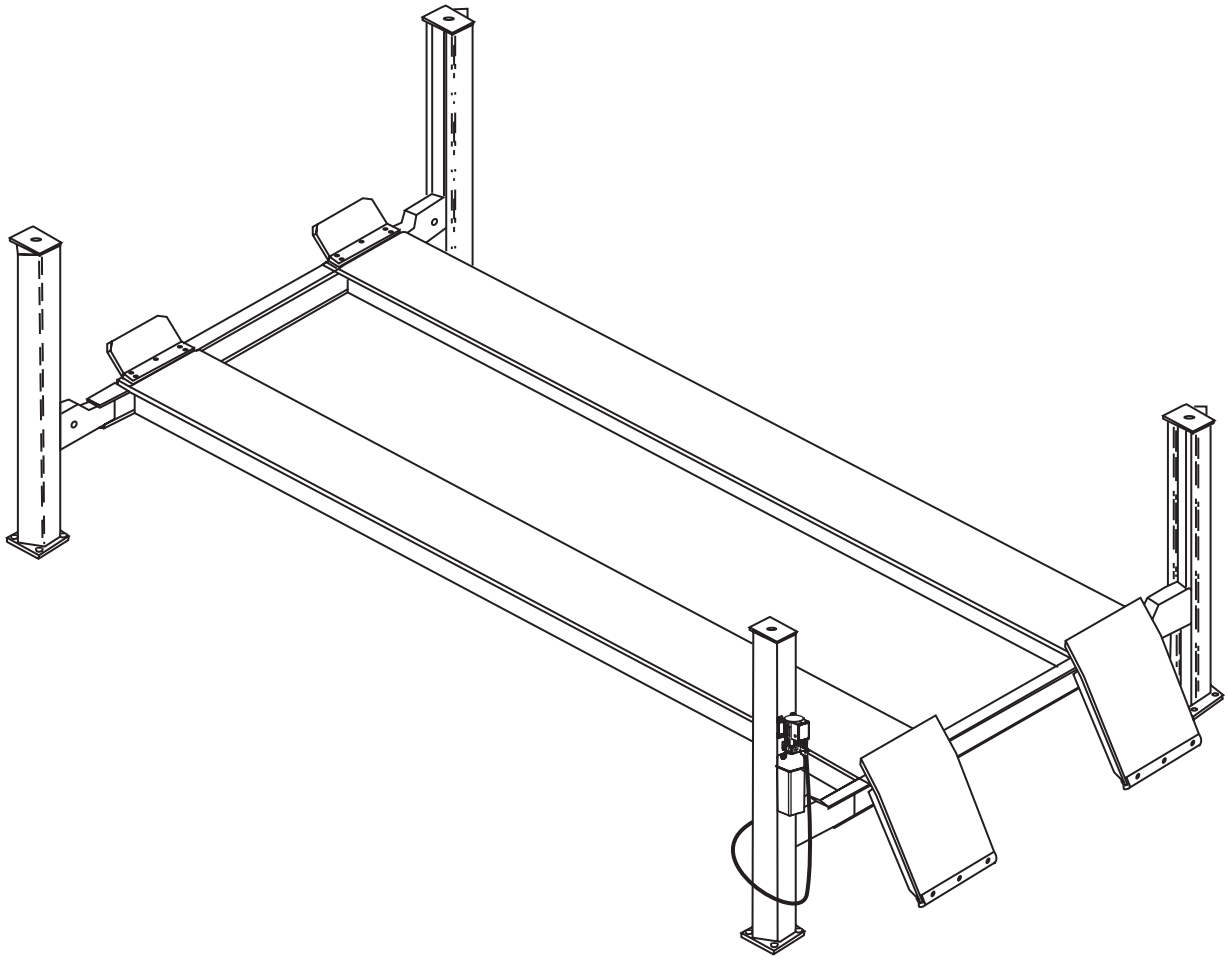
CR30 Installation Instruction

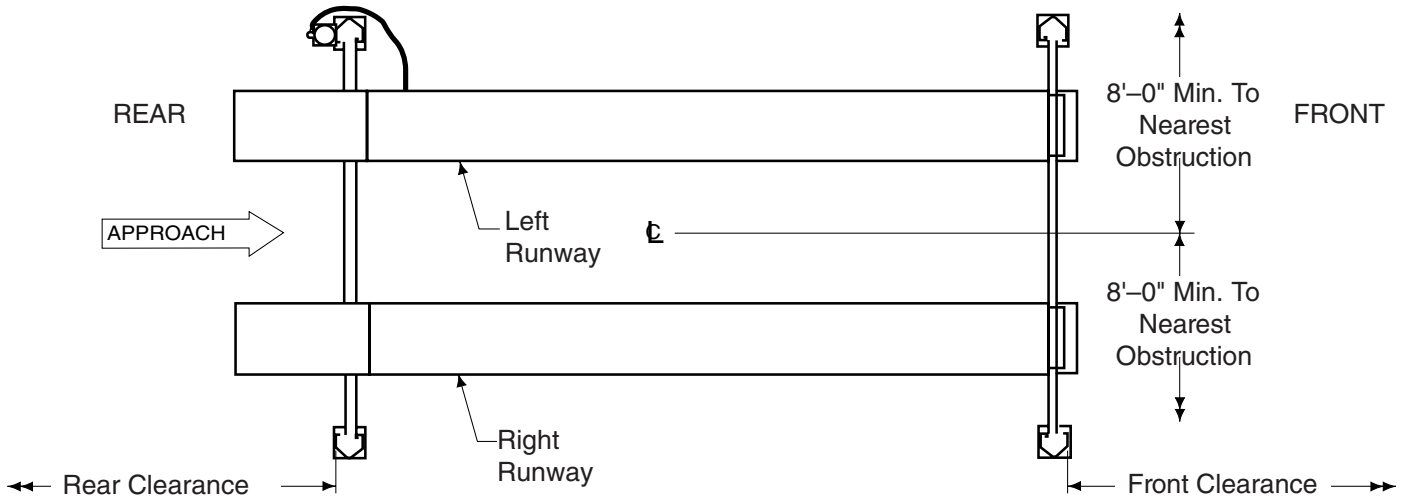
Capacity 30,000 lbs. (15,000 lbs. per axle)
235”/271”/308” Wheelbases
140” Minimum Wheelbase



 CO7302

INS10449
Rev. - 1/08/2009

Required Clearances



Rear Clearance (Min. 5'-6" of rear overhang of longest vehicle + required work space).

Front Clearance = front overhang of longest vehicle + required work space

Fig. 1

Read and understand Installation Instructions completely before starting with lift installation.

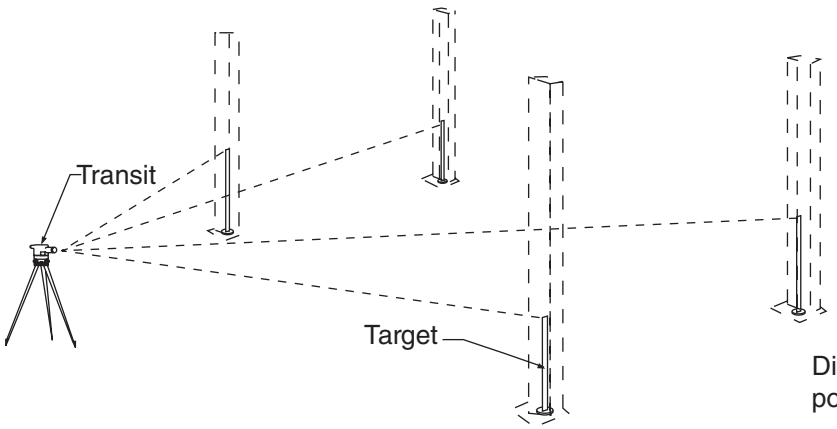
1. **Lift Location:** Use architects plan when available to locate lift. Fig. 1 shows dimensions of a typical bay layout. For power unit at right front, rotate lift 180°, leaving ramp/ chocks and wheel stops in original position. Lift floor area should be level.

⚠WARNING **DO NOT** install on asphalt or other similar unstable surfaces. Columns are supported only by anchors in floor.

Note: If runway extensions are used, an additional 3'–0" of clearance must be added to end with extensions.

2. Ceiling or overhead clearance must be 80" plus height of tallest vehicle.

3. **Estimating Column Shim requirements:**
   In the following section, the terms "highest" and "lowest" refer to elevation of floor.
   A. Mark locations where lift columns will be positioned in bay.
   B. Place target at column positions and record readings, Fig. 2.
   C. Find the highest of the four (4) locations. Find the difference between the reading at each of the remaining three (3) columns and the highest reading.
   D. The difference is the estimated amount of shim thickness needed at each column.

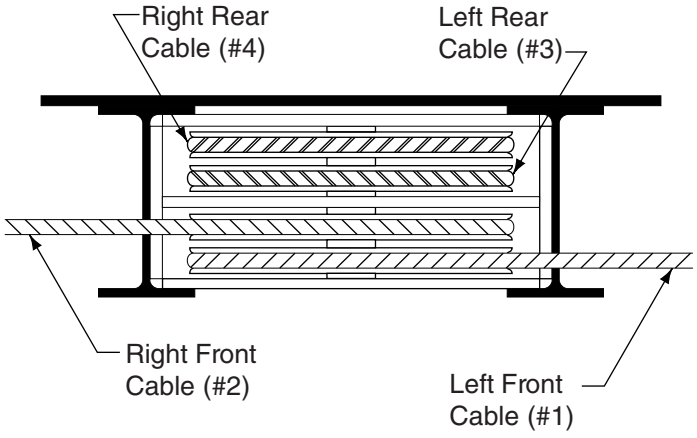


Dimension at highest position minus ot position = shim thickness required

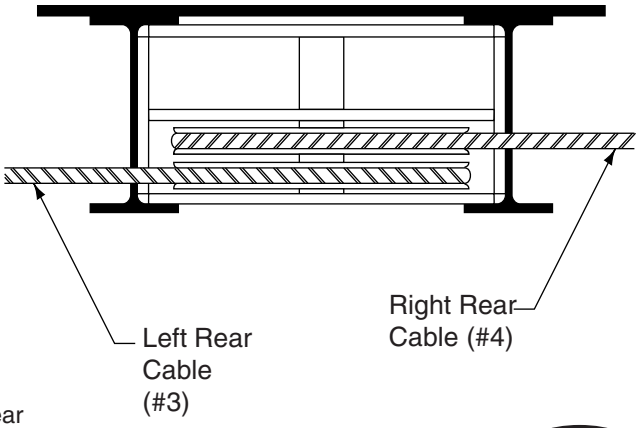
Fig. 2

Estimation Shim Requirements

Cable Seating in Sheave Grooves



Front
(Viewed from front)



Rear
(Viewed from rear)

Fig. 3

E. Maximum shim thickness of 2" is possible by using shims and anchors provided with lift. If more shimming is required, consult factory for different shim package including longer anchor bolts.

4. Runway and Yoke Assembly:

A. Determine direction of approach in bay.

B. Position left runway in bay with hydraulic cylinder hose connection to rear of bay. Cables and sheaves are pre-assembled in runway. Runway needs to be up off floor so shipping restraints can be removed from cable ends, air and hydraulic lines, and cylinder rod. Pull cables, air and fluid lines out for assembly. Make sure cables are in proper sheave grooves, Fig. 3.

C. Position front and rear yokes at respective ends of runway, Fig. 1. Feed cable ends through yoke end, Fig. 4. Do not assemble sheaves in yoke ends at this time.

IMPORTANT Be sure cables are not crossed inside yoke.

Ramp/Chock

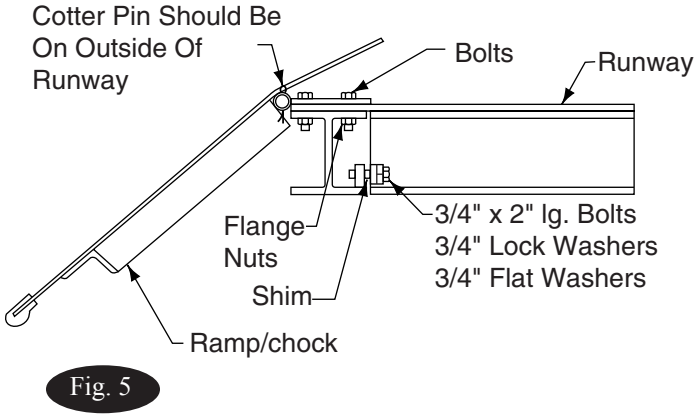


Fig. 5

Feed Cable Ends Through Yoke End

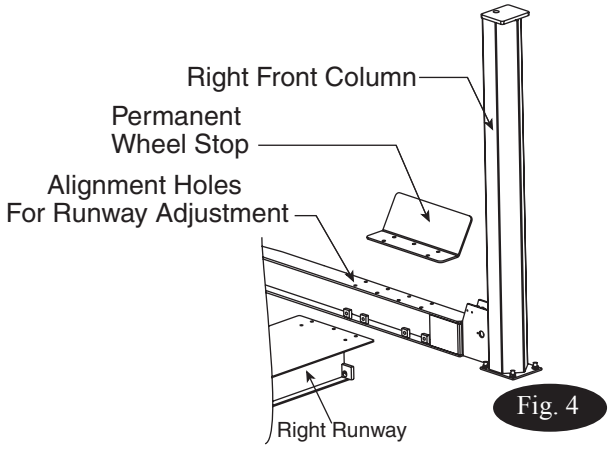


Fig. 4

D. Lay right runway in place on yoke. Slide right runway toward outside of lift until holes in yoke and runway line up, Fig. 4. Hold runway in place and bolt on ramp/chock and wheel stops to runway using ten $^{5}/_{8}$" x 2 $^{1}/_{2}$" bolts and flange nuts. Square up yokes with runways using four $^{3}/_{4}$"-10NC x 2" lg. bolts, $^{3}/_{4}$" flat washers, $^{3}/_{4}$" lock washers, and shims. Ramp/chocks go on rear, Fig. 5. Fig. 6. Repeat for left runway.

E. Insert each end of the left runway's $^{1}/_{4}$" air line into the Tee's connecting the locking latch air cylinders in each yoke, Fig. 7.

