RAISING THE LEVEL OF PERFORMANCE



MODEL 12000S

TWO POST

INSTALLATION, OPERATION MANUAL PARTS BREAKDOWN AND TROUBLE SHOOTING GUIDE

QUALITY LIFTS L.P. 200 Cabel St., P.O. Box 3972, Louisville, KY 40201 PHONE: 502-583-5438 FAX: 502-583-5488 TOLL FREE: 877-771-5438 www.qualitylifts.com 1. Lift Location: Use architects plan when available to locate lift in shop. See Figure 1 for a typical bay layout.

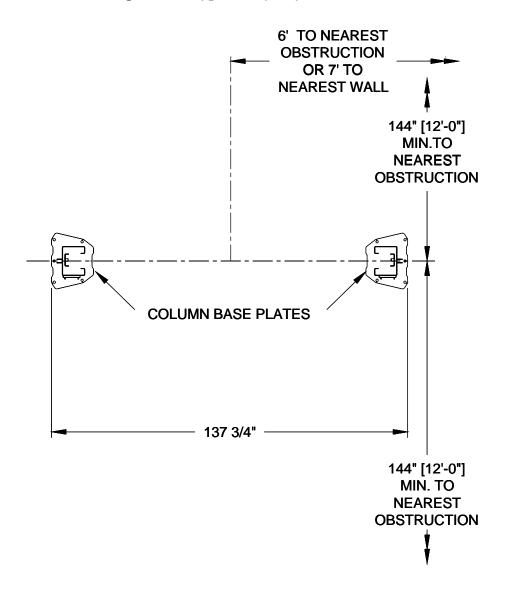


Figure 1 Typical Bay Layout

NOTE: Power Column is recommended to be installed on the passenger side of lift. **See Page 12** for Power and Idler Column diagram.

2. Lift Height: See Figure 2 for overall height of lift. Allow a minimum of 1" between lowest obstruction and top of lift.

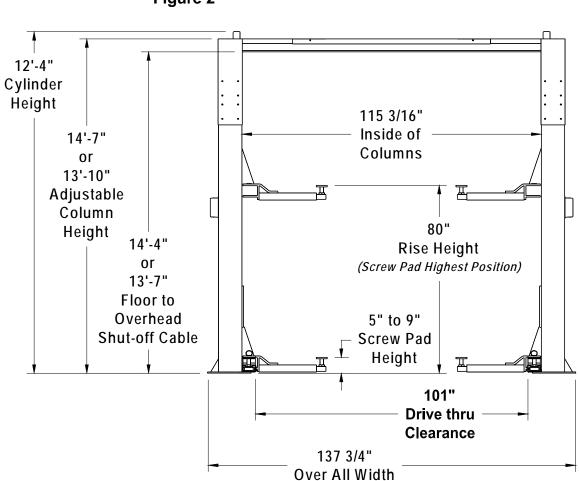
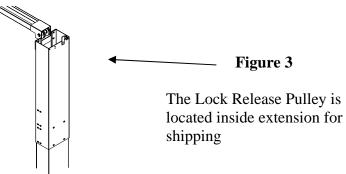


Figure 2

3. Lock Release Pulley: Install the lock release pulley to the column extensions. You will find the pulleys attached to inside of column extension or in the parts box. The pulley must be installed with the pulley up and the bracket mounted to the outside of the column extension. See Figure 3.

Top pulley should line up with pre-attached pulley near the locking pawl on column.

4. Column Extensions: Install column extensions before standing columns. See Page 14.



5. Lift Setting: Position columns in bay using dimensions shown in Figure 1. Again, It is recommended that the column with power unit mounting bracket be located on passenger side of lift. Both column base plates must be square to one another.

Concrete and Anchoring: Concrete shall have a compression strength of 3,000 PSI and a minimum thickness of 4" in order to achieve a minimum anchor depth of 3 $\frac{1}{4}$ ". This applies when using the standard supplied $\frac{3}{4}$ " X 5 $\frac{1}{2}$ " anchors. If the top of the anchor exceeds 2 $\frac{1}{4}$ " above the floor grade you **DO NOT HAVE ENOUGH ANCHOR DEPTH**.

Drill $14 - \frac{3}{4}$ " diameter holes in the concrete floor using the holes in the column base plate as a guide. See **Figure 4** for hole depth, hole spacing and edge distance requirements.

Figure 4

Concrete Thickness and Hole Depth	4.00 inches
Edge distance from cracks and seams	4.75 inches
Hole spacing	6.50 inches

Caution: DO NOT INSTALL this lift on **asphalt or other similar unstable surfaces.** The columns for this lift are supported only by the anchor bolts.

