



OWNER'S MANUAL

MODEL 810 NYC

INSTALLATION, OPERATION, MAINTENANCE & PARTS

**NOTE: MANUAL including SPECIFICATIONS, subject to change without notice
All ratings specified are based on structural factors only,
not vehicle capacities or capabilities.**



Miller Industries Towing Equipment Inc.
8503 Hilltop Drive
Ooltewah, Tennessee 37363
Phone (423) 238-7227 • FAX (423) 238-7237

FORM NO. 0501576
05 / 07
PRICE \$25.00

LIMITED WARRANTY

MILLER INDUSTRIES TOWING EQUIPMENT INC., hereinafter referred to as MILLER, warrants to the original purchaser that each new MILLER wrecker or other MILLER products will be free from defects in material and workmanship for a period of twelve (12) months from date placed in service, but in no event shall such warranty period exceed twenty-four (24) months from date of manufacture by MILLER. The purchaser must promptly notify MILLER in writing of any failure in material or workmanship. In no event shall MILLER accept such notification later than twenty-four (24) months from date of delivery or twelve (12) months from date placed in service, whichever is earlier.

MILLER's obligation under this warranty, statutory or otherwise, is limited to the repair or replacement at the MILLER factory, or at a point designated by MILLER, of such part or parts as shall appear upon inspection by MILLER to be defective in material or workmanship. New or remanufactured parts will be used for any replacement at MILLER's option. This warranty is not transferable. This warranty does not obligate MILLER to bear the cost of labor or transportation charges in connection with the repair or replacement of any parts found to be defective, nor shall it apply to a product upon which repairs or alterations have been made unless authorized by MILLER.

EXCEPT AS EXPRESSLY SET FORTH IN THIS WARRANTY, MILLER MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, AND HEREBY DISCLAIMS ALL OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. MILLER shall in no event be liable for claimed downtime, claimed loss of profits or goodwill, or any other special, incidental, indirect, or consequential damages concerning or relating to any product or parts, whether based on negligence, strict liability, breach of contract, breach of warranty, misrepresentation or any other legal theory, regardless of whether the loss resulted from any general or particular requirement which MILLER knew or had reason to know about at the time of sale.

MILLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE FINISHED PRODUCTS MANUFACTURED OR SUPPLIED BY ANOTHER MANUFACTURER AND SUPPLIED BY MILLER TO PURCHASER, including, but not limited to, any vehicle to which a MILLER product may be affixed or any accessories or wire rope, and MILLER EXPRESSLY DISCLAIMS ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AS TO SUCH EQUIPMENT OR PRODUCTS. This language shall in no way affect or diminish the rights of the purchaser to rely on such warranties as are extended by such manufacturers or suppliers. MILLER shall, to the extent permitted under applicable law, pass on to the purchaser such manufacturer's or seller's warranty.

MILLER, whose policy is one of continuous improvement, reserves the right to improve its products through changes in design or materials as it may deem desirable without being obligated to incorporate such changes in products previously sold. This warranty is not intended to cover or include the following items, which are set forth by way of example and not limitation:

- A. Normal deterioration of trim, paint, lettering, and appearance items due to wear or exposure to weather, road conditions, road treatments, etc.
- B. Any damage or defect due to accident, misuse, abuse, improper or unauthorized repairs, failure to provide reasonable and necessary maintenance, or uses for which the equipment was not designed or intended.
- C. Alterations or modifications that affect performance, operation or reliability.
- D. Normal maintenance parts including, but not limited to, wear pads, bushings, wire rope, mud flaps, fenderettes, light bulbs, hydraulic oil, filters, and tow sling belts.

IT IS EXPRESSLY UNDERSTOOD THAT MILLER MAKES NO IMPLIED WARRANTY THAT MILLER PRODUCTS SHALL BE FIT FOR THE PURPOSE OF LIFTING OR MOVING PEOPLE OR FOR ANY OTHER IMPROPER USE.



Miller Industries Towing Equipment Inc.
8503 Hilltop Drive
Ooltewah, Tennessee 37363

SERIAL NUMBER

Telephone (423) 238-4171

OWNER, USER AND OPERATOR:

Miller Industries Towing Equipment Inc. appreciates your choice of our wrecker for your application. Our number one priority is user safety which is best achieved by our joint efforts. We feel that you can make a major contribution to safety if you, as the equipment owner and operator:

- 1. Comply with Federal, State, and Local Regulations.**
- 2. Read, Understand, and Follow the Instructions in this Manual.**
- 3. Use Good, Safe Work Practices in a Common Sense Way.**
- 4. Only have Authorized and Trained Operators running the Wrecker.**

Also contained in this manual is a Parts Section for your Wrecker. Use of other than Factory or Factory Authorized Parts will render the Warranty void.

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The operator must read and understand all instructions in this manual before operating the wrecker.

It is assumed by Miller Industries that the Owner/Operator has thorough knowledge of the accepted and lawful retrieval and towing methods as dictated by his city, county or state. Miller Industries rejects any liability claim that may result from the incorrect or unlawful application of its equipment.

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Section I - SAFETY PRECAUTIONS

Presented in the interest of safety for all wrecker operators.



NOTICE

You are obligated to operate your wrecker safely. You can be held legally responsible for injuries or damages resulting from unsafe operating practices. The manufacturer's recommendations for operating this wrecker can help you avoid unsafe practices and their bad consequences. These recommendations are contained in this manual. Miller Industries is not responsible for the results of any unsafe practice of wrecker operators. Furthermore, the division is not responsible for the failure of the wrecker or its accessories resulting from improper maintenance.

The danger from an automobile does not cease when it is disabled or wrecked. Recovering and towing automobiles can be dangerous, too! The danger threatens wrecker operators and everyone close at hand. As a wrecker operator you must develop an awareness of the hazards involved. You must use every safeguard within reason to prevent injuries.

For each step in operating your wrecker develop the habit of asking yourself if it is safe to proceed. Carefully check all rigging (especially snatch blocks) before starting a heavy lift or pull.

We cannot warn you of all the possible dangers you will encounter. But we will tell you of the most common hazards we know about. Learn them well.

Section I - SAFETY PRECAUTIONS (cont'd)

- 1.1 Improper use of this equipment can be dangerous! Incorrect operation can result in bodily injury to the operator and bystanders. Therefore, a thorough understanding of the "operating principles" and "operating instructions" as found in this manual is essential.
- 1.2 Study each job to be done. Apply common sense judgment to assure safety to yourself and bystanders.
- 1.3 Plan ahead. Work safely. Avoid accidental damage and injury. If an accident or fire does occur, react quickly with the tools and skills at hand. Know how to use a first aid kit and a fire extinguisher - and where to get assistance.
- 1.4 Read and understand the following instructions.



1. READ THE MOUNTING/OPERATING/MAINTENANCE MANUAL FOR WARNINGS AND PRECAUTIONS.
2. NEVER TAKE ANYTHING FOR GRANTED. DON'T ASSUME THAT EVERYTHING IS ALL RIGHT AT THE START OF WORK TODAY JUST BECAUSE EVERYTHING SEEMED ALL RIGHT AT THE END OF WORK YESTERDAY. BEFORE BEGINNING OPERATION, THOROUGHLY INSPECT THE ENTIRE WRECKER TO BE SURE IT IS IN GOOD OPERATING CONDITION.
3. VISUALLY INSPECT THE WRECKER FOR EVIDENCE OF PHYSICAL DAMAGE, SUCH AS CRACKING, BENDING, OR DEFORMATION OF PLATES OR WELDS. INSPECT CAREFULLY FOR CRACKING OR FLAKING OF PAINT, WHICH MAY INDICATE A DANGEROUS CRACK IN THE STRUCTURE BENEATH. DO NOT OPERATE UNTIL REPAIRS ARE MADE.
4. LOOSE OR MISSING HARDWARE, BOLTS, NUTS, AND PINS SHOULD BE PROPERLY TIGHTENED OR REPLACED WITH MANUFACTURER'S SPECIFIED HARDWARE.
5. CHECK FOR FLUID LEAKS. HYDRAULIC SYSTEM LEAKS MUST BE CORRECTED BEFORE THE WRECKER IS OPERATED. INSPECT ALL HYDRAULIC HOSES, ESPECIALLY THOSE WHICH FLEX

Section I - SAFETY PRECAUTIONS (cont'd)

OR MOVE IN SERVICE, AND REPLACE IF NECESSARY. SECURE ALL CAPS AND FILLER PLUGS FOR ALL SYSTEMS.

6. YOUR CLOTHING SHOULD BE RELATIVELY CLOSEFITTING.
7. ALWAYS WEAR PROTECTIVE ITEMS SUCH AS SAFETY GLASSES, GLOVES, REFLECTIVE CLOTHING AND SAFETY SHOES.
8. BEFORE OPERATING THE BOOM, REFER TO THE BOOM CAPACITY LABELS ON THE BOOM AND INSIDE OF THE DOOR OF THE CAB AND IN THE SPECIFICATION SECTION OF YOUR OPERATING MANUAL. FOR CHASSIS CAPACITY CONSULT YOUR TRUCK DEALER. NEVER EXCEED MANUFACTURER'S LOAD RATING. THE STIPULATIONS PERTINENT TO THESE RATINGS SHALL ALWAYS BE CAREFULLY OBSERVED.

RATINGS SHOWN ARE BASED ON THE HYDRAULIC, MECHANICAL, OR STRUCTURAL DESIGN OF THE WRECKER RATHER THAN STABILITY. IT IS ALWAYS UNSAFE TO APPLY ANY LOAD WHICH IS GREATER THAN RATED LOAD SHOWN ON THE DATA PLATE.

9. DO NOT USE THIS EQUIPMENT EXCEPT ON SOLID, LEVEL SURFACE WITH STABILIZERS PROPERLY EXTENDED AND TRUCK BRAKES LOCKED.
10. OPERATE ALL CONTROLS SLOWLY AND SMOOTHLY TO AVOID DAMAGE TO WRECKER OR INJURY TO PERSONNEL.
11. DO NOT OPERATE, WALK OR STAND BENEATH BOOM OR A SUSPENDED LOAD.
12. NEVER LIFT LOAD OVER ANYONE.
13. DO NOT USE BOOM TO LIFT PEOPLE.
14. KEEP LOAD WITHIN ONE FOOT OF THE GROUND WHENEVER POSSIBLE.
15. FOR TRAVEL, BOOM MUST BE IN STOWED POSITION AND P.T.O. DISENGAGED.

Section I - SAFETY PRECAUTIONS (cont'd)



ONLY AUTHORIZED AND TRAINED PERSONNEL SHOULD BE PERMITTED TO OPERATE THIS WRECKER UNSUPERVISED.

TRAINED PERSONNEL ARE THOSE WHO HAVE WORKED UNDER EXPERIENCED SUPERVISION AND HAVE PERFORMED ALL WRECKER MANEUVERS, HAVE READ THE MOUNTING, OPERATING AND MAINTENANCE MANUAL, WARNINGS AND PRECAUTIONS, AND UNDERSTAND AND HAVE HAD EXPLAINED TO THEM BY THEIR EMPLOYER THE HAZARDS OF OPERATING THE WRECKER. THEY MUST BE FAMILIAR WITH THE HAZARDS OF OPERATING AT A SITE WHERE ELECTRIC POWER LINES, IRREGULAR GROUND CONTOUR, WATER, ICE, MUD, OR OTHER CONDITIONS CAN INTERFERE WITH ORDINARY CAREFUL OPERATION OF THIS WRECKER.

AN UNTRAINED OPERATOR SUBJECTS HIMSELF AND OTHERS TO DEATH OR SERIOUS INJURY.



USE SAFETY CHAINS ON ALL TOWING AND LIFTING APPLICATIONS!

Section I - SAFETY PRECAUTIONS (cont'd)

SAFETY TIPS



Death or serious injury can occur when working near power lines.

Learn - beforehand - as much about your working area as possible. Be sure that exact locations of overhead power lines, and other obstructions or hazards are known.



Don't use winch cables with hooks attached by means of cable clips. Use only cables with hooks attached by means of thimbles and machine swaged terminals.

USE CABLE CLIPS ONLY IN THE EVENT OF AN EMERGENCY FIELD TEMPORARY REPAIR.

Use at least three clips spaced 3-4 inches apart and reduce the cable working limit by 20%. U-bolt of the clip should never be around the live or long end of the cable. Replace clips as soon as possible with swaged cable termination.

Section I - SAFETY PRECAUTIONS (cont'd)

SAFETY TIPS

Proper technique for using wire rope clips.

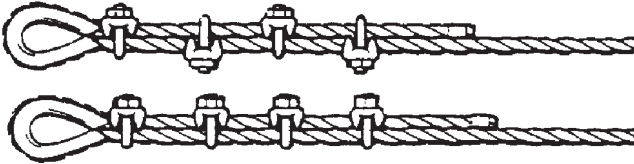
USE CABLE CLIPS ONLY IN THE EVENT OF AN EMERGENCY FIELD TEMPORARY REPAIR.

RIGHT
WAY



Attach Attach Attach Attach
Second Third Fourth First

WRONG
WAY



1. Turn back rope length specified in the chart. Apply first clip so U-bolt is no less than the saddle width from the dead end. Tighten nuts evenly and torque as specified.
2. Apply next clip as near loop as thimble will permit. Turn nuts on firm, but do not tighten.
3. Space additional clips as indicated so distance between clips is equal. Tighten all nuts evenly and torque as specified.
4. Apply the initial load and retighten all nuts to recommended torque. Inspect periodically and retighten as needed to the recommended torque.

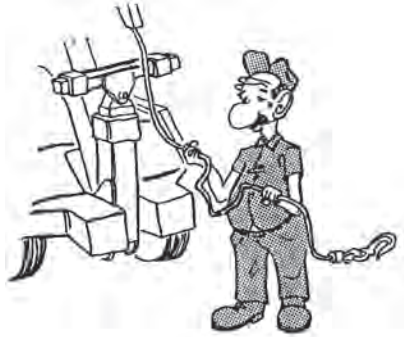
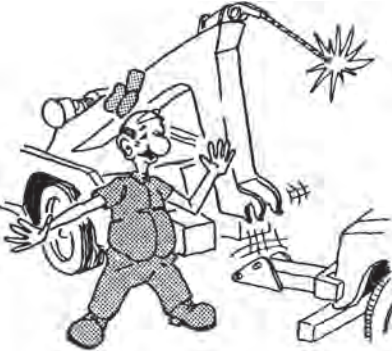
CLIP SIZE (INCHES)	MINIMUM NUMBER OF CLIPS	AMOUNT OF ROPE TO TURN BACK IN INCHES	TORQUE IN FT.LBS.
3/8	2	6 1/2	45
7/16	2	7	65
1/2	3	11 1/2	65
9/16	3	12	95
5/8	3	12	95
3/4	4	18	130

This table is based on Crosby-Laughlin.

Section I - SAFETY PRECAUTIONS (cont'd)

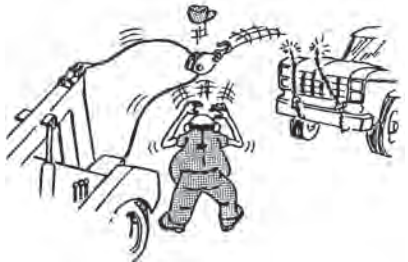
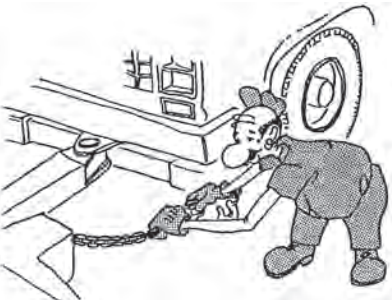
SAFETY TIPS

Don't use a wrecker that has not been properly maintained. Pay special attention to wrecker mounting bolts, cable condition, and lubrication of moving parts.



Don't use damaged cables on your wrecker. Become familiar with the various types of cable damage and carefully inspect all cables being used in a recovery operation before starting to pull.

Always use two safety chains when towing all vehicles, regardless of distance.



After rigging cables, don't begin pulling without rechecking connections. Make sure that all cables and snatch blocks are securely attached and cannot accidentally pull loose.

Section I - SAFETY PRECAUTIONS (cont'd)

SAFETY TIPS

Don't expect your wrecker to tow loads equal to the wrecker rating. Wrecker ratings apply to loads imposed during recovery, with the wrecker properly stabilized.



Don't pull a load with your wrecker without making absolutely sure that the winch drum clutch is FULLY engaged.

Don't attempt to recover heavy loads without first estimating the amount of pull that will be required. Rig to keep the estimated amount of pull well within equipment ratings.



Don't exceed ratings of booms, cables, snatch blocks, or winches. Stay within nameplate ratings. Note that boom ratings decrease significantly as a boom is extended.

Section I - SAFETY PRECAUTIONS (cont'd)

SAFETY TIPS

Don't get under a raised vehicle or load unless it has adequate safety blocks in place.



Don't exceed WORKING LIMIT ratings of cable. Use breaking strength ratings only for selecting replacement cable.

Don't tie down the front end of your wrecker for recovery work or heavy lifts. You are apt to damage the truck frame if you do.



Don't disengage the winch drum clutch while the winch cable is loaded.

