

Model: LSS2P9CF

9,000 LB (4091KG) TWO POST LIFT

Installation / Operation & Service Parts Manual

**READ the Manual Thoroughly Before Installing,
Operating, Servicing, or Maintaining the Lift
SAVE this MANUAL and ALL INSTRUCTIONS**

**TOTAL AUTOMOTIVE LIFTING SOLUTIONS INC.
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Tel: 905-847-1198 Fax: 905-891-114**

**Part Number: M-LSS-209-BIF
Issue 002 Effective: Feb., 2017**

Lift Purchase Buyers Agreement

Warranty

Each product comes with a two (2) year parts warranty with five (5) years warranty on the structure. The parts warranty is limited to defects in workmanship and material. The warranty does not cover misuse, abuse, overloading, lack of maintenance, and inappropriate use or “normal wear and tear”. Warranty parts must be returned to manufacturer for inspection to qualify for warranty. Shipping costs are the owner’s responsibility.

Freight Damage

Each lifting product is carefully inspected before being loaded by our shipping department. Any damage to the product must be noted on the shipping companies “bill of lading” and signed by the driver. It is the owner’s responsibility to advise manufacturer within **48 business hours**, of any shipping damage.

Installation

At the purchase request, delivery and installation can be arranged by a professional contractor. It is the owner’s responsibility to approve the completion of the work done and that the product is working properly. If there is a dispute with the work being done the owner must advise our office within **24 business hours**.

Lift Maintenance

Every lifting product will require ongoing adjustment and maintenance. It is normal that the lifting cables will require adjustment to ensure that the lift operates level. Periodic adjustments are the owner’s responsibility. If the owner requires the assistance of a lift technician, a service charge will be paid directly for a service call. The lift is manufactured with a baked on power coat finish. It is recommended to maintain this finish that scratches are periodically touched up with automotive style paint. All non-painted services should be kept clean and lubricated to prevent rust or corrosion.

Service Calls

Onsite service of your lifting product can be arranged by a qualified lift service technician. The owner will be responsible for paying the contractor directly for this service at the time the work is completed. It is the owner’s responsibility to return any parts to manufacturer for warranty consideration.

Your new lift will provide years of dependable service if installed, operated and maintained properly. Read and follow all safety, installation, operation, and maintenance instructions in this manual before installing and operating the lift. In addition, read and follow all safety and other information included on and with the lift before operating the lift. **Keep this manual in a secure place for future reference, training and service part identification.**

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IMPORTANT: It is the shop owner's responsibility to provide a satisfactory installation area for the lift. Lifts should only be installed indoors on level concrete floors with a minimum of 4 inches (102mm) and 3000 psi (20.7MPa) concrete that has been aged a minimum of 30 days. Please consult a qualified individual if any doubt exists concerning proper installation and subsequent safe operation of the lift. Do not install the lift on asphalt or outdoors.

Prior to installation, it is the shop owner's responsibility to provide constant electrical power in the correct voltage, phase, etc., and all wiring for electrical hook-up of the lift. The shop owner must insure that the electrical installation conforms to local building and safety codes. Where required, the shop owner will provide an electrical isolation switch located in close proximity to the lift. This switch will have an emergency stop capability and isolate electrical power from the lift for servicing requirements.

Hydraulic oil cannot be shipped with the lift and will be supplied by either the shop owner or the installer. ISO 32 hydraulic oil (10W non detergent hydraulic oil) must be used to fill the reservoir tank before operating the lift.

It is the shop owner's responsibility to train all operators in lift operation and safety.

UNLOADING PROCEDURE and LIFT PACKAGE CONTENTS

For your information:

All lift components are grouped together in one package held at each end by steel frames.

Unpacking Procedure:

When the lift arrives on site:

- ✓ If possible have the lift unloaded in the installation area.
- ✓ Check for freight damage and report immediately to the trucking company who delivered the lift.
- ✓ Check for missing parts and report immediately to the factory.

Main Components include:

- ✓ Power Side Column and Carriage Assembly – 1 pc (c/w equalizing cable, cylinder assembly, lifting chain and roller all pre-installed)
- ✓ Opposite Side Column and Carriage Assembly – 1 pc (c/w equalizing cable, cylinder assembly, lifting chain and roller all pre-installed)
- ✓ Arms – 4 pc (c/w arm restraint gear assemblies)
- ✓ Powerpack Assembly – 1 pc
- ✓ Overhead Crossbeam, 2 Tower extensions, Padded Shutoff Bar, Electrical Limit Switch.

Accessory and Hardware Box includes:

- ✓ Baseplate Shims (6mm - 3mm - 1mm assortment)
- ✓ Anchor Bolt Assemblies - 10 pc
- ✓ Arm Pins – 4 pc
- ✓ Rubber Stack Pad Assembly – 4 pc
- ✓ Honda Adapters – 2 pc
- ✓ Stack Pad Adapter (3") – 4 pc
- ✓ Stack Pad Adapter (6") – 4 pc
- ✓ Hydraulic Hose w/ Fittings – 2 pc (1 long and 1 short)
- ✓ Fittings Box (bolts, washers, nuts, screws, cable ties, etc.)
- ✓ Owner's Manual

IMPORTANT SAFETY INSTRUCTIONS

When using your garage equipment, basic safety precautions should always be followed, including the following:

1. Read all instructions
2. Do not operate equipment with a damaged cord or if equipment has been dropped or damaged – until it has been examined by a qualified service person
3. Do not let a cord hang over the edge of the table, bench, or counter or come in contact with hot manifolds or moving fan blades
4. Adequate ventilation should be provided when working on operating internal combustion engines
5. Keep hair, loose clothing, fingers, and all parts of body away from moving parts
6. To reduce the risk of electric shock, do not use in wet locations or expose to rain
7. Use only as directed in this manual. Use only manufacturer's recommended attachments
8. ALWAYS WEAR SAFETY GLASSES. Everyday eyeglasses only have impact resistant lenses, they are not safety glasses

Basic common sense safety precautions should always be followed when installing, operating and maintaining the lift as a risk of fire, electric shock, or injury may be present.

In addition:

1. Only trained and authorized personnel should position a vehicle and operate the lift. Do not allow customers or bystanders to operate the lift or be in the lift area.
2. Inspect the lift daily. Do not operate if potential problems have been identified or lift malfunctions. Do not operate if lift has damaged or broken components. Never walk or work under the lift unless all safety locks are completely engaged.
3. Never overload the lift. The rated capacity decal is located on the powerpack column. The hydraulic system on this lift is not designed to be a load holding device. Mechanical safety locks must be engaged before proceeding under the lift, with vehicle servicing, or system maintenance. Never override operating controls. This is unsafe and will void the warranty.
4. Before driving a vehicle between the columns, position all arms to insure unobstructed entry. Do not hit or run over arms as this could damage the lift and/or vehicle.
5. Use all 4 arms to raise a vehicle. Position all lift pads to contact vehicle manufacturer's recommended lifting points. Raise lift slowly until all pads contact the vehicle. Check all pads for complete and secure contact with the vehicle. Check all arm restraints to insure they are engaged properly. Check that vehicle is stable on the lift. Only after confirming these procedures, raise the lift to desired working height.
6. Special care must be used when lifting pick-up trucks. Optional truck adapters may be required to reach manufacturer recommended lifting points. Always use these lifting points. Running boards and other installed accessories may also require optional adapters. Insure contents of the cargo box will not affect vehicle balance while on the lift.
7. **Important:** Removal or installation of heavier parts can change the vehicle's center of gravity on the lift resulting in a critical load shift. The vehicle may then be unstable. Plan

ahead for this possibility to insure continued safety and refer to the vehicle manufacturer's service manual for recommended procedures.

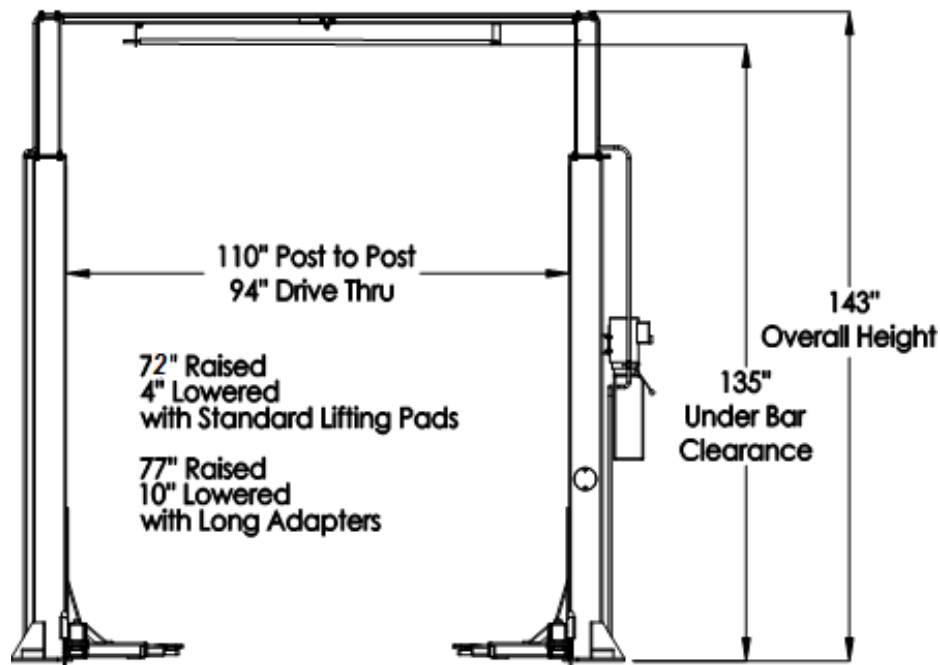
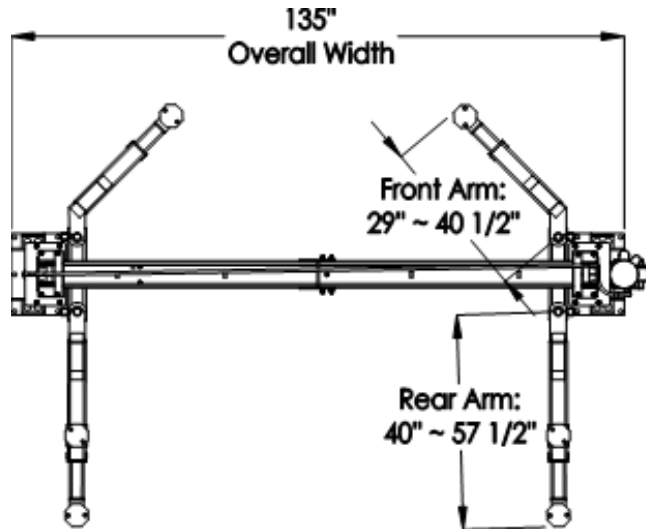
8. Always keep the lift area free of obstructions and debris. Clean up grease and oil spills immediately.
9. Never raise a vehicle with passengers inside. Before lowering a vehicle, check the lift and lift area and remove all obstructions. Before removing vehicle from the lift or lift area, position arms to the drive through position and confirm an unobstructed exit.
10. Do not perform any maintenance or installation of any components without first ensuring that electrical power has been disconnected at the source or panel and cannot be re-energized until all maintenance and/or installation procedures are completed (ANSI 244.1)

