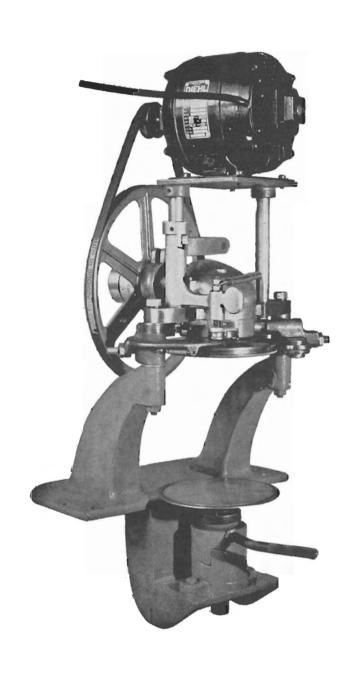
Operating Instructions & Parts List Dixie No. 10 Power Sealer



DIXIE CANNER COMPANY
Athens, Georgia

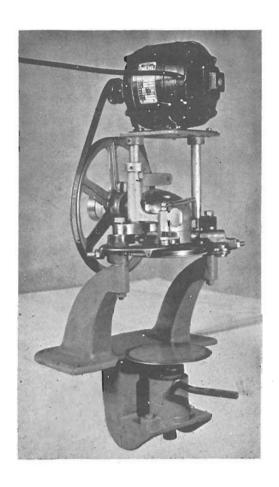


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The Dixie No. 10 Sealer, shown in the accompanying photograph, brings together in compact form, the valuable features of larger, expensive, hi-speed machines. It has no equal as a sealer for regular commercial type results where a sealer is needed for canning products in cans larger than No. 3.

This sealer is equipped to close standard size No. 5 or No. 10 cans. However, the No. 10 Sealer can be adapted to close special size cans with a diameter range from 5-1/8" to 6-5/8". Extension parts are available for use in sealing cans of special heights.

The machine is constructed of the very best materials and the highest quality of workmanship prevails throughout. The No. 10 Sealer is ruggedly constructed with heavier cast iron frame, reinforced bearings, bronze levers, brass bushings, etc. to give long continuous service in closing larger cans.

The seaming rolls are automatically operated by positive cam action which controls the seaming operation and assures a perfect seam when properly adjusted.

Seaming chucks and rolls are manufactured of special alloy steel, properly tempered. The seaming rolls are full floating and interlock with the seaming chuck in such a manner as to eliminate all possibility of damaging either rolls or chuck through faulty adjustment. The rolls will always remain in perfect alignment through years of service. This valuable feature will be appreciated by the user and is found only in the Dixie.

INSTRUCTIONS FOR USE OF THE DIXIE NO. 10 SEALER

The Dixie power driven sealer, unless otherwise specified, is shipped with 115-volt AC motor, 1/3 H.P., and equipped to close either No.5 or No. 10 standard size cans. A set of tools, for making necessary adjustments, is enclosed with each sealer.

HOW TO SET UP SEALER

Uncrate sealer and attach firmly to a strong table. Attach the motor cord to any regular l15-volt receptacle. When the current is turned on, the motor turns the large drive pulley by means of a V-belt. Then by moving the starting lever to the left, the automatic clutch is engaged with the drive pulley and turns the sealer the correct number of times to seal a can, automatically stopping the sealer in a neutral position. CAUTION: BEFORE PLACING SEALER IN OPERATION, CHECK CARE-FULLY TO SEE THAT IT IS PROPERLY ADJUSTED. IT MUST BE IN PROPER ADJUSTMENT AT ALL TIMES.

- 1. Move can raising handle (D-155) to the extreme right position which lowers base plate (D-134).
- 2. Position cover on can to be sealed and place can on base plate; move can raising handle (D-155) to extreme left position so that upper base plate cam block (D-132) locks onto lower base plate cam block (D-131), thus clamping can cover tightly against seaming chuck.
- 3. Move starting lever (D-140) to the left and the can will be sealed, stopping the sealer in a neutral position.
- 4. Move the can raising handle to the right and remove can. The machine is now ready to receive another can for sealing.

