

MANUAL

REBAR CUTTERS & BENDERS DO SO WITH EASE

IMPORTANT!! Please read this carefully to assure peak performance & results

<u>CAUTION:</u> DO NOT attempt to cut or bend any cable with this machine without special attachments. Contact ROD CHOMPER, INC. for these and any other questions!

**Fill with Hydraulic oil before Approximately	re starting! (Texaco Rando HD-32 or the equivalent. Gallons
Serial #	Machined wired for:
	VoltsAmps
Model #	PhaseHorsepower
	Cycle
Mfg. Date	VIN #

Rod Chomper, Inc. 4249 58Th Street Holland, MI 49423 USA (616) 392-9677 Toll Free US: (866) 392-9677

Website: www.rodchomper.com

Sales-sales@rodchomper.com Parts & Service-service@rodchomper.com

THANK YOU FOR PURCHASING OUR ROD CHOMPER MACHINE!

The Rod Chomper has been engineered in a unique way to cut & bend reinforcing rod. It has been computer designed to last for many years of trouble free service. The Rod Chomper, is made to be used, in shop or on the job site, depending on the machine. It will cut or bend 1 1/4" re-bar with the proper wheel and pin.

WARNING:

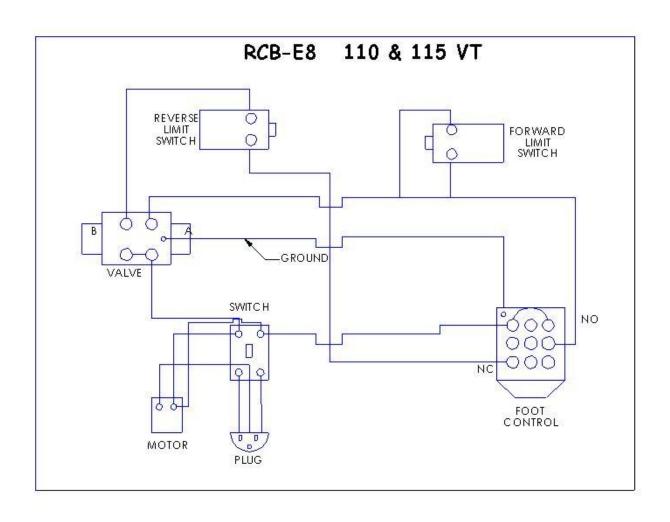
- 1. When changing the knives, wheel or pins, shut off the machine and lock out power.
- 2. Keep hands clear from knives, pins and wheels at all times.
- 3. When bending mode is in operation, never stand in the path of bending bar.
- 4. DO NOT REMOVE GUARDS!!
- 5. DO NOT USE over 25 feet of extension cord. Use of a longer cord may result in lower voltage and possible motor damage.)
- 6. DO NOT cut or bend anything other than the recommended re-bars in the machines.

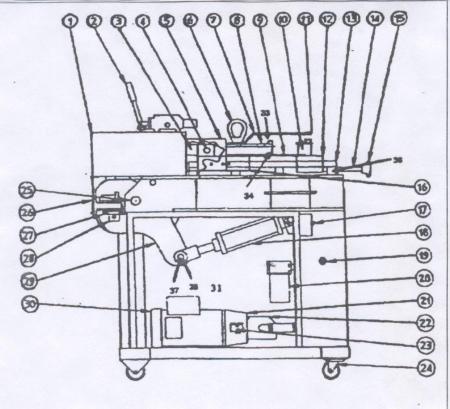
GENERAL OPERATING INSTRUCTIONS:

- 1. CHECK OIL in tank to make sure tank is full before running machine.
- 2. CHANGE OIL & FILTER in machine once a year.
- 3. If you have a portable model, also check oil in engine.
- 4. GREASE machine at all grease fittings as marked. Grease = once a week, Grease Daily = daily. When greasing Rod Chomper, check to see that the lock nuts are tight on cylinder and pivot bolt.
- 5. Before plugging in electric machine, check available line voltage. 110, 220 single phase or 220/440 three phase. A licensed electrician should perform running power to machine for startup. Refer to machine operators manual or serial # tag to ensure proper machine wiring. It may be necessary, depending on machine, to add lockable disconnect when wiring.
- 6. When running machine, KEEP HANDS clear from knives and moving parts at all times.
- 7. When bending, make sure you are using proper pin and wheel for rod size you are bending. Before bending rod, back adjustment screw all the way out to set to desired position. After bending a sample piece and the bend is not correct, adjust screw to obtain your desired degree of bend (see Specific Operating Instructions for standard hook bending).
- 8. When using the Rod Chomper re-bar cutter, first set cut-bend switch on machine control box to cut and insert bar to be cut to the furthest point possible toward the inside of the blades, making sure that the blades are in the fully open or retracted position. Press the ON button on control panel of electric machines, start gas engine on portable machines, REMOVE HANDS, press down foot switch pedal, and bar will be sheared automatically. When removing pressure on foot pedal, shear jaws are returned to the fully open position.
- 9. The number of grade #60 bars that the following machines will cut and bend in one operation are as follows:

6 BAR CUT	6 BAR BEND	8 BAR CUT	8 BAR BEND	11 BAR CUT	11 BAR BEND
6-#3	4-#3	8-#3	4-#3	18-#3	4-#3
4-#4	3-#4	6- #4	3- #4	14-#4	4-#4
1-#5	1-#5	2-#5	2-#5	7-#5	2-#5
1-#6	1-#6	1-#6	1-#6	4-#6	2-#6
		1-#7	1-#7	2-#7	1-#7
		1-#8	1-#8	2-#8	1-#8
				1-#9	1-#9
				1#-10	1-#10
				1-#11	1-#11

10. TO CHANGE OIL- it takes _____ gallons of AW 32 Hydraulic oil or equal. Change filter every 200 hours. Change oil once a year.



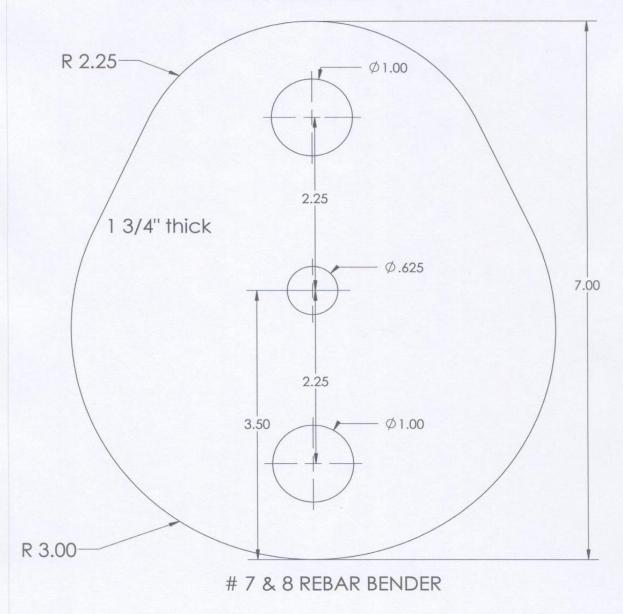


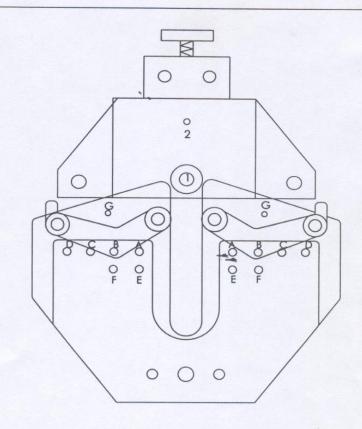
- 1. bending attachment cover
- 2. valve
- 3. linking arm
- 4. linking pin
- 5. linking cover
- 6. lifting eye
- 7. plastic guard
- 8. bending die
- 9. bending plate assembly
- 10. bending pin
- 11. bolt- 1"
- 12. slide adjuster
- 13. ware bar
- 14. adjusting screw
- 15. adjusting knob
- 16. bending assembly
- 17. switch
- 18. cylinder
- 19. oil sight gauge
- 20.oil filter assembly

