### PEXTO FORMING MACHINES

Forming Machines, or Slip Roll formers, are intended for rolling sheet metal or forming cylinders of various diameters.

The two pinch rolls feed the sheet against the rear roll, curving the sheet and forming the cylinder. The rear or forming roll can be adjusted by screws on the rear of left and right end housings, varying the diameter of the required cylinder. Pinch rolls can be adjusted for stock thickness by screws on the front end of the housings.

The capacity ratings of **PEXTO** forming machines are based on forming mild steel, fully annealed, the full length of the rolls and are considered as standard by the sheet metal trade for forming rolls of a specified diameter and length. Definite capacities, however, depend upon the diameter and length of the cylinder to be formed and the number of passes through the rolls to obtain a given diameter. Stiffness of material and uniformity desired are also factors. When a forming machine is overloaded, the immediate result will be deflection in the center of the rolls, resulting in cylinders bulged in the center.

Three inch diameter forming rolls have longitudinal grooves in the rear forming roll to assist in starting the sheet. Forming rolls 3" in diameter and larger have all three rolls driven as standard. Three roll drive for rolls under 3" in diameter at extra cost.

In order to reduce the number of rear roll adjustments when sheets are of light gauge, proceed as follows:

- 1. Insert the sheet between two pinch rolls.
- 2. Bend the sheet upwards and slightly around the top roll.
- 3. Continue to pass the sheet through the machine.

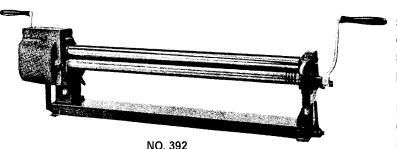
This will also reduce the flat spot on the leading edge of the sheet.

The right-hand housing is provided with a hinged journal cap and lifting latch. After the cylinder is formed, the latch is lifted and the lever is pressed down. This raises the top roll and the cylinder can be slipped off the roll without distortion.

Forming machines are provided with grooves in the right end of the lower and rear rolls to allow for forming cylinders with a wired edge.

**WARNING:** Before operating, machines <u>must</u> be bolted to the work bench. If the floor stand has been provided, machine must be bolted to the floor stand with bolts provided. Stand <u>must</u> be securely lagged to the floor.

## **SLIP ROLL FORMERS 390, 391, 392**



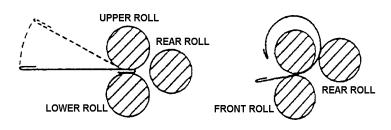
These machines are available in three different sizes. All three models offer the standard front roll drive. These units may be mounted directly to a sturdy work bench or to an optional fabricated pedestal, designed specifically for each unit.

| MODEL                     | 390   | 391   | 392   |
|---------------------------|-------|-------|-------|
| Capacityga.               | 16-18 | 18-20 | 20-22 |
| Max Lengthins.            | 36    | 42    | 48    |
| Roll Diameterins.         | 2 1/2 | 2 1/2 | 2 1/2 |
| Shipping Weight Boxedlbs. | 457   | 500   | 540   |

### **INSTRUCTIONS**

**CAUTION:** Be sure that the machine is securely bolted onto the pedestal or to the customer supplied bench. Pedestal or work bench should be bolted to the floor.

- 1. Adjust the Lower Roll to grip the metal firmly and evenly but without straining the machine. The Lower Roll is adjusted up or down with the two lower Adjusting Screws (19).
- 2. Adjust the Rear Roll to form the metal up as it travels through the rollers. The Rear Roll is adjusted up or down with the two rear Adjusting Screws (21). Be sure the Rear Roll is parallel with the Lower Roll. If the rolls are not parallel, the formed metal will be conical in shape instead of cylindrical.
- 3. Feed the stock to the rolls only from the front.
- 4. As the front rolls grip the stock, lift the rear er of the metal upward. This will help reduce the flat spot on the leading edge of the sheet and will also cause the leading edge to pass over the rear roll readily.