Section I - SAFETY PRECAUTIONS (cont'd)

SAFETY TIPS

Don't permit bystanders in the area while performing recovery work.



Don't completely unwind all cable from a winch while loaded. Keep **AT LEAST** five wraps on the drum.

Don't operate your wrecker's engine faster than recommended. excessive speeds can damage hydraulic pumps, and winches.



Don't rely on anti-theft steering locks to secure the steering wheel. Use a special steering wheel clamping device. Rope is commonly used to secure steering wheels, but that is not as reliable as devices designed for this purpose.

Section I - SAFETY PRECAUTIONS (cont'd)

SAFETY TIPS

Don't tow a vehicle that reduces the weight on the front wheels of your wrecker more than 40 percent.



When using a towing dolly, don't exceed the speed recommended for the dolly.

After you have hooked up a vehicle for towing, don't start the tow until you have double checked the hook-up, installed safety chains, and released the parking brakes of the towed vehicle.



Don't travel with the wrecker Clutch pump engaged. Engage it only while operating the wrecker controls.

Section I - SAFETY PRECAUTIONS (cont'd)

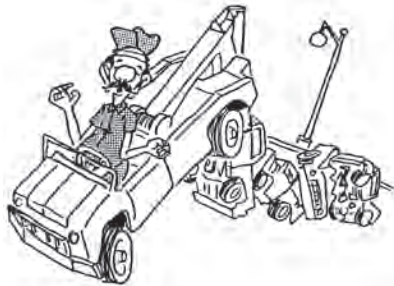
SAFETY TIPS

Don't tow a vehicle on its drive wheels unless steps have been taken to protect its transmission and differential. Follow the recommendations of the vehicle manufacturer. As an alternative, use a towing dolly.



Don't tow a vehicle on its front wheels if they are damaged.

Don't tow a vehicle on its front wheels unless the steering wheel is secured with the front wheels straight ahead.



Don't tow a vehicle at night without proper signal lights on the towed vehicle and the wrecker.

Section I - SAFETY PRECAUTIONS (cont'd)

SAFETY TIPS

Don't use wrecker flashing lights except under conditions permitted by law.



Don't continue to wind in winch cable after the hook is against the boom end.

STRAPS PLUS SAFETY CHAINS

Wheel lifts require both systems for safety.

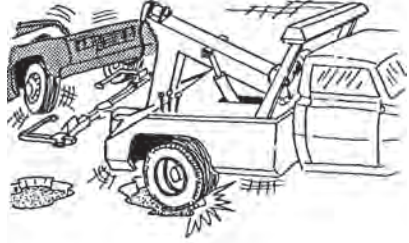
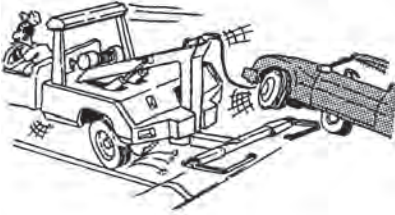
You should use wheel straps plus safety chains with all wheel lifts.

The following illustrations show why.

Section I - SAFETY PRECAUTIONS (cont'd)

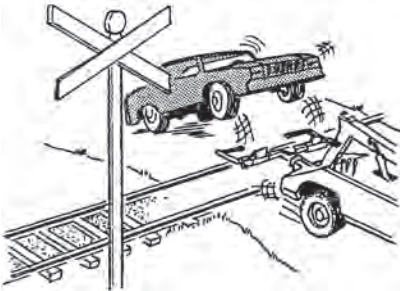
SAFETY TIPS

Without straps, the towed vehicle may bounce free when crossing a speed bump or dip.



Without straps, a pothole may cause the vehicle to come free.

Without straps, crossing a railroad track may free the vehicle.

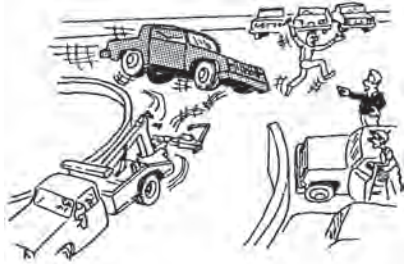
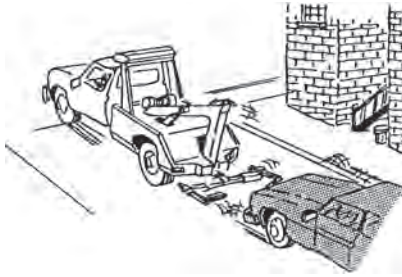


Without straps, a panic stop or minor collision may cause the vehicle to come loose.

Section I - SAFETY PRECAUTIONS (cont'd)

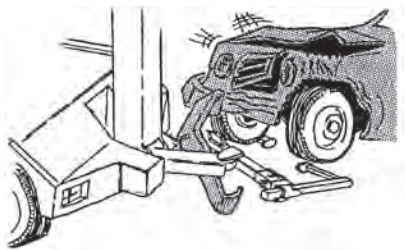
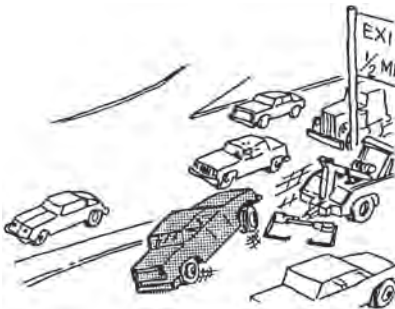
SAFETY TIPS

Without straps, fast starts may cause the vehicle to jump free, especially when going uphill.



Without straps, maneuvering in parking areas may twist the vehicle free of the wheel lift.

Without straps, the vehicle may contact the ground and pull free if wheel lift hydraulics fail.



Without straps, the vehicle might be forced out of the wheel lift if the crossbar is obstructed.

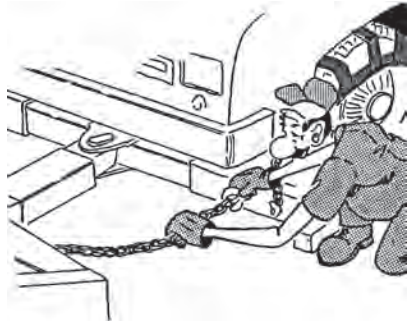
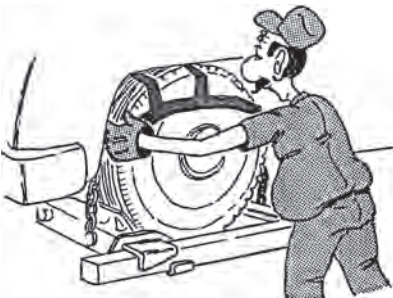
Section I - SAFETY PRECAUTIONS (cont'd)
SAFETY TIPS

**To avoid such accidents,
use wheel straps
plus safety chains.**

You need both systems for safety.

**Installing them takes very
little time and effort.
They may save a life
or avoid serious injury.**

A. Always use two wheel straps when towing all vehicles, regardless of distance.



B. Always use two safety chains when towing all vehicles, regardless of distance.

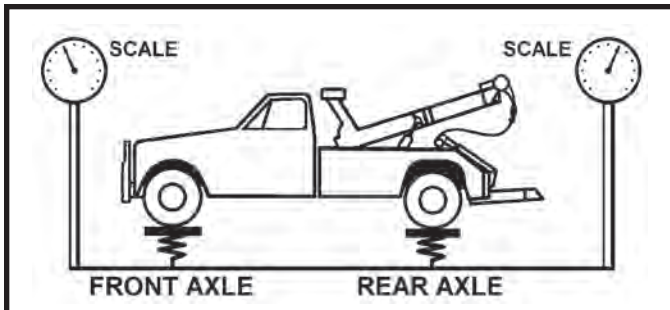
Section I - SAFETY PRECAUTIONS (cont'd)

SAFE TOWING

There are two key factors in safe towing:

1. Have enough front axle weight for safe steering.
2. Avoid excess rear axle weight.

The issue here is safety. Unsafe steering may cause a serious accident. It is recommended that a safe steering formula that maintains at least 50 percent of the UNLADEN (unloaded) front axle weight, for towing, be used.



Unladen weights at front and rear axles.

The formula is expressed as follows: $ML = .5FAW \times WB/OH$

where:

ML = maximum lifted load for safe steering.

FAW = unladen (unloaded) weight at front axle.

WB = wheel base or distance between the center of the front axle to the center of the rear axle(s).

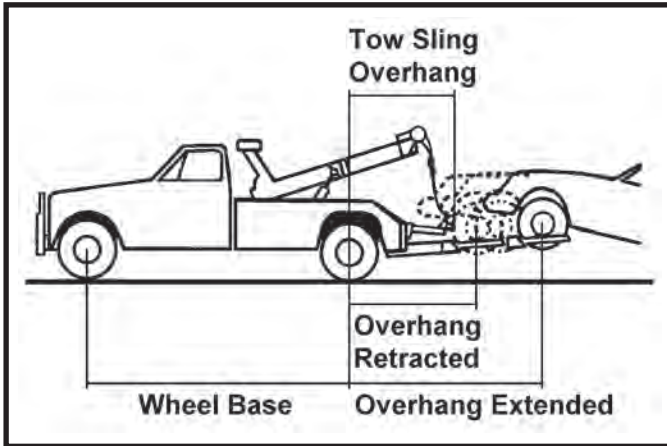
OH = overhang or distance from the center of the rear axle(s) to the lift point of the towing device.

To use the formula, multiply the unladen weight at the front axle by .5. Multiply the result by the wheel bases. Then, divide that result by the overhang. So, you should calculate the maximum lifted load for each tow truck, using this formula, post those limits in the truck and instruct each driver to strictly observe those limits.

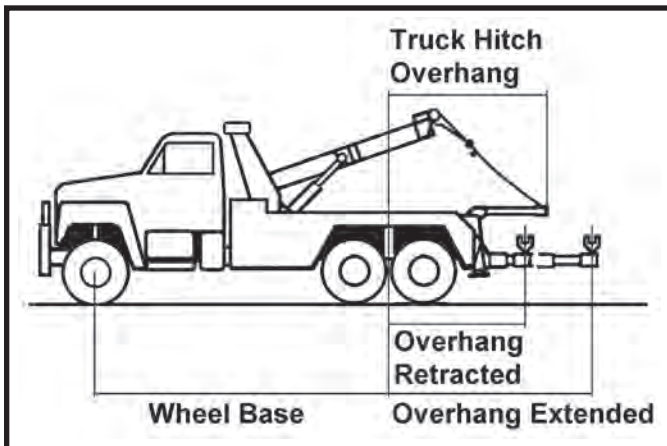
You should also observe gross vehicle weight ratings (GVWR), gross axle weight ratings (GAWR), and the towing equipment ratings.

Section I - SAFETY PRECAUTIONS (cont'd)

SAFE TOWING



Wheel base and overhang distances for tow slings and wheel lifts.



Wheel base and overhang distances for truck hitches and underlifts.

Section II - SPECIFICATIONS

- 2.1 Federal law requires that the final stage manufacturer, i.e., that person or company installing new equipment on a new chassis, must certify the completed vehicle by obtaining, completing and affixing to the door post on the drivers side of the vehicle, a Certification Label similar to the one shown. See Figure 2.1.

MANUFACTURED BY: _____
DATE OF MANUFACTURE _____ mo _____ yr
INCOMPLETE VEHICLE MANUFACTURED BY: _____
DATE INC. VEH. MFD. _____ mo _____ yr
GVWR _____
GAWR FRONT _____ with _____ tires, _____ rims, @ _____ psi cold _____
GAWR INTERMEDIATE (1) _____ with _____ tires, _____ rims, @ _____ psi cold _____
GAWR INTERMEDIATE (2) _____ with _____ tires, _____ rims, @ _____ psi cold _____
GAWR REAR _____ with _____ tires, _____ rims, @ _____ psi cold _____
THIS VEHICLE CONFORMS TO ALL APPLICABLE FEDERAL MOTOR VEHICLE SAFETY STANDARDS IN EFFECT IN: _____ mo _____ yr
VEHICLE IDENTIFICATION NUMBER: _____
VEHICLE TYPE: _____

FIGURE 2.1

Section II - SPECIFICATIONS (cont'd)

2.2 SERIAL NUMBER / SPECIFICATION LABEL

Each 810 NYC will have a Serial Number / Specification Label mounted on the outer boom. The label will exhibit the Model Number, Serial Number and Ratings. See Figure 2.2.

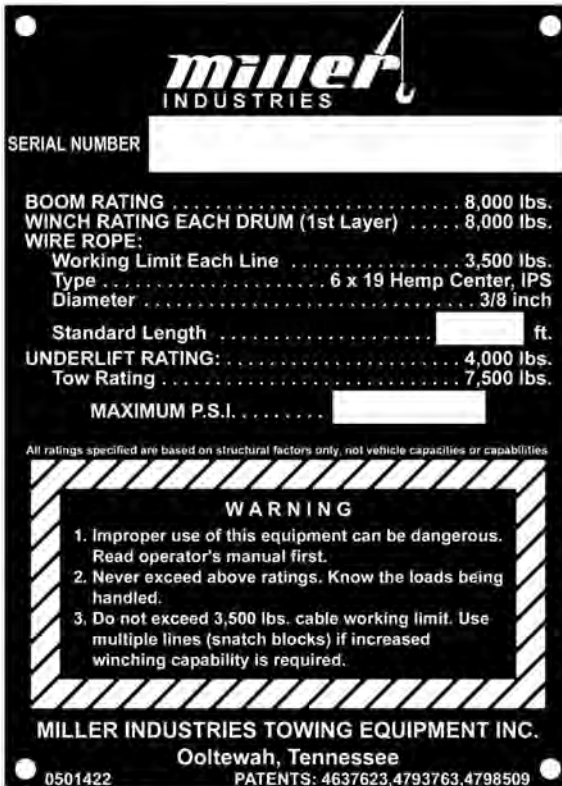


FIGURE 2.2

2.3 SPECIFICATIONS - 810 NYC

8-ton independent recovery boom (rated at boom swivel) with 8,000 lb. hydraulic winch, 86" wide modular body 60" C.A.

Section II - SPECIFICATIONS (cont'd)

2.3 SPECIFICATIONS - 810 NYC (cont'd)

(a) Winch

Rating (1st layer) 8,000 lbs.

(b) Cable

Diameter and length (each drum) 3/8" Dia. x 100'

Type 6 x 19 hemp center, IPS

Working line limit 3,500 lb.

(c) Boom Specifications

Boom Rating at Boom Swivel (Retracted)	16,000 lbs.
Maximum Boom Elevation	38°

2.4 SPECIFICATIONS - Wheel Lift

DESCRIPTION	INCHES
Retracted Distance from Tailgate At Normal Tow Position	41"
Extended Distance from Tailgate At Normal Tow Position	73"
Maximum Hydraulic Extension	32"

Lifting Rating 4,000 lbs.

Tow Rating 7,500 lbs.

Section II - SPECIFICATIONS (cont'd)

2.5 CHASSIS RECOMMENDATIONS

The 810 NYC should be installed on a chassis with minimum GVWR of 17,500 lbs., dual rear wheels and a maximum C.A. of 60". A heavy-duty spring package is recommended.

2.6 STANDARD FEATURES

- Independent Boom & Wheel Lift System
- 60" C.A. 86" Wide Modular Body
- Safety Chains in Tailboard Chain Pockets
- Safety Chain Pocket Guards
- Wheel Lift Ratchets/Straps
- Drivers and Passenger Side Tool Compartments
- In-Cab Wheel Lift Remote Controls
- 8,000 lb. Planetary Hydraulic Winch
- Mud Flaps
- Wiring Harness with Junction Box
- 3/8" x 100' Cable Assembly
- FMVSS Lighting
- Tire Spacers (Flat Tires)
- Trailer Hitch Attachment
- Clutch Pump and Brackets

Note: Specifications Subject to Change without Notification.

Section III - OPERATIONAL FUNCTIONS WRECKER

- 3.1 Your new wrecker is fully hydraulic. It receives its power by means of a belt driven electric clutch operated hydraulic pump mounted to the truck engine.
- 3.2 The hydraulic pump is electrically engaged and is switched on by the clutch pump switch mounted in the truck cab. See Figure 3.1.



FIGURE 3.1



THE PUMP IS DESIGNED TO RUN ANY FUNCTION AT NORMAL IDLE SPEED. DO NOT OVER-REV ENGINE.

- 3.3 The hand held control units are electrically switched on by the switch, and the hydraulic pump is electrically engaged when any function switch on the hand held control unit is activated.

NOTE

THE PUMP IS ONLY ACTIVATED WHEN A HAND HELD CONTROL SWITCH IS ACTIVATED.

Section III - OPERATIONAL FUNCTIONS WRECKER (cont'd)

- 3.4 Each recovery function of your 810 NYC is controlled from the hand held control unit found in the driver's side tool compartment. The hand held control unit is clearly marked as to its functions and directions. See Figure 3.2.



FIGURE 3.2

- 3.5 The wrecker boom is elevated and extended by means of double-acting cylinders. The boom can be elevated or extended under "LOAD" or "NO-LOAD" conditions.
- 3.6 The self-locking, worm-driven winch is powered by its own hydraulic motor attached directly to the winch input shaft. See Figure 3.3.