- 21. motor housing
- 22. pump
- 23. cupler
- 24. casters
- 25. head bolt & nut
- 26. front guard
- 27. knives
- 28. guard
- 29. head
- 30. motor
- 31. slide cover
- 32. decals
- 33. bolt $\frac{3}{4}$ " x 2 $\frac{1}{2}$ "
- 34. roller
- 35. foot control micro switch (not shown)
- 36. adjusting screw block
- 37. cylinder pin
- 38. cylinder bushing
- 39. limit switch
- 40. selinoid valve

BENDING DIE 8 & 11 BAR PUSH STYLE BENDER



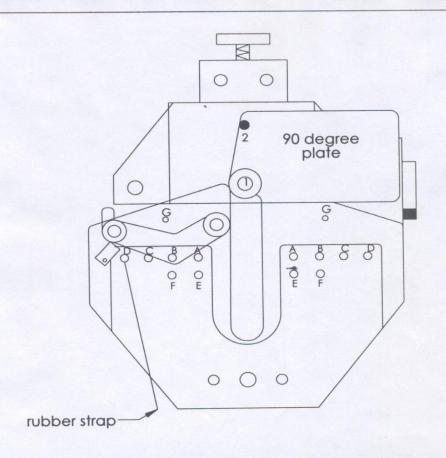




OPTIONAL DOG ATTACHMENT

<u>WARNING:</u> DO NOT cycle machine without rod in machine as it could damage dogs.

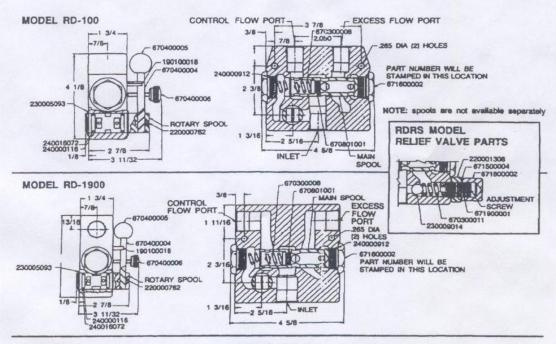
- 1. Insert roller dogs in B location with 2" diameter center pin in #1 location for 1/2" rod diameter and smaller.
- 2. Insert roller dogs in C location with 4" diameter center pin in #1 & #2 location for 5/8" rod diameter and smaller.



90 DEGREE ATTACHMENT (OPTIONAL)

WARNING: DO NOT cycle machine without rod in machine as it could damage dogs. When setting up dog, make sure adjusting screw is extended all the way out.

- 1. Insert dog in B location with 2" diamter center pin in #1 location for 1/2" rod diameter and smaller.
- 2. Insert roller dog in C location with 4" diamter center pin in #1 & #2 location for 5/8" rod diameter and smaller.

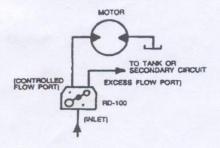


APPLICATIONS:

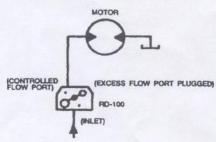
As illustrated in the circuit below the RD-100/RD-1900 adjustable flow control valves can be used to control the speed of a hydraulic motor. In this circuit oil from a source is directed into the inlet of the valve. By moving the handle the flow can be varied from zero when handle is vertical to maximum when the handle is hortzontal. Oil not going to the controlled flow port is bypassed to the excess flow port where it can be used to supply another circuit or returned

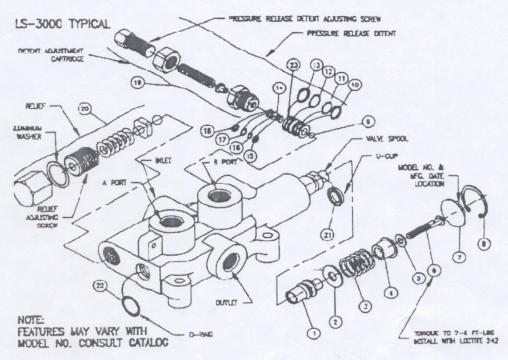
to tank. Instead of the control flow directly supplying a motor it can be used as a adjustable priority divider and provide adjustable priority flow to a directional control valve bank. Also as illustrated the RD-100/RD-1900 can be used as a restrictive type flow control. In this circuit the excess flow port is blocked. This would normally be used with a pressure compensated pump or in a closed center system.

