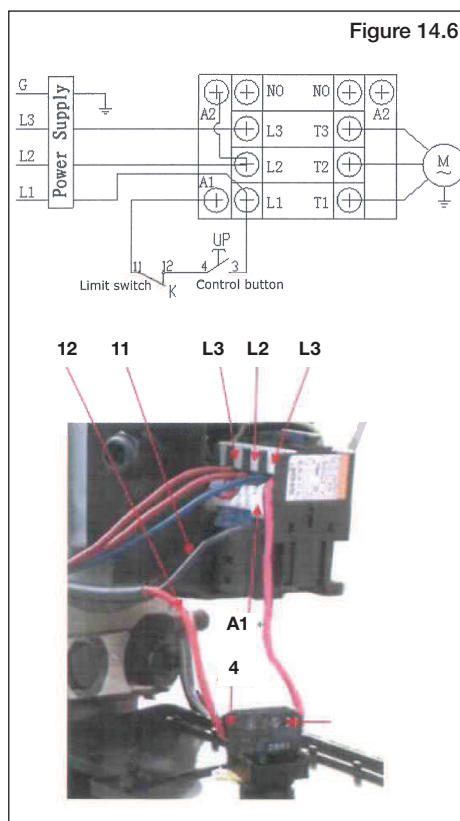
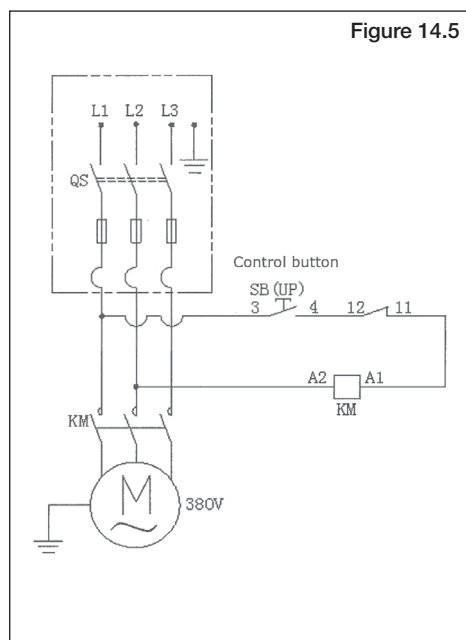
1. Power supply line (zero wire N) connected with wire 5 of motor.
2. Wire 11 of limit switch connected with wire 6 of motor.
3. Wire 12 of limit switch connected with wire 4 of control button.
4. Power supply line (fire wire L) connected with wire 3 of control button.
(See Fig. 14.4)



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THREE PHASE MOTOR

1. Circuit diagram. (See Fig 14.5)
2. Connection step (See Fig. 14.6)
 - a. The source wires (L1, L2, L3) connected with terminals of AC contactor marked L1, L2, L3 respectively.
 - b. Terminals 4 of control button connected with wire 12 of limit switch; wire 11 connected with A1 terminals of AC contactor.
 - c. Terminals 3 of control button connected with L1 terminals of AC contactor.



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COMMON PROBLEMS THAT MAY BE ENCOUNTERED

The common problem that may be encountered and their probable causes are covered in the following chart

