## CRINURY



## OWNERS MANUAL

 5 (O) $\triangle$ (O) Installation, Operation, Maintenance \& Parts
## CENTURY

WRECKER

## CORPORATION

1-75 At Ooltewah Exit • P. O. Box 120 • Ooltewah (Chattanooga), TN 37363• Telephone: (615) 238-4171 or (615) 267-1831 FORM NO. 05001351281

Its purpose, aside from operating and maintenance instructions, is to promote safety through the use of accepted operating procedures.
Read all instructions thoroughly before operating the wrecker.
Also contained in this manual is a parts section for the 1040 Hydraulic Wrecker. Use of other than factory or factory authorized parts will render the warranty void.


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## Section 1 - SAFETY PRECAUTIONS

1.1 It is assumed by CENTURY WRECKER CORPORATION that the owner/operator of this equipment has thorough knowledge of the accepted and lawful retrieval and towing methods as dictated by his city, county, or state. CENTURY WRECKER CORPORATION rejects any liability claim that may result from the incorrect or unlawful application of its equipment.
1.2 Improper use of this equipment can be dangerous! incorrect operation can result in bodily injury to the operator and bystanders. Therefore, a thorough understanding by the operator of the "operating principles" and "operating instructions" as found in this manual is essental.
1.3 Study each job to be done. Apply common-sense judgement to assure safety to yourself and bystanders.
1.4 Read and understand the following charts and labels.

CERTIFICATION LABEL
Federal law requires that the final stage manufacturer, i.e. that person or company installing equipment on a new chassis, must certify the completed vehicle by obtaining, completing and affixing to the door post on the driver's side of the vehicle, a Certification Label simitar to the one shown. (FiG. 1-1)



FIG. 1-2

FIG. 1-1

## SPECIFICATION LABEL

Each CENTURY Wrecker will have a specification label mounted on the driver's side of the wrecker frame. The specification label whli exhibit the model number and ratings of the wrecker to which it is a!fixed. (FIG $1-2$ )

## SPECIFICATIONS

## MODEL 1040

40 ton full hydraulic wrecker with dual $40,000 \mathrm{lb}$. hydraulic winches, full-power three-stage boom. $94^{\prime \prime}$ wide, heavy-duty body with four tool compartments and hydraulic rear outriggers.

## WINCHES

Rating (first layer, each drum) .................. 40,000 lb. each

## CABLE

Diameter and length (each drum) ............. . 5/8" dia. $\times 300 \mathrm{ft}$.
 Working limit (each line) ................................. 10,200 lb.

## BOOM

|  | Length <br> From <br> Pivot | Maximum <br> Working <br> Height (1) | Maximum <br> Working <br> Distance(2) | Boom <br> Rating <br> Static (2) |
| :--- | :---: | :---: | :---: | :---: |
| First Stage | $13^{\prime}$ | $15^{\prime}$ | $26-1 / 2^{\prime \prime}$ | $80,000 \mathrm{lb}$. |
| Second Stage | $20^{\prime}$ | $21^{\prime}$ | $9^{\prime} 8-1 / 2^{\prime \prime}$ | $24,000 \mathrm{lb}$. |
| Third Stage | $26^{\prime}$ | $26^{\prime}$ | $15^{\prime} 8-1 / 2^{\prime \prime}$ | $12,000 \mathrm{lb}$. |

(1) At maximum boom elevation of $60^{\circ}$ above horizontal.
(2) At minimum boom elevation of $0^{\circ}$ above horizontal.

WEIGHT
Approximate weight $12,500 \mathrm{lb}$.

## CHASSIS RECOMMENDATIONS

A tandem axie chassis is recommended. However, a single axle chassis may be satisfactory if properly equipped. Consult factory for further information.
Minimum GVWR (Gross Vehicle Weight Rating) $40,000 \mathrm{lb}$.
Minimum RBM* each frame rail $3,000,000$ in./lb
Minimum C.B. (Cab to Bogie) Dimension 120".
Minimum frame length behind center line of bogie 62"
The outside frame rails of chassis extending behind cab must be free of fuel tanks, air tanks, battery boxes exhaust stacks, etc.