IMPORTANT: Using the horseshoe shims provided, shim each column base 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. Recheck columns for plumb. Tighten anchor bolts to an installation torque of 150 ft.-lbs. Shim thickness MUST NOT exceed ½" when using the 5 ½" long anchors provided with lift. Plumb the column uprights. See Figure 5.

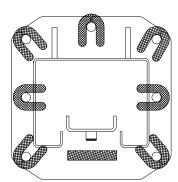


Figure 5

NOTE: If more than 2 horse shims are used at any of the column anchor bolts, pack nonshrink grout under the unsupported area of the column base. Insure shims are held tightly between the base plate and the floor after torquing the anchor bolts. If the anchor bolts do not tighten to 150 ft-lbs, replace the concrete under each column base with a 4' X 4 ' X 6" thick concrete (minimum 3000 PSI) pad keyed under existing floor and flush with the top of existing floor. Let the concrete cure to concrete manufacturers specifications prior to installing lift and anchor bolts. Routinely check the anchor bolts- torque them to 90 ft-lbs. Do not exceed 90 ft-lbs after initial installation. Doing so will slowly pull the anchors out of the concrete.

7. **Overhead Installation**: Assemble overhead sections. **See Page 17.** Raise overhead beam into position between columns. The beam attaches to the top of the column extension with four bolts on each side. **See Page 14** for diagram.

8. Overhead Shutoff Switch Installation:

- Install eyebolts in pre-drilled holes at the top of each column extension on the front side of the lift (side where power unit is located). Secure with the provided washers and nuts.
- Attach cable to Idler side eyebolt using aluminum cable crimp.
- Run attached cable on the Idler Column through the eyebolt on the Power Column.
- Route the cable at a 90 degree angle so that it runs down the Power Column and attach to the cut-off switch in the top of the motor with an aluminum crimp. Make sure before final crimp that all slack is taken out of the cable so that the cable is tight.

9. Power Unit: Mount power unit with motor up to column bracket. Use four 5/16" X 1" bolts, nuts and flat washers provided. Install and hand tighten 90° fitting to pump until O-Ring is seated. Tighten locknut to 35 – 40 ft-lbs. Connect supply hoses. <u>Make sure the hoses at the top of each column are clear of the cylinder path when the lift is at full rise.</u>

Note: Over tightening locknut may tear O-Ring.

10.Hoses: Clean adapters and hoses. Inspect all threads for damage. Inspect all hose ends to be sure they are crimped.

Flared Fittings Tightening Procedure:

- 1. Screw fittings together finger tight. Using proper size wrench, rotate the fitting 2 ¹/₂" hex flats.
- 2. Back the fitting off one full turn.
- 3. Again tighten the fittings finger tight. Using a wrench, rotate the fitting 2 ½" hex flats. This will complete the tightening procedure and develop a pressure tight seal.

11. Equalizing Cables:

<u>Cables are pre attached at the factory for the maximum height of 14'4"</u>. Pull cables from column.

Idler Side: The cable on the offside of column must go over the right hand pulley (when you are facing the carriage) on the overhead on both sides of lift at the top. Then down the column and attach to the cable tab on the carriage. **See Page 19**

Power Side: The cable on the offside of column must go over the right hand pulley (when you are facing the carriage) on the overhead on both sides of lift at the top. Then down the column and attach to the cable tab on the carriage. **See Page 19**

<u>Note - Height Reduction</u>: To lower the lift, the pre attached cables must be moved up, inside the carriage to the <u>optional</u> cable brackets. This will adjust for the slack in the cables. **See Page 19**

The carriage must be raised to the 1st or 2nd lock position to attach cables to the optional brackets. <u>Use appropriate equipment to raise the carriages to latch position.</u> <u>Be sure locking latch is securely engaged.</u>

12. Lock Release Cable:

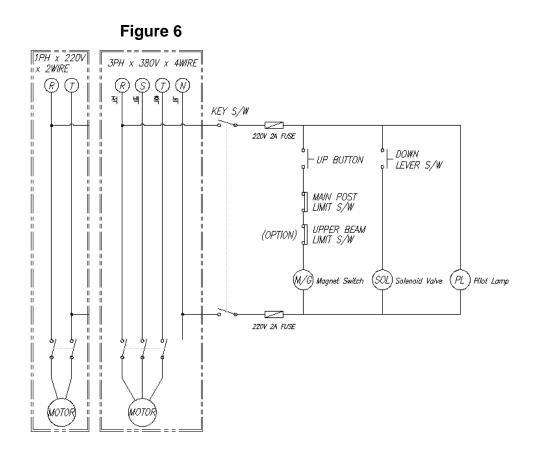
- A. On the offside of lift slip loop end of cable over end of shoulder screw on the side of latch control plate.
- B. Feed to other end of the cable down to the latch pulley then up the side of the column
- C. Route the cable over the top of the pulley to the far side of the lift.

