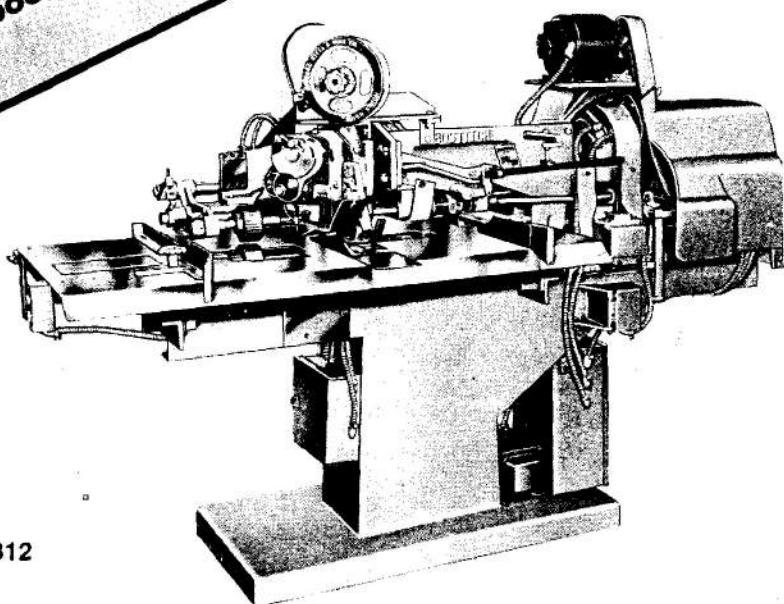


INSTRUCTIONS AND PARTS LIST  
OF THE  
**RSCA 685H, AND 685J**  
AUTOMATIC  
BOSTITCH WIRE STITCHERS

**DO NOT START THIS MACHINE**  
or make any adjustments  
until you have read the  
instruction book carefully.



**IDEAL STITCHER COMPANY**  
Division of W.R. Pabich Mfg.

2323 N. Knox Avenue  
Chicago, Illinois 60639  
Phone 773-486-4141 Fax 773-486-4812

MADE IN U.S.A. IN MASSACHUSETTS



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## **IMPORTANT**

The master or safety switch should be shut off:

1. Whenever doing any electrical work on the machine or when working around the solenoids, etc. as the shutting off of the motor by the stitcher start and stop switch does not cut off all the current.
2. Whenever the stitcher is to be idle for a protracted period of time.
3. Whenever a jam occurs and either wire or corrugated boxes need to be removed.

## **NOTE**

When it is required to turn the stitcher over by hand when the master switch is on, push the start button on switch (A) photo No. 8. This will release the brake so that the machine can be turned over by hand.

Switch designations, such as LS4 for example, are for references in instructions, diagrams, etc. Actual part numbers are as shown below.

R.H. Micro Switches—Bostitch Part No. 86110.

L.H. Micro Switches—Bostitch Part No. 86111.

All solenoids (except in control box)—Bostitch Part No. 85173.

# INSTALLATION, ADJUSTMENT AND MAINTENANCE of BOSTITCH RSCA 685H, & 685J STITCHERS

MODEL 685H — HIGH BASE — 54" TABLE HEIGHT — HAND FEED OPERATION WITH OR WITHOUT ELEVATOR

MODEL 685J — LOW BASE — 38" TABLE HEIGHT — HAND FEED OPERATION WITH OR WITHOUT ELEVATOR

SIZE OF WIRE: — RIBBON

WIDTH OF STAPLES: — 7/16"

STITCHES PER MINUTE: — UP TO 445

H.P. 1/4 — 1725 R.P.M.

This machine is designed to stitch boxes up to a combined thickness of  $\frac{5}{8}$ " (two thicknesses).

Care must be taken that the wire used is the proper size for the Former and Driver furnished with the machine.

NOTE: This book does not include head instructions. It should be used in conjunction with "Instructions and Parts List for Bliss Heads."

## INTRODUCTION

A Wire Stitcher, like any other machine, will give satisfactory results to its owner only if properly installed, regularly lubricated, intelligently adjusted and carefully maintained. Moving parts will wear in time and require replacement, while others may break through accident. Trained service men are available but not always to be had at a moment's notice, and a knowledge of the functions of the more important parts of the stitcher is therefore most desirable for every person responsible for its operations, in order to know what to do in case of trouble.

We have, therefore, gathered together the combined experience of our experts in this line and have attempted to present the information in a manner that will make it quickly available and readily understood.

We would urge, however, in any case of serious difficulty, that you notify our nearest sales office, sending samples of the defective work and describing the trouble in detail, so as to obtain the benefit of their experience in arriving at the proper solution. **Be sure to report the serial number and model of the machine** when corresponding with regard to equipment, so that same may be identified quickly.

## ESSENTIAL POINTS IN STITCHING

The legs of the staple must be the same length. The same amount of wire must be fed at each revolution.

The wire must enter the gripper freely.

The cutter knife and cutter tube must be sharp and properly adjusted.

The open-head device or clincher must be adjusted for the thickness of board to be stitched.

The wire spool must be free to turn and wire must not be allowed to become tangled.

The machine must be KEPT CLEAN AND PROPERLY OILED. An inspection of machine will readily disclose places to be oiled. Be sure to check for oiling parts that are beneath the table.

## INSTALLATION

All fixed adjustments of your machine were properly made before shipment, and to put it into service it is only necessary to clean off the grease, see that the machine is properly and completely oiled, thread the machine with the proper size wire, and make the necessary adjustments for box to be stitched.

Any machine can be seriously damaged during its installation if it is not properly set up, and we recommend close adherence to the following procedure:

After uncrating machine, examine carefully for any breakage in transit. If such be found, do not attempt to run the machine, but report at once to the selling agent. If service man is present, let him examine machine and then report to the manufacturer.

Place the machine on a level floor, using shims under the base if it is necessary to prevent any movement or rocking. **Examine the nameplate on motor and see that its specifications are the same as those of the power to be used.** Unless these requirements are met with, do not attempt to operate the machine.

See that motor is free to revolve when large pulley 685047 is turned by hand. Be sure that the V-Belt is under proper tension, lowering motor platform slightly if too tight, or raising it if belts run loose. After any adjustment, see that the motor plate screws are tight.

Connect power to disconnect switch and start motor running: **NOTE!** Before starting motor, be sure that the main clutch is not engaged. In other words, flywheel 685047 (Photo No. 6) should turn freely without turning over the stitcher head or mechanism in the rear of the machine.

After the motor is started, see that it runs freely, without undue noise, and that the large pulley rotates clockwise as viewed from the front of the machine. Should it rotate counter-clockwise, motor wiring should be reconnected by an electrician in order to reverse the direction of rotation.

**NOTE:**—Before oiling the machine, making any adjustments, or putting wire into the stitcher head, **be sure that the motor is shut off.**

Be sure that the machine is oiled thoroughly at all points before operating. See "Lubrication" for directions and list of points.

Next set the open-head device (Photo No. 2) for the thickness of stock to be stitched. Open-head can be raised and lowered by means of screws UA6824.1 and UA6520.1.

#### WIRE THREADING AND FEED

Place a spool of wire of proper size on the spool-holder, the wire leading to the left from top of the spool. Thread wire through Oiler Felt 70H and push through wire feed tube and into head. Saturate felt with oil. Adjust brake band by loosening wing nut. When correct tension on brake band is obtained, tighten wing nut.

**Note:**—If tension is too great the wire will bind and catch between the coils and thus may cause uneven staple legs. If too loose, the spool may unwind, causing snags in the wire.

Cut binding wires on wire coil and bend same back over edge of spool, holding free end of wire in the hand to prevent unwinding and tangling. Cut off bent and twisted end of the wire, using hand cutter 133H on stitcher head and then straighten out about 6" by drawing through the fingers.

The end of the wire to be inserted in the machine must be just as straight as possible. See page 5 BSA 486.

**CAUTION:** Never operate the machine with wire feeding and with no board above clincher. Serious damage may result from this too frequent practice.

**CAUTION:** Before running machine be sure that rubber feed rollers are not set too close so as to put excessive load on operating parts. See page 3, for instructions for setting.

Start motor and drive some staples into board, and, if necessary, adjust clincher height to get desired tightness of clinching.

#### LUBRICATION

The machine should be oiled at the beginning of each eight-hour run. The oil holes and oil cups are easily found on the stitcher head and on the machine. **NOTE:**—An examination underneath the table will disclose a few additional places to oil. In addition to the above oiling, the following points should be oiled frequently.

1. Supporter unit on stitcher head.
2. Spool holder spindle.
3. Anvil (Gripper) 119H and anvil throwout block 123H.
4. Auxiliary brake lever 25490 (Photo No. 2) between lever and brake hold down roll assembly 25762A.
5. High speed disk clutch yoke shifting shoes (Photo No. 5) and tooth clutch yoke shifting shoes (Photo No. 6), also see Diagram No. 11 for additional oiling of H.S. clutch unit.
6. Squirt oil occasionally onto ratchet 25429 (Photo No. 6) and surrounding parts.

7. When running the lower box feed rubber rollers loose on the shaft be sure that they are greased.
8. There are other parts, etc., to be lubricated which will be pointed out in other sections of this book.

#### OPERATION

Before attempting to make the necessary adjustments required for various sizes of boxes, etc., a brief outline as to how the machine works should be of help.

Assuming that the machine has been set up for the required number of staples, proper location of side gauges, etc., and the motor started:

Blanks are folded and fed into and through the openhead device to the feed rollers. These rollers are revolving at a high rate of speed and feed the box up to the trip gauge which, by means of a switch and a solenoid, causes the main clutch to be engaged. Just prior to the clutch being engaged, the high speed rollers are brought to a stop and these rollers are then moved step by step to act as the staple spacing feed rollers. When the last staple is made or driven, the rollers are again revolved at the same high speed shown above, to eject the box and be ready to feed the next box up to the trip gauge. The conversion of the rollers from high speed to intermittent feed and from intermittent feed back to high speed is practically instantaneous. When the last staple of a box has been driven and the feed roller conversion has taken place, the main clutch is disengaged, thus leaving the stitcher head and other mechanism inoperative until a new box is inserted in the feed rollers, which are at this time running at high speed.

#### LOCATING FIRST STAPLE

Referring to Photo No. 3, the trip gauge plate unit can be seen.

Screws UA5110.2 in the trip gauge plate 585101A should be loosened. Only one screw is shown on photo but the other screw is on the opposite side.

With the screws loosened, simply slide the trip plate unit forward or backward until the back edge of the trip gauge plate as shown at (B) registers with a mark on the scale or bar 585177A that corresponds to the distance from the end of the flap to location of first staple in box. Tighten screws firmly, making sure that the trip gauge plate does not bind in the stripper member 585021.

It will be noted that there is a stripper member which moves integrally with the trip plate unit. This member should at all times be free to move and should be remeshed with the trip plate member in case it has been necessary to disassemble this unit for repairs, etc.

**CAUTION:**—Shut motor off before making trip gauge adjustment.

#### TO SET SIDE GAUGES (For Models #685H & #685J)

Refer to photos No. 2, 5 and 9.

Loosen screws on both ends of side gauges 685062A and 685067A.

Fold and insert box through open-head. Locate box in proper relation to open-head for stitch required and bring side gauges up to edges of box. Do not set gauges so tight as to cause binding action on the box.

#### **TO SET END FLAP DEFLECTORS**

Refer to photo No. 1 and photo No. 2.

These deflectors 25951A and 25660 are used to guide leading end of box under front of trip gauge unit. It is only necessary to readjust these deflectors for particular cases such as going from one extremity of box thickness to another—, etc.

To adjust deflector 25951A (photo No. 2) loosen screw "A" and move front end or end nearest trip gauge up or down as required. Do not set so as to cause too much pressure on the box. Tighten screw firmly.

To adjust deflector 25660 (photo No. 1) loosen screw "A" and move front end or end nearest trip gauge up or down as required. Do not set so as to cause too much pressure on the box. Tighten screw firmly.

#### **TO SET FEED ROLLERS FOR THICKNESS OF BOX**

It is not necessary to change opening between the upper and the lower feed rollers for every change in thickness, but whenever a considerable difference occurs, a change in setting should be made. It may be necessary to change the setting of rollers in some cases where the front or leading end of the boxes is being damaged excessively by its impact with the trip gauge. Increasing the opening between the rollers will obviate or diminish the damage.

Refer to photo No. 4.

When it is desired to change the opening between the feed rollers, the following steps should be taken:

1. Loosen lock nut 25752A (photo No. 4) and back out screw 25499A approximately  $\frac{1}{4}$ " to  $\frac{3}{8}$ ".
2. Turn hand screw 25445A to raise or lower rollers to setting desired. The average opening should be approximately the amount of two thicknesses of the box board. This opening may have to be readjusted to suit certain conditions which will be described farther on in this text.
3. When the rollers are set as desired, turn screw 25499A until it just contacts lever 25500 and then lock same with lock nut 25752A.

**CAUTION:**—Do not have rollers set to give more pressure than is required to satisfactorily step feed the box.

#### **TO SET MACHINE FOR NUMBER OF STAPLES REQUIRED**

Refer to photo No. 7.

The machine can be set for a range of 3 to 38 staples inclusive.

Referring to dial 685022A it will be noticed that it is calibrated in multiples of 5, i.e., 5-10-15, etc.

Each notch in this dial represents one staple. To set for number of staples required, simply pull lever 685021 out of notch and turn arm to point where arrow (A) can be inserted into notch representing the number of staples required. The numbers stamped on dial can be used as a quick means of determining correct notch for number of staples required. For example, if 12 staples are required, pull out lever 685021, turn and insert arrow (A) into two notches past the mark No. 10 on the dial.

#### **TO SET MACHINE FOR SPACING BETWEEN STAPLES**

Refer to photo No. 6.

Loosen nut HN71614, and turn adjusting screw knob 585065A, which moves indicator 585174 to spacing desired. Moving indicator towards inner end of arm 585014 will increase distance between staples, and moving indicator towards outer end of arm will shorten distance between staples. **Tighten nut HN71614.**

Several settings may be required to obtain spacing desired, and spacing should be checked with machine running boxes.

The maximum and minimum spacing that can be obtained is  $2\frac{5}{8}$ " and  $\frac{7}{8}$ " respectively.

Brake band 25089A is to prevent over-travel of step feed rollers. Adjustment can be made by brake band adjusting nut. However, it is seldom necessary to adjust brake and **CARE SHOULD BE USED NOT TO HAVE BRAKE SET TOO TIGHT**, as it will put undue load on motor and parts.

Brake band composed of parts 25929, 25539A and 25930A shown on photo No. 2, and called auxiliary brake unit, is also for the purpose of preventing over-travel of the feed rollers when they are acting as step feed rollers. This brake is adjusted by turning the Brake Hold Down Roll Assembly, 25762A to give pressure required. Both of these brakes act to control the accuracy of the staple spacing. **CARE SHOULD BE USED NOT TO HAVE THESE BRAKES SET TOO TIGHT. KEEP BRAKES FREE FROM OIL!**

See section of this text devoted to poor staple spacing and remedy.

Assuming that the machine has been set up for a box according to the preceding instructions, the machine is ready to run.

#### **TO SET MACHINE FOR TIE STITCH**

Refer to photo No. 7 and diagram No. 5.

Two more staples than used for single stitching are required when tie stitching is used.

After setting staple selector dial to number of staples required, set mark (representing number of staples required and corresponding with staple dial setting) on cam 25425 (photo No. 7) to mark on lock sleeve 25424A, and tighten screw in sleeve 25424A. This setting applies whenever the number of staples is changed.

Pull down lever 25217 (photo No. 7).

The above directions constitute setting for tie stitch.

forward and trips main clutch. Reduce the weight of the trip gauge by means of adjusting springs 585570A (photo No. 3). Springs 585570A are made stronger by hooking ends into a higher hole on parts 585076A and 585077A.

**BOX IS STITCHED WITH 1st STAPLE QUITE A DISTANCE AWAY FROM ITS PROPER LOCATION AND THE LEADING END OF BOX SHOWS NO MARKS, etc., from hitting the trip gauge plate.**

If a check shows that the trip gauge plate is properly set, then the reason for the trouble is that the box has been fed so close to the preceding box that the trip gauge plate cannot drop between the boxes, and the clutch is being tripped later by the box as it passes under the trip gauge plate which is resting on box.

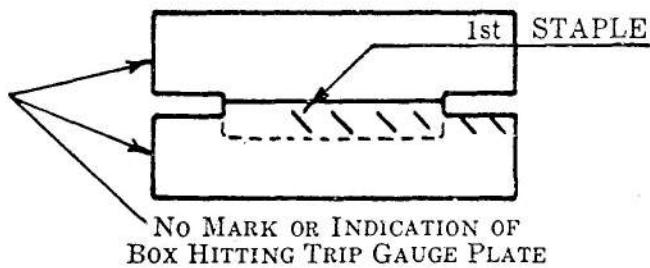
Remedy:—

Hook springs 585570A into a lower hole on parts 585076A and 585077A (photo No. 3). This will allow trip gauge plate to drop quicker.

If, however, because this spring has been made weaker, there is a tendency for the boxes to retrip machine as they are sliding under the trip gauge plate, then it may be necessary to readjust #210-297 trip gauge return spring to make it a little stronger.

The simplest solution to this problem would be to have operator slow down a little.

**ILLUSTRATION OF BOX SHOWING ABOVE TROUBLE —**



**BOXES COME THROUGH MACHINE WITH THE 1st STAPLE O.K., BUT THE 2nd STAPLE AND OTHERS SHOW DEFORMATION OR BOX TEARING AT STAPLE POSITIONS.** The staple spacing may also be very erratic. These troubles nearly always are the result of faulty functioning of the mechanisms that are supposed to keep the box feed rollers from revolving at a high speed during the cycle of stapling.

Remedy:—

1. Check the switch (called the high speed clutch switch) on right hand side of trip gauge unit to see if electrically correct. Check for broken wire, poor electrical contacts, etc. When checking switch, also check to see that all nuts, etc., in this unit are tight and are in place.

2. Check Solenoid No. 2 (photo No. 5) to see if it operates when switch plunger is depressed.

**NOTE:—**This solenoid is operated through relay CR 2 and contacts CR 2-2. See cable diagram.

3. If above items are correct, then check to see if the switch plunger is being depressed enough by the lever 585109A (photo No. 3) when the trip gauge unit is pulled all the way back. The switch plunger should be almost seated when correct. (See "R.H. or High Speed Roller Clutch Switch Adjustment", page 9.)

4. Solenoid is kept energized by lever 585020 (photo No. 3) when the auxiliary brake shaft has moved link 585088 to cause lever 585109A to operate switch plunger.

**CAUTION:—**Do not make any adjustments so that the switch plunger is fully depressed to a solid condition.

5. When the above items have been checked and are functioning O.K. and trouble still occurs then check to see that the auxiliary brake shaft 685028A (photo No. 8) is properly locked during the cycle of stapling. This lock is shown on photo No. 4 by members 25480A, 25535. The function of this lock is to stop the motions of the trip gauge lifter lever, the auxiliary brake, and the up and down motion of the feed rollers during the cycle of stapling. It also functions to keep the high speed clutch disengaged by means of lever 585020 (photo No. 3), which, through link 585088, operates lever 585109A to keep switch lever depressed, thus keeping solenoid energized and the high speed clutch disengaged during the stapling cycle. If the auxiliary brake shaft lock does not lock up or stay locked, then the high speed clutch switch plunger is allowed to move out so that the circuit is broken and H.S. clutch is caused to function, thus making the box feed rollers revolve at high speed during the stapling cycle, which causes box to move and tear when formers are still on box.

To determine if lock is working properly, have machine in neutral, trip clutch, and turn over by hand with box between feed rollers. This will put pressure on the locking mechanism and take out the natural spring of parts, shaft, etc., so that adjusting of the lock will be correct for working conditions.

When the machine has been turned over so that the lever 25484B (photo No. 8) is on the high point of cam 585124, then lever 25480A (photo No. 4) should slip over or lock on the lower part of 25535 (photo No. 4). At this point, there should be a little clearance on the locking members.

If an adjustment of this lock has to be made, loosen screw on side of member 25535 and screw on top of same member. Move part 25535 to necessary clearance for positive lock and tighten screw on side. Turn screw on top so that it contacts lever (A) (photo No. 4) and tighten nut firmly. When making this adjustment, try to keep clearance between locking members at a minimum, but regardless, be sure that lock takes place under actual working conditions.

If staple deformation or box tearing or former scuff marks still exist after remedies shown above have been applied, sticher head may be out of time with step feed mechanism due to broken tooth on

bevel gears or main drive shaft twisted or broken. If main drive shaft is broken, stitcher head will fail to operate. See "Instructions for removing main drive shaft, bevel gears, etc.", page 8.

#### **BOX FAILS TO TRIP MACHINE FOR STAPLING CYCLE, ETC.**

1. Roll pressure may not be enough. In which case the feed rollers will not cause box to move trip gauge unit to engage clutch switch.
2. Check to see that clutch rheostat, (D), (photo No. 10) is adjusted high enough to give clutch proper torque or pulling power. See section entitled, "Clutch and Brake Adjustments."
3. Main clutch switch (located on L.H. side of trip gauge unit) may be faulty or screw operating same may be improperly adjusted. See "L.H. or Main clutch trip switch adjustment", page 9.
4. See photo No. 10 and Wiring diagram. Check fuses FB 1 and FB 2. Check to see that relay CR 1 functions to release brake and engage clutch.
5. Check for all wire connections from switch to relay, etc. Also check for brush condition on clutch collector ring.

