

MODEL 7000 A TWO POST ASYMMETRICAL LIFT
INSTALLATION AND OWNERS MANUAL

9/94

IMPORTANT NOTICE REGARDING THE FLOOR:

THE FLOOR ON WHICH THE LIFT IS TO BE INSTALLED MUST BE 4 INCH MINIMUM THICKNESS CONCRETE, WITH A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI, AND REINFORCED WITH STEEL BAR.

FAILURE BY THE PURCHASER TO PROVIDE THE RECOMMENDED MOUNTING SURFACE COULD RESULT IN UNSATISFACTORY LIFT PERFORMANCE, PROPERTY DAMAGE, OR PERSONAL INJURY.

IMPORTANT NOTICE REGARDING INSTALLATION:

THE LIFT IS DESIGNED TO BE INSTALLED WITH THE POWER UNIT ON THE RIGHT HAND OR PASSENGER SIDE OF THE BAY. IF IT IS DESIRED TO INSTALL THE POWER UNIT LEG ON THE LEFT HAND OR DRIVER SIDE OF THE BAY, THE ARM LOCK SLIDER ON THE SHORT SWING ARM OF THE POWER UNIT LEG MUST BE SHORTENED BY 1-1/4".

WARNING: FAILURE TO MAKE THIS MODIFICATION WILL RESULT IN DAMAGE TO THE ARM LOCK MECHANISM, UNSATISFACTORY LIFT PERFORMANCE, AND POSSIBLE PROPERTY DAMAGE OR PERSONAL INJURY.

THIS LIFT REQUIRES A CERTAIN PROCEDURE DURING INSTALLATION TO REDUCE THE AMOUNT OF AIR TRAPPED IN THE CYLINDERS. FAILURE TO FOLLOW THE PROCEDURE WILL RESULT IN UNSATISFACTORY LIFT PERFORMANCE.

IMPORTANT NOTICE REGARDING CEILING HEIGHT:

THIS IS AN OVERHEAD TYPE LIFT WHICH REQUIRES A CEILING HEIGHT OF AT LEAST 12'- 0".

IMPORTANT:

READ THIS INSTALLATION MANUAL BEFORE INSTALLING THE LIFT.

READ THE ANCHOR BOLT INSTRUCTION PAGE BEFORE DRILLING AND INSTALLING THE ANCHOR BOLTS.

DO NOT RAISE A VEHICLE ON THE LIFT UNTIL THE LIFT HAS BEEN CORRECTLY INSTALLED AND ADJUSTED AS DESCRIBED IN THIS MANUAL.

DO NOT REMOVE A TRANSMISSION, SUSPENSION ASSEMBLY, OR OTHER HEAVY ITEM FROM THE FRONT OF A FRONT WHEEL DRIVE VEHICLE UNLESS THE VEHICLE IS ADEQUATELY SUPPORTED IN THE REAR.

MAINTENANCE, EVERY MONTH

1. Lubricate the four inside corners of the legs with heavy duty bearing grease.
2. Check the hydraulic fluid level. If necessary add oil cross referenced to Mobil DTE 25 or Texaco HD 46. These are petroleum based hydraulic oils, non foaming, non detergent, 10 weight. Fill to screw near top of tank. Do not overfill.
3. Check carriage latch syncing: Latches should click at the same time. Adjust cables if required. Instructions are in the Installation text.
4. Check anchor bolt tightness. If the anchor bolts are excessively loose, check more often.

OPERATING TIPS

1. Always set a vehicle on the latches before working under it.
2. SLOWLY lower vehicles onto the safety latches.
3. Keep the four inside corners of the legs lubricated with heavy duty bearing grease.
4. If the carriages get out of sync (latches do not click at the same time), readjust the cables as described in the Installation Instructions.
5. Check anchor bolt tightness every month.
6. Do not remove the transmission, suspension assemblies, or other heavy items from the front of front wheel drive vehicles without supporting the rear of the vehicle.

TOOLS FOR INSTALLATION

Concrete hammer drill with

3/4" bit
11/16" open end wrench
3/4" open end wrench
1-1/16" deep socket
1-1/8" socket or wrench
13/16" open end wrench

Level (18" minimum length)
Vise grips
Tape measure
Funnel
Hoist or forklift
Two 12' step ladders

3 gallons of petroleum based hydraulic oil, non foaming, non detergent, 10 weight, such as Mobil DTE 25 or Texaco HD 46.

INSTALLATION

IMPORTANT NOTICE REGARDING CEILING HEIGHT:

THIS IS AN OVERHEAD TYPE LIFT WHICH REQUIRES A CEILING HEIGHT OF 12'-0".

IMPORTANT NOTICE REGARDING INSTALLATION:

FOLLOW THE RECOMMENDED PROCEDURE FOR HYDRAULIC SYSTEM BLEEDING TO AVOID UNSATISFACTORY LIFT PERFORMANCE.

1. Unpack the lift. Remove the swing arms, bolt box, power unit box, overhead beam, and uprights. Save all packing bolts.
2. Remove the 1/2" bolts which hold the two legs together. Remove the top leg.
3. Refer to Figure 1, 7000 Two Post Asym. Lift Assembly, to see how the lift is assembled. Note that there is a mainside leg and upright, an offside leg and upright, and an upright ring weldment to guide the overhead switch limit cable, and a system of low and high pressure hoses connecting the cylinders and the power unit.
4. Refer to Figure 2, 7000 Two Post Lift Asym. Placement, to determine where to place the legs in the service bay. The mainside leg holds the power unit. The mainside leg with its power unit is best located on the right hand or passenger side of the lift. It could be placed on the left hand or driver side, but the power unit would be in the way of under-hood service.
5. Position the two legs on the floor on their backs. Refer to Figure 3, Leg Assembly. Attach the mainside upright to the mainside leg using six 1/2 x 2-1/2" grade 5 bolts. See also Step 6 below. The mainside leg has a bracket on the side for mounting the power unit. The mainside upright has additional brackets on its post for hose placement.
6. At the right rear of the top of the mainside leg, above the power unit mounting bracket, attach the upright limit cable ring weldment using the rear 1/2" bolt.
7. Refer to Figure 3, Leg Assembly. Attach the offside upright to the top of the offside leg using six 1/2 x 2-1/2" bolts.
8. Remove the port plugs from the two cylinders. When attaching hydraulic fitting with pipe threads to the cylinders use

teflon tape. DO NOT START THE TAPE CLOSER THAN 1/8" TO THE END OF THE PIPE FITTING. This will prevent pieces of tape from contaminating the system. Refer to Figure 3, Leg Assemblies. Attach a male pipe thread to male JIC 90 elbow to the nipple at the rod end of both cylinders. The fitting should face away from the rod end. To one cylinder, attach a male pipe thread to male JIC branch tee to the top opening. The openings should be perpendicular to the mounting holes in the cylinder end. This is the mainside cylinder.

9. Attach a male pipe thread to male JIC 90 elbow to the top opening of the other cylinder. The opening should be perpendicular to the mounting holes in the cylinder end and face away from the nipple at the rod end. This is the offside cylinder.
10. Mount the mainside and offside cylinders in their respective leg assemblies. Refer to Figure 3. The fittings at the rod end of the cylinders should be placed inside the legs. At the top, the cylinder is mounted using a 1/2 x 4-1/2" Grade 8 bolt with nut. Do not extend the cylinder rams for the lower cylinder mounting at this time.
11. Lay out and mark the floor for the leg placement locations. Stand up and place the two legs in the correct locations.
12. Drill the six anchor bolt holes for the MAINSIDE LEG ONLY. It will be necessary to raise the carriage about 24 inches. SEE THE CONCRETE ANCHOR BOLT INSTRUCTION PAGE FOR DRILLING AND INSTALLATION INFORMATION. Install the anchor bolts but do not tighten the nuts.
13. The mainside leg must be checked for vertical alignment both side to side and front to rear. Use a level to check this. Shim the legs as necessary to level the legs. Shim next to and on both sides of the anchor bolts. Tighten the anchor bolt nuts.