- D. Route the cable of the top pulley on the power side of the lift.
- E. Bring the cable down the power side column and feed the cable over the pulley just above the safety latch.
- F. Pull the cable through the hole in the shoulder screw on the right side of latch control plate. You may have to loosen the setscrew before pulling cable through.
- G. Using pliers pull the cable tight and tighten the setscrew.
- H. Install Latch Release Handle and test locks. Make sure both locks fully engage lock bar on carriage and fully disengage lock bar.
- **13. Electrical:** Have a certified electrician run 208 230V Single Phase 60 Hz power supply to motor. Size wire for a 25 Amp circuit. **See Figure 6**

CAUTION: Never operate the motor on line voltage less than 208 Volts. Motor damage may occur.

IMPORTANT: Use a separate circuit for each power unit if you are installing more than one lift in your service area. Protect each circuit with a time delay fuse or circuit breaker. For single phase 208 – 230V use a 25 Amp fuse. For three phase use a 15 amp fuse. All wiring must comply with NEC and all local electrical codes.

Note: Standard single-phase motor CAN NOT run on 50 Hz line. Motor damage will occur.



14.Overhead Shutoff Switch: Check overhead wire to verify that the Power Unit stops when the overhead wire is contacted and restarts when the overhead wire is released.

15. Arm & Arm Restraint Installation:

Quality Lifts factory installs arm restraints and arm restraint gears on arms. <u>The arm</u> restraint gear must be adjusted to correctly engage.

Install the short arms toward the front of the lift using one of the four arm pins provided. After installing the four arm pins install the four split pins in arm pins. **See Page 12.**

Note: Once arm is installed in yoke, pull up actuator pin and swing arm fully around being sure that Arm Restraint Gear and Arm Restraint stay aligned.

Note: Check operation of arm restraints by raising carriage $3^{\circ} - 6^{\circ}$. Rotate arms. If arms move freely the arm restraint must be adjusted.

After installing and adjusting arm restraints it is necessary to grease with white lithium grease.

16.Oil Fill and Bleeding: Use Dexron III ATF or Hydraulic Oil (must be anti-foam, anti-rust) that meets ISO 32 specifications to fill the reservoir on the power unit. Remove fill-breather cap and pour in fluid until full. Raise lift up just under the 1st locking position (do not place on lock). Loosen the 6mm bleed screws located at the top of cylinders on the sides. Start power unit and run up until the oil seeps out of the bleed screws. When this occurs, the cylinders have been properly bled of air. Tighten the bleed screws and <u>Replace fill-breather cap</u> on the power unit.

If fill-breather cap is lost or broken order a replacement. Reservoir must be vented.

17. Lock Release Cable Adjustment:

- A. Check to make sure the latch will properly engage and disengage. Slowly release the latch handle. At 1/8" gap between the top of the latch dog and the column is allowable.
- B. When raising lift, listen to latches to be sure that both latch dogs fall into the latch slots almost simultaneously. If they do not, loosen the setscrew for the latch cable and adjust tension as necessary.
- C. Install both latch covers.
- 18. **Pressure Test:** Run lift to full rise and keep motor running for 5 seconds. Stop and check all hose connections. Tighten or reseal and leaks discovered.
- **19. Equalizer Cable Adjustment:** Raise the lift to check equalizer cable tension. Below the carriage, grasp the two adjacent cables between your thumb and forefinger and pull them together. This should require approximately 15 lbs. of pressure.
- 20. Lubricate Bearing Surface: Quality Lifts are shipped without any lubrication of the bearing surfaces. After installation is complete and before operating the lift all 4 bearing surfaces in each column need to be lubricated. Using the supplied tub of grease, apply to all 4 corners of the column (on the inside) above and below the carriage. (Any type of shop grease can be used to lubricate the columns, if the supplied tub is not available). Upon the raising and lowering of the lift, grease will be worked in sufficiently. This is a regular maintenance procedure that should be done routinely to ensure the full life of the lift.
- 21. Serial Number and Decal: The serial number is written on the outside of the power unit box. It will be an eight digit number starting with four 0's (ie. 00002995) and the decal should be attached to the power side column for easy recognition. If the serial tag is not on the column, it will be located in the power unit box with the elbow fitting for the hydraulic line. When talking to the factory (Quality Lifts), always be prepared to identify the lift by this serial number. This is how we track <u>ALL</u> lifts

