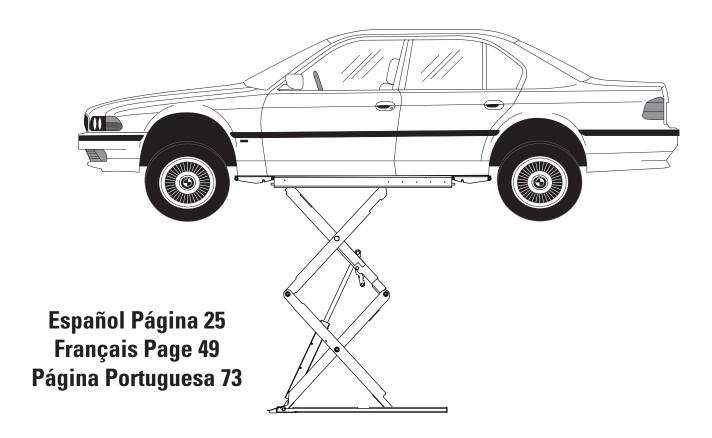
# Installation Instructions Double Section Scissor Lift

**(000 Series)** 

**Capacity 7,700 lbs (3,500 kg)** 

(Maximum 3,850 lbs (1,750 kg) per pad)



Read entire manual before assembling, installing, operating, or servicing this equipment.

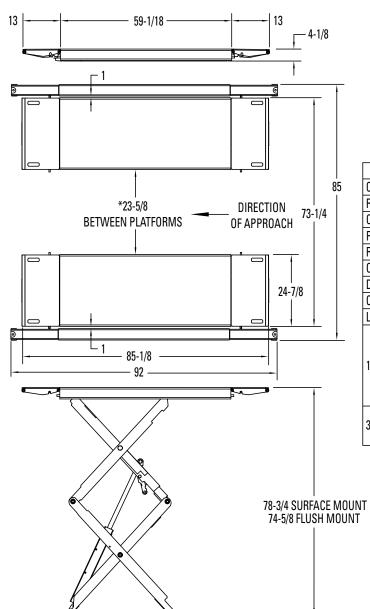
Intended for unibody vehicles and some frame vehicles within the rated lift capacity.

LP20632

#### 1. General Lift Location

Use architects plan when available to locate lift. Fig. 1 shows typical lift dimensions.

Control cabinet may be placed on the left or right. This is shown in Fig. 3.



\*NOTE: 23-5/8" WILL ACCOMMODATE MOST VEHICLES. LIFT MAY BE ADJUSTED DURING INSTALLATION BUT DISTANCE BETWEEN PLATFORMS SHOULD NOT EXCEED 30".

CDECIFICATION	CUDEACE MOUNT	FLUCU MOUNT
SPECIFICATION	SURFACE MOUNT	FLUSH MOUNT
COLLAPSED HEIGHT	4-1/8	-
RAISED HEIGHT	78-3/4	74-5/8
OVERALL LENGTH	85-1/8	85-1/8
PLATFORM LENGTH	59-1/8	59-1/8
RAMP LENGTH	13	13
OVERALL WIDTH	85	73-1/4
DISTANCE BETWEEN PLATFORMS	23-5/8	23-5/8
CAPACITY AT 180 MM HEIGHT	7700 lbs	7700 lbs
LIFTING TIME	43 SEC.	43 SEC.
1Ø MOTOR	50 HZ, 4HP, 208-230V	50 HZ, 4HP, 208-230V
	60 HZ, 4HP, 208-230V	60 HZ, 4HP, 208-230V
3Ø МОТОR	50/60 HZ, 4HP, 230V/460V	50/60 HZ, 4HP, 230V/460V

Fig. 1

#### 2. Vertical Clearance

Check the height of the area where the lift is to be installed. Clearance should be calculated based on the full raised height of the lift and the height of the tallest vehicle being lifted.

AWARNING Failure by purchaser to provide adequate clearance could result in unsatisfactory lift performace, property damage, or personal injury.

#### 3. Flooring

Be certain you have the proper concrete floor to properly handle the loaded lift. Floor should be in generally good condition with no large cracks, spalling or deterioration.

Minimum requirements for concrete are 4 inches minimum depth, with steel reinforcement, cured to 3000 psi. Floor should be level within 1/4 inch under each platform area. No anchors should be installed within 2-1/2 inches of any crack, edge, or expansion joint. There should be no floor seam under ramp roller locations. If these conditions cannot be met, a pad may be poured to accommodate the lift.

Check with local building inspectors and/or permits office for any special instructions or approvals required for your installation.

**AWARNING** Failure by purchaser to provide the recommended mounting surface could result in unsatisfactory lift performace, property damage, or personal injury.

#### 4. Electrical Requirements from Customer

- 208-230 VAC single phase 50 Hz power for 21 full load amps.
- 208-230 VAC single phase 60 Hz power for 21 full load amps.
- 230/460 VAC three phase 50 Hz or 60 Hz power for 7 3.5 full load amps.
- All wiring must conform to all national and local electrical codes.

IMPORTANT Never operate the motor on line voltage less than 208V. Motor damage may occur.

IMPORTANT
Use separate circuit for each power unit.
Protect each circuit with a time delay fuse or circuit breaker.

**AWARNING** Make sure that the main power supply is disconnected to avoid the possibility of electrocution.

#### **5. Safety Notices and Decals**

For your safety, and the safety of others, read and understand all of the safety notices and decals included here.