IMPORTANT: DO NOT USE AN IMPACT WRENCH TO TIGHTEN ANCHOR NUTS.

Re-check the leg and make any necessary adjustments. See the concrete anchor bolt instruction page for tightening information.

IMPORTANT: The legs must be shimmed so that the bases are adequately supported. If more than 1/2" of shimming is required, do not use the small shims provided by the factory. Fabricate larger shims from steel flat, 1/4" or 1/2" thick by 2" or more wide.

14. Raise the overhead beam and attach it to the uprights using 1/2 x 2-1/2" grade 5 bolts.

15. Check the alignment and plumbness of the entire structure. Level the offside leg in both the side to side and front to rear directions. The base of the leg may vary slightly from the measured dimension, but it is more important that the leg be perpendicular and parallel with the other leg.
16. Drill the anchor bolt holes for the offside leg. It will be necessary to raise the offside carriage 24". Install the anchor bolts and shim the base as required. Tighten the nuts and recheck the plumbness of the leg. Make any necessary adjustments. DO NOT USE AN IMPACT WRENCH ON THE ANCHOR BOLTS.
17. The two carriages should be positioned at the same height above the bases. If one carriage is low, it should be raised to the height of the other. Both carriages should be resting on the same safety latch tooth in each leg. Measure the distance from the leg base to the bottom of each carriage. The two measurements should be within 3/8" of each other. If one carriage is low, raise it to the safety latch tooth which makes the two carriage heights approximately the same.
18. Refer to Figure 4, Two Post Cable Installation. Assemble a 3/4" NF nylon insert nut with a SAE washer onto one end of each cable. Start at the left rear hole at the top of the mainside carriage. Thread the cable up thru the hole in the carriage top, up to the overhead pulley, across to the other overhead pulley on the offside, down thru the hole in the leg top, down thru the hole in the right rear of the offside carriage top, around the pulley in the leg bottom, and up to the right front hole of the carriage top. Secure the cable end with a 3/4" NF nylon insert nut and SAE washer. Do not tighten the cable at this time.
19. Start at the left rear hole of the offside carriage and run the second cable in the same manner. Secure the cable end with a 3/4" NF nylon insert nut and a SAE washer. Do not tighten the cable at this time.
20. The carriages should be resting on the same safety rack tooth and the cables should be slack. The safety latch pull rods will not pull down, indicating that the weight of each carriage is on its safety latch. Measure the height above the base plate for each carriage. The measurements should be within 3/8" of each other. Make a note of the two measurements.

IMPORTANT: The carriages must remain at the same height while the cross cables are being tightened. Overtightening of one cable could raise the carriage in the opposite leg and cause the carriage safety latches to be out of sync.

Take out the slack, but do not tighten, both cables by turning down the nuts on the top of each carriage top. Use vise grips to hold the cable end while tightening the nut. Do not damage the threads with the vice grips.

22. Alternately tighten the cable nuts at both carriages until the cables are tightened. Correct tension in the cables is indicated by approximately 1/4" deflection on the cable in the leg when pulled at its midpoint. Measure the carriage heights or check the safety latch pull rod for the carriage weight to verify that neither carriage has been raised. If a carriage has been raised more than 1/8", loosen the cables and repeat the procedure.
23. Pull each cylinder rod down and insert the threaded end into the mounting holes at the carriage base. There is a snap ring on each rod just past the threaded end. Attach a 3/4 NF nut to the threaded rod and tighten until the rod turns. DO NOT HOLD THE ROD WITH PLIERS, CHANNEL LOCKS, ETC. CYLINDER LEAKS CAUSED BY DAMAGED FINISH ON THE RODS ARE NOT COVERED BY WARRANTY. Hold the 3/4 nut with a wrench and tighten a 3/4 NF jam nut against it. Slide the carriages back down against the base.
24. Locate the power unit mount bracket on the side of the main-side leg. Insert the 5/16 x 1" bolts to face the outside and secure with 5/16 plain nuts. Attach the power unit to the bolts and secure with 5/16 nylon insert nuts.
25. Refer to Figure 5, Limit Cable Installation. Strip 4" from the end of the plastic coated 1/16" cable. Attach the cable to the ring on the offside upright weldment using a metal squeeze clamp. Thread the cable thru the mainside upright ring, down to the upright ring weldment, and down to the power unit. On top of the conduit box of the power unit is the pull rod for the cable. Cut the cable 4" longer than the pull rod location, strip the cable end, and attach with a threaded cable clamp. The cable should not have any slack, but it should not hold the plunger off the limit switch inside the conduit box. Check and adjust if necessary. Put a dab of grease on the rings where the cable rubs the ring.
26. Refer to Figure 6, Hose Installation. Attach a 9/16 O-ring to 3/8 male JIC 90 elbow to the pressure port of the power unit and attach a 3/8 male pipe to 3/8 male JIC 90 elbow to the return port. On the Fenner unit, the ports are on the left side. On the Barnes, they are on the front and left sides. The two low pressure hoses have push in fittings. The longer of the two low pressure hoses is run between the fittings on the cylinder tops and the hose sits on top of the overhead beam. The second low pressure hose is run from the mainside cylinder top down thru the upright tube, out the

hole in the side of the upright, down thru the guides on the leg to the return port on the power unit.

27. Mount the branch tee bulkhead fitting and swivel nut 45 elbow to the mainside upright as shown in Figure 6. The short high pressure hose runs from the bulkhead fitting down to the cylinder, behind the cylinder down to the mainside cylinder port. Attach a swivel nut 90 elbow to one end of the long high pressure hose. Drop this end inside the mainside upright down to the bulkhead fitting as shown in Fig 6. This long high pressure hose runs from the bulkhead fitting, up thru the mainside upright, thru the guides on the top of the overhead beam, down thru the offside upright, and down the left side of the offside cylinder to the port. Tie-wrap these hoses to the cylinders as shown in Figure 6. The medium length high pressure hose runs from the swivel nut 45 elbow on the bulkhead fitting down thru the guides on the leg to the high pressure port on the power unit.
28. If the Power Unit is a Fenner, remove the fill level screw near the top of the tank. Remove the breather and insert a funnel in the tank and fill with petroleum base hydraulic oil, non foaming non detergent, such as Mobil DTE 25 or Texaco Hd 46. Replace the screw and tank breather.

If the Power Unit is a J. S. Barnes, attach the elbow fitting to tank vent port on the right side of the unit. Remove the fill level screw near the top of the tank. Insert a funnel in the elbow fitting and fill the tank to the screw hole with petroleum base hydraulic oil, non foaming, non detergent, such as Mobil DTE 25 or Texaco HD 46. Replace the screw. Attach the breather to the elbow fitting.
29. Establish electrical hook-up to 220V single phase. See Figure 7, 7000 Two Post Electrical Wiring Diagram.
30. Install the swing arms with the swing arm pins. The long arms go to the front, or drive in side of the lift. Lubricate the swivel pad screws and install them onto the arms.
31. Refer to Figure 8, 7000 Two Post Arm Lock Installation. Attach the arm lock parts as shown.
32. Lubricate the four inside corners of both legs with heavy duty bearing grease.
33. DO NOT ATTEMPT TO RAISE A VEHICLE AT THIS TIME. THE HYDRAULIC SYSTEM MUST BE BLED TO REMOVE ALL AIR. Lower the lift to the ground. To lower, first raise the carriages just enough to release the latches using the push button switch on the power unit. Pull out the latch pull rods under each carriage, lower the lift using the lowering control lever on the power unit.