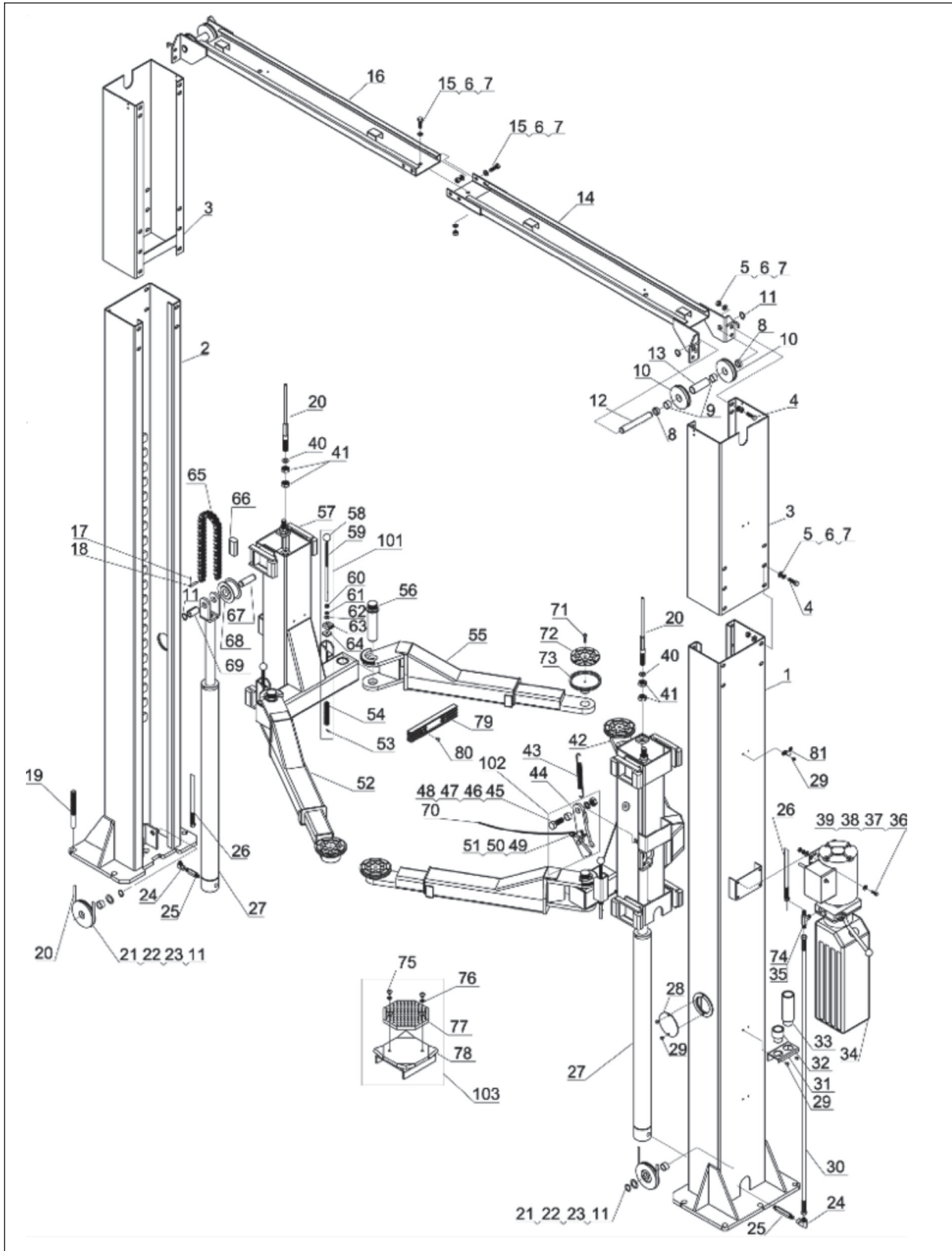
PROBLEM	SOLUTION
Motor does not operate?	<p>Failure of the motor to operate is normally caused by one of the following:</p> <ol style="list-style-type: none"> 1. Breaker or fuse blown. 2. Faulty wiring connections; call electrician. 3. Defective up button; call electrician for service. 4. Motor thermal overload tripped. Wait for overload to cool.
Motor functions but lift will not rise?	<p>If the motor is functioning, but the lift will not rise do the following in this order:</p> <ol style="list-style-type: none"> 1. A piece of trash is under check valve. Push handle down and push the up button at the same time, Hold for 10-15 seconds. This should flush the system. 2. Check the clearance between the plunger valve of the lowering handle. There should be 2mm clearance. 3. Remove the check valve and clean ball and seal. <p>WARNING : Failure to properly relieve pressure in the following steps can cause injury to personnel. This lift uses ISO Grade 32 or other good grade non-detergent hydraulic oil at a high hydraulic pressure. Be familiar with its toxicological properties, precautionary measures to take and first aid measures as stated in the Safety Summary before performing any maintenance with the hydraulic system:</p> <ol style="list-style-type: none"> 4. Oil level too low. Oil level should be at or near the max line indicated on the tank or the dipstick. 5. If Three phase power unit - could be wired incorrectly.
Oil blows out breather of power unit?	<p>If oil blows out of the breather of the power unit:</p> <ol style="list-style-type: none"> 1. Oil reservoir overfilled – Relieve all pressure and siphon out hydraulic fluid until at a proper level. 2. Lift lowered too quickly while under a heavy load. – Lower the lift slowly under heavy loads.
Motor hums and will not run?	<p>If the motor hums but fails to run, take the following actions:</p> <ol style="list-style-type: none"> 1. Lift overloaded – Remove excessive weight from lift. 2. Faulty wiring / Bad Capacitor / Low voltage – Call Electrician 3. Impeller fan cover dented. Take off and straighten. <p>WARNING : The voltages used in the lift can cause death or injury to personnel. In the following steps make sure that a qualified electrician is used to perform maintenance.</p>