## STANDARD EQUIPMENT - MODEL 1040

Twin hydraulic pumps - Dual variable speed hydraulic winches - 300 ft . of cable each drum - $360^{\circ}$ directional boom sheave system - Power boom elevation - Dual side-by-side elevation cylinders with counter balance valve - Roller bearings for second and third stage extension - Lubrication fittings on all shafts and other moving parts " 94" wide heavy duty body with flat floor - 9 " sill channels - Diagonally opposed hydraulic rear outriggers with counter balance valves - Rear tie-back loops and trailer ball bracket - Chain slots for scotch blocks in tailgate - Dual control stations recessed in side - Vernier throttle control - Four $11 \mathrm{cu} . \mathrm{ft}$. tool compartments with shelves and stainless steel key-locking latches - Mud flaps-- Federal standard $\# 108$ lighting - Deluxe switch panel - Wiring hamess - Fold-away tow hitch brackets

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## Section II - OPERATIONAL FUNCTIONS

2.1 Your new CENTURY Wrecker is totally hydraulic. It receives its power from the fruck engine by means of a Power Take-Off/Pump Combination attached to the truck transmission. Since the pump is attached directly to the P.T.O., no drive line or universal joints are needed. (FIG. 2.1)


FIG. 2.1
2.2 Each function of your CENTURY Wrecker can be controlled from either of the dual control stations located at the rear of the wrecker. (FIG. 2.2)

2.3 The vernier throttle control located at the left rear control station is used to vary the speed of the truck engine to govern the maximum speed of the winches and cylinders. (FIG. 2.2)
2.4 The control handies 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.
2.5 The boom is elevated or extended by means of double-acting "Nydraulic cylinders and can be operated under either "LOAD" or "NO LOAD" conditions.
2.6 The jacks are lowered or raised by activating control handles located at the forward control stations on either side of the wrecker body. (FIG. 2.3)

2.7 The self-locking, worm-driven winches are powered by hydraulic motors attached directly to the winch input shafts. (FIG. 2.4)

2.8 Before operating your CENTURY Wrecker, remove shipping plugs from the vent caps of each winch. (FIG. 2.5)


FIG. 2.5
2.9 The CENTURY switch panel controls the flashing beacon bar. flood lights, and hook-up lights. Also mounted in the switch panel is the P.T.O. control knob and indicator lights for each function. (FIG. 2.6)


FIG. $2 . \mathrm{s}$

FIG 2.3

## Section III - OPERATING INSTRUCTIONS

3.1 Reduce engine to idle, depress truck clutch and engage P.T.O. by pulling out knob located on CENTURY switch panel. (FIG. 3.1)


FIG. 3.1

## Caution!

Never drive truck on street with P.T.O. engaged as this can cause pump failure from over-speed and over-heating.
3.2 Set engine speed by slowly turning throtile control knob, located below left rear control station, counter-clockwise. A speed range of 1500 RPM is usually sufficient for most applications, but do not exceed 2,000 RPM. To release throttle control, push button in center of knob in, while also pushing knob straight in.

3.3 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 operating cable "IN-OUT" controls. Keep hand tension on cables to avoid loose cable on drum.

### 3.4 Hydraulic Boom Elevation and Extension

(a) Set boom at desired elevation by operating BOOM "UP. DOWN" control. Boom will be automatically held in this position, even with a loss of hydraulic pressure, by means of a holding valve mounted at the base of the lift cylinders. (FIG. 3.3)


FIG. 3.3
(b) Extend boom to desired distance by operating BOOM " N OUT" control. (Caution should still be observed to payoutenough cable to allow boom to extend.) (FIG. 3.4)


FIG. 3.4

### 3.5 Use of Rear Jacks

(a) The rear jacks are for use when lifting heavy loads.
(b) To raise or lower jacks, operate control handles located on either side of wrecker body at the forward control stations.

## Section IV - MAINTENANCE

4.1 The continued operation of your CENTURY Hydraulic Wrecker is largely dependent upon adherence to a properly scheduled maintenance program. To help you in this program, the CENTURY WRECKER CORPORATION has provided the following information regarding lubrication, preventive maintenance and hydraulic system care.

### 4.2 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 WRECKER CORPORATION has taken every precaution to assure that each component and fitting was thoroughly cleaned and the system purged before your CENTURY Wrecker was put into operation. Therefore, servicing of the system should be done with extreme care.
(a) Before checking oil in reservoir, wipe away all dirt and grime around filler cap before removing cap. When adding oil, make sure containers, funnels, and pouring spouts are absolutely clean.
(b) When replacing hoses, fittings, or other components, clean thoroughly then assemble 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.
4.3 The following general fubrication 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, or otherwise damaged components including, but not limited to, the following:

