35 TYPING REPERFORATOR (LPR)

LUBRICATION

CONTENTS PAGE

1. GENERAL 1

2. BASIC UNIT 2

Axial positioning mechanism 11, 12
Detent assemblies 12
Feed mechanism 5
Function box mechanism 10
Function cam-clutch trip mechanism 14
Jack shaft mechanism 16
Mainshaft mechanism 7
Perforator mechanism 4
Printing mechanism 13
Punch mechanism 5
Pushbars 8
Range finder mechanism 7
Ribbon carrier mechanism 15
Ribbon feed mechanism 3
Ribbon shift contact mechanism 12
Ribbon shift magnet 14
Rocker bail mechanism 13
Rotary positioning mechanism 6
Selecting mechanism 6
Tape depressor mechanism 16
Transfer mechanism 8
Typing reperforator (left front view) 2
Typing reperforator (right rear view) 9

3. VARIABLE FEATURES 17

Manual backspace mechanism 17
Power drive backspace mechanism (early design) 17
Power drive backspace mechanism (latest design) 18
Remote control noninterfering rub-out tape feed-out mechanism 19-23

1. GENERAL

1.01 This section is reissued to include additional lubrication procedures for the 35 typing reperforator. Since this is an extensive revision, marginal arrows ordinarily used to indicate changes have been omitted.

1.02 This section provides lubrication information for the 35 typing reperforator. General areas of the equipment are shown by photographs. Specific points to receive lubricant are indicated by line drawings and descriptive text. The symbols in the text indicate the following directions:

Symbol	Meaning
O1	Apply one drop of oil.
O2	Apply two drops of oil
O3	Apply three drops of oil, etc.
G	Apply thin coat of grease.
SAT	Saturate with oil. (Felt washers, etc.)

KS7470 oil and KS7471 grease should be used.

1.03 The equipment should be thoroughly lubricated, but over-lubrication which might allow oil to drop or grease to be thrown on other parts should be avoided. Special care should be exercised to prevent lubricant from getting between armatures and pole faces or between electrical contact points.

1.04 The following general instructions supplement the specific lubricating points illustrated on subsequent pages:

Apply one drop of oil to all spring hooks.

Apply a light film of oil to all cam surfaces.

Apply a thick coat of grease to all gears.

Saturate all felt washers, oilers, etc.

Apply oil to all pivot points.

Apply oil to all sliding surfaces.

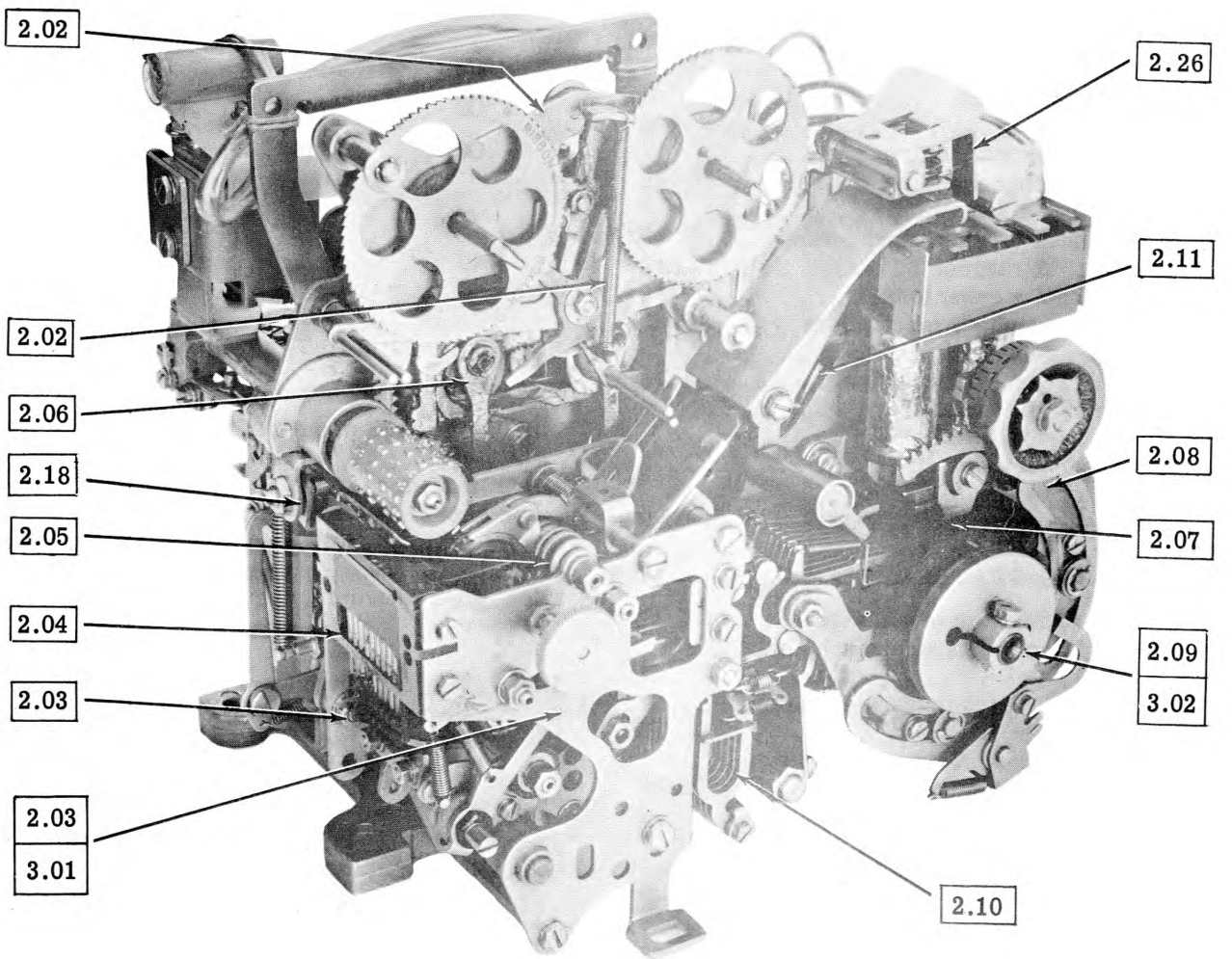
1.05 All equipment should be lubricated before being placed in service or prior to storage. After a few weeks of service, relubricate to make certain that all specified points have received lubricant. Thereafter, the following schedule should be adhered to:

Operating Speed	Lubrication Interval
60 W.P.M.	3000 hours or 1 year *
75 W.P.M.	2400 hours or 9 months *
100 W.P.M.	1500 hours or 6 months *

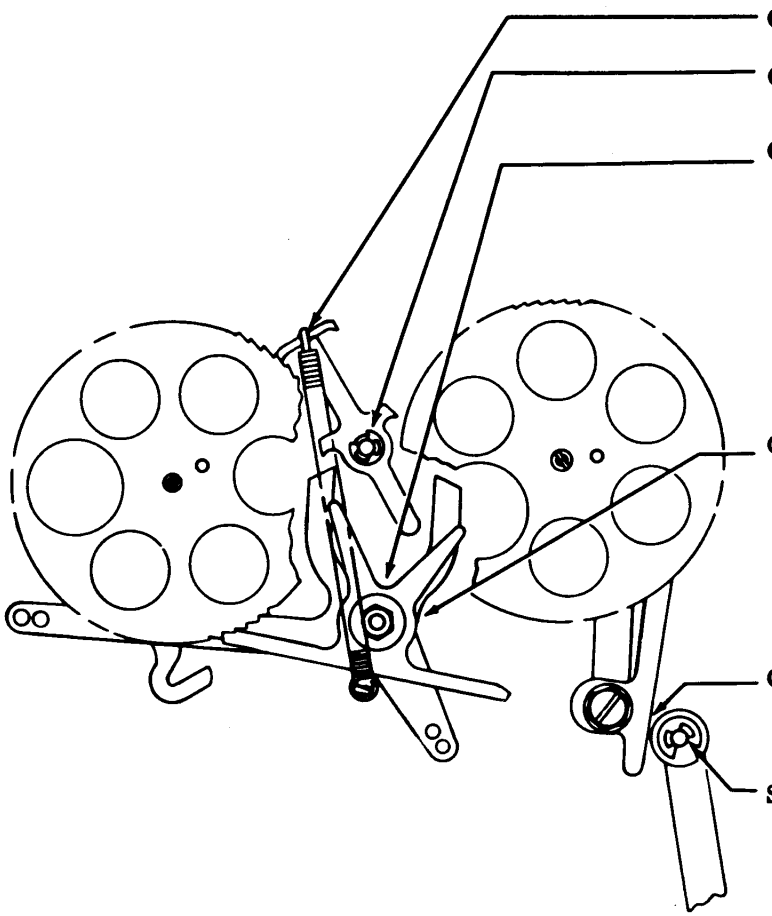
*Whichever occurs first.

2. BASIC UNIT

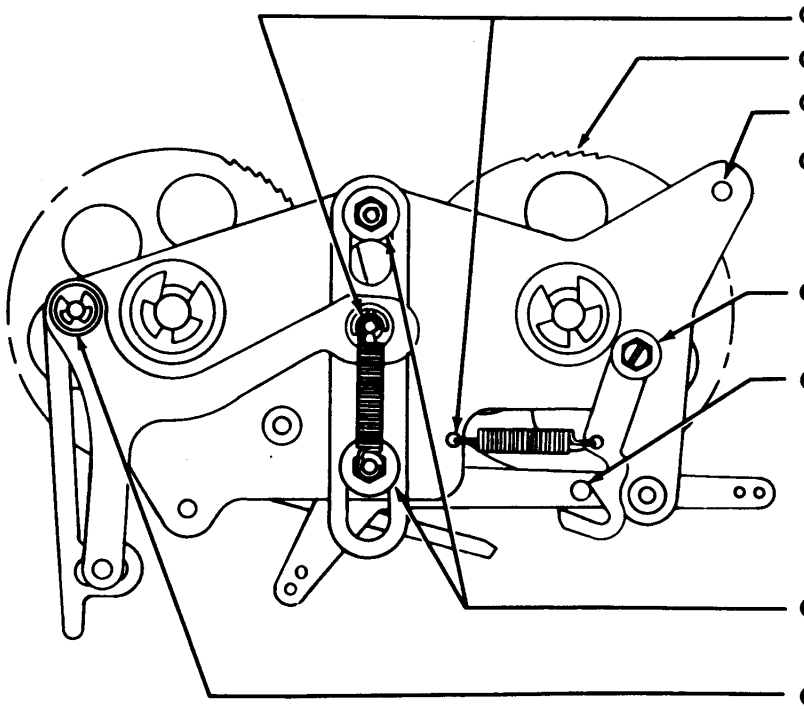
2.01 Typing Reperforator (Left Front View)



