

CENTURY®

LEGENDARY LEADERSHIP



OWNER'S MANUAL

EB-4 / EXPRESS

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.

CENTURY®

Miller Industries Towing Equipment Inc.

8503 Hilltop Drive

Ooltewah, Tennessee 37363

Phone (423) 238-4171 • FAX (423) 238-5371

FORM NO. 0501029

03 / 1999

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

Telephone (423) 238-4171

SERIAL NUMBER

OWNER, USER AND OPERATOR:

Century 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.

TABLE OF CONTENTS



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

It is assumed by CENTURY that the Owner/Operator has thorough knowledge of the accepted and lawful retrieval and towing methods as dictated by his city, county or state. CENTURY 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.

Century is not responsible for the results of any unsafe practice of wrecker operators. Furthermore, the manufacturer 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.



WARNING

- 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

Section I - SAFETY PRECAUTIONS (cont'd)

FLEX 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)



WARNING

**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.**



WARNING

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

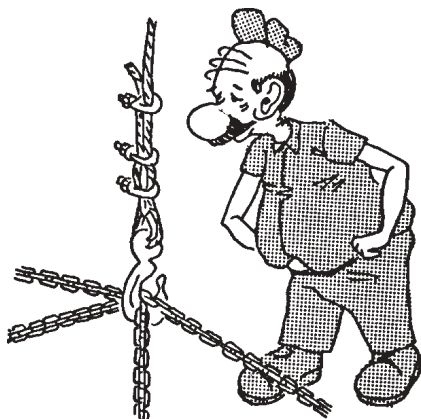
Section I - SAFETY PRECAUTIONS (cont'd)

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.

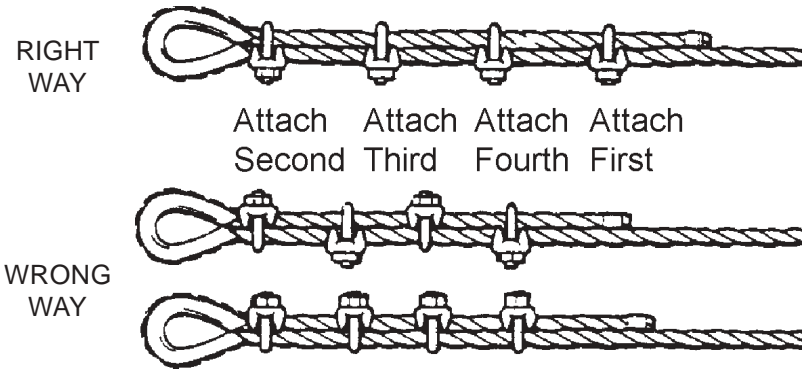
USE CABLE CLIPS ONLY IN THE EVENT OF AN EMERGENCY FIELD TEMPORARY REPAIR.

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.



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.

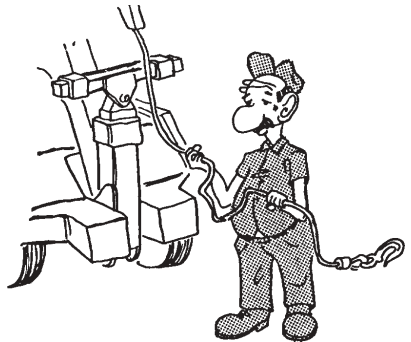
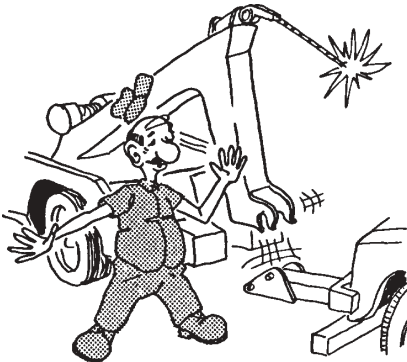
CLIP SIZE (INCHES)	MINIMUM NUMBER OF CLIPS	AMOUNT OF ROPE TO TURN BACK IN INCHES	TORQUE IN FT.LBS.
3/8	2	6 1/2	45
7/16	2	7	65
1/2	3	11 1/2	65
9/16	3	12	95
5/8	3	12	95
3/4	4	18	130

This table is based on Crosby-Laughlin.

Section I - SAFETY PRECAUTIONS (cont'd)

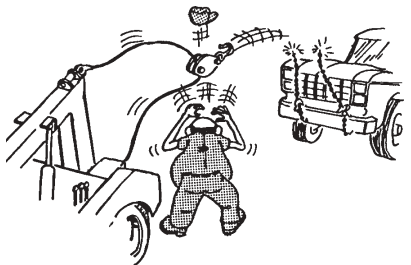
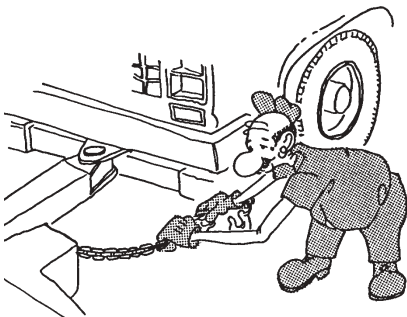
SAFETY TIPS

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.

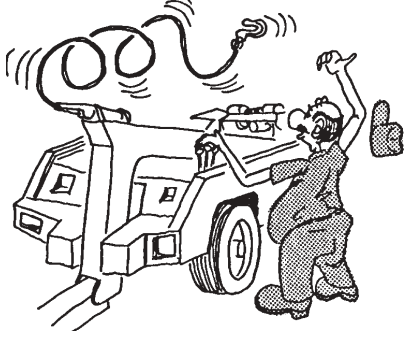
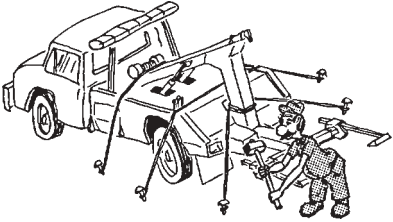


After rigging cables, don't begin pulling without rechecking connections. Make sure that all cables and snatch blocks are securely attached and cannot accidentally pull loose.

Section I - SAFETY PRECAUTIONS (cont'd)

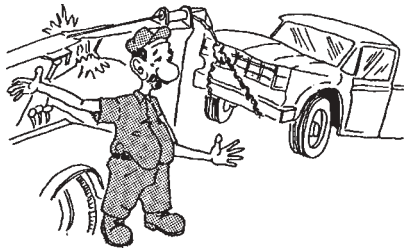
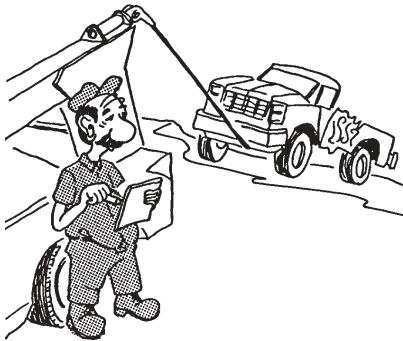
SAFETY TIPS

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.

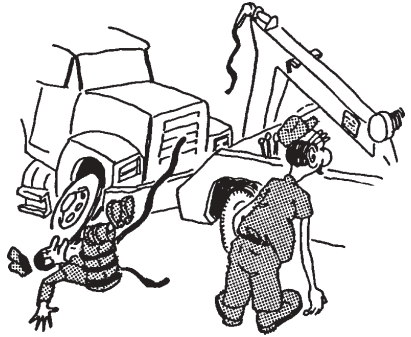
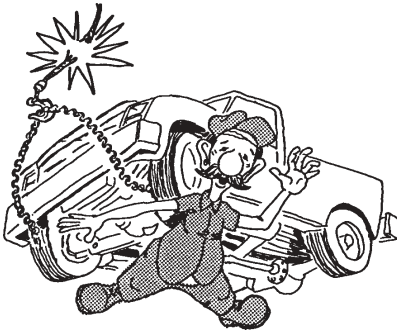


Don't exceed ratings of booms, cables, snatch blocks, or winches. Stay within nameplate ratings. Note that boom ratings decrease significantly as a boom is extended.

Section I - SAFETY PRECAUTIONS (cont'd)

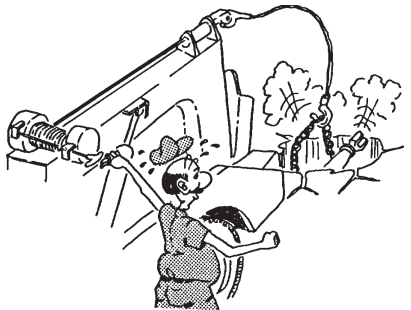
SAFETY TIPS

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.

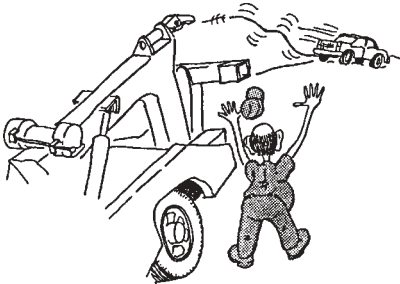
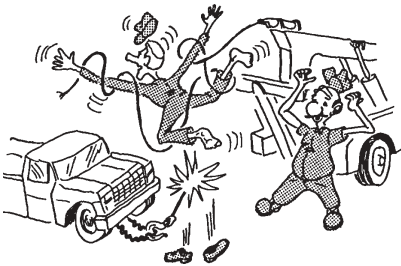
Don't tie down the front end of your wrecker for recovery work or heavy lifts. You are apt to damage the truck frame if you do.



