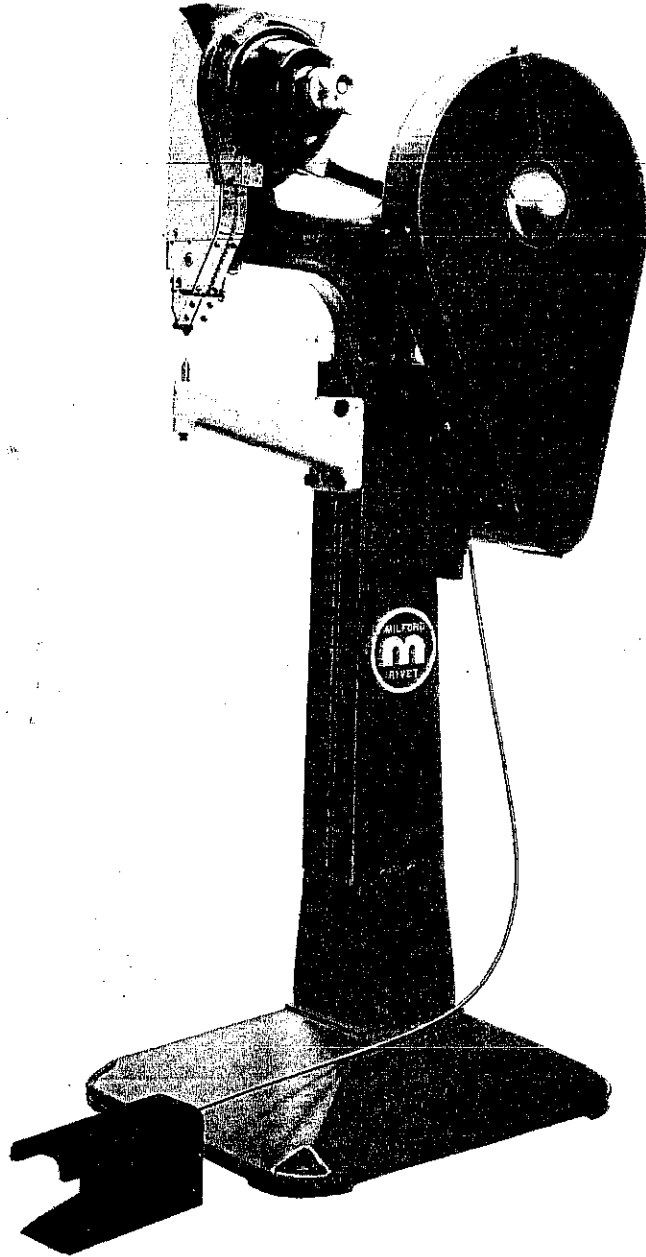


MACHINE AND PARTS DEPARTMENT

**MODEL NO. 205 & 220**

**PARTS CATALOG**