Proper maintenance and inspection is necessary for safe operation.

#### DO NOT operate a damaged lift.

Safety decals similar to those shown here are found on a properly installed lift. Be sure all safety decals have been placed on the control cabinet. Verify that all authorized operators know the location of these decals and fully understand their meaning. Replace worn, faded, or damaged decals promptly.

**AWARNING**Do not attempt to raise a vehicle on the lift until the lift has been correctly installed and adjusted as described in this manual.

#### SAFETY WARNING LABELS FOR HINGED FRAME ENGAGING LIFTS

#### Lift Owner/User Responsibilities:

- A. This Safety Warning placard
  SHALL be displayed in a
  conspicuous location in the lift area.
- B. Use one of the mounting arrangements illustrated on back of this placard.
- **C.** These Safety Warning labels supplement other documents supplied with the lift.
- Be certain all lift operators read and understand these labels, operating instructions and other safety related information supplied with the lift.



#### 6. Installation

**Important:** Always wear safety glasses while installing lift.

#### **Required Tools and Supplies List**

- 1. 208-230V, 60 Hz, 30 amp service
- 2. 208-230V, 50 Hz, 30 amp service
- 3. 460V, 60 Hz, 10 amp service
- 4. 15 liters of ATF Dexron III or hydraulic fluid that meets ISO 32 specifications
- 5. Chalk line
- 6. Tape measure, 15 ft min.
- 7. Level, 6 ft min.
- 8. Open end wrenches
- 9. Needle nose pliers
- 10. Cross head screw driver
- 11. Oil funnel
- 12. Hammer drill with 1/2" bit

#### 7. Surface Mount & Flush Mount Control Cabinet Layout

Layout the service bay according to the architect's plans or owners instructions. Failure to install in this orientation can result in personal and property damage. Be certain that the proper conditions exists, see previous page.

**Note:** The correct orientation of the platforms is critical for proper layout of the lift.

Place the control cabinet in the approximate location (do not anchor), Fig. 3. Relocating the control cabinet further away than the standard distance will require the installer to provide suitable hydraulic hoses.

Additional hose covers will also be needed if installing the control cabinet at a further distance than the standard distances in surface mount configurations. Hydraulic hoses should be 1/4" min. ID with a min. working pressure of 4000 psi with #6 JIC Swivel Female fittings. Extension Hose Kits available.

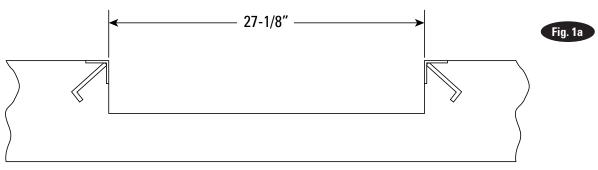
#### 8. Flush Mount Pit Requirements

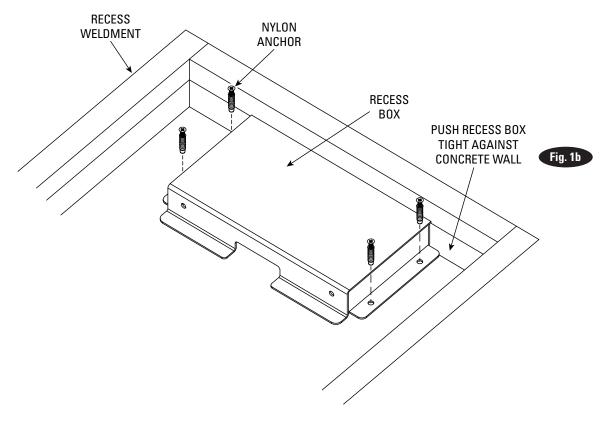
Prior to pouring concrete, installer will need the Full Flush Mount Kit (part # XX100003). Please contact the phone number listed on the front cover of the manual for additional assistance. The Full Flush Mount Kit contains frame components with concrete ties that will need to be placed during concrete pour. See parts breakdown manual for included components. Pit forms are not provided and will be the responsibility of the installer.

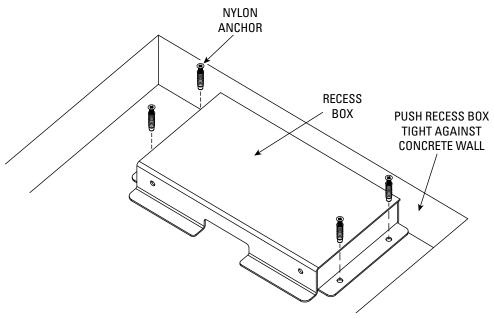
Bend frame anchors outward, perpendicular to angle frame, and downward approximately 45° to floor level, Fig. 1a.

Place the recess box in the pit and install M8 bolts to secure to frame and anchors to pit floor. If recess weldment is not used, fasten recess box using anchors only, Fig. 1b.

