

38 PRINTER

LUBRICATION

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Function area	8	1. GENERAL	
Function clutch	3	1.01 This section provides lubrication pro-	
Function levers	9	cedures for the Model 38 Printer. It is	
Function rocker shaft	5	reissued to make some corrections, to change the	
Function shaft area	5	lubrication interval, and to include lubricating	
Intermediate gears	4	instructions for the backspace mechanism. Mar-	
Latchlever	7	ginal arrows indicate the changes and additions.	
Latchlever and trip lever	19	To remove the printer as a unit from the	
Main shaft area	2	teletypewriter, refer to Section 574-400-702TC.	
Motor area	4	1.02 Lubrication of the printer is presented	
Print hammer	15	by mechanisms. Photographs show	
Pushlevers and stripper bail	18	numbered callouts which correspond to para-	
Reset arm	15	graphs containing line drawings. The line drawings	
Reset bail	10	show the specific points of each mechanism to be	
Ribbon guide spring	17	lubricated.	
Ribbon mechanism	16	1.03 References to front, rear, left, right,	
Rocker and pawls	10	etc, are made viewing the printer from	
Selector area	17	its normal operating position.	
Selector clutch	19	1.04 Lubricate the printer before placing it	
Selector levers	19	in service, and just before placing it in	
Slides	14	storage. After about 100 to 200 operating hours,	
Slide guideplates	14		
Spacing area	11		
Space bellcrank	11		
Spacing mechanism - 1	12		
Spacing mechanism - 2	13		
Stop bail	7		
Stripper drive lever	9		

→ relubricate printer. Thereafter, lubricate every 750 operating hours or six months, whichever occurs first.

CAUTION: DISCONNECT POWER BEFORE APPLYING ANY LUBRICANT. DO NOT USE SOLVENTS TO CLEAN PLASTIC PARTS OR PROTECTIVE FINISHES. USE A SOFT DRY CLOTH. IF NECESSARY, USE A SOFT DAMP CLOTH WITH MILD DETERGENT, THEN RINSE AND BUFF WITH A SOFT DRY CLOTH.

1.05 Whenever the printer is disassembled, apply an equally well-mixed coat of KS7470 oil and KS7471 grease to the areas indicated below:

Eccentric Cams	(2.02 and 2.04)
Adjusting Tab	(2.11)
Cam Roller	(2.13)
H-Plate	(2.13)
Codebar Shafts	(2.17 and 2.18)
Spacing Gear	(2.23)
Selector Cam	(2.44)
Platen Shaft	(2.46)

NOTE: Whenever clutches are disassembled, apply a thin coat of KS7471 grease to the shoe lever spring loops, and KS7470 oil to the internal mechanisms.

1.06 The following symbols, and their meaning, apply to the lubrication points in each paragraph:

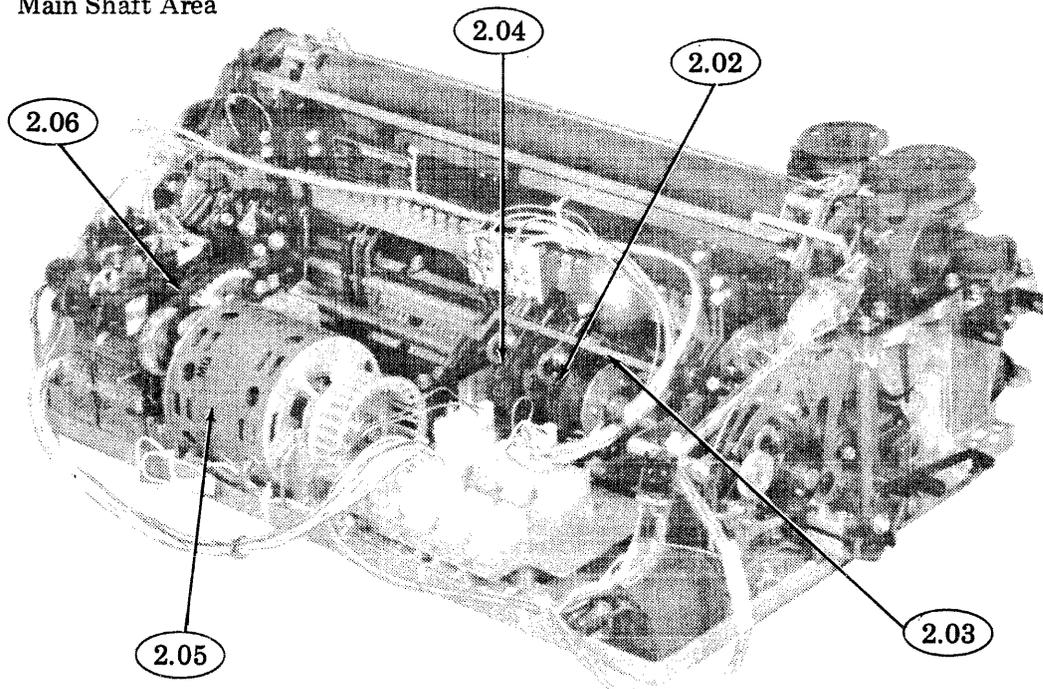
<u>SYMBOL</u>	<u>MEANING</u>
D	Dry — no lubricant permitted
G	Grease — apply KS7471 grease as instructed
O	Oil — apply KS7470 oil as instructed

1.07 Lubricate the printer thoroughly. Saturate all felt washers and oilers, and apply oil to each end of all springs. Apply oil to points where it will adhere and not run off. Avoid overlubrication. Keep electrical contacts and wire insulations free of lubricants. In general, apply oil to hollow shafts, wicks, and locations where parts rub, slide, or move with respect to each other. Apply grease to gear teeth and points of heavy pressure.

2. BASIC UNIT

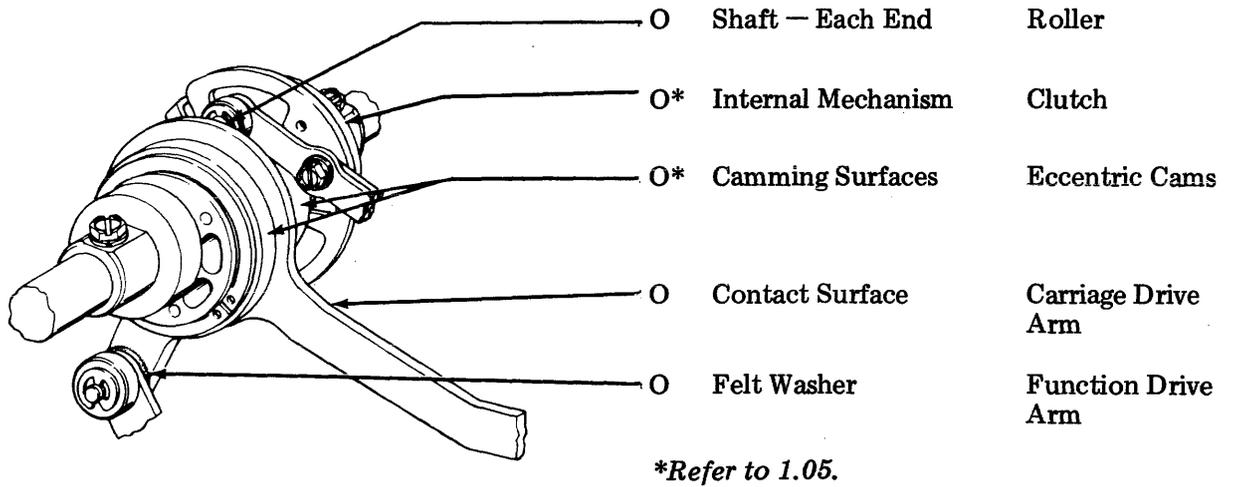
COMMON MECHANISMS

2.01 Main Shaft Area



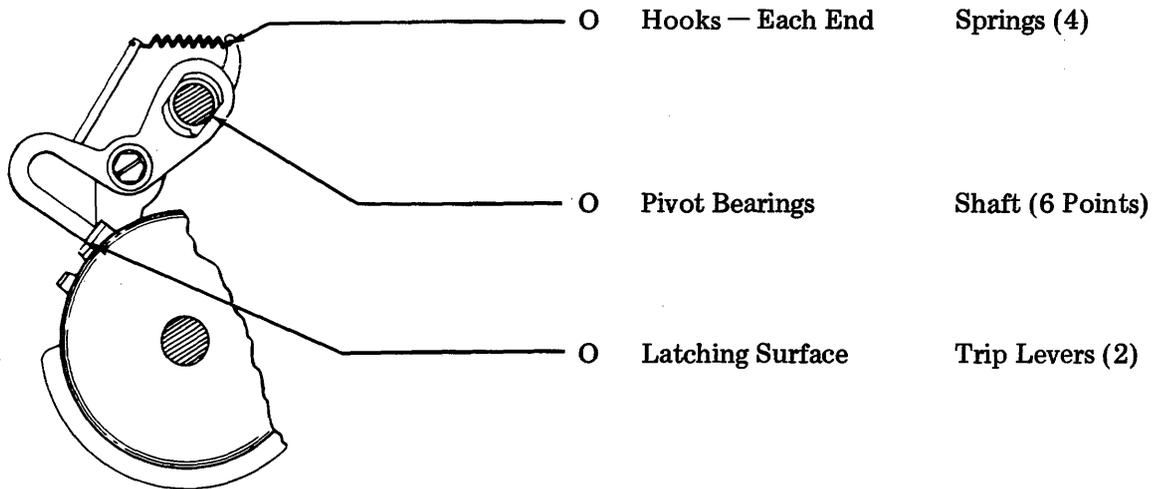
left rear view

2.02 Function Clutch



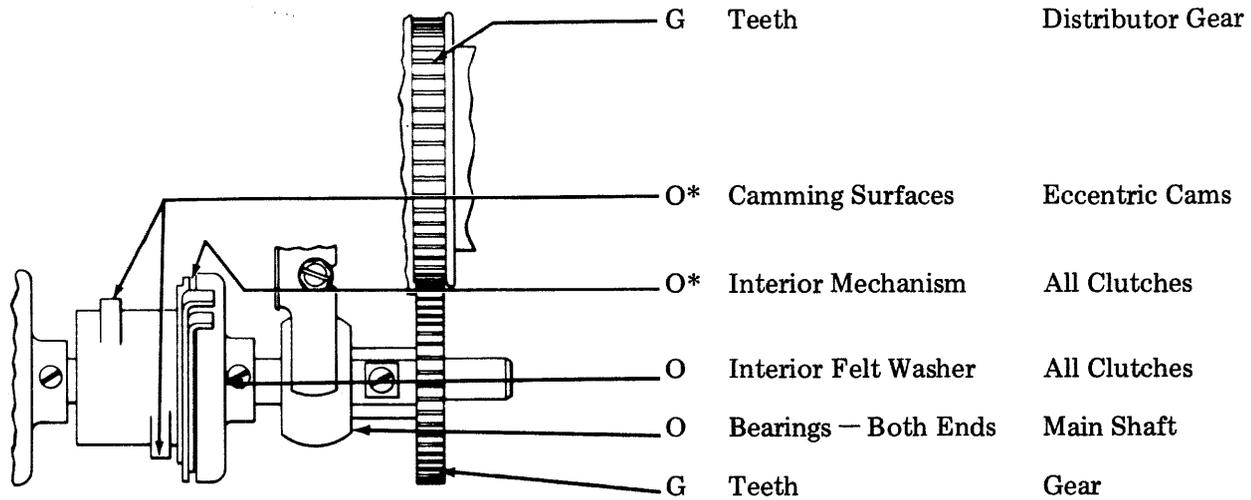
left front view

2.03 Trip Shaft



left side view

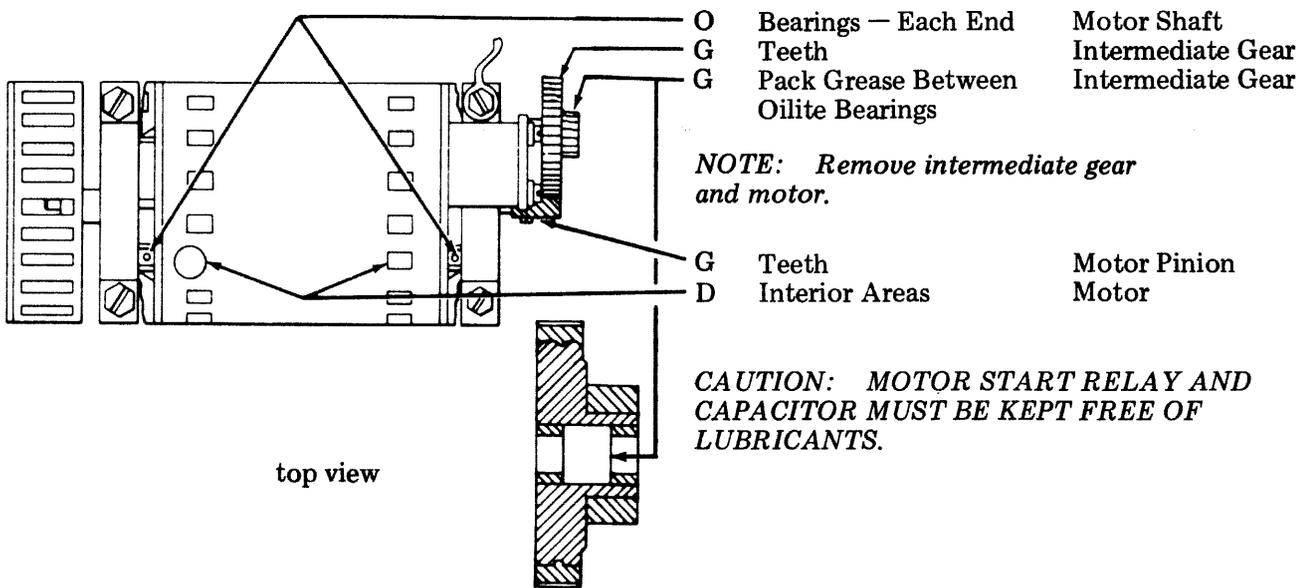
2.04 Codebar Clutch



top view

*Refer to 1.05.

