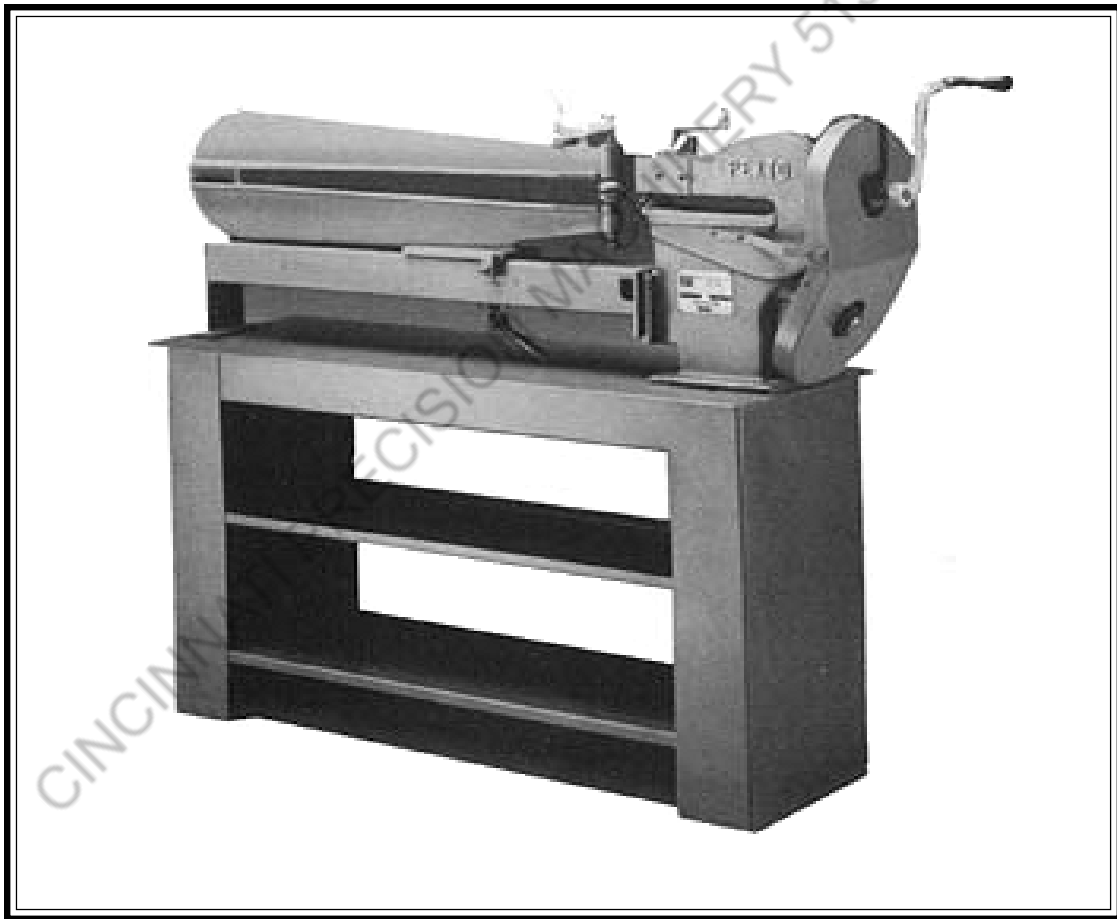


PEXTO

No. 299

RING AND CIRCLE SHEAR

OPERATING INSTRUCTIONS AND PARTS IDENTIFICATION



ROPER WHITNEY OF ROCKFORD, INC.

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RING & CIRCLE SHEAR NO. 299
SPECIFICATIONS



The No. 299 Shear has the capacity to cut circles in 3 1/4" to 42 1/2" square 20 gauge blanks. May be ordered with an optional floor mount stand.

Height	23 1/2"
Length	82"
Width	21"
Capacity, Mild Steel	20 Ga.
Diameter of Cutters	1 5/8"
Diameter of Clamping Discs	2 1/4"
Depth of Cutting Head to Gauge	9 1/8"
Depth of Cutting Head to Frame	10"
Depth of Circle Arm	30 1/2"
Will Circle from Square Blanks	3 1/4" to 42 1/2"
Will Cut Rings Small as (inside dia.)	3 1/4"
Will Cut Rings Large as (outside dia.)	42 1/2"
Shipped Crated Regularly, Hand	300 lbs. approx.