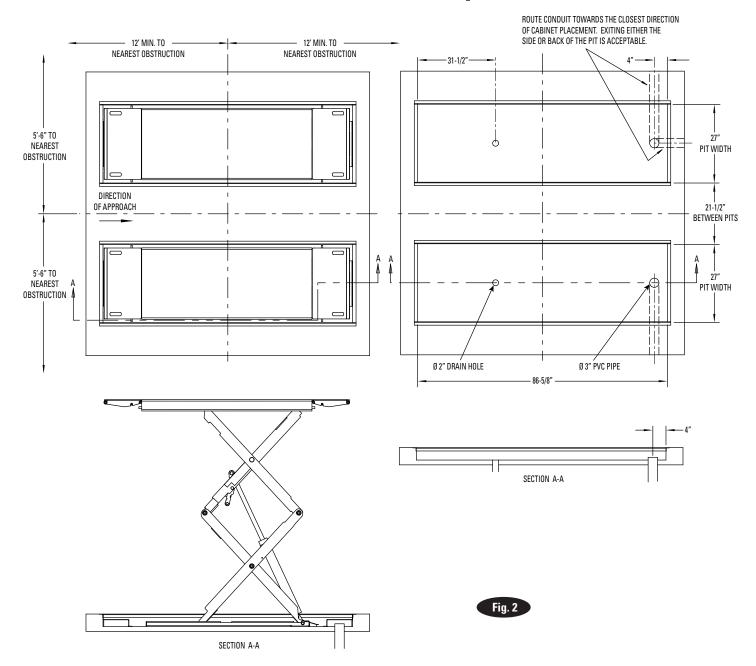
For flush mount pit specifications, Fig. 2.







### **Flush Mount Only**



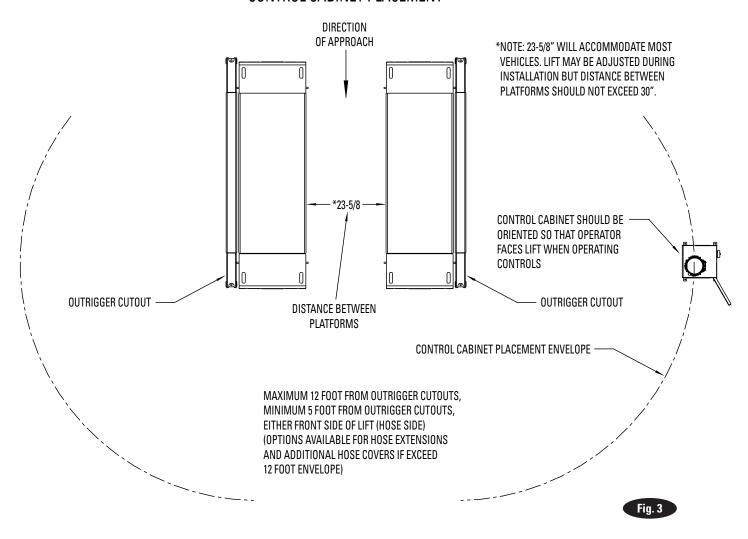
#### 9. Platforms and Control Cabinet Detail Layout

Place platforms and control cabinet as shown in Fig. 3 for surface mount or flush mount applications. **DO NOT anchor any components at this time.** The control cabinet should be located on the opposite end of vehicle approach, as shown in Fig. 3. Operator should be in a position to notice any misalignment of lifting pads or vehicle during operation. Rotary Lift does not recommend placing the control cabinet in a different location orientation and doing so would be the responsibility of the installer and/or end user.

IMPORTANT Control cabinet should always be oriented so operator is facing the direction of the lift when operating the lift.

If lift will be a flush mount application, the total run length of the pipe chase from pit to bottom rear of control cabinet should not exceed 79".

#### CONTROL CABINET PLACEMENT



#### 10. Control Cabinet Connections

#### **Electrical Connection:**

Have a certified electrician run appropriate power supply to motor wire size for a single phase 30 amp. or three phase 20 amp. circuit.

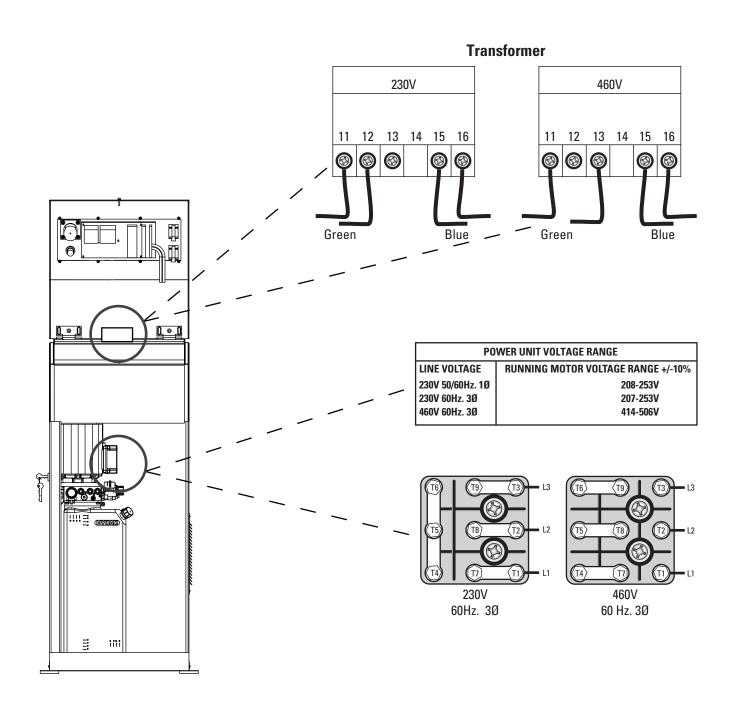
ACAUTION Never operate the motor on line voltage less than 208V. Motor damage may occur.