COMMON PROBLEMS THAT MAY BE ENCOUNTERED

The common problem that may be encountered and their probable causes are covered in the following chart

PROBLEM	SOLUTION
Lift jerks going up and down?	<p>If the lift jerks while going up and down, it is usually a sign of air in the hydraulic system:</p> <ol style="list-style-type: none"> 1. Raise lift all the way to top and return to floor, repeat 4-6 times. Do not let this overheat power unit. 2. Bleed hydraulic system.
Oil Leaks?	<p>Oil leak causes at the power unit and cylinders are normally caused by the following</p> <ol style="list-style-type: none"> 1. Power unit – If the power unit leaks hydraulic oil around the tank- mounting flange check the oil level in the tank. The level should be 50mm below the flange of the tank. A screwdriver can be used as a dipstick. 2. The rod end of the Cylinder – Piston – the rod seal of the cylinder is out. Rebuild or replace the cylinder. 3. Breather end of the Cylinder – Vent ; the piston seal of the cylinder is out.. Rebuild or replace the cylinder.
Lift makes excessive noise/vibrates?	<p>Excessive noise from the lift is normally caused by the following:</p> <ol style="list-style-type: none"> 1. Cross beam ends are rubbing the columns. Re-adjustment needed 2. Cylinder too tight, load lift to half capacity and cycle up and down a few times to break in lift cylinder, it should quieten down with use. 3. May have excessive wear on cable sheaves or shafts, replace them. 3. Lubricate carriage guides with lithium grease..

TL4.00HDI EXPLODED PARTS VIEW



Disclaimer: All measurements are accurate at the time of publication but are subject to change.

TL4.00HDI PART NUMBERS & DESCRIPTION

ITEM NO	PART NUMBER	DESCRIPTION	QTY
1	QL4W-2R1-00	Right Column Welded Group	1
2	QL4W-2L1-00	Left Column Welded Group	1
3	QL4W-100-00	Long Column Group	1
4	GB5782-86	Hexagonal Head Bolt M12x40	24
5	GB93-87	Lock Washer 12	24
6	GB97.1-85	Flat Washer 12	34
7	GB6170-86	Hexagon Nuts M12	29
8	QL4L-400-04	Short Sleeve	4
9	QL40-700-02	Thick Cable Wheel Bushing	4
10	QL4L-400-02 4"	Thick Cable Wheel	4
11	GB894.1-86	Axial Elastic Rings 25	10
12	QL4L-400-01	Pulley Shaft	2
13	QL4L-400-03	Long Bushing	2
14	QL4L-4R0-00	Right Beam Welding Group	1
15	GB5782-86	Hexagonal Head Bolt M12x25	5
16	QL4L-4L0-00	Left Beam Welding Group	1
17	GB91-86	Split Pin 2x20	8
18	QL40-000-12	Chain Pin	4
19	QL4W-000-03	Swelling Bolt Group	10
20	QL4L-600-00	Steel Cable Parts	2
21	QL40-200-03	Cable Wheel	2
22	QL40-200-04	Cable Wheel Washer	2
23	QL40-200-05	Sleeve Bushing	2
24	QL40-000-09	Internal And External Connections	2
25	QL40-000-B10	Anti-Riot Barrel Connector	2
26	QL40-100-00	Cylinder Parts	2
27	QL4W-000-02	Oil Pipe (Joint-Tank)	1
28	QL40-200-01	Window Panel	2
29	GB818-85	Cross Recessed Pan Head Screw M6x8	20