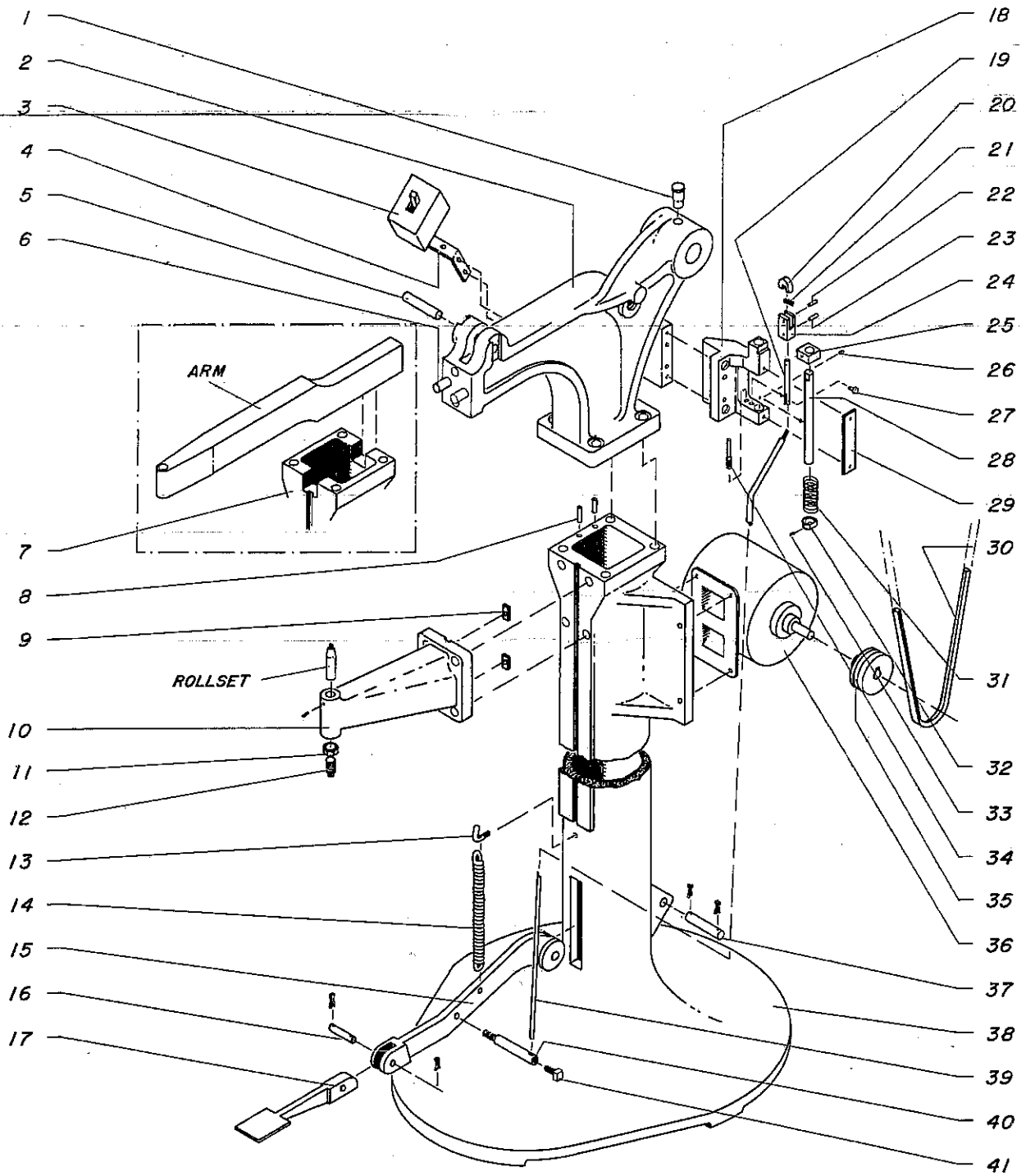


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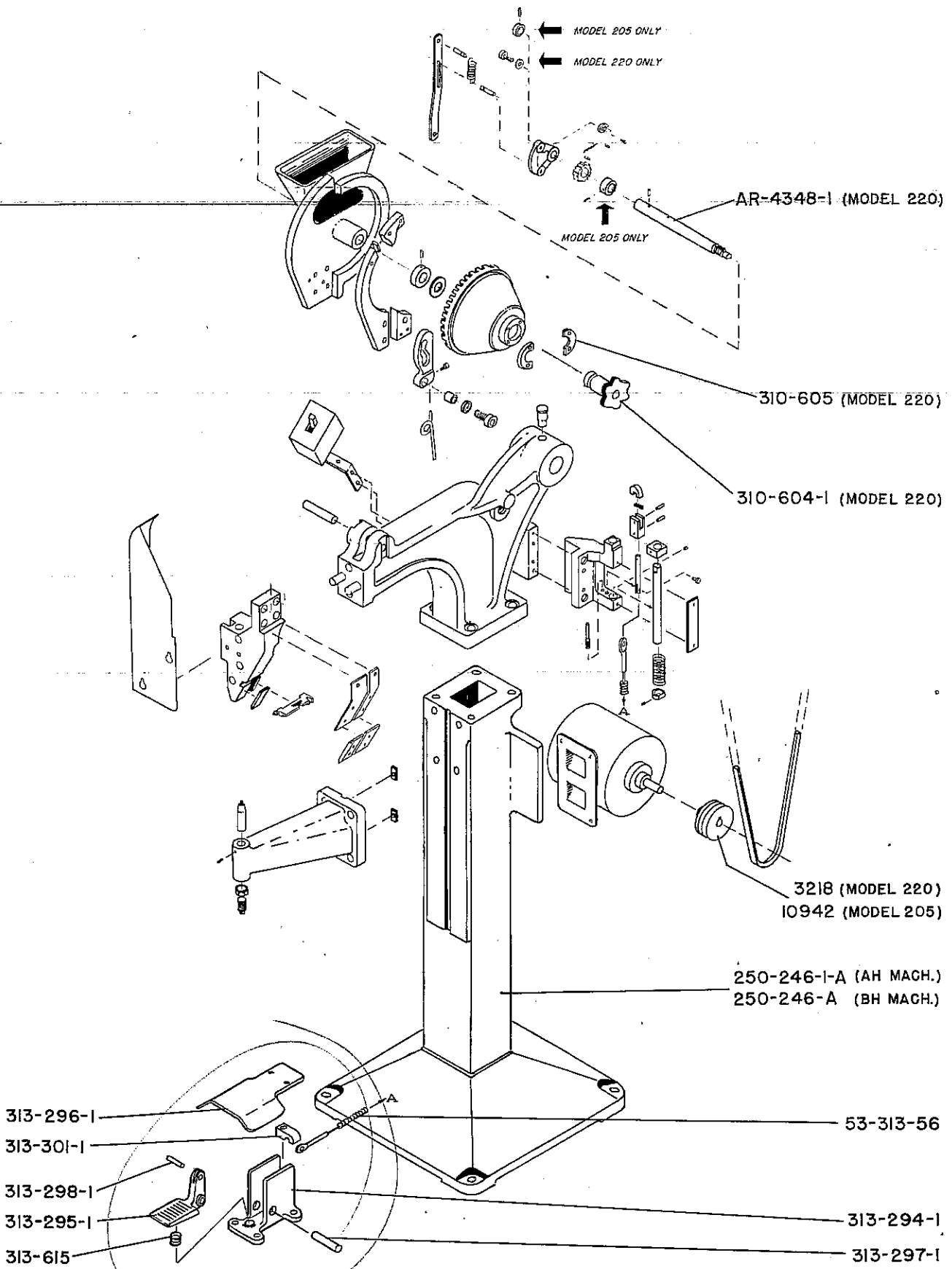


