9,000 POUND TWO-COLUMN AUTOMOTIVE LIFT Model: CAE-9KFP MANUAL



9,000 POUND CAPACITY

MODEL: CAE-9KFP TWO-COLUMN AUTOMOTIVE LIFT

READ THIS ENTIRE MANUAL BEFORE OPERATION BEGINS

RECORD BELOW THE FOLLOWING INFORMATION WHICH IS LOCATED ON THE SERIAL NUMBER DATA PLATE Serial No. Model No. Date of Install RECORD BELOW THE FOLLOWING CUSTOMER INFORMATION Company Name Contact Person * Street Address City State Phone Fax Fmail *

*Optional Fields

NOTE: To validate warranty, this information must be copied and either faxed or mailed to:

CANADIAN AUTO EQUIPMENT #7, 4905-102 Avenue SE Calgary, AB, T2C 2X7 customercare@canadianautoequipment.ca

Toll-Free: 1-888-269-3346

IMPORTANT INFORMATION

Two Post Lifts

- 1. 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.
- Consult building owner and / or architect's plans when applicable to establish the best lift location. The lift should be located on a relatively level floor with 4 in. minimum thickness, 3000-psi concrete slab that has been properly cured. There can be no cracks in the slab within 36 in. of the base plate location, and no seams in the foundation within 6 in. of its location! Remember: any structure is only as strong as the foundation on which it is located!

IMPORTANT! Make sure you have extra help or heavy duty lifting equipment when unloading and assembling the lift.

- 3. Please read 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.
- 4. The 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.
- 5. Make sure you have enough area and ceiling height to install lift. (See Lift Specifications)
- 6. Never raise a car until you have double checked all bolts, nuts and hose fittings.
- 7. Always lower the lift onto the locks before going under the vehicle. Never allow anyone to go under the lift when raising or lowering.

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.

CAUTION!!

ENSURE THAT ALL CABLE SHEAVES, BEARINGS, AND SHAFTS ARE SUFFICIENTLY LUBRICATED. ALSO, THE CORNERS OF EACH COLUMN SHOULD BE LIGHTLY GREASED WITH QUALITY GREASE PRIOR TO OPERATING THE LIFT. LUBRICATE ALL ON AN ANNUAL BASIS.

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

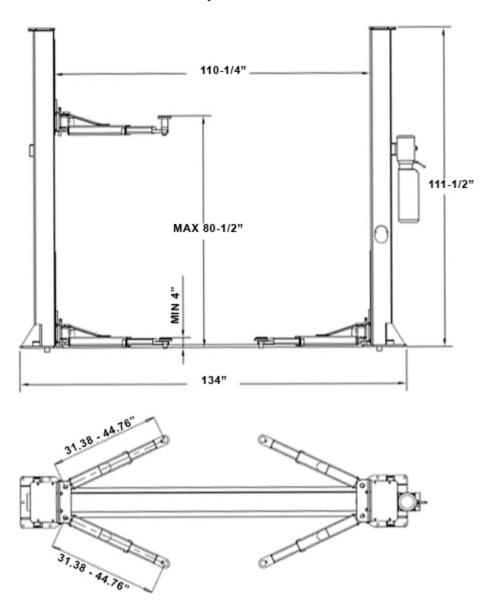
Personal injury.

This lift is a 9,000 lb. capacity, 2-Post Lifts. 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 3" increments starting at about 16" from the ground. The locking latches must be manually disengaged for the lift to lower. The locking latch is released by pulling the Release Cable raising the latch up off the latch rack. Once the raise button is pressed, the latch will automatically reengage after approximately 3" 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 2-1/2" cylinder, driven by an electric / hydraulic pump.