TL4.00HDI PART NUMBERS & DESCRIPTION

ITEM NO	PART NUMBER	DESCRIPTION	QTY
30	QL40-000-08	Oil Pipe (Valve-Tank)	1
31	QL4L-000-18	Frid	2
32	QL40-000-04	Short Joints	4
33	QL40-000-05	Long Joint	4
34	QL4L-000-21	Hydraulic Power Units	1
35	QL4W-000-01	Tee Connector	1
36	GB5782-86	Hexagonal Head Bolt M8x25	4
37	GB97.1-85	Flat Washer 8	8
38	GB93-87	Lock Washer 8	4
39	Gb6170-86	Hexagon Nuts M8	4
40	Gb97.1-85	Flat Washer	20
41	GB6170-86	Hexagon Nuts M20	8
42	QL4W-500-R0	Right Bend Arm Of Welding Group	1
43	QL40-500-02	Extension Spring	2
44	QL40-521-00	Insurance Block Welding Group	2
45	GB5783-86	Hexagonal Head Bolt M20x50	2
46	QL40-500-03	Sleeve Bushing	2
47	GB93-87	Lock Washer 20	2
48	GB6170-86	Hexagon Nuts M20	2
49	GB818-85	Cross Recessed Pan Head Screw M6x35	2
50	GB97.1-85	Flat Washer 6	2
51	QL40-520-01	Compression Spring	2
52	QL4W-400-00	Straight Arm Of Welding Group	2
53	GB879-86	Elastic Cylindrical Pin	4
54	QL40-530-02	Compression Spring	4
55	QL4W-500-L0	Left Bend Arm Of Welding Group	1
56	QL40-800-00	Bolt Welding Group	4
57	QL4W-310-00	Slipway Welding Group	2
58	QL40-000-15	Handle The Ball M10	4

TL4.00HDI PART NUMBERS & DESCRIPTION

ITEM NO	PART NUMBER	DESCRIPTION	QTY
59	QL40-530-01	Draft Bar	4
60	GB6170-86	Hexagon Nuts M10	4
61	GB93-87	Lock Washer 10	4
62	GB97.1-85	Flat Washer 10	8
63	QL40-530-04	Rack	4
64	QL40-530-03	Gear Gasket	4
65	QL40-200-02	Dray Chain	2
66	QL40-500-01	Slide Block	16
67	QL40-100-03	Rolled Axle	2
68	QL40-100-02	Contact Roller	2
69	QL40-100-04	Bearing Hpb	2
70	QL40-500-04	Steel Cable	2
71	GB70-85	Hexalobular Socket Cheese Head Screws M6x20	4
72	QL40-000-03	Pallet Pad	4
73	QL40-000-02	Pallet	4
74	O-RING	O-RING	1
75	GB819-85	Cross Recessed Countersunk Head Screw M6x12	4
76	GB97.1-85	Flat Washer 6	4
77	QL4L-X20-01	Bracket Pad	2
78	QL4L-X21-00	Bracket Welded Group	4
79	QL4W-000-04	Door Shield	2
80	GB818-85	Cross Recessed Countersunk Head Screw M6x20	4
80	QL4L-000-05	Staple Bolt	6
101	QL4L-320-00	Rack - Rod Components	4
102	QL40-520-00	Insurance Stopper Blocks	2
103	QL4L-X20-00	Bracket Parts	2