**MILFORD RIVET  
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ELYRIA, OHIO • AURORA, ILLINOIS • HATBORO, PENNSYLVANIA



**HEAD, BASE, TRIP AND DRIVE ASSEMBLIES**



**SUPPLEMENT FOR MODELS 205 & 220**

Parts and/or part numbers not shown on this sheet will be found in the main pages of our Model 205 & 220 Parts Catalog.

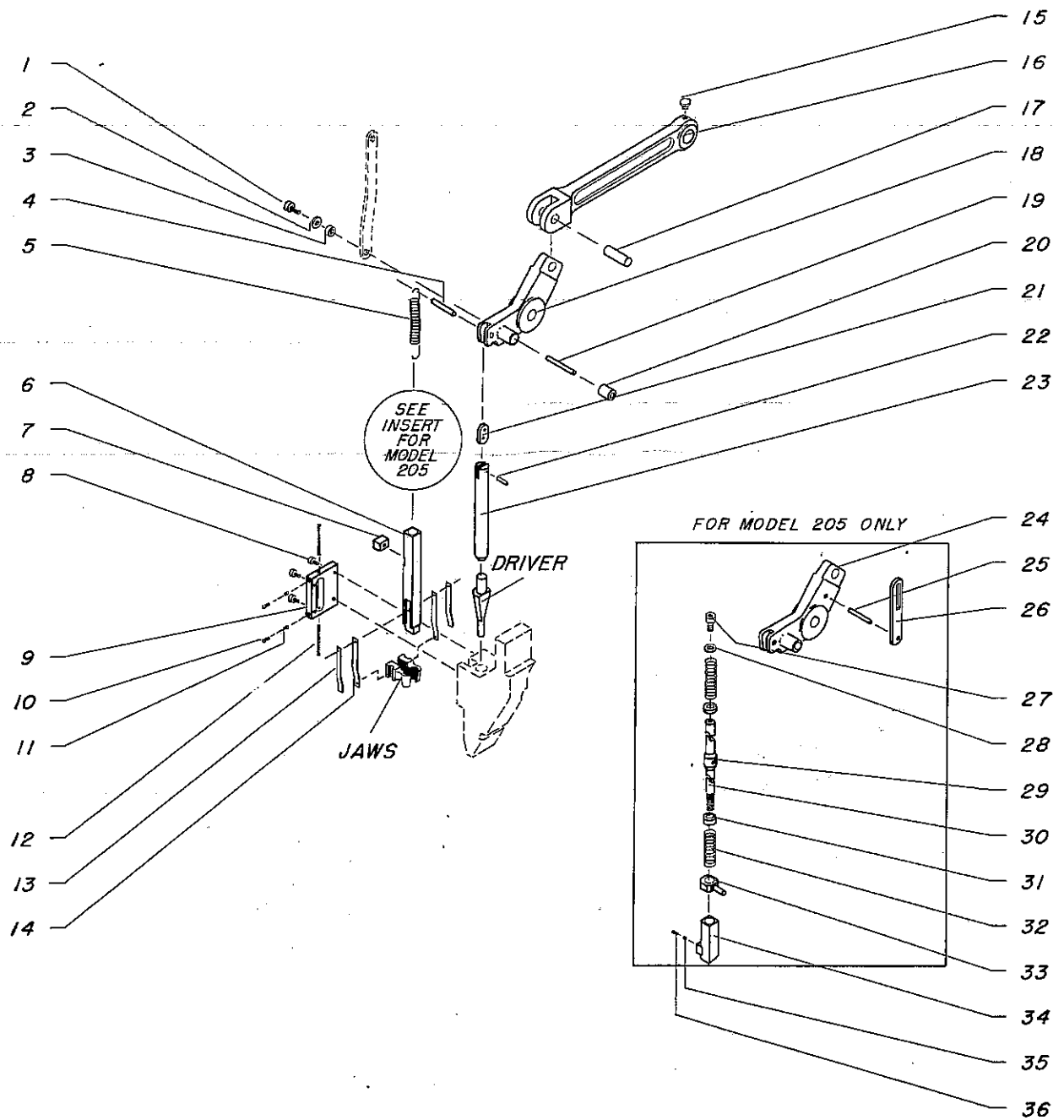
# SUPPLEMENT FOR MODELS 205 & 220

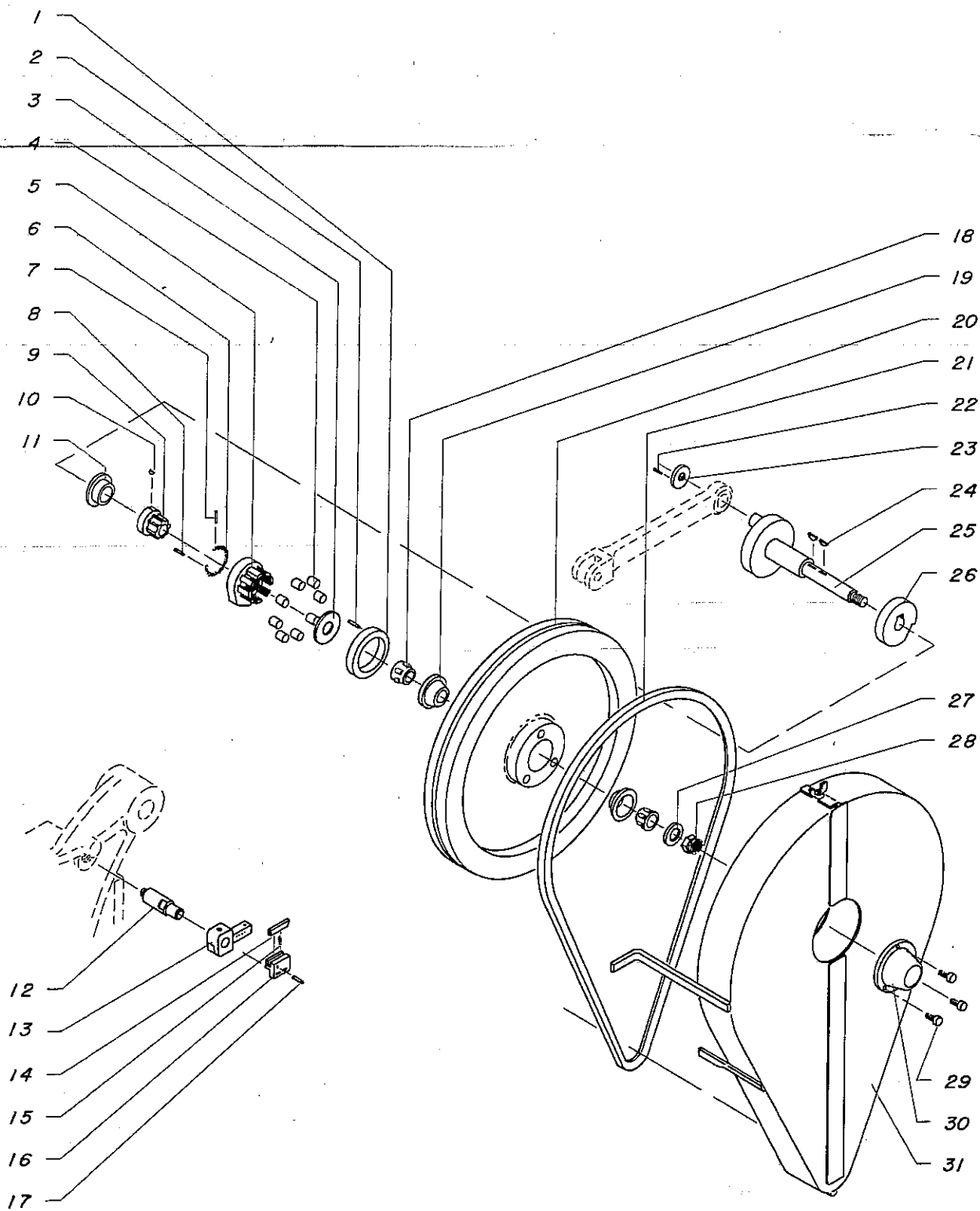
MODEL 205 REVISION #2  
MODEL 220 REVISION #3