1. Hydraulic hoses and fittings*
2. Cables and fittings
3. Sheaves
4. Boom-end fittings
5. Controls
6. Hydraulic oil filter
7. Oil reservoir
8. Lights and wiring
9. Winches
10. Pivot bearing surfaces and pins (See Lubrication Chart, Page 5)
(b) Check hydraulic oil level in reservoir and fill to within 1-1/2" to $2^{\prime \prime}$ from top of tank, or until visible in filler neck. Use SAE 10W/30, multigrade service classification SC (formerly MS) or better.
(c) Replace hydraulic filter element after first week of operation, then every three months thereafter.
(d) Tighten all bolts. Vibration and stress may loosen even properly torqued bolts.
(e) Lubricate all grease fittings on the wrecker including:
11. Jack leg cylinder pivots
12. Sheaves (fittings in sheave shaft)
13. Boom-end swivels (隹ting top side of boom swivel)
14. Winch clutches - (See page 21)
15. Boom elevation and extension cylinder pivots
16. Boqm pivot
(f) Oil all bearing surfaces which are not equipped with grease fittings. Use pump-can with SAE 30 oil.
(9) Grease boom slide pads with grease fittings located on top of outer boom at heel end-2nd stage only.
(h) Check oll level in winches. Fill to level of oil plug located in side-plate of gear housing. Use SAE 140 general purpose gear oil. Lubricate grease fittings on clutches - may be reached through plastic cap openings with winch engaged. (See page 21)
(i) Lubricate cables with oily rag while respooling cable onto drum. Special cable lubricants are also available which have penetrating qualities.
4.4 Check torque on wrecker hold-down boits every month. (Torque to 460 ft . Ibs.)

### 4.5 Summary of Required Lubricants

(a) Hydraulic Oil - 10W/30, Multigrade SAE service classification SC (formerly MS) or better.

Examples:

1. Mobii - Deluxe Special 10W30
2. Sinclair - Triplex
3. Texaco - Ursatex $10 \mathrm{~W} / 30$
4. Amoco - Super Permalube 10W30
5. Gulf - Gulflube X.H.D. 10 W/30
(b) Worm Gear Oil - SAE 140 general purpose gear oil

Examples:

1. Humbel-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 - General purpose automotive lubricating grease.
(d) Oil for miscellaneous bearing surfaces - SAE 30
(e) Oil for cables - Motor oil or special purpose cable lubricant.

### 4.6 Care and use of hydraulic equipment in areas of extremely cold climate.

When the CENTURY Hydraulic Wrecker is used in seasonal cold climate regions $\left(+20^{\circ} \mathrm{F}\right.$. and below), the viscosity of the normally recommended $10 \mathrm{~W} / 30$ engine oil may increase to the point where it adversely affects hydraulic functions during starting and warmup.
If this is the case, it will be necessary to change fluids seasonally to maintain maximum system efficiency and life. The following list of fluids will, in most cases, prove adequate for this purpose.

| Mfg. . . . . . . . . . . . . . . . . . Prod/Fluid | Mig. . . . . . . . . . . Prod/Fluid |
| :---: | :---: |
| Atiantic Richfield ..... Duro AW-S-150 | Humble...... Teresso EP44 |
| Chaptin . . . . . . . . . . . . . . . . Hydro Light | Mobile............ DET 24 |
| Chevron .............. Chevron EP-9 | Pure...... Puropale AW 150 |
| Cities Service . . . . . Pacemaker XD-15 | Shell . . . . . . . . . . Tellus 923 |
| Continental ........ Conoco Super 15 | Standard Industron .. FF 44 |
| Gulf ................. Harmony 43AW | Sun ........ Sunvis 816 WR |
| Houghton ........ Hydro-Drive HP-150 | Texaco ..... Pando HD-150 |

Regions subject to continuous sub-zero or artic climates require special hydraulic fluids. Contact CENTURY WRECKER CORPORATION or your local oil supplier for information regarding specific temperature requirements.
*There is no practical way to determine the life expectancy of rubber hydraulic components such as hoses, o-rings, etc. While appearing to be in top condition these components may be adversely affected by continued usage, climate or the passing of time. For this reason, it is recommended that the rubber components (especially hoses) should be replaced every 5 years.

## SECTION IV - MAINTENANCE



## Important

The above lubrication points should be cared for monthly; more often if the wrecker is used quite frequently Note: Check wrecker frame hold down bolts every month. (Torque to 460 ft . bss.)