BYPASS FLOW CIRCUIT



RESTRICTIVE FLOW CIRCUIT





PLEASE NOTE:

BEFORE REMOVING VALVE SPOOL OR SPOOL SLEEVE REMOVE DETENT ADJUSTING CART., DETENT PISTON AND STEEL BALL INSTALL SPOOL AND SPOOL SLEEVE BEFORE REINSTALLING STEEL BALL.

This feature provides a pressure release detent for the spool 'out' (handle in) position. When the spool is manually placed in the detent position oil is directed to the 'B' work port (the port away from the handle). When the pressure in the 'B' port reaches a preset level the detent will release and the spool will center. The factory setting is 1400 psi. The detent release pressure is adjustable by loosening the jam nut and turning the adjusting screw. Turning the adjusting screw clockwise will increase the detent release pressure and counterclockwise will decrease the detent release pressure. NOTE: If the detent release pressure is set too high the spool will not center. If the pressure is too low the detent will not hold. If cap screw item 6 becomes loose detent will not function properly.

An adjustable ball spring relief valve is standard on all LS-3000 valves. The standard factory setting is 2250 psi, 3 gpm and 120 degree F. Other settings can be specified. The relief pressure is adjusted by removing scorn nut, and turning the adjusting screw. Turning the adjusting screw clockwise will increase the pressure and counterclockwise will decrease the pressure (a pressure guage must be installed in the inlet line whenever the relief pressure is adjusted). Do not backout adjusting screw to the point it falls out.

WARNING: OVERPRESSURE MAY CAUSE SUDDEN AND UNEXPECTED FAILURE OF A COMPONENT IN THE HYDRAULIC SYSTEM RESULTING IN SERIOUS PERSONAL INJURY. ALWAYS USE A GUAGE WHEN ADJUSTING A RELIEF VALVE.

CENTRAL TIL					-	m . mm x 10	DESCRIPTION
ITEM	QTY	PART NO.	DESCRIPTION	ITEM	QTY	PART NO.	DESCRIPTION
1	1	670700019	DETENT SLEEVE			0.4001/0/7	O-RING
2	1	670500033	WASHER	16	1	240016067	
3	1	670300020	SPRING	17	1	240016068	O-RING
,	1	671400010	STOP CUP	18	1	240019008	BACK-UP WASHER
4	1	670500028	WASHER	19	1	660330002	DETENT ADJUSTING CART.
5	1			20	1	660125004	RELIEF KIT
6	1	220000953	CAP SCREW	21	1	240016086	U-CUP
7	1	670500032	SPACER		1		O-RING
8	1	230001125	SNAP RING	22	1	240000210	PISTON SLEEVE
9	1	230009009	STEEL BALL	23	1	671100012	
10	1	240019013	BACK-UP WASHER			660530001	LS-3000 SEAL KIT
11	1	240000013	O-RING			660125004	RELIEF KIT DETENT ADJUSTING CART.
12	1	240000014	O-RING			660330002	
13	1	240019014	BACK-UP WASHER			660130007	PRESSURE RELEASE DETENT KIT
14	1	671100011	PISTON			660130001	COMPLETE HANDLE KIT

240019007 BACK-UP WASHER

IMPORTANT THAT YOU REVIEW THE FOLLOWING ITEMS CAREFULLY TO UNDERSTAND YOUR SAFETY AND RESPONSIBILITY REGARDING ELECTRICAL POWER!

- 1. All electrical material and equipment must be grounded.
- 2. 2-Wire Cords (Ripcords or Zip cords) are **UNACCEPTABLE** at all facilities, unless the cord is a component part of an assembly that is specifically approved.
- 3. All equipment, regardless of source of power, must comply with all national electrical codes, state and local safety codes.