SAVE THIS INSTRUCTION

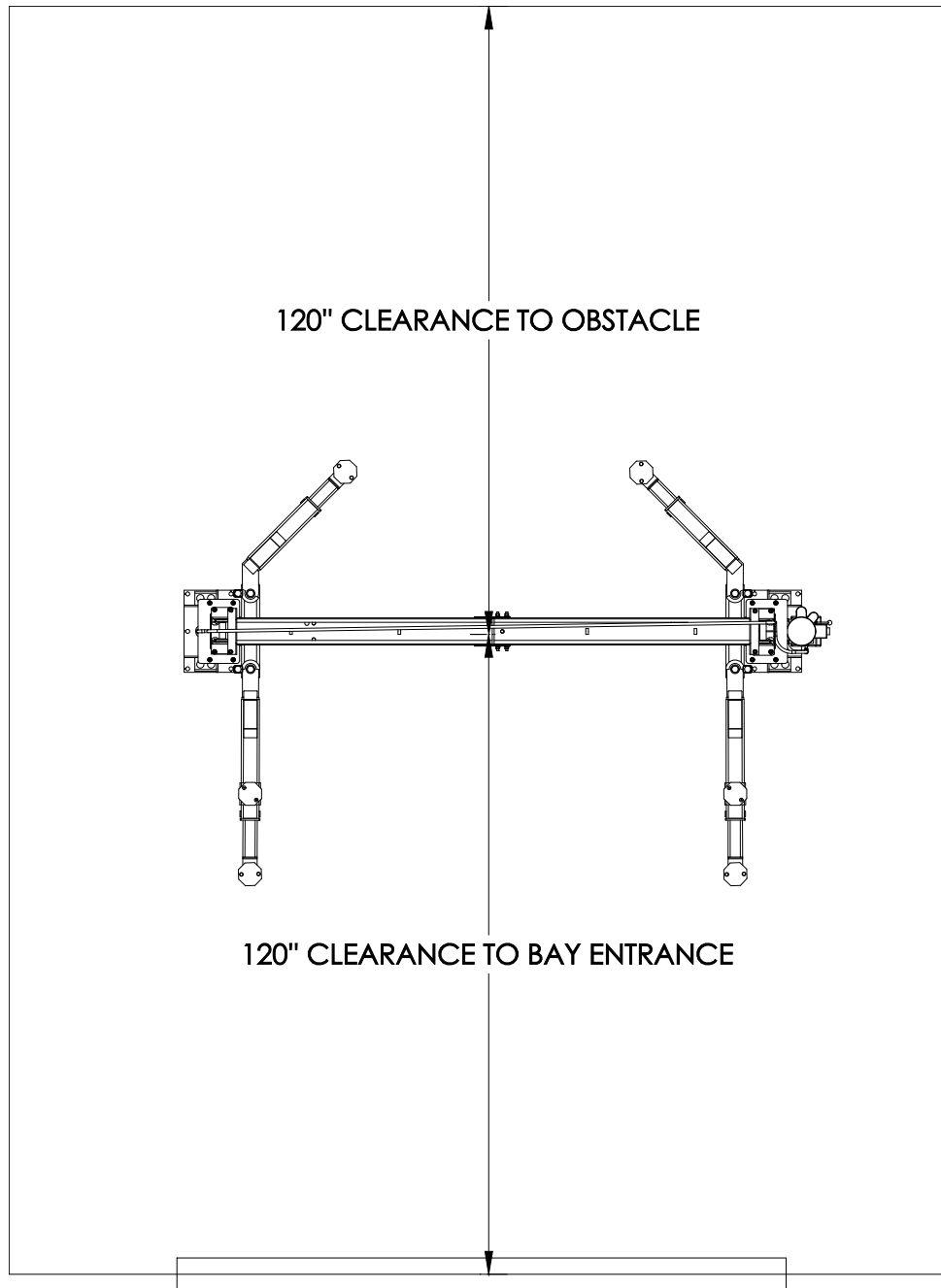
GENERAL REQUIREMENTS and LIFT SPECIFICATIONS

9,000 lb. Capacity (2,250 lb. per lift pad)

Lowered Height - Standard Lift Pad:	4"
Raised Height - Standard Lift Pad:	71"
Raised Height with adapters:	74"
Lifting Time:	50 sec
Shipping Weight:	1,350 lb
Concrete:	4 inches, 3000psi (20.7MPa), aged 30 days.
Electrical:	230V-1ph-60Hz-20A



SUGGESTED BAY DIMENSION REQUIREMENT



EACH BASEPLATE MUST MAINTAIN A MIN. DISTANCE OF 6 INCHES FROM ANY FLOOR SEAM

TOOLS REQUIRED and PRE INSTALLATION PROCEDURES

Tools Required: Gather all the tools listed below.

- 4" x 4" Wooden Blocks (for unpacking)
- 16ft. Measuring Tape
- Chalk Line and Chalk
- Side Cutters
- Crow Bar
- Metric Wrenches and Ratchet Set
- SAE Wrenches and Ratchet Set
- Metric and SAE Allen Key Sets
- Hammer
- Screwdrivers
- Step Ladder
- 4 ft. Level
- Rotary Hammer Drill with 3/4" diameter Masonry Drill Bit

Pre Installation Procedures

Before proceeding with installation, read the installation manual and insure all instructions are fully understood and all component parts are accounted for.

1. In the installation area, identify the center line of the bay and mark the floor. Also mark the center of bay entrance door. Connect these two points with a short chalk line in the area where lift will be located. Draw a second chalk line at 90° to locate the positions of both lift columns. Insure each lift column is equal distance from bay centerline and **each baseplate maintains a minimum distance of 6 inches from any floor seam**. Do not install if floor has cracks or deterioration that could affect lift stability. The shop owner is responsible for confirming there are no obstructions in the installation area like floor drains, under floor piping or electrical conduit that could be damaged or prevent safe lift installation and secure lift anchoring. Check ceiling for beams or heating ducts and walls for protruding structures, etc. Confirm that the overall height you intend to install will fit in the bay. Insure the lift can be safely installed in the position you have marked out on the bay floor.
2. Place the lift on wooden blocks so that the steel shipping frames can be removed.
3. Remove protective wrapping. Clear installation area of all packaging materials.
4. Unbolt steel shipping frames and remove from installation area.
5. Carefully remove top column and lay on the floor (carriage side up).
6. Carefully remove arms and hardware box from the lower column.
7. Identify powerpack column. Move (carriage side up) to appropriate location placing the baseplate end on your floor marks. Similarly, move the second column to the opposite location.

INSTALLATION PROCEDURE

See the Installation and Parts Reference section of this manual for diagrams and parts lists that will assist you during the installation process. Use these diagrams and parts lists together with the following written instructions.

1. Assemble the tower extensions on each column (Diagram 2). (installed inverted for shipping)
2. Raise the power side column and the other column(with extensions installed) facing each other. Make sure the outside distance between baseplates is 135".
3. Using a 3/4" concrete drill, drill the anchor holes in the main side column, installing anchors (do not tighten). Use a block of wood or rubber mallet to drive anchor bolts in. Drill to a minimum depth of 4" to insure maximum holding power. Drilling thru concrete (recommended) will allow the anchor to be driven thru the bottom if the threads are damaged.
4. Using a level, check column for side-to-side plumb and front-to-back plumb. Use 3/4" washers or shim stock, placing shims as close as possible to the hole locations. This will prevent bending the column bottom plates. Tighten 3/4" anchor bolts to 150-lbs.
5. Install crossbeam as Diagram 2 and Diagram 13.
6. Using a tape measure, measure from back corner of the base on main side column to the opposite back corner of the offside column to insure legs are square.
7. Drill holes and install anchor bolts at non-power side column.
8. Installing the equalizing cables: refer to Diagram 5 for general cable arrangement for the lift. Set carriages on the first safety latch engagement. Be sure each carriage is at the same height by measuring from the top of the base to the bottom of the carriage (double check the latches before working under the carriages). This dimension should be within 1/4". Run first cable. Tighten nut on one cable stud so that the end of stud passes the nylon on the nut. Pull the other end of cable and run nut on it. Tighten both nuts. Repeat above for second cable.
9. Connecting the hydraulic hoses, as shown on Diagram 10.
10. Mount the power unit on lift as Diagram 1.
11. Install the swing arms on the carriages using the included 1 1/2" diameter pins. Check for proper engagement of the arm lock- the rack on the lock should fully engage the gear on the arm.
12. Adjust the carriage cables tension. Adjust each cable to approximately 1/2" side-to-side play. Check the latch releases to insure the carriage is still sitting on the appropriate latch.
13. Remove the vent plug from the power unit and fill the reservoir. Use ISO 32 hydraulic oil (10W non detergent hydraulic oil). Put the black plastic cap at the top of the tank.
14. Attach micro switch to overhead safety bar bracket (diagram 13, item 3) on power pack side of overhead cross-member. Connect the switch to power unit by referring diagram 14.
15. Make the electrical hookup to the power unit. 220V Single Phase. It is recommended that a 220 Volt, 30 Amp twist lock plug be installed in the power line just ahead of the power unit. Size wire for 30-amp circuit. **Warning: the wiring must comply with local code. Have a certified electrician make the electrical hook-up to the power unit. Protect each circuit with time delay fuse or circuit breaker 208v.230v single Phase. 60 Hz 30 Amps. Motor can not run on 50hz with out a physical change to motor.**

16. Do not place any vehicle on the lift at this time. Cycle the lift up and down several times to insure latches click together and all air is removed from the hydraulic system. To lower the lift, latch releases must be manually released. Latches will automatically reset once the lift ascends approximately 17" from base. If latches click out of sync, tighten the cable on the one that clicks first.

Insure this manual along with all operation, inspection and maintenance instructions are delivered to the owner/user/employer

Final Check Procedure of Assembled Lift

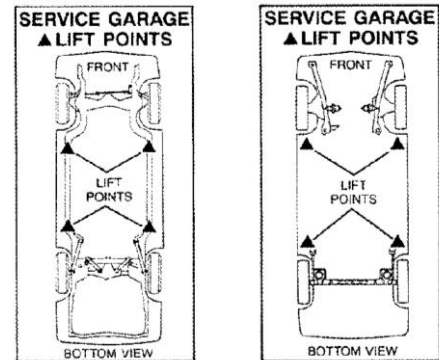
- ✓ Check hydraulic oil level in reservoir. Confirm hydraulic connections are tight with no leaks. Confirm black breather cap is installed in fill hole.
- ✓ Confirm that both columns are level and properly shimmed with all anchor bolts torqued to 150 ft.-lbs. (204Nm). Confirm lift stability
- ✓ Confirm that all electrical components have been wired properly and are operational
- ✓ Confirm that all cables are adjusted properly
- ✓ Confirm safety locks and arm restraints are functioning properly
- ✓ Lubricate all lubrication points (refer to pg. 15)

OPERATING INSTRUCTIONS and LIFT MAINTENANCE

LIFT OPERATION: Before lifting a vehicle, insure all operators are qualified, have been trained and are following all safety instructions.