## PARTS LISTING

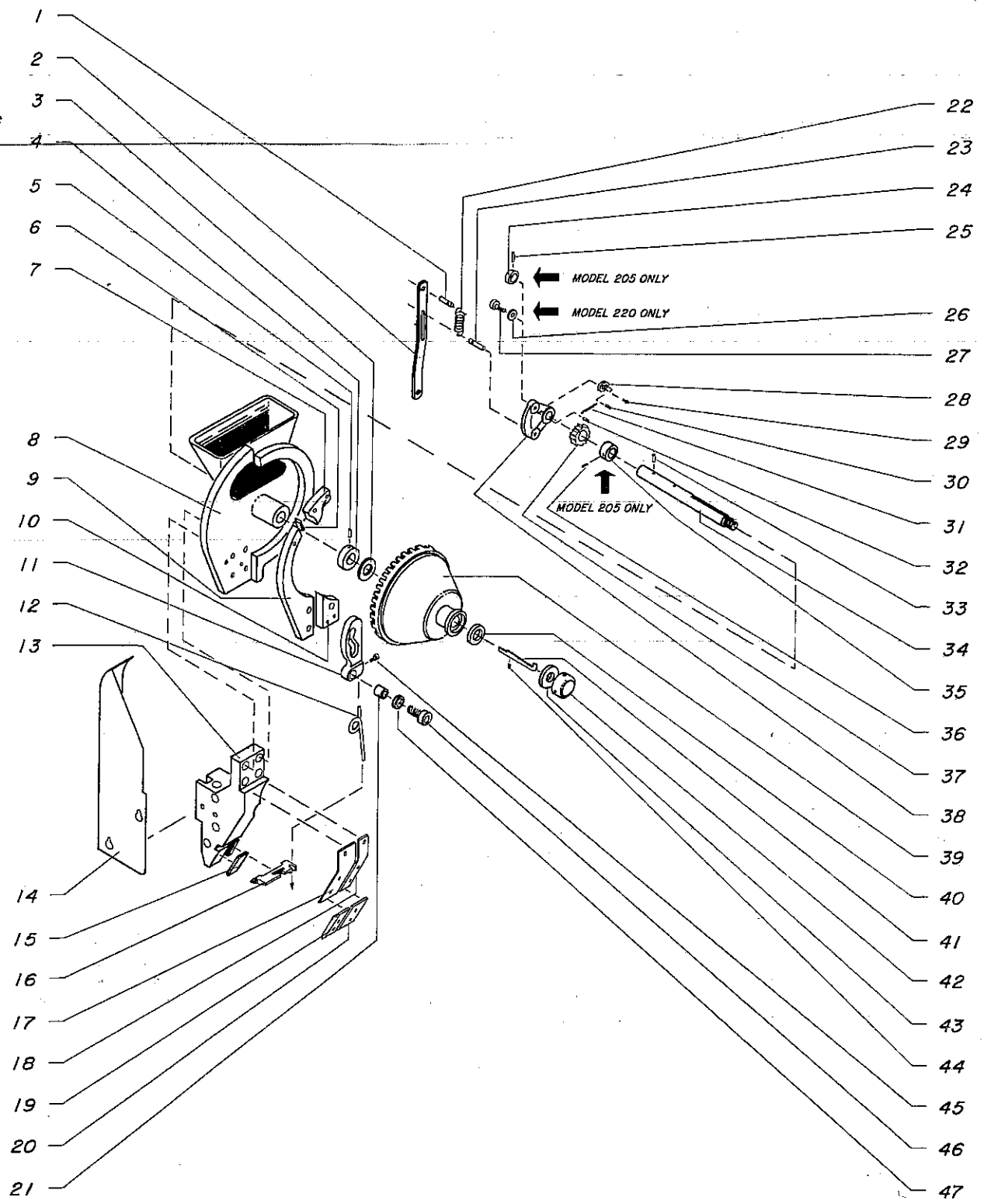
| PART NO.    | PART NAME                           |
|-------------|-------------------------------------|
| 3218        | Motor Pulley (Model 220)            |
| 10942       | Motor Pulley (Model 205)            |
| 310-604-1   | Hand Wheel (Model 220)              |
| 310-605     | Hand Wheel Plates (Model 220)       |
| 313-294-1   | Base                                |
| 313-295-1   | Treadle Pad                         |
| 313-296-1   | Treadle Guard                       |
| 313-297-1   | Pivot Pin                           |
| 313-298-1   | Pivot Pin                           |
| 313-301-1   | Cable Clamp                         |
| 313-615     | Foot Trip Spring                    |
| 53-313-56   | Cable Assembly                      |
| 250-246-1-A | Pedestal Column Assembly (AH Mach.) |
| 250-246-A   | Pedestal Column Assembly (BH Mach.) |
| AR-4348-1   | Hopper Shaft (Model 220)            |

Parts and/or part numbers not shown on this sheet will be found in the main pages of our Model 205 & 220 Parts Catalog.