Section III - OPERATIONAL FUNCTIONS WRECKER (cont'd)



FIGURE 3.3

NOTE

**CHECK OIL LEVEL IN WINCH BEFORE ANY OPERATION.
FILL TO PROPER LEVEL WITH REQUIRED GEAR LUBRICANT
AS NEEDED. REFER TO SECTION V - MAINTENANCE
FOR PROPER PROCEDURES.**

- 3.2** The switch panel mounted in the truck cab controls the flashing beacon bar, flood lights and hook-up lights. See Figure 3.4.

Section III - OPERATIONAL FUNCTIONS WRECKER (cont'd)



FIGURE 3.4



**USE SAFETY CHAINS ON ALL TOWING
AND LIFTING APPLICATIONS.**

Section IIIA - OPERATIONAL FUNCTIONS WHEEL LIFT

- 3A.1** Your new wheel lift is totally hydraulic. It receives its power by means of a belt driven electric clutch operated hydraulic pump mounted to the truck engine.
- 3A.2** The hydraulic pump is electrically engaged and is switched on by the clutch pump switch mounted in the truck cab. Refer to Figure 3.1.



**THE PUMP IS DESIGNED TO RUN ANY FUNCTION
AT NORMAL IDLE SPEED. DO NOT OVER-REV ENGINE.**

- 3A.3** The hand held control units are electrically switched on by the switch, and the hydraulic pump is electrically engaged when any function switch on the hand held control unit is activated.

NOTE

**THE PUMP IS ONLY ACTIVATED WHEN A HAND HELD
CONTROL SWITCH IS ACTIVATED.**

- 3A.4** Each wheel lift function of your 810 NYC is controlled from either of the hand held control units found in the truck cab or the passenger's side tool compartment. The hand held control unit is clearly marked as to its functions and directions. See Figure 3A.1.

Section IIIA - OPERATIONAL FUNCTIONS WHEEL LIFT (cont'd)



FIGURE 3A.1

- 3A.5** The wheel lift is elevated, extended, tilted and folded, and the claws are opened and closed by means of double-acting hydraulic cylinders and can be operated under either "LOAD" or "NO LOAD" conditions.
- 3A.6** The switch panel is mounted in the truck cab and controls the light bar, flood lights and lower work lights. Refer to Figure 3.4.



**USE SAFETY CHAINS ON ALL TOWING
AND LIFTING APPLICATIONS.**

Section IV - OPERATING INSTRUCTIONS

WRECKER

4.1 For reasons of safety, it is important that the Owner(s) / Operator(s) of the wrecker should become thoroughly familiar with the controls and functions of the wrecker before attempting any operation of the wrecker.

4.2 HYDRAULIC WINCH

The hydraulic winch is to be used in retrieving and lifting a vehicle for transport.

- (a) **DO NOT** fasten the winch hook directly to any vehicle to be towed.
- (b) **DO NOT** wrap the winch cable around any object.
- (c) **DO NOT** exceed the working limit of the cable (3,500 lbs.).
- (d) **DO NOT** use the winch or cable for the lifting of people.

4.3 PREPARING TO RECOVER VEHICLE

- (a) Position wrecker as near as possible to disabled vehicle to be recovered.
- (b) Reduce truck's engine to an idle and apply parking brake. Depress clutch, place transmission in neutral and engage clutch pump by activating clutch pump switch located in cab. Refer to Figure 3.1. When engaged, the clutch pump indicator light in the cab will illuminate.



NEVER DRIVE TRUCK ON STREET WITH CLUTCH PUMP ENGAGED, THIS CAN CAUSE PUMP FAILURE DUE TO OVER-SPEED AND OVERHEATING.

- (c) Adjust engine speed to desired RPM (recommended 1400 to 1500) using the electronic throttle control in cab of truck.

DO NOT EXCEED 1500 RPM

Section IV - OPERATING INSTRUCTIONS

WRECKER (cont'd)

4.4 BOOM ELEVATION

Elevate boom to desired height by use of the BOOM "UP/DOWN" Control.

NOTE

IN THE EVENT OF HYDRAULIC PRESSURE LOSS, THE BOOM WILL REMAIN ELEVATED DUE TO THE HOLDING VALVE INCORPORATED INTO THE LIFT CYLINDERS.

4.5 BOOM EXTENSION

- (a) The inner boom may be extended to desired position by use of the BOOM "IN/OUT" Control.
- (b) Before operating any control handles, observe the winch cables to make sure they are free and have sufficient slack to allow boom to extend. If not, pay out sufficient cable by either (1) or (2):
 - (1) Operate CABLE "IN/OUT" Control.
 - (2) Disengage winch drum by pushing in the winch clutch control handle and rotating it 90°. This will allow the winch drum to free wheel and cable may be pulled out by hand. After sufficient cable has been pulled out rotate the winch clutch control handle 90° to allow winch to re-engage.

4.6 CABLE

- (a) The boom end yokes swivel to allow pulls from either side. See Figure 4.1.

Section IV - OPERATING INSTRUCTIONS WRECKER (cont'd)



FIGURE 4.1

- (b) A snatch block may be used, during recovery operation, to reduce line load and increase pulling capacity. The winch cable is then anchored in the ring at the end of the boom.
- (c) After recovery operation is complete, rewind winch cable on drum by operation of the CABLE "IN/OUT" Control.



**USE SAFETY CHAINS ON ALL TOWING
AND LIFTING APPLICATIONS.**

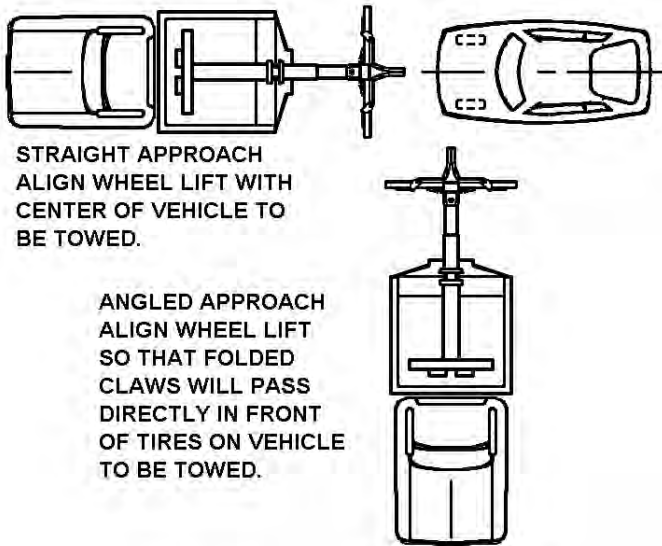
Section IVA - OPERATING INSTRUCTIONS

WHEEL LIFT

4A.1 For reasons of safety, it is important that the Owner(s) and Operator(s) of the Wheel Lift System become thoroughly familiar with its controls, components and load requirements before attempting any operation.

4A.2 PREPARING TO LOAD VEHICLE

(a) Align the Wheel Lift with the disabled vehicle to be towed. See Figure 4A.1.



STRAIGHT APPROACH
ALIGN WHEEL LIFT WITH
CENTER OF VEHICLE TO
BE TOWED.

ANGLED APPROACH
ALIGN WHEEL LIFT
SO THAT FOLDED
CLAWS WILL PASS
DIRECTLY IN FRONT
OF TIRES ON VEHICLE
TO BE TOWED.

FIGURE 4A.1

NOTE
LEAVE SUFFICIENT SPACE BETWEEN REAR OF
WRECKER AND VEHICLE TO BE TOWED SO THAT
WHEEL LIFT MAY BE LOWERED TO TOWING
POSITION WITHOUT STRIKING VEHICLE.

Section IVA - OPERATING INSTRUCTIONS

WHEEL LIFT (cont'd)

- (b) Reduce truck's engine to an idle and apply parking brake. Depress clutch, place transmission in neutral and engage Clutch pump by pulling Clutch pump control knob located in cab. When engaged, the Clutch pump indicator light in the cab will illuminate. Refer to Figure 4.1.



NEVER DRIVE TRUCK ON STREET WITH CLUTCH PUMP ENGAGED, THIS CAN CAUSE PUMP FAILURE DUE TO OVER-SPEED AND OVERHEATING.

- (c) Adjust engine speed to desired RPM (recommended 1400 to 1500) using the electronic throttle control in cab of truck.

DO NOT EXCEED 1500 RPM

4A.3 VEHICLE HOOK UP

- (a) Lower Wheel Lift Boom to the horizontal position using the WHEEL LIFT FOLD "UP-DOWN" Control, and then lower Wheel Lift to ground and raise until Wheel Lift just clears ground level by use of the BOOM "UP-DOWN" Control. See Figure 4A.2.



BE SURE YOU ARE CLEAR OF THE WHEEL LIFT BOOM, CROSSBAR AND CLAWS WHEN THE WHEEL LIFT IS LOWERED.

Section IVA - OPERATING INSTRUCTIONS

WHEEL LIFT (cont'd)

4A.3 VEHICLE HOOK UP (cont'd)



FIGURE 4A.2

- (b) Extend Wheel Lift Boom to maximum stroke, then retract boom approximately 3" by use of the WHEEL LIFT EXTEND "IN-OUT" Control. See Figure 4A.3.



FIGURE 4A.3

Section IVA - OPERATING INSTRUCTIONS

WHEEL LIFT (cont'd)

4A.3 VEHICLE HOOK UP (cont'd)

- (c) If disabled vehicle is equipped with small or flat tires, it may be necessary to attach the small tire adapters to claws. See Figures 4A.4 and 4A.5.



FIGURE 4A.4



FIGURE 4A.5

OPERATING INSTRUCTIONS

WHEEL LIFT (cont'd)

4A.3 VEHICLE HOOK UP (cont'd)

- (d) After all preparations have been made, position crossbar by either (1) or (2):
1. Straight Approach: Back the Wheel Lift until the crossbar is firmly against the tires of the vehicle to be towed. See Figure 4A.6.



FIGURE 4A.6

2. Angled Approach: Back the Wheel Lift until the crossbar is rotated by contact with the tire and is centered between tires on vehicle to be towed. See Figures 4A.7 and 4A.8.

OPERATING INSTRUCTIONS

WHEEL LIFT (cont'd)

4A.3 VEHICLE HOOK UP (cont'd)



FIGURE 4A.7



FIGURE 4A.8

- (e) Engage claws to capture tires of vehicle to be towed using the CLAW "OPEN/CLOSE" Control. See Figure 4A.9. Ensure that both claws have fully captured both tires before proceeding.

OPERATING INSTRUCTIONS

WHEEL LIFT (cont'd)

4A.3 VEHICLE HOOK UP (cont'd)



FIGURE 4A.7



**DO NOT ATTEMPT TO LIFT OR MOVE VEHICLE
IF CLAWS ARE NOT IN POSITION SHOWN
IN FIGURE 4A.9 WITH TIRES CAGED.**

- (f) Check position of tires from left to right. Tires should be centered on the wheel lift as much as possible. On wide track vehicles such as vans, this is critical. On these vehicles, the tires may hang over the claws one or two inches on each side. This is permissible provided tire tie-down straps are properly installed.

OPERATING INSTRUCTIONS

WHEEL LIFT (cont'd)

4A.3 VEHICLE HOOK UP (cont'd)



**DO NOT ATTEMPT TO LIFT OR MOVE VEHICLE
IF CLAWS ARE NOT IN POSITION SHOWN
IN FIGURE 4A.9 WITH TIRES CAGED.**

- (f) Check position of tires from left to right. Tires should be centered on the wheel lift as much as possible. On wide track vehicles such as vans, this is critical. On these vehicles, the tires may hang over the claws one or two inches on each side. This is permissible provided tire tie-down straps are properly installed.

NOTE

TOWING REAR WHEEL DRIVE VEHICLES

**WHEN LIFTING AND TOWING FROM REAR DRIVE AXLE,
PLACE VEHICLE IN GEAR WITH PARKING BRAKE
ENGAGED. STRAIGHTEN FRONT WHEELS AND ATTACH
STEERING WHEEL LOCK.**

**WHEN LIFTING AND TOWING FROM FRONT TIRES,
DISENGAGE PARKING BRAKE AND PLACE IN NEUTRAL GEAR.**

**VEHICLE MUST BE PLACED IN GEAR WITH PARKING BRAKE
ENGAGED BEFORE DISCONNECTING FROM THE WHEEL LIFT.**

OPERATING INSTRUCTIONS

WHEEL LIFT (cont'd)

4A.3 VEHICLE HOOK UP (cont'd)

NOTE
TOWING FRONT WHEEL DRIVE VEHICLES

**WHEN LIFTING AND TOWING FROM FRONT DRIVE WHEELS,
DISENGAGE PARKING BRAKE AND PLACE IN NEUTRAL GEAR.**

**WHEN TOWING FROM REAR WHEELS, ENGAGE PARKING
BRAKE AND PLACE IN NEUTRAL GEAR.**



**USE TIE-DOWN STRAPS AND SAFETY CHAINS
ON ALL TOWING AND LIFTING APPLICATIONS.**

4A.4 TIE-DOWN STRAP PROCEDURES

- (a) Using the BOOM "UP/DOWN" Control, raise the vehicle to the desired towing height.
- (b) Lay the safety strap across the tire. Make sure the strap is flat and not twisted. The strap should follow the curvature of the tire.
- (c) Place hook with tightening handle on outside of claw, the other end should hook into crosstube.
- (d) Pull the safety strap tight across the tire, to assure safety. See Figure 4A.10.

OPERATING INSTRUCTIONS

WHEEL LIFT (cont'd)

4A.4 TIE-DOWN STRAP PROCEDURES (cont'd)



FIGURE 4A.10

- (e) With the strap pulled tight, pass the chain between the two hooks welded to the front of the crossbar at an angle.
- (f) Repeat tie-down strap procedures on opposite side of vehicle.

4A.5 SAFETY CHAIN HOOK-UP PROCEDURES

- (a) Extend free end of chain from storage caddy. See Figure 4A.11.

OPERATING INSTRUCTIONS

WHEEL LIFT (cont'd)

4A.5 SAFETY CHAIN HOOK-UP PROCEDURES (cont'd)



FIGURE 4A.11

- (b) Loop free end of chain under crossbar and attach to vehicle to be towed. See Figure 4A.12 & 4A.13.



FIGURE 4A.12

OPERATING INSTRUCTIONS

WHEEL LIFT (cont'd)

4A.5 SAFETY CHAIN HOOK-UP PROCEDURES (cont'd)



FIGURE 4A.13

- (c) The following are some suggested vehicle hook-ups for safety chains. See Figures 4A.14 thru 4A.17 or consult "AAA" towing manual.

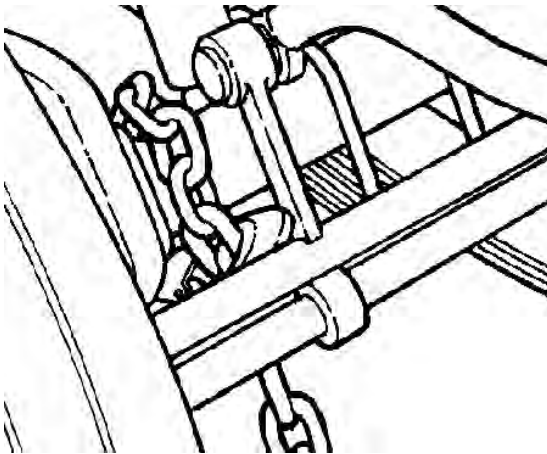


FIGURE 4A.14

OPERATING INSTRUCTIONS

WHEEL LIFT (cont'd)

4A.5 SAFETY CHAIN HOOK-UP PROCEDURES (cont'd)

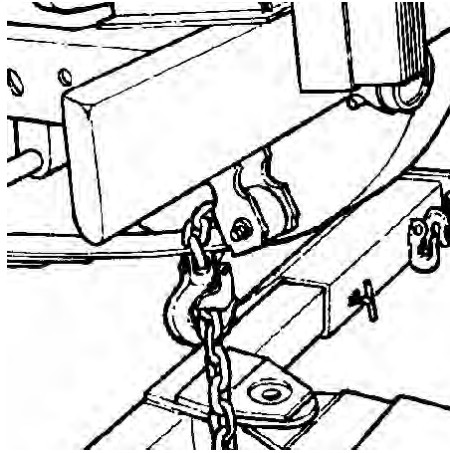


FIGURE 4A.15

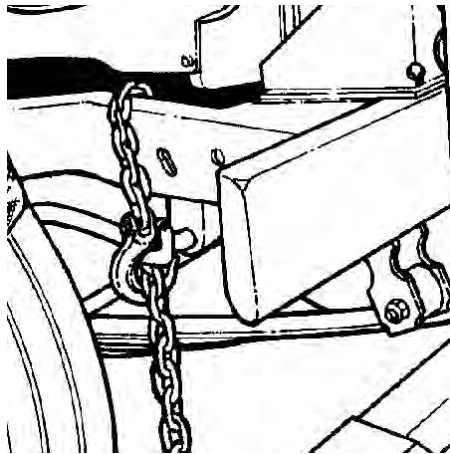


FIGURE 4A.16

OPERATING INSTRUCTIONS

WHEEL LIFT (cont'd)

4A.5 SAFETY CHAIN HOOK-UP PROCEDURES (cont'd)

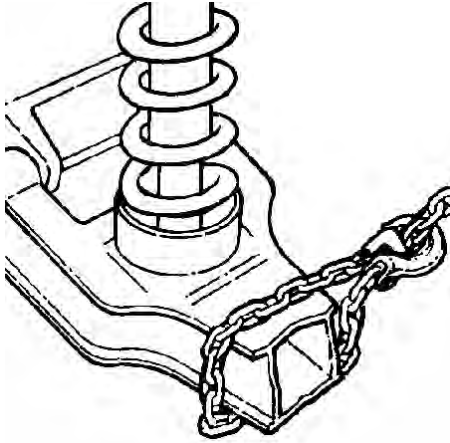


FIGURE 4A.17

- (d) After attaching the safety chains to the vehicle, pull the chain tight under the crossbar and seat chain firmly in the outermost hook welded to the front of the crossbar. See Figure 4A.18.