MAINTENANCE RECORD

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MPOBTANT HYORAULIC FOSES AND CABLES SHOULD BE INSPECTED WEEKLY FOR SIGNS OF ABRASION. WEAR. KINKS OR FRAYS

## SECTION V - INSTALLATION 1040

## P.T.O. \& PUMP INSTALLATION

1. Mount Century deluxe switch panel to floor of cab between driver's seat and door (Refer to pg. 3 fig. 3.1 for picture). Use two switch panel mounting brackets ( $\mathrm{P} / \mathrm{N} 0700952$ ) with hardware from "Switch Panel Mtg. Hardware Kit" \#0900217.
2. Install P.T.O. control cable (knob end) to switch panel and guide cable down to transmission. Be sure cable is not pinched or crimped at any point and does not interfere with any components on truck. This end of cable will be attached in later step.
3. Drain truck transmission oil.
4. Disengage P.T.O. (Gears should turn freely.)
5. Check and remember for step H10 which way P.T.O. gear shifter rod has to move to engage P.T.O.
6. Install P.T.O. to transmission of truck using enclosed gaskets and stud kit. (For proper installation refer to P.T.O. owner's manual supplied with P.T.O. - Ideally P.T.O. should be mounted to transmission, so that pump, when mounted to P.T.O., will be to the rear of cab.)


Figure 5.1
7. Assemble "Mechanical Advantage" system according to fig. 5.1. Use hardware from "Manual P.T.O. Control Kit" \#0900267.
8. Mount assembled "Mechanical Advantage" system to P.T.O. Use two capscrews from P.T.O. inspection plate to mount angle bracket. Assemble the rest of "Mechanical Advantage" system according to fig. 5.2. Use balance of hardware from "Manual P.T.O. Control Kit" \#0900267.
9. Push P.T.O. control cable knob all the way in at switch panel.


Figure 5.2
10. Be sure that P.T.O. is disengaged, then connect P.T.O. control cable to eye-bolt weldment (0800533) on "Mechanical Advantage" pivot arm, in such a way, so that when P.T.O. control cable knob is pulled, pivot arm will engage P.T.O. gears (fig.5.3). Use two 5/16 helical lockwashers and one 5/16-24 hex nut supplied in "P.T.O. Control Cable Kit" $\$ 0900454$.
11. Assemble pump. Use fittings from "Pump Hydraulic Kit" \#0900385. Refer to "Pump \& Filter Hydraulics" page 19 for diagram of correct installation.
12. Mount pump to P.T.O. in a position to allow fittings on pump to be horizontal (parallel with ground). Hardware supplied with P.T.O.

## Note:

Be sure to refill oil in transmission before operating.


## Note:

Customer MUST supply own mounting bracket at area "AA" to hold control cable stationary. Mount bracket to truck chassis or anything on truck chassis that is stationary. Be sure bracket does not interfere with movement or function of any component on truck

## PREPARATION OF TRUCK FRAME

1. Cut truck frame rails off at $62-1 / 2^{\prime \prime}$ behind center line of bogie. (Fig.5.4)


Figure 5.4
2. If any crossmembers are in the cut-off portion of the frame, they MUST be removed and reinstalled on the frame before the wrecker body is instalied. Failure to replace crossmember may vord your frame warranty.

## SECTION V - INSTALLATION 1040

3. Place $4^{\prime \prime} \times 4^{\prime \prime} \times 1 / 2^{\prime \prime}$ body mounting angles on truck frame using dimensions shown in Fig. 5.4. Leg with pre-drilled holes to be vertical against side of frame. Notch vertical leg of angles as necessary to clear spring hangers and other obstructions. If a predrilled hole is notched out, redrill the hole as close to original position as possible. DO NOT CUT HORIZONTAL LEG OF MOUNTING ANGLE.
4. After notching to clear obstructions, clamp angles securely to frame. Piloting through pre-drilled holes in angles, drill holes in frame. Bolt angles in place with $7 / 8^{\prime \prime}$ diameter bolts and nuts in "Body Mounting Hardware Kit" \#0900236. DO NOT WELD ANGLES TO TRUCK FRAME.