Insure the vehicle is securely positioned on the lift using manufacturer's recommended lifting points. Insure all arm restraints are totally engaged. Never allow anyone under the lift when raising or lowering it with or without a vehicle. Always confirm safety locks on both sides of the lift are completely engaged before proceeding under a vehicle.

Lift electrical operating controls are located on the power pack (one "up" button for raising the lift and one "down" lever for lowering the lift). Before lowering, slightly raise the lifting and then pull the release cables under each carriage. Make certain the safety locks do not accidentally re-engage while lift is being lowered. Customers and bystanders should not be in the lift area.



Typical Label Drawings
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LIFT OPERATIONAL TEST WITH A TYPICAL VEHICLE:

To Raise Vehicle:

1. Lower carriages to the floor position.
2. Retract lifting arms to minimum length.
3. Swing arms away from the path of the vehicle.
4. During loading or spotting, center the vehicle between the columns as shown in figure above.
5. Swing arms under the vehicle. Position the vehicle support pads at the VEHICLE MANUFACTURERS RECOMMENDED LIFTING POINTS. Beginning with some 1994 year models, auto makers will identify recommended lift points by placing a label on the vertical lock face plate of the front passenger side door. (ANSI/SAE J2184-OCT92)
6. Clear area around the lift.
7. Raise the vehicle until the vehicle support pads are in full contact, approximately 12 inches off floor. Check to see that vehicle is stable on the lift by moderately rocking the bumper. Recheck the position of the pads for any movement.
8. Raise the vehicle to the desired working elevation and release control button.
9. Lower lifting carriages until they completely contact the mechanical safety locks. The vehicle is now ready for service.

To Lower Vehicle:

1. Clear area around and under the lift of obstructions and warn personnel to stand clear.
2. Raise vehicle by at least 3 inches.
3. Pull the release cable under each carriage to clear safety locks.
4. No one must be under the vehicle when lowering as the safety locks are not engaged.
5. Push lower lever on the power unit to lower the lift.
6. Lower the lift until arms have bottomed and are clear of the lifting points.
7. Swing the lifting arms from beneath the vehicle and fully retract the arms.
8. Remove the vehicle.

LIFT MAINTENANCE:

Before maintaining, servicing or repairing the lift, insure that an acceptable "lock out/tag out device is activated.

The following minimum maintenance schedule must be performed by the owner and/or lift operator:

DAILY:

- Raise and lower the lift (with no vehicle) at the beginning of each shift to verify it is operating properly and carriages are level. Confirm all arm restraints engage and disengage smoothly and totally and telescoping arms have no excessive movement.
- Check all hydraulic fittings and lines for damage or leaks. Check electrical wiring for damage. Check all moving parts for uneven or excessive wear. Repair or replace all damaged, worn, or broken components immediately.
- Remove oil/grease on all lift pads.

WEEKLY:

- Check hydraulic fluid in power pack reservoir. (confirm no leaks before topping up)
- Check equalizing cable adjustment. Check safety lock release cable adjustment.

MONTHLY:

- Check that all anchor bolts are torqued to 150 ft-lbs (204Nm).
- Clean and lubricate arm restraints. (confirm all components are in good condition)
- Lubricate safety locks in both columns.
- Check that overhead safety shutoff is operating properly.

EVERY TWO MONTHS:

- Remove and grease arm pins – reinstall insuring secure fit.
- Clean and re-grease slide block channel in both columns.
- Clean and lubricate all cable pulleys.

EVERY YEAR:

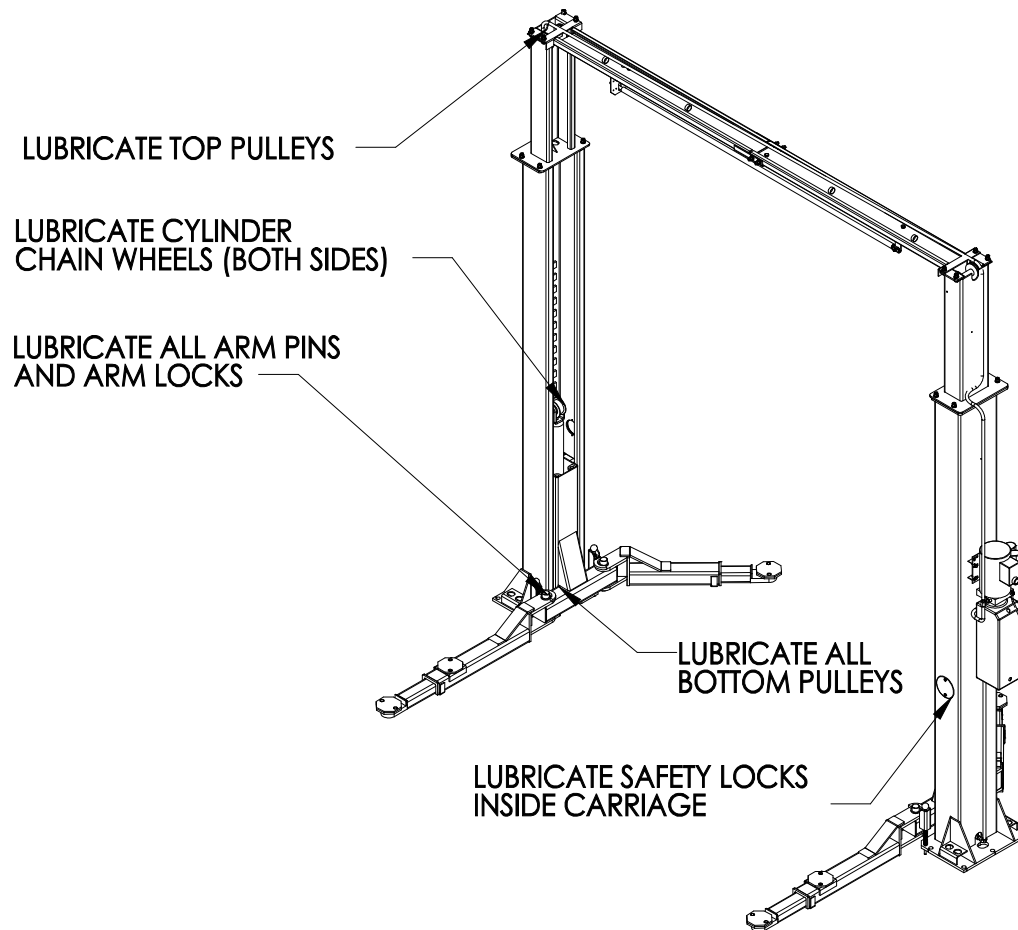
- Arrange for a Trained Lift Service Person to inspect and certify all aspects of the lift. Confirm that both equalizing cables meet the standard.

HYDRAULIC OIL:

- Change and replace hydraulic oil in every minimum two years.

LUBRICATION SPECIFICATIONS:

The following picture shows locations that are required to be lubricated. (where grease is required use a multi-purpose lithium grease, where lubricating oil is required use WD-40 or a SAE 30 oil)

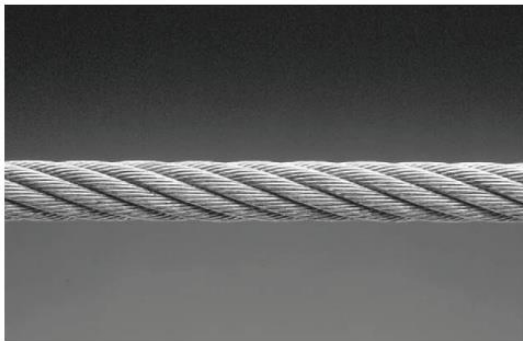


The following criteria will determine when a lifting cable is no longer acceptable for service:

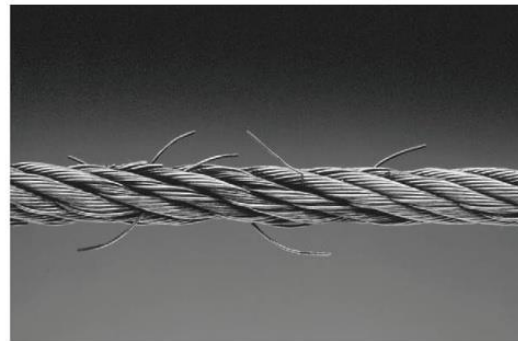
- 12 randomly distributed broken wires in one lay or four broken wires in one strand in one lay in running ropes
- one outer wire broken at the contact point with the core of the rope, which has worked its way out of the rope structure and protrudes or loops out from the rope structure
- wear of one-third the original diameter of outside individual wires
- kinking, crushing, birdcaging, or any other damage resulting in distortion of the rope structure
- evidence of heat damage from any cause-reduction from nominal diameter greater than those listed in the following table:

Rope Diam.	OD \leq 5/16"	5/16" \leq OD \leq 1/2"	OD \geq 1/2"
Max. reduction	1/64"	1/32"	3/64"

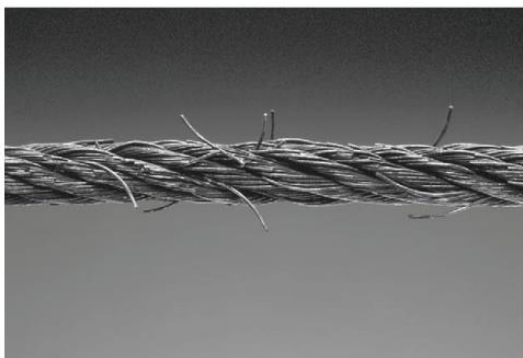
If any of the cable is as shown in the following pictures, do not use.



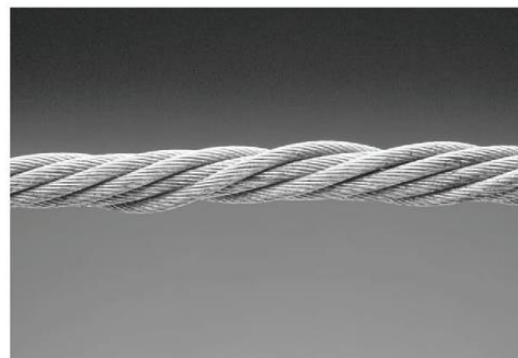
Typical Good Cable



Cable With Broken Wires



Cable With Severe Corrosion



Cable With Necking

Note: Attention shall be given to end connections. Upon development of two broken wires adjacent to socket end connections, the rope shall be resocketed or replaced. Resocketing shall not be attempted if the resulting rope length will be insufficient for proper operation.