34. Loosen the high pressure hose connections at both cylinders. Run the power unit until fluid appears at the mainside cylinder port. Tighten that hose connection. Run the power unit until fluid appears at the offside cylinder port and there is no more air. Tighten that hose connection.

DO NOT ATTEMPT TO RAISE A VEHICLE AT THIS TIME.

Raise the lift to full height. Lower the lift onto the safety latches. Raise the carriages, pull out both latch pull rods, and lower the lift to the ground. If there are any problems, check the Troubleshooting section of the manual.

35. DO NOT ATTEMPT TO RAISE A VEHICLE AT THIS TIME. Raise the lift to the top of its travel and lower it to the floor three times to remove air from the hydraulic system.

IMPORTANT: DO NOT ATTEMPT TO RAISE A VEHICLE UNTIL;

1. The cables are adjusted correctly. The latches click together as the lift is raised. Both safety latches lock when the carriages are lowered onto the locks and the pull rods cannot be pulled out.
2. The legs have been leveled and the anchor bolts have been tightened.
3. The leg corners have been greased.
4. The hydraulic system has been bled and the lift has been cycled three times to remove air.

36. THE FIRST TIME A VEHICLE IS PLACED ON THE LIFT, RAISE IT NO HIGHER THAN THREE FEET. Lower the vehicle onto the latches.

IMPORTANT: WHEN LOWERING VEHICLES ONTO THE SAFETY LATCHES, SLOWLY PUSH THE LEVER ON THE POWER UNIT TO ALLOW A CONTROLLED DESCENT TO THE LATCH STOP. A FAST DROP ONTO THE LATCHES COULD CAUSE THE VEHICLE TO BOUNCE.

Lower the vehicle to the floor. The lift should move up and down smoothly. If there are any problems, check the Troubleshooting section of this manual. Correct any problems before continuing.

37. Raise the vehicle to full height and lower the carriages onto the safety latches. Lower the vehicle to the floor. If there are any problems, check the Troubleshooting section of this manual.
38. After cycling the lift a few times with a vehicle on it, recheck the tightness of the anchor bolt nuts. Check the nuts for tightness every week for the first month, and every month afterwards.

TROUBLESHOOTING

1. PUMP MOTOR WILL NOT RUN.

1. Check electrical supply breaker.
2. Check for activation of the travel limit switch by a tall vehicle. Normally, lowering a vehicle onto the safety latches will deactivate the limiting mechanism. However, if the plunger in the switchbox has lifted off the limit switch and the carriages are on the safety latches, the pin on the limit switch must be manually held down to activate the circuit.
3. Check adjustment of overhead cable and microswitch in cable control box. If the cable holds plunger off of the microswitch, the circuit is broken.
4. Check microswitch in motor control box.

2. THE VEHICLE DOES NOT MOVE UP AND DOWN SMOOTHLY.

IMPORTANT: IF A VEHICLE DOES NOT MOVE UP AND DOWN SMOOTHLY, DO NOT CONTINUE TO RAISE IT. LOWER THE VEHICLE AND CORRECT THE PROBLEM.

1. Adjust vehicle placement on the lift for more equal weight distribution.
2. Check the four inside corners of the two legs for roughness. Any rust or burrs must be removed with 120 grit emery cloth. The surfaces must be smooth.
3. Lubricate the leg corners with heavy duty bearing grease.
4. Check the legs for vertical alignment both side to side and front to rear. Use a level to check this. Shim the legs as necessary to level the legs. Use steel 3/4" washers or 2x1x1/16" or 1/8" steel flat strips. Shim next to and on both sides of the anchor bolts.

IMPORTANT: The legs must be shimmed so that the bases of the legs are adequately supported. If more than 1/2" of shimming is required, do not use the shims provided by the factory. Fabricate larger shims from steel flat which is 1/4" to 1/2" thick by 2" or more wide.

3. THE LIFT WILL NOT PICK UP ITS RATED LOAD.

1. Adjust vehicle placement on the lift for more equal weight distribution.
2. Check the voltage of the electrical supply with the unit running under load. The voltage should be at least 208 volts. Voltage less than this will not allow the motor to develop full power.
3. The relief valve in the power unit is preset at the pump factory and should not be adjusted. Call the lift manufacturer for assistance.

4. THE LIFT WILL NOT LOWER

A. SAFETY LATCH PULL RODS

The lift will move down approximately 1", then it stops. Check the safety latch pull rods. If one of the rods has moved back up, that carriage is resting on its safety latch.

Explanation: The pull rod is out of adjustment and is rubbing on the leg. When the carriage is lowered, the rod is pulled in, engaging the safety latch. Adjust the rod to clear the leg. Push down on the first bend of the rod just inside the leg. Bend the rod slightly to allow it to move freely between the leg and the carriage.

B. THE LIFT WILL NOT LOWER.

CARRIAGES OUT OF SYNC.

The vehicle is at the top of the lift's travel and one safety latch will not disengage to allow the lift to lower.

Explanation: The carriages are out of sync. The carriage which is "low" cannot be raised enough to clear the latch rack so that it can be disengaged. This is confirmed by the inability to pull down the latch rod on that carriage. Also, the carriages do not "click" at the same time as the lift is raised.

To lower lift:

1. Raise the lift to full height.
2. Push IN both safety latch pull rods to engage latches.
3. Use a hydraulic jack and a length of pipe to raise the low carriage enough to disengage the safety

latch. Pull the latch rod on that carriage only.

4. Remove the jack and pipe.
5. Pull the latch rod on the other carriage to disengage the latch.
6. Lower the lift and remove the vehicle.
7. Readjust the carriage chain nuts and cables as described in this manual.

5. CYLINDER LEAKS DOWN.

There may be some contamination in the check valve which prevents the valve from seating. Hold open the lowering valve while energizing the motor switch. Allow the motor to run for 30 seconds to flush the valve. Repeat 3 or 4 times. If the cylinder continues to leak down, the valve may be faulty. Contact the manufacturer.

6. POWER UNIT SWITCH WILL NOT RELEASE.

Contact the manufacturer for a replacement switch. Also, install a 20 amp, 220 volt twist lock plug in the electrical line just before the power unit electrical box. If the switch should ever stick in the closed position, the plug can be opened.

CYLINDER REPLACEMENT:

1. Raise the lift carriages a few inches. Place a 2" spacer under each carriage. Lower carriages onto the spacers.
2. DO NOT HOLD THE CYLINDER ROD WITH ANYTHING WHICH WILL DAMAGE THE FINISH. CYLINDER LEAKS CAUSED BE DAMAGED RODS ARE NOT COVERED BY WARRANTY. Hold the 3/4 full nut and remove the jam nut. Remove the full nut.
3. Remove the pressure hose from the bottom fitting. Remove the low pressure hose from the top fitting.
4. Pull the rod from the carriage bottom plate. Push the rod into the cylinder to prevent damage to the rod during handling.
5. Remove the cylinder from the upright by taking out the 1/2 x 4-1/2 grade 8 bolt at the top of the cylinder.
6. Reverse procedure to replace the cylinder.
7. Bleed hydraulic system as described in Installation steps 32 and 33.