<u>Place the Quality Lifts decal on one of the column extensions. Simply take</u> <u>backing off and apply to the column (making sure it is straight) and rub the</u> <u>letters off.</u>

Warranty

Five Year Limited Structural Warranty to include:

- Columns
- Uprights
- Pulleys
- Overhead Beam
- Arms
- Swivel Pins
- Carriages
- Floor Plate
- Tracks
- Ramps
- Ramp Pins
- Cross Rails
- Top Rail Beam
- Legs

Two Year Limited Hydraulic Warranty to Include:

- Power Unit
- Cylinders
- Hoses

Seller provides no warranties other than in accordance with Seller's written limited warranty accompanying the particular product sold.

Warranty will not be provided on parts that are found to be defective due to abuse, product misuse, accidents or improper maintenance.

Warranty parts must be returned to Quality Lifts for inspection freight prepaid. Upon determination that the part(s) is defective Quality Lifts will replace the defective part at no cost. This warranty applies to original owner and is non-transferable.

In no event shall Seller be liable for special, consequential, or incidental damages or injures of any kind or nature whatever, including but not limited to loss of profit, rental of substitute equipment or other commercial loss, for the breach of or delay in performance of the warranty. In no event will Seller's liability exceed the price paid for the product. No employee, agent, representative, dealer or other person or entity is authorized to give any warranties of any nature on behalf of Seller.

THOSE LIMITED WARRANTIES AER EXCLUSIVE AND ARE IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH IMPLIED WARRANTIES ARE EXPRESSLY EXCLUDED IN ALL CASES.

WARRANTY REGISTRATION

SERIAL #_____ **INV. DATE:**_____

DISTRIBUTED BY: _____

ADDRESS: _____

CITY: _____ STATE: ____ ZIP: _____

CUSTOMER INFORMATION

COMPANY NAME:

CONTACT: _____

PHONE NUMBER:

ADDRESS: _____

CITY: _____ STATE: ____ ZIP: _____

Please remit above form to:

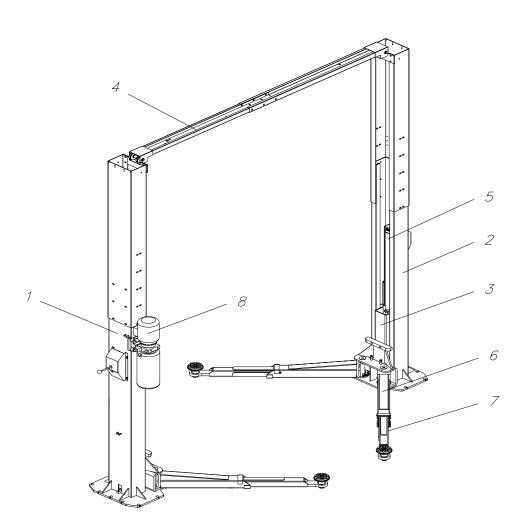
Quality Lifts P.O. Box 3972 Louisville, KY 40201 (877) 771-5438 office (502) 583-5488 fax

This form must be received for warranty to become effective!

PARTS BREAKDOWN

MODEL 12000S

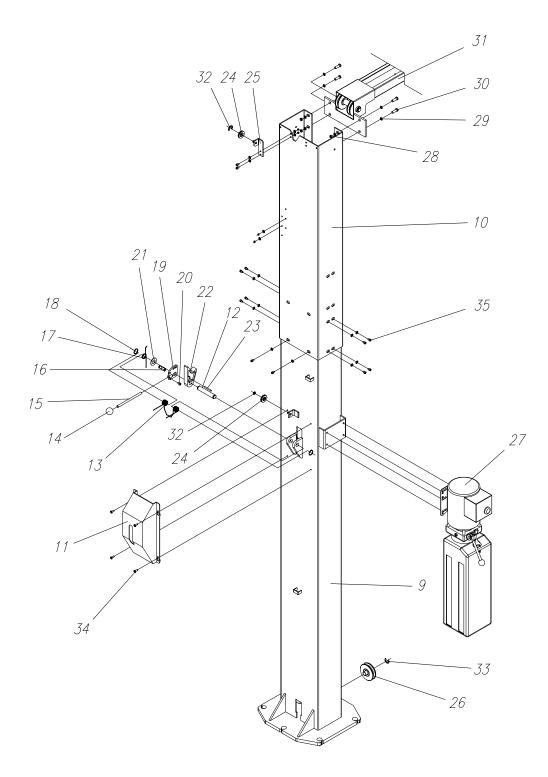
ITEM #	DESCRIPTION	PAGE #
1	Power Column	14
2	Idler Column	14
3	Carriage	15
4	Overhead	17
5	Cylinder	16
6	Long Arm	16
7	Short Arm	16
8	Power Unit	-