2.02 Ribbon Feed Mechanism

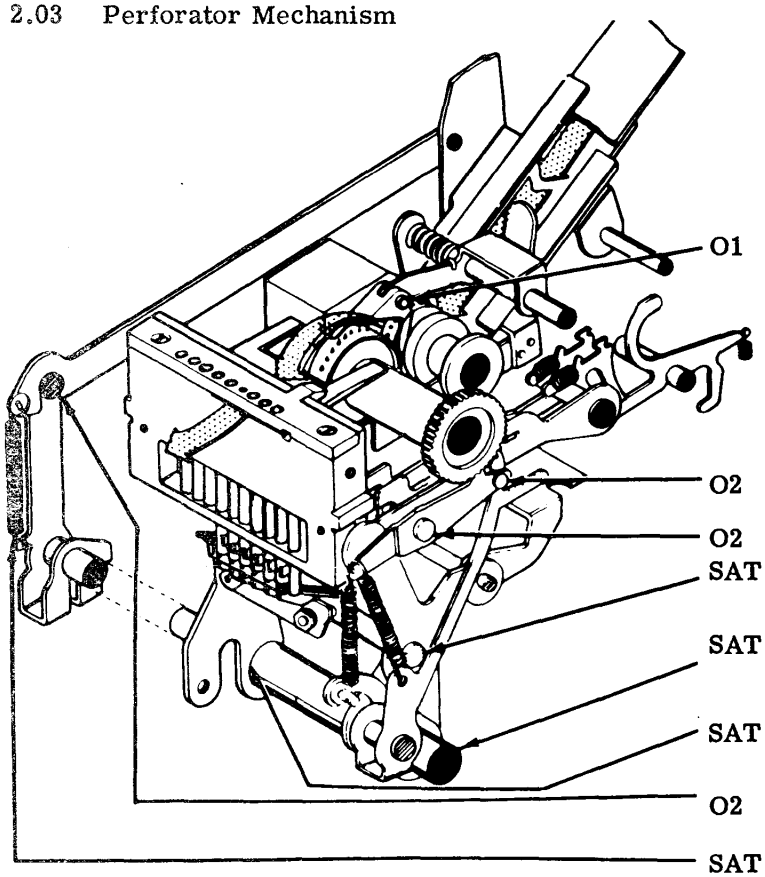


O1	Hooks (2)	Spring
O2	Pivot Point	Feed Pawl
O2	Pivot	Check Pawl
O2	Pivot Points (2)	Reversing Arm
G	Contacting Surface	Drive Arm Adjustable Extension
SAT	Felt Washer	Drive Arm Roller

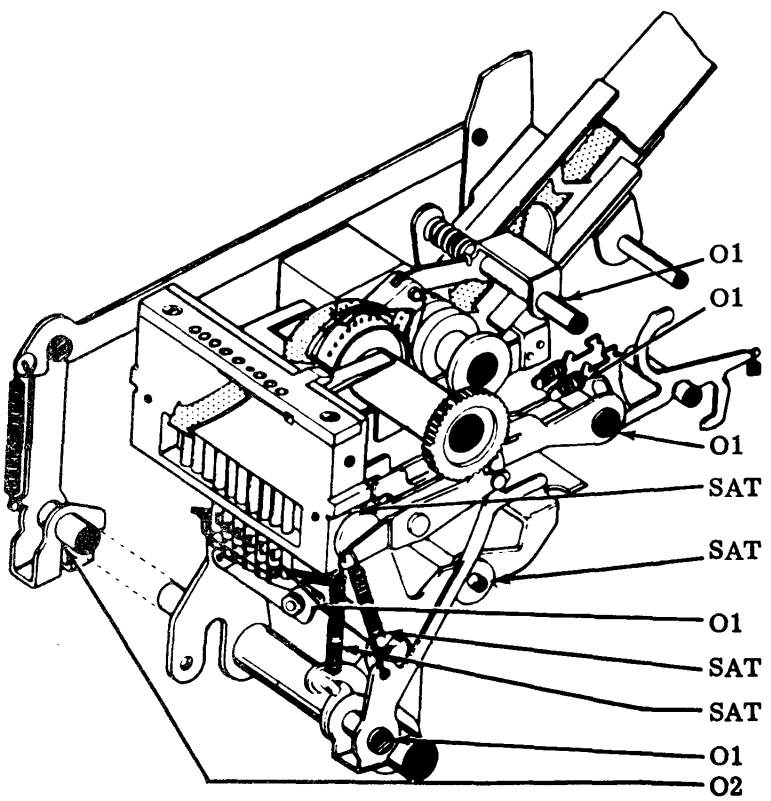


O1	Hooks (2)	Springs (2)
G	Teeth	Ratchet Wheel (2)
O2	Shaft	Rollers (2)
O2	Shaft, Felt Washers	Ratchet Wheel (2)
O2	Pivot	Detent
G	Contacting Surfaces	Detent
O2	Upper and Lower Bushing	Slide Lever
O2	Pivot	Drive Arm

2.03 Perforator Mechanism

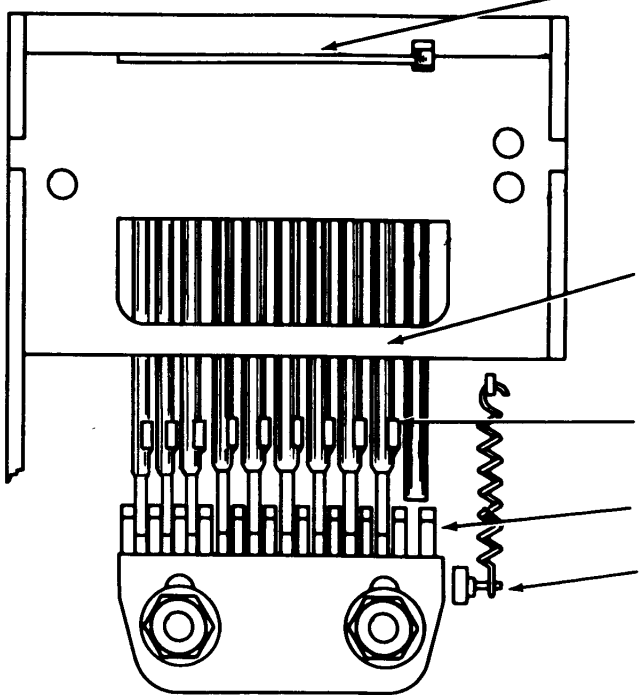


O1	Pivot Point	Tape Shoe
O2	Roller	Detent Lever
O2	Pivot Point	Detent Lever
SAT	Pivot Points (4) (Felt Washers)	Front and Rear Toggle Link
SAT	Pivot Points (2) (Felt Washers)	Toggle Bail
SAT	Pivot Points (2) (Felt Washers)	Toggle Bail
O2	Pivot Points (2)	Punch Drive Link
SAT	Felt Wick	Drive Link Spring



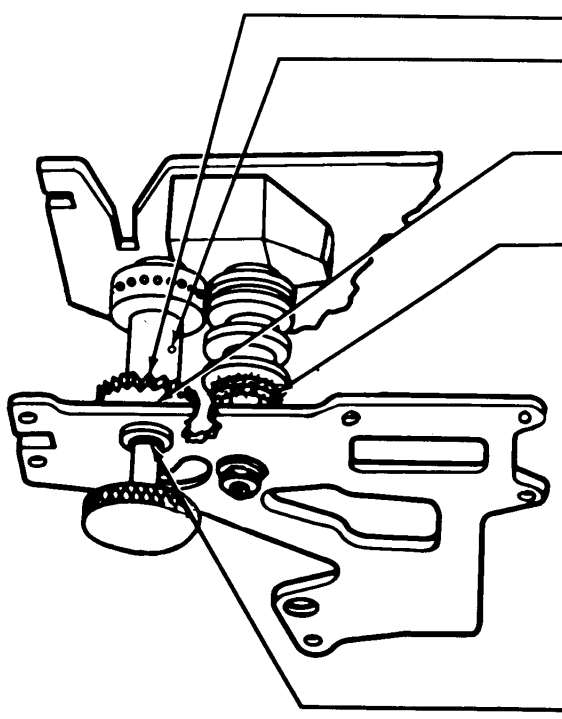
O1	Pivot Points (2)	Tape Shoe Arm
O1	Hooks - Each End	Springs
O1	Pivot Points (9)	Punch Slides
SAT	Felt Strip	Oscillating Slide Post
SAT	Pivot Points (2) (Felt Washers)	Reset Bail
O1	Contact Surfaces (9)	Punch Slides
SAT	Felt Wick	Feed Pawl Spring
SAT	Felt Wick	Detent Spring
O1	Pivot Points (2)	Feed Pawl
O2	Pivot Points (2)	Rocker Arm

2.04 Punch Mechanism



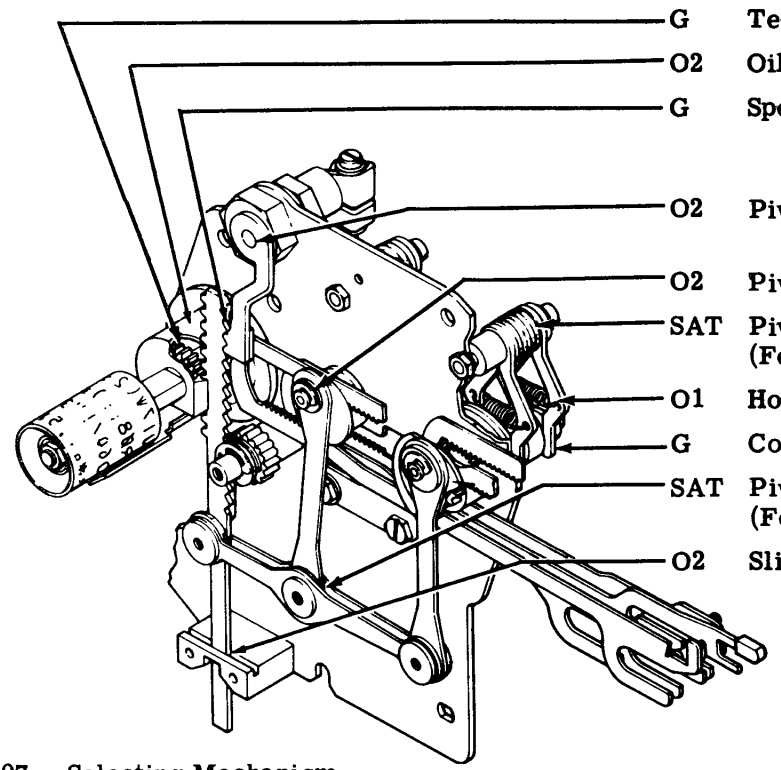
O1	Sliding Surface (9) (Upper Guide)	Punch Pin
O1	Sliding Surface (9) (Lower Guide)	Punch Pin
O1	Sliding Surface (9)	Punch Pin
O1	Sliding Surface (9)	Punch Slide Guide
O1	Hooks - Each End	Spring

