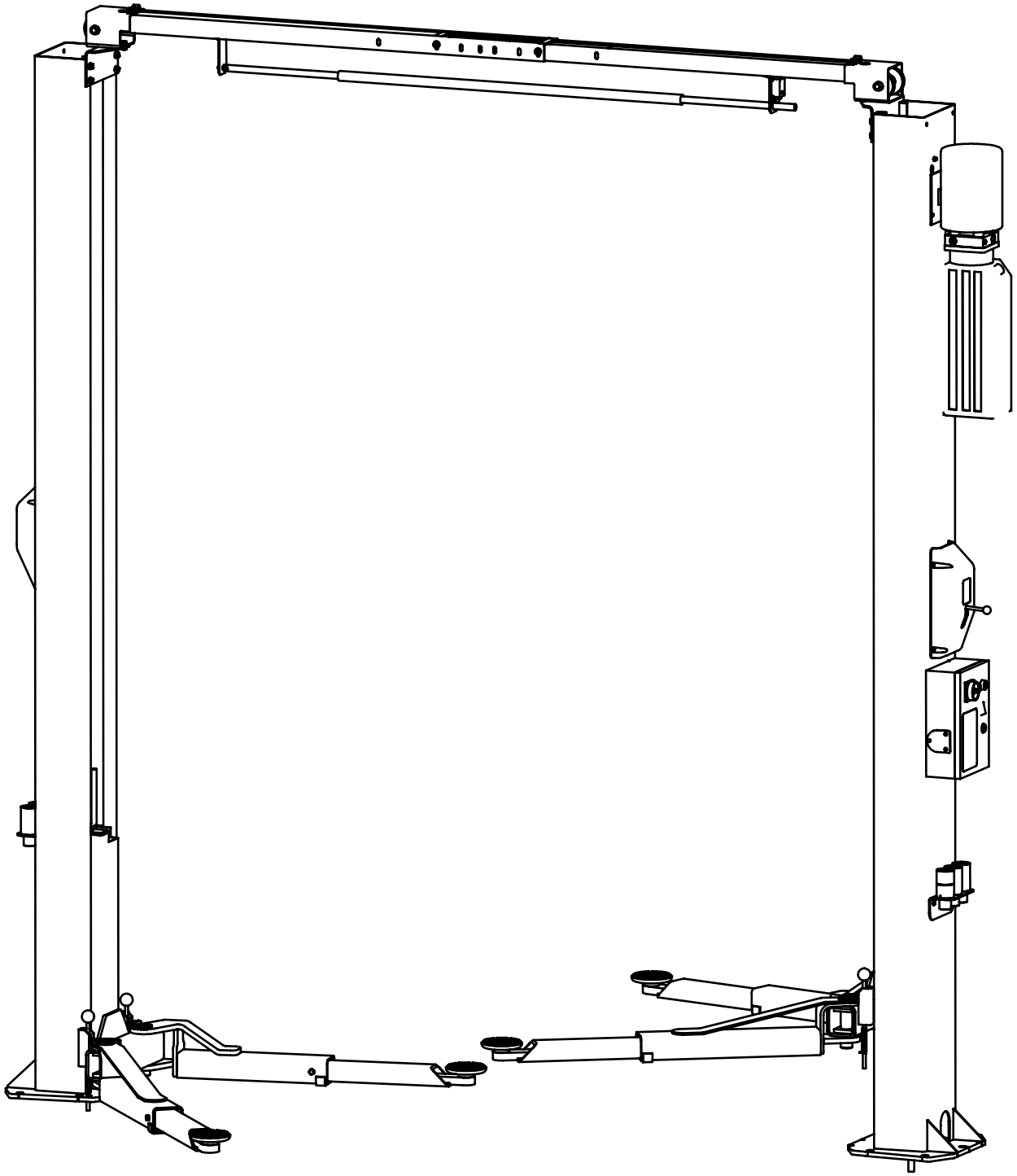
PB3E Two Post Lift



TP6-S1

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PB3E Definition

This lift is a 3T . capacity, two-column lift. The safety system in this lift is attached to the back of the carriage to provide a single point release that saves time when operating.

PB3E Important Notes

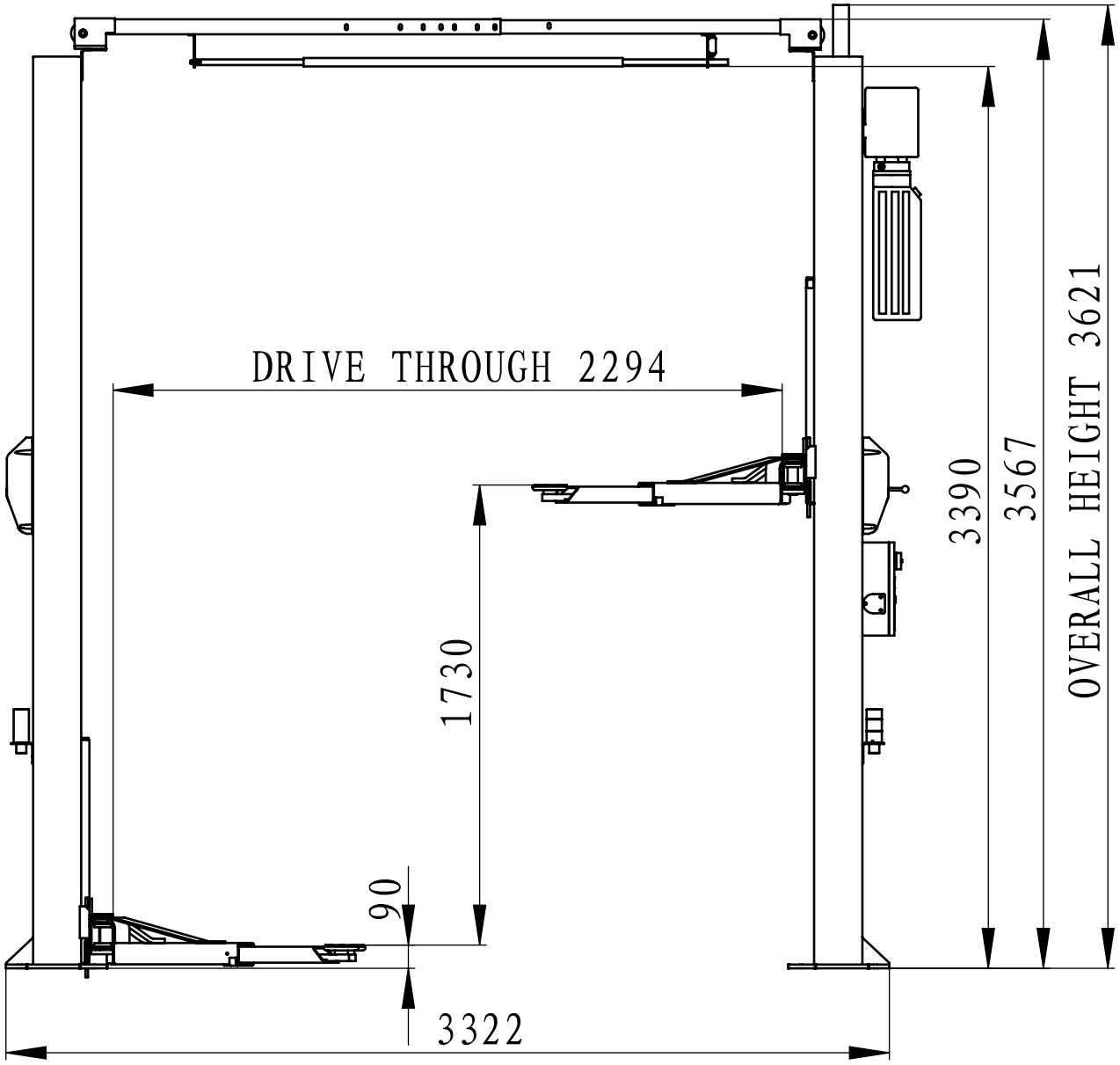
Please read the Safety Procedures and operation instructions in this manual before operating the lift. Proper installation is very important. To minimize the chance of making an error in installation, please read this manual through carefully before beginning installation. Check with building owner and/or architect's building plans when applicable. The lift should be located on a relatively level floor with 4" thick, 3000 psi sufficiently cured concrete.