All wiring must conform to all national and local electrical codes.

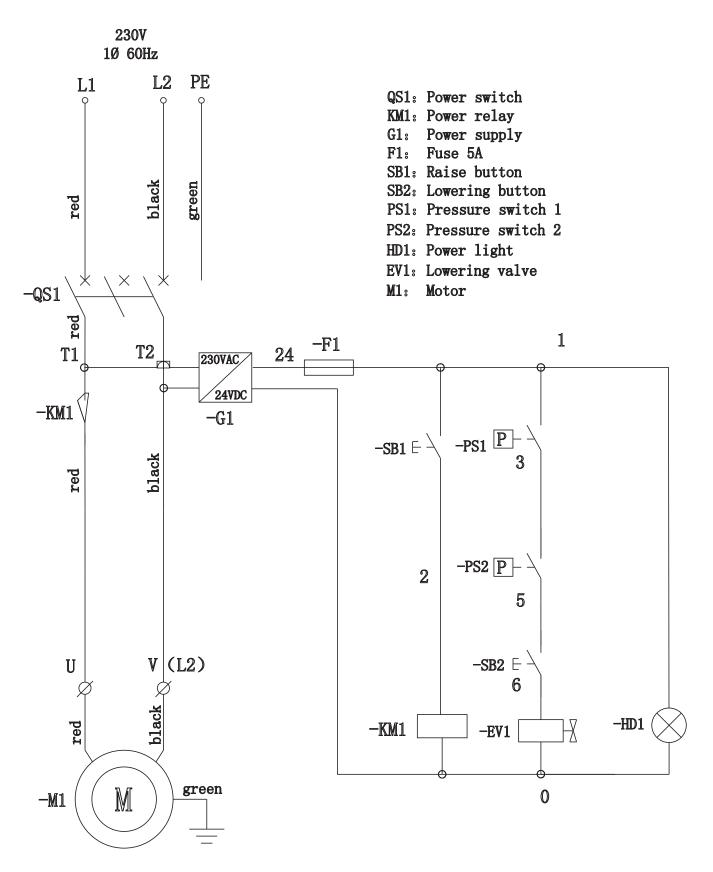
**IMPORTANT** Use seperate circuit for each power unit. Protect each circuit with a time delay fuse or circuit breaker. Use a 20 amp. (three phase) or 30 amp. (single phase) fuse.

AWARNING Make sure that the main power supply is disconnected to avoid the possibility of electrocution.

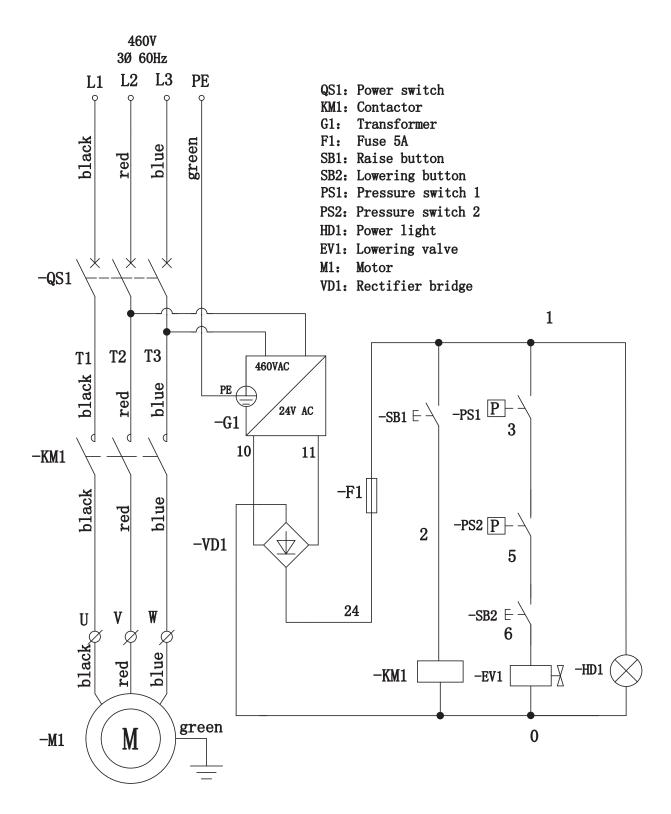
AWARNING All connections made inside the control panel must be kept 18" (457mm) off of the floor.



## WIRING SCHEMATIC 208-230V SINGLE PHASE



## WIRING SCHEMATIC 230-460V THREE PHASE



#### 11. Oil Filling and Bleeding

Use Dexron III ATF, or hydraulic fluid that meets ISO32 specifications. Remove fill breather cap, Fig. 4, and fill full of fluid. Turn power to on and ensure the disconnect switch and emergency stop buttons are in the "ON" position. Proceed with the following steps.

AWARNING Only skilled and authorized personnel should be allowed to perform these operations. Carefully follow all instructions shown below to prevent possible damage to the car lift or risk of injury to people.

Be sure that the operating area is cleared of people. After positioning the lift as specified and performing electric and hydraulic connections, the lift can be operated by following the specific procedure.

