



MODEL NO. 455 COMBINATION SHEAR/NOTCHER/BENDER OPERATION, PARTS & MAINTENANCE MANUAL

Model:	PEE	Purchased From:
Serial #:	R	Date Received:



An American Tradition Since 1910

FOREWORD

This manual has been prepared for the owner and operators of Roper Whitney No. 455 Combination Shear/Notcher/Bender. Its purpose, aside from operations instructions, is to promote safety through the use of accepted operating procedures. Read all instructions thoroughly before operating the machine.

Also contained in this manual is the parts list for your machine. It is recommended that only Roper Whitney or factory authorized parts be used as replacements.



Warranty Statement:

3 YEAR LIMITED WARRANTY

Roper Whitney ("Manufacturer") warrants, commencing with the date of shipment to first end-user ("Customer") and for a period of thirty-six (36) months thereafter, all machinery and parts manufactured by Manufacturer to be free of defects in workmanship and material. This warranty remains in force for the above time period only if all of Manufacturer's operational procedures are followed and recommended maintenance is performed. If, within such warranty period, any machinery or parts manufactured by Manufacturer shall be proved to Manufacturer's satisfaction to be defective, such machinery or parts shall be repaired or replaced, at Manufacturer's option. All warranty claims are made F.O.B Manufacturer's plant, providing such machinery or parts are returned freight prepaid to Manufacturer's plant or designated service center for Manufacturer's inspection. All failed parts or components must be returned to Manufacturer prepaid for inspection before credit will be issued for new parts or components. Manufacturer's obligation hereunder shall be confined to such repair or replacement and does not include any charges, direct or indirect, for removing or replacing defective machinery or parts. No warranty shall apply to machinery, or parts or accessories, which have been furnished, repaired, or altered by others so as, in Manufacturer's judgment, to affect the same adversely or which shall have been subject to negligence, accident or improper care, installation, maintenance, storage, or other than normal use or service, during or after shipment. No warranty shall apply to the cost of repairs made or attempted outside of Manufacturer's plant or designated service center without Manufacturer's authorization. No warranty shall apply with respect to machinery or part not manufactured by Manufacturer, including but not limited to motors, accessories, electrical and hydraulic components, if such machinery or part is subject to warranty by the manufacturer of such machinery or part. No warranty claims by Customer will be honored with respect to any machinery or part from which the name and date plate has been removed or is otherwise no longer located or exhibited on such machinery or part. THE FOREGOING WARRANTIES ARE IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY AND IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. MANUFACTURER SHALL NOT BE SUBJECT TO ANY OTHER OBLIGATIONS OR LIABILITIES WHATSOEVER WITH RESPECT TO MACHINERY, PARTS, ACCESSORIES, OR SERVICES MANUFACTURED OR FURNISHED BY IT OR ANY UNDERTAKINGS, ACTS, OR OMISSIONS RELATING THERETO. UNDER NO CIRCUMSTANCES SHALL MANUFACTURER BE LIABLE FOR ANY CONSEQUENTIAL OR OTHER DAMAGES, EXPENSES, LOSSES, OR DELAYS HOW SO **EVER CAUSED.**

THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF.

Note: Consumable tooling is not covered under the 3 year manufacturer's warranty.

RETURN OF THE PRODUCT REGISTRATION CARD FURNISHED WITH THE PRODUCT IS NECESSARY TO OBTAIN WARRANTY COVERAGE THEREON. CARD MUST BE FULLY COMPLETED, SIGNED BY THE PURCHASER, AND IF APPLICABLE, SIGNED BY THE DISTRIBUTOR. RETURN REGISTRATION CARD TO:

Roper Whitney 2833 Huffman Blvd. Rockford, IL 61103 815-962-3011 / Fax 815-962-2227 www.roperwhitney.com

SAFETY INSTRUCTIONS

FOR MAXIMUM OPERATOR SAFETY DO:

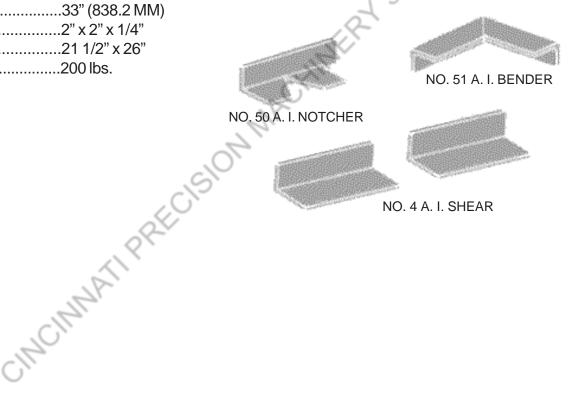
- 1. Read and understand this manual
- 2. Be sure to stay within capacity of this machine.
- 3. Wear safety glasses.

CAUTION: The machine must be securely bolted to the floor before use.

SPECIFICATIONS:

The No. 455 Combination Shear/Notcher/Bender consists of No. 4 Angle Iron Shear, No. 50 Angle Iron Notcher and No. 51 Angle Iron Bender all mounted on sturdy floor stand. A 72" operating bar handle is furnished and fits all of the tools.

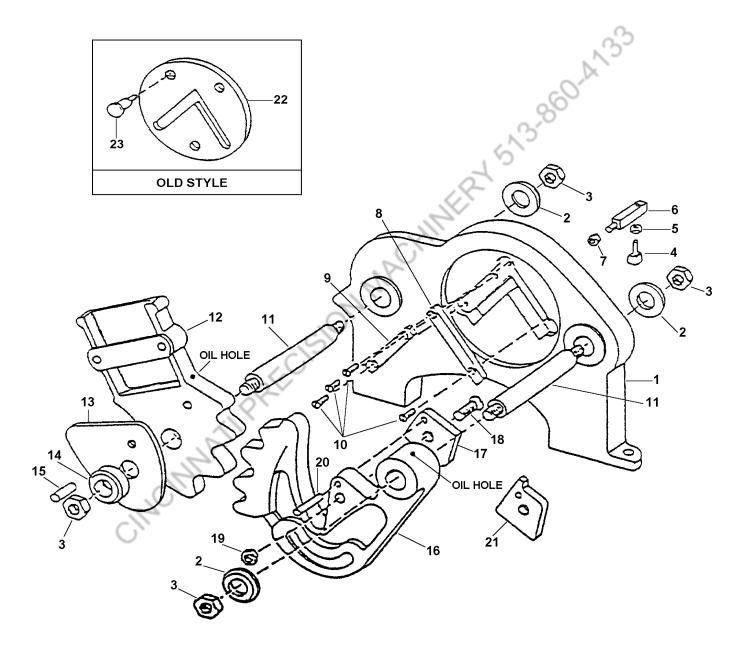
Height......33" (838.2 MM) Max. Capacity.....2" x 2" x 1/4" Floor Space.....21 1/2" x 26" Weight.....200 lbs.



NO. 4 ANGLE IRON SHEAR

CARE: A heavy gear lubricant should be applied to the gear teeth, movable shear arm and operating handle. Light machine oil should be placed in oil holes provided in movable shear arm and operating handle. All bolts and nuts should be checked occasionally to insure their being tight. Long die segment and short die segment have four cutting edges and may be rotated. Support stud adjusting screw may require adjustment to insure angle being level with die segments.