#### **Box does not throw-out satisfactorily.**

1. Check side gauges to see if they are too tight.
2. Check roll pressure to see if it is enough.
3. Check to see if trip gauge plate unit bears too heavily on box. If so, adjust the lifter spring 585570A (photo No. 3) to take some of the weight of trip gauge plate unit off the box. To make these springs stronger, hook into higher holes on parts 585076A and 585077A.

#### **Feed Rolls Stop and Fail to Eject Box After Completing the Stitching Cycle and the Stitcher Motor is Still Running.**

- 1.) Check the auxiliary brake shaft locking position; refer to "Auxiliary Brake Shaft Lock Lever 25480A Adjustment," page 9.
- 2.) Check "Switch Adjustment for Electric Clutch Disengagement and Brake Engagement at End of Stapling Cycle," page 7.
- 3.) Check the high speed micro-switch LSA, photo No. 3.

#### **Boxes being stitched out of square.**

These invariably are boxes whose stitching seams are so short or weak as to make a box that can be easily racked or twisted out of shape.

##### **Remedy:—**

1. Loosen lower L.H. feed roller 25639BA (photo No. 1) and try box through machine, leaving roller loose.
2. If adjustment 1 does not fully correct trouble, then loosen collars on each side of the roller, and move roller nearer to the center.
3. Loosen lower R.H. feed roller 25640BA (photo No. 1) if adjustments 1 and 2 do not correct the troubles.

4. Moving lower R.H. feed roller closer to center helps on some boxes.

5. Decreasing the feed roll pressure may help.

6. The collars on each side of the lower feed rollers are to be used for keeping the lower feed rollers (when set to run loose on shaft) in place to which they are set.

**Note:—**Do not run with loose rollers unless required for above reason, as poor spacing might result on larger or harder-to-feed boxes.

**Note:—**Be sure that these rollers are well greased when running loose on shaft.

7. Check to see that the deflectors on the open-head unit are not set too low as this will put too much pressure on panel of box, tending to force it back out of square. Do not use any more roller pressure than is required to feed box in and out and space staples properly.

#### **Front end of boxes being excessively broken down due to impact with trip gauge unit.**

On some types of boxes it will not be possible to eliminate all tendency of front end of boxes to be smashed in or broken down. However, difficulties in this respect may be greatly helped or eliminated entirely on some boxes by reducing the pressure of the box feed rollers. Reduction of pressure, however, should not go beyond that which is required to obtain satisfactory spacing of staples. See section entitled, "To set feed rollers for thickness of box", for changing the pressure of feed rollers, page 3. In some cases offsetting the top feed rollers from the bottom feed rollers will help.

#### **Boxes come out of machine with no staples.**

1. **CHECK FOR FAULTY WIRE FEED;** Wire may be tangled on spool; Wire feed clutch may be faulty.

2. May be because operator is feeding boxes too fast in relation to the trip gauge or target dropping down. In that case, hook springs into a lower hole on parts 585076A and 585077A (photo No. 3). This will allow trip gauge to drop quicker.

#### **Scuffing of Box.**

If the box shows indications of scuffing approximately 3" ahead of first staple, it may be due to wrong relationship of main clutch switch and high speed clutch switch (located on trip gauge unit) timing. See "Switch adjustment (on trip gauge unit) main clutch and high speed clutch", page 9.

#### **Trip gauge fails to raise up enough to come off box when box is fed against trip gauge plate.**

This is an indication of too much load on trip gauge operating parts.

1. Check to see that feed rollers are not set up with too much pressure.

2. Check to see that auxiliary brake hold down roll assembly 25762A (photo No. 2) is not set for too much pressure.

3. Check to see that lifter arm 585019 (photo

No. 3) raises trip gauge plate high enough to clear box by inserting box into feed rollers and turning machine over by hand.

If trip gauge plate does not clear box, check the following:

1. With machine in neutral be sure that drop roller adjusting screw 25499A (photo No. 4) contacts drop lever 25500. Now put box into feed rollers making certain that rollers are set to proper pressure to feed box to trip gauge plate.
2. Trip clutch and turn machine over by hand until trip gauge lifter arm 585019 (photo No. 3) has lifted trip gauge plate up to its highest point.
3. Loosen screws in arm 585019.
4. Screw down the Brake Hold Down Roll Assembly 25762A (photo No. 2) to put extra tension on brake. Pull up on trip gauge lifter arm 585019 until trip gauge plate can go no further. Tighten the two screws in arm 585019. Check to see that the bottom of trip gauge plate is even or slightly above the bottom of stripper.
5. **Back out Brake Hold Down Roll Assembly 25762A to normal brake pressure!**

#### If Stitcher Should Stop and Cannot Be Turned Over By Hand

Check the following:

- 1.) Remove stitcher head and try to turn machine over by hand.
- 2.) Remove feed ratchet arm pin 25074 in connecting rod. If connecting rod is frozen remove grease fitting and two set screws in eccentric.
- 3.) Remove pins in side plates 585087 and push plates away from connecting rod (Diagram No. 4).
- 4.) Free connecting rod and eccentric, reassemble all parts, lubricate and test by turning machine over by hand.

#### Staple Dial Does Not Return to Neutral.

When all adjustments are apparently correct, i.e. return spring seems to be strong enough, switch adjustments, etc. seem to be correct, the trouble could be that the switch knock off lever 585091 is not depressing the knock off cam 585047 enough to lock lever 585029 (photo No. 7). The proper adjustment of this unit will correct this trouble.

#### ADJUSTMENT AND MAINTENANCE OF STITCHER Electric Clutch and Brake Unit. Installation and Adjustment.

Refer to diagram No. 6 in 685 stitcher instruction book and Warner Electric Brake and Clutch Service Manual.

Whenever it may be necessary to remove the electric clutch and brake from the stitcher or to install a new clutch and brake unit, the instructions given on diagram No. 6 (685 stitcher instruction book) must be followed. The clutch and brake

service manual shows the amount of permissible wear up to the point when the unit is worn out, together with other essential information.

To supplement the instructions given on diagram No. 6, when reassembling parts, drive pulley 685047 should be pushed tightly against collar (A) and then securely locked by means of eccentric collar (B).

#### Clutch and Brake Adjustments.

The clutch-brake control box contains the rheostats for adjusting the clutch and brake for proper operation.

The clutch rheostat (D) (photo No. 10) is set at approximately No. 70 to No. 100 graduation.

The brake includes an over excitation unit to provide for maximum braking efficiency. It is recommended that the stitcher be operated with this unit in operation except for certain conditions described below.

To put this unit into operation, simply move switch lever (B), (photo No. 10) to "ON" position and set brake rheostat (A) at approximately No. 50 graduation, or such graduation as will stop formers in non interfering position with box being fed through openhead.

If for any reason the stitcher is run at a slower speed, which would cause the over excitation unit to stop the stitcher too soon, change brake rheostat to a lower setting. If, after adjusting rheostat to a lower setting, stitcher still stops too soon, move switch lever (B), (photo No. 10) to "OFF" position and adjust brake rheostat to obtain proper stopping of stitcher.

If the over excitation unit fails to operate due to lamp (C) burning out or for any other reason, move switch lever (B) to "OFF" position and increase adjustment of brake rheostat (A).

Should the maximum adjustment of rheostat then fail to stop stitcher soon enough, stitcher speed must be reduced until the over excitation unit is again operating satisfactorily.

NOTE: The brake and clutch rheostats should in all cases be set only high enough to obtain satisfactory starting and stopping of stitcher so as not to shorten the life of the brake and clutch.

#### Switch Adjustment for Electric Clutch Disengagement and Brake Engagement at End of Stapling Cycle.

When lever 585002A (photo No. 7) has been depressed by lever 685021, as last staple is being driven, adjust screw (C) (photo No. 7) to operate switch LS4 to disengage clutch and energize brake to stop machine.

#### Failure of Main Electric Clutch-Brake Unit.

- 1.) Check for loose or broken wires in clutch-brake control box, photo No. 10.
- 2.) Check fuses FB1 and FB2, photo No. 10.
- 3.) Check relay CR1 for defective points.
- 4.) Check electric clutch collector ring brushes and connections in brush holder box (Diagram No. 6).

5.) Check for broken or loose wires from collector rings to clutch magnet.

**If Main Electric Brake Fails to Release.**

1.) Check main clutch micro switch LS3, photo No. 3.

2.) Check brake micro switch LS4, photo No. 7 and also clutch-brake adjustments, page 7.

3.) Check CR1 relay for frozen contact points (photo No. 10).

4.) Check for loose or broken wires.

**INSTRUCTIONS FOR REMOVING MAIN DRIVE SHAFT (FRONT SECTION), BEVEL GEARS, ETC.**

1. Take off openhead assembly by removing two screws UA6824.1 (photo No. 2).

2. Remove head by unscrewing three (3) head bolts in rear of head.

3. Remove Feed Roller bracket, 585022, (photos Nos. 2 and 9) by first driving the two dowel pins out through the bottom of bracket 25021CA (photo No. 2). Remove screws holding brackets 585022 and 25021CA to the head casting. The bracket will come off by pulling or tapping same to rear.

4. Before removing part 500L5 (photo No. 1), BE CAREFUL TO CATCH THE OIL, which is in the angle gear housing, in a container. BE SURE THAT OIL IS PUT BACK INTO ANGLE GEAR HOUSING WHEN PARTS ARE RE-ASSEMBLED.

5. Remove head casing 500L5 (photo No. 1).

6. Remove angle gear housing. It will probably be necessary to use a thin chisel, screw driver or like tool to break this housing loose at the joint. Pull this housing directly off the dowel pins.

7. Tighten screw (A) against sleeve 685048 to prevent sleeve pulling out of bearing 85735 (see Diagram No. 6).

8. Pull gear and front section of main shaft out and any necessary repairs or replacements can be made.

9. To reassemble insert main shaft and bevel gear into sleeve 685048 (Diagram No. 4), regardless of position of square on end of shaft or teeth in gear.

10. Back out screw (A) free of sleeve 685048 (see Diagram No. 6).

11. Turn the machine over by hand in normal driving direction until the screw holes in eccentric and connecting rod, (Diagram No. 5), are in line. (See also Diagram No. 3.) Now mesh the two bevel gears so that the driver bar link hole, (A, diagram No. 3), is to the right of vertical centerline going through holes (E) and (F), as shown on Diagram No. 3.

**This location is very important, as this is the correct timing for the stitcher head in relation to the step feed clutches.**

NOTE: Be sure foregoing condition is obtained with the backlash or play taken out of bevel gears; i.e., with gears fully meshed and head cam turned

by hand counterclockwise until backlash is out, see that the hole (A) is to the right as described above.

12. Now reassemble balance of parts making sure that trip gauge is level and square with table.

13. When all parts are completely reassembled, trip machine and turn over by hand for final check. See that formers are just off the blank on their way up when feed rollers start to act to step feed boxes and that the Trip Gauge Plate 585101A, clears the bottom of the stripper so boxes can pass under trip gauge plate. If adjustment has to be made, refer to items Nos. 1, 2, 3, 4 and 5 on page 7, under section, "If trip gauge plate does not clear box, check the following." If above conditions are met, then machine is correctly adjusted and can be run by power.

**Instructions for Removing Main Drive Shaft (Rear Section), Installing New Main Drive Belt, Clutch-Brake Unit #86113, Pulley, Etc.**

1.) Tighten screw (A) (Diagram No. 6) against sleeve 685048 to prevent sleeve from pulling out of bearing 85735.

2.) Disconnect connecting rod 585006A from feed ratchet arms, 25013 and 25014 by removing pivot pin 25074 (photo No. 6).

3.) Remove brush holder and bracket 585151 (photo No. 5).

4.) Remove high speed roller drive chain 85579 (photo No. 6).

5.) Remove the four (4) cap screws (A) holding outboard bearing bracket 685008 to base plate 685016 (photo No. 8), and knock out dowel pins between bracket and base plate.

6.) Remove springs FP (photo No. 4) and 685054 (photo No. 7).

7.) Mark shaft in a suitable manner so that when reassembling, the square on end of shaft will be located in the same relation to the square hole in sleeve, 685048, as it was before removal. This is necessary to maintain correct timing between stitching head and feed connecting rod.

8.) Entire shaft and all parts on shaft, including bracket 685008, can now be moved back toward end of machine until the main drive pulley 685047 touches sprocket 25741 (photo No. 8). The square end on drive shaft will now be separated from sleeve 685048, allowing entire assembly to be lifted up and removed from machine.

9.) Install any new parts that are necessary and reassemble, making certain that shaft is inserted in sleeve 685048 in exactly same position as before removal.

10.) Follow instructions given on Diagram No. 6 for reassembly of clutch and brake unit.

11.) Loosen screw (A) (Diagram No. 6) and turn machine over by hand to check for timing. See that formers are just off the blank on their way up when feed rollers start to act to step feed box.

NOTE: It is important, in reassembling shaft, to be certain that shaft and sleeve are in same relative position, one to the other, as before re-

removal; otherwise it will be necessary to disassemble shaft as described in steps #1 through #8 above, and turn shaft to bring square on end of shaft to original relationship with sleeve 685048.

The only other alternative for retiming is to remove head, head casing, etc. and time stitcher as described in steps #1 through #6 and #10 through #13 in section headed "Instructions for Removing Main Drive Shaft (Front Section), Bevel Gears, Etc., page 8.

#### **Trip Gauge Setting and Adjustment.**

Refer to diagram No. 12.

After the initial setting of the trip gauge, no further adjustment can be made except for squaring with table by using the clearance in the bolt holes. The bottom edge of the Trip Gauge Plate 585101A should be as near parallel with top of table as possible.

The trip gauge should be set so that when the Trip Gauge Plate 585101A is resting on top of the  $\frac{3}{16}$ " thick plate screwed to the table, the centerline of pivot (A) will be on a line parallel with the table and passing through centerline of pivot (B) or not more than  $\frac{1}{16}$ " higher than pivot (B). Under no circumstances should pivot (A) be lower than pivot (B).

Check to see that when Trip Gauge Plate 585101A is in the lower position, top edge of plate is still above lower edge of stripper, 585021 (photo No. 3).

Also check to see that lower edge of Trip Gauge Plate 585101A is above bottom edge of stripper 585021, when trip gauge plate is in its highest position.

#### **Switch Adjustment (on Trip Gauge Unit) — Main Clutch and High Speed Clutch.**

These two switches (LSA and LS3) are located on the trip gauge unit as shown on photo No. 3.

The R.H. switch or high speed roller clutch switch (looking from the discharge end of machine) is the one that stops the box feed rollers from revolving at high speed. This switch also engages the step feed tooth clutch.

The L.H. or opposite switch causes the main driving clutch to be engaged.

The adjusting of these two switches is as follows: (Note: Under no circumstances allow switch plungers to bottom or come to solid position.)

##### **1. R.H. or High speed feed roller clutch switch adjustment.**

With machine in neutral (normal stopping position when clutch is disengaged under power) **shut off motor.**

##### **2. Pull trip gauge unit all the way back. Adjust screw (C) diagram #7, until switch plunger is depressed to approximately $\frac{1}{16}$ " of bottoming.**

#### **L.H. or Main clutch trip switch adjustment.**

1. Pull trip gauge unit back until lever 585109A, diagram No. 7, just contacts switch plunger. NOTE:—Screw (C) must be adjusted as per item 2 (paragraph above) before this instruction can be followed.
2. With this setting, adjust main clutch switch operating screw so that there is approximately  $\frac{1}{16}$ " clearance between screw and main clutch trip switch plunger.

If the above adjustments have been correctly made it will be noticed that the high speed roller clutch switch is contacted before the main clutch switch.

#### **Safety Switch Adjustment.**

Referring to photo No. 6, note switch LS1. This switch is connected into the motor current. On lever 585002A (photo No. 7), a screw is located which operates against the plunger of switch LS1. This screw is adjusted so that it contacts the switch plunger, breaking the circuit one dial (685022A) movement later than switch LSY, which controls the number of staples. In the event that switch LSY fails to work, switch LS1 will open the motor current and machine will stop.

#### **Staple Dial Switch Adjustment.**

Have machine in neutral position with main switch ON, but motor switch OFF.

Press the start button on switch (A) (photo No. 8). This will release the brake so that the machine can be turned over by hand.

Set lever 685021 in No. 3 notch in staple dial 685022A.

Turn the stitcher over by hand two full revolutions. Continue to turn and at end of the connecting rod's next down stroke, have screw (B) (photo No. 7), operate switch LSY to stop staple count.

Run machine by power, trip clutch and check staple count. If obtaining more staples than dial is set for, turn screw in slightly. If obtaining less staples than dial is set for, back screw out slightly.

#### **Auxiliary Brake Shaft Lock Lever 25480A Adjustment.**

Refer to photo No. 4.

1. Trip clutch and turn machine by hand to high point of auxiliary brake cam 585124, so that auxiliary brake shaft lock is fully engaged.
2. With this setting, adjust screw (A) in the auxiliary brake lock lever arm 25480A to just contact the plate on end of link 685010A.
3. Lock nut firmly.

#### **Ratchet Cam 25069BA Release Stop Screw (A) Adjustment.**

Refer to photo No. 6 and diagram No. 1.

1. Turn machine by hand one full revolution until connecting rod is at high point.

2. Pull ratchet cam 25069BA in direction shown on diagram No. 1. Make sure that staple dial return stop disc 25419 is against stop 25422.
3. Adjust screw (A) to make setting as shown at (B).
4. Lock nut firmly.

#### **High Speed Disc Clutch Adjustment.**

Refer to photo No. 5.

1. Loosen two screws in clutch fork 585380.
2. Raise clutch lever 585192A by hand until a measurement of  $\frac{5}{8}$ " to  $1\frac{1}{16}$ " is obtained between the bottom of the head on the solenoid plunger and the top of the solenoid frame. This cannot be done unless all backlash is taken out of the entire linkage.
3. Lock clutch fork 585380 when above setting has been obtained. After locking, check to see that the  $\frac{5}{8}$ " to  $1\frac{1}{16}$ " measurement is maintained.
4. Adjust screw 685043 to permit lever 585192A to raise up approximately  $\frac{1}{16}$ " further than the  $\frac{5}{8}$ " to  $1\frac{1}{16}$ " solenoid setting. This is to allow for wear on clutch plates.
5. Tighten lock nut on screw 685043.
6. To readjust for clutch wear, loosen screws in clutch fork and adjust as per paragraphs 1, 2, 3, 4 and 5 above.

#### **Setting of Tooth Clutch Step Feed Mechanism.**

Refer to diagram No. 10.

1. With machine in stopped and neutral position, have clutch fork 25591 loose on shaft.
2. Have fork 25591 firmly press the sliding member of tooth clutch into full engagement with stationary member of clutch 25427A.
3. At the same time push on solenoid plunger (A) so that it is firmly seated. At this point, lock fork 25591 tightly on shaft.
4. Adjust stop screw 685043 so that when clutch is disengaged, an opening of approximately .035" to .040" as shown at (B) is obtained.
5. Spring 251354, in spring link assembly 585381A, must be adjusted to be strong enough to hold tooth clutch firmly engaged when doing long and heavy boxes. This adjustment is made by means of nut 251359. Be careful, however, that spring is not so strong that solenoid plunger cannot fully seat itself at end of stroke. This applies when the tooth clutch is being engaged and also when it happens that the teeth come on top of each other. In this case, the solenoid plunger must also seat itself, hence the spring must yield accordingly.

#### **STITCHING WIRE**

It is essential that a suitable size of stitching wire be employed for the work at hand. If wire is

too light, it will buckle and will not penetrate the stock.

Wire must be of good quality and of proper hardness, otherwise it will bend or buckle.

Wire must not be oversize or it will stick in the formers and driver and refuse to feed.

Wire must be clean, without rough edges. The latter will wear the wire tubes and former grooves unduly. Some coated wire flakes off particles, which collect in the wire tubes and may even clog them completely, in which case, they should be removed and cleaned by inserting a piece of round wire and pushing out the plug.

#### **PREVENTATIVE MAINTENANCE CHECK LIST**

Note:—If necessary, refer to various sections in instruction book for more detailed instructions of items below.