2.05 Motor Area

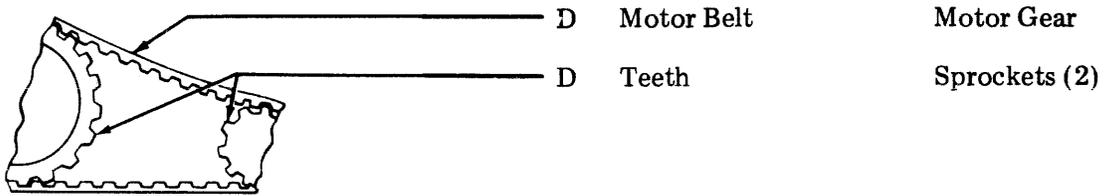


top view

NOTE: Remove intermediate gear and motor.

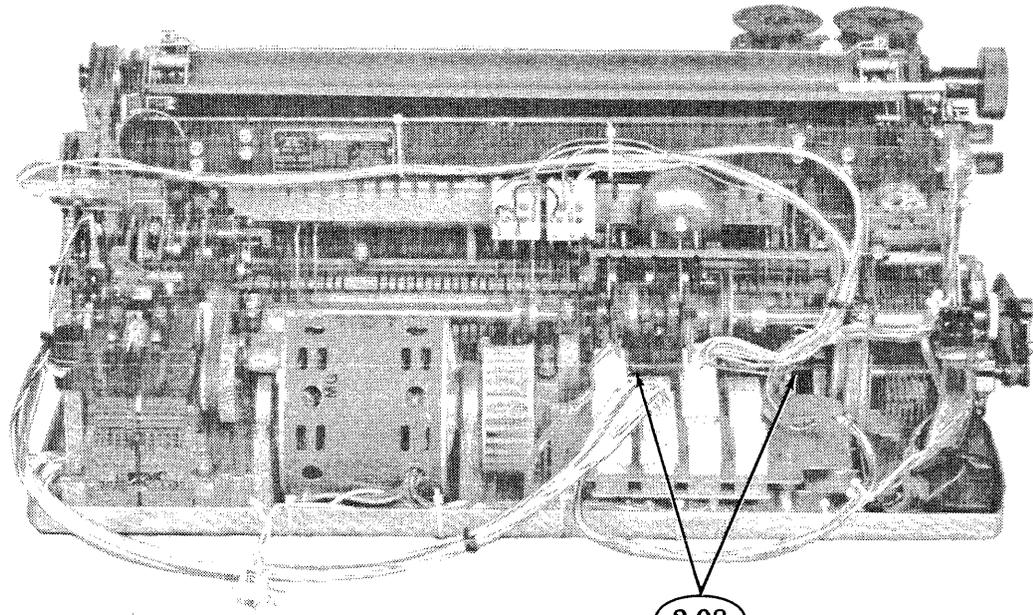
CAUTION: MOTOR START RELAY AND CAPACITOR MUST BE KEPT FREE OF LUBRICANTS.

2.06 Intermediate Gears



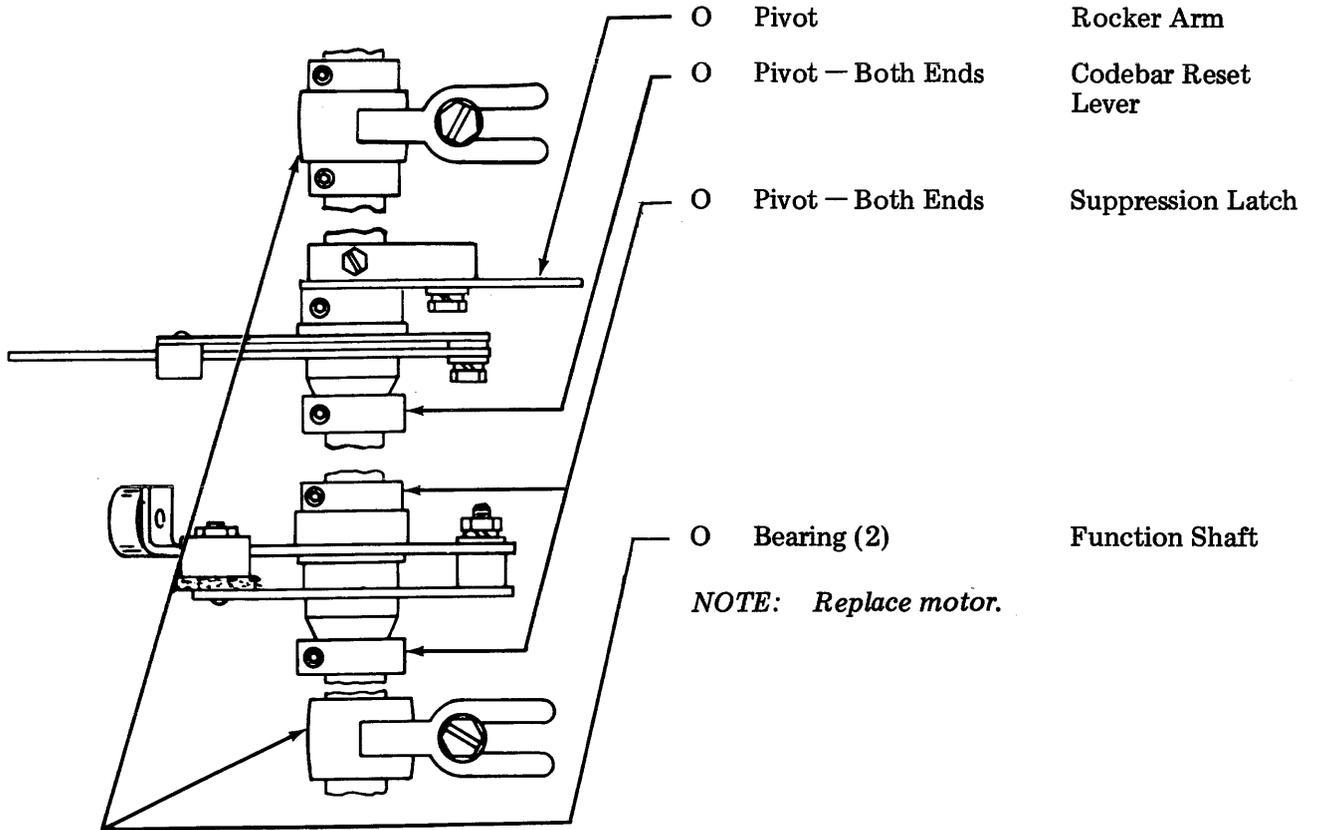
right side view

2.07 Function Shaft Area



rear view

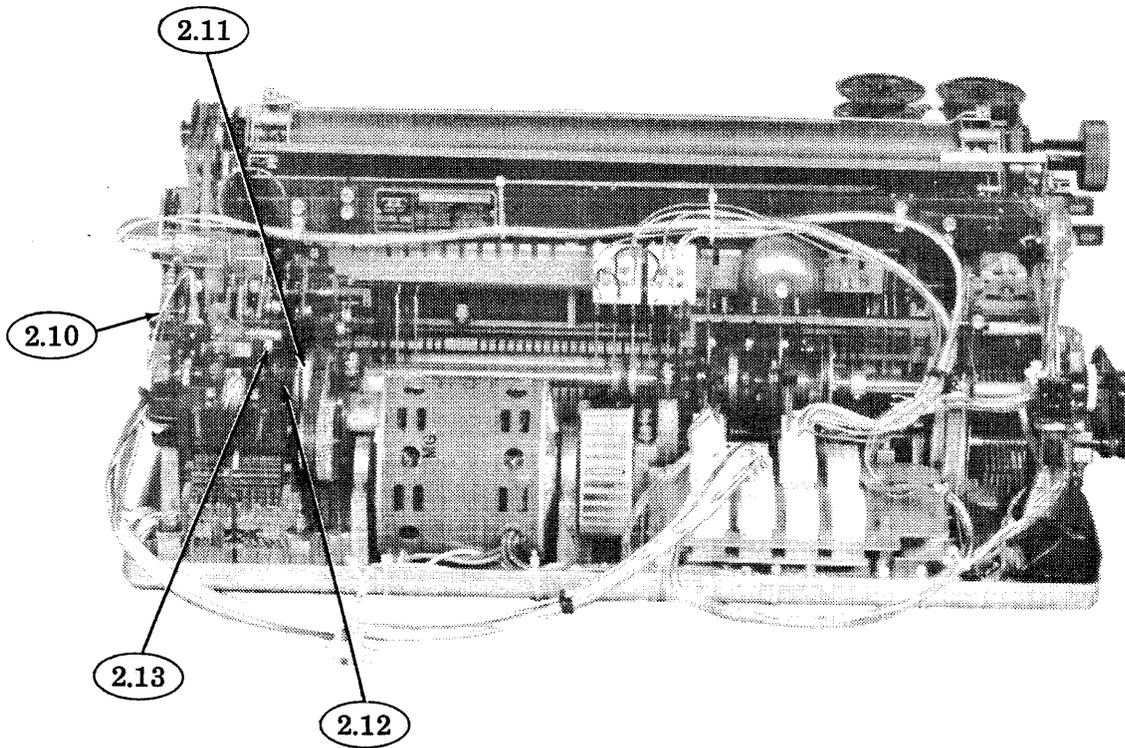
2.08 Function Rocker Shaft



NOTE: Replace motor.