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

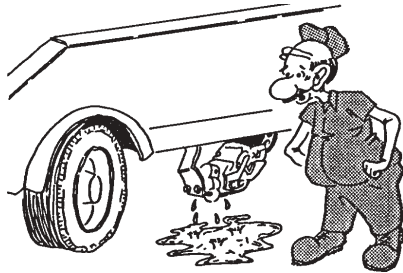
Section I - SAFETY PRECAUTIONS (cont'd)
SAFETY TIPS

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 PTO shafts, hydraulic pumps, and winches.

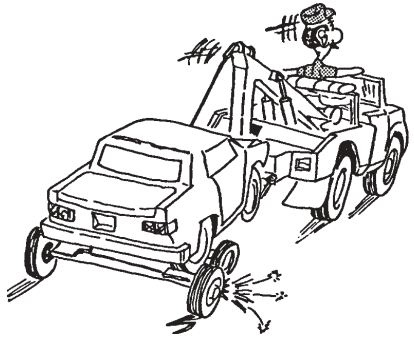


Don't rely on anti-theft steering locks to secure the steering wheel. Use a special steering wheel clamping device. Rope is commonly used to secure steering wheels, but that is not as reliable as devices designed for this purpose.

Section I - SAFETY PRECAUTIONS (cont'd)

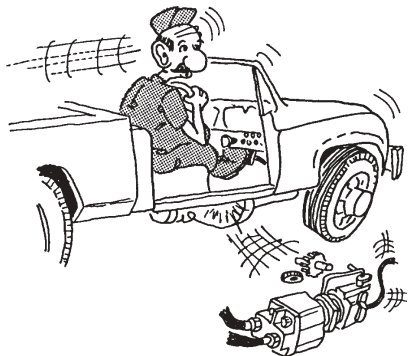
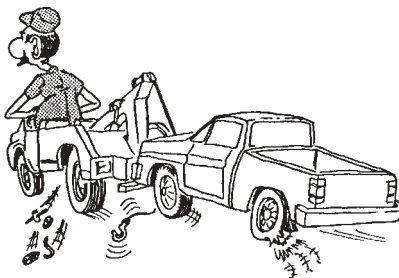
SAFETY TIPS

Don't tow a vehicle that reduces the weight on the front wheels of your wrecker more than 50 percent.



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

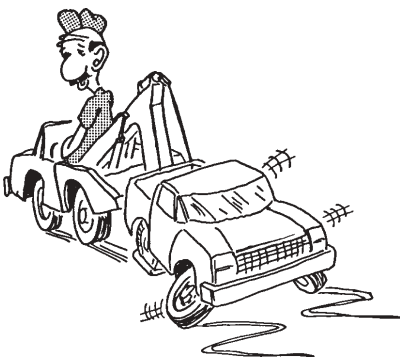
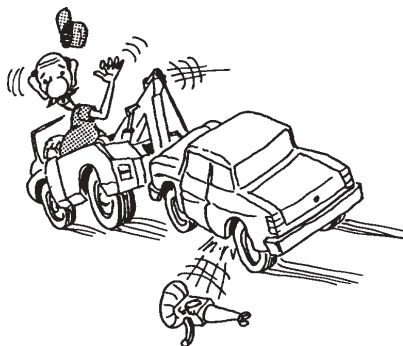
After you have hooked up a vehicle for towing, don't start the tow until you have double checked the hook-up, installed safety chains, and released the parking brakes of the towed vehicle.



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

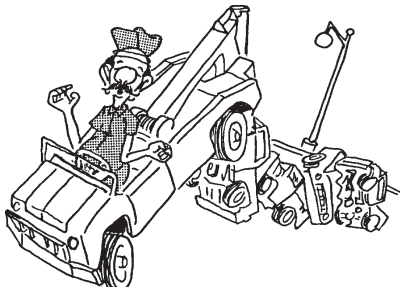
Section I - SAFETY PRECAUTIONS (cont'd)
SAFETY TIPS

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.

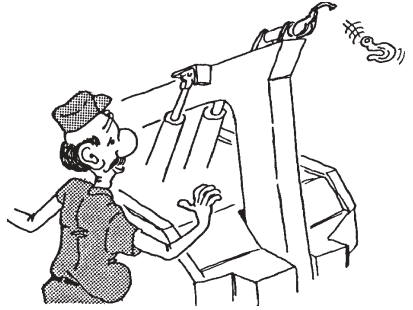
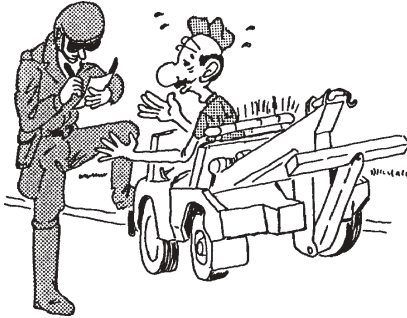


Don't tow a vehicle at night without proper signal lights on the towed vehicle and the wrecker.

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

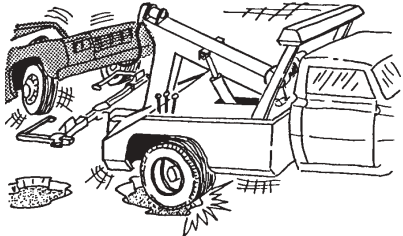
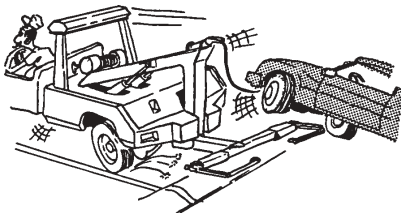
Wheel lifts require both systems for safety.

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

The following illustrations show why.

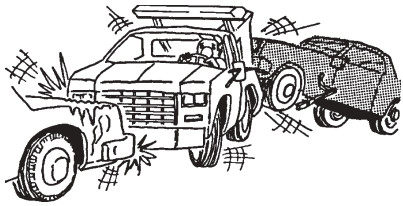
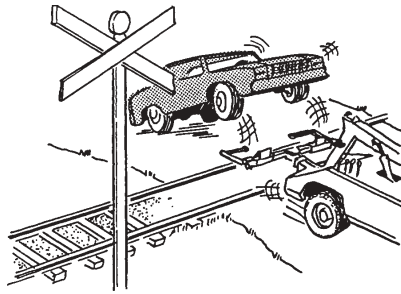
Section I - SAFETY PRECAUTIONS (cont'd)
SAFETY TIPS

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



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

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

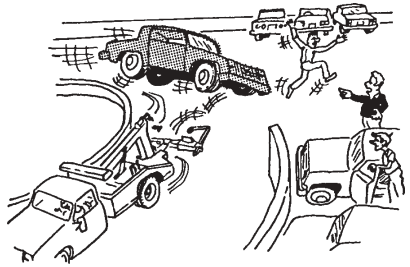
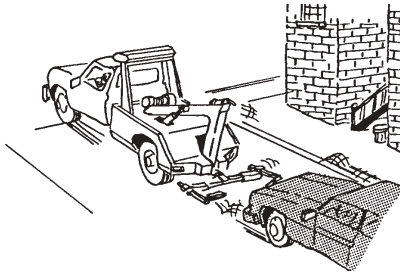


Without straps, a panic stop or minor collision may cause the vehicle to come loose.

Section I - SAFETY PRECAUTIONS (cont'd)

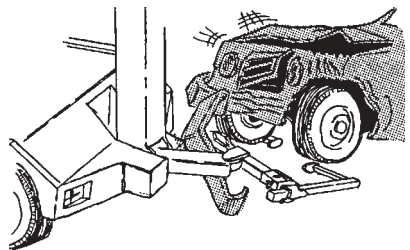
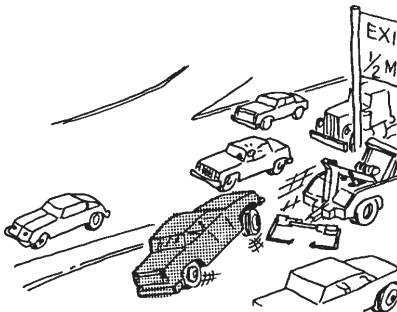
SAFETY TIPS

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 cross bar is obstructed.

Section I - SAFETY PRECAUTIONS (cont'd)

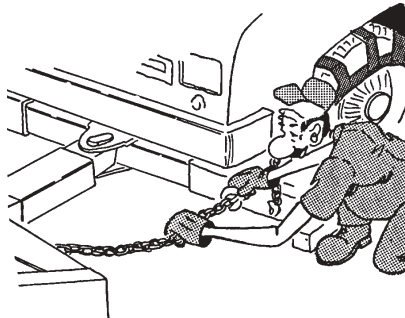
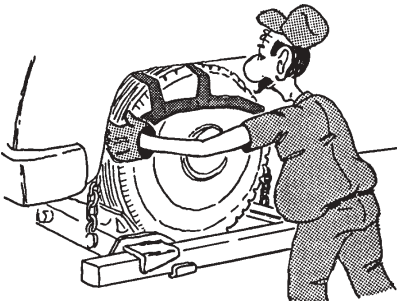
SAFETY TIPS

**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.

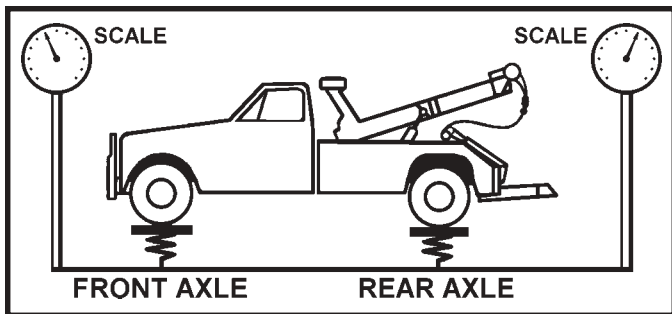
Section I - SAFETY PRECAUTIONS (cont'd)

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: $ML = .5FAW \times WB/OH$

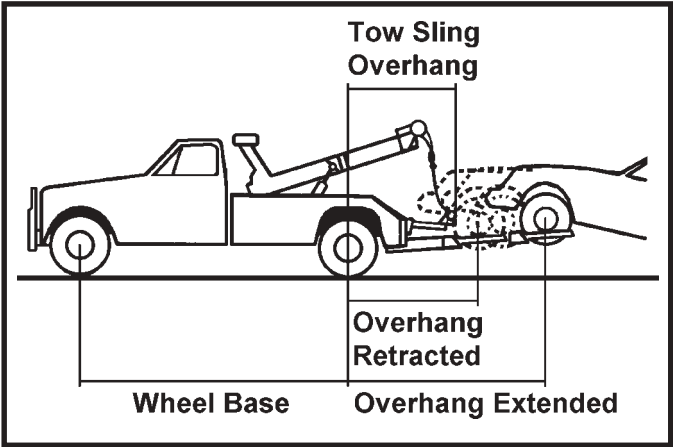
where:

- 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.