COLUMN AND LOCK

ITEM #	PART #	QTY	DESCRIPTION
9	27M02000	2	Column
10	27M80110	2	Column Extension
11	26K06185/95	2	Lock Release Cover
12	26K06100	2	Lock Release Shaft
13	26K06140	2	Lock Release Spring 1
14	PHANDLE30M10	1	Lock Release Handle
15	26K70140	1	Lock Release Shaft
16	26K06090	2	Lock Release Wire Pin
17	26K06130	2	Lock Release Spring 2
18	SN-E19	4	E-Snap Ring
19	26K06080	2	Lock Release Connector
20	WBM0615	2	Connector Bolt
21	26K06210	2	Lock Spacer
22	26K06110	2	Lock Pawl
23	SPIN0640	2	Spring Pin
24	26K06120	4	Lock Release Pulley
25	26K02150	2(1R/1L)	Lock Release Bracket
26	27M06160	2	Pulley
27	AB-1534	1	Power Unit
28	HNM10	8	Hex Nut
29	WPM10	8	Flat Washer
30	HEXM1025	8	Hex Bolt
31	27M76100	1	Overhead
32	SN-E08	4	E-Snap Ring
33	SN-E15	2	E-Snap Ring
34	TRTBM0608	4	Pan Head Screw
35	WBM1020	20	Socket Head Bolt