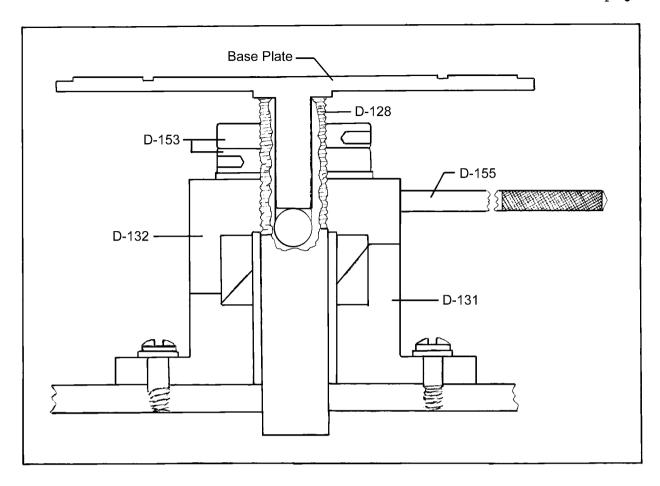
ADJUSTING THE SEALER

IN ORDER TO INSURE A PERFECT SEAL, THE BASE PLATE PRESSURE AND BOTH SEAMING ROLLS MUST BE IN PROPER ADJUSTMENT AT ALL TIMES. Gauge wires are furnished for adjusting the seaming rolls. Base Plate adjusting nuts (D-153) are provided whereby the proper tension can always be maintained. See accompanying drawings and make adjustments as follows:

ADJUSTING BASE PLATE

In order to insure a perfect seal with your No. 10 Sealer, proper tension of base plate must always be maintained. The can should always be clamped snugly between the base plate and seaming chuck. Adjustment of base plate tension is made as follows:

- Loosen upper base plate adjusting nut (D-153) by turning in a counter clockwise direction, using pin wrenches (D-154).
- Again using pin wrenches, turn lower base plate adjusting nut (D-153) to proper height on can raising shaft (D-128) to obtain proper base plate tension.
- 3. Tighten upper base plate adjusting nut to fit snugly against lower base plate adjusting nut to lock in place.



SECTIONAL VIEW OF BASE PLATE ASSEMBLY

ADJUSTING SEAMING ROLLS

The function of the first seaming roll operation is to roll the cover hook and the body hook into proper position. The function of the second seaming roll operation is to complete the sealing of the can. The seaming rolls are adjusted as follows:

First Operation

- l. Disconnect the motor cord from the receptacle with the seaming levers in neutral position. (Driven pulley turns freely without turning chuck.)
- 2. Engage the automatic clutch by moving the starting lever (D-140) to the left and turn driven pulley (D-137) until driving screw (D-85), which is located in a cross bar of driven pulley (D-137), comes in contact with cam for clutch (D-70). At this point, clutch is in position to begin first seaming operation.
- 3. Turn the large driven pulley by hand exactly nine (9) revolutions to the left (counter clockwise). This brings the first operation roll (D-120) to its innermost position in relation to the chuck.

- 4. Loosen hexagon lock nut for seaming roll screw (D-16).
- 5. Place large diameter gauge wire (D-40) in seaming groove of first operation roll. Adjust seaming roll set screw (D-17) until gauge wire fits snugly between the roll and the roughened edge of the seaming chuck. Move gauge wire back and forth, allowing sufficient friction to turn seaming roll (D-120). DO NOT PLACE WIRE IN GROOVE OF SEAMING CHUCK.
- 6. Tighten hexagon lock nut (D-16), using a screwdriver to keep screw (D-17) from turning when tightening lock nut.