All electrical cords must be the three-wired or four wire, grounded type. All exposed non-current carrying metal parts of fixed equipment, which are liable to be energized, must be grounded.

4. TO COMPUTE WATTAGE: Multiply AMPS x VOLTAGE.

Example: 20 amps x 120 volts = 2400 watts

208 volt, single phase: 30 x 208 = 6,240 208 volt, three phase: 30 x 360 = 10,800

5. Unless otherwise directed, HWE electricians are authorized to cut floor coverings to permit installation of service.

DAYTON **FOR RCB-E8-H\$ 1 & 3 MACHINES ONLY DAYTON ELECTRIC MANUFACTURING CO. CHICAGO, IL 60648

Assembly instructions & parts list Hydraulic pressure control valve

<u>ATTENTION:</u> Read carefully before attempting to assemble, install, operate or service the Dayton relief valve. Retain for future reference!

DESCRIPTION

The pressure compensated flow control valve is designed to regulate the speed of a hydraulic motor or cylinder from stop to a max of 30 GPM. The valve is a three-port version with a built in adjustable relief that dumps to the excess flow port. Once the adjustable handle is set to the desired flow, the motor or cylinder speed will remain constant regardless of load variations in the system.

SPECIFICATIONS

GENERAL SAFETY INFORMATION:

- 1. Do not operate valve above 3000 PSI.
- 2. Overpressure may cause sudden failure.
- 3. Do not touch valve body during or immediately after operation, as this component can become hot.
- 4. Check for proper relief pressure at start up and recheck at frequent intervals.
- 5. Consult specifications and make sure the relief valve size is appropriate to the application. Do not us an undersized valve.
- 6. Do not attempt to service valve before releasing all hydraulic pressure in the system.
- 7. Use petroleum based hydraulic oils only.
- 8. Be sure all system components have maximum operating pressure ratings at least equal to those achieved in the system in which they are mounted.

ASSEMBLY

The valve is assembled as it comes from the box. After removing the plastic plugs from the ports, the valve can be plumbed in to the pressure line between the pump and the valve(s) with the tank port plumbed back to the reservoir. During system startup procedures, check all operations completely to insure proper settings.

OPERATION

- 1. The hydraulic relief valve's main function in a system is to provide relief of oil pressure by allowing excess oil to flow back to the reservoir at the desired system pressure.
- 2. After the system has been plumbed and during the first start up, check to be sure the relief valve is adjusted to the desired setting and that the system is functioning properly.
- 3. To adjust the relief valve, remove the acorn nut and loosen the jam nut. Turning the adjusting screw clockwise increases pressure, counter clockwise reduces pressure. After the desired pressure is reached, hold the adjusting screw steady and tighten the jam nut. Then, replace the acorn nut and tighten.

CAUTION: Do not back off adjusting to the point where it detaches from the valve body.

4. Air must be removed from the hydraulic system to insure smooth operation.

WARNING: Do not try and operate at pressures higher than 3000 PSI.