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 or personal injury that occurs as the result of alteration of the equipment described in this manual or any subsequent damages.

PB3E BASIC SPECIFICATION

Lifting Capacity	3000kg
Rise(adapter in highest position)	1820mm
Height Overall	3621mm
Width Overall	3322mm
Drive-Through Clearance	2294mm
Inside Columns	2712mm
Long Arm	876～1472mm
Short Arm	550～1105mm
Adapter Height	94～149mm
Floor To Overhead Switch	3455mm
Motor Power	2.2kw
Power Supply	380V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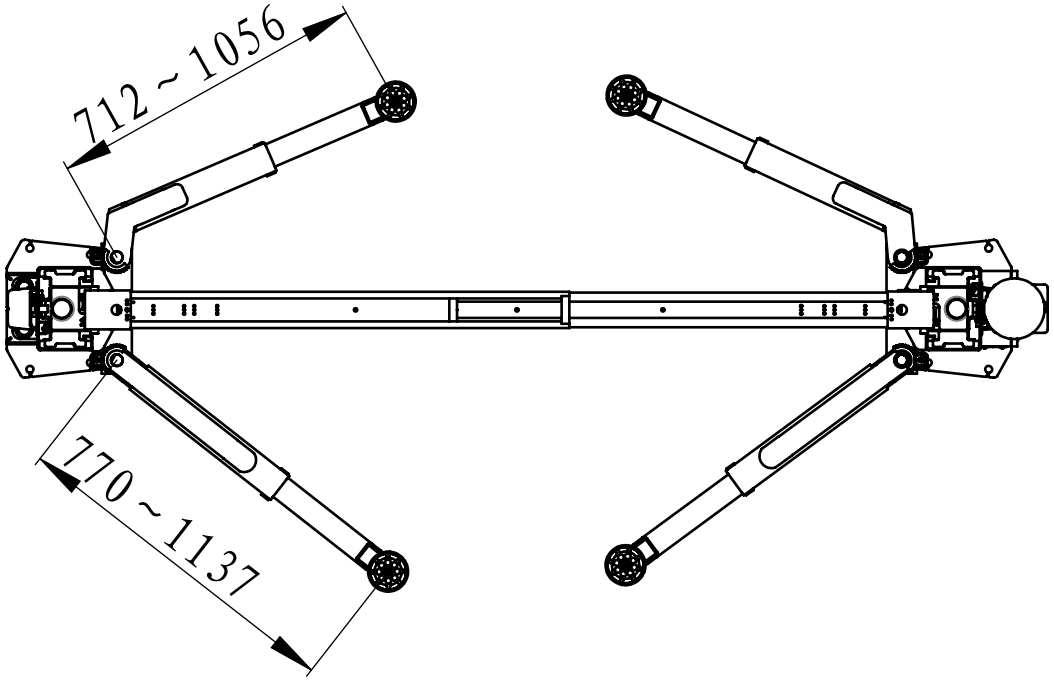
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IMPORTANT FOUNDATION AND ANCHORING INFORMATION

1. 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 ¼". When using the standard supplied ¾" x 5 ½" long anchors; if the top of the anchor exceeds 2 ¼" above the floor grade, you DO NOT have enough embedment.

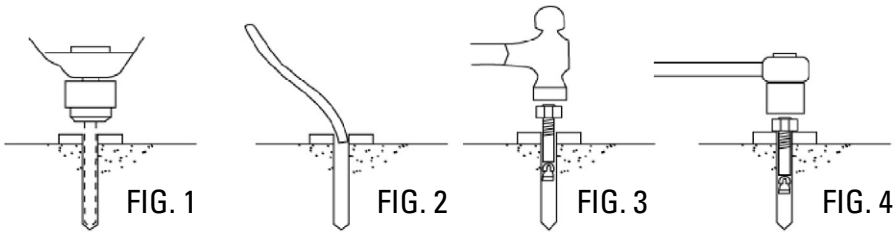
2. Use the existing holes in column base plate as a guide for drilling the ¾" diameter holes into the concrete. Maintain a 6" minimum distance from any slab edge or seam. Hole to hole spacing should be a minimum 6 ½" in any direction. Concrete thickness or hole depth should be a minimum of 4".

3. CAUTION: DO NOT install on asphalt or other similar unstable surface. Columns are supported only by anchoring in 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 (Reference Shim Kit). Torque anchors to 85 ft-lbs. Shim thickness MUST NOT exceed ½" when using the 5 ½" long anchors provided with the lift. Adjust the column extensions plumb.