2.05 Feed Mechanism



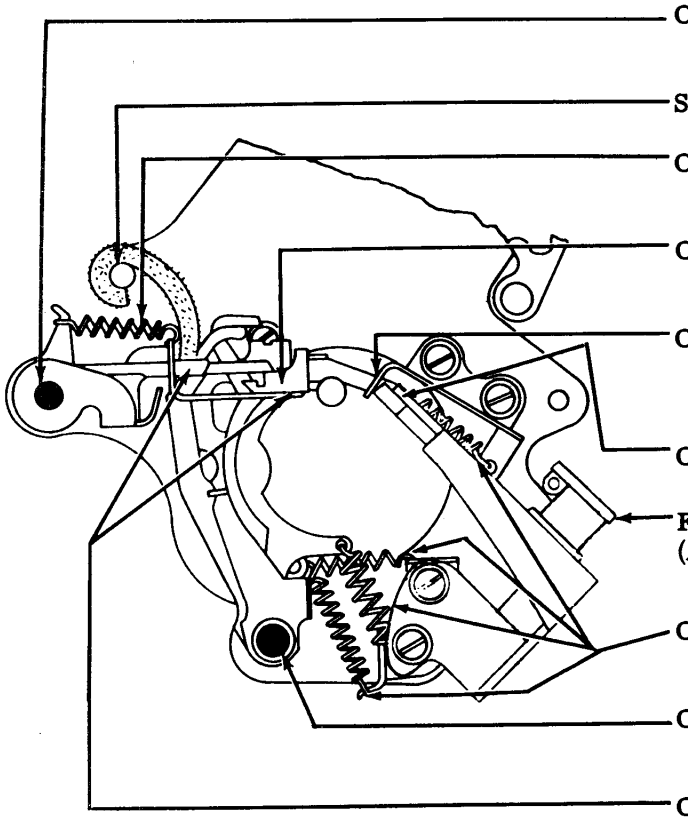
G	Ratchet Teeth (2)	Feed Wheel
O1	Oil Hole	Feed Wheel
SAT	Pivot Point (Felt Washer)	Feed Wheel
SAT	Pivot Point (Felt Washer)	Die Wheel
O2	Pivot Points (2)	Handwheel Bearing

2.06 Rotary Positioning Mechanism



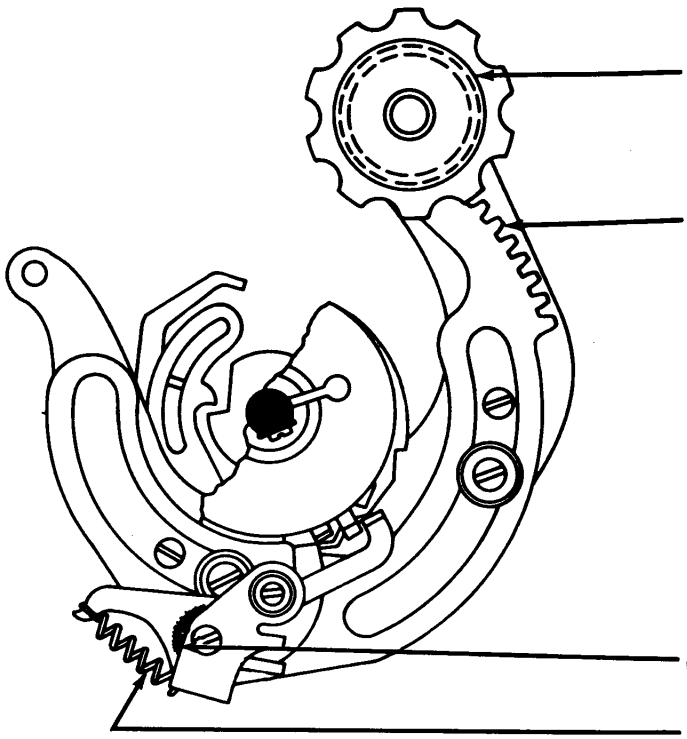
G	Teeth	Rotary Output Rack
O2	Oil Hole	Type Wheel Housing
G	Special Teeth	Rotary Output Rack Rotary Correcting Lever
O2	Pivot Point	Rotary Correcting Lever Shaft
O2	Pivot Points (2)	Connecting Rods
SAT	Pivot Points (Felt Washers)	Detent Levers (8)
O1	Hooks - Each End	Springs (4)
G	Contact Points	Detent Levers (8)
SAT	Pivot Points (3) (Felt Washers)	Cross Links
O2	Sliding Surface	Rotary Output Rack

2.07 Selecting Mechanism



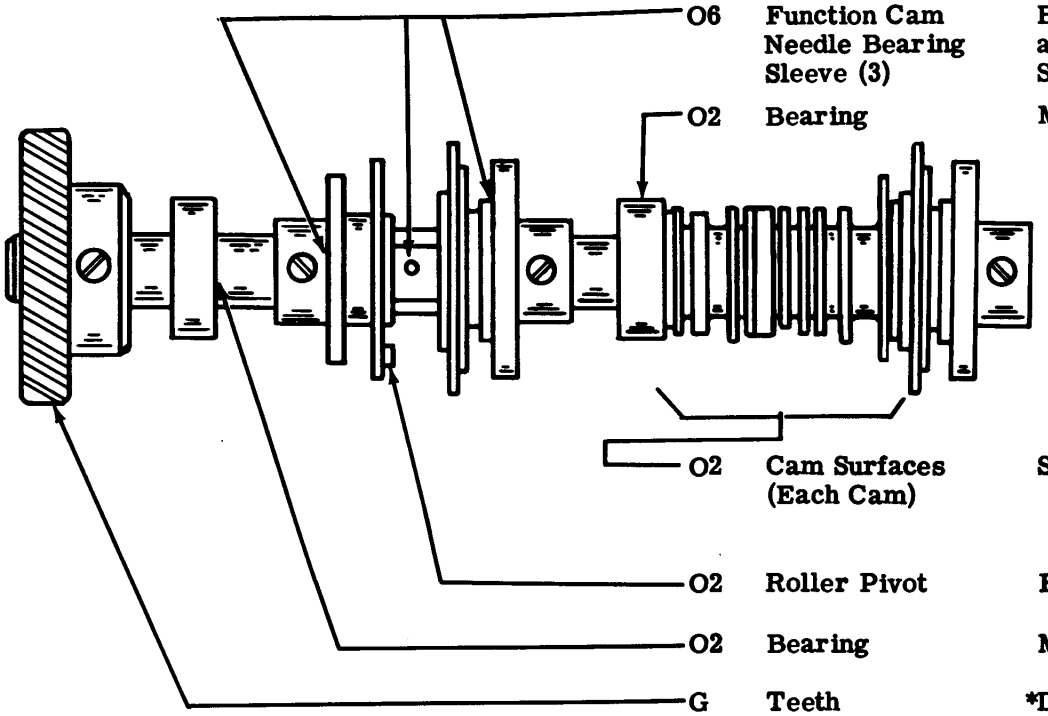
O2	Bearing Guide Slots (8)	Pushlever Guide
SAT	Felt Wick	Selector Wick
O1	Hooks - Each End (8)	Springs
O2	Engaging Surfaces (8)	Pushlevers
O2	Guide Slot	Marking Locklever
O2	Wick	Lubricator Wick
Fill Up (Avoid Airlock)		Lubricator Reservoir
O1	Hooks - Each End (12)	Springs
O2	Bearing Guide Slots (12)	Selector Lever Guide
O2	Guide Slots	Selector and Pushlever Guide

2.08 Range Finder Mechanism



G	Teeth	Knob
G	Teeth	Rack
SAT	Felt Washers (2)	Clutch Stop Arm
O1	Hooks - Each End	Spring

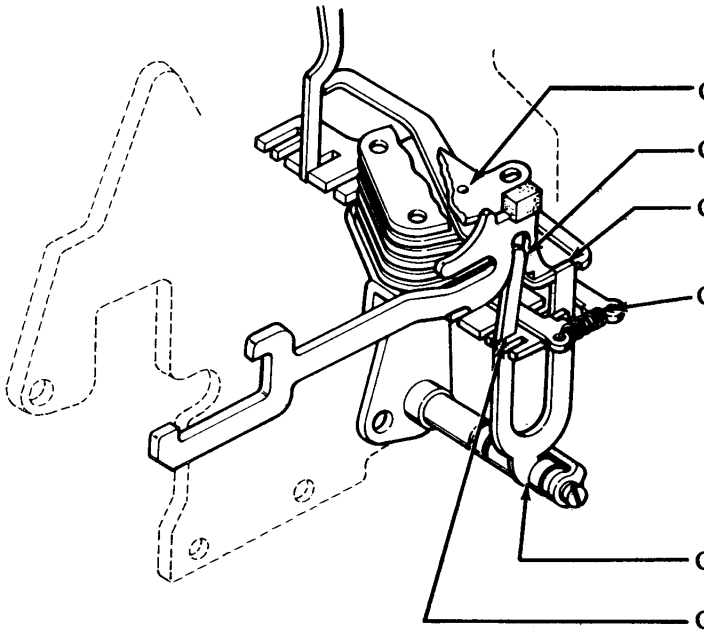
2.09 Mainshaft Mechanism



O6	Function Cam Needle Bearing Sleeve (3)	Both Ends of Sleeve and Oil Hole in Sleeve
O2	Bearing	Mainshaft
O2	Cam Surfaces (Each Cam)	Selector Cam
O2	Roller Pivot	Function Cam
O2	Bearing	Mainshaft
G	Teeth	*Driven Gear

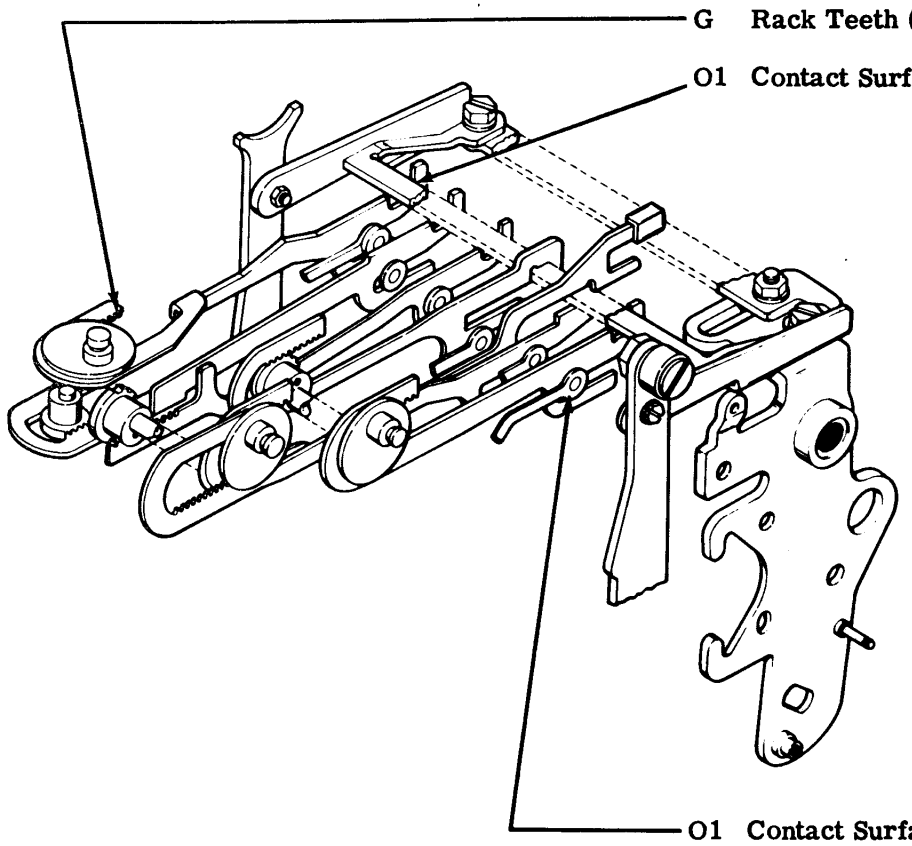
*Note: Do not lubricate when unit is equipped with a belt driven sprocket.