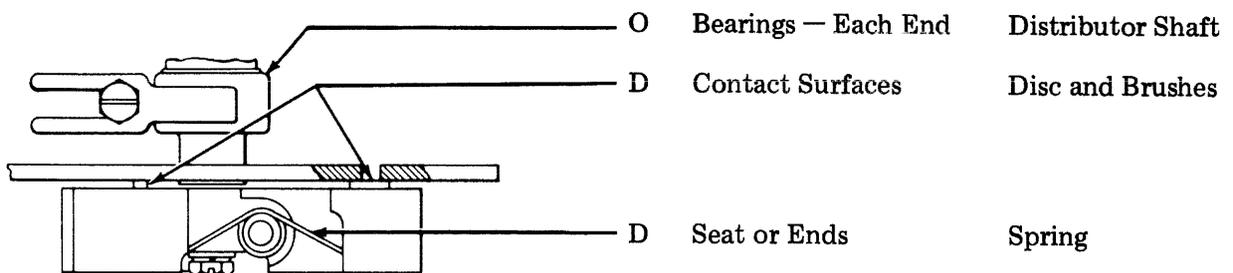
top right view

2.09 Distributor Area



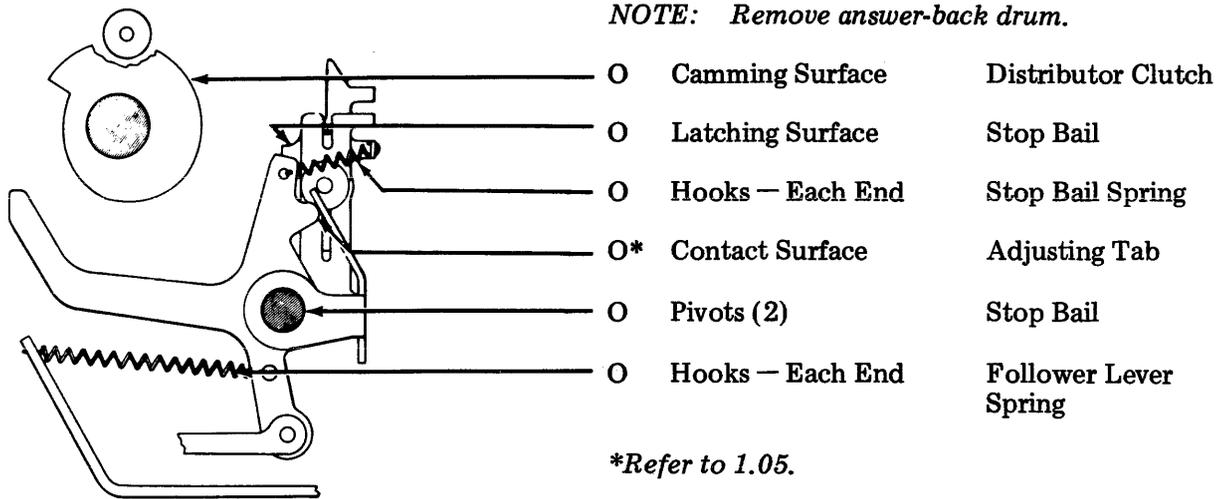
rear view

2.10 Disc and Brushes



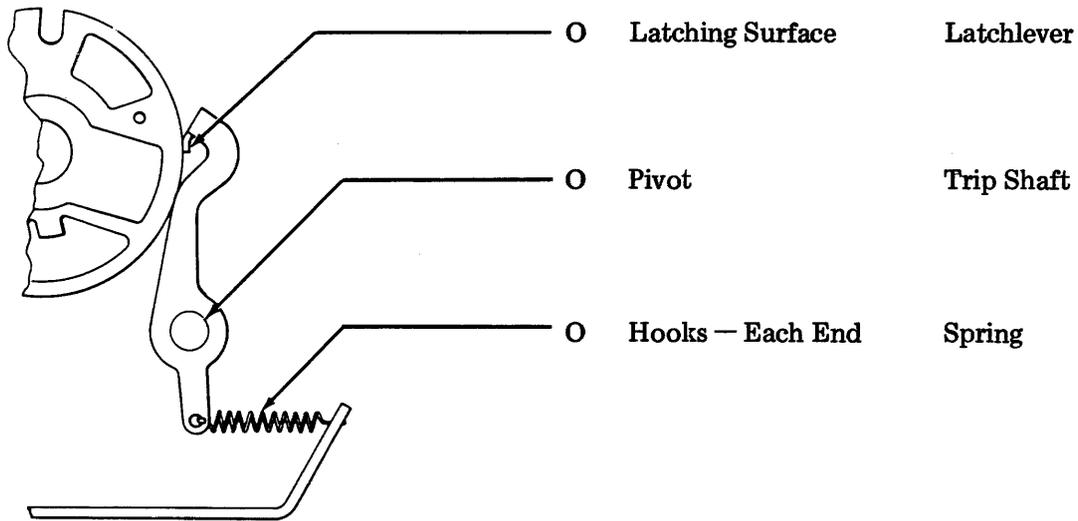
top right view

2.11 Stop Bail



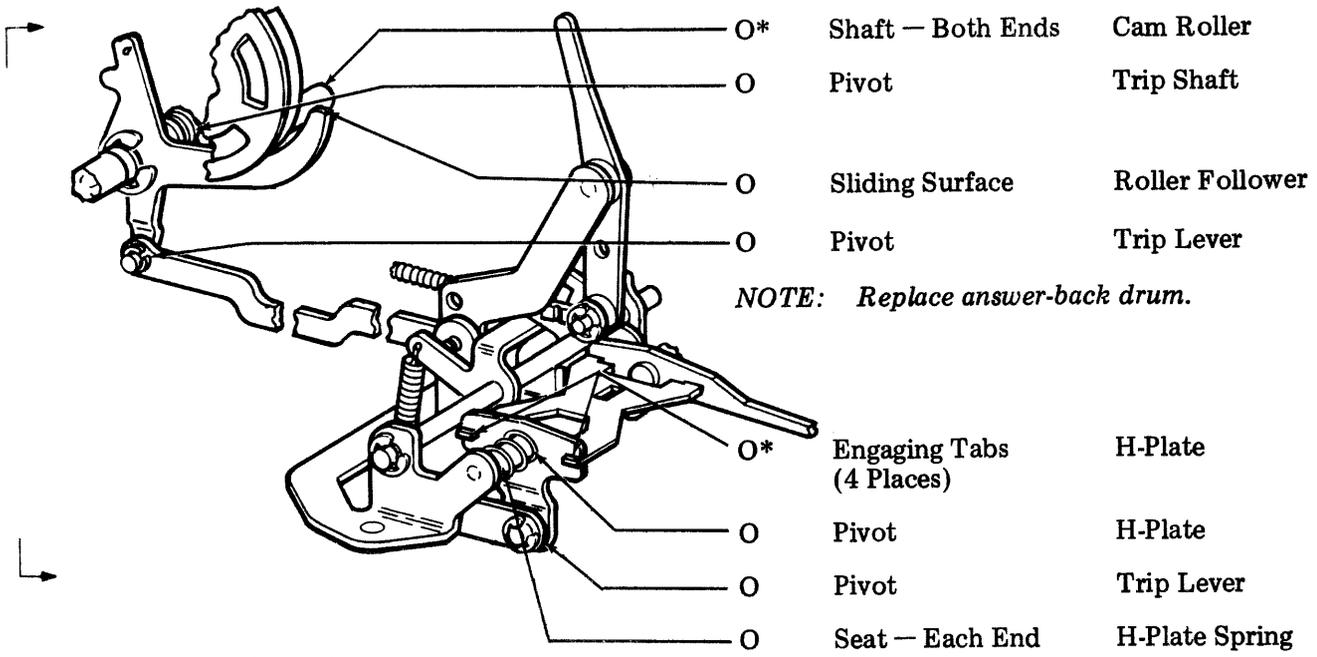
right side view

2.12 Latchlever



right side view

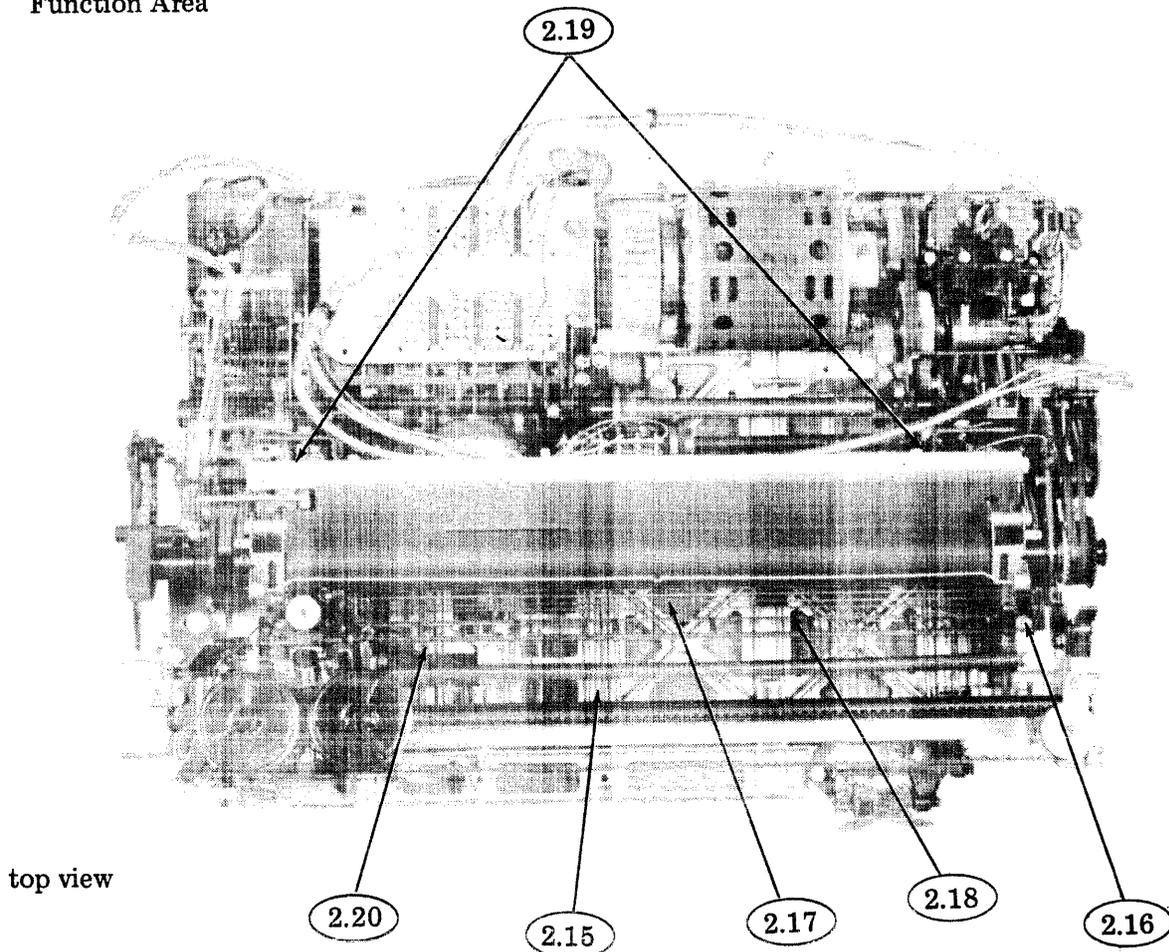
2.13 Trip Lever



left front view

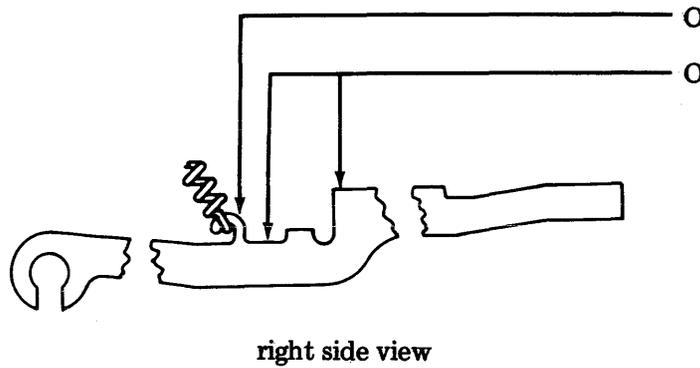
*Refer to 1.05.

2.14 Function Area



top view

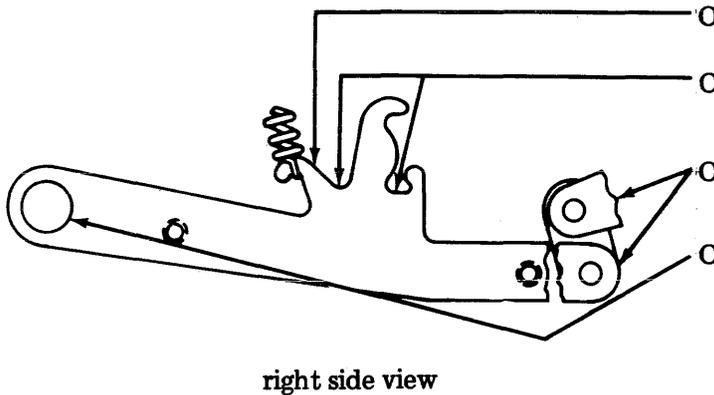
2.15 Function Levers



- O Hooks — Each End
- O Engaging Surfaces
- O Springs
- O Function Levers

right side view

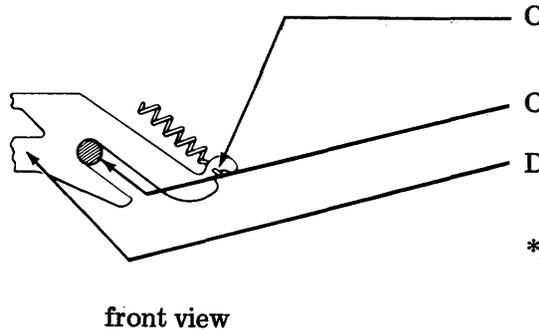
2.16 Stripper Drive Lever



- O Hooks — Each End
- O Engaging Surfaces
- O Pivots
- O Felt Washers (2)
(Each End of Shaft)
- O Springs
- O Stripper Drive Lever
- O Stripper Drive Link
- O Front Function Shaft

right side view

2.17 Codebars

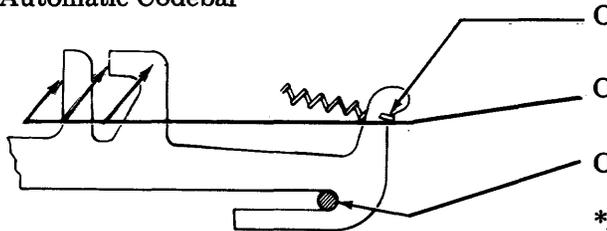


- O Hooks — Each End
- O* Pivots
- D Area Between Codebars
- O Springs
- O Codebar Shaft

**Refer to 1.05.*

front view

2.18 Automatic Codebar

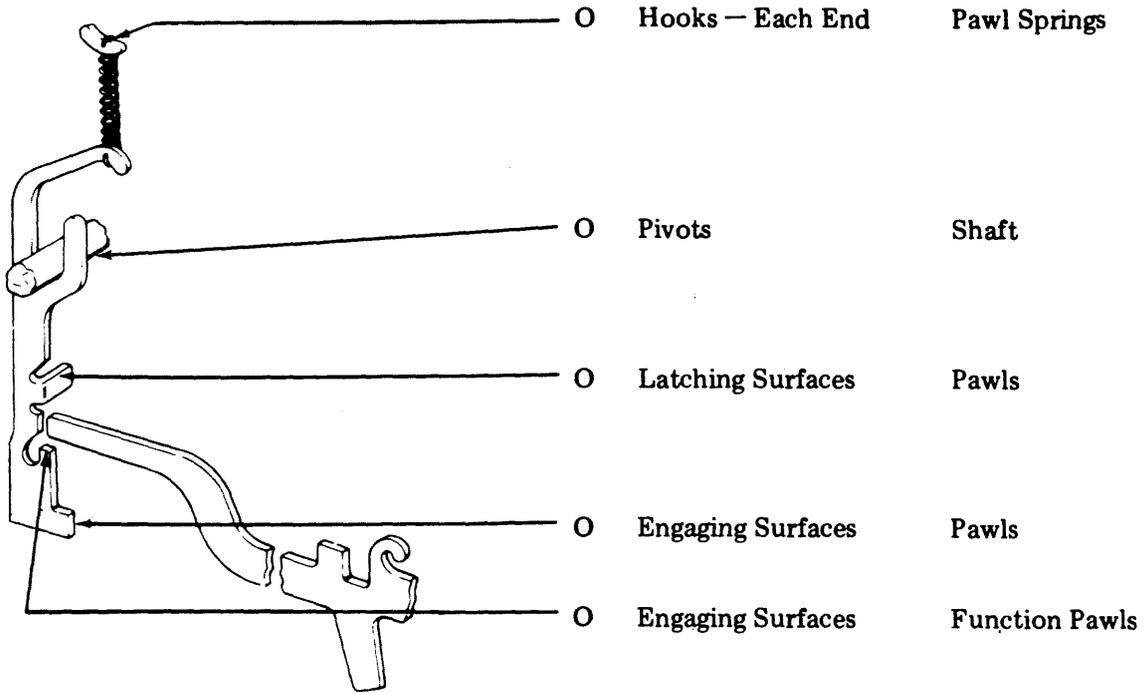


- O Hooks — Each End
- O Blocking Contact
- O* Pivot
- O Spring
- O Tab (1 of 3)
- O Codebar Shaft