Wheel Stop

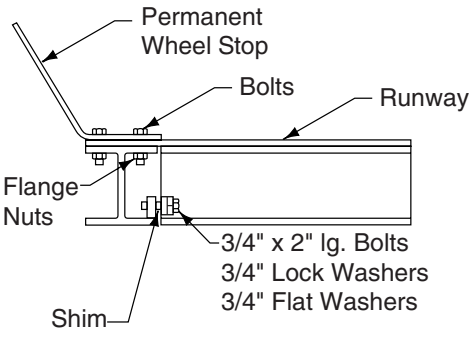


Fig. 6

Air Line in Runway

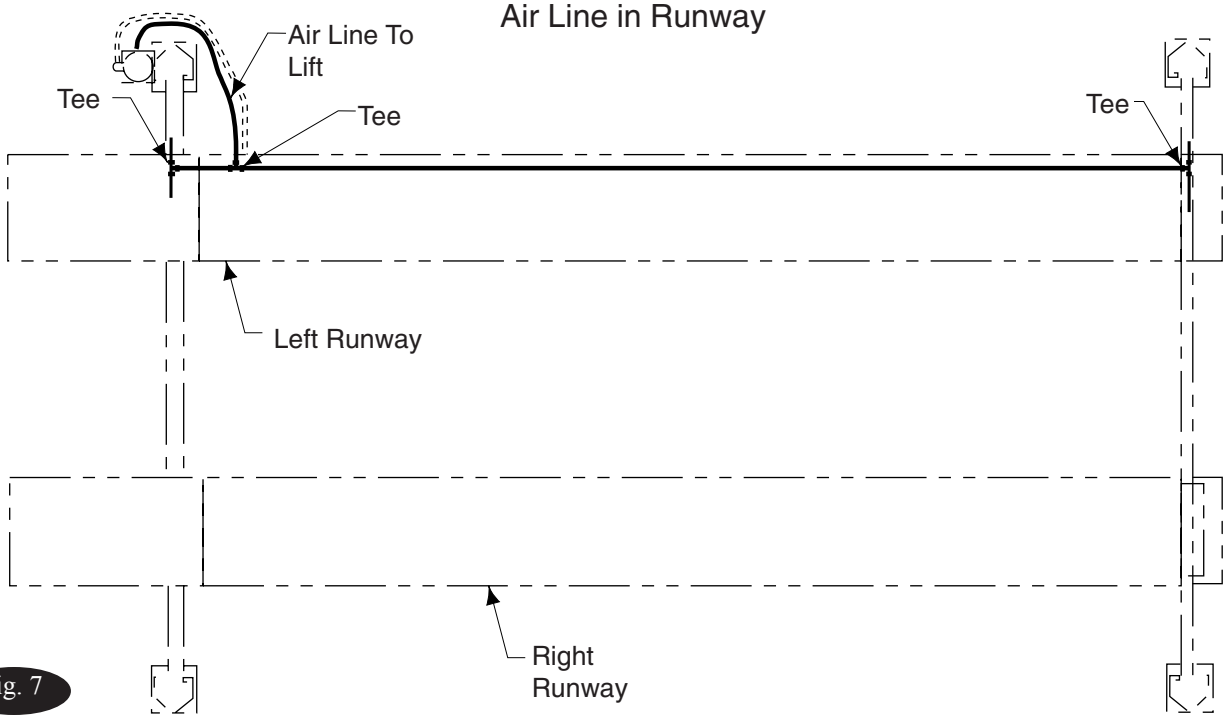


Fig. 7

Alignment Stud

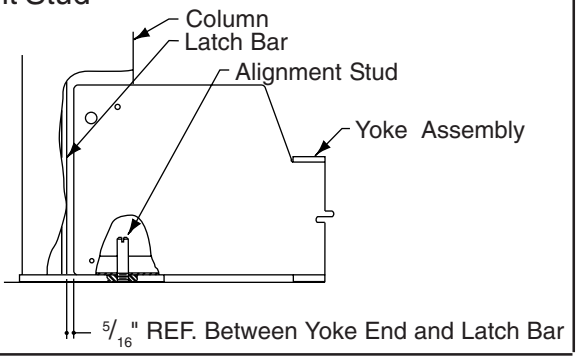
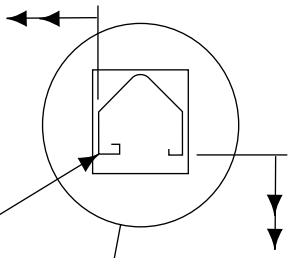


Fig. 8

$^{5}/_{16}$" REF. Between Yoke End and Latch Bar

Check Lift Dimensions



Double Return Bend always to the Inside of Lift.

235" - 249-1/8" Ref.
271" - 285 1/8" Ref.
308" - 321-1/8" Ref.
Between Columns

Width and length measurements are made from column sides, NOT column base plate. Diagonals are measured from inside corner of column.

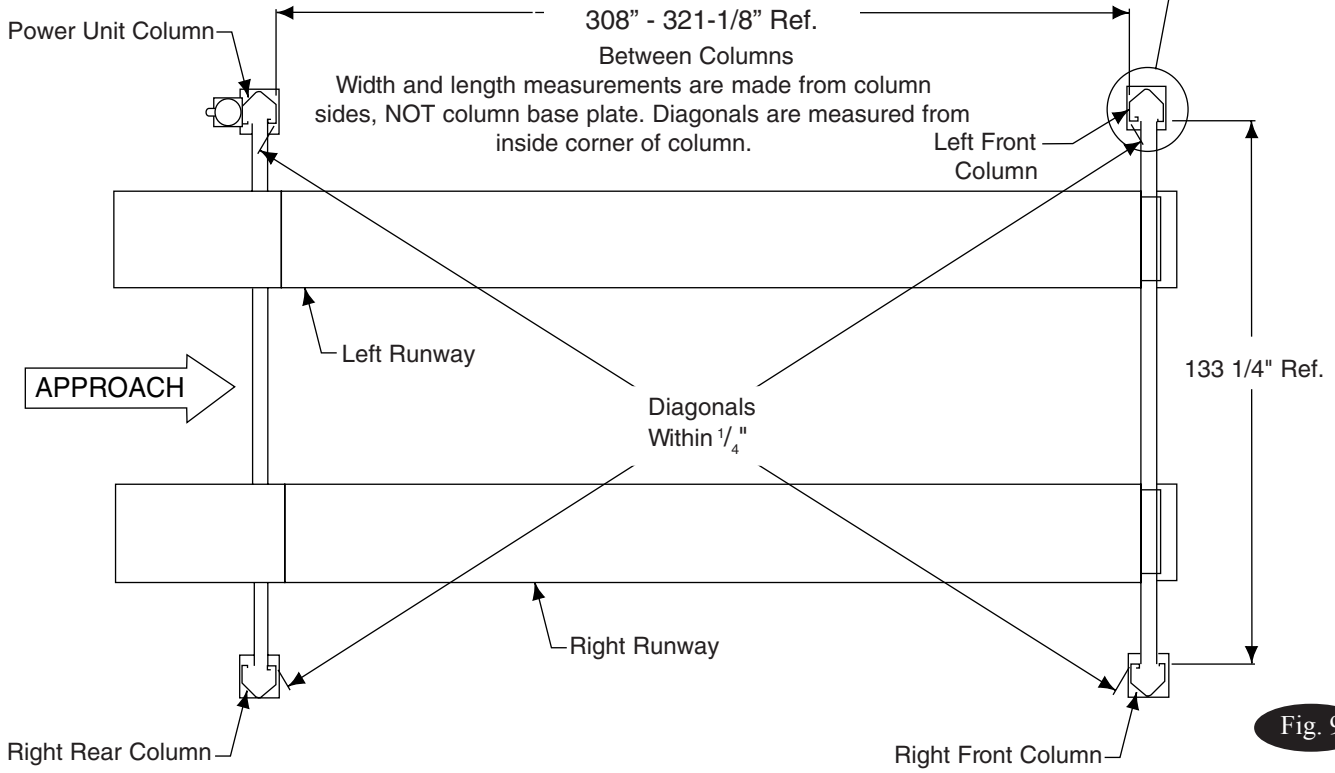


Fig. 9

5. Columns:

Note: Columns are not interchangeable. They must be set at their respective corner of the lift. Column double return bend is always to inside of lift, Fig. 9. Place the power unit column at the left rear corner of the lift. The point where the hydraulic hose passes through side of left runway should be visible from this corner. Insert alignment stud through hole in yoke end and thread into base plate of column, Fig. 8. Repeat for other columns.

IMPORTANT The yoke/column alignment studs **MUST** be used for proper centering of columns to yokes, Fig. 8. A gap of $^{5}/_{16}$" must be maintained between column and yoke.

See step 6 B. **Note:** It may be necessary to remove Plastic Slider from Column Stop on yoke end, Fig. 10, before aligning yoke in column. After yoke is in column, reinstall Plastic Slider and secure with $^{5}/_{16}$" button head screw.

6. Anchoring:

Keep columns square to center line of lift. Check lift location in the bay, Fig. 1. Check dimensions side-to-side, front-to-rear, and diagonally. Diagonals must be equal to within $^{1}/_{4}$", Fig. 9.

For each column:

A. Minimum recommended concrete specifications is 3,000 PSI, 5-1/2″ to 6″ thick and should sustain 2,000 lb. anchor load.

B. Start with power unit column. Use yoke spacer tool to ensure $^{5}/_{16}$" gap between column and yoke. Place yoke spacer tool on yoke end, Fig. 8a, with ears facing away from column. Slide yoke spacer tool so that the end of the tool opposite the ears is against the side of the yoke end facing the column.

C. Use shims provided to shim column base to plumb columns, first fore and aft then side to side. Use a 4' level to check plumb of columns. Recheck $^{5}/_{16}$" gap between column and yoke with yoke spacer tool. Maximum shim thickness is 2", Fig. 12. If more shimming is required, consult factory for different shim package including longer anchor bolts. Drill four $^{5}/_{8}$" diameter holes through concrete floor using base holes as guide, Fig. 11. Repeat for other columns.

D. Insert base anchors, Fig. 11. Repeat for other columns. Tighten nuts. Recheck columns for plumb. Re-shim if necessary. Torque anchor bolts to 35-45 ft. lbs., Fig. 11. If anchor bolts do not hold when torqued to required amount, concrete must be replaced. Saw cut and remove 24" x 24" square area under each column base. Repour with reinforced # 3000 minimum concrete to depth of 6", keying new concrete under existing floor.

Fig. 8a

7. Cable Connection:

Install yoke end sheaves, Fig. 13. Retain with sheave pin and $^{5}/_{16}$" pan head machine screw, Locktite the screw threads. Attach each cable to column top plate with nut and jam nut. Install sheave covers on each yoke end, Fig. 13. Roping diagram shows a view of completed roping, Fig. 14.

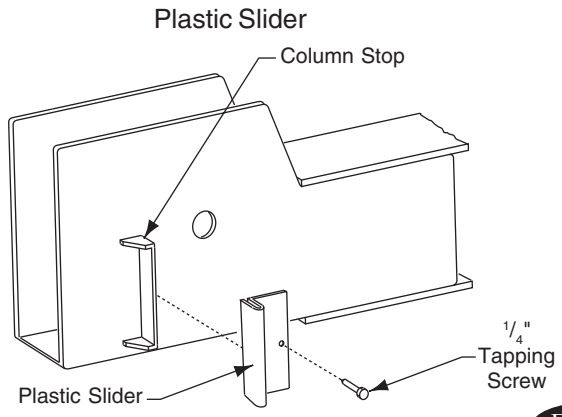


Fig. 10

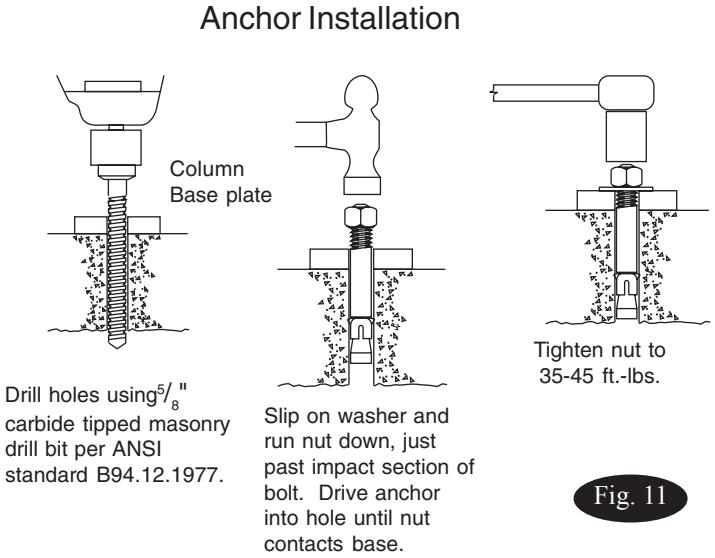


Fig. 11

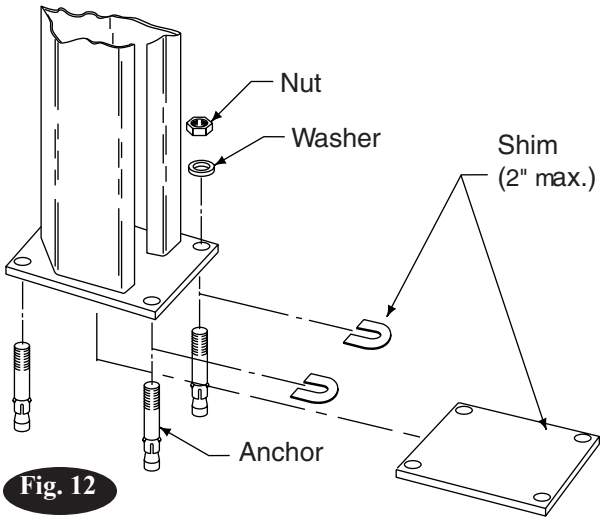


Fig. 12

8. Adjust Cable: Adjust all cables with lift fully lowered. Loosen cable jam nut. Tighten adjusting nut on cable stud on top of column until yoke end is raised $^1/_4$". Back off adjusting nut one (1) turn. Tighten jam nut. Do this for all four (4) cables. See Fig. 13.