LIFT SPECIFICATIONS

Capacity	9,000 lbs.
Rise Time	50 Seconds
Overall Height	111-1/3"
Overall Floor Width	134-1/2"
Maximum Lift Height	80 3/4"
Minimum Pad Height	4"
Between Columns	110"
Column Size	7-1/4" x 11-1/8"
Motor	2HP, 220 Volt, 1PH

Set-up Dimensions

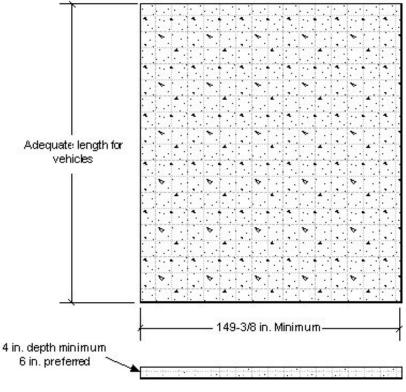


FOUNDATION and ANCHORING REQUIREMENTS

- Concrete shall have compression strength of at least 3,000 PSI and a minimum thickness of 4" in order to achieve a minimum anchor embedment of 3 1/4". NOTE: When using the standard supplied 3/4" x 5 1/2 long anchors; if the top of the anchor exceeds 2 1/4" above the floor grade, you DO NOT have enough embedment.
- 2. Maintain a 6" minimum distance from any slab edge or seam. Hole to hole spacing should be a minimum 61/2" in any direction. Hole depth should be a minimum of 4".

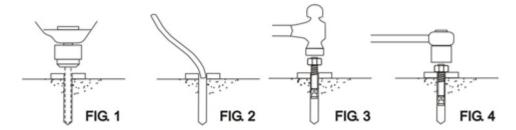
CAUTION!!

- 3. DO NOT install on asphalt or another similar unstable surface. Columns are supported only by anchoring to floor.
- 4. 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 85 ft-lbs. Shim thickness MUST NOT exceed ½" when using the 5 1/2" long anchors provided with the lift. Adjust the column extensions plumb.
- 5. If anchors do not tighten to 120 ft-lbs. installation torque, replace the concrete under each column base with a 4' x 4' x 12" thick 3,000 PSI minimum concrete pad keyed under and flush with the top of existing floor. Allow concrete to cure before installing lifts and anchors (typically 2



to 3 weeks).

ANCHORING TIP SHEET



- 1. Anchors must be at least 6" from the edge of the slab or any seam.
- Use a concrete hammer drill with a carbide tip, solid drill bit the same diameter as the anchor, 3/4". (.775 to .787 inches diameter). Do not use excessively worn bits.
- Keep the drill in a perpendicular line while drilling.
- Let the drill do the work. Do not apply excessive pressure. Lift the drill up and down occasionally to remove residue to reduce binding.
- 5. Drill the hole to depth equal or greater to the length of anchor.
- For better holding power blow dust from the hole.
- 7. Place a flat washer and hex nut over threaded end of anchor, leaving approximately 1/2 inch 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 120-foot pounds.

TOOLS REQUIRED FOR INSTALL

The installation of this lift is relatively simple and can be accomplished by two men in a few hours. The following tools and equipment are needed:

- Hoist or Forklift (optional)
- ISO 32 Light Hydraulic Oil (approx. 12 quarts)
 Tape Measure
- 4' Level
- Rotary Hammer Drill with 3/4 in & ½". Drill Bit Core Drill Rebar Cutter recommended)

- Metric Sockets and Open Wrench set
- Vise grips
- 8mm Socket Head Wrench
- Torque wrench with 1-1/8" socket for anchors
- Teflon Tape

INSTALLATION PROCEDURE

- **STEP 1.** After unloading the lift, place it near the intended installation location.
- **STEP 2.** Remove the shipping bands and packing materials from the unit.

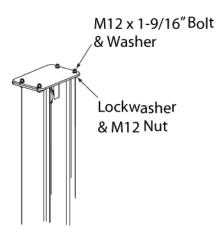
 The Power Unit will be unpacked from the top. **NOTE**: Be careful not to drop power unit.
- **STEP 3.** Remove the packing brackets and bolts holding the two columns together (do not discard bolts; they are used in the assembly of the lift).
- **STEP 4**. Once the power unit column location is decided, 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. It is helpful to try and locate the power side with the passenger side of the vehicle when loaded on the lift to save steps during operation.