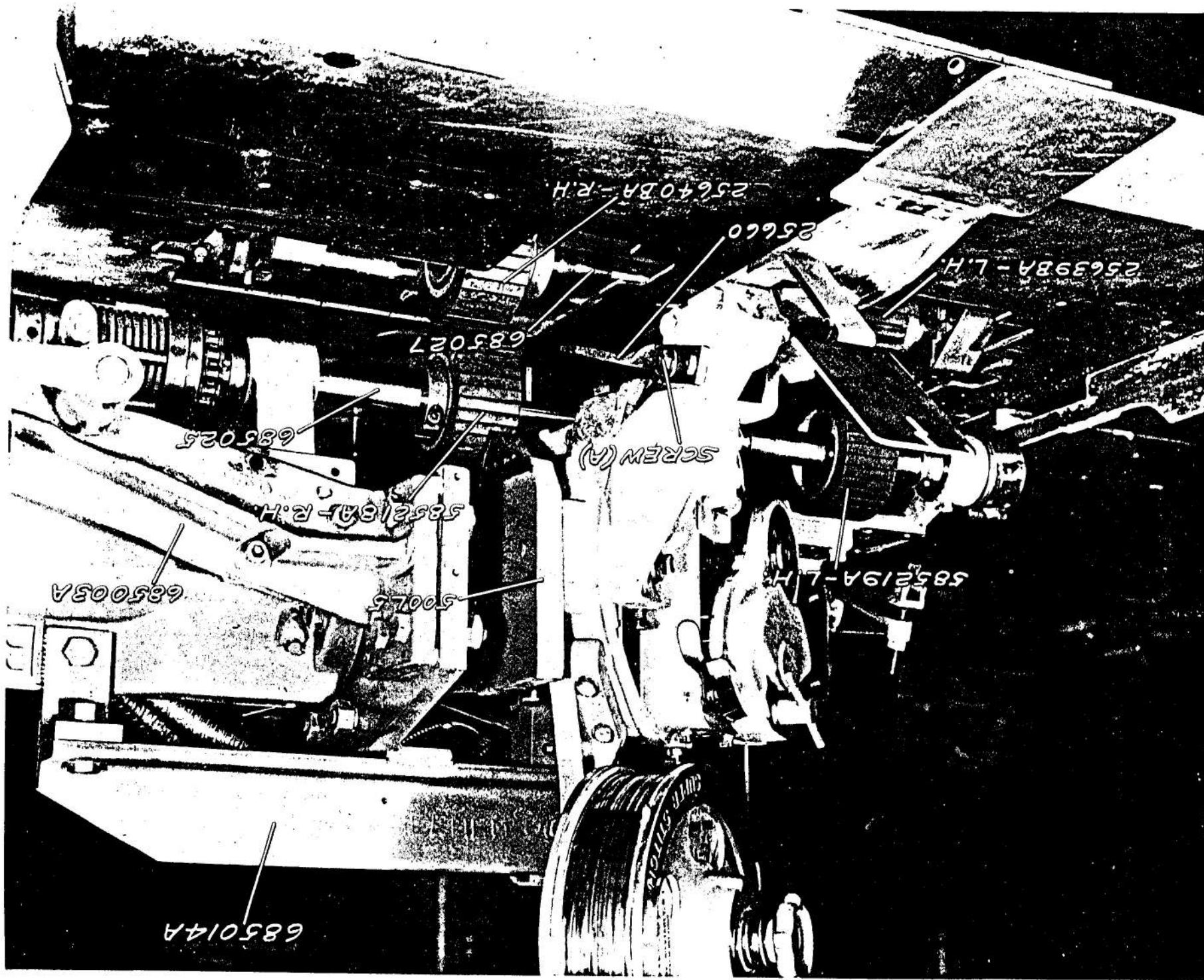
In order to obtain the maximum efficiency of these machines, and to keep "down time" to a minimum, the following check list is recommended:

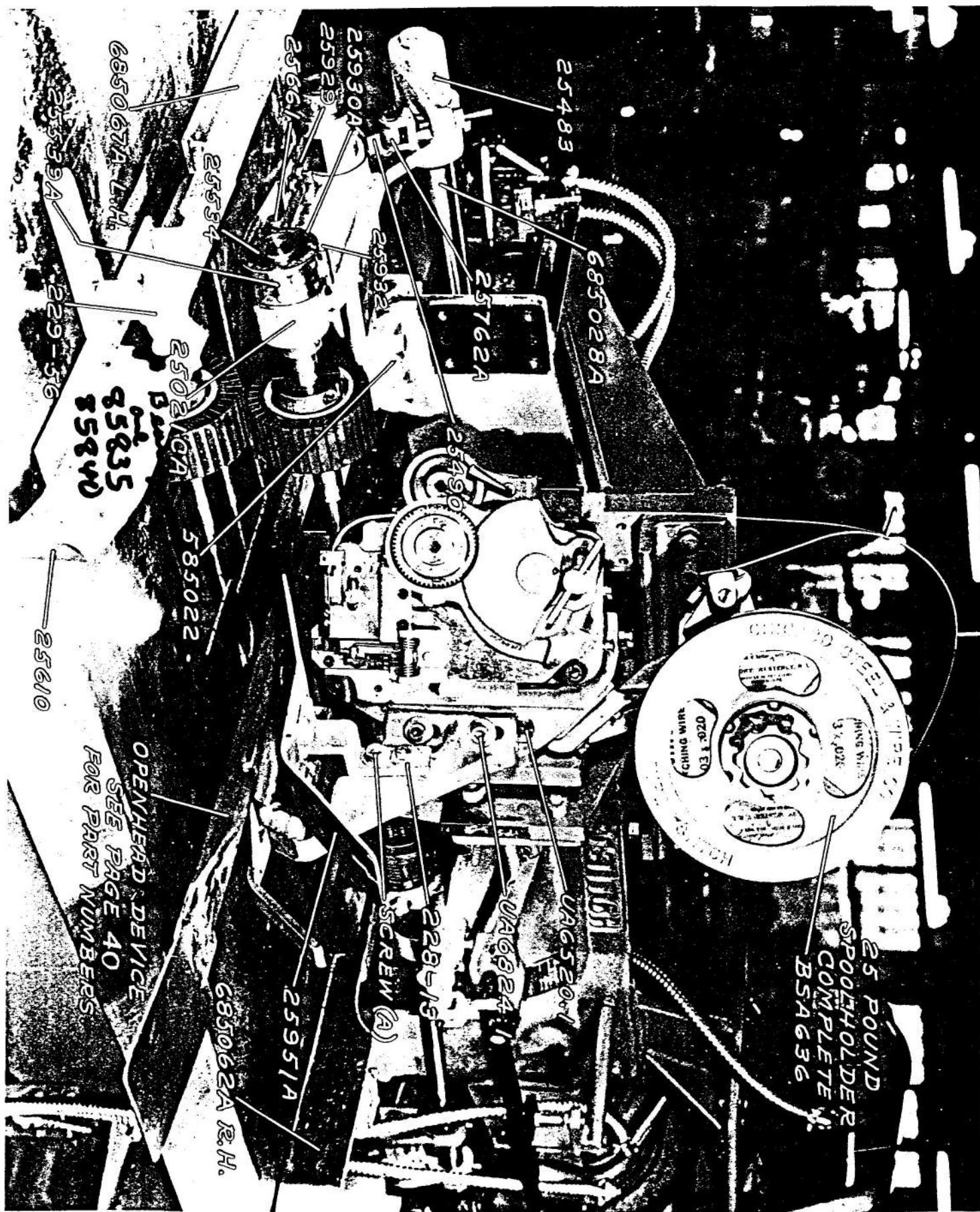
##### **Daily:**

1. Each unit should be oiled every 8-hour run. Use a good grade of oil such as #20 S.A.E. or equivalent. The wire feed clutch should be oiled with a light oil such as 3-in-1 or the equivalent.
2. Check wire feed clutch at end of daily run to see that it is free of gummy oil, grit and wire scrapings. If not, disassemble clutch, clean with kerosene or a good oil solvent and lubricate the rollers with 3-in-1 oil or equivalent.
3. Check operation of all Micro switches to see that they are properly adjusted and make certain that the plungers do not bottom.
4. Box feed clutch brake and auxiliary brake should be cleaned daily as excessive oil on the brakes may cause too great a variation in the spacing of staples.
5. Check tension on staple dial return spring. Tension should be no more than is necessary to operate efficiently when dial is set for 3 staples.

##### **Weekly:**

1. Disassemble stitcher head, clean thoroughly. Check for and replace any badly worn parts; oil and reassemble.
2. Check diameter of upper and lower rubber feed rollers. New upper feed rollers are 4" in diameter and new lower feed rollers are  $4\frac{1}{2}$ " in diameter. When approximately  $\frac{1}{2}$ " off of the diameter of either set of rollers is worn off, replace with new rollers for efficient operation.
3. Check to see that feed roller rocker arm bearing springs #25301 are not broken and are properly adjusted for pressure.
4. Check high speed clutch plates to see that they are dry and free of oil.
5. Clean machine thoroughly, check all adjustments carefully and readjust if necessary and lock firmly.





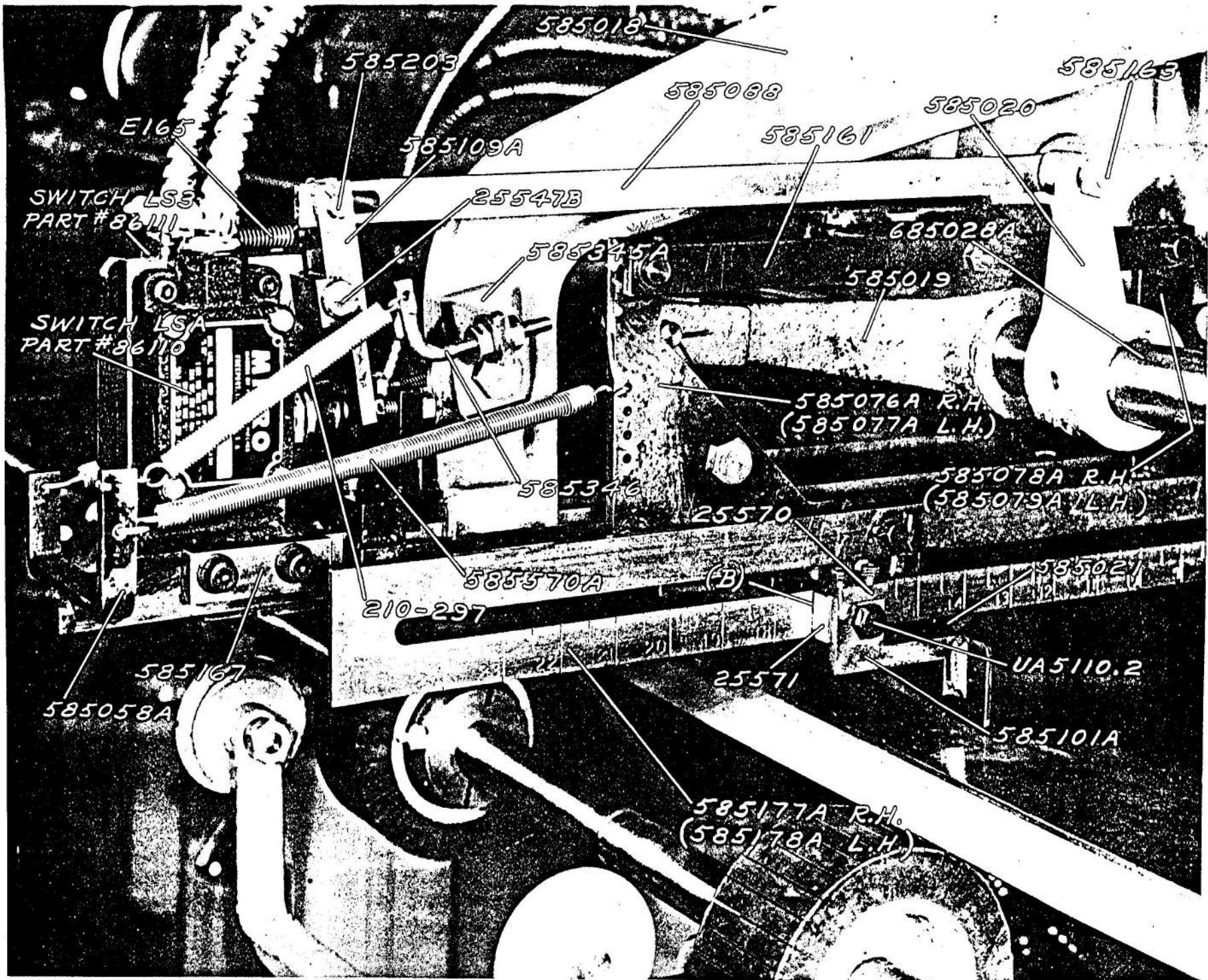
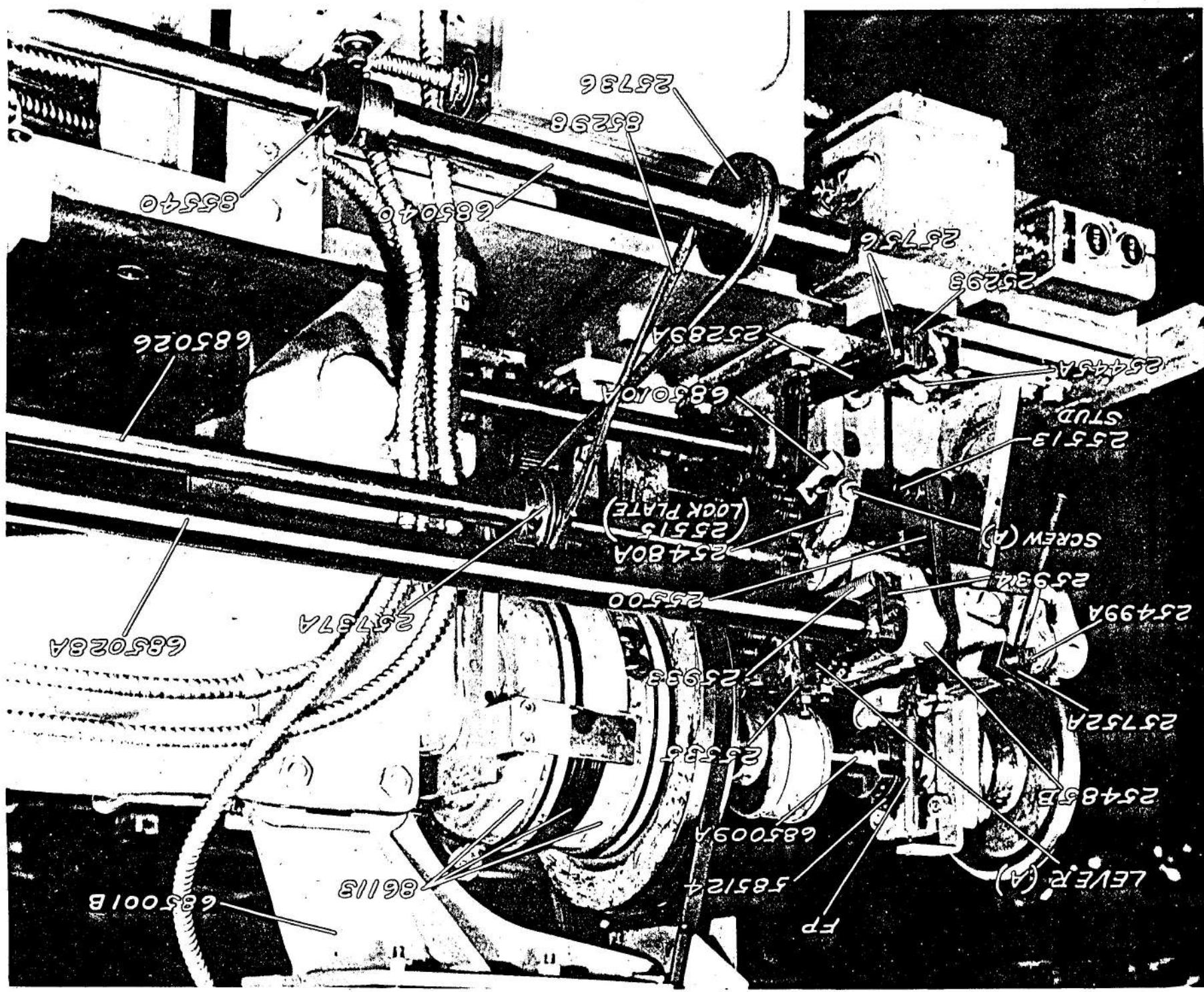
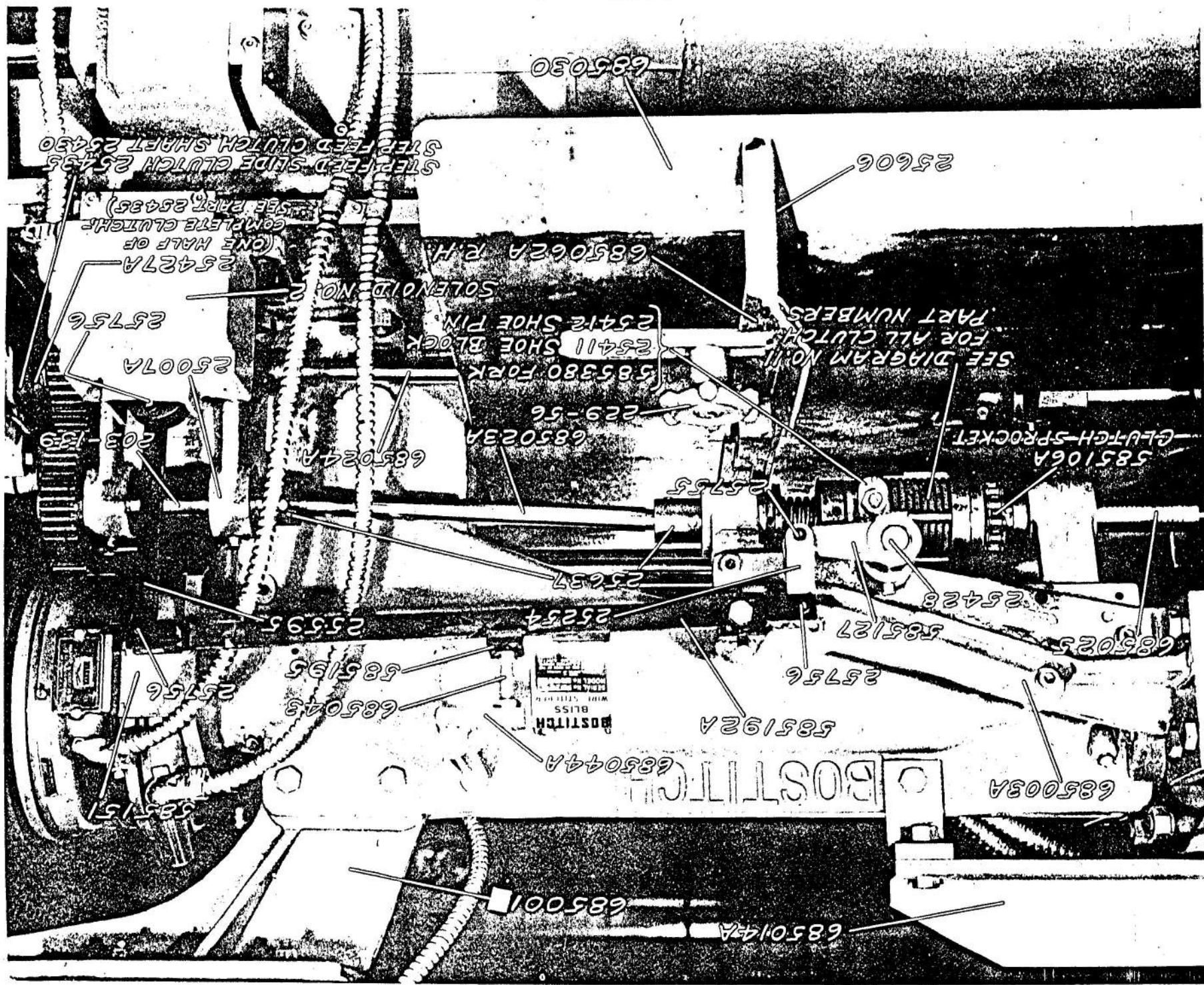
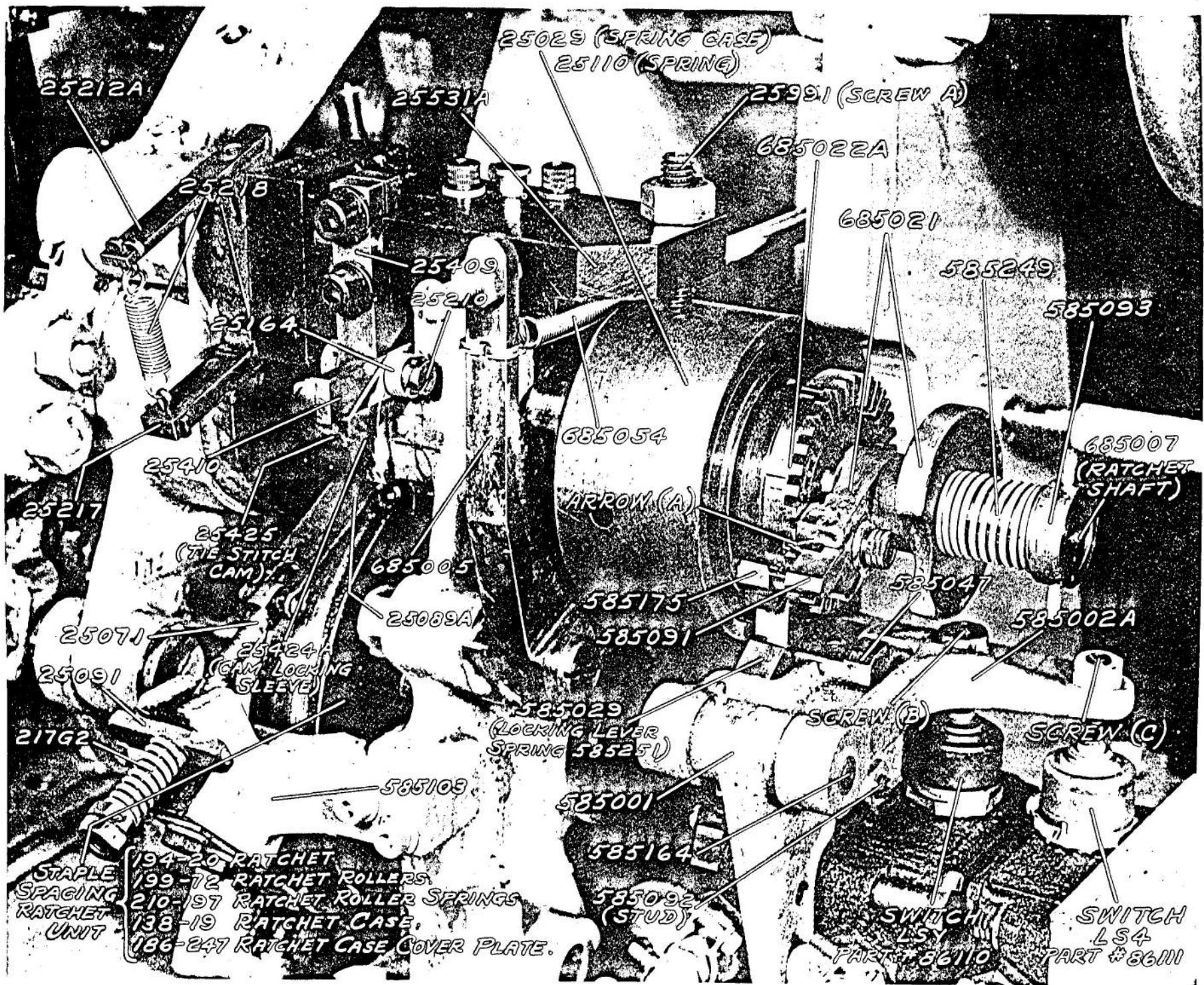
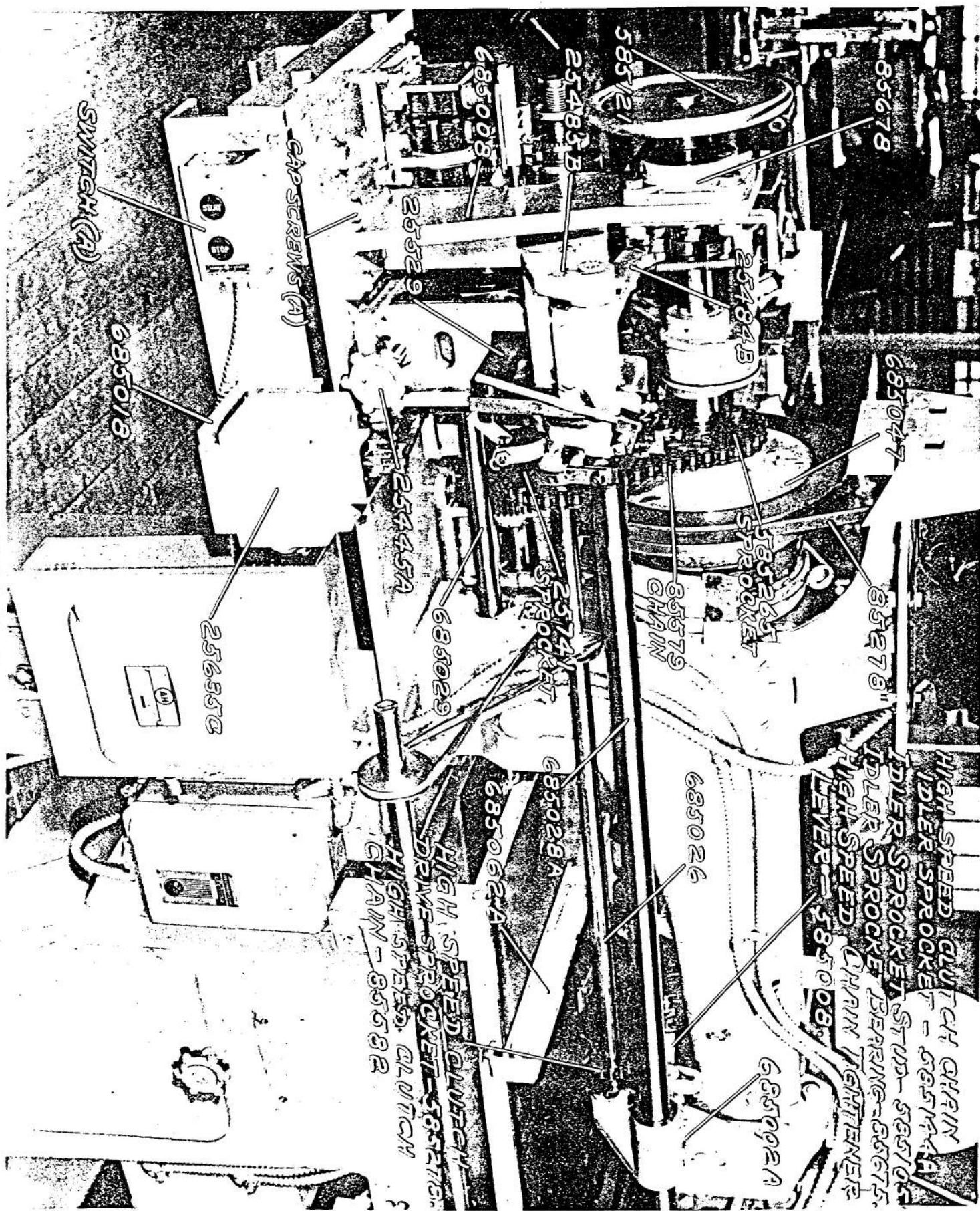