7000A TWO POST ASYMMETRIC LIFT ASSEMBLY PARTS LIST (2/94)

ITEM	PART NO.	NAME/DESCRIPTION	RQD.
1	994002	Bolt Box	1
2	056101	Mainside Leg Weldment	1
3	056201	Offside Leg Weldment	1
4	056500	Carriage Assembly	2
5	056501	Carriage Wldmnt	2
6	070525	Safety Latch	2
7	070528	Wipeout	2
8	070530	Pivot, latch	2
9	991077	Cotter pin, 3/32 x 1-1/2	2
10	913682	Bolt, latch, 3/4 x 2 NC	2
11	913600	Nut, latch, 3/4 nyl insert, NC	2
12	913605	Washer, latch, 3/4 flat	4
13	912005	Washer, wipeout	4
14	090541	Pull rod	2
15	991071	Spring, latch	2
16	991070	Cap nut, 3/16	2
17	056601	Short Swing Arm, Right Hand	1
18	056602	Short Swing Arm, Left Hand	1
19	056603	Long Swing Arm	2
20	056801	Overhead Wldmnt	1
21	056802	Mainside Upright Wldmnt	1
22	056803	Offside Upright Wldmnt	1
23	070606	Pad Wldmnt	4
24	991030	1-3/8 Snap Ring	6
25	995020	4" Sheave	4
26	995030	6" Sheave	2
27	991211	Bushing, sheaves	6
28	992317	Cylinder, 2 x 67-1/2	2
29	995120	Rub Block	16
30	992016	Power Unit, AB-1134-A, RV16	1
31	912701	1/2 x 2-1/2 NC Bolt	18
32	912601	1/2 NC Nut	18
33	912605	1/2 Flat Washer	36
34	912631	1/2 NC Bolt x 3/4, Carriage Stop	4

BOLT BOX PARTS LIST, PN 994002 (10/93)

1	991009	Manual	1
2	992625	Cable, 3/8 dia x 32'-10"	2
3	992609	Cable, Limit switch, 1/16	1
4	991084	Clamp, 1/16 cable, Alum Squeeze	1
5	991244	Clamp, 1/8 Cable, Threaded	1
6	995438	Swing Arm Pin, 8"	4
7	056804	Upright Limit Cable Ring Wldmnt	1
8	991082	Tie Wrap	2
9	911701	5/16 NC nut, power unit mnting	4
10	911703	5/16 Nyl ins nut, NC "	4

BOLT BOX PARTS LIST, CONT.

ITEM	PART NO.	NAME/DESCRIPTION	RQD.
11	911741	5/16 x 1 NC bolt, power unit mnt	4
12	912701	1/2 x 2-1/2 NC Bolt, Assy	8
13	912601	1/2 NC Nut, 8 Assy, 2 Cyl mnt	10
14	912605	1/2 Flat Washer	16
15	913604	3/4 Nyl Insert Nut NF, cable mnt	4
16	913606	3/4 SAE Washer, "	4
17	913828	3/4 x 5-1/2 anchor bolt	12
18	913602	3/4 NF Nut, Cyl mnt	2
19	913611	3/4 NF Jam Nut, Cyl mnt	2
20	912781	1/2 x 4-1/2 NC Bolt, Gr 8, "	2
	037760	Arm Lock Assy, Asym	4
21	037703	Long Plunger	4
22	070705	Short Slider	2
23	070706	Short Bumper Slider	2
24	991216	Spring, 13/16 dia x 3	4
25	991209	E-Clip	8
26	991218	5/8 SAE Washer	4
27	991259	Rubber Bumper	2
27	992134	3/8 Hose x 48, High Pressure	1
28	992135	3/8 Hose x 64, " "	1
29	992136	3/8 Hose x 200, " "	1
30	912137	3/8 Hose x 86, " "	1
31	992138	3/8 Hose x 101, " "	1
32	992463	3/8 JIC Bulkhead branch Tee	1
33	992454	3/8 Bulkhead Nut	1
34	992410	9/16 O-ring to 3/8 JIC 90 Elbow	1
35	992402	3/8 Male JIC to 3/8 MNPT, 90	4
36	992419	3/8 JIC Branch Tee to 3/8 MNPT	1
37	992426	3/8 JIC Swivel Nut 90 Elbow	1
38	992464	3/8 JIC Swivel Nut 45 Elbow	1
39	992426	3/8 JIC Swivel Nut 90 Elbow	1
40	991127	Shims	16

