

 **Vintage  
Windings**

MODEL 108

operator's  
manual  
and  
parts list

**ESSEX<sup>®</sup>**  
machinery

**INSTRUCTION MANUAL  
& PARTS CATALOG  
FOR THE  
MODEL 108  
COIL  
WINDING  
MACHINE**



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## INSTRUCTIONS FOR ORDERING REPAIR PARTS

The following suggestions for ordering repair parts are offered which, if followed, will avoid expensive delays caused by correspondence and communications as a result of improper or inadequate descriptions.

1. Give part name and number exactly as in catalog. Numbers marked 'X' represent an assembly of two or more pieces. If the part desired is not illustrated, or if in doubt, send complete description. Reference can also be made to last invoice.
2. State clearly the quantity of each part desired.
3. When ordering gears, give the number of teeth, width of face, size of bore, length of hub, and outside diameter.
4. When ordering pulleys, give diameter, width of face, straight or crown, and size of bore. Also state whether plain, flanged, or V-belt type.

5. Give exact shipping instructions- Parcel Post, express, or freight-and correct shipping address.

6. Give date of catalog the part numbers were taken from and serial number of machine to which parts will be applied.

7. When improvements are made in the design of parts, the latest design is supplied automatically when the parts are interchangeable.

8. Order only genuine Fort Wayne replacement parts for top level performance of your machines.

9. Please mail, phone, or telex your orders to:



[www.VintageWindings.com](http://www.VintageWindings.com)

## PART SYMBOLS

Many of the parts shown in this catalog, especially commercial items that can be classified by common characteristics, are symbolized by combinations of letters and numbers, as for example, WA-503, which means Washer 503. Below is a list of letter prefixes of these classifications with their explanations.

BB	Ball Bearings	EM	Electric Motors	P	Purchase Locally
BE	Belts	ES	Electrical Switches		if available
BJ	Ball Joints	KE	Keys	RN	Rings
BO	Bolts	NU	Nuts	RV	Rivets
BU	Bushings	OL	Oilers	RD	Rods
CN	Chain	PN	Pins	SC	Screws
CT	Chaplets	PP	Pipe	ST	Studs
CS	Coil Spring	PF	Pipe Fittings	TU	Tubing
CO	Collars	EP	Plugs-Expansion	WA	Washer
EC	Overload Heater Elements	PO	Porcelains	WK	Wicking
EF	Electric Fittings All Types	PU	Pulleys	WR	Wrenches

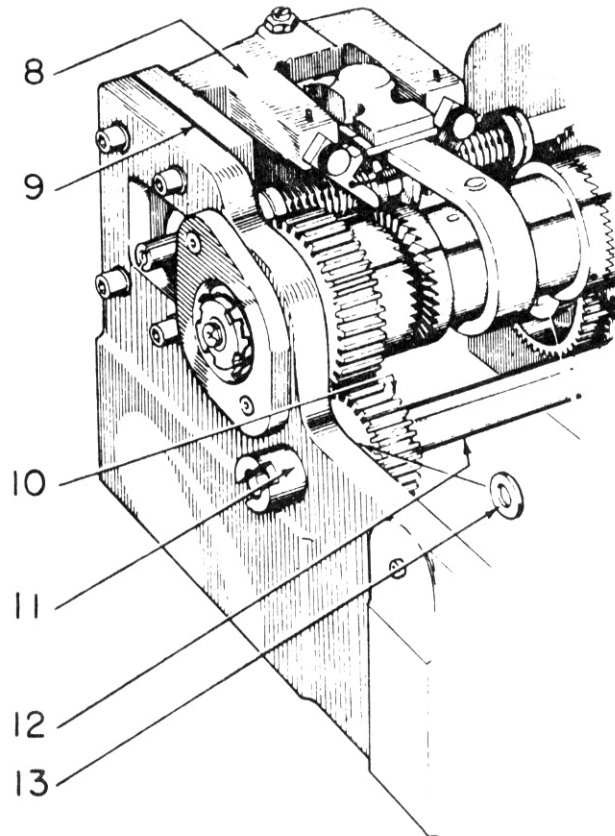
(Continued on Page 4)



# INSTRUCTIONS FOR ORDERING REPAIR PARTS

(CONTINUED)

Major parts and assemblies are identified on the parts plate by key numbers for rapid identification of the complete parts data on the opposite page.



KEY NO.	PART NO.	PART NAME
8 . . .	<b>108-38X</b> . . .	Clutch Yoke Support Bracket Assembly
	<b>SC-6134</b> . . .	Clutch Yoke Support Bracket Screw - Hollow Set - Flat Point #5-40 x $\frac{3}{16}$ "
	<b>SC-7634</b> . . .	Clutch Yoke Support Bracket Screw - Headless - Cone Point $\frac{1}{4}$ " - 20 x $\frac{3}{4}$ "
	<b>NU-300</b> . . .	Clutch Yoke Support Bracket Nut
	<b>SC-2910</b> . . .	Clutch Yoke Support Bracket Screw
	<b>WA-530CA</b> . . .	Clutch Yoke Support Bracket Washer

"X" after a part number signifies a complete assembly consisting of all of the parts immediately following and indented below it. Components of an inseparably united assembly are not listed after the assembly number on the parts list.

Part numbers listed but not indented under the same key number are closely related to the major part but are not part of an assembly. Major parts carrying the same number as the assembly are not listed separately in the breakdown of the assembly components.

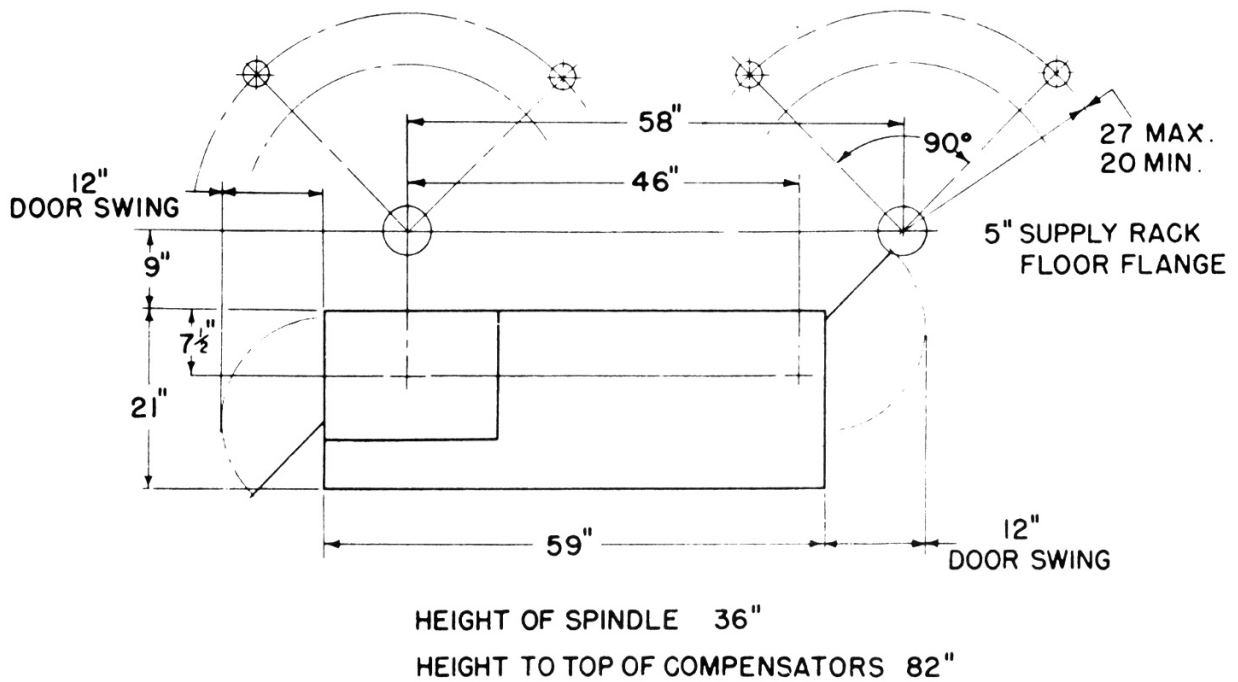
## INSTALLATION AND OPERATION

The No. 108 Manual Paper-Feed Coil Winder is packed in two cases. One case contains the machine, and the other the supply attachment. All the floor flanges, wire supply support extensions and braces have been removed from the supply attachment to permit more compact packing.

**WARNING;** Use care in removing the machine and parts from cases to prevent breakage. Check all miscellaneous parts with packing list.

Remove the top and all sides of the machine case and lift the machine off the platform.

### FLOOR PLAN

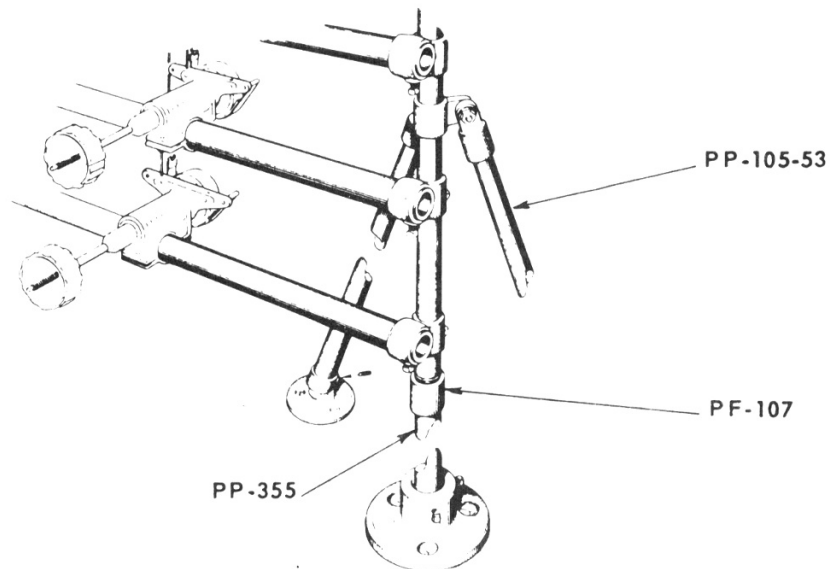


**INSTALLATION:** Place the machine in the position in which it will be located, allowing enough space for servicing. Carefully level the machine lengthwise and crosswise using an accurate spirit level on the table top. Raise the Paper Feed Shelf if necessary to make room for the level. (Leveling the machine properly reduces wear and insures uniform level of the oil in the case.) When the machine is level, fasten it to the floor. The holes for the lag screws will be found inside the two columns.



#### SETTING UP WIRE SUPPLY RACK:

1. Remove the Wire Supply from its packing case and place it on a truck or box with Spool Spindles pointing upward.
2. Screw the Wire Supply Support Extensions (PP-355) into the Couplings (PF-107) on the upper supports and add the Floor Flanges at the bottom.
3. Replace the smaller Floor Flanges on the four braces.
4. Set up the Supply with the upright supports about 4 1/2" from the back edge of the machine Bed and centralize the Spool Spindles, with the Wire Guide Frame Support.
5. Attach the Braces (PP-105-53) to the clamps just above the couplings and screw the floor flanges to the floor.
6. Using a short level on the cross bars of the supply, readjust the supports and braces so that the spindles in each row are all at the same level.



**ELECTRICAL EQUIPMENT:** The panel in the rear of the left-hand column contains a combination receptacle. The Three-Contact Wire Breakage Detector Cable from the Wire Supply Rack must be plugged into the upper section of the receptacle. A Soldering Iron, Work Light or other load not exceeding 100 watts may be plugged into the lower section.

**SWITCHES:** A Cutler-Hammer Safety Switch is located at the rear of the left-hand column.

Rapid Traverse Push Button Switches are located in the front of the gear case below the "open wind" - "close wind" Handwheel (E).

Fuse and overload protection are provided in the motor and control circuits and are located within the Control Enclosure at rear of left column.

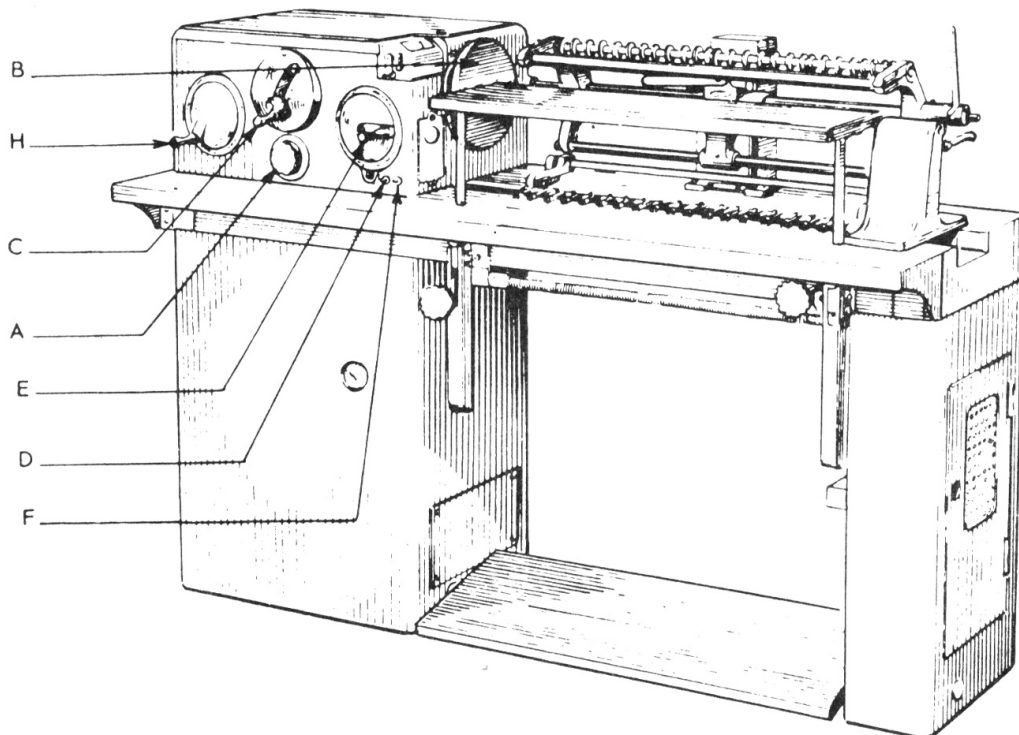
Power source should agree with the information on the Electrical Data Plate affixed to the panel in the rear of the left-hand column.

Power should be brought to the No. 108 Coil Winder at the Control Enclosure through a Pair of #12 Conductors: see wiring diagram shipped with the machine. Machine should be grounded.

**COIL ANALYSIS:** To set up the machine properly, first analyze the coil to be wound; check the wire size, number of turns, turns per layer, coil length, diameter and insulation.

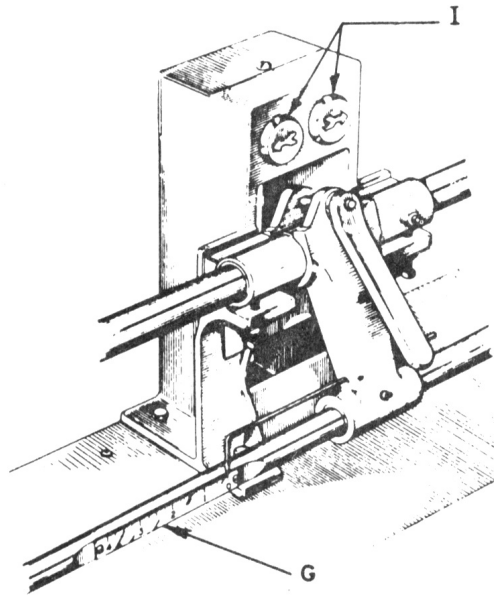
#### SET-UP PROCEDURE:

1. Pull out the Master Ratio Knob (A) and turn it toward the Range for the wire size to be wound. At the same time, slowly turn the Handwheel (B) until the pin on the inside face of the knob drops into the locating hole.
2. Pull out the Wire Size Selector Handle (C) and move it until it is opposite the number on the plate that corresponds to the wire size called for in the specifications. Set the handle in the locating hole. To do this, it may be necessary to rotate the Handwheel (B) slowly until the handle drops into the locating hole.





3. Start the machine. Press the left-hand Rapid Traverse Button (D) and stop the traverse just before it reaches "zero" on the scale (G). Then turn the Handwheel (B) away from you until the Indicator Lights (I) change. Check alignment of pointer with "0" on scale (G).
4. Next, turn the "open wind" - "close wind" Handle (E) as far as it will go toward "open" without forcing it.
5. From extreme decrease, turn Handle (H) "turns per layer" toward increase, 12 complete turns for each inch of coil length.



6. Set all the white dials on the Counter at "zero" and the silver-ed dials for the total turns in the coil. Then run the machine until the counter registers the number of turns per layer required.

If the Indicator Lights (I) change before the counter registers the desired number of turns per layer, reset the traverse at "zero" on the scale, as described in step 3; turn Handle (H) toward increase to extend the winding length, then repeat this step.

7. Rotate the Handle (H) toward decrease until the light changes.

**Warning: DO NOT FORCE THE HANDLE**

8. Turn the Handle (E) toward "close wind" until the pointer registers the desired layer length on the Scale (G). This completes the set-up.

As a check on the accuracy of turns per layer, you should turn the counter back to "zero": run the machine until the indicator light changes, and take another counter reading. If any minor corrections for turns per layer are necessary, they can be made with the Handle (H).

**RAPID TRAVERSE:** To traverse the wire rapidly to the left-hand end of the wire layer, press the left-hand Rapid Traverse Button (D). Press the right-hand one (F) to do the same thing in the opposite direction.

**INSERTING LEADS:** At the right-hand end of the Traverse Shaft is a Margin Cam Lever that protrudes through an angular slot in the Wire Guide Holder Sleeve. (See Illustration below.) This lever is locked by a ball plunger and should be in the neutral position before starting to wind. Press the lever backward when the guides are at the left-hand end of the coil and the wires will be carried outside the coil into the left-hand margin to facilitate locating for leads. With the guides at the right-hand end of the coils, pull the lever forward and the wires will be carried into the right-hand margin. Have the Master Ratio Knob (A) in neutral while winding on margins.

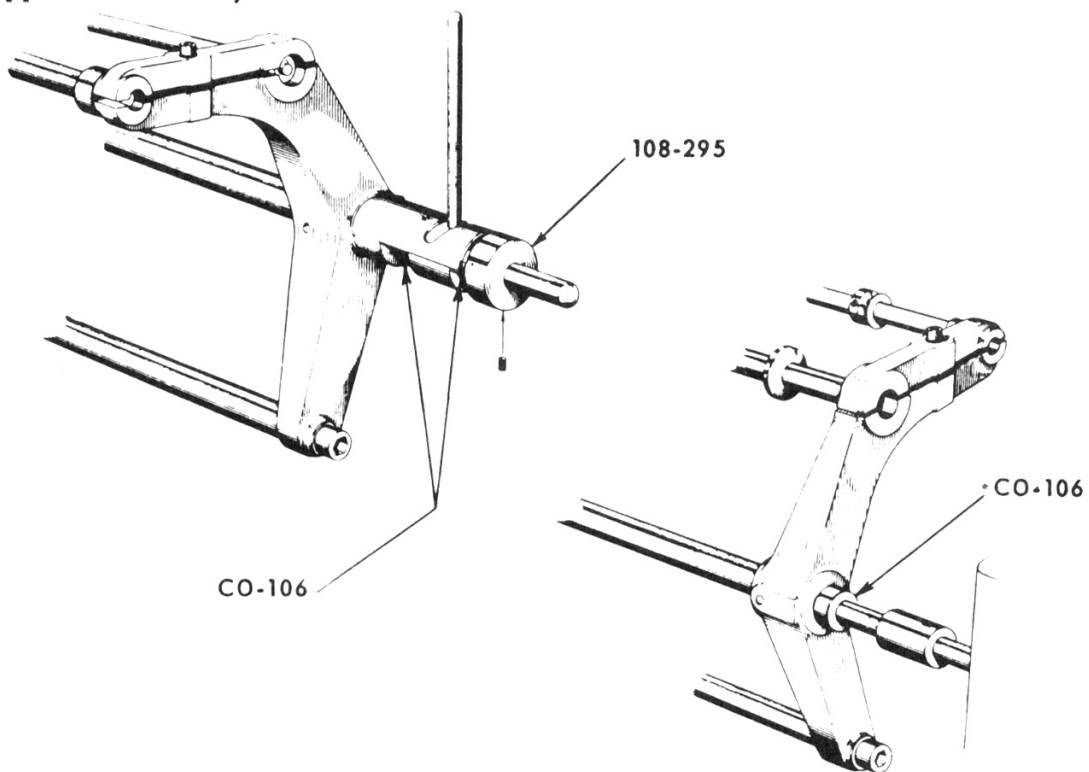
**MARGIN CAM LEVER ADJUSTMENT:** The wires can be carried a maximum of  $5/32$ " into either margin. Two Collars on the Traverse Bar (108-183) permit adjustment to locate them at any point inside of this limit. The adjustment is made as follows:

1. Loosen the Collars (108-295) and (CO-106).

**RIGHT-HAND MARGIN:**

2. With the pointer at some figure in excess of  $5/32$ " on the scale, such as  $1/4$ ",  $1/2$ " etc., pull the lever forward from neutral, until the pointer registers, on the scale, the desired distance that the wire should be brought out into the margin.

3. Set and tighten Collar (108-295) against the right-hand Wire Guide Support Assembly.





#### LEFT-HAND MARGIN:

4. Return the lever to neutral.
5. Press the lever backward until the pointer indicates the desired distance on the scale.
6. Set and tighten Collar (CO-106) against the left-hand Wire Guide Support Assembly.

**INSTALLING ARBOR:** Mount the coil tube on the arbor and set the arbor in place. At one end of the arbor is an insert with a hole that fits over a pin in the spindle. At the other end, there is an insert that fits into the tailstock. The handwheel and spindle have a slot into which the arbor fits and which acts as a driver for the arbor. To install the arbor, depress the tailstock handle, place the end of the arbor on the pin in the handwheel and raise the tailstock handle. In the top position, this handle locks and holds the arbor securely. The tailstock can be relocated for different lengths of arbors.

**TRANSFERRING COIL STICKS:** Before removing the finished coil stick, insert the end of the spare coil arbor in the slot in the handwheel and hold the arbor closely against the finished coil stick, then revolve both arbors one turn. The wires will hold the new arbor in place, and tape can then be applied to both arbors to anchor the wire turns. Cut the wires between the tapes; remove the finished coil stick and set the new one in the winding position. Also raise the Wire Guide Frame to provide ample space during this transfer operation.

**WIRE GUIDES:** The No. 108 Coil Winder can be equipped with individual adjustable wire guides or a basic Wire Guide Roll, 108-180. The latter can be grooved to specifications for one definite overall coil length, and is recommended for quick set-up when the coil specifications do not change too frequently.

#### SETTING ADJUSTABLE GUIDES:

1. Run the traverse all the way to the left.
2. Locate the center of the first guide at the left directly over the left-hand end of the wire layer on the first coil. The location of this point depends on the amount of selvage on each end of the coil stick.

3. With a pair of dividers or a gauge made to agree with the overall coil length, set the remaining guides so that the distance between their centers is equal to the overall coil length.

4. The overall coil length includes the wire layer and the paper extension at each end of the coil.

The following is suggested for the correct amount of paper extension:

Wire Size #19 through #29	1/8" at each coil end
Wire Size #30 through #37	3/32" at each coil end
Wire Size #38 through #44	1/16" at each coil end

Thus, on a coil containing #24 wire and having 1" length of wire layer, the guides should be located 1 1/4" apart.

**ADJUSTING WIRE GUIDES VERTICALLY:** Adjust the Clamp Handle (Key No. 12 Plate 12) until the clamp is tight enough to hold the Wire Guide Frame in a raised position but not so tight that it can't be raised easily. Adjust Elevation Stop Screw (Key No. 14 Plate 12) to allow about 1/2" clearance between the outside diameters of the Finished Coils and the Wire Guides when they are in the winding position.

**COIL MARKING:** Before coils are removed from the machine, they can be marked to indicate the correct points at which they should be sawed apart. This is done by marking blades that are mounted below the coil stick and are raised to contact it by means of a Marking Blade Control Lever on the inner side of the right-hand column. When not in use, the blades drop back into individual guards. The blades can be adjusted for various coil lengths.

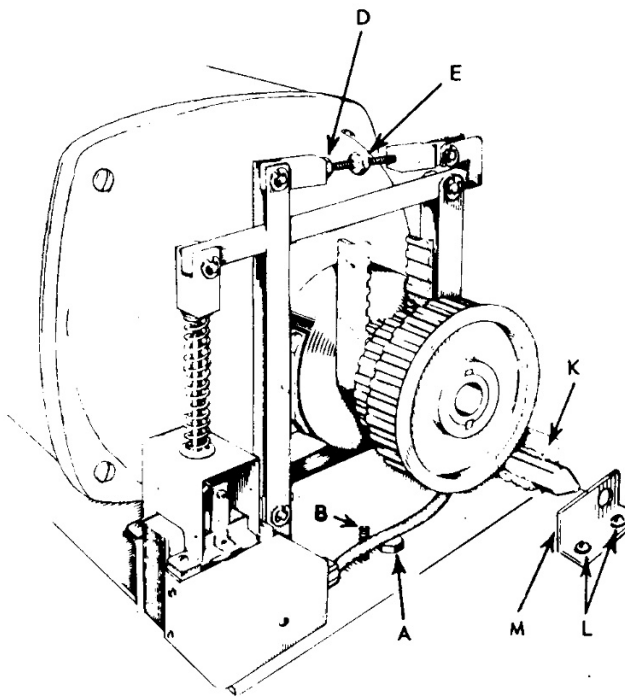
**PAPER FEED SHELF:** The Paper Feed Shelf is mounted in front of the operator on a horizontal track and can be adjusted both horizontally and vertically to locate it in the best position for the size of coil being wound. At the right-hand end of the front rim of the shelf is a latch that, when lifted, allows the shelf to be moved backward or forward. There are two knobs under the table top. The left-hand knob regulates the height to which the shelf can be raised and the right-hand knob locks it in position.

### TO ADJUST THE SHELF:

1. Loosen the left-hand knob.
2. With one hand on the shelf to prevent it from rising too abruptly, loosen the right-hand knob.
3. When shelf is at desired height, tighten left-hand knob to maintain this position.
4. To lock shelf in position, tighten right-hand knob.
5. To lower, loosen right-hand knob and depress to bottom, then tighten right-hand knob to maintain this position.

### BRAKE ADJUSTMENT:

1. Loosen Checknut (D).
2. Adjust Brake Adjusting Screw (E) until the machine stops in the desired number of spindle revolutions.
3. Tighten Checknut (D).
4. Be sure that motor turns freely when brake is off.



### SPINDLE DRIVE BELT ADJUSTMENT:

1. Adjust Allen Screw (B) until you get approximately 1" movement with your hand "C". See Page 13.

NOTE: When making this adjustment have belt on either high or intermediate speed steps of cone pulleys.

NOTE: Hex Head Cap Screw (A) is used only during shipping. It must be removed when machine is installed. To remove Motor Base (K) from machine - remove 2 screws (L) and Pivot Plate (M).

WINDING SPEEDS: The motor speed should be maintained at about 1800 R.P.M. for most economical operation. Consequently, three step cone pulleys have been provided to maintain the desired winding speed. The small motor pulley and large spindle pulley combination give a range of 0-700; the intermediate steps, 0-1500; the large motor pulley and a small spindle pulley, 0-3200, approximately. Thus if a spindle speed of 2400 is desired, by running the belt on the large step of the motor pulley the speed of the motor is kept at about 1800.

COUNTER: The "Veeder" counter has two sets of five dials; one white and one silvered. To set it for the number of wire turns required, rotate the crank at the end of the counter until all of the figures on the white dials appear in the window as zeros. Raise the cover and press the silvered dials toward the white dials and rotate one at a time until the required number on each is opposite "zero" on the white dials. Be sure that all dials lock when released. Next, rotate the Reset Crank two complete turns. If the required number appears on silvered dials, and all the white dials read "zero", the setting is correct. During winding, the white dials will always show the number of wire turns that have been wound. The silvered dials are used only to indicate the number of wire turns required.