- 5. The diameter of the formed cylinder is determined by the position of the Rear Roll. To increase the diameter of a cylinder, lower the Rear Roll by turning the two rear Adjusting Screws (21) counter clockwise. To reduce the diameter of a formed cylinder, raise the Rear Roll by turning the two rear Adjusting Screws (21) clockwise. The two rear Adjusting Screws (21) should be turned an equal number of turns in order to keep the Rear Roll parallel with the front gripping rolls.
- 6. To remove a cylindrical piece without distorting it, lift up the Locking Handle (29), raise the Right Hand Housing Cap (28) and turn the Cam Handle (33) down. This raises the outboard end of the Upper Roll and allows the formed cylinder to be slipped off of the Upper Roll.
- 7. The Lower Roll and the Rear Roll have grooves of varying widths in one end. These are for the purpose of accommodating a wired edge when forming a shape or when forming wire into a ring.



### INTERCHANGEABLE PARTS LIST ---- 390, 391, 392

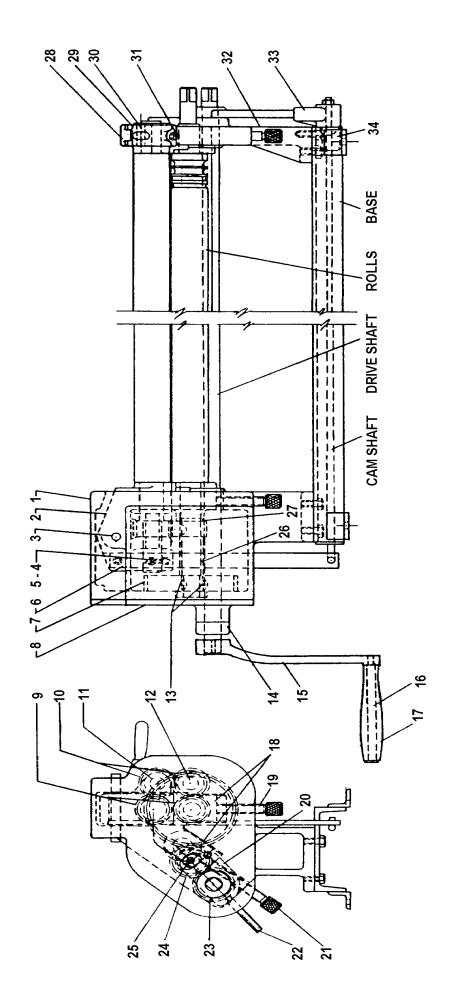
| INDEX | CATALOG<br>NO. | NAME                                      | OLD PART<br>NO. |  |
|-------|----------------|---|-----------------|--|
| 1     | 267940021      | L.H. Housing Assembly                     | 16944           |  |
| 2     | 767170147      | Rocking Box                               | 11492           |  |
| 3     | 767160166      | Pin                                       | 16946           |  |
| 4     | 767650045      | Screw                                     | 11271           |  |
| 5     | 767560055      | Nut                                       | 10155           |  |
| 6     | 767030162      | Lifting Lever                             | 11508           |  |
| 7     | 767380155      | Gear                                      | 11500           |  |
| 8     | 767220146      | Cover                                     | 16945           |  |
| 9     | 767380151      | Conn. Gears                               | 11496           |  |
| 10    | 267940022      | Compensating Gears                        | 11497           |  |
| 11    | 767680158      | Stud                                      | 11503           |  |
| 12    | 767680159      | Stud                                      | 11504           |  |
| 13    | 600123913      | #12 Woodruff Keys                         |                 |  |
| 14    | 767260161      | Collars                                   | 11506           |  |
| 15    | 767210150      | Hand Crank                                | 11495           |  |
| 16    | 767210051      | Stale                                     | 11266           |  |
| 17    | 767460052      | Handle                                    | 11267           |  |
| 18    | 767170148      | Roll Boxes                                | 11493           |  |
| 19    | 767650175      | Adj. Screws - Lower                       | 10849           |  |
| 20    | 767010156      | Idler Holder                              | 11501           |  |
| 21    | 767650149      | Adj. Screws - Rear                        | 11494           |  |
| 22    | 767460160      | Handle - Idler Holder                     | 11505           |  |
| 23    | 767380153      | Drive Pinion                              | 11498           |  |
| 24    | 767380154      | Idler Pinion                              | 11499           |  |
| 25    | 767680157      | Idler Pin                                 | 11502           |  |
| 26    | 767630164      | Lower Roll Spacer                         | 11513           |  |
| 27    | 767630165      | Lower Roll Spacer                         | 11514           |  |
| 28    | 267940020      | Hinge Cap (Included in R.H. Housing Assy) | 11510           |  |
| 29    | 767460163      | Locking Handle                            | 11511           |  |
| 30    | 767160063      | Hinge Pin                                 | 11512           |  |
| 31    | 767650030      | Locking Handle Screw                      | A-5807          |  |
| 32    | 267940020      | R.H. Housing Assembly                     | 11490           |  |
| 33    | 767210105      | Cam and Handle                            | 10848           |  |
| 34    | 767210104      | Cam                                       | 10847           |  |