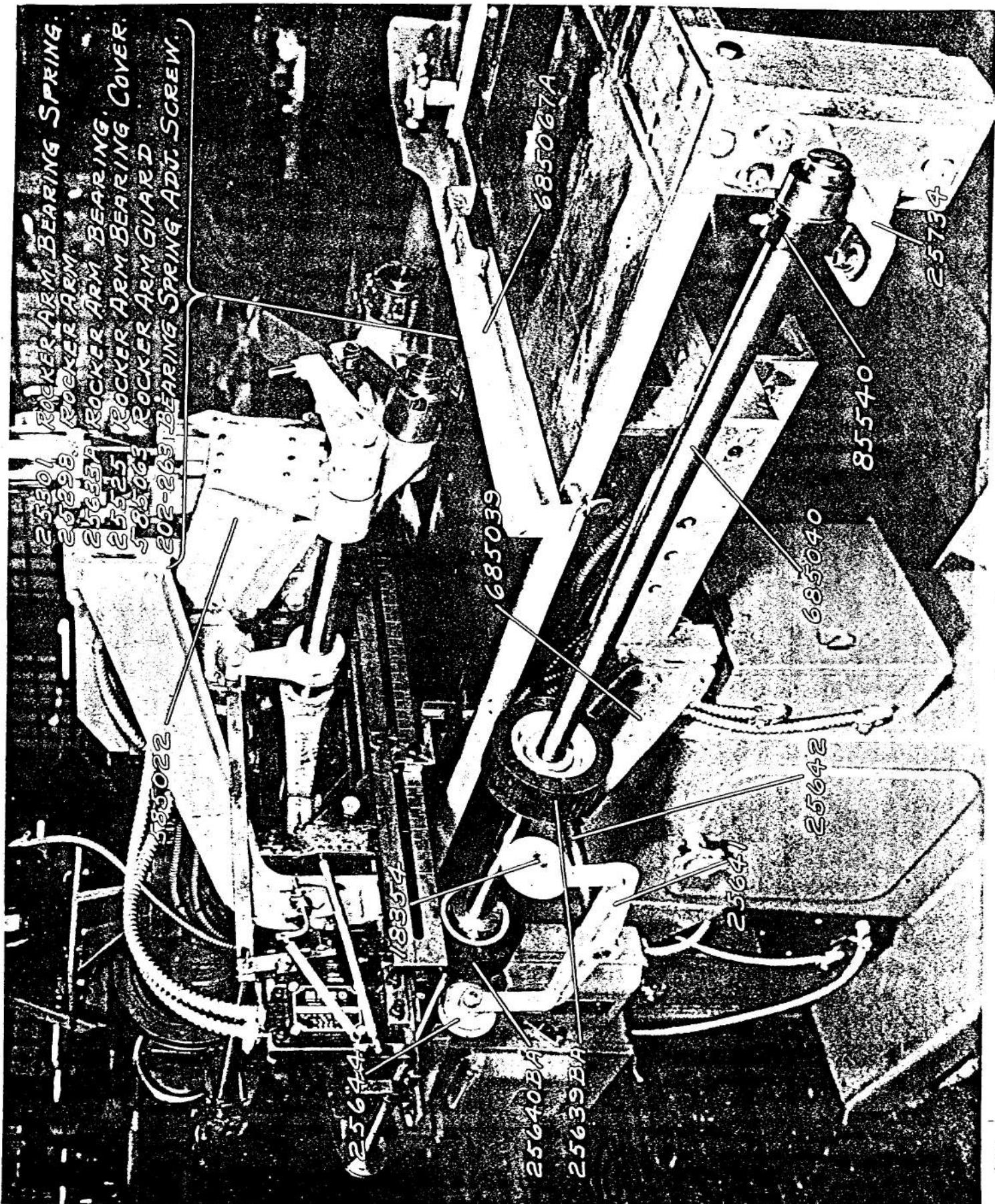
PHOTO No. 4

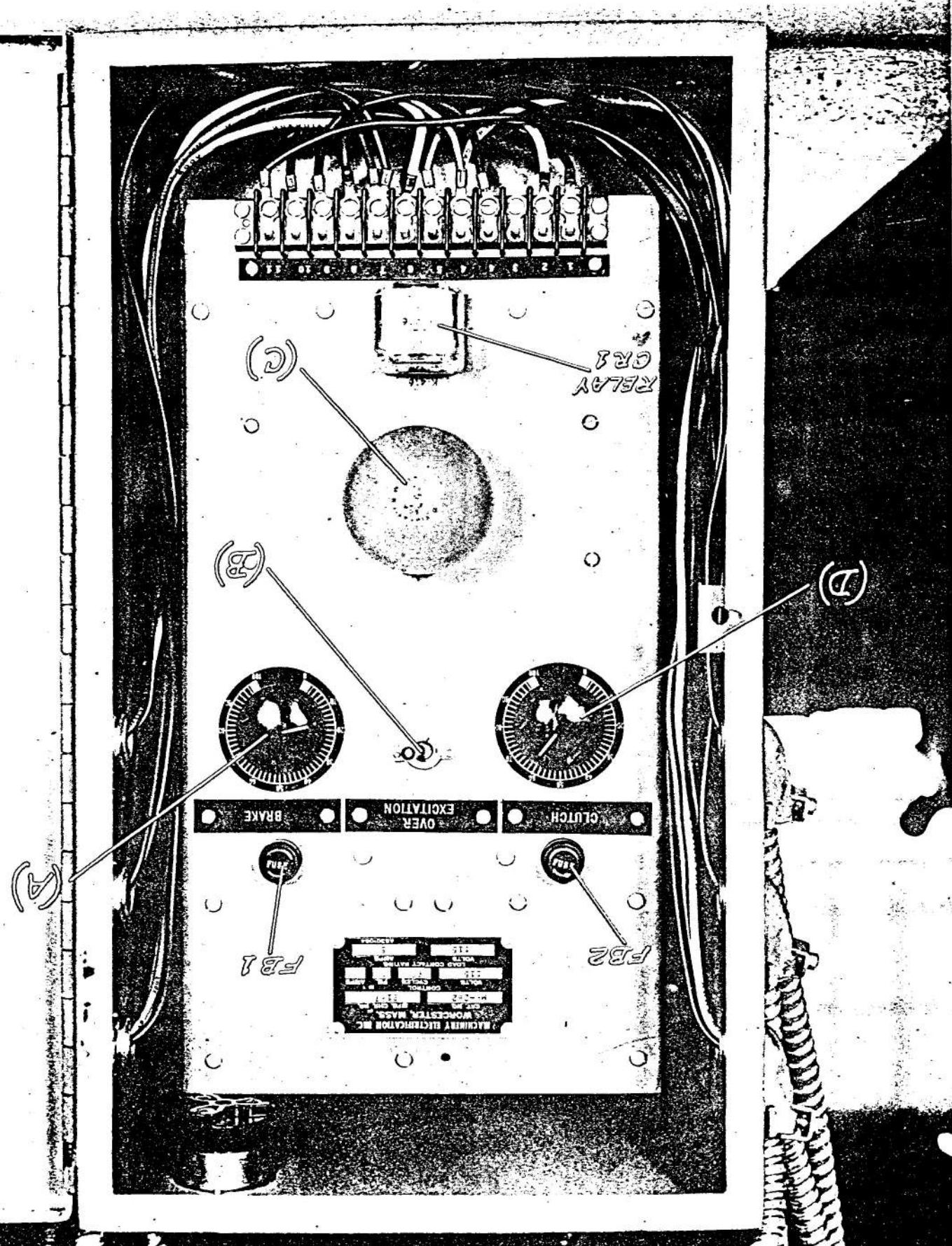


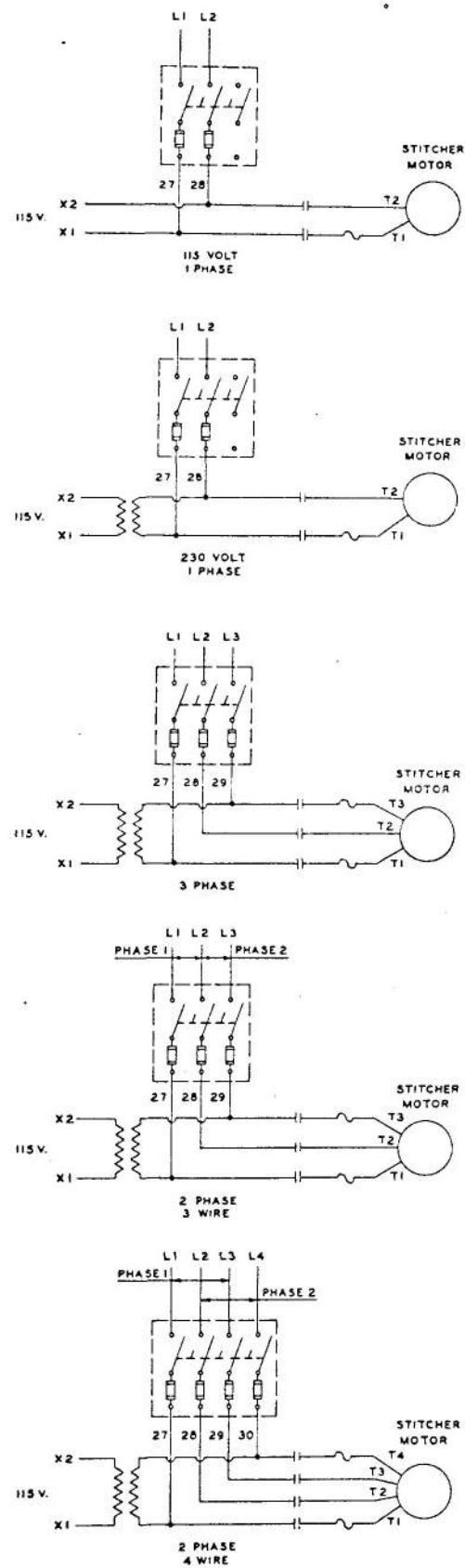
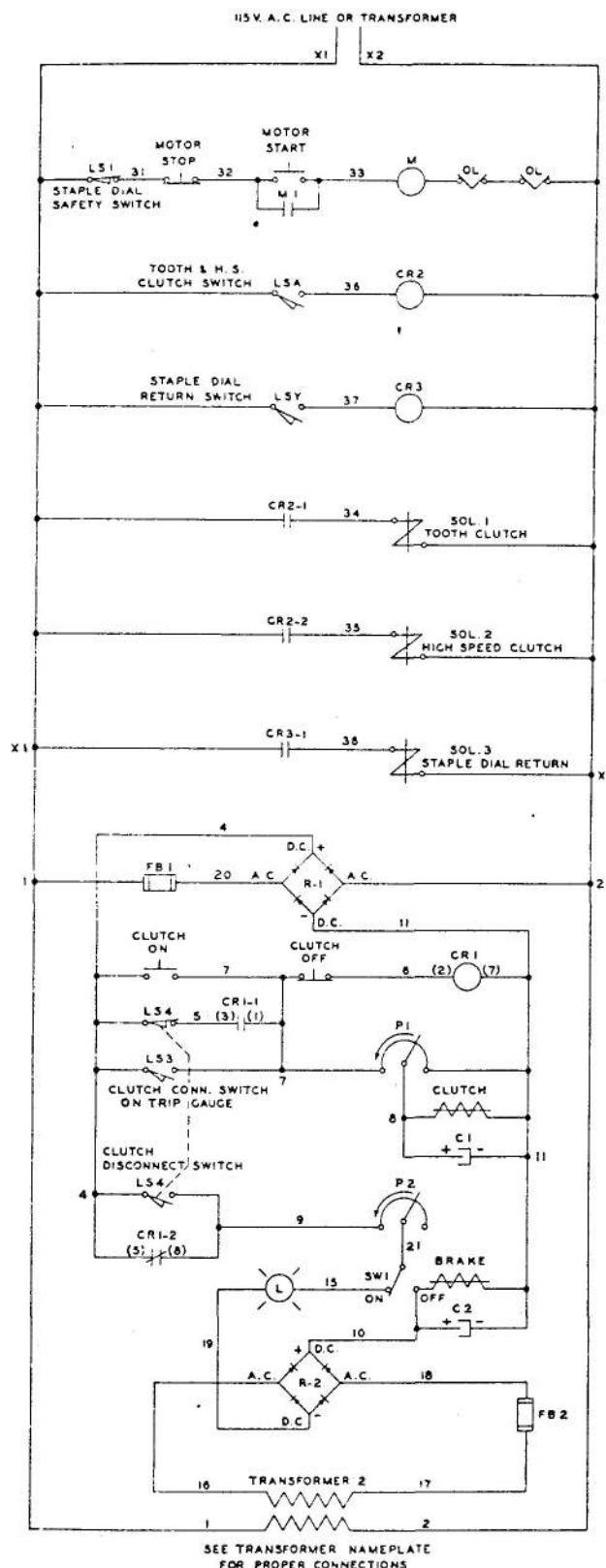




