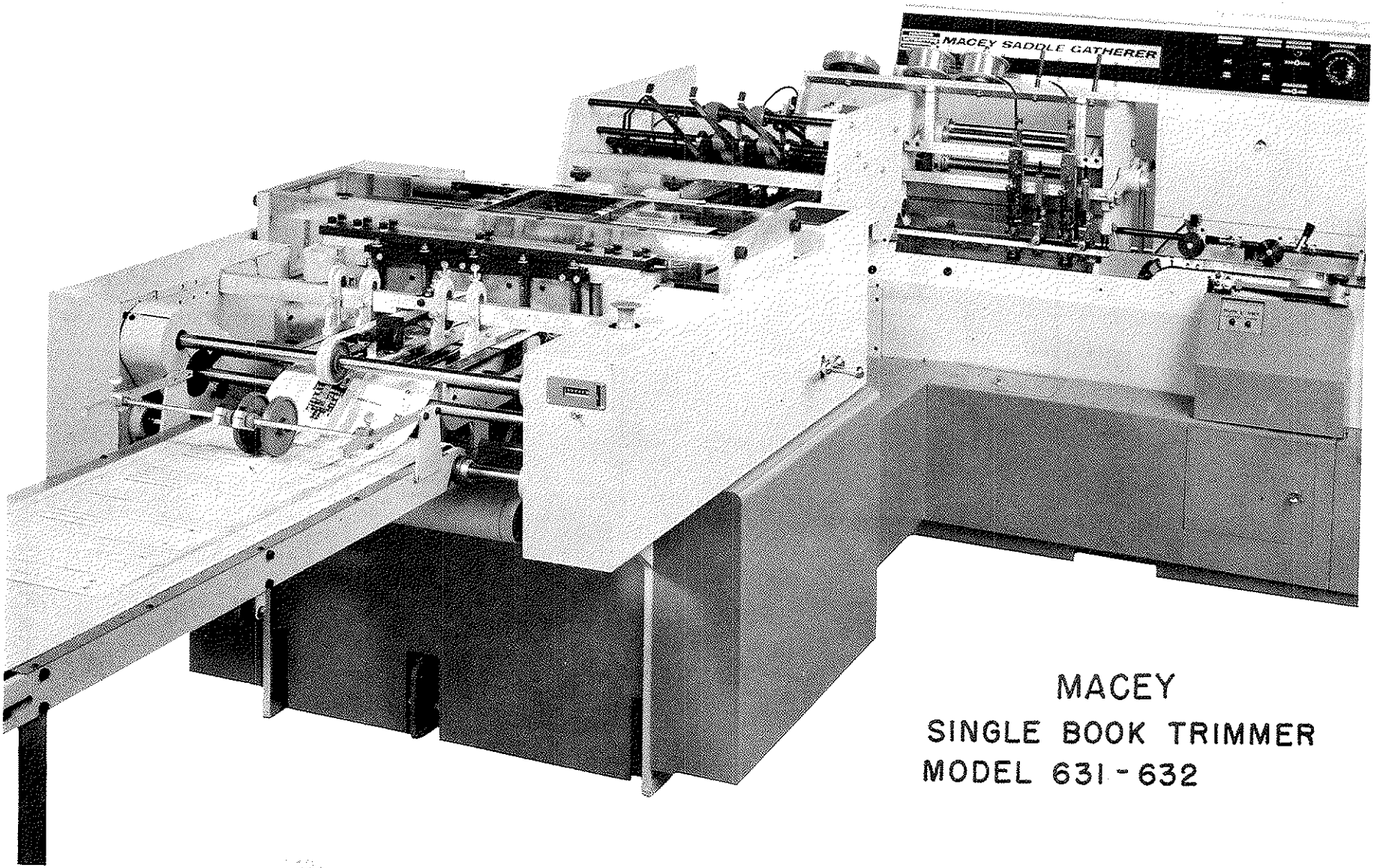
MACEY

SINGLE BOOK TRIMMER

MODEL 631-632-610



MACEY
SINGLE BOOK TRIMMER
MODEL 631 - 632

HARRIS-SEYBOLD COMPANY

A DIVISION OF HARRIS-INTERTYPE CORPORATION

MODEL SPECIFICATIONS

(Subject to Change Without Notice)

MODEL

631

632

MACHINE: MACEY SINGLE BOOK TRIMMER

SPECIFICATIONS:

Sheet Size (trimmed)	3" x 5 5/8" Minimum 12" x 19 1/2" Maximum
Speed	Direct driven from saddle gatherer; maximum speed of 7500 for one-up cutting. Above 7500 use optional two (2) book collector.
Set-Up Time	Approximately 15 minutes
Registration	Book is jogged for top and bottom trim by tampers on each side and against adjustable stop fingers on crown
Knives	Three cutting and three bed knives; cutting knives are guided by preloaded ball bushings (no adjustment necessary). Shear action for cutting
Setting of Knives	Direct reading scale to adjust top and bottom cutting and bed knives. Face cut stop fingers are adjusted for face cuts by direct measurement
Maximum Thickness of Gather..	1/2" compressed (5/8" fluffed thickness)
Maximum Trim Allowance	5/8" on head and tail. 1" face trim
Chip Removal	Mechanical - Belt Conveyor removes chips from under knives to empty box
Delivery	Belt Conveyor - Indexes and counts only when completed book is delivered
Power Required	NONE - driven from Saddle Gatherer
Controls	Stop switch at delivery end - jam switch between knives
Floor Space	144" long x 50" wide
Weight - Net	1700 lbs.
Shipping	1800 lbs.

* Changed since last issue

Supersedes 12-21-66

Approved Carl H. Heigl

Carl H. Heigl

Date 6-5-69

HARRIS-SEYBOLD COMPANY

A DIVISION OF HARRIS-INTERTYPE CORPORATION

MODEL SPECIFICATIONS
(Subject to Change Without Notice)

MODEL
631
632

MACHINE: MACEY SINGLE BOOK TRIMMER

Standard Equipment furnished with each machine:

Creeper Belt Delivery
Chip Collector Conveyor
Installation and Operating Instructions
(domestic orders only)

Optional Equipment available at extra charge:

Two Book Collector - Attachment Model No. 633A
Batch Counter - Attachment Model No. 634A
Extra Set of Knives
* 4th & 5th Knife - Attachment Model 635

* Changed since last issue
Supersedes 12-21-66
H-S FORM 624-1B

Approved Carl H. Heigl

Date 6-5-69
Sheet 2 of 2 Sheets

HARRIS-SEYBOLD COMPANY

A DIVISION OF HARRIS-INTERTYPE CORPORATION

MODEL SPECIFICATIONS

(Subject to Change Without Notice)

MODEL
610
611

MACHINE: Model 610 - Macey Single Book Trimmer for Hook-up to "Pony" Type Gang Stitcher

Model 611 - Macey Single Book Trimmer for Hook-up to "Pony" Type Gang Stitcher with Auto Pockets

SPECIFICATIONS:

Book Size (trimmed)	3 1/2" x 5 5/8" Minimum 12 1/2" x 19" Maximum
Speed	Maximum and minimum speed is determined by gang stitcher; all speeds depend upon size, thickness, type of fold, kind and condition of stock as well as other operating conditions
Maximum Trimming Thickness.....	3/8" compressed (5/8" fluffed thickness)
Maximum Trim Removal.....	5/8" on all three sides
Knives	3 shearing; 3 bed
Knife Action	Mechanical. Knives guided by preloaded ball bushings requiring no adjustment for wear
Clamp Action.....	Mechanical. Book clamped on three sides
Chip Removal	Mechanical Belt Conveyor
Delivery	Indexing Belt Conveyor
Height of Delivery	33 1/2"
Counter.....	On Delivery End
Power Requirements	None **
Controls.....	Stop switch at delivery end; jam switch between knives controls clutch
Gang Stitcher Shuttle Requirements	20" Single Stroke - maximum speed of gang stitcher (approximately 6600 cycles per hour) 10" Double Stroke - maximum speed of gang stitcher (approximately 6600 cycles per hour)

* Changed since last issue

Supersedes 12-3-65

H-S FORM 624-1B

Approved Carl H. Heigl

Date 6-5-69

Sheet 1 of 2 Sheets

HARRIS-SEYBOLD COMPANY

A DIVISION OF HARRIS-INTERTYPE CORPORATION

MODEL SPECIFICATIONS (Subject to Change Without Notice)

MODEL 610 611

MACHINE: Model 610 - Macey Single Book Trimmer for Hook-up to "Pony" Type Gang Stitcher

Model 611 - Macey Single Book Trimmer for Hook-up to "Pony" Type Gang Stitcher with Auto Pockets

Floor Space	144" x 59"
Weight - Net	1800 lbs.
Shipping	1900 lbs.

** Driven from Pony-type Gang Stitcher
Serial Numbers available from General Sales Office

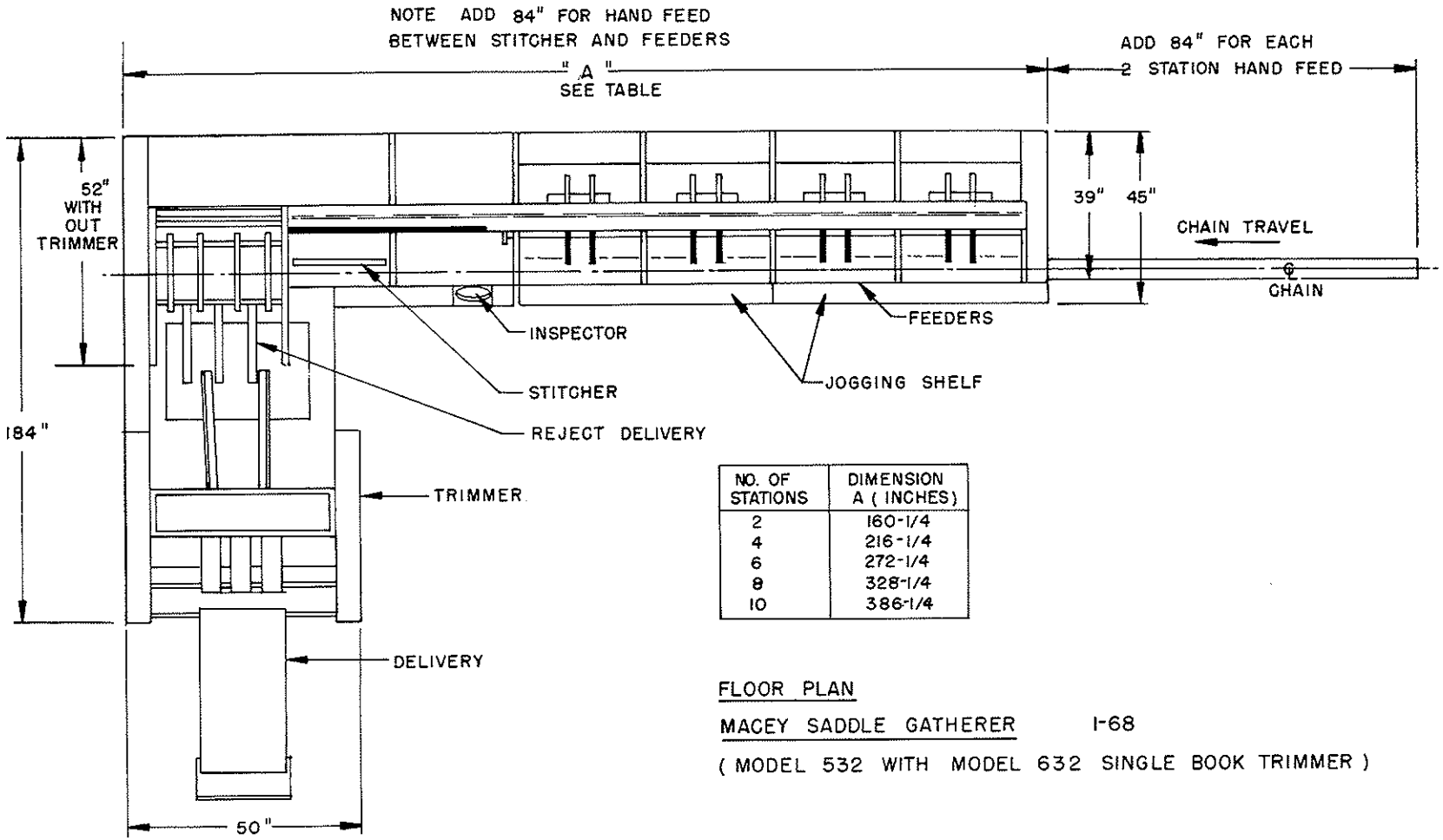
Standard equipment furnished with each machine:

Creeper Belt Delivery
Chip Collector Conveyor
Installation and Operating Instructions
(domestic orders only)

Optional equipment available at extra charge:

Two Book Collector - Attachment Model No. 633A
Batch Counter - Attachment Model No. 634A
Extra Set of Knives

No Trim Delivery - Model 612
* 4th & 5th Knife - Attachment Model 635



NO. OF STATIONS	DIMENSION A (INCHES)
2	160-1/4
4	216-1/4
6	272-1/4
8	328-1/4
10	386-1/4

FLOOR PLAN

MACEY SADDLE GATHERER I-68

(MODEL 532 WITH MODEL 632 SINGLE BOOK TRIMMER)

SINGLE BOOK TRIMMER

INDEX

MACEY SINGLE BOOK TRIMMER

Model Nos. 610, 631, 632

RECEIVING

Before accepting the machine from the transportation company, an examination of the machine for possible damage in shipment should be made. If there is any evidence of damage, a notation to that effect should be made on the Bill of Lading, and the Harris-Seybold Sales Office should be notified immediately.

UNCRATING

The Single Book Trimmer is shipped in one crate with the belt conveyor fastened to the top of the machine and the accessory box fastened to the skids.

When removing the crate, care should be taken so that no damage to the machined or the painted surfaces results. In the process of removing the machine from the skids, care should be taken to avoid twisting or bending the machine.

Check machine to insure no parts or tools were worked loose in shipment.

ASSEMBLY TO SADDLE GATHERER - MODEL NOS. 631 & 632

1. Move the Single Book Trimmer into position, the tie plates extending from the Trimmer in position to fasten to the mounting angles on the Stitcher base.

2. The Trimmer must be leveled with the Entry Rail Support Shaft (Fig. 1, Det. 9) aligned with the bolt holes in the delivery frames of the Saddle Gatherer. Leveling screws on each end of the two Trimmer frames are used to level the machine. The spirit level may be placed on the exposed machined surfaces of the Upper Side Knife Support castings for leveling the machine lengthwise. To level across the width of the machine, the level may be placed on the face cut bed knife or the machined surface of the lower casting.

3. When the machine is level, fasten the Entry Rail Support Shaft (Fig. 1, Det. 9) to the delivery section frames of the Stitcher. Fasten the tie plates (Fig. 4, Det. 52 securely to the Stitcher base and Trimmer frames.

4. Remove the wooden blocks attached to the upper knife castings. Use the screws holding the blocks for fastening the spring loaded pressure clamps.

5. The bed knives (Fig. 1, Det. 42) may now be installed. Place the bed knife on the lower support casting with the back of the bed knife flush up against the back up plates (Fig. 1, Det. 5) and snug up the socket screws. Repeat this procedure on the remaining two bed knives. Manually rotate flywheel (Fig. 4, Det. 65) until the knives are at the bottom of the stroke. Place a light underneath the knife to be set so the gap between the shear and bed knives is visible. Adjust the back up screws located in the side rails (Fig. 1, Det. 5) to obtain a uniform gap of approximately .003" between the shear and bed knives along the entire length of the knives. When the proper setting is achieved, clamp the bed knife by tightening the socket head screws located in the bed knife. Repeat the procedure on the remaining bed knives. Note: Make sure there is a clearance between the shear and bed knives because the knives will be damaged if there is no clearance.

6. Check each knife adjustment by cutting a single sheet of paper. To cut the paper, rotate the Trimmer manually by turning the flywheel (Fig. 4, Det. 65). If paper does not cut clean, adjust the back up set screws located near the bottom of the shear knife support casting. Adjust the shear knife back up screws wherever necessary along the length of the knife to achieve a clean cut. Recheck the cut after each adjustment. Repeat this procedure on all the shear knives. Check all socket head screws, which clamp the knives for tightness.

7. Hook the delivery belt conveyor rails (Fig. 9, Det. 15) over the steel bushings (Fig. 3, Det. 42) located on each side of the belt drive pulley. Fasten the set screws (Fig. 9, Det. 28). Wrap the conveyor belt around the belt pulleys and adjust the belt take up screws (Fig. 9, Det. 26)

8. To time the Single Book Trimmer to the Saddle Gatherer, jog a book through the Stitcher to the position where the book is just delivered on the Trimmer entry conveyor. Rotate the flywheel (Fig. 4, Det. 65) to position the chain pusher fingers (Fig. 1, Det. 93) approximately two to three inches ahead of the delivered book. Attach the Trimmer drive chains (Fig. 4, Det. 51 and 70). Fasten the coupling clamp (Fig. 4, Det. 55) and take up the chain slack with the idler sprockets (Fig. 4, Det. 59).

9. The electrical connection between the Trimmer and the Saddle Gatherer is made by plugging in the red connector from the Trimmer to the connector in the octagonal box directly behind the Stitcher.

10. Install the machine guards between the Saddle Machine and the Single Book Trimmer.

ASSEMBLY TO CHRISTENSEN PONY STITCHER (Model No. 610)

1. Remove the Christensen flywheel shaft and check against drawing No. B-610-0-5005 to determine if a stepped key is necessary. Also have the 1/4" wide x 1/8" deep x 1-3/4" long keyway machined in the shaft as shown on the drawing.

2. Position the center of the Single Book Trimmer at an offset of 17-3/4" from the centerline of the Christensen Stitcher as shown on drawing No. C-610-0-5002.

3. Leveling screws are provided at each end of the Trimmer frames to level the machine. A spirit level may be placed on the exposed machined surfaces of upper side knife support castings for leveling the machine lengthwise. To level across the width of the machine, the level may be placed on the face cut bed knife or the machined surface of the lower casting.

4. Refer to drawing No. C-610-0-5007 and spot hole locations in the Stitcher base casting for mounting the tie bar angles (Part No. B-610-0-1019) as illustrated. Use tie bar angles to spot the holes. Drill 1/4" diameter, tap 5/16-18, 3 holes for each angle. Fasten tie bar angles to the Stitcher base casting.