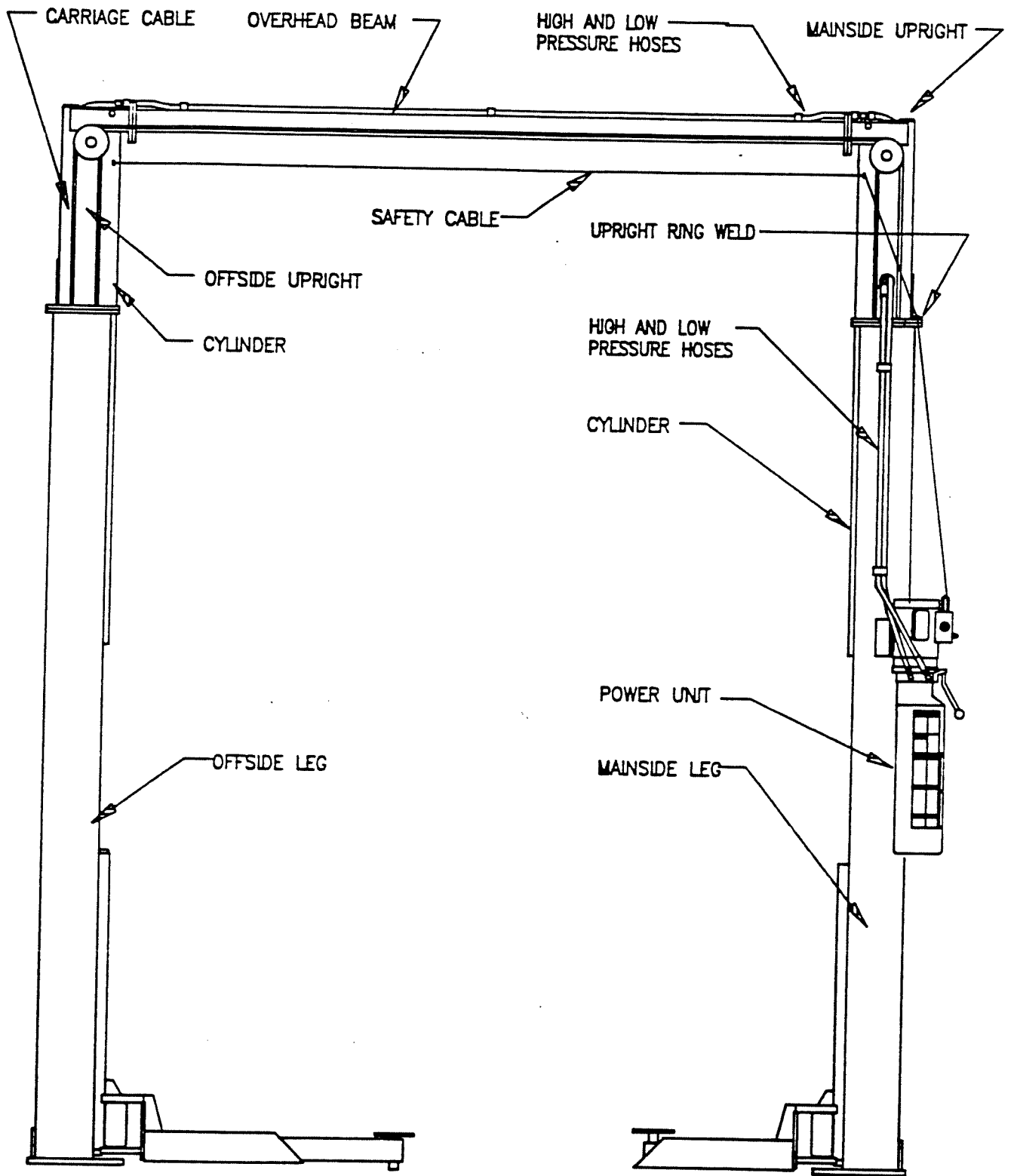
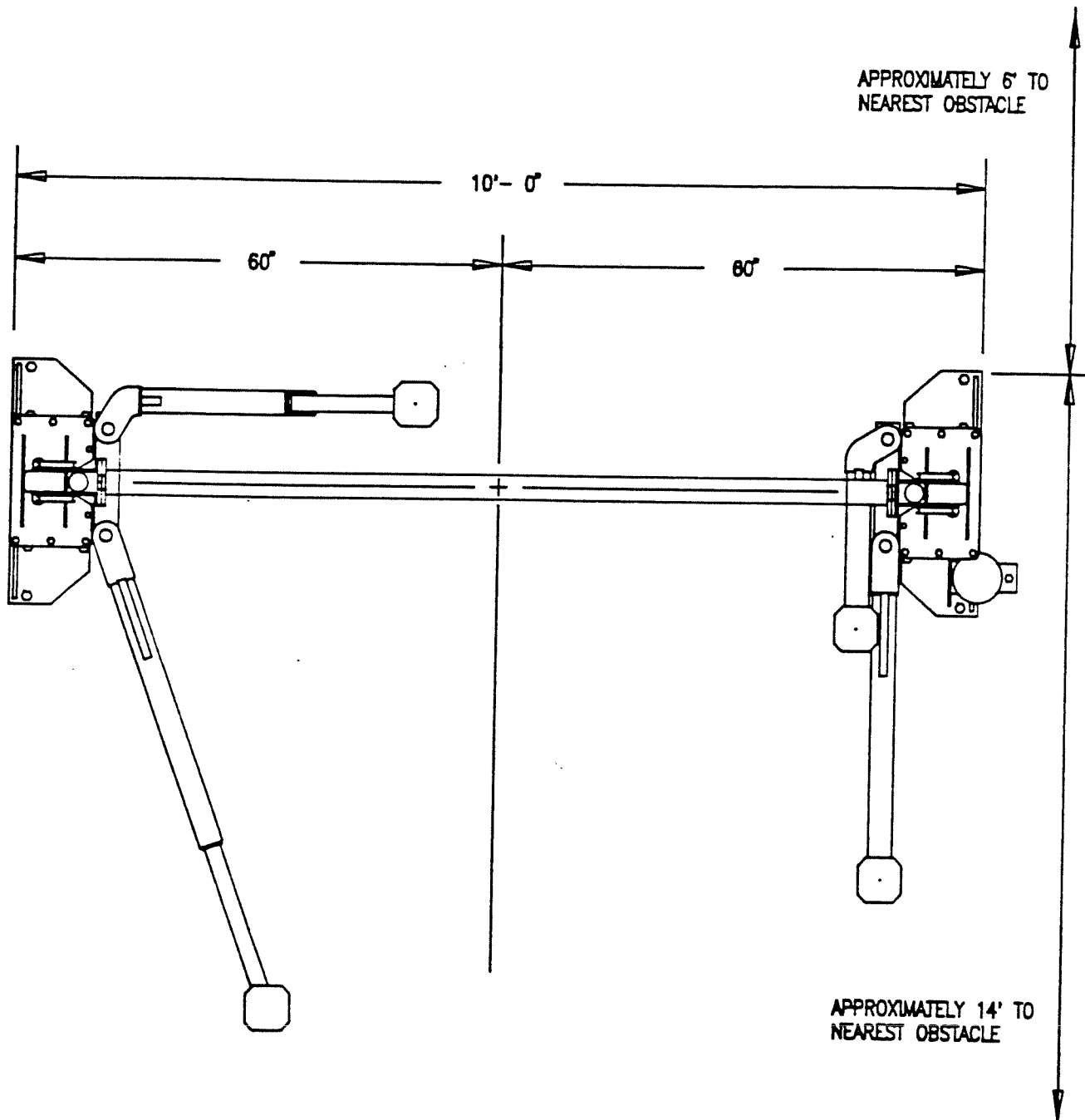


FIGURE #1

7000 TWO POST ASYMMETRICAL LIFT ASSEMBLY



IMPORTANT NOTICE:

THE FLOOR MUST BE 4" MINIMUM THICKNESS CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSL, REINFORCED WITH STEEL BAR PER COMMERCIAL PRACTICE.