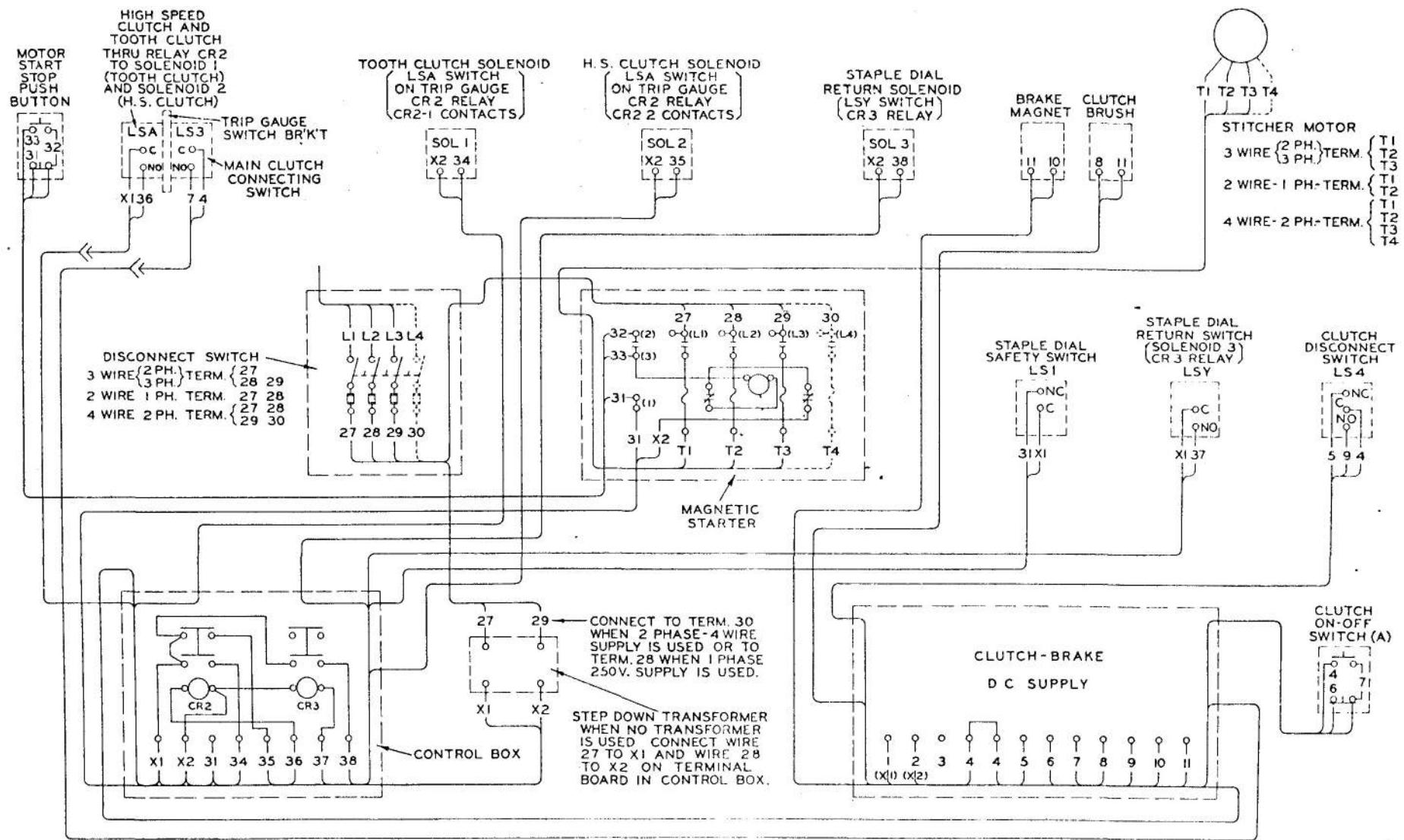




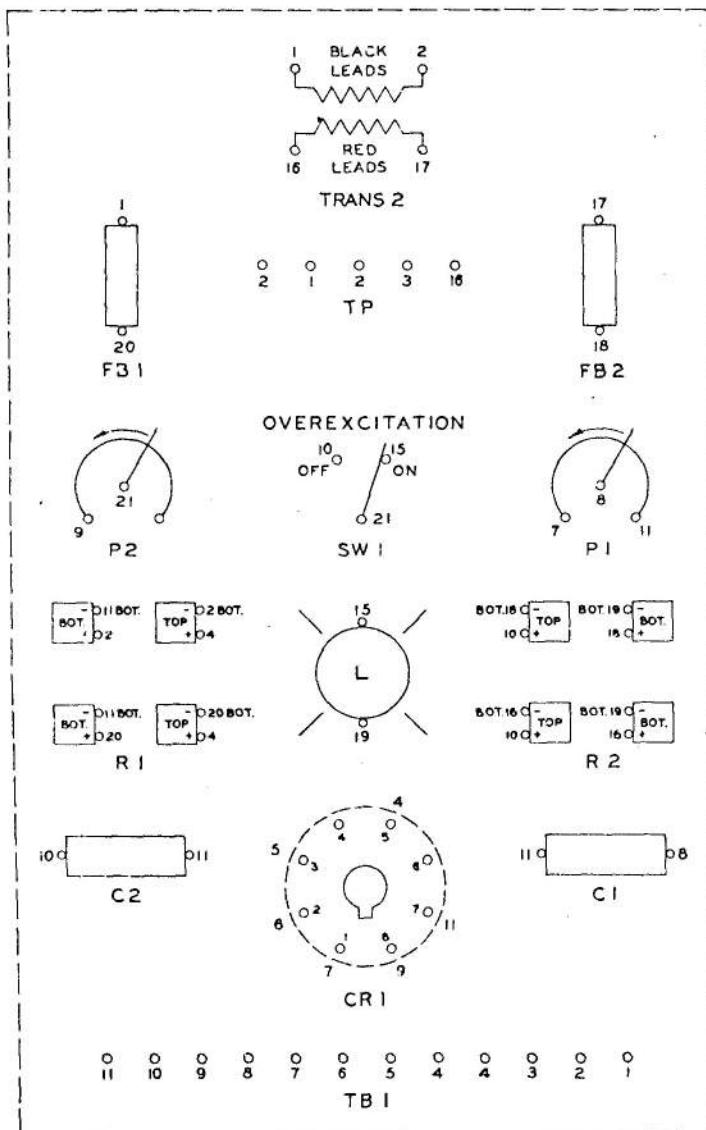




ELEMENTARY WIRING DIAGRAM  
685 STITCHER



## CABLE DIAGRAM 685 STITCHER



REAR VIEW OF CHASSIS

PANEL INTERNAL CONNECTIONS

WIRE	DEVICE	WIRE	DEVICE
1	TB1 - TPI	11	TB1 - C2
	TP - TRANS 2		C2 - C1
	TP - FBI		C1 - CRI
2	TB1 - TP		CRI - PI
	TP - TRANS 2		PI - TP
	TP - TP		TP - RI
	TP - RI	15	RI - RI
	RI - RI	16	SWI - L
4	TB1 - TB1		TP - R2
	TB1 - CRI		R2 - R2
	CRI - RI	17	FB2 - TRANS 2
	RI - RI	18	FB2 - R2
5	TB1 - CRI		R2 - R2
6	TB1 - CRI	19	L - R2
7	TB1 - CRI	20	R2 - R2
	CRI - PI		FBI - RI
8	TB1 - CI		RI - RI
	CI - PI	21	SWI - P2
9	TB1 - CRI		
	TB1 - P2		
10	TB1 - C2		
	TB1 - R2		
	R2 - R2		
	R2 - SWI		

NOMENCLATUREBOSTITCH  
PART NUMBERS

C1 2 - CAPACITOR	86186
CRI - CONTROL RELAY	86185
RELAY SOCKET	86227
FBI 2 - BUSS FUSE HOLDER	86235
BUSS FUSE	86195
L - LAMP	
LAMP SOCKET	86234
P1 2 - POTENTIOMETER	86184
R1 2 - RECTIFIER	86183
SW1 - OVEREXCITATION TOGGLE SWITCH	85189
TB1 - TERMINAL BOARD	86236
TP - TERMINAL STRIP	86237
TRANS 2 - TRANSFORMER	86182

D. C. SUPPLY INTERNAL CONNECTIONS  
685 STITCHER

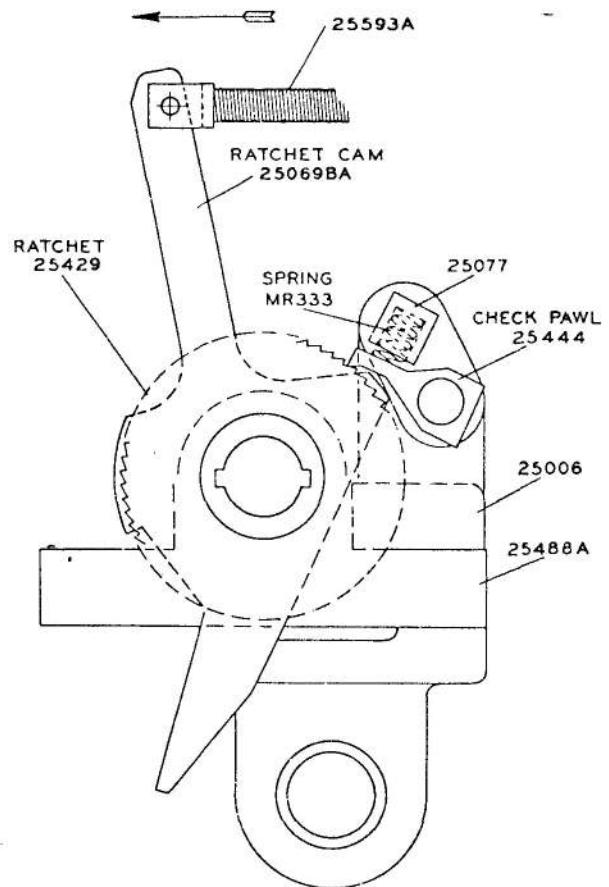
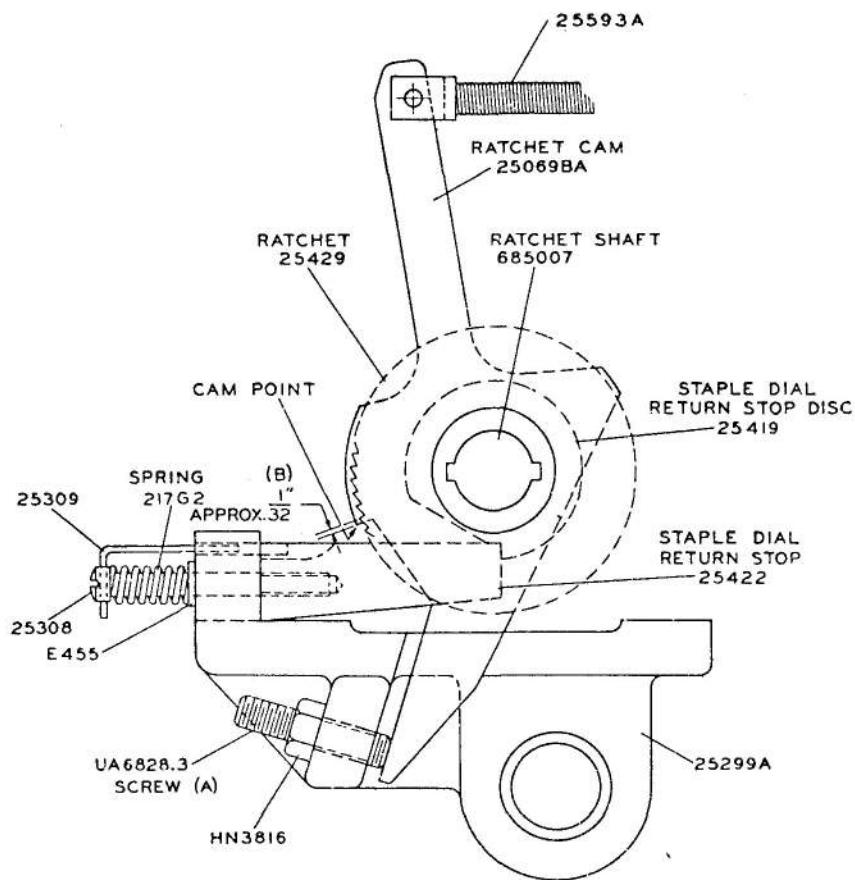
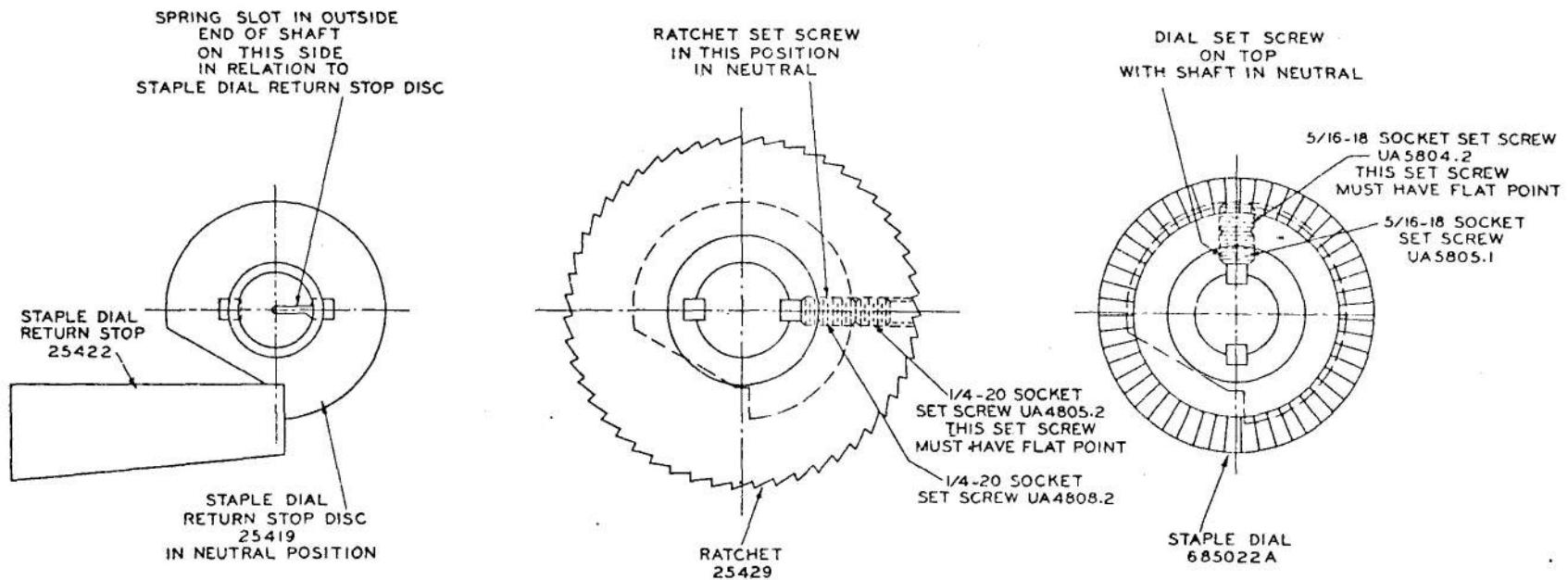