**Refer to 1.05.*

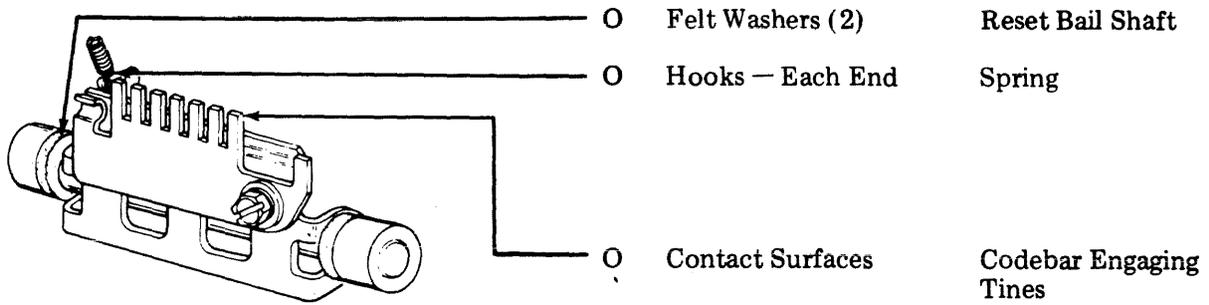
front view

2.19 Rocker and Pawls



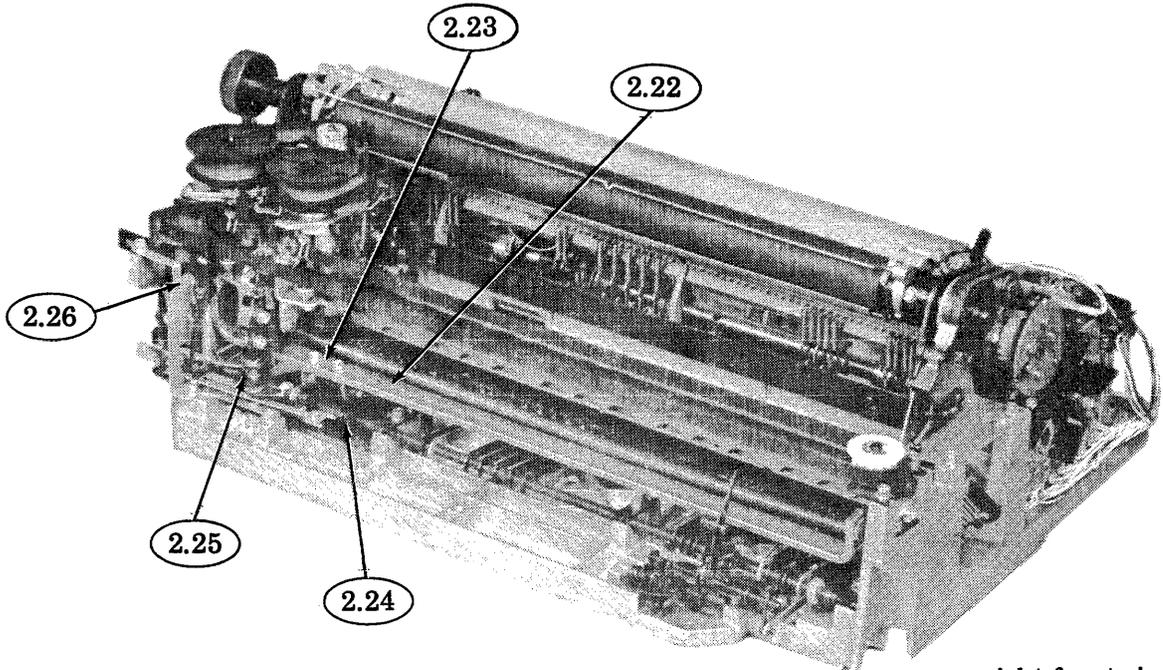
left front view

2.20 Reset Bail



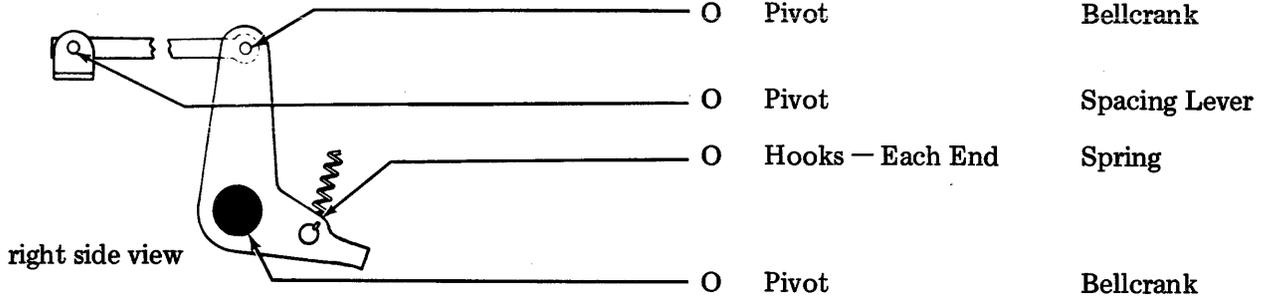
left front view

2.21 Spacing Area



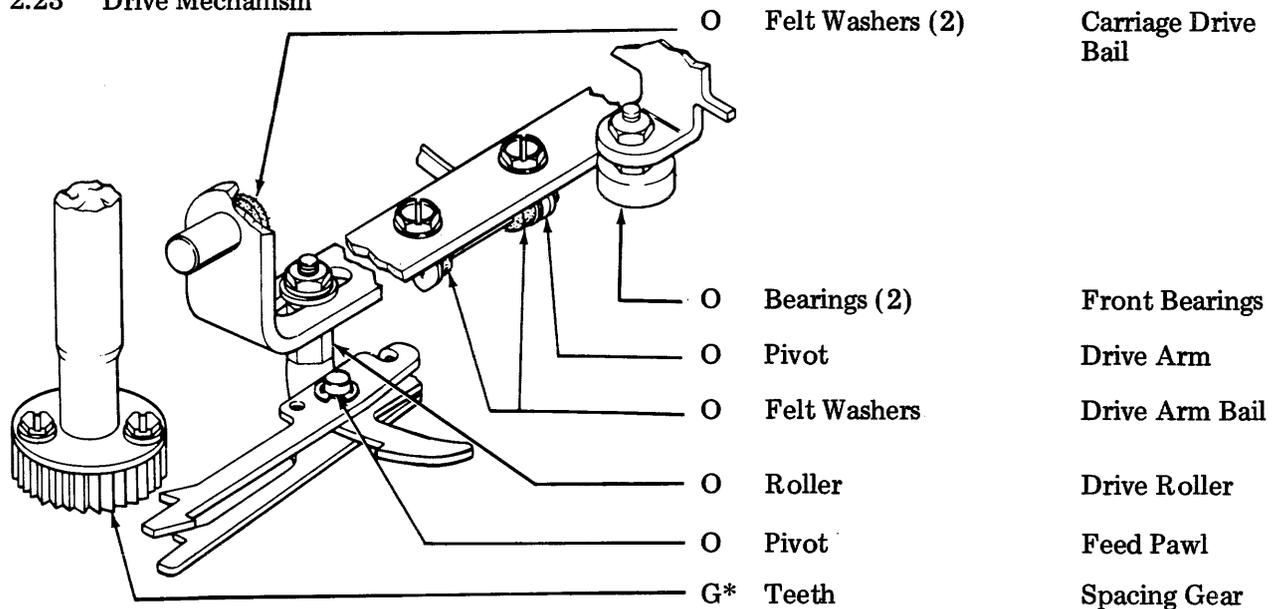
right front view

2.22 Space Bellcrank



right side view

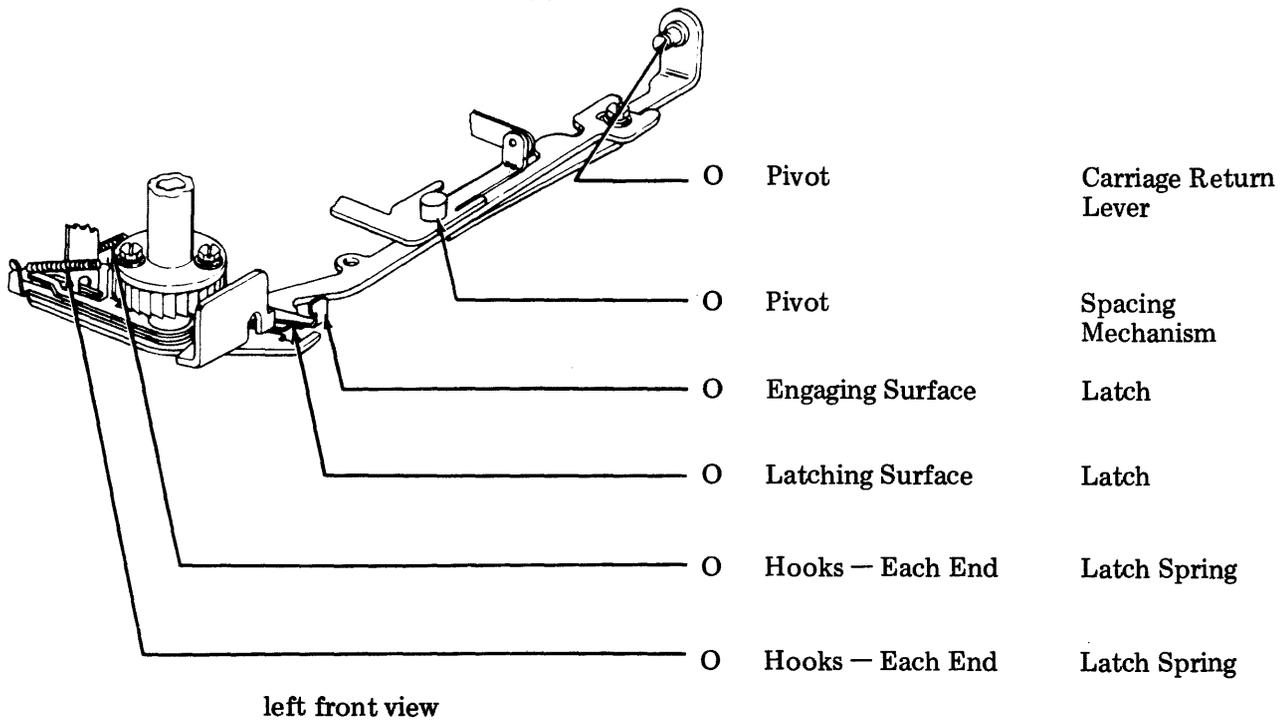
2.23 Drive Mechanism



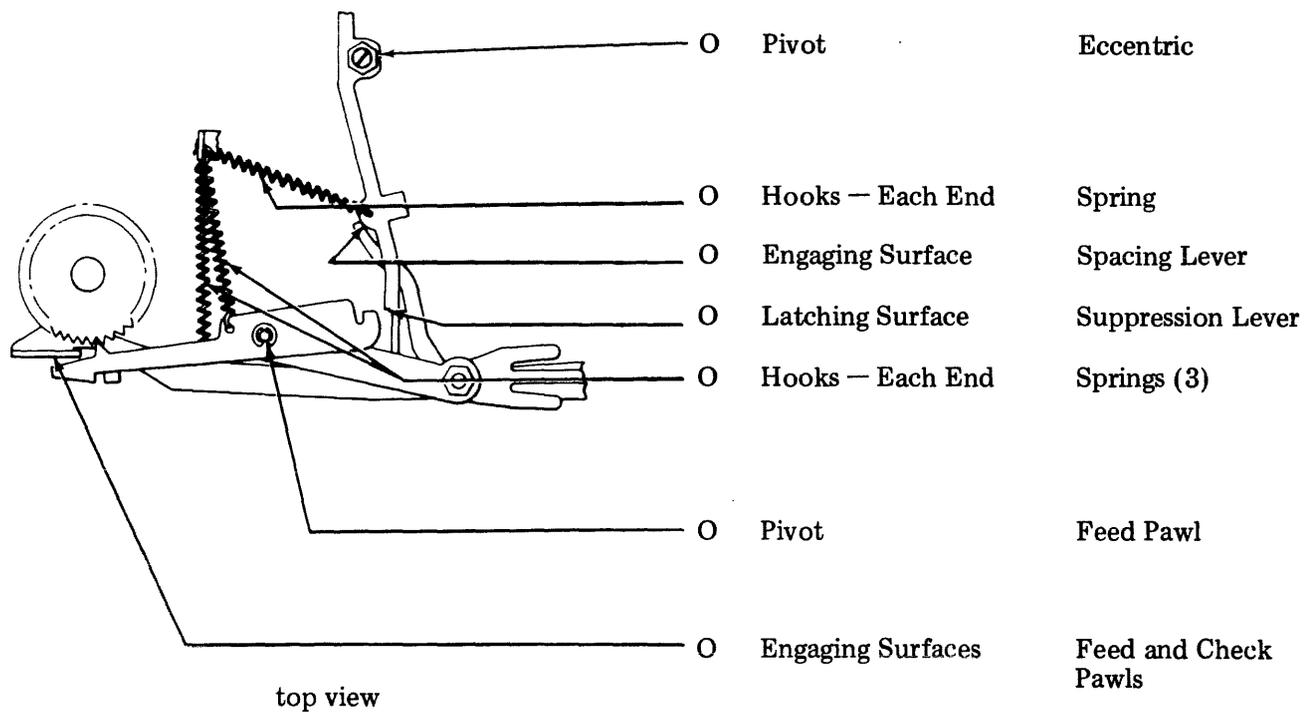
left front view

*Refer to 1.05.