FIGURE 4A.18

OPERATING INSTRUCTIONS

WHEEL LIFT (cont'd)

4A.5 SAFETY CHAIN HOOK-UP PROCEDURES (cont'd)

- (e) Pull excess chain back to the storage caddy. While holding chain securely, feed any excess chain back into the storage caddy until the chain is even with the bottom of the tailgate. See Figure 4A.19.



FIGURE 4A.19



**MAKE SURE THAT CHAIN LINKS ARE FIXED
SECURELY IN CHAIN CADDY "KEYHOLE" SLOTS.**

- (f) Raise vehicle to desired height for towing. Retract boom pulling disabled vehicle as close as possible to the wrecker body while maintaining enough clearance for turns.
- (g) Give hook-up a final check and disengage clutch pump by switching Hand Held Control Switch "OFF" in truck cab or on optional control panel.

OPERATING INSTRUCTIONS

WHEEL LIFT (cont'd)

4A.5 SAFETY CHAIN HOOK-UP PROCEDURES (cont'd)

NOTE

WHEN GOING OVER CURBS AND INTO TIGHT AREAS, BOOM CAN BE RAISED BY REMOTE CONTROL TO CLEAR.

STINGER CAN BE EXTENDED (LIMITED BY SAFETY CHAINS) TO GIVE ADDITIONAL TURNING ABILITY.

CURBS SHOULD BE CROSSED AT A 45 DEGREE ANGLE.



WHEN TOWING FROM REAR AXLES, SECURE STEERING WHEEL OF VEHICLE. DO NOT RELY ON THE STEERING WHEEL LOCKING DEVICE.



DO NOT TOW ON DRIVE WHEELS FOR MORE THAN 40 MILES. USE DOLLIES OR TOW FROM DRIVE WHEELS.



DO NOT EXCEED 50 M.P.H. WHEN TOWING ON DRIVE WHEELS. FAILURE TO DO SO MAY RESULT IN TRANSMISSION AND/OR DRIVE LINE DAMAGE TO TOWED VEHICLE. CONSULT VEHICLE MANUFACTURER.

OPERATING INSTRUCTIONS

WHEEL LIFT (cont'd)

4A.5 SAFETY CHAIN HOOK-UP PROCEDURES (cont'd)



DO NOT DISENGAGE PARKING BRAKE OR TAKE VEHICLE OUT OF GEAR UNLESS VEHICLE IS SECURED TO TOW TRUCK.



DO NOT LEAVE VEHICLE UNATTENDED OR UNATTACHED UNLESS IT IS IN GEAR WITH PARKING BRAKE ENGAGED.

4A.6 SAFETY CHECK PROCEDURES

- (a) In the event of a sudden stop, follow the procedures below, for reasons of safety in towing.
 - 1. Pull off the roadway and check safety straps to make certain they are tightened securely.
 - 2. If safety straps are loose, lower the wheel lift to the ground, letting the tires realign in the crossbar. Raise the Wheel Lift and tighten the safety straps securely.

4A.7 RELEASING TOWED VEHICLE

- (a) Apply towed vehicle parking brake, remove safety straps and safety chains from vehicle.
- (b) Lower wheel lift until vehicle wheels are on the ground.

OPERATING INSTRUCTIONS

WHEEL LIFT (cont'd)

4A.7 RELEASING TOWED VEHICLE (cont'd)

- (c) Disengage claws by using the CLAW "OPEN/CLOSE" Control. Ensure that both claws have fully released both tires before proceeding.
- (d) Drive wrecker forward until wheel lift crossbar and claws are clear of vehicle. Raise boom slightly if crossbar is dragging ground.
- (e) Using appropriate controls, retract wheel lift boom and raise wheel lift to the fold position.
- (f) Raise wrecker boom to obtain sufficient clearance between wheel lift and ground when driving. Disengage hydraulic pump by switching clutch pump switch to "OFF" position.

4A.8 EMERGENCY MANUAL CONTROL OPERATIONS

NOTE

THE 810 NYC CAN BE OPERATED MANUALLY IF THERE IS A MALFUNCTION OR POWER LOSS OF THE CONTROL VALVE SOLENOIDS.

- (a) Push type manual overrides are furnished on each spool end.
- (b) To gain access to the spool, remove the valve cover plate on wrecker body.
- (c) Push in at the override(s) using a screw driver.

Section V - MAINTENANCE

5.1 The continued operation of your wrecker is largely dependent upon strict adherence to a properly scheduled preventive maintenance program. To help you in this program, We have provided the following information regarding lubrication, preventive maintenance, hydraulic system and safety devices care.

5.2 HYDRAULIC SYSTEM

The importance of absolute cleanliness of the hydraulic system cannot be over stressed. The smallest amount of grit, metal flake or other foreign material in the system can cause extensive damage to pumps, motors and valves. We have taken every measure to assure that each component and fitting was thoroughly cleaned before your unit was shipped to you. Therefore, servicing of the system should be done with extreme care.

- (a) Before checking oil level in reservoir, wipe away all dirt, grease and grime around filter cap before removing it. Make certain that all containers, funnels and pouring spouts are absolutely clean before filling reservoir.
- (b) When replacing hoses, fittings or other components, clean thoroughly, dismantle and reassemble carefully.
- (c) Failure to observe these precautions, and failure to change the filter element at regular intervals could result in loss of your warranty in the event of failure to certain components.

5.3 LUBRICATION & PREVENTIVE MAINTENANCE

The following general lubrication and preventive maintenance should be performed at least once per month for moderate usage, or more often as required, for heavy usage.

- (a) Inspect, repair or replace any worn, cracked, leaking, otherwise damaged components including, but not limited to, the following:
 - 1. **Hydraulic hoses and fittings.**
 - 2. **Cable and fittings.**
 - 3. **Cylinders.**
 - 4. **Boom-end fitting.**
 - 5. **Controls.**

Section V - MAINTENANCE (cont'd)

5.3 LUBRICATION & PREVENTIVE MAINTENANCE (cont'd)

6. **Hydraulic oil filter.**
 7. **Oil reservoir.**
 8. **Lights and wiring.**
 9. **Winch.**
 10. **Pivot bearing surfaces and pins.**
- (b) Check hydraulic oil level in reservoir and fill to about 2" from bottom of the reservoir filler neck. Refer to 5.4, part (a), SUMMARY OF REQUIRED LUBRICANTS for recommended oils to use.
- (c) Replace hydraulic oil filters after first week of operation, then every three (3) months thereafter.
- (d) Inspect all bolts for tightness and re-tighten as necessary. Vibration and stress may loosen even properly torqued bolts.
- (e) Lubricate all grease fittings on the Wrecker and Wheel Lift including:
1. **Winch**
 2. **Cylinder Pivot Bearings**
 3. **Cross Bar Pivot**
 4. **Boom Slide Pads**
 5. **Boom End Swivel**
- (f) All bearing surfaces not equipped with grease fittings should be oiled using SAE 30 oil in a pump can.
- (g) Check oil level of winches and fill to proper level, level plug on end plates, with SAE 140 general purpose gear oil.
- (h) Lubricate grease fitting on winch freespool clutch control.
- (i) Lubricate winch cables using an oily rag while respooling onto drum. Other special cable lubricants are available which have better penetrating qualities. Consult your local oil company for a list of these.

Section V - MAINTENANCE (cont'd)

5.4 SUMMARY OF REQUIRED LUBRICANTS

(a) Hydraulic Oil

Examples:

1. **Texaco Rando HD 46**
2. **Shell Tellus Oil 46**
3. **Mobil Nuto H46**
4. **Exxon Nuto H46** or Equal

(b) Winch Worm Gear Oil - SAE 140 general purpose gear oil.

Examples:

1. **Humble - Pen-O-Led EP #5**
2. **Phillips - Phillips Worm Gear Oil 140**
3. **Shell - Macona #978**
4. **Sinclair - Pennant EP #6**
5. **Standard - Stanogear #5**
6. **Texaco - Maropa #5**

(c) Grease - Synthetic Fortified such as Drydene SFG.

(d) Oil for miscellaneous bearing surfaces - SAE 30.

(e) Cable Oil - SAE 30 or special cable lubricant.

NOTE

THERE IS NO PRACTICAL WAY TO DETERMINE THE LIFE EXPECTANCY OF HYDRAULIC HOSES AND OTHER RUBBER COMPONENTS.

WHILE APPEARING TO BE IN EXCELLENT CONDITION, THESE COMPONENTS MAY BE ADVERSELY AFFECTED BY USAGE, WEATHER OR THE PASSING OF TIME.

THEREFORE, IT IS RECOMMENDED THAT ALL RUBBER COMPONENTS, ESPECIALLY HOSES, BE REPLACED EVERY FIVE (5) YEARS REGARDLESS OF APPEARANCE.

Section V - MAINTENANCE (cont'd)

5.5 CARE OF HYDRAULICS IN COLD CLIMATE

When the Wrecker and Wheel Lift are used in seasonal cold climate regions (+20° F and below), the viscosity of the normally recommended 10W40 oil may increase to the point where it adversely affects hydraulic functions during starting and warm-up.

If this is the case, it will be necessary to change fluids seasonally to maintain maximum system efficiency and life.

Regions subject to continuous sub-zero or arctic climates require special hydraulic fluids. Contact us or your local supplier for information regarding specific temperature requirements.

5.6 LUBRICATION

1. Cable -Use oil or approved cable lubricant.
2. Winch Oil Level - Fill to oil plug level inside of housing with SAE 140 general purpose gear oil.
3. Cylinder Pivot Bearings - GP Grease.
4. Winch Coupling Control - GP Grease.
5. Hydraulic Reservoir - Fill to 2" from top of reservoir filler neck.
6. Hydraulic Filter - Replace after first week of operation then every three (3) months.
7. Boom End Swivel - GP Grease.
8. Sheave - GP Grease.
9. Boom Shaft Pivot - GP Grease.
10. Compartment Door Pivots - Use SAE 30 Oil.
11. Underlift Pivots and Slide Pads - Drydene SFG or equivalent.

NOTE

THE ABOVE SERVICE REQUIREMENTS SHOULD BE SERVICED MONTHLY. SERVICE MORE OFTEN IF THE EQUIPMENT IS USED FREQUENTLY.

Section VI - PARTS

This Section is provided by the manufacturer for the purpose of ordering any component part of the **810 NYC** that may be required when part replacement is necessary. Be certain to use only original equipment replacement parts for warranty purposes as well as for keeping your **810 NYC** in its original state and optimum operating capacities.

When ordering replacement or spare parts be sure to provide the following information to the manufacturer's **Parts Department**.

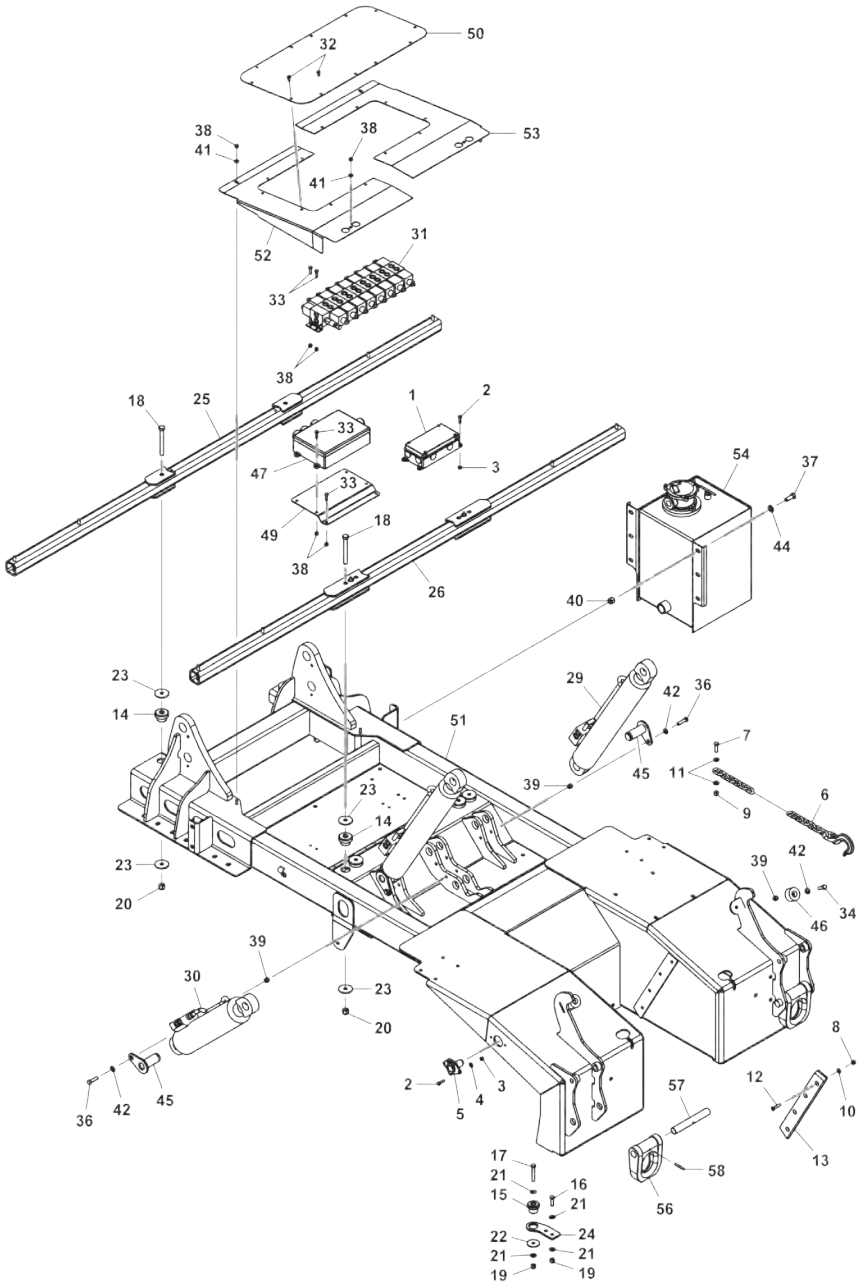
1. **Manual Number & Date of Publication**
2. **Manual Page Number**
3. **Page Title**
4. **Reference Number of Part Desired**
5. **Part Number**
6. **Part Description**
7. **Quantity of Part Desired**

Providing this information will help ensure that the correct parts will be delivered to you in an expedient manner without delay. Should additional information be required for repair or replacement of certain components, contact your Wrecker Manufacturer Authorized Representative.

The Manufacturer reserves the right, without notice or obligation, to improve or modify their products, which may change the specifications, models and feature availability.