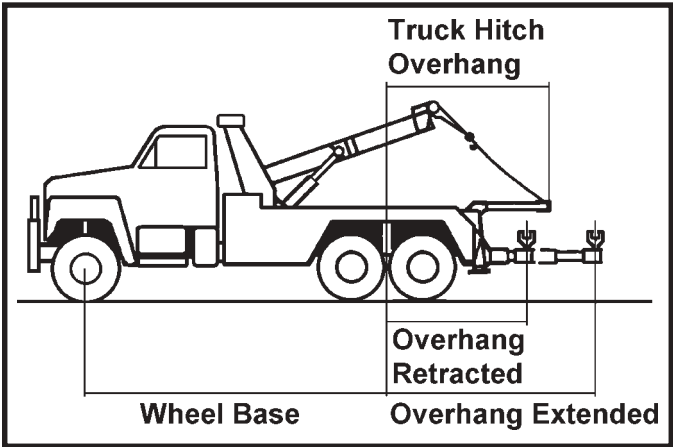
To use the formula, multiply the unladen weight at the front axle by .5. Multiply the result by the wheel bases. Then, divide that result by the overhang. So, you should calculate the maximum lifted load for each tow truck, using this formula, post those limits in the truck and instruct each driver to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

Each Century EB4 / EXPRESS Wrecker will have a Serial Number / Specification Label mounted on the outer boom. These labels will display the Model Number, Serial Number, Lift/Tow and Cable Ratings. See Figure 2.2.

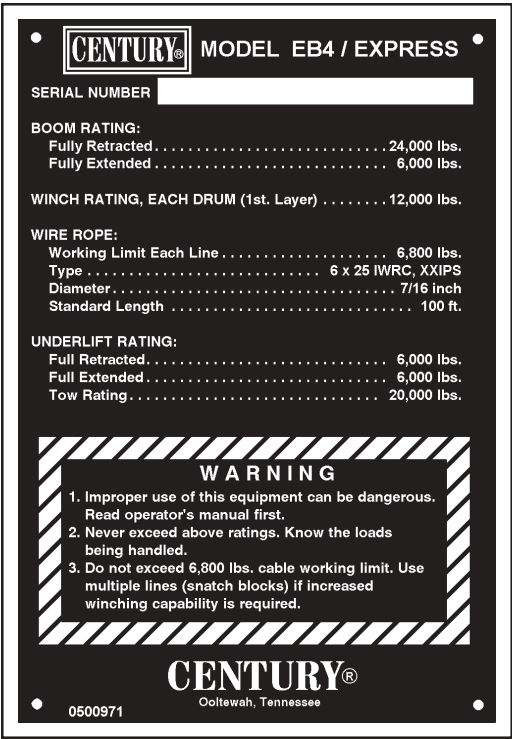


FIGURE 2.2

2.3 SPECIFICATIONS - EB4 Wrecker

12-ton hydraulic recovery boom (rated at boom swivel retracted) with dual 12,000 lb. hydraulic winches, full power two-stage boom, and 90" wide 84" C.A. heavy duty body.

(a) Winches

Rating (1st layer each drum) 12,000 lbs.

Section II - SPECIFICATIONS (cont'd)

2.3 SPECIFICATIONS - EB4 Wrecker (cont'd)

(b) Cable

Diameter and Length (each drum) 7/16" Dia. x 100'
Type 6 x 25 IWRC, XXIPS
Working Line Limit 6,800 lbs.

(c) Boom Specifications

Description	Retracted	Extended
Lift Height from Ground to Hook at Max. Boom Elevation	94 7/16"	130 5/16"
Reach past Tailgate at Min. Boom Elevation	1 5/8"	61 5/8"
Reach past Tailgate at Max. Boom Elevation	-	25 3/4"
Range of Elevation 0 - 36.5°		
Boom Rating at Boom Swivel (Retracted) 24,000 lbs.		
Boom Rating at Boom Swivel (Extended) 6,000 lbs.		

2.4 SPECIFICATIONS - EB-4 / EXPRESS WHEEL LIFT

(a) Wheel Lift Specifications

Description	Position	Inches
Retracted Distance from Tailgate to Rear Edge of Bar	At Full Down	39 1/4"
	At Normal Tow Position	45"
Extended Distance from Tailgate to Centerline of Lift Forks	At Full Down	70 1/2"
	At Normal Tow Position	76 1/4"
Maximum Hydraulic Extension		31 1/4"

Section II - SPECIFICATIONS (cont'd)

2.4 SPECIFICATIONS - EB-4 / EXPRESS WHEEL LIFT (cont'd)

(b) Wheel Lift Capacities

Retracted	6,000 lbs.
T.E.M.A.	6,000 lbs.
Extended	6,000 lbs.
Tow Rating	20,000 lbs.

2.5 CHASSIS RECOMMENDATIONS

Century EB-4 / EXPRESS should be installed on a chassis with a minimum GVW of 17,500 lbs., dual rear wheels, and a minimum C.A. of 84". A heavy duty spring package is recommended.

2.6 STANDARD EQUIPMENT

- Integrated Boom & Wheel Lift System
- Variable Speed Hydraulic Winches
- 6 x 25 IWRC, XXIPS 7/16" x 100' Wire Rope Each Winch
- Express Hydraulic Autoload System
- In-Cab Lanyard Control for Wheel Lift
- Power Fold for Stinger Storage
- 360° Direcional Boom End Swivels
- Power Boom Elevation with Holding Valve
- Power Boom Extension
- Lubrication Fittings on all Shafts and Other Moving Parts
- 90" Wide Body with 2 Tool Compartments per side and 9" Sills
- Tunnel on Front Compartment
- Dual Control Stations
- Federal Standard 108 Lighting
- Wiring Harness with Junction Box
- Back Up Alarm
- Clutch Pump or PTO and Pump Combination
- Safety Chains with Built-In Pockets
- EZ Service Hydraulic Filter
- Spring Loaded Winch Clutch Releases
- All Components for Complete Installation

Section II - SPECIFICATIONS (cont'd)

2.7 OPTIONAL EQUIPMENT

- Convenience Group
- Wrecker Special Light Bar
- Work Lights
- Light Pylon
- Fiberglass Fenderettes
- Cable Anti-Spooling Tensioners
- Switch Panel
- Mud Flaps

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Section III - OPERATIONAL FUNCTIONS WRECKER

- 3.1** Your new CENTURY EB-4 Wrecker is fully hydraulic. It receives its power by means of either a belt driven electric clutch operated hydraulic pump mounted to the truck engine or a PTO/Pump combination attached to the truck transmission. No drive line or universal joints are required with either pump.
- 3.2** The hydraulic pump may be mechanically or electrically engaged by the PTO knob or the PTO switch in the truck cab.



CAUTION

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

- 3.3** Each function of your CENTURY EB-4 Wrecker can be controlled from either of the dual control stations located at the rear of the wrecker body.
- 3.4** The control handles are clearly marked as to their functions and directions. Movement of the control handles meters the flow of oil through valves to control the speed of each function.
- 3.5** The wrecker boom is elevated and extended by means of double-acting hydraulic 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 3.1.

Section III - OPERATIONAL FUNCTIONS WRECKER (cont'd)



FIGURE 3.1

- 3.7** Before operating your wrecker, remove the rubber shipping plug from the winch vent cap.

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.**

- 3.8** The optional switch panel controls the light bar, flood lights and lower work lights. See Figure 3.2.

Section III - OPERATIONAL FUNCTIONS WRECKER (cont'd)



FIGURE 3.2



WARNING

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

[illegible]

Section IIIA - OPERATIONAL FUNCTIONS

WHEEL LIFT

- 3A.1** Your new CENTURY EB-4 / EXPRESS Wheel Lift is totally hydraulic. It receives its power by means of either a belt driven electric clutch operated hydraulic pump mounted to the truck engine or a PTO/ Pump combination attached to the truck transmission. No drive line or universal joints are required with either pump.
- 3A.2** The hydraulic pump may be mechanically or electrically engaged by the PTO knob or the PTO switch in the truck cab.



CAUTION

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

- 3A.3** Each function of your CENTURY EB-4 / EXPRESS Wheel Lift can be controlled from either of the dual control stations located at the rear of the wrecker body.
- 3A.4** The control handles are clearly identified as to functions and directions. Movement of the control handles meters the flow of oil through valves to control the speed of each function.
- 3A.5** The EB-4 / EXPRESS Wheel Lift is elevated and extended by means of double-acting hydraulic cylinders and can be operated under "LOAD" or "NO-LOAD" conditions.