5. If anchors do not tighten to 85 ft-lbs. installation torque, replace the concrete under each column base with a 4' x 4' x 6" thick 3,000 PSI minimum concrete pad keyed under and flush with the top of existing floor. Allow concrete cure before installing lifts and anchors.

ANCHORING TIP SHEET



1. Anchors must be at least 6" from the edge of the slab or any seam.
2. 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 or bits which have been incorrectly sharpened.
3. Keep the drill in a perpendicular line while drilling.
4. 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 to the length of anchor.
6. For better holding power blow dust from the hole.
7. Place a flat washer and hex nut over threaded end of anchor, leaving approximately ½ 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. If the top of the anchor exceeds 2-1/4" above the floor you do not have enough embedment. Check each anchor bolt with torque wrench to 85 foot pounds.

PREPARATION

The installation of this lift is relatively simple and can be accomplished by 2 men in a few hours. The following tools and equipment are needed:

Appropriate lifting equipment

AW 32, 46 or other good grade Non-Detergent Hydraulic Oil SAE-10 (12 quarts)

Chalkline and 12' Tape Measure

Rotary Hammer Drill with 3/4" Drill Bit. Core Drill Re Bar Cutter recommended

Transit and a 4' Level

Sockets and Open Wrench set, 1/2" thru 1-1/2" (1-1/8" for 3/4" Anchors) Locking Pliers, 8mm Socket Head Wrench

GENERAL INFORMATION

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, contact Hanmecson International, Inc. immediately.
2. 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" minimum thickness, 3000 psi concrete slab that has been properly cured. *There can be no cracks in the slab within 36" of the base plate location, and no seams in the foundation within 6" of its location! Remember: any structure is only as strong as the foundation on which it is located!*

Check for ceiling clearance first to confirm the lift can be set up in your bay!

STEP 1: After unloading the lift, place it near the intended installation location.

STEP 2: Remove the shipping bands and packing materials from the lift. The power unit and cylinders will be unpacked from the top.

STEP 3: Open the wrapping from the upper column and carefully remove the parts from inside. Unbolt the column from the shipping brackets. Unbolt the up-rights from the columns and assemble it to the column

STEP 4: Unpack the cylinders and open the oil port on each cylinder by unscrewing the black plastic cap. Move the carriage up about 20" to 25". Next, carefully slide the cylinder inside from the bottom of the carriage. The oil port will face the backside of the column and the notch on the bottom of the cylinder will fit into the hole in the center of the base plate.

STEP 5: Position the columns facing each other 107-1/4" inside base plates . Square the columns by measuring diagonally from corner points on base plates (within 1/4").

STEP 6: Using a 3/4" diameter concrete drill, drill the anchor holes thru the main side column, installing anchors as you go. Use a block of wood or rubber mallet to drive anchor bolts in. Drill to a minimum depth of 4" to insure maximum holding power. Drilling thru concrete (recommended) will allow the anchor to be driven thru the bottom if the anchor needs to be replaced later.

STEP 7: 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 1/2"). Tighten anchor bolts to 85 ft-lbs. of torque.

STEP 8: Install the overhead cross beam. This cross beam has two pieces, to be connected by five (4) bolts in the center 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. Next, install the cross beam between two columns .

STEP 9: After fastening the cross beam, check and confirm that the remaining column is plumb.

STEP 10: Secure the remaining column by duplicating STEP 6 and STEP 7

STEP 11: Install the safety latch on both side columns as shown on Fig. 2 and 3. Connect the safety release cable (parts #33) between two latches. Check that the tension of the cable is tight. Pull the single point release handle several times and check the tension again by making sure both latches release at the same time when the handle is pulled.

STEP 12: Mount the power unit on the main side leg to the power unit bracket using the four 5/16" bolts and nuts. Connect the power unit to the fitting installed on the back of the main leg by using a short hose supplied.

STEP 13: Connect the equalizing cables (Item #31 on parts list) . Do not tighten at this stage of assembly.

NOTE!!!

The cable stud that connects to the front right corner of the carriage should be connected first by pulling the stud through the carriage hole and up where it is easy to be held by locking pliers. Pull the stud back into place after threading at least ½" of the stud past the locknut. Connect the other ends to the rear right corners of the carriage with at least ½" 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 14: Adjust the carriage cable tension. This is accomplished by tightening the carriage adjustment nut on 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 1/2" side-to-side play. Check the latch releases to insure the carriage is still engaged in the appropriate latch. See additional instruction to assure proper latch engagement (located after STEP 19).

STEP 15: Install all four swing arms, readjust the arm lock pre-installed to make sure that gear rack are engaging the moon gear on the arm properly.

STEP 16: Remove the vent plug from the power unit and fill the reservoir. Use a Ten Weight (SAE-10) non-foaming, non-detergent hydraulic fluid. The unit will hold approximately twelve quarts of fluid.

STEP 17: Make the Electrical hookup to the power unit; 220V Single Phase. It is recommended that a 220 Volt, 30 Amp twist lock plug be installed in the power line just ahead of the power unit. Use wire capable of supporting a 30-amp circuit. Connect 3 phase in similar manner.

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. Single phase GHS motor cannot run on 50 Hz. Protect 3 phase 380V/50 Hz. with 30 amp time delay fuse.

STEP 18a: (used on lifts with single phase GHS power unit)

Locate each hole in the center of the up-rights, approximately 6" below the top edge, on the same side of the columns as the power unit. Install the two eye-bolts to the outside of each up-right with the hardware provided.

Insert the cable through the eye-bolt in the slave column side and secure with crimp fitting. Run cable across to the motor column side through the eye-bolt and down to the motor. Insert cable through the pull-pin on top of the motor and temporarily secure with locking pliers or small clamp.

Operate lift and apply pressure to the safety cable to insure motor shuts off prior to any part of vehicle coming in contact with cross-rail.

Adjust cable if necessary and secure with crimp fitting. Remove any excess cable with wire cutters.

STEP 18b: Install overhead bar and switch switch. Wire switch in series with motor

Operate lift and apply pressure to the overhead bar to insure motor shuts off prior to any part of vehicle coming in contact with cross-rail.

STEP 19: Do not place any vehicle on the lift at this time. Cycle the lift up and down several times to insure latches engage properly and all air is removed from the system (see bleeding instructions following this step). To lower the lift, first raised the lift to clear the latches and then pull down the safety release handle to lower the lift. If latches function out of sync, tighten the cable on the latch that engages first.