5. Refer to drawing C-610-0-5007. Attach the split cam (A-610-0-1044) to the clutch trip shaft. Position switch bracket (A-610-0-1045) to have the cam actuate the switch when the clutch shaft is tripped. Spot the holes on the Christensen base casting, drill 13/64 diameter holes and tap 1/4-20, two holes. Fasten the bracket to the Christensen Stitcher and set the cam to actuate the switch when clutch shaft is tripped.

6. Refer to drawing D-610-0-5004. Assemble the clutch on the Christensen shaft and replace in the Stitcher. Locate the brush assembly mounted on bracket (A-610-0-1046) over the center of the slip rings and spot the holes for mounting the bracket in the center of the slots to allow for adjustment. Drill 13/64 diameter holes and tap 1/4-20. Complete the shaft assembly by mounting the flywheel with the armature (B-610-0-1041) fastened to it, the drive sprocket and the outboard support arm (C-610-0-9). Fasten brush holder bracket. Attach the tie plate (B-610-0-1014) and fasten bearing and lock to outboard support arm (C-610-0-9).

7. Refer to instructions for Assembly to Saddle Gatherer and follow instruction Nos. 4, 5, 6 and 7.

8. Set the Stitcher shuttle to deliver a book centered on the Trimmer entry conveyor. Jog a book through the Stitcher until it is just dropped on the Trimmer entry conveyor. Rotate the Trimmer (manually turn flywheel Fig. 4, Det. 65) to position the chain pusher fingers (Fig. 1, Det. 93) approximately 2 or 3 inches ahead of the book on the entry conveyor. Attach drive chain between sprocket (Part Nos. B-610-0-1013 and C-610-0-1039). Take up chain slack with idler sprocket (A-610-0-1017).

9. Make wiring connections for power supply and drive motor as per wiring diagram (C-610-0-5000). Check circuits for correct operation.

10. Assemble chain and belt drive guards to complete the installation.

TRIMMER OPERATING SEQUENCE

The tape delivery of the Saddle Gatherer or Christensen Pony Stitcher delivers the book to the Trimmer entry conveyor. The chain fingers (Fig. 1, Det. 93) on the continuously moving chains, push the book to the intermittent chains. The intermittent chain fingers (Fig. 1, Det. 70) push the book into position for the head and tail trim. The book is registered by the stop fingers (Fig. 1, Det. 64) at the crown, and the intermittent chain fingers. The tamper blades (Fig. 2, Det. 26 and 57) on both sides bring the book in register for the correct head and tail trim. The book is then clamped (Fig. 2 Det. 20) and held in register while the head and tail trim is cut. The clamps release the book and the intermittent chain fingers push the book to the face cut tapes, (Fig. 3, Det. 21 and 41). The tapes register the book against the stop fingers (Fig. 3, Det. 94) for the face trim. The book is clamped and the face cut is made. After the face cut is made the clamps release the book and the tapes carry the book to the Belt Conveyor. When the book is being carried to the Belt Conveyor it passes over a plastic sensing lever (Fig. 3, Det. 31) which actuates the indexing mechanism for the Belt Conveyor and the counter switch. The Belt Conveyor or Counter do not operate when a book is missed.

TRIMMING TIMING

The operating sequence of the Single Book Trimmer as a function of the "height of clamp above the bed knife" is illustrated on Fig. 11.

TRIMMER SET UP PROCEDURE

1. Knife Adjustment for Head and Tail Cut

   a. Jog the Trimmer to the position where the paper clamps are compressed 1/4" on the downstroke. This releases the pressure on cross members allowing even movement of the side knives.

   b. Shut the power off.

   c. Remove the jam switch rails (Fig. 1, Det. 92) by loosening the two knobs (Fig. 1, Det. 75) and disconnecting the plug for the trip switch from the socket on the guide rail holders. Repeat for other side.

   d. Loosen the following screws on each side of Trimmer:

      1) Upper knife clamp bolts - Fig. 2, Det. 13 - 2 per side
      2) Lower knife clamp bolts - Fig. 1, Det. 41 - 2 per side
      3) Lock Screw - stop fingers - Fig. 1, Det. 14 - 1 per side
      4) Lock Screw - conveyor rails - Fig. 1, Det. 101 - 1 per side

   e. Crank (Fig. 1, Det. 37) the knives to the desired book size plus 2 or 3 turns of the crank larger than the book size. Crank the knives back in to the desired book size as per the scale (Fig. 2, Det. 11. This will eliminate the backlash in the adjusting screws. Check the setting with a scale to insure exact size for head and tail trim.

   f. Retighten the clamp bolts and lock screws that were loosened for instruction "d" above.

2. Stop Finger Adjustment, Head and Tail Cut

   a. Turn the power on and jog the Trimmer to the position where the intermittent chain just stops. Be sure the Trimmer stops at this precise spot otherwise the paper clamps will be too low to insert the stop finger gage.

   b. Shut the power off.

   c. Loosen the set screws in both stop fingers (Fig. 1, Det. Nos. 43 and 64) with a 5/32" Hex Allen wrench and slide the stop fingers all the way towards the face cut knife.

2. Stop Finger Adjustment, Head and Tail Cut (continued)

d. Refer to Fig. 1 and set stop finger gage as illustrated by inserting a sample of the untrimmed book against the fixed pin and moving the sliding block in to box the book in snugly. Lock the set screws on the sliding stop.

e. Insert the dowel pins on the stop finger gage into the dowel pin holes (shown in Fig. 1) on the entry conveyor rail (Fig. 1, Det. 5) keeping the sliding stop towards the face cut knife. With the gage in position, slide the stop fingers forward to the sliding stop and maintain pressure on the stop finger against the sliding stop while tightening the set screws in the stop finger. Repeat for stop finger on the other side.

3. Intermittent Chain Finger Adjustment

a. Place a sample of the untrimmed book against the stop fingers and check location of intermittent chain finger. The book should be boxed in snugly between the stop fingers and the chain fingers. If the book is not boxed in snugly, adjust the chain fingers as per instructions below.

b. To adjust the intermittent chain fingers, loosen the clamp ring bolts (Fig. 1, Det. 100) with a Hex Allen wrench and rotate the intermittent chain drive shaft until the intermittent chain fingers are in the desired position. Retighten the clamp ring bolts.

4. Adjust Face Cut Stop Fingers

a. Loosen the two set screws in the stop finger slide (Fig. 3, Det. 32) with a 5/32" Hex Allen wrench. Slide the stop fingers to the desired finished book size. Check the measurement at both ends of the stop finger casting to insure the stop fingers are parallel to the face cut knife before retightening the set screws in the stop finger slide.

5. Side Tamper Adjustment

a. With a sample of the untrimmed book boxed in by the intermittent chain fingers and the stop fingers, adjust the head tamper (Fig. 2, Det. 26) for the required head trim by loosening the wing nut (Fig. 2, Det. 45) and turning adjusting screw (Fig. 2, Det. 46)

5. Side Tamper Adjustment (continued)

to position the tamper blade (Fig. 2, Det. 26) for the desired head trim. Lock the wing nut and adjust the foot tamper to box the book in snugly. Lock the wing nut on the tail tamper adjustment.

6. Entry Guide Rail Adjustment

a. Loosen the wing nut on each of the entry guide bars and position bars to guide book into the knives in approximately the correct position for the head and tail trim, and retighten the wing nuts. This results in the minimum disturbance of the book by the tampers in registering for the head and tail trim.

7. Delivery Belt Roller Adjustment

a. Adjust the upper front tape roller (Fig. 3, Det. 2) to a position where a small amount of lift or pressure occurs as the book enters the tapes. This adjustment is made by loosening the lock nut (Fig. 3, Det. 11) and turning the adjusting screw (Fig. 3, Det. 12) to correctly position the tape roller. When correctly positioned, lock the adjustment by retightening the lock nut.

b. Adjust the auxiliary roller by loosening the set screw in the roller support (Fig. 3, Det. 18) and slide the auxiliary roller up to a position slightly behind the stop fingers. Lock the set screw. This will assist in driving the book out after the face cut is made.

8. Delivery Upper Guide Adjustment

a. The upper guides (Fig. 3, Det. 98) should be set at a position approximately 1/16" higher than the book thickness. To adjust, loosen the lock screw (Fig. 3, Det. 17) and the wing nut (Fig. 3, Det. 14). Turn the thumb screw (Fig. 3, Det. 15) until guide is properly positioned. Retighten the lock screw and wing nut. Repeat adjustment on all upper guides.

9. Jam Switch Rail Adjustment

a. Set a sample book on the entry conveyor rails and replace the jam switch rails. Tighten the knobs (Fig. 1, Det. 75) and reconnect the jam switch plug on each of the guide rails. Adjust the guide rail height using the adjusting screws (Fig. 1, Det. 82) to allow enough clearance for the sample book between the conveyor and the jam rails. Any additional material will raise the jam switch rails and trip the micro switch (Fig. 1, Det. 85).

10. Face Cut Jam Switch Adjustment

a. Turn the power on and jog the sample book into the face cut stopping the machine at the bottom of the stroke. Refer to Fig. 10, and adjust switch arm (A-600-0-1786) as per instructions noted on drawing.

11. Adjusting the Conveyor Belt Hold Down Wheel Assembly

a. Jog the machine until the trimmed book just drops and lays fully on the conveyor belt. Loosen the thumb screws (Fig. 9, Det. 17) on the slide block (Fig. 9, Det. 18) and position upper tape assembly so the book will enter under the tape as soon as the belt conveyor indexes. Lock the thumb screws.

12. Check the Trimmer Set-Up

a. Run a few books through the Trimmer and check the finished books to insure that all adjustments have been correctly set.

11. Counter

a. If the check above indicates a correct set up, flip the counter switch to the "on" position and the Trimmer is ready to run.

TRIMMER ELECTRICAL SYSTEM

1. Models 631 and 632 electrical system consists of:

   a. Five trip switches:
      1. A switch (Fig. 1, Det. 98) located at the end of each entry conveyor rail to detect books that are not delivered properly from the Saddle machine.

      2. A switch located on each of the upper guide rails (Fig. 1, Det. 85) to stop the machine if a jam up occurs anywhere between the upper guide bars and the conveyor rails (Fig. 1, Det. 5).

      3. A switch mounted to the face cut shear knife casting to detect a jam up at the face cut.

   b. Push button control stations:
      1. A Start switch

      2. A Stop switch

      3. A Lockout Stop switch - This is a safety switch which when fully depressed opens the machine control circuit and allows the operator to work on the Trimmer without fear of the machine being started from any of the control stations on the machine. When ready to resume operation, the Lockout Stop switch must be pulled up.

   c. Counter Control

      1. A toggle switch to supply power to the counter

      2. A micro switch to impulse the counter whenever a book is delivered.

2. Mode. 610 electrical system consists of:

a. Three jam switches:

1. A switch located on each of the upper guide rails (Fig. 1, Det. 85) to stop the machine if a jam occurs anywhere between the upper guide bars and the conveyor rails (Fig. 1, Det. 5).

2. A switch mounted to the face cut shear knife casting to detect a jam up at the face cut.

b. Push button control station:

1. A jog switch

2. A lockout stop switch - This is a safety switch which when fully depressed opens the machine control circuit and allows the operator to work on the Trimmer without fear of the machine being started from any of the control stations on the machine. When ready to resume operation, the lockout switch must be pulled up.

c. Drive motor and clutch control:

1. The drive motor is controlled by the stop and start switches located on the control box.

2. The control relay coil is controlled by the clutch start and stop switches on the control box. Also, the clutch may be disengaged by the manual trip switch actuated by the split cam (A-610-0-1044). The clutch can be re-engaged without having to energize the control relay coil again. If the control relay holding circuit is interrupted by the jam switches, or the stop switch, it is necessary to re-energize the control relay by depressing the clutch start switch.

d. Counter Control:

1. A toggle switch to supply power to the counter

2. A micro switch to impulse the counter whenever a book is delivered.

KNIFE REMOVAL

1. Jog machine to position referred to in Trimmer Set Up Procedure, Instruction No. 3, (Knife Adjustment for Head and Tail Cut). Follow procedure described and move knives to maximum open position (18 inch on scale or more). Follow tightening procedure.

2. Jog knife to top of stroke or maximum up position and shut "off" main electrical switch.

3. Remove all side clamps - 14 Hex head cap screws with 1/2" wrench. Caution note - clamp mounting bar face stamped "0" must be mounted away from knife.

4. Remove tamper pivot bracket - 2 Hex head cap screws each side - use 9/16" wrench, (this procedure used only with the "arm type" side tamper.)

5. Remove all socket screws from all three upper shear blades - use 3/8" Allen wrench.

6. Remove three bed knives - use 7/16" Allen wrench.

7. Move bed and shear knife back-up screws flush with back-up plate or casting - use 5/32" Allen wrench.

KNIFE INSTALLATION

1. To compensate for any material ground off the upper shear knives during sharpening, a series of set screws in the edge of the knife are adjusted with the use of the brass gage which is provided in the accessory box. Lay the knife in the gage with the full width of the knife down in the gage lining up the set screw with cut-out slot in gage. Back out set screw with 1/8" Allen wrench until set screw touches the top of gage. Repeat for all set screws in three knives.

2. Remove all foreign matter from bed and shear knife clamping surfaces.

KNIFE INSTALLATION (continued)

3. Replace bed knives, make sure the back of the knife is against the back-up plate. Snug up socket screws with 7/32" Allen wrench. Repeat for all three bed knives.

4. Install three top shear knives and tighten all socket screws with 3/8" Allen wrench - make sure knives are in the casting with the "edge" set screws snug against back-up edge of casting.

5. Turn "on" main electric disconnect switch and jog trimmer until knives are at the bottom of the stroke, shut "off" main electric disconnect switch. Place a light source under knife which is to be set. The gap between the bed and shear knives is more readily visible. Care should be taken to provide approximately .003 gap, this can be accomplished by inserting a .003 thick paper shim between bed and shear knife and lock screws. Use back-up screws to maintain a uniform .003 gap along entire length of bed knife. Repeat this procedure on all three knives. Do not set too tight. Knives will be damaged if set too close.

6. Turn "on" main electric disconnect switch and check each knife adjustment by cutting a single sheet of paper. If paper is not cut clean, adjust shear back-up screws in upper casting with 5/32" Allen wrench at point where cut is not clean. Recheck cut after each adjustment. Repeat on all knives.

7. Tighten all socket screws in knives and replace tamper pivot brackets and tighten Hex screw with 9/16" wrench. Align tamper blade parallel to bed knife before locking screws securely. (This procedure used only with the "arm type" side tamper.)

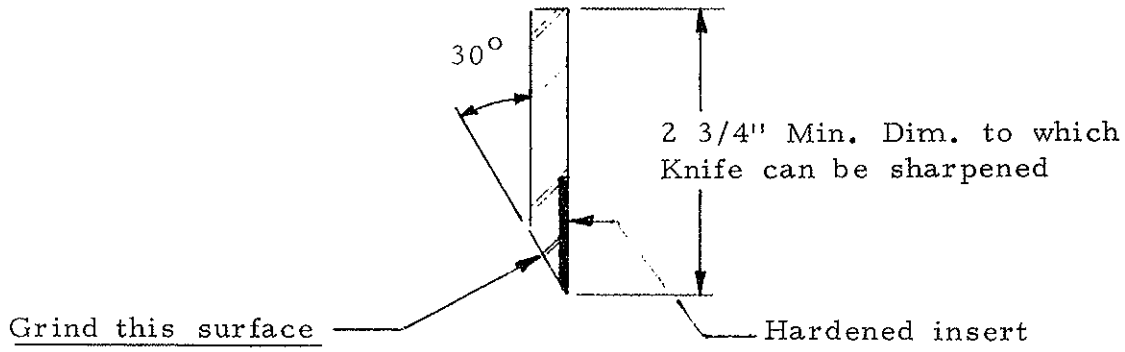
8. Replace clamps - make sure clamps are reassembled same as when removed - use 1/2" wrench.

LUBRICATION

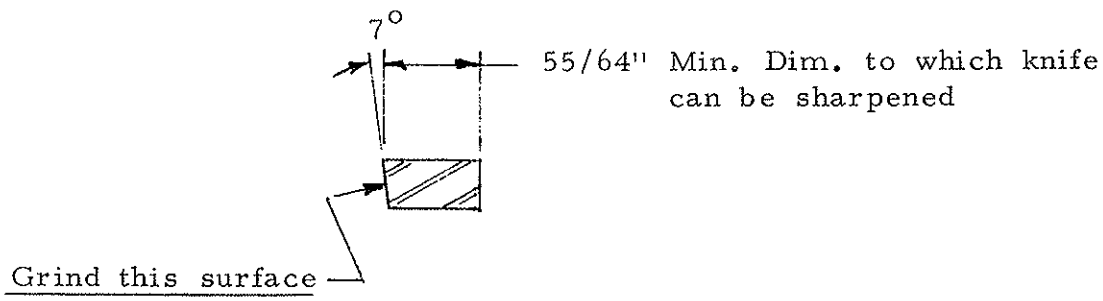
A lubrication chart, Fig. 6, is included in this manual and the type of lubricant and schedule as specified by the chart should be followed. On the Model 610, the drive chain from the Christensen to the Trimmer should be oiled weekly.