STEP 5. Install the fittings into the hydraulic cylinders, be sure to apply to Teflon tape to the pipe thread end of all the cylinder fittings ONLY. Note: each cylinder has a port on both sides. One has a plastic shipping plug that MUST be removed. See image below



STEP 6. Install the top plate onto the top of the columns, using the supplied hardware tighten hardware.



STEP 7.Using a chalk line make a reference line in your bay for either the front or rear edge of the lift.

Step 8. Upright the columns facing each other 134-1/2" from outside base plate to base plate. (check to make sure that the chains are on the chain rollers for each column) Align the edge of the columns on the chalk line making sure to recheck that alignment before anchoring either column. Square the columns by measuring diagonally from corner points on base plates (within 1/4"). Verify that the drive over plate will fit between the columns before anchoring the columns

STEP 8. Use the existing holes in column base plate as a guide for drilling the 3/4" diameter holes into the concrete. Drill the anchor holes only for ONE column, installing anchors as you go. You will install anchors in second column after the cables, hoses, and floorplate are installed.

NOTE: Drilling thru concrete slab (recommended) will allow the anchor to be driven thru the bottom of slab if the threads are damaged or if the lift will need to be relocated.

STEP 9. 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 ½"). Tighten ¾" anchor bolts to 150 ft-lbs. of torque.

- **STEP 10.** Lift the yellow carriage on both columns until the top of the carriage is over the top of the cylinder. Rest the carriage on the automatic safety locks. Use a tape measure to make sure both are sitting at the same height.
- **Step 11.** Lay out the equalization cables. Taking one of the threaded cable ends insert it into the front left cable support hole in the carriage from the top until it is reachable from the bottom of the carriage.

Install one of the washers followed by both of the cable nuts set the final nut flush with the end of the threads, lock the nuts together tightly.

Take the remaining end of the cable & route it up & over the upper pulley. Down through the left rear hole in the carriage. Around the lower left pulley across to the other column up the lower pulley in that column, to the right rear cable support bracket in the carriage. Install one washer & one nut for now.

Repeat this process with the second cable. Do not tighten either cable at this time.



Step 12. Connect the hydraulic hose between the two columns, do not over tighten the hydraulic fittings.

Step 13. Place the drive over plate between the columns, making sure that the plate fits between the two columns.

- **Step 14.** Check to make sure the final column is squared up with the reference chalk line & drill anchor & level the final column. Torqueing the anchors to 120ft lbs.
- **Step 15.** Using the supplied ½" anchors, anchor the drive over plate to the ground & tighten the anchors to 30ft lbs.
- **Step 16.** Mount the arms using the arm pins. Check the arm restraints to ensure that the arms are locked when off of the ground. They should unlock when the lift is fully down.
- **Step 17.** Fill the Power unit with AW-32/ISO-32 hydraulic oil
- **Step 18.** Mount the Power unit & connect the hydraulic hose using the 90deg. Fitting. (DO NOT USE TEFLON TAPE OR ANY OTHER THREAD SEALANT WHEN ATTACHING TO THE POWER UNIT OR CONNECTING THE HYDRAULIC HOSES)
- **Step 19.** Remove the supplied power cord & replace it. Connect the power unit to 220v single phase power. (follow the appropriate rules & regulations for your specific area).
- **Step 20.** Adjust the cables by holding the rear cable from the bottom with vise grips tighten that cable until there is approx. 1" of deflection on the front cable of the opposite column. Repeat the same adjustment on the other Collum. Do not install the lock nut yet.
- **Step 21.** Using the power unit raise the lift 6" Unlock the lift by pulling the release cables that are hanging under each carriage. Press the lowering valve handle on the motor allowing the lift to go down. Lower the lift fully to the ground (this will self-bleed any air from the hydraulic system)
- **Step 22.** now that the lift has been lowered fully to the ground. Raise it up approximately 3' paying close attention to the sound of the latches engaging. If one is faster than the other. Tighten the cable in the back of the carriage of the faster side. Doing so will speed up the slow side.
- **Step 23.** Once the lift is fully functioning & the latches are engaging at the same time. Install the lock nuts on the cable studs in the back of the column.
- **Step 24.** Now that the latches are engaging in sync. Raise the lift to full height. Make sure that there are not leaks. Unlock the lift & lower it fully to the ground & you are DONE.