Section VI - PARTS (cont'd)

SUBFRAME ASSEMBLY



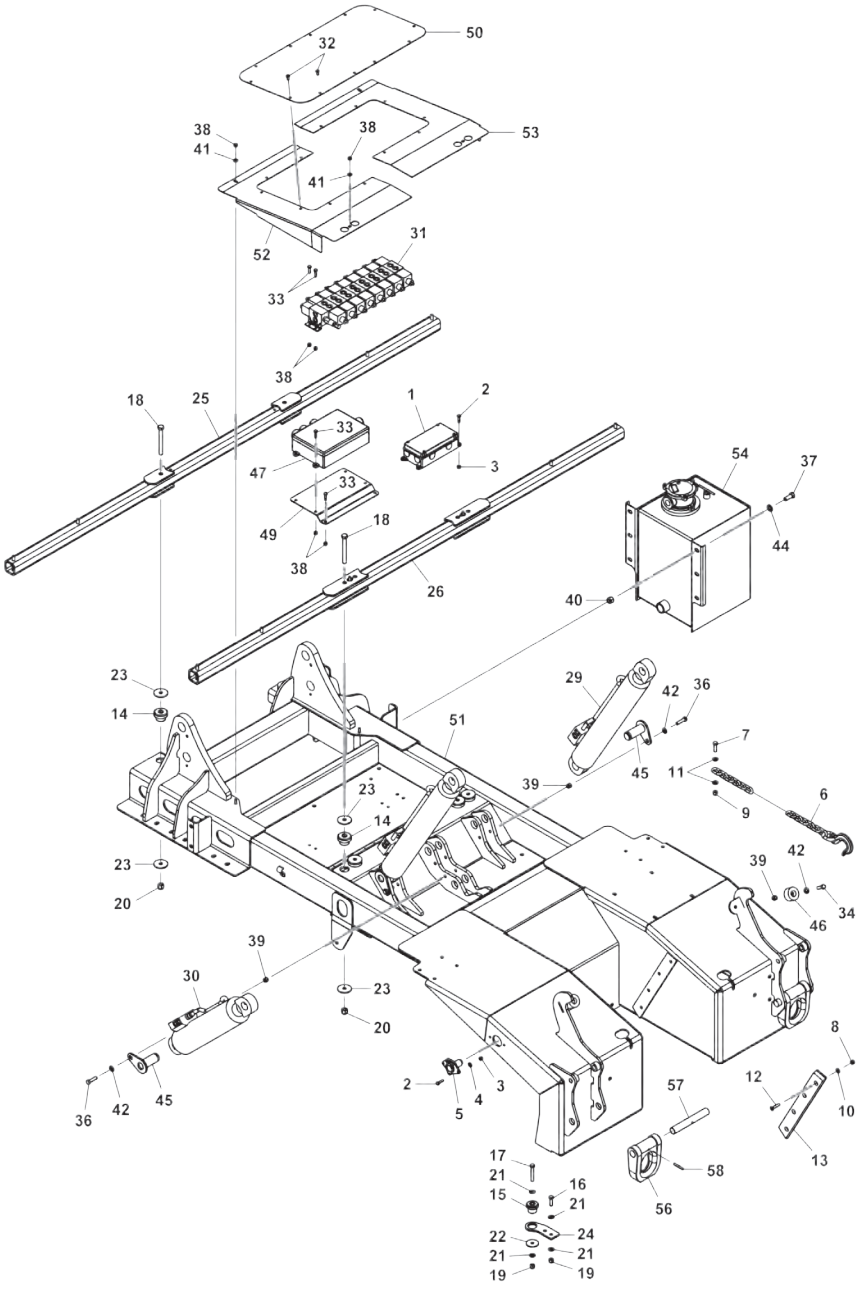
Section VI - PARTS (cont'd)

SUBFRAME ASSEMBLY

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	1	0303385	JUNCTION BOX, 10 POLE
2	4	--	SCREW, 1/4"-20 X 1" HEX HD CAP
3	4	--	NUT, 1/4"-20 NYLOK HEX
4	2	--	WASHER, 1/4" FLAT ZP
5	1	0301671	TOW LIGHT SOCKET, 4-PIN
--	--	23299000	NEW YORK CITY BASIC UNIT ASSEMBLY
6	2	0307383	CHAIN ASSY 5/16" G7 X 12'
7	2	--	SCREW, 3/8"-16 X 1-1/4" HEX HD CAP
8	8	--	NUT, 5/16"-18 NYLOK HEX
9	2	--	NUT, 3/8"-16 NYLOK HEX
10	8	--	WASHER, 5/16" FLAT
11	4	--	WASHER, 3/8" FLAT
12	8	--	SCREW, 5/16"-18 X 1-1/2" FL HD SKT
13	2	805040011	VERTICAL BOOM GUIDE PAD
--	--	23299002	BODY INSTALL, NEW YORK CITY
14	6	0306680	RUBBER "T" MOUNT, LTI 20203
15	2	0307114	RUBBER MOUNT, TBA 20103
16	4	--	SCREW, 3/8"-16 X 1-1/4" HEX HD CAP
17	2	--	SCREW, 3/8"-16 X 2-1/2" HEX HD CAP
18	4	--	SCREW, 1/2"-13 X 4-1/2" HEX HD CAP
19	6	--	NUT, 3/8"-16 NYLOK HEX ZP
20	6	--	NUT, 1/2"-13 NYLOK HEX
21	12	--	WASHER, 3/8" FLAT
22	2	--	SPECIAL WASHER, .406ID X 1.75OD X .125THK
23	12	--	WASHER, 1/2" ID X 2" OD X .150" THK
24	2	23297854	BODY REAR MTG PLATE, (NYC)
25	1	23298103	TOOLBOX TUBE WELDMNT (NYC)
26	1	23298113	REAR BODY MTG TUBE WELDMNT
--	--	23299100	SUBFRAME ASSEMBLY (NYC)
27	2	0302726	GREASE FITTING, 1/4"-28 45°
28	1	0306889	GROUND HARNESS, 11 WIRE

Section VI - PARTS (cont'd)

SUBFRAME ASSEMBLY (cont'd)



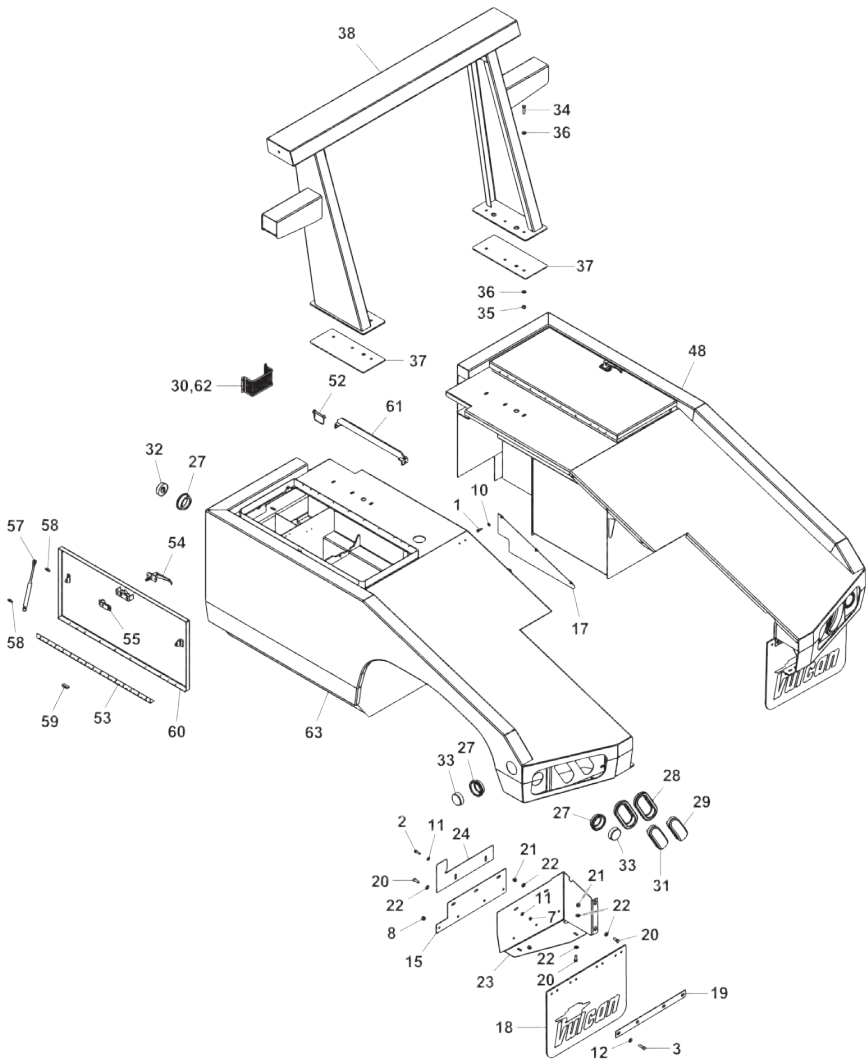
Section VI - PARTS (cont'd)

SUBFRAME ASSEMBLY (cont'd)

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
--	--	23299100	SUBFRAME ASSEMBLY (NYC) (cont'd)
29	2	0307575	BOOM LIFT CYLINDER
30	1	0307840	WHEEL LIFT CYLINDER
31	1	0307842	SOLENOID VALVE, 8 SPOOL
32	12	--	SCREW, 1/4"-20 X 1/2" HEX HD CAP
33	10	--	SCREW, 1/4"-20 X 1" HEX HD CAP
34	2	--	SCREW, 3/8"-16 X 1-1/4" HEX HD CAP
35	1	--	SCREW, 3/8"-16 X 1" HEX HD CAP
36	3	--	SCREW, 3/8"-16 X 1-1/2" HEX HD CAP
37	4	--	SCREW, 1/2"-13 X 1-1/4" HEX HD CAP
38	14	--	NUT, 1/4"-20 NYLOK HEX
39	5	--	NUT, 3/8"-16 NYLOK HEX
40	4	--	NUT, 1/2"-13 NYLOK HEX
41	4	--	WASHER, 1/4" FLAT
42	5	--	WASHER, 3/8" FLAT
43	1	--	LOCKWASHER, 3/8" HELICAL
44	4	--	WASHER, 1/2" FLAT
45	3	0806854	PIN WELDMENT
46	2	E300006	VIBRATION PAD
47	1	23295003	JUNCTION BOX
48	1	23295004	WIRING HARNESS
49	1	23297120	JUNCTION BOX BRACKET (NYC)
50	1	23297142	ACCESS DCV COVER PLATE (NYC)
51	1	23298100	NYC SUBFRAME WELDMENT
52	1	23298104	LH DCV COVER WELDMENT
53	1	23298105	RH DCV COVER WELDMENT
54	1	23298500	HYDRAULIC TANK ASSEMBLY
55	1	810740001	WIRING HARNESS 810
--	--	0902842	"D" RING KIT
56	2	0712380	"D" RING
57	2	BA0259	"D" RING PIN
58	2	HD0106	SPRING PIN, 1/4" X 1-3/4"

Section VI - PARTS (cont'd)

BODY ASSEMBLY



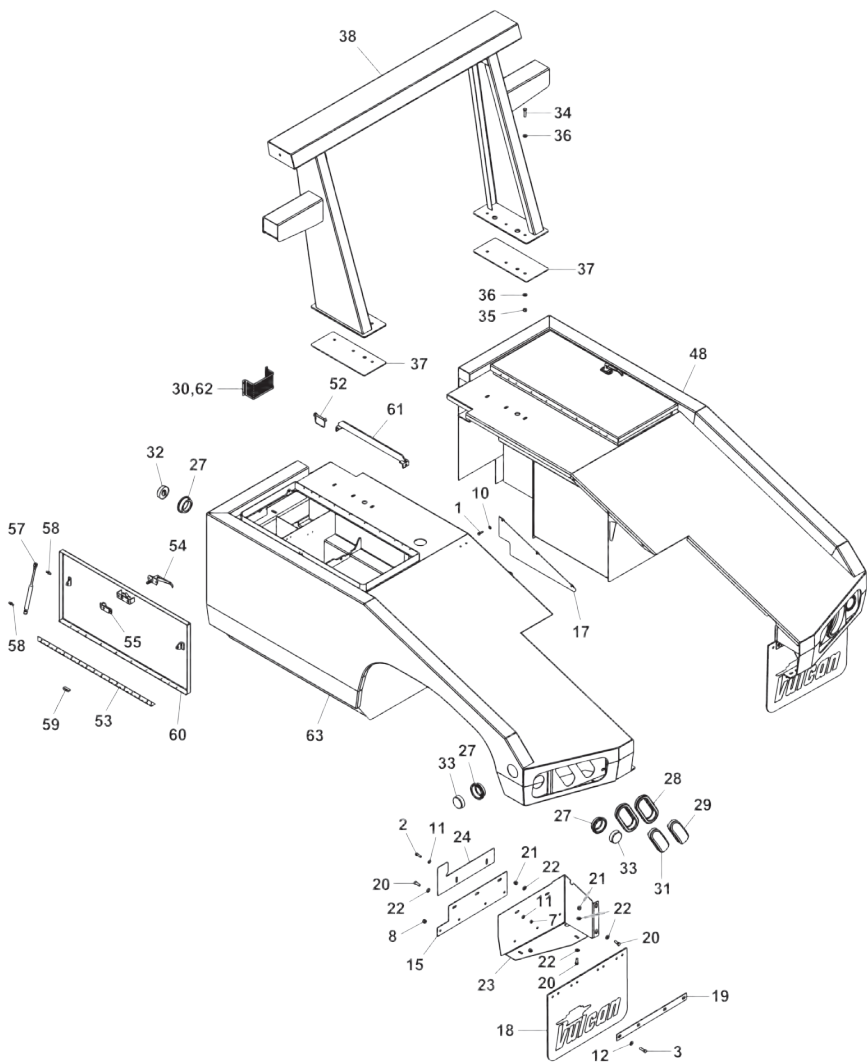
Section VI - PARTS (cont'd)

BODY ASSEMBLY

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
--	--	23299002	BODY INSTALL, 810 NEW YORK CITY
1	14	--	SCREW, 1/4"-20 X 1" HEX HD CAP
2	4	--	SCREW, 5/16"-18 X 1" HEX HD CAP
3	4	--	SCREW, 3/8"-16 X 1-1/4" HEX HD CAP
4	2	--	SCREW, 3/8"-16 X 2-1/2" HEX HD CAP
5	4	--	SCREW, 1/2"-13 X 4" HEX HD CAP
6	8	--	HEX NUT & STAR WASHER, #8-32
7	4	--	NUT, 5/16"-18 HEX
8	10	--	NUT, 3/8"-16 NYLOK HEX
9	4	--	NUT, 1/2"-13 NYLOK HEX
10	6	--	WASHER, 1/4" FLAT
11	4	--	WASHER, 5/16" FLAT
12	20	--	WASHER, 3/8" FLAT
13	8	--	SCREW, 1/4"-20 X 3/4" HEX HD CAP SS
14	6	--	LOCKWASHER, 1/4" HELICAL SS 316
15	2	810010001	MUD FLAP BRACKET, CS
16	1	810031100	LH INSIDE SKIRT WELDMNT
17	1	810038100	RH INSIDE SKIRT WELDMNT
18	2	0307996	MUD FLAP, BLANK
19	2	804500001	MUD FLAP BACK-UP STRIP
--	--	810033000	TAIL LIGHT GUARD KIT
20	8	--	SCREW, 3/8"-16 X 1" HEX HD CAP GR5 ZP
21	8	--	NUT, 3/8"-16 NYLOK HEX ZP
22	16	--	WASHER, 3/8" FLAT ZP
23	1	810030015	LIGHT COVER PANEL, LH SS
24	2	810030016	GUARD FILLER PLATE, SS
25	1	810037015	LIGHT COVER PANEL, RH SS
--	--	23299051	LIGHT PARTS BAG, 810 NYC
26	1	0300442	LIGHT, 3 BAR15741R (9025006)
27	6	0303127	GROMMET, 2.5" ROUND MARKER
28	4	0303128	GROMMET, OVAL
29	2	0307964	LIGHT, 6" OVAL LED BACK-UP
30	2	9025073	LIGHT, TOOLBOX DOME, NO SWITCH
31	2	174027008	LIGHT, 6" OVAL RED LED
32	2	521-0112001	MARKER LIGHT, YEL LED 2.5"
33	4	521-0112002	MARKER LIGHT, RED LED 2.5"

Section VI - PARTS (cont'd)

BODY ASSEMBLY (cont'd)



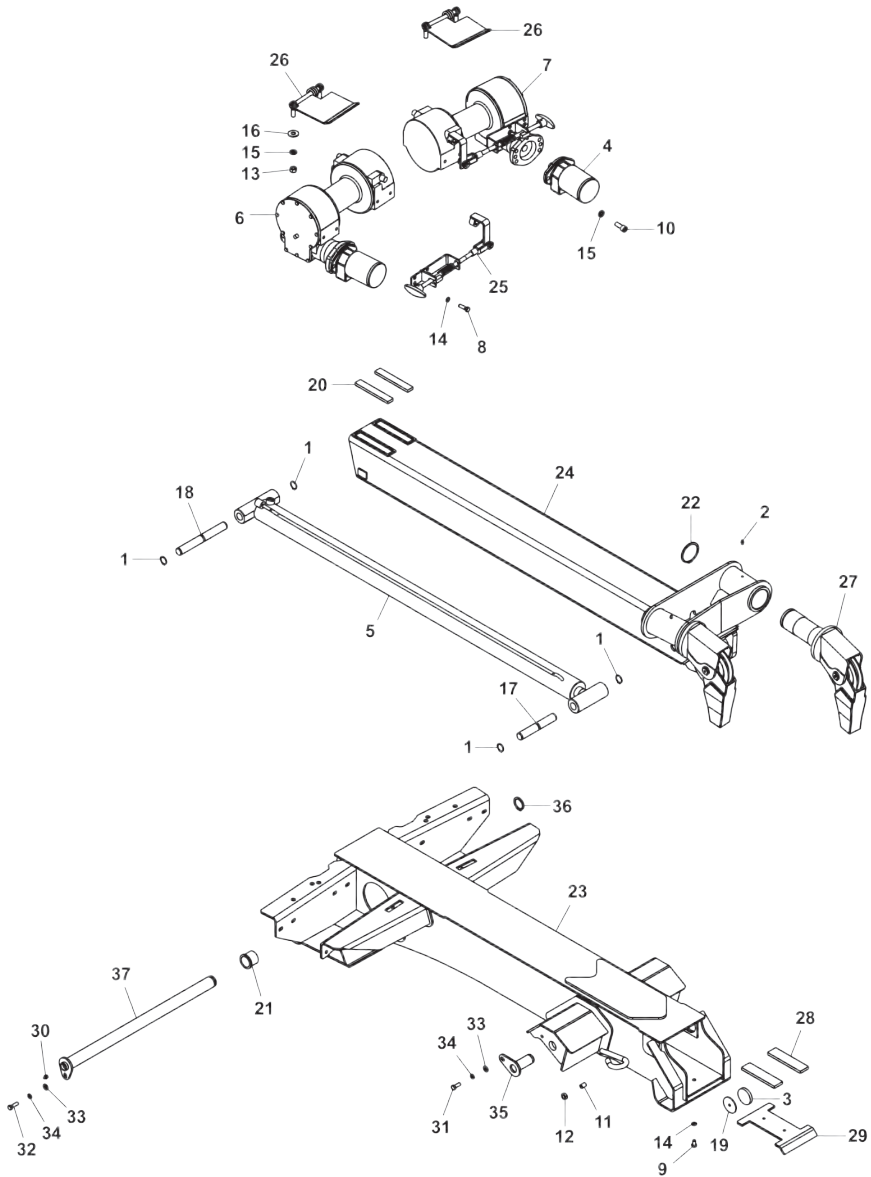
Section VI - PARTS (cont'd)