WARNING

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

[illegible]

Section IV - OPERATING INSTRUCTIONS

WRECKER

- 4.1 For reasons of safety, it is important that the Owner/Operator(s) of the CENTURY EB-4 Wrecker should become thoroughly familiar with the controls and functions of the wrecker before attempting any operation.

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 (6,800 lbs.).
- (d) **DO NOT** use the winch or cable for the lifting of people.

4.3 PREPARING TO LOAD VEHICLE

- (a) Position EB-4 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 or PTO.



CAUTION

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

- (c) Before operating any control handles, observe the winch cables to make sure they are free and have sufficient slack to let boom extend. If not, pay out sufficient cable by either (1) or (2):
 - (1) Operate CABLE "IN-OUT" Control. Keep hand tension on cables to avoid loose cable on drum.

Section IV - OPERATING INSTRUCTIONS

WRECKER (cont'd)

4.3 PREPARING TO LOAD VEHICLE (cont'd)

- (2) Disengage winch drum by pushing in the winch clutch control handle and rotating it 90°. See Figure 4.1. 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 back 90° to allow winch to re-engage.



FIGURE 4.1

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 AT THE DESIRED ELEVATION
DUE TO THE LIFT CYLINDERS' HOLDING VALVE.**

Section IV - OPERATING INSTRUCTIONS WRECKER (cont'd)

4.5 BOOM EXTENSION

Extend boom to desired length by use of the BOOM "IN-OUT" Control.

4.6 CABLE

- (a) The boom end yoke swivels to allow pulls from either side. See Figure 4.2.



FIGURE 4.2

- (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. Refer to Figure 4.2.
- (c) The standard snatch block may be used when a lower winching angle is required for recovery operations. See Figure 4.3.

Section IV - OPERATING INSTRUCTIONS
WRECKER (cont'd)

4.6 CABLE (cont'd)



FIGURE 4.3

- (d) After recovery operation is complete, rewind winch cable on drum by operation of the CABLE "IN/OUT" Control.



WARNING

**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 CENTURY EB-4 / EXPRESS 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 CENTURY EB-4 / EXPRESS Series Wheel Lift with the disabled vehicle to be towed. See Figure 4A.1.

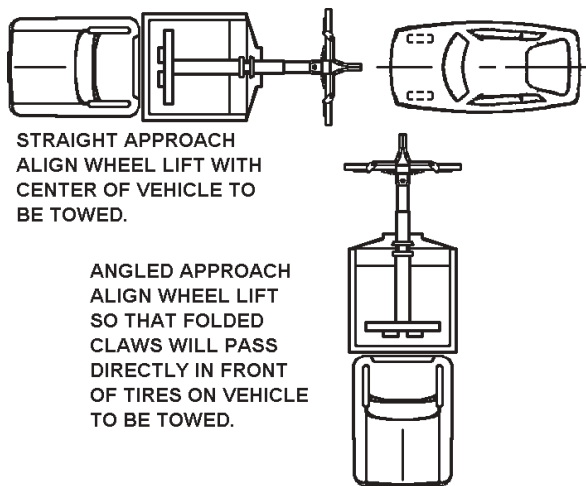


FIGURE 4A.1

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.

- (b) Reduce truck's engine to an idle and apply parking brake. Depress clutch, place transmission in neutral and engage clutch pump or PTO.

Section IVA- OPERATING INSTRUCTIONS

WHEEL LIFT (cont'd)

4A.2 PREPARING TO LOAD VEHICLE (cont'd)



CAUTION

NEVER DRIVE TRUCK ON STREET WITH PTO 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 Vernier Throttle Control located on the left rear slope of the wrecker body, or 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.



CAUTION

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 tires, it may be necessary to attach the small tire adapters to claws.
- (d) After all preparations have been made, position crossbar by either (1) or (2):
 - (1) Straight Approach: Back the CENTURY EB-4 / EXPRESS Wheel Lift until the crosstube is firmly against the tires of the vehicle to be towed. See Figure 4A.4.



FIGURE 4A.4

- (2) Angled Approach: Back the CENTURY EB-4 / EXPRESS 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.5 and 4A.6.

Section IVA- OPERATING INSTRUCTIONS

WHEEL LIFT (cont'd)

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



FIGURE 4A.5



FIGURE 4A.6

- (e) Engage claws to capture tires of vehicle to be towed using the CLAW "OPEN/CLOSE" Control. See Figure 4A.7. Ensure that both claws have fully captured both tires before proceeding.

Section IVA- OPERATING INSTRUCTIONS

WHEEL LIFT (cont'd)

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



FIGURE 4A.7



CAUTION

**DO NOT ATTEMPT TO LIFT OR MOVE VEHICLE
IF CLAWS ARE NOT IN POSITION SHOWN
IN FIGURE 4A.7 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.

Section IVA- OPERATING INSTRUCTIONS

WHEEL LIFT (cont'd)

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

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.**

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.**



WARNING

**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.

Section IVA- OPERATING INSTRUCTIONS

WHEEL LIFT (cont'd)

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

- (b) Attach tie down strap hook to crossbar as shown in Figure 4A.8.



FIGURE 4A.8

- (c) Route tie down strap up the inside of the tire to a point beyond the top center of the tire, then across the top to the outside of the tire, inserting the ratchet hook into the ratchet attachment hole on the tire retainer. See Figure 4A.9.



WARNING

**THE TIE DOWN STRAP MUST CROSS THE TIRE
BEYOND THE TOP CENTER OF THE TIRE
IN ORDER TO FUNCTION PROPERLY.**

Section IVA- OPERATING INSTRUCTIONS

WHEEL LIFT (cont'd)

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



FIGURE 4A.9

- (d) When using small tire adapters, attach ratchet hook as shown in Figure 4A.10.



FIGURE 4A.10

Section IVA- OPERATING INSTRUCTIONS

WHEEL LIFT (cont'd)

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

- (e) Engage ratchet lock and tighten strap across tire securely.
- (f) Repeat tie down strap installation on opposite side of vehicle.
- (g) Figure 4A.11 illustrates correct tie down strap installation.



FIGURE 4A.11



WARNING

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

4A.5 SAFETY CHAIN HOOK-UP PROCEDURES

- (a) Extend free end of chain from storage caddy.

Section IVA- OPERATING INSTRUCTIONS

WHEEL LIFT (cont'd)

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

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



FIGURE 4A.12

- (c) The following are some suggested vehicle hook-ups for safety chains. See Figures 4A.13 thru 4A.16 or consult "AAA" towing manual.

Section IVA - OPERATING INSTRUCTIONS
WHEEL LIFT (cont'd)

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

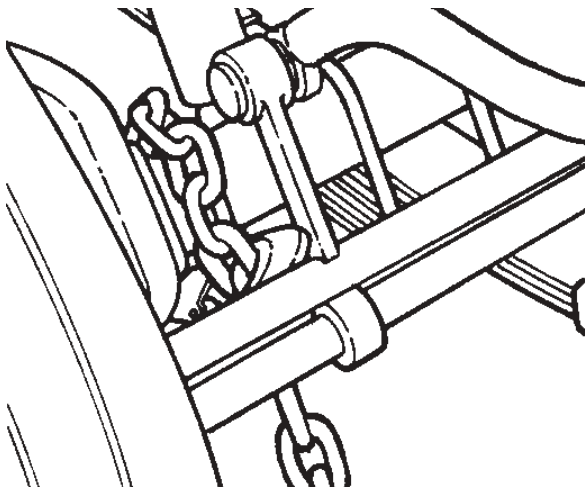


FIGURE 4A.13 (AXLE HOOK-UP)

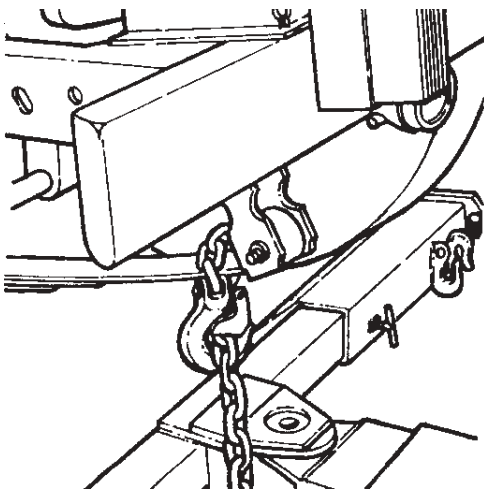


FIGURE 4A.14 (LEAF SPRING HOOK-UP)

Section IVA - OPERATING INSTRUCTIONS

WHEEL LIFT (cont'd)

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

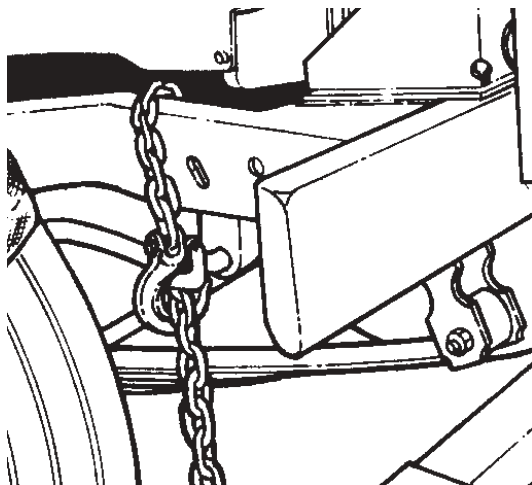


FIGURE 4A.15 (FRAME HOOK-UP)

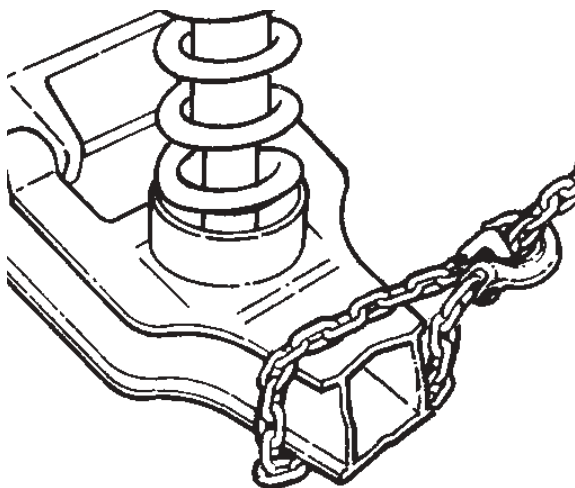


FIGURE 4A.16 (A-FRAME HOOK-UP)

Section IVA - OPERATING INSTRUCTIONS

WHEEL LIFT (cont'd)

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

- (d) After attaching the safety chains to the vehicle, pull the chain tight under the crossbar and seat chain firmly in the innermost hook welded to the front of the crossbar. See Figure 4A.17.