RESHARPENING OF KNIVES

a. Shear Knives



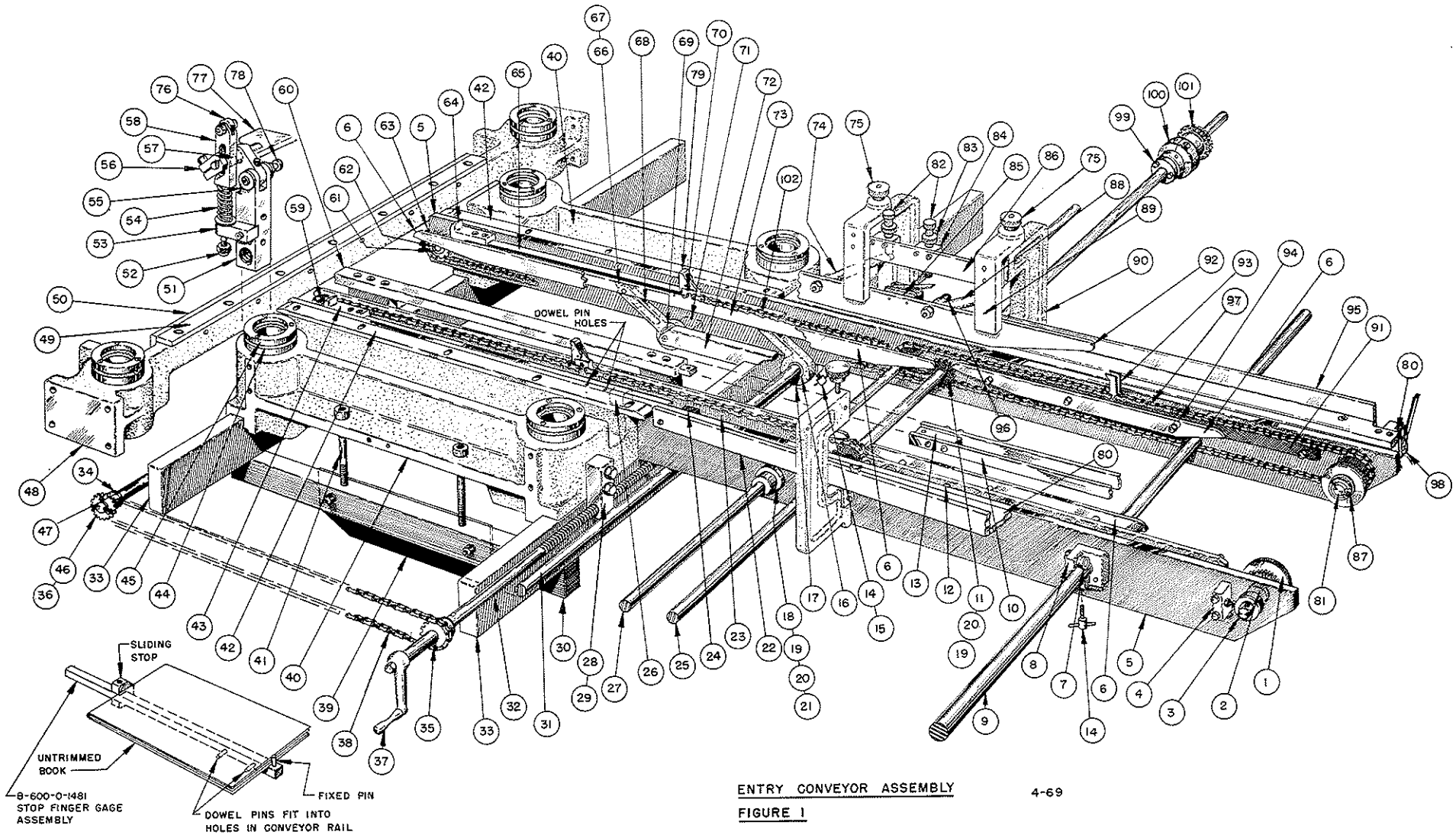
b. Bed knives



ENTRY CONVEYOR ASSEMBLY
FIGURE I

NO.	DESCRIPTION	PART NO.
1	IDLER SPROCKET WHEEL	A-600-0-1482
2	TAKE-UP STUD BRG. WASHER	A-600-0-1484
3	TAKE-UP CLAMP WASHER	A-600-0-1492
4	TAKE-UP BLOCK	A-600-0-1491
5	SIDE RAIL	D-600-0-1367
6	CHAIN TRACK PAPER GUIDE	A-600-0-1427
7	CAM FOLLOWER	S-7-202
8	CONVEYOR ROLLER SUPT.	A-600-0-1447
9	SHAFT	A-530-0-1262
10	PAPER SUPPORT BARS	B-600-0-1326
11	SPROCKET (1" DIA. HOLE)	A-600-0-1645
11	SPROCKET (1" HEX HOLE)	B-600-0-1821
12	CHAIN TRACK SPACER	A-600-0-1279
13	PART OF B-600-0-1326	----------
14	LOCK SCREW	A-600-0-1458
15	DRIVE ARM SHOE	A-600-0-1520
16	STOP FINGER SLEEVE	A-600-0-113
17	STOP FINGER DRIVE ARM	B-600-0-114
18	CONVEYOR DRIVE SPROCKET	A-600-0-1645
19	BELT PULLEY SPACER	A-600-0-1297
20	BUSHING COLLAR	A-600-0-1371
21	BUSHING SPACER	A-600-0-1480
22	PLATE-SIDE ADJ.	D-600-0-1770 D-600-0-1771
23	INTERMITTANT CHAIN TRACK	A-600-0-1625
24	CHAIN TRACK SPACER	A-600-0-1417
25	CONVEYOR SHAFT (1" DIA.)	A-600-0-1306
25	CONVEYOR SHAFT (1" HEX.)	B-600-0-1820
26	CHAIN TRACK SPACER	A-600-0-1418
27	CONV. CHAIN DRIVE SHAFT	A-600-0-1618
28	KNIFE ADJ. NUT R. H.	A-600-0-1054
29	KNIFE ADJ. NUT L.H. (NOT SHOWN)	A-600-0-1055
30	SIDE KNIFE CLAMP	B-600-0-1062
31	CONV. CHAIN DRIVE SHAFT	A-600-0-1306
32	SIDE KNIFE ADJ. SCREW	B-600-0-1616
33	KNIFE SLIDE RAIL	B-600-0-1060
34	ADJ. SPROCKET CLAMP PLATE	A-600-0-1505
35	ADJ. SCREW SPROCKET	A-600-0-1053
36	HUB-ADJ. SPROCKET	A-600-0-1504
37	HANDLE	S-2-327
38	#41 CHAIN	S-8-348
39	CHIP DEFLECTOR	B-600-0-1450
40	BED KNIFE SUPPORT	D-600-0-1
41	5/8 - 11 x 6" BOLT	S-1-881
42	SIDE BED KNIFE	B-600-0-1067
43	STOP FINGER L.H.	A-600-0-1373
44	FELT WIPER RING	A-600-0-1245
45	WIPER RETAINER	A-600-0-1246
46	ADJ. SPROCKET	A-600-0-1503
47	REAR ADJ. SCREW	B-600-0-1617
48	BED KNIFE & FRAME SUPT.	D-600-0-7
49	BED KNIFE	B-600-0-1068
50	BACK-UP PLATE	A-600-0-1623
51	BRASS NUT R. H. (SHOWN)	A-600-0-1475
51	BRASS NUT L. H. (NOT SHOWN)	A-600-0-1476
52	1/4-28 ESNA NUT	S-1-914
53	SPRING ANCHOR	A-600-0-1362
54	PAPER GUIDE SPRING	A-600-0-1424
55	OILITE BUSHING @ FF-520-10	Part of- A-600-0-1475 & 1476

NO.	DESCRIPTION	PART NO.
56	COLLAR-TRAP DOOR ACTUATOR	A-600-0-1754
57	BUSHING - TRAP DOOR	A-600-0-1705
58	ACTUATOR - TRAP DOOR	A-600-0-1704
59	FRONT SPROCKET	A-600-0-1361
60	CLAMP PAD	B-600-0-1325
61	BEARING STUD	A-600-0-1385
62	N.D. BEARING	S-7-264
63	IDLER SPROCKET SUPT. (OPPOSITE)	A-600-0-1468
63	IDLER SPROCKET SUPT. (SHOWN)	A-600-0-1502
64	STOP FINGER	A-600-0-1485
65	STOP FINGER GUIDE	A-600-0-1372
66	GUIDE PIVOT BUSHING	A-600-0-1478
67	STOP FINGER GUIDE PIVOT	A-600-0-1477
68	STOP FINGER IDLER ARM	A-600-0-78
69	N.D. BEARING	S-7-264
70	LUG- INTERMITTANT CHAIN	A-600-0-1779
71	IDLER ARM PIVOT	A-600-0-1369
72	CHAIN DEFLECTOR R.H.(SHOWN)	A-600-0-1501
72	CHAIN DEFLECTOR L.H. (OPPOSITE)	A-600-0-1624
73	INTER. CHAIN TRACK	A-600-0-1479
74	GUIDE BAR ADJ. LINK	A-600-0-115
75	ADJ. KNOB	A-600-0-1307
76	BEARING	S-7-377
77	TRAP DOOR L.H.(SHOWN)	B-600-0-1766
77	TRAP DOOR R.H.(OPPOSITE)	B-600-0-1767
78	PIVOT SHAFT	A-600-0-1422
79	SWIVEL	A-600-0-1780
80	PLATE-ENTRY GUIDE	D-600-0-1768
80	PLATE-ENTRY GUIDE	D-600-0-1769
81	CONV. TAKE-UP STUD	A-600-0-1483
82	ADJUSTMENT SCREW	A-100-0-1018
83	LOCK NUT	A-100-0-1014
84	ADJ. SCREW BLOCK	A-600-0-1521
85	MICRO SWITCH	S-11-140
86	GUIDE TIE BAR	A-600-0-1522
87	N.D. BEARING	S-7-327
88	GUIDE BAR LINK	A-600-0-116
89	GUIDE BAR BRACKET	B-600-0-101
90	TUCKER SUPPORT	B-600-0-100
91	CHAIN TRACK	C-600-0-1607
92	UPPER GUIDE BAR	C-600-0-1758
93	CHAIN FINGER	A-500-0-1034
94	PAPER GUIDE SPACER	A-600-0-1470
95	PLATE-SIDE ADJ.	D-600-0-1770
95	PLATE-SIDE ADJ.	D-600-0-1771
96	SHOULDER SCREW	S-2-212
97	28½ LG. CHAIN	S-8-391
98	JAM SWITCH	S-11-296
99	TAPER LOCK BUSHING	B-600-0-1744
100	CLAMP COLLAR	A-600-0-1746
101	SPROCKET #40 CHAIN	B-600-0-1823
	#41 CHAIN	B-600-0-1745
102	INTERMITTANT CHAIN 16½ LG.	S-8-205



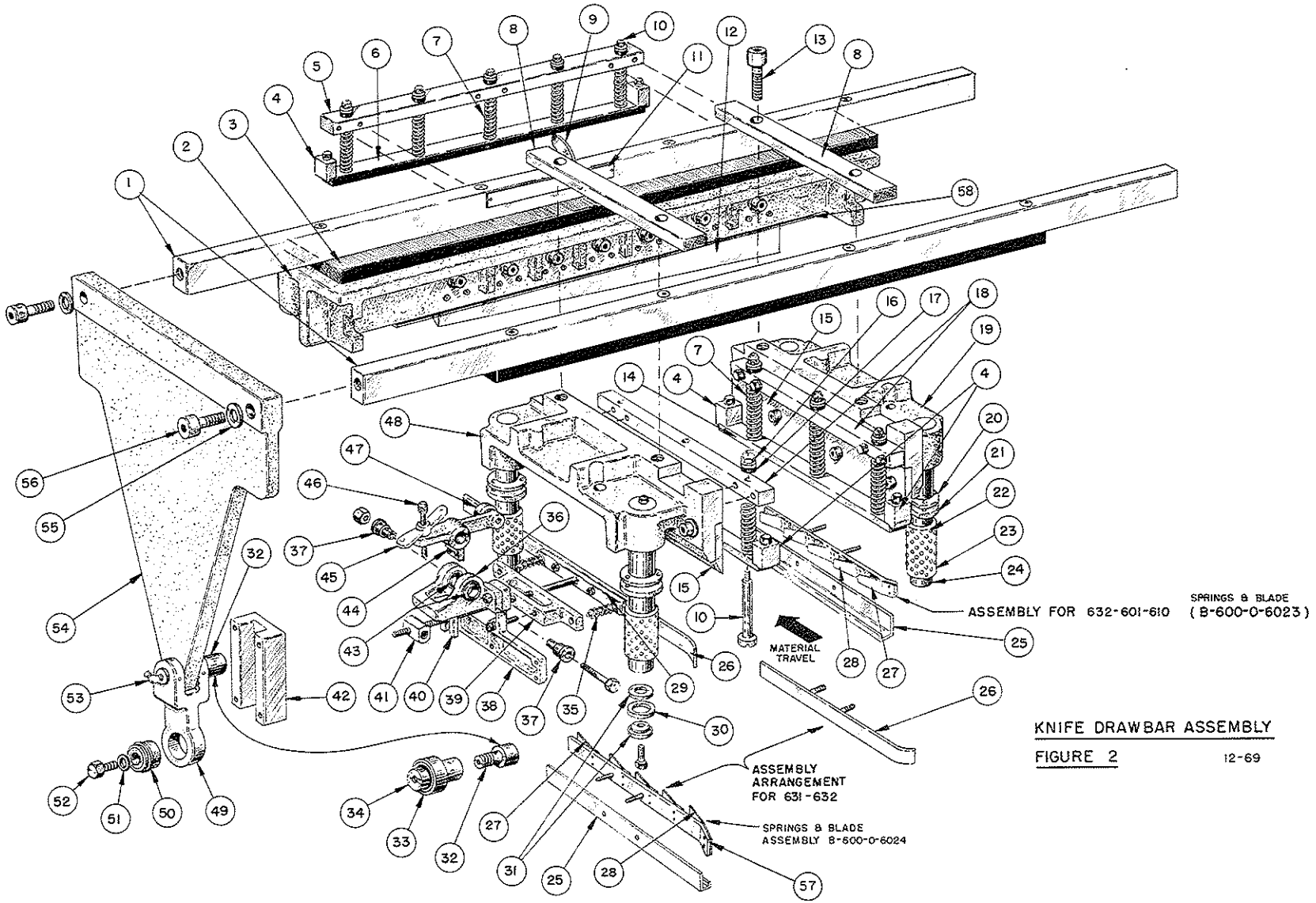
ENTRY CONVEYOR ASSEMBLY 4-69

FIGURE 1

KNIFE DRAWBAR ASSY.
FIGURE 2

NO.	DESCRIPTION	PART NO.
1	TRIMMER DRIVE BAR	B-600-0-1621
2	REAR KNIFE SUPPORT	E-600-0-13
3	REAR KNIFE DRIVE PLATE	B-600-0-1075
4	CLAMP SHOE	A-600-0-1571
5	SPRING ANCHOR BAR	B-600-0-1064
6	CLAMP BAR - REAR	B-600-0-1066
7	SPRING	S-2-329
8	DRAW BAR CLAMP	A-600-0-1050
9	SCALE POINTER	A-600-0-1052
10	CLAMP GUIDE STUD	A-600-0-1544
11	SCALE - SIDE KNIFE	A-600-0-1224
12	KNIFE	B-600-0-1072
13	SOC. HD. CAP SCR. 5/8-11 x 1½	S-1-901
14	SIDE CLAMP BAR	B-600-0-1065
15	SIDE KNIFE	B-600-0-1071
16	ELASTIC STOP NUT	S-1-803
17	RUBBER WASHER	S-9-117
18	SPRING ANCHOR BAR	B-600-0-1063
19	RIGHT KNIFE SUPPORT	D-600-0-3
20	WIPER RETAINER	A-600-0-1246
21	FELT WIPER RING	A-600-0-1245
22	DRAG SHOE	A-600-0-1642
23	BALL BUSHING	S-7-282
24	GUIDE POST SHAFT	B-600-0-1509
25	TAMPER SPRING GUARD	A-600-0-1496
26	TAMPER BLADE	A-600-0-1359
27	TAMPER SPRING R.H.	A-600-0-1630
28	TAMPER SPRING L.H.	A-600-0-1629
29	X TAMPER SLIDE	B-600-0-1553
30	FELT WIPER RING	A-600-0-1244

NO.	DESCRIPTION	PART NO.
31	WIPER RETAINER	A-600-0-1247
32	CAM FOLLOWER 1 3/4 DIA.	S-7-204
33	TORR. BRG. (INNER-RACE)	S-7-299
33	TORR. BRG.	S-7-300
34	YOKE PIN	A-600-0-1248
35	TAMPER SPRING	A-600-0-1558
36	TAMPER PIVOT BRACKET	B-600-0-119
37	TAMPER PIVOT STUD	A-600-0-1556
38	TAMPER SUPPORT	B-600-0-123
39	TAMPER SLIDE BRACKET	B-600-0-121
40	TAMPER PLATE	A-600-0-1557
41	SHOE- TAMPER DRIVE	A-600-0-1801
42	ECC. LINK GUIDE	B-600-0-68
43	BALL BEARING	S-7-335
44	TAMPER LEVER	A-600-0-122
45	TAMPER LOCK NUT	A-600-0-124
46	KNURLED NUT	A-100-0-1018
47	BALL BEARING	S-7-260
48	LEFT KNIFE SUPPORT	D-600-0-2
49	DRIVE YOKE	C-600-0-74
50	BALL BEARING	S-7-329
51	DRIVE LINK WASHER	A-600-0-1049
52	HEX. HD. CAP SCR.	S-1-164
53	GREASE FITTING	S-5-128
54	DRIVE BRACKET	D-600-0-125
55	3/4 LOCKWASHER	S-1-725
56	SOC. HD. CAP SCR.	S-1-889
57	SPRING TAMPER BLADE	B-600-0-1628
58	WEAR STRIP	A-600-0-1743