CAUTION!!

SAFETY AND OPERATING INSTRUCTIONS

Only authorized personnel are to operate lift

Read operating and safety procedures manual completely before operating lift.

- Properly maintain and inspect lift in accordance to owner's manual.
- Do not operate a lift that is damaged or in need of repair.
- Allow only authorized personnel in the lift bay.
- Stay clear of Lift when raising or lowering (NO RIDERS)
- Keep hands and feet away from pinch points at all times.
- Never override the Lifts operating and safety controls.
- If a vehicle is suspected of falling, clear area immediately.
- Do not rock vehicle while positioned on lift.
- Always use safety jack stands when removing or installing heavy components.

Vehicle Loading

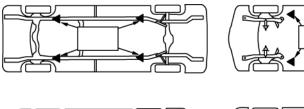
- Position vehicle for proper weight distribution (center of gravity should be midway between adapters).
- Swing arms under vehicle to allow adapters to contact at the manufacturer's recommended pick up points.
- Use caution before lifting pickup trucks, SUV's and other framed vehicles. The individual 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. (Ref: Lifting Points Guide and decal on Main side column for typical arm positioning)

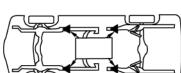
Raising Lift

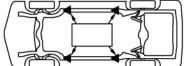
- Push Up switch to raise lift (make sure arm restraints engage or stop and slightly move arm to allow gear to mesh) until tires clear floor.
- Stop and check for secure contact on adapters and vehicle weight distribution. If secure raise to desired height.
- ALWAYS lower the lift into the nearest lock 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.

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 releases and press the lower lever to begin descent.
- Unload lift by first completely lowering lift, then swinging arms to drive-thru position before moving vehicle.







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.

SAFETY PROCEDURES

- Never allow unauthorized persons to operate lift. Thoroughly train new employees in the use and care of lift.
- Caution the power unit operates at high pressure.
- Remove passengers before raising vehicle.
- Prohibit unauthorized persons from being in shop area while lift is in use.
- Total lift capacity is 9,000 lbs. @ 2,250 lbs per lifting pad. 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 tires
 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.
- Always lift vehicle using all four pads.
- Never use lift to raise one end or side of vehicle.
- Always raise vehicle about 3" 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; tools, air hoses, shop equipment.
- Always lower lift to the lock position before going under vehicle. Never allow anyone to go under the lift when raising or lowering.

PREVENTIVE MAINTENANCE SCHEDULE

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

WARNING!!

Occupational Safety and Health Administration (OSHA) and the American National Standards Institute (ANSI) requires users to inspect lifting equipment at the start of every shift. These and other periodic inspections are the responsibility of the user.

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 are any indications of impending lift failure - CEASE OPERATION IMMEDIATELY! - Inspect, correct and/or replace parts as required.

Daily Pre-Operation Check (8-Hours)

- 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-Hours)

- 1. Check anchor bolts torque to 120 ft-lbs for the ¾ in. anchor bolts. Do not use an impact
- 1. wrench to tighten anchor bolts.
- 2. Check floor for stress cracks near anchor bolts.
- 3. Check hydraulic oil level.
- 4. Check and tighten bolts, nuts, and screws.
- 5. Check cylinder pulley assembly for free movement or excessive wear on cylinder yoke or pulley pin.
- 6. Check cable pulley for free movement and excessive wear.