FIGURE 4A.17

- (e) Pull chain tight around the crossbar and seat chain firmly in the second hook. See Figure 4A.18.



FIGURE 4A.18

Section IVA - OPERATING INSTRUCTIONS

WHEEL LIFT (cont'd)

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

- (f) 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.



CAUTION

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

- (g) 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. See Figure 4A.19.



FIGURE 4A.19

- (h) Give hook-up a final check and disengage clutch pump or PTO before commencing towing operations.

Section IVA - 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.



WARNING

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



CAUTION

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



CAUTION

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.

Section IVA - OPERATING INSTRUCTIONS

WHEEL LIFT (cont'd)

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

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

	CAUTION
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.
- (c) Disengage claws by using the CLAW "OPEN/CLOSE" Control. Ensure that both claws have fully released both tires before proceeding.

Section IVA - OPERATING INSTRUCTIONS

WHEEL LIFT (cont'd)

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

- (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 clutch pump or PTO.

Section V - MAINTENANCE

- 5.1** The continued operation of your CENTURY Wrecker is largely dependent upon strict adherence to a properly scheduled preventive maintenance program. To help you in this program, CENTURY has 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 overstressed. The smallest amount of grit, metal flake or other foreign material in the system can cause extensive damage to pumps, motors and valves. CENTURY has 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 Oil Filter.**
 - 2. **Oil Reservoir.**
 - 3. **Controls.**
 - 4. **Cables and Fittings.**

Section V - MAINTENANCE (cont'd)

5.3 LUBRICATION & PREVENTIVE MAINTENANCE (cont'd)

5. **Hydraulic Hoses and Fittings.**
6. **Lights and Wiring.**
7. **Winch.**
8. **Pivot Bearing Surfaces and Pins.**

(See Lubrication Charts, page V-4 & V-5.)

- (b) Check hydraulic oil level in reservoir and fill to 1/2" (inch) above screen in 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. **Crossbar Pivot**
 4. **Boom Slide Pads**
 5. **Boom End Swivels**
- (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 level of oil plug located on side plate of gear housing. Use SAE 140 general purpose gear oil.
- (h) Lubricate grease fitting on winch freespool clutch control.
- (i) Lubricate winch cables using an oily rag while re spooling 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** - multi-purpose automatic transmission fluid formally known as MERCON / DEXRON 111 or alternatively MERCON / DEXRON VI (synthetic)
- (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 Grease such as Drydene SFG or equivalent.
- (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 CLIMATES

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

5.6 LUBRICATION

1. Cable - Use oily rag 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 - use GP Grease.
4. Winch Coupling Control - use GP Grease.
5. Hydraulic Reservoir - Fill to 1/2" above screen in filler neck with recommended hydraulic fluid.
6. Hydraulic Filter - Replace after first week of operation, and then every three (3) months.
7. Boom End Swivel - use GP Grease.
8. Sheave - use GP Grease.
9. Boom Shaft Pivot - use GP Grease.
10. Underlift Pivots and Slide Pads - use Drydene SFG or equivalent.

Section V - MAINTENANCE (cont'd)

MAINTENANCE RECORD

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Section V - MAINTENANCE (cont'd)

MAINTENANCE RECORD

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***IMPORTANT:** HYDRAULIC HOSES AND CABLES SHOULD BE INSPECTED WEEKLY FOR SIGNS OF ABRASION.

Section V - MAINTENANCE (cont'd)

MAINTENANCE RECORD

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Section V - MAINTENANCE (cont'd)

MAINTENANCE RECORD

[illegible]

Section V - MAINTENANCE (cont'd)

MAINTENANCE RECORD

[illegible]

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Section VI - PARTS LIST

This Section is provided by the manufacturer for the purpose of ordering any component part of the **CENTURY EB-4 / EXPRESS** 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 **CENTURY EB-4 / EXPRESS** 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 LIST (cont'd)

REF. NO.	PART NUMBER	DESCRIPTION	NO. REQ'D
--	120015412	CENTURY EB4T W/EXPRESS CROSSBAR 84/90	
1	0302080	HARNESS SWITCH PANEL	1
2	0302122	SWITCH PANEL HOT WIRE	1
3	0303226	80 AMP CIRCUIT BREAKER	1
4	0303880	REMOTE CONTROL HANDLE	2
5	0303883	WINCH CABLE ASSEMBLY	2
6	0500971	DATA PLATE - EB4/6500 CENTURY	1
7	0714948	SUCTION HOSE, 1" 16C4 10 FT.	1
--	0901496	KIT - CENTURY NAMEPLATE	1
--	0903069	KIT - BACK UP ALARM	1
--	0903275	KIT - SAFETY CHAIN F6500	1
--	0903284	KIT - DAYTONA BOX	1
--	0903295	KIT - CONTROL KNOB	1
--	0904103	KIT - ELECTRICAL TERMINAL	1
--	0904782	KIT - STINGER POSITIONING	1
--	0904799	BODY ASSEMBLY 84CA/90W DUAL	1
--	AWS-1000-A	TIE DOWN STRAP ASSEMBLY	2
--	0901496	KIT - CENTURY NAMEPLATE	
8	0400035	#10-24 X 1/2" OVAL HD SS	6
9	0500406	NAMEPLATE, CENTURY	2
--	0903069	KIT - BACK UP ALARM	
10	0300077	WIRE, 16 GA, RED	2 FT.
11	0300153	CONNECTOR, WIRE (BLUE)	6
12	0301812	HEAT SHRINK TUBE-IN.MELT	1
13	0303061	BACK UP ALARM ECCO #MS97	1
14	0400057	1/4"-20 X 1-1/4" HHCS	2
15	0400367	1/4"-20 NYLOK HEX NUT ZP	2
16	0500676	INSTALLATION INSTRUCTIONS - BACKUP ALARM	1
--	0903275	KIT - SAFETY CHAIN F6500	
17	0303116	CHAIN ASSEMBLY, 3/8" HT X 10 FT	2
18	0400122	3/8"-16 X 1-1/4" HHCS GR5 ZP	2
19	0400392	3/8"-16 NYLOK HEX NUT ZP	2
20	0400480	3/8" FLAT WASHER ZP	2
--	0903284	KIT - DAYTONA BOX	
21	0300844	3/4" X 1/8" CLOSED CELL	25 FT.
22	0302855	TOOL CMPT LATCH PLAIN	4
23	0303993	STRIKER BOLT	4
24	0400021	#8-32 X 1/2" RDHD PH MCH SC SS	16
25	0400351	#8-32 HEX NUT & STAR WASHER ZP	16

Section VI - PARTS LIST (cont'd)

REF. NO.	PART NUMBER	DESCRIPTION	NO. REQ'D
--	0902798	KIT - CONTROL KNOB	
26	0300834	KNOB - CTRL (IN-OUT)	4
27	0300835	KNOB - BOOM (UP-DOWN)	2
28	0300837	KNOB - BOOM (IN-OUT)	2
29	0302856	KNOB - TILT, 3/8"-16 THREAD	2
30	0302917	KNOB - WHEEL LIFT EXTEND (IN-OUT)	2
31	0303283	KNOB - CLAW (OPEN-CLOSE)	2
32	0400393	3/8"-16 HEX NUT JAM ZP	14
--	0904103	KIT - ELECTRICAL TERMINAL	
33	0301476	1/4" BLADE CONN, PIGGYBACK	24
34	0301503	#10 RING CONN.	10
35	0302423	TERMINAL, 1/4" RING 14-16GA	4
--	0904782	KIT - STINGER POSITIONING	
36	0400238	1/2"-13 X 1-1/2" SKT HD CP SC	2
37	0400378	1/4"-20 X 1" FL PHIL HD	4
38	0400408	1/2"-13 NYLOK HEX NUT	2
39	0501002	INSTALLATION INSTRUCTIONS	1
40	0709110	CLAMP ADJUSTMENT BLOCK	2
41	0709111	SPACERS - ADJUSTING	6
42	0713131	SHEAR BLOCK	1
43	0804106	STINGER POSITIONING BRACKET WELDMENT	1
--	0904783	RETAINER PIN ASSEMBLY	1
44	HD1259	SNAPPER PIN	1
--	0904783	RETAINER PIN ASSEMBLY	
45	0400579	SPRING PIN, 3/8" X 4"	1
46	0714507	RETAINER PIN	1
--	0904799	BODY ASSEMBLY 84CA/90W DUAL	
47	0300032	PLUG, 1" DIA HOLE	1
48	0300071	CLAMP, HOSE, 1" IDEAL	2
49	0300113	GREASE FITTING, ALEMITE	1
50	0300329	SNAP RING, EXTERNAL 2"	2
51	0300787	HOSE ASSEMBLY, 53"	1
52	0301334	CATERPILLER GROMMET, 1/2"	1
53	0301471	HOSE ASSEMBLY, 30"	1
54	0301473	HOSE ASSEMBLY, 18"	1
55	0301533	TIE DOWN STRAP, 15"	1
56	0301659	HOSE ASSEMBLY, 150"	1
57	0302171	PLUG, 3/4"-16 PLASTIC	1
58	0302552	C-WA-10 WELD ADAPTER	4