LIFT PROBLEM TROUBLESHOOTING GUIDE

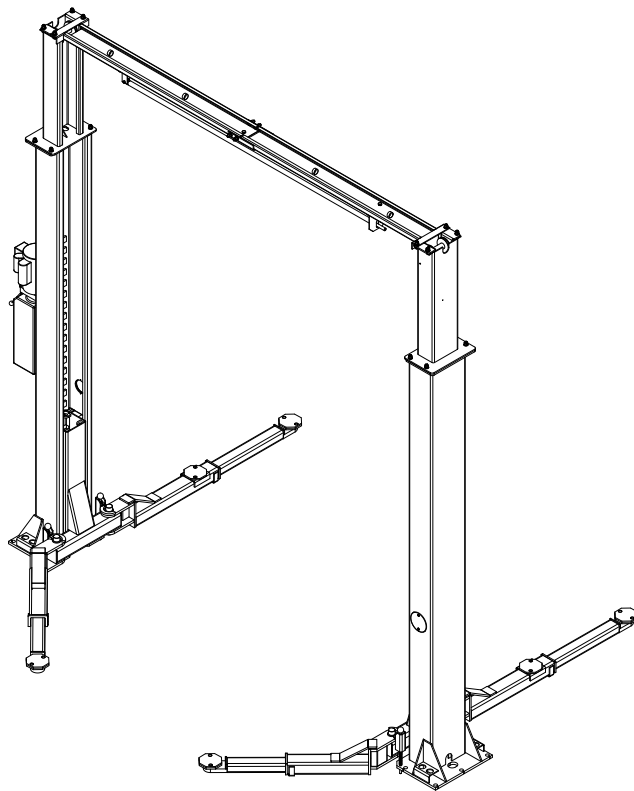
The following are some suggestions to consider if problems are encountered with the lift. Please call a Trained Lift Service Person for further clarification and information.

Problem	Possible Causes	Solutions
Lift Will Not Raise or Lower	<ol style="list-style-type: none"> 1. Blown fuse or circuit breaker 2. Incorrect voltage to motor 3. Bad wiring connections 4. "UP" switch burned out 5. Motor windings burned out 	<ol style="list-style-type: none"> 1. Replace fuse or reset/replace circuit breaker 2. Supply correct voltage to motor 3. Repair and insulate all connections 4. Replace switch 5. Replace motor
Lift Will Not Raise	<ol style="list-style-type: none"> 1. Air in oil or low oil level 2. Lowering Valve leaks 3. Motor runs backward 4. Pump damaged 5. Pump will not prime 6. Relief Valve leaks 7. Voltage to motor incorrect 8. Lift overloaded 	<ol style="list-style-type: none"> 1. Check fluid level, oil seal, bleed system 2. Clean valve or replace 3. Check for correct wiring 4. Repair or replace pump 5. Check fluid level and pick-up tube; replace pump 6. Clean Relief Valve (replace if necessary) 7. Supply correct voltage to motor 8. Verify that loaded vehicle weight does not exceed rated lift capacity
Lift Will Not Lower	<ol style="list-style-type: none"> 1. Mechanical locks are engaged 2. Obstruction under lift or in glide block tracks 3. Faulty lowering solenoid valve 	<ol style="list-style-type: none"> 1. Raise unit slightly and disengage mechanical locks 2. Carefully remove obstruction - clean glide block tracks 3. Replace valve
Lift Will Not Hold Pressure	<ol style="list-style-type: none"> 1. Contamination in system 2. Internal Cylinder leaks 3. Lowering Valve leaks 4. Check Valve leaks 5. External leaks 	<ol style="list-style-type: none"> 1. Check oil level, bleed cylinders, remove Contamination, replace oil seal 2. Check fitting, replace cylinder 3. Contaminated fluid, handle binds, clean valves 4. Clean check valve (replace if necessary) 5. Check all fittings and repair leaks
Lift Will Not Raise A Vehicle	<ol style="list-style-type: none"> 1. Low hydraulic fluid 2. Malfunction of pressure relief valve 3. Insufficient electrical voltage 4. Lift overload 5. Motor is running backwards 6. Air in hydraulic oil 7. Pump will not prime 8. Pump is damaged 9. Faulty lowering valve 	<ol style="list-style-type: none"> 1. Lower lift. Using ISO grade 32 hydraulic oil, fill the powerpack reservoir to 1" below the top 2. Clean pressure relief valve. if problem continues, call a service technician 3. Confirm a 208/230 volt power supply to the lift 4. Check that vehicle weight is evenly distributed And does not exceed rated capacity. 5. Confirm proper motor rotation - rewire if required 6. Check oil seal and bleed hydraulic system 7. Check hydraulic oil level and pick-up tube. Replace pump if required 8. Repair or replace pump 9. Clean or replace valve

Problem	Possible Causes	Solutions
Slow Drift Down	<ol style="list-style-type: none"> 1. Mechanical safety locks not engaged 2. Powerpack lowering valve contamination 3. Hydraulic system leaks 	<ol style="list-style-type: none"> 1. Raise lift to engage all safety locks then lower lift and confirm all safety locks are engaged 2. Back flush powerpack by opening manual over-right valve. Engage "up" switch and down lever at the same time and run approximately 10 seconds 3. Check cylinder and all fittings for any hydraulic oil leak
Lift Going Up Out of Level	<ol style="list-style-type: none"> 1. Cable(s) out of adjustment 	<ol style="list-style-type: none"> 1. re-adjust cables - Call service technician if problem persists
Anchors Will Not Stay Tight	<ol style="list-style-type: none"> 1. Holes drilled oversize 2. Concrete floor thickness or holding strength not sufficient 	<ol style="list-style-type: none"> 1. Relocate lift using the correct bit to drill holes 2. Break out old concrete and re-pour new foundation per lift installation instruction

Replace all worn or broken parts and components only with manufacturer approved/supplied parts and components

Replacement parts may be purchased from your local lift supplier or the manufacturer at 1 - 877 - 799 - LIFT (5438) or (905) 847 - 1198



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9,000 LB (4091KG) TWO POST LIFT
Litt Illustrations & Parts Lists

**For installation & service part reference
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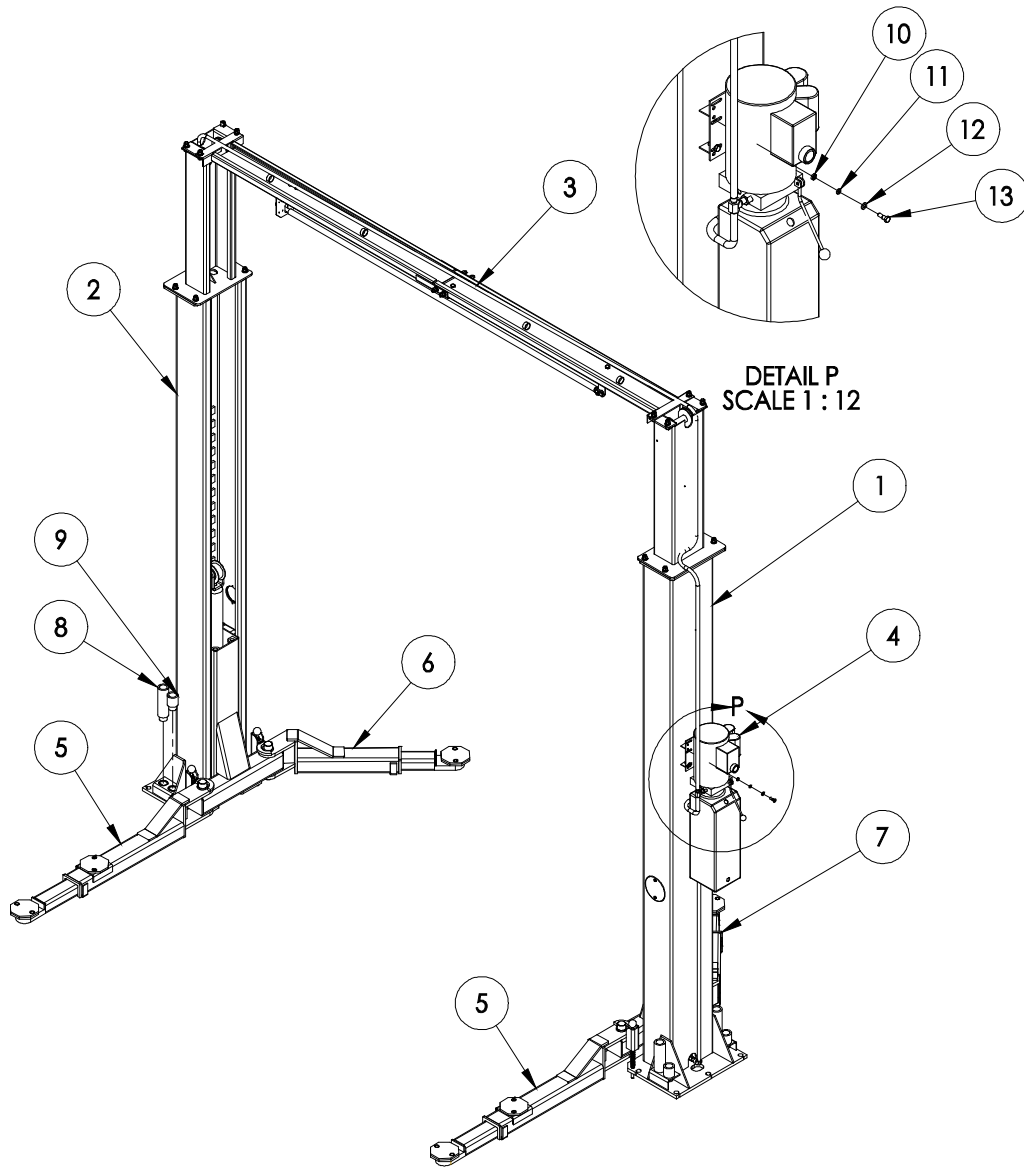
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2300 Speers Road
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Tel: 905-847-1198 Fax: 905-891-114

LIFT ILLUSTRATIONS and PARTS LISTS

The diagrams below identify the main components and the order in which they are to be installed. Numbers correspond to installation diagrams found in the chart below and on following pages. Page numbers for each diagram is also found in the chart below. These diagrams, along with related parts lists, will assist you when installing and servicing this lift. Please insure these lift diagrams and parts lists are kept in a secure place for quick reference.