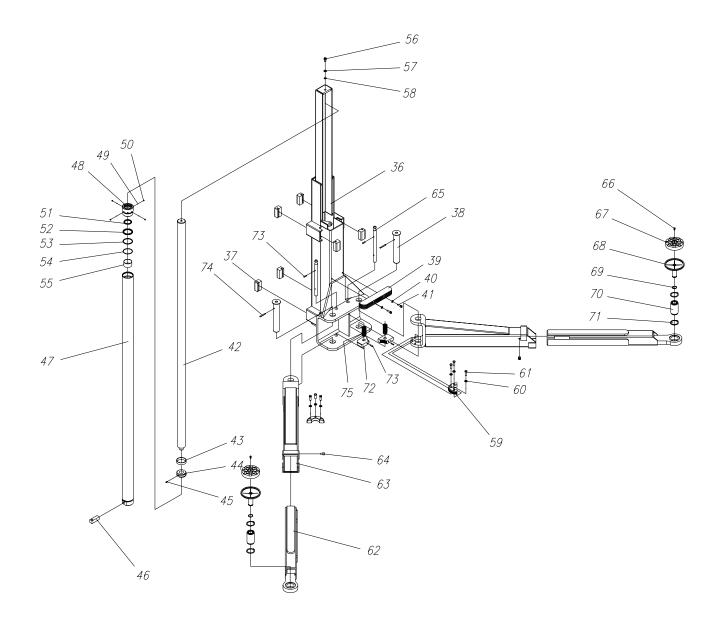
COLUMN AND LOCK



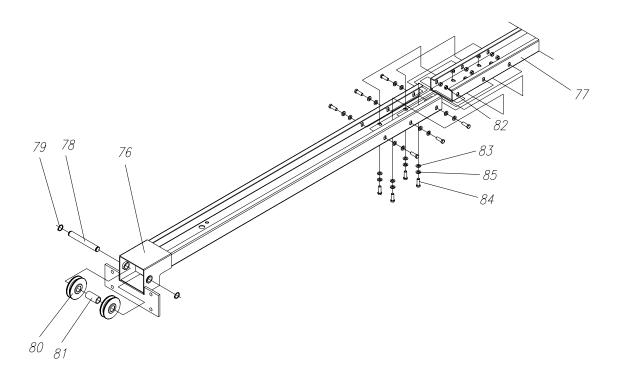
CARRIAGE, ARMS AND CYLINDER

ITEM #	PART#	QTY	DESCRIPTION
36	27M04000	2	Carriage
37	26C06060/70	8/8	Carriage Slide Blocks
38	27M70111	4	Arm Shaft
39	26K06150	2	Rubber Door Protector
40	WPM08	4	Flat Washer
41	WBM0830	4	Allen Bolt
42	27ME02A	2	Piston Rod
43	27ME04A	2	Wear Ring
44	27ME04A	2	Piston
45	27ME04A	2	Locking Bolt
46	26C06018	2	Hose Adapter
47	27ME01A	2	Cylinder
48	27ME05A	2	Gland
49	27ME05A	8	Steal Ball
50	27ME05A	8	Locking Bolt
51	27ME05A	2	Dust Seal
52	27ME05A	2	U-Packing
53	27ME05A	2	Back Up Ring
54	27ME05A	2	O-Ring
55	27ME05A	2	Bearing
56	WBM1230	2	Allen Bolt
57	WSM12	2	Spring Washer
58	WPM12	2	Flat Washer
59	27M25040	4	Large Arm Restraint
60	WSM10	12	Flat Washer
61	HEXM1030	12	Hex Bolt
62	27M24000	4	Slide Arm (Male)
63	27M22000	4	Long Arm (Female)
64	WBM1015	4	Allen Bolt
65	27M06030	4	Small Gear Shaft
66	WBM0615	4	Wrench Bolt
67	26K25030	4	Arm Support Rubber Footpad
68	26K25010	4	Arm Support
69	SN-CS25	4	Snap Ring- Small
70	26K25020	4	Arm Support 2 nd Screw
71	SN-CS45	8	Snap Ring- Large
72	26C06040	4	Small Arm Restraint Gear
73	SPIN0640	4	Spring Pin
74	SPIN0650	4	Spring Pin
75	27M06050	4	Arm Restraint Spring

CARRIAGE, ARMS AND CYLINDER

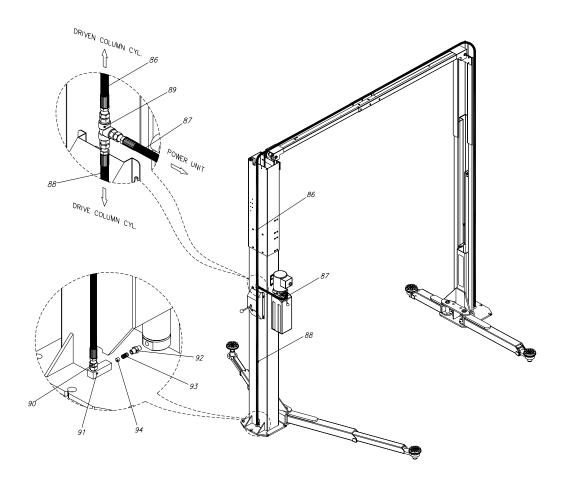


ITEM #	PART #	QTY	DESCRIPTION
76	27M76300	1	Overhead (1)
77	27M32000	1	Overhead (2)
78	26K40010	2	Pulley Shaft
79	SN-CS20	4	Snap Ring
80	27M06160	4	Pulley
81	26K40510	2	Pulley Spacer
82	HNM10	10	Hex Nut
83	WPM10	10	Flat Washer
84	HEXM1025	10	Hex Bolt
85	WSM10	10	Spring Washer



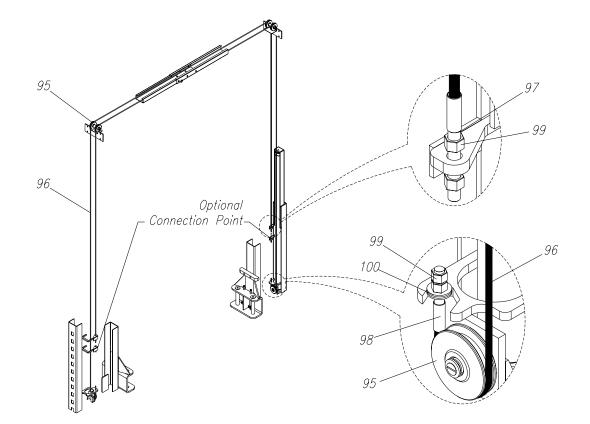
HYDRAULICS

ITEM #	PART #	QTY	DESCRIPTION
86	27M70120	1	Pressure Hose 1- 5/16"x2W
87	27M01020	1	Pressure Hose 2- 5/16"x2W
88	27M01030	1	Pressure Hose 3- 5/16''x2W
89	26K01040	1	Union Tee
90	HMCM-1/4-O5U	1	Oil Steel Nipple
91	26K06020	1	Hose Adapter
92	38100400	1	Oil Nipple
93	31\$71203	1	Orifice Spring
94	26K06180	1	Orifice