2.10 Transfer Mechanism



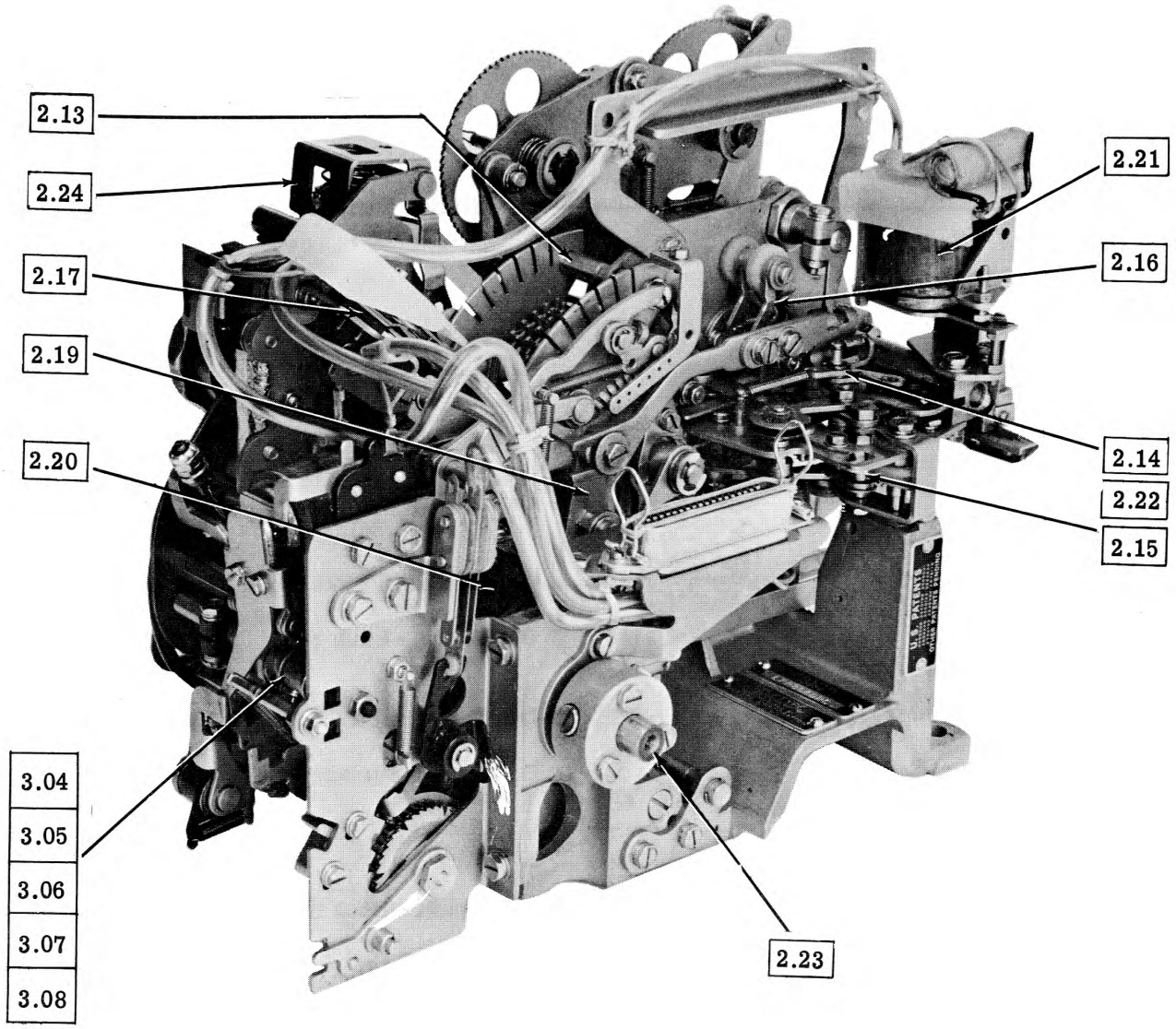
O1	Pivot Points (8)	Pulse Levers
O1	Contact Surfaces (8)	Transfer Levers
O1	Contact Points (8) (Each End)	Pulse Levers
O1	Hooks - Each End	Spring
O1	Pivot Points (8)	Transfer Levers
O1	Sliding Surfaces (8) (Each Side)	Guide Bracket

2.11 Pushbars

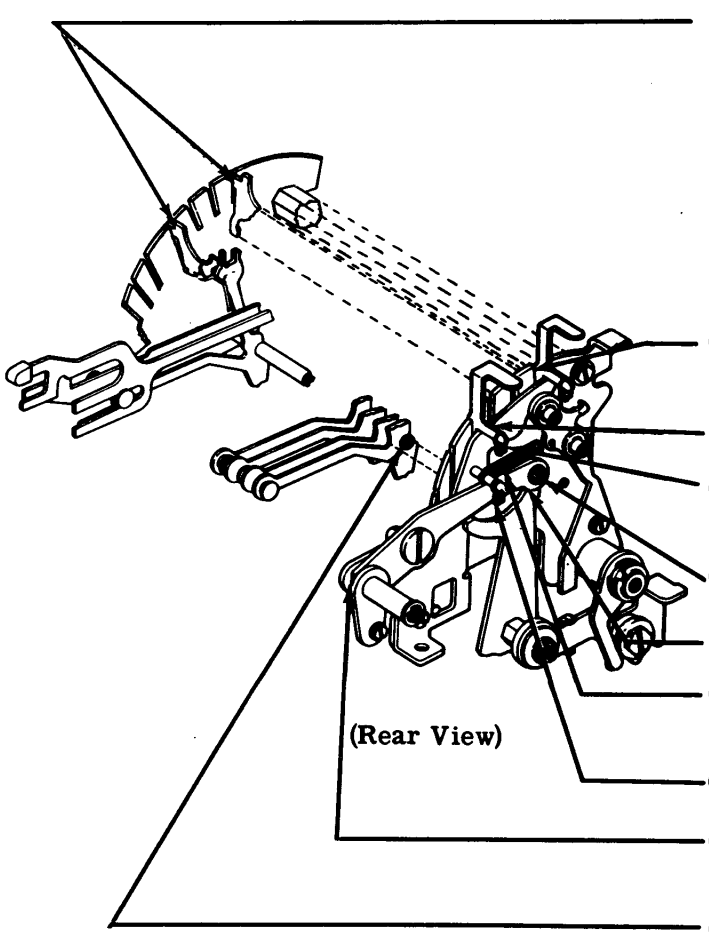


G	Rack Teeth (7)	Pushbars
O1	Contact Surfaces (7)	Pushbars
O1	Contact Surfaces (7)	Pushbars

2.12 Typing Reperforator (Right Rear View)

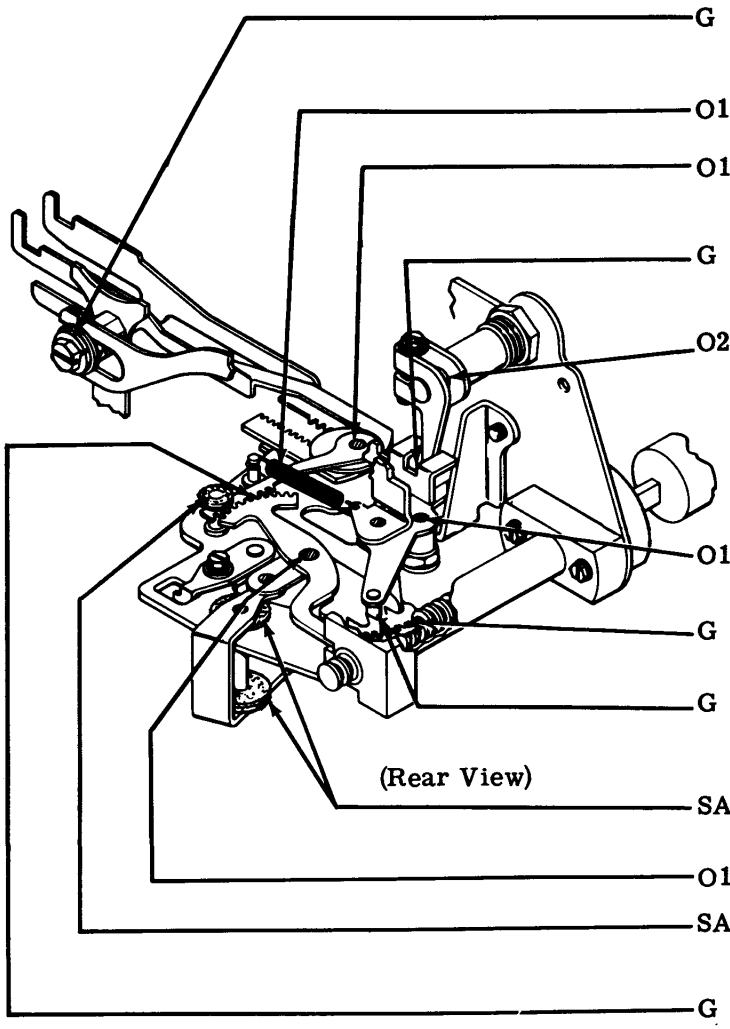


2.13 Function Box Mechanism



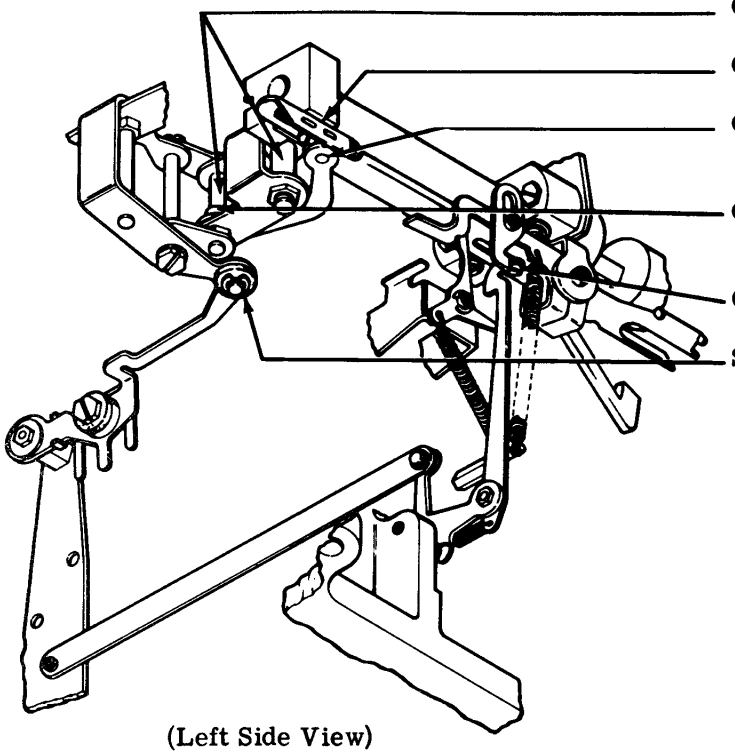
O1	Sliding Surfaces (Each Side)	Function Blades
O1	Sliding Surfaces (Each Side)	Function Blades
G	Contact Points (2)	Function Blades
O1	Hooks - Each End	Function Blade Springs (2)
O1	Pivot Point	Lifter Roller
G	Roller Surface	Lifter Roller
O1	Hooks - Each End	Lifter Toggle Link Spring
O1	Hooks - Each End	Lifter Spring
O1	Pivot Point	Function Blade Lifter
O1	Pivot Points (6)	Bellcranks