Section VI - PARTS LIST (cont'd)

REF. NO.	PART NUMBER	DESCRIPTION	NO. REQ'D
--	0904799	BODY ASSEMBLY 84CA/90W DUAL (cont'd)	
59	0302610	HOSE ASSEMBLY, 36"	1
60	0302855	TOOL COMPT LATCH PLAIN	1
61	0302926	HOSE ASSEMBLY, 29"	5
62	0303014	HOSE ASSEMBLY, 1/2" DIA 80"	4
63	0303193	BLACK SKUFF JACKET #SJ16	20 FT.
64	0303481	SLIDE PAD - BUMPER	3
65	0303863	HOSE ASSEMBLY, 170"	2
66	0304264	TOOL BOX HINGE	2
67	0400002	#4 X 1/4" DRIVE SCREW RD HD	4
68	0400021	#8-32 X 1/2" RD HD PH MCH SC SS	4
69	0400062	1/4"-20 X 3/4" THRD CUT HEX	2
70	0400070	1/4"-20 X 1" HHCS GR5 ZP	4
71	0400078	1/4"-20 X 2" HHCS GR5 ZP	1
72	0400118	5/16"-18 X 3/4" HHCS GR5 ZP	4
73	0400122	3/8"-16 X 1-1/4" HHCS GR5 ZP	2
74	0400154	3/8"-16 X 1/2 HHCS GR5 ZP	2
75	0400223	3/8"-16 X 3/4" FL HD	6
76	0400239	1/2"-13 X 3/4" HHCS GR5	2
77	0400249	5/8"-11 X 1-1/4" SOC HD CAP SCREW	8
78	0400264	5/8"-11 X 2-1/4" HHCS GR5 ZP	12
79	0400351	#8-32 HEX NUT & STAR WASHER ZP	4
80	0400382	5/16"-18 NYLOK HEX NUT ZP	4
81	0400398	3/8"-16 NYLOK HALF-NUT ZP	24
82	0400421	5/8"-11 NYLOK HEX NUT ZP	12
83	0400451	1/4" FLATWASHER ZP	4
84	0400452	1/4" HELICAL LOCKWASHER ZP	8
85	0400482	3/8" HELICAL LOCKWASHER ZP	2
86	0400508	5/8" HELICAL LOCKWASHER ZP	8
87	0400567	1/4" RIVET BTT 84 SS	4
88	0400579	SPRING PIN, 3/8" X 4" ZP	2
89	0701956	SCREW, OUTER CROSSTUBE RET, FI	4
90	0703640	WASHER, THRUST (NYLATRON)	2
91	0708529	HOSE, RETURN 3/4" I.D. X 36"	1
91	0708931	ACCESS COVER	1
92	0713913	SHAFT, BOOM PIVOT - EB4	1
93	0801952	LEG, SHIPPING	2
94	0803906	BOOM TRUNION PIVOT	2
95	0803919	TUBE, HOSE WELDMENT	1
96	0803947	BODY WELDMENT	1
97	0803957	TUBE, BOOM HOSE WELDMENT	1
--	0901479	VALVE, SHUTTLE ASSEMBLY	1
--	0902182	KIT - INLINE FILTER	1

Section VI - PARTS LIST (cont'd)

REF. NO.	PART NUMBER	DESCRIPTION	NO. REQ'D
--	0904799	BODY ASSEMBLY 84CA/90W DUAL (cont'd)	
--	0902721	KIT - HYDRAULIC TANK	1
--	0902949	IN-CAB CONTROL HYDRAULIC KIT	1
--	0904171	SWIVEL ASSEMBLY, BOOM END	1
--	0904520	KIT - VALVE	1
--	0904521	KIT - SOLENOID	1
--	0904534	TENSIONER, HOSE ASSEMBLY	1
--	0904539	KIT - SPLASH GUARD FT	1
--	0904595	CYLINDER - LIFT ASSEMBLY	1
--	0904598	CROSSBAR ASSEMBLY, MED DUTY	1
--	0904609	KIT - CONTROL DUAL	1
--	0904798	WKR & W/L LESS CROSSBAR DUAL	1
98	CZ15	RUBBER GROMMET, 1/2"	3
99	DE1716	5/32" X 1/4" DOME HEAD	4
--	0901479	VALVE, SHUTTLE ASSEMBLY	
100	0300142	FITTING, ELB 6MJ-4MP90	1
101	0301424	FITTING, MALE CONNECTOR 6MJ-4MP	2
102	0301868	FITTING, MALE RUN TEE 4FP-4FP-4MP	2
103	0302053	FITTING, STRAIGHT 8MJ-4MP	2
104	0302226	VALVE, SHUTTLE	1
105	0400090	1/4"-20 X 1-3/4" RD HD GR5 ZP	2
106	0400452	1/4" HELICAL LOCKWASHER ZP	2
--	0902182	KIT - INLINE FILTER	
107	0301547	FITTING, ELB 8MJ-12MB90	1
108	0301780	FITTING, CONNECTOR 8MJ-12MB	1
109	0301791	HOSE ASSEMBLY, 17"	1
110	0302506	IN-LINE FILTER, PARKER	1
111	0400081	1/4"-20 X 3-1/2" HHCS GR5 ZP	2
112	0400367	1/4"-20 NYLOK HEX NUT ZP	2
113	0400451	1/4" FLATWASHER ZP	2
--	0902721	KIT - HYDRAULIC TANK	
114	0300055	FITTING, HOSE BARB 12C4-12MP	1
115	0300056	FITTING, BARB 16C4-16MP	1
116	0300071	CLAMP, HOSE, 1" IDEAL	2
117	0300136	RETURN LINE FILTER ASSEMBLY	1
118	0300446	3/4" NPT PIPE PLUG, MALE	1
119	0300692	FITTING, 1" 90 DEG STREET	1
120	0305006	FILLER CAP (GO205, FB194)	1
121	0400045	#10-32 X 1/2" THRD CUT RD	6
122	0708529	HOSE, RETURN 3/4" I.D. X 36"	1

Section VI - PARTS LIST (cont'd)

REF. NO.	PART NUMBER	DESCRIPTION	NO. REQ'D
--	0902949	IN-CAB CONTROL HYDRAULIC KIT	
123	0300041	FITTING, CONNECTOR 8MJ-8MB	2
124	0300044	FITTING, CONNECTOR 6MJ-8MB	6
125	0300286	FITTING, HP CARRY-OVER	1
126	0301377	FITTING, TEE 6MJ-6MJ-6MJ	6
127	0301471	HOSE ASSEMBLY, 30"	3
128	0301883	SOLENOID VALVE	1
129	0302808	HOSE ASSEMBLY, 18"	12
130	0400122	3/8"-16 X 1-1/4" HHCS GR5 ZP	4
131	0400392	3/8"-16 NYLOK HEX NUT ZP	4
--	0904171	SWIVEL ASSEMBLY BOOM END	
132	0301814	3-1/2" EXT RETAINING RING	1
133	0300022	SHEAVE, 6" COMPLETE	1
134	0300113	GREASE FITTING, ALEMITE	1
135	0400060	1/4"-20 X 1/2" HHCS GR5 ZP	1
136	0400452	1/4" HELICAL LOCKWASHER ZP	1
137	0700032	RETAINER, SHEAVE SHAFT	1
138	0700166	WASHER, SPACER	4
139	0712974	SHAFT SHEAVE	1
140	0803650	SWIVEL, BOOM END	1
--	0900668	GUIDE ASSEMBLY, CABLE U	1
--	0900668	GUIDE ASSEMBLY, CABLE U	
141	0301531	U BOLT, 3/8" #G-426	1
142	0400392	3/8"-16 NYLOK HEX NUT ZP	2
143	0400393	3/8"-16 HEX NUT JAM ZP	2
144	0702285	BODY CABLE GUIDED	1
--	0904520	KIT - VALVE	
145	0300011	VALVE, 4-SPOOL CONTROL	1
146	0300041	FITTING, CONNECTOR 8MJ-8MB	4
147	0300044	FITTING, CONNECTOR 6MJ-8MB	10
148	0300052	FITTING, ELB 8MJ-10MB90	3
149	0300055	FITTING, HOSE BARB 12C4-12MP	1
150	0300286	FITTING, HP CARRY-OVER	2
151	0301375	FITTING, ELB STR 12MB-12FP90	1
152	0301388	FITTING, ELL 8MJ-8MB90	1
153	0301547	FITTING, ELB 6MJ-12MB90	2
154	0301780	FITTING, CONNECTOR 8MJ-12MB	1
155	0302798	VALVE, 3-SPOOL CONTROL	1
156	0400140	3/8"-16 X 4" HHCS GR5 ZP	6
157	0400392	3/8"-16 NYLOK HEX NUT ZP	6

Section VI - PARTS LIST (cont'd)