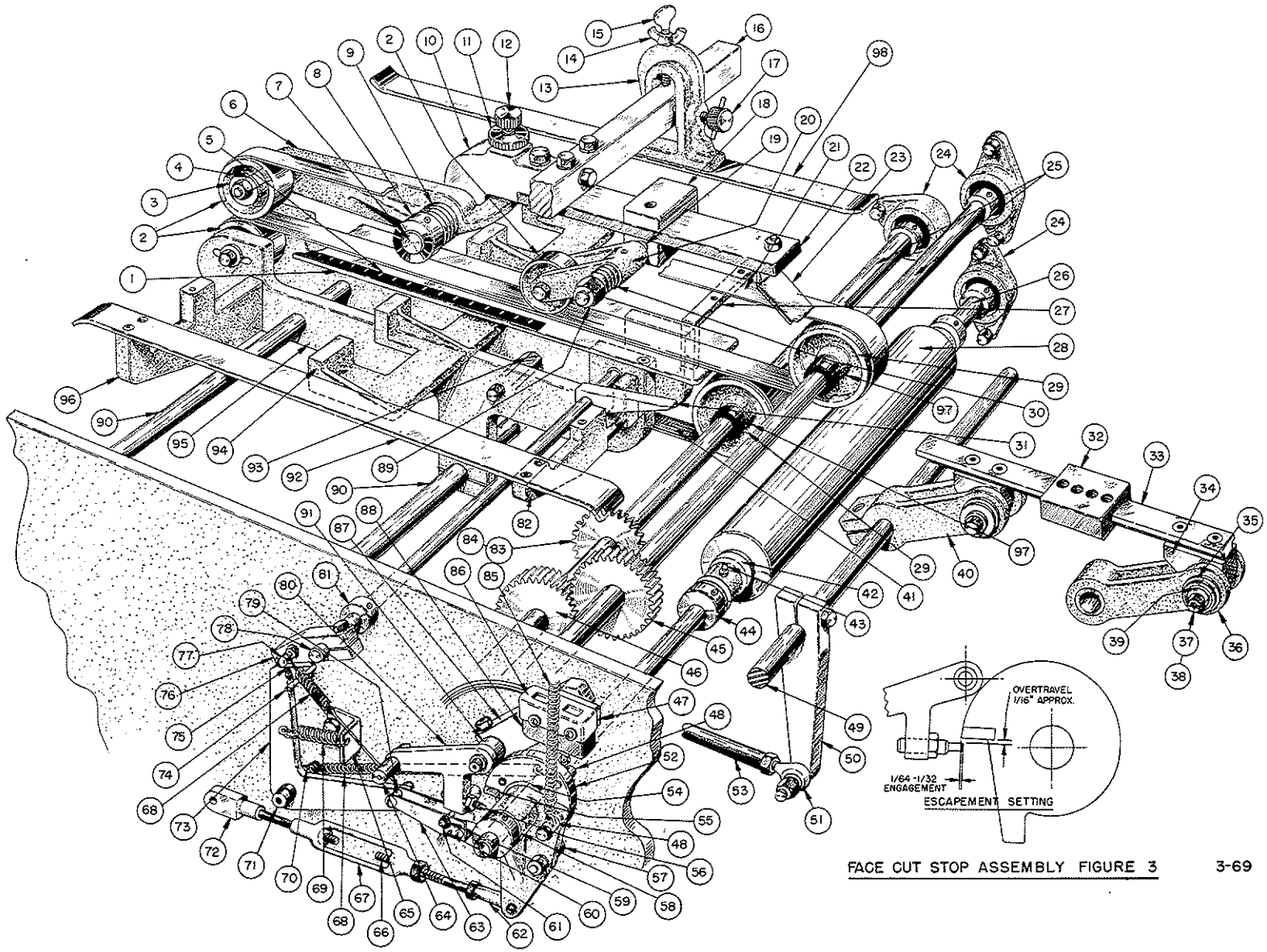


KNIFE DRAWBAR ASSEMBLY

FIGURE 2 12-69

FACE CUT STOP ASSEMBLY
FIGURE 3

NO.	DESCRIPTION	PART NO.
1	TAPE TRAY	A-600-0-1376
2	IDLER PULLEY	A-600-0-80
3	FLANGE BRG. IN PULLEY	----------
4	IDLER PULLEY SPACER	A-600-0-1381
5	SCALE	B-244-0-1391
6	UPPER TAPE ARM	A-600-0-99
7	UPPER TAPE ARM PIVOT	A-600-0-1439
8	COLLAR	A-100-0-1012
9	TORSION SPRING	A-500-0-1118
10	UPPER TAPE ARM SUPPORT	A-600-0-102
11	LOCK NUT	A-100-0-1014
12	ADJUSTMENT SCREW	A-600-0-1762
13	DEL. GUIDE BRACKET - OPEN	A-600-0-110
14	WING NUT 1/4-20	S-1-810
15	THUMB SCR. 1/4-20 x 2½	S-1-916
16	DEL. GUIDE BAR	B-600-0-1506
17	LOCK SCREW	A-600-0-1458
18	DEL. ROLLER SUPPORT	A-600-0-1528
19	ROLLER SHAFT	A-600-0-1400
20	ROLLER ARM	A-600-0-90
21	UPPER TAPE	S-12-521
22	DEL. ROLLER SUPPORT	A-600-0-1441
23	DEFLECTOR DELIVERY	A-600-0-1512
24	SEALMASTER BEARING	S-7-229
25	TAPE SHAFT	B-600-0-1737
26	SHAFT-CONV. BELT INDEX	B-600-0-1789
27	BRACKET - PAPER GUIDE	A-600-0-1805
28	3" CROWNED PULLEY	S-12-251
29	DRIVE PULLEY	A-600-0-146
30	TORSION SPRING R. H.	A-200-0-1011
31	BOOK TRIP LEVER	A-600-0-1398
32	STOP FINGER SLIDE	A-600-0-1444
33	STOP FINGER SLIDE	A-600-0-1378
34	PIVOT BLOCK	A-600-0-1382
35	SNAP RING BRG.	S-7-328
36	DEL. IDLER LEVER	B-600-0-83
37	BEARING STUD (THREADED)	A-600-0-1384
38	BEARING STUD	A-600-0-1385
39	BEARING SPACER	A-600-0-1383
40	DEL. FINGER LEVER	B-600-0-82
41	LOWER TAPE	S-12-520
42	BELT CONVEYOR BUSH	A-600-0-1419
43	GREASE FITTING (¼-28)	S-5-121
44	COLLAR	S-8-224
45	DRIVEN GEAR	A-600-0-1421
46	DEL. DRIVE GEAR	B-600-0-1414
47	SPACER	A-600-0-1793
48	SWIVEL	A-600-0-109
49	SPRING ANCHOR BAR	A-600-0-1456
50	DEL. STOP DRIVE ARM	A-600-0-1387
51	HELM UNIBALL	S-7-332
52	INDEX DRIVEN ARM	A-600-0-150
53	DEL. CONN. ROD	A-600-0-1388
54	TORRINGTON CLUTCH	S-8-484
55	ARM INSERT	A-600-0-1471
56	LATCHING SCREW	A-600-0-1457
57	INDEX DRIVE PIN	A-600-0-1391
58	WASHER-THRUST	S-7-296
59	SNAP RING	S-2-362
60	ROLL PIN	S-2-307
61	PIVOT- LATCH LEVER	A-600-0-1808
62	ROD END - INDEX ARM	A-600-0-1608
63	LATCH LEVER	A-600-0-1806
64	COUNTER WIRE ADJ. SCR.	A-600-0-1430
65	ANGEL LEVER STOP	A-600-0-1810
66	TAKE-UP ROD	A-600-0-1613
67	TURNBUCKLE	S-2-368
68	TENSION SPRING	S-2-338
69	ESCAPEMENT SPRING	A-600-0-1435
70	WASHER-FIBRE	S-1-924
71	STUD-TRIP LEVER	A-600-0-1814
72	CHAIN CONN.	A-600-0-1609
73	TRIP LEVER	A-600-0-1809
74	ROLL PIN	S-2-200
75	INSERT-ESCAPEMENT LEVER	A-600-0-1812
76	ARM-ESCAPEMENT SPRING	A-600-0-1813
77	SPRING ANCHOR	A-600-0-1431
78	SENSOR SHAFT	A-600-0-1792
79	BEARING SPACER	A-600-0-1811
80	ESCAPEMENT LATCH ARM	A-600-0-97
81	COLLAR	S-8-221
82	REAR PAPER GUIDE BRACKET	A-600-0-132
83	SPROCKET	S-8-467
84	HUB	A-600-0-1724
85	SPRING	S-2-369
86	SWITCH COVER	S-11-459
87	SWITCH ARM	A-600-0-1791
88	MICRO SWITCH	S-11-453
89	NUT	A-200-0-1009
90	TOP BELT SPACER BAR	A-600-0-1304
91	CONTROL ARM PIVOT	A-600-0-1390
92	PAPER GUIDE	B-600-0-1741
93	TAPE FRAME SPACER	A-600-0-1380
94	DEL. STOP FINGERS	C-600-0-147
95	TAPE SIDE FRAME	B-600-0-81
96	FRONT PAPER GUIDE BRACKET	A-600-0-131
97	TORRINGTON CLUTCH	S-8-484
98	UPPER GUIDE	

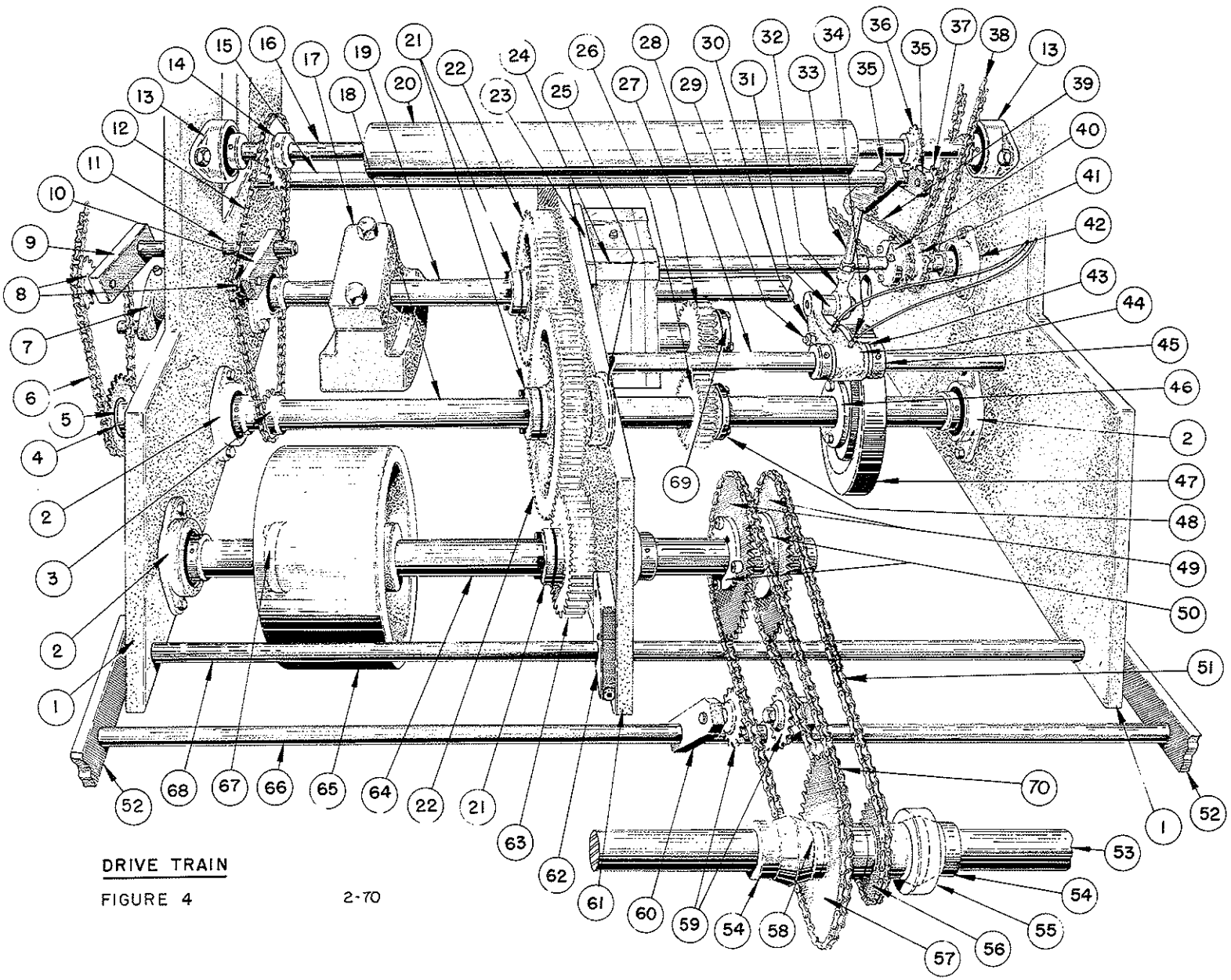


FACE CUT STOP ASSEMBLY FIGURE 3

DRIVE TRAIN 630 TRIMMER
FIGURE 4

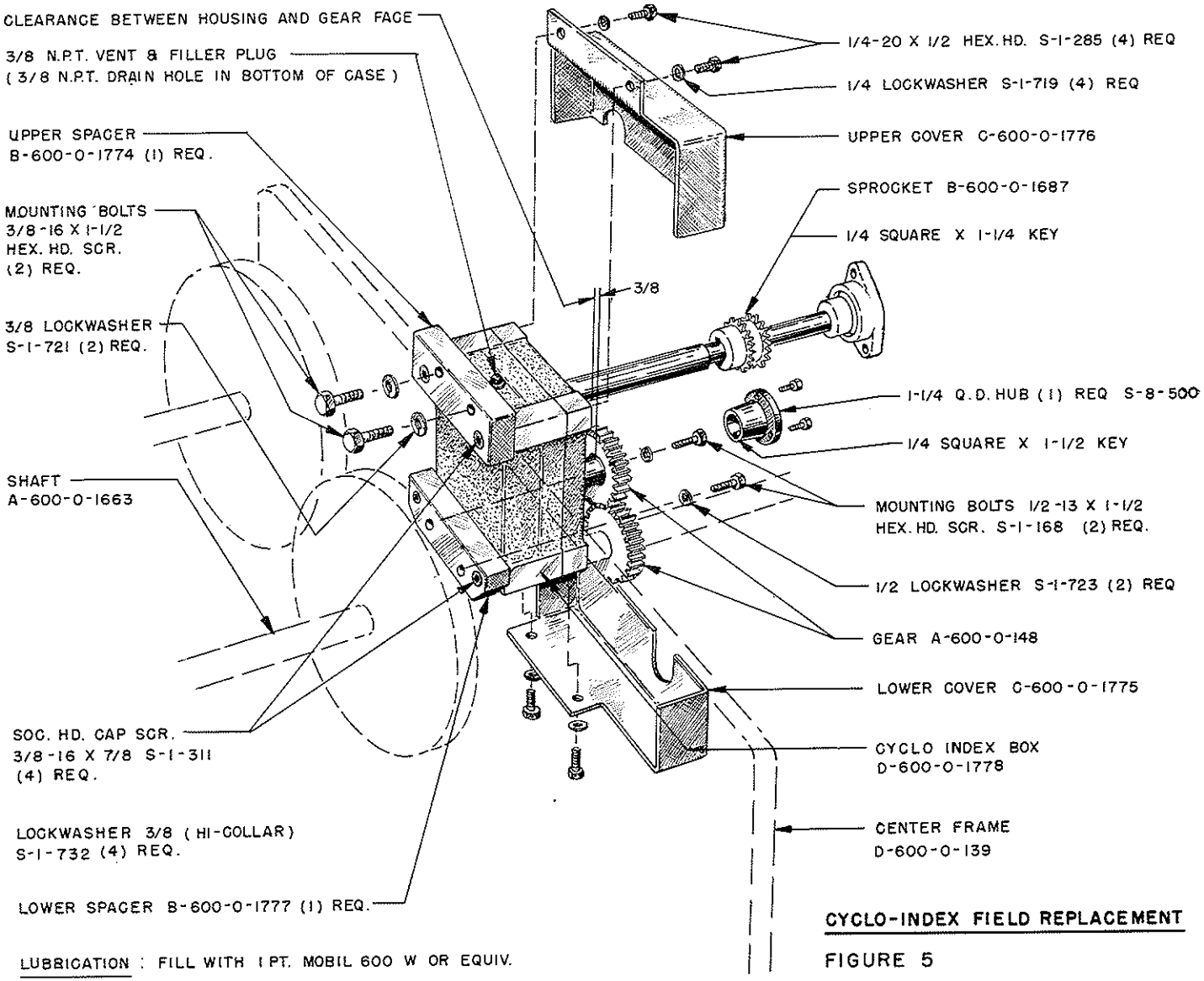
NO.	DESCRIPTION	PART NO.
1	FRAME	D-600-0-138
2	SEALED BEARING	S-7-220
3	SPROCKET	A-500-0-1486
4	SPROCKET	S-8-386
5	HUB	S-8-387
6	# 41 CHAIN TO CONT. CONVEYOR	S-8-401
7	KNIFE DRIVE ECCENTRIC	B-600-0-95
8	TAKE-UP IDLER	S-8-446
9	TAKE-UP ARM	A-600-0-1320
10	TAKE-UP ARM	A-500-0-1489
11	TAKE-UP SUPPORT	A-500-0-1636
12	#41 CHAIN TO CHIP CONVEYOR	S-8-402
13	SEALMASTER BEARING	S-7-229
14	BELT DRIVE SPROCKET	A-600-0-1300
15	CAM LEVER SHAFT	A-600-0-1117
16	CHIP CONVEYOR SHAFT	A-600-0-1456
17	COUNTERWEIGHT	C-600-0-69
18	SHAFT-TRIMMER CAM	A-600-0-1633
19	SHAFT - TRIMMER CRANK	A-600-0-1634
20	3" DIA. CROWNED PULLEY	S-12-251
21	WORTHINGTON HUB	S-8-403
22	MAIN DRIVE GEAR	C-600-0-120
23	SPACER BLOCK (UPPER)	B-600-0-1774
23	SPACER BLOCK(LOWER)	B-600-0-1777
24	CYCLO-INDEX ASSEMBLY	D-600-0-6025
25	BEARING ER-32	S-7-253
26	GEAR-STAR GEAR	B-600-0-148
27	GEAR-STAR GEAR	B-600-0-148
28	SHAFT-CAM LEVER	A-600-0-1499
29	1" CAM FOLLOWER	S-7-203
30	LEVER	B-600-0-91
31	SPACER	A-600-0-1548
32	HEIM ROD END	S-7-332
33	STOP FINGER CONN. ROD	A-600-0-1389
34	ANGLE GREASE FITTING	S-5-148
35	TAKE-UP ARM	A-500-0-1095

NO.	DESCRIPTION		PART NO.
36	SPROCKET(DRIVES 2 UP COLLECTOR)		A-600-0-1300
37	TAKE-UP IDLER		S-8-446
38	#41 CHAIN TO DELIVERY		S-8-332
39	#41 CHAIN TO TAPE DELIVERY		S-8-400
40	Q.D. HUB 1" BORE		S-8-468
41	SPROCKET	NO. 40 CHAIN	B-600-0-1824
		NO. 41 CHAIN	B-600-0-1687
42	BEARING 1"BORE ER-16		S-7-121
43	THRUST WASHER		S-7-326
44	OILITE BUSHING		S-7-329
45	COLLAR 1½		S-8-225
46	Q.D. HUB		S-8-403
47	CAM-STOP FINGER		C-600-0-86
48	HUB 2" BORE		S-8-403
49	SPROCKET		S-8-427
50	HUB 2" BORE		S-8-430
51	# 50 CHAIN 95-5/8 LG.		S-8-436
52	TRIMMER BRACE		B-600-0-1590
53	SHAFT-TRIMMER DRIVE		B-600-0-1648
54	TRIMMER DRIVE HUB		B-600-0-1649
55	CONV. DRIVE HUB CLAMP		B-530-0-1084
56	SLOW SPEED SPROCKET		B-600-0-1647
57	DIRECT DRIVE SPROCKET		B-600-0-1646
58	CARLOCK THRUST WASHER		S-7-350
59	TAKE-UP IDLER		S-8-447
60	TAKE-UP ARM		A-600-0-1159
61	FRAME-CENTER		D-600-0-139
62	CLAMP BLOCK		A-300-0-1118
63	PINION-DRIVEN		B-600-0-143
64	SHAFT-FLYWHEEL		A-600-0-1632
65	FLYWHEEL		C-600-0-108
66	TIE BAR		B-600-0-1217
67	KEY-CLUTCH		A-500-0-1691
68	TIE BAR		B-600-0-1217
69	HUB 1½ BORE		S-8-500
70	No.50 CHAIN 100-5/8" LG. & CONN. LINK		S-8-437