BLEEDING OF CYLINDERS AND CABLE ADJUSTMENT FOR 2-POST LIFTS

Bleeding of cylinders equipped with bleed screws on 2-post lift -

1. Assure proper level of oil in the reservoir tank before proceeding.

2. Raise the lift till arms are approximately waist high.

3. Be sure NOT to drop arms down onto the safety latches (they must remain off the latches).

4. With a ladder go to the top of the cylinders and carefully and slowly open the bleed screw (do NOT remove).

5. Open until allowing aire to escape and tighten immediately when oil is noticed coming out (we recommended to place a rag over the screw while doing this so as to contain the amount of oil released).

6. Tighten the screw.

NOTE: Do NOT over tighten as you may damage the screw or the threads in the cylinder).

7. Repeat steps 1-5 as many times as necessary for the two cylinders and as often as required to assure all air has been bled from the system.

Equalizer Cable Adjustment -

NOTE: Proceed with the following procedure only when being assured the bleeding procedure has been completed and the columns are properly level and on the same plane.

1. Begin with lift fully lowered. Now raise until hearing the first set of locking latches engage noting which of the two sides engaged first and stop immediately.

2. After determining which column engaged latches first, go to the opposite column and tighten the nut on the end of the equalizer cable that supports the side which did not engage. By tightening this nut you are thereby raising the carriage on the opposite side so as to bring level with the side that engaged locks during step 1.

3. Continue tightening the nut until hearing the opposite side (the side which had not engaged during step 1) engage the lock. Proceed to tighten another 1/2 turn and stop.

4. Lower the lift to the floor and proceed by raising again so as to assure the locks engage as simultaneously as possible.

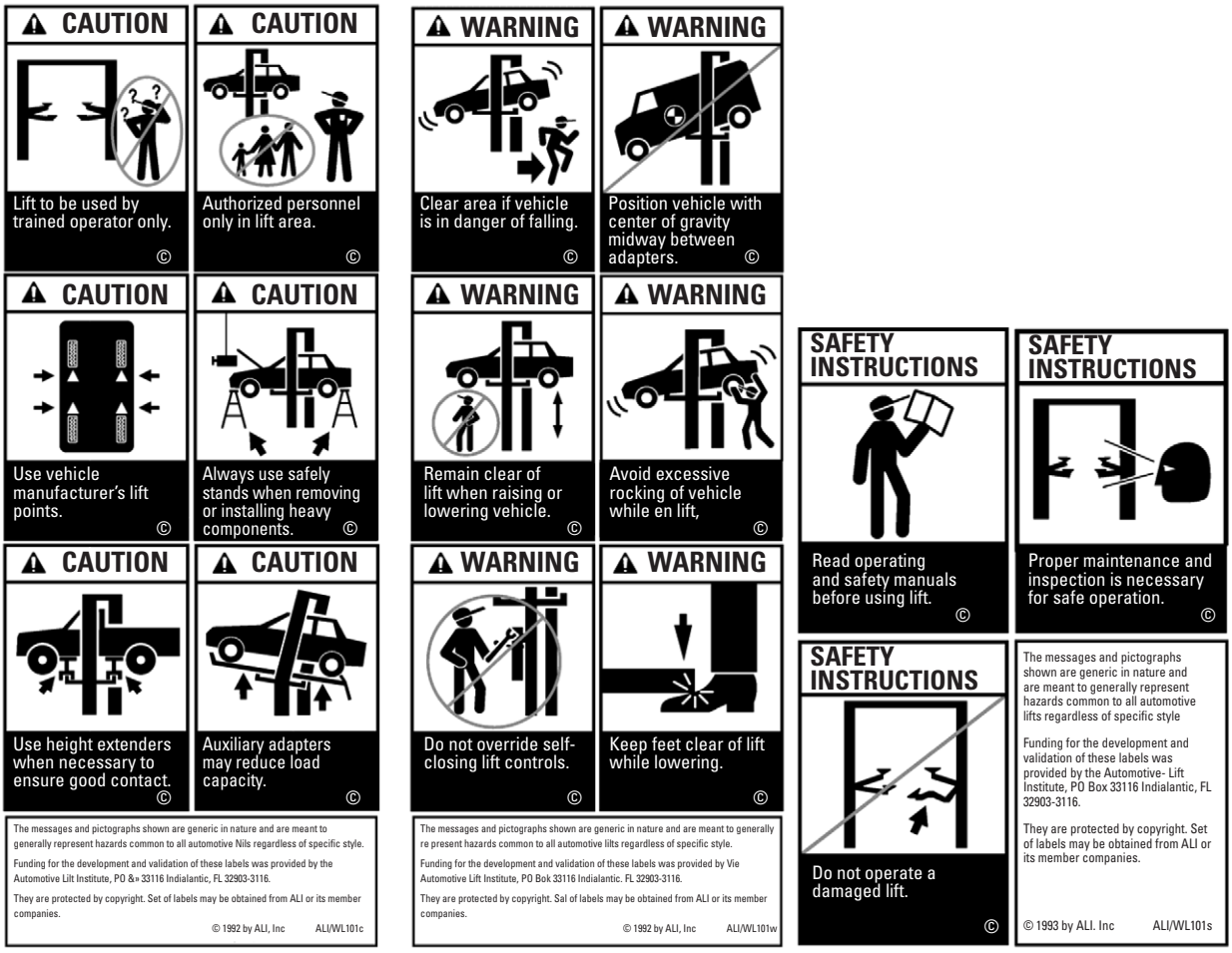
5. If simultaneous engagement is noted - proceed to raise the lift making note that the locks engage simultaneously at every position all the way to the top.

TIP: If simultaneous lock engagement differs from lower positions to higher positions the cause is due to not having the columns in proper plane or level.