DIAGRAM I



PARTS AND KEY RELATIONSHIP ON RATCHET SHAFT

DIAGRAM 2

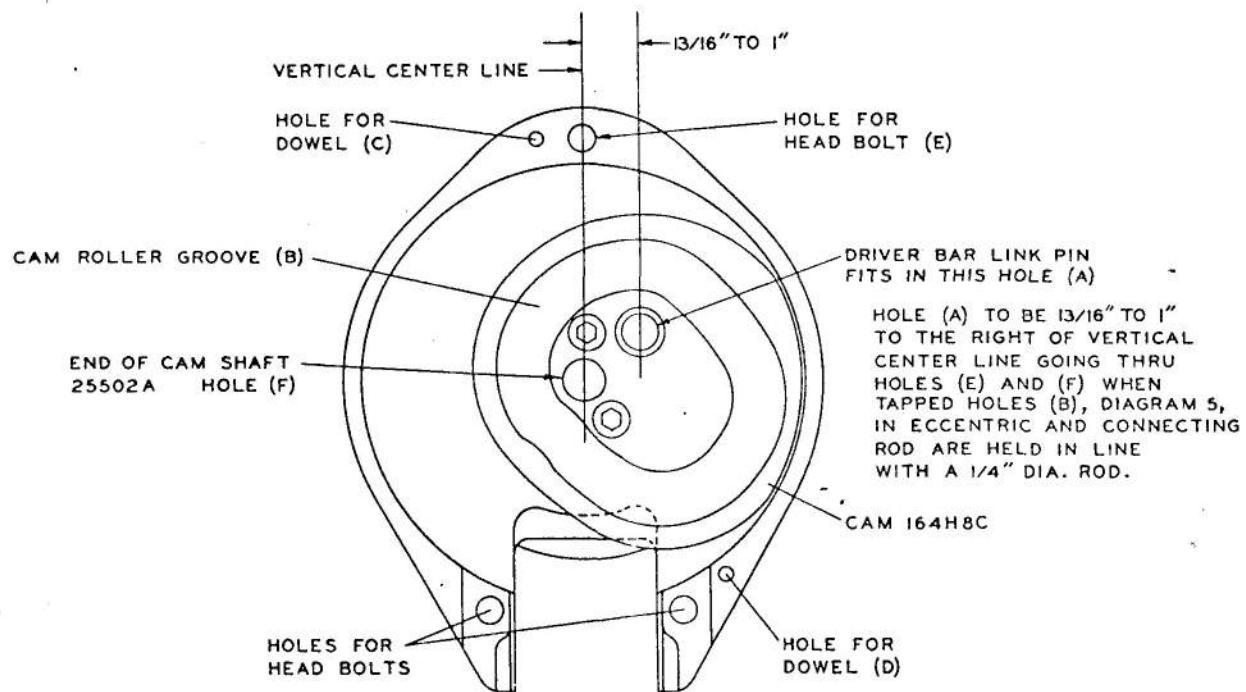


DIAGRAM 3

28

WARNER ELECTRIC CLUTCH AND BRAKE UNIT  
NO. ICB-825 90 VOLT D.C.  
BOSTITCH PART NO. 86113

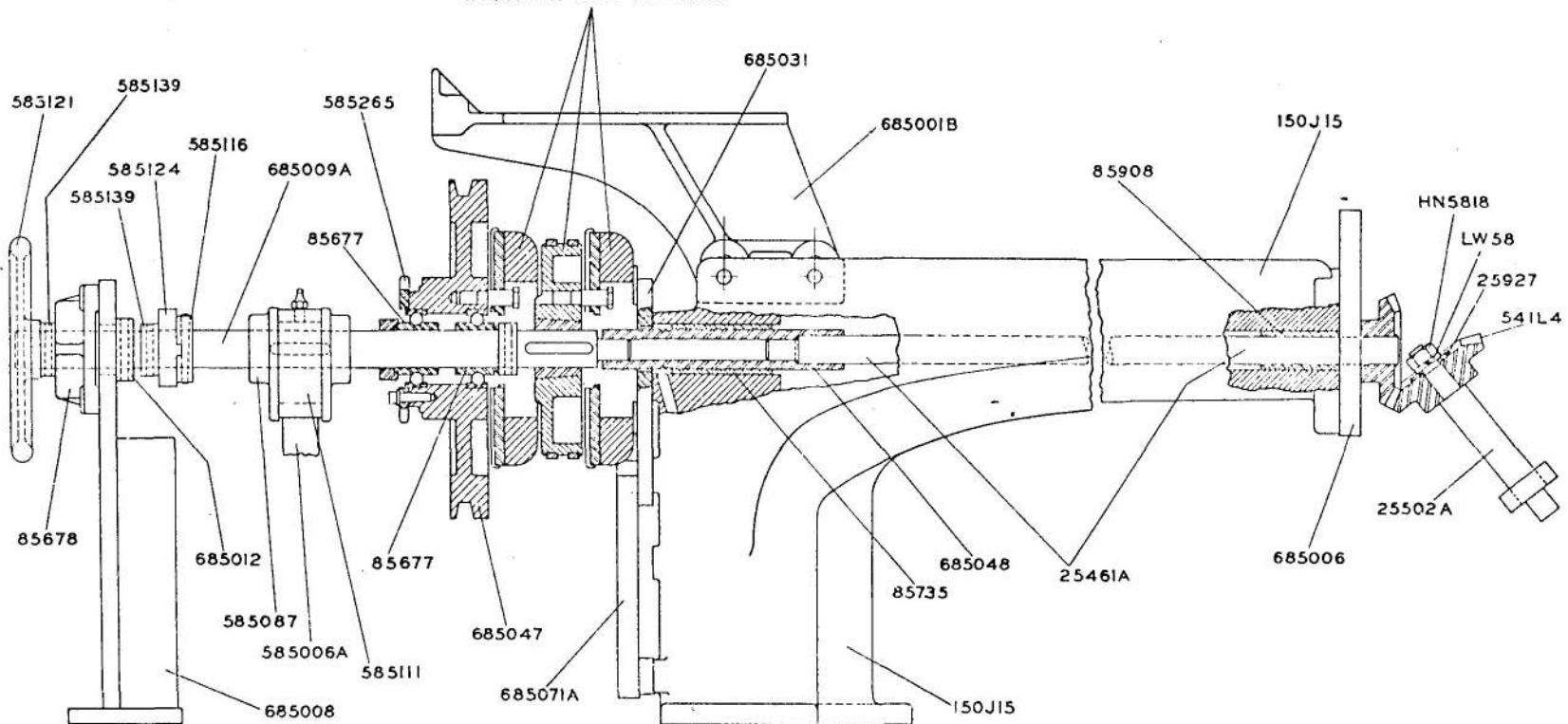


DIAGRAM 4

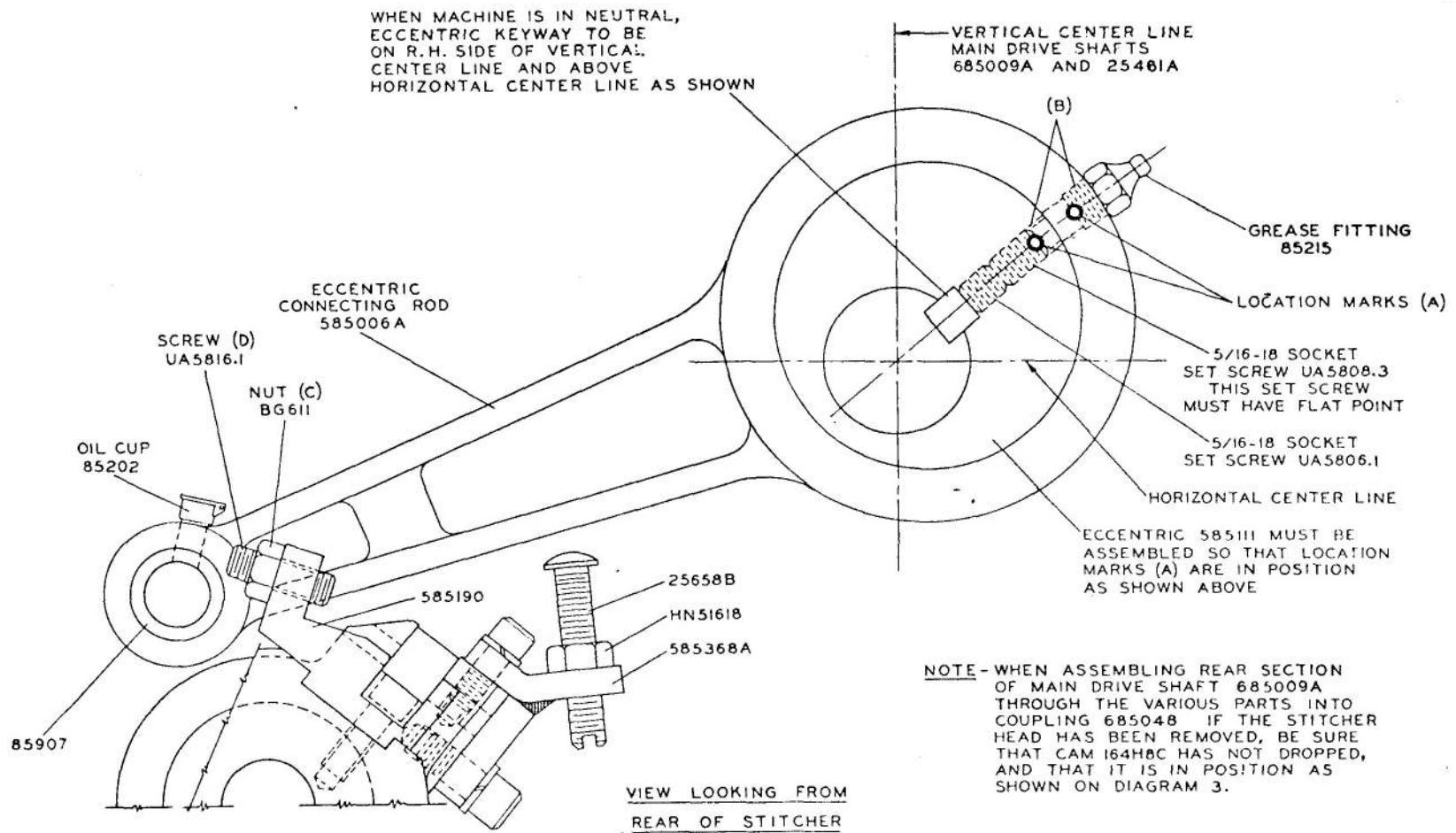
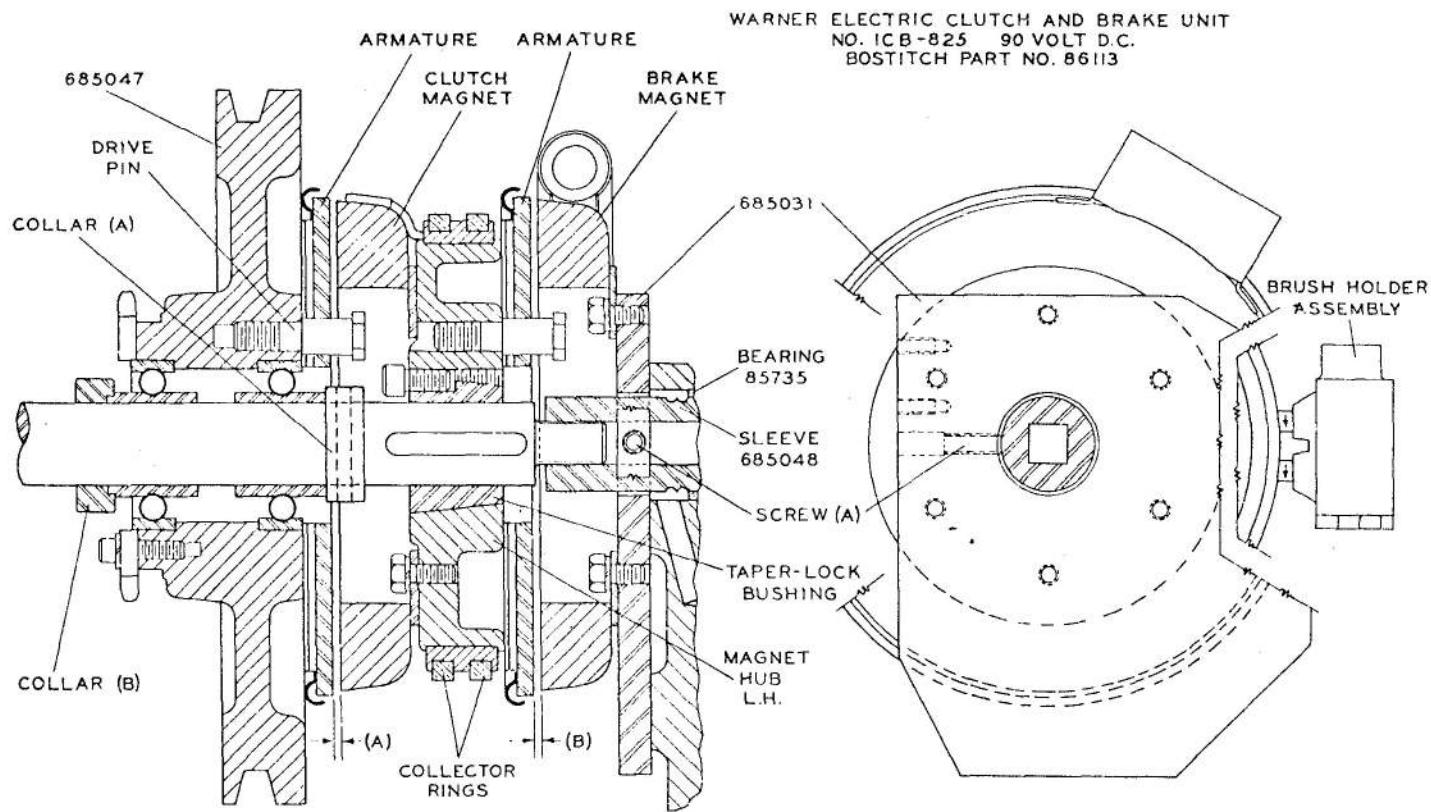


DIAGRAM 5



DIMENSIONS (A) AND (B) FOR THE INSTALLATION OF A NEW CLUTCH AND BRAKE UNIT SHOULD BE  $1/16$ " RESPECTIVELY.  
IF CLUTCH AND BRAKE UNIT FOR ANY REASON HAS TO BE REMOVED AFTER BEING IN OPERATION AND IS TO BE  
REASSEMBLED TO MACHINE, THE FOLLOWING INSTRUCTIONS SHOULD BE CAREFULLY CARRIED OUT.

1 - BEFORE REMOVING, MEASURE AND MAKE A RECORD OF DIMENSIONS (A) FOR CLUTCH AND (B) FOR BRAKE.  
2 - WHEN REASSEMBLING, LOCATE CLUTCH AND BRAKE TO (A) AND (B) DIMENSIONS AS NOTED IN ITEM 1.  
UNLESS THIS IS DONE THE CLUTCH MAGNET AND THE BRAKE ARMATURE WILL NOT BE LOCATED CORRECTLY.

DIAGRAM 6

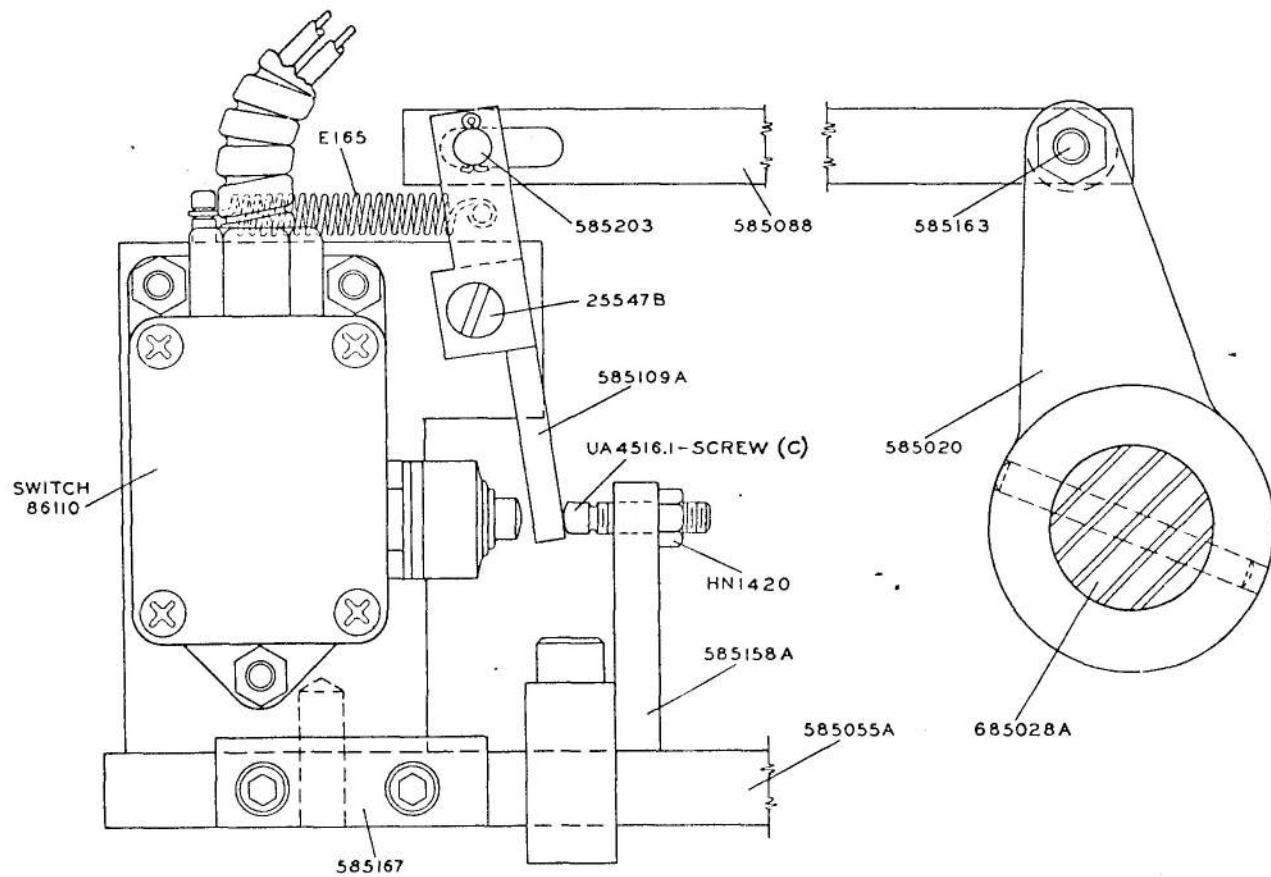
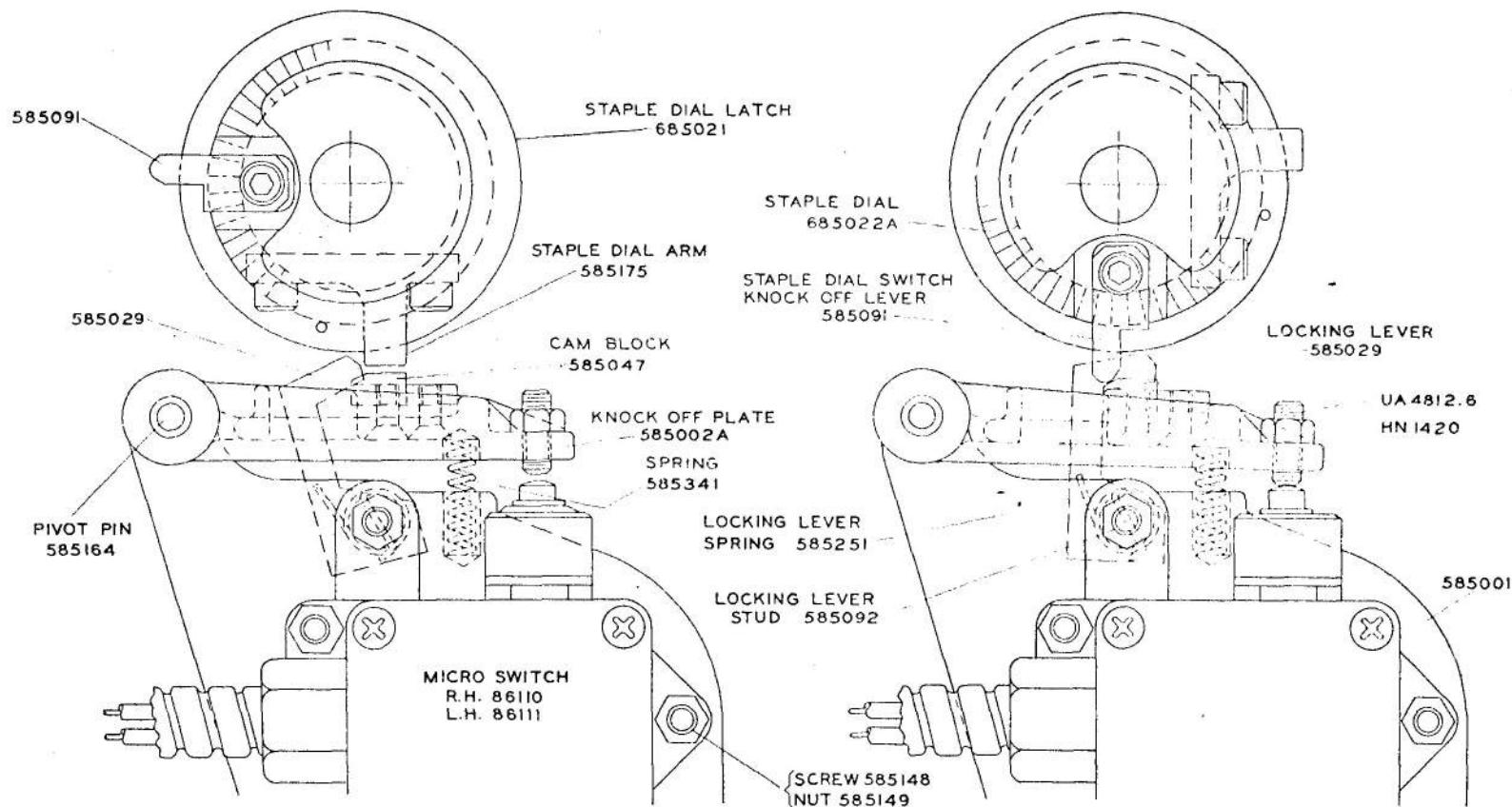