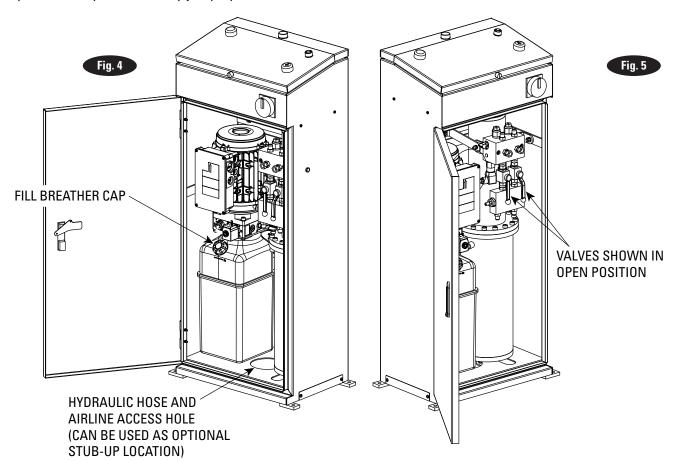
- 1. Close the valves shown in Fig. 5.
- 2. Push the "UP" button until the tank is only half full.
- 3. Add 5 additional liters of fluid.
- 4. Open valves, platforms may jump upward.

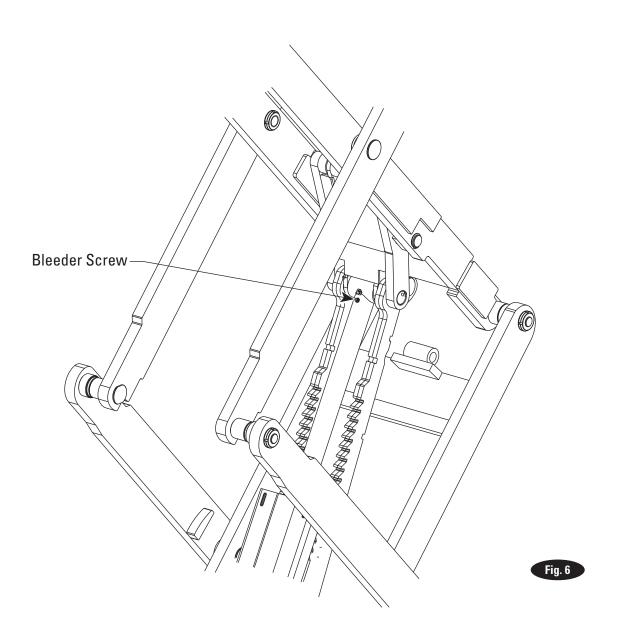
- 5. Push the "UP" button until both platforms stop moving.
- 6. Bleed air from each cylinder located underneath the platforms using bleed screw, Fig. 6.
- 7. Close both valves, Fig. 5.
- 8. Push the "UP" button until both platforms stop moving.
- 9. Lower platforms.
- 10. Repeat process 1 thru 9 several times (omit step 3) until no air is released as explained in previous step 6.

If lift does not lower during the bleeding process, open the valves to lower, then close the valves and repeat the bleeding process.

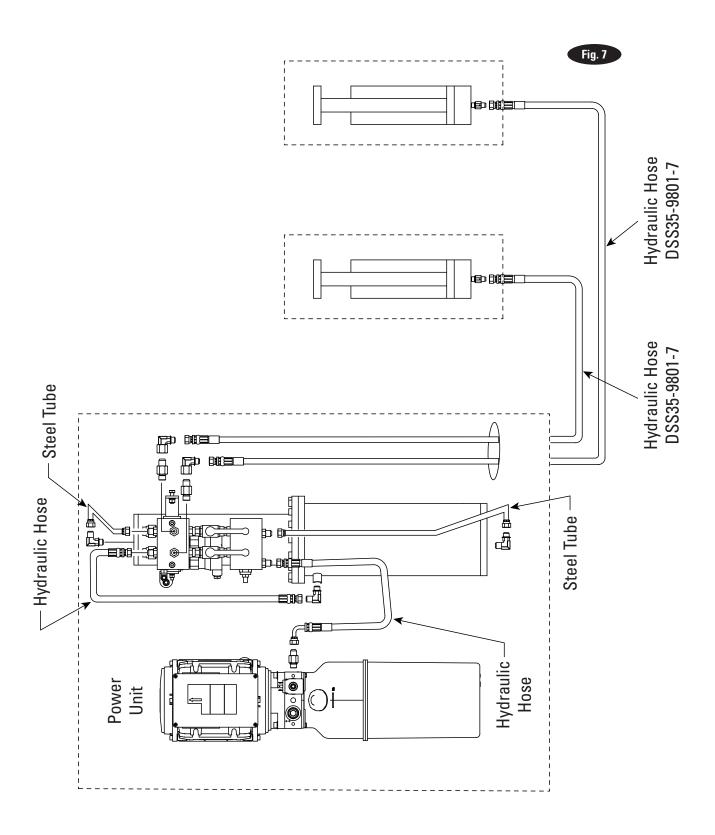
11. Close cabinet door.

If lift does not raise but the motor runs, check the motor for proper direction of rotation and switch the phases on the power supply line if necessary.