Safety Procedures:

1. **Do not raise a vehicle on the lift until the installation is completed as described in this manual.**
2. **Anyone who will be in the vicinity of the lift** when it is in use should read and refer to the following publications supplied with this lift along with this manual:
   - "LIFTING IT RIGHT", ALI SM07-1.
   - "AUTOMOTIVE LIFT SAFETY TIPS", ALI-ST05.
   - "VEHICLE LIFTING POINTS FOR FRAME ENGAGING LIFTS", ALI/LP-GUIDE.
   - "SAFETY REQUIREMENTS FOR OPERATION, INSPECTION, AND MAINTENANCE", ANSI/ALI ALOIM-2008.
3. **Technicians** should be trained to use and care for the lift by familiarizing themselves with the publications listed above. The lift should never be operated by an untrained person.
4. **Always position the arms and adapters properly out of the way** before pulling the vehicle into, or out of the bay. Failure to do so could damage the vehicle and/or the lift.
5. **Do not overload the lift.** The capacity of the lift is shown on cover of this document.
6. **Positioning the vehicle** is very important. Only trained technicians should position the vehicle on the lift. Never allow anyone to stand in the path of the vehicle as it is being positioned.
7. **Position the arms to the vehicle manufacturer's recommended pickup points.** Raise the lift until contact is made with the vehicle. Make sure that the arms have properly engaged the vehicle before raising the lift to a working height.
8. **Keep everyone clear of the lift when the lift is moving, the locking mechanism is disengaged, or the vehicle is in danger of falling.**
9. **Unauthorized personnel** should never be in the shop area when the lift is in use.
10. **Inspect the lift daily.** The lift should never be operated if it has damaged components, or is malfunctioning. Only qualified technicians should service the lift. Replace damaged components with manufacturer's parts, or equivalent.
11. **Keep the area around the lift clear** of obstacles.
12. **Never** override the self-returning lift controls.
13. **Use safety stands** when removing or installing heavy vehicle components.
14. **Avoid excessive rocking** of the vehicle when it is on the lift.
15. **To reduce the risk of personal injury,** keep hair, loose clothing, fingers, and all body parts away from moving parts.
16. **To reduce the risk of electric shock,** do not use the lift when wet, do not expose the lift to rain.
17. **To reduce the risk of fire,** do not operate equipment in the vicinity of open containers of flammable liquids (gasoline).
18. **Use the lift only as described in this manual,** use only manufacturer's recommended attachments.
19. Unusual vehicles, such as limousines, RV's, and long wheelbase vehicles, may not be suitable for lifting on this equipment. If necessary, consult with the manufacturer or the manufacturer's representative.
20. The troubleshooting and maintenance procedures described in this manual can be done by the lift's owner/employer. Any other procedure should only be performed by trained lift service personnel. These restricted procedures include, but are not limited to, the following: cylinder replacement, carriage and safety latch replacement, and leg replacement.

21. **Anyone who will be in the vicinity of the lift** when it is in use should familiarize themselves with following Caution, Warning, and Safety related decals supplied with this lift, and replace them if the are illegible or missing:



Operating Instructions:

Vehicle Loading

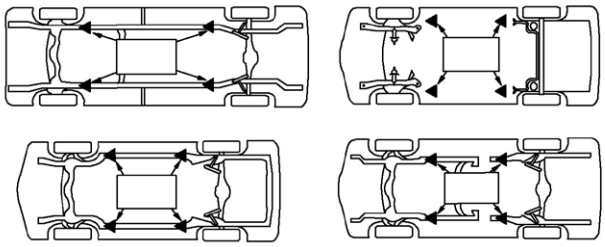
- Position vehicle for proper weight distribution (center of gravity should be midway between adapters).
- Swing arms under vehicle to allow adapters to contact at the manufacturer's recommended pick up points.
- Use caution before lifting pickup trucks, suv's and other framed vehicles. The individual axle weight capacity should not exceed 1/2 of lift capacity.
- Make sure vehicle is neither front nor rear heavy.

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.

PREVENTIVE 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.

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 is 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 **50 ft-lbs** for the ¾ in. anchor bolts. Do not use an impact 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.

Monthly Maintenance

1. With lift lowered check the hydraulic fluid level. If necessary add oil as described in the Installation Instruction section of this manual.
2. Check carriage latch synchronization: Latches should click at the same time. If necessary adjust cables as described in the Installation Instruction section of this manual.
3. Check tightness of all bolts.
4. Check anchor bolt tightness. If the anchor bolts are loose, they should be re-torqued to 90ft/lbs.
   - Check the nuts for tightness every week for the first month, and every month afterwards.
5. Replace worn or broken parts only with lift manufacturer's parts, or their equivalent.

Yearly Maintenance

1. Lubricate chains
2. Grease rub blocks and column surface contacting rub blocks
3. 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.

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.

Troubleshooting	
1.	The power unit does not run:
	Check electrical supply breaker, or fuse.
	Check micro-switch and connections in motor control box.
	Check voltage to the motor.
2.	The power unit runs but does not raise the lift:
	Check the oil level.
	Check that the lowering valve is not stuck open.
	Check the connections and components on the suction side of the pump.
3.	The power unit raises the lift empty, but will no lift a vehicle.
	Make sure the vehicle is not above the rated capacity of the lift.
	Make sure the vehicle is positioned properly.
	Clean the lowering valve by running the power unit for 30 seconds while holding the lowering valve open.
	Check the motor voltage.
4.	Lift drifts down.
	Check for external leaks.
	Clean the lowering valve by running the power unit for 30 seconds while holding the lowering valve open. Repeat this procedure three times.
	Clean the check valve seat.
5.	Slow Lifting and/or oil foaming up.
	Check that oil used meets the specification in the Installation Instruction section of this manual.
	Tighten all suction line fittings.

Troubleshooting	
6.	Anchors continually work loose
	If holes were drilled too large relocate the lift per the Installation Instruction section of this manual.
	Floor is not sufficient to provide the necessary resistance, remove an area of concrete and re-pour as described in the Installation Instruction section of this manual.
7.	Lift does not raise and lower smoothly.
	Reposition vehicle for a more even weight distribution.
	Check the four inside corners of the two legs for roughness. Any rust or burrs must be removed with 120 grit emery cloth.
	Lubricate the leg corners with heavy duty bearing grease.
	Use a level to check the legs for vertical alignment both side to side and front to back. Shim the legs as necessary per the Installation Instruction section of this manual.
	Check the oil level.
	Make sure there is no air in the hydraulic lines, bleed system as described in the Installation Instruction section of this manual.
8.	The lift will only lower approximately, 1” then stops.
	Check that the safety latch pull rods are disengaged.
9.	Power Unit will not stop running
	Switch is damaged, **turn off power to th lift** and replace switch.

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 employees shall comply with this procedure.