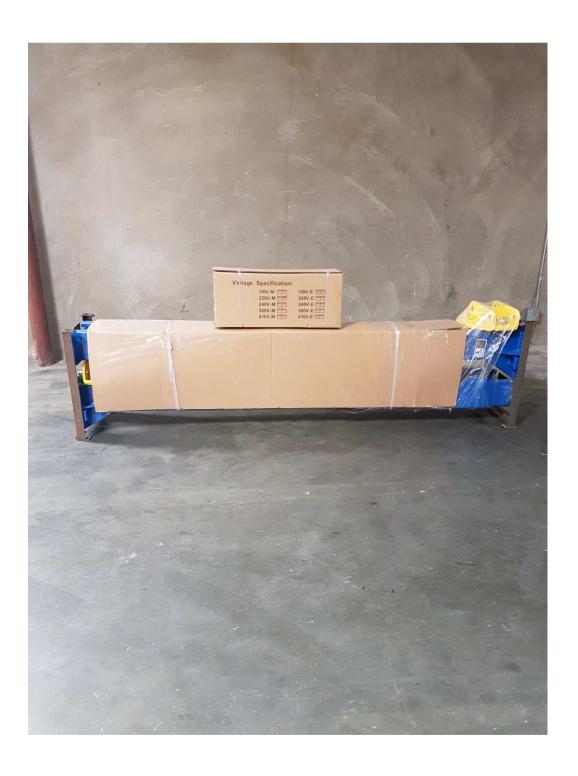
Yearly Maintenance

- 1. Lubricate chains
- 2. 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.

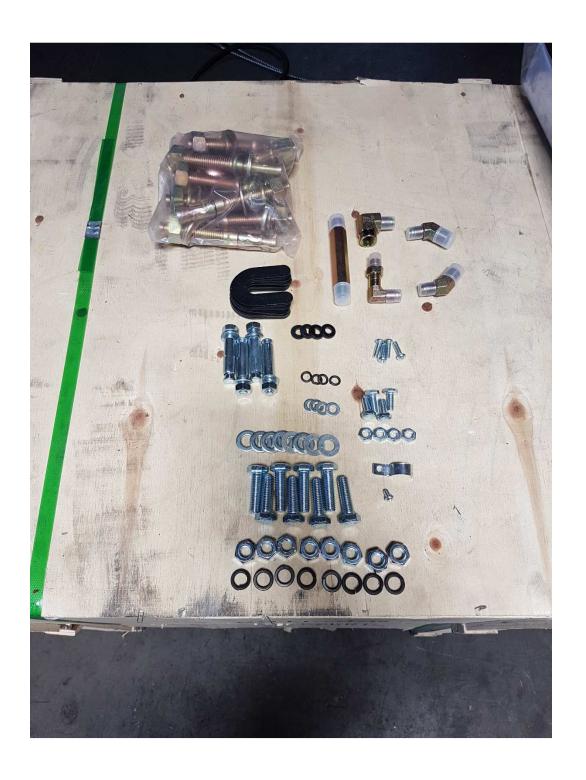
Special Maintenance Tasks

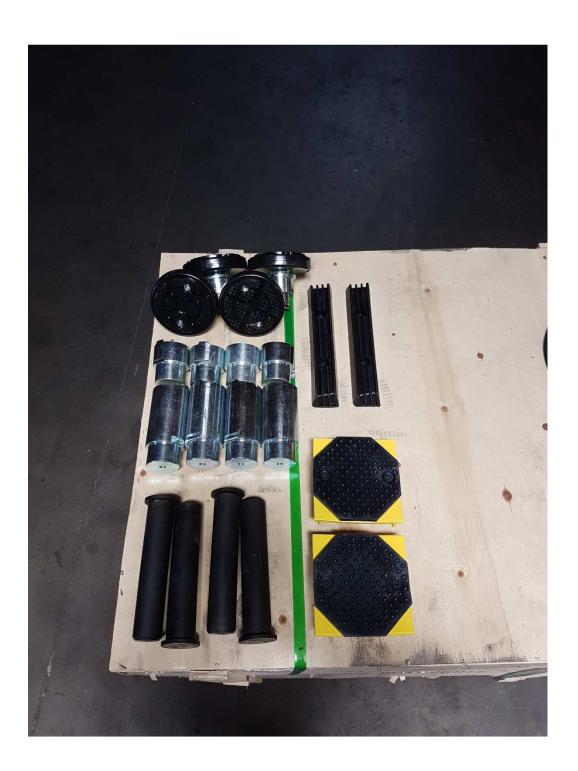
NOTE: The following items should only be performed by a trained maintenance expert:

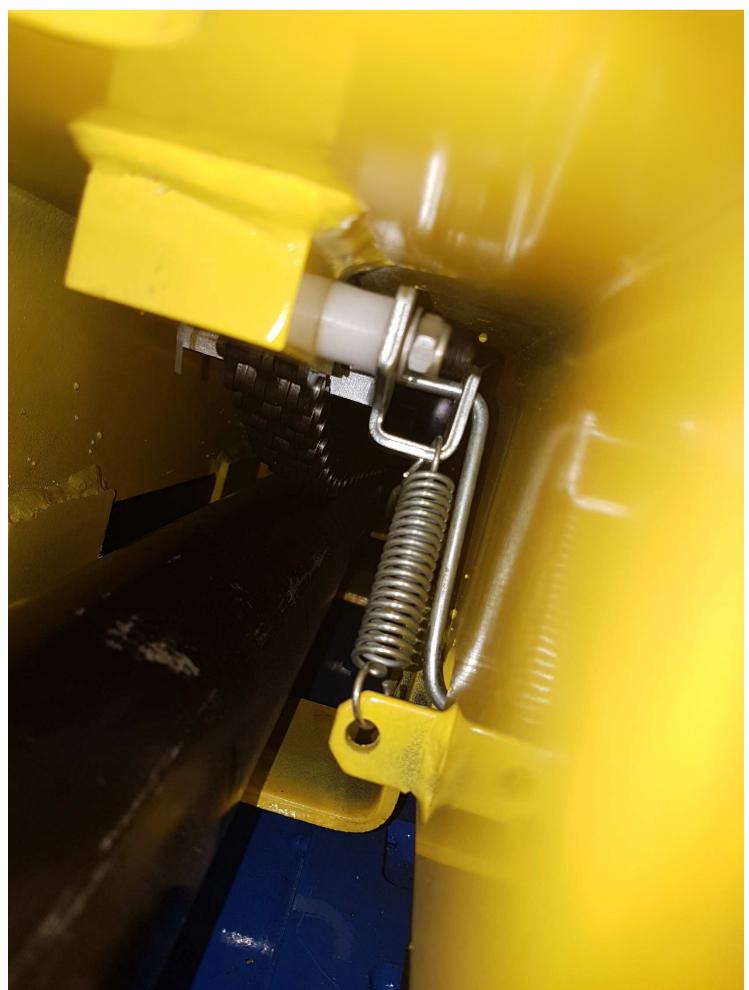
- Replacement of hydraulic hoses.
- Replacement of chains and rollers.
- Replacement of cables and sheaves.
- Replacement or rebuilding air and hydraulic cylinders as required.
- Replacement or rebuilding pumps / motors as required.
- Checking of hydraulic cylinder rod and rod end (threads) for deformation or damage.