Attaching Cables

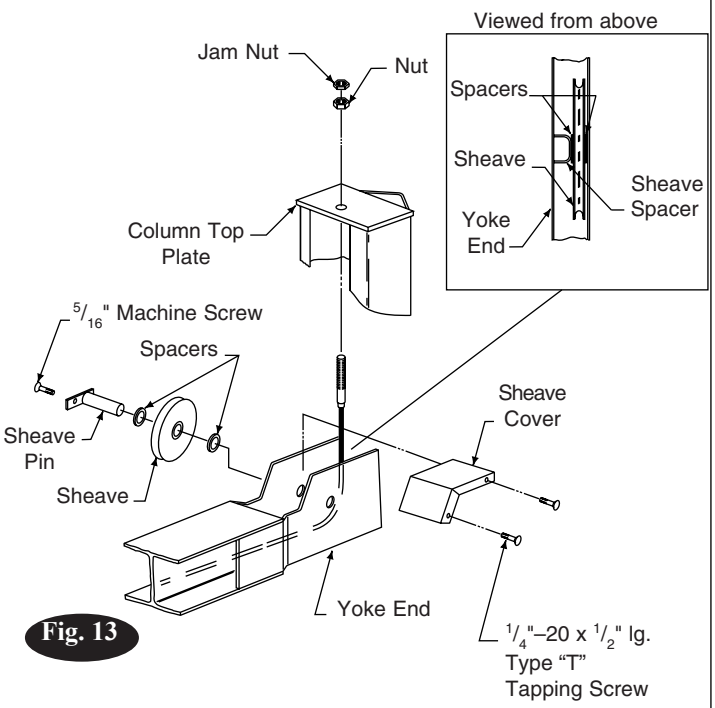


Fig. 13

9. Power Unit:

A. Align Air Valve Bracket with holes in right side of column bracket, Fig. 16.

B. Put four $^5/_{16}$" x1- $^1/_2$" lg. hex. bolts through holes in column bracket, using push-nuts to hold in place.

C. Mount power unit, with motor up, to the column bracket and install four $^5/_{16}$" lock washers and nuts.

D. Run hydraulic hose from runway through slot in side of runway to power unit output port, Fig. 17. **DO NOT** use Teflon tape on hydraulic hose connections. Install and hand tighten elbow to pump until O-ring is seated and elbow should be oriented downward at approximately 45°,Fig. 17. Tighten locknut to 35-40 ft. lbs.

E. Install enclosed capacity label on power unit, Fig. 17.

10. Electrical: Have a certified electrician run 230 volt single phase 60 Hz. power supply to motor, Fig.18 and 19. Size wire for 20 amp. circuit. See Motor Operating Data table.

Cable in Slack Cable Arm Rollers

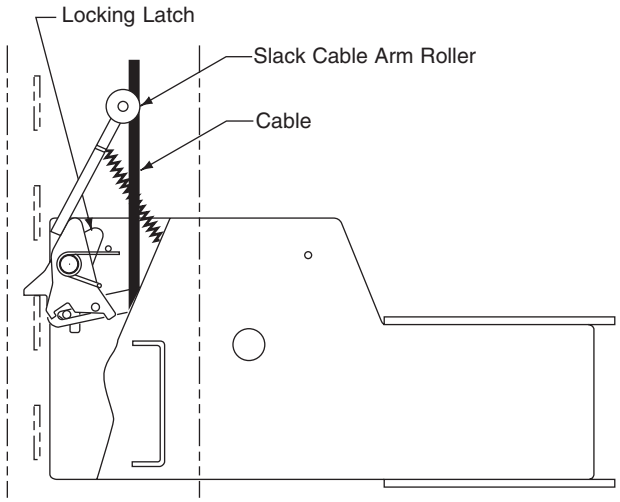
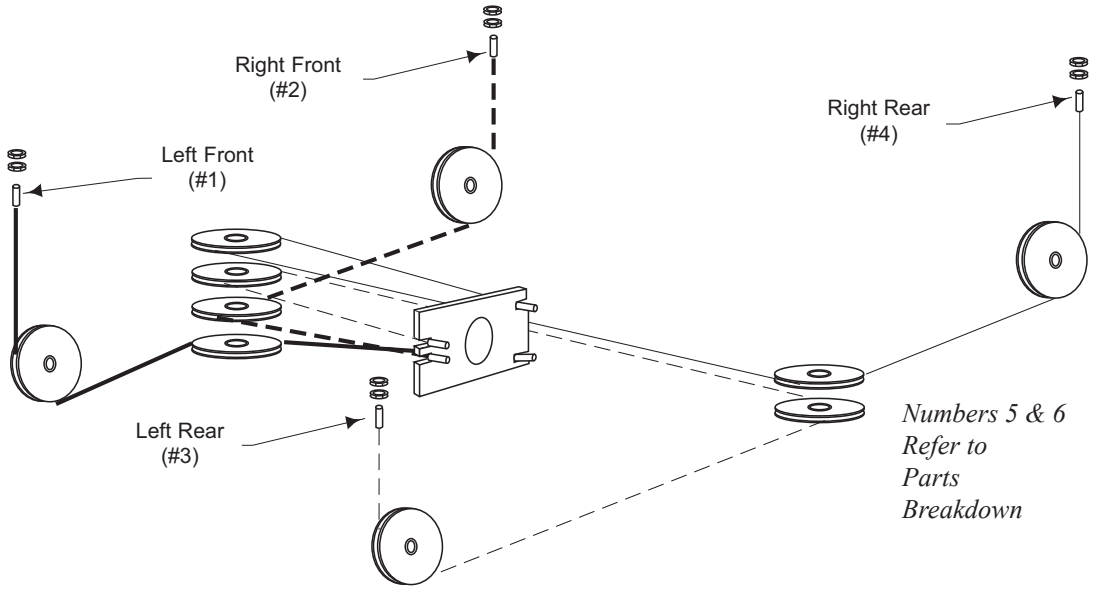


Fig. 15

IMPORTANT Cables must fit in slack cable arm rollers, Fig.15

Roping Diagram



Numbers 5 & 6 Refer to Parts Breakdown

Fig. 14

Mount Power Unit

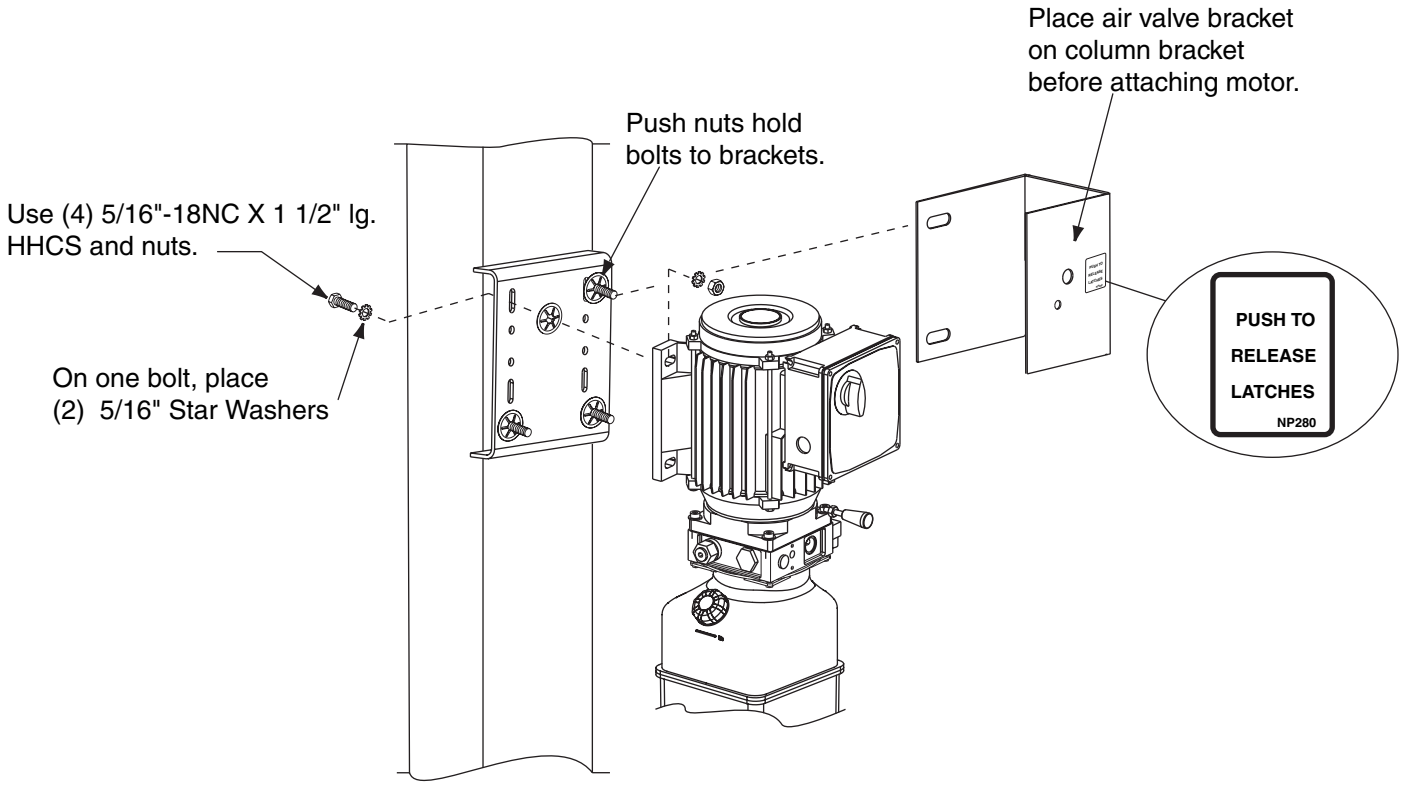


Fig. 16

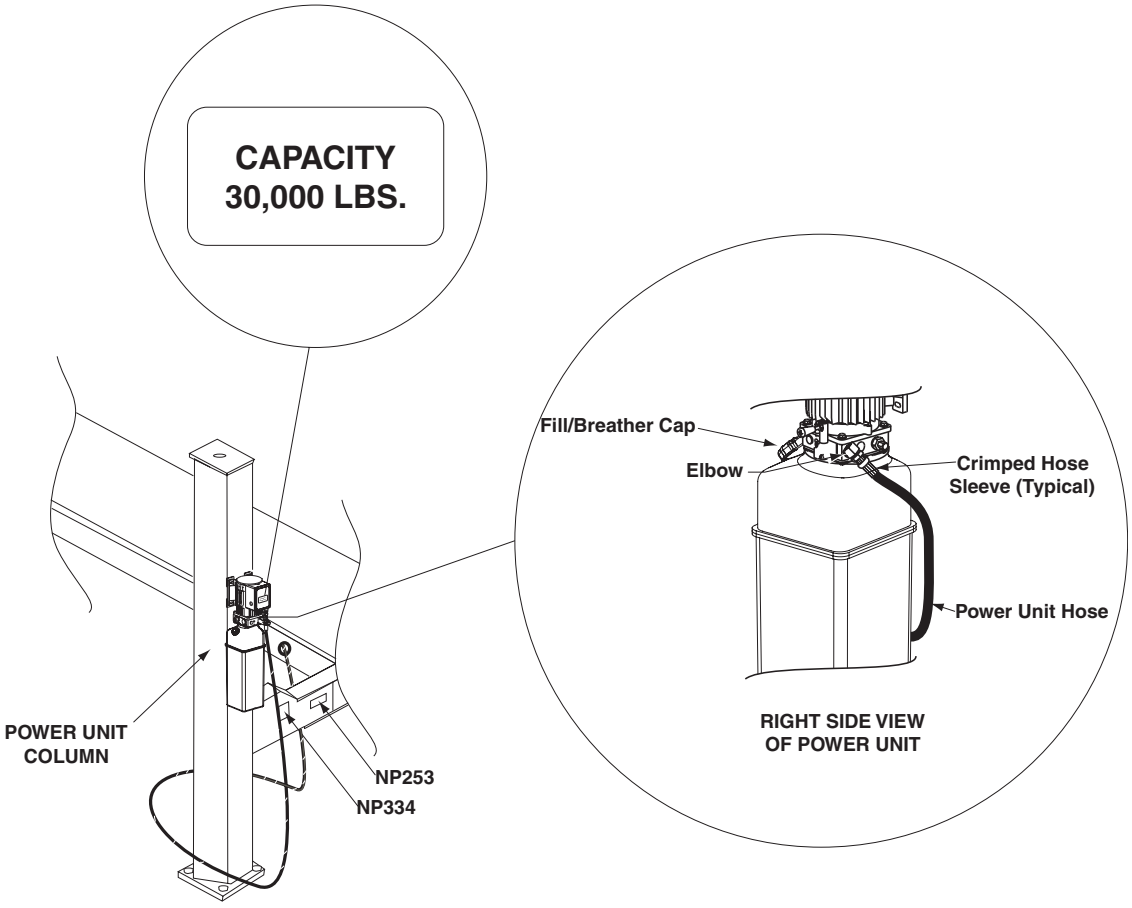


Fig. 17

Note: Motors utilizing 3 phase current available. Refer to wiring drawing in 3 phase power unit carton.

IMPORTANT Use separate circuit for each power unit. Protect each circuit with time delay fuse or circuit breaker: single phase -30 amp.; 3 phase (230v) -15 amp.; 3 phase (460v) -8.75 amp, Fig. 21. Wiring must comply with local electrical codes.

Note: Motor **CAN NOT** be run on 50Hz. line without a physical change in the motor.

⚠WARNING Risk of explosion. This equipment has internal arcing or sparking parts which should not be exposed to flammable vapors. It should not be located in a recessed area or below floor level.