2.14 Axial Positioning Mechanism



G	Sliding Guide Surfaces	Correcting Drive Link
O1	Hooks - Each End	Spring
O1	Pivot Point	Axial Output Rack
G	Contact Points	Rotary Correcting Clamp
O2	Pivot Point	Rotary Correcting Lever Shaft
O1	Pivot Point	Axial Correcting Plate
G	Teeth	Axial Sector Type Wheel Shaft
G	Contact Surface	Axial Correcting Plate Roller
SAT	Pivot Points (Felt Washers)	Oscillating Drive Bail
O1	Pivot Point	Axial Sector
SAT	Pivot Point (Felt Washer)	Guide Roller
G	Teeth	Axial Sector Axial Output Rack

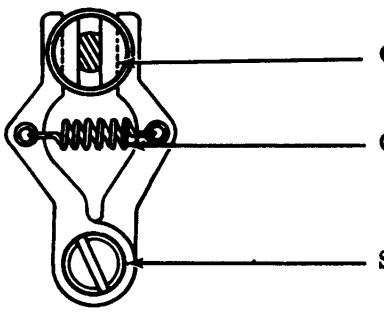
2.15 Axial Positioning Mechanism (continued)



(Left Side View)

O1	Pivot Point	Oscillating Bail
O1	Contact Surfaces	Ribbon Carrier
O1	Pivot Points	Ribbon Oscillating Lever
O1	Pivot Point (Felt Washer)	Ribbon Oscillating Lever
O1	Contact Surfaces	Ribbon Carrier
SAT	Pivot Points (2) (Felt Washers)	Oscillating Drive Link

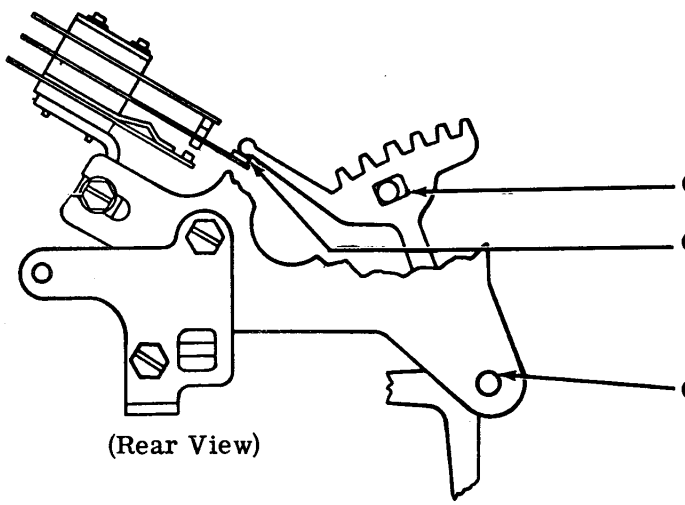
2.16 Detent Assemblies



(Bottom View)

O1	Detent Points	Detent Levers (4)
O1	Hooks - Each End	Detent Lever Springs (2)
SAT	Pivot Points (Felt Washers)	Detent Levers (4)

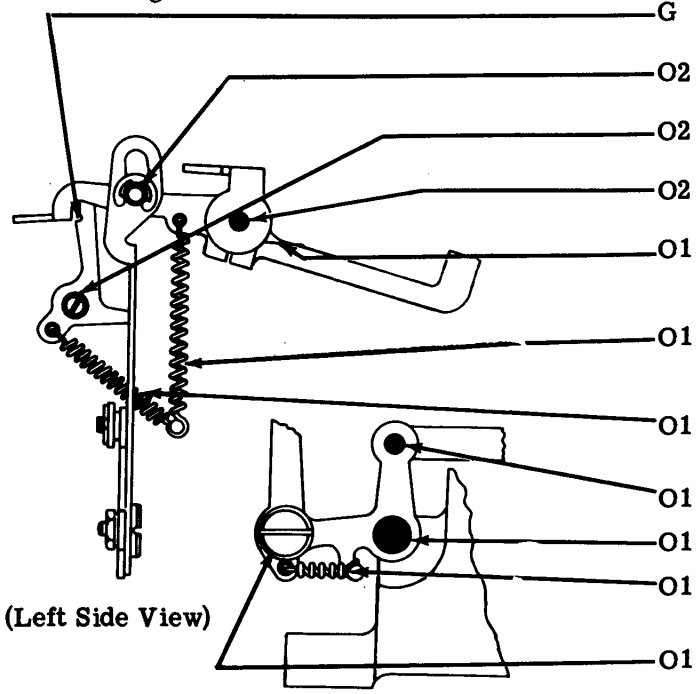
2.17 Ribbon Shift Contact Mechanism



(Rear View)

O1	Sliding Surface	Stop Post
G	Surfaces	Swinger and Bellcrank
O1	Pivot	Bellcrank

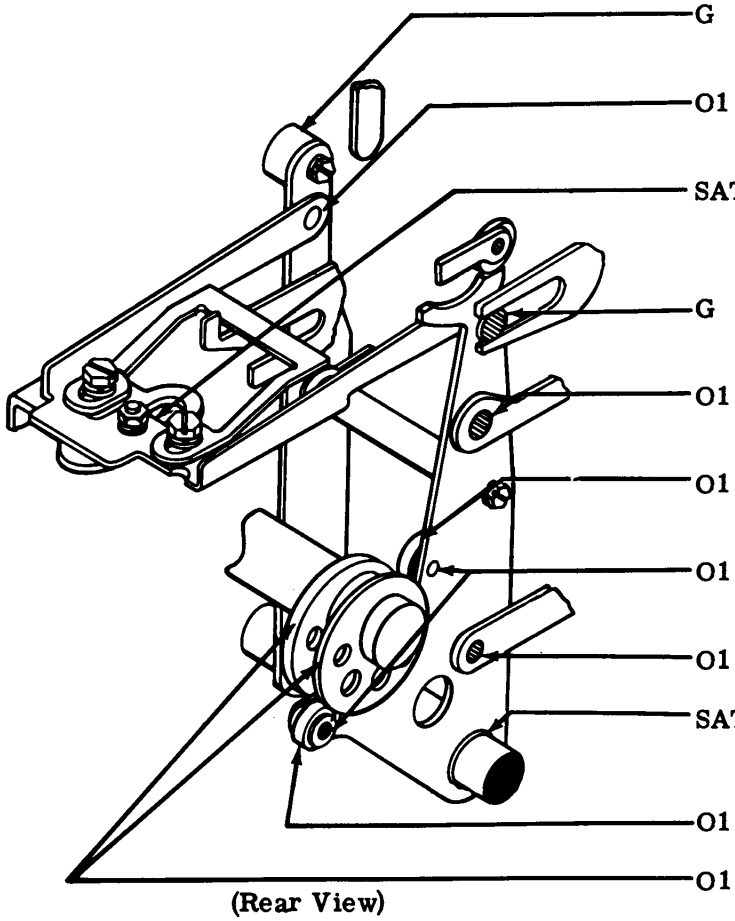
2.18 Printing Mechanism



(Left Side View)

G	Contact Surface	Printing Latch
O2	Sliding Surface	Printing Trip Link
O2	Pivot Point	Printing Latch
O2	Pivot Points	Print Hammer
O1	Hooks - Each End	Print Hammer Spring
O1	Hooks - Each End	Hammer Accelerator Spring
O1	Hooks - Each End	Printing Latch Spring
O1	Pivot Point	Printing Drive Link
O1	Pivot Point	Printing Pivot Arm
O1	Hooks - Each End	Printing Trip Link Spring
O1	Pivot Points (2)	Printing Pivot Arm

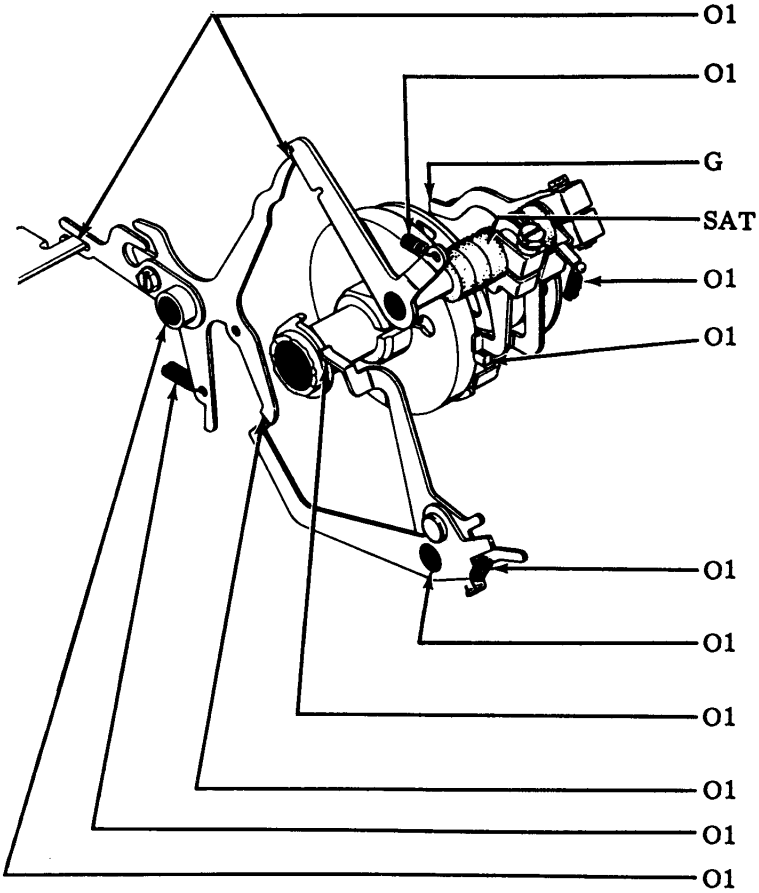
2.19 Rocker Bail Mechanism



(Rear View)

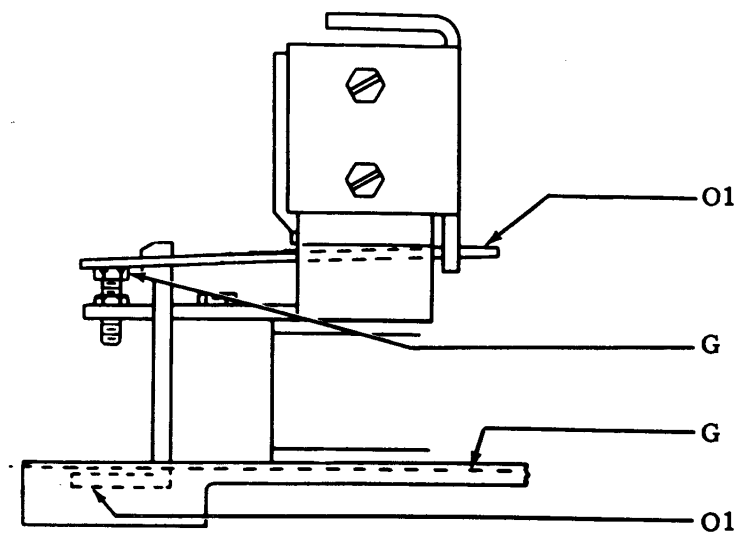
G	Contact Surface	Ribbon Feed Eccentric Stud
O1	Pivot Points	Pushbar Operating Blade
SAT	Sliding Surface (Felt Washer Under Blade)	Pushbar Operating Blade
G	Pivot Point	Correcting Drive Link
O1	Pivot Point	Oscillating Drive Link
O1	Roller Surface	Cam Follower Roller (Upper and Lower)
O1	Pivot Points	Cam Follower Rollers
O1	Pivot Point	Printing Drive Link
SAT	Pivot Point (Felt Strip)	Rocker Bail
O1	Roller Surface	Cam Follower Roller
O1	Contact Surface	Function Cam