**DRIVESHAFT, CLUTCH AND BACKSTOP ASSEMBLIES**



**HOPPER AND RAIL ASSEMBLIES**



# PARTS LISTING

## HEAD, BASE, TRIP AND DRIVE ASSEMBLIES

| ITEM NO. | DESCRIPTION   | PART NO.  |
|----------|---|-----------|
| 1        | Oil Cup   | SH-120    |
| 2        | Head  | 10506-1   |
| 3        | Starting Switch   | SE-4B-1   |
| 4        | Switch Bracket  | AR-4323   |
| 5        | Setting Lever Pin                                       | 4779      |
| 6        | Dowel Pin—5/16 x 1 1/2                                  | RO-37     |
| 7        | Pedestal—for AH model only                              | 10505-1   |
| 8        | Dowel Pin—5/16 x 1 1/2                                  | RO-37     |
| 9        | Key   | 11070     |
| 10       | Anvil Bracket   | 10726     |
| 11       | Hex Jam Nut—9/16-18                                     | SB-25     |
| 12       | Threaded Anvil  | AR-4012   |
| 13       | Spring Hook   | 10288     |
| 14       | Spring  | S-71      |
| 15       | Treadle Lever   | 4709      |
| 16       | Treadle Lever Rod Pin                                   | 4778      |
| 17       | Treadle Foot Pad  | 6834      |
| 18       | Trip Bracket  | 10859     |
| 19       | Latch Pull Rod  | ARL-5545  |
| 20       | Latch   | AR-4126   |
| 21       | Latch Spring  | AR-4139   |
| 22       | Spirol Pin  | RO-79     |
| 23       | Roll Pin—1/8 x 3/4                                      | RO-66     |
| 24       | Latch Carrier   | AR-4125   |
| 25       | Clutch Latch Collar                                     | AR-4040   |
| 26       | Brass Pad   | 11071-4   |
| 27       | Clevis Pin  | ARL-5574  |
| 28       | Clutch Stop Rod   | 10861     |
| 29       | Guide Plate   | 10863     |
| 30       | V-Belt  | 5L-670    |
| 31       | Clutch Stop Rod Spring                                  | AR-4041   |
| 32       | Clutch Stop Rod Collar                                  | AR-4039   |
| 33       | Roll Pin  | RO-65     |
| 34       | Latch Release Rod                                       | AR-4128-1 |
| 35       | Motor Pulley—5/8 bore                                   | 10942     |
| 36       | Motor—1/3 h.p., 1725 r.p.m.<br>220 Model only           | SE-148-1  |
|          | Motor—1/3 h.p., 1140 r.p.m.<br>205 Model only           | SE-120-1  |
| 37       | Treadle Lever Pin                                       | 4777      |
| 38       | Pedestal—for BH model only                              | 10505     |
| 39       | Trip Rod  | 4755-1    |
| 40       | Trip Rod Stud   | 4619-1    |
| 41       | SQ.H.S.S.—5/16-18 x 3/4<br>Roll Set<br>Arm—for AH model | SB-311    |

## LINKAGE, JAWSLIDE AND DRIVER ASSEMBLIES

| ITEM NO.                  | DESCRIPTION              | PART NO.   |
|---------------------------|--------------------------|------------|
| <b>220 and 205 Models</b> |                          |            |
| 8                         | S.H.C.S.—10-32 x 3/8     | SB-339     |
| 9                         | Raceblock Cover          | 10471      |
| 10                        | S.H.S.S.—8-32 x 3/16     | SB-241     |
| 11                        | Brass Pad                | 11071-6    |
| 12                        | Stop Screw               | SAR-2063-1 |
| 13                        | Jaw Spring Reinforcement | 3354-3     |
| 14                        | Jaw Spring               | 3354       |
| 15                        | Oiler                    | SM-77      |
| 16                        | Connecting Rod           | 10805      |
| 17                        | Setting Lever Yoke Pin   | 4780       |
| 19                        | Stud                     | 27         |
| 20                        | Roller                   | 28         |

### 220 Model Only

|   |                        |        |
|---|------------------------|--------|
| 1 | S.H.C.S.—5/16-18 x 3/4 | SB-347 |
| 2 | Flat Washer—5/16       | SB-407 |

|    |                      |         |
|----|----------------------|---------|
| 3  | Ratchet Link Bushing | 10818   |
| 4  | Upper Link Pin       | 10813-1 |
| 5  | Spring               | AR-4094 |
| 6  | Jaw Slide            | 10739-1 |
| 7  | Jaw Slide Block      | 10997   |
| 18 | Setting Lever        | 4579-2  |
| 21 | Setting Lever Link   | 7057-J  |
| 22 | Lower Link Pin       | 10819   |
| 23 | Spindle              | 16-2    |

### 205 Model Only

|    |                      |           |
|----|----------------------|-----------|
| 4  | Upper Link Pin       | 220-004   |
| 21 | Setting Lever Link   | 220-008   |
| 23 | Spindle              | 220-006   |
| 24 | Setting Lever        | 220-009   |
| 25 | Driving Pin          | 220-003   |
| 26 | Hopper Drive Link    | 220-005   |
| 27 | S.H.C.S.—10-32 x 1/2 | SB-348    |
| 28 | Steel Burr—3/16      | SB-407    |
| 29 | Collar               | 250-114   |
| 30 | Jaw Slide Drive Rod  | 220-001   |
| 31 | Spring Washer        | 250-115   |
| 32 | Jaw Slide Spring     | 220-002   |
| 33 | Spindle Pin          | 220-007   |
| 34 | Jaw Slide Assembly   | 10739-3-A |
| 35 | Brass Pad            | 11071-5   |
| 36 | S.H.S.S.—10-32 x 1/4 | SB-246    |