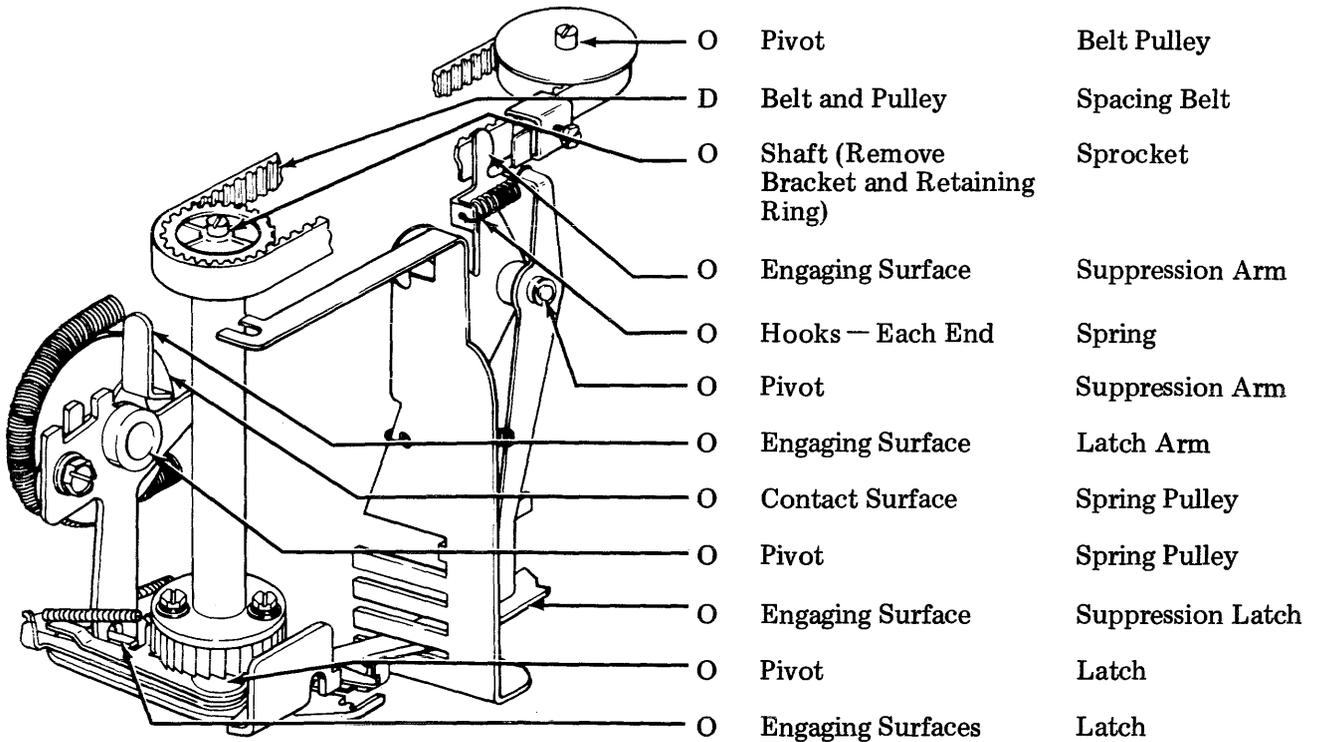
2.24 Carriage Return and Spacing Levers



2.25 Spacing Mechanism — 1

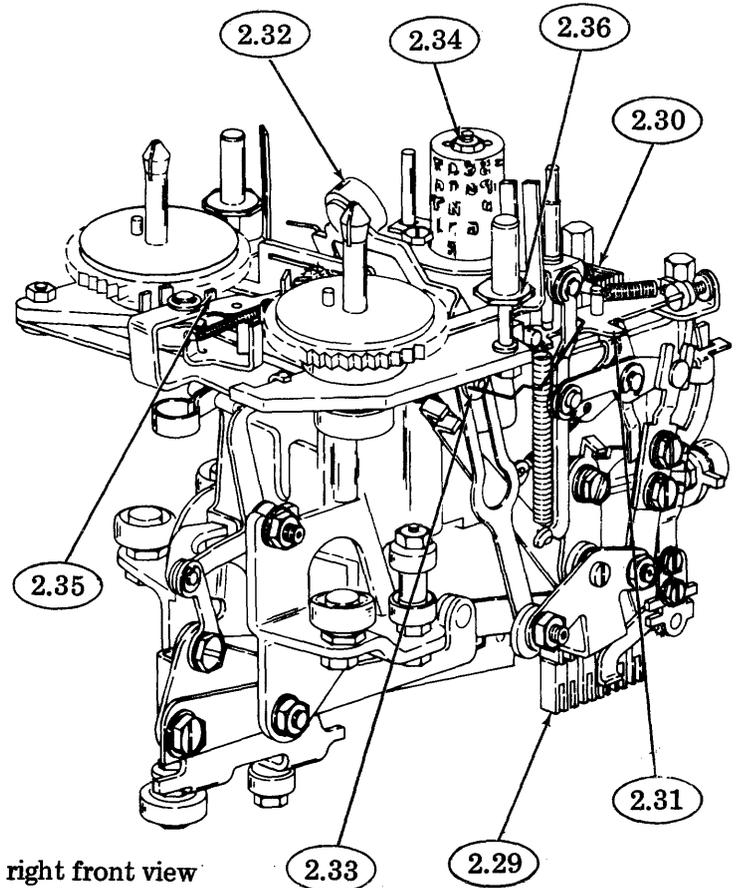
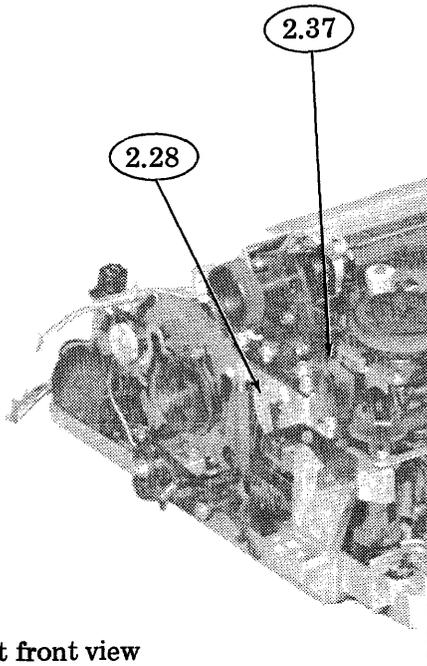


2.26 Spacing Mechanism — 2



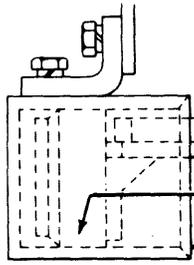
left front view

2.27 Carriage Area



NOTE: Remove ribbon mechanism and carriage return spring before lubricating. For disassembly and reassembly, refer to Section 574-422-702TC.

2.28 Dashpot

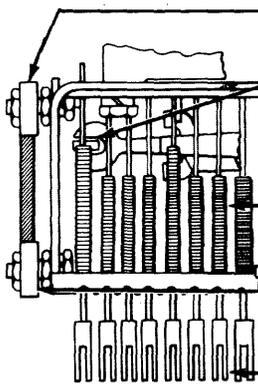


front view

- O Sliding Surfaces Dashpot and Cylinder

(Apply with oil dampened cloth. Too much lubricant will cause malfunction.)

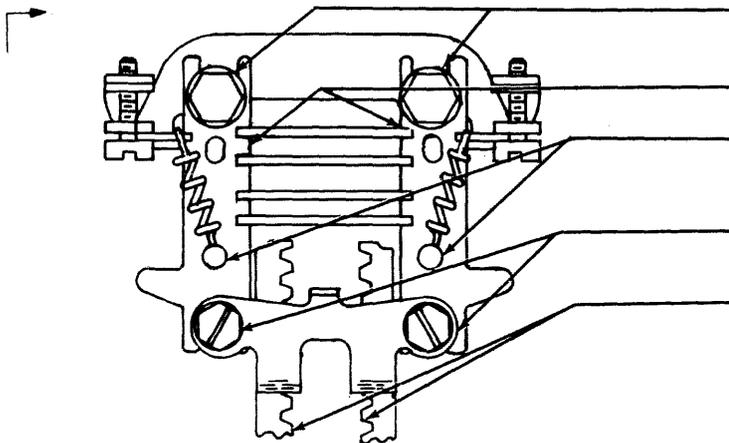
2.29 Slides



left side view

- O Bearing Rear Roller (Top)
- O Engaging Surface Suppression Latch Fork
- O Seats — Each End Slide Guide Springs
- O Bearing Rear Roller (Bottom)
- O Codebar Contacts Slides

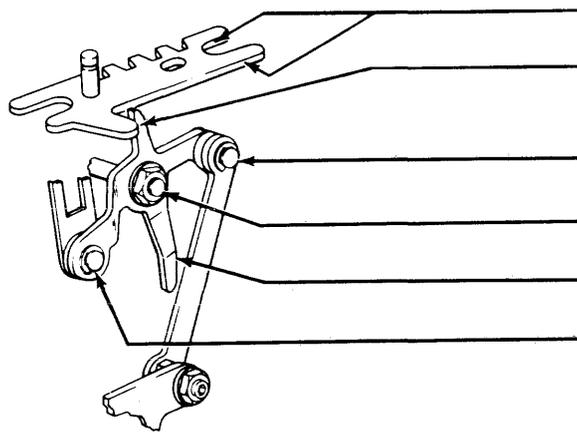
2.30 Slide Guideplates



top view

- O Sliding Contacts Stop Plate
- O Engaging Surfaces Stop Slides
- O Hooks — Each End Springs
- O Contact Points Slide Guides
- O Teeth Pinion Racks

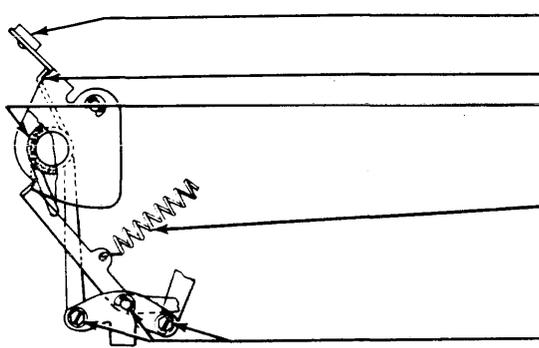
2.31 Drive Arm



- O Contact Surface Plate
- O Contact Surfaces Plate and Drive Arm
- O Pivot Drive Arm
- O Pivot Drive Arm
- O Contact Surface Drive Arm
- O Pivot Link

right side view

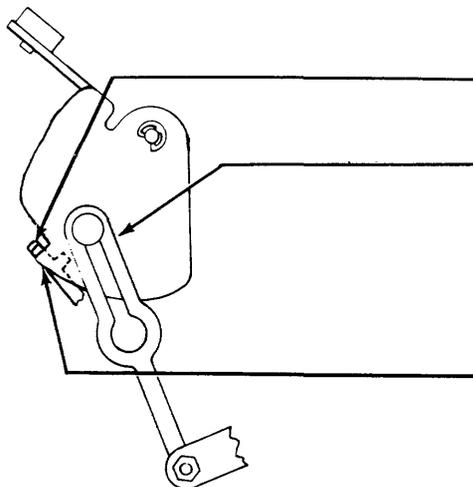
2.32 Print Hammer



- D Surface Print Hammer
- O Ends (2) Torsion Spring
- O Pivots (2) Spring Shaft
- O Hooks — Each End Spring
- O Bearings (3) Drive Bail