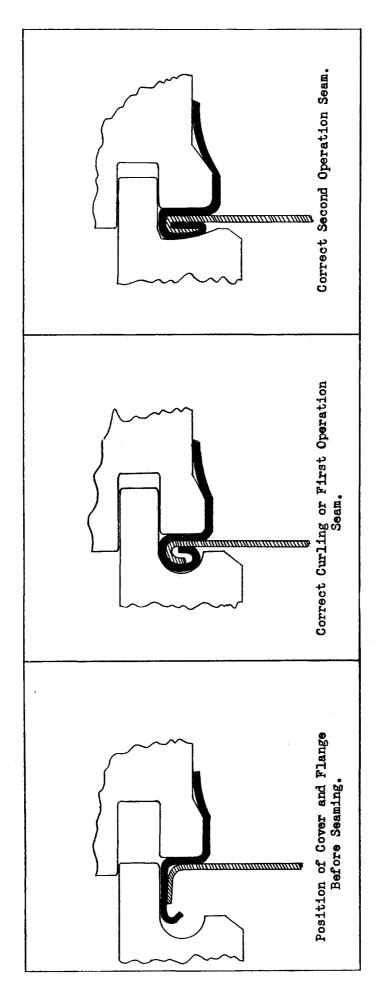
Second Operation

- 1. After adjusting first operation roll, give the driven pulley exactly nine (9) more turns in the same direction (counter clockwise). This is equivalent to eighteen (18) turns from neutral or starting position and brings the second operation seaming roll (D-121) to its innermost position in relation to the seaming chuck.
- 2. Loosen hexagon lock nut for seaming roll screw (D-16).
- 3. Place <u>small</u> diameter gauge wire (D-41) in seaming groove of second operation roll (D-121).
- 4. Adjust seaming roll set screw (D-17) until gauge wire fits snugly between the roll and the roughened edge of seaming chuck. Move gauge wire back and forth, allowing sufficient friction to turn seaming roll (D-121).
- 5. Tighten hexagon lock nut (D-16), using a screwdriver to keep set screw (D-17) from turning when tightening lock nut.
- 6. Turn driven pulley two additional revolutions to return sealer to neutral position.

NOTE: In adjusting seaming rolls, make sure you start from neutral position and with driving screw (D-85) in contact with cam for clutch (D-70). Count carefully number of turns of pulley and be sure the seaming roll is in its innermost position when inserting gauge wires. Also make certain to place gauge wire in seaming groove of seaming roll and not in the groove of seaming chuck.

After you have sealed fifty or more cans on a new sealer and broken it in a bit, it is advisable to retest seaming rolls for absolute accuracy.

If sealer shows a tendency to work overly hard, or "lock", it may be because seaming rolls have been improperly adjusted. In that case, we advise that you reread instructions and carefully readjust seaming rolls.



STAGES OF FORMATION OF DOUBLE SEAM

- Turn driven pulley (D-137) until seaming rolls assume their neutral or outermost position.
- Remove tension spring (D-64), then remove screws for housing cover (D-2) and lift off gear housing cover (D-1), exposing upper end of chuck shaft.
- 3. Loosen lock nut (D-16) and turn set screw (D-17) backward, on both first and second operation levers, until seaming rolls are moved back as far as they will go.
- 4. With wrench (D-43) in left hand, hold chuck shaft (D-14) firmly. Apply chuck wrench (D-44) to holes in seaming chuck and unscrew the chuck by exerting pressure in the direction indicated by the (off) arrow, as shown on wrench (D-44). NOTE: If chuck sticks, hold chuck shaft firmly with wrench in left hand and exert a quick jerk with wrench in right hand to loosen. Good coating of oil on threads of lower part of shaft and threads of chuck will prevent sticking.
- 5. Install new seaming chuck on threaded end of shaft by turning to the right, still holding the upper end of chuck spindle with wrench (D-43). Replace gear housing cover (D-1) and tension spring (D-64).
- 6. Proceed to adjust the sealer as per fore-going instructions for adjusting seaming rolls and base plate.

NOTE: The same base plate may be used for both No. 5 and No. 10 tin cans since the base plate is machined to fit both.