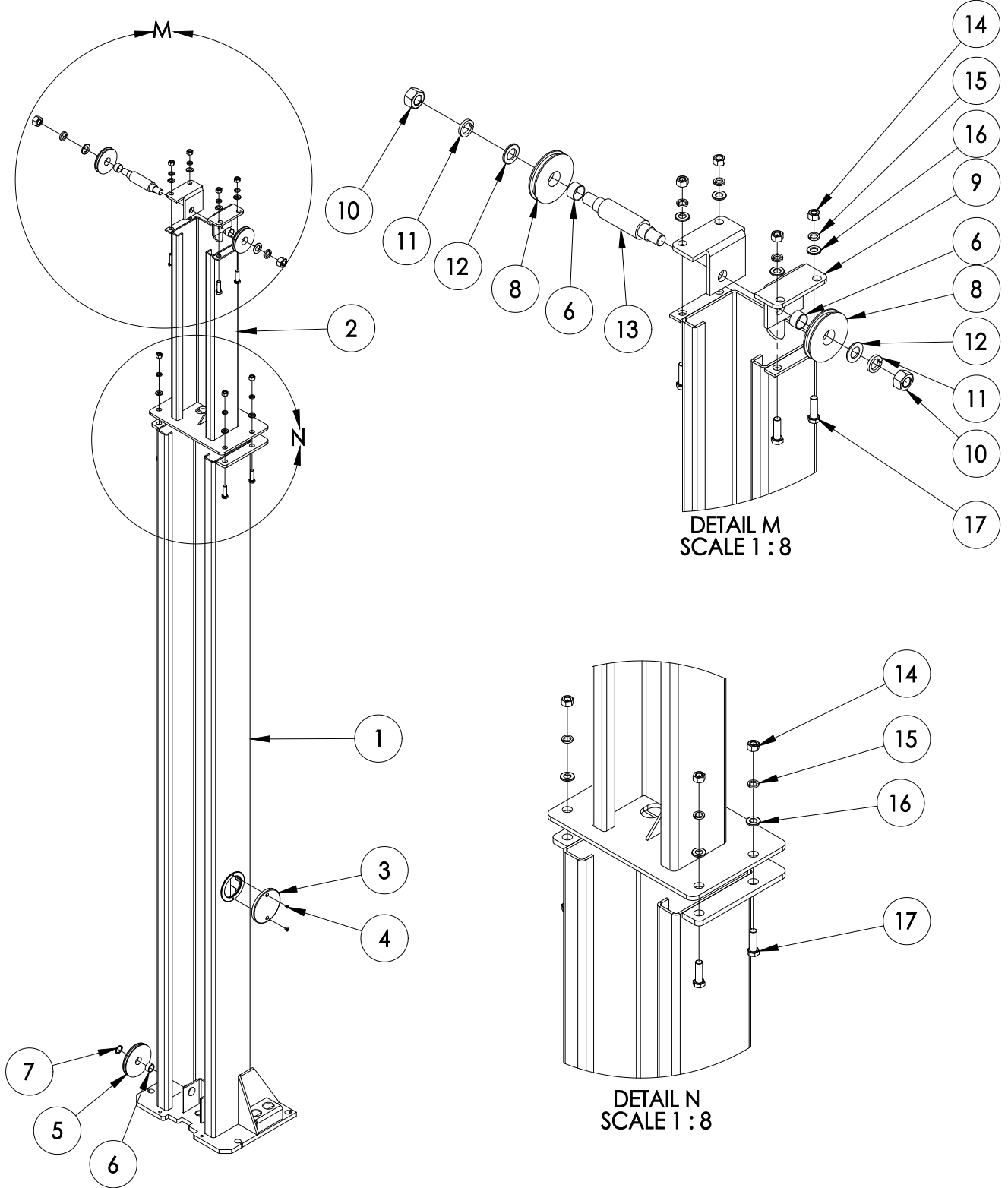
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Diagram #1: LIFT ASSEMBLY



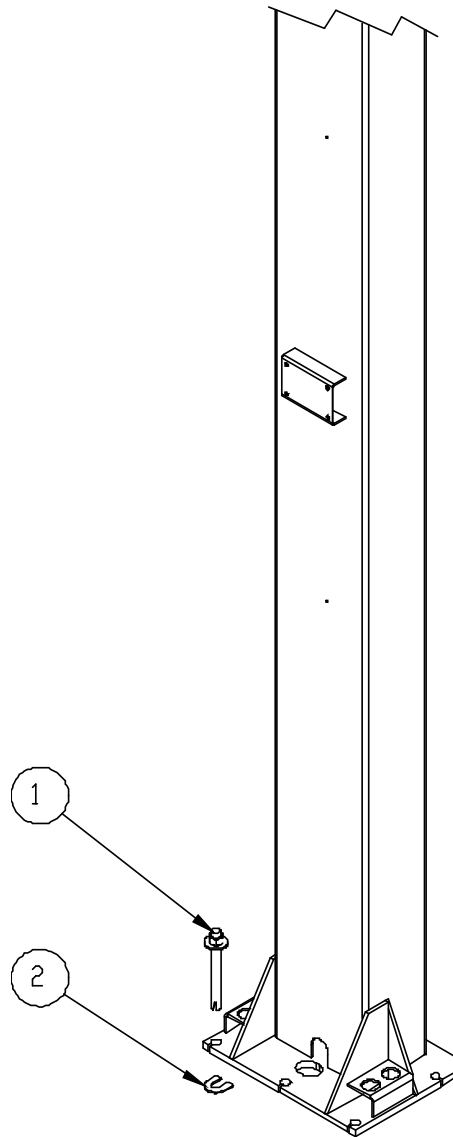
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	42090000	PASSENGER SIDE TOWER ASSEMBLY	1
2	42090001	DRIVER SIDE TOWER ASSEMBLY	1
3	42090003	CROSS BEAM ASSEMBLY	1
4	32100002	POWER UNIT	1
5	42090004	STRAIGHT ARM	2
6	42090005	BEND ARM (DRIVER SIDE)	1
7	42090006	BEND ARM (PASSENGER SIDE)	1
8	22090000	LONG LIFTING ADAPTER	4
9	22090001	SHORT LIFTING ADAPTER	4
10	32090029	M8 NUT	4
11	32090030	8MM LOCK WASHER	4
12	32090031	8MM WASHER	4
13	32090032	M8 BOLT	4

Diagram #2: TOWER ASSEMBLY



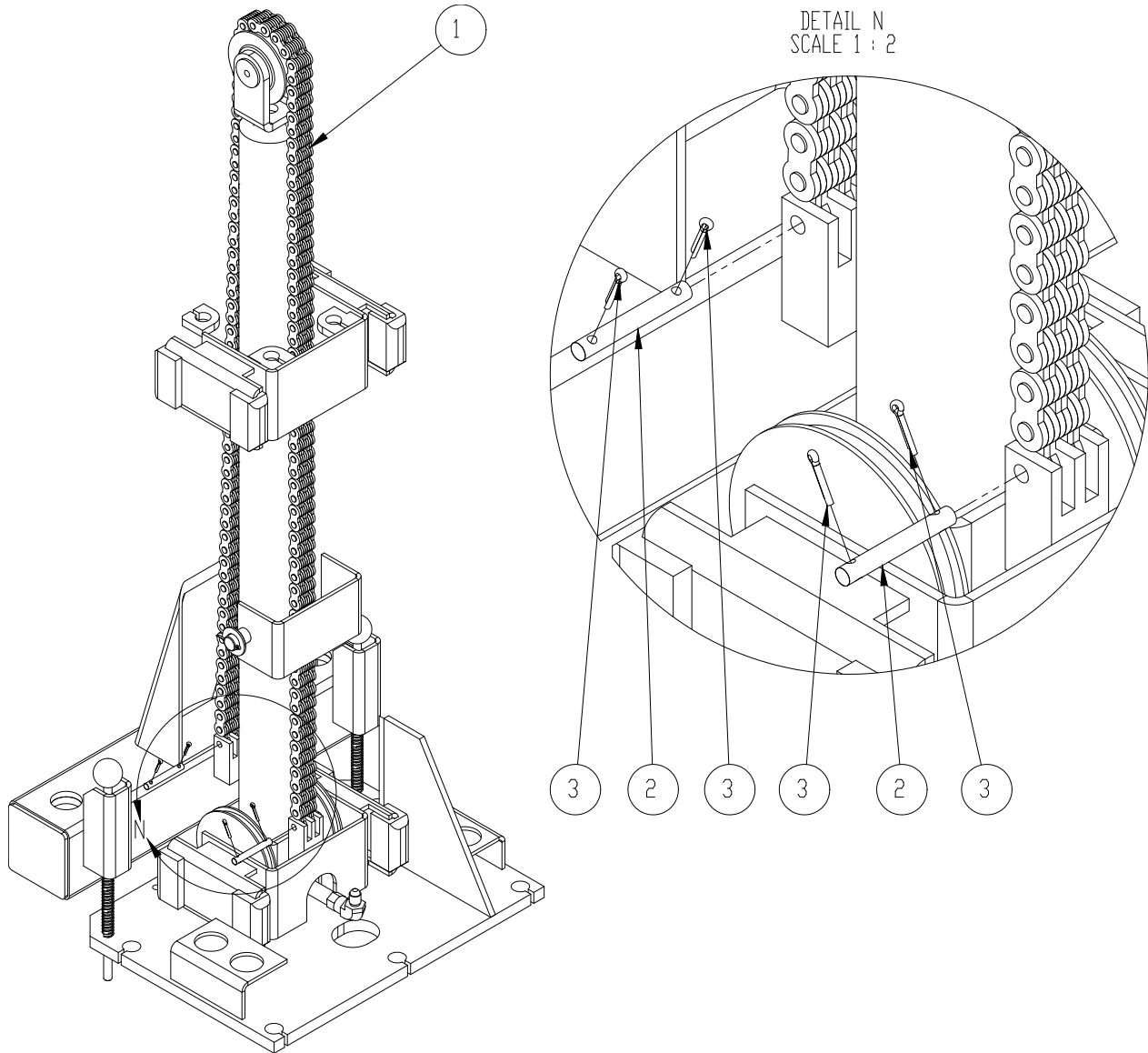
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	22090005	COLUMN	2
2	22090006	TOWER EXTENSION	2
3	32090013	WINDOW COVER	2
4	32090044	M6 SCREW	4
5	22090010	BOTTOM PULLEY	2
6	32090045	BUSHING	6
7	32090046	SNAP RING	8
8	22090010	TOP PULLEY	4
9	22090013	TOP BRACKET LEFT/RIGHT	2X2=4
10	32090046	SNAP RING	6
11	32090033	20MM FLAT WASHER	4
12	32090033	20MM FLAT WASHER (SPACER)	4
13	22090009	TOP PULLEY SHAFT	2
14	32090034	M12 NUT	16
15	32090035	12MM LOCK WASHER	16
16	32090036	12MM FLAT WASHER	16
17	32090037	M12X35 HEX BOLT	16