right side view

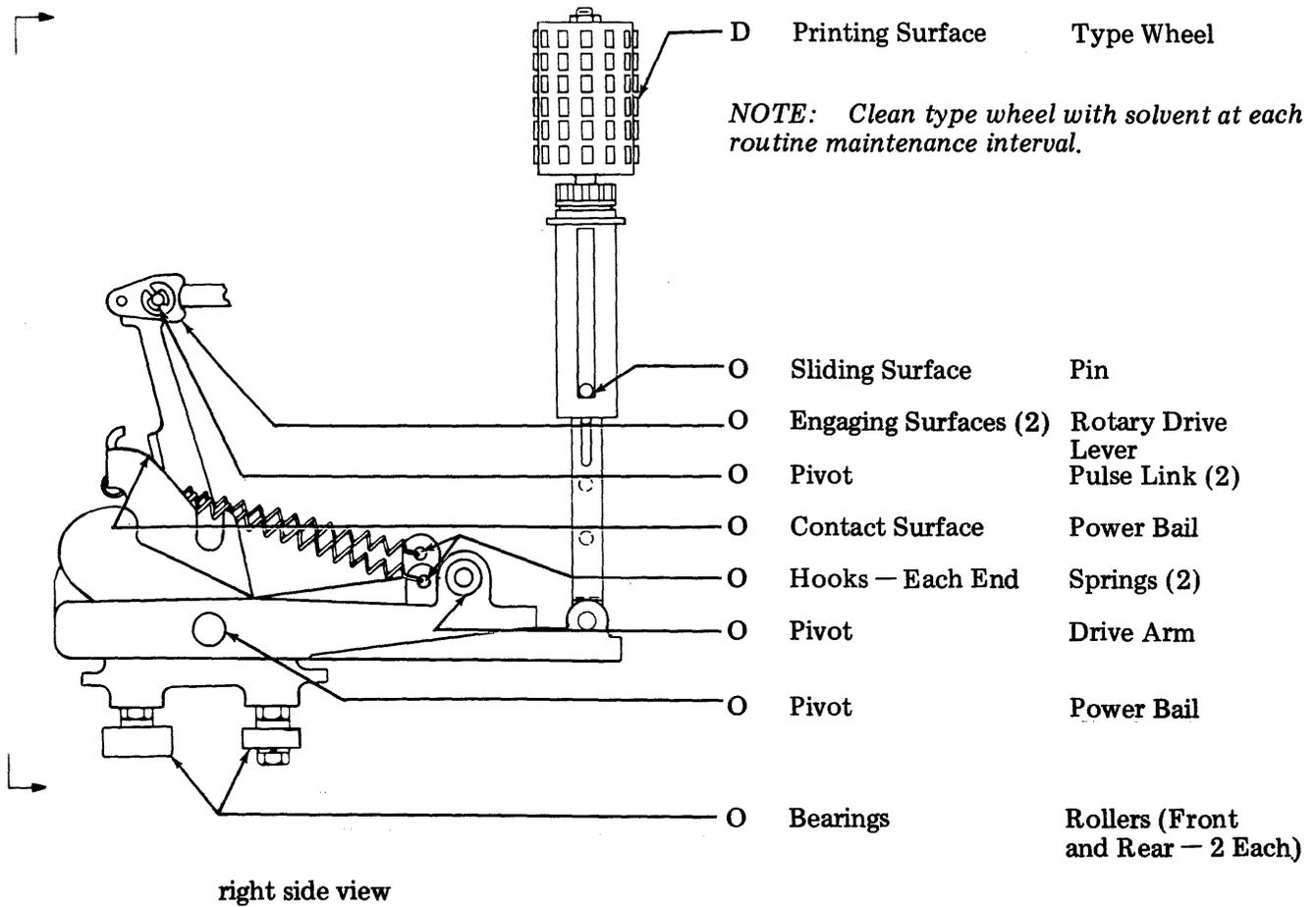
2.33 Reset Arm



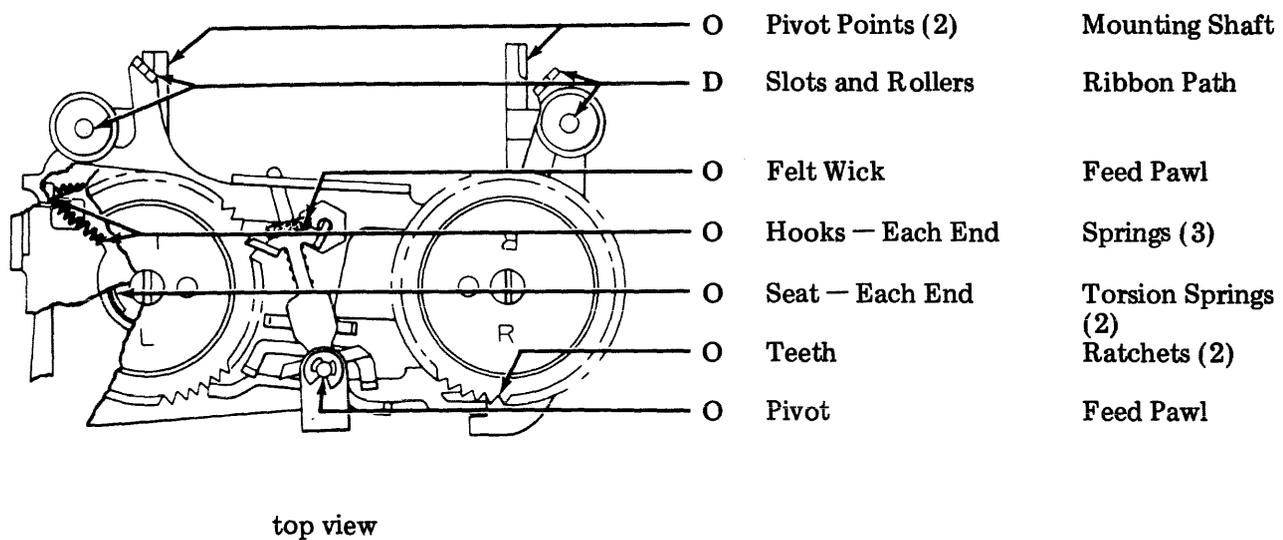
- O Latching Surface Trip Lever
- O Sliding Contacts Reset Arm
- O Camming Surface Print Hammer Bail

right side view

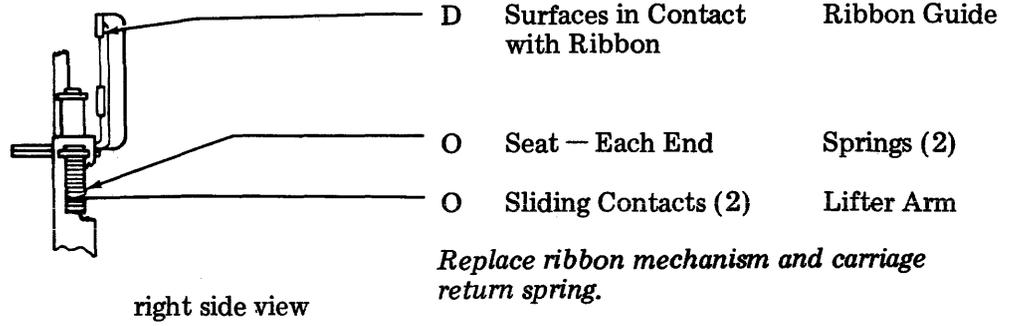
2.34 Type Wheel Mechanism



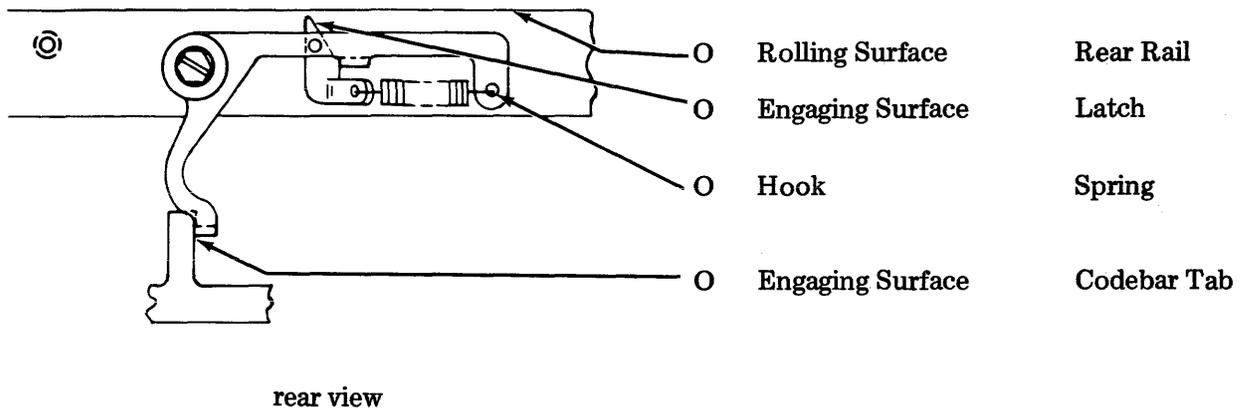
2.35 Ribbon Mechanism



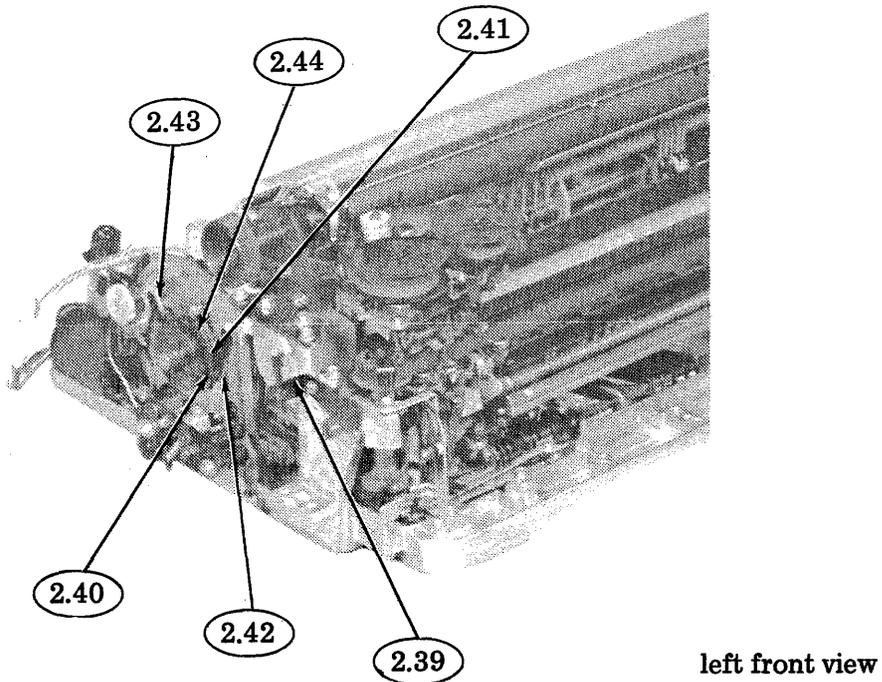
2.36 Ribbon Guide Spring



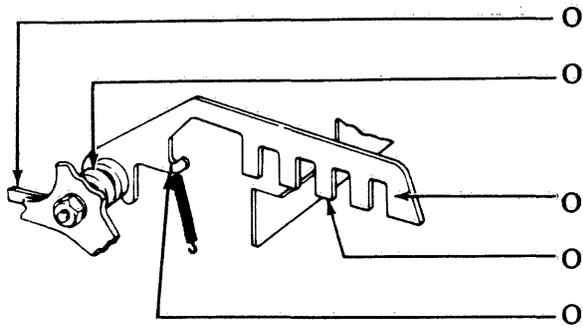
2.37 Carriage Rear Rail



2.38 Selector Area



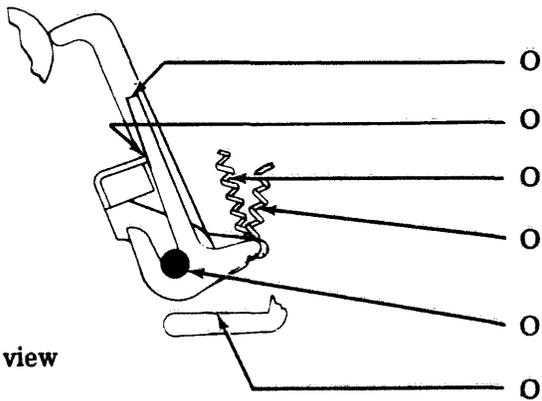
2.39 Blocking Levers



left front view

- | | | |
|---|-------------------|-----------------|
| ○ | Contact Surfaces | Blocking Levers |
| ○ | Pivots | Shaft |
| ○ | Engaging Surfaces | Codebar Slots |
| ○ | Contact Surfaces | Tines |
| ○ | Hooks | Springs |

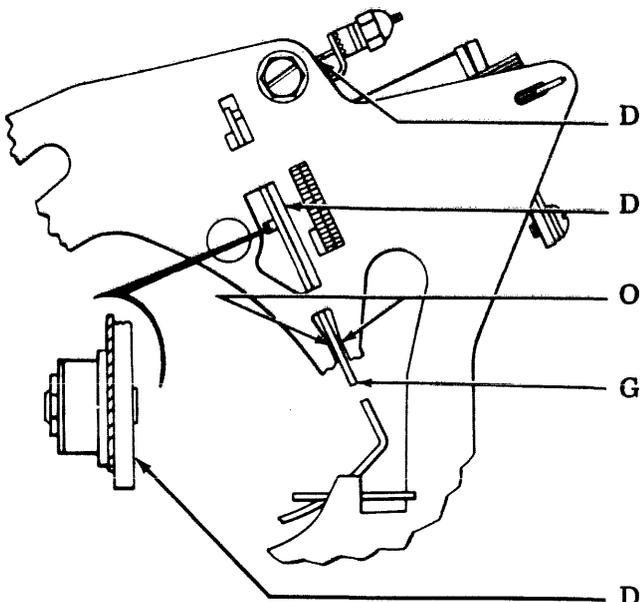
2.40 Pushlevers and Stripper Bail



left side view

- | | | |
|---|------------------|-------------------|
| ○ | Latching Surface | Pushlevers |
| ○ | Contact Surface | Stripper Bail |
| ○ | Hooks — Each End | Bail Spring |
| ○ | Hooks — Each End | Pushlever Springs |
| ○ | Pivots | Pushlevers |
| ○ | Contact Surfaces | Blocking Levers |

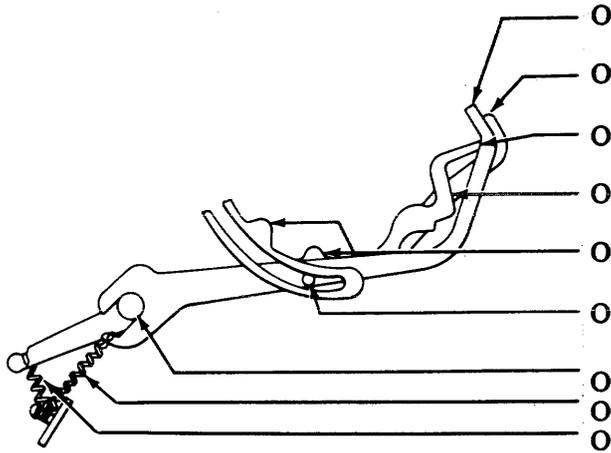
2.41 Armature



left side view

- | | | |
|---|-------------------|-----------------|
| D | Hooks | Armature Spring |
| D | Engaging Surfaces | Armature |
| O | Engaging Surfaces | Side Plates |
| G | Engaging Surface | Armature |
| D | Engaging Surface | Armature |