Responsibility

The responsibility for assuring that this procedure is followed is binding upon all employees and service personnel from outside service companies (i.e., Authorized Rotary Installers, contactors, etc.). All employees 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 designee) in the purpose and use of the lockout procedure.

Preparation

Employees authorized 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 authorization 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 authorized lockout person operates the main energy isolation device removing power to the subject lift.
   - If this is a lockable device, the authorized 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 3" x 6" in size, an easily noticeably color, and states not to operate device or remove tag.
   - If this device is a non-lockable circuit breaker or fuse, replace with a "dummy" device and tag it appropriately as mentioned above.
4) Attempt to operate lift to assure the lockout is working. Be sure to return any switches to the "OFF" position.
5) The equipment is now locked out and ready for the required maintenance or service.

Restoring Equipment to Service

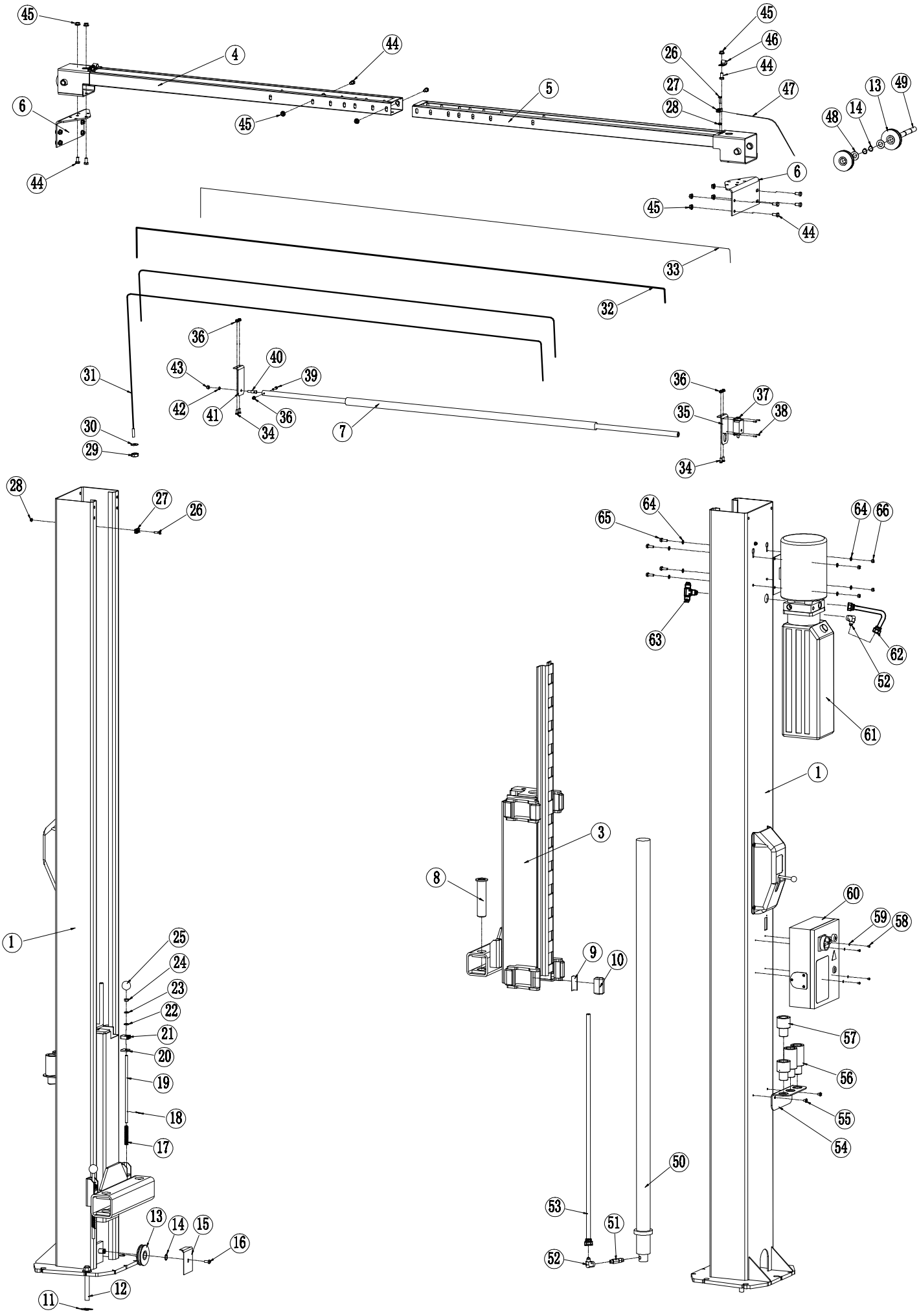
1) Assure the work on the lift is complete and the area is clear of tools, vehicles, and personnel.
2) At this point, the authorized person can remove the lock (or dummy circuit breaker or fuse) & tag and activate the energy isolating device so that the lift may again be placed into operation.