Diagram #3: COLUMN SHIMMING & ANCHOR BOLTS



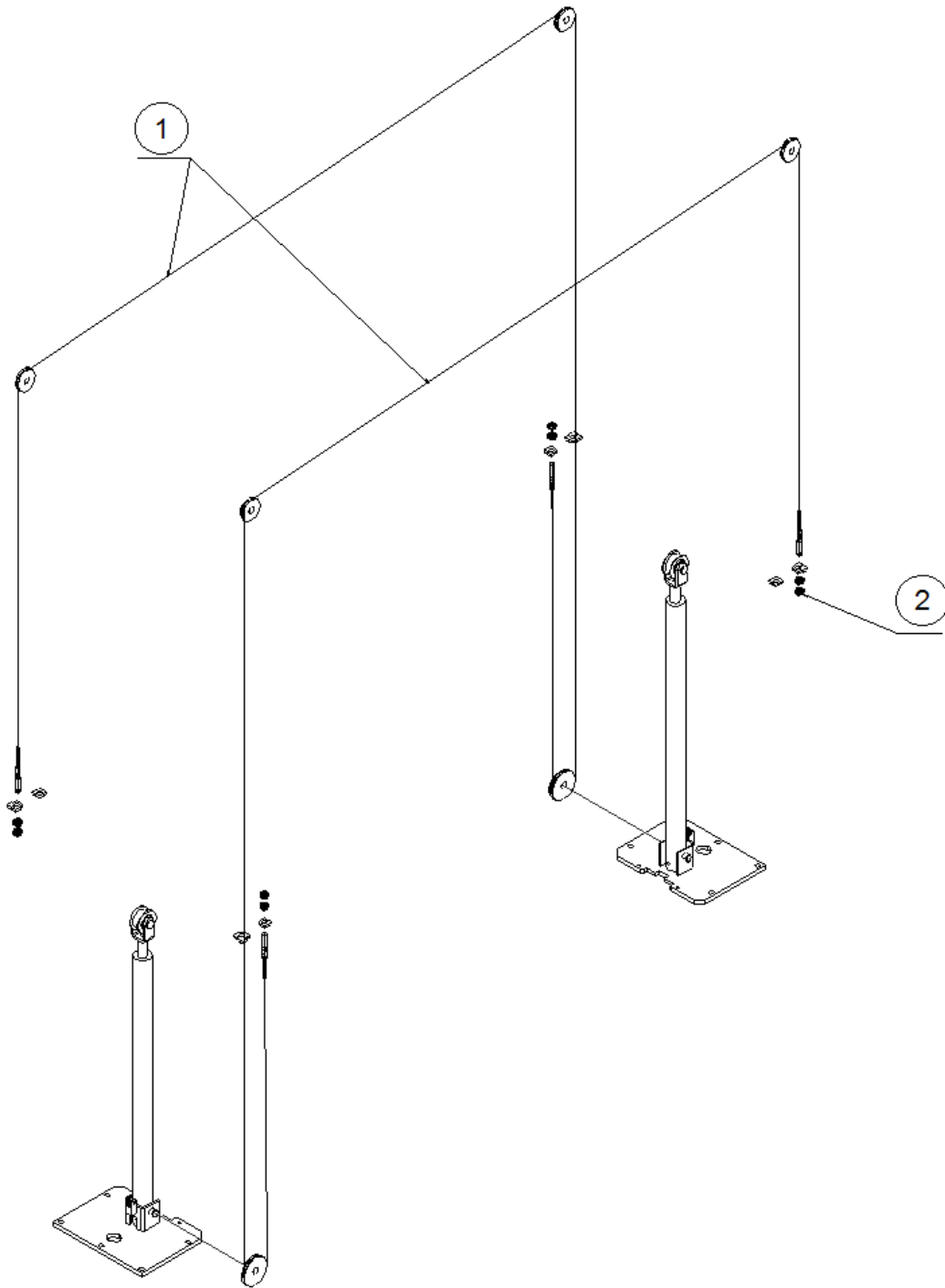
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	32090000	ANCHOR BOLT ASSEMBLY	10
2	32090001	SHIM	10

Diagram #4: LIFTING CHAIN ASSEMBLY



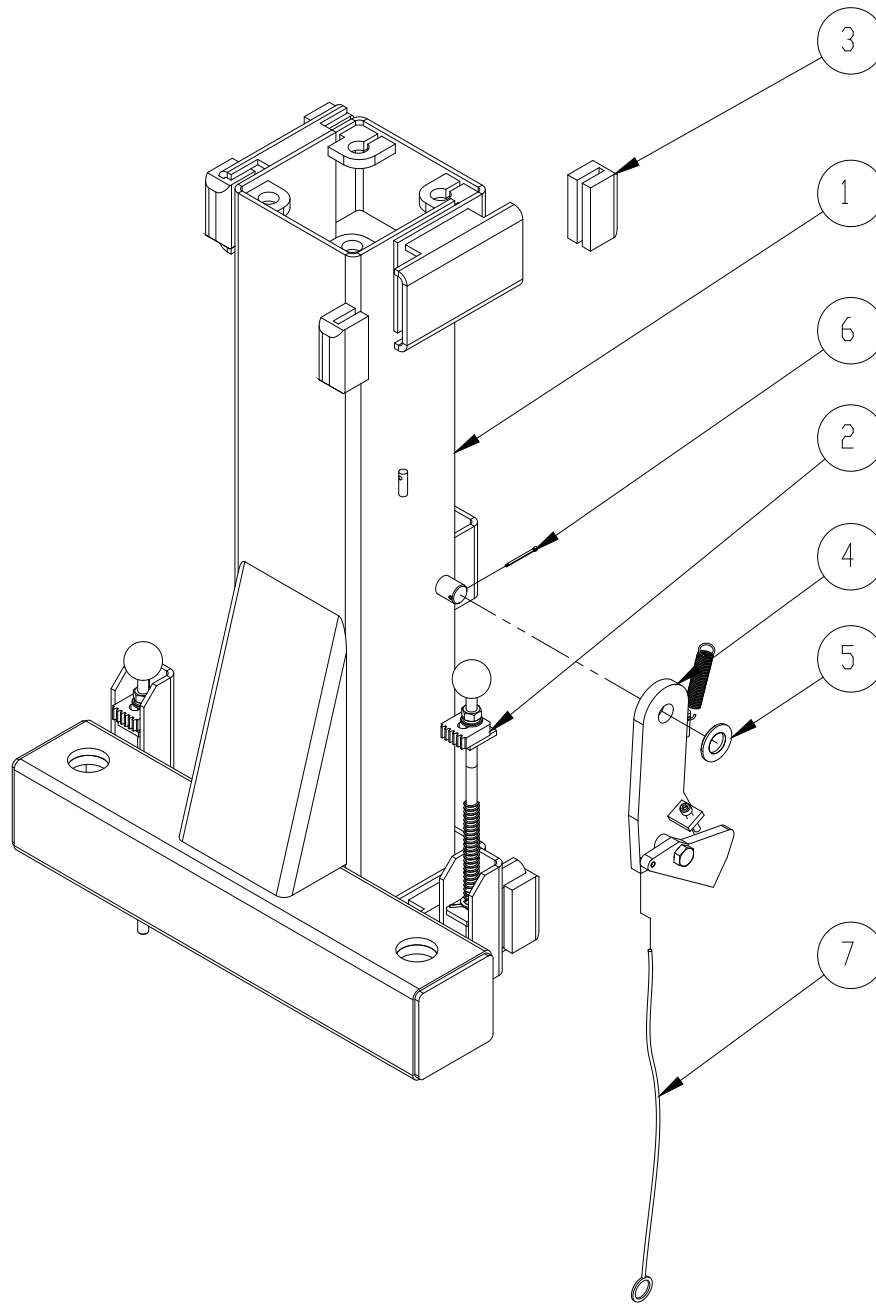
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	32090002	CHAIN	2
2	32090003	PIN	4
3	32090004	SPLIT PIN	8

Diagram #5: EQUALIZING CABLES



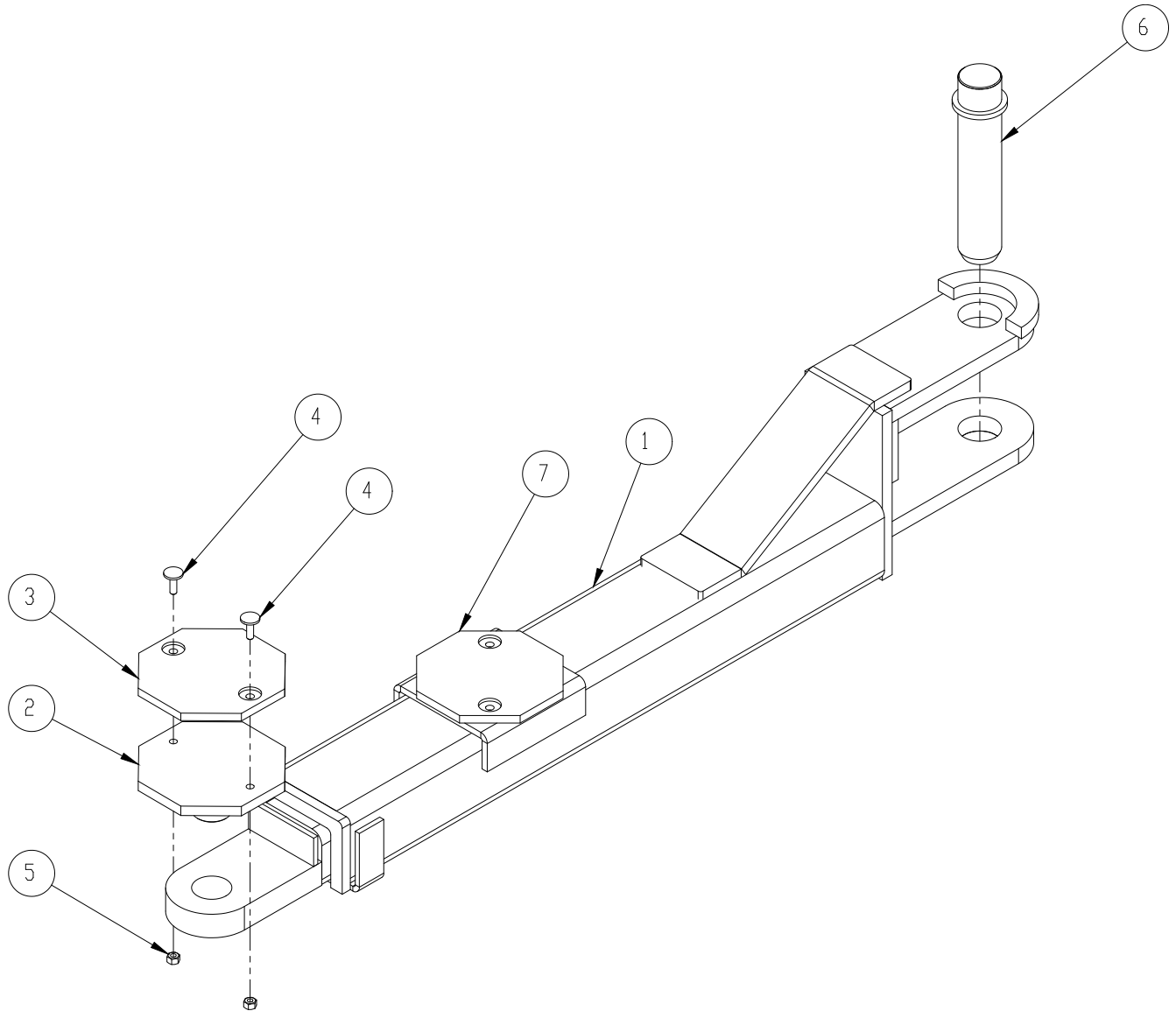
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	32090019	CABLE	2
2	32090021	NUT	8