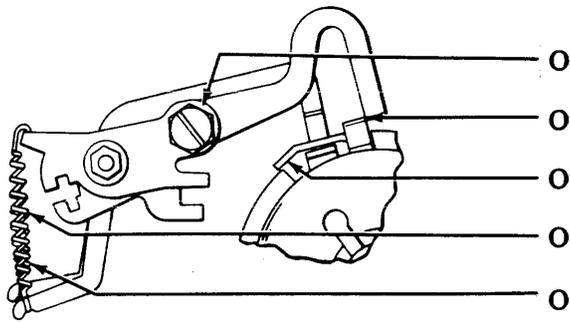
2.42 Selector Levers



left side view

- O Tip Start Lever
- O Contact Surface Locklever
- O Contact Surface Selector Levers
- O Engaging Surface Selector Levers
- O Camming Surface Selector Levers
- O Sliding Contact Start Lever
- O Pivots Levers
- O Hooks — Each End Start Lever Spring
- O Hooks — Each End Spring (9)

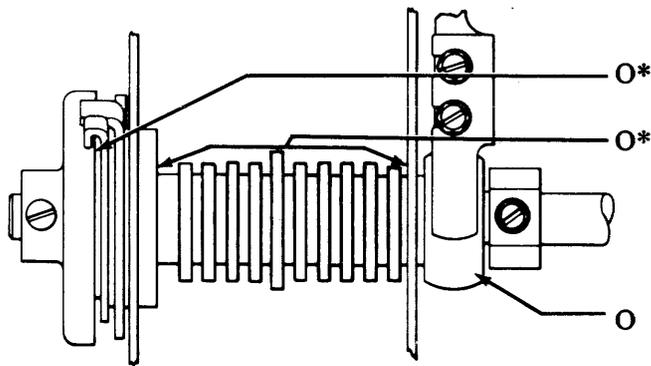
2.43 Latchlever and Trip Lever



left side view

- O Pivots (2) Levers
- O Engaging Surface Trip Lever
- O Latching Surface Latchlever
- O Hooks — Each End Trip Lever Spring
- O Hooks — Each End Latchlever Spring

2.44 Selector Clutch



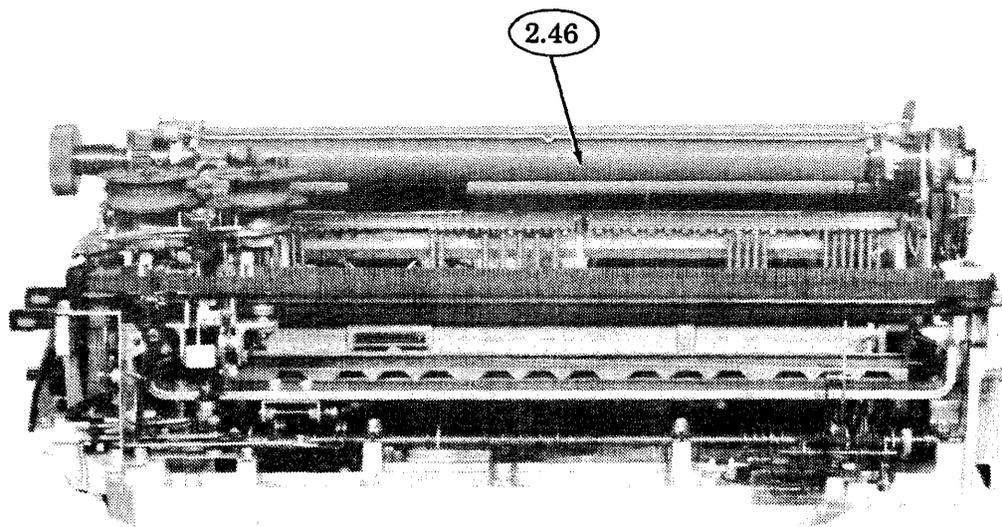
top view

- O* Internal Mechanism Selector Clutch
- O* Camming Surface Selector Cam
- O Bearing — Each End Main Shaft

**Refer to 1.05.*

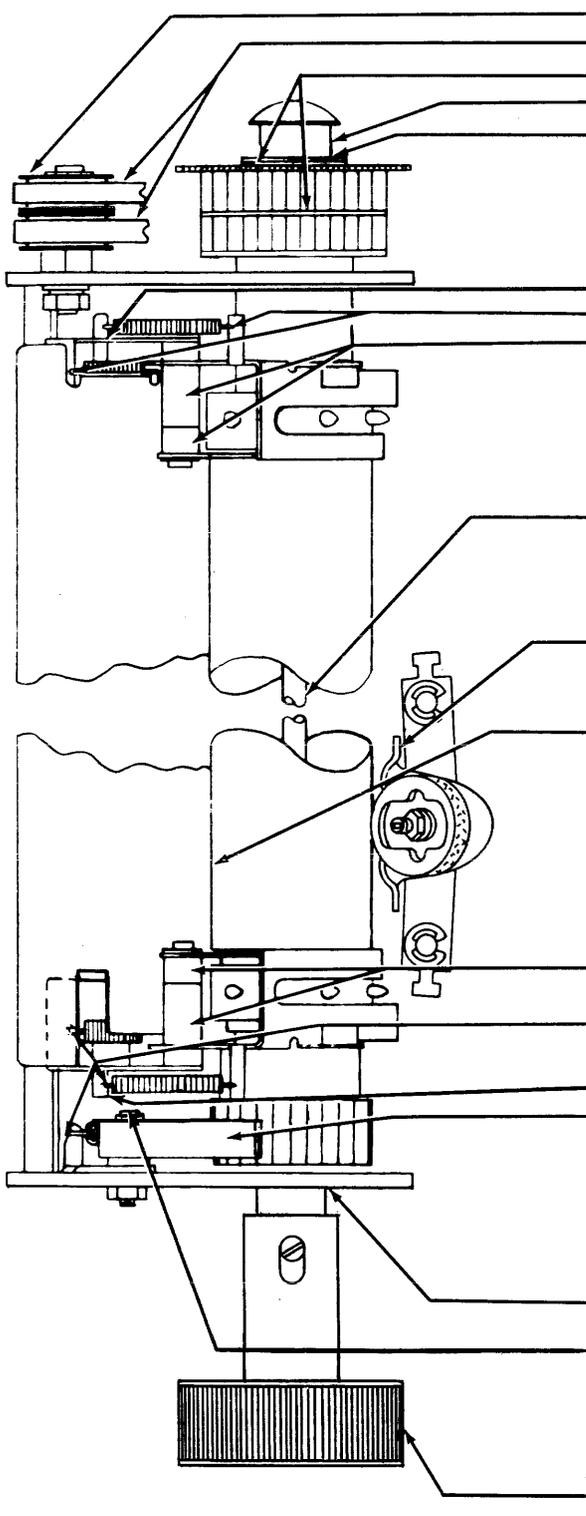
SPROCKET FEED MECHANISMS

2.45 Paper Feed Area



front view

2.46 Platen Mechanism



- O Bearing
- D Belts
- O Bearing
- O Bearing
- O Felt Washers (2 Within Shaft)
- Idler
- Drive
- Pulley
- Button
- Shaft

NOTE: Disassemble Shaft Per Section 574-422-702TC.

- O Pivot
- O Hooks — Each End
- O Bearing
- Paper Guide
- Spring
- Paper Guide

- O* Bearings — Both Ends
- Platen Shaft

NOTE: Reassemble shaft.

- D All Surfaces Contacting Ribbon

- D All Surfaces Contacting Paper

- O Bearing
- Paper Guide

- O Hooks — Each End
- Spring

- O Pivot
- O Bearing
- Paper Guide
- Pawl

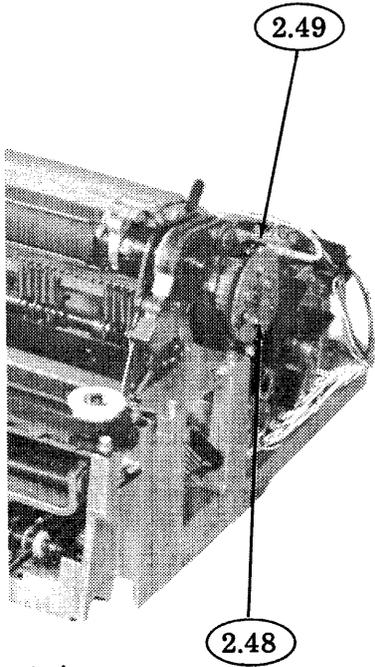
- O & G* Bearing
- O Pivot
- Left and Right Plate
- Detent Lever

- D Bearing
- Knob

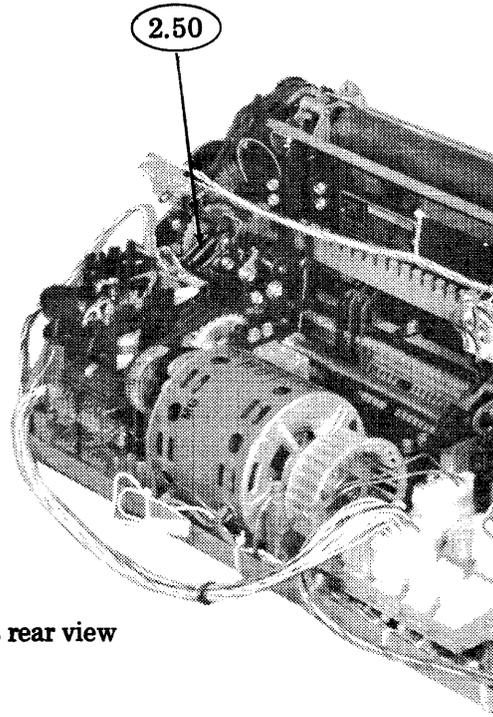
*Refer to 1.05.

top view

2.47 Platen Drive Area



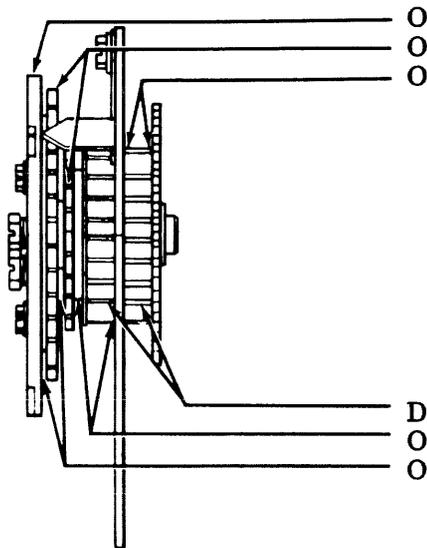
right front view



right rear view

(Form-out mechanism removed for illustration purposes. Removal for lubrication is not required.)