## MODIFICATION OF TRUCK FRAME CUT-OFF

1. If $10-1 / 2^{\prime \prime}$ dimension is exceeded from top of mounting angle to bottom of truck frame flange at rear of $62-1 / 2^{\prime \prime}$ cut-off, cut bottom flange of truck frame 10-1/2" down from top of mounting angle and $8^{\prime \prime}$ forward from rear of 62-1/2" cut-off. (Fig. 5.5)


FIG. 5.5
2. Determine " $X$ " dimension on wrecker body furnished. Note: " $X$ " dimension is the distance between botiom of wrecker body silk channel and outrigger reinforcing angle on taitgate. (Fig. 5.6)


FIG. 5.6

[^1]

FIG. 5.7
4. Drill holes through truck frame piloting through pre-drifled holes in support angle.
5. Mount support angles to truck frame using 7/8" bolts and nuts supplied in "Body Mounting Hardware Kit" \#0900236. DO NOT WELD SUPPORT ANGLES TO TRUCK FRAME.
6. Before attempting to install the Century Wrecker Body Assembly, it may be necessary to rework the chassis exhaust (tailpipe) to prevent its interference with the wrecker body.
7. Install electrical wiring harness in wrecker body using "Wiring Harness Hardware Kit" $\# 0900287$. Refer to page 24 for illustration.
8. Install light kit in wrecker body. See page 23.

## INSTALLATION OF WRECKER BODY, FRAME AND BOOM

NOTE: The outside tires may have to be removed before instaling wrecker body.

1. Locate and identify on truck cab wiring harness each of the following wires.
a. Running lights
b. Back-up lights
c. Right turn \& stop light
d. Left turn \& stop light

Cut each of these wires about $12^{\prime \prime}$ behind truck cab. (Wires will be connected to wrecker body in a succeeding step.)
2. Using hoist, overhead crane, etc., position and center body on truck frame. (in some cases it may be necessary tolift front of body higher than the rear to get outrigger reinforcing angle on tailgate installed properly.)
3. Weld wrecker body sitl channels to body mounting angle on truck frame. DO NOT WELD TO TRUCK FRAME:. Welds should be 5 . 6 inches long every $8-9$ inches apariexcept in areas where bolts are closer together, welds shoufd be continuous in these areas.
3. Weld support angles to outrigger reinforcing angle on tailgate.
8. Complete wirig hook-ups benoen cab and wrecker body. See hoge 22 for cobr coding of wiring harness. If any wires for optional acessories are not used, tape end of wire and store out of the way.
3. To mimst wiring hook-ups to sulich panet, connect 4 -wire wiring harness extension, (see page 22) to the matching color wire on wrecker body wiring harness, run these 4 wires up to switch panel Splice green (P.T.O.) wire lead into wire on switch panel that runs

## SECTION V - INSTALLATION 1040

from red P.T.O. light to white plunger button. Connect white (auxiliary) wire lead to toggle switch marked "Aux". Connect brown (floodlights) wire lead to toggle switch marked "Flood". Switch Panel has wire with one loose end, this is a ground wire and must be grounded. Run a "hot" wire (not supplied) from truck cab wiring harness to switch panel and connect to post with end painted red. Purple wire (toolbox lights) lead from wrecker body wiring harness may also be connected to this red post.

## Note:

Toggle switch marked "Beacon" is for optional Flashing Beacon Light. No wire is included on harness - customer must supply own wire if option is used.
7. Install suction line fittings to bottom of oil reservoir in wrecker frame weldment using "Suction Line Fittings Kit" \#0900386. See page 19 for diagram of installation. Be sure fittings are tight to eliminate oil leakage.
8. Mount wrecker frame assembly to wrecker body using 7/8" dia. bolts \& nuts from "Wrecker Frame Mounting Hardware Kit" \#0900234. Bolts should come from underneath floor plate with nuts on top. Torque nuts to 460 ft . Ibs
9. Install suction hose ( $2^{\prime \prime} 10 \times 10^{\prime}$ ) from pump to oil reservoir in bottom of wrecker frame. Use two hose clamps supplied with "Hose Clamps Hardware Kit" \#0900235. See Pump \& Filter Hydraulics. page 19. for location of suction line hose to pump.
10. Make two high pressure hose assemblies by connecting 1"I.D. $x$ $48^{\prime \prime}$ long hoses to $1^{\prime \prime} 1.0 . \times 66^{\prime \prime}$ long hoses with straight couplings (P/N 0300431-1" JiC Male $\times 1^{\prime \prime}$ JIC Male).
11. Install high pressure hose assemblies from pump to control valves. See "Pump \& Fitter" Hydraulics" page 19 for diagram.
12. Install two filter return line hoses ( 1 " ID $\times 18$ " Ig .) from filters to control valves. Use 4 hose clamps from "Hose Clamps Hardware Kit" $\# 0900235$. See "Pump \& Filter Hydraulics" page 19 for diagram.
13. Install two lower elevation cylinder hoses to fittings on elevation cylinders. (See "Elevation Cylinder Hydraulics" page 14 for diagram) Route hoses down through holes in wrecker frame base plate and under floor plate forward to control valves. Do not install to control valves at this time.
14. Install boom in wrecker frame by first inserting two extension cylinder hoses through hole in front plate of wrecker frame, then align $3^{\prime \prime}$ boom pivot shaft holes in boom with shaft holes in wrecker frame. Slide pivot shaft through wrecker frame and boom. Secure shaft by installing part $\$ 0400180-\left(1 / 2^{\prime \prime}-13 \times 6^{\prime \prime}\right.$ cap screw) through hole in pivot shaft boss on wrecker frame and hole in pivot shaft. Tighten cap screw with part \#0400407 (1/2" $\times 13$ Nylok nut)
15. Place upper rod ends of elevation cylinders in brackets on bottom of boom. Install two pivot shafts ( $2^{\prime \prime}$ dia. $\times 8^{\prime \prime} \lg$ ) through brackets and rods. Secure in place with part $\# 0400130\left(3 / 8^{\prime \prime}-16 x\right.$ $3-1 / 2^{\prime \prime}$ cap screw) and 0400392 ( $3 / 8^{\prime \prime}-16$ Nylok nut). Refer to "Wrecker \& Boom Ass'y pages 11 and 12
16. To complete Winch Motor, Elevation Cylinder and Extenston Cylinder hose hook-ups to control valves, refer to page 13 for correct hose location on correct control valve. Rear outrigger hoses are already connected by factory.