2.20 Function Cam-Clutch Trip Mechanism



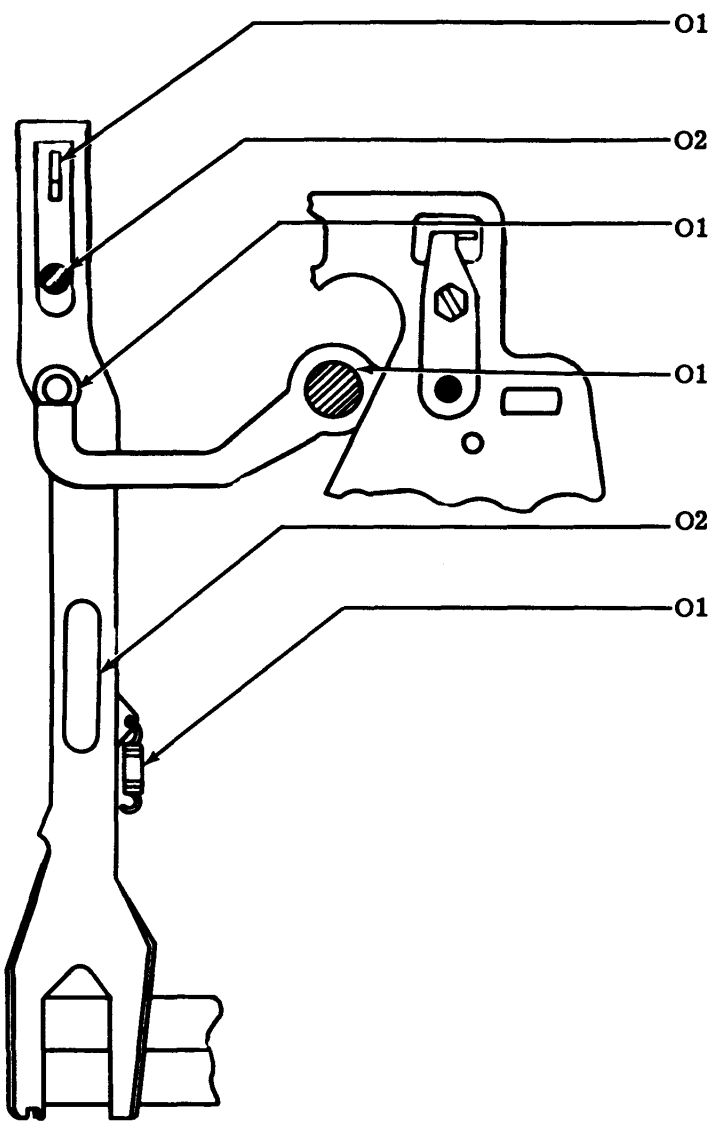
O1	Contact Points (2)	Trip Lever
O1	Hooks - Each End	Clutch Release Spring
G	Contact Surface	Reset Lever
SAT	Felt Washers	Clutch Trip Shaft
O1	Hooks - Each End	Latchlever Spring
O1	Contact Surface	Clutch Stop-Lug
O1	Hooks - Each End	Follower Lever Spring
O1	Pivot Point	Trip Cam Follower Lever
O1	Contact Surface	Trip Cam Follower Lever
O1	Contact Point	Trip Lever
O1	Hooks - Each End	Trip Lever Spring
O1	Pivot Point	Trip Lever

2.21 Ribbon Shift Magnet



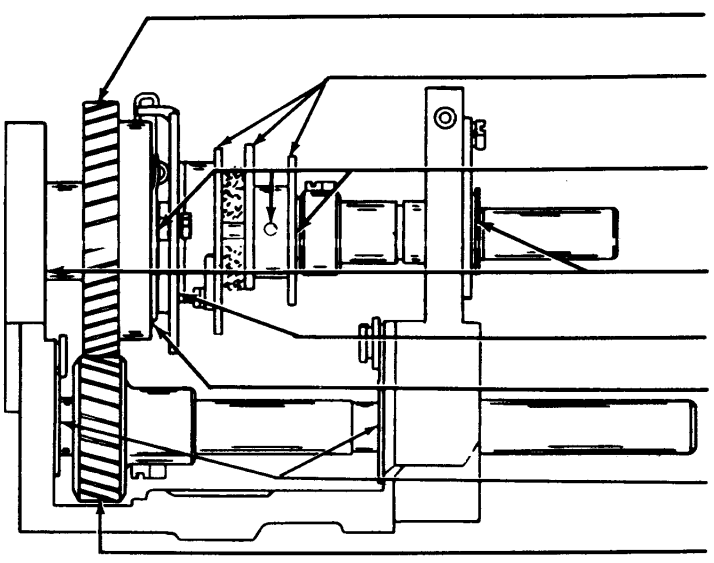
O1	Pivot Point	Armature Hinge
G	Contact Point	Downstop
G	Upper Surface	Print Suppression Link
O1	Contact Surfaces	Blocking Link

2.22 Ribbon Carrier Mechanism



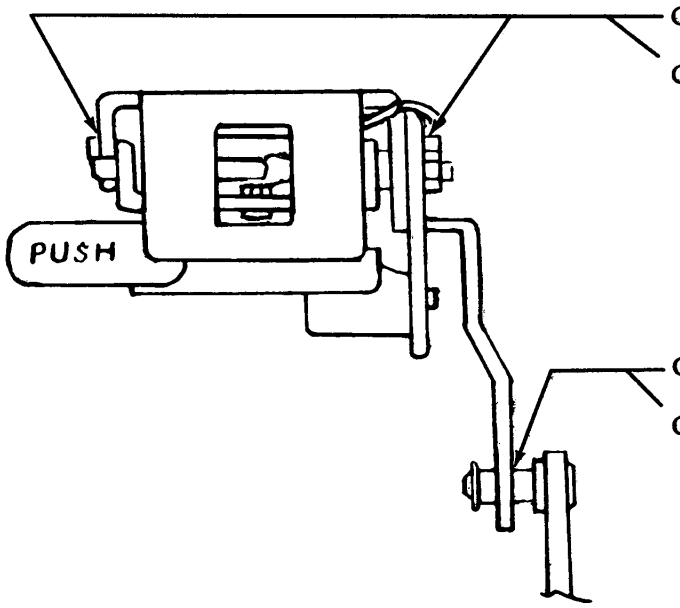
O1	Engaging Surfaces	Blocking Link
O2	Engaging Surfaces	Rear Guide Post
O1	Engaging Surfaces	Ribbon Oscillating Lever
O1	Pivot	Ribbon Oscillating Lever
O2	Engaging Surfaces	Ribbon Carrier
O1	Hooks - Each End	Spring

2.23 Jack Shaft Mechanism



G	Teeth	Gear
G	Camming Surfaces (2)	Function Cam
O6	Function Cam Needle Bearing Sleeve	Both Ends of Sleeve and Oil Hole in Sleeve
O2	Bearing Surfaces	Ball Bearings (2)
O1	Camming Surface	Clutch Cam Disc
O1	Bearing Surface	Function Clutch Drum
O2	Bearing Surfaces	Ball Bearings (2)
G	Teeth	Gears