#### STRAP-TYPE TENSION - WITH SOLID SPINDLE ADJUSTMENT AND OPERATION

Supply Holder Bars (12) are spaced 6 1/4" from center to center and are mounted in front of the Support Rods. The Compensator Bracket Bar (7) is mounted in back of the Support Rods and 8" above the top Supply Holder Bar.

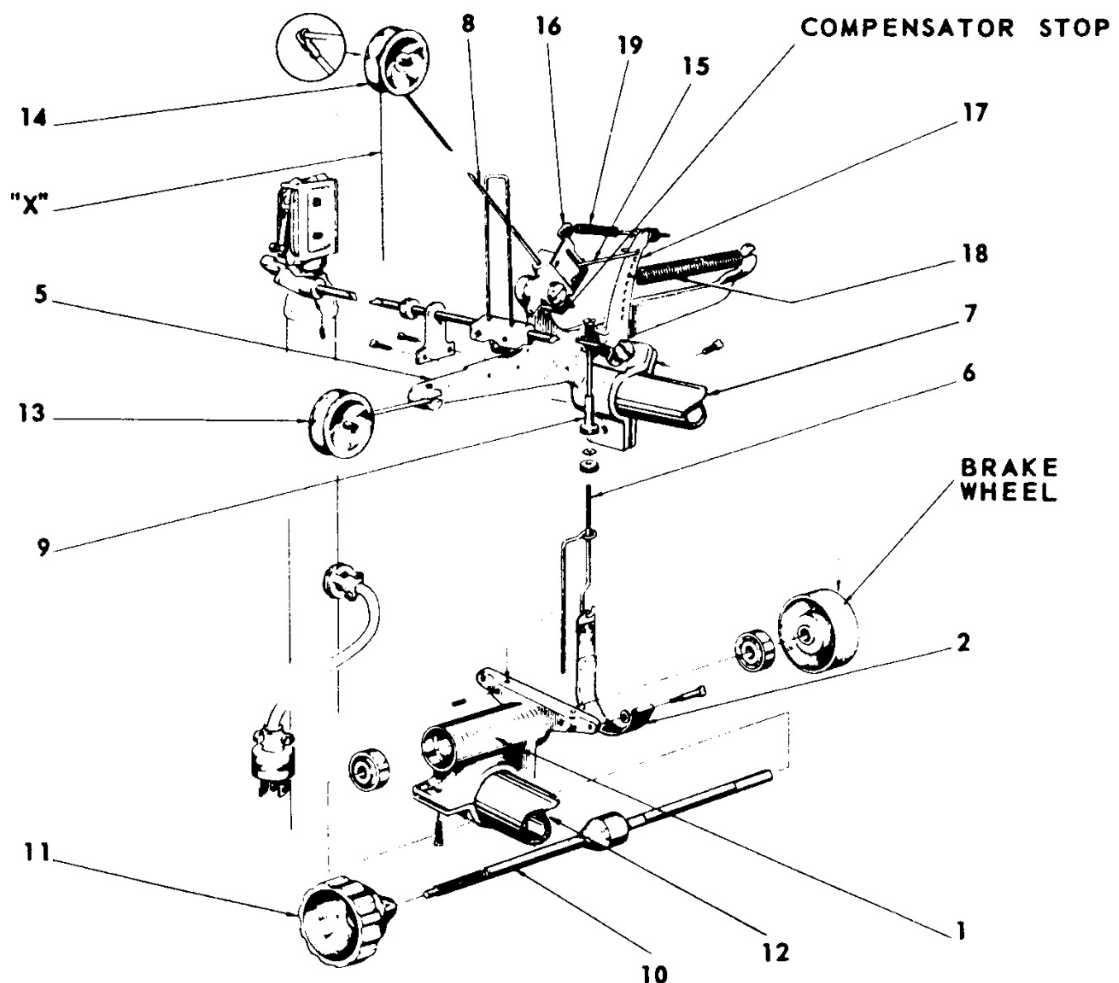
The Wire Supply Bracket (1) is provided with a ball bearing at each end. To install Spindle 104-946-3X, remove the Brake Wheel, pass the Spindle through the Bracket and replace the Brake Wheel. Locate the Bracket directly under the Compensator Bracket (5) so that the Brake Connecting Rod (6) is vertical, and in back of the Supply Holder Bars (12).

The solid type Spindle (10) has a double thread and a plastic Lock Nut (11) that can be spun on and off quickly. The thread is long enough to accommodate a variety of spool sizes. The Spindle revolves clockwise, when facing the front of the machine.

With the Compensator (8) at its extreme upper position, (against the stop) tighten the Brake Connecting Rod Adjuster (9) until the outer end of the Compensator is drawn down about 3". This provides an over-travel and extra take-up to prevent over-run after the Brake is applied.

Thread the wire from the spool up and over the Auxiliary Wire Guide Wheel (13) and Compensator Wheel (14).

To adjust the tension, pull downward on the wire marked "X" until the Tension Adjusting Lever Link (15) reaches the bottom of the slot in the Compensator Bearing Plate (16). At this point, the Tension Adjusting Lever Link (15) should start to move the Tension Adjusting Lever (17) forward, releasing the Brake. Tighten the Brake Connecting Rod Adjuster (9) to prevent the spool from revolving. (This is a temporary adjustment only.)



For the next step in the adjustment of the wire tension, we recommend the use of a sensitive Spring-Scale to measure the tension in ounces. Weights equal to the tension required may be substituted for the scale. This method of weighing the tension is especially desirable when winding coils in multiples as it will insure equal wire tension in each coil.



Make a loop in the end of wire "X" and hook the scale or weight into it, then Tension Spring (18) should be raised or lowered into the row of holes in the Tension Adjusting Lever (17) until the Compensator balances and indicates the correct tension. The Tension Adjusting Lever Link (15) should now pull the Tension Adjusting Lever (17) forward, and the Brake Band (2) should start to release. The Compensator Plate Adjusting Spring (19) must be adjusted to allow the Compensator (8) to be pulled down until the Link (15) starts to move the Tension Adjusting Lever (17) forward.

The temporary adjustment previously made must now be corrected by readjusting the Brake Rod Adjuster (9) until the Supply Spindle and Wire-Spool start to revolve.

Check the adjustments by holding the Wire-Spool to prevent its turning, and pulling downward on the wire "X" until the Compensator (8) reaches its lowest position. Hold the Wire and release the Wire-Spool; the Compensator (8) should spring upward causing the Wire-Spool to revolve. The Brake must stop the spool just before the Link (15) becomes slack. The over-travel of the Compensator (8) should take care of any slight over-run.

Three Tension Springs (18), Light, Medium and Heavy, are furnished with each tension, and the principal adjustment is made by hooking one of the Tension Springs (18) into the Tension Adjusting Lever (17). Nine holes in this lever make it possible to get nine different adjustments with each Tension Spring (18). When the machine is running under actual winding conditions, it may be necessary to make slight alterations in the above adjustment. The Compensator (8) should operate in a position slightly above or below the horizontal. If it runs too high, tighten the Brake Connecting Rod Adjuster (9) slightly; if too low, loosen this Adjuster.

A slight adjustment of the Compensator Plate Adjusting Spring (19) may help to smooth out the operation, but it must be remembered that the Tension Adjusting Lever Link (15) operates the Brake Mechanism, and that Spring (19) should never be so strong that it renders this link inoperative.

When the tension is properly adjusted, the Wire-Spool will rotate at a uniform speed without sudden or intermittent "checking" and the Compensator will move with only a slight up-and-down stroke.

If, after being in operation for some time, the Steel Strap Tensions are not running smoothly, the cause may be sticky Brake Bands or Brake Wheels. Try cleaning the braking surfaces with gasoline before changing the adjustment. Also a light film of lubricating oil on the rim of the "Brake Wheel" is sometimes helpful.

If this condition occurs with Felt Lined Tension Straps, supplied as optional equipment for fine wires, the contact surfaces of the brake wheels should be brought to a high finish with a polishing agent.

Two different types of Compensators are available, Light and Heavy. The Light type is recommended for wire sizes from #29 to #42, and the Heavy type for wire sizes #19 to #28 (B. & S. Gauge).

It is suggested that a record be made of the Tension Spring used for a given wire size, and the location of the hole in which it is hooked. The correct tension setting for this wire size can then readily be duplicated whenever required.

**LUBRICATION:** The case should contain 2- $\frac{1}{2}$  quarts of S.A.E. #10 motor oil or enough so that the bottom of the oil pump is submerged. The machine is equipped with a pump and a perforated pipe to distribute oil.

The wire guide frame support (Plate #12) should receive a light shot of grease once a week. The Traverse Shift Bar Support (Key No. 5 Plate 3) has an alemite fitting and should receive a shot of grease weekly. Use Atlantic Lubricant # 2, Socony Gg Grease B.R.B. No. 1 or their equivalents.

The counter should receive a drop of sewing machine oil on the driving gear inside and in the two oilers outside once weekly.

Follow the motor manufacturer's specifications for motor lubrication.

**AUXILIARY GEARING:** Beginning with Serial No. 320, each No. 108 Coil Winder is equipped with auxiliary gearing that can be put into mesh easily to give the required turns per inch to accommodate wires finer than #44 and heavier than #20 B & S. Some of these gears shown by Key Nos. 22, 23, 24 Plate 6, are shipped loose. Others, Key Nos. 30, 31 and 33 Plate 6, are installed at the time of manufacture because it is very difficult to install them afterward. However, they can be installed on machines not so equipped.

Page Numbers 20, 21 and 22 show the gear arrangements for winding wire #20 to #44; wires heavier than #20, and finer than #44 respectively. The charts list the minimum and maximum turns per inch that can be obtained at each step on the cone. The turns per inch listings are shown for the extreme positions of the open wind - close wind handwheel and the two positions of the master ratio knob. For example, on page 20 standard gearing with the master ratio knob set at 20 through 31, the open wind - close wind handwheel at extreme open and the selector handle at #20/21, 25.9 revolutions of the spindle, move the traverse one inch. Change the open wind - close wind handwheel to extreme closed and the number of revolutions required to move the traverse one inch will increase to 33.1. Changing to any intermediate position of the open wind - close wind handwheel will cause a corresponding change in the number of spindle revolutions required to move the traverse one inch. Moving

the master ratio knob to the 32 through 44 position changes the number of revolutions, required to move the traverse one inch, to 99.8 with the open wind - close wind hand-wheel at extreme open and 127.5 with it at the extreme closed position. Moving the selector handle gives corresponding results as listed on the chart.

The gears on the cone are so arranged that with the selector handle in any position, it is possible to wind at least 10% "open" for the wire size listed. It is also possible to wind any lesser percentage desired except for #43 and #44 wires; with these the minimum is 6% and 16% respectively.

Any wire size may be wound with any degree of spacing desired by setting up for the proper number of turns per inch within the machine range; that is, a minimum of 25.9 turns per inch may be wound with any wire size up through #44 by simply selecting the proper gears.

The auxiliary gears must be put in mesh to wind wires heavier than #20 or finer than #44.

#### Arranging Gears for Heavy Wires - Page 21

1. Remove the 31 tooth idler gear and stud shown in chart No. 1 and replace them with the stud 108-351, Adapter Bushing 108-73-2 and the gears 104-10-2-36 and 104-10-2-38 assembled on it. The 38 tooth gear should be on the outside.

Stud 108-351 and the gears that go on it are shipped loose with the machine.

2. Move gear 104-10-2-28 to the left until it is out of mesh with gear 108-80X. Place the lock ring RN-553 to the right of the gear so it can't move back into mesh.

3. Move gears 104-10-2-38 and 104-10-2-53 on the spindle shaft to the right until the 53 tooth gear meshes with the 38 tooth gear on the stud 108-351.

4. Move the gear 108-387 to the left and engage the lugs on it with gear 108-80X. Gear 108-387 should now be in mesh with gear 104-10-2-96.

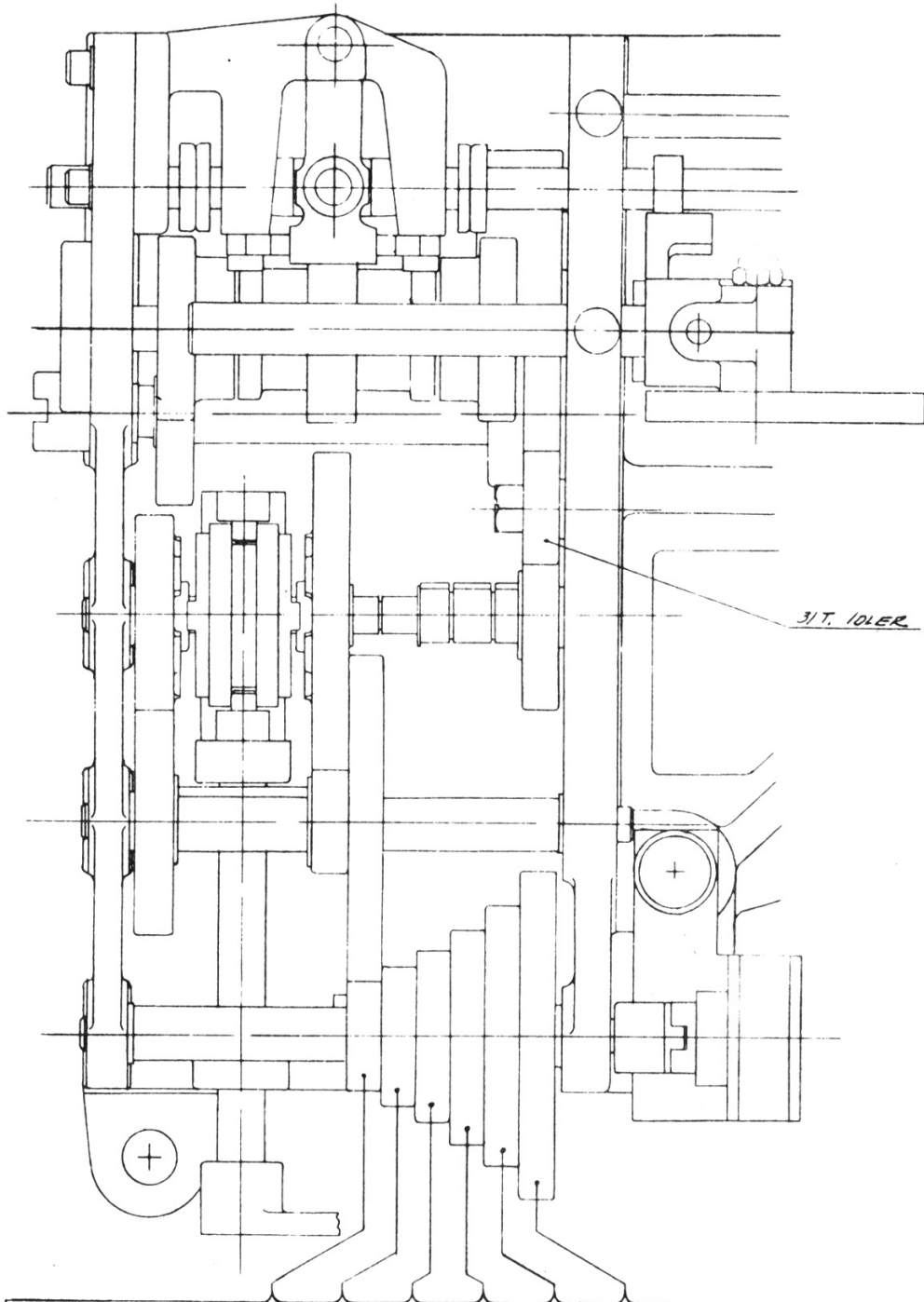
5. After the gears mentioned in steps 3 and 4 are rearranged, the lock rings should be replaced on the opposite side of the gears to which they were previously located.

#### Arranging Gears for Fine Wires - Page 22

1. Temporarily locate gear 108-387 as described in step 4 for heavy wire.

2. Temporarily move gear 108-10-2-53 on the spindle shaft as far to the left as it will go.
3. Use stud 108-351 as described in step 1 for heavy wires but replace the 38 tooth gear on the outside with the loose gear 104-10-2-53.
4. Mesh gear 104-10-2-38 on the spindle shaft with gear 104-10-2-53 on the stud and then move the 53 tooth gear on the spindle shaft as far as it will to to the right.
5. Move the gear 108-387 to the right until it is out of mesh with gear 104-10-2-96, then replace the lock ring to hold it in position.

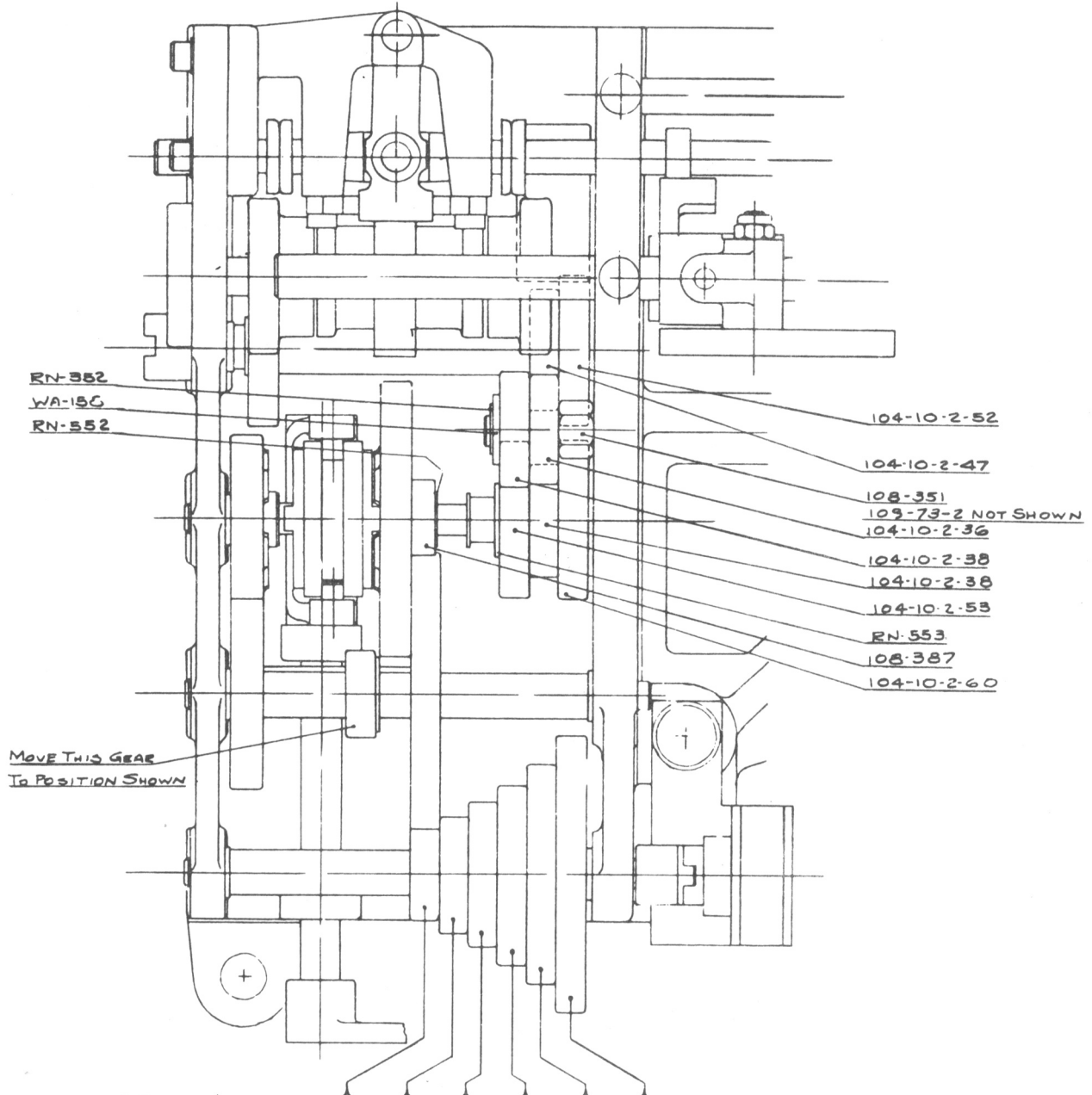
# LAYOUT OF GEARING - STANDARD MACHINE



20 THRU 31	EXTREME OPEN	25.9	32.4	40.9	51	63.5	79.4
	EXTREME CLOSED	33.1	41.4	52.3	65.2	81	101.3
32 THRU 44	EXTREME OPEN	99.8	125.5	158	196.5	244	306
	EXTREME CLOSED	127.5	160	201.5	251	312	391
MASTER RATIO KNOB	OPEN & CLOSE W/INCH HANDWHEEL	TURNS PER INCH					



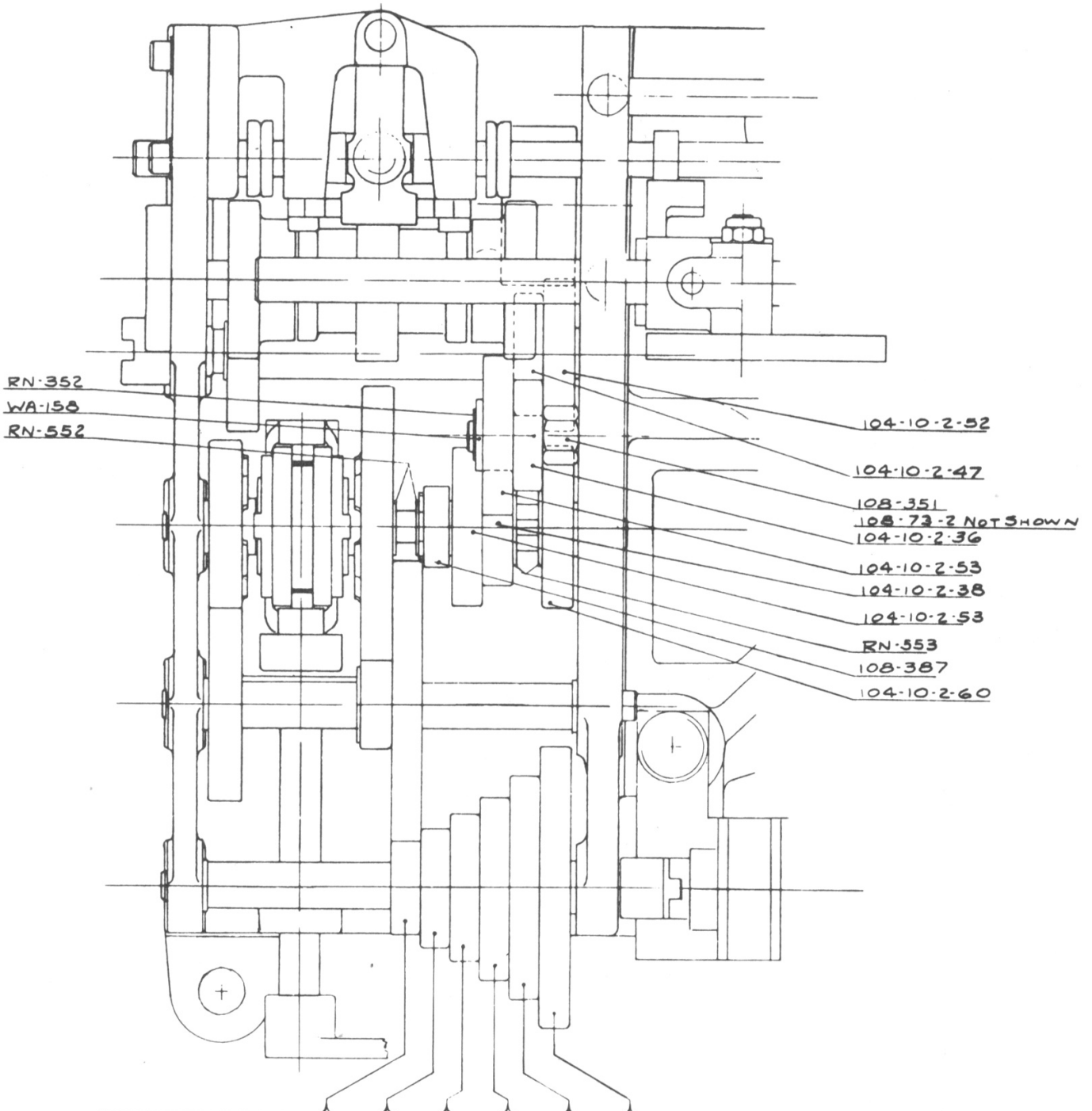
**LAYOUT OF GEARING REQUIRED TO ADAPT #108 MACHINE  
FOR EXTRA COARSE WIRE SPACING  
AND CHART OF RESULTING TURNS PER INCH**



32 THRU 44	EXTREME OPEN	8.69	10.9	15.7	17.1	21.3	26.6
	EXTREME CLOSED	11.1	13.9	17.5	21.8	27.2	34
MASTER RATIO KNOWN	OPEN & CLOSE WIND KNOW WIRE	TURNS PER INCH					

**NOTE: HOLD SPINDLE SPEED TO 500 R.P.M.  
MAX. WHEN WINDING WIRE COARSER  
THAN NO. 20 OR EQUIVALENT.**

**LAYOUT OF GEARING REQUIRED TO ADAPT #108 MACHINE  
FOR EXTRA FINE WIRE SPACING  
AND CHART OF RESULTING TURNS PER INCH**



20 THRU 31	EXTREME OPEN	54.7	689	865	108	134	168
	EXTREME CLOSED	69.9	87.9	110	137	171	214
32 THRU 44	EXTREME OPEN	210	263	331	412	514	642
	EXTREME CLOSED	267	336	423	526	656	820
MASTER RATIO KNOWN OPEN & CLOSE WIND HANDWHEEL		TURNS PER INCH					

**AUXILIARY GEARING WIRE CHART  
FOR  
#108 MACHINE FINE AND HEAVY WIRE SIZES**

#108 AUXILIARY GEARING WIRE CHART							
MASTER RATIO KNOB SETTING	OPEN AND CLOSE WIND HANDWHEEL APPROXIMATE SETTING	WIRE SELECTOR HANDLE SETTING					
		BOTTOM HOLE #1	#2	#3	#4	#5	TOP HOLE #6
EXTRA FINE WIRE SIZES #27 P. E. THRU #50 P. E.							
20 THRU 31	OPEN	27	29	31	33	35	37
	CLOSED	28	30	32	34	36	38
32 THRU 44	OPEN	39	41	43	45	47	49
	CLOSED	40	42	44	46	48	50
EXTRA HEAVY WIRE SIZES #10 P. E. THRU #21 P. E.							
32 THRU 44	OPEN	10	12	14	16	18	20
	CLOSED	11	13	15	17	19	21

## HOW TO REMOVE GEAR CASE BRACKET ASSEMBLY

1. Remove Gear Case Cover (108-32) - Plate 1, Key #20.
2. Remove Gear Case End Cover Assembly (108-141X) - Plate 1, Key #9.
3. Remove Traverse Length Sprocket Assembly by loosening Allen Screw (108-159X) Plate 3, Key #16.
4. Remove Traverse Drive Belt (BE-137) - Plate 3, Key #27.
5. Remove Traverse Shipper Extension Assembly (108-113X) - Plate 3, Key #7, by inserting a long Allen Wrench through front opening.
6. Unscrew transfer plate assembly (108-377X) - Plate 9, Key #2 and remove.
7. Remove handwheel assembly (108-23X) - Plate 9, Key #1 through set screw.
8. Remove four Allen Cap Screws in Idler gear yoke assembly (108-48X) Plate 5, Key #25 and remove upper half.
9. Remove Right Hand Counter Gear Retaining Ring (RN-303) - Plate 5 Key #8.
10. Remove two yoke support screws (SC-2908) - Plate 4, Key #3. The assembly should drop out of the way for removal of spindle.
11. Spindle (108-59) - Plate 5, Key #9 is then pulled through the left side; thus allowing the counter gear to be removed without falling into the case.
12. Loosen top Allen Set Screw in traverse bar coupling assembly (108-68X) - Plate 13, Key #18.
13. Loosen top Allen Set Screw in bell crank pivot block assembly (108-262-3X) - Plate 8, Key #12 and push into the case inner traverse bar (108-69) - Plate 8, Key #14.
14. Pull out of gear case open-wind close-wind handwheel assembly (108-16-3X) - Plate 8, Key #6, by loosening screw in handwheel gear (108-272X) - Plate 8 Key #24.
15. The Traverse End trip finger (108-216-2) Plate 7, Key #1, has to be removed by loosening screw (SC-6201) in Upper Shipper Pin Assembly (108-215-2X) - Plate 7, Key #2.
16. Three gear case bracket screws (SC-2966) Plate 8, Key #36, which are located in a triangular shape have to be removed and now the assembly is ready to be taken out.
17. Pull out master radio knob (108-56X) - Plate 6, Key #42, and by pulling back, the unit will come out freely. IMPORTANT: Be sure that the Traverse Drive Coupling (108-94) - Plate 7, Key #11, is also removed.
18. Remove clutch yoke cotter pin (PN-111) . Plate 7, Key #4, and this will allow the lower shipper pin (108-106) - Plate 7, Key #6, to drop.
19. Two gear case bracket screws (SC-2964) - Plate 8, Key #32, have to be removed.
20. Two gear case bracket pins (PN-338) are knocked out and the Gear Case will come apart in two sections which will allow for easy installation of the Auxiliary Gearing.