### **Hydraulic Schematics**

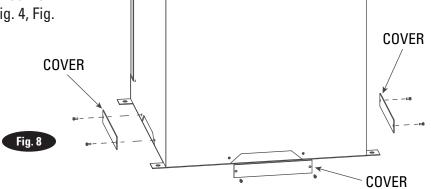


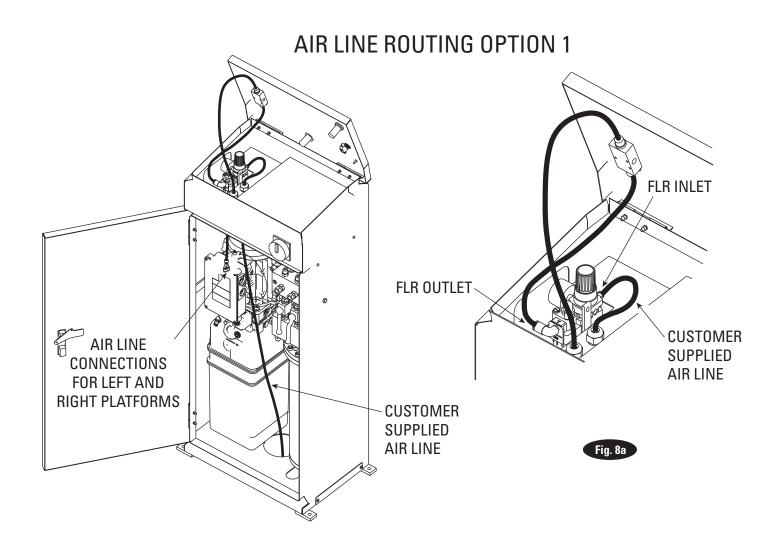
#### 12. Hydraulic Hose and Air Line Routing

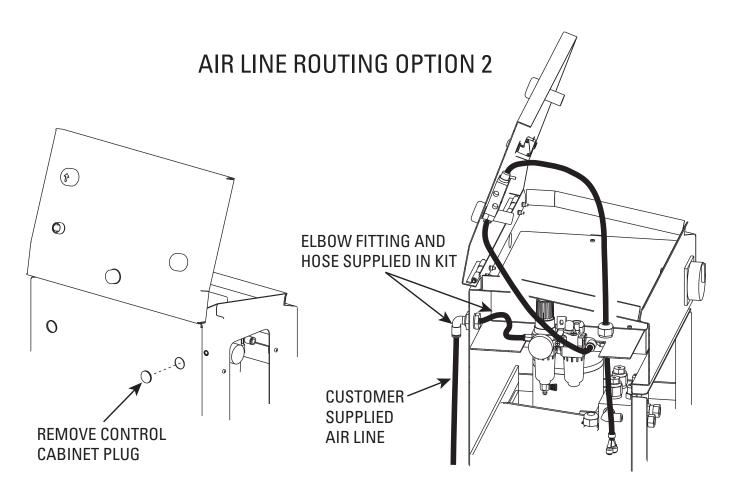
1.The control cabinet includes three removable covers for hydraulic and air line routing, Fig.8.

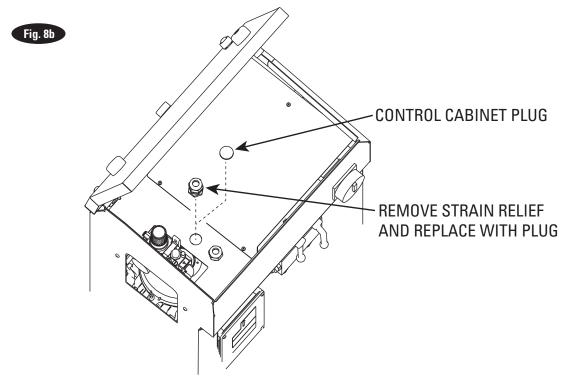
2. Customer to route hydraulic hose and air lines from lift to control cabinet panel as desired. See Fig. 4, Fig.

8, Fig. 8a and Fig. 8b.