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 41 -104 F (5 -40 C).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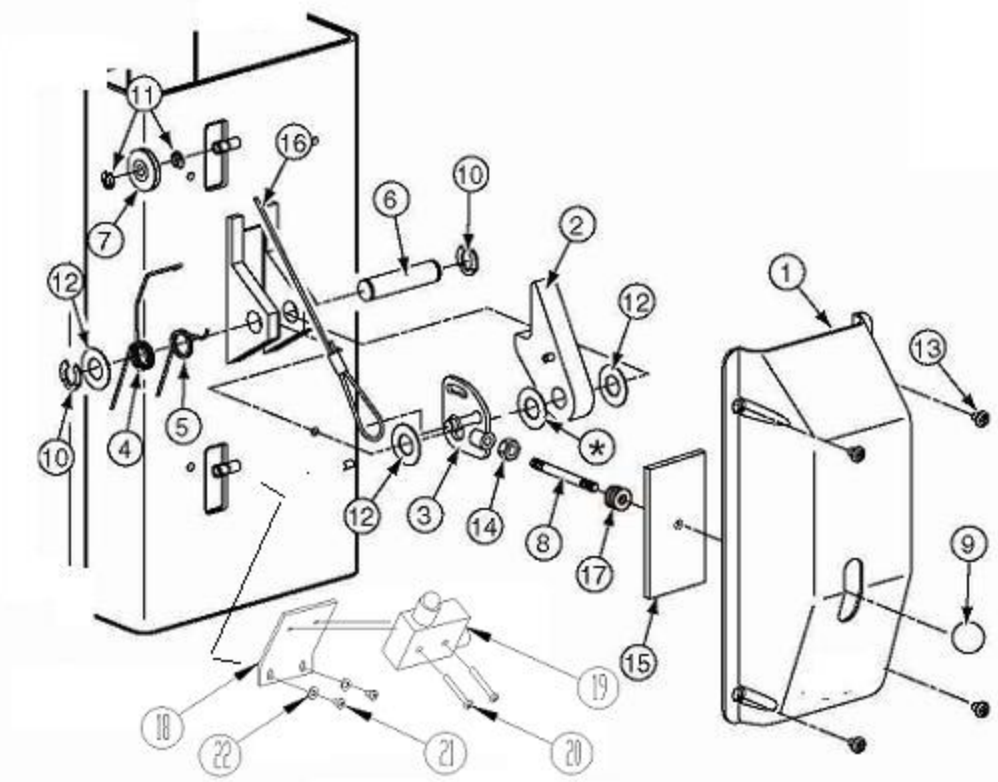
1	TP6-1100	Column Weldment	2
2	HPRO-5003	LIMITED BAR	1
3	TP6-2000	Carriage Weldment	2
4	G3T-4100	L.H. Overhead	1
5	G3T-4200	R.H. Overhead	1
6	TP10-3006	Top Bracket	2
7	HPRO-5005	RUBBER PROTECTION	1
8	30400-5005G	Arm Pin	4
9	30400-5025G	Slider Block Shim	16
10	TP10-6003	Slider Block	16
11	30400-1025	U SHIM	16
12	P19-190	Anchor Bolt	10
13	N377	Sheave	6
14	41411	Klipring For 3/4" Shaft	10
15	G3T-1001	Sheave Cover	2
16	40063	1/4"-20NC*3/8"Lg. PHMS Plated	2
17	30400-5012-1	Press Spring	4
18	B51-3*26	Spring Pin 3*26Lg.	4
19	30400-5015	Actuator Pin	4
20	30400-5017G	GEAR SHIM	4
21	30400-5014G	PAWL	4
22	B41-10	FLAT WASHER φ10	4
23	B40-10	SPRIN WASHER φ10	4
24	B30-10	HEX NUT M10	4
25	B84-35	BALL HANDLE	4
26	40108	1/4"-20NC*1"Lg.HHCS	4
27	N619	LATCH CABLE BRACKET	4
28	40641	1/4"-20NC Flanged Lock Nut	4
29	B33-12	NYLON LOCK NUT M12	4
30	B41-12	FLAT WASHER φ12	4
31	TP6-5001	EQUALIZER CABLE	2
32	TP6E-9801-2	Overhead Hose	1
33	FJ7600	LATCH RELEASE CABLE	1
34	B10-6*16	M6*16Lg.HHCS	4
35	HPRO-5002G	SWITCH BRACKET B	1
36	B33-6	Nylon Lock Nut M6	5
37	LX19-001	OVERHEAD SWITCH	1
38	B23-3*10	M3*10Lg.PHMS	4
39	B10-6*30	M6*30Lg.HHCS	1
40	HPRO-5004	TUBE SHAFT	1
41	HPRO-5001G	LIMITED BAR BRACKET A	1
42	B41-8	FLAT WASHER φ8	1
43	B30-8	M8 HEX NUT	1
44	41536	M10-1.5*20Lg. HHCS	18
45	41655	M10-1.5 Flanged Lock Nut	18

46	G3T-8005	HOSE CLAMP	2
47	N618	LATCH CABLE GUIDE	2
48	41388	WASHER	16
49	G3T-4001	SHEAVE SHAFT	2
50	NYG11-9100	Cylinder	2
51	HBS40-9802-2.1	VALVE BODY	2
	IFC-6T-6	FLUX CONTROL	2
52	SW-002	FITTING 90D	3
53	TP6E-9801-1	Mainside Hose	1
54	FJ6145Y	ADAPTER BRACKET	2
55	40227	5/16"-18NC*3/8"Lg.PHMS	12
56	1070922	1.25″ EXT.Adapter	4
57	1070923	3.5″ EXT.Adapter	4
58	B41-4	FLAT WASHER φ4	6
59	B23-4*6	M4*6Lg.PHMS	6
60	TP6-X2	ELECTRICAL BOX KIT	1
61	PDL2211	POWER UNIT	1
62	1WB-13JC	HOSE	1
63	HPRO-Y002	T fitting	1
64	40854	5/16" External Tooth Lockwasher	8
65	40271	5/16"-18NC*1-1/2 HHCS	4
66	40670	5/16"-18NC HEX NUT	4

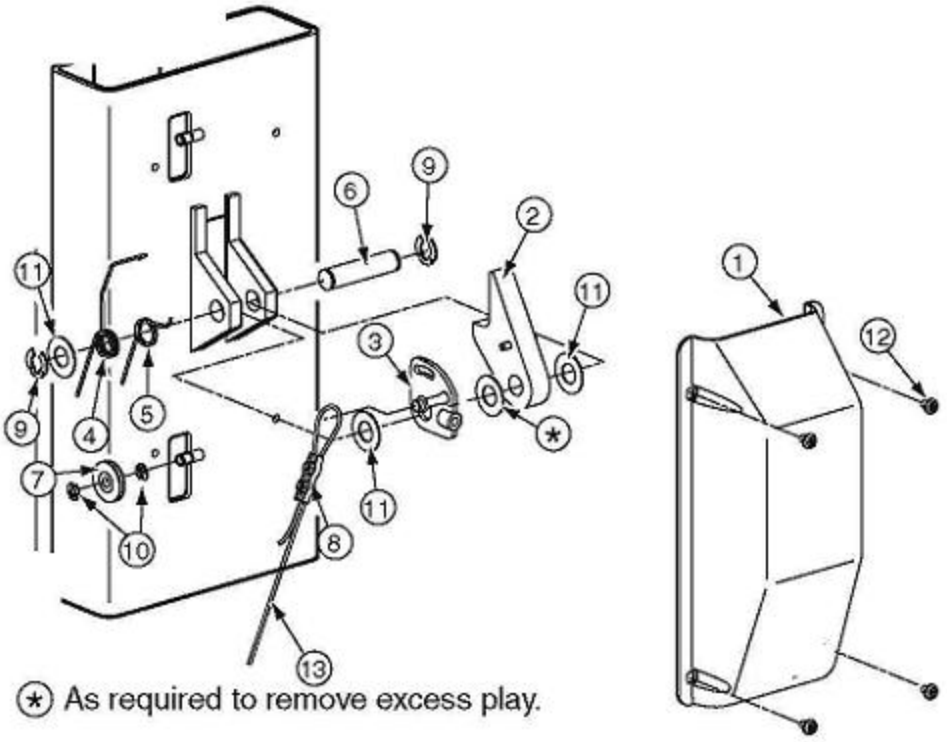
Locking Latch Detail (Right Column)