Diagram #6: CARRIAGE ASSEMBLY



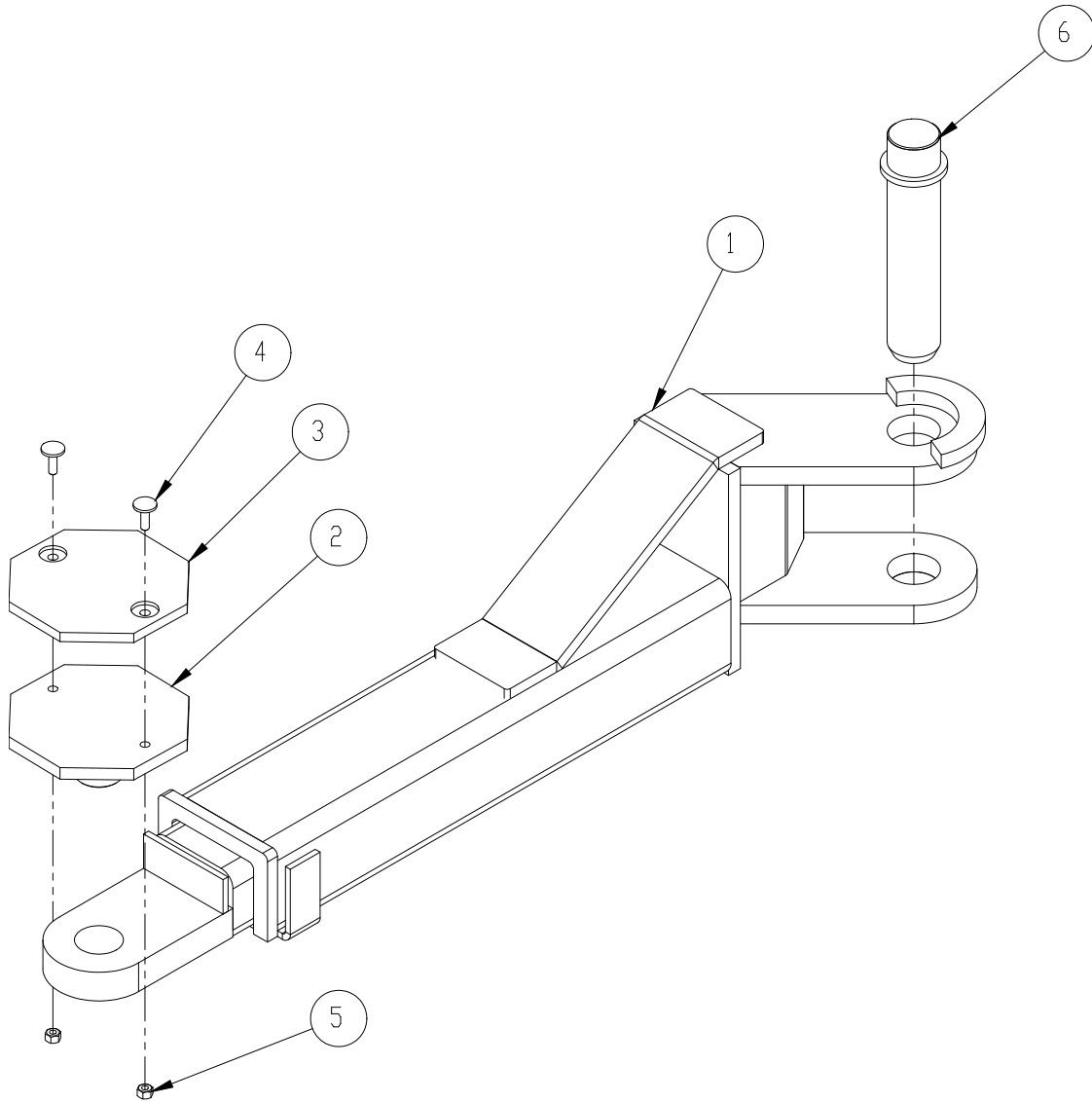
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	22090000	CARRIAGE WELDMENT	2
2	32098104	ARM LOCK ASSEMBLY	4
3	32090022	SLIDER	16
4	42090007	SAFETY LOCK ASSEMBLY	2
5	32090038	WASHER	2
6	32090005	ROLLING SPRING PIN	2
7	32090006	RELEASE CABLE	2

Diagram #7: REAR ARMS



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	22090001	REAR ARM ASSEMBLY (STRAIGHT)	2
2	22090007	LIFTING PAD	4
3	32090018	RUBBER PAD	4
4	32090027	M6 BOLT	8
5	32090028	M6 NUT	8
6	22090008	ARM PIN	4
7	42090008	HONDA ADAPTER ASSEMBLY	2

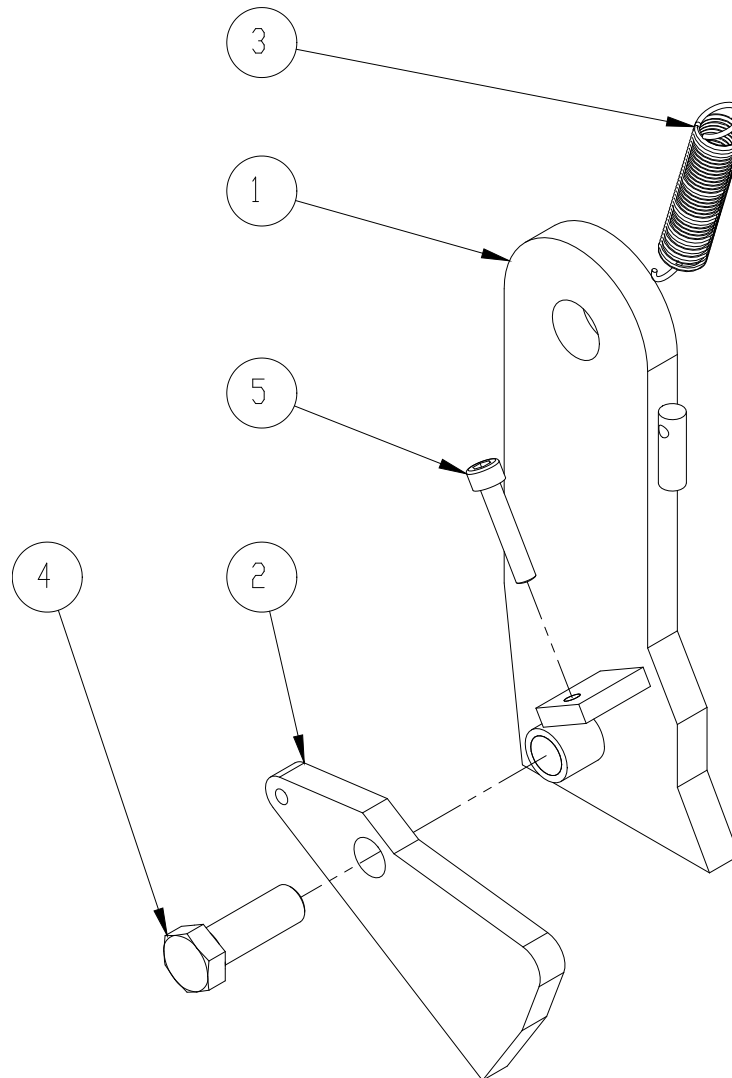
Diagram #8: FRONT ARMS



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1*	22090002	DRIVER SIDE FRONT ARM/REAR SIDE FRONT ARM	1/1
2	22090007	LIFTING PAD	4
3	32090018	RUBBER PAD	4
4	32090027	M6 BOLT	8
5	32090028	M6 NUT	8
6	22090008	ARM PIN	4

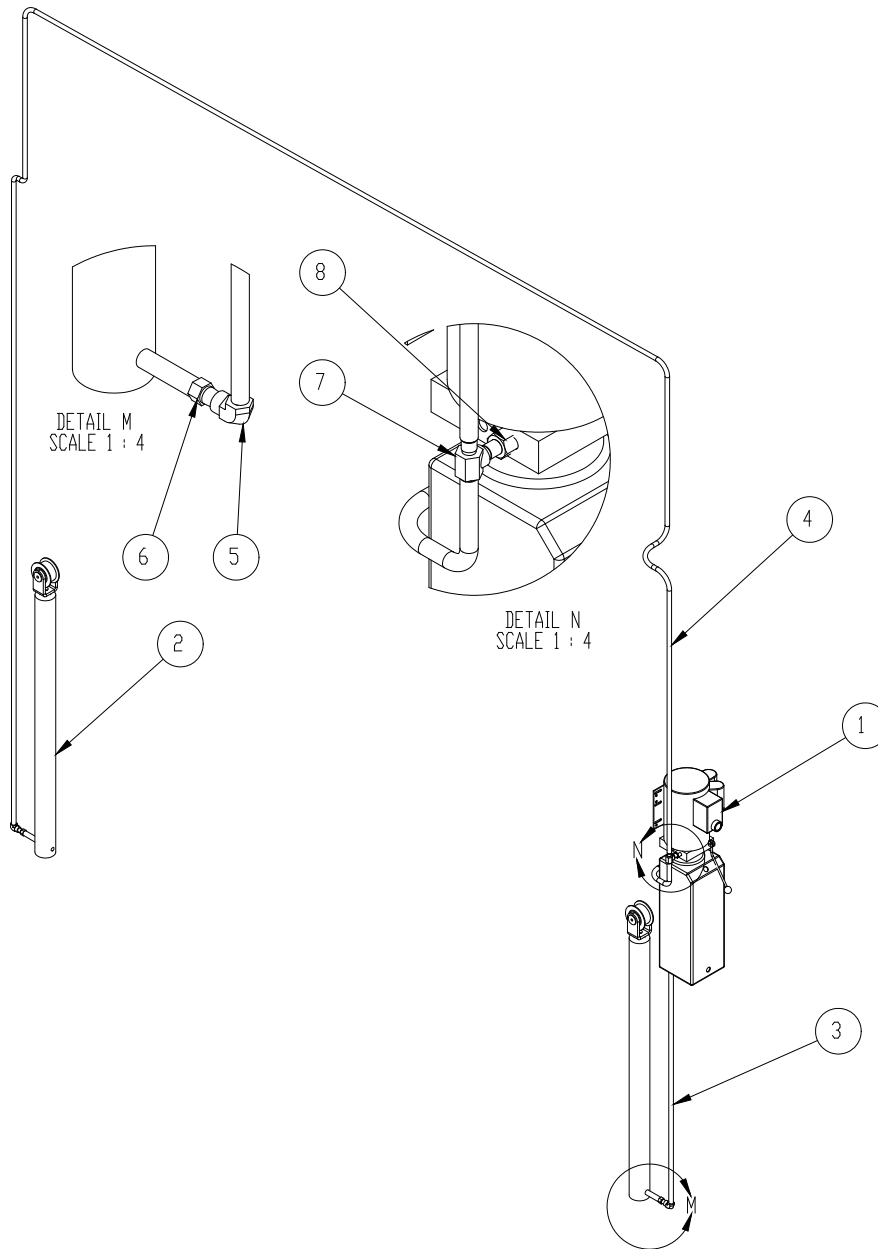
* Lift has two different bend arms, one is at driver's side and the other is at passenger's side.