## Note:

If any hydraulic function works in reverse, according to control handles, reverse hose hook-ups on control valve ports.
17. Install two control valve access cover plates to wrecker body using "Access Cover Mounting Kit" $\# 0900266$. See page 10.
18. Fill oll reservoir in wrecker frame with recommended oll for your areas. (See pg. 4. Type S.C. or better.)

## Note:

When filling oil reservoir be sure to clean filler neck on frame of all dirt and grease. Reservoir will be full when oil can be seen at bottom of filler neck. Do not fill beyond this point as approximately 1 " of air space is required in reservoir.
19. Mount rear mud guards to wrecker body using "Mud Guard Mtg . Hardware Kit" \#0900408. See page10.
20. Mount mud flaps to rear mud guards using "Mud Flap Mtg. Hardware Kit" \#0900451. See page 10.
21. Install Boom End Swivels using hardware from "Boom Swivel Installation Kit" \#0900279. See page 12.
22. Guide end of wire rope through boom end swivel and install on winches.







EXTENSION CYLINDER ASSEMBLY

| ITEM | PART No. | description | NO.REQ'D | ITEM | PART No. | DESCRIPTION | NO.REQ'D |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 0300113 | Grease Fitting | 2 | 8 | 0301094 | Straight Adapter |  |
| 2 | 0300365 | Hose Clamp | 4 | 9 | 0301095 | Hose $3 / 4^{\prime \prime} \times 15-1 / 2^{\prime \prime}$ Long | 1 |
| 3 | 0300436 | 3rd Stage Cylinder |  | 10 | 0301098 | Hose 3/4" $\times 23-1 / 2^{\prime \prime}$ Long | 1 |
| 4 | 0300437 | 2nd Stage Cylinder | 1 | 11 | 0400251 | Cap Screw - $5 / 8^{\prime \prime}-11 \times 1+1 / 4^{\prime \prime}$ | 2 |
| 5 | 0300615 | Efbow - $90^{\circ} 3 / 4^{\prime \prime}$ NPT $\times 3 / 4^{\prime \prime} \mathrm{JIC}$ | 4 | 12 | 0400252 | Cap Screw - $5 / 8^{\prime \prime}-11 \times 1-1 / 2^{\prime \prime}$ | 2 |
| 6 | 0300782 | Locknut - 3 /4"-14 | 4 | 13 | 0400421 | Nuts - $5 / 8^{\prime \prime}-11$ Nylok | 2 |
| 7 | 0300887 | Hose $3 / 4^{\prime \prime} \times 90-1 / 2^{\prime \prime}$ L Long | 2 | 14 | 0400508 | Lockwasher - $5 / 8^{\prime \prime}$ Helical | 2 |