To assemble the above, procedure is reversed and care must be exercised so that all moving parts turn freely and perfect alignment is obtained on the Traverse Assembly.

The above instructions are to be used as a guide. It is recommended that a service representative of our company do the installing for best results.

## HOW TO ADJUST BELL CRANK ASSEMBLY

An adjustment can be made to the bell crank assembly to correct traverse backlash. Where this condition exists, the indicator lights will reverse before the traverse. Before making this adjustment, it is a good idea to check the turns per layer and the traverse length indicator to make sure the traverse and not the indicator light is in need of adjustment.

The bell crank adjusts as follows: Set the machine for the finest wire size; then run the traverse to the extreme left with the ratio bar down until the pivot pin, Key 11, Plate 8, and the bell crank slide block, Key 1, are accessible. Now run the traverse back to the right about 1/4 of an inch. Next, loosen the nut on the pivot pin, Key 11, tighten this pivot pin until it is snug, but don't force it. Then back it off 1/4 turn. Hold the pivot pin in this position and tighten the pivot pin nut.

Repeat the same procedure with the pivot pin in the bell crank slide block, Key 1, Plate 8.

If the 1/4 turn adjustment doesn't eliminate the backlash, repeat the whole procedure, but this time back off the pivot pin a little less than 1/4 turn.

Always be sure to tighten the pivot pins before backing them off.

The above adjustment tells what to do to correct backlash, but after this adjustment is made the traverse should be checked to see that the bell crank isn't tightened too much, for if it is too tight it may break the pin in the reversing clutch or key, KE-700, in over-running clutch shaft.

The traverse can be checked for tightness as follows:

1. Set the winder for the finest wire sizes.
2. Set the ratio bar to fully closed wind.
3. Run the traverse to extreme left and adjust the indicator, if necessary, until it is on zero.
4. Now run the traverse all the way to the right and then back again to the left until the indicator is within 1/2" of zero.
5. Using the treadle and exerting light pressure on the hand wheel, run the machine slowly until the traverse reverses.
6. If zero on the scale has gone more than 1/8" beyond the indicator, the bell crank assembly is too tight and the adjustment outlined above should be repeated.

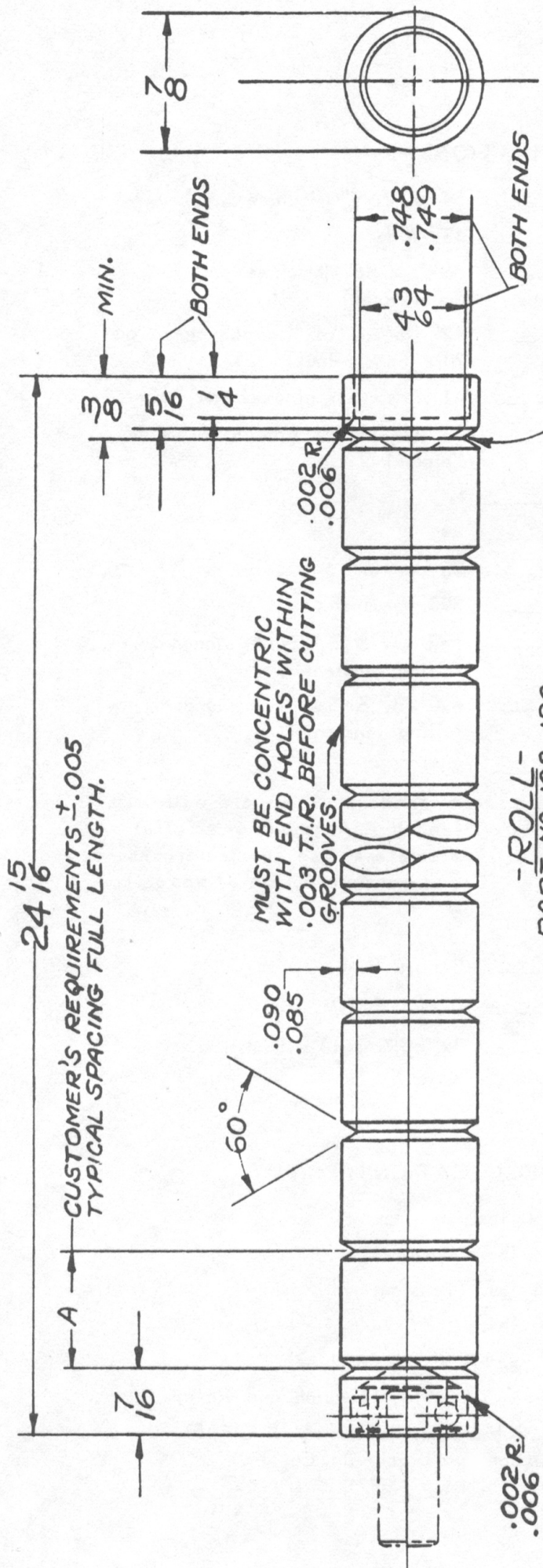


## HOW TO ADJUST SHIPPER SHAFT NUTS

The shipper shaft nuts, Key 30, Plate 8, offer protection in case the clutch doesn't reverse at the left-hand end of the traverse. Should this happen, the boss on the bell crank pivot block, Key 12, Plate 8, which presses against these nuts to trip the clutch, continues to press against them and move the shipper shaft to the left until the clutch teeth are forced apart. At this point, there should be .005 to .010 inches clearance between the shipper shaft nuts and the side of the gear case bracket, Key 20. While they should be as close as possible, it is important that these nuts do not hit the bracket, as doing so will cause serious damage. Since they are adjusted at the factory, they very seldom need readjustment unless they are loosened.

The position of the nuts can be checked to this measurement as follows: Run the traverse to the left until it is almost at the point of reversal. Holding the secondary clutch yoke assembly, Key 19, Plate 7, firmly to the right so that it loads the clutch, continue to run the traverse slowly to the left and observe the teeth on the right-hand side of the traverse, reversing clutch assembly, Key 18, Plate 7. They should clear the clutch drive gear before the shipper shaft nuts touch the side of the gear case bracket. If the nuts seem to be getting too close to the bracket before the clutch teeth disengage, stop the machine and check the clearance between nuts and bracket with a feeler gauge. Re-adjust the nuts if necessary until the clutch teeth disengage while there is a .005 to .010 of an inch clearance between the nuts and the bracket.

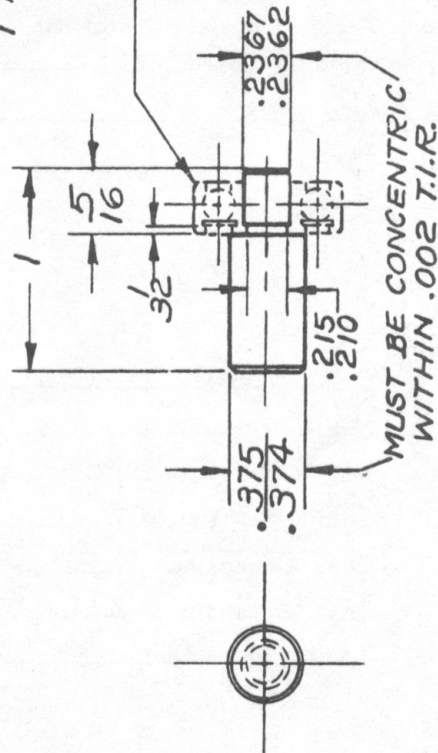




GROOVES MUST BE CONCENTRIC WITH PINS WITHIN .005 T.I.R. AFTER ASSEMBLY.

-ROLL-  
 PART NO. 108-180  
 MATERIAL: ALUM. ALLOY 17 ST. OR EQUAL  
 1 REQ. PER MACHINE

PART NO. BB-142  
 (M.R.C. 36F)  
 2 REQ. PER ROLL



-PIN-  
 PART NO. 108-224  
 MATERIAL: C.D.S. A151 B-1112  
 2 REQ. PER ROLL

STANDARD DIMENSIONS  
 FOR  
 #108 MACHINE WIRE GUIDE ROLL

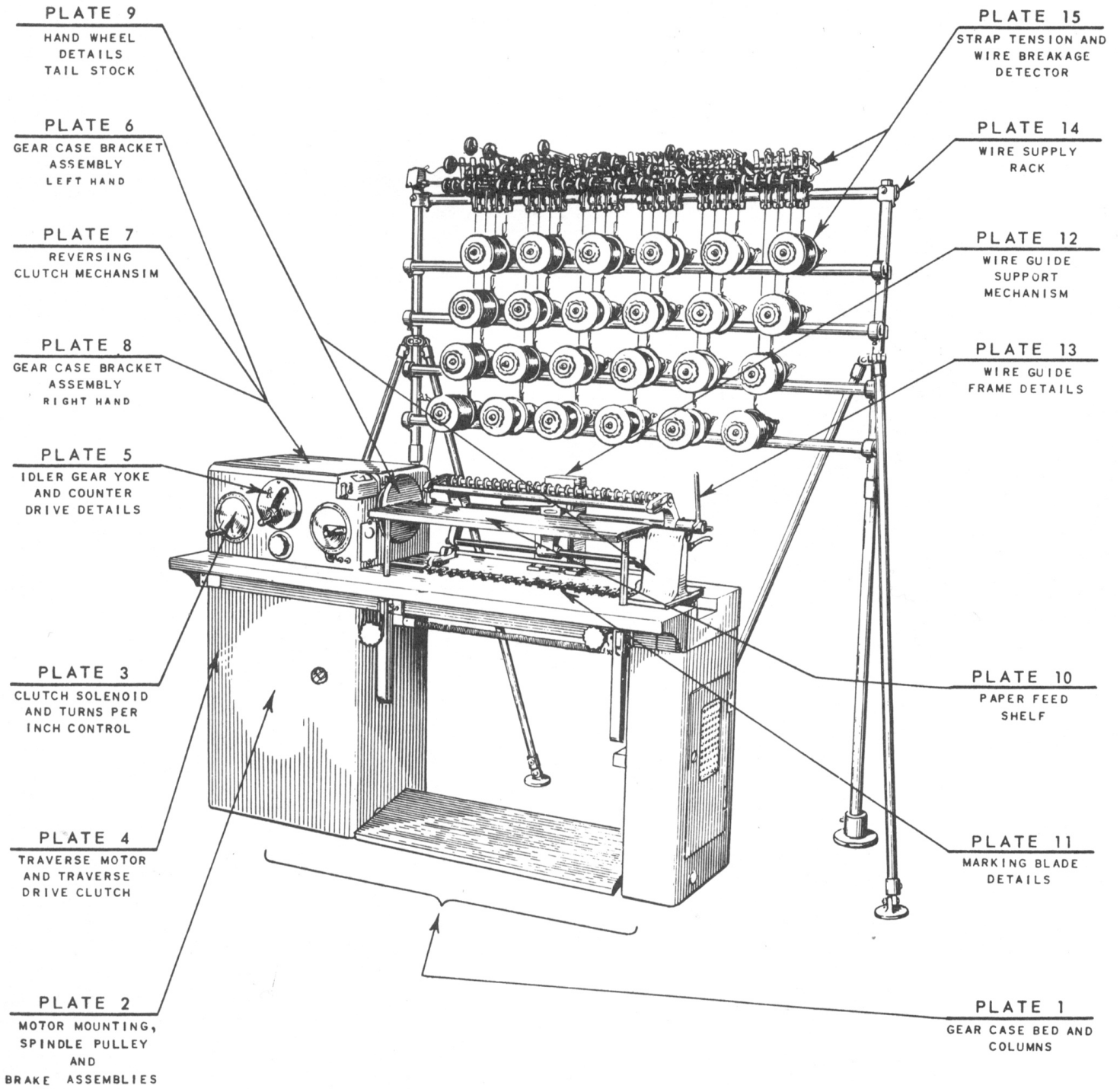
## SPECIFICATIONS

Floor Space _____	59" x 22½" (Machine only)
Wire Spool Rack _____	63" Wide
Total, Floor Space _____	86½" x 46" (Machine and Wire Spool Rack)
Height _____	82" (to top of "Compensators" on Wire Spool Rack)
Height _____	41½" (to top of Machine Proper)
Height _____	36" (to top of Winding Arbor or Spindle)
Minimum Length of Wire Layer _____	¼"
Maximum Length of Wire Layer _____	4"
Minimum Number of Wire Turns _____	26 per inch
Maximum Number of Wire Turns _____	390 per inch
Minimum Diameter of Wire _____	#42 (B. & S.) (with standard unrolling tensions)
Maximum Diameter of Wire _____	#20 (B. & S.) (with standard unrolling tensions)
Normal Width of Insulating Paper _____	24"
Minimum Inside Diameter of Coil _____	½" round or ⅜" square with 24" length of Arbor. (For smaller diameters, use shorter arbors and narrower width of paper.)
Maximum outside Diameter Of Coil _____ (Without Arbor Transfer Operation)	6"
Maximum Winding Speed _____	3100 R.P.M.
Spindle Motor _____	0-2400 R.P.M.
Traverse Motor _____	⅓ H.P. 1140 R.P.M.

## PACKING SPECIFICATIONS

Gross Weight _____	1250 lbs. (two cases)
Net Weight _____	544 lbs. (Machine)
Net Weight _____	206 lbs. (Tension and Rack)
Total, Net Weight _____	750 lbs.
Case Dimensions _____	68" x 44" x 27" (Machine)
Case Dimensions _____	64" x 51" x 18" (Tension and Rack)
Total Cubic Feet _____	81 Cubic Feet (Machine - 47 Cu. Ft., Tension and Rack - 34 Cu. Ft.)

# INDEX TO PLATES



Plates 16, 16A  
Speed & Brake Controls



MODEL 108 COIL WINDING MACHINE

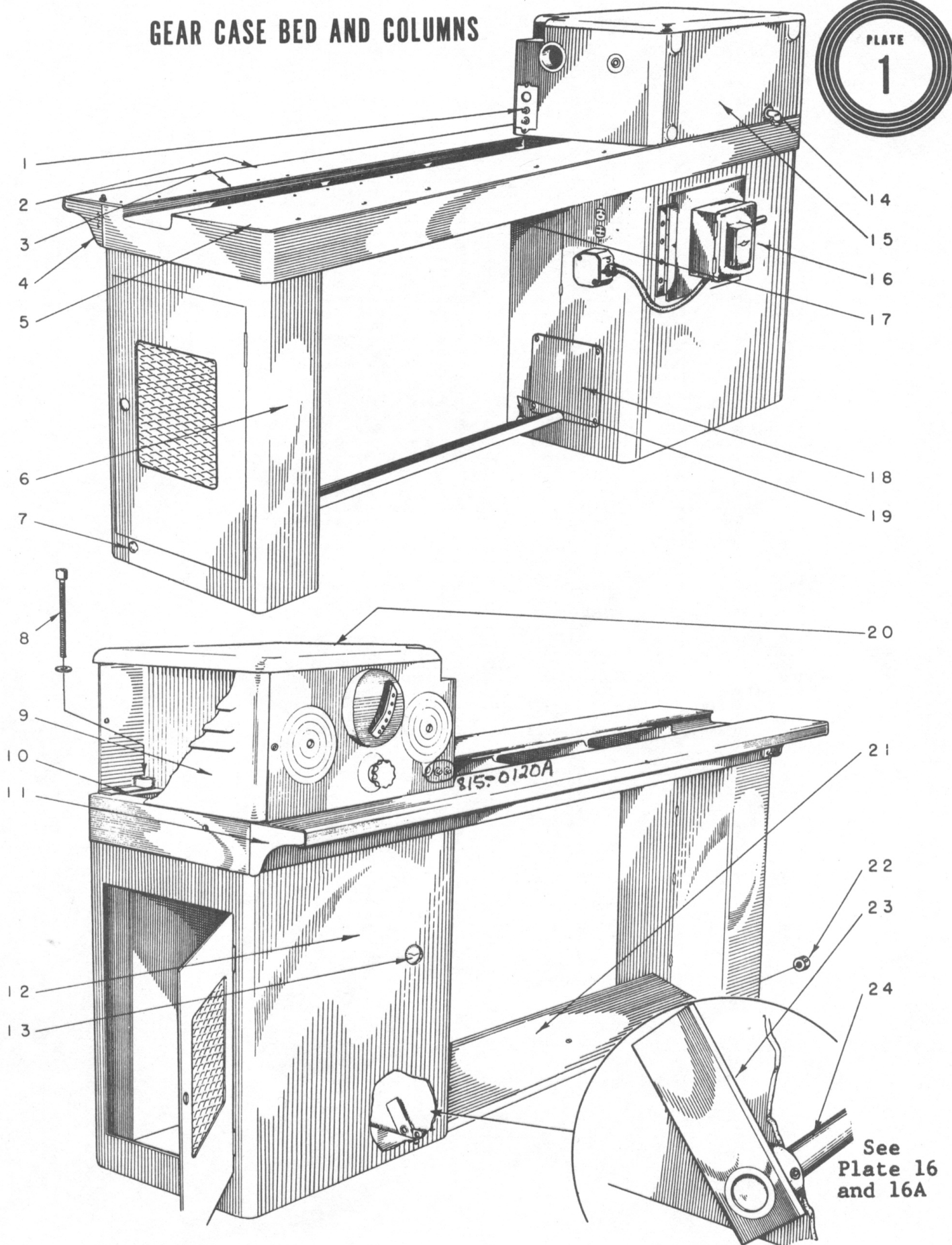
PARTS LIST

PLATE 1

NEW NO.	KEY NO.	OLD NO.	PART NAME	QTY.
245.0107B 503.0194A	- 1	108-240-3 SC-4548	Gear Case Plate Cover Gear Case Plate Cover Screw- Rd. Hd. #10 - 32 x 1/2"	
130.0249D 509.0205A	- 2	108-203 SC-9550	Front Shelf Front Shelf Screw - Button Hd. Socket #10-24 x 3/8"	
509.0201A	- 3	SC-9551	Front Shelf Screw - Button Hd. Socket #10-24 x 1/2"	
530.0134A 525.0017A 130.0248B 500.0361A	- 4	WA-503 NU-114 108-209-3 SC-2908	Front Shelf Washer #10 Int. Lok Front Shelf Nut 10 - 24 Hex Shelf Gusset R. H. Shelf Gusset R. H. Screw 1/2 - 20 x 1/2 S.H.C.S.	(4)
530.0135A		WA-530	Shelf Gusset R. H. Washer 1/4 - Int Lock	(4)
130.0250D 509.0197A	- 5	108-83 SC-9550	Rear Shelf Rear Shelf Screw #10 - 24 Button Soc. Hd. x 3/8	
900.0398D 500.0487A	- 6	108-6X SC-3185	Column R. H. Assembly Column R. H. To Bed Screw 3/8 - 16 x 4 S.H.C.	
530.0137A 525.0073A		WA-506 NU-102 108-204	Column R. H. To Bed Washer Column R. H. To Bed Nut Column R. H. Shelf - Obsolete - 2 used on older units	
270.0008P 500.0611A	- 7 - 8	108-178 SC-2976	Treadle Rod Cap 7/8 Plug Button Gear Case To Bed Screw 1/2 - 13 S.H.C.S. x 8 (7 allowed)	(1)
530.0139A		WA-534	Gear Case To Bed Washer 1/2 Int Lock	(1)
900.0658B	- 9	108-141X	Gear Case End Cover Assembly 245.0108C	
506.0202A		SC-274	Gear Case End Cover Screw #10 - 32 x 1/2 F.S.H.C.	
131.0031B 130.0247B 500.0361A	- 10 - 11	108-194 108-209-4 SC-2908	Rear Shelf Extension Shelf Gusset L. H. Shelf Gusset L. H. Screw 1/2 - 20 x 1/2 S.H.C.S.	
530.0135A		WA-530	Shelf Gusset L. H. Washer Int. Lock 1/2	
900.0437D 842.0022B 270.0039A	- 12 - 13 - 14	108-5-3X 108-467 PF-318	Column L. H. Assembly Load Meter Gear Case Oil Plug 1/2 HPT Pipe Sq. Hd.	
195.0055		PF-2018	Gear Case Street Elbow 1/2 HPT Steel Ell	
900.0654E 500.0605A	- 15	108-2X SC-3187	Gear Case Assembly 115.0048E Gear Case To Bed Screw 1/2 - 13 x 6 S.H.C.S.	(2)
530.0139A		WA-534	Gear Case To Bed Washer 1/2 Int. Lock	(2)
421.0001A		SE-107	Oil Seal, Open Wind - Close Wind Handwheel	
421.0001A 421.0002A 421.0003A		SE-107 SE-108 SE-109	Oil Seal Master Ratio Knob Oil Seal, Traverse Rod Oil Seal Shipper Shaft Extension	
275.0035D	- 16 17 18	108-1-2 108-463 SC-9553	Bed Column Cover Plate Column Cover Plate Screw	
	19	WA-695	Treadle Rod Washer	
245.0105D 900.0498C 250.0040C	- 20 - 21	108-32 108-181X 108-202 SC-2203	Gear Case Cover Treadle Assembly 120.0126C Treadle Pad Treadle To Rod Screw 1/2 - 20x1 1/2 F.S.H.C.S.	(4)
		WA-156 WA-206	Treadle To Rod Washer 1/2 Plain Treadle To Rod Lock Washer 1/2 Int. Lock	(4)
		NU-100	Treadle To Rod Nut 1/2 - 20 Hex	(4)
440.0022A	- 22	CO-111CAX	Treadle Rod Collar	
	23	108-420X	Brush Control Treadle Arm	
135.0100B	- 24	108-185	Treadle Rod	

# GEAR CASE BED AND COLUMNS

PLATE  
1



MODEL 108 COIL WINDING MACHINE

PARTS LIST

PLATE 2

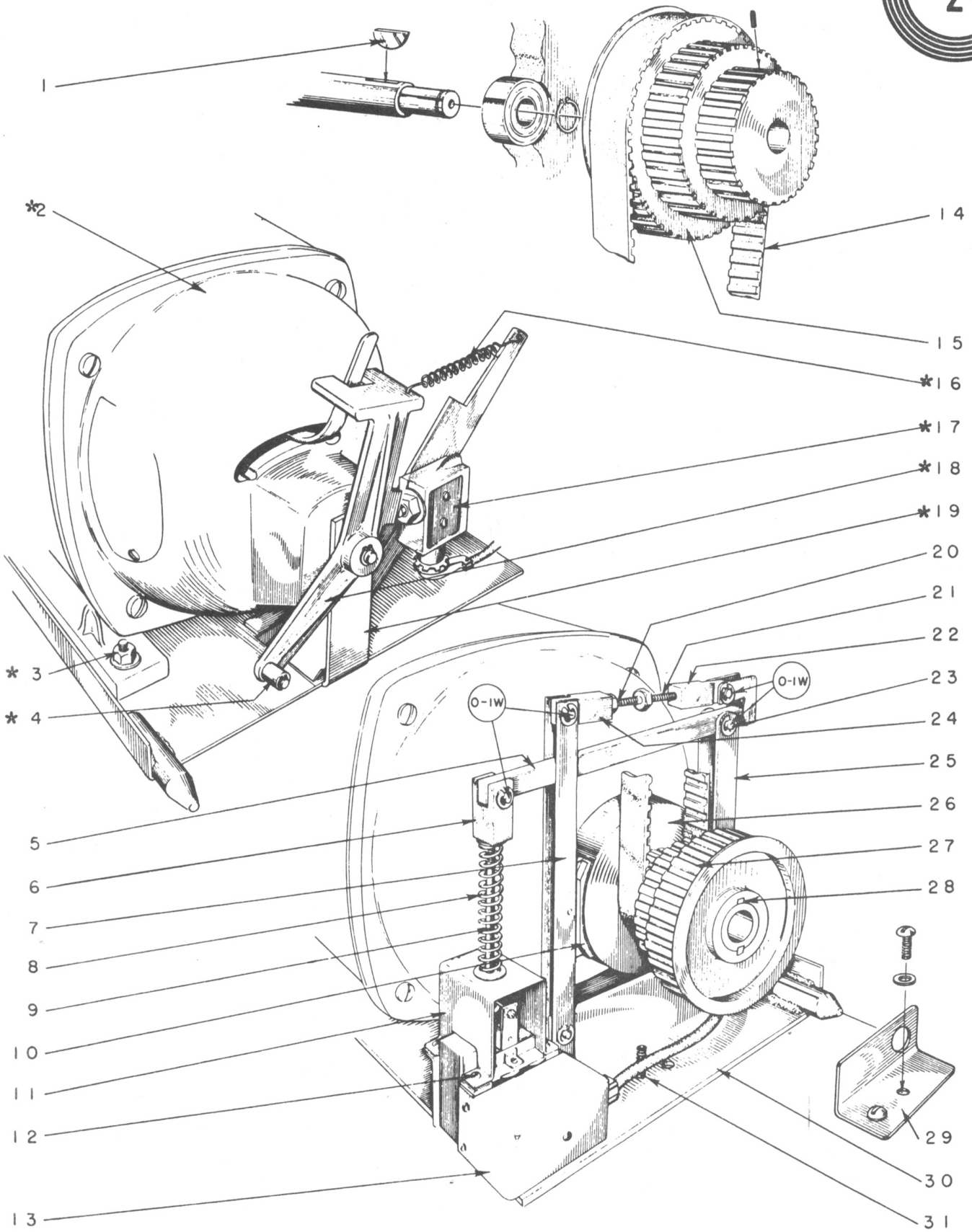
NEW NO.	KEY NO.	OLD NO.	PART NAME	QTY.
480.0015A	- 1	KE-709	Spindle Key #606, 3/16 x 3/4	
	*2	EM-3/4-IB-V-L	Motor	
	*3	BO-1851	Motor Mounting Bolt 5/16 - 18 x 2 1/2 Carriage	(4)
533.0103A		WA-208	Motor Mounting Washer 5/16 Plain	(4)
		NU-102	Motor Mounting Nut 5/16 - 18 Hex	(4)
	*4	108-429	Brush Control Lever Roller	
545.0005A		RN-352	Retaining Ring #5100-37	
900.0439B	5	108-414X	Brake Lever Assembly	
170.0057B	6	108-416	Brake Lever Yoke	
900.0435B	7	108-410X	Long Brake Arm Assembly	
475.0060A	8	CS-911	Brake Lever Spring	
170.0056B	9	108-417	Brake Lever Ling Eye Bolt 3 5/8 LG - 3/8 Hole 1/2 - 28 x 2 Thd/Mate	
900.0434B	10	108-411X	Brake Shoe Assembly	
130.0196B	11	108-418	Brake Spring Bracket	
503.0198A	12	SC-4650	Brake Spring Bracket Screw #10 - 32 x 3/8 Rd. H. M. S.	(4)
525.0018A		NU-115	Brake Spring Bracket Nut 10-32 Hex	(4)
530.0134A		WA-229	Brake Spring Bracket Washer #10 Lock	(4)
865.0025A	13	ES-405	Brake Release Solenoid	
420.0050A	14	BE-2363	Spindle Belt 660H075	(1)
900.0570B	15	108-434X	Spindle Pulley Assembly	
137.0095B		108-434	Spindle Pulley - Large 31T	
137.0096B		108-435	Spindle Pulley - Medium	
137.0097B		108-436	Spindle Pulley - Small	
126.0034B		108-437	Spindle Pulley Flange	
480.0077A		KE-106	Spindle Pulley Key 3/16 $\phi$ x 1 1/2	
510.0254A		SC-6205	Spindle Pulley Screw 10-32 x 1/2 Fl Pt	(1)
	*16	60-58	Brush Control Return Spring	
	*17	ES-162	Foot Treadle Switch	
	*18	108-427X	Brush Control Lever Assembly	
	*19	108-422X	Brush Control Bracket Assembly	
		108-424	Brush Control Switch Support	
		108-423	Bracket Rib	
		108-425-2	Stud	
		SC-3108	Brush Control Bracket Screw	
		WA-530	Brush Control Bracket Washer	
525.0121A	20	NU-137	Adjusting Locknut 5/16 - 18 Hex Jam	
900.0433B	21	108-413X	Adjusting Screw	
120.0119B	22	108-412	Adjusting Screw Connector R. H.	
523.0043B	23	108-191-3	Pivot Pin 1/4 x 15/16	
545.0016A		RN-550	Retaining Ring #5133-25	
120.0120B	24	108-412-2	Adjusting Screw Connector L. H.	
900.0438B	25	108-408X	Short Brake Arm Assembly	(2)
136.0022B		108-409	Stud	
900.0443B	26	108-419X	Brake Drum Assembly	
510.0285A		SC-6023	Screw 1/4-20 x 1/4 Soc Set	
900.0444B	27	108-430X	Motor Pulley Assembly	
137.0088B		108-432	Motor Pulley - Small - 9T	
137.0089B		108-431	Motor Pulley - Medium - 16T	
137.0090B		108-430	Motor Pulley - Large - 23T	
126.0033B		108-433	Motor Pulley Flange	
480.0077A		KE-106	Motor Pulley Key 3/16 $\phi$ x 1 1/2	
510.0246A		SC-6205	Motor Pulley Screw #10 - 32 x 1/4 Soc Set Screws	
480.0052A	28	KE-113	Key 3/16 x 3/16 x 2 1/2	
120.0119B	29	108-404	Motor Support Pivot Plate	
509.0255A		SC-2407	Motor Support Pivot Plate Screw 5/16 - 18 x 1/2 Butt Soc C	
530.0036A		WA-232	Motor Support Pivot Plate Washer 5/16 Int. Lock	
900.0436D	30	108-405X	Motor Base Assembly	
135.0097B		108-406	Motor Pivot	
130.0197B		108-407	Motor Support	
		NU-301	Nut 4/16 - 18 Hex Reg	
510.0349A	31	SC-3337	Motor Plate Adjusting Screw 5/16 - 18 x 1 1/4 S Set Screw Fl.Pt.	(1)
525.0021A		NU-971	Motor Plate Adjusting Screw Nut 5/16 - 18	(1)