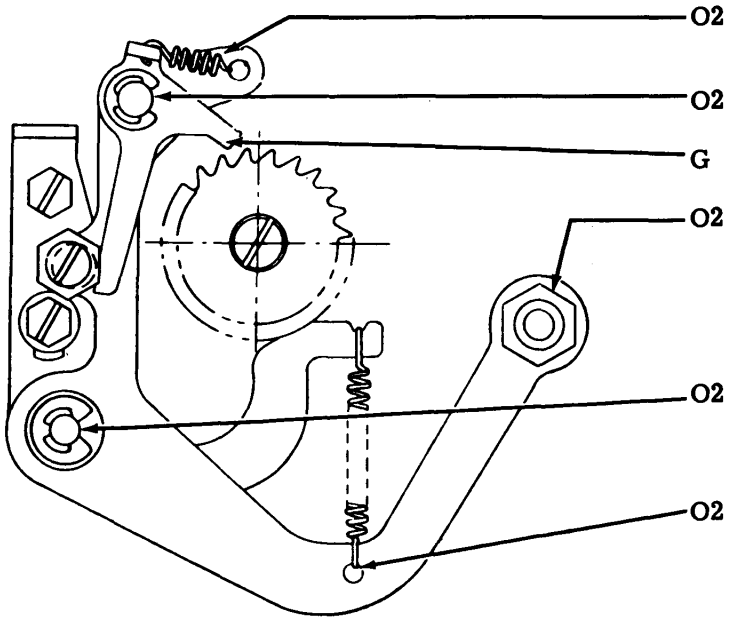
2.24 Tape Depressor Mechanism



O2	Pivot Points	Tape Depressor
G		
O2	Roller Surface	Drive Roller
G		

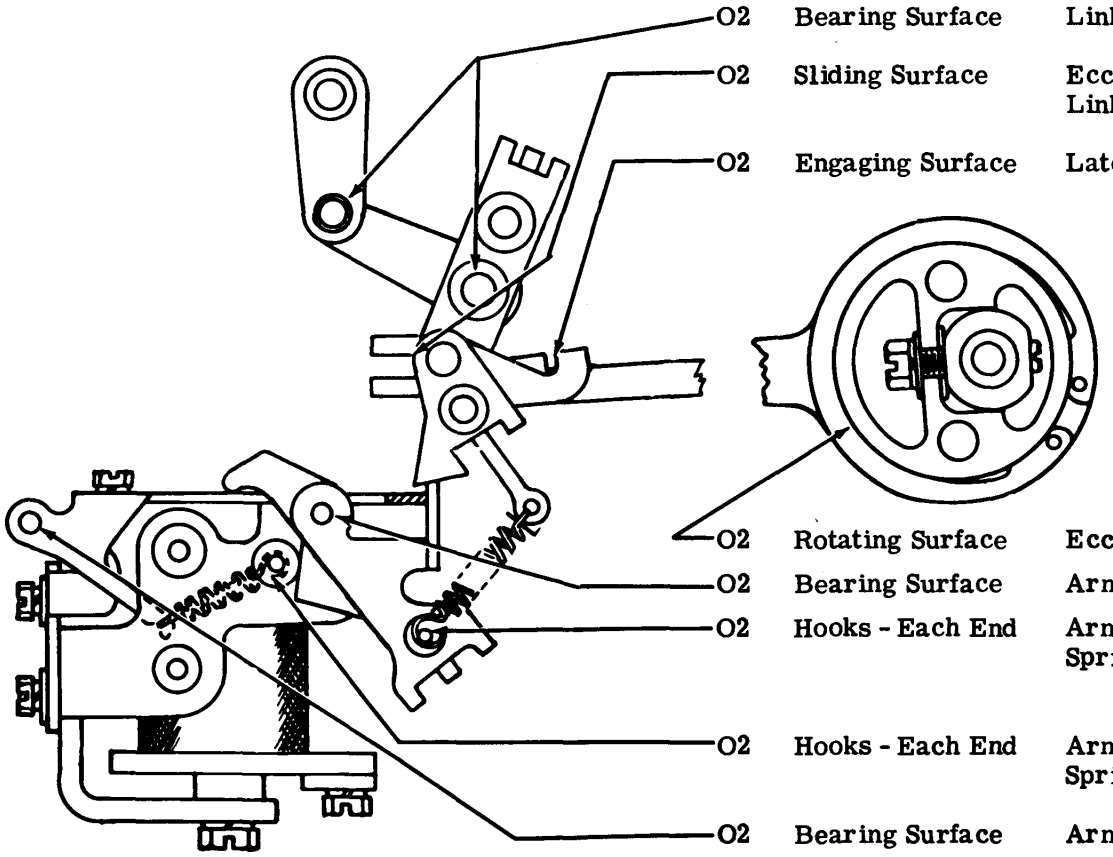
3. VARIABLE FEATURES

3.01 Manual Backspace Mechanism



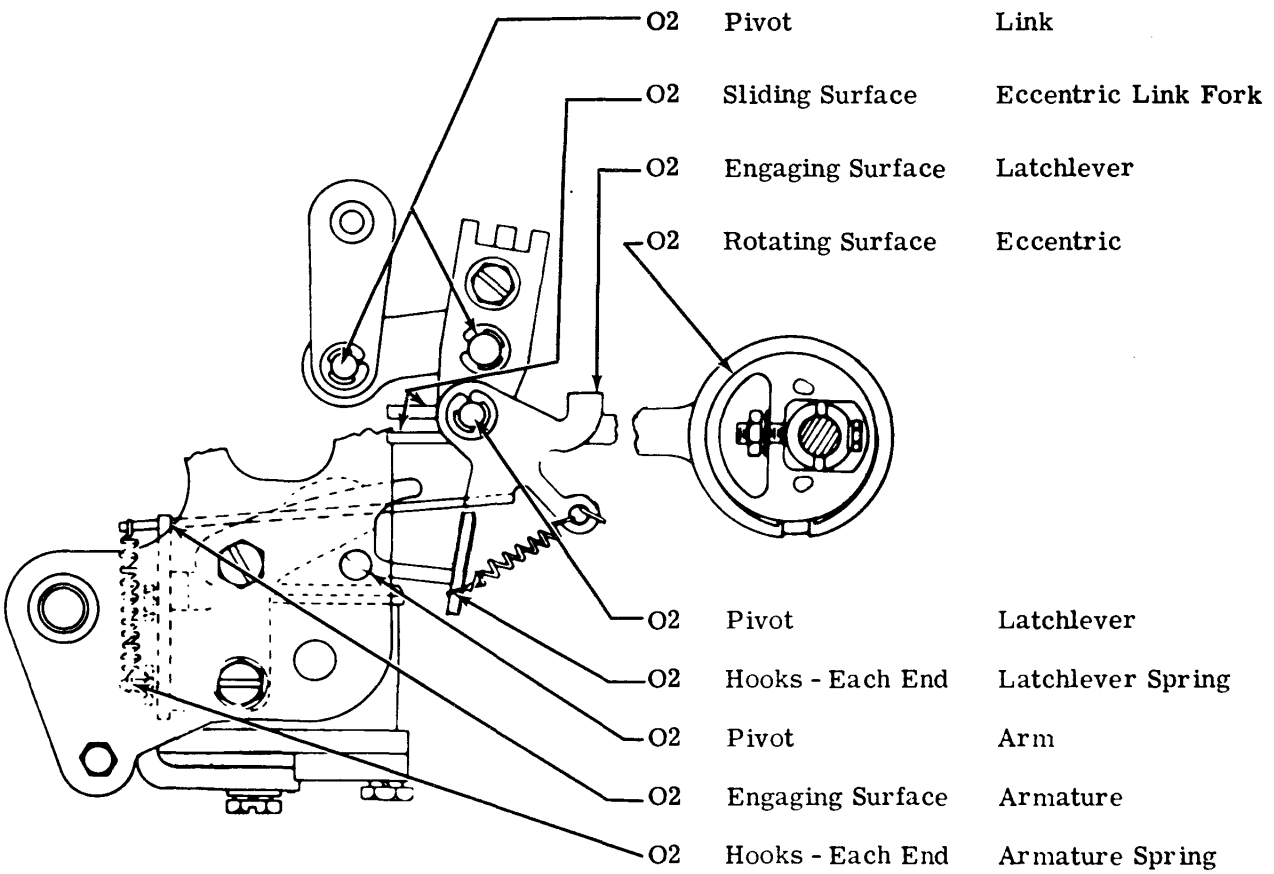
O2	Hooks - Each End	Backspace Pawl Spring
O2	Bearing Surface	Backspace Pawl
G	Feeding Surface	Backspace Pawl
O2	Bearing Surface	Nut, Shoulder
O2	Bearing Surface	Bellcrank
O2	Hooks - Each End	Bellcrank Spring

3.02 Power Drive Backspace Mechanism (Early Design)

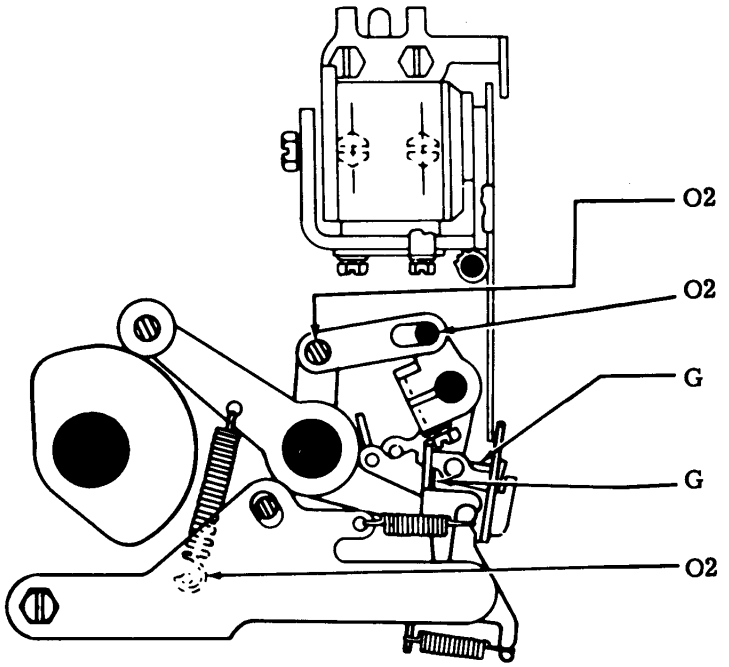


O2	Bearing Surface	Link
O2	Sliding Surface	Eccentric Drive Link Fork
O2	Engaging Surface	Latch
O2	Rotating Surface	Eccentric
O2	Bearing Surface	Arm
O2	Hooks - Each End	Armature Latch Spring
O2	Hooks - Each End	Armature Bail Spring
O2	Bearing Surface	Armature Bail

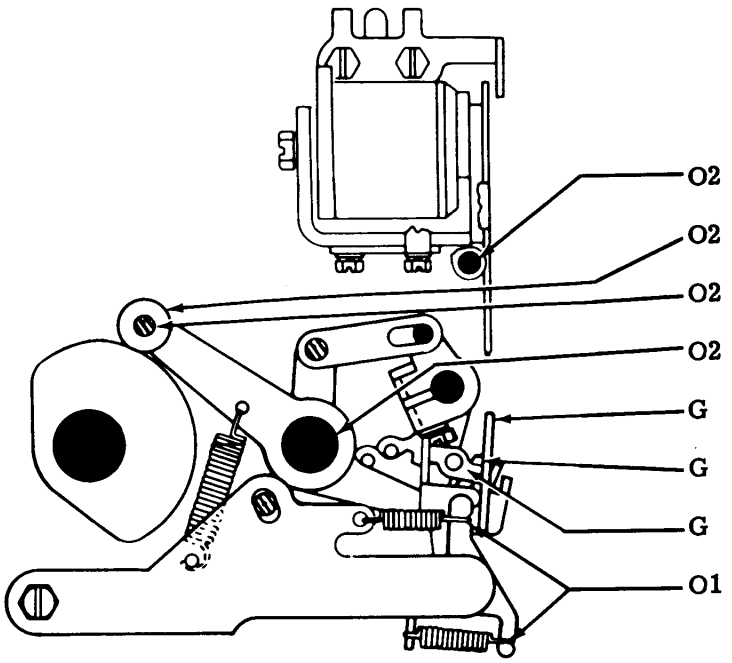
3.03 Power Drive Backspace Mechanism (Latest Design)



3.04 Remote Control Noninterfering Rubout Tape Feed-Out Mechanism

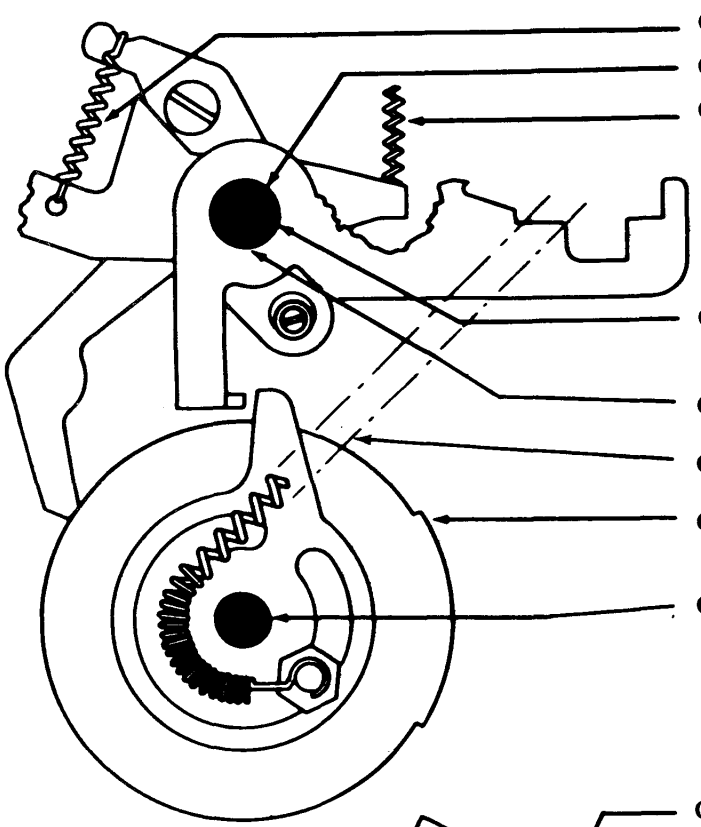


O2	Pivot Point	Drive Link
O2	Slide Surface	Drive Link
G	Contact Point	Release Lever
G	Contact Point	Latchlever
O2	Hooks - Each End	Spring