BODY ASSEMBLY (cont'd)

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
--	--	23299900	PYLON KIT, 810 NYC
34	4	--	SCREW, 3/8"-16 X 1-1/4" HEX HD CAP
35	4	--	NUT, 3/8"-16 NYLOK HEX
36	8	--	WASHER, 3/8" FLAT
37	2	23297910	NEOPRENE PYLON BASE, 810 NYC
38	1	23298900	PYLON WELDMENT, 810 NYC
--	--	23298600	RH BODY ASSEMBLY, 810 NYC
39	2	HD1259	SAFETY SNAP PIN
40	1	0303690	PIANO HINGE 304SS (30" LG)
41	1	0307955	LOCKING "L" HANDLE
42	1	0307956	CABINET LATCH
43	1	0307960	GASKET
44	2	0307962	GAS STRUT
45	4	0307963	BALL STUD
46	1	23297601	COVER PLATE, 810 NYC
47	1	23297627	DEAD BOLT STRIKER PLATE, 810 NYC
48	1	23298610	RH BODY WELDMENT, 810 NYC
49	1	23298640	DOOR WELDMENT, 810 NYC
50	1	23298650	CHAIN BAR WELDMENT, 810 NYC
51	1	23298660	LIGHT COVER WELDMENT, 810 NYC
--	--	23298700	LH BODY ASSEMBLY, 810 NYC
52	2	HD1259	SAFETY SNAP PIN
53	1	0303690	PIANO HINGE 304SS (30" LG)
54	1	0307955	LOCKING "L" HANDLE
55	1	0307956	CABINET LATCH
56	1	0307960	GASKET
57	2	0307962	GAS STRUT
58	4	0307963	BALL STUD
59	1	23297627	DEAD BOLT STRIKER PLATE, 810 NYC
60	1	23298640	DOOR WELDMENT, 810 NYC
61	1	23298650	CHAIN BAR WELDMENT, 810 NYC
62	1	23298660	LIGHT COVER WELDMENT, 810 NYC
63	1	23298710	LH BODY WELDMENT, 810 NYC

Section VI - PARTS (cont'd)

RECOVERY BOOM ASSEMBLY



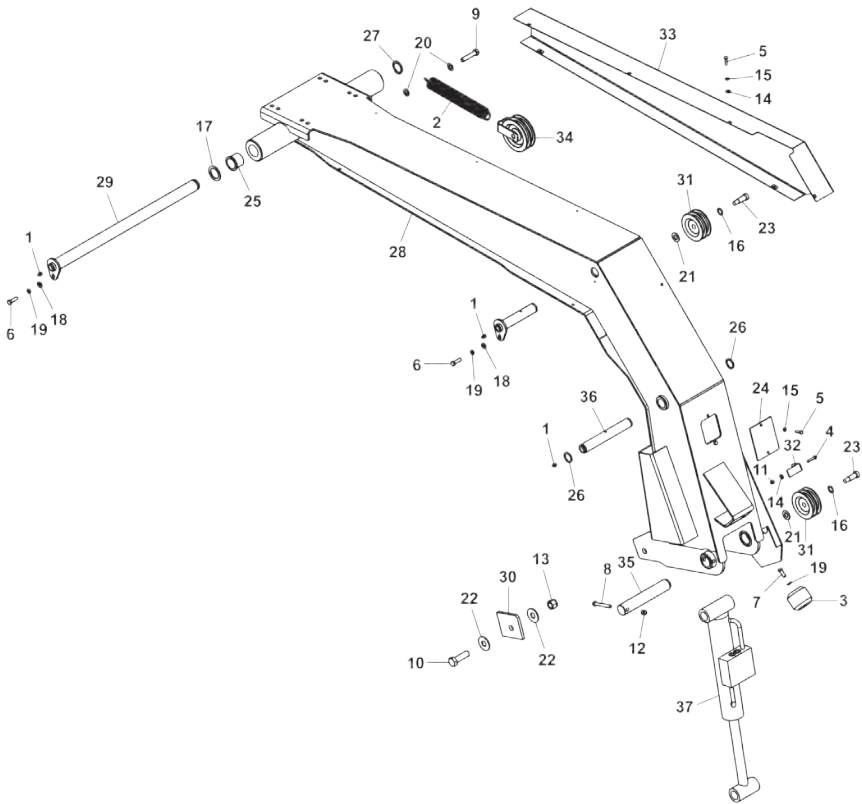
Section VI - PARTS (cont'd)

RECOVERY BOOM ASSEMBLY

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
--	--	23299200	RECOVERY BOOM ASSEMBLY, NYC
1	4	0300110	SNAP RING, 1" 5100-100
2	2	0300113	GREASE FITTING, 1/4"-28 STRAIGHT
3	2	0306819	SLIDE PAD, 2-1/4" DIA UHMW
4	2	0307097	HYD MOTOR, PARKER 4 CU IN
5	1	0307839	HYD CYL, S24050024PP 107"
6	1	0307967	WINCH, LH RAMSEY WIDE DRUM
7	1	0307968	WINCH, RH RAMSEY WIDE DRUM
8	14	--	SCREW, 3/8"-16 X 1-1/4" HEX HD CAP
9	2	--	SCREW, 3/8"-24 X 5/8" HEX HD CAP
10	4	--	SCREW, 1/2"-13 X 1-1/4" SKT HD
11	2	--	SCREW, 1/2"-13 X 3/4" SKT HD SET
12	2	--	NUT, 1/2"-13 HEX JAM
13	4	--	NUT, 1/2"-20 HEX
14	16	--	LOCKWASHER, 3/8" HELICAL
15	8	--	LOCKWASHER, 1/2" HELICAL
16	4	--	WASHER, 1/2" FLAT
17	1	0705499	SHAFT, UPPER SPADE
18	1	0703137	SHAFT
19	2	0717674	SHIM, PAD SPACER
20	2	9031088	SLIDE PAD, 3/8 X 1 X 6 UHMW
21	2	9053713	FLANGE BEARING, 1-1/2" I.D.
22	2	9055275	SNAP RING, 2-3/4" EXTERNAL
23	1	23298200	OUTER BOOM WELDMENT, NYC
24	1	23298300	INNER BOOM WELDMENT, NYC
25	1	23299106	FREESPOOL KIT, NYC
26	1	124001813	ANTI-SPOOL DEVICE, DUAL WINCH
27	2	805180000	SHEAVE HOUSING ASSEMBLY
28	2	896040002	SLIDE PAD, NYLATRON 6 X 1-1/2 X
29	1	3012-794004	CAGE PLATE, U/L PAD
--	--	23299000	NEW YORK CITY BASIC UNIT ASSEMBLY
30	2	0301895	GREASE FITTING, STR 1/8" PTF
31	2	--	SCREW, 3/8"-16 X 1" HEX HD CAP
32	1	--	SCREW, 3/8"-16 X 1-1/4" HEX HD CAP
33	3	--	WASHER, 3/8" FLAT
34	3	--	LOCKWASHER, 3/8" HELICAL
35	2	0806854	PIN WELDMENT
36	1	9056150	RETAINING RING, 1-1/2"
37	1	806501500	PIN WELDMENT, RECOVERY BOOM

Section VI - PARTS (cont'd)

WHEEL LIFT BOOM ASSEMBLY



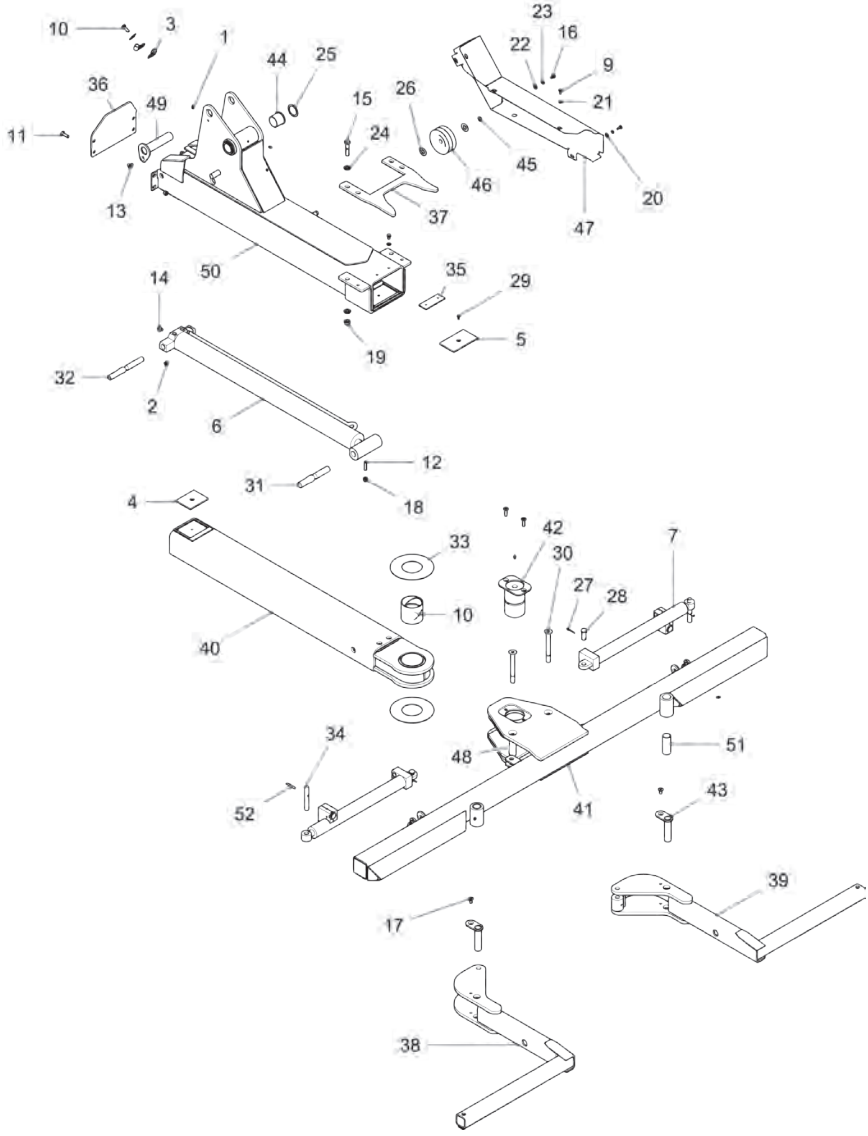
Section VI - PARTS (cont'd)

WHEEL LIFT BOOM ASSEMBLY

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
--	--	23299003	WHEEL LIFT BOOM ASSEMBLY, 810NYC
1	3	0301895	GREASE FITTING, STR 1/8" PTF
2	1	0303521	SPRING, EXT HOSE TENSION
3	1	0306688	TIMBREN SPRING 180 AEON 2 7/8"
4	2	--	SCREW, 1/4"-20 X 1-1/4" HEX HD CAP
5	8	--	SCREW, 1/4"-20 X 1" HEX HD CAP
6	2	--	SCREW, 3/8"-16 X 1-1/4" HEX HD CAP
7	1	--	SCREW, 3/8"-16 X 1" HEX HD CAP
8	1	--	SCREW, 3/8"-16 X 3" HEX HD CAP
9	1	--	SCREW, 1/2"-13 X 2-1/2" HEX HD CAP
10	2	--	SCREW, 3/4"-10 X 3-1/2" HEX HD CAP
11	2	--	NUT, 1/4"-20 NYLOK HEX
12	1	--	NUT, 3/8"-16 NYLOK HEX
13	2	--	NUT, 3/4"-10 NYLOK HEX
14	6	--	WASHER, 1/4" FLAT
15	10	--	LOCKWASHER, 1/4" HELICAL
16	2	--	SHIM WASHER, 5/8" ID X 1" OD X .02" THK
17	1	--	SHIM WASHER, 1-1/2" ID X 2-1/8" OD X .125" THK
18	3	--	WASHER, 3/8" FLAT
19	3	--	LOCKWASHER, 3/8" HELICAL
20	3	--	WASHER, 1/2" FLAT
21	2	--	WASHER, 5/8" FLAT
22	2	--	WASHER, 3/4" FLAT
23	1	--	SHOULDER BOLT, 5/8" X 1-1/4"
24	1	0708519	COVER PLATE, BOOM UPPER
25	2	9053713	FLANGE BEARING, 1-1/2" I.D.
26	2	9056125	RETAINING RING, 1-1/4" NOM HVY DUTY EXT
27	2	9056150	RETAINING RING, 1-1/2"
28	1	23298201	MAIN BOOM WELDMENT, NYC
29	2	806501500	PIN WELDMENT, RECOVERY BOOM
30	2	810040002	STOP BLOCK
31	2	810040004	SMALL SHEAVE, 2-GROOVES 4"
32	1	810040006	HOSE RETAINING ANGLE, BOOM AS
33	1	810040600	TENSIONER COVER WELDMENT, BOOM
34	1	810041500	TENSIONER BRACKET WELDMENT
35	1	810350001	PIN, STINGER PIVOT
36	1	810350002	PIN, UPPER TILT CYLINDER
37	1	810730000	FOLD CYLINDER

Section VI - PARTS (cont'd)

WHEEL LIFT ASSEMBLY



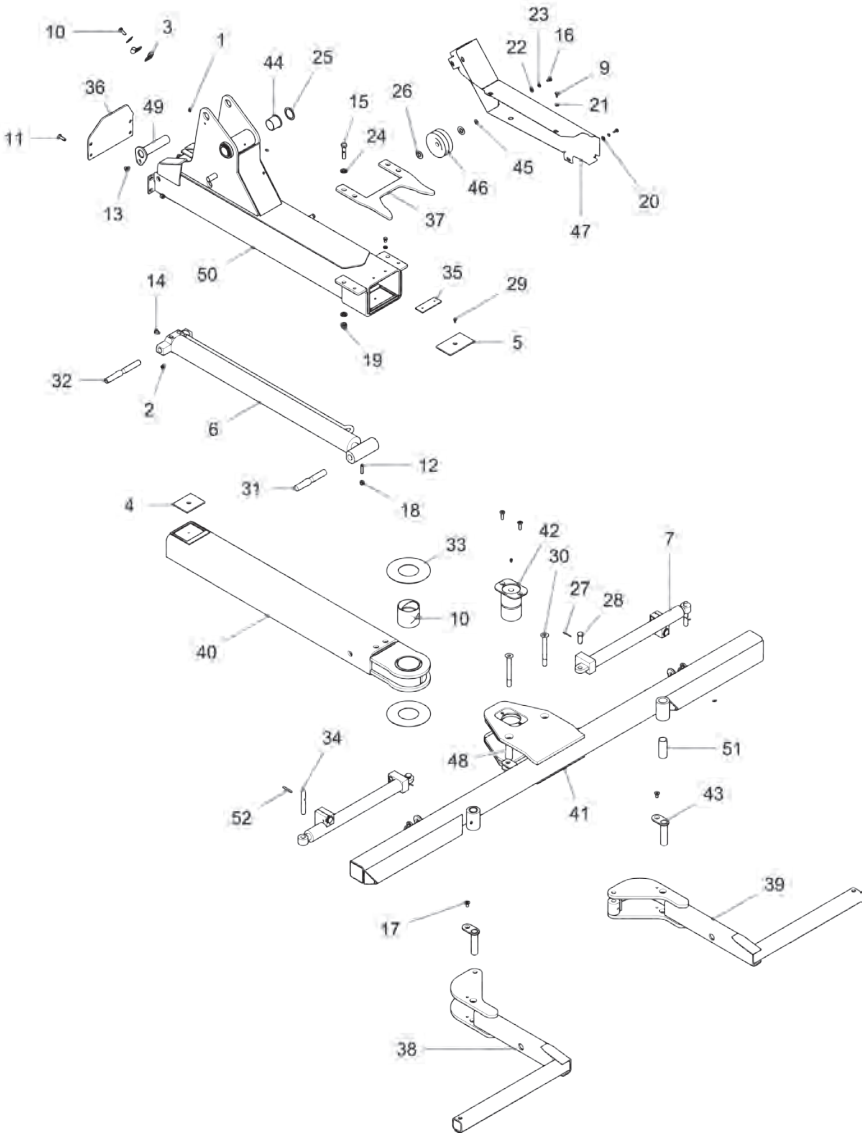
Section VI - PARTS (cont'd)