LEFT CONTROL VALVE

## EXTERNAL EXTENSION CYLINDER HYDRAULICS

| ITEM | PART NO. | DESCRIPTION | NO.REQ'D | ITĖM | PART N | . DESCRIPTION | NO. REQ'O |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 0300310 | Holding Valve | 1 | 7 | 0301093 | Bulk Head Union - $3 / 4^{\prime \prime}$ JIC $\times 3 / 4^{\prime \prime}$ JiC | 2 |
| 2 | 0300553 | Tee - $3 / 4^{\prime \prime}$ NPT $\times 3 / 4^{\prime \prime}$ JIC Run 3/4" JIC Branch | 1 | 8 | 0301095 | Hose - $3 / 4^{\prime \prime} \times 15-1 / 2^{\prime \prime}$ Long | 1 |
|  | 0300607 | Hose $-3 / 4^{\prime \prime} \times 54^{\prime \prime}$ Long | 2 | 9 | 0301096 | Hose $-3 / 4^{\prime \prime} \times 16-5 / 16^{\prime \prime}$ Long | 1 |
| 4 | 0300615 | Elbow - $90^{\circ}, 3 / 4^{\prime \prime}$ NPT Male $\times 3 / 4^{\prime \prime}$ JIC Male | 1 | 10 | 0301097 | Hose -3/4" $\times 22-1 / 2^{\prime \prime}$ Long | 1 |
| 5 | 0300711 | Reducer - $1 / 4^{\prime \prime}$ NPT - Male $\times 3 / 4^{\prime \prime}$ JIC Female | 1 | 11 | 0301098 | Hose - $3 / 4^{\prime \prime} \times 23-1 / 2^{\prime \prime}$ Long | 1 |
| 6 | 0301092 | Male Adapter $-3 / 4^{\prime \prime}$ JIC $\times 3 / 4^{\prime \prime}$ NPT | 1 | 12 | 0400107 | Hex Head - $5 / 16^{\prime \prime}-18 \times 2-1 / 2^{\prime \prime}$ | 2 |











| ITEM | PART NO. | DESCRIPTION | NO.REQ'D | ITEM | PART NO. | DESCRIPTION | NO. REQ'D |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \\ & 5 \\ & 6 \end{aligned}$ | $\begin{aligned} & 0300113 \\ & 0300736 \\ & 0400383 \\ & 0400384 \\ & 0400393 \\ & 0700954 \end{aligned}$ | Grease Fitting Ball Joint | 1 | 7 | 0701169 | Pipe Cap | 1 |
|  |  |  | 2 | 8 | 0800214 | Control Handle | 2 |
|  |  | $\begin{aligned} & \text { 5/16-24 Nut - Jam } \\ & 5 / 16-24 \text { Nut - Nylok } \\ & 3 / 8-16 \text { Nut - Jam } \\ & \text { Spacer - Handle } \end{aligned}$ | 2 | 9 | 0800307 | Control Handle - Shaft | 1 |
|  |  |  | 2 | 10 | 0800309 | Mounting Bracket - Front | 1 |
|  |  |  | $2$ | A | See page 2 |  |  |
|  |  |  | $4$ |  | See page |  |  |




CONTROL ROD ASSEMBLY

| ITEM | PART NO. | DESCRIPTION | NO.REQ'D | ITEM | PART NO. | DESCRIPTION | NO. REQ'D |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 0300113 | Grease Fitting | 6 | 14 | 0800150 |  |  |
| 2 | 0300736 | Ball Joint | 18 | 15 | 0800151 | Cross Control Rod ( $30-3 / 8^{\prime \prime}$ ) | 2 2 |
| 3 | 0300834 | Knob - Cable In-Out | 4 | 16 | 0800154 | Cross Control Rod (47-5/8") | 2 |
| 4 | 0300835 | Knob-Boom Up-Down | 2 | 17 | 0800155 | Cross Control Rod (50-5/8') | 2 |
| 5 | 0300836 | Knob-Jack Up-Down | 4 | 18 | 0800156 | Bell Crank Weldment | 2 |
| 6 | 0300837 | Knob-8oom In-Out | 2 | 19 | 0800421 | Clevis Weldment | 6 |
| 7 | 0400383 | Nut, 5/16" ${ }^{\prime \prime} 24$ Hex, Plated | 18 | 20 | 0800459 | Longitudinal Control Rod (73-3/4") | 2 |
| 8 | 0400384 | Nut, 5/16" - 24 Hex, Nylok, Plated | 18 | 21 | 0800465 | Cross Control Rod (29-1/2") | 2 |
| 9 | 0400408 | Nut, 1/2"-13 Hex, Nylok, Plated | 6 | 22 | 0800466 | Cross Control Rod (48') | 2 |
| 10 | 0400410 | Nut, 1/2"-13 Hex, Plated | 6 | 23. | 0800534 | Longitudinal Control Rod (122-3/8") | 2 |
| 11 12 | 0400492 | Washer (Fiat) 1/2" | 12 | $24^{*}$ | 0800535 | Longitudinal Control Rod (127-1/4") | 2 |
| $\begin{aligned} & 12 \\ & 13 \end{aligned}$ | 0400533 | Pin (Clevis) | 6 | 25 |  | Control Handle Ass'y - Front | 2 |
| 13 |  | Cotter Pin | 6 |  | 0900149 | Control Handle Ass'y - Rear | 2 |