NO. 4 PARTS LIST



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NO. 4 PARTS LIST

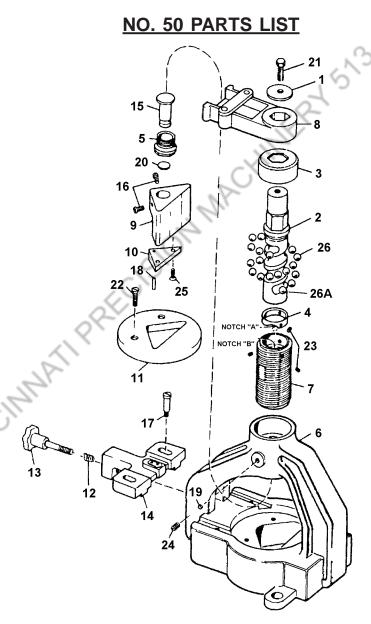
NO.	PART NO.	PART NAME	QTY.
1	740060015	Base	1
2	740830019	Hinge Bolt Washer	3
3	600023053	Hinge Bolt Nut, 3/4-16 Jam	4
4	633012279	Support Stud Adj. Screw, 1/2-13 x 2" Sq. Hd.	1,3
5	649023007	Support Stud Adj. Screw Nut, 1/2-13 Hex Jam	1,5
6	740160020	Work Support Stud	M
7	649023010	Support Stud Nut, 3/4 x 10 Hex Jam	-O 1
8A	250004150	Support Stud Nut, 3/4 x 10 Hex Jam Die Segment Set Long Die Segment	Set
8	740120021	Long Die Segment	1
9	740120022	Short Die Segment	1
10	613012089	Die Mounting Screws, 1/4-20 x 3/4 Flat Head	4
11	740160018	Hinge Bolt	2
12	740670017	Operating Handle	1
13	740060026	Gear Flange Support	1
14	740830025	Hinge Bolt Washer	1
15	600063477	Gear Flange Support Pin, 5/16 x 1" Roll Pin	1
16	740030016	Movable Shear Arm	1
17	350004070	Movable Shear Blade	1
18	613012179	Shear Blade Screw 3/8 - 16 x 1 1/2 Flat Head	1
19	649023005	Movable Shear Blade Screw Nut, 3/8-16 Hex Jam	1
20	600063477	Shear Blade Pin, 5/16 x 1" Roll Pin	1
21	350004025	Movable Blade for 2 x 2 x 1/8 Angle	1
22	350004060	Base Shearing Die (Old Style)	1
23	740650057	Base Shearing Die Screws (Old Style)	3
24	740460027	72" Bar Handle (Not Shown)	1
	CINCIP		

NO. 50 ANGLE IRON NOTCHER

CARE: Before attaching coupling pin to spindle, grease coupling head.

OPERATION: Coupling nuts have left hand thread. To assemble spindle, place a small amount of heavy grease in ball race of spindle. Slide stop collar on spindle with notch "A" in stop collar in down position. Place 30 ball bearings (11/32") in ball race of spindle and thread into ball race sleeve as far as possible; turn back until ball race can be seen. Align notch "A" in stop collar with "B" start of ball race in frame and tighten the three-stop collar set screws. Screw ball race sleeve into punch body until bottom of ball race sleeve is even with bottom of punch body. Align flats and insert set screw plugs and screws.

CAUTION: After angle has been notched, round fluted knob (13) must be backed out to free clamp bracket (14). This must be done prior to reversing spindle direction. Failure to do so will result in damage to tool.