REF. NO.	PART NUMBER	DESCRIPTION	NO. REQ'D
--	0904521	KIT - SOLENOID	
123	0300041	FITTING, CONNECTOR 8MJ-8MB	2
124	0300044	FITTING, CONNECTOR 6MJ-8MB	8
125	0302488	FITTING, ELB 8MJ-8FJX90	2
126	0303378	HARNESS GROUND	1
127	0303851	SOLENOID VALVE, 4-SPOOL	1
130	0400122	3/8"-16 X 1-1/4" HHCS GR5 ZP	4
131	0400392	3/8"-16 NYLOK HEX NUT ZP	4
--	0904534	TENSIONER, HOSE ASSEMBLY	
123	0303521	SPRING, EXT HOSE TENSION	1
124	0303858	FITTING, BULKHEAD ELBOW 4MJ-BLKHD90	2
125	0303862	HOSE ASSEMBLY, 112"	2
126	0400059	1/4"-20 X 5/8" HHCS GR5 ZP	10
127	0400154	3/8"-16 X 1/2" HHCS GR5 ZP	4
130	0400367	1/4"-20 NYLOK HEX NUT ZP	10
131	0400482	3/8" HELICAL LOCKWASHER ZP	4
123	0400635	1/2" X 2-1/2" SHOULDER SCREW	1
124	0703484	PULLEY, HOSE TENSIONER	1
125	0703488	WASHER, HOSE TENSIONER PULLEY	1
126	0713937	COVER, HOSE TENSION TRACK	1
127	0803135	BRACKET WELDMENT	1
130	0803936	TRACK, HOSE TENSION WELDMENT	1
--	0904539	KIT - SPLASH GUARD FT	
131	0400066	1/4"-20 X 3/4" HHCS GR5 ZP	4
132	0400370	1/4" "U" TYPE TINNERMAN	4
133	0400452	1/4" HELICAL LOCKWASHER ZP	4
134	0713997	MUD GUARD	2
--	0904595	LIFT CYLINDER ASSEMBLY	
135	0300206	FITTING, BRANCHTEE 6MJ-6MJ-4MP	1
136	0300209	FITTING, ELB 6MJ-6MP90	2
137	0301620	FITTING, ELB 6MJ-6MB90	4
138	0301696	FITTING, ELB 6MJ-6FJX90	1
139	0301731	VALVE, HOLDING 4000 PSI	1
140	0301855	FITTING, TEE 6MJ-6MJ-6MP	1
141	0302573	FITTING, TEE 6MJ-6MJ-6FJX	1
142	0302926	HOSE ASSEMBLY, 29"	4
143	0303869	CYLINDER HYD BOOM LIFT - EB4	2
144	0400078	1/4"-20 X 2" HHCS GR5 ZP	2
145	0400122	3/8"-16 X 1-1/4" HHCS GR5 ZP	1
146	0400366	1/4"-20 HEX NUT ZP	2

Section VI - PARTS LIST (cont'd)

REF. NO.	PART NUMBER	DESCRIPTION	NO. REQ'D
--	0904595	LIFT CYLINDER ASSEMBLY (cont'd)	
147	0400451	1/4" FLATWASHER ZP	2
148	0400452	1/4" HELICAL LOCKWASHER ZP	2
149	0400482	3/8" HELICAL LOCKWASHER ZP	1
150	0400586	#2 HITCH PIN (HAIR PIN)	4
151	BK518	PIN, CLEVIS - BOOM CYL	4
--	0904598	CROSSBAR ASSEMBLY, MED DUTY	
152	0303860	HOSE ASSEMBLY, 10"	1
153	0303861	HOSE ASSEMBLY, 17"	1
154	0303886	PLUG 4MB	2
155	0303911	CYLINDER, MED DUTY EXPRESS	2
156	0303917	BEARING, MED DUTY EXPRESS	2
157	0400349	3/8"-16 X 3/4" FLT SKT HD	2
171	0400427	5/8"-11 HEX JAM NUT ZP	2
158	0400428	5/8"-11 FLEXLOC THIN HIGH	2
159	0400546	1/8" X 1-1/4" COTTER PIN	2
160	0400590	5/8" X 1-1/4" CLEVIS PIN	2
161	0714030	PIN, CYLINDER, MED DUTY EXPRESS	2
162	0714521	BOLT, PIVOT PIN (EXPRESS)	2
163	0803949	ADAPTER, TIRE WELDMENT	2
164	0803956	CROSSBAR WELDMENT, MED DUTY	1
165	0803958	ARM, LEFT L WELDMENT, MED DUTY	1
166	0803959	ARM, RIGHT L WELDMENT, MED DUTY	1
167	0803963	PIN WELDMENT, L ARM TO CROSSBAR	2
168	0804069	PIVOT PIN WELDMENT, EB4 EXPRESS	1
169	HC1291	FITTING, 4MJ-4MB STR THR	6
170	HD0106	1/4" X 1-3/4" SPRING PIN ZP	2
--	0904609	KIT - CONTROL DUAL	
160	0300122	GROMMET, SPLIT PLASTIC	21
161	0400066	1/4"-20 X 3/4" HHCS GR5 ZP	6
162	0400370	1/4" "U" TYPE TINNERMAN	6
163	0400390	3/8"-16 HEX JAM NUT	14
164	0400392	3/8"-16 NYLOK HEX NUT ZP	7
165	0400393	3/8"-16 HEX NUT JAM ZP	21
166	0400452	1/4" HELICAL LOCKWASHER ZP	6
167	0400527	5/16" X 5/8" CLEVIS PIN	7
168	0400542	3/16" X 1-1/4" COTTER PIN SS	14
169	0400543	1/8" X 3/4" COTTER PIN	7
170	0701099	ROD, CONTROL	7
171	0703501	ANGLE, CROSS CONTROL	1
172	0704517	CHANNEL, X-ROD BEARING	2

Section VI - PARTS LIST (cont'd)

REF. NO.	PART NUMBER	DESCRIPTION	NO. REQ'D
--	0904609	KIT - CONTROL DUAL (cont'd)	
173	0705494	LEVER, CONTROL	14
174	0713483	CROSSROD, WRECKER FI	4
175	0713484	CROSSROD, WHEEL LIFT FI	3
176	0800604	ARM, CONTROL	7
177	0801309	SHIFTER, VALVE, SHORT	2
178	0801310	SHIFTER, VALVE, MEDIUM	3
179	0801311	SHIFTER, VALVE, LONG	2
--	0904798	WRECKER & W/L LESS XBAR DUAL	
188	0300044	FITTING, CONNECTOR 6MJ-8MB	2
189	0300110	SNAP RING, 1"	4
190	0300113	GREASE FITTING, ALEMITE	8
191	0300679	BEARING PAD, NYLATRON	4
192	0301376	FITTING, CONNECTOR 8MJ-10MB	4
193	0301921	HOSE ASSEMBLY, 128"	2
194	0301964	HOSE ASSEMBLY, 65"	1
195	0301965	HOSE ASSEMBLY, 131"	1
196	0302469	MOTOR, CHAR-LYNN	2
197	0302919	CYLINDER HYD FOLD	1
198	0302922	HOSE ASSEMBLY, 170"	2
199	0303067	SLIDE PAD - INNER BOOM	1
200	0303068	SLIDE PAD - OUTER BOOM	1
201	0303550	CYLINDER HYD EXTEND - SWRK	1
202	0303852	WINCH ASSEMBLY - NARROW DRUM	1
203	0303853	WINCH ASSEMBLY - NARROW DRUM	1
204	0400060	1/4"-20 X 1/2" HHCS GR5 ZP	3
205	0400066	1/4"-20 X 3/4" HHCS GR5 ZP	2
206	0400070	1/4"-20 X 1" HHCS GR5 ZP	2
207	0400129	3/8" X 3/4" ALLEN HD SET	1
208	0400139	3/8"-16 X 1-1/2" HEX SKT SET	1
209	0400234	7/16"-14 X 1-1/4" HHCS GR5 ZP	8
210	0400353	3/8" X 1/2" SET SCR W/PATCH	1
211	0400367	1/4"-20 NYLOK HEX NUT ZP	6
212	0400376	7/16"-14 X 2" HHCS GR5 PL	8
213	0400393	3/8"-16 HEX NUT JAM ZP	2
214	0400398	3/8"-16 NYLOK HALF-NUT ZP	2
215	0400451	1/4" FLATWASHER ZP	6
216	0400452	1/4" HELICAL LOCKWASHR ZP	4
217	0400480	3/8" FLATWASHER ZP	12
218	0400487	7/16" HELICAL LOCKWASHER	16
211	0400593	1/4"-20 X 1/2" SKT FL HD	6
219	0703082	PIN, EXT CYL PIVOT	1

Section VI - PARTS LIST (cont'd)