TO TIGHTEN BELTS

Raise the motor by loosening hold-down screws and inserting thin sheets of steel or washers between the motor and platform.

Bottom View Showing Seaming Chuck

Top View With Housing Cover Removed

It is suggested that before sealing a large number of cans or when changing from one can size to another, ordinary precaution be used in determining whether or not the sealer is properly adjusted. A simple test for the efficiency of the can sealing operation is as follows:

Place about three (3) tablespoons of water in an empty can and seal, keeping the top end up at all times. Immerse the sealed can in hot water until it is entirely covered. Hold the can under water for five (5) minutes. If no bubbles appear, the can apparently has been sealed well. If bubbles do appear, it is an indication that the can is not properly sealed and that an adjustment of the sealer is necessary. A few minutes' time invested in this can test may be considered insurance against spoilage through leakage.

CARE OF SEALER

With ordinary care, this sealer should give you excellent service and be free from troubles if the following simple rules are observed:

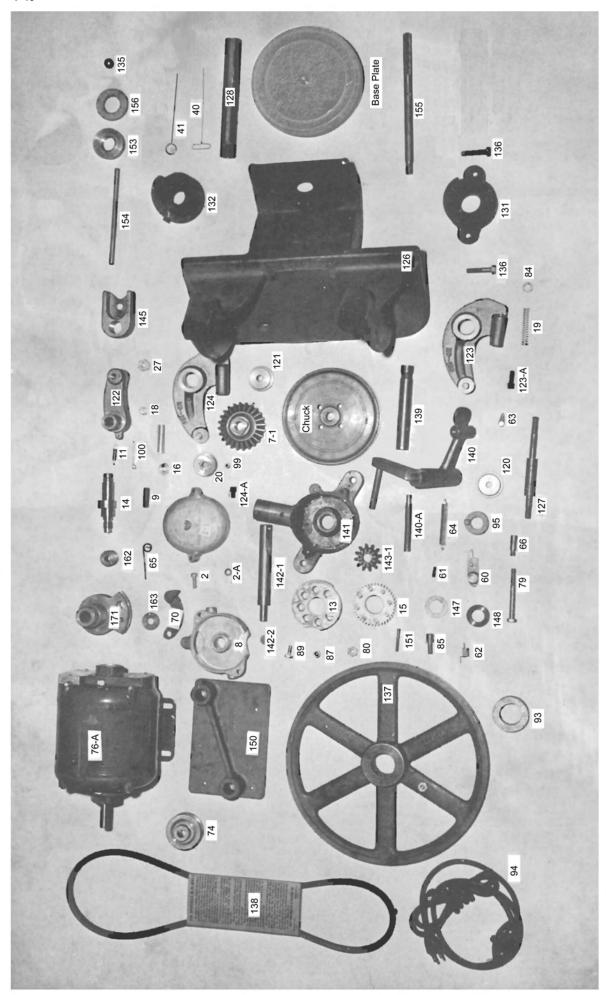
- 1. Keep sealer in proper adjustment at all times.
- Replace worn parts as needed.
- 3. Clean thoroughly after each daily use and apply a few drops of light weight oil to all moving parts and in all holes plainly marked "OIL".
- 4. At start of each season and periodically thereafter, remove housing cover (D-1) and apply grease to gears D-143-1 and D-7-1.

SERVICE

A complete stock of parts is maintained by Dixie Canner Company, Athens, Georgia. Parts may be ordered as needed to replace worn parts. Your Dixie Sealer may be returned to Athens for complete overhauling at a nominal charge for labor plus cost of parts used. (Always prepay shipping charges on Dixie Sealers returned for repair and write a letter authorizing the repair work. It is suggested you remove the motor before returning your sealer to save on shipping cost.) NOTE: If you use your Dixie Sealer extensively, you should consider purchasing a "spare" so one may be returned for repair while the other is in use.