DIAGRAM 7



STAPLE DIAL RETURN MECHANISM  
DIAGRAM 8

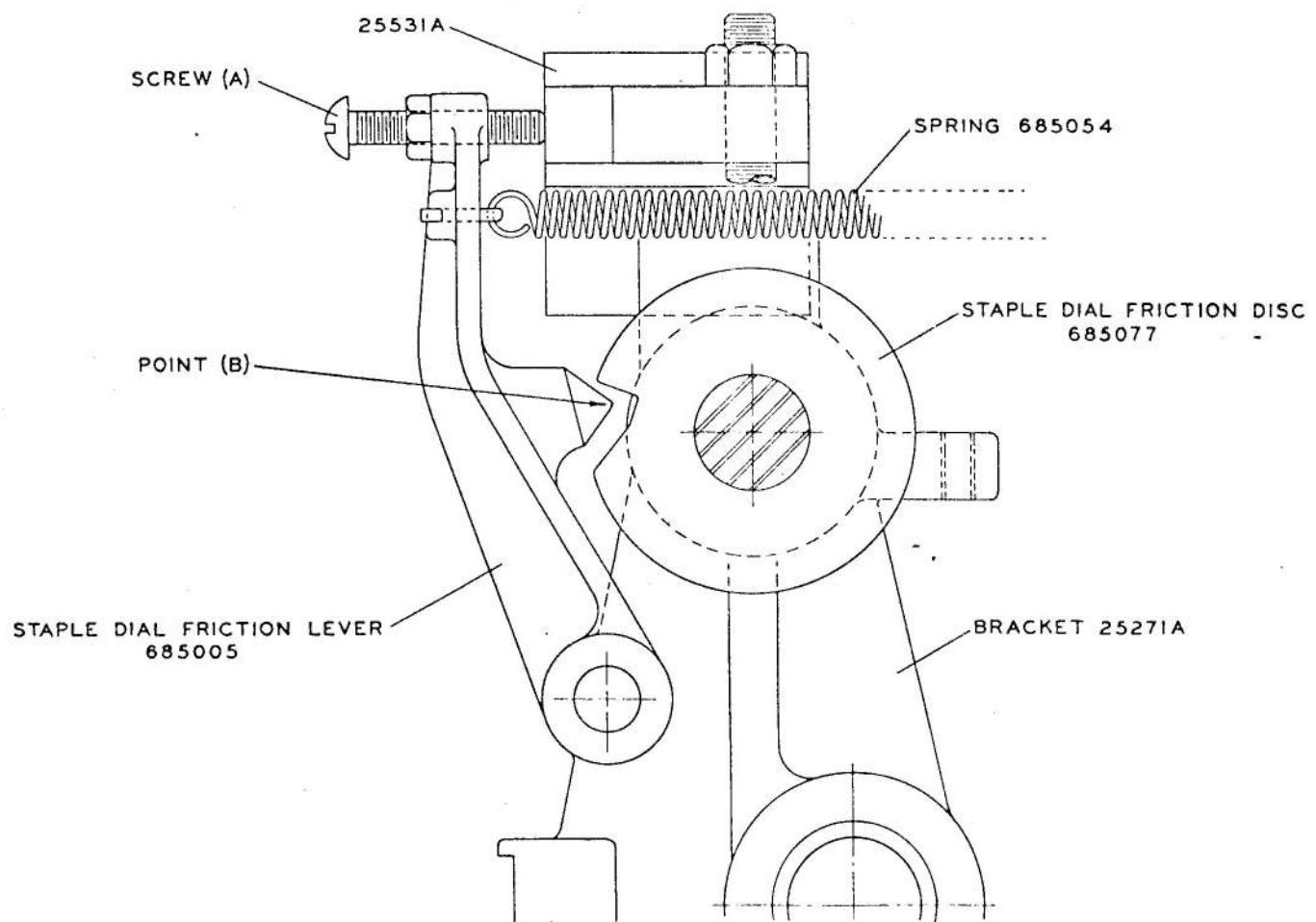


DIAGRAM 9

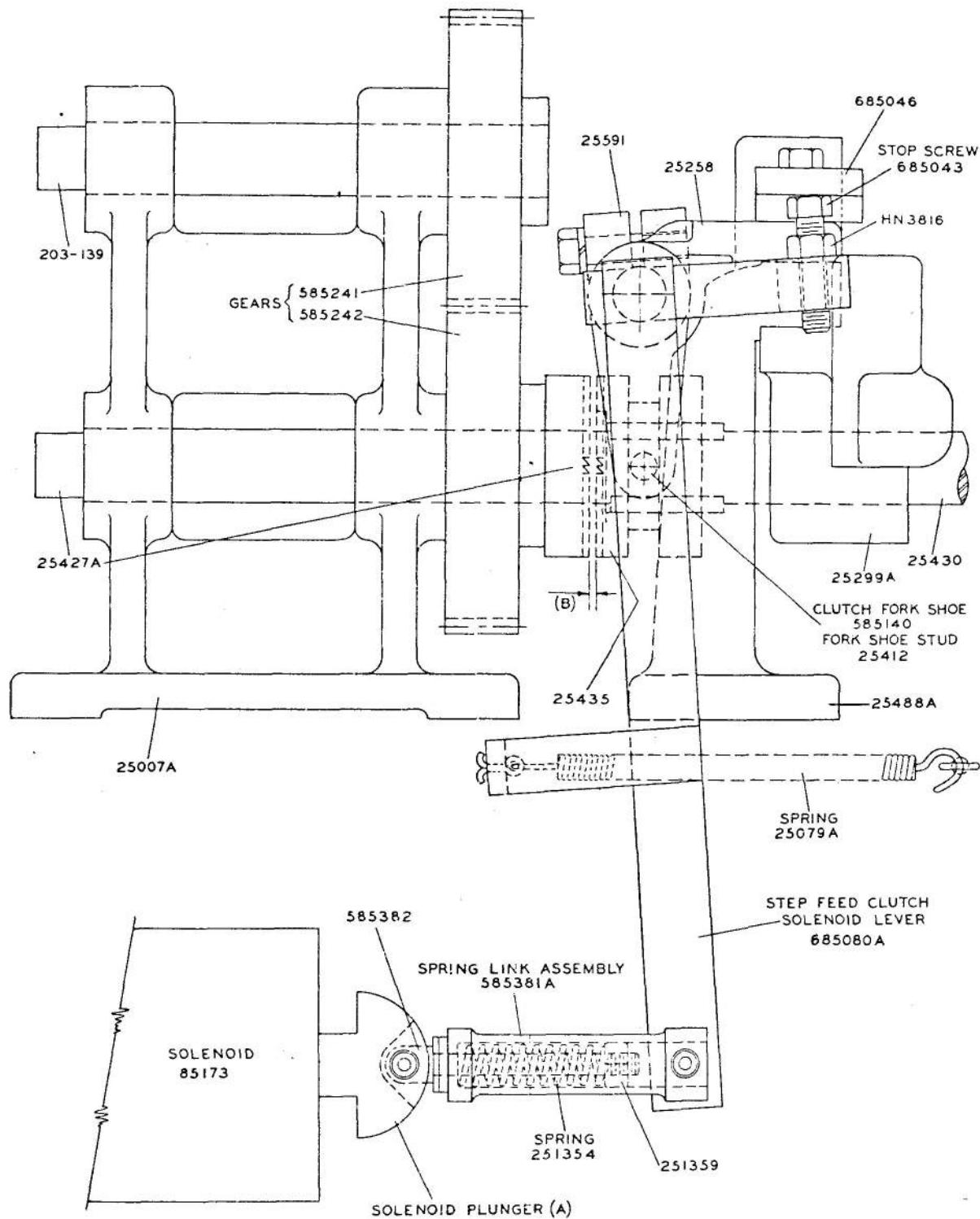


DIAGRAM 10

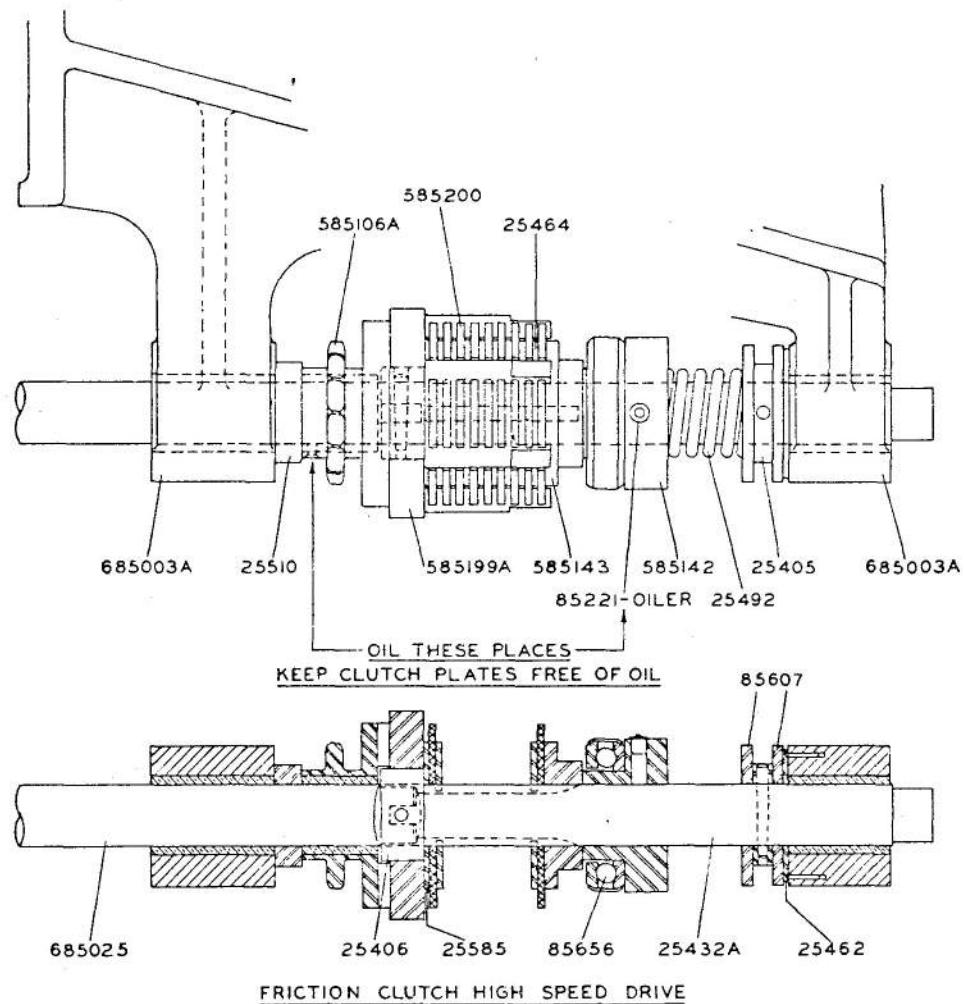


DIAGRAM II

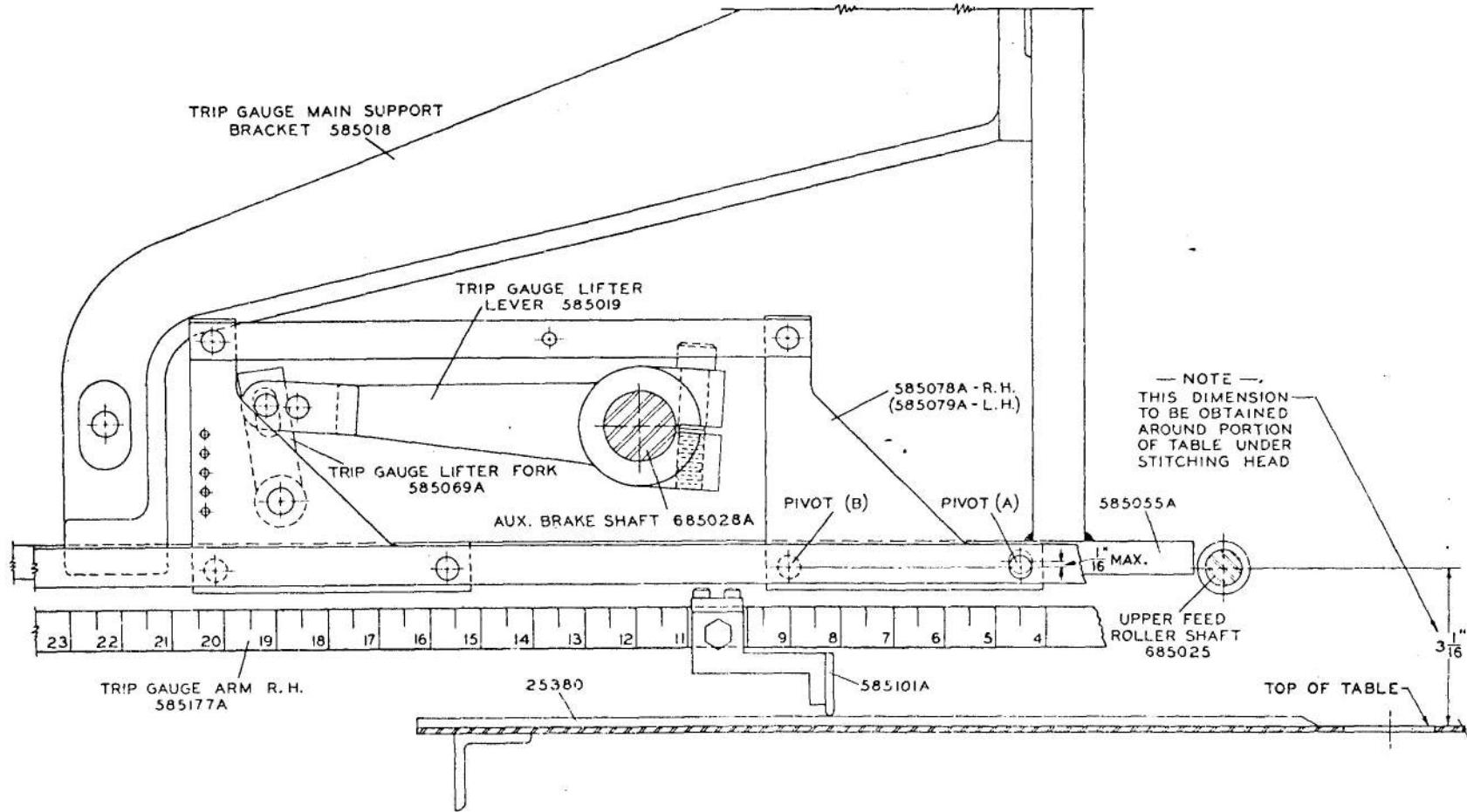


DIAGRAM 12

# PARTS RECOMMENDED FOR CUSTOMER'S STOCK

## STITCHER PARTS

585218A Upper Step Feed Rollers—R.H. (1 per Machine)  
 585219A Upper Step Feed Rollers—L.H. (1 per Machine)  
 25639BA L.H. Lower Feed Roller (1 per Machine)  
 25640BA R.H. Lower Feed Roller (1 per Machine)  
 185H85  $\frac{3}{16}$ " Crown Clincher  
 (Order Type Used on Machine)  
 185H87  $\frac{3}{16}$ " Crown Clincher  
 (Order Type Used on Machine)  
 UA1405.2 Clincher Screw  
 85173 Solenoid 110V, 60 Cycle (3 per Machine)  
 86110 Micro Switch—R.H. (2 per Machine)  
 86111 Micro Switch—L.H. (3 per Machine)  
 85278 Vee Belt—Main Drive  
 25110 Ratchet Return Spring  
 25014 Ratchet Auxiliary Arm  
 25069BA Ratchet Cam  
 25593A Ratchet Cam Spring  
 25444 Ratchet Pawl  
 MR333 Ratchet Pawl Spring (2 per Machine)  
 25050 Ratchet Key (2 per Machine)  
 585006A Connecting Rod  
 585133 Tie Stitch Arm  
 25070 Tie Stitch Latch  
 585190 Tie Stitch Latch Block  
 FP Auxiliary Brake Lever Spring  
 186-247 Ratchet Cover Plate  
 194-20 Ratchet Wheel  
 199-72 Step Feed Ratchet Rollers (7 per Set)  
 210-197 Step Feed Ratchet Rollers Springs (7 per Set)  
 25539A Auxiliary Brake Band—Central  
 25929 Auxiliary Brake Band—Left End  
 25930A Auxiliary Brake Band—Right End  
 251348 Spring Link Case  
 251354 Solenoid Spring

251359 Solenoid Link Nut  
 210-297 Trip Gauge Unit Return Spring  
 25756 Solenoid Pin (7 per Machine)  
 25755 Solenoid Pin (1 per Machine)  
 25411 High Speed Clutch Fork Shoe (2 per Machine)  
 585140 Step Feed Clutch Fork Shoe (2 per Machine)  
 25492 High Speed Clutch Spring  
 25164 Tie Stitch Trigger Spring  
 585200 High Speed Clutch Plate (9 per Machine)  
 25301 Feed Roll Rocker Arm Bearing Spring  
 (2 per Machine)  
 25079A Solenoid Lever Spring  
 25658B Tie Stitch Adjusting Screw  
 585156 Trip Gauge Lifter Lever Pin  
 E165 High Speed Switch Lever Spring  
 585175 Staple Dial Arm  
 585013A Roller Clutch Drive Link  
 685041 Roller Clutch Drive Link Stud  
 585170 Feed Adjustment Clamping Screw  
 585251 Locking Lever Spring  
 585341 Micro Switch Knock Off Plate Spring  
 585091 Staple Dial Switch Knock Off Lever  
 585047 Knock Off Plate Cam Block  
 585570A Trip Gauge Weight Relief Spring  
 (2 per Machine)  
 585249 Staple Dial Spring  
 85006 Rubber "O" Ring (16 per Machine)  
 86181 Control Relay for all Solenoids—115V.  
 —60 Cycle (2 per Machine)  
 86185 Relay for Clutch—Brake Unit (inside Control  
 Box)—90V.—D.C. (1 per Machine)  
 86184 Potentiometer for Clutch—Brake Unit  
 (2 per Machine)  
 86195 "Buss"—Glass Tube Fuse—1 Amp.—250V.  
 (2 per Machine)

# COMPONENT PARTS OF

## RSCA 685 SERIES AUTOMATIC STITCHERS

FP	Auxiliary Brake Lever Spring	25091	Brake Take-up Screw Bar
BSA67A	Allen Wrench for Step Feed Roller and Tie Stitch Cam Lock	25110	Ratchet Return Spring
76	Tie Stitch Pivot	25115	High Speed Shaft Sprocket Key
134-65	Collar—1" Diam. Hole	25149	Breather Pipe
138-19	Ratchet Cover	25153	Trip Gauge Clamp Bar Spacer
150J15	Body	25164	Tie Stitch Trigger Spring
164H8C	Drive Cam	25196	Tie Stitch Pawl Spring
E165	High Speed Switch Lever Spring	25208	Tie Stitch Latch Shaft
174	Table Washer	25210	Tie Stitch Trigger Stud
185H85	Clincher ( $\frac{1}{16}$ " Crown)	25211	Tie Stitch Latch Lifter Stud
185H87	Clincher ( $\frac{3}{8}$ " Crown)	25212A	Tie Stitch Lock
UA1405.2	Clincher Screw	25217	Tie Stitch Latch Lifter
UA1406.3	Clincher Screw for Open Head	25218	Tie Stitch Latch Spring
186-247	Ratchet Cover Plate	25254	Clutch Fork Link
194-20	Ratchet Wheel	25258	High Speed Clutch Fork Bracket
199-72	Ratchet Roll	25271A	Roller Clutch Bearing Bracket
202-263	Drop Roller Arm Bearing Spring Adj. Screw	25288	Staple Dial Friction Lever Stud
203-139	Reverse Gear Shaft	25289A	Staple Control Solenoid Lever
207-56	Drop Roller Arm Bearing Slide	25292	Solenoid Lever Bushing
210-197	Ratchet Roll Spring	25293	Solenoid Link
210-297	Trip Gauge Return Spring	25298	Drop Roller Arm
217G2	Brake Takeup Spring and Staple Dial Return Stop	25299A	Step Feed Clutch Bracket
217-191	Head Casing Stud—Long	25301	Drop Roller Arm Bearing Spring
217-192	Head Casing Stud—Short	25304	Ratchet Spring Swivel Pin
228-13	Openhead Bracket Screw Washer	25308	Staple Dial Return Stop Screw
229-56	Side Gauge Hand Wheel	25309	Staple Dial Return Stop Screw Retainer
MR333	Ratchet Pawl Spring	25380	Trip Gauge Target Support Plate
C451	Shakeproof Screw in 25021CA	25405	High Speed Clutch Shaft Collar
E455	Ratchet Stop Block Spring Washer	25407	Tie Stitch Trip Sleeve Block
500L5	Head Casing	25408	Tie Stitch Eccentric
501L	Elbow Assembly	25409	Tie Stitch Trigger Plate
541L4	Head Drive Shaft Bevel Gear	25410	Tie Stitch Trigger
BG611	Tie Stitch Latch Block Nut	25411	High Speed Clutch Fork Shoe
0087	Drop Roller Adjusting Screw Lock Spring	25412	High Speed Clutch Fork Shoe Stud and Step Feed Clutch Fork Shoe Stud
SB1204	Leveling Bushing	25419	Staple Dial Return Stop Disc
2341	Drop Roller Adjusting Screw Lock Pin	25421	High Speed Clutch Lever Bushing
UA3308.2	Openhead Hinge Screw	25422	Staple Dial Return Stop
9067	Tie Stitch Eccentric Nut	25424A	Tie Stitch Trip Sleeve
9069	Tie Stitch Eccentric Spring	25425	Tie Stitch Cam
15262	Roller Clutch Link Stud Washer	25427A	Step Feed Gear Shaft
18354	Long Box Support Arm Roll Stud	25428	High Speed Disc Clutch Fork Shaft
19277	Fork Bracket Dowel	25429	Staple Selector Ratchet
25006	Check Pawl Bracket	25430	Step Feed Clutch Shaft
25007A	Reverse Gear Bearing Bracket	25432A	High Speed Clutch Shaft
25013	Feed Ratchet Arm	25435	Step Feed Slide Clutch
25014	Ratchet Auxiliary Arm	25444	Ratchet Pawl
25021CA	Top Feed Roll Shaft Hanger	25445A	Drop Roller Adj. Screw—Lower
25022A	Drop Roller Shaft Bracket	25446	Step Feed Clutch Bracket Oiler
25029	Ratchet Return Spring Case	25461A	Main Drive Shaft—Front Section
25068	Ratchet Cam Bushing	25462	High Speed Clutch Thrust Washer—Small
25069BA	Ratchet Cam	25464	High Speed Clutch Steel Disc
25070	Tie Stitch Latch	25480A	Aux. Brake Lock Arm
25071	Brake Take-up Screw	25481	Drop Roller Lever—Lower
25074	Feed Ratchet Arm Pin	25483	Aux. Brake Operating Lever
25076	Ratchet Pawl Pivot	25484B	Aux. Brake Lever
25077	Ratchet Pawl Spring Post	25485B	Aux. Brake Shaft Bracket
25079A	Solenoid Lever Spring	25488A	Ratchet Shaft Bearing Bracket
25080	Spring Pin	25490	Aux. Brake Operating Drum Arm
25089A	Brake Band (Box Feed Clutch)	25492	High Speed Clutch Spring

25499A	Drop Roll Adj. Screw—Upper	585006A	Eccentric Connecting Rod
25500	Drop Roller Lever—Upper	585008	High Speed Chain Tightener Lever
25502A	Head Cam Shaft	585013A	Roller Clutch Drive Link
25506	Step Feed Clutch Key	585014	Feed Clutch Arm
25510	Collar for Shafts 685025 and 685026	585018	Trip Gauge Main Support Bracket
25512A	Aux. Brake Stub Shaft	585019	Trip Gauge Lifter Lever
25513	Drop Roller Lever Stud	585020	High Speed Switch Hold on Lever
25514	Drop Roll Bumper Washer	585021	Trip Gauge Stripper
25515	Auxiliary Brake Lock Bar	585022	Feed Roller Bracket
25516	Drop Roller Adj. Screw Bumper Washer	585029	Locking Lever
25518	Aux. Brake Cam Roller	585047	Knockoff Plate Cam Block
25519	Aux. Brake Lever Pin	585055A	Trip Gauge Horizontal Support
25521A	Lower Feed Roller Collar	585058A	Trip Gauge Slide Plate
25525	Drop Roller Arm Bearing Cap Cover	585063	Drop Roller Arm Guard
25529	Drop Roller Link	585065A	Feed Adjusting Screw
25531A	Tie Stitch & Spring Cage Bracket	585069A	Trip Gauge Lifter Fork
25534	Aux. Brake Drum	585076A	Rear Lever (R.H.)
25535	Aux. Brake Lock	585077A	Rear Lever (L.H.)
25537	Aux. Brake Operating Drum	585078A	Front Lever (R.H.)
25539A	Aux. Brake Band—Central	585079A	Front Lever (L.H.)
25547B	High Speed Switch Lever Stud	585087	Eccentric Collar
25570	Trip Gauge Plate Block Cap	585088	High Speed Switch Lever Link
25571	Trip Gauge Clamp Piece	585091	Staple Dial Switch Knockoff Lever
25585	High Speed Clutch Thrust Washer—Large	585092	Locking Lever Stud
25591	High Speed Tooth Clutch Fork	585093	Spring Retainer
25593A	Ratchet Pawl Cam Spring Assem.	585094	Feed Adj. Clamping Screw Spacer
25595	High Speed Clutch Solenoid Link	585101A	Trip Gauge Plate Assembly
25606	Side Gauge Angle Plate—R.H.	585102A	Operating Mechanism Bearing Bracket
25607	Small Box Side Gauge Extension—R.H.	585103	Brake Band Bracket
25610	Side Gauge Angle Plate—L.H.	585105	Idler Sprocket Stud
25611	Small Box Side Gauge Extension—L.H.	585106A	High Speed Clutch Sprocket
25633A	Drop Roller Arm Adj. Bearing	585109A	High Speed Switch Lever
25635C	Solenoid Guard (Ratchet Cam and H.S. Clutch)	585111	Eccentric
25636	Aux. Brake Band Anchor	585116	Aux. Brake Cam Hub
25637	Universal Shaft End	585121	Drive Shaft Handwheel
25639BA	Lower Step Feed Roller—L.H.	685083	Solenoid Bracket
25640BA	Lower Step Feed Roller—R.H.	585124	Aux. Brake Cam
25641	Long Box Support	585127	Solenoid Operating Link Fulcrum
25642	Long Box Support Arm Shaft	585133	Tie Stitch Arm
25644	Long Box Support Arm Roll	585138	Base Plate Spacer
25645B	Solenoid Guard Bracket (Ratchet Cam and H.S.	585140	Clutch Fork Shoe
25658B	Tie Stitch Adj. Screw	585142	High Speed Clutch Sleeve
25660	Box Deflector—Right Side	585143	Clutch Sleeve Bearing Plate
25661	Aux. Brake Band Right End Stud	585144A	High Speed Clutch Chain Idler Sprocket
25727	Motor Pulley—St'd.—445 R.P.M.	585148	Micro Switch Screw
25734	Aux. Throw Out Shaft Bracket	585149	Micro Switch Screw Nut
25736	Aux. Throw Out Driven Pulley	585150	Spring Holder
25737A	Aux. Throw Out Driving Pulley	585151	Brush Holder Bracket
25741	High Speed Roller Drive Shaft Sprocket	585156	Trip Gauge Lifter Lever Pin
25752A	Drop Roller Lock Nut Assem.	585158A	Trip Gauge Mounting Unit
25755	Solenoid Operating Link Fulcrum Pin	585161	Trip Gauge Upper Arm
25756	Solenoid Link Pin	585163	Hold On Switch Link Stud
25762A	Aux. Brake Hold Down Roll Assem.	585164	Knockoff Plate Pivot Pin
25927	Head Cam Shaft Washer	585165	Staple Dial Key
25929	Aux. Brake Band—Left End	585167	Trip Gauge Stop Block
25930A	Aux. Brake Band—Right End	585168	Roller Clutch Link Stud Spacer
25932	Aux. Brake Band Hinge Pin	585169	Feed Adj. Clamping Screw Washer
25933	Aux. Brake Lock Arm Spring	585170	Feed Adj. Clamping Screw
25934	Aux. Brake Lock Arm Spring Plate	585174	Feed Adj. Pointer
25991	Spring Case Tension Screw	585175	Staple Dial Arm
251348	Spring Link Case	585177A	Trip Gauge Arm—R.H.
251352	Leather Washer	585178A	Trip Gauge Arm—L.H.
251353	Steel Washer	585190	Tie Stitch Latch Block
251354	Solenoid Spring	585192A	High Speed Clutch Lever
251359	Solenoid Link Nut	585195	High Speed Clutch Lever Pad
585001	Staple Dial Micro Switch Bracket	585199A	High Speed Clutch Drive Ring
585002A	Micro Switch Knockoff Plate	585200	High Speed Clutch Plate



# RSCA 685 STITCHER PARTS LIST

## BY SECTIONS OR UNITS

### BASE AND TABLE PARTS

685017B	Base (685H)
685017C	Base (685J)
685030	Table (685H and 685J)
25607	Small Box Side Gauge Extension—R.H.
25611	Small Box Side Gauge Extension—L.H.
25641	Long Box Support Arm
25642	Long Box Support Arm Shaft
685039	Long Box Support Bracket
25644	Long Box Support Arm Roll
18354	Long Box Support Arm Roll Stud
685062A	Side Gauge—R.H.
685067A	Side Gauge—L.H.
25606	Side Gauge Angle Plate—R.H.
25610	Side Gauge Angle Plate—L.H.
299-56	Side Gauge Hand Wheel

### BODY PARTS

685016	Base Plate
150J15	Body
501L	Elbow Assembly
500L5	Head Casing
217-191	Head Casing Stud—Long
217-192	Head Casing Stud—Short
25149	Breather Pipe
SB1204	Leveling Bushing

### MAIN DRIVE

685008	Outboard Bearing Bracket
85678	Main Drive Shaft Bearing
685031	Brake Magnet Plate
685009A	Main Drive Shaft—Rear Section
25461A	Main Drive Shaft—Front Section
685048	Drive Shaft Sleeve
25502A	Head Cam Shaft Assembly
541L4	Head Cam Shaft Gear
25927	Head Cam Shaft Gear Washer
164H8C	Cam
685047	Drive Pulley
85677	Drive Pulley Ball Bearing
585265	Drive Pulley Sprocket
685012	Shaft Retaining Collar
585139	Shaft Retaining Collar
585302	Taper Lock Bushing Key
685001B	Motor Plate
585121	Hand Wheel
585151	Clutch Brush Holder Bracket
685098	Motor Pulley (Std. 445 R.P.M.)
85278	Vee Belt

### TRIP GAUGE PARTS

585018	Trip Gauge Main Support Bracket
585055A	Trip Gauge Horizontal Support
585167	Trip Gauge Stop Block
585058A	Trip Gauge Slide Plate
25153	Trip Gauge Clamp Bar Spacer
25380	Trip Gauge Target Support Plate
585158A	Mounting Unit
585076A	Rear Lever—R.H.