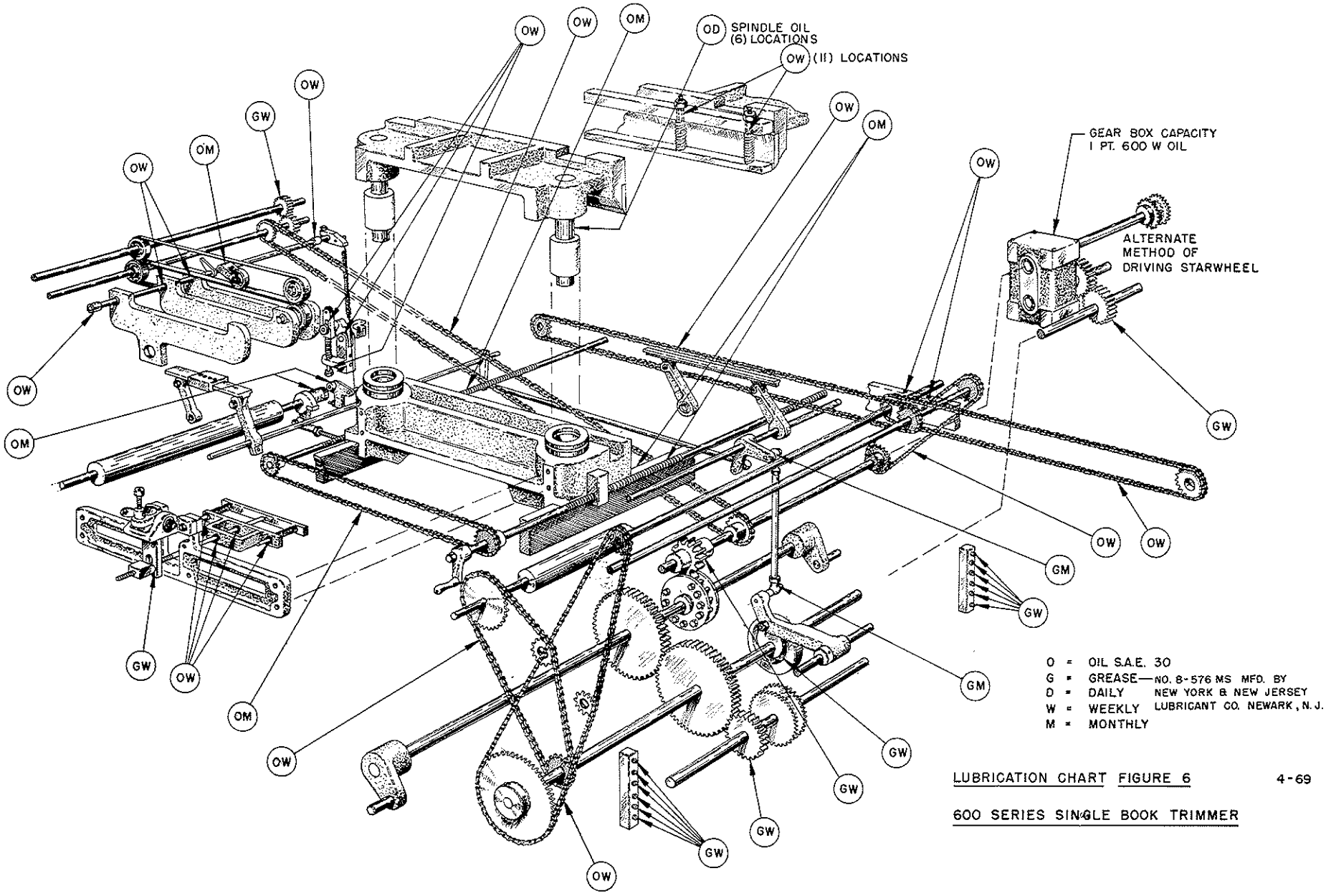
DRIVE TRAIN

FIGURE 4



CYCLO-INDEX FIELD REPLACEMENT 5-69

FIGURE 5



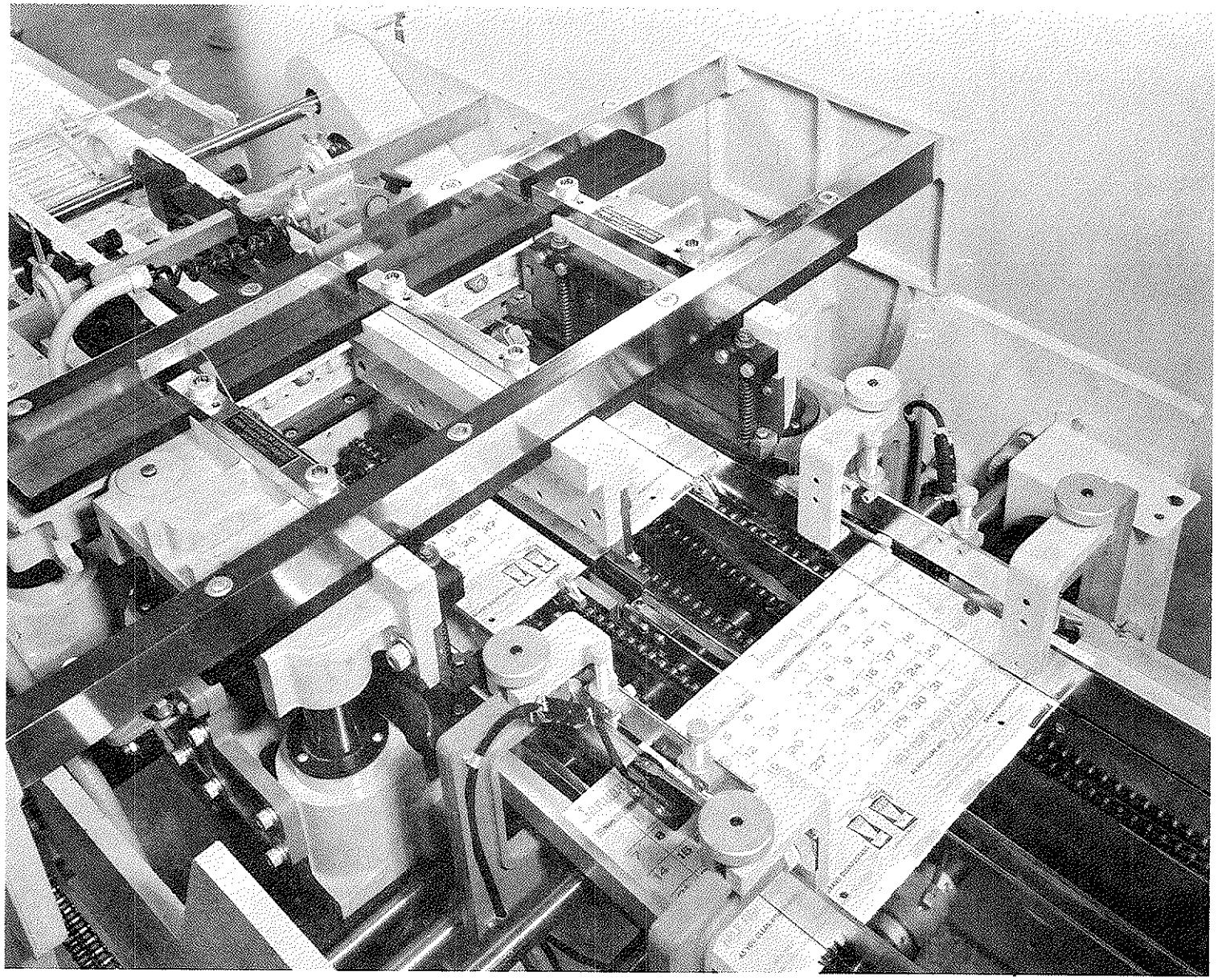
LUBRICATION CHART FIGURE 6 4-69

600 SERIES SINGLE BOOK TRIMMER

MACEY

4 th & 5 th KNIFE

ATTACHMENT NO. 635



HARRIS-SEYBOLD COMPANY

A DIVISION OF HARRIS-INTERTYPE CORPORATION

MODEL SPECIFICATIONS

(Subject to Change Without Notice)

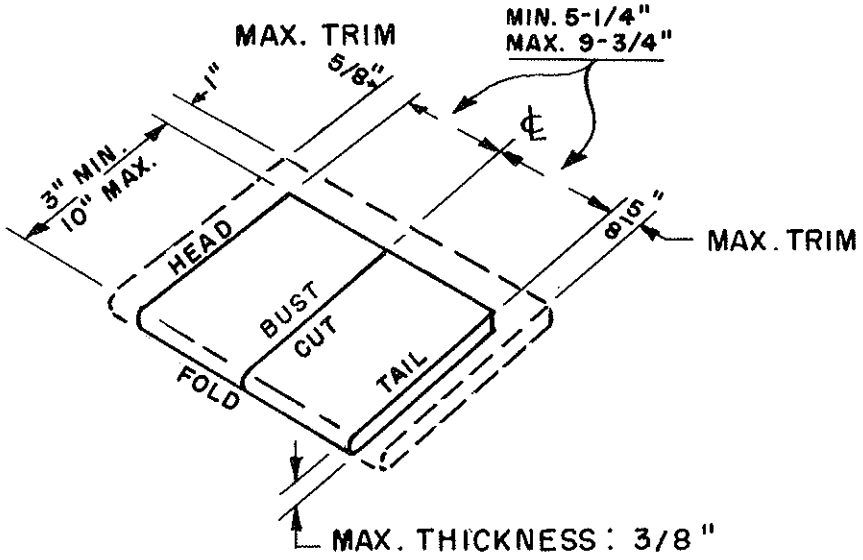
Attach. No. 635

MACHINE: 4th & 5th Knife Attachment for Macey Single Book Trimmer

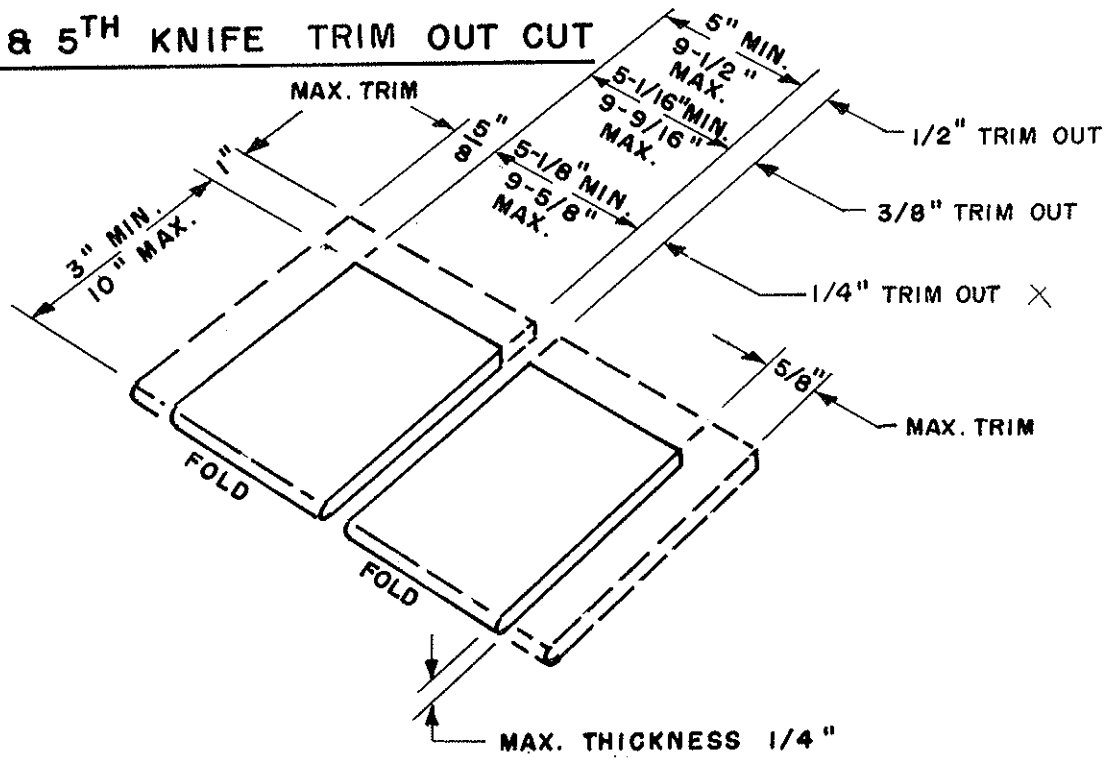
This attachment can be installed on previous and current models of the Single Book Trimmers.

The maximum and minimum sizes of the bust and trim out books are shown below.

4TH KNIFE BUST CUT



4TH & 5TH KNIFE TRIM OUT CUT



* Changed since last issue

Supersedes

Approved C. H. Heigl

Date 1-21-69

Sheet 1 of 1 Sheets

ATTACHMENT NO. 635

(4th & 5th Knives for Bust or Trim Out Cuts)

INSTALLATION INSTRUCTIONS

1. Refer to the Operating Manual on the Single Book Trimmer, paragraph on "Head and Tail Cut Adjustment". Jog the machine to the position where the paper clamps are compressed approximately 1/4". Shut the power switch off. Loosen the clamp and thumb screws as per instructions.

2. Crank the knives open to allow sufficient working room. Remove the center clamp pad assembly (Fig. No. 1, Det. No. 60). Slide the paper support bars (Fig. No. 1, Det. No. 10) to one side.

3. Place the lower knife assembly (Fig. No. 7) on the knife slide rails (Fig. No. 1, Det. No. 33). Place clamp bars (Fig. No. 7, Det. No. 16) to the underside of the knife slide rails and fasten loosely to the lower knife assembly with the bolts (Fig. No. 7, Det. 17) provided. Allow the knife assembly to slide freely on the knife slide rails.

4. Crank the head and tail cut knives in to a setting of approximately 13-1/2" between the knives. Turn the power switch "on" and jog the machine to the top dead center of the stroke and turn the power switch "off".

5. Refer to Fig. No. 8. Place the knife gage bars on the knives, one near each end of the head and tail cut knives. The gage bars must be parallel to each other. Crank the knives out until the side bed knives just touch the pins on the gage bars. Slide lower knife assembly into the position where the gage pins can be inserted into the hole on the gage bar and in between the center bed knives as illustrated in Fig. No. 8. The lower knife assembly is now centered and fastening the clamp bolts (Fig. No. 7, Det. 17) will clamp the assembly in position. Remove gage bars.

6. Attach the split sprockets (Fig. No. 7, Det. No. 19) on the intermittent chain drive shaft in line with the chain tracks (Fig. No. 7, Det. No. 14). Clamp the sprockets securely to the shaft.

7. Place the center chains (Fig. No. 7, Det. No. 21) over the drive sprockets (Fig. No. 7, Det. No. 19) keeping the pusher fingers (Fig. No. 7, Det. 12) on the center chains in line with each other and in line with the pusher fingers on the side chains by the head and tail cut knives. Complete the chain loop around the turn-around sprocket (Fig. No. 7, Det. No. 7) and connect the chain together.

8. Fasten the bust or trim-out cut knife (Fig. No. 7, Det. No. 30) to the upper knife support (Fig. No. 7, Det. No. 2). Carefully slide the upper knife between the bed knives on the lower knife assembly. Turn the power switch "on" and carefully jog the machine until the knives are at the bottom dead center of the

stroke. Turn the power switch "off". Place clamp bar (Fig. No. 7, Det. No. 1) on the knife drive bars, raise the upper knife support to the knife drive bars and fasten securely with the clamp bolts (Fig. No. 7, Det. No. 28).

9. IMPORTANT - Turn power switch "on" and very carefully jog the machine through a complete cycle, observing that the upper knife is properly located to enter between the lower knives without interference or knives may be damaged.

10. Center Knife Adjustments

The lower center knives have two sets of adjusting screws. One set (Fig. No. 7, Det. No. 31) is located underneath the bed knives. This set is used to clamp the knife mounting bar (Fig. No. 7, Det. 6) to the lower knife support (Fig. No. 7, Det. No. 9). This set is used to make a fast adjustment for change-overs from bust to trim-out cut or trim-out to bust and changes in the size of trim-outs. The second set of adjusting screws consists of the clamp screws (Fig. No. 7, Det. No. 11). This set is used to make fine adjustments on the knife.

11. Adjusting the Center Knives

a. Jog the machine to the bottom of the knife stroke.

b. Shut "off" the power switch.

c. Loosen clamp bolts (Fig. 7, Det. No. 4) and turn adjusting screws (Fig. No. 7, Det. No. 11) counter clockwise to loosen. Pull bed knife away from upper knife so a paper shim (approximately .003" thick) may be slipped between the knives. Next turn the adjusting screws (Fig. No. 7, Det. No. 11) clockwise just to the point where a resistance to turning the screw begins. Tighten the clamp bolts (Fig. No. 7, Det. No. 4).

d. Turn the power switch "on" and very carefully jog the machine through a full cycle observing that the upper knife enters between the bed knives with sufficient clearance so that no damage to the knives occurs.

e. Cut a single sheet of paper and make further knife adjustments if necessary to achieve a clean cut.

f. Fasten clamp bar assembly (Fig. No. 7, Det. No. 25) to upper knife support (Fig. No. 7, Det. No. 2).

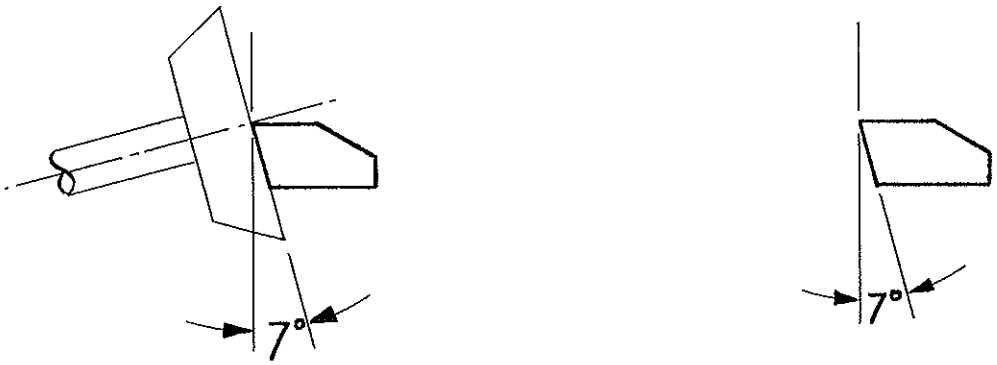
g. Reposition paper support bars and fasten to support block (Fig. No. 7, Det. No. 15).