FIGURE #2

7000 TWO POST ASYMMETRICAL LIFT PLACEMENT

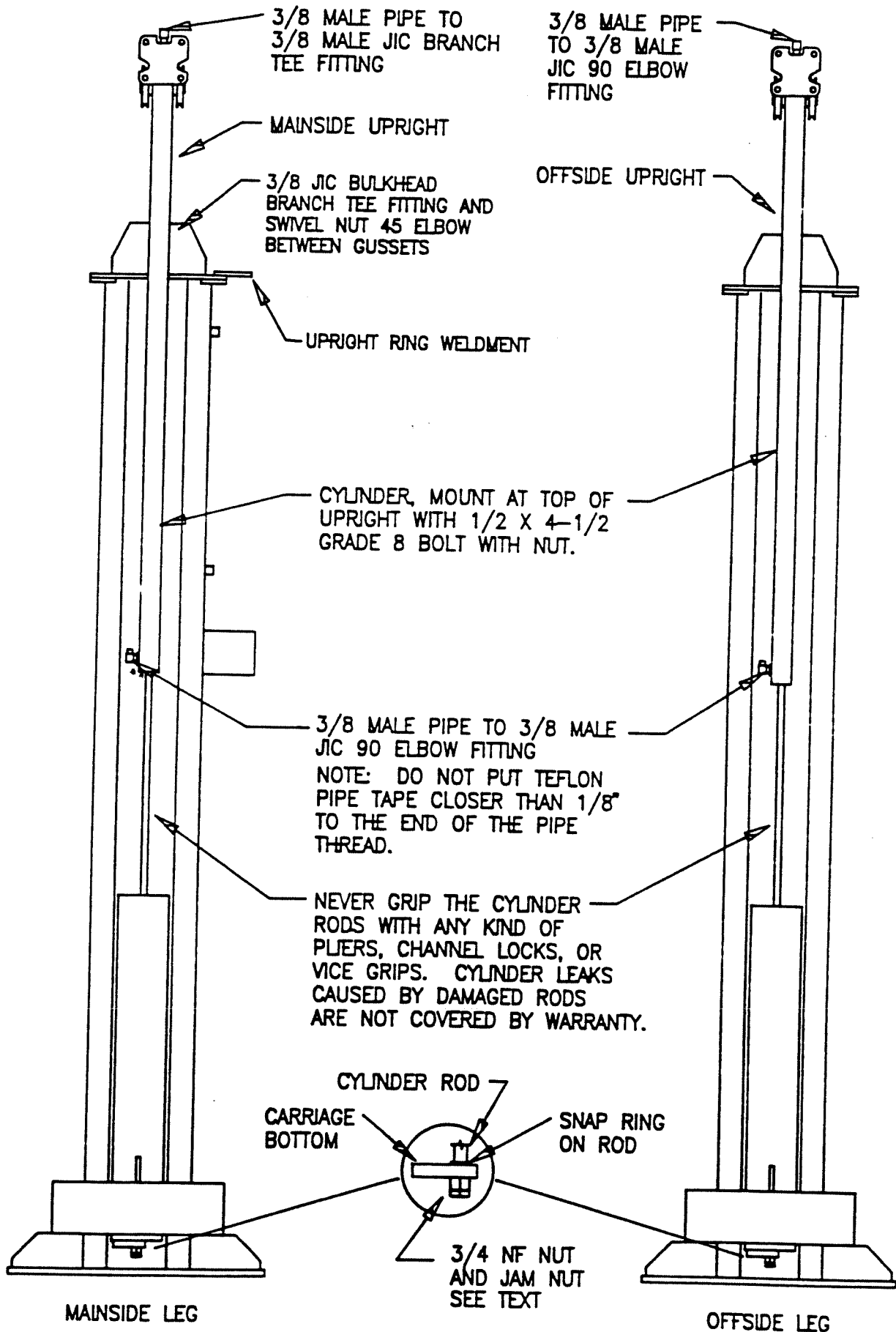


FIGURE #3

7000 TWO POST ASYMMETRIC LIFT LEG ASSEMBLY

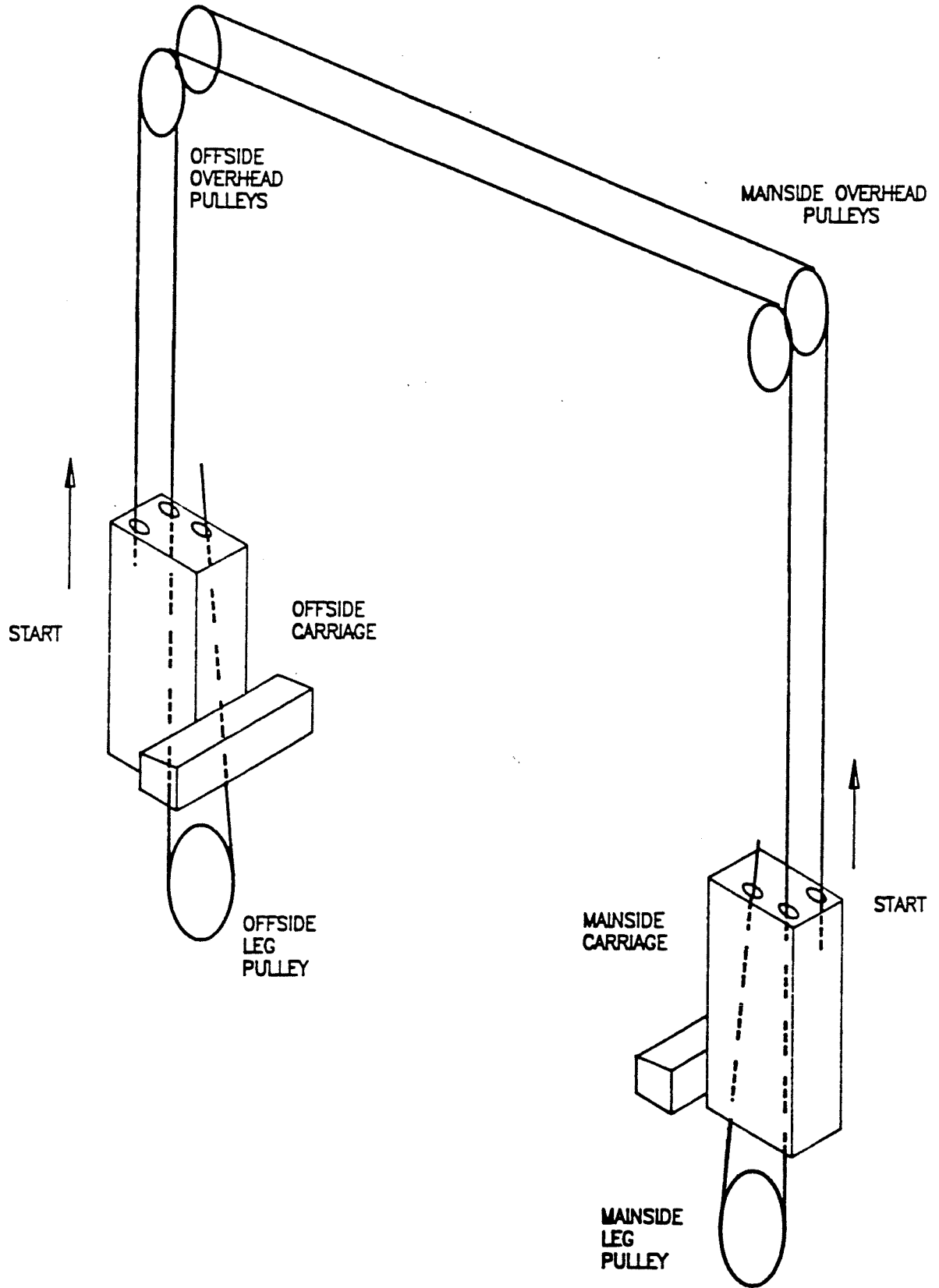


FIGURE #4