Wiring Diagram

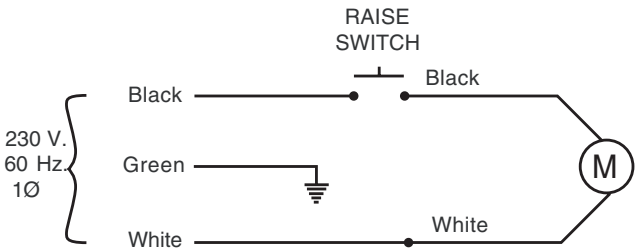
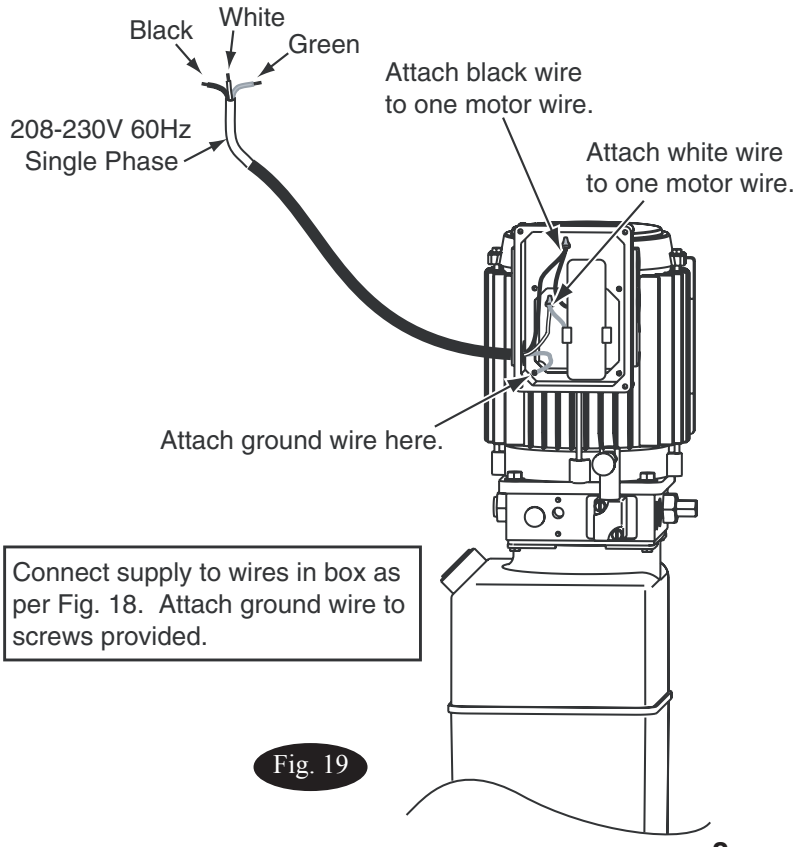


Fig. 18

Motor Operating Data Table

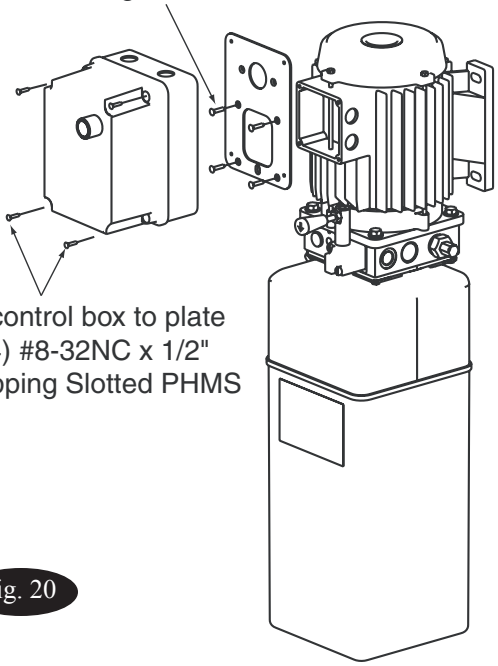
MOTOR OPERATING DATA - SINGLE PHASE		
LINE VOLTAGE OF POWER CO.		RUNNING MOTOR VOLTAGE RANGE
208V - 230V	60 HZ	197V - 253V



Connect supply to wires in box as per Fig. 18. Attach ground wire to screws provided.

Fig. 19

FOR 3 PHASE POWER UNITS ONLY:
Attach Control Plate to Motor using (4) 5mm-.80 x 8mm lg. Flat Head Machine Screws

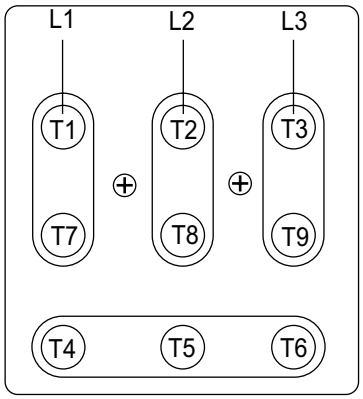


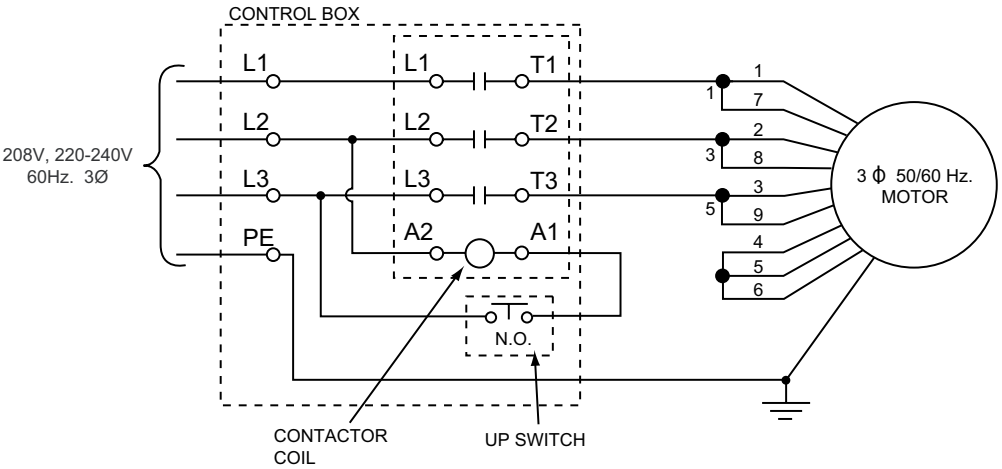
Attach control box to plate using (4) #8-32NC x 1/2" Self-Tapping Slotted PHMS

Fig. 20

MOTOR OPERATING DATA - THREE PHASE	
LINE VOLTAGE VOLTAGE RANGE	RUNNING MOTOR
208-230 VOLTS 60HZ	197 - 253 VOLTS
460 VOLTS 60HZ	414 - 506 VOLTS

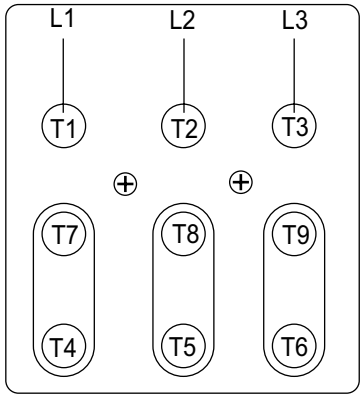
LOW VOLTAGE CONNECTION

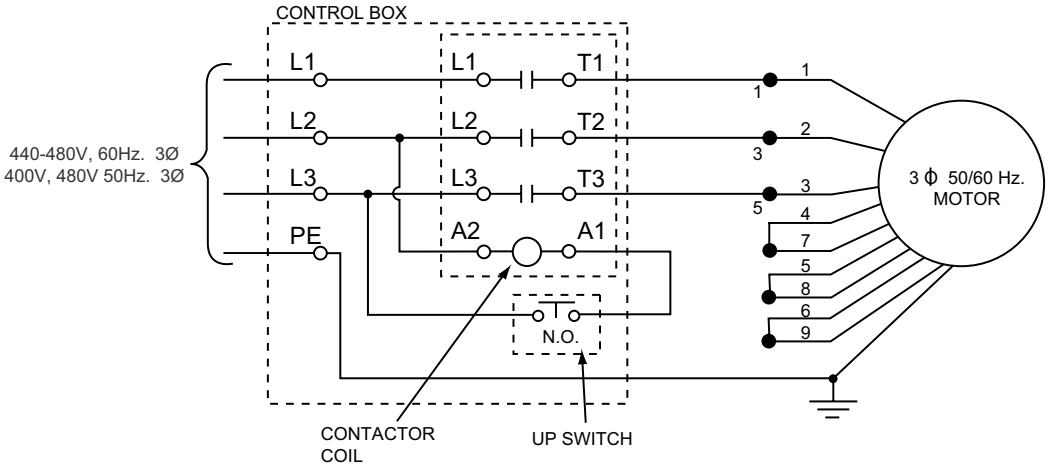




HIGH VOLTAGE CONNECTION

Fig. 21





LEGEND				
	T1	RED	T6	BLACK "T"
	T2	BLUE	T7	BROWN
	T3	WHITE	T8	YELLOW
	T4	BLACK "R"	T9	GREEN
	T5	BLACK "S"		

LEGEND				
	T1	WHITE	T6	BLACK
	T2	RED	T7	WHITE
	T3	BROWN	T8	RED
	T4	WHITE	T9	BLUE
	T5	RED		

Two different wiring colors were used. Determine appropriate LEGEND.

11. Fluid Filling:

CAUTION If fill/breather cap, Fig. 17, is lost or broken, order replacement. **DO NOT** substitute with a solid plug.

A. System capacity is twenty-two (14) quarts. Use Dexron III ATF. Remove fill/breather cap and fill vent screw, Fig. 17.

B. Add fluid until it reaches the fill line.

C. Replace fill/breather cap.

D. Start motor and raise lift to full rise. Lower the lift onto the locking latches.

E. **REMOVE ALIGNMENT STUDS** from all four (4) column bases, Fig. 8.

IMPORTANT Lift must be fully lowered before changing or adding hydraulic fluid.

12. Connecting Air Supply:

Note: Locking latches require 100 p.s.i. min to 120 p.s.i. max. air pressure

IMPORTANT A filter/regulator/lubricator must be installed on air supply at lift. Failure to do so will void the warranty.

A. Connect air valve to Reducing Tee, Fig. 24. Cut provided $^1/_4$" air line tubing with sharp blade to length as required. Tubing must be cut square with no burrs.

Note: To assemble air line tubing into fitting, use firm, manual pressure to push tubing into fitting until it bottoms, Fig. 23. If removal of the air line tubing from the fitting is ever required, hold Push Sleeve in (against fitting) and, at the same time, pull out on tubing.

IMPORTANT Tubing must bottom out in valve or fitting (approx. $^3/_4$") or it will leak.

B. Use Housing Collar to secure the Air Valve to the Air Valve Bracket, Fig. 24.

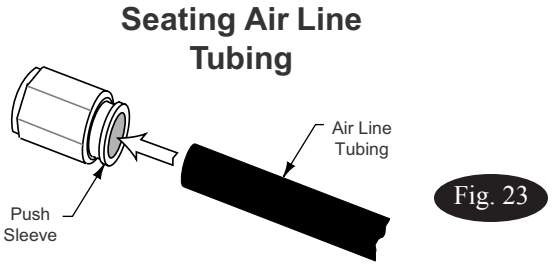


Fig. 23

C. Attach enclosed NP280 decal ("PUSH TO RELEASE LATCHES") below button on air valve bracket, Fig. 16.

D. Run $^1/_4$" air line from air valve to the slot in the fixed runway. Cut airline to length required and attach to Tee in runway, Fig. 22.

E. Connect Reducing Tee to female connector, Fig. 24, using $^3/_8$" air line tubing. Attach filter to female connector and connect into existing facility air supply. Make sure plastic plug is in bottom opening of Reducing Tee.

F. Check for air leaks by depressing air valve. Repair as required.

G. Use provided cable ties to tie air line to hydraulic hose between power unit and lift.

H. Actuate air valve and check latch operation on all four (4) corners. When releasing locks, the locking latch should pull back flush with yoke end to clear the latch bar located in all four (4) columns, Fig. 24. Adjust, if required, by removing cotter pin and washer holding Slotted Bracket on locking latch and screwing Slotted Bracket in to move it toward the air cylinder. After adjustment, replace washer and secure Slotted Bracket with a NEW cotter pin. Tighten jam nut. Apply Loctite® to jam nut to hold in place.

I. Use cable ties provided to tie $^3/_8$" air supply to electrical supply conduit at approximately 2'-0" intervals.

Air Line in Lift

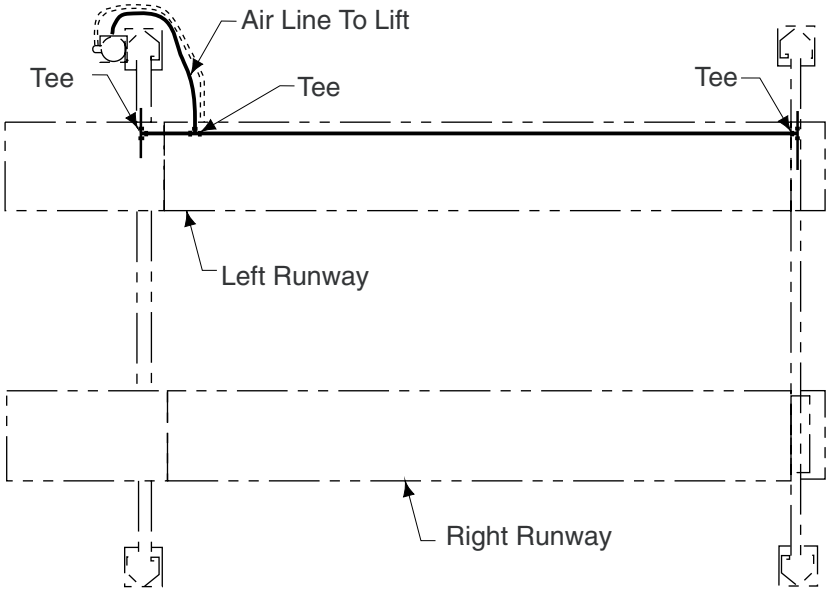


Fig. 22

Connect Air Supply to Air Valve

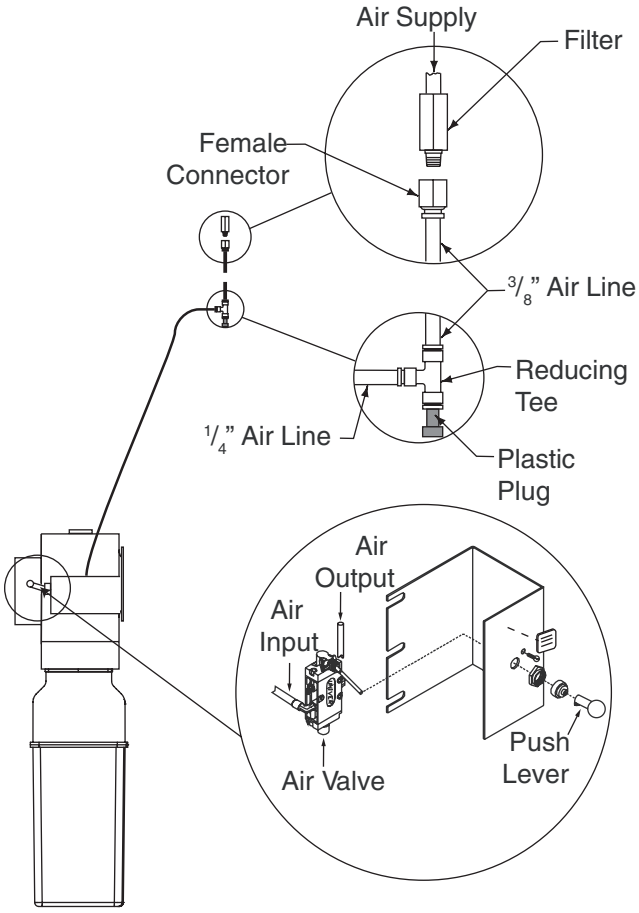


Fig. 24

13. Bleeding: Raise and lower lift (6) times. The cylinder is self-bleeding. After bleeding system, replace fill vent screw.