12. The 4th & 5th knives are now set up and the set up for the head, tail, and face cuts may be completed as per the instructions in the Trimmer Operating Manual.

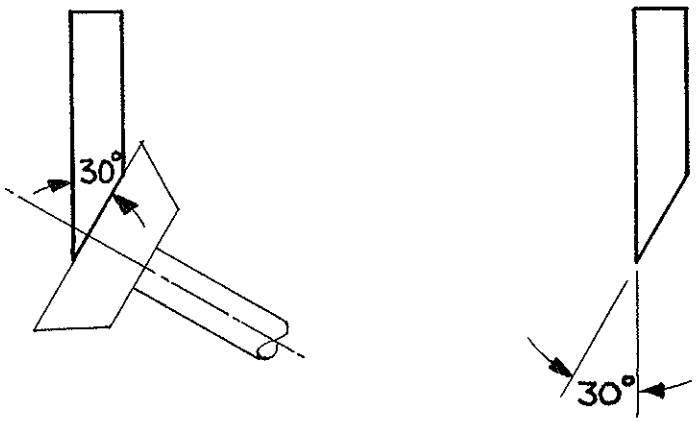
Resharpening the 4th & 5th Knives

The knives are made of D 2 Die Steel and heat treated to a hardness of Rockwell Scale "C" 60. The grinder must select the proper grinding wheel, feed and speed so that no damage is done to the knives during resharpening.

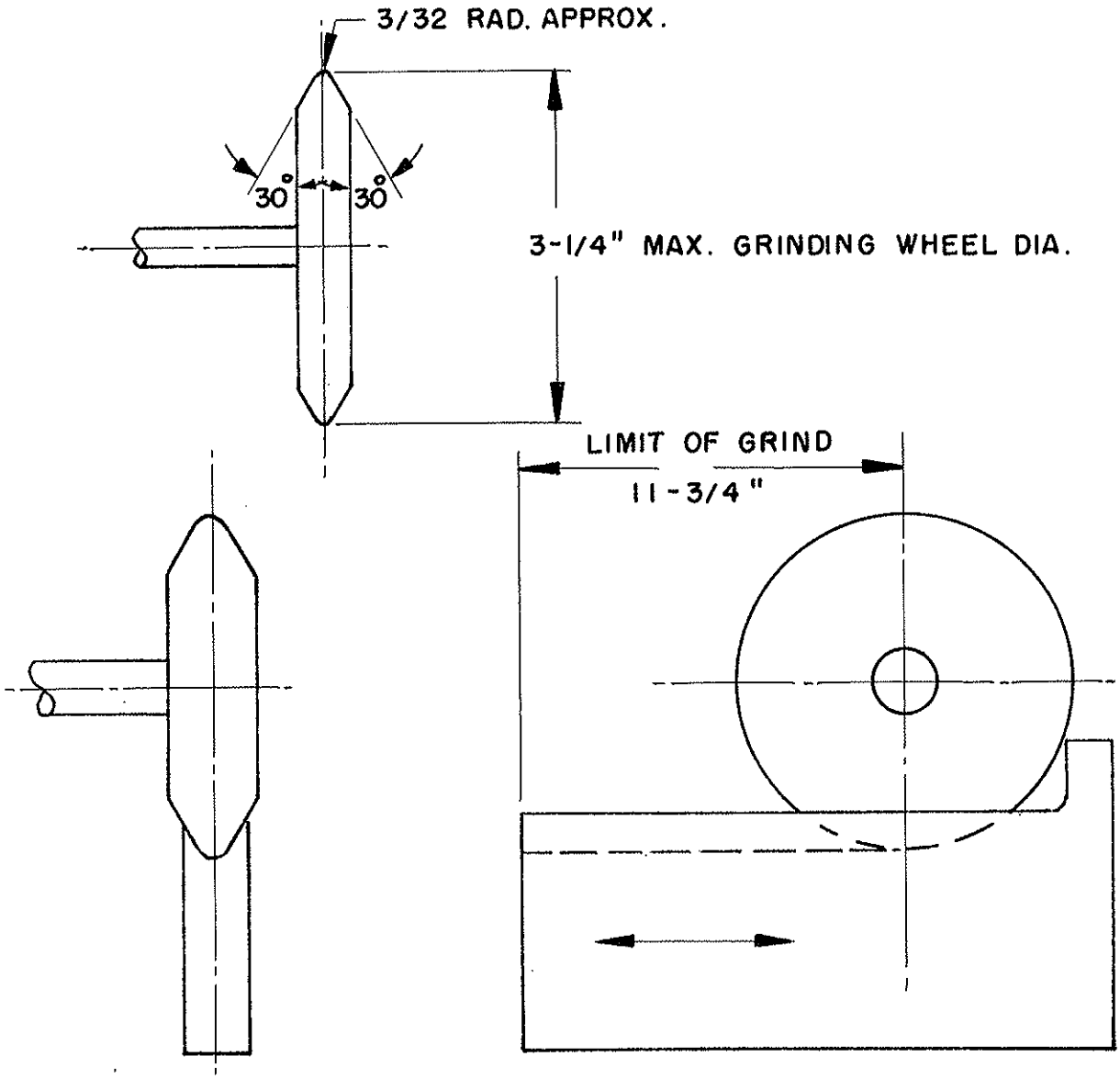
A. The bed knives are resharpened by grinding the side on a 7 degree angle as illustrated.



B. The bust cut knife is resharpened by grinding the bevel at a 30 degree angle as illustrated.



C. The trim-out knives require a formed grinding wheel as illustrated below.



4th & 5th KNIFE

Model 635

Detail No.	Part No.	Description
1	B-635-0-1035	Clamp-Upper Knife Support
2	C-635-0-1	Support - Upper 4th & 5th Knife
3	A-635-0-1039	Shoe - Clamp Bar
4	S-1-299	Soc. Head Cap Scr. 5/16 -18 x 1/2 lg.
5	C-635-0-1024	Knife - Center Bed
6	C-635-0-1025	Bar - Knife Mount.
7	A-600-0-1361	Sprocket - Idler
8	A-635-0-1007	Stud - Bearing
9	C-635-0-1027	Support - Center Bed Knife
10	A-635-0-1032	Spacer - Chain Track
11	S-1-277	Soc. Hd. Cap Scr. #10-24 x 3/4 lg.
12	A-600-0-1780	Swivel
13	A-600-0-1779	Lug - Intermittent Chain
14	B-635-0-1033	Track - Chain
15	A-635-0-1034	Support - Paper Guide
16	B-635-0-1012	Clamp - Center Knife
17	S-1-208	Hex Hd. Bolt 5/8-11 x 4" lg.
18	A-635-0-1006	Hub- Split Sprocket
19	A-635-0-1005	Sprocket - Int. Center Drive
20	A-635-0-1031	Spacer - Lower Knife Support
21	S-8-205	Chain - #41 16 1/2" lg.
22	B-635-0-1038	Bar - Center Knife Clamp
23	S-2-329	Spring - Dieco
24	A-635-0-1052	Key - Split Sprocket
25	B-600-0-1063	Spring Anchor Bar
26	A-600-0-1544	Stud - Clamp Guide
27	S-9-117	Washer - Rubber
28	S-1-880	Socket Hd. Cap Scr. 5/8-11 x 2" lg.
29	A-635-0-1008	Spacer - Bearing
30		Knife List
31	S-1-301	Soc. Hd. Cap Scr. 5/16 - 18 x 3/4 lg.

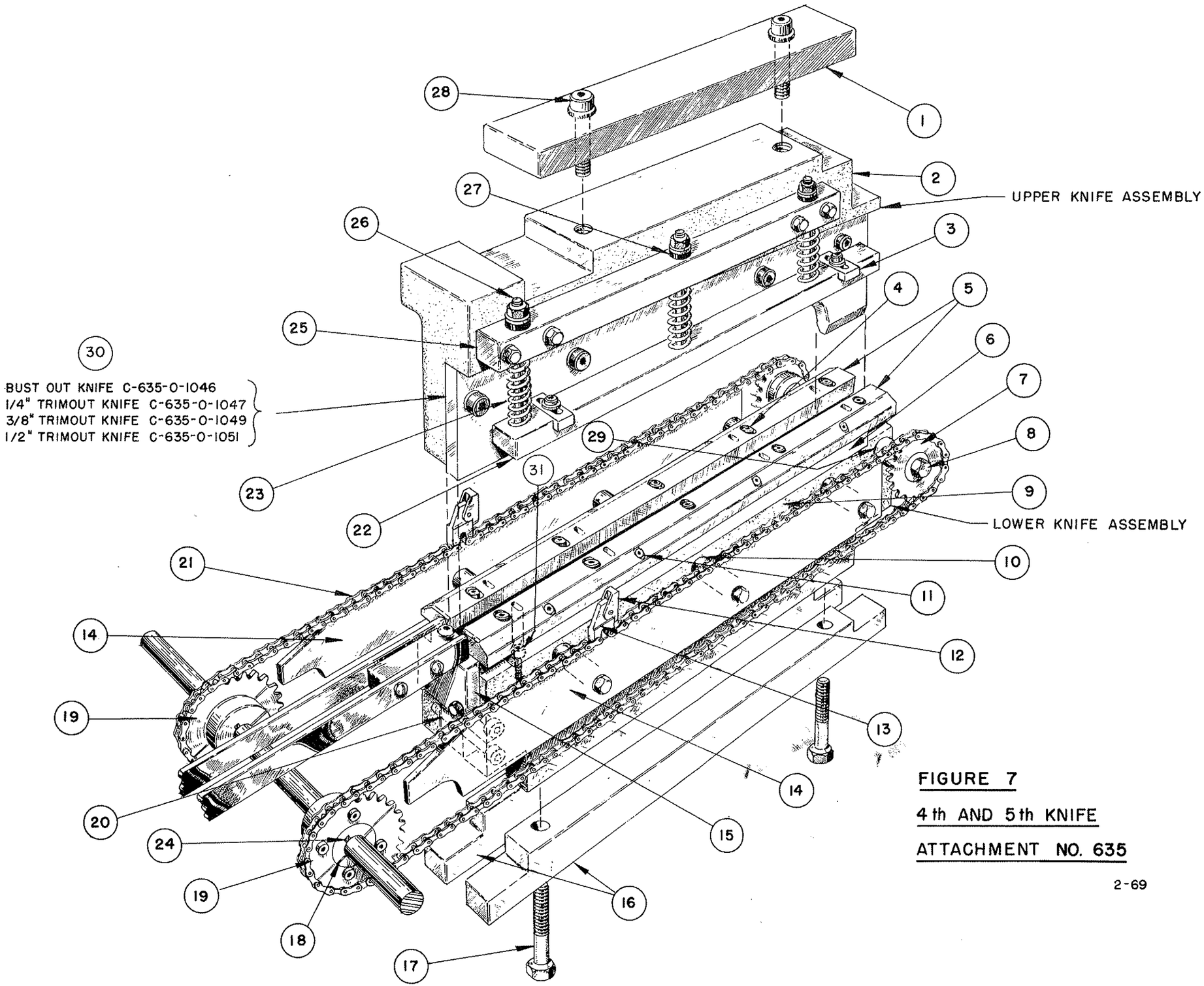


FIGURE 7

4th AND 5th KNIFE

ATTACHMENT NO. 635

2-69

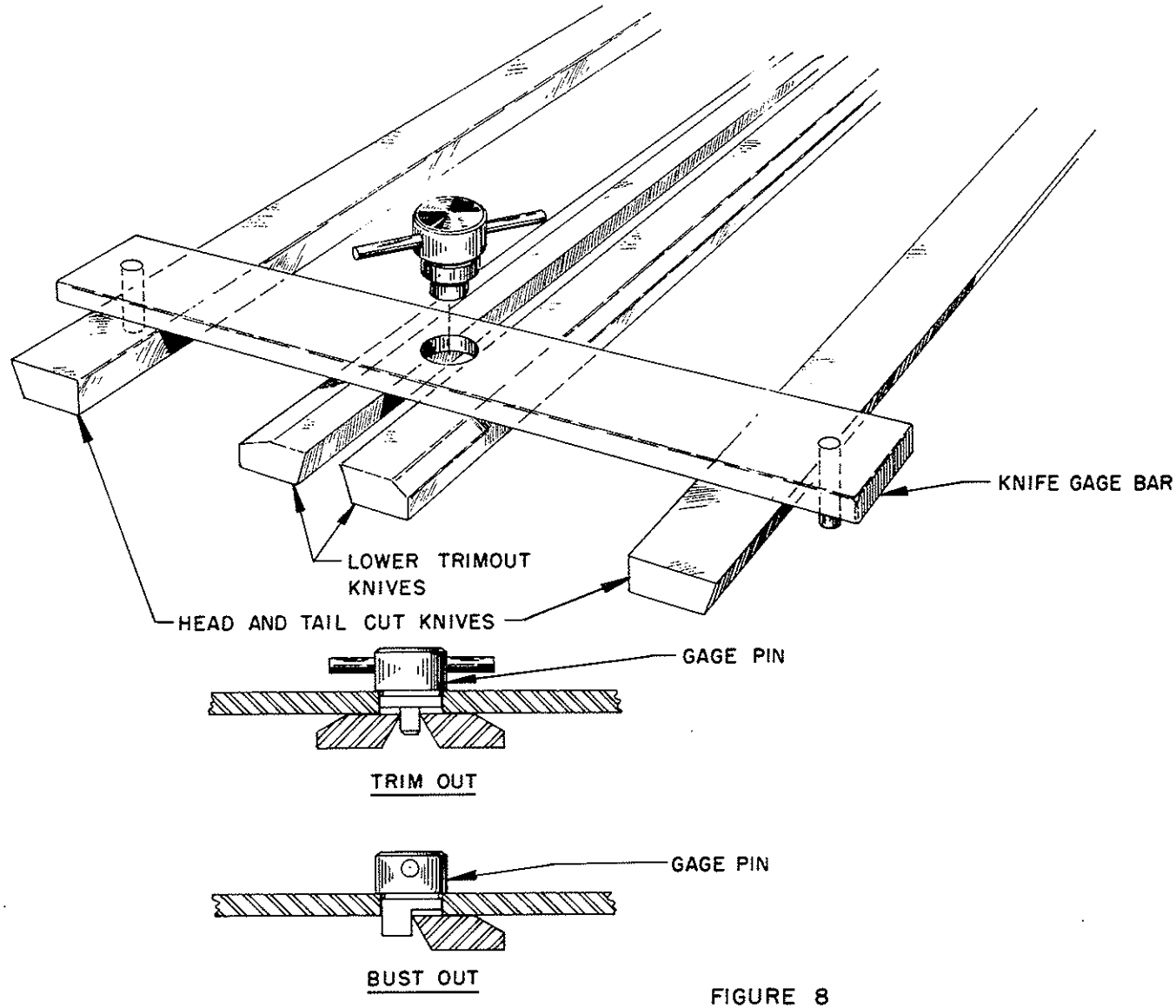
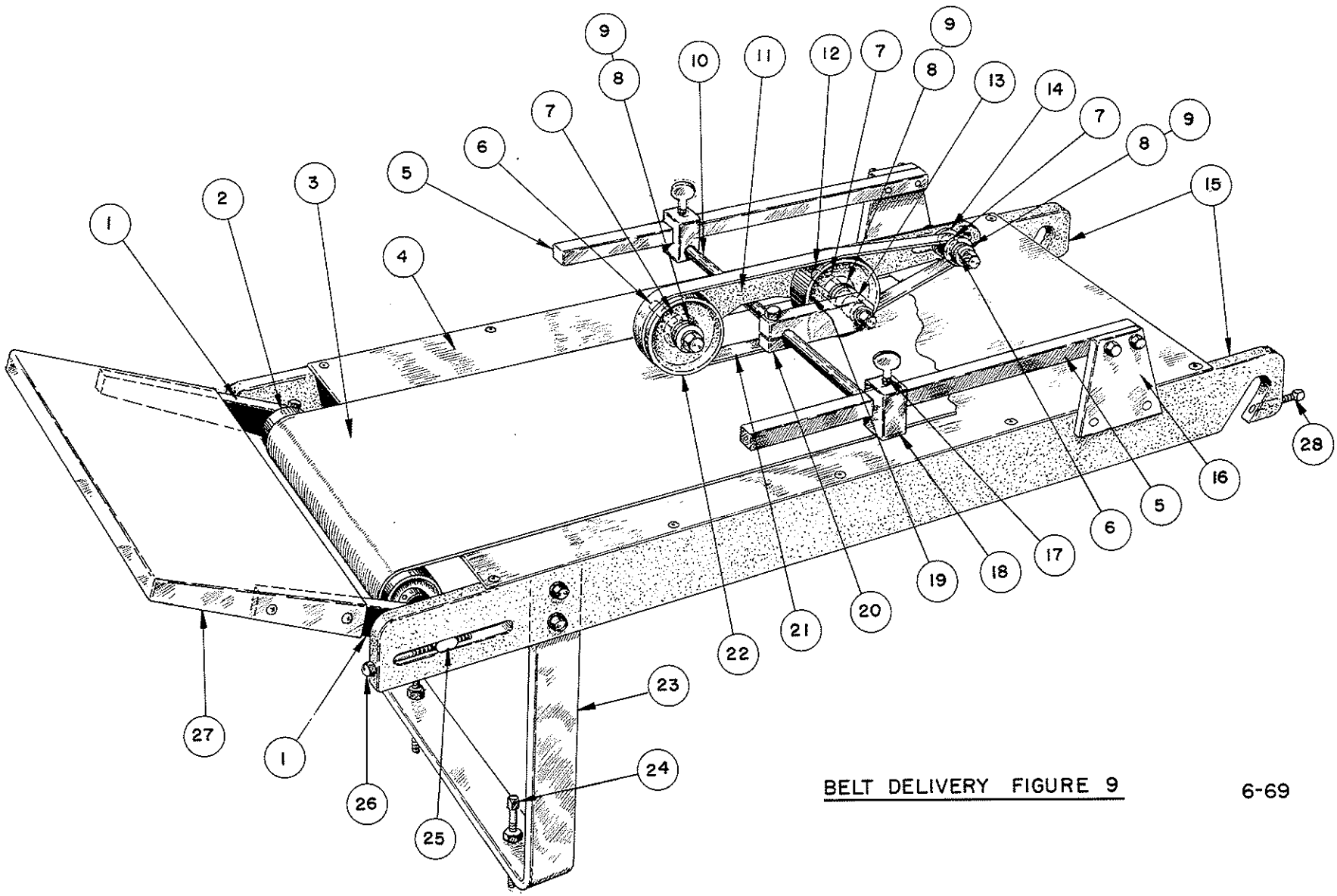