WHEEL LIFT ASSEMBLY

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	3	0300113	GREASE FITTING, 1/4"-28 STRAIGHT
2	2	0301397	GREASE FITTING, 90 DEG
3	2	0301601	HOSE CLAMP, 5/8" INSULATED
4	1	0301850	SLIDE PAD
5	1	0303018	SLIDE PAD, NYLATRON
6	1	0303020	CYLINDER, WHEEL LIFT EXTEND
7	2	0303844	CYLINDER, SWING L-ARM
8	1	0306748	BUSHING, ALUMINUM BRONZE
9	2	--	SCREW, 1/4"-20 X 5/8" HEX HD CAP
10	1	--	SCREW, 5/16"-18 X 1" HEX HD CAP
11	4	--	SCREW, 3/8"-16 X 1-1/4" FL HD SKT
12	1	--	SCREW, 3/8"-16 X 1-1/2" HEX SKT SET
13	1	--	SCREW, 3/8"-16 X 5/8" SKT HD SUNK
14	1	--	SCREW, 3/8"-16 X 1/2" HEX HD CAP
15	4	--	SCREW, 1/2"-13 X 2-1/4" HEX HD CAP
16	6	--	SCREW, 5/16"-18 X 1-1/2" HEX HD CAP
17	2	--	SCREW, 3/8"-16 X 3/4" FL HD SKT
18	4	--	NUT, 3/8"-16 HEX NYLOK
19	4	--	NUT, 1/2"-13 HEX NYLOK
20	1	--	WASHER, 1/4" FLAT
21	2	--	LOCKWASHER, 1/4" HELICAL
22	6	--	WASHER, 5/16" FLAT
23	7	--	LOCK WASHER
24	8	--	WASHER, SAE 1/2" HARDENED
25	2	--	WASHER, SHIM 1-1/2" X .062
26	2	--	WASHER, 5/8" FLAT SAE

Section VI - PARTS (cont'd)

WHEEL LIFT ASSEMBLY (cont'd)



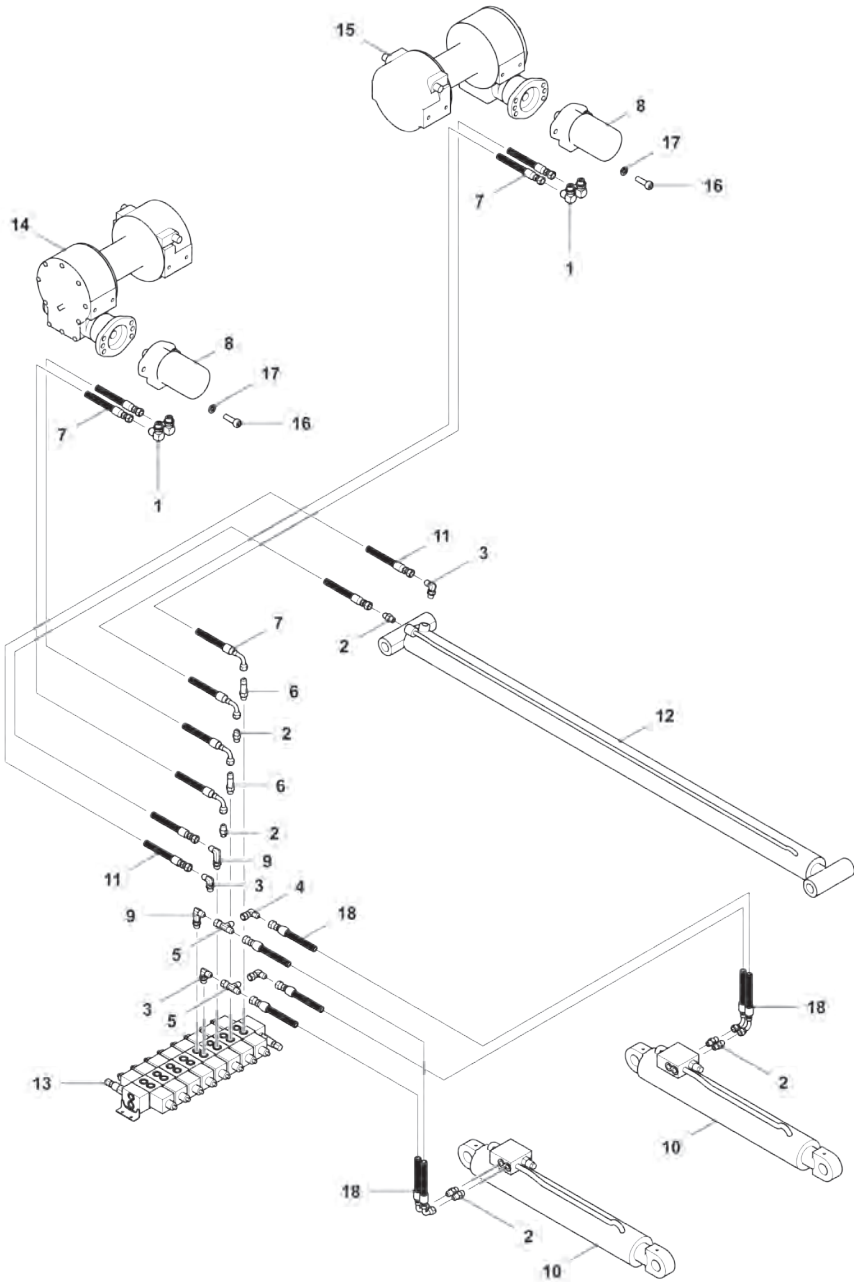
Section VI - PARTS (cont'd)

WHEEL LIFT ASSEMBLY (cont'd)

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
27	2	--	COTTER PIN, 1/8" X 1-1/4"
28	2	--	CLEVIS PIN, 5/8" X 1-1/2"
29	1	--	SCREW, 1/4"-20 x 1/2" SKT BUTTON HD
30	2	--	SCREW, 3/8"-16 X 1" FL HD SKT CAP
31	1	0702131	SHAFT, INNER TUBE CYLINDER
32	1	0703345	SHAFT, EXTEND CYLINDER
33	2	0710092	THRUST WASHER
34	2	0713885	PIN, CYLINDER (L-ARM END)
35	1	0715553	PLATE, OUTER W/L BOOM STOP
36	1	0716934	PLATE, HOSE PROTECTOR
37	1	0717589	PLATE, CROSSBAR POSITIONING
38	1	0803911	L-ARM WELDMENT, LEFT
39	1	0803912	L-ARM WELDMENT, RIGHT
40	1	0803928	INNER BOOM WELDMENT
41	1	0806980	CROSSBAR WELDMENT, EXPRESS
42	1	0806981	PIVOT PIN WELDMENT
43	2	0806982	PIN WELDMENT, " L " ARM PIVOT
44	2	9053713	FLANGE BEARING, 1-1/2" I.D. OILITE
45	1	9055062	SNAP RING, 5/8" EXTERNAL
46	1	810040004	SMALL SHEAVE, 2 GROOVES 4"
47	1	810041000	HOSE COVER WELDMENT, WRECKER ASSY
48	1	810050001	SLEEVE CROSSBAR ASSEMBLY
49	1	810350500	PIN WELDMENT, LOWER TILT CYLINDER
50	1	810310000	810 OUTER STINGER WELDMENT
51	2	E300002	BEARING, CLAW PIVOT
52	2	HD0106	SPRING PIN, 1/4" X 1-3/4"

Section VI - PARTS (cont'd)

RECOVERY BOOM & WINCH HYDRAULICS



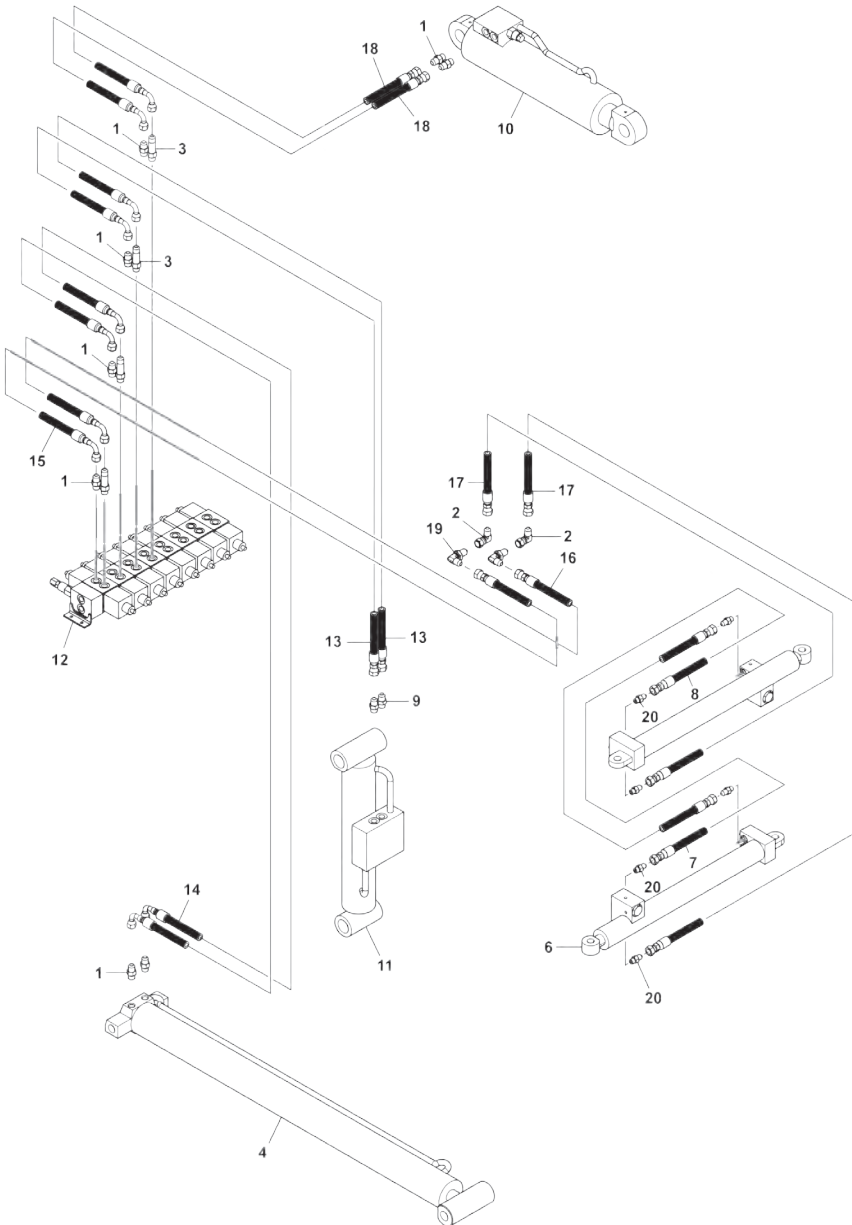
Section VI - PARTS (cont'd)

RECOVERY BOOM & WINCH HYDRAULICS

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1		0301388	ELBOW, 8MJ-8MB90
2		0301522	CONNECTOR, 6MJ-6MB
3		0301620	ELBOW, 6MJ-6MB90
4		0301696	ELBOW, 6MJ-6FJX90
5		0301781	TEE, SWIVEL NUT RUN
6		0302510	CONNECTOR, 6MJ-6MBL
7		0302584	HOSE ASSEMBLY, 50" LONG
8		0307097	HYDRAULIC MOTOR, PARKER
9		0307460	ELBOW, 6MJ-6MB90
10		0307575	LIFT CYLINDER
11		0307633	HOSE ASSEMBLY, 46" LONG
12		0307839	EXTEND CYLINDER, 107"
13		0307842	VALVE, SOLENOID 8 SPOOL
14		0307967	WINCH ASSEMBLY, HY-246 NARROW DRUM
15		0307968	WINCH ASSEMBLY, HY-246 NARROW DRUM
16		--	SCREW, 1/2"-13 X 1-1/2" SKT HD CAP
17		--	LOCKWASHER, 1/2" HELICAL
18		810770015	HOSE ASSEMBLY, D.C.V.

Section VI - PARTS (cont'd)

WHEEL LIFT HYDRAULICS



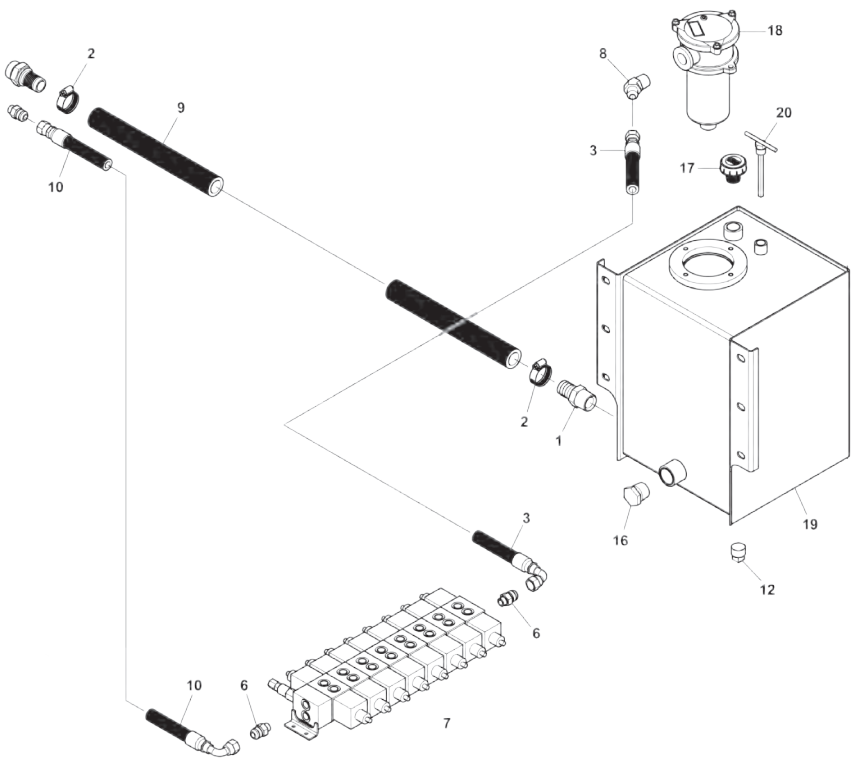
Section VI - PARTS (cont'd)

WHEEL LIFT HYDRAULICS

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	7	0301522	CONNECTOR, 6MJ-6MB
2	2	0301696	ELBOW, 6MJ-6FJX90
3	4	0302510	CONNECTOR, 6MJ-6MBL
4	1	0303020	CYLINDER, WHEEL LIFT EXTEND
5	58 FT.	0303193	SKUFF JACKET, BLACK (NOT SHOWN)
6	2	0303844	CYLINDER, SWING L-ARM
7	1	0303860	HOSE ASSEMBLY, 10-3/4"
8	1	0303861	HOSE ASSEMBLY, 17"
9	2	0307042	ORIFICE CONNECTOR, 6MJ-6MBR-3/64
10	1	0307840	CYLINDER, WHEEL LIFT LIFT
11	1	0307841	CYLINDER, WHEEL LIFT FOLD
12	1	0307842	CONTROL VALVE, SOLENOID 8-SPOOL
13	2	810770003	HOSE ASSEMBLY, 99"
14	2	810770005	HOSE ASSEMBLY, 132"
15	1	810770010	HOSE ASSEMBLY, 77"
16	1	810770011	HOSE ASSEMBLY, 77"
17	2	810770012	HOSE ASSEMBLY, 157"
18	2	810770015	HOSE ASSEMBLY, 29"
19	2	FC41	ELBOW, 6MJ BULKHEAD 90
20	6	HC1291	CONNECTOR, 4MJ-4MB

Section VI - PARTS (cont'd)

PUMP, VALVE & FILTER HYDRAULICS



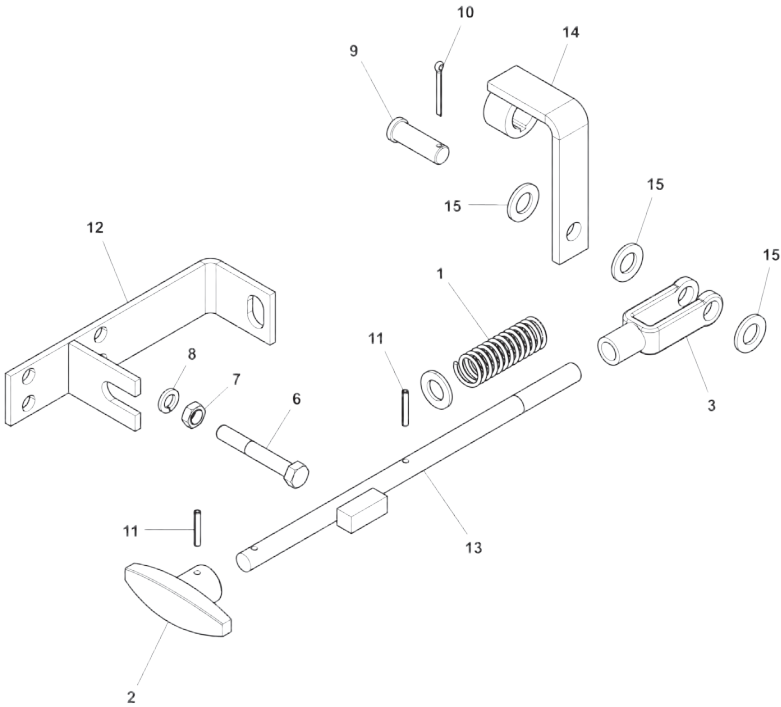
Section VI - PARTS (cont'd)