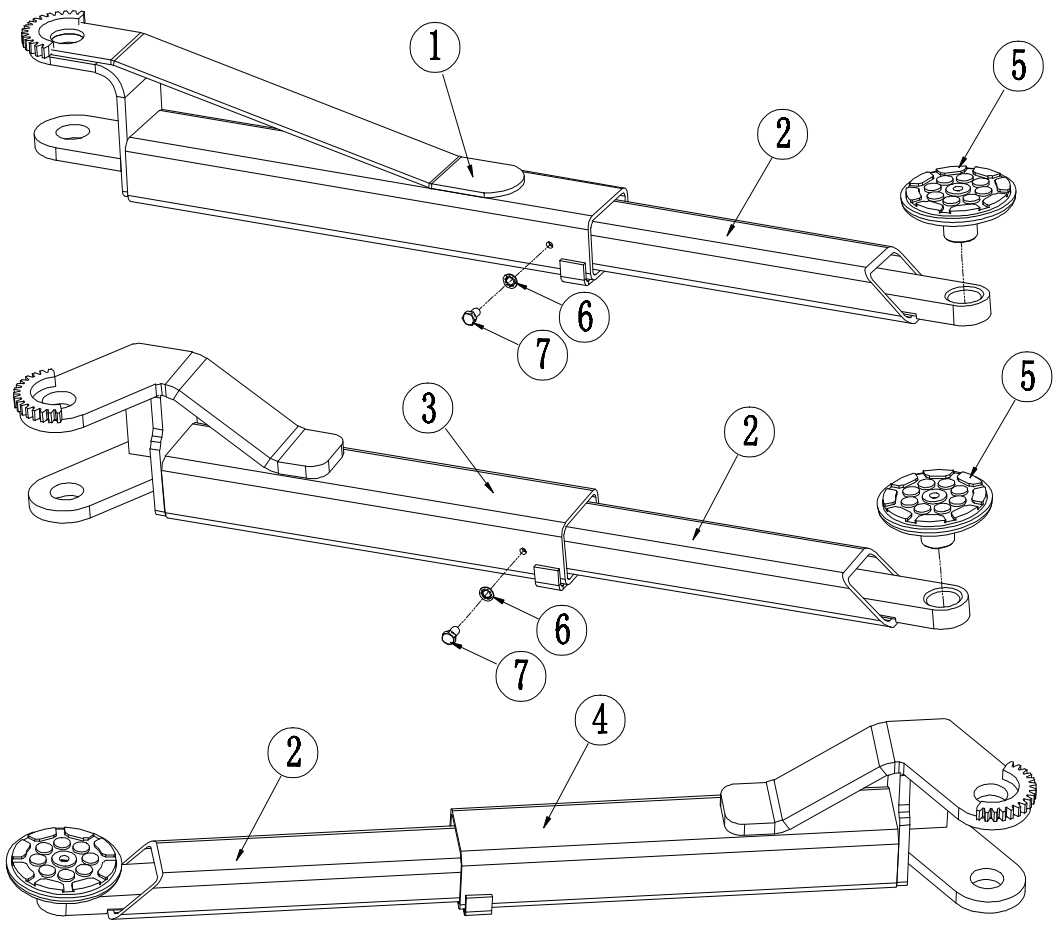
* As required to remove excess play.

ITEM	DESCRIPTION	PART#
1.	Control Side Cover	TP6-5003
2.	Locking Latch Dog	TP10-1010
3.	Control Plate	FJ7594-2
4.	Spring	FJ7566-10
5.	Spring	FJ7382-9
6.	Latch Shaft	FJ7382-34
7.	Locking Latch Sheave	FJ7322
8.	Handle	FJ7382-18
9.	Ball Handle	FC134-91
10.	Truarc Klipring #5304-75 for 3/4" Shaft	41411
11.	Truarc Klipring #5304-37 for 3/8" Shaft	41410
12.	1-1/2" O.D. x 3/4" I.D. x .045" Mach. Bush	41388
13.	5/16"-18NC x 3/8" Lg. PHMS	40227
14.	3/8" - 16NC Hex Jam Nut	40658
15.	Slot Cover	N617
16.	Locking Latch Cable	FJ7600
17.	3/8" Flat Washer	40820
18.	Switch Bracket	TP6-5002
19.	Lower Sswitch	LX19-001
20.	M4*30 PHMS	B23-4*30
21.	M4*6 PHMS	B23-4*6
22.	Dia.4mm WASHER	B41-4

Locking Latch Detail (Left Column)



ITEM	DESCRIPTION	PART#
1.	Latch Cover	TP6-5004
2.	Locking Latch Dog	TP10-1010
3.	Control Plate	FJ7594-2
4.	Spring	FJ7566-10
5.	Spring	FJ7382-9
6.	Latch Shaft	FJ7382-34
7.	Locking Latch Sheave	FJ7322
8.	Latch Cable Clamp	N63-1
9.	Truarc Klipring #5304-75 for 3/4" Shaft	41411
10.	Truarc Klipring #5304-37 for 3/8" Shaft	41410
11.	1-1/2" O.D. x 3/4" I.D. x .045" Mach. Bush.	41388
12.	5/16"-18NC x 3/8" Lg. PHMS	40227
13.	Locking Latch Cable	FJ7600



ITEM	DESCRIPTION	PART #
1.	TP6-3100	REAR OUTTER ARM WELD
2.	TP6-3200	REAR INNER ARM WELD
3.	TP6-4100	LEFT OUTTER ARM WELD
4.	TP6-4200	RIGHT OUTTER ARM WELD
5.	30400-6005-1	ADAPTER ASSEMBLY
6.	40843	3/8" INTERNAL TOOTH WASHER
7.	40155	3/8"-16NC*5/8"Lg.HHCS GRADE 8

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