Note: Some fluid may be exhausted from the cylinder breather vent during bleeding of the system.

14. Pressure Test: To pressure test, run lift to full rise and run motor for approximately five (5) seconds. Stop and check all hose connections. Tighten or reseal if required. Lower lift. Check fluid level in reservoir. Fill as required per instrustions in Step 11.

15. Final Adjustmemt:

A. Load vehicle, such as a 3/4 ton pickup or van onto lift.

B. Raise lift as high as it will travel (full height). As the lift is raised, note in which rear column locking latch clicks into slot at same time as the first column.

C. Adjust cable in other rear column so that its locking latch clicks into slot at same time as the first column.

⚠CAUTION There must be a minimum of two (2) threads above the nut after adjustment.

D. Raise lift again. This time listening for the first front latch to click into place. Adjust this simultaneously with the rear columns.

E. Do the same for the remaining front column.

F. Tighten jam nuts and lower lift.

Note: Latches may not click in at the same time when vehicle is being raised. They should be closed. Be sure all four (4) corners have passed the locking latch bar slot before lowering lift on locking latches.

Note: Replace any missing hardware with Grade 5 or higher.

IMPORTANT Cotter pins are usually good for one time use only. Replace any cotter pin, if removed, with new cotter pin.

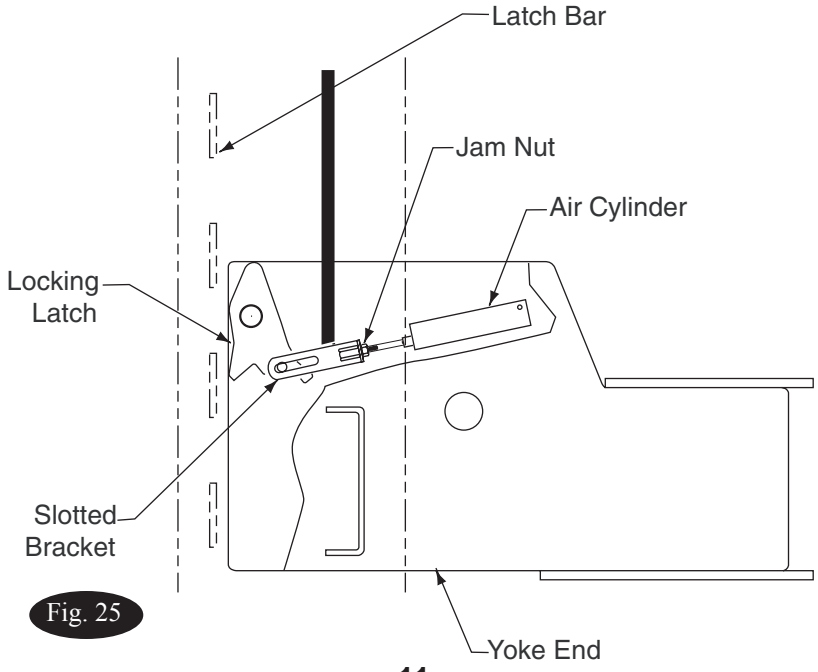
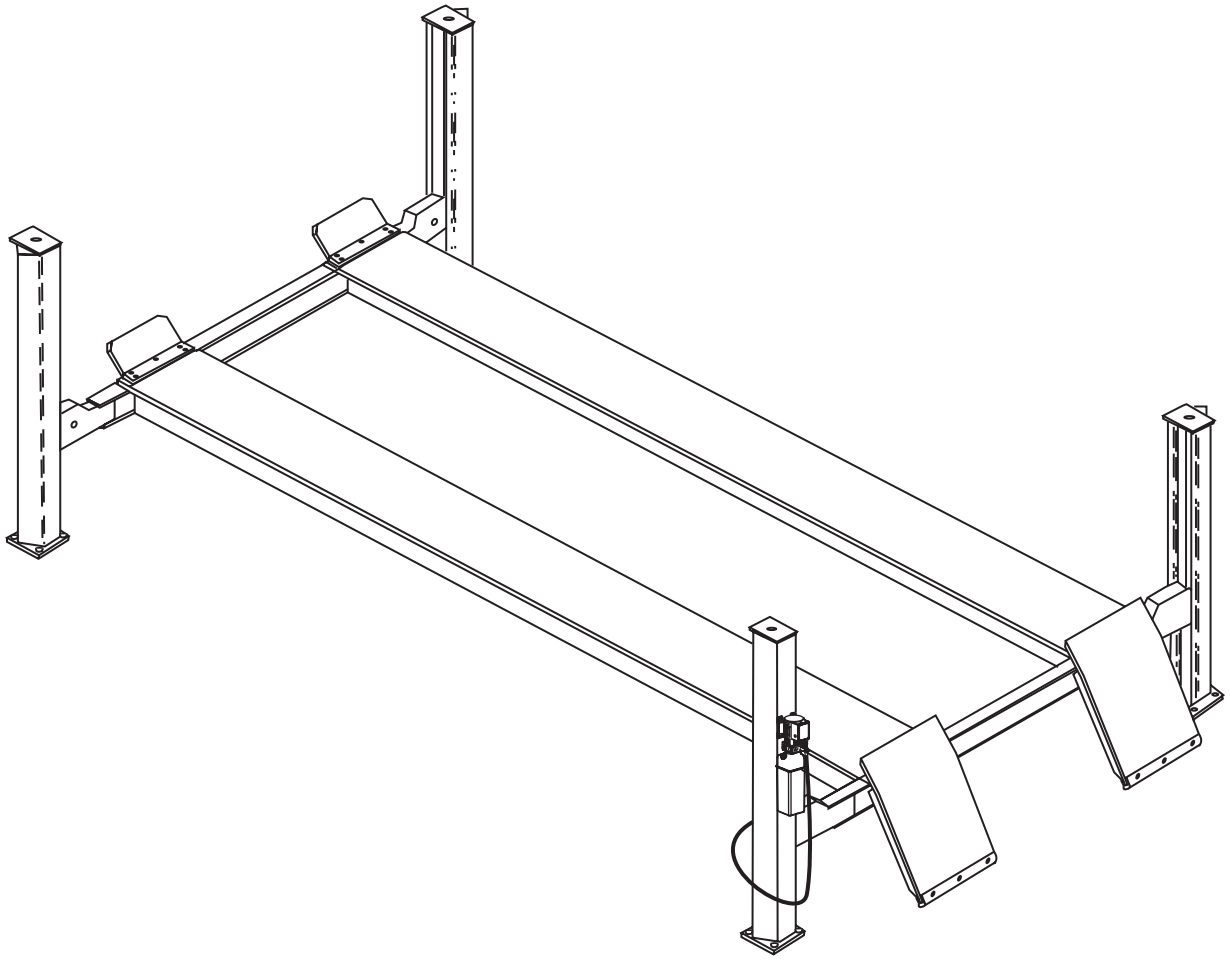


Fig. 25

Notes:

CR30 Operation & Maintenance

Capacity 30,000 lbs. (15,000 lbs. per axle)
235”/271”/308” Wheelbases
140” Minimum Wheelbase



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OMS10015
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Owner/Employer Responsibilities

The Owner/Employer:

- Shall ensure that lift operators are qualified and that they are trained in the safe use and operation of the lift using the manufacturer's operating instructions; ALI/SM01-1, *ALI Lifting it Right* safety manual; ALI/ST-90 *ALI Safety Tips* card; ANSI/ALI ALOIM-2008, *American National Standard for Automotive Lifts-Safety Requirements for Operation, Inspection and Maintenance*; ALI/WL Series, *ALI Uniform Warning Label Decals/Placards*; and in the case of frame engaging lifts, ALI/LP-GUIDE, *Vehicle Lifting Points/Quick Reference Guide for Frame Engaging Lifts*.

- Shall establish procedures to periodically inspect the lift in accordance with the lift manufacturer's instructions or ANSI/ALI ALOIM-2008, *American National Standard for Automotive Lifts-Safety Requirements for Operation, Inspection and Maintenance*; and The Employer Shall ensure that lift inspectors are qualified and that they are adequately trained in the inspection of the lift.

- Shall establish procedures to periodically maintain the lift in accordance with the lift manufacturer's instructions or ANSI/ALI ALOIM-2008, *American National Standard for Automotive Lifts-Safety Requirements for Operation, Inspection and Maintenance*; and The Employer Shall ensure that lift maintenance personnel are qualified and that they are adequately trained in the maintenance of the lift.

- Shall maintain the periodic inspection and maintenance records recommended by the manufacturer or ANSI/ALI ALOIM-2008, *American National Standard for Automotive Lifts-Safety Requirements for Operation, Inspection and Maintenance*.

- Shall display the lift manufacturer's operating instructions; ALI/SM 93-1, *ALI Lifting it Right* safety manual; ALI/ST-90 *ALI Safety Tips* card; ANSI/ALI ALOIM-2008, *American National Standard for Automotive Lifts-Safety Requirements for Operation, Inspection and Maintenance*; and in the case of frame engaging lifts, ALI/LP-GUIDE, *Vehicle Lifting Points/Quick Reference Guide for Frame Engaging Lifts*; in a conspicuous location in the lift area convenient to the operator.

- Shall provide necessary lockout/tagout means for energy sources per ANSI Z244.1-1982 (R1993), *Safety Requirements for the Lockout/Tagout of Energy Sources*, before beginning any lift repairs.

- Shall not modify the lift in any manner without the prior written consent of the manufacturer.

SAFETY INSTRUCTIONS

- **Never** allow unauthorized or untrained persons to operate lift or rolling jacks.
- **Shop Policy** should prohibit customers or non-authorized persons from being in shop area while lift is in use.
- **Thoroughly** train all employees in the use and care of lift and rolling jacks.
- **Be Sure** no one is standing in front or behind lift while vehicle is being driven onto or backed off the lift.
- **DO NOT** allow rear tires or portion of vehicle to interfere with ramp/chocks.
- **Be Sure** front wheel stops are in raised position before driving vehicle onto lift.
- **Never** allow front wheels to strike the front wheel stops.
- **DO NOT** permit employees or customers on lift when it is either being raised or lowered.
- **Always** stand clear of lift when raising or lowering and observe "Pinch Points" Warning.
- **Never** overload lift: capacity of lift is 30,000 lbs. (15,000 lbs. per axle). **CAPACITY SHOULD NOT BE EXCEEDED.**
- **Always** engage parking brake and use the rear wheel chocks to keep the vehicle from rolling freely on the runways.
- **Always** lower lift on locks before working on vehicle.
- **Keep** area around lift clean of tools, debris, grease, and oil.
- **Always** keep runway clean.
- **Replace** all caution, warning, or safety related decals on the lift when unable to read or missing.
- **For Rolling Jack Safety Instructions** see Rolling Jack Installation,Operation and Maintenance Instructions in the rolling jack box.

SAFETY WARNING LABELS for Four-Post Surface Mounted Roll-on Lifts

A. The following pictograph labels are located, as shown, on the lift power unit column.
B. Observe and heed Safety and Warning labels on the lift.

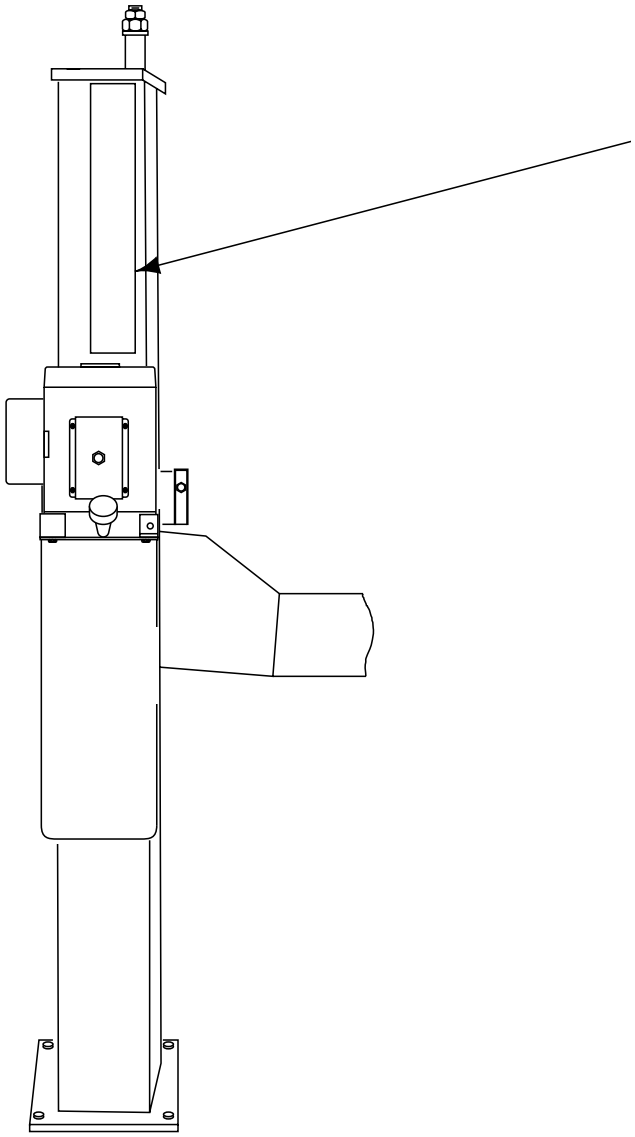


Fig. 1

OPERATING INSTRUCTIONS

⚠WARNING To avoid personal injury and/or property damage, permit only trained personnel to operate lift. After reviewing these instructions, get familiar with lift controls by running the lift through a few cycles before loading vehicle on lift. Observe and heed SAFETY and WARNING labels on the lift.