Whenever the setup or operating checks indicate that seams are not meeting specifications, or when an obvious defect is found on visual inspection, it is necessary to know what steps to take to correct the condition. The outline below may be used as a guide in correcting minor troubles.

- A. Sealer "locks" or operates with undue noise.
 - 1. Remove gear housing cover (D-1) and check drive shaft bevel gear (D-143-1). If broken, replace as follows:
 - a. Remove cotter key.
 - b. With machine in neutral position and without turning pulley (D-137), push drive shaft back and replace gear. (If pulley turns during this replacement, timing will be thrown off, thus making it impossible to adjust seaming rolls.)
- B. Starting lever (D-140) fails to return to neutral position and sealer operates continuously.
 - Tension spring (D-64) is weak and fails to move rocker arm pin into position to make contact with cam in clutch sleeve.
 - a. Replace tension spring (D-64).
- C. Unusually loose seaming rolls.
 - Remove and check seaming roll screws (D-9). If undue wear is evident, replace with new screws.
- D. Knocked down flanges or partial false seams.
 - Check seaming rolls and base plate for proper adjustment.
 - 2. Check containers for:
 - a. Bent flanges.
 - b. Mushroomed flanges.
 - c. Damaged or bent covers.
 - d. Can not centering on seaming chuck.
- E. Fractured or polished seams.
 - 1. Lack of lubrication of seaming rolls causing rolls to slip.
 - 2. Flat spots on seaming rolls.



Cat.	Quan. Per Description Sealer	Cat. No.	Quan. Per Description Sealer
D-1	Housing Coverl	D-61	Shoulder Pin for Trip Trigger Latchl
D-2	Screw for Housing Cover4	D-62	Spring, Trip Lever (short)-1
D-2-A	Lock Washer, 1/4"4	D-64	Spring, Tension1
D-7-1	Chuck Shaft Bevel Gearl	D-65	Cam Springl
D-8	Cam Housingl	D-66	Cam Studl
D-8-B	Insert for Cam Housing (Under D-8)l	D-70	Cam for Clutchl
D-9	Seaming Roll Screw2	D-74	Motor Sheave Pulleyl
D-11	Seaming Lever Spring2	D-76-A	Motor, 1/3 HP, 115/60/11
D-13	Seaming Caml	D-79	Hexagon Head Cap Screw, 5/16" - 18 x 2-3/4"1
D-14	Seaming Chuck Shaftl	D-80	Hexagon Nut, 5/16" - 181
D-15	Spur Gear1	D-84	5/16" Lock Washer2
D-16	Nut, Seaming Roll Screw2	D-85	Driving Screw1
D-17	Seaming Roll Set Screw2	D-87	No. 523 Style GB Oilerl
D-18	Set Screw for Cam Lever Spring2	D-89	Hexagon Head Cap Screw, 1/4" - 20 x 5/8"4
D-19	Cam Lever Spring2	D-90	1/4" Standard Washer2
D-20	Cam Roll2	D-93	Hub Shaft Collar1
D-27	Nuts for Frame2		Rubber Cord, Complete with
D-41	Gauge Wire, 2nd Operation	D=34=A	Toggle & Plugl
D-40	Roll1 Gauge Wire, 1st Operation	D-95	Stop Collar, (works between D-140 and D-150)1
D-42	Roll1 Screw Driver1	D-97	Allen Set Screw Wrench, 5/16"l
D-43	Wrench for Lock Nutl	D-99	Allen Set Screw, 5/16" x 5/16"1
D-43-A	Wrench for Chuck Shaft1	D-100	
D-44	Wrench for Seaming Chuck1	D-120	•
D-60	Trip Trigger Latchl		Roll1