\*Items 2, 3, 4, 16 to 19 are obsolete if Leland Motor; replace with 925.0047B Motor Replacement Kit

\*Item 2 for motor not having brush control, order 825.0029A Motor

# MOTOR MOUNTING, SPINDLE PULLEY AND BRAKE ASSEMBLIES

PLATE  
2



\*Obsolete see 925.0047B

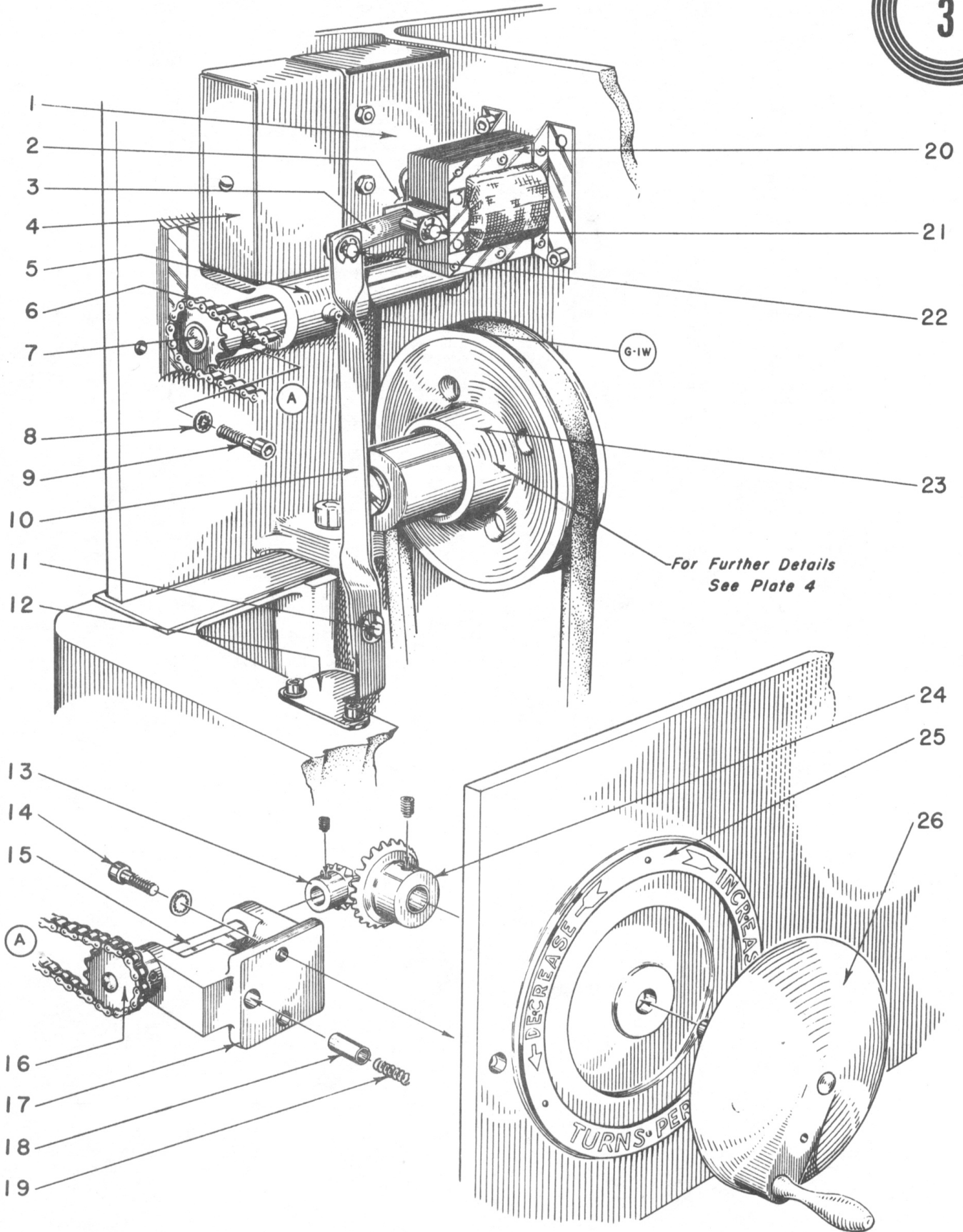
MODEL 108 COIL WINDING MACHINE

PARTS LIST			PLATE 3	
NEW NO.	KEY NO.	OLD NO.	PART NAME	QTY.
852.0024C	- 1	108-217	Traverse Junction Box	
500.0318A		SC-544	Traverse Junction Box Screw 10 - 32 x 7/8 SHC	
530.0134A		WA-527	Traverse Junction Box Washer #10 Int. Lock	
525.0568A		NU-112	Traverse Junction Box Nut ESNA #10 - 32	
886.0209B	- 2	108-158	Traverse Junction Box Grommet	
410.0034B	- 3	108-140-2	Solenoid Connector	
245.0098B	- 4	108-218	Traverse Junction Box Cover	
900.0615B	- 5	108-44X	Traverse Shift Bar Support Assembly	
195.0022A		108-220	Traverse Shift Bar Support Fitting	
465.0022A	- 6	CN-300-24½	Traverse Adjusting Chain Rc25 12L + 1C + 1 Off	
900.0572B	- 7	108-113X	Traverse Shipper Extension Assembly	
435.0002B		108-128	Traverse Shipper Extension Sprocket 25B14	
530.0135A	- 8	WA-503	Traverse Shift Bar Support Washer ½ - Int. Lock	
500.0363A	- 9	SC-2909	Traverse Shift Bar Support Screw ½ - 20 x 5/8 SHC	
170.0087B	- 10	108-189	Traverse Drive Clutch Operating Lever	
523.0093B	- 11	108-191	Operating Lever Pivot Pin	
545.0016A		RN-550	Operating Lever Retaining Ring #5133-25	
130.0251B	- 12	108-188	Traverse Drive Clutch Yoke Support	
500.0363A		SC-2908	Traverse Drive Clutch Yoke Support Screw ½ - 20 x 5/8 SHC	
530.0135A		WA-530CA	Traverse Drive Clutch Yoke Support Washer ½ Int. Lock	
900.0503B	- 13	108-118X	Traverse Adjusting Pinion Gear Assembly	
510.0244A		SC-6200	Traverse Adjusting Pinion Gear Screw 10 - 32 x 3/16 Soc Set	
500.0363A	- 14	SC-2910	Traverse Length Sprocket Support Screw ½ - 20 x 5/8 SHC	
530.0135A		WA-206CA	Traverse Length Sprocket Support Washer ½ - Int. Lock	
135.0121B	- 15	108-182-2	Traverse Length Sprocket Support Shaft 3/8 Hex x 2 7/8	
900.0502B	- 16	108-159X	Traverse Length Sprocket Assembly 25B14	
510.1246A		SC-6201	Traverse Length Sprocket Screw 10-32 x 1/4 Soc Set Cup Pt	
130.0225B	- 17	108-34	Traverse Length Sprocket Support	
450.0083B		108-375	Traverse Length Sprocket Support Bushing	
523.0099B	- 18	108-374	Traverse Length Sprocket Support Shaft Plunger	
475.0066A	- 19	CS-569	Traverse Length Sprocket Support Shaft Plunger Spring LC-020C-9	
865.0026B	- 20	108-190	Traverse Drive Solenoid	
500.0318A		SC-3110	Traverse Drive Solenoid Screw 10 - 32 x 7/8 SHC	
523.0098B	- 21	108-191-2	Solenoid Connector Pivot Pin	
545.0016A		RN-550	Retaining Ring #5133-25	
523.0093B	- 22	108-191	Operating Lever Pivot Pin	
545.0016A		RN-550	Retaining Ring #5133-25	
900.0622B	- 23	108-33X	Traverse Drive Clutch Assembly	
900.0616B	- 24	108-110X	Traverse Adjusting Gear Assembly	
510.1285A		SC-3311	Traverse Adjusting Gear Screw ½ - 20 x 1/4 Soc Set Cup Pt	
495.0065B	- 25	108-172	Turns Per Layer Dial	
523.0065A		PN-244	Turns Per Layer Dial Pin	
900.0573B	- 26	108-16-2X	Turns Per Layer Handwheel Assembly	
405.0055B		108-28-2	Turns Per Layer Handwheel Handle	
135.0127B		108-130	Turns Per Layer Handwheel Shaft	
508.0107A		PN-1772	Turns Per Layer Handwheel Pin ½ - 20 x 3/4 Soc Set Oval Pt	



# CLUTCH SOLENOID AND TURNS PER INCH CONTROL

PLATE  
3



MODEL 108 COIL WINDING MACHINE

PARTS LIST				PLATE 4	
NEW NO.	KEY NO.	OLD NO.	PART NAME		QTY.
523.0068A	- 1	PN-632	Groove Pin 1/8 x 3/4 Dowel		
445.0005B	- 2	108-94-2	Traverse Drive Coupling		
135.0133B	- 3	108-95	Traverse Drive Shaft		
421.0005B	- 4	108-139	Traverse Drive Pulley Support Gasket		
900.0625B	5	108-40X	Traverse Drive Pulley Support Assembly 130.0238B		
450.0087B		108-294	Traverse Drive Pulley Support Bushing AA-707-2		
450.0086B		BU-1224	Traverse Drive Pulley Support Bushing AA-744-5 -Sintered Iron - .502 x 753 x 1/2" Long		
900.0624B	- 6	108-39X	Traverse Drive Pulley Assembly 137.0099B		
450.0085A		BU-1222	Traverse Drive Pulley Bushing AA-1332-1		
420.0049A	- 7	BE-1221	Reduction Pulley To Traverse Drive Pulley Belt - Adjustalink 43 inches		
900.0442C	- 8	108-18-2X	Traverse Drive Reduction Pulley		
450.0081B		108-19	Traverse Drive Reduction Pulley Bushing FF843		
150.0034B	- 9	108-291-2	Spring Actuator		
245.0101B	- 10	108-292	Traverse Drive Shaft Extension Cover		
545.0022A	- 11	108-250-3	Retaining Ring #5101-75		
523.0090B	- 12	108-293	Spring Actuator Plunger		
523.0069B	- 13	PN-1788	Spring Actuator Pin		
475.0101B	- 14	108-290	Traverse Drive Shaft Extension Spring		
135.0132B	- 15	108-33	Traverse Drive Shaft Extension		
900.1052C	- 16	108-462-17X	Traverse Motor		
500.0261A		SC-1009	Traverse Motor Screw 5/16 - 18 x 3/4		
525.0021A		NU-100	Button Soc Hd Cap		
530.0136A		WA-206	Traverse Motor Nut 5/16 - 18 Hex		
480.0077A		KE-106	Traverse Motor Washer 5/16 Lok		
137.0087B	- 17	PU-1724	Traverse Drive Motor Pulley Brng #AK22-1/2B		
420.0048B	- 18	BE-1220	Traverse Motor to Reduction Pulley Belt - Adjustalink 30 inches		
525.0027A	- 19	NU-104	Traverse Drive Reduction Pulley Stud Nut		
534.0081B	- 20	108-452	Traverse Drive Reduction Pulley Stud Plate		
533.0106A	- 21	WA-160	Traverse Drive Reduction Pulley Stud Washer		
136.0078B	- 22	108-20-2	Traverse Drive Reduction Pulley Stud		
545.0025A	- 23	RN-359	Retaining Ring #5100-62		

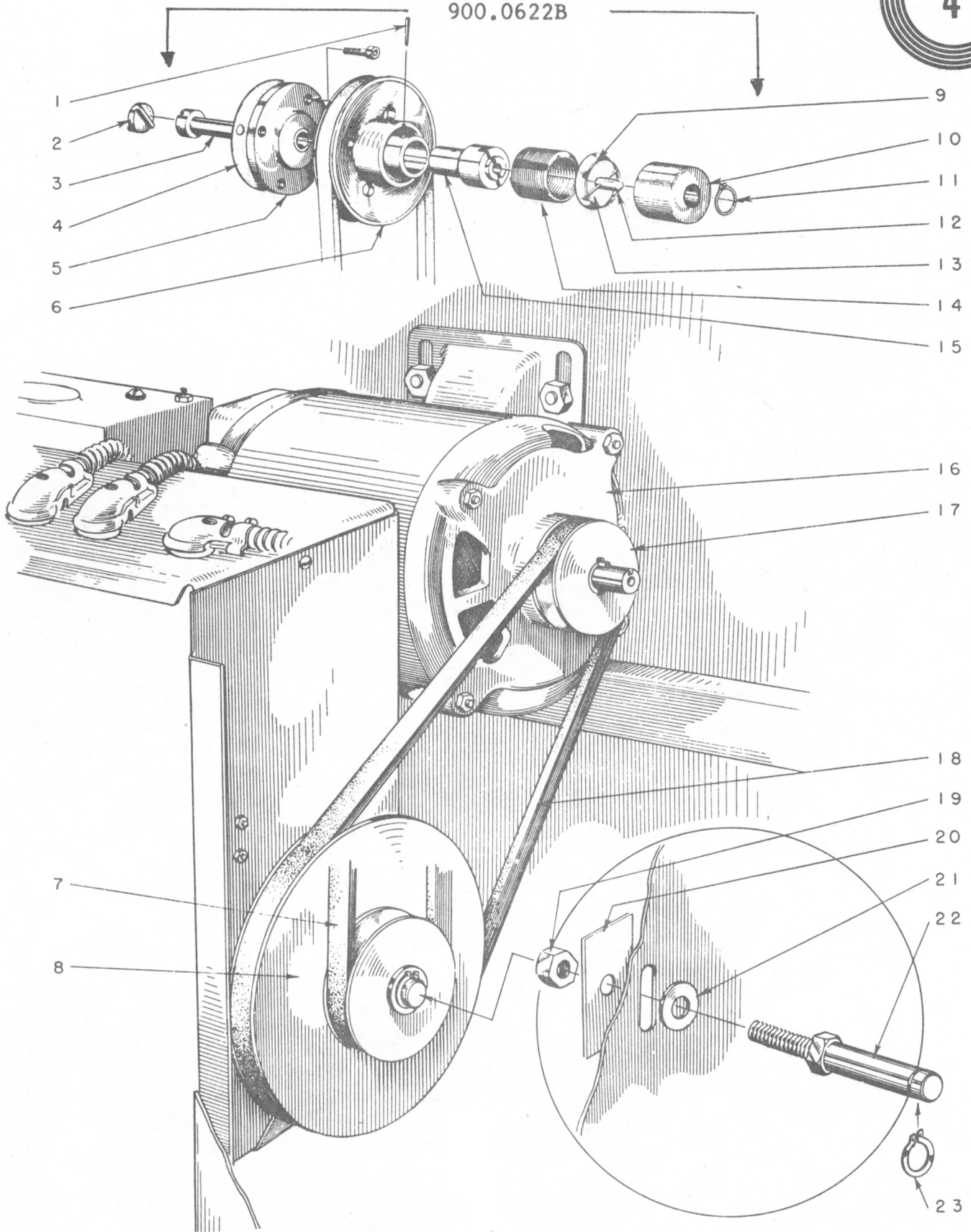
900.0622B Traverse Drive Clutch Assembly consists of Items 1 - 6 and 9 - 15.



# TRAVERSE MOTOR AND TRAVERSE DRIVE CLUTCH

PLATE  
4

900.0622B



MODEL 108 COIL WINDING MACHINE

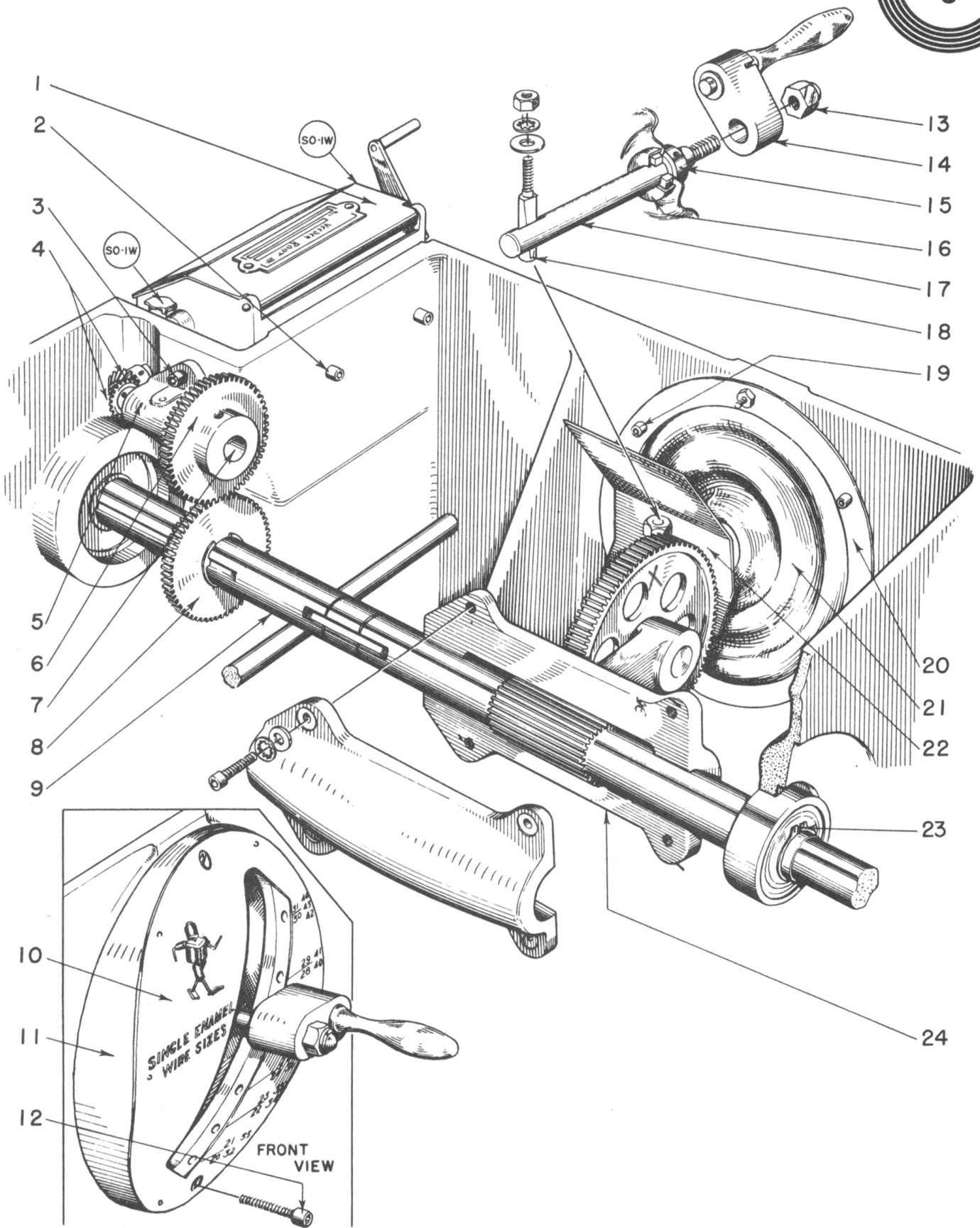
PARTS LIST

PLATE 5

NEW NO.	KEY NO.	OLD NO.	PART NAME	QTY.
890.0018B	- 1	108-234	Counter V1R SE 123945-1 W/ Pos. Reset	
500.0364A	- 2	SC-3109	Counter To Gear Case Screw 1/2 - 28 x 5/8 S.H.C.S.	(2)
530.0110A		WA-530CA	Counter To Gear Case Washer Int. Lock 1/2	(2)
500.0311A	- 3	SC-2901	Counter Jackshaft Support Screw 10 - 24 x 1/2 S.H.C.S.	
530.1034A		WA-204CA	Counter Jackshaft Support Washer #10 Lock Split	
900.0496B	- 4	108-127X	Counter Drive Gear Assembly	(2)
510.1629A		SC-6134	Counter Drive Gear Screw 5 - 40 x 1/8 Soc Set Cup Pt.	
130.0224B	- 5	108-135-2	Counter Jackshaft Support	
900.0497B	- 6	108-124X	Jackshaft Gear Assembly Ext. Spur "3264"	
135.0098B	- 7	108-136	Counter Jackshaft 3/8" $\phi$ x 2 9/16	
430.0096B	- 8	108-125	Counter Gear Ext. Spur 3264	
545.0018A		RN-303	Counter Gear Retaining Ring #5103-87	
135.0149C	- 9	108-59	Spindle	
455.0063A		BB-143	Spindle Bearing	
495.0063C	- 10	108-171	Selector Dial	
523.0065A		PN-244	Selector Dial Pin Escutchen 1/16 x 1/4 Brass	
500.0320A		SC-3103	Selector Dial Screw #10 - 32 x 1" SHC	
120.0127B	- 11	108-53	Selector Plate	
500.0319A	- 12	SC-2903	Selector Dial Screw #10 - 24 x 1" SHC	
528.0078A	- 13	NU-907	Shift Arm Nut 5/16 - 18	
900.0650B	- 14	108-149X	Shift Arm Clamp Assembly	
405.0072B		108-28	Shift Arm Clamp Handle	
137.0027B		108-29	Shift Arm Clamp Point	
475.0125A		CS-257	Shift Arm Clamp Spring	
523.0076A		PN-501	Shift Arm Clamp Pin	
900.0610B	- 15	108-258-2X	Oil Seal Clamp Assembly 175.0048B	
510.1201A		SC-3305	Oil Seal Clamp Screw 8-32 x 1/8 Soc Set Cup Pt.	
440.0193B	- 16	108-257-2	Oil Seal Collar	
135.0145B	- 17	108-150	Shift Arm 3/8" $\phi$ x 3 3/4 T.O.E. 5/16 - 18	
508.0106B	- 18	108-63	Shift Arm Screw	
533.0102A		WA-156	Shift Arm Screw Washer Plain 1/2	
530.0035A		WA-530CA	Shift Arm Screw Shakeproof Washer 1/2 Int.	
525.0069A		NU-100CA	Shift Arm Screw Nut 1/2 - 20 Hex	
500.0319A	- 19	SC-2903	Oil Seal Clamp Screw 10 - 24 x 1" S.H.C.S.	
530.1034A		WA-529	Oil Seal Clamp Washer #10 Lock	
175.0050B	- 20	108-212	Oil Seal Clamp	
421.0004B	- 21	108-54	Oil Seal	
245.0106B	- 22	108-222	Oil Seal Guard	
545.0005A	- 23	RN-362	Bearing Retaining Ring #5100-37	
900.0524D	- 24	108-48X	Idler Gear Yoke Assembly	
430.0083B		104-10-2-93	Idler Gear	
135.0099A		RD-812	Idler Gear Yoke Rod	
170.0086B		108-49	Idler Gear Yoke Cap	
500.0364A		SC-3109	Idler Gear Yoke Screw 1/2 - 28 x 5/8 S.H.C.S.	(4)
530.0135A		WA-530CA	Idler Gear Yoke Shakeproof Washer 1/2	(4)
533.0102A		WA-616	Idler Gear Yoke Washer 1/2	(4)