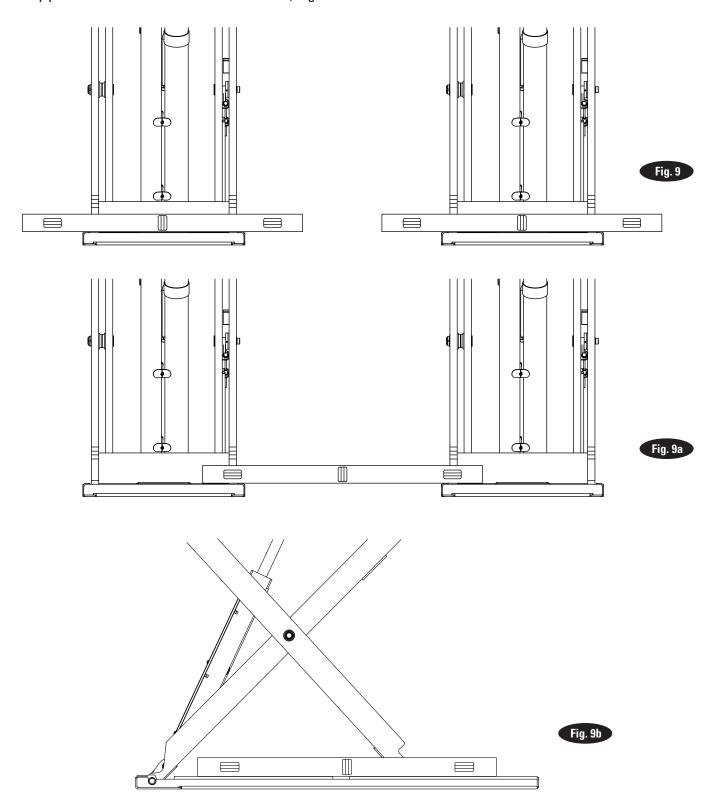


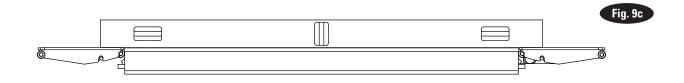


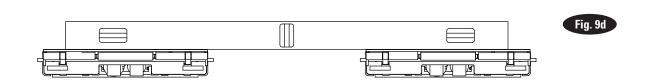


#### 13. Final Positioning of Platforms

- 1. Verify the platform bases are square and the distance between the platforms is correct.
- 2. Verify platform bases are level, Fig. 9.
- 3. Verify platform bases are level to each other, Fig. 9a.
- 4. Verify both platform bases are level front to rear, Fig. 9b.
- 5. Verify platforms are level, Fig. 9c.
- 6. Verify platforms are level to each other, Fig. 9d.





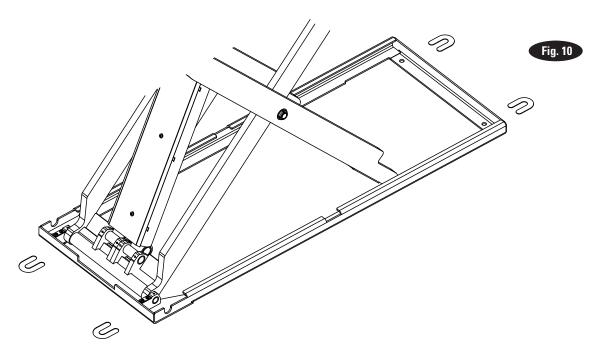


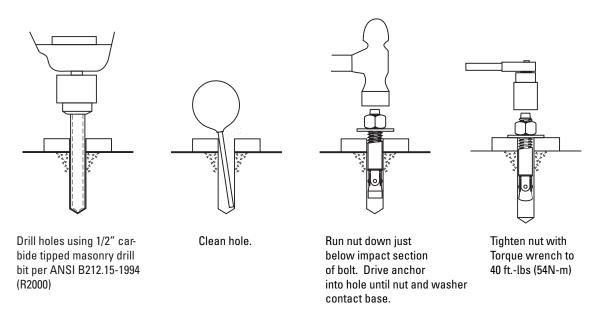
#### 14. Anchoring

- 1. Turn the disconnect switch to "ON" and press the "UP" button to raise the platforms which provides room under the runways for drilling.
- 2. Drill and install (8) eight lift anchors loosely. Do not tighten.
- 3. Complete leveling measurements described under item number 13.

- 4. Shim as necessary, Fig. 10, and tighten anchors.
- 5. Grout if necessary (see section 15).
- 6. Re-check for levelness.

AWARNING Do not install this lift without anchoring to required specifications. Failure could result in personal injury or death.





CONCRETE AND ANCHORING REQUIREMENTS			
STANDARD	ANSI/ALI ALCTV IBC 2006, 2009, 2012	SEISMIC	
Minimum Floor Thickness	4 INCHES	Varies by location consult	
Anchor	Hilti Kwik Bolt III 1/2" x 4-1/2" Anchors supplied with the lift.*	with your structural engineer and manufacturer's representative.	
Minimum Concrete Strength	3000 PSI		
Minimum Anchor Embedment	2-1/4 INCHES		
Minimum Distance to Concrete Edge, Crack, Expansion Joint, Abandanoned Anchor Hole	3 INCHES		

\*The supplied concrete fasteners meet the criteria of the American National Standard "Automotive Lifts - Safety Requirements for Construction, Testing, and Validation" ANSI/ALI ALCTV-2011, and the lift owner is responsible for all charges related to any additional anchoring requirements as specified by local codes.

Contact customer service for further information at: 800.445.5438

#### 15. Grouting

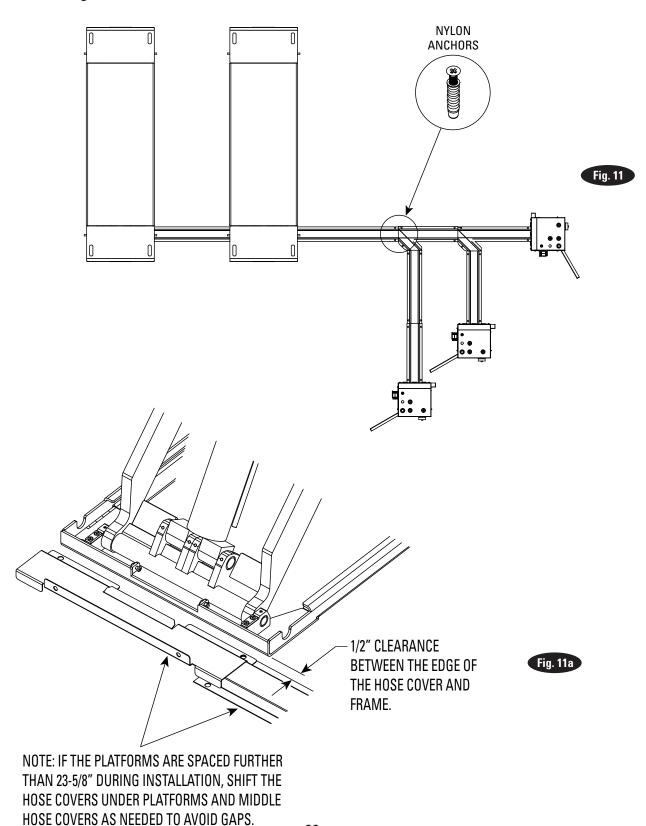
If lift must be shimmed, Fig. 10, the base must be grouted to provide continuous support. Grout must conform to ASTM C1107 and min. 5,000 psi (34 mpa).