## DRIVESHAFT, CLUTCH AND BACKSTOP ASSEMBLIES

| ITEM NO. | DESCRIPTION               | PART NO.     |
|----------|---------------------------|--------------|
| 1        | Friction Ring             | AR-1802-2-P  |
| 2        | Dowel Pin                 | AR-1808      |
| 3        | Clutch Retainer Washer    | AR-4219      |
| 4        | Roller                    | AR-1805-2-P  |
| 5        | Stop Cam                  | AR-1804-2-P  |
| 6        | Spring                    | AR-1806-2-P  |
| 7        | Roll Pin—1/8 x 3/4        | RO-56        |
| 8        | Roll Pin—1/8 x 3/8        | RO-77        |
| 9        | Driving Flange Cam        | AR-4079C-2-P |
| 10       | Woodruff Key—#3-1/2 x 1/2 | SH-79        |
| 11       | Driving Flange Rim        | AR-4079R-2-P |
| 12       | Brake Stud                | 10864        |
| 13       | Block Assembly            | 11031-AS     |
| 14       | Back Stop Latch           | 11030        |
| 15       | Spring                    | 11063        |
| 16       | Back Stop Carrier         | 11029        |
| 17       | Roll Pin—3/16 x 3/4       | RO-67        |
| 18       | Bearing Cone              | AR-4056      |
| 19       | Bearing Cup               | AR-4057      |
| 20       | Flywheel                  | 10898        |
| 21       | V-Belt                    | 5L-670       |
| 22       | Dowel Pin                 | RO-8         |
| 23       | Crankshaft Washer         | 4745         |
| 24       | Woodruff Key—letter A     | SH-98        |
| 25       | Disc Crank                | 4580-1       |
| 26       | Brake Drum                | 10860-1      |
| 27       | Washer—5/8                | SB-408       |
| 28       | Castellated Nut—5/8-18    | SB-24        |
| 29       | S.H.C.S.—10-32 x 5/8      | SB-331       |
| 30       | Flywheel Cap              | AR-4025      |
| 31       | Flywheel Guard Assembly   | 10699-AS     |

## HOPPER AND RAIL ASSEMBLIES

| ITEM NO.                  | DESCRIPTION  | PART NO. |
|---------------------------|--------------|----------|
| <b>220 and 205 Models</b> |              |          |
| 1                         | Spring Stud  | AR-4095  |
| 2                         | Ratchet Link | 10810    |

|     |                       |              |
|-----|-----------------------|--------------|
| 5   | Roll Pin—1/8 x 1 1/2  | RO-138       |
| 6   | Cam Out Shield        | ARL-5600     |
| 11  | Shuttle Lever         | 110-1        |
| 12  | Shuttle Spring        | 10852        |
| 15* | Throat Plate          | 90-( )       |
| 16* | Shuttle Assembly      | 10420-( )-AS |
| 17* | Left Hand Upper Rail  | 100-( )      |
| 18* | Right Hand Upper Rail | 99-( )       |
| 19* | Left Hand End Plate   | 102-( )      |
| 20* | Right Hand End Plate  | 101-( )      |
| 21  | Sleeve                | 11058        |
| 26  | Flat Washer—5/8       | SB-402       |
| 27  | S.H.C.S.—3/8-16 x 1/2 | SB-323       |
| 45  | S.H.C.S.—3/8-24 x 7/8 | SB-350-1     |
| 46  | Washer                | 11059        |
| 47  | S.H.C.S.—8-32 x 1/2   | SB-297       |

### 220 Model Only

|    |                        |             |
|----|------------------------|-------------|
| 3* | Spacer                 | AR-4266-( ) |
| 4  | Hopper Shaft Collar    | AR-4179     |
| 7  | Cam Out                | AR-62-L     |
| 8  | Hopper Back            | AR-4013-L   |
| 9* | C.I. Rivet Guide       | AR-4015-( ) |
| 10 | Steel Rivet Guide      | AR-4077-L   |
| 13 | Raceblock              | 10425       |
| 14 | Raceblock Guard        | 10940       |
| 22 | Ratchet Link Spring    | AR-4046     |
| 23 | Ratchet Link Guide Pin | 10814       |
| 28 | Ratchet Pawl           | SAR-316     |
| 29 | Ratchet Pawl Pivot Pin | SAR-318-B   |
| 30 | Pawl Spring Pin        | AR-4086     |
| 31 | Ratchet Pawl Spring    | SAR-317     |
| 32 | Hopper Arm Spring Pin  | SAR-313     |
| 33 | Hopper Shaft Key       | AR-4088     |
| 34 | Hopper Shaft           | AR-4348     |
| 37 | Ratchet Wheel          | AR-4058     |
| 38 | Hopper Arm             | SAR-311     |
| 39 | Hopper Barrel          | AR-4166-SF  |
| 40 | Hopper Barrel Insert   | AR-4352     |
| 41 | Hopper Barrel Key      | AR-4351     |
| 42 | Hopper Shaft Cap       | AR-4349     |
| 43 | Hopper Shaft Jam Nut   | AR-4350     |
| 44 | Sliding Key Spring     | AR-4353     |