WARRANTY

1. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.
2. The benefits under this warranty are in addition to other rights and remedies under a law in relation to the goods.
3. We warrant that these goods are free from defects in workmanship and materials for a period of 5 years on hoist structure and 12 months on hydraulics and working components from the date of purchase where the goods have been paid for in full and:
 - a. Have not been installed; or
 - b. Have been installed by a suitably qualified professional installer of goods of this type in accordance with the Installation,
 - c. Operation, Maintenance and Instruction Manual which is supplied with the goods at the time of purchase.
4. Subject to the conditions of warranty set out below, if the goods fail to operate for any reason within the applicable warranty period, we will repair or replace the goods free of charge.
5. Apart from any consumer guarantees under the Australian Consumer Law all other warranties, express or implied, and whether arising by virtue of statute or otherwise, are hereby excluded.

Tufflift Hoists Australia

2 Dairy Drive, Coburg North, VIC 3058

Phone +61 3 9470 7200

Fax +61 3 9470 7209

Freecall 1800 Tufflift (88 33 54)

www.Tufflift.com.au

Email enquiries@Tufflift.com.au



HOISTS FOR EVERY SPACE

CONDITIONS OF WARRANTY

1. To make a warranty claim:
 - 1.1. The goods, a copy of this warranty, proof of purchase and an explanation of the defect must be sent to us at the address specified in this warranty; and
 - 1.2. The goods must not have had their serial number (if any) removed, defaced or changed, their casing open, their power cord altered, nor have been tampered with in any other way.
2. Freight costs and travel expenses associated with compliance with this warranty and the repair or replacement of the goods under warranty are for your account, save for where we conduct an on-site repair of the goods at a location that is within 30 kilometres of one of our authorised service agents.
3. This warranty will be invalidated and will not apply in relation to loss, damage or deterioration to a goods which is caused by any of the following:
 - 3.1. Failure to handle, store, install, service or maintain the goods in accordance with the Installation, Operation, Maintenance and Instruction Manual which is supplied with the goods at the time of purchase;
 - 3.2. Impact or contact with objects or substances brought into proximity with the goods as a result of direct or indirect human intervention;
 - 3.3. The collapse or movement of the structure on which the goods are mounted or the removal or weakening of the foundations upon which the goods are mounted;
 - 3.4. Deliberate or careless acts or omissions on your part or on the part of your operator/s, agents, subcontractors or any other party, excluding ourselves and our distributors;
 - 3.5. Unauthorised modifications or alterations of any part of the goods;
 - 3.6. Any event beyond our control, including, but not limited to earthquake, fire, flood, lightening, strong wind, heavy hail, or the build-up of snow or other natural substances;
 - 3.7. Use of the goods in an outdoor environment;
 - 3.8. Exposure to corrosive or other adverse environmental elements;
 - 3.9. Cosmetic damage, to electrical cords, dents, electrical overload, surge, spikes and or lost / missing parts.
 - 3.10. Normal wear and tear;
 - 3.11. Loading in excess of the weight capacity or operating limitations displayed on the goods specifications;
 - 3.12. Use of the goods for a purpose other than those for which it was designed;
 - 3.13. Use of the incorrect voltage on the goods; or
 - 3.14. Shipment of the goods.
4. If the goods or parts are replaced under warranty, this warranty will apply to the replacement parts for the duration of the unexpired portion of the original warranty.
5. No amendment to this warranty will be valid or binding unless recorded in writing and signed by our authorised officer.
6. Subject to the Australian Consumer Law and any other applicable state or federal law:
 - 6.1. We expressly disclaim any responsibility for any other warranty issued by any other party in respect to any component or goods purchased from us or the specification, design, manufacture or installation thereof. All claims under warranties issued by third parties must be directed to those third parties;
 - 6.2. This warranty is given for the benefit of the first owner only and is not transferable. Any claims by parties other than the original purchaser will not be recognised.

WARRANTY INFORMATION SECTION

COMPLETE THIS SECTION FOR YOUR RECORDS

GOODS TYPE:

DATE OF PURCHASE:

INVOICE NUMBER:

MODEL NUMBER:

SERIAL NUMBER:

NAME ON INVOICE:



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