AWARNING If the floor is not level the platforms will not be level which could result in unsatisfactory lift performance, property damage, or personal injury.

#### 16. Hose Covers and Anchoring

Position hose covers as necessary per control cabinet location. Use provided anchors to fasten all hose covers securely, Fig. 11.

Position hose covers directly under each platform to 1/2" clearance, Fig. 11a.

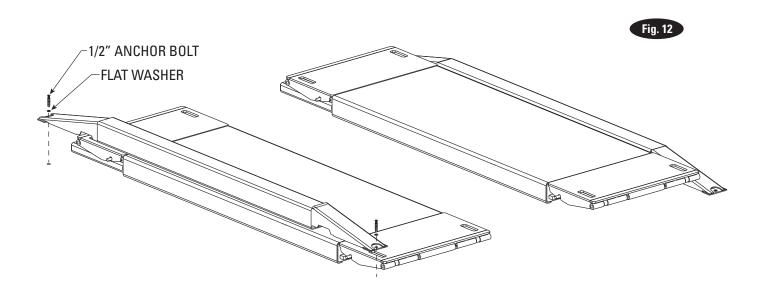


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#### 17. Anchoring Outriggers

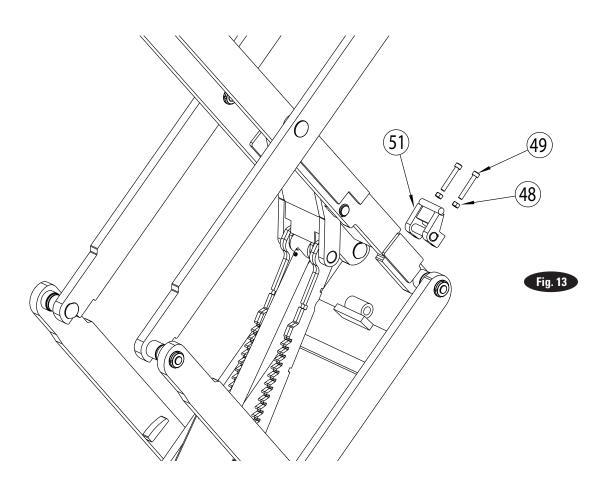
Anchor outriggers as shown below with anchor bolts and washers at each end of outriggers.

**Note:** Ensure there is a 1 inch gap between outrigger and platform to access ramp release latch.

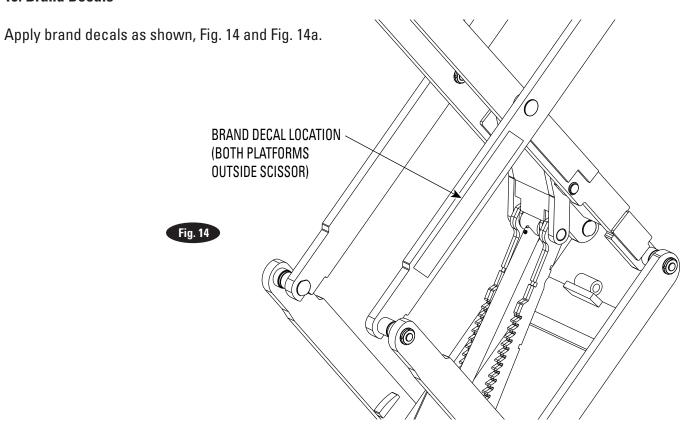


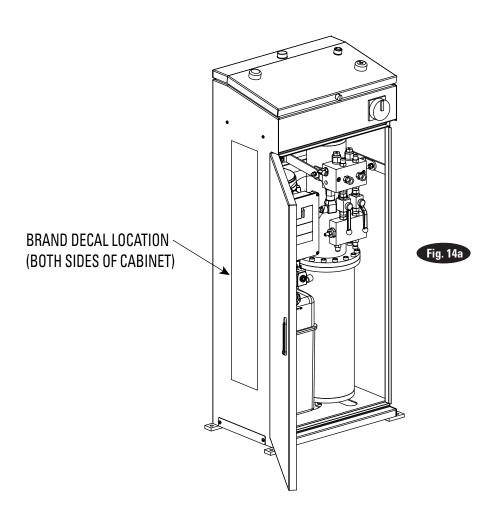
#### 18. Adjust Cushion Device

- 1. To adjust platform height in down position, use cushion screws (49), Fig. 13.
- 2. Cushion screws extending through cushion weldment (51), Fig. 13, too far will result in platform not lowering completely to the floor. Cushion screws not extending through cushion weldment far enough will cause the platform to lower to the floor too quickly and the platform to hit the frame too hard. (This will not damage the lift, but will be loud and may be disturbing to technicians.)
- 3. Once the cushion screws are adjusted properly, tighten lock nuts (48), Fig. 13.
- 4. Raise and lower lift once more to ensure screws are adjusted correctly.



#### 19. Brand Decals







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