Loading:

1. Lift must be fully lowered and no one in service bay while the vehicle is brought on lift.

2. Drive vehicle onto lift and center it on runways. At all times, be sure rear wheels are forward of the ramp/chocks and the ramp/chocks will clear tires when the lift is raised, Fig. 2. Driver and passengers must exit before raising.

3. Place triangular wheel chocks on each side of one rear tire, Fig. 2.

Raise Lift:

1. Push the RAISE button on the power unit. Release button at desired height, Fig. 3.

2. Lower onto locks.

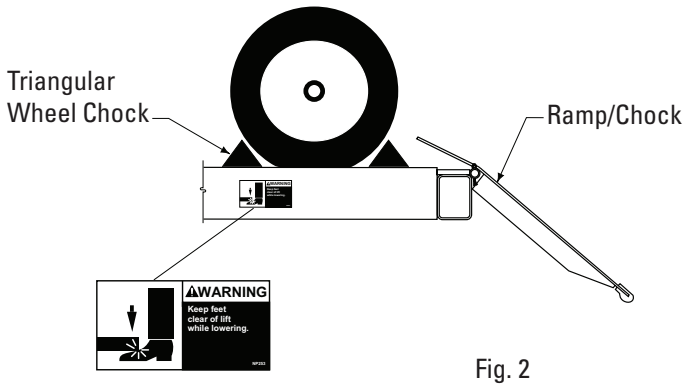


Fig. 2

Before Lowering Lift:

Be sure no one is in the lift area and that all tools, tool trays, etc. have been removed from under the lift.

⚠WARNING The runways, ramps and connecting yokes at each end of lift are designed to rest on the floor when fully lowered. Observe pinch point warning decals.

To Lower Lift:

Note: If button on air valve is released, the latches will automatically reset to the engaged position.

1. If lift has been resting on the locking latches, lift must be raised high enough for all four latches to clear the latch bar slots inside the columns.
2. Push the latch release button on power unit, Fig. 3, to disengage all four (4) locking latches.
3. Keeping the latch release button depressed, push lowering valve handle on the power unit to lower lift, Fig. 3. Lowering speed can be controlled by the force applied to the lowering valve handle.
4. Observe lift and vehicle to be sure lift is level while being lowered. If not, **STOP.** Repeat Steps 1 through 4.
5. Fully lower lift, remove the triangular wheel chocks and check to be sure area is clear before removing vehicle from lift.
6. If your lift is not operating properly, **DO NOT** use until adjustments or repairs have been made by qualified lift service personnel.

⚠CAUTION Keep hands clear of yoke ends while the lift is being raised or lowered, Fig. 4.

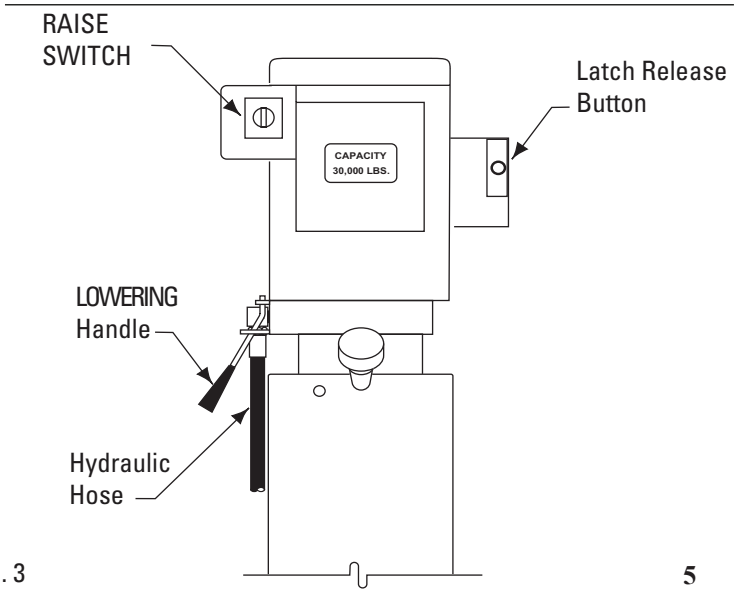


Fig. 3

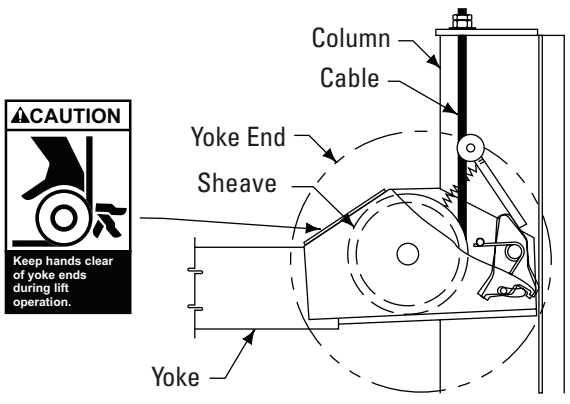


Fig. 4

Maintenance Instructions

⚠WARNING If you are not completely familiar with automotive lift maintenance procedures, **STOP:** Contact factory for instructions.

To Avoid Personal Injury, permit only qualified lift service personnel to perform maintenance on this equipment.

• **Use** only genuine replacement Parts for repairs.

• **Always:** Raise lift when cleaning floor area.

• **After First 2 Weeks of Usage:** Check cable adjustment per installation instructions. Continue to check cables per maintenance schedule below.

• **After First 2 Weeks of Usage:** Check torque on the column anchor bolts per installation instructions. Continue to check anchor bolts per maintenance schedule that follows.

• **Daily:** Check all column, lift/runway attaching bolts for tightness.

• **Daily:** Check cables and sheaves for wear. Observe for frayed cable strands. Wipe cables with a rag to detect hard to see small broken cable strands. Replace cables showing any broken strands. Replace worn parts as required with genuine parts.

• **Daily:** Inspect front wheel stops and ramp/chocks for damage or excessive wear. Replace as required.

• **Daily:** Check locking latch operation and reset. Adjust per instructions or repair if required.

⚠WARNING If slack cable arm is bent, replace immediately. Refer to illustration below.

• **Monthly:** Check torque on the column anchor bolts per specifications in installation instructions.

• **Monthly:** Check equalizer cable tension. Adjust per lift installation instructions. If there are no more threads available for adjustment, replace the cable. Do not use washers to stand off the nut to use previously used threads.

• **Semi-Annually:** Check fluid level of lift power unit and refill if required. If fluid is required, inspect all fittings, hoses, and seals. Repair as required.

IMPORTANT Cable adjustment should be checked by an authorized installer after the first 50 loaded lift cycles and after 300 loaded lift cycles.

Replace Bent Slack Cable Arm

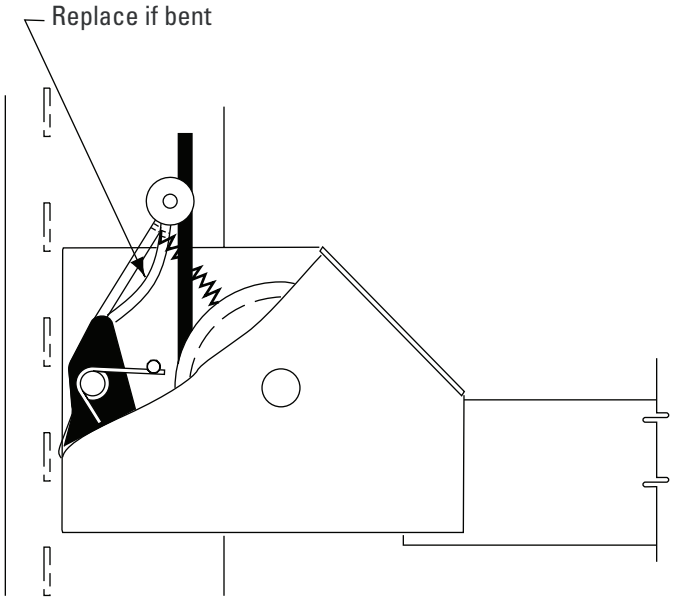


Fig. 5

Trouble Shooting

Trouble	Cause	Remedy
Motor does not run.	1. Check fuse or circuit breaker. 2. Check for correct voltage to motor. 3. Inspect all wiring connections. 4. Switch burned out. 5. Motor windings burned out.	1. Replace blown fuse or reset circuit breaker. 2. Supply correct voltage to motor. 3. Repair and insulate all connections. 4. Replace switch. 5. Replace motor.
Motor runs but will not raise lift.	1. Open lowering valve. 2. Pump sucking air. 3. Suction stub off pump. 4. Low fluid level.	1. Repair or replace lowering valve. 2. Tighten all suction line fittings. 3. Replace suction stub. 4. Fill tank with Dexron III ATF.
Motor runs—raises unloaded lift but will not raise vehicle.	1. Motor running on low voltage. 2. Trash in lowering valve. 3. Improper relief valve adjustment. 4. Overloading lift.	1. Supply correct voltage to motor. 2. Clean lowering valve. 3. Replace relief valve cartridge. 4. Check vehicle weight and/or balance vehicle weight on lifts.
Lift slowly settles down.	1. Trash in check valve seat. 2. Trash in lowering valve seat. 3. External fluid leaks.	1. Clean check valve. 2. Clean lowering valve. 3. Repair external leaks.
Slow lifting speed or fluid blowing out filler breather cap.	1. Air mixed with fluid. 2. Air mixed with fluid suction. 3. Fluid return tube loose.	1. Change fluid to Dexron III ATF. 2. Tighten all suction line fittings. 3. Reinstall fluid return tube.
Lift going up unlevel.	1. Cables out of adjustment. 2. Lift installed on unlevel floor.	1. Adjust slack out of cable. 2. Shim lift to level columns (Not to exceed 2”). **Note:** Maximum shim thickness of 2” is possible by using shim kit. Contact your Product Service Consultant for ordering information.
Lift stops short of full rise or chatters.	1. Low on fluid.	1. Check fluid level and bleed cylinder. If fluid is required inspect all fittings, hoses, and seals. Repair as required.
Anchors will not stay tight.	1. Holes drilled oversize. 2. Concrete floor thickness or holding strength not sufficient.	1. Use a fast setting cement to pour into oversize holes and reset anchors or relocate lift using a new bit to drill holes. 2. Break out old concrete and repour new pads for lift per installation instructions.
Lift will not lower.	1. Insufficient air supply to lift. 2. Latches out of adjustment.	1. Check air pressure. Air supply to lift should be between: Min. 100 p.s.i. and Max. 120 p.s.i. Check all lines and fittings for leaks or crimps. Repair or replace as required. 2. Check latches per installation instructions.

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 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 41º-104ºF (5º-40ºC).

APPROVED ACCESSORIES		
Item	Capacity	Part Number
Air/Electric Utility Box		FA915
Air/Electric Utility Box Without FRL		FA916
Rolling Jack	15,000 lbs.	RJ15000

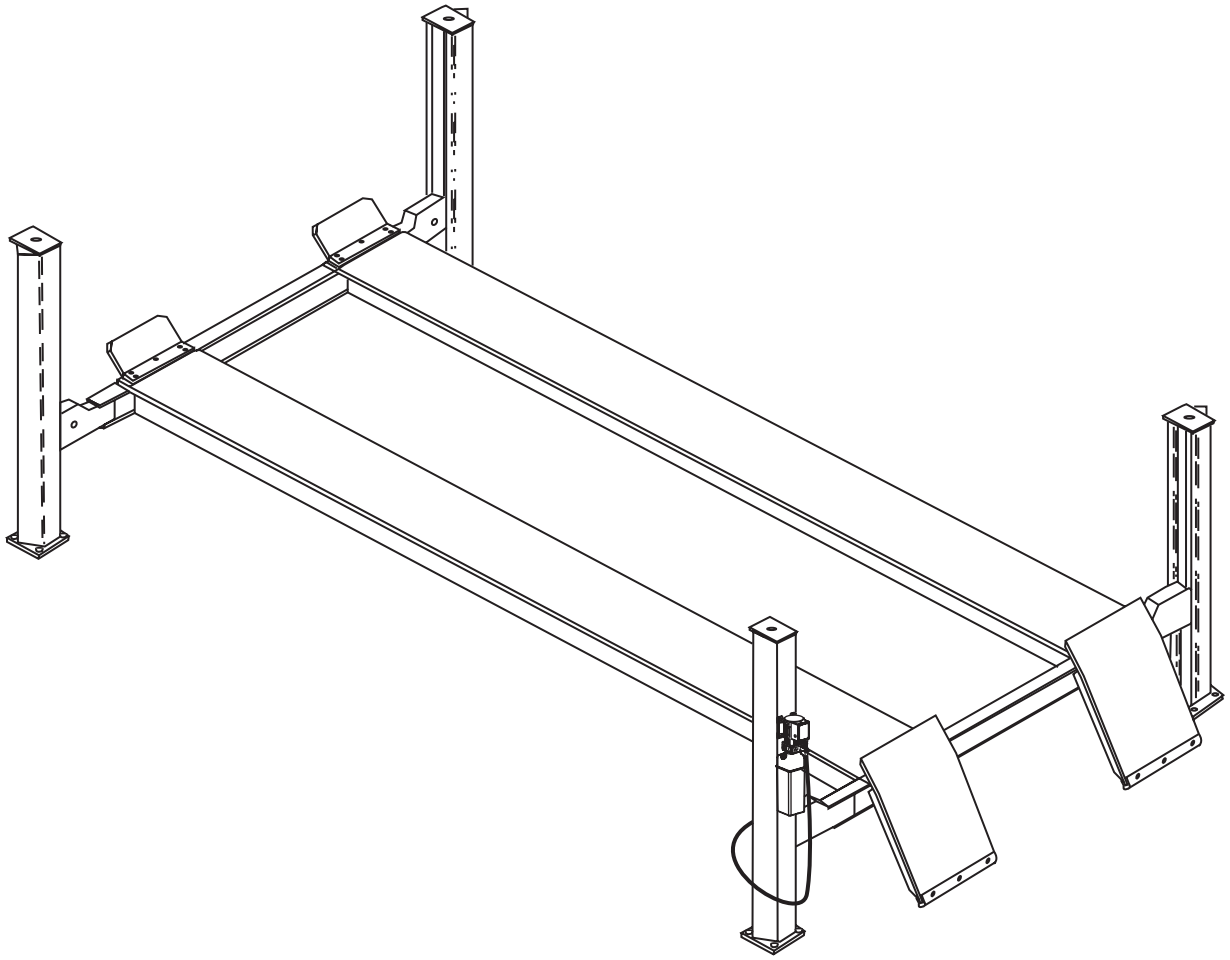
Notes

Notes

Notes

CR30 Parts Breakdown

Capacity 30,000 lbs. (15,000 lbs. per axle)
271” Wheelbase
140” Minimum Wheelbase