PUMP, VALVE & FILTER HYDRAULICS

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
1	1	0300056	HOSE BARB, 16C4-16MP
2	2	0300071	HOSE CLAMP, 1"
3	1	0302610	HOSE ASSEMBLY, 36"
4	1	0303524	CLUTCH PUMP, 7-GPM (NOT SHOWN)
5	1	0307544	SWING CHECK VALVE, 1" BRONZE (N.S.)
6	2	0307555	CONNECTOR, 8MJ-6MB
7	1	0307842	CONTROL VALVE, SOLENOID 8-SPOOL
8	1	0310033	ELBOW, 8MJ-12MP45
9	1	0702540	SUCTION HOSE, 12 FT (1" ID)
10	1	810770020	HOSE ASSEMBLY, 150"
11	1	HC1335	PIPE NIPPLE, 1" CLOSED THR (NOT SHOWN)
--	--	23298500	HYDRAULIC TANK ASSEMBLY
12	1	0303155	PIPE PLUG, 3/4" NPT MAGNETIC
13	2	--	SCREW, 5/16"-18 X 3/4" HEX HD CAP
14	2	--	LOCKWASHER, 5/16" HELICAL
15	2	--	SCREW, 5/16"-18 X 1/4" ALLEN HD SET
16	1	9012839	PIPE PLUG, 1"
17	1	9018131	BREATHER CAP, 3/4" (LUCAS)
18	1	9018399	IMMERSION FILTER ASSEMBLY
19	1	23298510	HYDRAULIC TANK WELDMENT
20	1	23298520	DIPSTICK WELDMENT

Section VI - PARTS (cont'd)

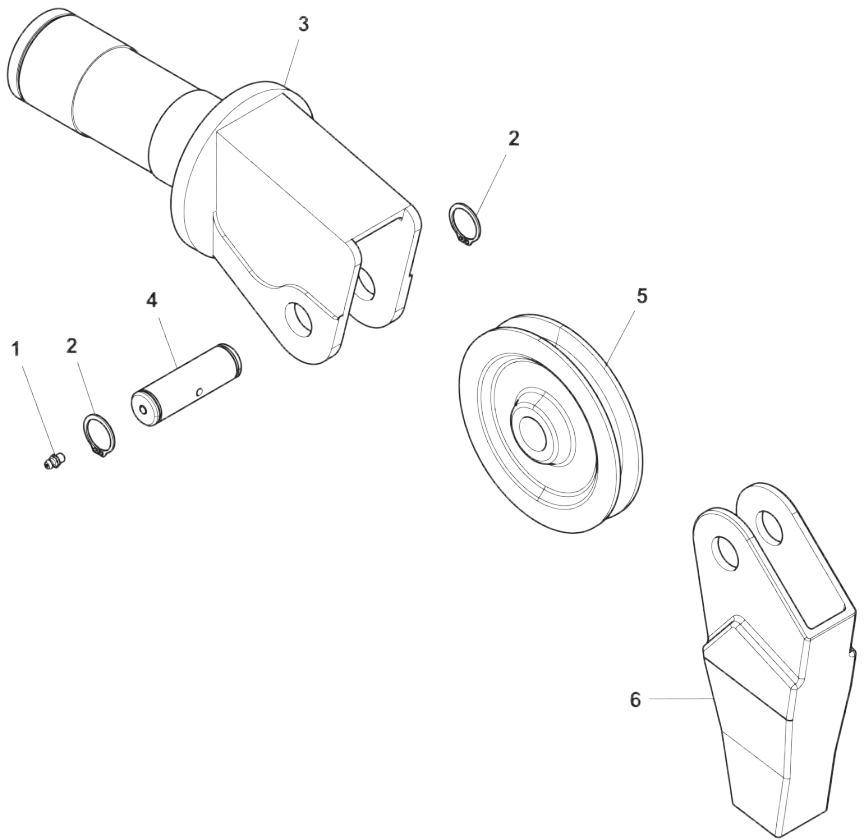
WINCH CLUTCH CONTROL ASSEMBLY



REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
--	--	23299106	WINCH FREESPOOL ASSEMBLY, NYC
1	1	0300845	COMPRESSION SPRING
2	1	0301532	"T" HANDLE
3	1	0301588	ADJUSTABLE YOKE
4	1	--	SCREW, 5/16"-18 X 1/2" SQ HD SET
5	1	--	SCREW, 3/8"-16 X 1" HEX HD CAP
6	1	--	SCREW, 3/8"-16 X 2-1/2" HEX HD CAP
7	1	--	NUT, 3/8"-16 HEX JAM
8	2	--	LOCKWASHER, 3/8" HELICAL
9	1	--	CLEVIS PIN, 1/2" X 1-1/2"
10	1	--	COTTER PIN, 1/8" X 1-1/4"
11	2	--	ROLL PIN, 5/32" X 1"
12	1	23298106	FREESPOOL BRACKET WELDMENT, NYC
13	1	23298108	CONTROL ROD WELDMENT, NYC
14	1	23298109	BELL CRANK WELDMENT, NYC
15	4	DE1381	WASHER, 1/2" SAE 17/32" ID

Section VI - PARTS (cont'd)

BOOM SWIVEL ASSEMBLY



REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
--	--	805180000	SHEAVE HOUSING ASSEMBLY
1	3	0300113	GREASE FITTING, 1/4"-28 STRAIGHT
2	2	9056098	RETAINING RING, EXT 1" NOM HVY DUTY
3	1	804181500	SHEAVE HOUSING CASTING
4	1	805180001	SHEAVE SHAFT
5	1	805180002	SHEAVE CASTING
6	1	852060100	CABLE GUIDE CASTING

Section VI - PARTS (cont'd)

MISCELLANEOUS KIT PARTS

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
--	--	23299001	SHIP KIT, NYC
1	1	HC1335	PIPE NIPPLE, 1" CLOSED THR
2	2	0300219	WIRE ROPE 3/8X6X19 IPS 100'
3	1	0303524	CLUTCH PUMP, 7 GPM
4	1	0303525	CL PUMP MTG KIT SPEC
5	1	0307544	SWING CHECK VALVE, 1" BRONZE
6	1	0307961	5 GALLON AIR TANK W/BRACKET
7	17	0307991	TRIM-LOC WEATHER STRIP
8	2	0307996	MUDFLAP, BLANK 9NUC
9	1	0501576	OWNERS SERVICE MANUAL (PARTS)
10	2	0906401	TIE-DOWN STRAP ASSEMBLY (EXPRESS)
11	1	23297852	FRONT MTG LH, NYC
12	1	23298850	RH FRONT MTG BRACKET WELDMENT NYC
13	1	23299050	KIT BOX, 810 SHIP KIT
14	1	23299051	LIGHT PARTS BAG, NYC
15	1	23299052	NYC BOLT BAG
16	1	23299810	LH DOLLY BRACKET ASSEMBLY
17	1	23299811	RH DOLLY BRACKET ASSEMBLY
18	1	23299900	PYLON KIT, NYC
19	2	174002274	5 LB. FIRE EXTINGUISHER
20	11	174016080	RUBBER REAR FENDERFLAIRS UNDE
21	1	806073000	LH REAR CHASSIS MTG, NYC
22	1	806074000	RH REAR CHASSIS MTG, NYC
23	2	810010001	BRACKET, CS MUD FLAP
24	1	810033000	TAIL LIGHT GUARD KIT
25	2	810040002	STOP BLOCK, 4-POS. (PROTOT.)
26	2	810620500	WHEEL SPACER WELDMENT
--	--	0906401	TIE-DOWN STRAP ASSEMBLY (EXPRESS)
27	1	0306724	STRAP-8' W/SLEEVE & HOOK
28	1	0306729	RATCHET ASSEMBLY W/HOOK
29	1	0501080	OPER INSTR-TIE DOWN STRAP
--	--	23299810	LH DOLLY BRACKET ASSEMBLY
30	2	--	5/16-18X1 HHCS
31	1	--	1/2-13X1.5 HHCS
32	1	23297812	DOLLY AXLE BRKT - (NYC)
33	1	23297813	FRONT DOLLY AXLE BRKT - (NYC)
34	1	23297831	PLATE - DOLLY LOCK (NYC)
35	1	23298810	LH DOLLY SUPPORT BRKT WELD'T
36	1	23298820	LH DOLLY HOLDER WELD'T
37	1	23298830	DOLLY LATCH PLATE WELD'T

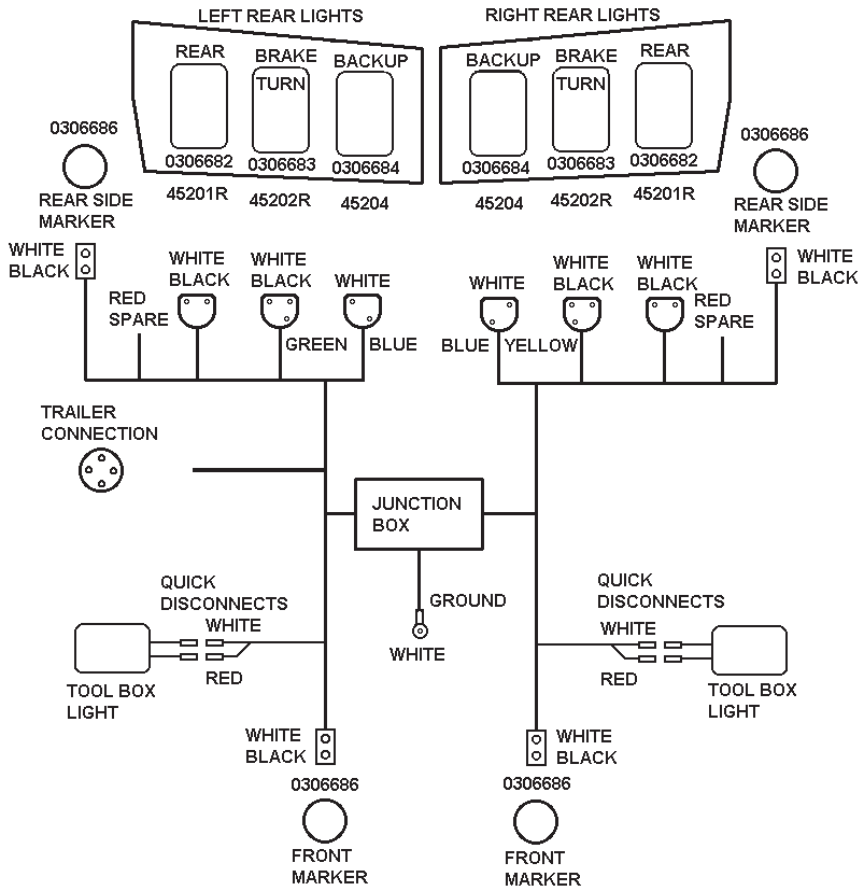
Section VI - PARTS (cont'd)

MISCELLANEOUS KIT PARTS (cont'd)

REF. NO.	NO. REQ'D	PART NUMBER	DESCRIPTION
--	--	23299811	RH DOLLY BRACKET ASSEMBLY
38	2	--	5/16-18X1 HHCS
39	1	--	1/2-13X1.5 HHCS
40	1	23297831	PLATE - DOLLY LOCK (NYC)
41	1	23298811	RH DOLLY SUPPORT WELD'T
42	1	23298821	RH DOLLY HOLDER WELD'T
43	1	23298830	DOLLY LATCH PLATE WELD'T
--	--	810033000	KIT, TAIL LIGHT GUARD
44	4	0400084	1/4-20X1.5 HHCS
45	8	--	3/8-16X1 HHCS
46	4	--	1/4-20 NYLOK HEX NUT
47	8	--	3/8-16 NYLOK HEX NUT
48	8	--	1/4 FLATWASHER
49	16	--	3/8 FLATWASHER
50	1	810030015	LH SS LIGHT COVER PANEL
51	2	810030016	PLATE - GUARD FILLER SS
52	1	810037015	RH SS LIGHT COVER PANEL

Section VII - SCHEMATICS

ELECTRICAL



WIRE COLOR	USE	WIRE COLOR	USE
WHITE	GROUND	GREEN	RIGHT TURN / BRAKE
BLACK	MARKER LIGHT	RED	WORK / SPOT LIGHT
YELLOW	LEFT TURN / BRAKE	BLUE	BACKUP LIGHT

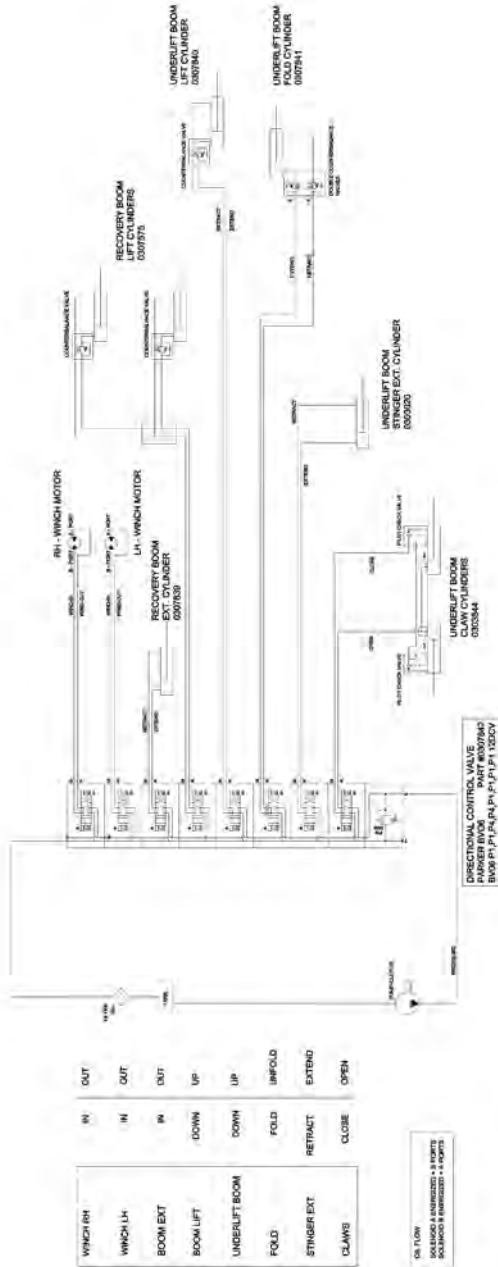
NOTE:

HARNESS PROVIDED IS A COMPLETELY SEALED SYSTEM. ANY OTHER FUNCTIONS MUST ORIGINATE FROM JUNCTION BOX. BREAKING OR CUTTING INTO PROVIDED HARNESS COMPLETELY VOIDS WARRANTY!

* ALL GROUNDS ON HARNESS ARE INTERNAL.

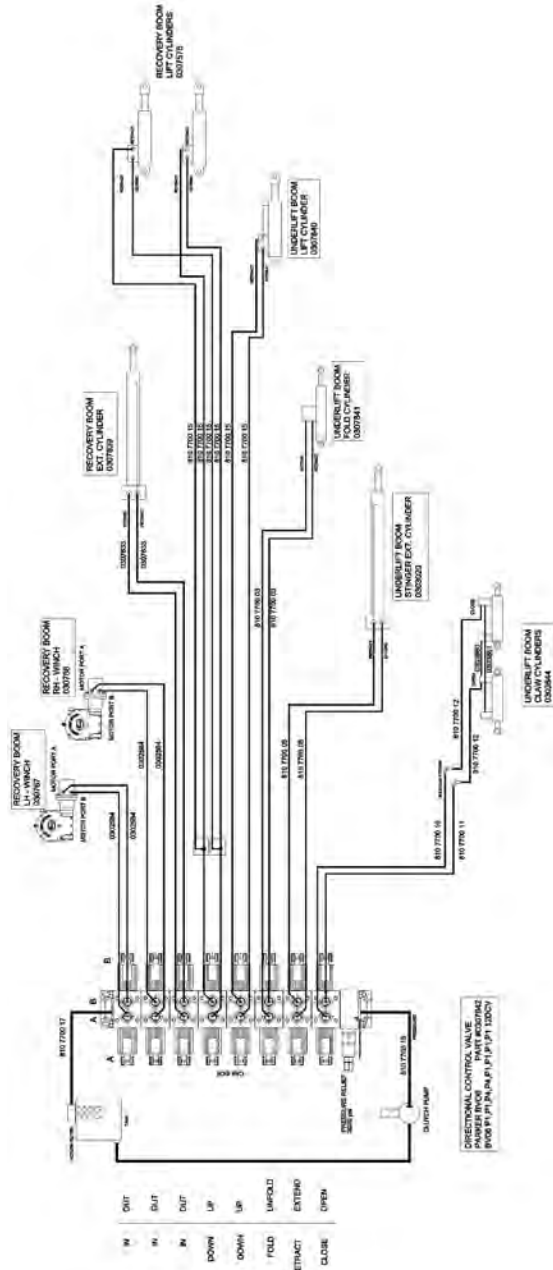
Section VII - SCHEMATICS

810 NYC HYDRAULICS



Section VII - SCHEMATICS

810 NYC HYDRAULICS



- IN
- OUT
- IN
- OUT
- IN
- OUT
- DOWN
- UP
- DOWN
- UP
- FOLD
- UNFOLD
- RETRACT
- EXTEND
- CLOSE
- OPEN



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