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NO. 50 PARTS LIST

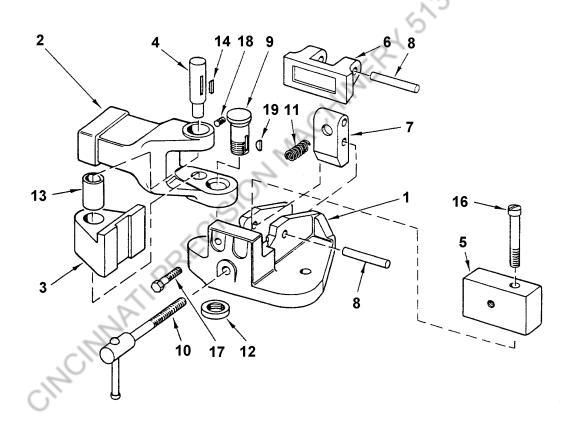
ITEM NO.	PART NO.	PART NAME	QTY.
1	678033116	Handle Washer	1
2	730770083	Spindle	1
3	740220072	Dust Cap	1
4	730260085	Stop Collar Coupling Nut Frame Ball Race Sleeve Operating Handle Shear Blade Holder Shear Blade Shear Die Clamp Spring Round Fluted Knob Clamp Bracket Coupling Pin	_ 1
5	331002011	Coupling Nut	ൂാ 1
6	740140067	Frame	₹2.1
7	730520084	Ball Race Sleeve	1
8	731460159	Operating Handle	1
9	740010068	Shear Blade Holder	1
10	350700212	Shear Blade	1
11	350700213	Shear Die	1
12	600184522	Clamp Spring	1
13	645356368	Round Fluted Knob	1
14	740670079	Clamp Bracket	1
15	740160077	Coupling Pin	
16	740650069	Blade Holder Set Screws	2
17	740650070	Clamp Hold Down Screws	2
18	600053316	Shear Blade Dowel Pin	1
19		See #24	
20	740570071	Pressure Plug	1
21	601012128	Handle Washer Screw 5/16-18 x 1/2 Hex Head	1
22	613012177	Die Screws 3/8-16 x 1 1/4 Flat Head	2
23	623012082	Stop Collar Set Screws 1/4-20 x 1/4 Headless Cone Pt	3
24	621012220	Socket Set Screw 7/16-14 x 5/8	2
25	613012088	Shear Blade Screws 1/4-20 x 5/8 Flat Head	2
26	600093702	11/32 Ball Bearings	31
26A	600093700	Ball Bearing	1
27	731460188	32" bar handle (not shown)	1
*	245940000	Ball Race Sleeve Assembly Consists of item numbers: 2, 4, 5, 7, 15, 23 and 26 fully assembled.	1

NO. 51 ANGLE IRON BENDER

CARE: An occasional oiling of all moving parts with a light machine oil is all the care necessary for this tool.

OPERATION: Loosen vise handle sufficiently to allow the angle iron to be bent to slide between the stationary jaw and the movable clamp jaw arm. Tighten vise handle. Loosen operating handle swivel block stud set screw. Set the operating handle swivel block stud on dimension closest to the angle to be bent (three settings are provided: 1/8", 1/4" and 3/16"). Tighten set screw after setting stud at desired setting. If the vise handle is turned out too far it is possible for the movable clamp jaw spring to be dislodged from its seat. If this happens, drive the movable clamp jaw pin out, reinsert spring in its recess and reassemble the movable clamp jaw and arm pin.

NO. 51 PARTS LIST



NO. 51 PARTS LIST

ITEM NO.	PART NO.	PART NAME	QTY.
1	731060173	Frame	1
2	731460174	Operating Handle	1
3	731130175	Operating Handle Swivel Block	1
4	731160176	Operating Handle Swivel Block Stud	1
5	731020177	Stationary Jaw Movable Clamp Jaw Movable Clamp Jaw Arm Movable Clamp Jaw Pins Handle Hinge Bolt Movable Clamp Jaw Screw Clamp Jaw Spring	? ₂ 1
6	731020178	Movable Clamp Jaw	ັ 1
7	731030179	Movable Clamp Jaw Arm	1
8	731160180	Movable Clamp Jaw Pins	2
9	731160181	Handle Hinge Bolt	1
10	731670185	Movable Clamp Jaw Screw	1
11	600184520	Clamp Jaw Spring	1
12	731560182	Handle Hinge Bolt Nut	1
13	731080183	Eccentric Adjusting Bushing	1
14	731530184	Eccentric Adjusting Bushing Key	1
16	611012229	Stationary Jaw Screw 7/16-14 X 1 3/4 Hex	1
17	611012232	Stationary Jaw Screw	1
		7/16-14 X 2 1/4 Fillister Head	
18	600325904	Swivel Block Stud Lock Screw 5/16-18 X 5/16	1
19	600123915	Hinge Bolt Key 13-3/16 X 1	1
	, NA		
	CIACIMAN		
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