### **INDIVIDUAL PARTS LIST --- 390, 391, 392**

| MACH. |                      | ROLLS                |                      | DRIVE CAM            |                      | BASE                 |
|-------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|       | Upper                | Lower                | Rear                 | SHAFT                | SHAFT                | BASE                 |
| 390   | 767630139<br>(11528) | 767630135<br>(11516) | 767630137<br>(11519) | 767680129<br>(11522) | 767030094<br>(10876) | 767060131<br>(11525) |
| 391   | (11529)              | (11517)              | (11520)              | (11523)              | (10877)              | (11526)              |
| 392   | 767630140<br>(11530) | 767630136<br>(11518) | 767630138<br>(11521) | 767680130<br>(11524) | 767030095<br>(10878) | 767060132<br>(11527) |

When ordering Replacement Parts always give Model Number, Letter and Serial Number.

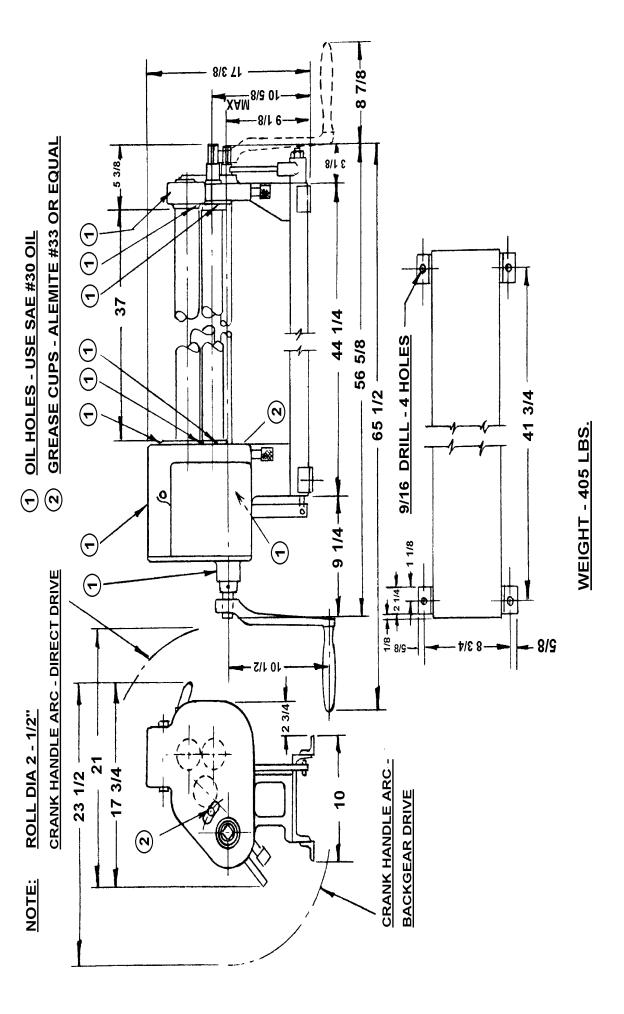
# PARTS IDENTIFICATION CHART - SLIP ROLL FORMERS 390, 391, 392



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.

ROPER WHITNEY OF ROCKFORD, INC. 2833 HUFFMAN BLVD., ROCKFORD, ILLINOIS 61103-3990 \* 815/962-3011 \* FAX 815/962-2227

## **FOUNDATION PLAN - 390 FORMER**



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