# IDLER GEAR YOKE AND COUNTER DRIVE DETAILS

PLATE  
5



MODEL 108 COIL WINDING MACHINE

PARTS LIST

PLATE 6

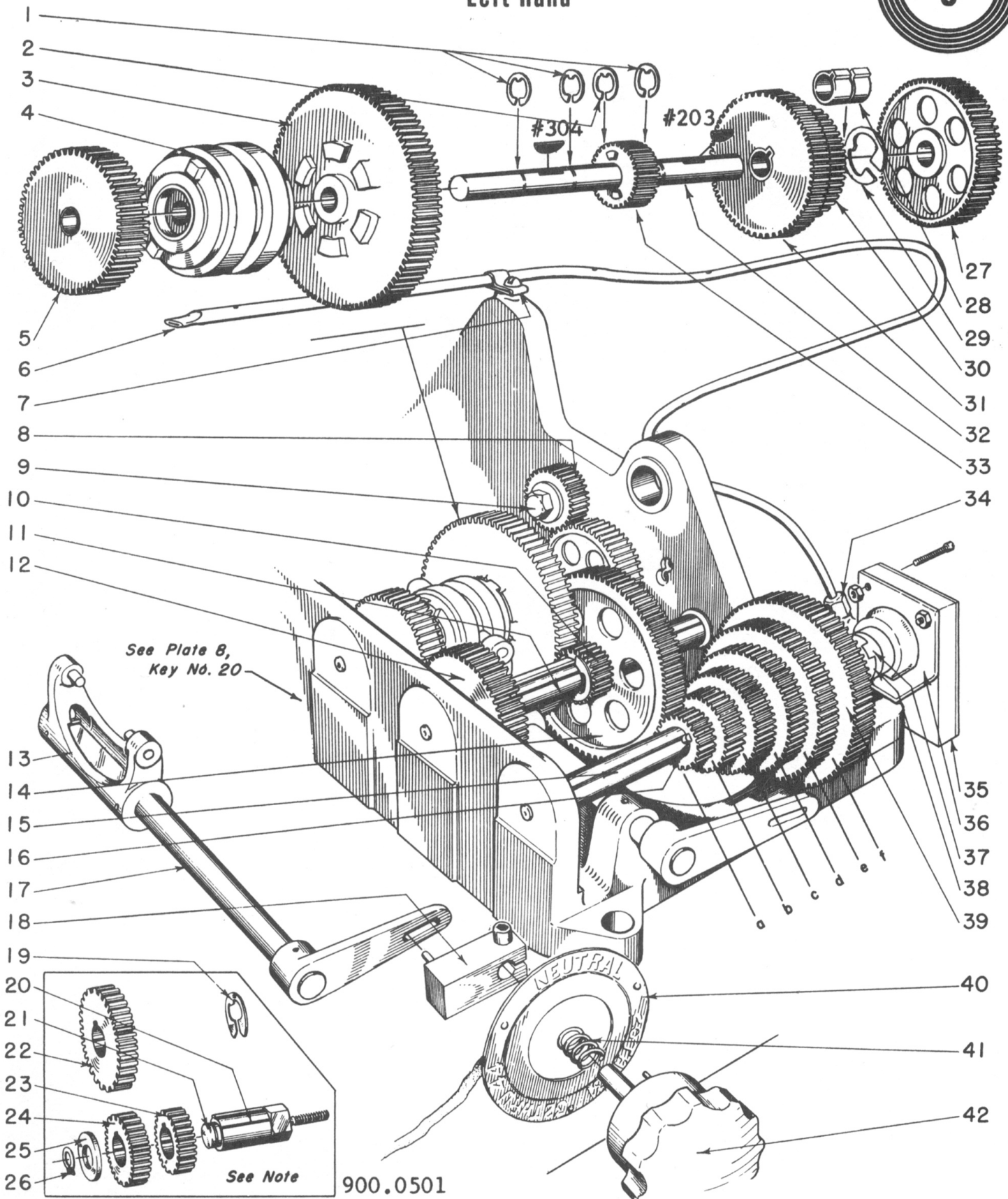
NEW NO.	KEY NO.	OLD NO.	PART NAME	QTY.
545.0017A	- 1	WRN-617	Retaining Ring #5131-37	(3)
545.0010A	- 2	RN-552	Retaining Ring #5133-37	
900.0617B	- 3	108-80X	Master Reduction Gear (Large) Assembly	
450.0082B		BU-1221	Master Reduction Gear Bushing	
900.0639B	- 4	108-84-2X	Over-Running Clutch Housing Assembly	
475.0103B		108-366	Over-Running Clutch Housing Spring Sleeve	
440.0189B		108-379	Over-Running Clutch Housing Collar	
900.0621B	- 5	108-81X	Master Reduction Gear (Small) Assembly	
450.0082B		BU-1221	Master Reduction Gear Bushing	
235.0037B	- 6	108-285	Oil Line	
885.0101B	- 7	108-286	Oil Line Clip	
500.0227A		SC-1174	Oil Line Clip Screw 10 - 24 x 1/2 Fil Hd	(1)
430.0095C	- 8	104-10-2-31	Idler Gear - 031 "2831"	
450.0091B		108-73	Idler Gear Bushing	
512.2024A	- 9	ST-1128	Idler Gear Stud	
533.0010A		WA-664CA	Idler Gear Stud Washer 3/8 ID. Plain	(A/R)
430.0095C	- 10	104-10-2-28	Gear 028 "2828"	
135.0143B	- 11	108-74	Intermediate Shaft	
480.0083B		108-75	Intermediate Shaft Key .125 x 188 x 2 9/16 Steel	
125.0104B		108-214	Spacer Washer	
545.0057A		RN-553	Retaining Ring #5133-62	
430.0095C	- 12	104-10-2-65	Gear 065 "2865"	
900.0614B	- 13	108-41X	Master Ratio Shipper Yoke Assembly	
523.0071A		PN-1773	Master Ratio Shipper Yoke Pin - 1/2" x 17/32"	
523.0072A		PN-1774	Master Ratio Shipper Yoke Pin - 1/8" x 7/8"	
430.0095C	- 14	104-10-2-96	Gear 096 "2896"	
135.0144B	- 15	108-76	Cone Gear Shaft	
480.0084B	- 16	108-77	Cone Gear Key Jib Key Special	
900.0575B	- 17	108-148X	Master Ratio Shift Shaft Assembly	
170.0088B		108-126	Master Ratio Shift Shaft Clevis	
523.0072A		PN-1774	Master Ratio Shift Shaft Pin 1/8 x 7/8 Roll Pin	(1)
900.0656B	- 18	108-119X	Bellcrank Assembly	
500.0365A		SC-2910	Bellcrank Screw 1/20 x 3/4 S.H.C.S.	(1)
521.0102A		PN-1329	Bellcrank Pin 3/16 x 7/8 Roll	
545.0057A	- *19	RN-553	Retaining Ring 5133-62	
450.0092B	- *20	108-73-2	Adapter Bushing	
136.0030B	- *21	108-351	Idler Gear Stud	
430.0095C	- *22	104-10-2-53	Change Gear - 053	
430.0095C	- *23	104-10-2-36	Change Gear - 036	
430.0095C	- *24	104-10-2-38	Change Gear - 038	
533.0104A	- *25	WA-158	Washer 3/8 Plain Steel	
545.0005A	- *26	RN-352	Retaining Ring #5100-37	
430.0095C	- 27	104-10-2-60	Gear 060 "2860"	
450.0098B	- 28	108-72	Percentage Gear Adapter Bushing	
545.0057A	- 29	RN-553	Percentage Gear Adapter Bushing Retaining Ring #5133-62	
430.0095C	- 30	104-10-2-38	Gear 038	
430.0095C	- 31	104-10-2-53	Gear 053	
135.0142B	- 32	108-143-2	Over-Running Clutch Shaft 3/8" $\phi$ x 5 11/16	
480.0080A		KE-700	Over-Running Clutch Shaft Key - Woodruff 1/16" x 3/8" #203	(1)
480.0008A		KE-701	Over-Running Clutch Shaft Key - Woodruff 3/32" x 1/2" #304	(1)
430.0093B	- 33	108-387	Gear "2826"	
195.0024B	- 34	PF-206	Oil Line Fitting Imp. East 69F (Male Ell) 1/2 - 1/8 HPT	
900.0644B	- 35	108-280X	Oil Pump	
130.0244B	- 36	108-281	Oil Pump Support	
445.0004B	- 37	108-94	Oil Pump Coupling	
440.0192B	- 38	108-93	Oil Pump Coupling Collar	
430.0095C	- 39 a	104-10-2-31	Cone Gear 031	
430.0095C	b	104-10-2-39	Cone Gear 039	
430.0095C	c	104-10-2-49	Cone Gear 049	
430.0095C	d	104-10-2-61	Cone Gear 061	
430.0095C	e	104-10-2-76	Cone Gear 076	
430.0095C	f	104-10-2-95	Cone Gear 095	
495.0066B	- 40	108-173	Master Ratio Dial	
523.0065A		PN-244	Master Ratio Dial Pin 1/16 x 1/2 Brass	
475.0065A	- 41	CS-750	Master Ratio Knob Spring	
900.0641B	- 42	108-56X	Master Ratio Knob Assembly 405.0057B	
135.0137B		108-137	Master Ratio Knob Shaft 7/16" $\phi$ x 2 3/4	
523.0073A		PN-1170	Master Ratio Knob Pin	
524.0030A		RV-714	Master Ratio Knob Rivet	

\*900.0501A Auxiliary Gear Assembly consists of Items 19 to 26



# GEAR CASE BRACKET ASSEMBLY Left Hand

PLATE  
**6**



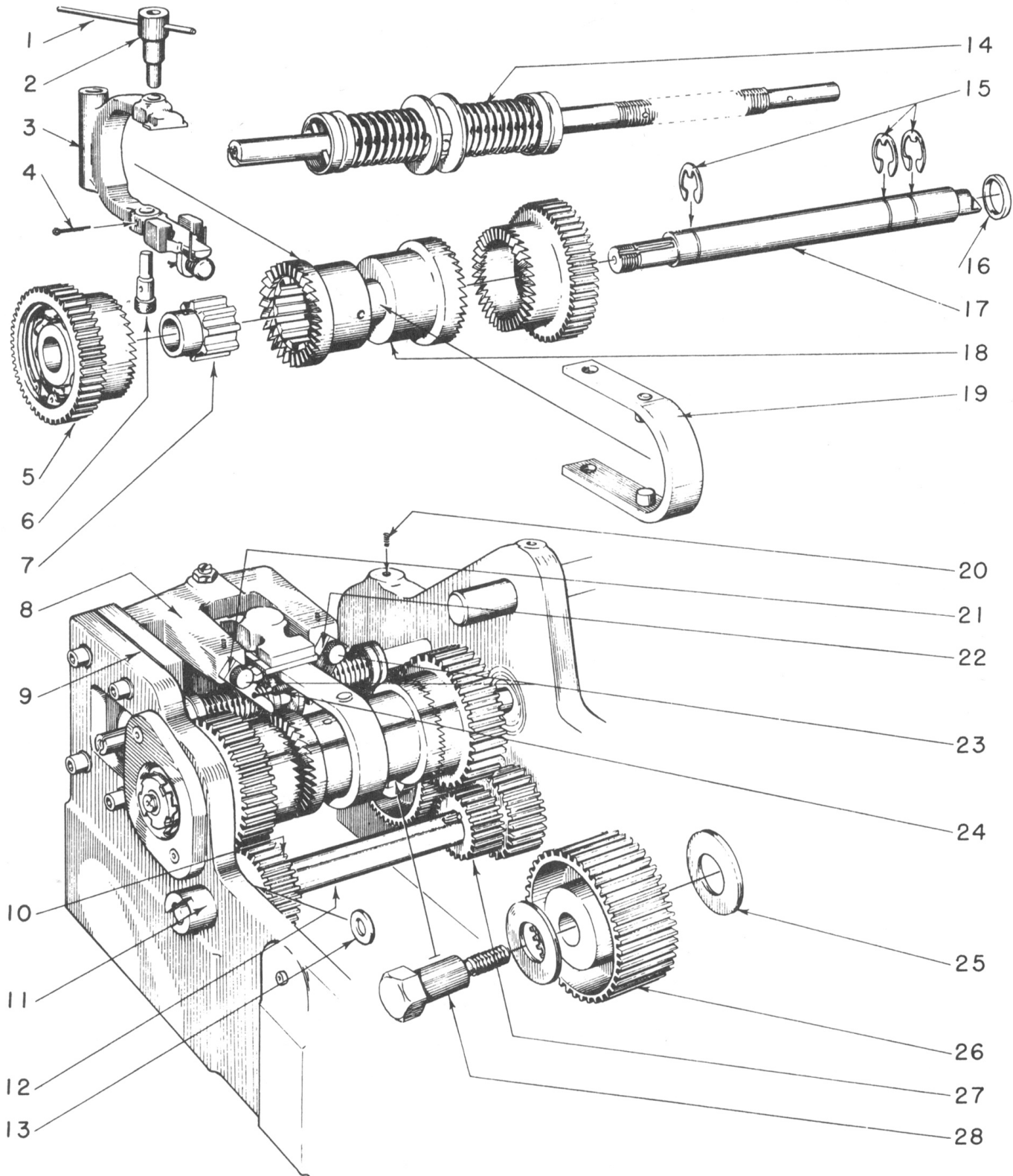
NOTE: THESE PARTS EXTRA WITH SHIPMENT, TO BE USED ONLY WHEN AUXILLIARY GEARs ARE IN USE. SEE INSTRUCTIONS SECTION, PAGE 16.

MODEL 108 COIL WINDING MACHINE

PARTS LIST			PLATE 7	
NEW NO.	KEY NO.	OLD NO.	PART NAME	QTY.
135.0139B	- 1	108-216-2	Traverse End Trip Finger	.120" x 5"
900.0612B	- 2	108-215-2X	Upper Shipper Pin Assembly	
510.0246A		SC-6201	Upper Shipper Pin Screw #10-32x 3/16	
900.0651C	- 3	108-108X	Clutch Yoke Assembly	
475.0107B		108-97	Clutch Yoke Spring	
136.0077B		108-99	Clutch Yoke Pin	
533.0101A		WA-100	Clutch Yoke Washer Plain 3/16	
522.0011A		PN-100	Clutch Yoke Cotter Pin 1/16 x 1/2	
450.0090B		108-396	Clutch Yoke Bushing	
522.0025A	- 4	PN-111	Clutch Yoke Cotter Pin 3/32 x 1	
900.0636B	- 5	108-61X	Clutch Drive Gear Assembly	
455.0067A		BB-144	Clutch Drive Gear Bearing #3201	
545.0024A		WRN-471	Clutch Drive Gear Retaining Ring #5000-125	
135.0025B	- 6	108-106	Lower Shipper Pin	
845.0026B	- 7	108-67	Traverse Reversing Clutch Spline	
521.0042A		PN-2814	Traverse Reversing Clutch Pin 3/32 x 3/4 Roll	
900.0623C	- 8	108-38X	Clutch Yoke Support Bracket Assembly 130.0237C	
510.0097A		SC-6134	Clutch Yoke Support Bracket Screw Hollow Set - Flat Point #5-40 x 3/16"	
510.2297A		SC-7634	Clutch Yoke Support Bracket Screw - Headless - Cone Point 1/2 - 20 x 3/4	
525.0119A		NU-300	Clutch Yoke Support Bracket Nut 1/2 - 20 Hex Jam	
500.0365A		SC-2910	Clutch Yoke Support Bracket Screw 1/2 - 20 x 3/4 S.H.C.S.	
533.0102A		WA-530CA	Clutch Yoke Support Bracket Washer 1/2 Plain	
125.0105B	- 9	108-386	Clutch Yoke Support Shim	
430.0095C	- 10	104-10-2-52	Gear - 052 "2852"	
480.0078A		KE-609	Gear Key 1/8 x 3/16 x 1/2	
545.0056A		RN-357	Gear Key Retaining Ring #5100-56	
440.0192B	- 11	108-93	Coupling Collar	
521.0059A		PN-2805	Coupling Collar Pin 1/8 x 3/4 Roll	
135.0147B	- 12	108-71	Traverse Clutch Gear Drive Shaft	
125.0104B	- 13	108-214	Spacer Washer	
900.0642C	- 14	108-88X	Reversing Clutch Shipper Shaft Assembly	
524.0035B		108-82	Reversing Clutch Shipper Shaft Pin	
440.0191B		108-90	Reversing Clutch Shipper Shaft Collar	
440.0192B		108-101	Reversing Clutch Shipper Shaft Collar	
475.0067A		CS-572	Reversing Clutch Shipper Shaft Spring	
523.0075A		PN-1639	Reversing Clutch Shipper Shaft Pin	
508.0097A		SC-6023	Reversing Clutch Shipper Shaft Screw 1/2 - 20 x 1/2	
475.0104A		108-129	Reversing Clutch Shipper Shaft Retainer	
545.0021A	- 15	WRN-500	Retaining Ring #5133-43	
440.0183A	- 16	CO-312	Traverse Reversing Clutch Shaft Collar	
135.0134B	- 17	108-64	Traverse Reversing Clutch Shaft	
900.0637C	- 18	108-60X	Traverse Reversing Clutch Assembly	
450.0088A		BU-1223	Traverse Reversing Clutch Bushing	
900.0643B	- 19	108-104X	Secondary Clutch Yoke Assembly	
510.0794A	- 20	108-105	Secondary Clutch Yoke Pin	
410.0033B	- (21)*	SC-6005	Gear Case Bracket Screw - 10-24 x 1/2	
136.0024B	- (22)*	108-91	Soc Set Screw Fl. Pt.	
522.0023A	- 23	108-91-2	Clutch Yoke Sear (L.H.)	
475.0105B	- 24	108-102-2	Clutch Yoke Sear (R.H.)	
534.0106A	- 25	108-102-2	Sear Pivot Pin	
430.0094B	- 26	PN-110CA	Sear Pivot Pin	
430.0095C	- 27	108-98	Sear Spring	
480.0079A	- 28	WA-690	Traverse Clutch Drive Gear Stud Washer Flat 3/8	
135.0029B	- 28	108-79	Traverse Clutch Drive Gear #2852	
		104-10-2-47	Gear - 047 #2847	
		KE-612	Gear Key 1/8 x 3/16 x 3/4	
		108-78	Traverse Clutch Drive Gear Stud	

\*410.0033B Set consists of Clutch Yoke Sear (R.H. & L.H.)

# REVERSING CLUTCH MECHANISM





MODEL 108 COIL WINDING MACHINE

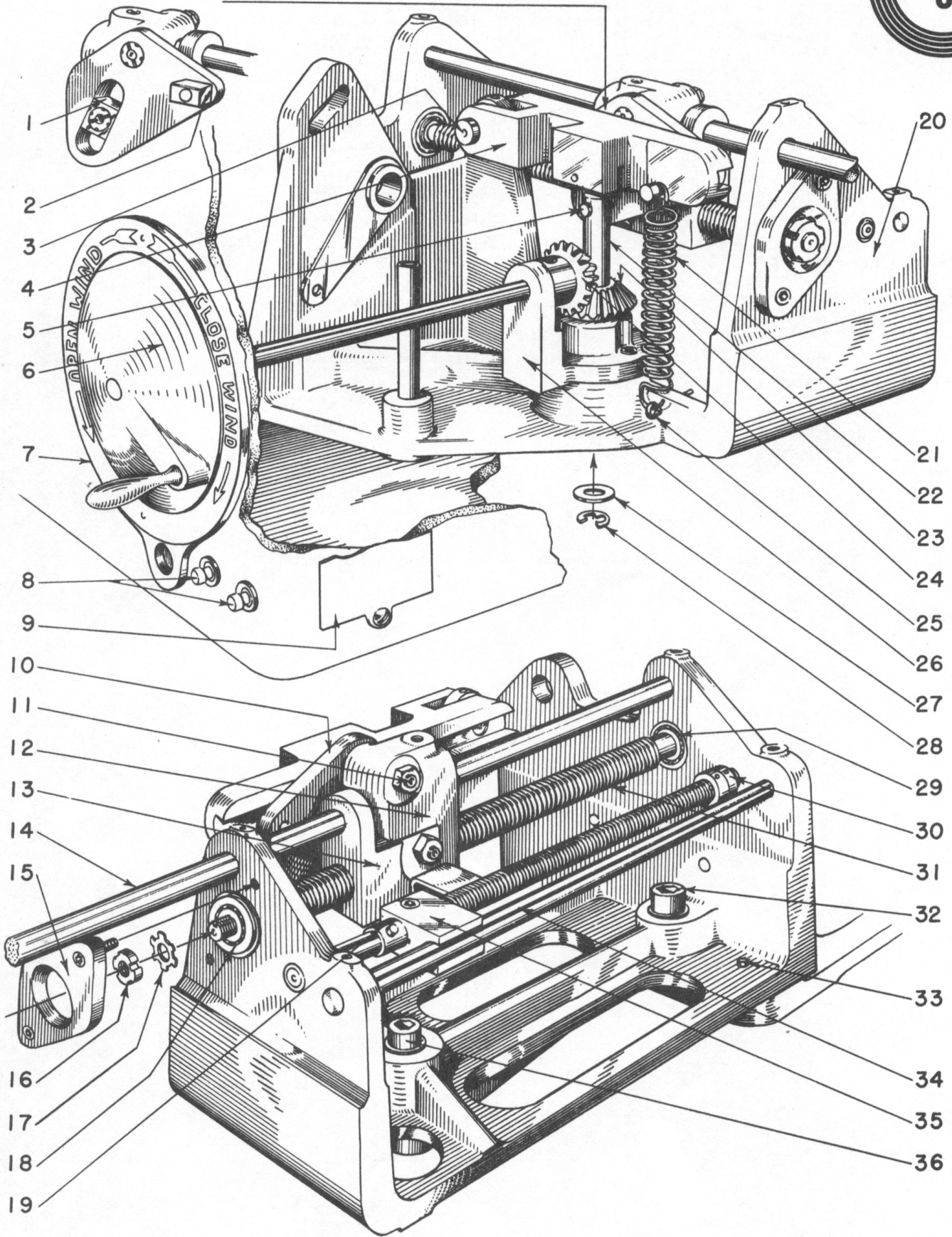
PARTS LIST

PLATE 8

NEW NO.	KEY NO.	OLD NO.	PART NAME	QTY.
120.0138B	- 1	108-383	Bellcrank Slide Block	
120.0139B	- 2	108-70	Traverse Ratio Slide Block	
523.0096B	- 3	108-142-2	Ratio Bar Pivot Pin	
900.0627B	- 4	108-36X	Ratio Bar Assembly	
136.0028B	- 5	108-270	Jackscrew Link Pin	
545.0015A/16		WRN-501	Jackscrew Link Pin Retaining Ring #5133-18	
900.0571B	- 6	108-16-3X	Open-Wind Close-Wind Handwheel Assembly	
135.0126B		108-115	Open-Wind Close-Wind Handwheel Shaft	
405.0055B		108-28-2	Open-Wind Close-Wind Handwheel Handle	
495.0064B	- 7	108-172-2	Open-Wind Close-Wind Dial	
815.0107A	- 8	ES-214	Switch - Use AH #33191NO	
245.0107B	- 9	108-240-2	Switch Plate	
900.0655B	- 10	108-263-4X	Bellcrank Assembly	
523.0100B		108-43-3	Bellcrank Pin	
508.0114B	- 11	108-52-2	Pivot Pin	(2)
525.0020A		NU-906	Pivot Pin Nut 1/2 - 28 Hex Steel	(2)
900.0653B	- 12	108-262-3X	Bellcrank Pivot Block Assembly	
510.1294A		SC-3322	Bellcrank Pivot Block Screw	
900.0609B	- 13	108-261-3X	Traverse Nut Assembly	
		SC-3175	Traverse Nut Screw #8 - 32 x 5/8 S.H.C.S.	(2)
135.0130B	- 14	108-69	Inner Traverse Bar 625" $\phi$ x 14 1/2"	
245.0103B	- 15	108-66-2	Bearing Cap	
500.0311A		SC-2900	Bearing Cap Screw #10 - 24 x 1/2 S.H.C.S.	
530.0134A		WA-592	Bearing Cap Washer Int. Lock #10	
528.0079A	- 16	NU-606	Bearing Cap Nut	
534.0104A	- 17	WA-1305	Bearing Cap Washer	
455.0061A	- 18	BB-211	Traverse Drive Screw Bearing #45500	
145.0051B	- 19	108-89	Shipper Shaft Sleeve	
521.0057A		108-82	Shipper Shaft Sleeve Pin 1/8 x 5/8 Roll	
900.0628C	- 20	108-4-2X	Gear Case Bracket R.H. Assembly	
475.0106B	- 21	108-107	Ratio Bar Spring	
508.0110B	- 22	108-138	Ratio Bar Jackscrew	
430.0091B	- 23	108-114	Jackscrew Gear Mitre #L-111Y 16P-20T	
900.0608B	- 24	108-272X	Handwheel Gear Assembly	
510.1285A		SC-6021	Handwheel Gear Screw 1/2 - 20 x 1/2 Soc Set Cup Pt.	
522.0048A	- 25	PN-133	Ratio Bar Spring Pin 5/32" $\phi$ x 3/4 Cotter	
130.0241B	- 26	108-25	Ratio Bar Bracket	
500.0363A		SC-2909	Ratio Bar Bracket Screw 1/2 - 20 x 5/8 S.H.C.S.	
533.0102A		WA-247	Ratio Bar Bracket Washer 1/2 Plain	
530.0035A	- 27	WA-158CA	Ratio Bar Bracket Washer 1/2 Lock-Split	
545.0010A	- 28	RN-552	Ratio Bar Bracket Retaining Ring #5133-37	
455.0062A	- 29	BB-212	Traverse Drive Screw Bearing #5200	
528.0086B	- 30	108-395	Shipper Shaft Nut Collar Threaded 7/16-14	
508.0109B	- 31	108-65	Traverse Drive Screw	
500.0575A	- 32	SC-2964	Gear Case Bracket Screw 1/2-13 x 1 3/4 SHC	(2)
530.0039A		WA-534	Gear Case Bracket Washer 1/2 Lock Split	(2)
523.0064A	- 33	PN-338	Gear Case Bracket Pin Taper #3 x 1	(2)
135.0146B	- 34	108-111	Traverse Stop Guide Rod 7/16" $\phi$ x 8 3/8	
900.0604B	- 35	108-92-2X	Traverse Length Control Stop Assembly	
500.0579A	- 36	SC-2966	Gear Case Bracket Screw 1/2-13 x 2 1/2 S.H.C.S.	(1)
530.0039A		WA-534	Gear Case Bracket Washer 1/2 Lock Split	(1)

# GEAR CASE BRACKET ASSEMBLY Right Hand

PLATE  
8



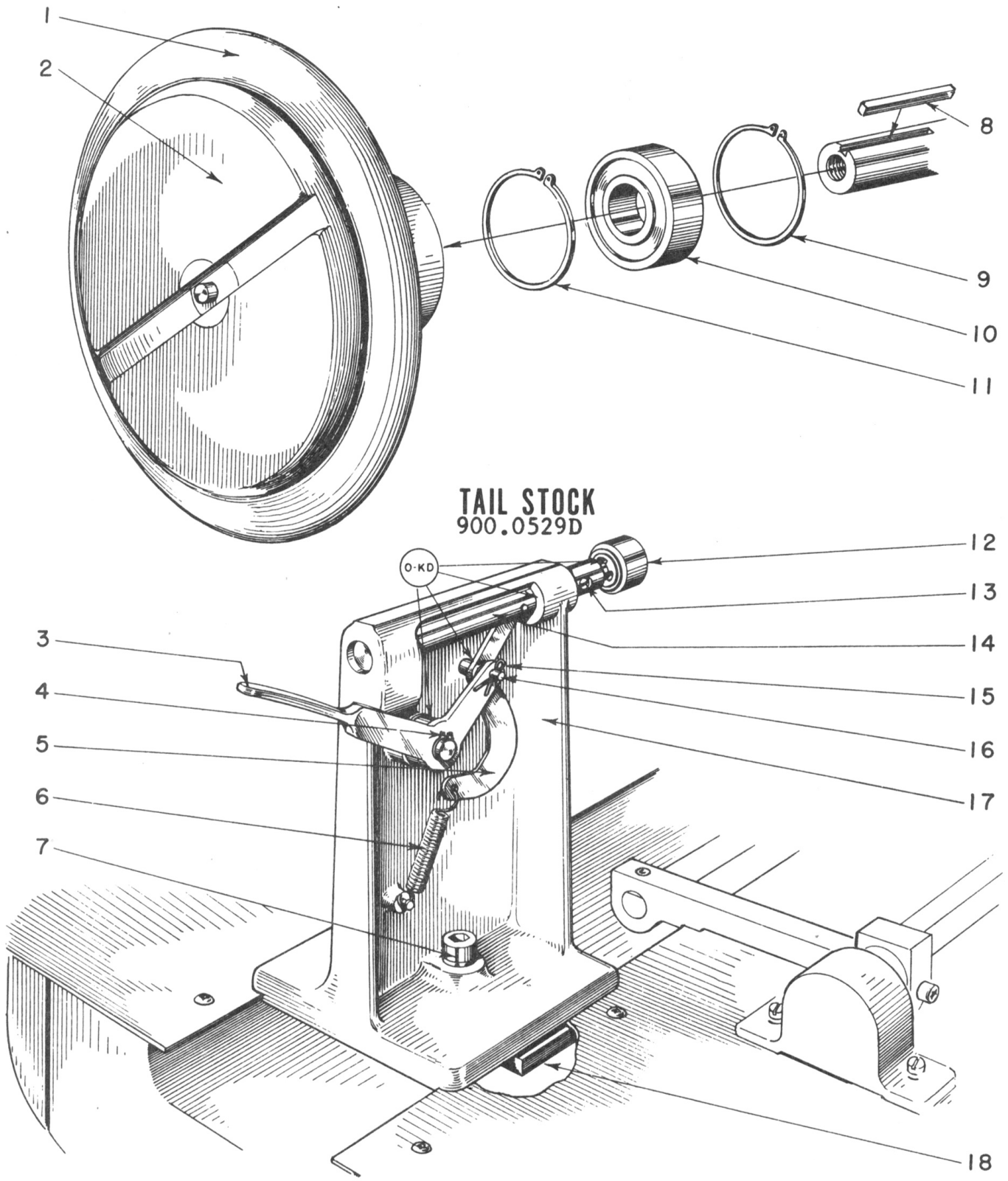
MODEL 108 COIL WINDING MACHINE

PARTS LIST

PLATE 9

NEW NO.	KEY NO.	OLD NO.	PART NAME	QTY.
900.0569B	- 1	108-23-2X	Handwheel Assembly	
900.0574B	- 2	108-377X	Transfer Plate Assembly	
150.0033B		108-378	Transfer Plate Adapter	
523.0079A		PN-1793	Transfer Plate Pin 5/16" $\phi$ x 3/4" Dowel	
170.0081B	- 3	108-367	Tailstock Lever	
545.0005A	- 4	RN-352	Retaining Ring #5100-37	
175.0082B	- 5	108-369	Tailstock Spring Link	
475.0061B	- 6	CS-117	Tailstock Spring Link Spring #LE-055D-3	
500.0569A	- 7	SC-2961	Tailstock Screw $\frac{1}{2}$ - 13 x 1" S.H.C.S.	
480.0077A	- 8	KE-106	Handwheel Key 3/16" $\phi$ x 2"	
545.0020A	- 9	WRN-601	Retaining Ring #5002-185	
455.0063A	- 10	BB-143	Spindle Bearing #99504	
545.0050A	- 11	WRN-477	Retaining Ring #5000-185	
900.0531B	- 12	108-228X	Tailstock Extension Assembly	
		455.0060A	BB-128	Tailstock Extension Bearing #R-6-FF
130.0227B		<del>130.0027B</del>	107-214	Tailstock Extension Center
		545.0010A	RN-552	Tailstock Extension Retaining Ring #5133-37
475.0062A		CS-571	Tailstock Extension Spring #LC-038E-8	
500.0171A	- 13	SC-3189	Tailstock Extension Screw #5-40 x $\frac{1}{4}$ S.H.C.S.	
900.0530B	- 14	108-229-2X	Tailstock Spindle Assembly	
170.0083B		108-371	Tailstock Link	
523.0077A		PN-1659	Tailstock Pin 5/32" $\phi$ x $\frac{1}{2}$	
522.0011A	- 15	PN-100P3	Tailstock Lever Cotter Pin 1/16 x $\frac{1}{2}$	
523.0081B	- 16	108-368	Tailstock Lever Connecting Pin	
900.0528C	- 17	108-58-2X	Tailstock Assembly	
523.0080B		108-370	Tailstock Pin 3/8" $\phi$ x 1 1/8	
523.0074A		PN-1904	Tailstock Spring Pin Type "G" Groov-Pin 3/16" x 3/8	
500.0311A		SC-6005	Tailstock Screw #10 - 24 x $\frac{1}{2}$ " S.H.C.S.	
524.0017A		NU-114	Tailstock Nut #10 - 24 Hex	
120.0128B	- 18	108-192	Tailstock Clamp Bar	
900.0529D	Tail Stock Assembly consists of Items 3 to 7 and 12 to 18			