REF. NO.	PART NUMBER	DESCRIPTION	NO. REQ'D
--	0904798	WRECKER & W/L LESS XBAR DUAL (cont'd)	
220	0703137	SHAFT, EXT CYL OUTERBOOM	1
221	0708406	PAD, GUIDE	2
223	0708407	SHAFT, LOWER-TILT CYL	1
224	0708410	SHIM, GUIDE PAD	6
225	0708519	PLATE, COVER - BOOM UPPER	1
226	0711334	PAD, STOP	1
226	0713906	RETAINER, BOLT ON PAD	1
227	0713959	SPACER, WINCH MTG EB4	4
228	0713974	SHAFT, BOOM PIV - EB4 W/L	1
229	0714062	SHAFT, BOOM FOLD -UPPER	1
226	0714168	SHAFT, W/L EXT CYL BASE	1
230	0803489	BOOM, INNER - 612 (12K)	1
231	0803898	BOOM, OUTER WELDMENT	1
232	0804111	OUTER MAIN BOOM, DUAL WN	1
--	0902816	CYLINDER ASSEMBLY, EXTEND	1
--	0904536	KIT - CLUTCH CONTROL DUAL	1
--	0904611	BOOM - INNER W/L ASSEMBLY	
233	AWS-3022-A	SNAP RING, LARGE BOOM PIN	4
--	0902816	CYLINDER ASSEMBLY, EXTEND	
180	0300113	GREASE FITTING	2
181	0300142	FITTING, ELB 6MJ-4MP90	2
182	0301964	HOSE ASSEMBLY, 65"	1
183	0301965	HOSE ASSEMBLY, 131"	1
184	0302948	CYLINDER, BOOM EXTEND	1
--	0904536	KIT - CLUTCH CONTROL DUAL	
234	0300845	SPRING-CLUTCH T5-68-79-1	2
235	0301532	"T" HANDLE	2
236	0301588	ADJUSTABLE YOKE	2
237	0400116	5/16"-18 X 1/2" SQ HD SET SCR	2
238	0400126	3/8"-16 X 1" HHCS GR5 ZP	2
239	0400150	3/8"-16 X 2-1/2" HHCS GR5 ZP	2
240	0400393	3/8"-16 HEX NUT JAM ZP	2
241	0400492	1/2" FLATWASHER ZP	8
242	0400537	1/2" X 1-1/2" CLEVIS PIN ZP	2
243	0400546	1/8" X 1-1/4" COTTER PIN	2
244	0400560	5/32" X 1" ROLL PIN ZP	4
245	0702408	CHANNEL, MOUNTING	2
246	0800779	CRANK-BELL	2
247	0803945	ROD, CONTROL - CL SHIFTER	2

Section VI - PARTS LIST (cont'd)

REF. NO.	PART NUMBER	DESCRIPTION	NO. REQ'D
--	0904611	BOOM, INNER W/LASSEMBLY	
190	0300113	GREASE FITTING, ALEMITE	1
180	0301397	GREASE FITTING, 90 DEG	2
183	0301825	CYLINDER HYD EXT	1
182	0301914	BEARING - INNER BOOM - DT	1
192	0303761	FITTING, ELBOW 6MJ-6MB	2
184	0400139	3/8"-16 X 1-1/2" HEX SKT SET	1
185	0400392	3/8"-16 NYLOK HEX NUT ZP	1
186	0714169	SHAFT, W/L EXTEND CYLINDER ROD	1
187	0803897	BOOM, INNER WELDMENT	1
--	AWS-1000-A	TIE-DOWN STRAP ASSEMBLY	
188	0304215	RATCHET, FORMULA II	1
193	AWS-1002-A	RATCHET HOOK	1
198	AWS-1002-B	RATCHET SPACER - 7/8" LONG	2
203	AWS-1003-A	TIE-DOWN STRAP W/ SLEEVE	1

[illegible]

Section VII - INSTALLATION

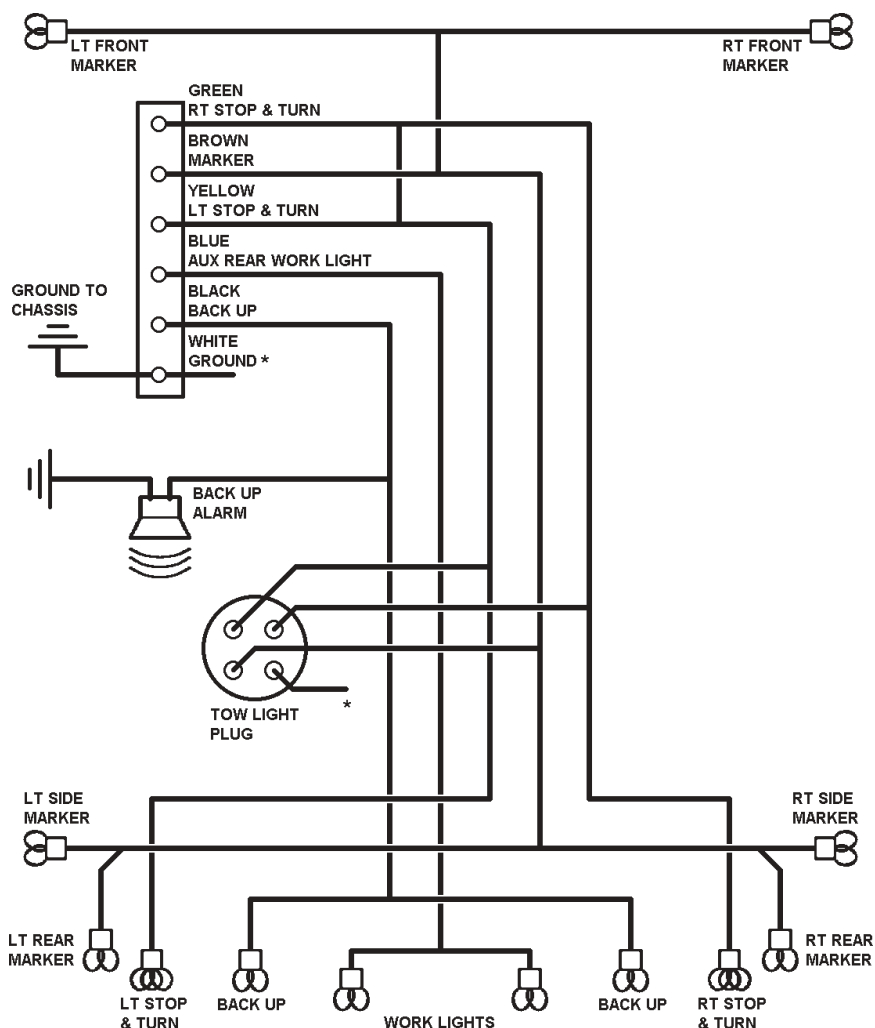
CENTURY has made every effort to ensure that installation of its EB-4 / EXPRESS on the more popular makes of American and foreign made chassis is a simple and straightforward matter.

Mounting instructions covering all aspects of installation for the more popular makes of American and foreign made chassis are provided with each mounting kit.

[illegible]

Section VIII - SCHEMATICS

ELECTRICAL



NOTE:

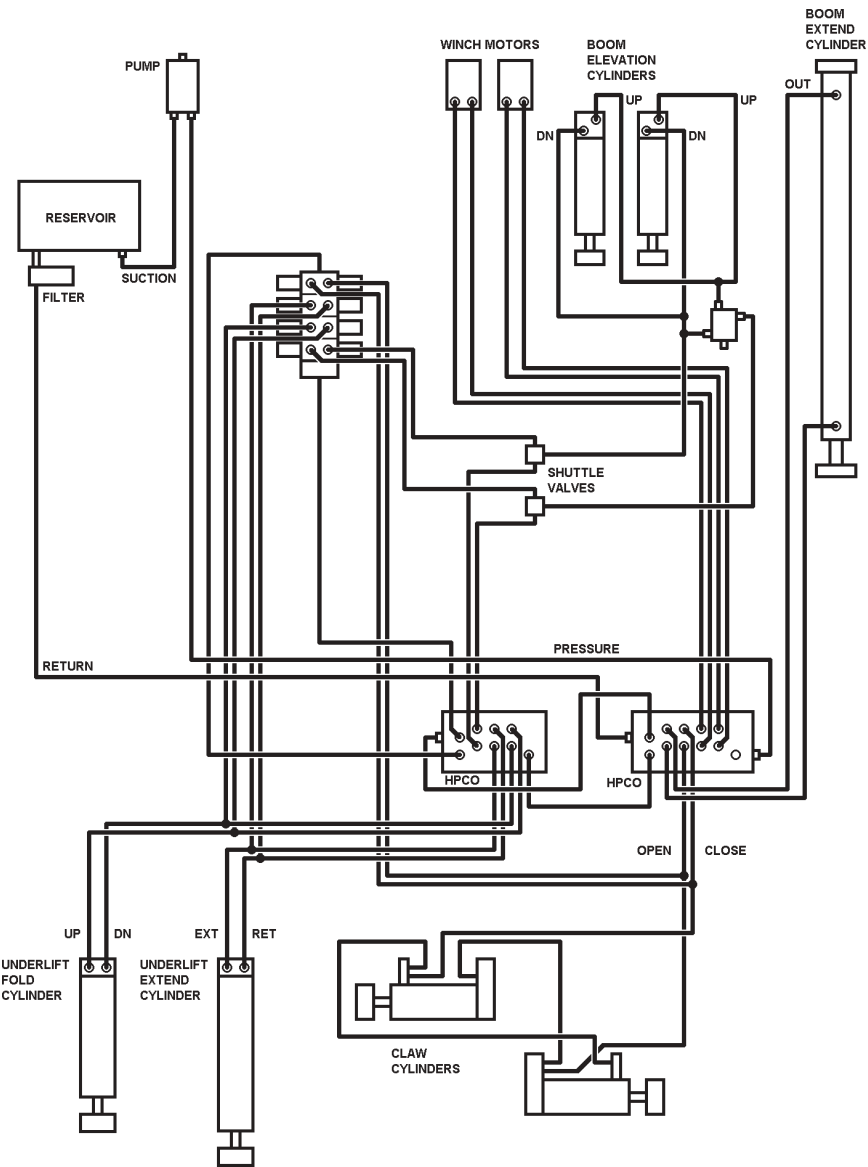
HARNESS PROVIDED IS A COMPLETELY SEALED SYSTEM.

ANY OTHER FUNCTIONS MUST ORIGINATE FROM JUNCTION BOX.

BREAKING OR CUTTING INTO PROVIDED HARNESS COMPLETELY
VOIDS WARRANTY!

* ALL GROUNDS ON HARNESS ARE INTERNAL.

Section VIII - SCHEMATICS (cont'd)
HYDRAULIC



[illegible]

CENTURY®

Miller Industries Towing Equipment Inc.

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