Cat.	Quan. Pe Description Sealer		Cat. No.	Quan. Per Description Sealer
D-121	2nd Operation Seaming Roll	-1	D-139	Posts for Motor Base2
D-122	Seaming Roll Lever	-2	D-140	Rocker Arm Lever with Pin (starting lever)l
D-123	Cam Roll Lever, 1st Operation	-1	D-140-A	Rocker Arm Shoulder Pinl
D-123-A	Roll Pin in D-123 Lever	-1	D-141	Gear Housingl
D-124	Cam Roll Lever, 2nd Operation	-1	D-142	Drive Shaftl
D_124_A	Roll Pin in D-124 Lever		D-143-1	Drive Shaft Bevel Gearl
D-125	No. 10 Seaming Chuck		D-145	Extension Blocks for Housing2
D-126	Cast Iron Frame Base	-1	D-150	Motor Platform1
D-127	Posts for Frame	-2	D-151	Spring Stop Pin (new style pin in D-70)l
D-128	Can Raising Shaft	-1	D-153	
D-131	Lower Base Plate Cam Block	e Cam Block1		Base Plate Adjusting nut, new style2
D-132	Upper Base Plate Cam Block	-1	D-154	Pin Wrenches2
D-134	Base Plate	-1	D-155	Can Raising Handlel
D-135	5/8" Steel Ball Under Base Plate	-1	D-156	Composition Washer Under Base Plate Adjusting Nuts1
D-136	5/16" x 1-1/2" Hex Cap Screw for Base Plate Cam Block	-2	D-162	Adjusting Plugs in D-145 Ext. Blocks2
D-137	Driven Sheave Pulley	-1		
D-138	"V" Belt	-1	D-163	Washer for D-145 Blocks2

INTERCHANGEABLE CHUCKS AND BASE PLATES MAY BE FURNISHED FOR ROUND CANS WITHIN THE RANGE OF THE MODEL 10 SEALER.

A separate chuck is required for each different diameter can and a separate base plate or spacer is required for each different size can. 502, 603 and 610 Diameter chucks are usually in stock for immediate shipment. Chucks may be made for cans of a different diameter within this range. (Note: FOR CANS SMALLER THAN 502 DIA. USE DIXIE MODEL 23 SEALERS).

Base Plates and/or spacers are available from stock or can be made as needed. When ordering chucks and/or base plates, always specify:

Type Can - (Tin, Aluminum, Fibre-body, etc.)

Can Size - (202 x 300, 211 x 400, 401 x 411, 404 x 414, etc.)

The Dixie No. 10 Sealer may be adapted for use as a can opener by replacing one of the seaming rolls with a Dixie Cutting Roll and following the instructions below:

- 1. With motor cord disconnected from receptacle and seaming lever in neutral position, remove first and second operation rolls (D-120) and (D-121) from levers D-122.
- 2. Insert cutting roll (D-165) in first operation lever and place can to be opened on base plate.
- 3. Bring cutting roll to its innermost position by turning driven pulley--starting from neutral position--nine (9) revolutions to the left. Then loosen lock nut (D-16) and adjust cutting roll to exert a slight pressure on wall of can by turning set screw (D-17). Tighten lock nut. NOTE: Do not adjust cutting roll to apply pressure on seaming chuck. If cutting roll applies excessive pressure on seaming chuck while machine is in operation, without can in machine, the chuck may be damaged.

SEALING METAL ENDS ON FIBRE-BODY CANS

The Dixie No. 10 Sealer may be used to seal metal ends to fibre-body cans. The resulting seal will be a "false seal" and not a double seal. All instructions and adjustments in OPERATING INSTRUCTIONS AND PARTS LIST MANUAL apply except adjusting first and second operation seaming rolls. These adjustments are made as follows:

First Operation

- 1. Follow steps 1 through 4, pages 3 and 4.
- 2. Instead of adjusting first operation roll to gauge wire, as instructed in step 5, page 4, adjust the roll towards the chuck, allowing for cover hook and can wall.
- 3. Follow step 6, page 4.

Second Operation

- Follow steps 1 and 2 for adjusting second operation roll, as shown on page 4.
- 2. Adjust second operation roll to apply ample pressure to complete crimping action of metal cover against can without breaking can wall.
- 3. Follow step 5 for final adjustment of second operation roll, page 4.