## ADJUSTING PUMP OUTPUT PRESSURE



Pressure relief valves are factory preset at 3000 P.S.i. Should the need arise to check pressure, the following procedure is recommended:

1. Disconnect one high pressure hose assembly in the center. Do not disconnect at pump or control valve.
2. Install pressure gauge assembly between the two high pressure hoses.
3. Engage P.T.O.
4. Set the throttle at 1500 R.P.M.
5. Deadhead extension or elevation cylinder, depending on which pump-valve assembly gauge is attached to, andread gauge. Do not deadhead cylinder more than 5 sec . at a time.
6. Adjust pressure at control valve by removing cap nut, loosening jam nut and turning adjusting screw accordingly. One-half turn of the screw will substantially effect pressure.
7. Repeat Step 5. DO NOT EXCEED 3000 P.S.I., per valve.
8. Reconnect hose assembly and repeat procedure on second pump-valve assembly.
9. Reconnect hose assembly before returning unit to service.




LT. FRONT
NOTE: CENTER SLOT IS EMPTY ON FRONT CONTROL STATIONS. (FOR USE WITH OPTIONAL DRAGLINE.)

## OUTRIGGER CONTROL RODS W/FRONT OUTRIGGERS

| ITEM | PART No. | DESCRIPTION | NO, REQ'D | ITEM | PART NO | DESCRIPTION | NO. REQ'D |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 0300052 | $90^{\circ}$ Elbow 1/2" JIC - 5/8" ${ }^{\prime \prime}$ SAE | 2 | 11 | 0400408 | 1/2" - 13 Hex Nut, Nylok, Plated | 4 |
| 2 | 0300113 | Grease Fitting (Straight) | 4 | 12 | 0400410 | 1/2" - 13 Hex Jam Nut - Plated | 4 |
| 3 | 0300490 | Tie Rods (3 Stack Convert to 4 Stack) Set of 3 |  | 13 | 0400492 | 1/2" Flat Washer, Plated | 8 |
|  |  | (Not Shown) | 2 Sets | 14 | 0400533 | Clevis Pin, $1 / 4^{\prime \prime} \times 1-1 / 4^{\prime \prime}$ Stainless Steel | 4 |
| 4 | 0300736 | Ball Joints | 12 | 15 | 0400541 | $1 / 16^{\prime \prime} \times 3 / 4^{\prime \prime}$ Cotter Pin, Stainless Steel | 4 |
| 5 | 0301195 | Center Section - Housing \#10 SAE Ports | 2 | 16 | 0800156 | Bell - Crank Weldment | 4 |
| 6 | 0301216 | Outrigger Hose - Front | 2 | 17 | 0800421 | Eye - Bolt Weldment | 4 |
| 7 | 0301217 | Outrigger Hose - Front | 2 | 18 | 0800459 | Long. Cont. Rod Weldment | 2 |
| 8 | 0301331 | $45^{\circ}$ EII - $5 / 8^{\prime \prime} \mathrm{SAE}-1 / 2^{\prime \prime} \mathrm{JIC}$ | 2 | 19 | 0800460 | Long. Cont. Rod Weldment | 2 |
| 9 | 0400383 | 5/16"-24 Hex Nut, Plated | 12 | 20 | 0800465 | Cross Control Rod Weldment | 2 |
| 10 | 0400384 | 5/16" -24 Hex Nut, Nylok, Plated |  | 21 | 0800468 | Cross Control Rod Weldment | 2 |



## CENTURY

WRECKER
CORPORATION
1-75 At Ooltewah Exit • P. O. Box 120 • Ooltewah (Chattanooga), TN $37363 \cdot$ Telephone: (615) 238-4171 or (615) 267-1831


[^0]:    * The RBM is determined by multiplying the section modulus of the frame rail by the tensile strength of the frame material. All frame reinforcements must extend the full length of frame due to body mounted rear jacks.

[^1]:     fatide of each truck frame rall so thoit?e horizontat feg of each $\because$ ni: is at " $X$ " dimension from top of bowy mountmo angle (fis.