### 205 Model Only

|     |                        |              |
|-----|------------------------|--------------|
| 3   | Spacer                 | AR-5536      |
| 4   | Hopper Shaft Collar    | ARL-5533     |
| 7   | Cam Out                | AR-5531-R    |
| 8   | Hopper Back            | 220-210      |
| 9*  | C.I. Rivet Guide       | ARL-5529-( ) |
| 10* | Steel Rivet Guide      | ARL-5555-R   |
| 13  | Raceblock              | 220-011      |
| 14  | Raceblock Guard        | 220-012      |
| 22  | Ratchet Link Spring    | ARL-5541     |
| 23  | Ratchet Link Guide Pin | AR-5092      |
| 24  | Hopper Shaft Collar    | AR-5243      |
| 25  | Spirol Pin—3/32 x 3/4  | RO-63        |
| 28  | Ratchet Pawl           | AR-5020      |
| 29  | Ratchet Pawl Pivot Pin | ARL-5542     |
| 30  | Pawl Spring Pin        | AR-5286      |
| 31  | Ratchet Pawl Spring    | AR-5111      |
| 32  | Hopper Arm Spring Pin  | AR-5287      |
| 33  | Hopper Shaft Key       | AR-5282      |
| 34  | Hopper Shaft           | AR-5636      |
| 35  | Ratchet Wheel Collar   | ARL-5583-1   |
| 36  | S.H.S.S.—1/4-20 x 1/4  | SB-269       |
| 37  | Ratchet Wheel          | AR-5021      |
| 38  | Hopper Arm             | AR-5209      |
| 39  | Hopper Barrel          | AR-5527      |
| 40  | Hopper Barrel Insert   | ARL-5632     |
| 41  | Hopper Barrel Key      | ARL-5633     |
| 42  | Hopper Shaft Cap       | ARL-5635     |
| 43  | Hopper Shaft Jam Nut   | ARL-5634     |
| 44  | Sliding Key Spring     | ARL-5637     |

\*NOTE: Tooled to specific rivet dimensions. Be sure to include rivet samples or dimensions when ordering.

# GENERAL INSTALLATION AND OPERATION INSTRUCTIONS

## UNCRATING

Before uncrating machine, inspect crate and visible parts of machine for damage. Unpack machine carefully. Do not lift machine from crate base with a sling or hoist that bears against any part of the rivet hopper or rivet feed mechanism. Use of a fork lift under the base is preferable.

## INSTALLATION

When placing machine in desired location, position it so that parts requiring lubrication and eventual servicing may be easily reached. The floor on which the machine is to rest should be even. Fasten machine securely to floor with lag screws.

## LUBRICATION

Periodic oiling of all moving parts is necessary to maintain the machine in proper working condition. Too much oil, however, will prevent the machine from working properly. Excessive oil on the crankshaft or flywheel will interfere with the operation of the clutch and excessive oil on the hopper shaft will result in oil flowing into the hopper barrel.

The flywheel, crankshaft, hopper shaft, driver and jaw slides should be oiled daily, sparingly. Do not oil any part of the hopper and rail assembly. All oils points on machine are marked with red paint.

## TESTING

Step on foot pedal to release clutch and turn flywheel over by hand to be certain all moving parts are operating properly. As the flywheel nears the end of one complete cycle, spin flywheel hard so that clutch will reload.

Connect motor and cycle machine several times under power by stepping on foot pedal. If you are supplying and installing your own motor, be certain that you are using a  $\frac{1}{2}$  HP, 1725 RPM motor and the "V" belt and motor pulley that accompanied the machine.

## ADJUSTMENT OF SETTING TOOLS

To check the roll set for proper adjustment, place the work on the roll set so that the plunger protrudes through the work. Then bring the driver down to the work by stepping on the foot pedal and turning the flywheel by hand. Turn the roll set adjusting screw located directly beneath the roll set until the work is held snugly between the driver and the nose of the roll set. Be certain that the driver is at the bottom of its stroke and that there is no rivet in the jaws when this adjustment is made. Return the driver to the top of its stroke, spinning the flywheel hard to reload the clutch. Tighten set screw to lock roll set and tighten check nut to lock roll set adjusting screw after final adjustment has been made.

Next pull the jaws, by hand, down to the roll set plunger. Adjust the down position of the jaws so that there is approximately a  $\frac{1}{16}$ " gap between the tip of the roll set plunger and the bottom of the nose of the jaws.

## OPERATION OF MACHINE

On completion of the adjustment of the setting tools, partially load the hopper with rivets, turn the hopper by hand to initially fill the rails and make a trial run by riveting a few pieces of work under power as a final check to see if the machine is riveting satisfactorily. It is suggested that the flywheel guard not be installed until the machine is ready for a production run.

There are several points that must be kept in mind in order to insure successful operation of the machine:

- 1 Do not load hopper over  $\frac{1}{3}$  full with rivets.
- 2 Keep foreign matter out of hopper.
- 3 Keep hopper and rails free of dirt and oil.
- 4 Do not attempt to free rivet jams in hopper and rails with any type of hard or sharp instrument.
- 5 Be certain that roll set plunger at all times protrudes through the work before setting a rivet.



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