HAND WHEEL DETAILS

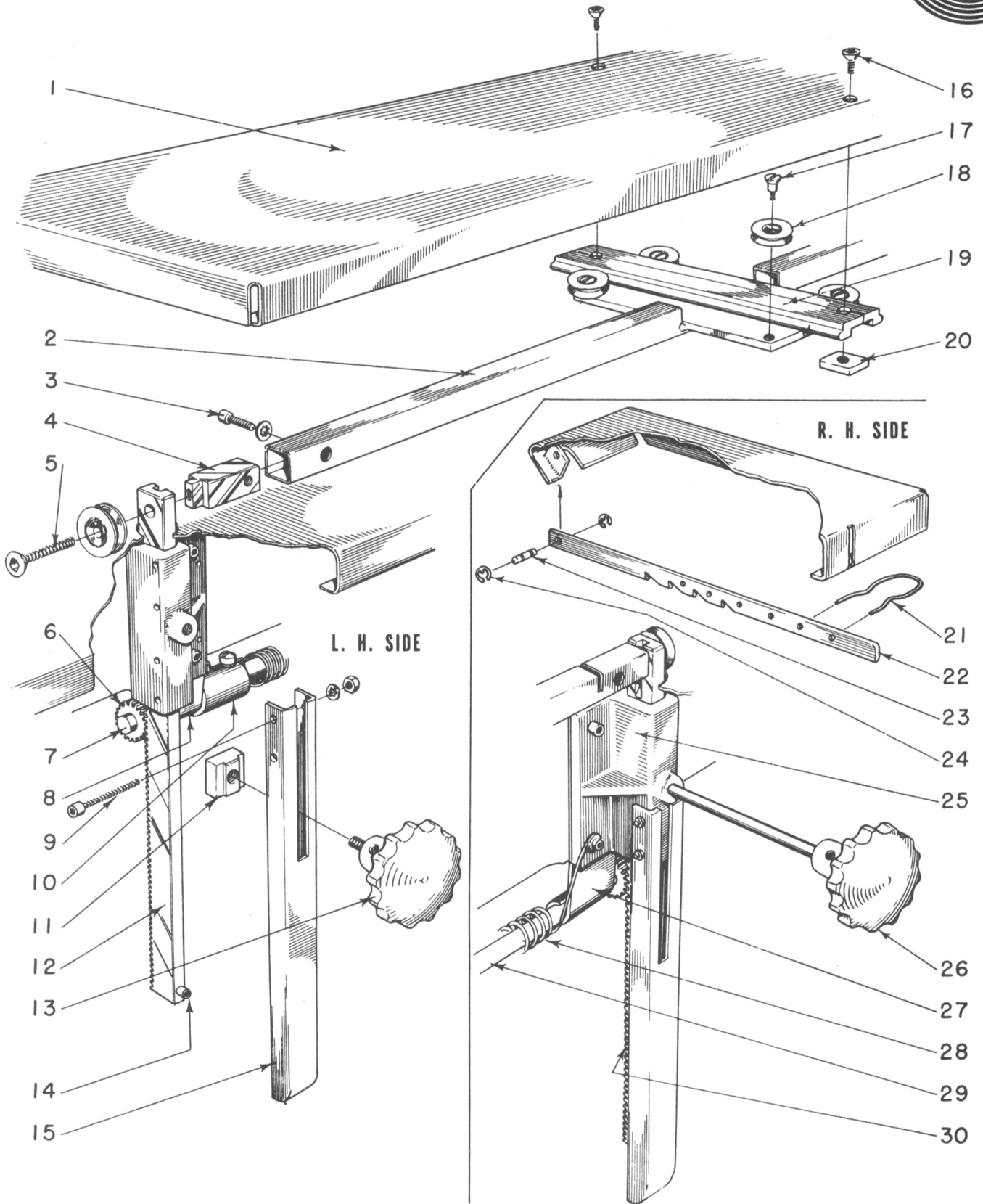


MODEL 108 COIL WINDING MACHINE

PARTS LIST			PLATE 10	
NEW NO.	KEY NO.	OLD NO.	PART NAME	QTY.
131.0066D	- 1	108-300	Feed Shelf	
900.0058B	- 2	108-303X	Feed Shelf Support Assembly	
500.0363A	- 3	SC-3108	Feed Shelf Support Plug Screw ½ - 20 x 5/8" S.H.C.S.	
530.0110A		WA-530CA	Feed Shelf Support Plug Washer ½ - Lock	
270.0037B	- 4	108-306	Feed Shelf Support Plug	
506.0240A	- 5	SC-292	Feed Shelf Support Plug Screw ½-28 x 1" Fl. S.H.C.S.	
430.0095C-028	- 6	104-10-2-28	Pinion Shaft Gear	
135.0135B	- 7	108-308	Pinion Shaft	
480.0078A		KE-609	Pinion Shaft Key	
545.0056A		RN-357	Retaining Ring #5100-56	
120.0134B	- 8	108-302	Pinion Plate L.H.	
500.0324A	- 9	SC-2905	Guard Rack Screw #10-32 x 1½ Soc. Hd. Cap	
530.0109A		WA-529	Guard Rack Washer #10 Lock	
525.0018A		NU-114CA	Guard Rack Nut #10 - 32 Hex St.	
900.0620B	- 10	108-68-2X	Pinion Shaft Coupling Assembly	
510.1283A		SC-3309	Pinion Shaft Coupling Screw - Hollow Set - Cup Point ½ -20 x 3/16	
502.0223A		SC-1207	Pinion Shaft Coupling Screw - Filister Head Machine ½ -20 x 3/8	
175.0067B	- 11	108-309	Feed Shelf Height Clamp	
431.0012B	- 12	108-304	Feed Shelf Rack L.H.	
900.0640B	- 13	108-310X	Feed Shelf Clamp Screw Assembly	
405.0056B		107-232	Feed Shelf Clamp Screw Knob	
508.0112B	- 14	A-SC-2058	Feed Shelf Stop Screw #10-24 x 3/8 S.H.C.S.	
533.0101A		WA-100	Feed Shelf Stop Washer #10 Flat	
245.0145B	- 15	108-307	Feed Shelf Rack Guard	
506.2202A	- 16	SC-273	Guide Rail Screw #10-32 x ½ Fl. Soc. Hd.	
512.2027A	- 17	104-249-7	Support Bearing Screw	
455.0065B	- 18	104-243-2X	Feed Shelf Support Bearing	
235.0070B	- 19	108-305	Guide Rail	
528.0045B	- 20	108-325	Guide Rail Nut #10-32 x ½ Sq x 3/16	
475.0070B	- 21	108-364	Feed Shelf Latch Stop Hair Pin Clip	
410.0032B	- 22	108-312	Feed Shelf Latch	
523.0083B	- 23	108-313	Feed Shelf Latch Pivot	
545.0055A	- 24	WRN-502	Retaining Ring #5133-12	
235.0066B	- 25	108-301	Feed Shelf Rack Guide	
500.0363A		SC-2909	Feed Shelf Rack Guide Screw ½-20 x 5/8 S.H.C.S.	
530.0110A		WA-530CA	Feed Shelf Rack Guide Washer ½ Lock	
900.0577B	- 26	108-311X	Feed Shelf Clamp Screw Assembly	
405.0056B		107-232	Feed Shelf Clamp Screw Knob	
120.0133B	- 27	108-302-2	Pinion Plate R.H.	
475.0102B	- 28	108-327	Feed Shelf Spring	
135.0136B	- 29	108-308-2	Pinion Shaft 9/16" x 24 11/16	
431.0011B	- 30	108-304-2	Feed Shelf Rack R.H. 28P - 14½	
900.1214E	Paper Feed Shelf Assembly consists of Items 1 to 30			

# PAPER FEED SHELF

900.1214E





MODEL 108 COIL WINDING MACHINE

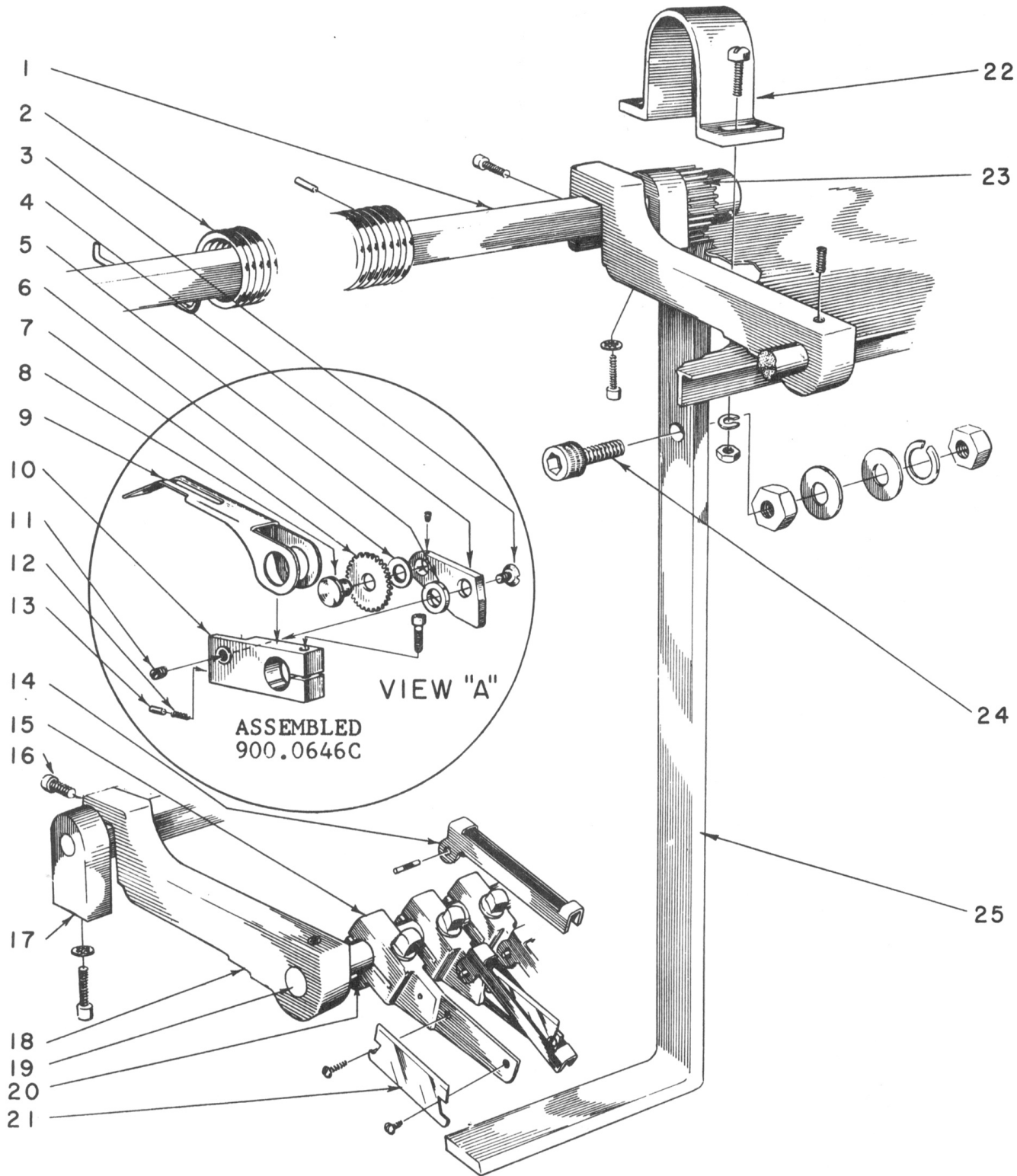
PARTS LIST			PLATE 11	
NEW NO.	KEY NO.	OLD NO.	PART NAME	QTY.
900.0601B	- 1 . . .	108-319X . . . . .	Marking Blade Pivot Rod Assembly	
523.0078A		PN-1598 . . . . .	Marking Blade Pivot Rod Assembly Pin	
475.0100B	- 2 . . .	108-363 . . . . .	Marking Blade Counter Balance Spring	
508.0096B	- 3 . . .	SC-4383 . . . . .	Marking Blade Arm To Holder Screw	
900.0648B	- 4 . . .	107-512X . . . . .	Marking Blade Arm To Assembly	
510.0129A		SC-6140 . . . . .	Marking Blade Arm Screw 5-40 x 1/8 Soc. Set-Fl. Pt.	
534.0108A	- 5 . . .	WA-2316 . . . . .	Marking Blade Arm Washer	
534.0108A	- 6 . . .	WA-2316 . . . . .	Marking Blade Stud Washer	
111.0003A	- 7 . . .	107-267-2 . . . . .	Marking Blade	
136.0126B	- 8 . . .	107-513 . . . . .	Marking Blade Stud	
245.0104B	- 9 . . .	108-316-4 . . . . .	Marking Blade Guard	
900.0647B	- 10 . . .	107-499X . . . . .	Marking Blade Arm Holder Assembly	
500.0316B		SC-3102 . . . . .	Marking Blade Arm Holder Screw 10-32 x 3/4 S.H.C.S.	
145.0050B		107-510 . . . . .	Marking Blade Arm Holder Sleeve	
510.0280B	- 11 . . .	SC-6461 . . . . .	Marking Blade Arm To Holder Lock Screw 1/2-28 Set 1/8 Hollow Lock	
475.0064A	- 12 . . .	CS-614 . . . . .	Marking Blade Arm Holder Spring	
520.0048A	- 13 . . .	PN-3029 . . . . .	Marking Blade Arm Holder Pin 3/16 x 5/16 Dowel	
245.0149B	- 14** . .	108-316-3 . . . . .	Marking Blade Guard	
		PN-2343 . . . . .	Marking Blade Guard Pin	
900.1049B	- 15** . .	107-266X . . . . .	Marking Blade Holder Assembly	
500.0417A		SC-4902 . . . . .	Marking Blade Holder Screw 5/16-18 x 1" S.H.C.S.	
500.0371A	- 16 . . .	SC-2912 . . . . .	Marking Blade Screw 1/2-20 x 1 1/2 S.H.C.S.	
130.0232B	- 17 . . .	108-322 . . . . .	Marking Blade Support	
500.0361A		SC-2908 . . . . .	Marking Blade Support Screw 1/2-20 x 1/2 S.H.C.S.	
533.0135A		WA-530 . . . . .	Marking Blade Support Washer 1/2 Int. Lock	
900.1070B	- 18 . . .	108-320-2X . . . . .	Marking Blade Arm Assembly - 9/16 Shaft Hole	
510.0333A		SC-6041 . . . . .	Marking Blade Arm Screw 5/16-18 x 5/16 Soc Set Fl Pt	
900.0630AB		*108-320-12X. . . . .	Marking Blade Arm Assembly - 1/2 Shaft Hole	
		107-12-2 . . . . .	Marking Blade Shaft (Old)	
135.0148B		*107-12-7 . . . . .	Marking Blade Shaft (New)	
	20** . .	RD-116-23 1/2 . . . . .	Marking Blade Aligning Rod 1/2" $\phi$	
111.0005B	- 21** . .	107-267 . . . . .	Marking Blade	
503.0121A		SC-3505 . . . . .	Marking Blade Screw - Rd. Hd. Machine - #5-40 x 1/2	
503.0125A		SC-668 . . . . .	Marking Blade Screw - Rd. Hd. Machine - #5-40 x 1/8	
245.0099B	- 22 . . .	108-326 . . . . .	Gear Guard	
502.0229A		SC-1210 . . . . .	Gear Guard Screw 1/2 - 20 x 5/8 Fil Hd	
509.0029A		*SC-1010 . . . . .	Gear Guard Screw Soc. Button 1/2 - 20 x 5/8 SHC	
530.0135A		WA-206 . . . . .	Gear Guard Washer 1/2 Int. Lock	(3)
525.0019A		NU-100 . . . . .	Gear Guard Nut 1/2	(3)
430.0084B	- 23 . . .	108-355 . . . . .	Pivot Rod Gear 20/20	(2)
523.0066A		PN-309 . . . . .	Pivot Rod Gear Pin Taper #0 x 1"	
500.0575A	- 24 . . .	SC-2964 . . . . .	Control Lever Pivot Screw 1/2 - 13 x 1 3/4 SHCS	
525.0027A		NU-304 . . . . .	Control Lever Pivot Nut 1/2 - 13 Nut	
533.0012A		WA-105 . . . . .	Control Lever Pivot Washer 1/2 Plain	
530.0039A		WA-210 . . . . .	Control Lever Pivot Washer 1/2 Lock	
525.0127A		NU-104 . . . . .	Control Lever Pivot Nut 1/2 - 13 Jam	
170.0084C	- 25 . . .	108-317 . . . . .	Marking Blade Control Lever	
		*108-317-2 . . . . .	Marking Blade Control Lever	

\*These parts used only with marking blade parts shown in view "A"

\*\*900.0646C Marking Blade Assembly consists of Items 3 to 13 (Replaces Items 14, 15, 20, 21)



MARKING BLADE DETAILS

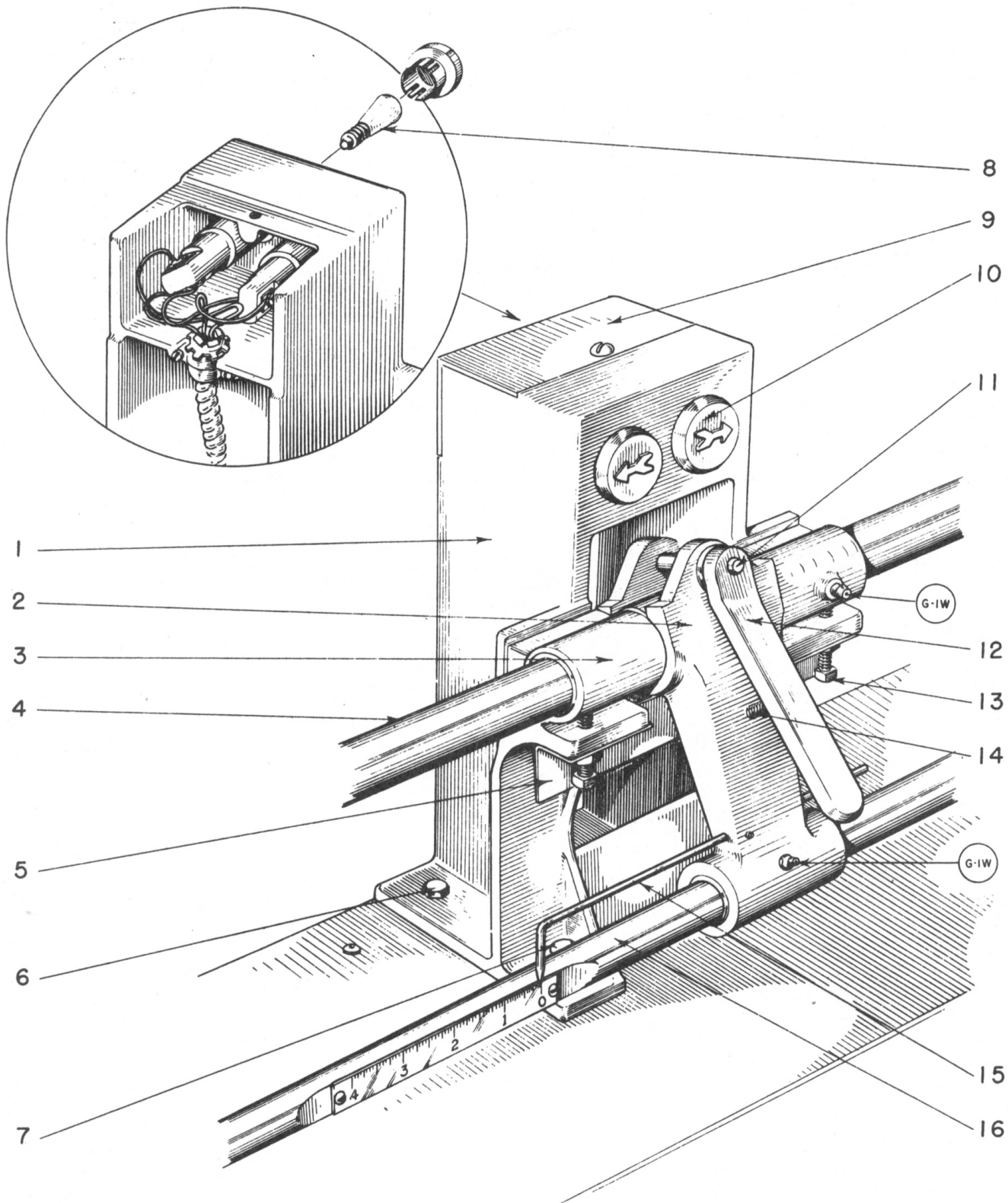


MODEL 108 COIL WINDING MACHINE

PARTS LIST			PLATE 12	
NEW NO.	KEY NO.	OLD NO.	PART NAME	QTY.
130.0223D 500.0369A	- 1 . . .	108-163 . . . . . SC-2909 . . . . .	Wire Guide Frame Support Frame Support to Bearing Screw ½-20 x 1" H.H.C.S.	(2)
533.0008A		WA-156CA . . . . .	Frame Support to Bearing Washer ½ Plain	(2)
530.0110A		WA-530CA . . . . .	Frame Support to Bearing Shakeproof Washer ½	(2)
900.0506XC	- 2 . . .	108-164X . . . . .	Wire Guide Frame Clamp Assembly	(1)
195.0022A		108-320 . . . . .	Wire Guide Frame Clamp Fitting #1728B	(1)
510.0748A		SC-6143 . . . . .	Wire Guide Frame Clamp Screw #6- 32 x 15/16 Soc Set Fl. Pt.	(1)
528.0081A		NU-910 . . . . .	Wire Guide Frame Clamp Spline Nut #42N016094	(1)
900.0505C	- 3 . . .	108-174X . . . . .	Frame Support Bearing Assembly	(1)
195.0022A		108-220 . . . . .	Frame Support Bearing Fitting #1728B	(2)
185.0033B	- 4 . . .	108-177 . . . . .	Wire Guide Frame Upper Tie Tube	
120.0125B	- 5 . . .	108-451 . . . . .	Elevation Stop Screw Plate	
501.0369A	- 6 . . .	SC-1304 . . . . .	Support Screw ½-20 x 1" H.H.C.S.	
501.0365A	- 7 . . .	SC-1302 . . . . .	Support Screw ½-20 x 3/4" H.H.C.S.	
530.1035A		WA-231 . . . . .	Support Washer ½ Lock Split	
525.0019A		NU-100CA . . . . .	Support Nut ½ - 20 Hex	
870.0059A	- 8 . . .	EF-307 . . . . .	Traverse Direction Light Bulb #656-145-GW (G.E.)	(2)
245.0100B	- 9 . . .	108-193 . . . . .	Support Cover Plate	
503.0202A		SC-4552 . . . . .	Support Cover Plate Screw #10- 32 x ½ Rd. Hd. Mach.	(1)
870.0058A	- 10 . . .	EF-295 . . . . .	Traverse Direction Indicator	(2)
508.0093A	- 11 . . .	BO-1534 . . . . .	Clamp Handle Bolt 3/8-16 x 2½ Sq. Hd.	(1)
533.0104A		WA-158CA . . . . .	Clamp Handle Washer 3/8 Plain	(1)
405.0054B	- 12 . . .	108-186 . . . . .	Clamp Handle	(1)
510.4002	- 13 . . .	SC-5605 . . . . .	Adjusting Screw ½-20 x 1½ Sq. Hd. Set	(2)
525.0019A		NU-100CA . . . . .	Adjusting Screw Nut ½ - 20 Hex	(2)
510.0354A	- 14 . . .	SC-6494 . . . . .	Elevation Stop Screw 5/16 - 24 x 3/4" Slo Hed Set	(2)
405.0045B	- 15 . . .	108-394 . . . . .	Traverse Length Scale Pointer	(1)
900.0606B	- 16 . . .	108-184X . . . . .	Wire Guide Frame Lower Tie Tube Assembly	(1)
490.0002B		108-393 . . . . .	Wire Guide Frame Lower Tie Tube Scale 1" to 4"	(1)
490.0018A		108-393-2 . . . . .	Wire Guide Frame Lower Tie Tube Metric Scale	
503.0097A		SC-682 . . . . .	Wire Guide Frame Lower Tie Tube Scale Screw 4 - 40x ½ Rd. Hd.	(2)
900.1215E (Old No.)	} Wire Guide Frame & Support consists of Items 1 to 16 on Plate 12 and Items 1 to 21 on Plate 13. Provide Serial number of machine when ordering.			
900.1293E (New No.)				