KNIFE GAGE BAR
LOWER TRIMOUT KNIVES
HEAD AND TAIL CUT KNIVES
GAGE PIN
TRIM OUT
GAGE PIN
BUST OUT

FIGURE 8

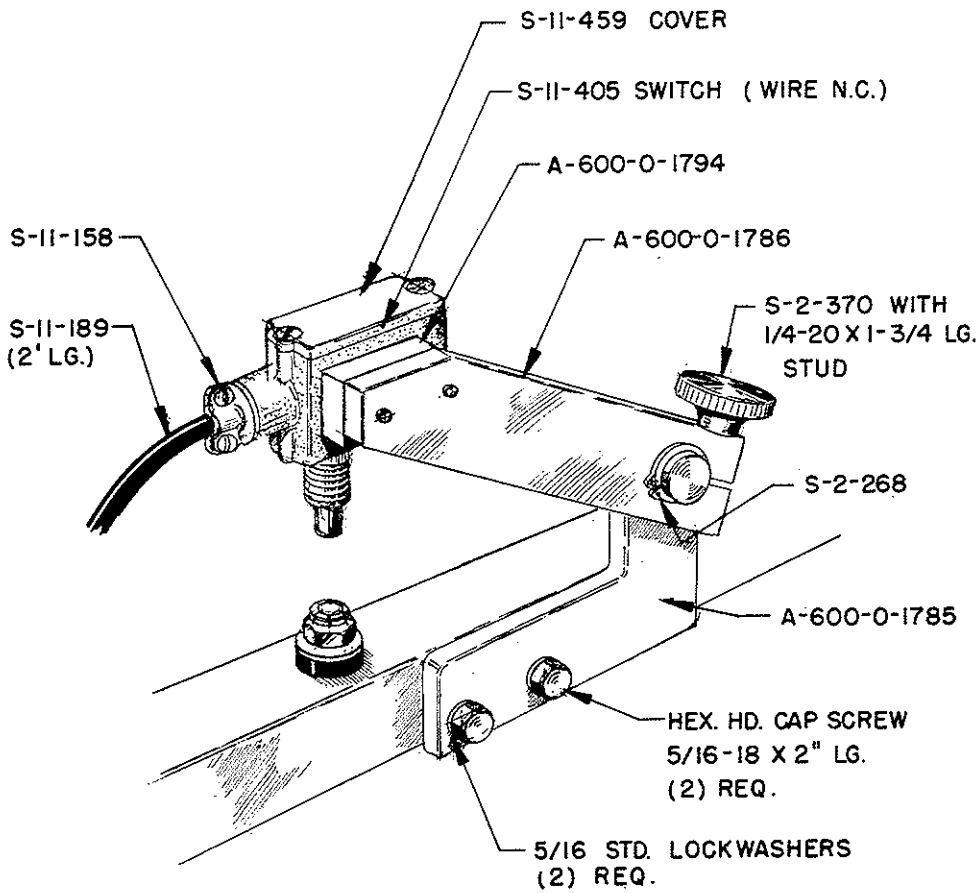
BELT DELIVERY
FIGURE 9

NO.	DESCRIPTION	PART NO.
1	TABLE SUPPORT	A-600-0-1619
2	3" CROWNED PULLEY	S-12-252
3	2 PLY COTTON BELT	S-12-250
4	BELT TRAY	B-600-0-1087
5	ROLLER SUPPORT BAR	A-600-0-1084
6	ROLLER SHAFT	A-244-0-1423
7	NEEDLE BEARING (2)REQ.	S-7-420
8	THRUST RACE	S-7-424
9	THRUST BEARING	S-7-385
10	SHAFT- HOLD DOWN	A-600-0-1816
11	ROLLER FRAME	B-244-0-1420
12	ROLLER SHAFT	A-244-0-1424
13	NEEDLE BEARING	S-7-419
14	FRONT ROLLER	A-244-0-1422
15	CONVEYOR FRAME	B-600-0-1235
16	ROLLER SUPT. BRACKET	A-600-0-1598
17	THUMB SCREW	S-1-799
18	BLOCK-HOLD DOWN SLIDE	A-600-0-1815
19	HOLD DOWN ROLLER	A-244-0-1426
20	ROLLER ARM	A-244-0-1421
21	CLOTH TAPE	S-12-551
22	DRIVING ROLLER	B-244-0-1425
23	LEG-CONVEYOR BELT	A-600-0-1599
24	HEIGHT ADJ. SCR. ½-13 x 5"	S-1-711
25	BELT TAKE-UP SHAFT	A-600-0-1081
26	BELT TAKE-UP SCREW	A-600-0-1090
27	TABLE	B-600-0-1083
28	SQ. HD. SET SCREW	S-1-594

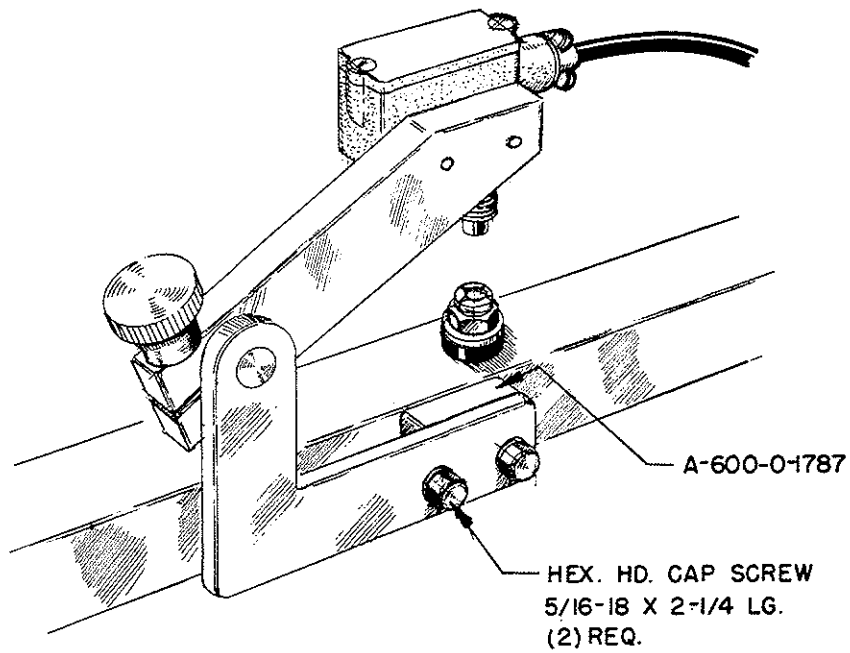


BELT DELIVERY FIGURE 9

FOR BOTH MODELS:
ADJUST SWITCH TO JUST CLEAR END OF CLAMP STUD WHEN BOOK IS UNDER CLAMP. TWO BOOKS WILL CLICK SWITCH TO STOP MACHINE

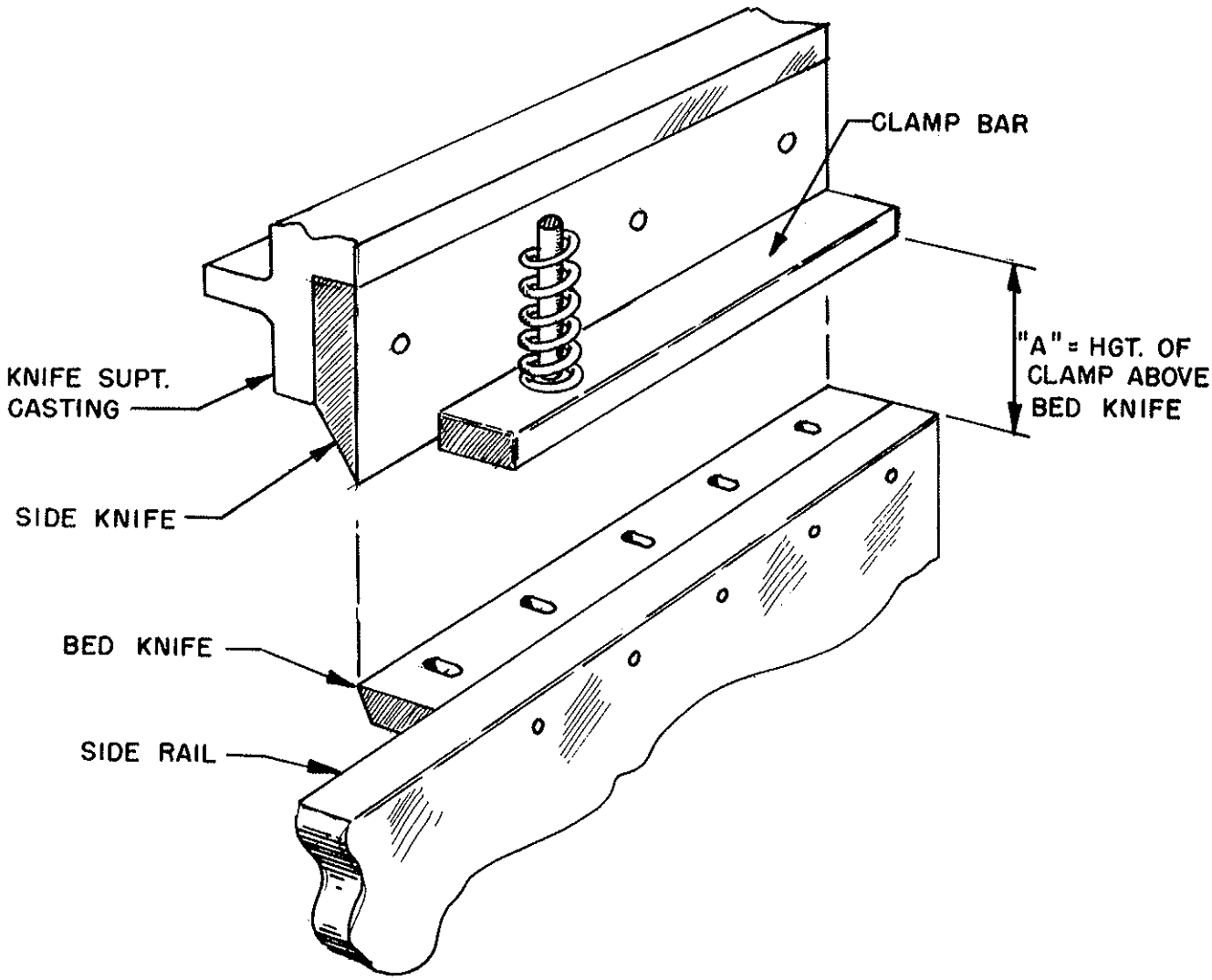


MODEL 631



MODEL 632

FIGURE 10



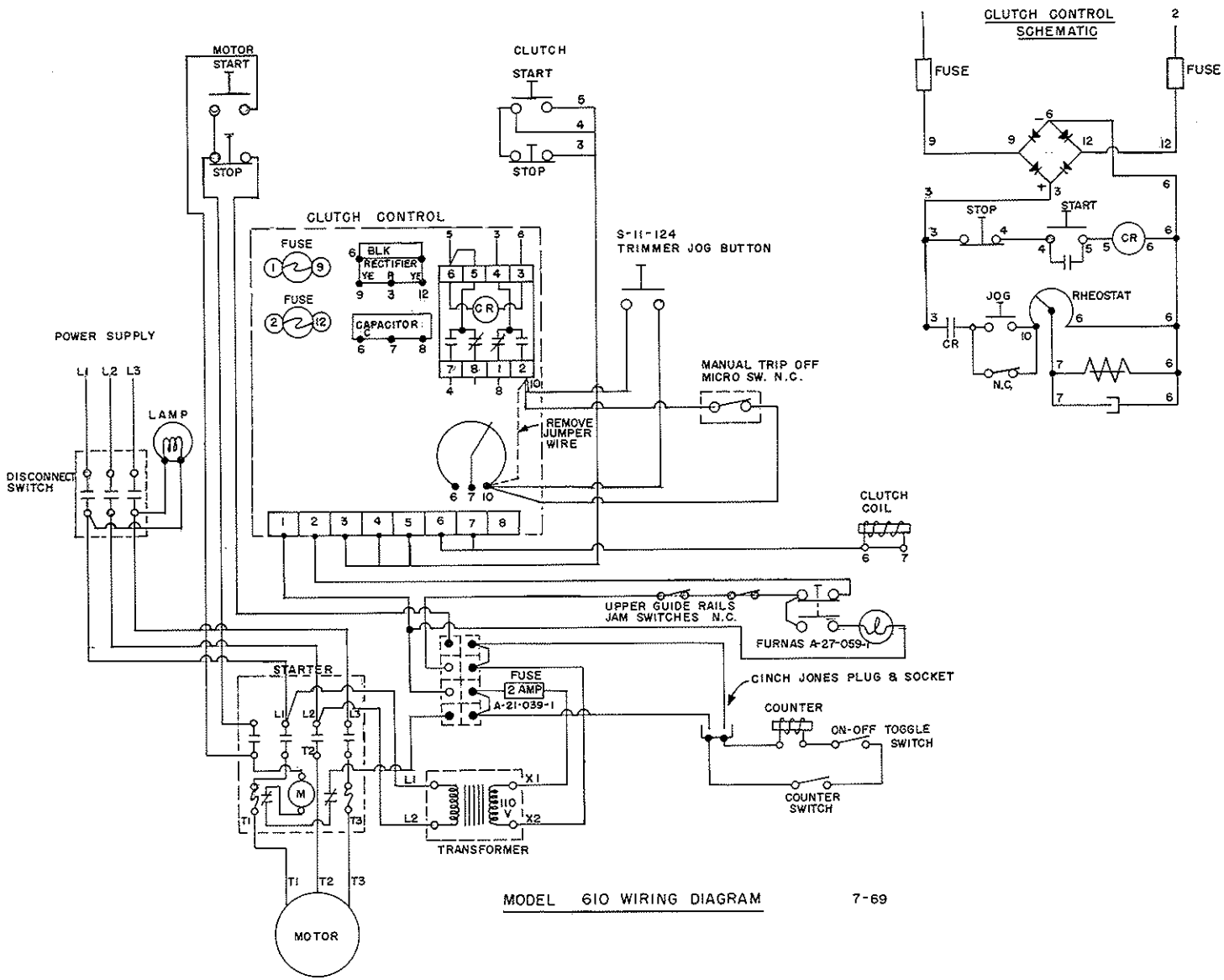
OPERATING SEQUENCE OF SINGLE BOOK TRIMMER

	DIM. "A"	FUNCTION
1.	2-17/32" TDC	a) Knife is at top of stroke b) Intermittent and continuous chain fingers parallel to each other transferring book to intermittent chain c) Stop finger starts up
2.	1-7/8" Downstroke	a) Stop finger up
3.	21/32" * Downstroke	a) Intermittent chain stops
4.	0"	a) Stop finger starts down
5.	21/32" * Upstroke	a) Intermittent chain starts

*Should be as equal as practical

Note: The "A" dimension was obtained by measuring machine #631-395.

FIGURE 12



MODEL 610 WIRING DIAGRAM 7-69

MACEY BATCH COUNTER
MODEL 634-A
FIELD INSTALLATION

The Macey Batch Counter is designed for use with Macey Single Book Trimmers, Model 601, 602, 610, 611, 631, and 632. The Counter can be set to count groups or sets of books in batches of from 5 to 80 in increments of one. The space between each batch is equal to 3 books or 3 machine cycles. The counter will repeat automatically to the number set on the counter dial.

The complete unit consists of three individual assemblies as shown in Fig. 1:

Detail 1 - Is the stop unit assembly. This unit is supported by a round bar. This assembly may be moved longitudinally on the bar to change the configuration of the batch separation. The operation of the solenoid is controlled by cycle counter.

Shoulder Screw	S-2-126
Solenoid	S11-430
Gate Pivot Lever	A-600-0-141
Connecting Link	A-600-0-142
Mounting Block	B-600-0-1694
Gate Finger	A-600-0-1698
Guard	B-600-0-1699
Slide Rod	A-600-0-1718
Slide Rod Clamp	A-600-0-1719

Detail 2 - Is a quick disconnect plug to be used when replacing the counter assembly.

Quick Disconnect	Part Of Cyclo-Master

Detail 3 - Is the counter assembly and mounts on a bracket to the to the trimmer frame. The Red Pointer on the counter should be set to the number of books desired in each batch. The pointer can be moved at anytime without turning off the power by pushing the red reset button on the side of the counter.