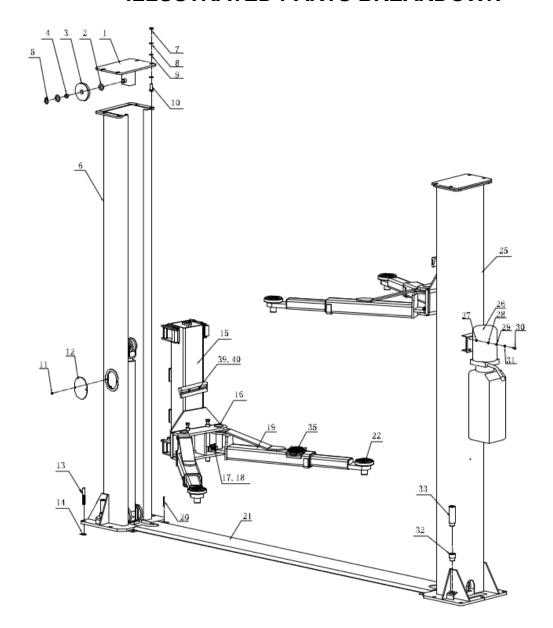
Troubleshooting Information

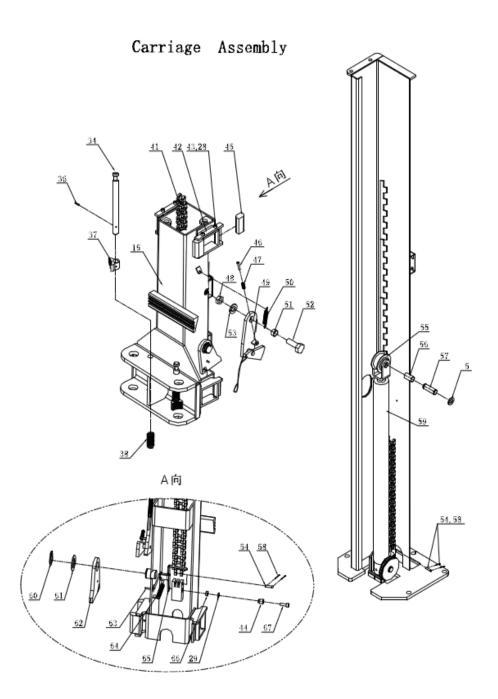
The common problems that may be encountered and their probable causes are covered in the following paragraphs:

PROBLEM	SOLUTION
Motor Does Not Operate	Failure of the motor to operate is normally caused by one of the following:
	Breaker or fuse blown.
	2. Faulty wiring connections; call electrician.
	3. Defective up button; call electrician for service.
Motor Functions but Lift Will	If the motor is functioning, but the lift will not rise do the following in the order
Not Rise	given:
	 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.
	 Check the clearance between the plunger valve of the lowering handle. There should be 1/16" clearance.
	3. Remove the check valve cover and clean ball and seat.
	Failure to properly relieve pressure in the following step 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.
	Oil level too low. Oil level should be just under the vent cap port when the lift is down. Relieve all hydraulic pressure and add oil as required.
Oil Blows out Breather of Power Unit	 If oil blows out of the breather of the power unit, take the following actions: Oil reservoir overfilled. Relieve all pressure and siphon out hydraulic fluid until at a proper level Lift lowered too quickly while under a heavy load. Lower the lift slowly under heavy loads.
Motor Hums and Will Not Run	If the motor hums but fails to run, take the following actions: 1. Lift overloaded. Remove excessive weight from lift
	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
	 Faulty wiring Call electrician Bad capacitor Call electrician Low voltage Call electrician
Lift Jerks Going Up and Down	If the lift jerks while going up and down, it is usually a sign of air in the hydraulic system. Raise lift all the way to top and return to floor. Repeat 4-6 times. Do not let this overheat power unit.
Oil Leaks	Oil leak causes at the power unit and cylinders are normally caused by the following:
	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 two inches below
	the flange of the tank. A screwdriver can be used as a "dipstick".
	 Cylinder - Piston Rod: the rod seal of the cylinder is out. Rebuild or replace the cylinder.
	 Cylinder - Vent: the piston seal of the cylinder is out. Rebuild or replace the cylinder.

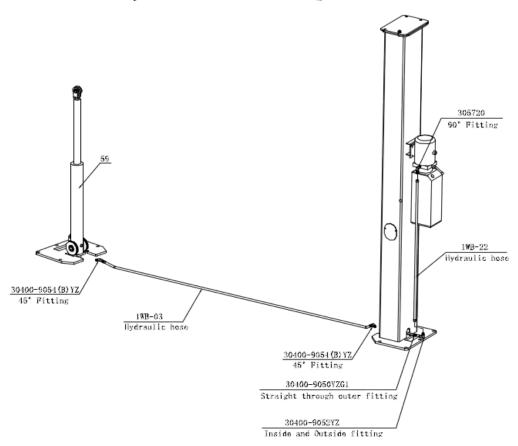
Lift makes excessive noise / vibrates	 Excessive noise from the lift is normally caused by the following: Cylinder too tight, load lift half capacity and cycle up and down a few times to break in. Lift cylinder should quiet down with use. If not contact your Direct Lift Distributor to purchase an Oil Additive. May have excessive wear on cable sheaves or shafts. Replace them.
Lift will not go down	 A lift not being able to go down is usually caused by: Primary latches not disengaged. Raise the lift 1.5" pull the release cable on each carriage press the lowering handle on the pump Fluid restriction. Making sure the lift is safely locked remove lowering valve & check for any restrictions Secondary latches are not disengaging. Check to make sure all is connected & in place. Manual hold the secondary latch/s back. Lower the lift until you can see the Lower/ secondary latch through the access hole in the side of the column. Using a pry bar pry the lower/secondary latch towards the front of the Collum. Doing so will correct the angles on the connecting linkage.