# WIRE GUIDE SUPPORT MECHANISM

ORIGINAL 900.1215E  
NEW 900.1293E



MODEL 108 COIL WINDING MACHINE

PARTS LIST

PLATE 13

NEW NO.	KEY NO.	OLD NO.	PART NAME	QTY.
*150.0014B	- 1	108-353	Wire Guide Bar Bearing Adapter	
*900.1051B	- 2	108-224X	Wire Guide Bar Bearing Stud Assembly	
455.1082		BB-142	Wire Guide Bar Bearing Stud Bearing #R-6-FF	(2)
(1) 130.0234C	- 3	108-162-14	Wire Guide Support R.H. Assembly, Obsolete 900.1055C	(1)
500.0371A		SC-3112	Wire Guide Support R.H. Cap Screw 1/2-20 x 1 1/2 S.H.C.S.	(2)
500.0275A	- 4	SC-959	Margin Cam Screw 8-32 x 1 S.H.C.S.	(2)
900.0533B	- 5	108-247X	Auxiliary Wire Guide Assembly	(AR)
508.0111B		108-249	Auxiliary Wire Guide Screw 8-32 x 1/2 Soc Set Brass Tip	(AR)
135.0124B	- 6	108-248	Auxiliary Wire Guide Shaft .5625" $\phi$ x 25 1/2" long 3/8" $\phi$ Ends	(1)
<i>135.0318B</i>	<i>4" ends</i>			
523.0067A	- 7	PN-350	Tie Tube Pin #4 Taper x 3/4"	(2)
	(8)	108-448X	Auxiliary Wire Guide Bracket R.H. Assembly	
Obsolete on Later Models		108-449	Auxiliary Wire Guide Holder	
		108-450	Auxiliary Wire Guide Stud	
		108-448-2X	Auxiliary Wire Guide Bracket L.H. Assembly	
		108-449	Auxiliary Wire Guide Holder	
		108-450	Auxiliary Wire Guide Stud	
	9	108-211X	Margin Lever Collar Assembly	
170.0089B		108-156	Margin Lever	
460.0003A		BB-404	Lock Ball - 1/2"	
475.0063A		CS-573	Lock Ball Spring	
900.0634B	- 10	108-233X	Margin Cam Assembly	
440.0188B		108-155	Margin Cam Collar	
900.0607B	- 11	108-295X	Margin Stop Collar Assembly	(1)
510.0285A		SC-6021	Margin Stop Collar Screw 1/2-20 x 1/2 Soc. Set Fl. Pt.	(1)
135.0131B	- 12	108-183	Traverse Bar .5625/.5605" $\phi$ x 34"	(1)
440.0017A	- 13	CO-106X	Traverse Bar Collar Assembly or 440.0115A (SC 56 x 15016)	(3)
<del>510.1331A</del>		SC-6021	Traverse Bar Collar Screw 5/16-18 x 1/2 Soc Set. Cup Pt.	
900.0635B	- 14	105-616-2X	Wire Guide Assembly 440.0188B	(AR)
508.0111B		SC-6021	Wire Guide Screw 8-32 Soc. Set	(AR)
135.0125B	- 15	108-352X	Wire Guide Bar Assembly .625/.625 $\phi$ x 25 1/2" 3/8" $\phi$ Ends	(1)
<i>NH 12/7/81</i>	<i>135.0350B shaft only</i>			
SPECIAL		108-180	Basic Guide Roll (Without Grooves)	
(2) 455.0060A	- 16	BB-213	Auxiliary Wire Guide Shaft Bearing	(2)
(3) 130.0235C	- 17	108-162-15	Wire Guide Support L.H. Assembly, Obsolete 900.1069C	(1)
500.0371A		SC-3112	Wire Guide Support L. H. Cap Screw 1/2 - 20 x 1 1/2 S.H.C.S.	
900.0626B	- 18	108-68X	Traverse Bar Coupling Assembly	(1)
510.1283A		SC-3309	Traverse Bar Coupling Screw 1/2-20 x 3/16 Soc Set Cup Pt.	(2)
500.0571A	- 19	SC-3144	Tie Tube Screw 1/2-13 x 1 1/2 S.H.C.S.	
530.0139A		WA-534	Tie Tube Washer 1/2 Int. Lock	
900.0564C	- 20		Extension R.H.	
900.0566C	- 21		Extension L.H.	

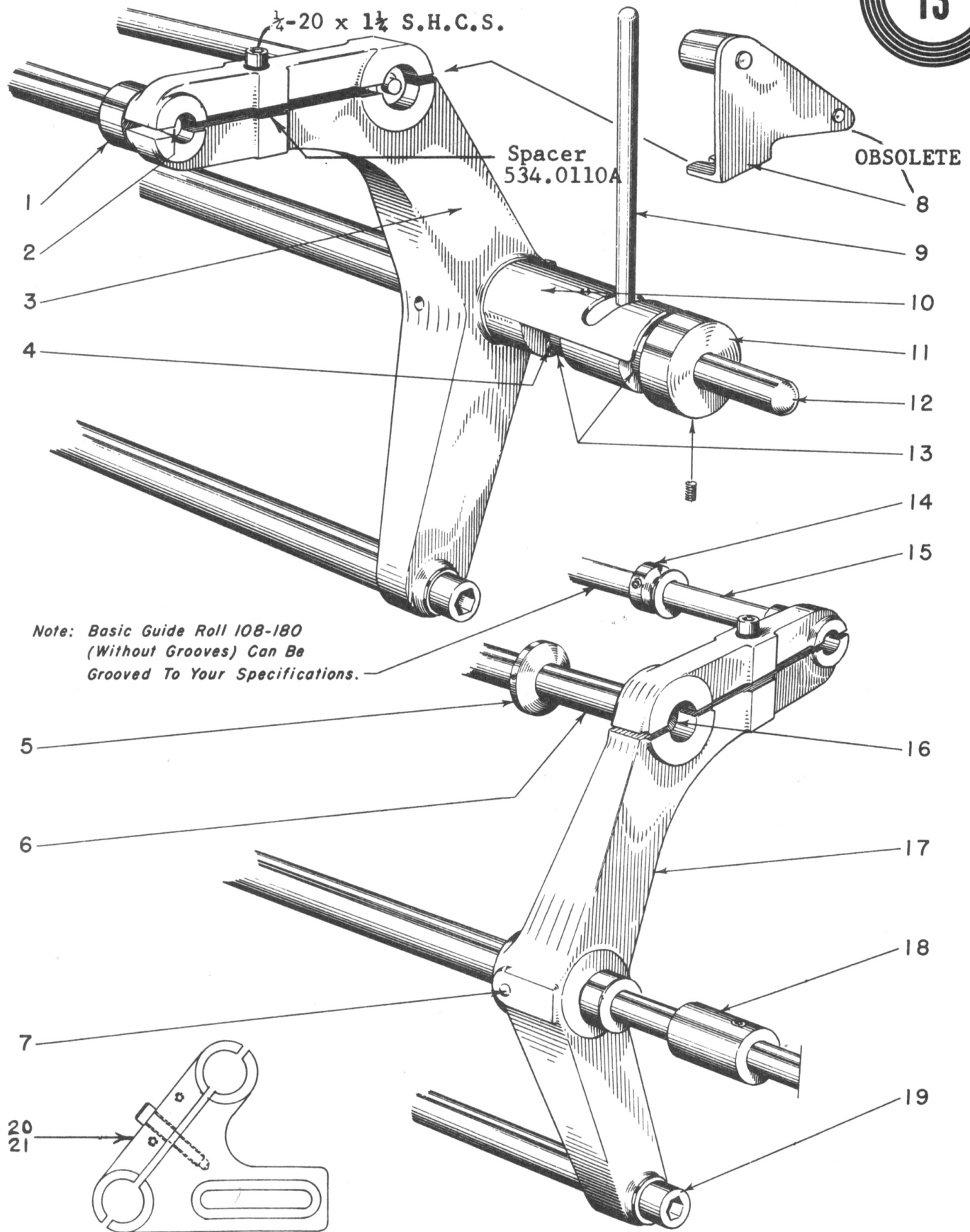
\*In new machines, Wire Guide Bar Bearing Adapter and Stud Assembly have been replaced with 440.0182A Collar 21/32 I.D. x 7/8 O.D. x 7/32.

- (1) Provide Serial Number, Original P/N 900.1055C (108-162-7X)
- (2) Provide Serial Number, Original P/N 1202-2 (Nice)
- (3) Provide Serial Number, Original P/N 900.1069C (108-162-5X)

900.1215E (Old No.)  
 900.1293E (New No.) } Wire Guide Frame & Support consists of Items 1 to 16 on Plate 12 and Items 1 to 21 on Plate 13. Provide Serial number of machine when ordering.

Original 900.1215E  
New 900.1293E

# WIRE GUIDE FRAME DETAILS



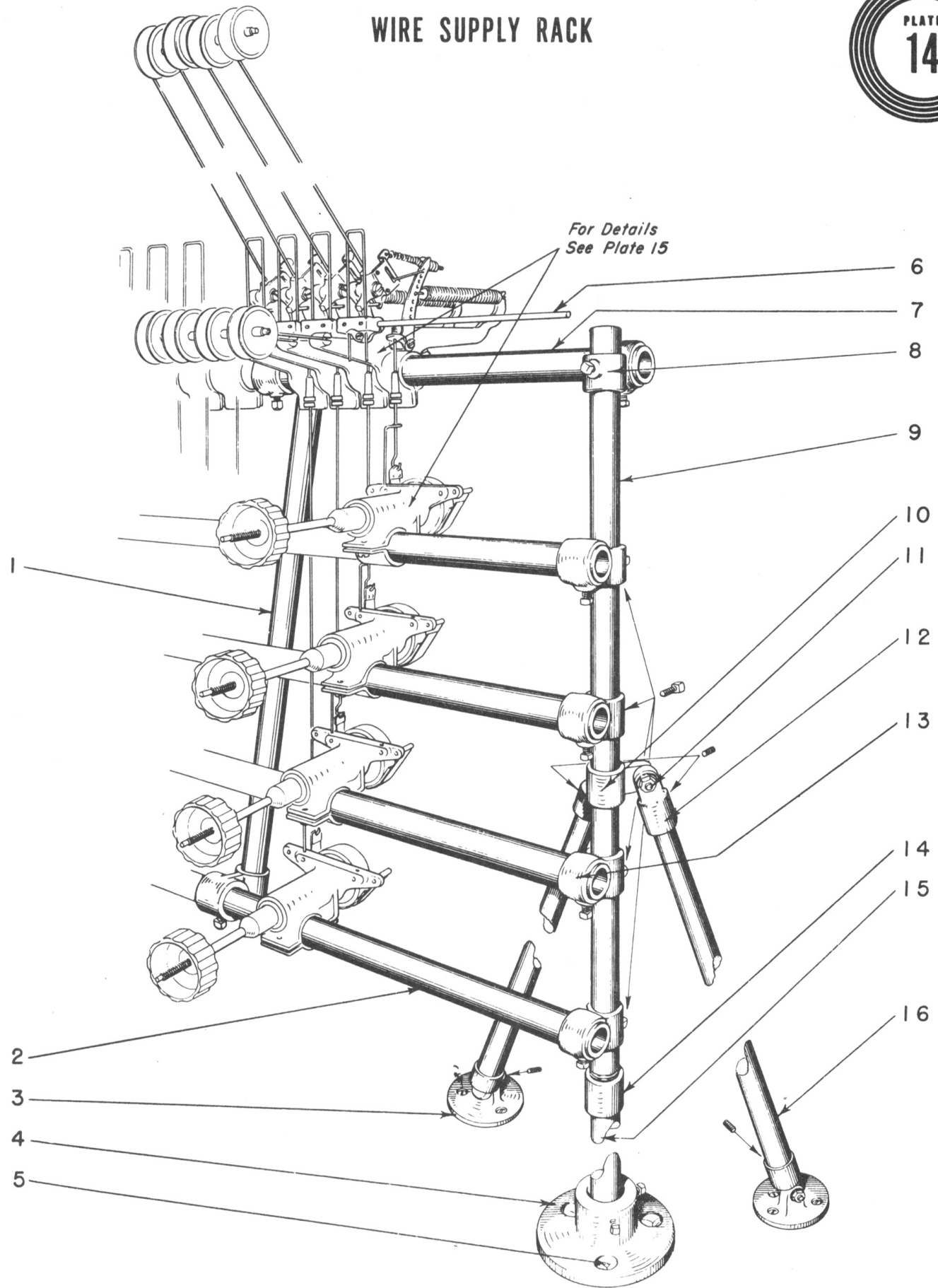
MODEL 108 COIL WINDING MACHINE

PARTS LIST			PLATE 14	
NEW NO.	KEY NO.	OLD NO.	PART NAME	QTY.
185.0051A	- 1	PP-384	Center Support 1" IPS x 30" TBE	
130.0341B	- 2	TU-346	Supply Holder Bar 1½" x 3/16 Wall Tube x 59"	
125.0055B	- 3	104-943	Wire Supply Support Bracket Floor Flange #143-5	(4)
900.0930C	- 4	105-968X	Wire Supply Bracket Support Floor Flange Assembly #60-6	
135.0172A	- 6	RD-301-55	Breakage Lever Rod	
130.0341B	- 7	107-342	Compensator Bracket Bar 1½" x 3/16 Wall x 59"	
900.0920B	- 8	*105-568X	Compensator Bracket Support Holder Assembly #45-6	
185.0049A	- 9	PP-356	Wire Supply Bracket Support R.H. 1" IPS x 32 TOE	
185.0048A		105-569-3	Wire Supply Bracket Support L.H.	
175.0061B	- 10	104-944	Wire Supply Support Brace Clamp #52-6	(2)
500.0419A	- 11	SC-1436	Wire Supply Support Brace Clamp Screw 5/16-18 x 1½ SHCS	(4)
525.0019A		NU-101CA	Wire Supply Support Brace Clamp Screw Nut 5/16-18 x HEX	(4)
533.0103A		WA-102CA	Wire Supply Support Brace Clamp Screw Washer 5/16 Plain	
900.0946B	- 12	104-942X	Wire Supply Support Brace End Assembly #50-5F	(4)
900.0920B	- 13	105-568X	Supply Support Bracket Assembly #45-6	(13)
195.0026A	- 14	PP-107	Wire Supply Bracket Support Coupling 1" IPS Coupling	(1)
185.0040A	- 15	PP-355	Wire Supply Bracket Support Extension 1" IPS x 38" TOE	(1)
185.0043A	- 16	PP-105-53	Wire Supply Support Brace 3/4 IPS x 62"	(5)

\*Formerly 105-571-2X, not available

900.0724 Strap Unrolling Tension Foundation consists of all above items except 6.

# WIRE SUPPLY RACK





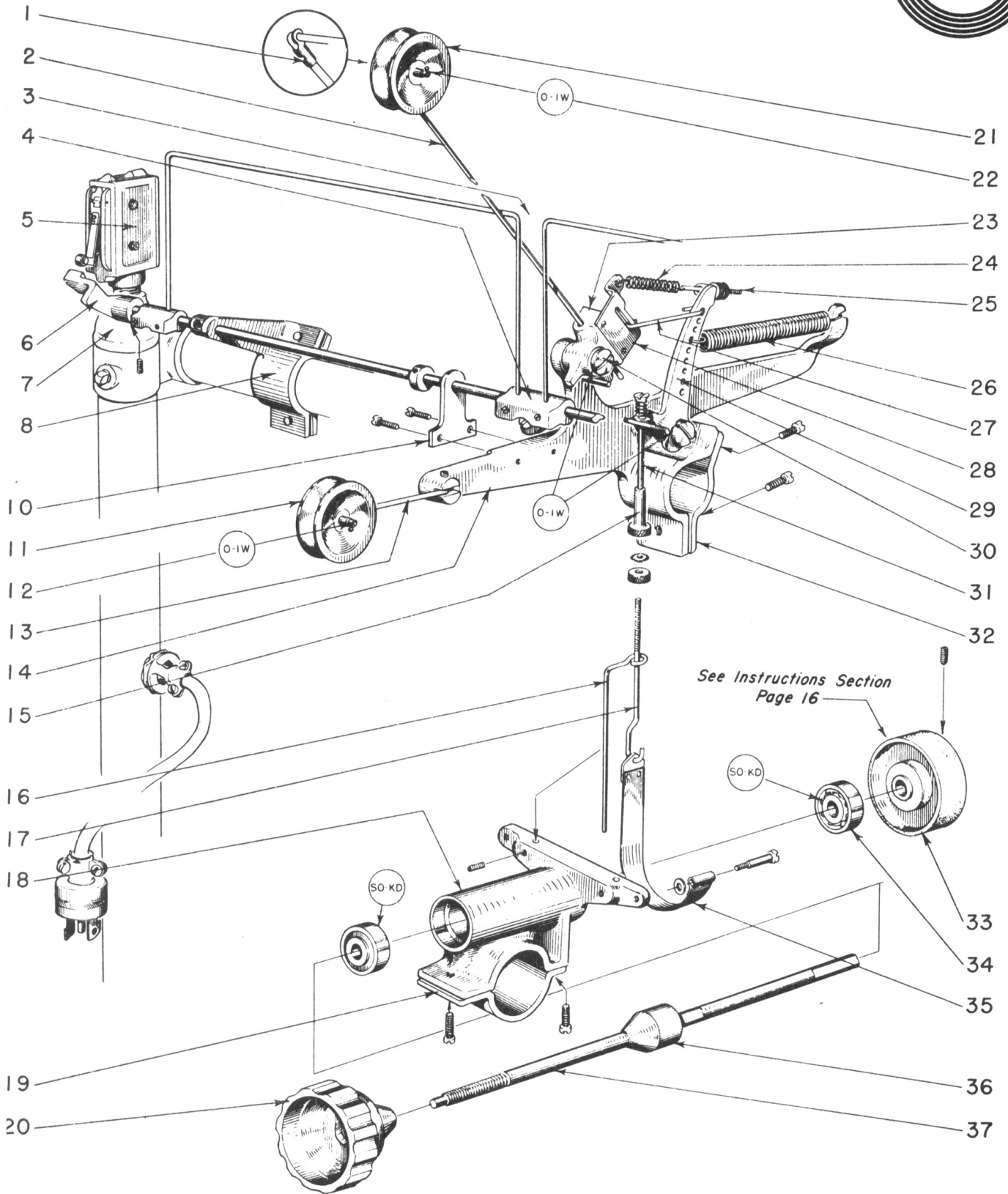
MODEL 108 COIL WINDING MACHINE

PARTS LIST

PLATE 15

NEW NO.	KEY NO.	OLD NO.	PART NAME
	- 1 . . .	105-937CA . . . . .	Wheel Guard (Retaining Ring #5555-12)
137.0134B	- 2 . . .	105-579 . . . . .	Compensator-#29 to #42 Wire
900.1004B	137.0138	105-759-4CA . . . . .	Compensator-#19 to #28 Wire
		105-579-3 . . . . .	Compensator-#42 to #46 Wire
170.0176B	- 3 . . .	105-584-3 . . . . .	Breakage Lever
900.0910B	- 4 . . .	105-583X . . . . .	Breakage Lever Bearing Assembly
510.0246A		SC-4735CA . . . . .	Breakage Lever Bearing Screw #10-32 x 5/8" Soc. Set Screw, Fl. Pt.
815.0115A	- 5 . . .	ES-179 . . . . .	Wire Breakage Detector Switch #BZD-Z-WZ
900.1007B	- 6 . . .	108-330-2X . . . . .	Breakage Lever Assembly 170.0162B
510.1247A		SC-3302 . . . . .	Breakage Lever Screw Set 10-24 x 5/16 Soc Set Screw, Cup Point
195.0027A	- 7 . . .	PF-110 . . . . .	Support Coupling L.H. 1" to 1/2" TB #1261
195.0028A		PF-2014 . . . . .	Support Nipple L.H. 1/2" I.P.S. Close 3/4"
130.0344B	- 8 . . .	104-896-2 . . . . .	Breakage Lever Rod Support
502.0229A		SC-1210CA . . . . .	Breakage Lever Rod Support Screw 1/2-20 x 5/8 Fillet Hd.
455.0094B	- 10 . . .	105-582CA . . . . .	Breakage Lever Rod Bearing
502.0202A		SC-1155CA . . . . .	Breakage Lever Rod Bearing Screw #8-32 x 1/2" Fillet Head
900.0915B	- 11 . . .	90-2285-56 . . . . .	Wire Guide Wheel
	- 12 . . .	90-1419CAX . . . . .	Wire Guide Wheel Collar (Retaining Ring #5555-12)
900.0950B	- 13 . . .	105-758X . . . . .	Wire Guide Wheel Extension
900.1032B	- 14 . . .	105-574-4X . . . . .	Compensator Bracket
528.0111B	- 15 . . .	105-567CA . . . . .	Brake Rod Adjuster #8-23 x 1" Thumb Nut
530.0157A		WA-501 . . . . .	Brake Rod Adjuster Lock Washer #6 Ext.
528.0101A		NU-511CA . . . . .	Brake Rod Adjuster Lock Nut 5-40 Knurled
235.0064B	- 16 . . .	105-561CA . . . . .	Brake Connecting Rod Guide
178.0173B-001	17 . . .	105-565-3 3/8CA . . . . .	Brake Connecting Rod
178.0173B-002		105-565-9 5/8CA . . . . .	Brake Connecting Rod
178.0173B-003		105-565-15 7/8CA . . . . .	Brake Connecting Rod
178.0173B-004		105-565-22 1/8CA . . . . .	Brake Connecting Rod
900.1255C	- 18 . . .	105-570X . . . . .	Wire Supply Bracket Assembly
510.0253A		SC-6200 . . . . .	Wire Supply Bracket Screw #10-24 x 1/2" Soc Set Screw, Fl. Pt.
175.0065B	- 19 . . .	105-560 . . . . .	Wire Supply Bracket Clamp
502.0227A		SC-1009CA . . . . .	Wire Supply Bracket Clamp Screw Fillet Hd Main 1/4 - 20 x 1/2
900.1013B	- 20 . . .	104-948-3X . . . . .	Supply Spindle Nut
900.1003B	- 21 . . .	90.2285-56 . . . . .	Compensator Wheel - #29 to #42 Wire
900.0915B		104-624-2CAX . . . . .	Compensator Wheel - #19 to #28 Wire
		90-2285-59 . . . . .	Compensator Wheel - #43 to #46 Wire
	- 22 . . .	90-1419CAX . . . . .	Compensator Wheel Collar - #29 to #42 Wire (Retaining Ring #5555-12)
		CO-100X . . . . .	Compensator Wheel Collar - #14 to #28 Wire (Retaining Ring #5555-18)
		90-1419-4X . . . . .	Compensator Wheel Collar - #43 to #46 Wire (Retaining Ring #5555-12)
900.0947B	- 23 . . .	105-577-2 . . . . .	Compensator Bearing
510.0209A		SC-5007 . . . . .	Compensator Bearing Set Screw #8-32 x 5/16" Soc Set Screw, Fl. Pt.
475.0125A	- 24 . . .	CS-257 . . . . .	Compensator Plate to Adjusting Lever Spring - #29 to #42 Wire
475.0124A		CS-140 . . . . .	Compensator Plate to Adjusting Lever Spring - #19 to #28 Wire
475.0125A		CS-257 . . . . .	Compensator Plate to Adjusting Lever Spring - #43 to #46 Wire
136.0063B	- 25 . . .	105-580CA . . . . .	Compensator Plate Spring Adjuster
528.0110B		105-581CA . . . . .	Compensator Plate Spring Adjuster Nut
528.0100A		NU-509CA . . . . .	Compensator Plate Spring Adjuster Lock Nut 8-32 x 1/2
475.0073A	- 26 . . .	CS-176 . . . . .	Tension Adjusting Lever Spring-#29 to #40 Wire
475.0072A		CS-180 . . . . .	Tension Adjusting Lever Spring-#41 to #42 Wire
475.0123A		CS-177 . . . . .	Tension Adjusting Lever Spring-#19 to #28 Wire
		CS-192 . . . . .	Tension Adjusting Lever Spring-#43 to #46 Wire
170.0159A	- 27 . . .	105-589CA . . . . .	Tension Adjusting Lever Link
120.0176B	- 28 . . .	105-578CA . . . . .	Compensator Bearing Plate
508.0149A		SC-1076CA . . . . .	Compensator Bearing Plate Screw
900.0943B	- 29 . . .	105-587CAX . . . . .	Tension Adjusting Lever Assembly
508.0149A		ST-195 . . . . .	Tension Adjusting Lever Stud
508.0148A	- 30 . . .	ST-194 . . . . .	Compensator Bearing Stud
508.0146B	- 31 . . .	105-566CA . . . . .	Brake Adjusting Screw #8-32 x 2 1/2 Fl Hd Mach Screw 2" Thread
533.0005A		WA-153CA . . . . .	Brake Adjusting Screw Spring Washer #8 Flat
475.0127A		CS-529 . . . . .	Brake Adjusting Screw Spring
175.0066B	- 32 . . .	105-575 . . . . .	Compensator Bracket Clamp
502.0229A		SC-1210CA . . . . .	Compensator Bracket Clamp Screw 1/2-20 x 5/8 Fillet Head
900.1016B	- 33 . . .	105-764-8X . . . . .	Brake Wheel Assembly
450.0136B		105-772X . . . . .	Brake Wheel Bushing Assembly
455.0082A	- 34 . . .	BB-121 . . . . .	Wire Supply Bracket Ball Bearing-Originally 455.0055A
900.0954B	- 35 . . .	105-562X . . . . .	Brake Band Assembly-#19 to #46 Wire
508.0141A		ST-302 . . . . .	Wire Supply Bracket Brake Stud
		WA-154CA . . . . .	Wire Supply Bracket Brake Stud Washer
160.0033B	- 36 . . .	104-947 . . . . .	Supply Spindle Cone
900.1017B		PN-1577 . . . . .	Supply Spindle Cone Pin
135.0201B	- 37 . . .	104-946-3X . . . . .	Supply Spindle Assembly
<u>AVAILABLE ASSEMBLIES</u>			
900.0738D	Compensator Bracket Assembly (Items 1 to 15 and 21 to 32)		
900.1009C	Spindle Assembly (Items 16, 18, 19, 20 and 33 to 37)		
900.1033A	Strap Unrolling Tension Unit (All Items Except 3 to 8, 10, 17)		
Order also Item 17 in the appropriate size.			