Cyclo Master Counter	S-10-113

Detail 4 - Total Counter Switch S-11-241

Detail 5 - Plug Male S-11-213
Plug Female S-11-211

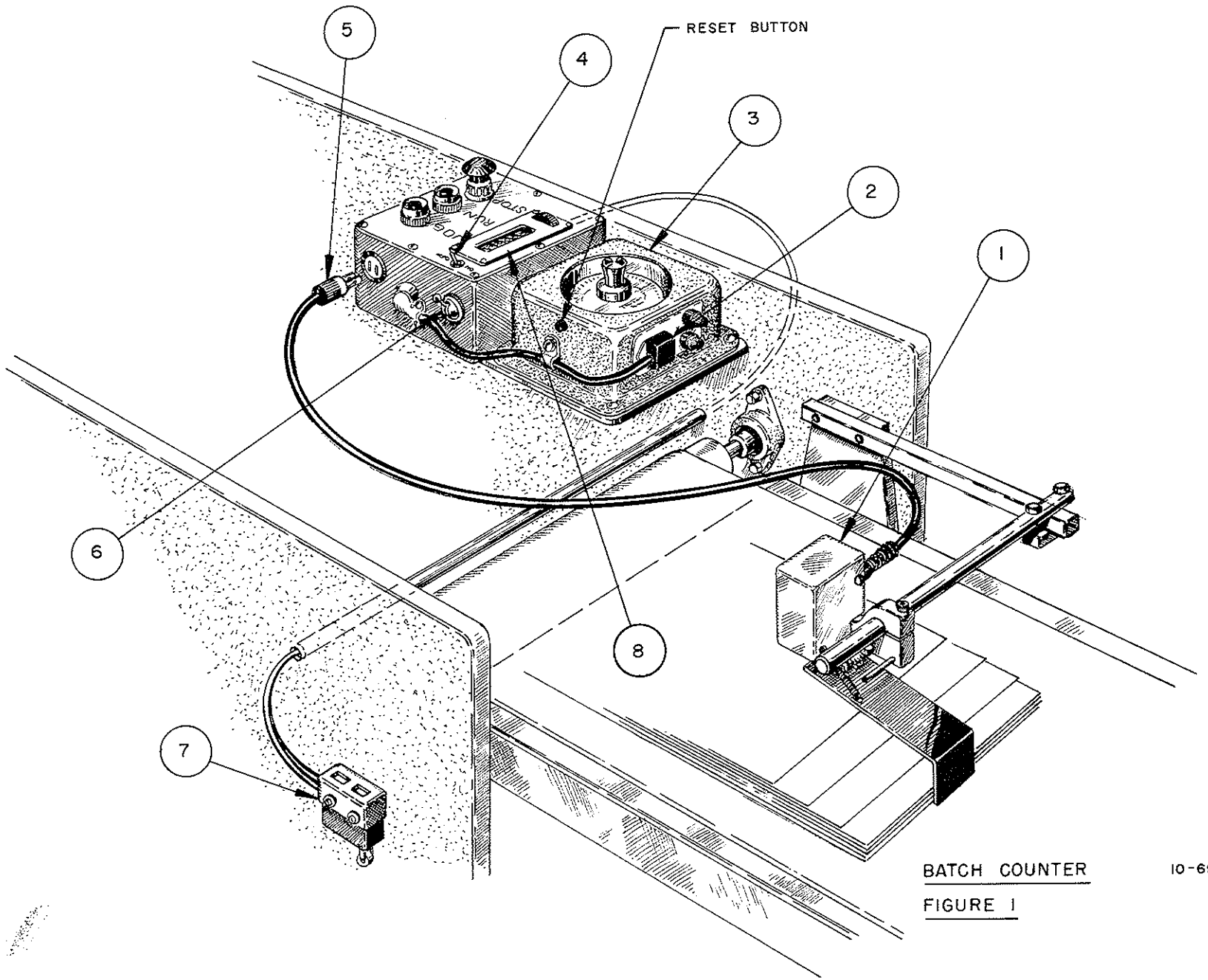
Detail 6 - Switch controls the operation of the cyclo-master and stop unit.

Cyclo Master Switch	S-11-241

Detail 7 - Switch actuates both total counter and cyclo-master counter.

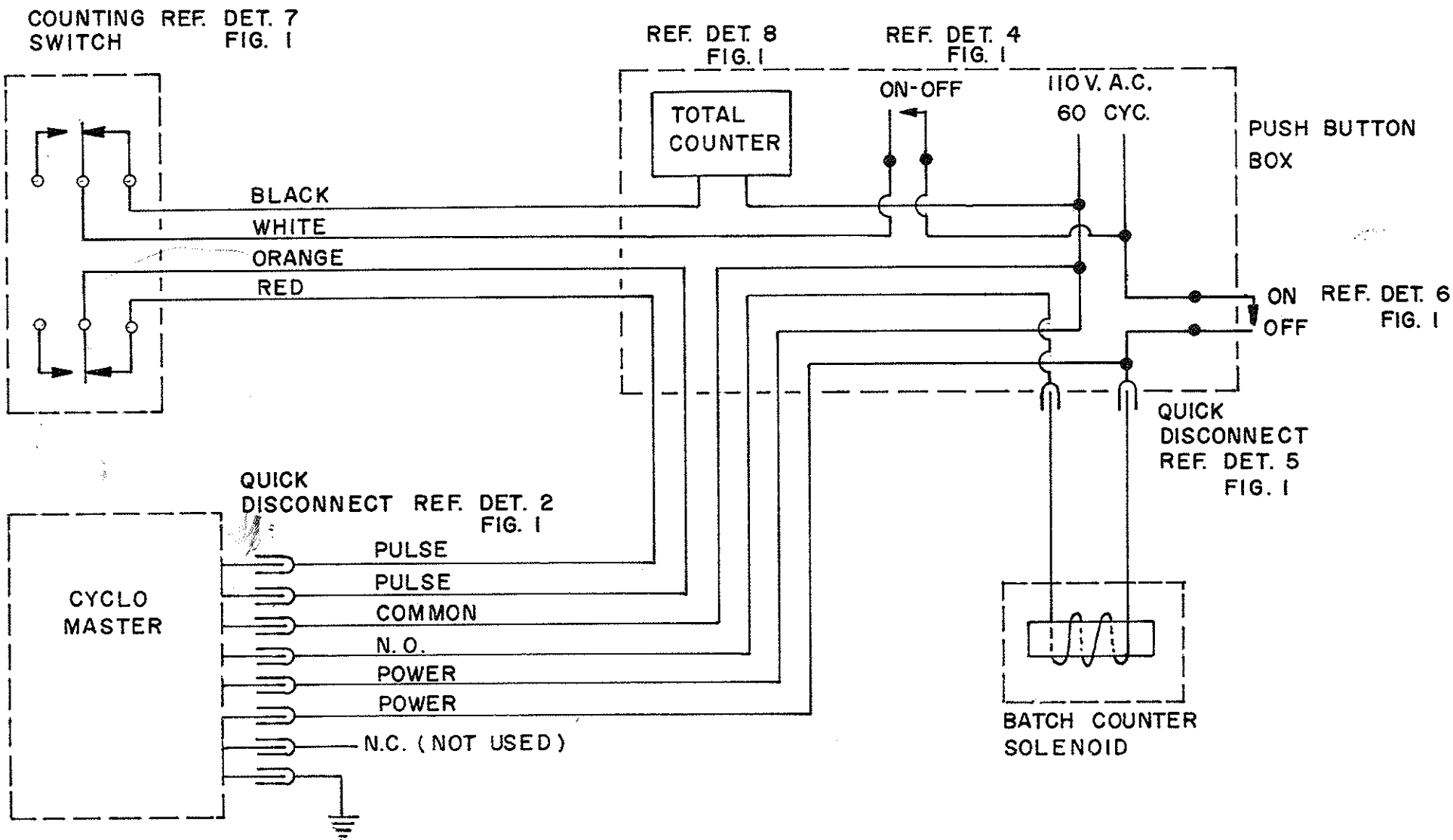
Counting Switch	S-11-453
Cover	S-11-459

Detail 8 - Total Counter S-10-110



BATCH COUNTER 10-69

FIGURE 1



BATCH COUNTER WIRING

FIGURE 2

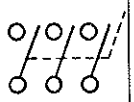
10-69

SYMBOLS FOR USE ON ELECTRICAL DIAGRAMS

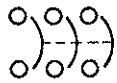
Addenda to J.I.C. Electrical Standards

SWITCHES

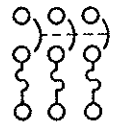
DISCONNECT



CIRCUIT INTERRUPTER

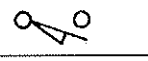


CIRCUIT BREAKER



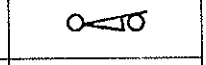
LIMIT

NORMALLY OPEN

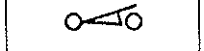


HELD CLOSED

NORMALLY CLOSED



HELD OPEN



LIQUID LEVEL

NORMALLY OPEN

NORMALLY CLOSED

VACUUM & PRESSURE

NORMALLY OPEN

NORMALLY CLOSED

TEMPERATURE ACTUATED

NORMALLY OPEN

NORMALLY CLOSED

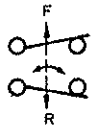
FLOW (AIR, WATER, ETC)

NORMALLY OPEN

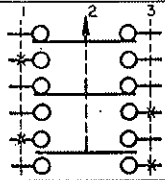
NORMALLY CLOSED

SPEED (PLUGGING)

ANTI-PLUG



SELECTOR



FOOT

NORMALLY CLOSED

NORMALLY OPEN

PUSH BUTTONS

SINGLE CIRCUIT

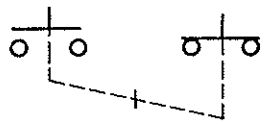
NORMALLY OPEN

NORMALLY CLOSED

DOUBLE CIRCUIT

MUSHROOM HEAD

MAINTAINED CONTACT



TIMER CONTACTS
CONTACT ACTION RETARDED WHEN COIL IS:

ENERGIZED

NORMALLY OPEN

NORMALLY CLOSED

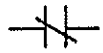
DE-ENERGIZED

NORMALLY OPEN

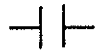
NORMALLY CLOSED

GENERAL CONTACTS
STARTERS , RELAYS , ETC

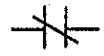
OVERLOAD THERMAL



NORMALLY OPEN

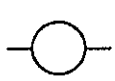


NORMALLY CLOSED



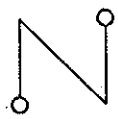
COILS

RELAYS, TIMERS , ETC

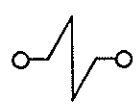


OVERLOAD THERMAL

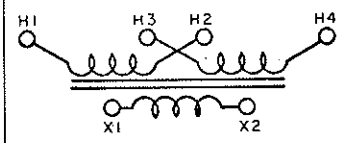
BLOWOUT



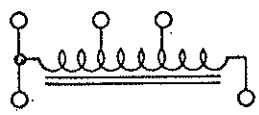
SOLENOID



CONTROL TRANSFORMER

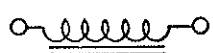


AUTO TRANSFORMER

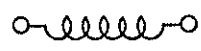


REACTORS

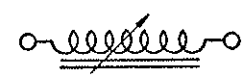
IRON CORE



AIR CORE



ADJUSTABLE

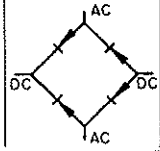


(SHOWN WITH IRON CORE)

RECTIFIERS

HALF WAVE

FULL WAVE



MOTORS

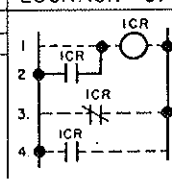
THREE PHASE

D.C. TYPES

FIELDS

ARMATURE

LOCATION OF RELAY CONTACTS



NUMBERS IN PARENTHESIS DESIGNATE THE LOCATION OF RELAY CONTACTS. A LINE UNDERNEATH A LOCATION NUMBER SIGNIFIES A NORMALLY CLOSED CONTACT.

SYMBOLS FOR USE ON ELECTRICAL DIAGRAMS

RESISTORS

FIXED	TAPPED	POTENTIOMETER OR RHEOSTAT
RES H HEATING ELEMENT		

DENOTE PURPOSE

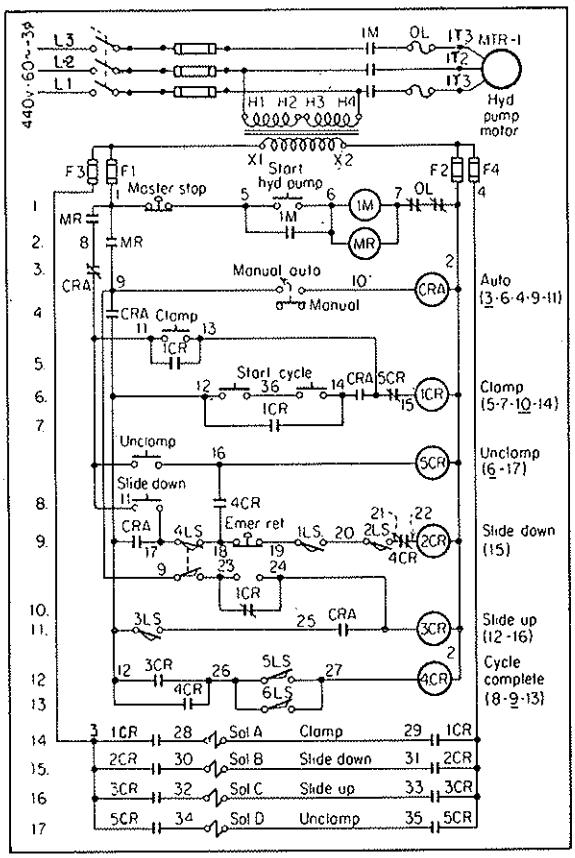
ELECTRONIC TUBES

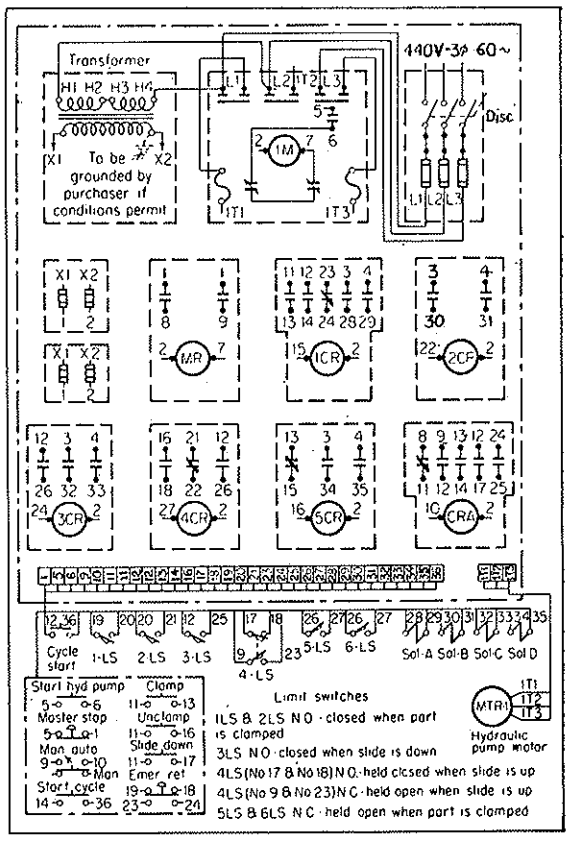
COLD CATHODE	DIODE	TRIODE	TETRODE	PENTODE	IGNITRON	PHOTO-CELL
VOLTAGE REG.					DOT IN ANY TUBE DENOTES GAS.	

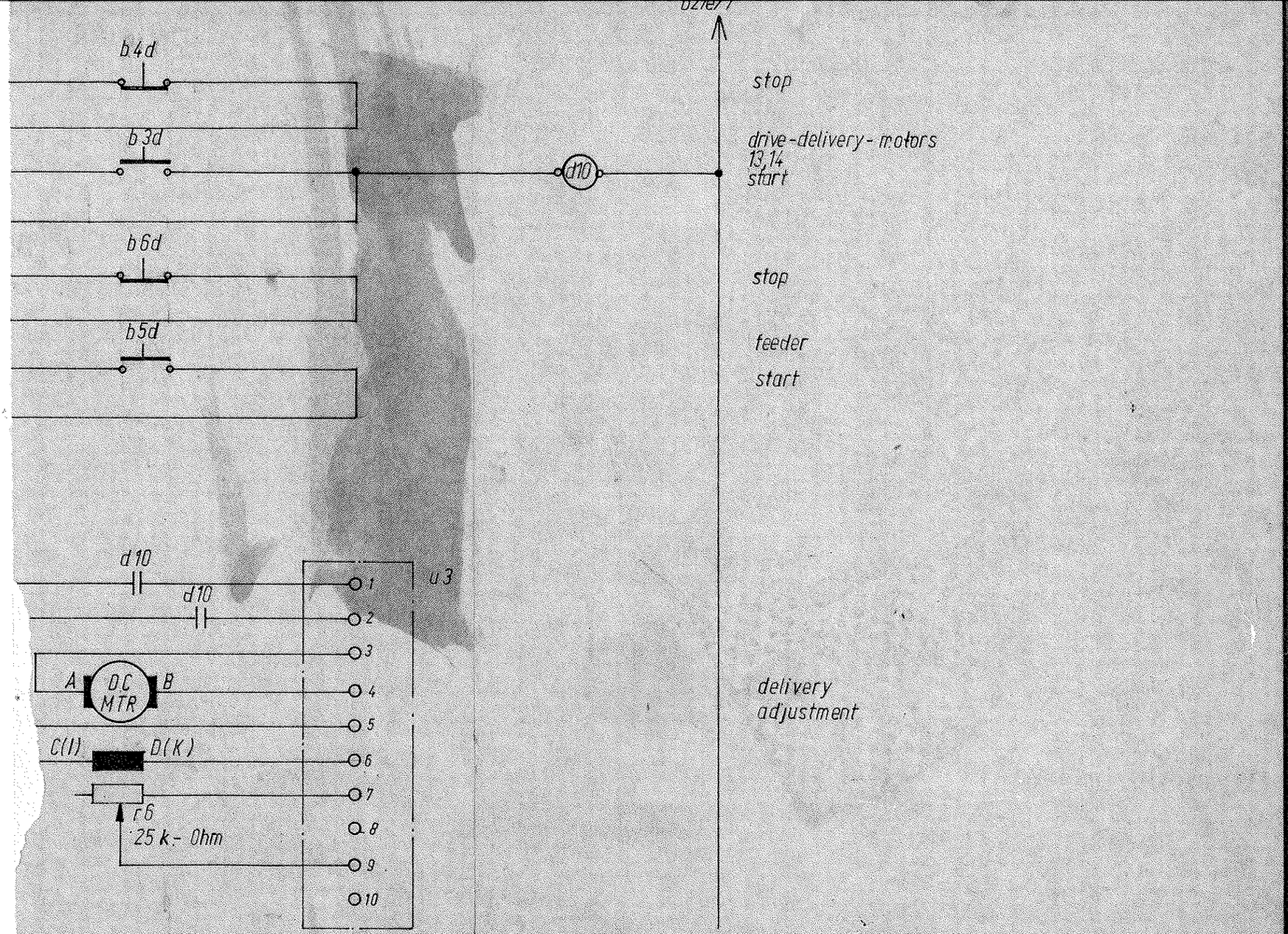
MISCELLANEOUS

FUSE (POWER OR CONTROL CIRCUIT)	HORN, SIREN, ETC	BELL OR BUZZER	PLUG AND RECEPTACLE	METER SHUNT	METER
					V M A M

THERMOCOUPLES	LAMPS	BATTERY	GROUND	CAPACITOR	
				FIXED	ADJUSTABLE
	R DENOTE COLOR BY LETTER				







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Alte Zeichn. Nr.	Datum	And. Nr.	A	B	C	D	E	F	Variantenausgabe		Bem.

saba	Gezeichnet	26.6.74		Urheberschutz nach DIN 34	Maßstab:	Ersatz für:
	Geprüft					
	Normgeprüft		Benennung		Zeichnungs - Nr.	Ausg.
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