7000 TWO POST ASYMMETRICAL LIFT CABLE INSTALLATION

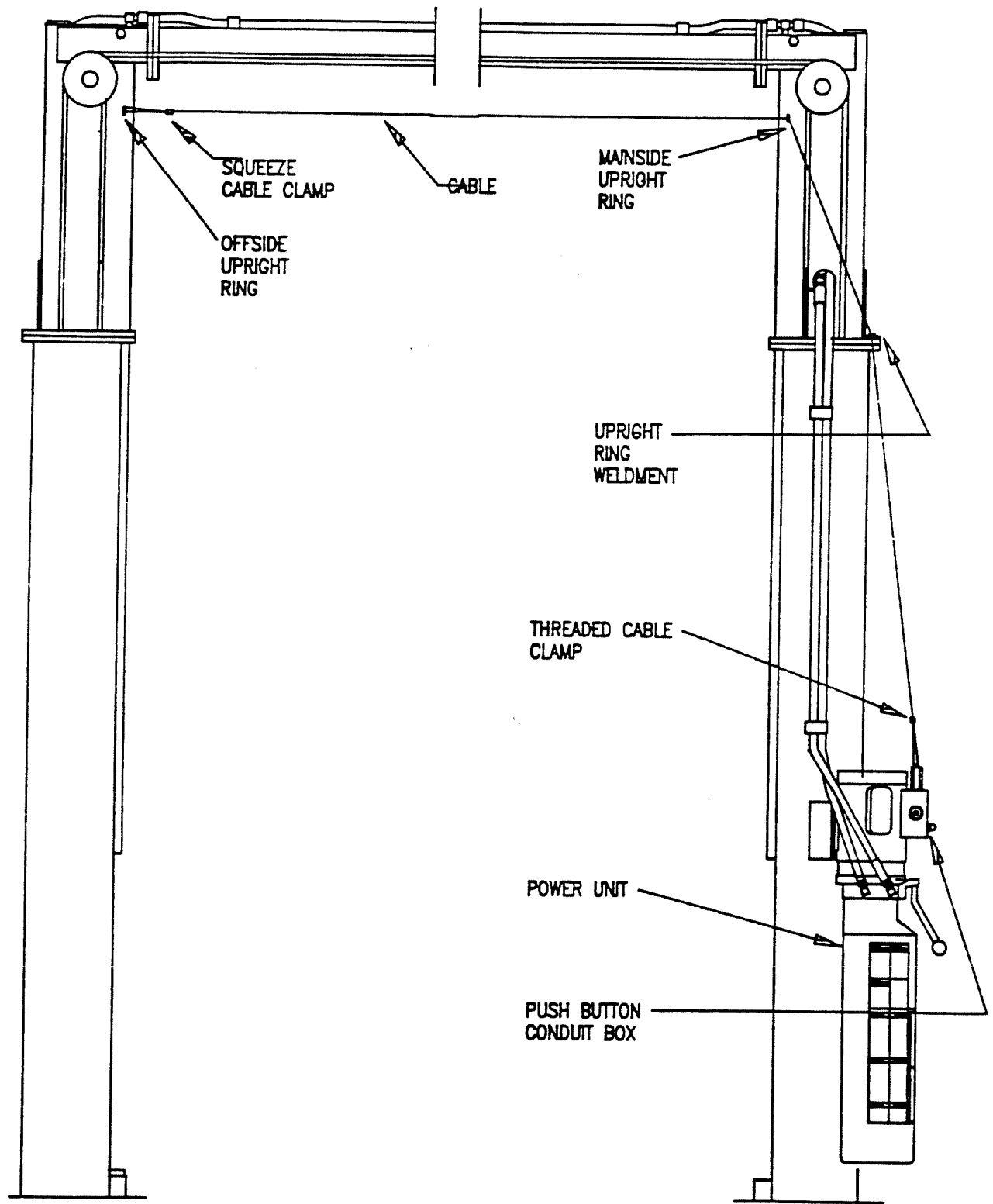


FIGURE #5

7000 TWO POST ASYMMETRICAL LIFT LIMIT CABLE INSTALLATION

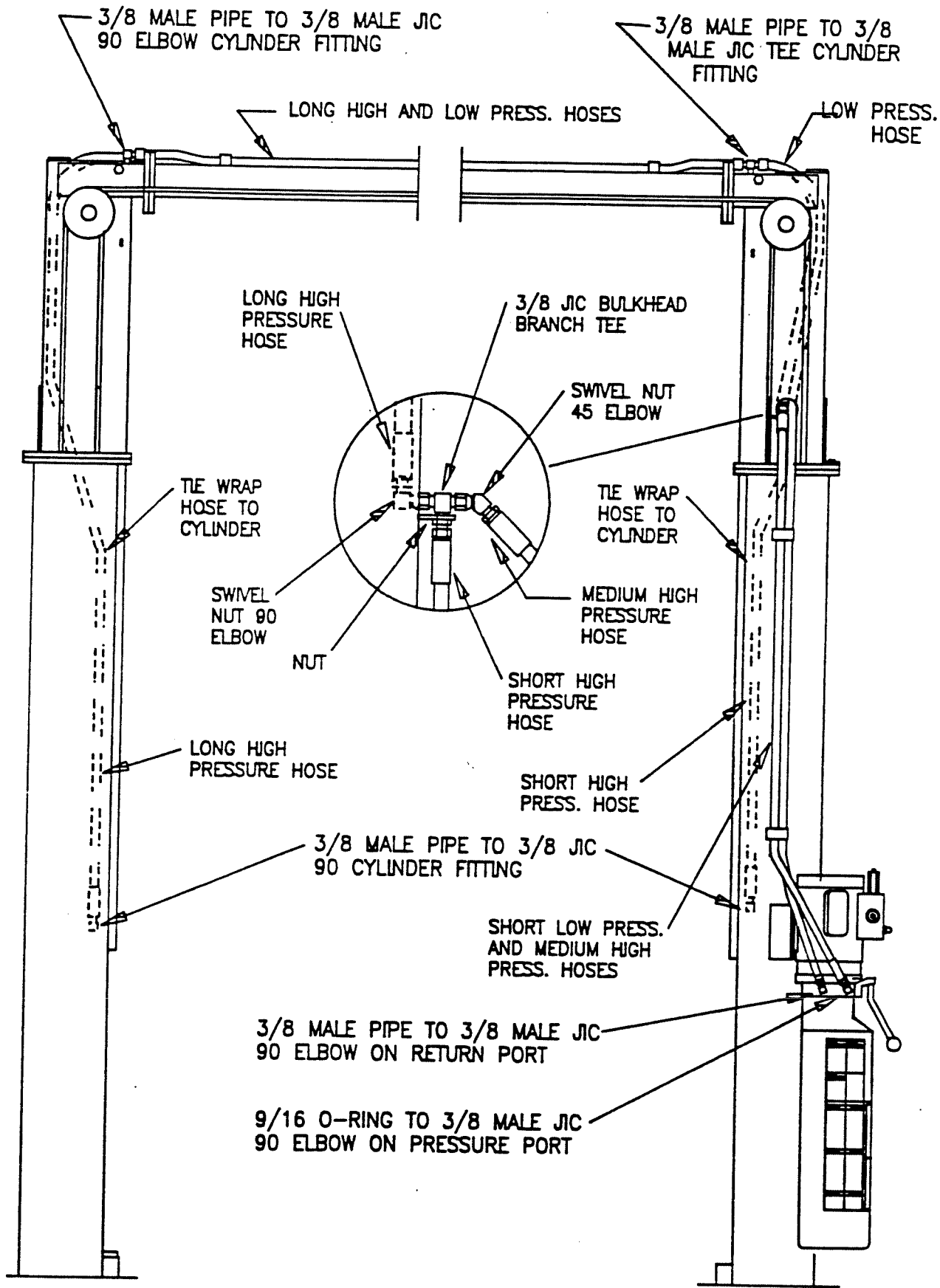
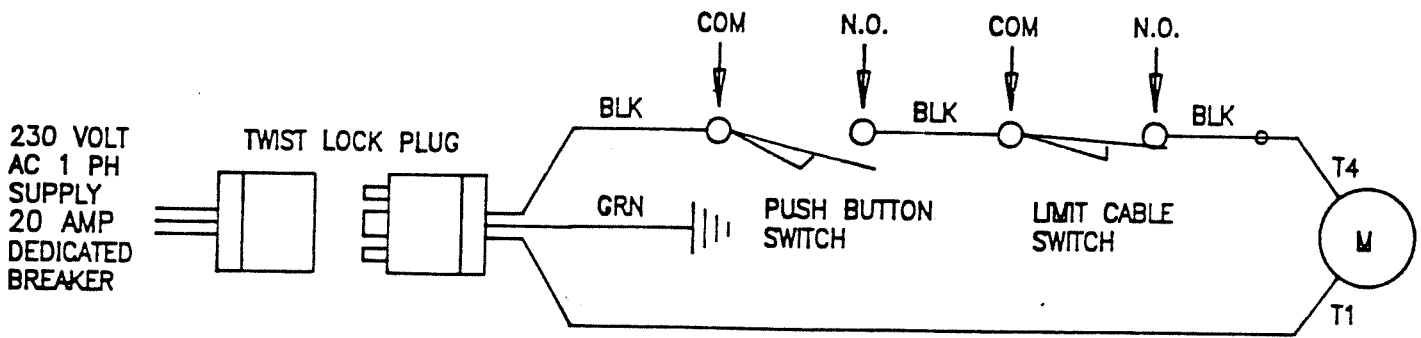