# STRAP TENSION AND WIRE BREAKAGE DETECTOR



SO-KD Sewing Machine Oil. Keep From Drying

O-IW Oil - Weekly

MODEL 108 COIL WINDING MACHINE

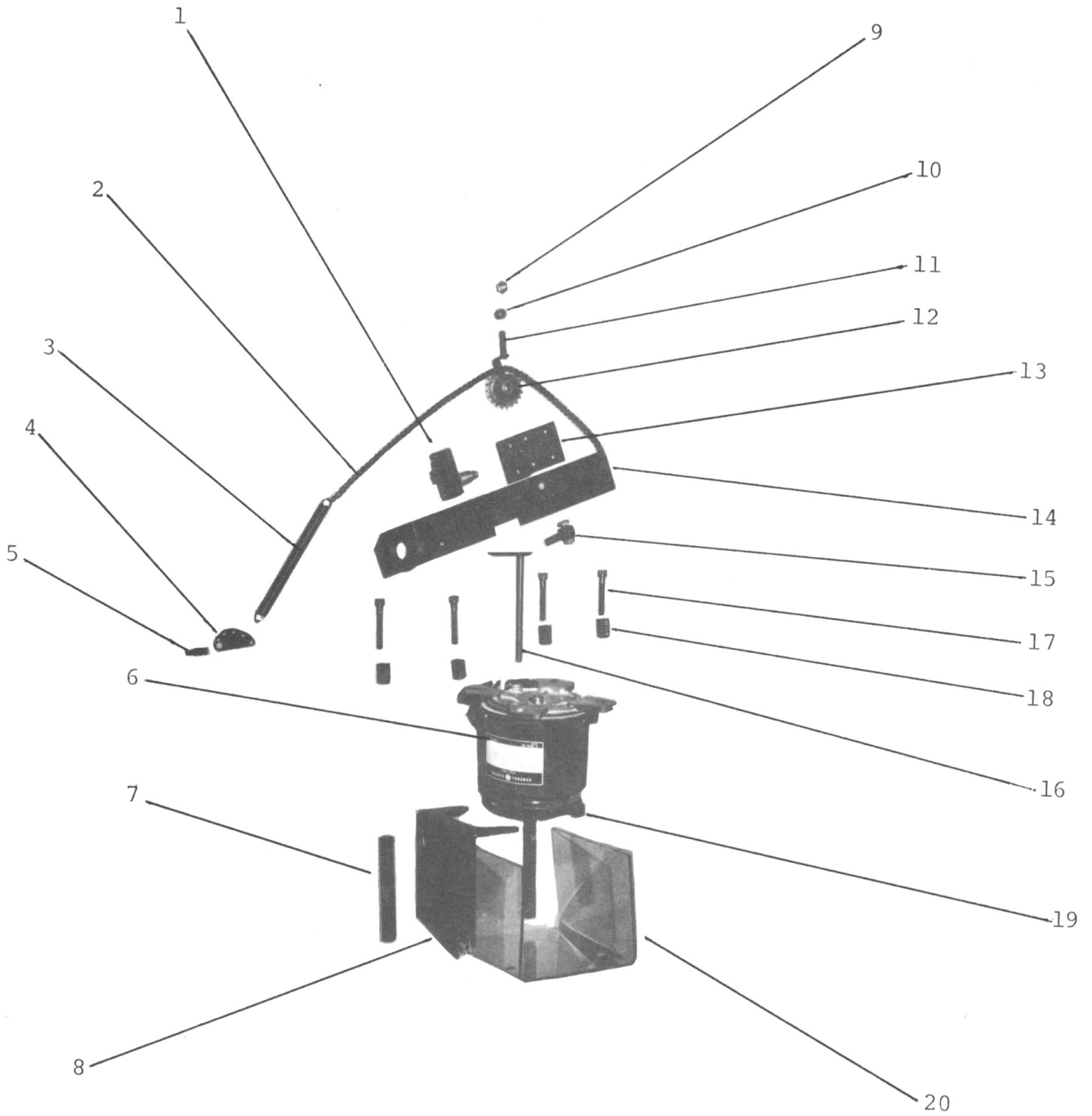
PARTS LIST

PLATE 16

NEW NO.	KEY NO.	OLD NO.	PART NAME	QTY.
815.0087A	-	1	Micro Switch	(1)
503.0161A	-	SC-544	Screw 6-32 x 1 Rd Hd Slotted	(2)
528.0056A	-	NU-1105	Nut 6-32	(2)
465.0001A	-	2 . . . . CN-301-50	Chain	(1)
475.0057A	-	3 . . . . CS-287-2	Spring-Extension	(1)
170.0207A	-	4 . . . .	Link-Spring	(1)
136.0021A	-	5 . . . . ST-1406	Stud	(1)
530.0034A	-	WA-204	Washer #10 Plain	(1)
525.0067A	-	NU-114	Nut #10-24 Hex	(1)
875.0052A	-	6 . . . .	Transformer - Auto 9T92A13	(1)
125.0102B	-	7 . . . . 108-658	Mounting Post	(2)
533.0057A	-		Washer #12 Flat SAE	(4)
130.0190C	-	8 . . . . 108-656-2	Bracket - Control Cable	(1)
538.0058A	-	WA-101	Washer Plain $\frac{1}{2}$	(4)
525.0063A	-	NU-100	Nut $\frac{1}{2}$ - 20 Hex	(2)
525.0063A	-	9 . . . . NU-100	Nut $\frac{1}{2}$ - 20 Hex	(1)
125.0100A	-	10 . . . . CO-1102-19	Collar	(1)
509.0235A	-	11 . . . . SC-9550-45	Screw $\frac{1}{2}$ -20 x 1 Soc Butt Hd	(1)
530.0035A	-	WA-206	Washer $\frac{1}{2}$ Lock Split	(1)
900.0391A	-	12 . . . .	Sprocket Assembly Welded -25820 $\frac{1}{2}$ B	(1)
455.0068A	-	BB-660	Bearing 77R4	(1)
130.0189B	-	13 . . . . 108-659-B	Bracket - Limit Switch	(1)
503.0227A	-	SC-609	Screw $\frac{1}{2}$ -20 x $\frac{1}{2}$ Rd Hd Mach	(2)
530.0068B	-	NU-100	Nut $\frac{1}{2}$ - 20 Hex	(2)
900.0394C	-	14 . . . . 108-627-24	Treadle-Arm-Welded	(1)
510.1377A	-	SC-3342	Screw $\frac{3}{8}$ - 16 x 5/16 Soc Set Cup Pt.	(2)
506.0243A	-	SC-216	Screw $\frac{1}{2}$ -20 x 1 $\frac{1}{2}$ Fl. Soc Hd Cap	(1)
530.0258A	-	WA-156	Washer $\frac{1}{2}$ Plain	(1)
530.0035A	-	WA-206	Washer $\frac{1}{2}$	(1)
525.0063A	-	NU-100	Nut 6-32 Hex	(1)
900.0397B	-	15 . . . . 50-2753-9X	Support Stop Assembly	(2)
130.0192B	-	50-2753-4	Support	(2)
501.0369A	-	SC-1304	Screw $\frac{1}{2}$ -20 x 1 Hex Hd Cap	(2)
525.0069A	-		Nut $\frac{1}{2}$ -20 Hex Jam	(2)
525.0021A	-	ANU-971	Nut 5/16 - 18 Hex Jam	(4)
530.0036A	-	WA-207	Washer 5/16 - Lock Split	(1)
900.1090B	-	16 . . . . 108-655	Arm - Trans Drive- Welded	(1)
500.0315A	-	17 . . . . SC-2914	Screw $\frac{1}{2}$ -20 x 1 $\frac{1}{2}$ Soc Hd Cap	(4)
125.0101	-	18 . . . . CO-1113-4	Spacer	(4)
900.0397B	-	19 . . . .	Support See Item 15	(1)
245.0095B	-	20 . . . . 108-657-4	Guard Transformers	(1)
509.0227A	-	SC-9559	Screw $\frac{1}{2}$ -20 x $\frac{1}{2}$ Soc Butt Hd Cap	(2)

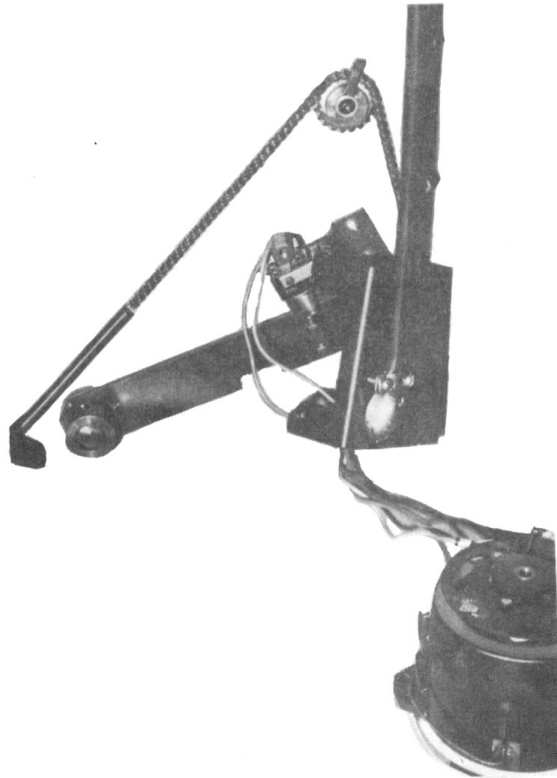
SPEED & BRAKE CONTROL ASSEMBLY

SEE ALSO PLATE 16A

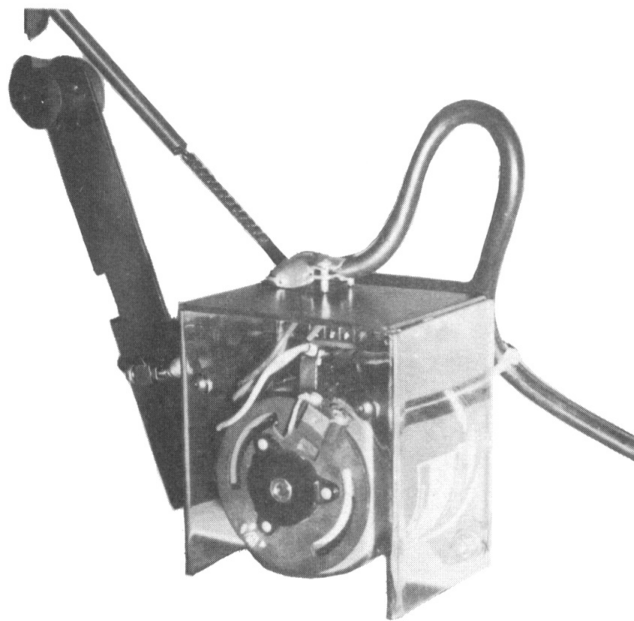


SPEED & BRAKE CONTROL ASSEMBLY

SEE ALSO PLATE 16



INSTALLED  
LESS  
TRANSFORMER



INSTALLED

MODEL 108 NUMERICAL INDEX  
 CONVERSION TO DECIMAL STOCK NUMBERS

<u>ORIGINAL NO.</u>	<u>DECIMAL NO.</u>	<u>PLATE NO.</u>	<u>KEY NO.</u>
60-58	475.0072A	2	16
90-1419CAX		15	- 12
90-1419-AX		15	- 22
90-2285-45		15	- 11
90-2285-45		15	- 21
<del>103-10-2-28</del>	430.0095C 028	6	- 10
<i>104</i> 31	031	6	8
36	036	6	23
38	038	6	24
39	039	6	39
47	047	6	27
49	049	6	39
52	052	6	10
53	053	6	31
60	060	6	27
61	061	6	39
65	065	6	12
76	076	6	- 39
95	095	6	39
104-10-2-96	430.0095C 096	6	- 14
104-243-2X	455.0065A	10	- 18
104-249-7	512-2027A	10	- 17
105-624-2CAX	900.1003B	15	- 21
104-896-2	130.0344B	15	8
104-942X	900.0946B	14	- 12
104-943	126.0055B	14	- 3
104-944	175.0061B	14	- 10
104-946-3X	900.1017B	15	- 37
104-947	160.0033B	15	- 36
104-948-3X	900.1013B	15	- 20
105-560	175.0065B	15	- 19
105-561-CA	235.0064B	15	- 16
105-562X	900.0954B	15	- 35
105-565-3 3/8"	170.0173B 001	15	- 17
105-565-9 5/8"	170.0173B 002	15	- 17
105-565-15 7/8"	170.0173B 003	15	- 17
105-565-22 1/8"	170.0173B 004	15	- 17
105-566-CA	508.0146B	15	- 31
105-567-CA	528.0111B	15	- 15
105-568X	900.0920B	14	- 13
105-569-3	185.0049A	14	- 9
105-570X	900.1255C	15	- 18
105-571-2X		14	- 8
105-574-4X	900.1032C	15	- 14
105-575	175.0066B	15	- 32
105-577-2	455.0092B	15	- 23
105-578CA	120.0176B	15	- 28
105-579	137.0134B	15	- 2
105-579-3			
105-579-4XB	900.0945B	not shown	
105-580CA	136.0063B	15	- 25
105-581CA	528.0110B	15	- 25
105-582CA	455.0094B	15	- 10
<i>104-804-3X</i>	<i>900.0882</i>		



<u>ORIGINAL NO.</u>	<u>DECIMAL NO.</u>	<u>PLATE NO.</u>	<u>KEY NO.</u>
105-583X	900.0910B	15	- 4
105-584-3	170.0176B	15	- 3
105-587CA	900.0943B	15	- 29
105-589CA	170.0159B	15	- 27
105-616	900.0635B	13	- 14
105-758X	900.0950B	15	- 13
105-759-4CA	137.0138B	15	- 2
105-764-8X	900.1016B	15	- 33
105-772	450.0136B	15	- 33
105-937CA		15	- 1
105-968X	900.0930C	14	- 4
107-12-7	135.0148B	11	- 19
107-205	900.0564C	13	- 3
107-214	130.0227B	9	- 12
107-232	405.0056B	10	- 13
107-266X	900.1049B	11	- 15
107-267	111.0005B	11	- 21
107-0342	130.0341B	14	- 7
108-1-2	275.0035D	1	- 17
108-2X	900.0654E	1	- 15
108-4-2X	900.0628C	8	- 20
108-5-3X		1	- 12
108-6X		1	- 6
108-16-2X	900.0573B	3	- 26
108-16-3X	900.0571B	8	- 6
108-18-2X	900.0442B	4	- 8
108-19	450.0081B	4	- 8
108-20-3	136.0078B	4	- 22
108-23-2X	900.0569C	9	- 1
108-25	130.0241B	8	- 26
108-28	405.0072B	5	- 14
108-29	136.0027B	5	- 14
108-32	245.0105D	1	- 20
108-33	135.0132B	4	- 15
108-34	130.0225B	3	- 17
108-36X	900.0627B	8	- 4
108-38X	900.0623C	7	- 8
108-39X	900.0624B	4	- 6
108-40X	900.0625B	4	- 5
108-41X	900.0614B	6	- 13
108-43-3	523.0100B	8	- 10
108-44X	900.0615B	3	- 5
108-48X	900.0568D	5	- 24
108-49	170.0086B	5	- 24
108-52-2	508.0114B	8	- 11
108-53	120.0127B	5	- 11
108-54	421.0004A	5	- 21
108-56X	900.0641B	6	- 42
108-58-2X	900.0258C	9	- 17
108-59	135.0149C	5	- 9
108-60X	900.0637C	7	- 18
108-61X	900.0636B	7	- 5
108-63	508.0106B	5	- 18
108-64	135.0134B	7	- 17
108-65	508.0109B	8	- 31

<u>ORIGINAL NO.</u>	<u>DECIMAL NO.</u>	<u>PLATE NO.</u>	<u>KEY NO.</u>
108-66-2	245.0103A	8	- 15
108-67	845.0026B	7	- 7
108-68X	900.0626B	13	- 18
108-68-2X	900.0620B	10	- 10
108-69	135.0130B	8	- 14
108-70	120.0139B	8	- 2
108-71	135.0147B	7	- 12
108-72	450.0089B	6	- 28
108-73	450.0091B	6	- 8
108-73-2	450.0092B	6	- 20
108-74	135.0143B	6	- 11
108-75	480.0083B	6	- 11
108-76	135.0144B	6	- 15
108-77	480.0084B	6	- 16
108-78	136.0029B	7	- 28
108-79	430.0094B	7	- 26
108-80X	900.0617B	6	- 3
108-81X	900.0621B	6	- 5
108-82	524.0035B	7	- 14
108-83	130.0250D	1	- 5
108-84-2X	900.0639B	6	- 4
108-88X	900.0642C	7	- 14
108-89	145.0051B	8	- 19
108-90	440.0191B	7	- 14
108-91	410.0033B	7	- 21
108-91- 23	410.0033B	7	- 22
108-92-2X	900.0604B	8	- 35
108-93	440.0192B	7	- 11
108-94-2	445.0005B	4	- 2
108-95	135.0133B	4	- 3
108-97	475.0107B	7	- 3
108-98	475.0105B	7	- 24
108-101	440.0190B	7	- 14
108-102-2	136.0024B	7	- 23
108-104X	900.0643B	7	- 19
108-105	523.0097B	7	- 19
108-106	136.0025B	7	- 6
108-107	475.0106B	8	- 21
108-108X	900.0651C	7	- 3
108-110X	900.0616B	3	- 24
108-111	135.0146B	8	- 34
108-113X	900.0572B	3	- 7
108-114	430.0091B	8	- 23
108-115	235.0126B	8	- 6
108-118	900.0503B	3	- 13
108-119	900.0656B	6	- 18
108-124X	900.0497B	5	- 6
108-125	430.0096B	5	- 8
108-126	170.0088B	6	- 17
108-127X	900.0496B	5	- 4
108-128	435.0002B	3	- 7
108-129	475.0104B	7	- 14
108-130	135.0127B	3	- 26
108-135-2	130.0224B	5	- 5
108-136	135.0098B	5	- 7

<u>ORIGINAL NO.</u>	<u>DECIMAL NO.</u>	<u>PLATE NO.</u>	<u>KEY NO.</u>
108-137	135.0137B	6	- 42
108-138	508.0110B	8	- 22
108-139	421.0005B	4	- 4
108-140-2	410.0034B	3	- 3
108-141X	900.0658C	1	- 9
108-142-2	523.0096B	8	- 3
108-143-2	135.0142B	6	- 32
108-148X	900.0575B	6	- 17
108-149X	900.0650B	5	- 14
108-150	135.0145B	5	- 17
108-156	170.0089B	13	- 9
108-158	886.0209B	3	- 2
108-159X	900.0502B	3	- 16
108-162-5X	900.1069C	13	- 17
108-162-7X	900.1055C	13	- 3
108-163	130.0223D	12	- 1
108-164X	900.0506C	12	- 2
108-171		5	- 10
108-172	495.0065B	3	- 25
108-172-2	495.0064B	8	- 7
108-173	495.0066B	6	- 40
108-174X	900.0505C	12	- 3
108-177		12	- 4
108-178		1	- 7
108-1800		13	- 15
108-181X		1	- 21
108-182-2	135.0121B	3	- 15
108-183	135.0131B	13	- 12
108-184X		12	- 16
108-185		1	- 24
108-186	405.0054B	12	- 12
108-188	130.0251B	3	- 12
108-189	170.0087B	3	- 10
108-190	865.0065B <i>0026B</i>	3	- 20
108-191	523.0093B	3	- 11
108-191-2	523.0098B	3	- 21
108-191-3	523.0043B	2	- 23
108-192	120.0128B	9	- 18
108-193	245.0100B	12	- 9
108-194	131.0031B	1	- 10
108-202		1	- 21
108-203	130.0249D	1	- 2
108-204		1	- 6
108-209-3	130.0248B	1	- 4
108-209-4	130.0247B	1	- 11
108-211X		13	- 9
108-212	175.0059B <i>0050B</i>	5	- 20
108-214	125.0104B	7	- 13
108-215-2X	900.0612B	7	- 2
108-216-2	135.0219B	7	- 1
108-217	852.0024C	2	- 1
108-218	245.0098B	3	- 4
108-222	245.0106B	5	- 22
108-224X	900.1051B	13	- 2
108-228X	900.0531B	9	- 12
108-229-2X	900.0530B	9	- 14

<u>ORIGINAL NO.</u>	<u>DECIMAL NO.</u>	<u>PLATE NO.</u>	<u>KEY NO.</u>
108-233X	900.0634B	13	- 10
108-234	890.0018B	5	- 1
108-240-3	245.0107B	1	- 1
108-247X	900.0533B	13	- 5
108-248	135.0318B	13	- 6
108-249-3	508.0111B	13	- 5
108-250-3	545.0022A	4	- 11
108-257-2	440.0193B	5	- 16
108-258-2X	900.0610B	5	- 15
108-261-3X	900.0609B	8	- 13
108-262-3X	900.0653B	8	- 12
108-263-4X	900.0655B	8	- 10
108-270	136.0028B	8	- 5
108-272X	900.0608B	8	- 24
108- <del>180X</del> 280X	900.0644B	6	- 35
108-281	130.0244B	6	- 36
108-285	185.0037B	6	- 6
108-286	885.0101B	6	- 7
108-290	475.0101B	4	- 14
108-291-2	150.0034B	4	- 9
108-292	245.0101B	4	- 10
108-293	523.0090B	4	- 12
108-294	450.0087N	4	- 5
108-295X	900.0607B	13	- 11
108-300	131.0030D	10	- 1
108-301	235.0066B	10	- 25
108-302	120.0134B	10	- 8
108-302-2	120.0133B	10	- 27
108-303X	900.0558	10	- 2
108.304	431.0012B	10	- 12
108-304-2	431.0011B	10	- 30
108-305	235.0070B	10	- 19
108-306	270.0037B	10	- 4
108-307	245.0145B	10	- 15
108-308	135.0135B	10	- 7
108-308-2	135.0136B	10	- 29
108-309	175.0067B	10	- 11
108-310X	900.0640B	10	- 13
108-311X	900.0577B	10	- 26
108-312	410.0032B	10	- 22
108-313	523.0083B	10	- 23
108-316-3	245.0149B	11	- 14
108-317-2	170.0084C	11	- 25
108-319X	900.0601B	11	- 1
108-320-2X	900.1070B	11	- 18
108-322	130.0232B	11	- 17
108-325	528.0045B	10	- 20
108-326	245.0099B	11	- 22
108-327	475.0102B	10	- 28
108-330-2X	900.1007B	15	- 6
108-351	<del>136.0030B</del> 900.1304B	6	- 21
108-352X		1314	- 15
108-353	150.0014B	13	- 1

<u>ORIGINAL NO.</u>	<u>DECIMAL NO.</u>	<u>PLATE NO.</u>	<u>KEY NO.</u>
108-353-2	150.0015B	13	- 15
108-355	430.0084B	11	- 23
108-363	475.0100B	11	- 2
108-364	475.0070B	10	- 21
108-367-2	170.0081B	9	- 3
108-368	523.0081B	9	- 16
108-369	170.0082B	9	- 5
108-370	523.0080B	9	- 17
108-371	170.0083B	9	- 14
108-374	523.0099B	3	- 18
108-375	450.0083B	3	- 17
108-377X	900.0574B	9	- 2
108-378	150.0033B	9	- 2
108-379	440.0189B	6	- 4
108-383	120.0138B	8	- 1
108-386	125.015B	7	- 9
108-387	430.0093B	6	- 33
108-393	490.0002B	12	- 16
108-393-2		12	- 16
108-394	405.0045B	12	- 15
108-395	528.0086B	8	- 30
108-404	120.0118B	2	- 29
108-405X	900.0436D	2	- 30
108-406	135.0097B	2	- 30
108-407	130.0197B	2	- 30
108-408X	900.0438B	2	- 25
108-410X	900.0435B	2	- 7
108-411X	900.0434B	2	- 10
108-412	120.0119B	2	- 22
108-412-2	120.0120B	2	- 24
108-413X	900.0433B	2	- 21
108-414X	900.0439B	2	- 5
108-416	170.0057B	2	- 6
108-417	170.0056B	2	- 9
108-418	130.0196B	2	- 11
108-419	900.0443B	2	- 26
108-420X		1	- 23
108-42:2X	900.1080C	2	- 19
108-423		2	- 19
108-424		2	- 19
108-425-2		2	- 19
108-427X		2	- 18
108-429	450.0163B	2	- 4
108-430	900.0444B	2	- 27
108-431	137.0089B	2	- 27
108-432	137.0088B	2	- 27
108-433	126.0033B	2	- 27
108-434	137.0095B	2	- 15
108-434X	900.0570B	2	- 15
108-435	137.0096B	2	- 15
108-436	137.0097B	2	- 15
108-448X	900.1071B	13	- 8
108-448-2X	900.1072B	13	- 8
108-449		13	- 8
108-450		13	- 8

<u>ORIGINAL NO.</u>	<u>DECIMAL NO.</u>	<u>PLATE NO.</u>	<u>KEY NO.</u>
108-451	120.0125B	12	- 5
108-452	534.0081B	4	- 20
108-462-17X	900.1052C	4	- 16
108-463		1	- 18
108-467-4	842.0022B	1	- 13
BB-121	455. <sup>0082</sup> <del>0055</del> A	15	- 34
BB-128	455.0060A	9	- 12
BB-142	455.1082	13	- 2
BB-143	455.0063A	5	- 9
BB-144	455.0067A	7	- 5
BB-211	455.0061A	8	- 18
BB-212	455.0062A	8	- 29
BB-213		13	- 16
BB-404	460.0003A	13	- 9
BE-1220	420.0048A	4	- 18
BE-1221	420.0049A	4	- 7
BE-2363	420.0050A	2	- 14
BE-2800-43	420.0049A	4	- 7
BU-1222	450.0085A	4	- 6
BU-1223	450.0088A	7	- 18A
BU-1224	450.0086A	4	- 5
CN-300-24½		3	- 6
CN301-101	465.0022A	3	- 6
CO-100X		15	- 22
CO-106X	440.0115A	13	- 13
CO-111CA-X	440.0022A	1	- 22
CO-312	440.0183A	7	- 16
CS-117	475.0061A	9	- 6
CS-140	475.0124A	15	- 24
CS-176	475.0073A	15	- 26
CS-177	475.0123A	15	- 26
CS-180	475.0072A	15	- 26
CS-192 <i>same as CS180</i>		15	- 26
CS-257	475.0125A	5	- 14
CS-529	475.0127A	15	- 31
CS-569	475.0066A	3	- 19
CS-571	475 <sup>475</sup> <del>474</del> .0062A	9	- 12
CS-572	475.0067A	7	- 14
CS-573	475.0063A	13	- 9
CS-582	475.0063A	3	- 9
CS-750	475.0065A	6	- 41
CS-911	475.0060A	2	- 8
EF-295		12	- 10
EF-307	870.0059A	12	- 8
EF-710-14	870.0058A	12	- 10



<u>ORIGINAL NO.</u>	<u>DECIMAL NO.</u>	<u>PLATE NO.</u>	<u>KEY NO.</u>
EM-3/4-1B-V-6		2	- 2
ES-162		2	- 17
ES-179	815.0115A	15	- 5
ES-211		1	- 21
ES-214		8	- 8
ES-405	865.0008A	2	- 13
ES-637-27	815.0107A	8	- 8
ES-638-32		2	- 17
ES-642-1		1	- 16
KE-106	480.0077A	2	- 15
KE-113	480.0052A	2	- 28
KE-609	480.0078A	7	- 10A
KE-612	480.0079A		
KE-700	480.0080A	6	- 32
KE-701	480.0081A <del>4808</del>		
KE-709	480.0015A	2	- 1
NU-606	528.0079A		
PF-107	195.0026A	14	- 14
PF-110	195.0027A	15	- 7
PF-206	195.0024A	6	- 34
PF-318		1	- 14
PF-2014	195.0028A	15	- 7
PF-2018		1	- 14
PN-100	522.0011A	7	- 30
PN-632	523.0068A	4	- 1
PN-1659	523.0077A	9	- 14
PN-1773	523.0071A	6	- 13
PN-1788	523.0069A	4	- 13
<del>PN</del> -2805	521.0059A	7	- 11A
PN-2814	521.0042A	7	- 7
PP-355	185.0049A	14	- 15
PP-356	185.0049A	14	- 9
PP-384	185.0051A	14	- 1
PP-105-53		14	- 16
PU-1724		4	- 17
RD-301-55	135.0172A	14	- 6
RD-812	135.0099A	5	- 24
RN-352	545.0005A	2	- 4
RN-357	545.0056A	10	- 78
RN-359	545.0012A	4	- 23
RN-550	545.0016A	2	- 23
RN-552	545.0010A	6	- 26
RN-553	545.0057A	6-19	- 29
SE-107	421.0001A	1	- 15

<u>ORIGINAL NO.</u>	<u>DECIMAL NO.</u>	<u>PLATE NO.</u>	<u>KEY NO.</u>
SE-108	421.0002A	1	- 15
SE-109	421.0003A	1	- 15
ST-194	508.0148A		
ST-105	508.0149A		
ST-1128	512.2024A		
TU-346	185.0050A	14	- 2
WA-1305	534.0104A		
WRN-471	545.0024A	7	- 5B
WRN-477	545.0050C	9	- 11
WRN-501	545.0016A		
WRN-601	545.0020A	9	- 9
WRN-617	545.0017A	6	- 1

MODEL 108 ELECTRICAL SYSTEM

Wiring Diagram Blueprint (970.0085D) is enclosed with this Manual.  
Sequence of Operation is on the blueprint.

PARTS LIST

<u>PART NO.</u>	<u>SYMBOL*</u>	<u>PART NAME</u>
851.0002A	ICB	Circuit Breaker
815.0115A	WBS	Limit Switch
850.0035A	F3	Fusetron 4.5 AMP
850.0034A	F4	Fusetron 2 AMP
850.0006A	F5, F6	Slo-Blo, 2 AMP
875.0049A	T1	Control Transformer
825.0055A	1MTR	Motor 1/6 HP Split Phase
825.0029A	2MTR	Motor 3/4 HP DC
830.0049A	TMR,MR	Relay D.P.S.T. 115 VAC Coil
830.0049A	MRR	Relay 1N.O. 1N.C. 115 VAC Coil
855.4025	1NS	Insulator
865.0025A	BS	Brake Solenoid 115 VAC
865.0026A	TS	Traverse Solenoid
810.5492	C1	Capacitor 108 MFD 220/250 VAC
855.4024	ITHY	Surge Protector (Varistor)
875.0052A	T2	Adjustable Transformer
855.0305A	REC 1	Bridge Rectifier
842.0022A	A	Loadmeter
870.0059A	1L, 1R	Lamp 6 WATT, 145 VOLT
815.0107A, 0120	LT, RT	Pushbutton SW.N.O.
815.0087A	FTS	Limit Switch
815.0108A	TDS	Limit Switch

\*Identification used on Wiring Diagram