ITEM #	PART#	QTY	DESCRIPTION
95	27M06160	6	Pulley
96	27M06010	2	Cable
97	N/A	2	Cable Bolt
98	N/A	2	Cable Bolt
99	HNM12	8	Hex Nut
100	WPM12	4	Flat Washer

SYNCHRONIZATION



MODEL 12000S

OPERATION AND MAINTENANCE PROCEDURE

- Complete the warranty registration form (page 11) and fax back, or mail to Quality Lifts. Failure to do this could void the warranty
- *The owner/employer shall* make sure that all lift operators are qualified and trained in the safe use and operation of the lift in accordance with the manufacturer's operating instructions. They also shall display the lift manufacturer's operating instructions and maintenance schedule in a conspicuous location and area, convenient to the operator.
- *The owner/employer shall* establish procedures to periodically inspect and maintain the lift in accordance with the lift manufacturer's suggestions. The employer shall insure that the lift inspector and maintenance personnel are qualified and that they are adequately trained in these procedures.

The employer shall maintain these periodic inspection and maintenance records.

PREPARATION

- 1) When operating the lift up or down, keep your concentration on the vehicle and what you are doing.
- 2) If there are two or more lifts, make sure not to touch the controls of another lift.
- 3) Do not lift a vehicle that exceeds the maximum capacity of this lift.
- 4) Do not lift a vehicle with a person or load inside.
- 5) When raising or lowering the lift, make sure to pause 1-2 seconds between the transitions.
- 6) This lift is designed for automotive maintenance only. Do not use the lift

for any other purpose. Doing so could void the warranty.

- 7) If any of the safety devices are not operating correctly, stop the lift immediately and locate the problem. DO NOT OVERIDE ANY OF SAFETY FEATURES, doing so could result in serious injury or even death.
- 8) Any defect or damage that occurs due to mishandling or maintenance could void the warranty.
- 9) Make sure to drive the vehicle smoothly into and away from the lift and avoid sudden stops. The tires may be slippery, especially if wet.
- 10) Never go under the vehicle while operating the lift. If there is a possibility of the vehicle falling- immediately leave the area.
- 11) Do not operate the lift if the vehicle is tilted or leaning. This could cause the vehicle to fall.
- 12) This unit is not designed for outdoor installation or for car wash purposes. Doing so could void the warranty.

LIFTING A VEHICLE

- 1) Insure carriages are at the lowest position and the lifting arms are open to their full drive thru position.
- 2) Position the vehicle in the bay so that the vehicle's "center of gravity" is located between the two columns.

Insure that the highest point of the vehicle will make contact with the overhead shut-off cable..

Do not place vehicle in the bay backwards.

Do not attempt to lift the vehicle with only two arms, doing so could void the warranty.

Refer to vehicle manufacturers service manual, technical bulletins, "Vehicle Lifting Points Guide" or other publications to locate the recommended lifting points.

3) Position the arms and adapters so all four pads contact the vehicle simultaneously.

The vehicle should remain level during lifting and lowering.

- 4) Raise the lift until all four wheels are just off the ground. Test the stability by slightly rocking the vehicle. Check pads to ensure they are in secure contact with vehicle lifting points. If the vehicle seems unstable, lower the lift and readjust the arms. When vehicle is in a stable position raise it just above the desired working height.
- 5) Lower the vehicle until the safety latches on **<u>BOTH</u>** columns engage. At this point the vehicle should be stationed in a level position. If only one side engages, stop lowering the vehicle, raise it several inches, and try to engage both latches again. The vehicle is not secure until the lift is engaged in both latches.

Always lower the lift into the locks before going under the vehicle.

Always use recommended safety stands when removing or installing heavy components.

LOWERING A VEHICLE

- 1) Insure that the area under and around the vehicle is clear of personnel and tools.
- 2) Raise the vehicle until both locking latches are released.
- 3) Disengage the latches by pulling down and holding the lock release handle. This is a single point lock release and holding the handle down releases the locks in both columns.
- 4) Lower the vehicle by depressing the lowering (dump) valve handle.
- 5) Continue to lower the vehicle until the carriages stop against the base

plate. At this point the arm restraints will automatically disengage. Retract the extension arms and place the arms in the drive thru position. It is now safe to drive the vehicle out of the bay.

MAINTENANCE

To avoid personal injury permit only qualified personnel to perform maintenance on this equipment.

The following maintenance points are suggestions for a preventive maintenance program. The actual program should be tailored to the particular installation.

- Never operate the lift until the proper repair is completed. Using the lift with the defect not repaired may cause damage, serious accident or even death. Doing so could void the warranty.
- If lift stops short of full rise or chatters going up, check the fluid level and bleed both cylinders as explained in installation instructions.
- Only use parts or accessories that are authorized by Quality Lifts.