The following procedure should be followed in adjusting seaming rolls for applying overseals to paint cans.

FIRST OPERATION:

- 1. With the motor cord disconnected, place seaming lever in neutral position.
- 2. Engage automatic clutch and turn driven pulley nine (9) revolutions counter clockwise to bring first operation seaming roll to its innermost position in relation to the seaming chuck.
- 3. After loosening hexagon lock nut (D-16), adjust set screw (D-17) until seaming roll touches chuck, then adjust set screw to bring roll back from chuck far enough to allow for can wall plus thickness of overseal. Be sure the seaming roll does not exert enough pressure on can wall to cut into it.
- 4. Tighten lock nut (D-16), using a screwdriver to keep set screw (D-17) from turning.

SECOND OPERATION

1. After turning driven pulley nine (9) additional turns in same direction to bring second operation seaming roll to its innermost position, follow the same procedure as for adjusting first operation roll. The second operation roll adjustment should allow the seaming roll to exert ample pressure on chuck to crimp curled edge of overseal underneath the double seam of the can without cutting into the can wall. NOTE: A visual check of the finished seam may be made by using the corner of a flat or mill file to cut a cross section through the double seam.

ADJUSTING BASE PLATE FOR OVERSEALS

In order to insure perfect attachment of overseal on paint cans, a set of base adjusting nuts is provided to maintain proper tension of base plate. Adjust as follows:

- Using pin wrenches (D-154), loosen upper adjusting nut (D-153); then move lower adjusting nut to proper height on can raising shaft.
- 2. Tighten upper adjusting nut firmly against lower adjusting nut.

SUPPLEMENT TO: MODEL 10 OPERATING G INSTRUCTIONS & PARTS LIST

TIMING YOUR MACHINE

Timing of the sealer is proper when, at the end of the seaming cycle, both cam roll levers are in neutral position with the "toe" of the clutch cam in contact with the starting lever pin at about 1 o'clock position and the driven pulley turns freely. The cam roll levers are activated by the seaming cam. The sealer may be timed as follows:

- 1. Expose the bevel gears by removing the motor, motor base, tension spring, and housing cover.
- 2. The operator's left hand engages the automatic clutch by holding the "heel" of the clutch cam in contact with the driving pin that is in one spoke of the driven pulley.
- 3. While holding the clutch engaged, slowly turn the driven pulley until both cam rolls are in neutral position. When they are in neutral position the driven pulley can be turned about 3/4 revolution without engaging the positive action of either of the cam roll levers.
- 4. Continue holding the clutch engaged, and carefully turn the driven pulley clockwise until the positive action and movement of both cam roll levers can be seen and felt. At this exact location, carefully mark the position of the chuck shaft bevel gear and make certain that it remains in the exact position until Steps 5, 6, and 7 have been completed.
- 5. Remove the cotter pin from the drive shaft and apply pressure sharply against the driven pulley forcing the drive shaft to slip out of the drive shaft bevel gear, while making certain that the chuck shaft bevel gear remains in the exact position placed in Step 4. Now, the drive shaft bevel gear may be removed.
- 6. While holding the "heel" of the clutch cam in contact with the driving pin at the position of about 3 o'clock, carefully align and reinsert the drive shaft into the bevel gear. (Models that are equipped with a steel bevel gear must have the woodruff key properly positioned in the keyway).
- 7. Continue holding the clutch engaged and turn the driven pulley counter clockwise. Notice that it will turn freely for 3/4 revolution, to the position of about 6 o'clock, before you feel and see the positive action and movement of the 1st operation cam roll lever. This indicates that the sealer is properly timed. However, if necessary repeat Steps 6 and 7, moving the drive shaft bevel gear ONE cog at a time until the positive action and movement of both cam rolls occurs at about 3 o'clock and the positive action and movement of the 1st operation cam roll occurs at about 6 o'clock. Then replace the cotter key and bend it around the drive shaft snugly. Reassemble the machine and test the automatic clutch.