LIMITED WARRANTY
DAYTON ELECTRIC MFG. CO.
5959 W. HOWARD ST. CHICAGO, IL 60648

HEAVY DUTY FOOT SWITCH

1. READ WARNING STATEMENT on next page.

- 2. When wiring up this device, make sure POWER IS OFF AND LINES ARE DEAD.
- 3. When wiring up this device with flexible cord, an UNDERWRITERS LAB LISTED liquid tight connector, must be provided. Use appropriate pipe thread sealant at assembly to seal connector threads. When threading into the conduit opening, care must be taken to tighten the thread joint sufficiently to prevent loosening but should NOT BE FORCED! The conduit threads should be kept clean; free from dirt and foreign materials that would hinder proper installation.
- 4. TO CHANGE ADJUSTMENT of the operating point of an interior switch, depress the treadle to the point where you want the switch to operate. With the treadle depressed to the desired operating point, turn the adjusting screw until the switch snaps. Turn clockwise to lower the operating point and counter clockwise to raise it. Apply Loctite Corporation Threadlocker Adhesive #290 (or equivalent) penetrating low-viscosity anaerobic liquid to adjusting screw J after changing adjustment. Avoid applying and excessive amount of the liquid adhesive to prevent migration. Remove excess liquid adhesive to prevent migration. Remove excess liquid adhesive by wiping.
- 5. Tighten the cover screws so that an effective seal is obtained with the gasket.
- 6. CLEANLINESS must be observed during installation and in use. On a regular basis, lubricate the treadle pivot rod with one or two drops of lubricating oil on that portion of the pivot that extends between the outside of the base and inside of the treadle; two places. On a regular basis, inspect foot switch frequently to guard against wear and damage. Unlawful alterations or removal of guards, or for unusual enclosure deterioration and the like. Inspect the entire length of the connecting cord (or wiring system) from where it enters the foot switch to the equipment its wired up to for wear, loose strain relief connections and the like. DO NOT OPERATE the foot switch if any of the above is observed or if the nameplate or warning label has been obscured or removed. It is IMPERATIVE that inspection authorities and users excersice more than ordinary care with regard to installation and maintenance and that this info sheet be made available to the end user, operations, maintenance personnel and to others responsible for the proper installation and safe operations of this foot switch.

ADDITIONAL COPIES OF THIS INFO AVAILABLE UPON REQUEST



USE OF FOOT CONTROLS ON MACHINERY, LAKING EFFECTIVE POINT OF OPERATION SAFE GUARDS, CAN CAUSE SERIOUS INJURY TO THE OPERATOR!

Foot controls should only be used where "Point of Operation" and "Pinch Point" guarding devices have been properly installed and are utilized so that it is IMPOSSIBLE for the operator's hands and fingers to remain within the point of operation during the machine cycle.

IT IS THE REPONSIBILTY OF THE USER to determine the suitability of a foot control for the user's intended use. Also to determine that the foot control chosen by the user, wiring up and installation, will comply with all Federal State, local safety, health regulations and codes.

Due to the unlimited variety of business equipment, instruments and vehicles on which our foot switches are used, the thousands of standards, and customers' varying interpretations of the standards covering these applications, it is impossible for *LINEMASTER* personnel to be experts on standards and requirements for all these products. We offer foot switch models and guards plus a variety of specials, which are made to customer specifications. We can advise you what is available in our foot switch line and you can examine models to see what meets your needs. We believe our customers' engineering departments should be qualified experts in their own product field and know what specifications or details they may require in a foot switch for their equipment. If one of our stock models meets their needs, they can specify it, or possibly ask for a modification of a stock model if it is required.

SHOULD YOU HAVE ANY QUESTIONS OR IF ANY OF THE ABOVE WARNING IS UNCLEAR, PLEASE CALL LINEMASTER SWITCH CORPORATION.
(203) 974-1000 /FAX (203) 974-0691

DEFINITIONS:

POINT OF OPERATION- The point or area of the machine or equipment where the piece of material is actually positioned and work is being performed during any process such as cutting, shearing, forming, welding, riveting, assembling, etc.

PINCH POINT- Any point at which it is possible for a portion of the body to be caught and injured between a moving machine, equipment, or work piece parts.

ROD CHOMPER INC. ONE YEAR LIMITED WARRANTY

Rod Chomper, Inc. will warrant each new machine to be free from defects in material and workmanship for a period of one year from date of purchase. As long as the machine is properly installed and subjected to normal use and service. This warranty is void if the machine is changed or modified in any way.

If a customer needs warranty service, he should contact the dealer from whom he purchased the machine. Then the dealer will contact Rod Chomper, Inc. and receive a returned goods authorization number if required. Rod Chomper, Inc. will determine the method of satisfying the warranty. If Rod Chomper, Inc. determines the machine should be returned to the factory, it must be accompanied by proof of purchase and a clear explanation of the exact problem. The machine must be returned freight pre-paid. No other warranty, except as stated above, is implied or expressed.

Motors and valves of electric and hydraulic parts are warranted by manufacture.