585077A	Rear Lever—L.H.
585078A	Front Lever—R.H.
585079A	Front Lever—L.H.
585340	Front Lever Tie Rod
585177A	Trip Gauge Arm—R.H.
585178A	Trip Gauge Arm—L.H.
585161	Upper Arm
210-297	Trip Gauge Return Spring
585021	Trip Gauge Stripper
585101A	Trip Gauge Plate Assembly
25570	Trip Gauge Plate Block Cap
25571	Trip Gauge Clamp Piece
585069A	Trip Gauge Lifter Fork
585019	Trip Gauge Lifter Lever
585156	Trip Gauge Lifter Lever Pin
585109A	High Speed Switch Lever
585203	High Speed Switch Link Pin
585088	High Speed Switch Lever Link
25547B	High Speed Switch Lever Stud
585020	High Speed Switch Hold On Lever
585163	Hold On Switch Link Stud
585130A	Trip Gauge Support Angle
585345A	Trip Gauge Return Spring Bracket
585346	Trip Gauge Return Spring Adjusting Screw
585570A	Trip Gauge Weight Relief Spring
E165	High Speed Switch Lever Spring

### UPPER STEP FEED SHAFT AND HIGH SPEED CLUTCH PARTS

25007A	Reverse Gear Bearing Bracket
685003A	High Speed Clutch Shaft Bearing Bracket
585022	Feed Roller Bracket
25021CA	Top Feed Roll Shaft Hanger—Front
585241	Step Feed Roll Drive Gear—Upper
203-139	Reverse Gear Shaft
25637	Universal Shaft End
685023A	Universal Feed Shaft—Upper
25432A	High Speed Clutch Shaft
685025	Upper Step Feed Roller Shaft
25510	Collar (On Shaft 685025)
585106A	High Speed Clutch Sprocket
585199A	High Speed Clutch Drive Ring
25585	High Speed Clutch Thrust Washer—Large
585200	High Speed Clutch Plate
25464	High Speed Clutch Steel Disc
585143	Clutch Sleeve Bearing Plate
585142	High Speed Clutch Sleeve
85656	High Speed Clutch Sleeve Ball Thrust Bearing
25492	High Speed Clutch Spring
85607	High Speed Clutch Sleeve Washer
25462	High Speed Clutch Thrust Washer—Small
25405	High Speed Clutch Shaft Collar
685043	High Speed Clutch Lever Stop Screw
685044A	High Speed Clutch Lever Stop Bar
585380	High Speed Disc Clutch Fork
25411	High Speed Clutch Fork Shoe
25412	High Speed Clutch Fork Shoe Stud
25428	High Speed Clutch Fork Shaft
585127	Solenoid Operating Link Fulcrum

25254 Clutch Fork Link  
 25755 Clutch Fork Link Pin  
 585192A High Speed Clutch Lever  
 25756 Solenoid Link Pin  
 585195 High Speed Clutch Lever Leather Pad  
 25595 High Speed Clutch Solenoid Link  
 685019 High Speed Clutch Solenoid Bracket Plate  
 25421 High Speed Clutch Lever Bushing

HIGH SPEED ROLLER DRIVE

685026 High Speed Roller Drive Shaft  
 25741 High Speed Roller Drive Shaft Sprocket  
 25115 High Speed Shaft Sprocket Key  
 585008 High Speed Chain Tightener Lever  
 585278 High Speed Clutch Drive Sprocket  
 585144A High Speed Clutch Chain Idler Sprocket  
 85675 Idler Sprocket Ball Bearing  
 585105 Idler Sprocket Stud  
 85582 High Speed Clutch Chain  
 85583 High Speed Clutch Chain Connecting Link  
 85579 High Speed Roller Drive Shaft Chain  
 85476 Drive Shaft Chain Connecting Link

LOWER STEP FEED SHAFT PARTS

25271A Roller Clutch Bearing Bracket  
 25488A Ratchet Shaft Bearing Bracket  
 25299A Step Feed Clutch Bracket  
 25258 High Speed Clutch Fork Bracket  
 25430 Step Feed Clutch Shaft  
 25506 Step Feed Clutch Key  
 25435 Step Feed Slide Clutch  
 25427A Step Feed Gear Shaft  
 585242 Lower Feed Shaft Gear  
 25637 Universal Shaft End  
 685024A Universal Feed Shaft  
 685027 Lower Feed Roll Shaft  
 138-19 Ratchet Cover  
 186-247 Ratchet Cover Plate  
 194-20 Ratchet  
 199-72 Ratchet Roll  
 210-197 Ratchet Roll Spring  
 217G2 Spring (On part 25071)  
 585103 Brake Band Bracket  
 25089A Brake Band  
 25071 Brake Take-Up Screw  
 25091 Brake Take-Up Screw Bar  
 585014 Feed Clutch Arm  
 585170 Feed Adjustment Clamping Screw  
 585065A Feed Adjusting Screw  
 585174 Feed Adjustment Pointer  
 585013A Roller Clutch Drive Link  
 685041 Roller Clutch Link Stud  
 585168 Roller Clutch Link Stud Spacer  
 15262 Roller Clutch Link Stud Washer  
 585094 Feed Adjustment Clamping Screw Spacer  
 585169 Feed Adjustment Clamping Screw Washer  
 25591 Tooth Clutch Fork  
 585140 Clutch Fork Shoe  
 25412 Clutch Fork Shoe Stud  
 685080A Step Feed Clutch Solenoid Lever  
 685043 Solenoid Lever Stop Screw  
 585381A Spring Link—Assembled  
 251348 Spring Link Case  
 685046 Solenoid Lever Stop Screw Plate  
 585382 Solenoid Link  
 251352 Washer (Leather)  
 251353 Washer (Steel)  
 251354 Solenoid Link Spring

251359 Solenoid Link Nut  
 25756 Solenoid Pin  
 25079A Solenoid Lever Spring  
 25080 Spring Pin  
 685083 Solenoid Bracket  
 25521A Lower Feed Roll Collar  
 134-65 Collar (On 685027)

RUBBER ROLLERS

585218A Upper Step Feed Roller—R.H.  
 585219A Upper Step Feed Roller—L.H.  
 256408A Lower Step Feed Roller—R.H.  
 256398A Lower Step Feed Roller—L.H.

REAR END MECHANISM

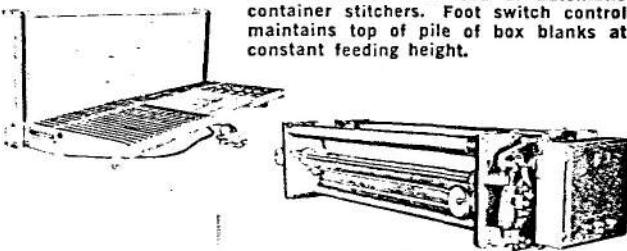
685007 Ratchet Shaft  
 25050 Engaging Arm and Ratchet Shaft Key  
 25419 Staple Dial Return Stop Disc  
 25422 Staple Dial Return Stop  
 25308 Staple Dial Return Stop Screw  
 25309 Staple Dial Return Stop Screw Retainer  
 217G2 Spring (On 25308)  
 E455 Ratchet Stop Block Spring Washer  
 25069BA Ratchet Cam  
 25068 Ratchet Cam Bushing  
 25593A Ratchet Cam Spring Assembly  
 585150 Ratchet Cam Spring Holder  
 25429 Staple Selector Ratchet  
 25006 Check Pawl Bracket  
 25444 Ratchet Pawl  
 25077 Pawl Spring Post  
 MR333 Ratchet Pawl Spring  
 25076 Ratchet Pawl Pivot  
 25292 Solenoid Lever Bushing  
 25293 Solenoid Lever Link  
 25756 Solenoid Pin  
 25013 Feed Ratchet Arm  
 25014 Ratchet Auxiliary Arm  
 25074 Feed Ratchet Arm Pin  
 685077 Staple Dial Friction Disc  
 685005 Staple Dial Friction Lever  
 25288 Staple Dial Friction Lever Stud  
 685054 Staple Dial Friction Spring  
 685078 Spring Adjusting Screw  
 25029 Ratchet Return Spring Case  
 25110 Ratchet Return Spring  
 25991 Spring Case Tension Screw  
 685022A Staple Dial  
 585165 Staple Dial Key  
 585175 Staple Dial Arm  
 685021 Staple Dial Latch  
 585091 Staple Dial Switch Knock Off Lever  
 585249 Staple Dial Spring  
 585093 Spring Retainer  
 685010A Ratchet Cam Link  
 25289A Staple Control Solenoid Lever  
 685018 Staple Control Solenoid Bracket  
 685011 Micro Switch Plate  
 585001 Staple Dial Micro Switch Bracket  
 585002A Micro Switch Knock Off Plate  
 585341 Micro Switch Knock Off Plate Spring  
 585164 Knock Off Plate Pivot Pin  
 585047 Knock Off Plate Cam Block  
 585029 Locking Lever  
 585092 Locking Lever Stud  
 585251 Locking Lever Spring

585148	Micro Switch Screw
585149	Micro Switch Screw Nut
585232A	Micro Switch Bracket
DROP ROLLER PARTS	
25022A	Rocker Shaft Bracket
685029	Drop Roller Shaft
25298	Drop Roller Arm
25633A	Drop Roller Arm Adjusting Bracket
207-56	Drop Roller Arm Bearing Slide
202-263	Drop Roller Arm Bearing Spring Adjusting Screw
585063	Drop Roller Arm Guard
25525	Drop Roller Arm Bearing Cap Cover
25481	Drop Roller Lever—Lower
25500	Drop Roller Lever—Upper
25529	Drop Roller Link
25513	Drop Roller Lever Stud
25445A	Drop Roller Adjusting Screw—Lower
25499A	Drop Roller Adjusting Screw—Upper
25516	Drop Roller Adjusting Screw Bumper Washer
25514	Drop Roller Bumper Washer
2341	Drop Roller Adjusting Screw Lock Pin
0087	Drop Roller Adjusting Screw Lock Spring
25752A	Lock Nut Assembly
25301	Drop Roller Arm Bearing Spring
TIE STITCH PARTS	
76	Tie Stitch Pivot
BG611	Tie Stitch Latch Block Nut
585133	Tie Stitch Arm
25070	Tie Stitch Latch
585190	Tie Stitch Latch Block
25164	Tie Stitch Trigger Spring
25196	Tie Stitch Pawl Spring
25208	Tie Stitch Latch Shaft
25408	Tie Stitch Eccentric
9067	Tie Stitch Eccentric Nut
9069	Tie Stitch Eccentric Spring
25211	Tie Stitch Latch Lifter Stud
25210	Tie Stitch Trigger Stud
25212A	Tie Stitch Lock
25218	Tie Stitch Latch Spring
25407	Tie Stitch Trip Sleeve Block
25409	Tie Stitch Trigger Plate
25410	Tie Stitch Trigger
25658B	Tie Stitch Adjusting Screw
25424A	Tie Stitch Trip Sleeve
25425	Tie Stitch Cam
25531A	Tie Stitch and Spring Cage Bracket

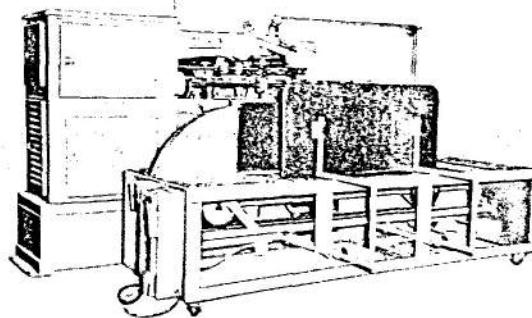
25217	Tie Stitch Latch Lifter
585368A	Tie Stitch Adjusting Screw Plate
AUXILIARY BRAKE PARTS	
585102A	Operating Mechanism Bearing Bracket
25485B	Auxiliary Brake Shaft Bracket
685002A	High Speed and Auxiliary Brake Shaft Bracket
685028A	Auxiliary Brake Shaft
25484B	Auxiliary Brake Lever
25535	Auxiliary Brake Lock
25480A	Auxiliary Brake Lock Arm
25518	Auxiliary Brake Cam Roller
25519	Auxiliary Brake Cam Roller Pin
585124	Auxiliary Brake Cam
585116	Auxiliary Brake Cam Hub
25515	Auxiliary Brake Lock Bar
25934	Auxiliary Brake Lock Arm Spring Plate
25933	Auxiliary Brake Lock Arm Spring
FP	Auxiliary Brake Lever Spring
25483	Auxiliary Brake Operating Lever
25537	Auxiliary Brake Operating Drum
25512A	Auxiliary Brake Stub Shaft
25490	Auxiliary Brake Operating Drum Arm
25762A	Auxiliary Brake Hold Down Roll Assembly
25534	Auxiliary Brake Drum
25539A	Auxiliary Brake Band—Central
25636	Brake Band Anchor
25930A	Auxiliary Brake Band—Right End
25929	Auxiliary Brake Band—Left End
25661	Auxiliary Brake Band Stud—Right End
25932	Auxiliary Brake Band Hinge Pin
ECCENTRIC FEED	
585006A	Eccentric Connecting Rod
585111	Eccentric
585302	Eccentric Key
585087	Eccentric Collar
AUXILIARY THROW OUT UNIT	
25734	Auxiliary Throw Out Bracket
685040	Auxiliary Throw Out Shaft
85540	Pillow Block
25737A	Throw Out Driving Pulley
25736	Throw Out Driven Pulley
134-65	Collar
685038	Auxiliary Throw Out Bracket Support
85298	Rounded Belt
85285	Belt Hook
25639BA	Throw Out Roller—L.H.
25640BA	Throw Out Roller—R.H.

# STANDARDIZE ON BOSTITCH EQUIPMENT FOR CO-ORDINATED PRODUCTION AND A SINGLE RELIABLE SOURCE FOR PARTS AND SERVICE

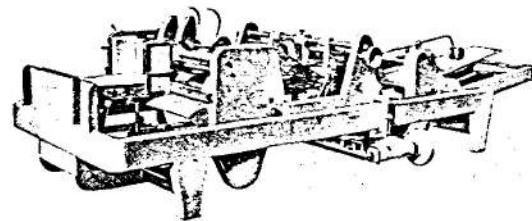
**ELEVATOR**—for fast feed of automatic container stitchers. Foot switch control maintains top of pile of box blanks at constant feeding height.



**WAX COATING HEAD**—bridge mounted, coats your medium the economical way on your corrugator.

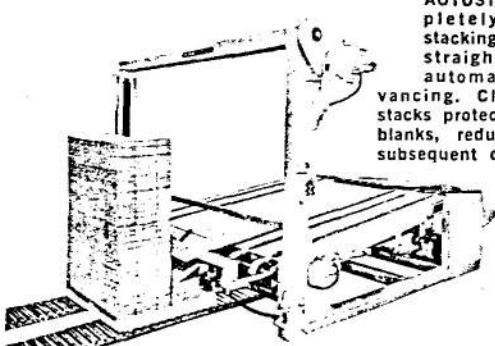


**COUNTER STACKER**—for use with manually and mechanically fed stitchers, tapers and gluers—saves time and increases output. Counts accurately.



**FLAP CUTTER**—cuts flaps automatically after joint is completed. Boxes accurately squared and secured before flaps are cut.

**AUTOSTAK**—for completely automatic stacking of blanks in straight stacks with automatic stack advancing. Clean, straight stacks protect ends of box blanks, reduce rejects in subsequent operations.

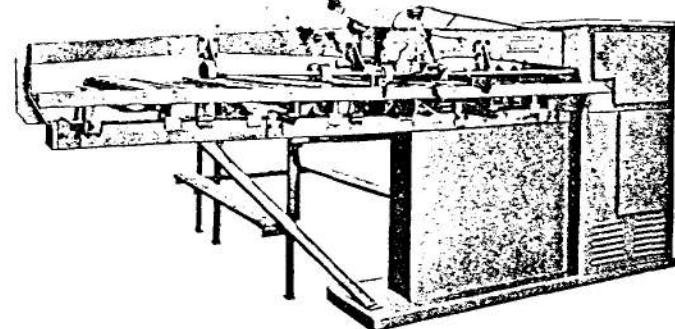


PRODUCTION IS BETTER AND FASTER WITH

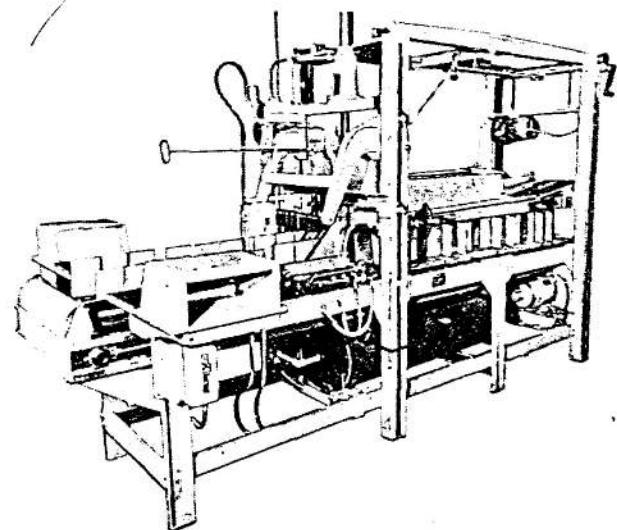
**BOSTITCH®**

**IDEAL STITCHER COMPANY**  
Division of W.R. Pabich Mfg.

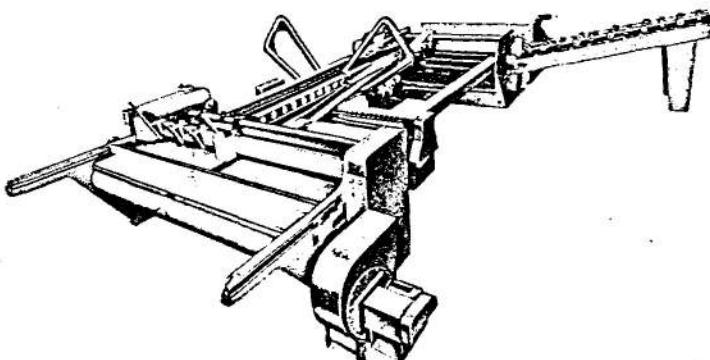
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**Bostitch® #950 automatic stitcher**—designed to meet most crucial requirements for large volume and continuous high-speed production of wide range of box sizes.



**PARTITION ASSEMBLER**—mechanizes the assembly of carton partitions. Assembles up to 50 partitions per minute.



**BELT-FEED FOLDER-GLUERS**—low-cost, high-speed production for plants handling a wide variety of boxes.