INSTRUCTIONS FOR NO. 299 **PEXTO RING AND CIRCLE SHEAR**

This machine may be used for cutting inside and outside circles and straight slitting

WARNING: Before operating, machine must be bolted to work bench. If floor stand has been provided, machine must be bolted to floor stand with bolts provided. Stand must be securely lagged to floor.

1. Set up Shear with Cutting Head at operator's right. Turn crank in clockwise direction.
2. The adjustable Slitting Gauge located in the throat of Cutting Head is used for straight slitting.
3. The adjustable Swinging Gauges, located on the Circle Arm, center the work preparatory to cutting circles and/or rings.
4. Hand Lever, located on Circle Arm, clamps work in position. Square Head Set Screw, with check nut, on Lever adjusts Lever for various metal thicknesses.
5. Front and Rear Circle Arm Adjusting Screws position Circle Arm in relation to Cutting Head. If Circle Arm is improperly positioned the circles will:
 - a. Have a "rolled-over" edge if **Rear** Circle Arm Adjusting Screw is in too far.
 - b. Form an ellipse if **Front** Circle Arm Adjusting Screw is in too far.

The optimum position of Circle Arm is between these extreme settings. Loosen Circle Arm Clamping Screw when making adjustments.

6. Upper Cutter has vertical adjustment which is controlled by Crank Screw.
7. Cutter clearance must be adjusted to compensate for wear, regrinding or replacement. Lower cutter clearance adjusted by round adjusting nuts on either end of lower shaft.
8. Clamping Handle holds Circle Arm firmly in position for circle cutting.
9. Lower Disc should be positioned to hold blank level with top edge of Lower Cutter.
10. The Cutting Head Extension is graduated for direct reading of diameters of circles being cut.
11. Lock all adjustments after setting.
12. Lubricate (at points indicated on sketch) once each working day with SAE 30 oil.

299 RING & CIRCLE SHEAR

PARTS LIST

REFER TO PARTS IDENTIFICATION CHART

INDEX	PART NO.	PART NAME	OLD PART #	REQUIRED PER UNIT
1	740140164	Frame	10916	1
2	740170157	Rocking Box	10917	1
3	740380165	Gear	10918	2
4	740420166	Slitting Gauge	10919	1
5	740210167	Crank	10920	1
6	740680168	Shaft, Upper	10921	1
7	740680169	Shaft, Lower	10922	1
8	740560170	Nut, Adj. (Lower Shaft, Front)	10923	1
9	740260171	Collar, Lower Shaft	10924	1
10	764670217	Adj. Screw, Crank Handle Ass'y		1
11	640184534	Spring, Rocking Box	10797	1
12	350700078	Cutter Blade, Upper	3B-7694	1
13	350700079	Cutter Blade, Lower	3B-7693	1
14	740160173	Pin, Pivot	3B07869	1
15	740680174	Stale, Crank	10043	1
16	640356309	Handle, Crank	10050	1
17	740480175	Wrench, Spanner	10930	1
18	600010461	Plug, Brass Set Screw		2
19	740560178	Nut, Adj. (Lower Shaft, Rear)	10931	1
20	640245103	Washer, Thrust	711665	1
21	740030179	Lever	10934	1
22	740030180	Lever, Hand	10935	1
23	746030003	Lever, Clamping Screw	10272	1
24	740830181	Washer, Clamp	10273	1
25	590684025	Gauge, Swinging	10936	2
26	740010182	Disc, Clamping	A07282	2
27	640204709	Bearing, Ball Radial	710137	2
28	640184535	Spring, Disc Stud	A60232	1
29	740160066	Stud, Upper Disc		1
30	600053370	Pin, Dowel (5/16" x 1/2" Hardened)		1
31	740160184	Stud, Lower Disc	A07284	1
32	740260186	Collar, Gauge	10944	2
33	740010187	Clamp, Lower Rubber Disc	10945	1
34	740010188	Clamp, Upper Rubber Disc	10946	1
35	740260189	Collar, Guide	10949	1
36	740650190	Screw, Clamping	10951	1
37	633012363	Screw, Sq. Head Set (5/8"-11 x 1")	WS-0676	1
38	740160192	Center, Lower Disc Stud	10952	1
39	740440193	Guard, Cutter	A07622	1