Diagram #9: SAFETY LOCK ASSEMBLY



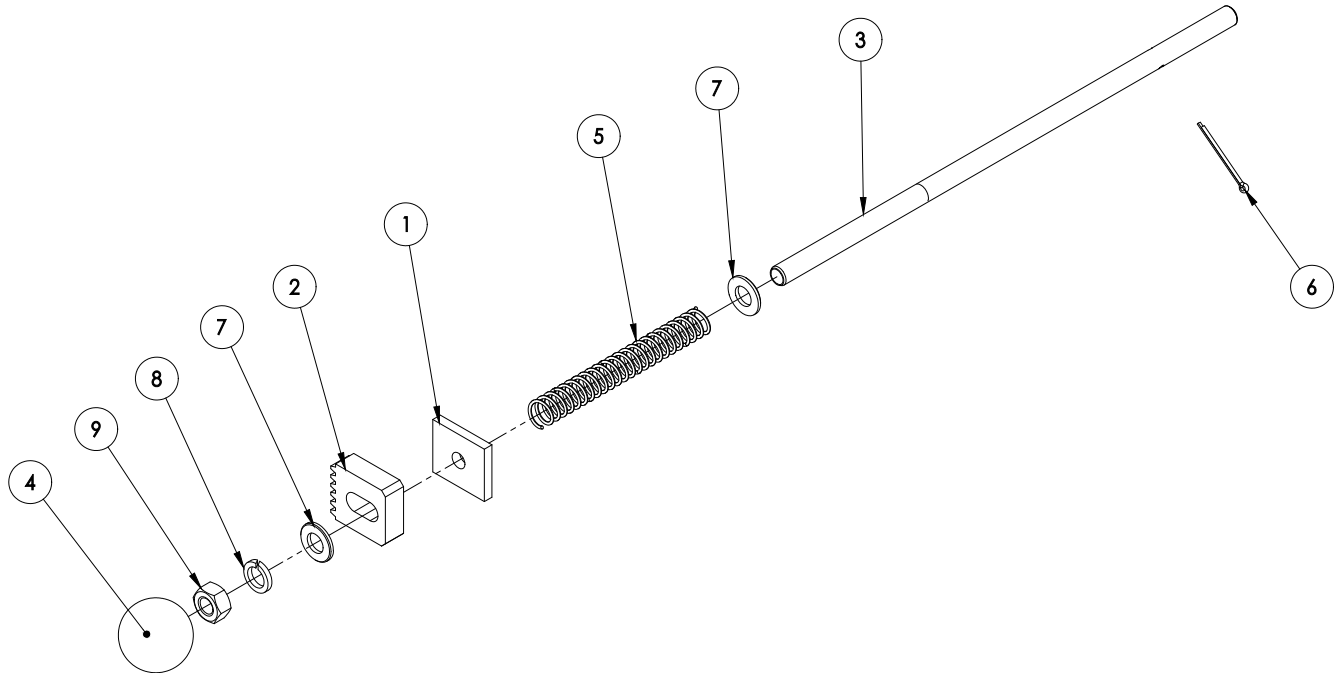
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	22090003	LOCK WELDMENT	2
2	12090002	GUIDING BLOCK	2
3	32090007	LOCK RETURNING SPRING	2
4	32090039	HEX BOLT	2
5	32090040	HEX BOLT (C/W COMPRESSION SPRING)	2

Diagram #10: HYDRAULIC SYSTEM



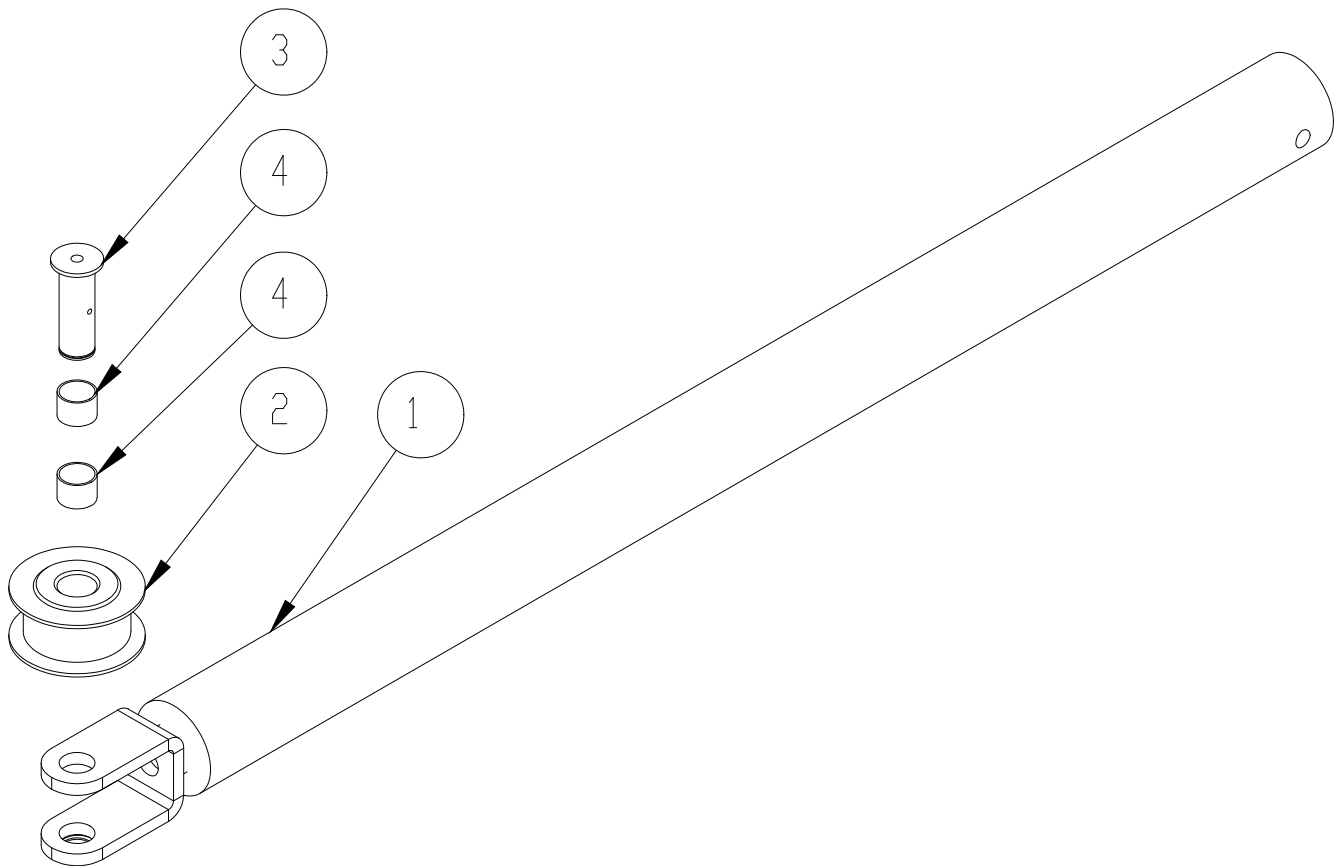
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	32100002	POWER UNIT	1
2	32090014	HYDRAULIC CYLINDER	2
3	32095000	HYDRAULIC HOSE (SHORT)	1
4	32095001	HYDRAULIC HOSE (LONG)	1
5	32090023	ELBOW FITTING	1
6	32090024	CYLINDER FITTING (ELBOW)	2
7	32090025	T FITTING	1
8	32090026	PUMP FITTING	1

Diagram #11: ARM LOCK PLUNGER ASSEMBLY



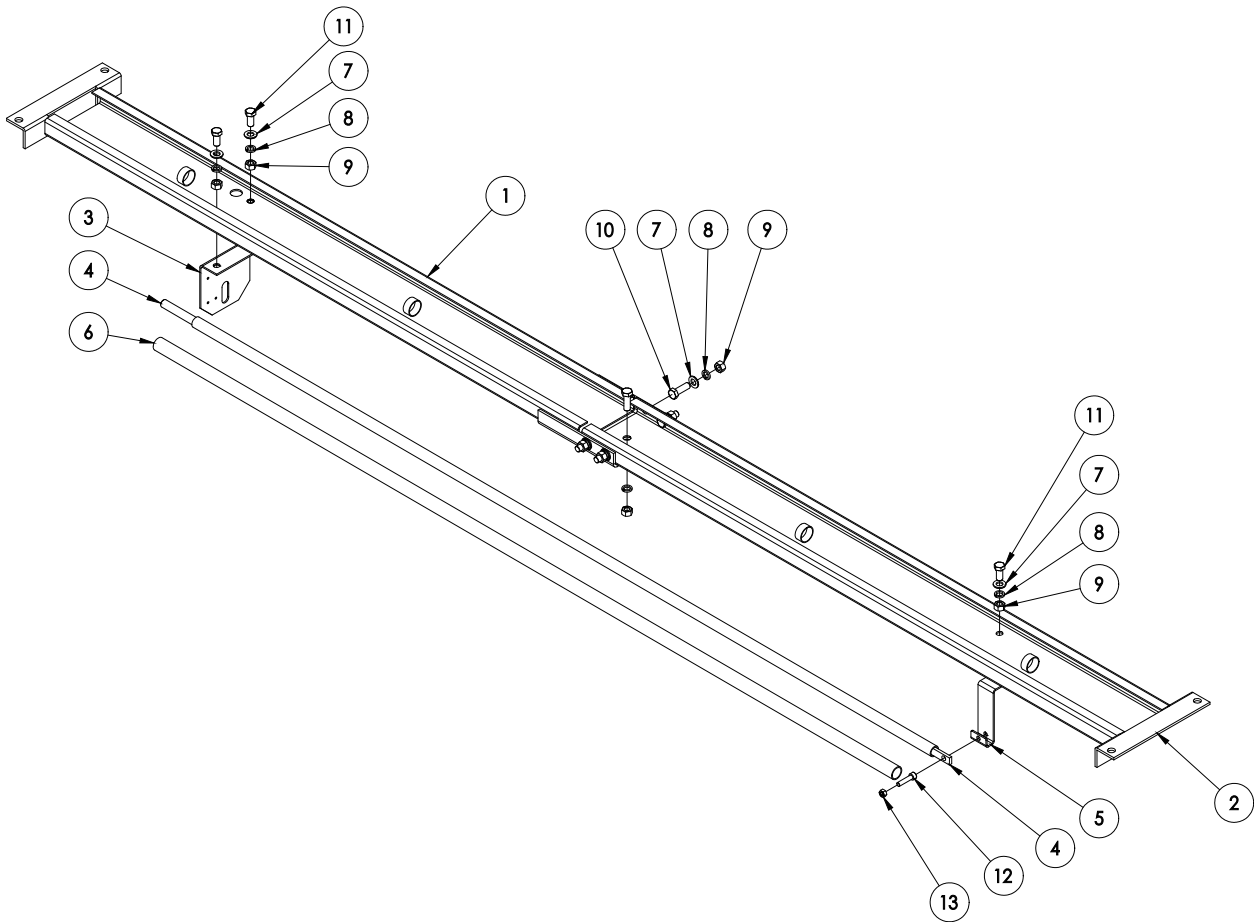
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	12090004	SPACER	4
2	32090013	ARM LOCK	4
3	12090005	PLUNGER	4
4	32090008	PLASTIC BALL	4
5	32090009	SPRING	4
6	32090010	ROLLING SPRING PIN	4
7	32090041	WASHER	8
8	32090042	LOCK WASHER	4
9	32090043	NUT	4

Diagram#12: CYLINDER ASSEMBLY



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	32090014	CYLINDER ASSEMBLY	2
2	32090015	WHEEL	2
3	32090016	WHEEL PIN (WITH SNAP RING)	2
4	32090017	BUSHING	4

Diagram#13: CROSS BEAM ASSEMBLY



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	22090004	RIGHT CROSSBEAM WELDMENT	1
2	22090005	LEFT CROSSBEAM WELDMENT	1
3	32090012	LIMIT BAR BRACKET	1
4	12090003	LIMIT BAR	1
5	32090013	LIMIT BAR HINGE	1
6	32090011	LIMIT BAR COVER	1
7	32090036	12MM FLAT WASHER	8
8	32090035	12MM LOCK WASHER	8
9	32090034	M12 NUT	8
10	32090037	M12 HEX BOLT	5
11	32090037	M12 HEX BOLT	3
12	32090032	M8 HEX BOLT	1
13	32090029	M8 NUT	1

Diagram#14: WIRING DIAGRAM