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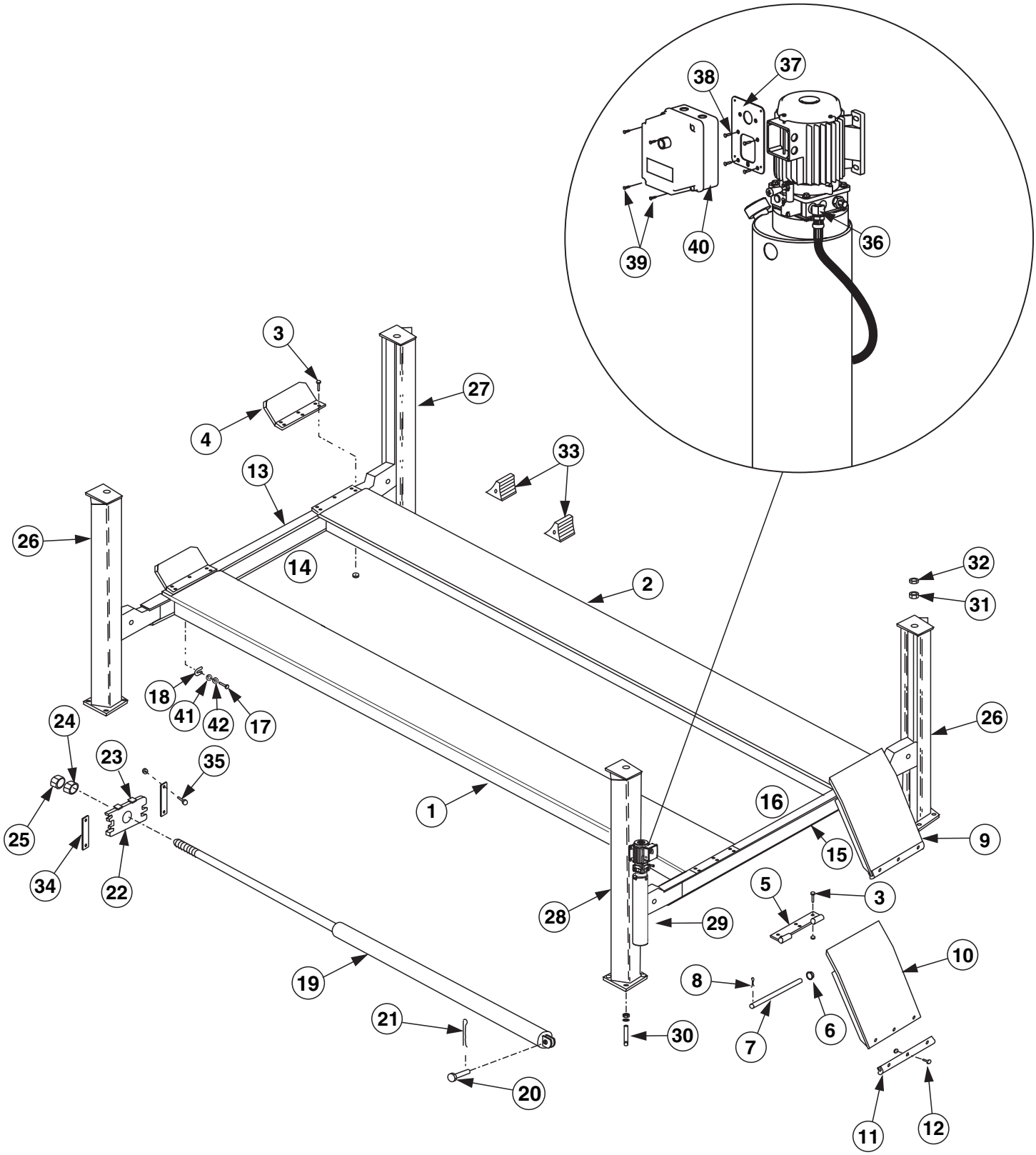
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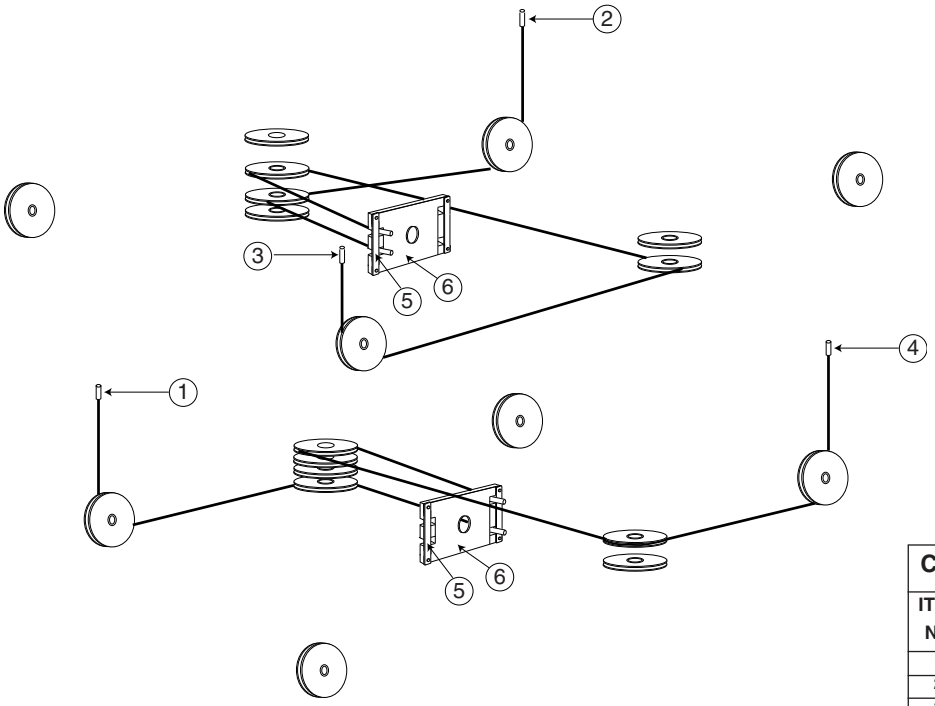
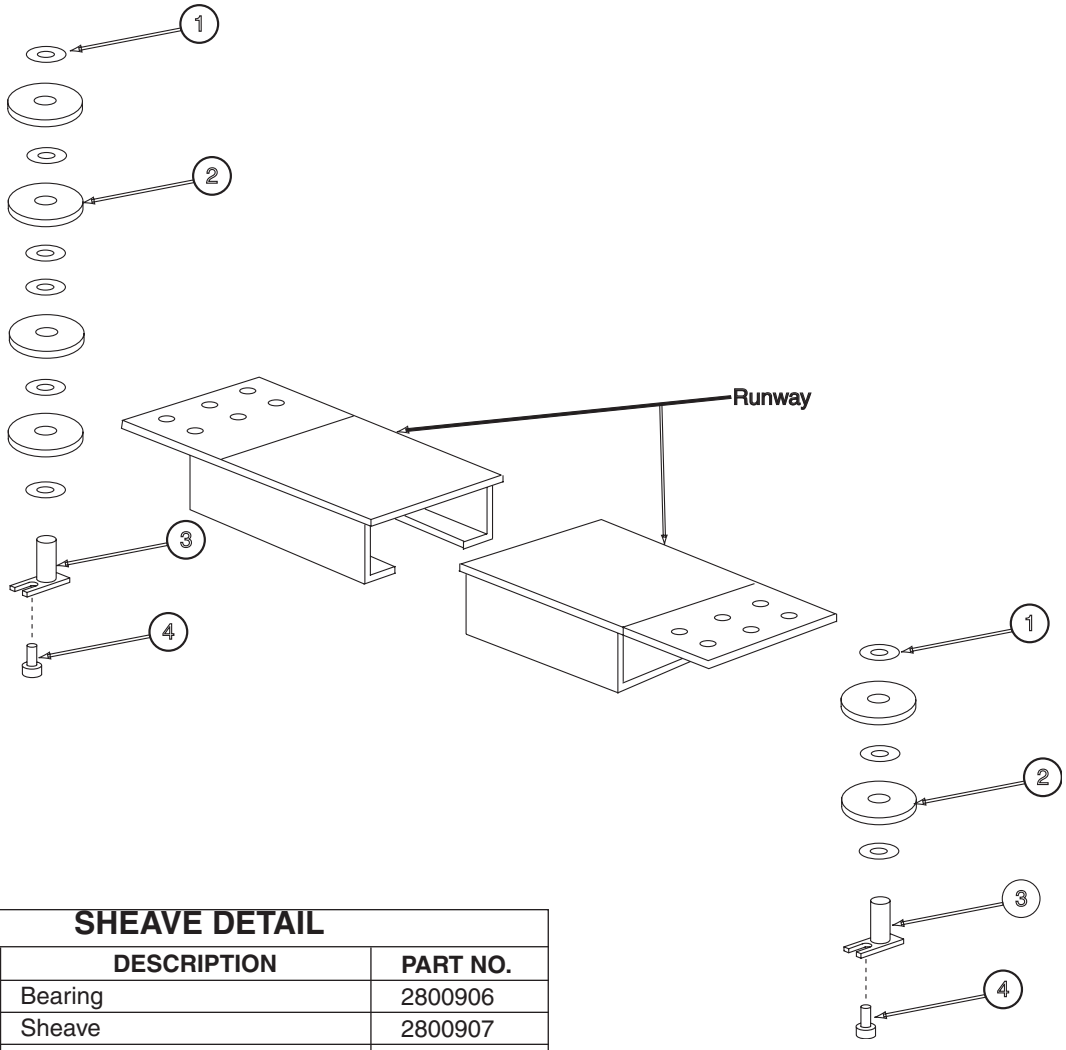
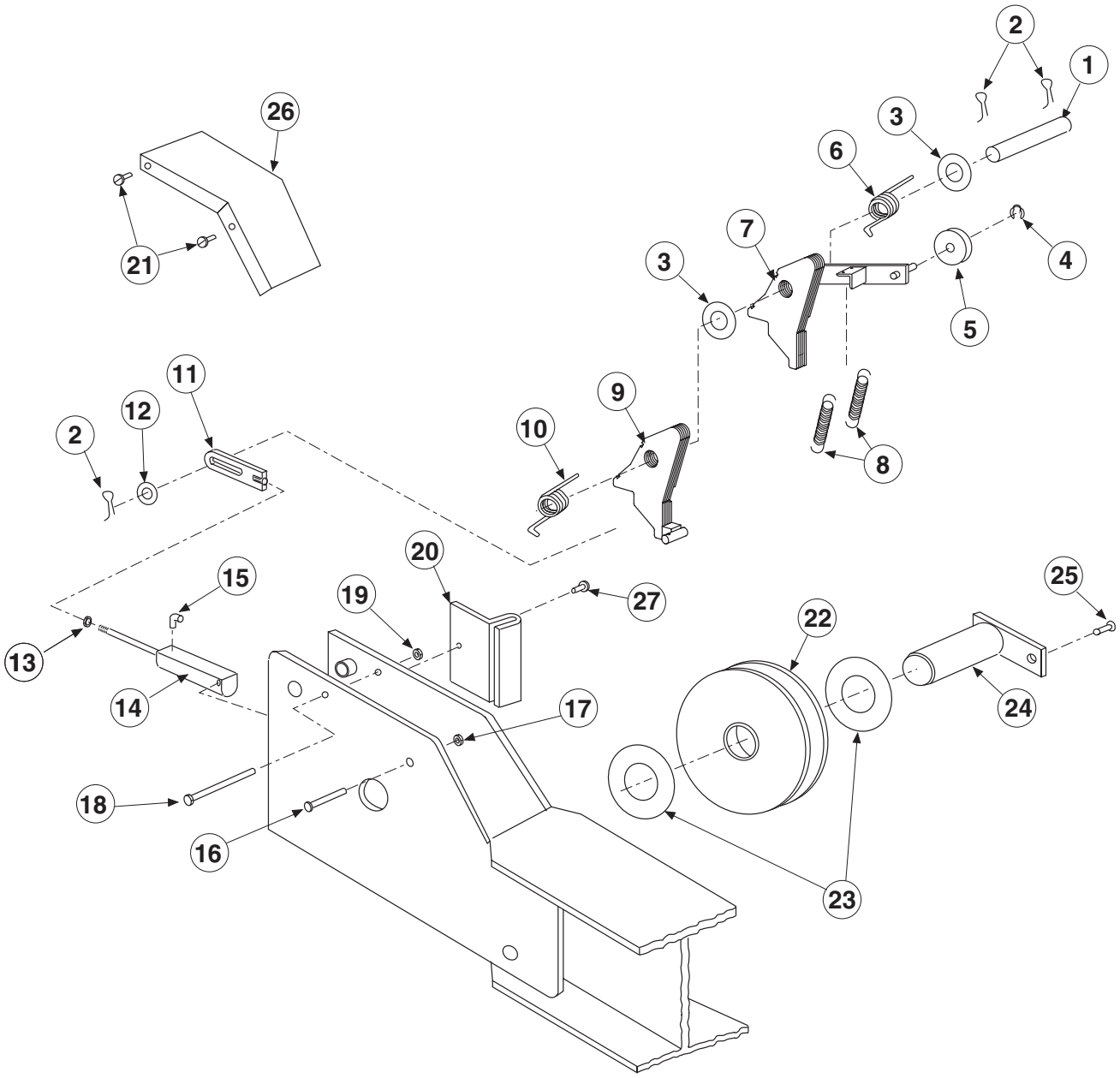
CR30 COMPONENTS		
Item	Description	Part. No.
1	Left Hand Rnwy Assy. (Includes: cylinder; cables; sheaves)	3000500
2	Right Hand Runway Assembly	3000501
3	5/8" -11NC x 2 1/2" Hex Cap Screw (High Strength)	3000502
	5/8" -11NC McClean-Fogg Nut	40360
4	Wheel Stop	FC5780-6
5	Hinge Weld	FC5780-4
6	5/8" Pushnut Fastener	FC5179-4
7	Hinge Pin	FC5225-39
8	5/32" x 1" Cotter Pin	41202
9	Ramp/Chock Assembly	2800505
10	Ramp/Chock Weldment	2800506
11	Plastic Slide	1400948
12	#10-24NC x 3/4" Lg. PNHDMS	40030
	#10-24NC Hex Nut	40630
13	Front Yoke Weld	2800401
14	Front Yoke Assembly (Includes latches)	2800400
15	Rear Yoke Weld	2800403
16	Rear Yoke Assembly (Includes latches)	2800402
17	3/4"-10NC x 2" Lg. HHCS (Grade 8 min.)	40426
18	Plastic Shim	FJ716-6
19	Hydraulic Cylinder	2800900
20	Clevis Pin	2800901
21	3/16" x 3" Cotter Pin	41253
22	Cable Pull Bar	2800508
23	Glide	2800509
24	1 3/4" - 5NC Heavy Hex Nut	40777
25	1 3/4" - 5NC Heavy Hex Jam Nut	40778
26	Right Hand Column	2800102
27	Left Hand Column	2800101
28	Power Unit Column	2800100
29	1Ø Power Unit	P3028
	3Ø Power Unit	P3082
30	Anchor Bolt	FC5393-3
31	1 1/8"-7NC Hex Nut	40769
32	1 1/8"-7NC Hex Jam Nut	40770
33	Rear Wheel Chock	2800510
34	Retainer Bar	2800511
35	1/4"-20NC x 2 1/2" Lg. HHCS and Lock Nut	4 Req'd.
36	Elbow	P1028-4
37	Adapter Plate	FA132-2
38	5x.8x8mm FHMS	4 Req'd
39	#8-32 NC x1/2"LG	4 Req'd
40	Control Box	FA7163
41	3/4" Flat Washer	41018
42	3/4" Lock Washer	41000