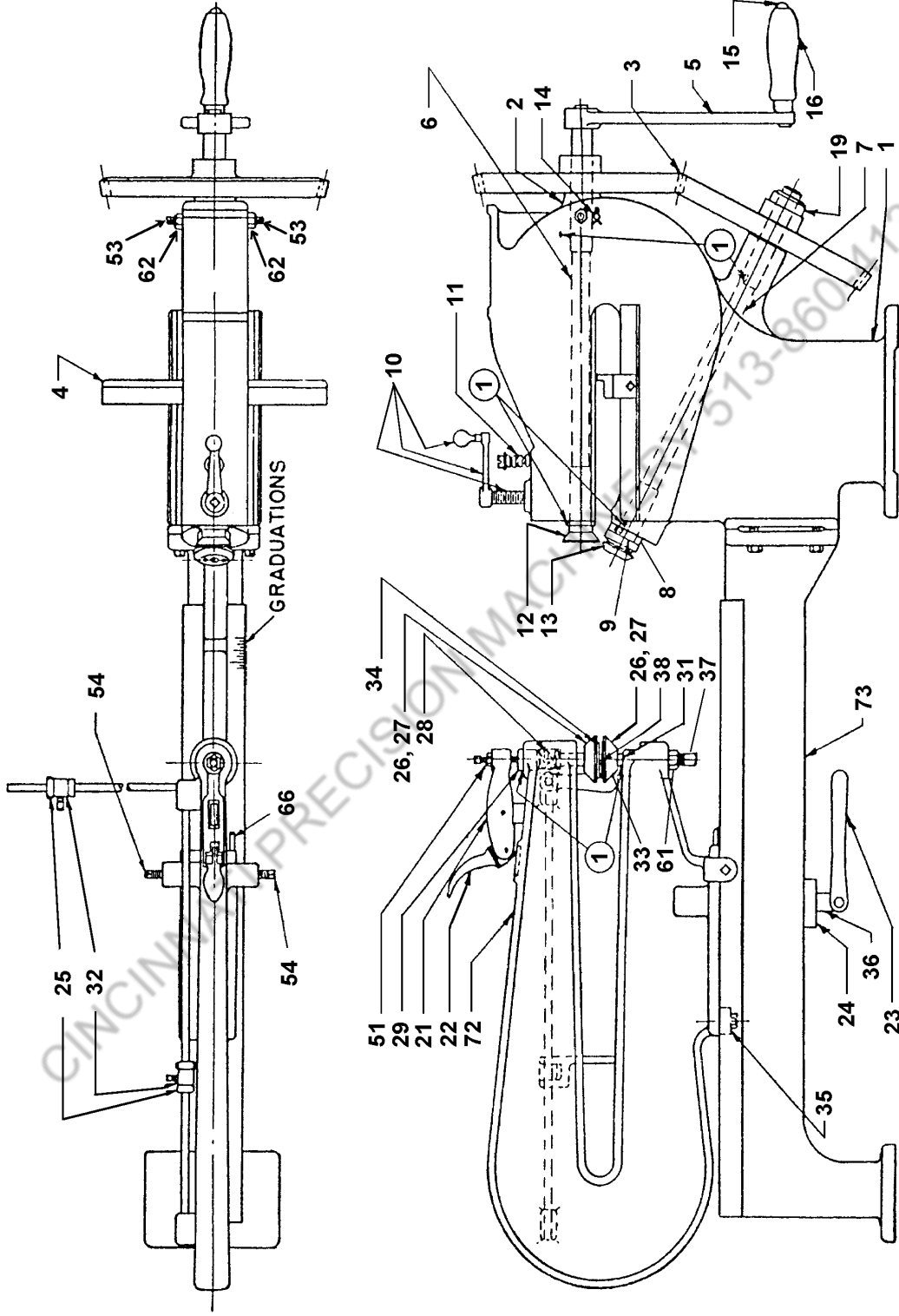
299 RING & CIRCLE SHEAR

PARTS LIST

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40	740440194	Guard, Gear	2B-4149	1
41	740441095	Guard, Gear Cover	3B11631	1
42	740180196	Strap, Gear Cover Mounting - Top	A07623	1
43	740180197	Strap, Gear Cover Mounting - Side	A07624	2
44	600346123	Name Plate	A0-7701	1
45	601012143	Screw, Hex Hd. Cap (5/16"-18 x 2 1/2")	WS-0024	1
46	601012175	Screw, Hex Hd. Cap (3/8"-16 x 1")	WS-0033	1
47	611012177	Screw, Socket Hd. Cap (3/8"-16 x 3/8")	WS-0539	4
48	615012084	Screw, Button Hd. Soc. Cap (1/4"-20 x 3/8")	WS-0447	16
49	615012049	Screw, Button Hd. Soc. Cap (#10-24 x 3/8")	WS-0452	4
50	611012049	Screw, Socket Hd. Cap (#10-24 x 3/8")	WS-0500	1
51	633012133	Screw, Square Hd. Set (5/16"-18 x 1")	WS-0617	1
52	633012139	Screw, Square Hd. Set (5/16"-18 x 1 3/4")		1
53	600325908	Screw, Headless Set (5/16"-18 x 7/8")	WS-0716	2
54	600325909	Screw, Headless Set (5/16"-18 x 1 1/4")	WS-0718	2
55	621012082	Screw, Socket Set (1/4"-20 x 1/4")	WS-0813	1
56	621012084	Screw, Socket Set (1/4"-20 x 3/8")	WS-0815	1
57	621012124	Screw, Socket Set (5/16"-18 x 1/4")	WS-0827	2
58	621012128	Screw, Socket Set (5/16"-18 x 1/2")	WS-0831	3
59	649023003	Nut, Hex Jam (1/4"-20)	WS-1331	4
60	649023007	Nut, Hex Jam (1/2"-13)	WS-1335	2
61	649023009	Nut, Hex Jam (5/8"-11)	WS-1337	1
62	643023004	Nut, Hex Full (5/16"-18)	WS-1353	3
63	600073514	Pin, cotter (3/32" Dia. x 3/4")	WS-1526	2