DAILY

- Keep lift components clean and dry.
- Check for loose or broken parts.
- Check hydraulic system for any fluid leaks.

WEEKLY

- Check arm support rubber footpads (Item 70 Page 16) for abrasions and deformations.
- Check synchronization cables and pulleys for excessive wear. Replace as required with genuine Quality Lifts parts.
- Check synchronization cable tension as described in installation instructions. Adjust if necessary.

MONTHLY

• Check the anchor bolts- torque them to 90 ft-lbs. Do not exceed 90 ft-lbs after initial installation. Doing so will slowly pull the anchors out of the concrete.

- Check overhead shutoff switch. While raising lift, trigger the shutoff cable. The power unit motor should stop when the cable is raised. *This is very important to keep from running a vehicle into the overhead beam.*
- Lubricate bearing surfaces- Use the supplied tub or any heavy viscous grease to lubricate the 4 inside corners (bearing surfaces) of both columns. This will help against unusual "wear and tear" on the carriage slide blocks and column surface.

SEMI-ANNUALLY

- Check power unit hydraulic fluid level per the installation instructions.
- Check carriage slide blocks for abrasions.

IF ANY PROBLEMS ARE ENCOUNTERED CONTACT YOUR LOCAL SERVICE REPRESNTATIVE OR THE MANUFACTURER FOR ASSISTANCE.

TROUBLE SHOOTING GUIDE <u>12000S</u>

TROUBLE	CAUSE	SOLUTION
Lift going up unlevel	 Synchronization cables out out of adjustment Lift is installed on unlevel floor 	 Adjust cables to the correct tension (See manual) Shim lift to level columns (Do not exceed ¹/₂")
Carriages not going up	 Leak in hydraulic system Overloading the lift Problem with pressure relief valve 	 Find and repair leak keep load under the rated capacity Clean or replace the valve
Carriages not going down	 Carriage still engaged in the lock Lowering valve clogged Vehicle not loaded (spotted) correctly Foreign object blocking the carriage 	 Raise lift up, push lift lowering valve, and lower Check lowering valve in power unit Check pickup points for that particular vehicle Remove the object
Locking latches do not engage	 Lock release shaft rusted. (Usually occurs on outside installations or wash bays) Lock release spring broken Lock release cables need adjustment 	 Remove covers, oil the mechanism. Operate locks to allow oil to penetrate Replace broken spring Adjust clamp at cable end
Lift chatters on the way up	1) Air in the cylinders	1) Bleed cylinders

Fluid Leak	 Defect in hydraulic hose Defect in fitting Defect in cylinder packing (seals) 	 Replace hydraulic hose Tighten fitting, and replace if necessary Repack seals or replace cylinder if necessary
Fluid is contaminated	1) Water or foreign substance	1) Replace hydraulic fluid
Slow lowering speed	 Plugged cylinder orifice Lowering valve (screen) clogged Wrong weight of fluid Pinch or restriction in hydraulic hoses Foreign object in carriage 	 Remove and clear orifice Remove and clean valve Replace with recommended fluid Clean and/or replace hydraulic hoses Remove foreign object
Footpads slipping from pickup point when raising lift	1) Column not plumb	1) Plumb columns
Arms dragging on floor (sagging)	 Lift out of plumb Unlevel floor Worn arm pins Worn arm or carriage holes Worn carriage slide blocks Bent arm (overloaded) 	 Plumb columns Replace floor or shim columns Replace arm pins Replace parts Replace slide blocks Replace arm and check damage to carriage

1) Oversized holes	1) Relocate lift using a new
	bit to drill holes
2) Concrete floor thickness	2) Tear out old concrete and
	 1) Oversized holes 2) Concrete floor thickness

	or PSI strength not sufficient 3) Anchors not torqued correctly	pour new pads for the lift3) Torque bolts to the correct spec
Abnormal noise from the power unit	 Overloading the lift Hydraulic fluid low 	 Keep load under the rated capacity. Check fluid level, fill and bleed cylinders
Motor will not work	 Defect in motor Fuse disconnected Defect in power button Overhead shut-off cable is activated Incoming power voltage is less than 220V that is needed 	 Contact service center Fix fuse Replace button Deactivate shut-off system Have licensed electrician check the wiring

If you do not feel comfortable or qualified with trying the "Solutions" contact an authorized service center immediately to perform the necessary procedures. Contact Quality Lifts if you need a recommendation for a service center.