FIGURE #6

7000 TWO POST ASYMMETRICAL LIFT HOSE INSTALLATION



FENNER POWER UNIT ELECTRIC CIRCUIT DIAGRAM

FIGURE #7

7000 TWO POST ASYMMETRICAL LIFT ELECTRICAL WIRING DIAGRAM

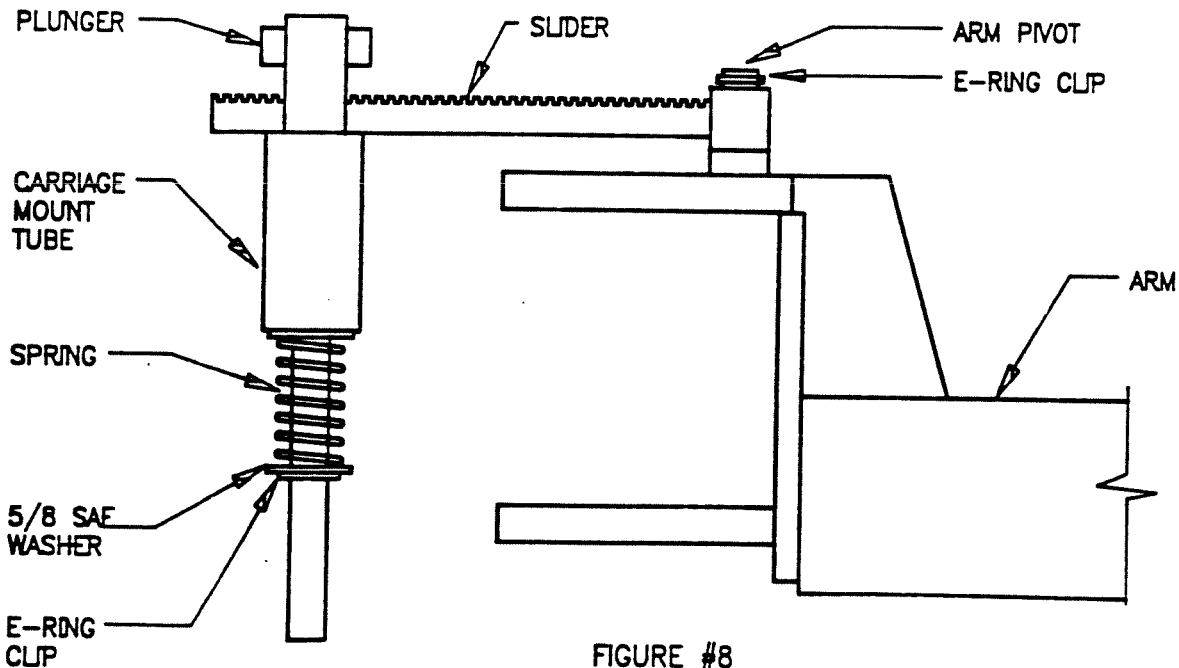
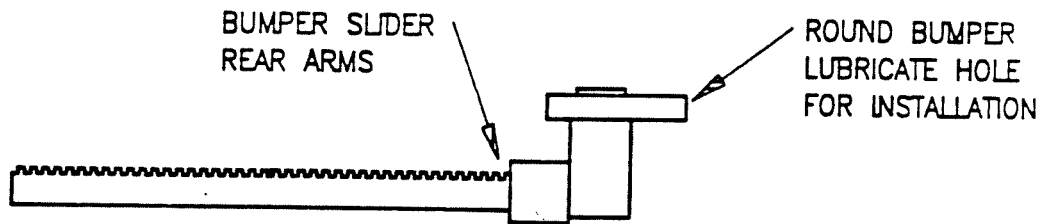


FIGURE #8

7000 TWO POST ASYMMETRICAL LIFT ARM LOCK ASSEMBLY

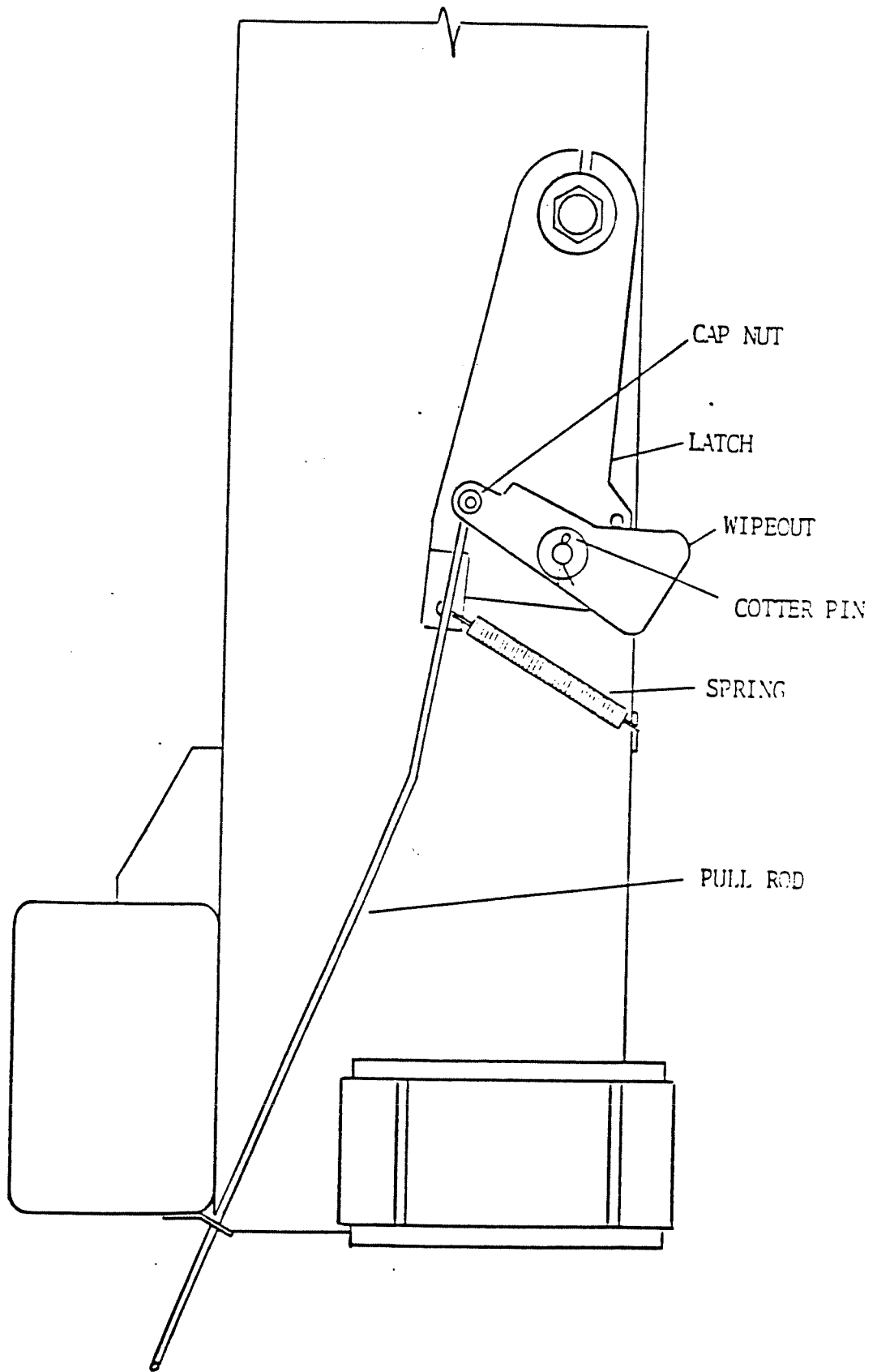


FIGURE #9

7000 TWO POST ASYMMETRICAL LIFT LATCH ASSEMBLY