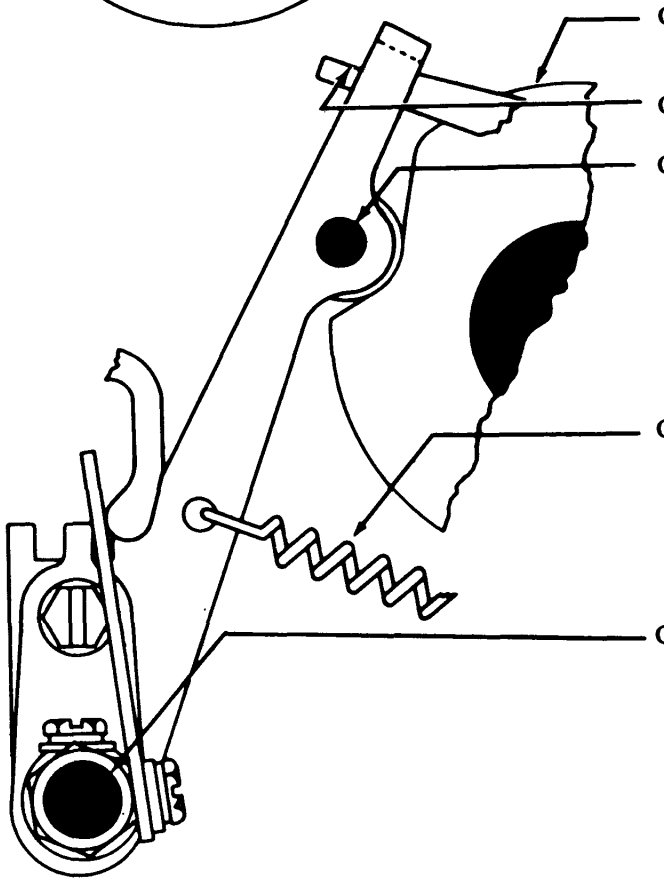


O2	Pivot Point	Armature Hinge
O2	Roller Surface	Drive Bail Roller
O2	Pivot Point	Drive Bail Roller
O2	Pivot Point	Drive Bail
G	Contact Point	Blocking Bail
G	Contact Point	Drive Bail
G	Contact Point	Blocking Latch
O1	Hooks - Each End (2)	Spring

3.05 Remote Control Noninterfering Rubout Tape Feed-Out Mechanism (continued)

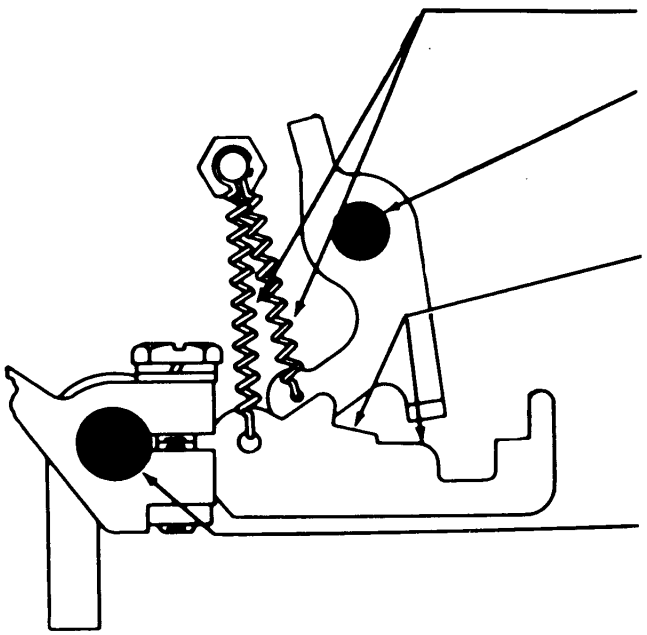


O1	Hooks - Each End	Spring
O2	Bearing Surface	Release Arm
O1	Hooks - Each End	Spring
O2	Bearing Surfaces (2)	Latchlever
O2	Bearing Surface	Time Delay Lever
O1	Hooks - Each End	Spring
G	Camming Surface	Time Delay Cam
O2	Bearing Surface	Time Delay Cam

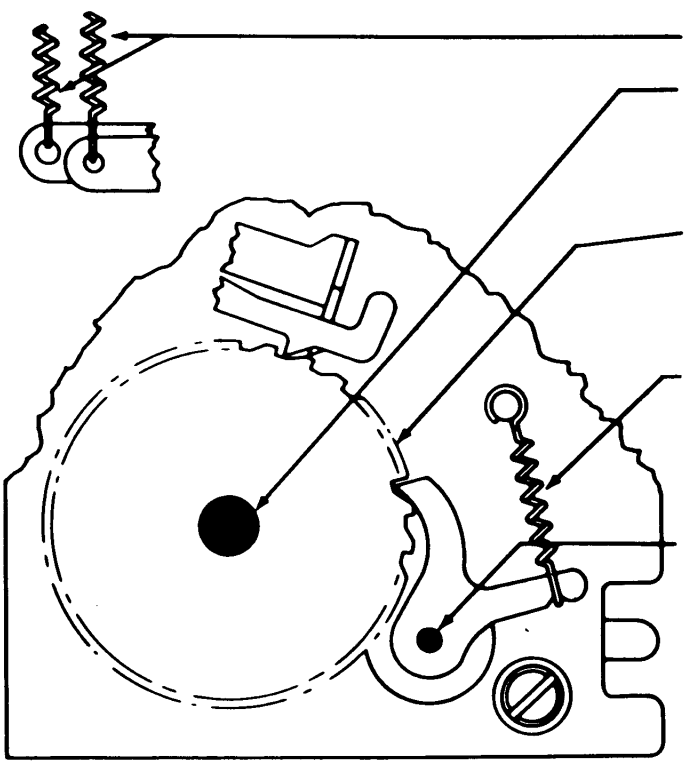


O2	Camming Surface	Drive Cam
O1	Contact Surface	Release Arm
O2	Bearing Surface	Roller
O1	Hooks - Each End	Spring
O2	Bearing Surfaces	Bearings (Front and Rear)

3.06 Remote Control Noninterfering Rubout Tape Feed-Out Mechanism (continued)

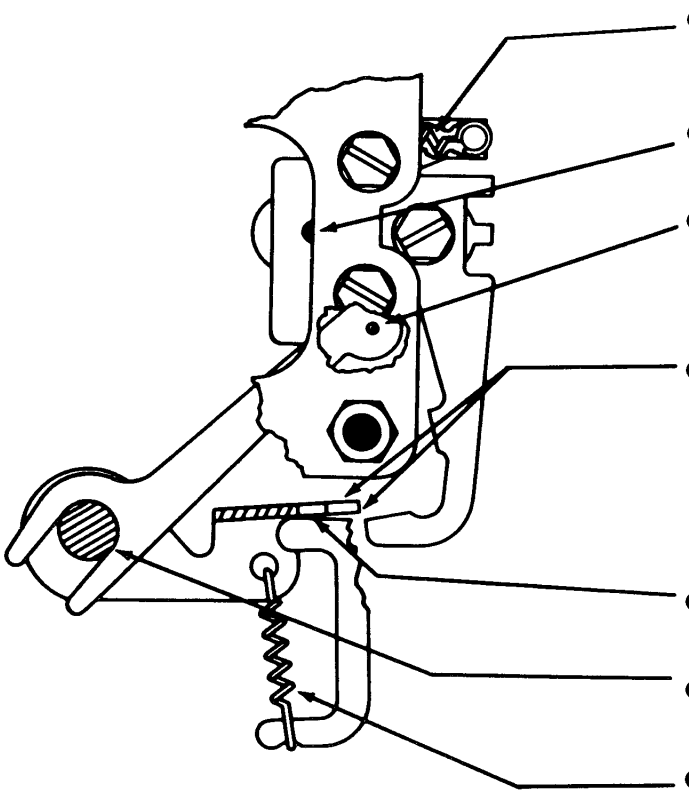


O1	Hooks - Each End	Springs (3)
O2	Bearing Surface	Release Lever
G	Contact Surfaces (2)	Latchlever
O2	Bearing Surfaces (2)	Reset Cam Follower



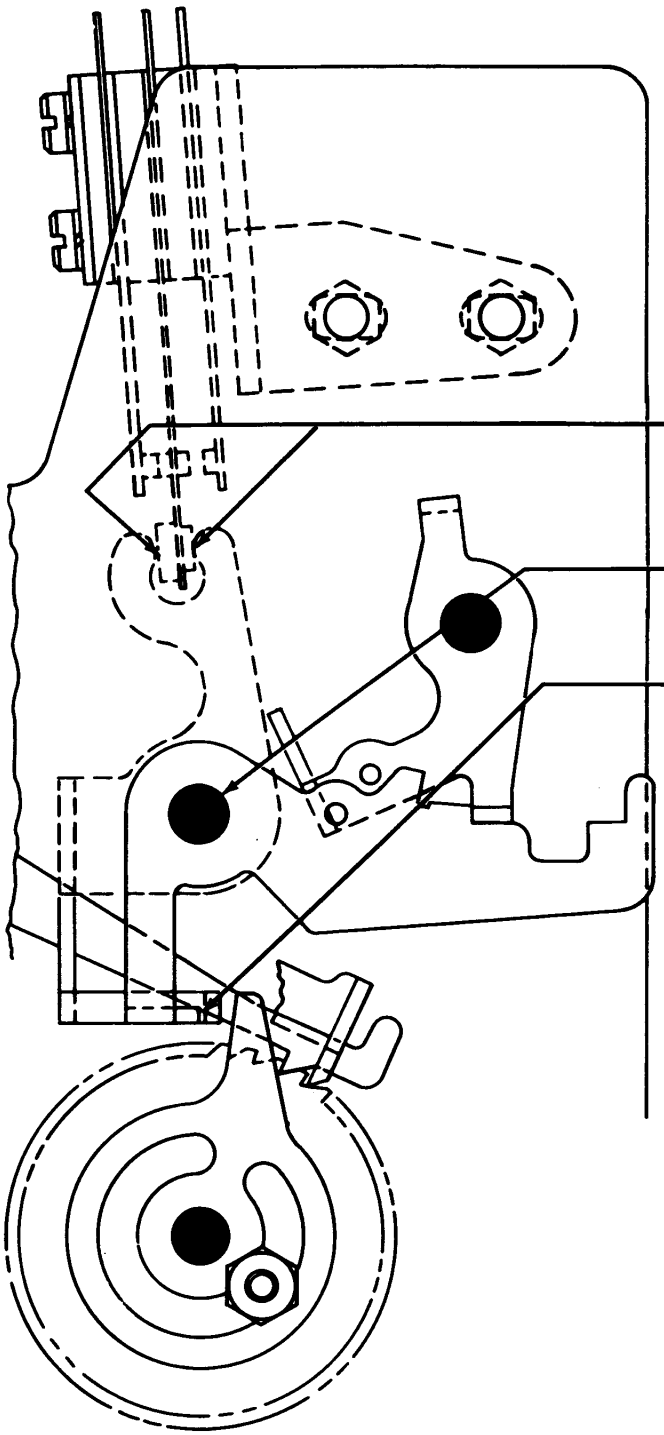
O1	Hooks - Each End	Springs (2)
O2	Bearing Surfaces (Place between Ratchets)	Ratchets (2)
G	Teeth	Ratchets (2)
O1	Hooks - Each End	Spring
O1	Pivot Point	Rear Check Pawl

3.07 Remote Control Noninterfering Rubout Tape Feed-Out Mechanism (continued)



O1	Hooks - Each End	Spring
O1	Pivot Point	Reset Bail Latch
O1	Pivot Point	Reset Bail Link
O1	Contact Surfaces (2)	Reset Bail
O1	Contact Surface	Reset Bail Trip Lever
O1	Contact Surface	Reset Bail Link
O1	Hooks - Each End	Spring

3.08 Remote Control Noninterfering Rubout Tape Feed-Out Mechanism (continued)



G	Sliding Surfaces	Swinger Insulator Button
O1	Pivot Point	Bail W/Hub
G	Engaging Surfaces	Lower Bail Extension