64	600063498	Pin, Roll (3/16" Dia. x 3/8")		1
65	600063445	Pin, Roll (5/32" Dia. x 1")	WS-1545A	2
66	600063470	Pin, Roll (1/4" Dia. x 1 1/4")	WS-1594A	1
67	600063472	Pin, Roll (1/4" Dia. x 1 3/4")	WS-1598A	1
68	678033102	Washer, Flat (#10)		1
69	600113819	Screw, Drive (#4 x 1/4")	WS-1907	2
70	600123920	Key, Woodruff (#17)	WS-1948A	2
71	641012089	Screw, Thumb (1/4"-20 x 3/4")	WS-1955-1	2
72	740030065	Arm, Circle		1
73	740200159	Bracket, Extension	10971	1
74	740030161	Rod, Sliding Gauge	10972	1
75	740030163	Rod, Swing Gauge	10973	1
76	600000202	Scale		1

NO. 299 PARTS IDENTIFICATION CHART



FOR MODELS MANUFACTURED PRIOR TO 1976:

If you need to replace the **Bearing** in the **Clamping Disc**, and your machine was built **prior to 1976**, you will need to order all of the following parts. Because of a major change to the bearing, the replacement must be made as a unit which consists of these parts:

<u>PART NAME</u>	<u>PART NO.</u>	<u>NO. REQUIRED</u>
Lower Disc Stud Center Point	740160192	1
Clamping Disc	740010182	2
Upper Disc Stud	740160066	1
Lower Disc Stud	740160184	1
Ball Radial Bearing (Nice)	640204709	2
Flat Washer #10 (For Upper Disc)	678033102	1
SHC Screw (For Upper Disc)	611012049	1
Upper Rubber Disc Clamp	740010188	1
Lower Rubber Disc Clamp	740010187	1
Upper Disc Stud Spring	640184535	1
Lower Disc Hex Jam Nut	649023008	1
Lower Disc Screw	740650191	1

This will effect only those models manufactured prior to 1976.