ILLUSTRATED PARTS BREAKDOWN





Hydraulic hose routing



PARTS LIST OF BP LIFT

ITEM	DRAWING	DESCRIPTION	QTY
1	NTPF-2100	Roof cable wheel seat	2
2	30400-1005C	Cable wheel washer	8
3	BP-2002	Thick cable wheel	2
4	52052A	Thick cable wheel bushing	2
5	GB894. 1-86- Φ 25	Axial elastic rings25	10
6	9KEP-1000B	Driven column welded group	1
7	GB6172-86-M12	Hexagon nuts M12	8
8	GB93-87- Φ 12	Sping washer 12	8
9	GB97. 1-85- φ 12	Flat washer 12	8
10	GB5782-86-M12*40	Hexagonal head bolt	8
11	GB818-85-M6*8	Cross recessed pan head screw	4
12	LSOH-1001	Window panel	2
13	PZ-3/4"*5.5"	Core type expansion bolt	10
14	30400-1025	Plastic spacer	10
15	9KEP-5100	Carriage	2
16	NTPF-5005	Bolt welding group	4
17	52042C	Sector gear	4
18	GB70. 1-M10*16	Hexadon socket cap screws	12
19	9KEP-8100	Striaght arm of welding group	4
20	PZ-M10*80	expansion bolt	4
21	9KEP-3000	Mudsill parts	1
22	9KEP-6005	Pallet	4
25	9KEP-1000A	Active column welded group	1
26		Hydraulic power units	1
27	GB6170-86-M8	Hexagon nuts M8	4
28	GB97. 1-85- φ8	Sping washer 8	20
29	GB93-87- Φ8	Flat washer 8	6
30	GB5783-86-M8*20	Hexagon bolt M8*20	4
31	30400-1999	Damping washer	4
32	LS-ZG-130	Long jiont	4
33	9KACD-ZG-65	Short jiont	4
34	9KACD-2001	Trolley	4
36	GB91- ф 5∗40	Cylindrical pin	4
37	30400-5014C	Cluster gear	4

PARTS LIST OF BP LIFT

38	9KACD-2002	Extension sping	4
39	OH-5500	The rubber door blocked	2
40	GB818-M6*20	Cross recessed pan head screw	4
41	BL644*121P	Link chain	2
42	30400-5003-1-2	Dam-board	8
43	GB70, 1-M8*20	Hexadon socket cap screws	16
44	30400-5035	Stop collar	2
45	30400-5024	Nylon slider	16
46	GB818-M6*35	Cross recessed pan head screw	2
47	30400-5006-1	Sping	2
48	GB6170-86-M20	Hexagonal nut	2
49	30400-5006	Stop tilting mechanism	2
50	30400-5006-3	Sping	2
51	30400-5011G	Bush	2
52	GB5783-86-M20*50	Hexagonal bolt	2
53	GB97. 1-85- ф 20	Sping washer 20	2
54	30400-5023	Chain pin	2
55	91773	Rolled axle	2
56	91773-2	Bearing hub	2
57	30400-9012-01	Contact roller	2
58	GB91- ф 2∗20	Split pin	4
59	N01-9100	Active cylinder parts	2
60	GB894. 1-86- φ 35	Axial elastic rings35	2
61	GB97. 1-85- ф 36	Flat washer 36	2
62	30400-5028	Chain lock	2
63	30400-5027	Connecting rod	2
64	30400-5032	Sping	2
65	30400-5029G	Chain lock	2
66	HB8029-M8	The nylon lock nut	2
67	GB5782-86-M8*60	Hexadon socket cap screws	2
			16