2.48 Cam, Pulley, and Gear Combination

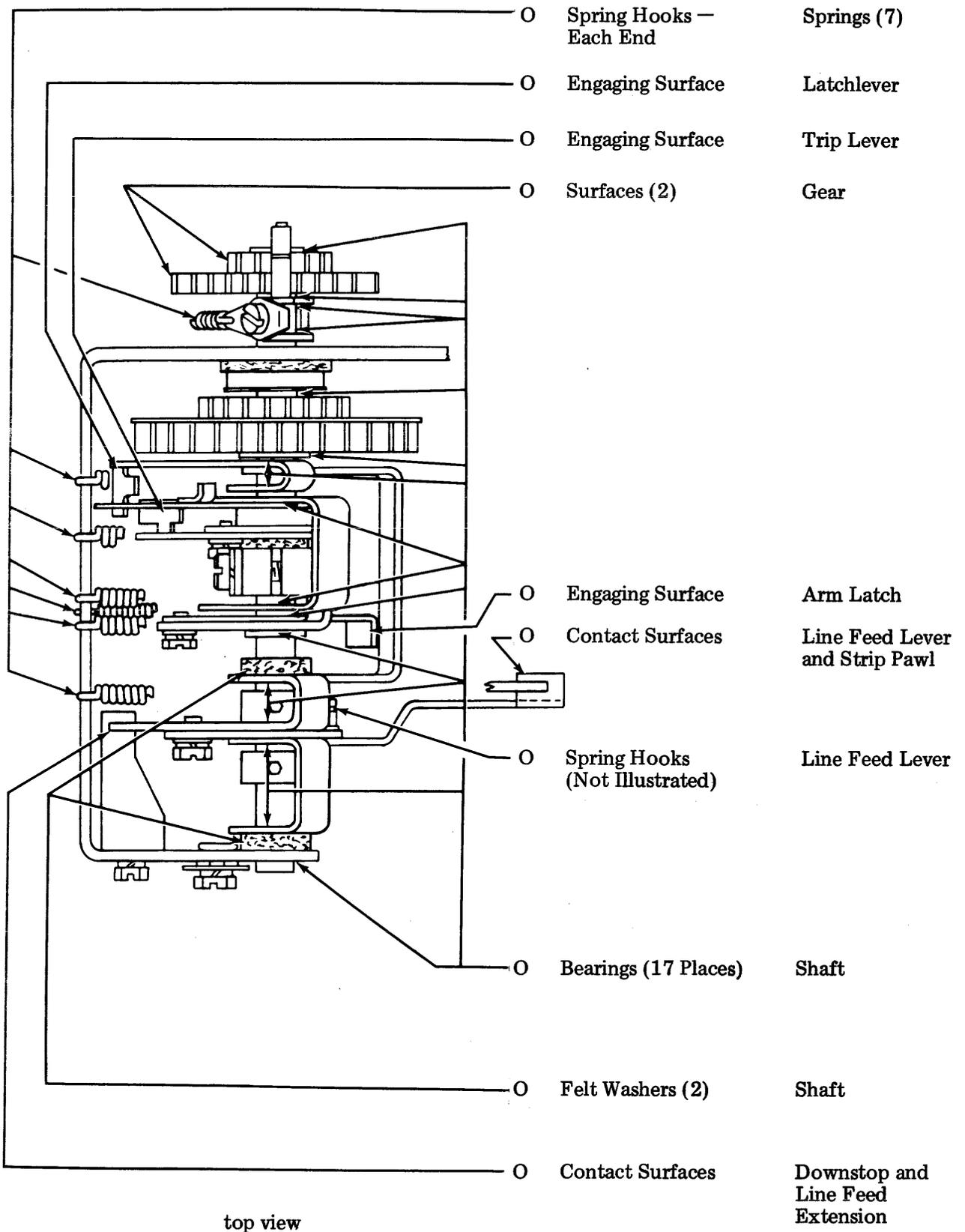


top view

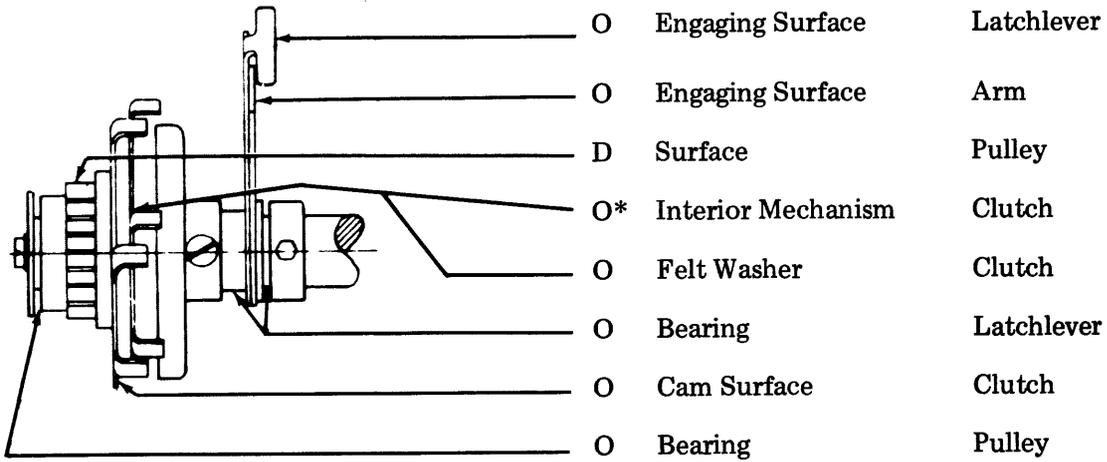
O	Cam Surface	Cam Gear
O	Gear Surface	Cam Gear
O	Bearing	Gear and Pulley

D	Surface	Pulley
O	Bearing	Gear and Pulley
O	Bearing	Cam Gear

2.49 Form-Out Mechanism



2.50 Line Feed Clutch

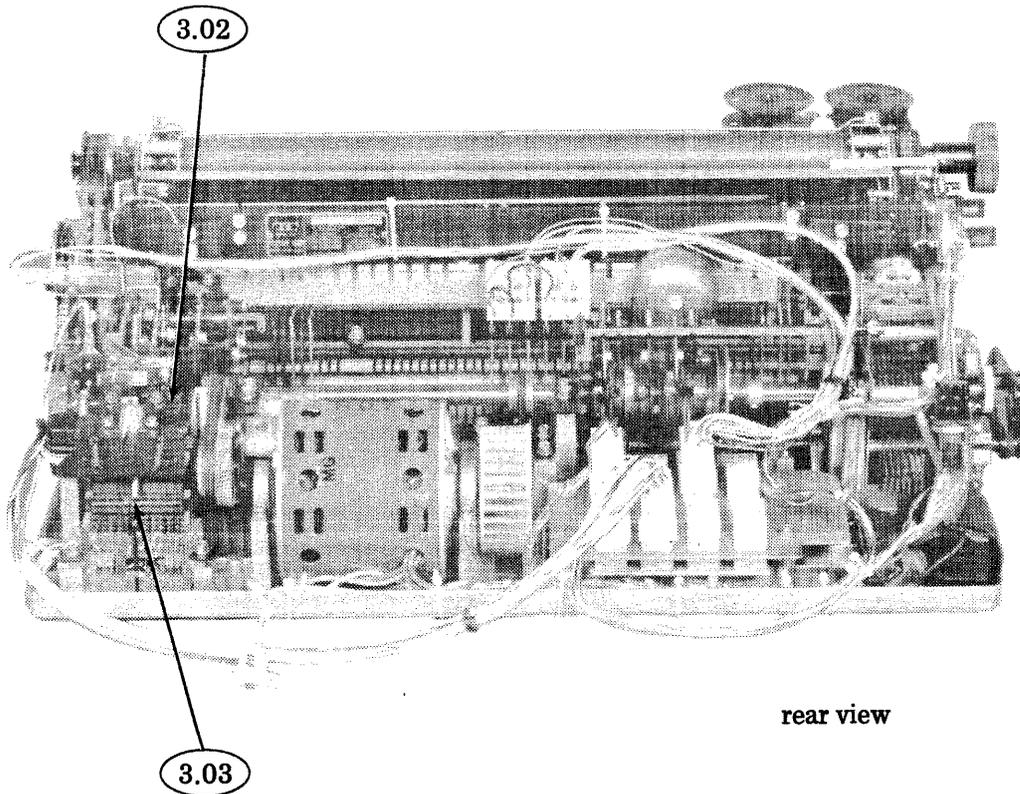


*Refer to 1.05.

top view

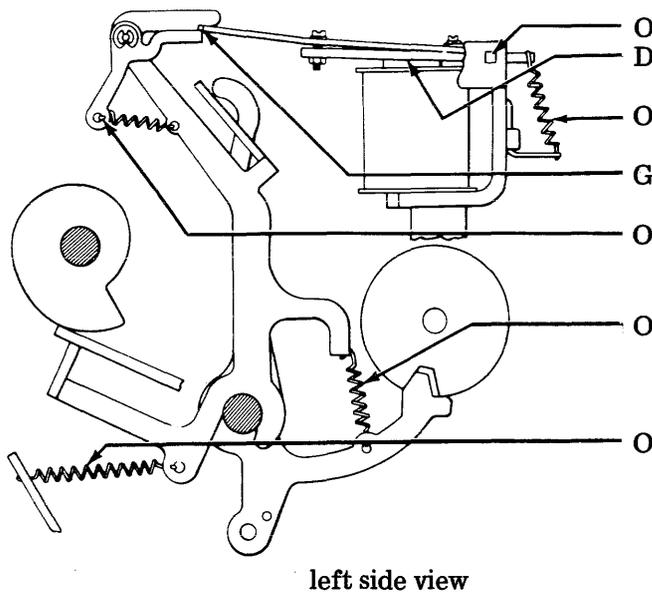
3. VARIATION TO BASIC UNIT

3.01 Answer-Back Area



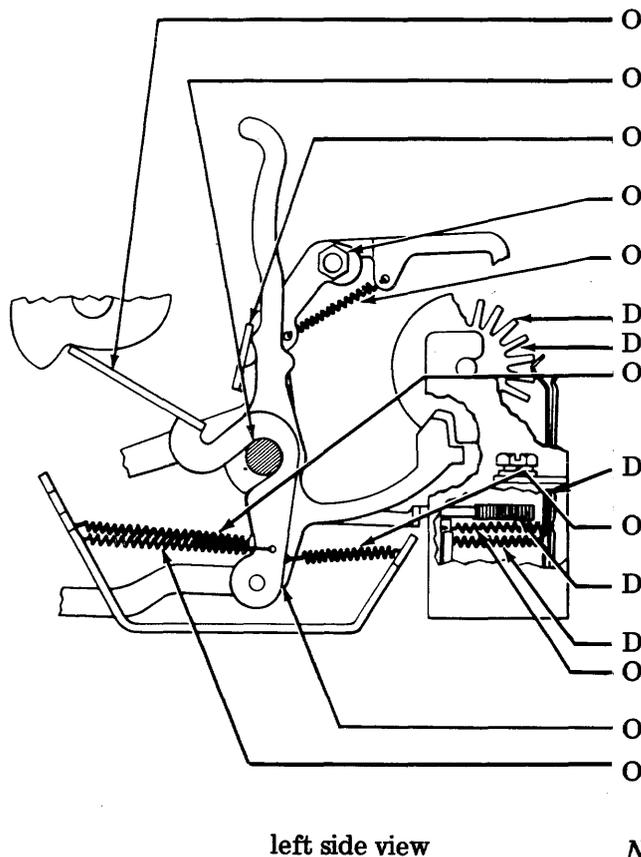
3.02 Trip Magnet

NOTE: Remove answer-back drum.



- | | | |
|---|------------------|--------------------------|
| O | Pivots (2) | Armature |
| D | Contact Surface | Armature |
| O | Hooks — Each End | Armature Spring |
| G | Latching Surface | Armature Extension |
| O | Hooks — Each End | Lever Spring |
| O | Hooks — Each End | Control Lever Spring |
| O | Hooks — Each End | Blocking Follower Spring |

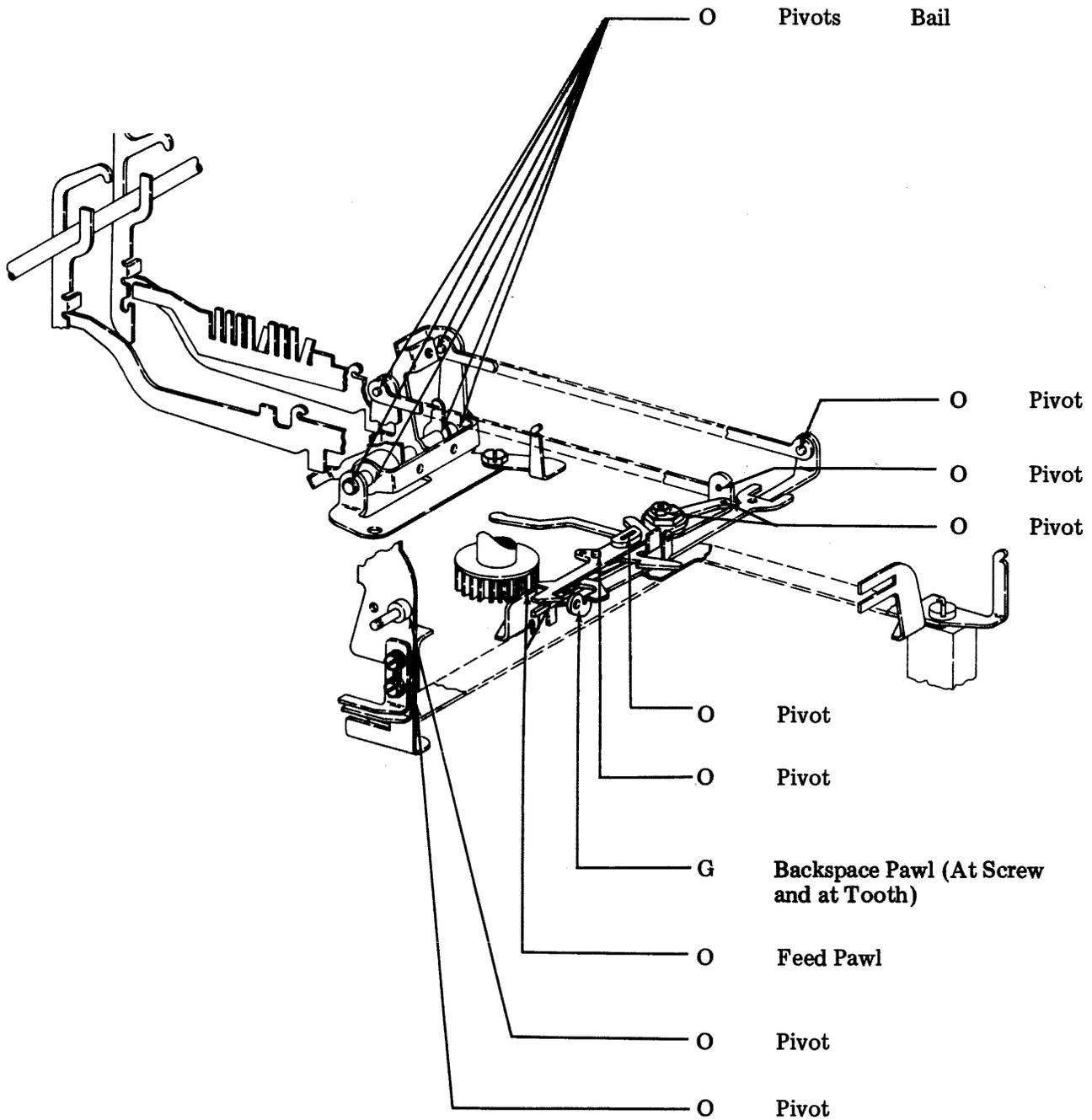
3.03 Answer-Back Mechanism



- | | | |
|---|-------------------|----------------------|
| O | Camming Surface | Follower Lever |
| O | Pivots (2) | Trip Shaft |
| O | Camming Surface | Feed Lever |
| O | Pivot | Feed Pawl |
| O | Hooks — Each End | Feed Pawl Spring |
| D | Tine Surfaces | Drum |
| D | Feed Ratchet | Drum |
| O | Hooks — Each End | Feed Lever Spring |
| D | Contact Surface | Contact Wires (9) |
| O | Hooks — Each End | Control Lever Spring |
| D | Contact Extension | Break Lever |
| D | Hooks | Springs (9) |
| O | Hooks — Each End | Detent Lever Spring |
| O | Pivot | Function Lever |
| O | Hooks — Each End | Follower Spring |

NOTE: Replace answer-back drum.

3.04 Backspace Mechanism



left front view