CABLE ROPING DETAIL 235" WB		
ITEM NO.	DESCRIPTION	PART NO. SM30
1	Left Front Cable	3000900
2	Right Front Cable	3000901
3	Left Rear Cable	3000902
4	Right Rear Cable	3000903
5	Pull Bar Hold	2800512
6	Cable Pull Bar	2800508

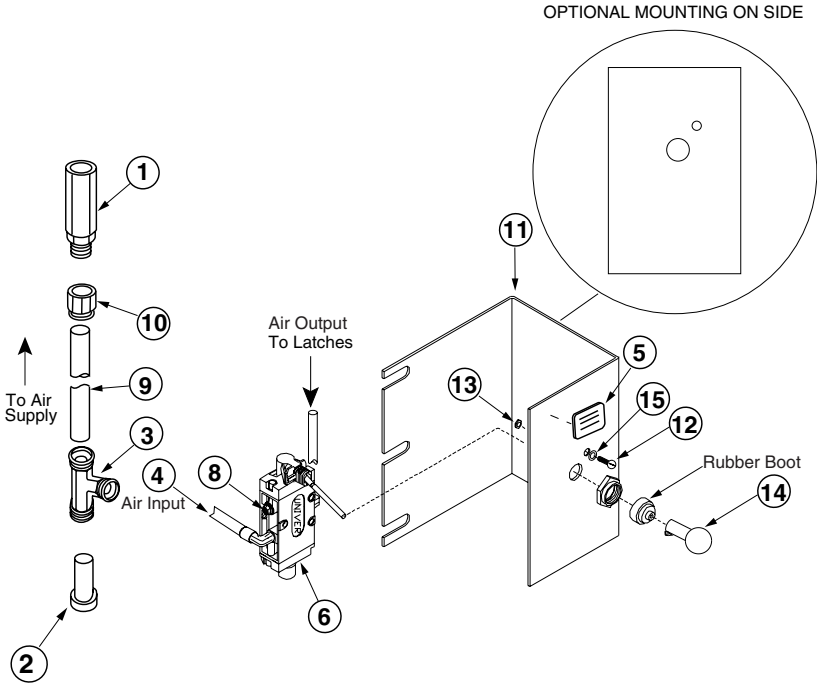


SHEAVE DETAIL		
ITEM NO.	DESCRIPTION	PART NO.
1	Bearing	2800906
2	Sheave	2800907
3	Sheave Pin Assembly	2800908
4	5/16"-18NC x 1/2" HSBHCS	40225

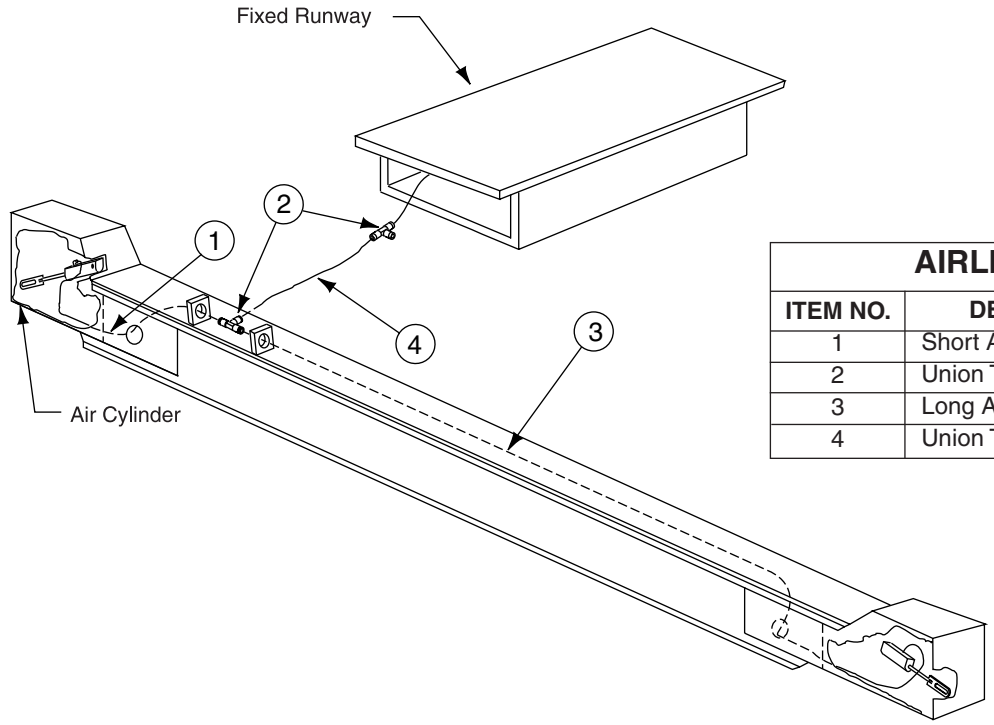


YOKE END DETAIL

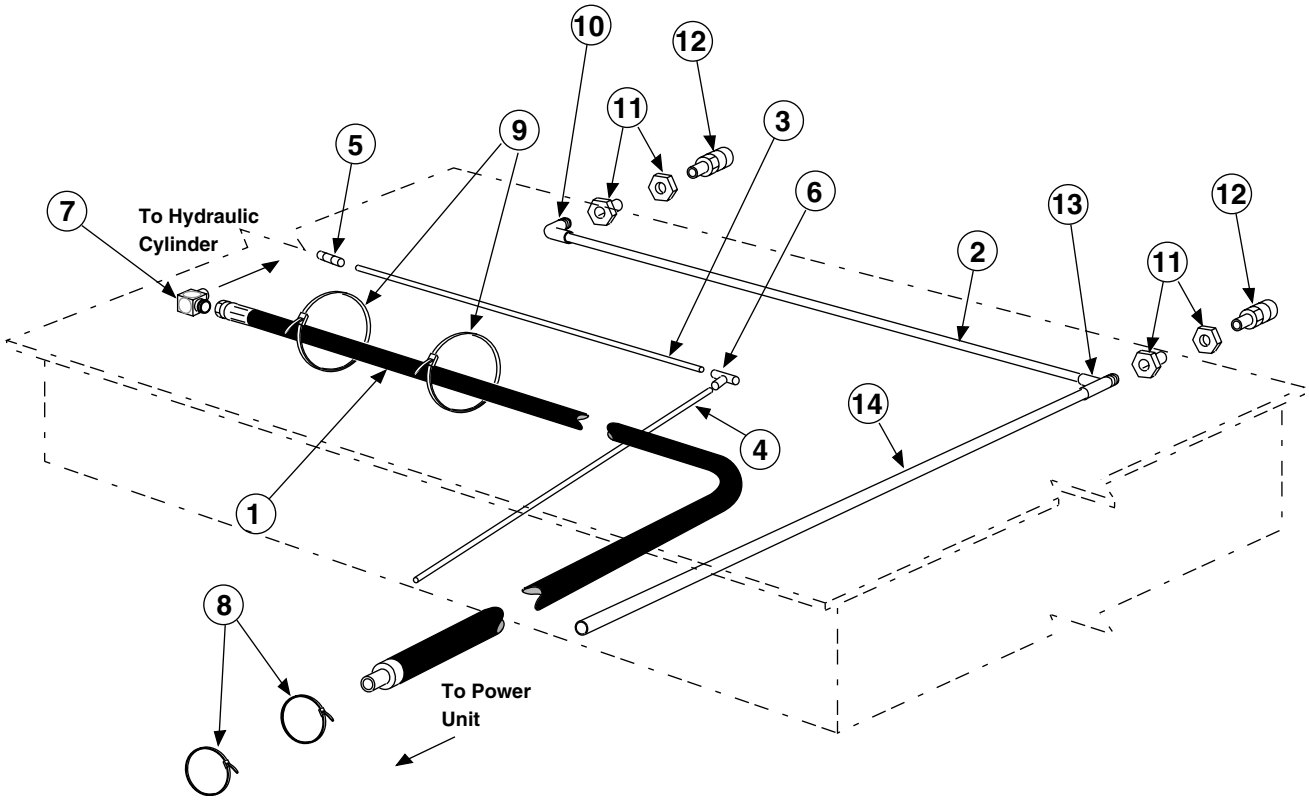
ITEM	DESCRIPTION	PART NO.	ITEM	DESCRIPTION	PART NO.
1	Latch Shaft	2800909	15	Elbow	2800911
2	1/8" x 1 1/4" Cotter Pin	41201	16	1/4" - 20NC x 1 1/2" Lg. bolt	2 req'd.
3	Bearing	2800910	17	1/4" - 20NC Nylon Insert Lock Nut	2 req'd.
4	Klip Ring for 3/8" Shaft	41410	18	1/4" - 20NC Hex CS x 4 1/2" Lg.	40116
5	Slack Cable Roller	2800404	19	1/4" - 20NC Hex Jam Nut	40640
6	Left Hand Torsion Spring	2800405	20	Plastic Slider	2800414
7	Slack Cable Locking Latch	L.H. 2800407	21	Pinetree Retainer	2800912
		R.H 2800406	22	Sheave	2800907
8	Extension Spring	2800408	23	Bearing	2800913
9	Locking Latch	L.H. 2800410	24	Sheave Pin Assembly	2800914
		R.H. 2800409	25	5/16"-18NC HSBHCS x 1/2" Lg.	40225
10	Right Hand Torsion Spring	2800411	26	Yoke End Cover	2800415
11	Slotted Bracket	2800412	27	1/4" - 20NC HHTS x 1/2" Lg.	40067
12	3/8" Cut Washer	40820			
13	1/4" - 28NF Hex Jam Nut	40622			
14	Air Cylinder	2800413			



AIR LOCK RELEASE VALVE DETAIL		
ITEM NO.	**DESCRIPTION**	**PART NO.**
1	Valve	2800915
2	3/8" Plug	1400955
3	Union Tee	1400956
4	1/4" Tubing (50' roll)	1400943
5	Nameplate	NP280
6	Control Assembly	1400944
7	Elbow	2800916
8	Filter/Muffler	1400958
9	3/8" Tubing (40 Ft. Roll)	1400942
10	Female Connector	2800917
11	Air Valve Bracket	2800918
12	#8-32NC x 1-1/2" Screw	40007
13	#8-32 Nut	40637
14	Handle	1400939
15	#8 Flat Washer	40788



AIRLINE DETAIL		
ITEM NO.	**DESCRIPTION**	**PART NO.**
1	Short Airline	2800416
2	Union Tee	2800417
3	Long Airline	2800418
4	Union Tube	2800419



TUBING DETAIL					
ITEM	DESCRIPTION	PART NO.	ITEM	DESCRIPTION	PART NO.
1	Hose	2800919	8	Wire Tie	2800925
2	Long Runway Tube	2800920	9	Cable Tie	2800926
3	Main Tube	2800921	10	Male Elbow	1400965
4	1/4" Supply Tube	2800922	11	Connector	1400938
5	Union	2800923	12	Coupler	2800927
6	Union Tee	2800417	13	Male Run Tee	1400969
7	Elbow Adapter	2800924	14	3/8" Supply Tube	2800928

Notes: