

32 TYPING UNIT
LUBRICATION

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Function shaft area	5	1.01 This section provides lubrication re- quirements for the 32 typing unit. It is reissued to make corrections and change the lubrication interval. Marginal arrows indicate changes. To remove the typing unit from the teletypewriter set as a unit, refer to Section 574-160-702TC.	
Intermediate gears	5	1.02 Lubrication of the typing unit is pre- sented by mechanisms. Photographs show numbered callouts that correspond to para- graphs containing line drawings. These drawings show specific points of each mechanism to be lubricated.	
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SECTION 574-172-701TC

1.03 References to front, rear, left, right, etc, are made viewing the typing unit from its normal operating position.

1.04 Lubricate all components of the teletypewriter set at the following intervals:

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.

LUBRICATION INTERVAL
(Based on 5-Day Week)

Daily Operation of Typing Unit			
Speed (wpm)	0-8 hrs	8-16 hrs	16-24 hrs
60	39 wks	26 wks	13 wks
100	26 wks	13 wks	6 wks
All Speeds*	3 wks	2 wks	1 wk

*Newly installed equipment

Note 1: Reduce lubricating intervals 15 percent for a 6-day week and 30 percent for a 7-day week.

Note 2: Sets with typing unit serial numbers below 144,000, reduce lubricating intervals 33 percent. Those with serial numbers above 144,000, use above chart.

Note 3: For units operating at speeds between those shown, use slower of two speeds.

1.05 Whenever the typing unit is disassembled, apply an equally well-mixed coat of TKS7470 oil and TKS7471 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	2.49

Note: Whenever clutches are disassembled, apply a thin coat of TKS7471 grease to the shoe lever spring loops and TKS7470 oil to the internal mechanisms.

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

Note: The amount of lubricant applied is at the discretion of maintenance personnel.

SYMBOL

MEANING

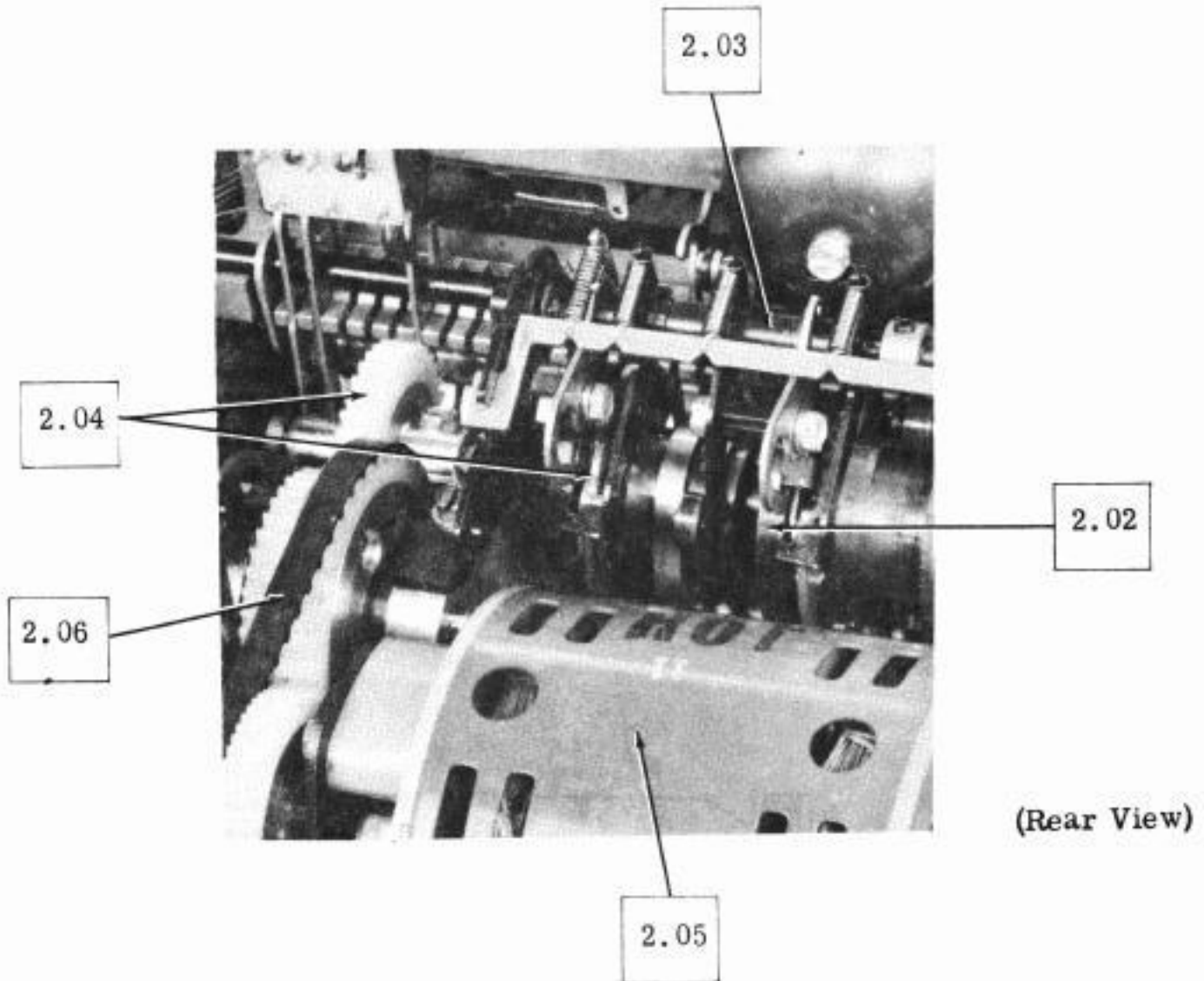
D	Dry	— no lubricant permitted
G	Grease	— apply TKS7471 grease
O	Oil	— apply TKS7470 oil

1.07 Lubricate the typing unit 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 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 UNITS

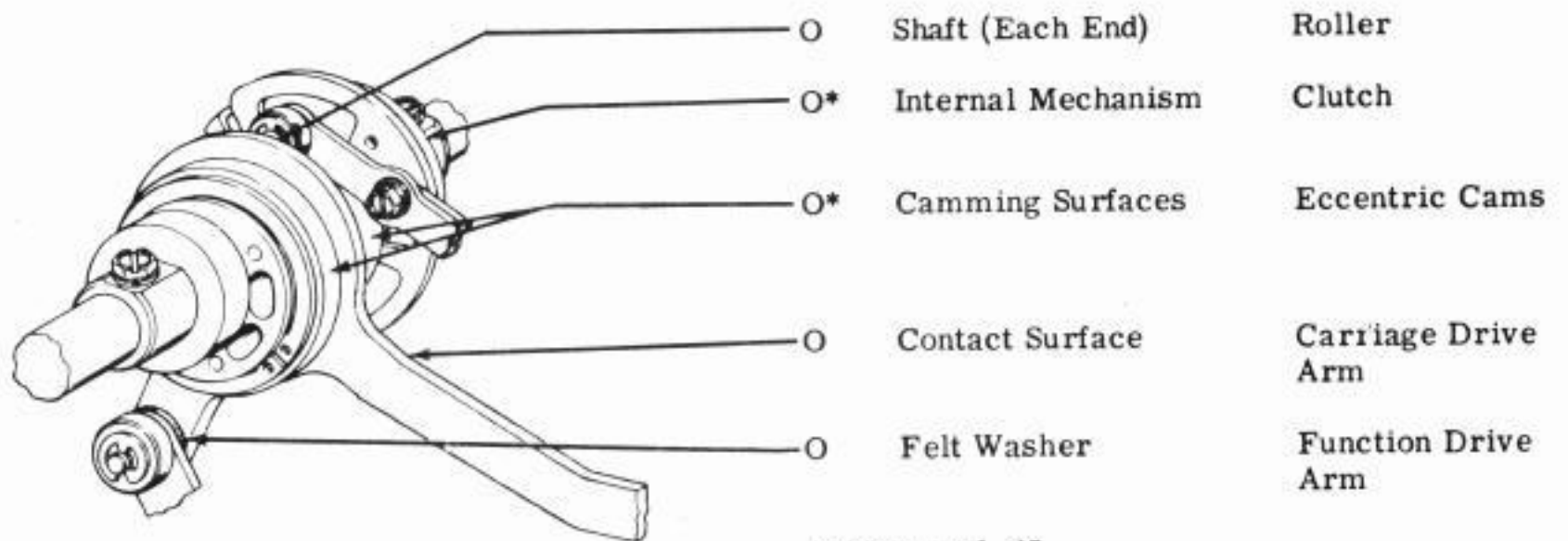
COMMON MECHANISMS

2.01 Main Shaft Area



(Rear View)

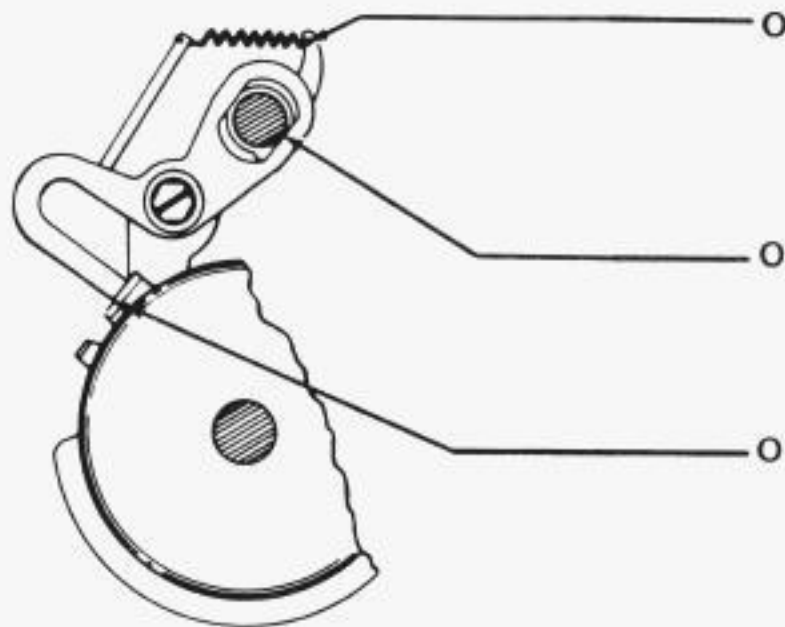
2.02 Function Clutch



*Refer to 1.05.

(Left Front View)

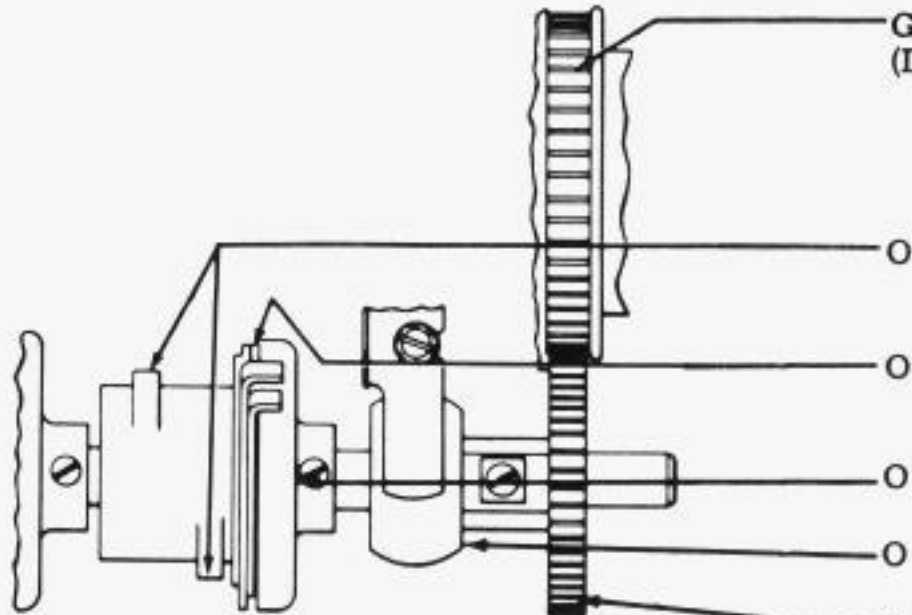
2.03 Trip Shaft



(Left Side View)

- | | | |
|---|------------------|------------------|
| O | Hooks (Each End) | Springs (4) |
| O | Pivot Bearings | Shaft (6 Points) |
| O | Latching Surface | Trip Levers (2) |

2.04 Codebar Clutch

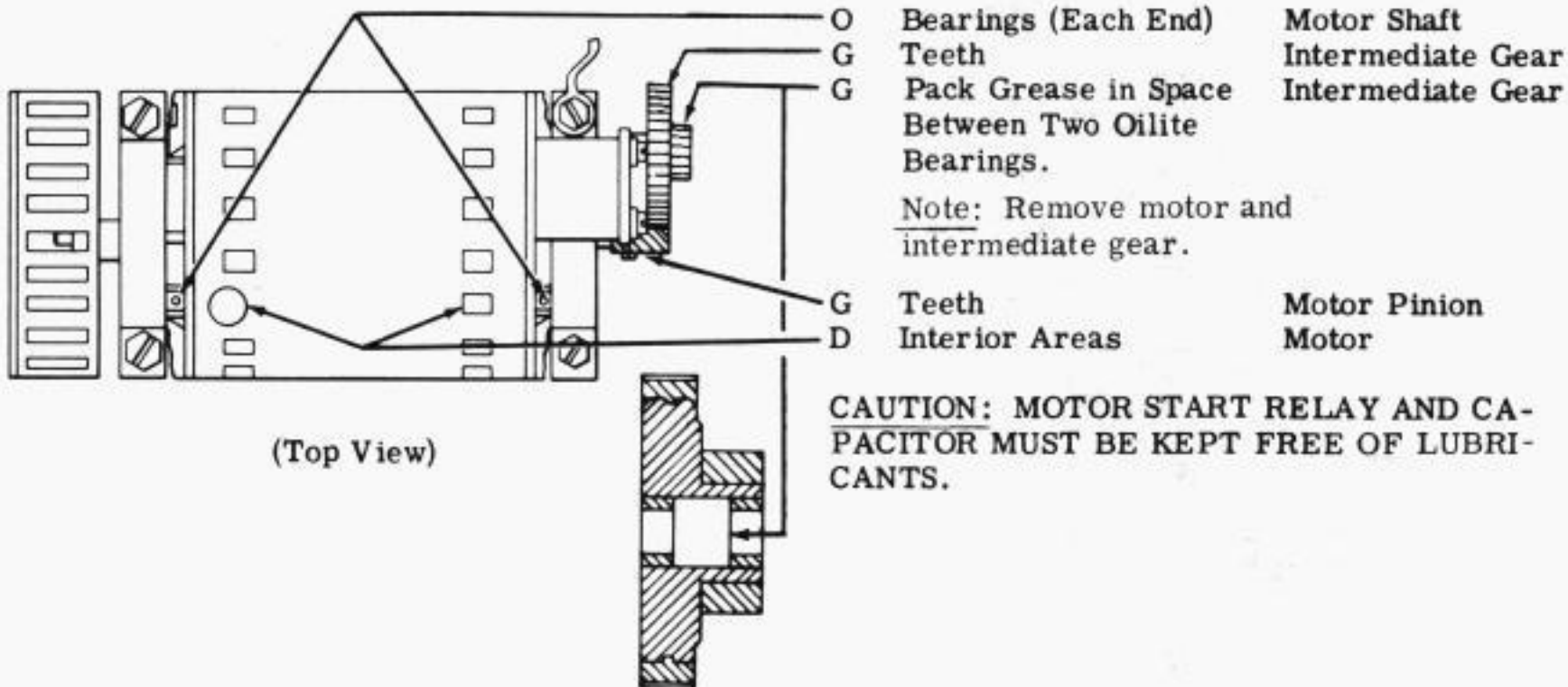


(Top View)

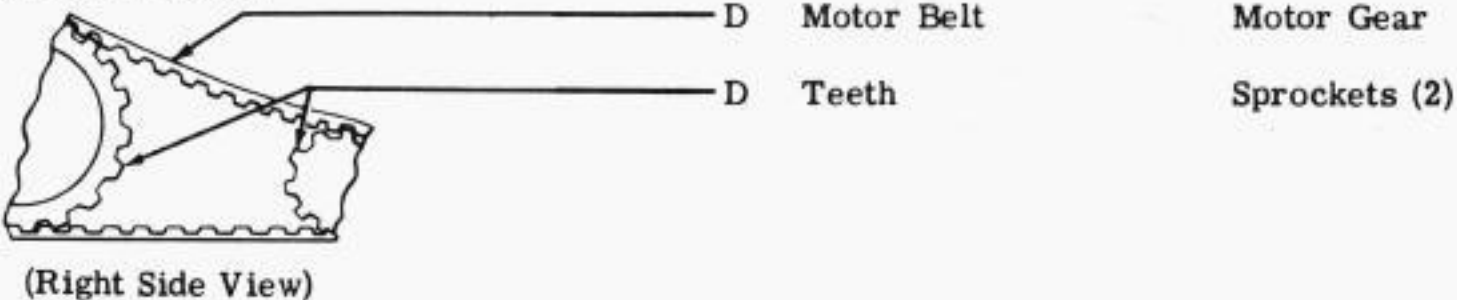
- | | | |
|----|----------------------|--|
| G | Teeth | Distributor Gear
(Do not grease teeth of motor belt sprocket) |
| O* | Camming Surfaces | Eccentric Cams |
| O* | Interior Mechanism | All Clutches |
| O | Interior Felt Washer | All Clutches |
| O | Bearings (Both Ends) | Main Shaft |
| G | Teeth | Gear |

*Refer to 1.05.

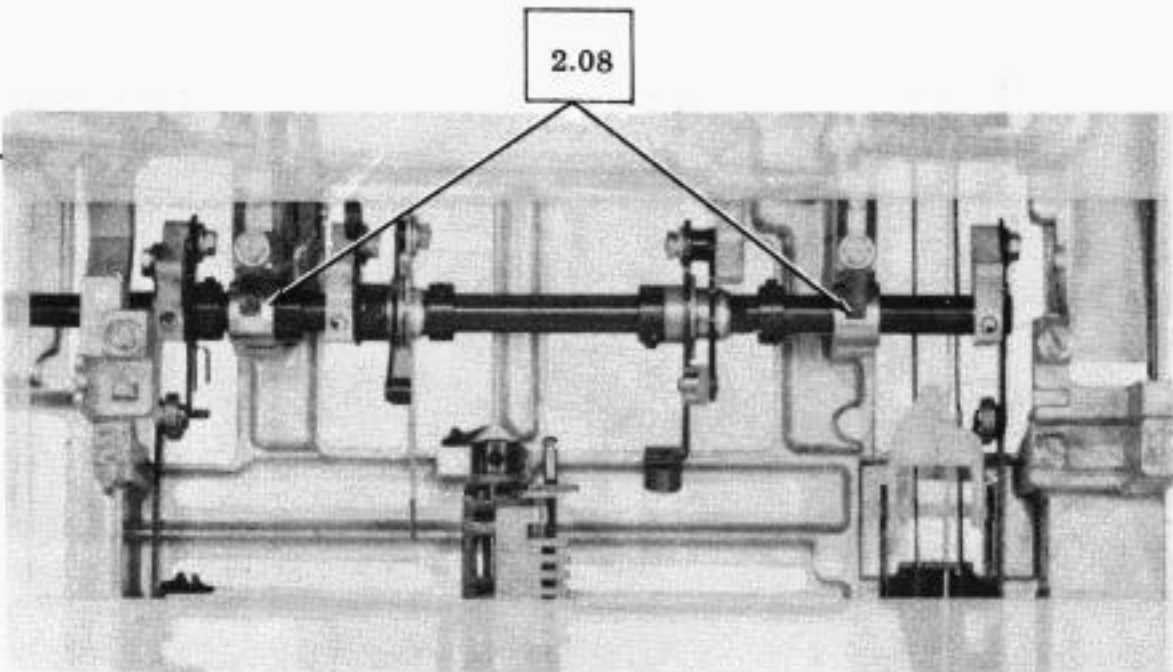
2.05 Motor Area



2.06 Intermediate Gears

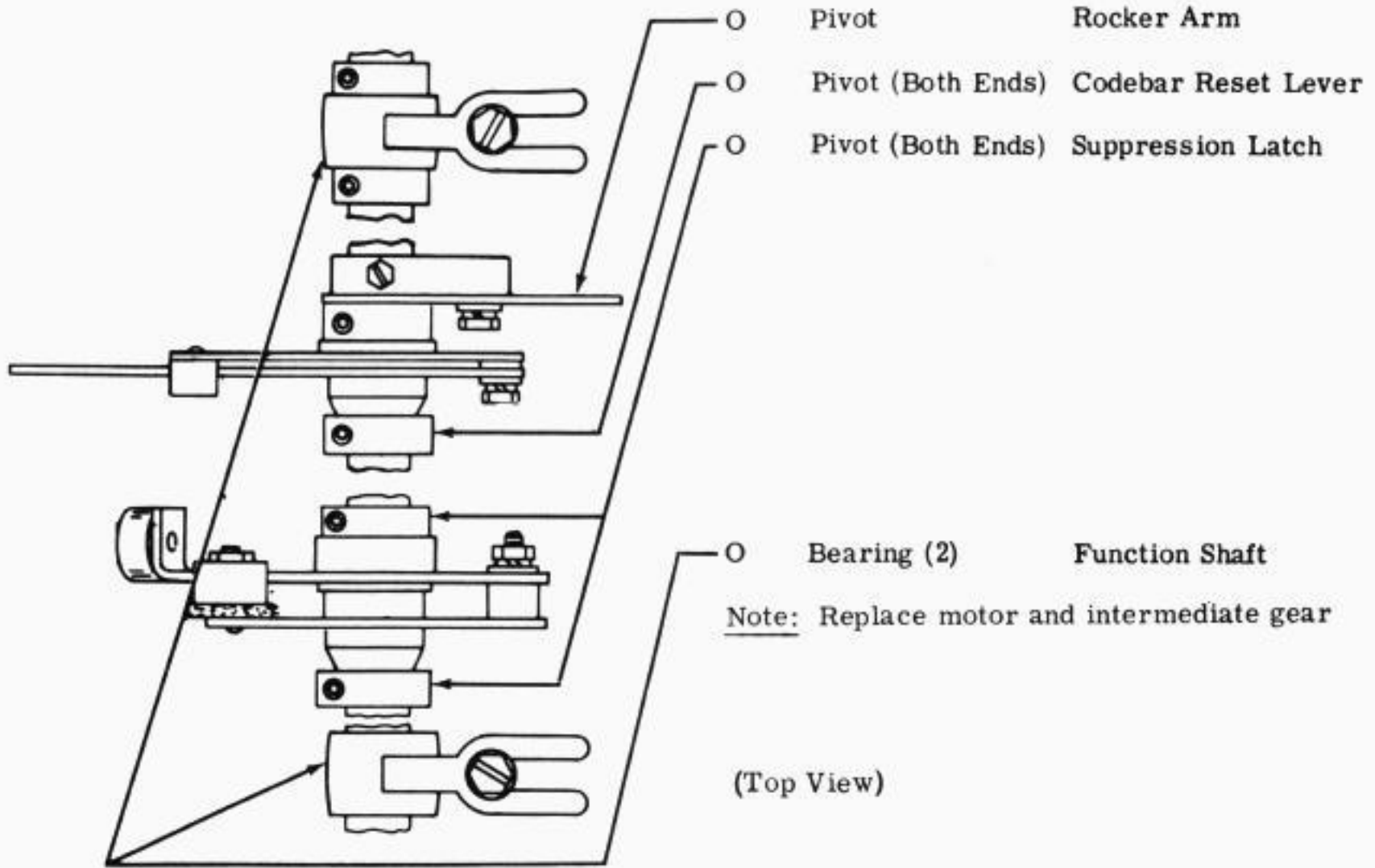


2.07 Function Shaft Area

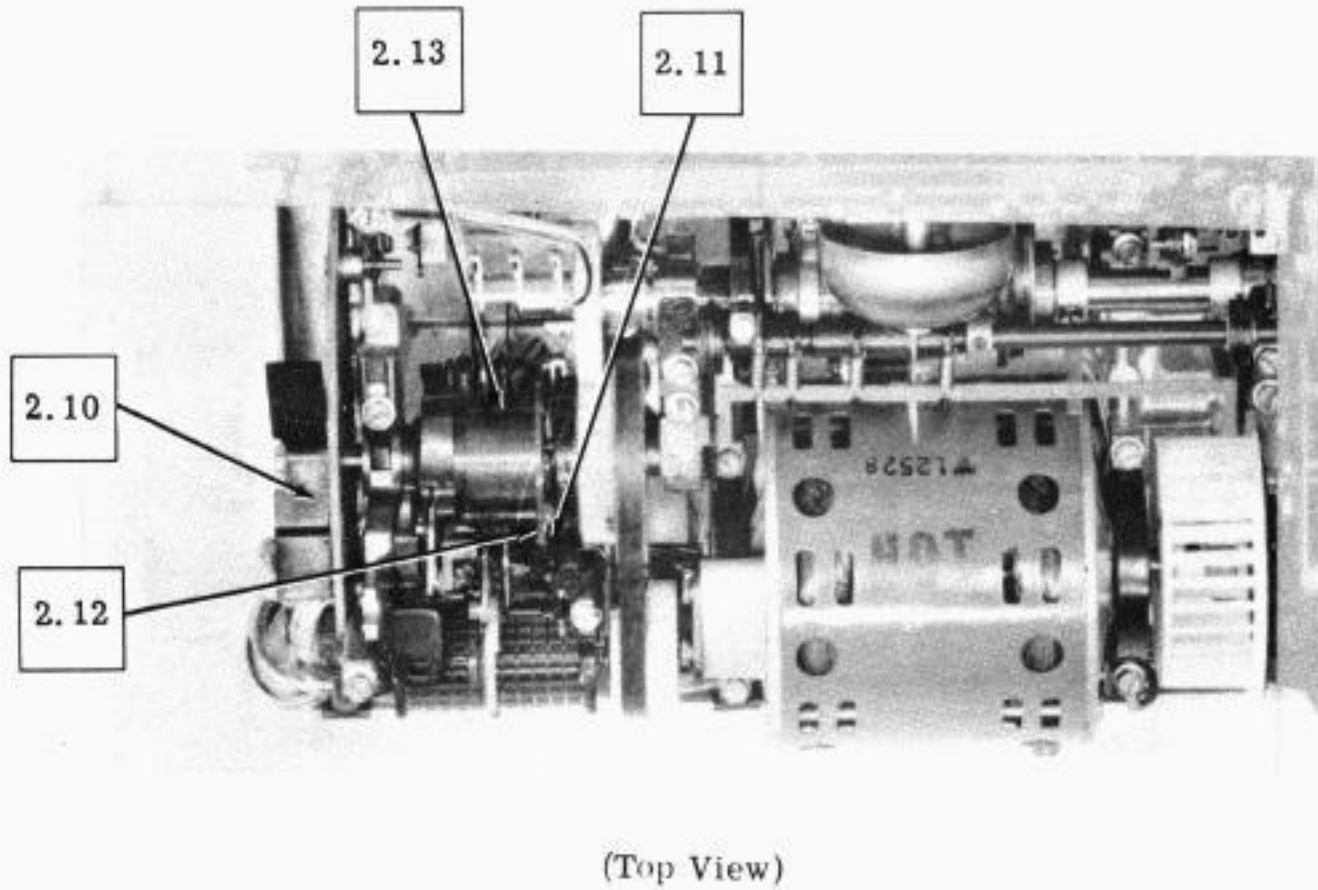


(Top View)

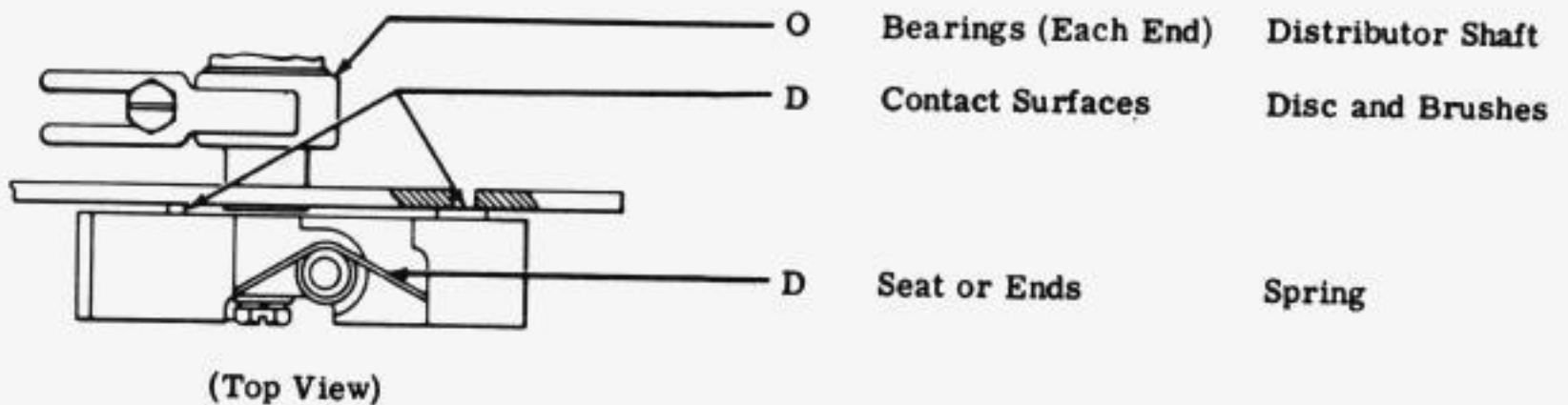
2.08 Function Rocker Shaft



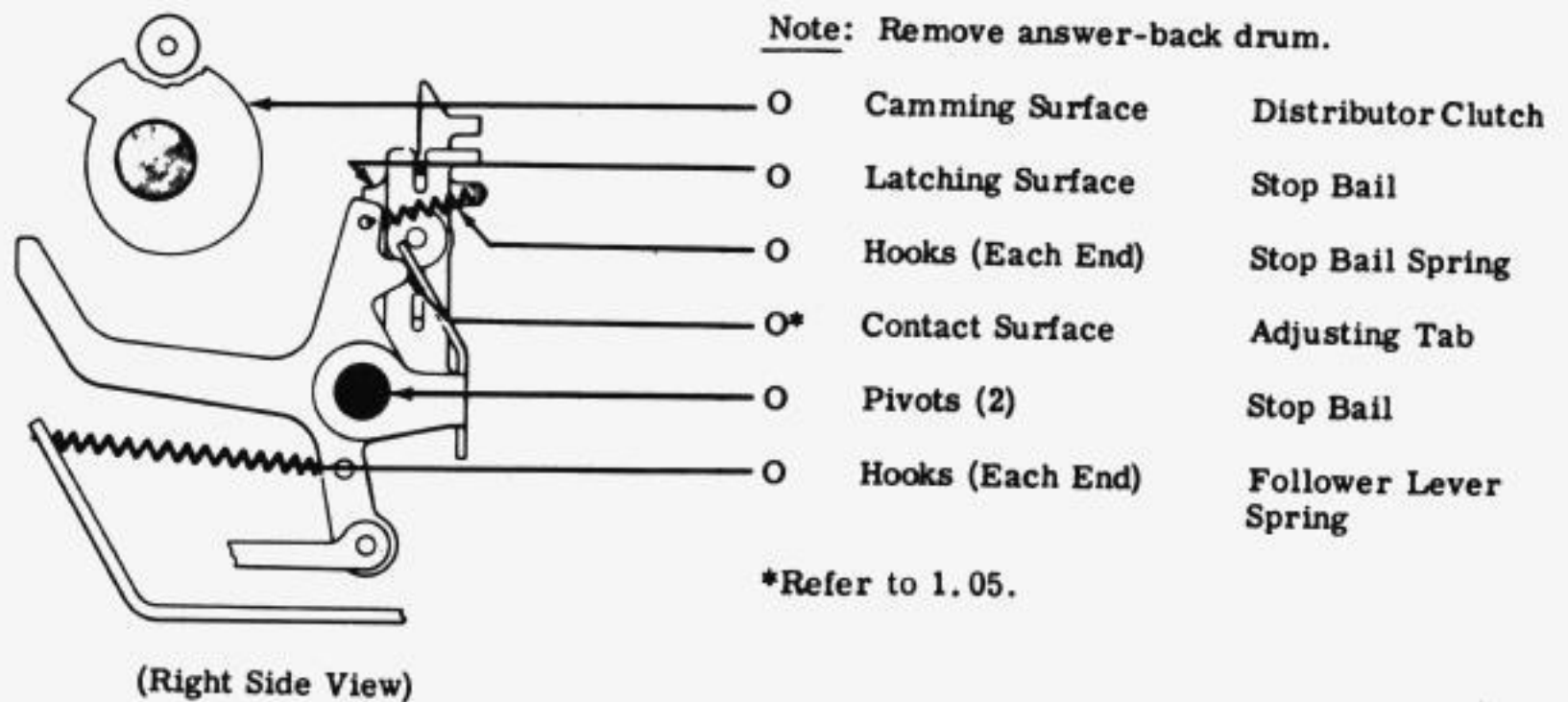
2.09 Distributor Area



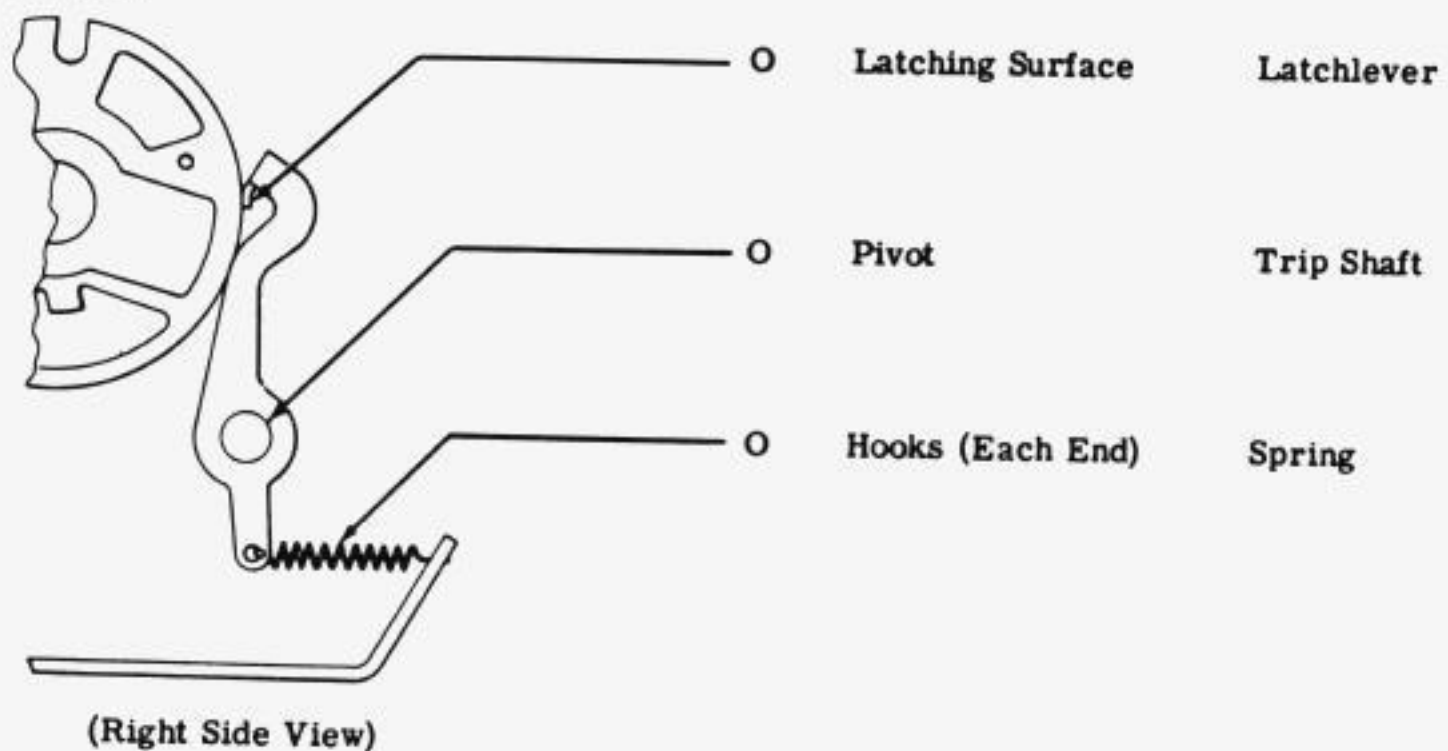
2.10 Disc and Brushes



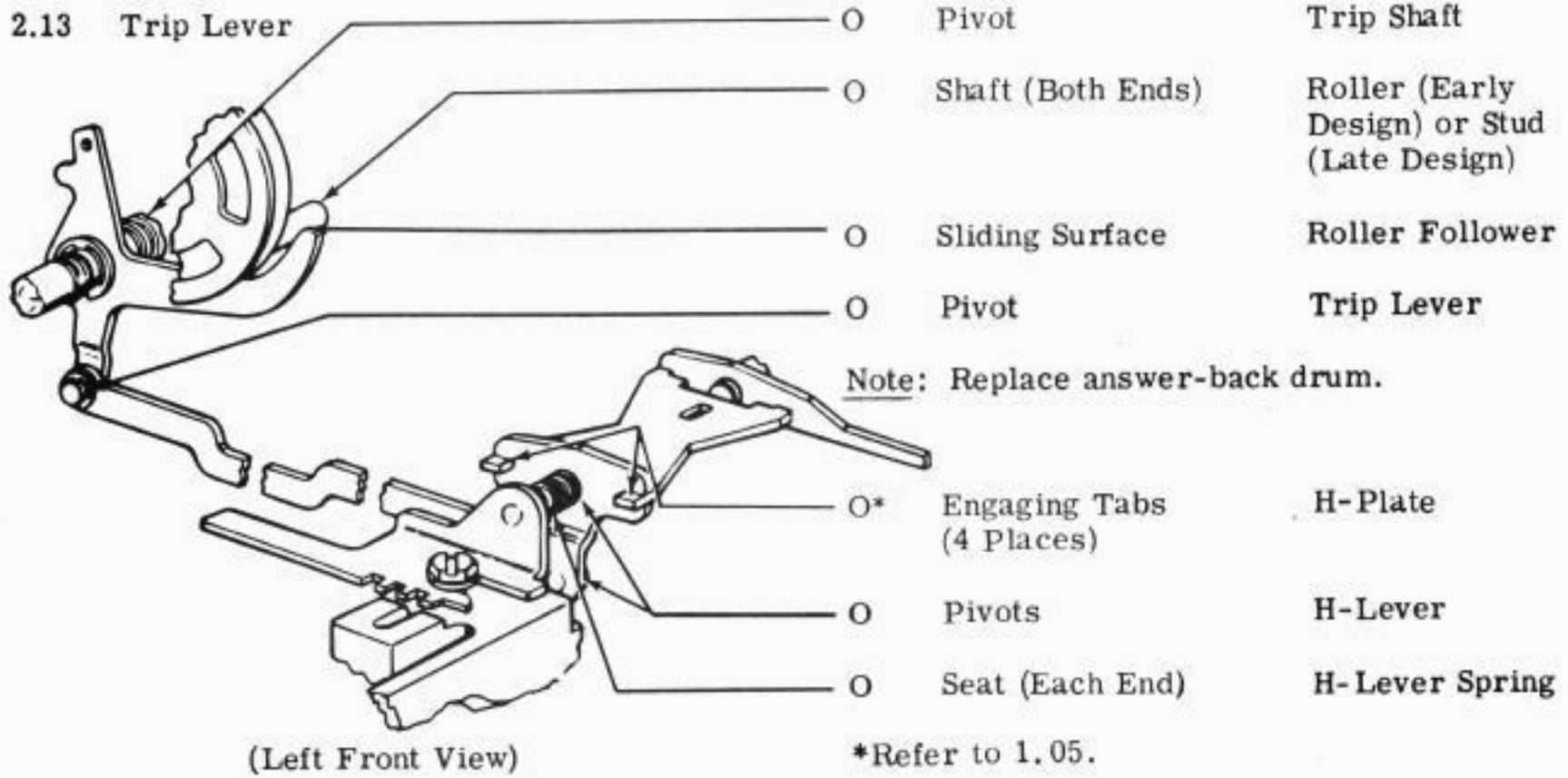
2.11 Stop Bail



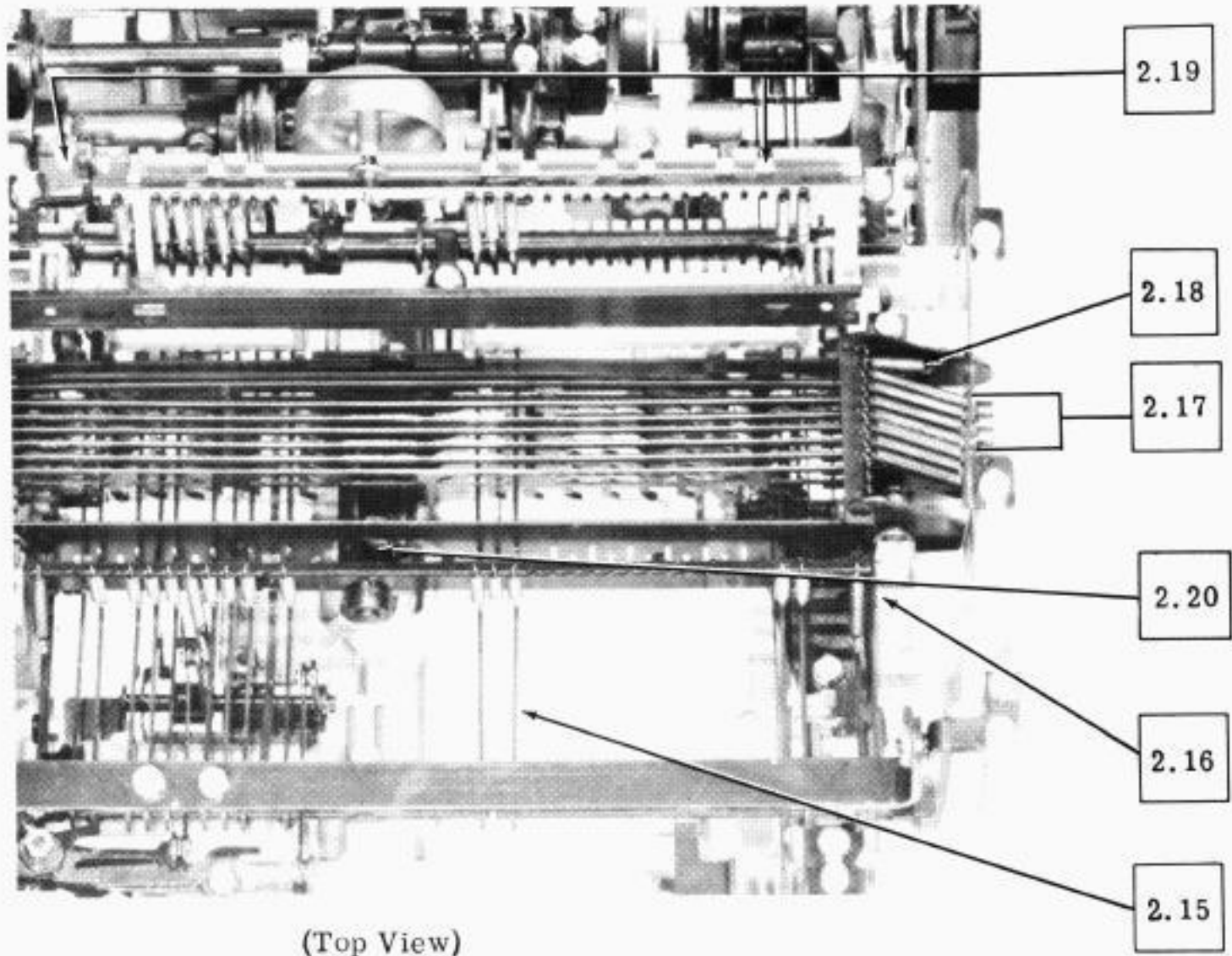
2.12 Latchlever



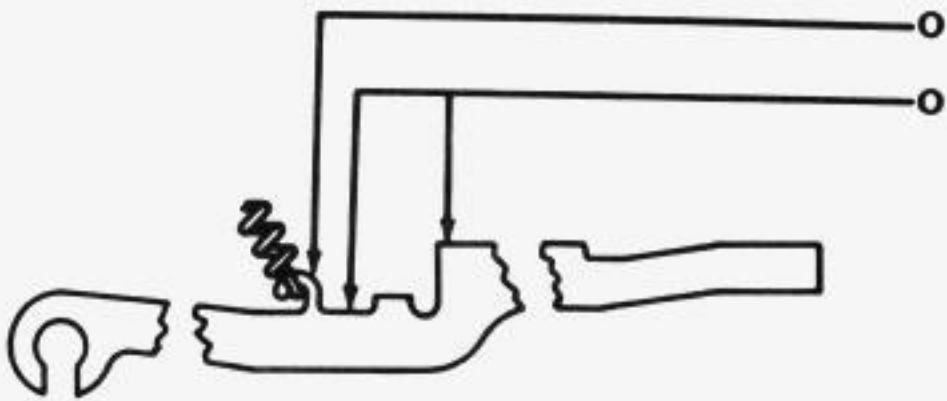
2.13 Trip Lever



2.14 Function Area



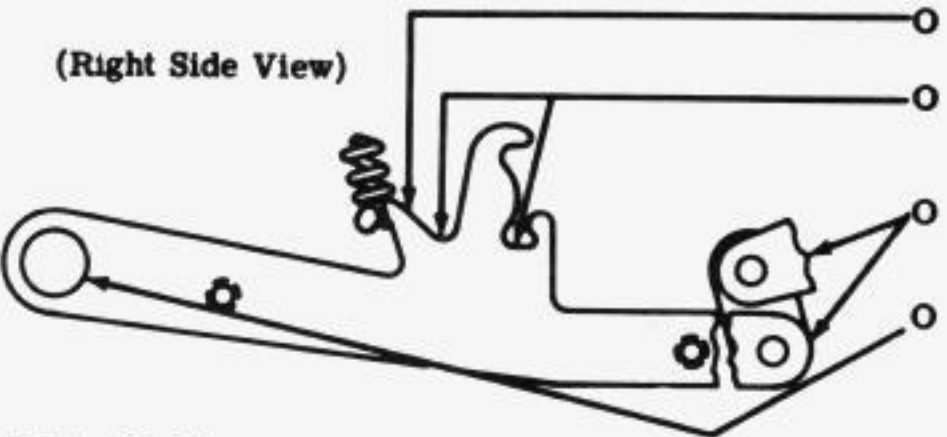
2.15 Function Levers



(Right Side View)

- O Hooks (Each End) Springs
- O Engaging Surfaces Function Levers

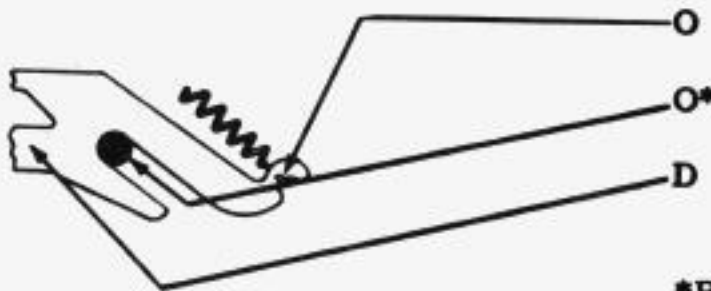
2.16 Stripper Drive Lever



(Right Side View)

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

2.17 Codebars

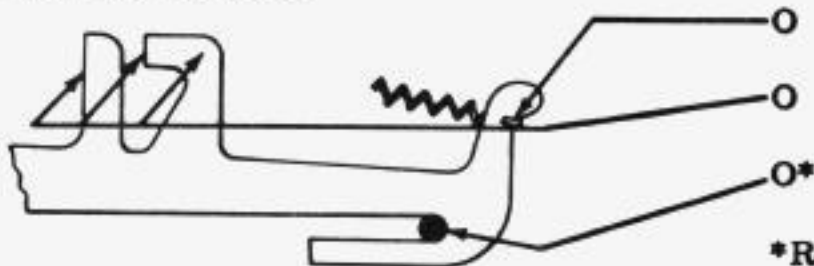


(Front View)

- O Hooks (Each End) Springs
- O* Pivot Shaft
- D Area Between Codebars

*Refer to 1.05.

2.18 Automatic Codebar

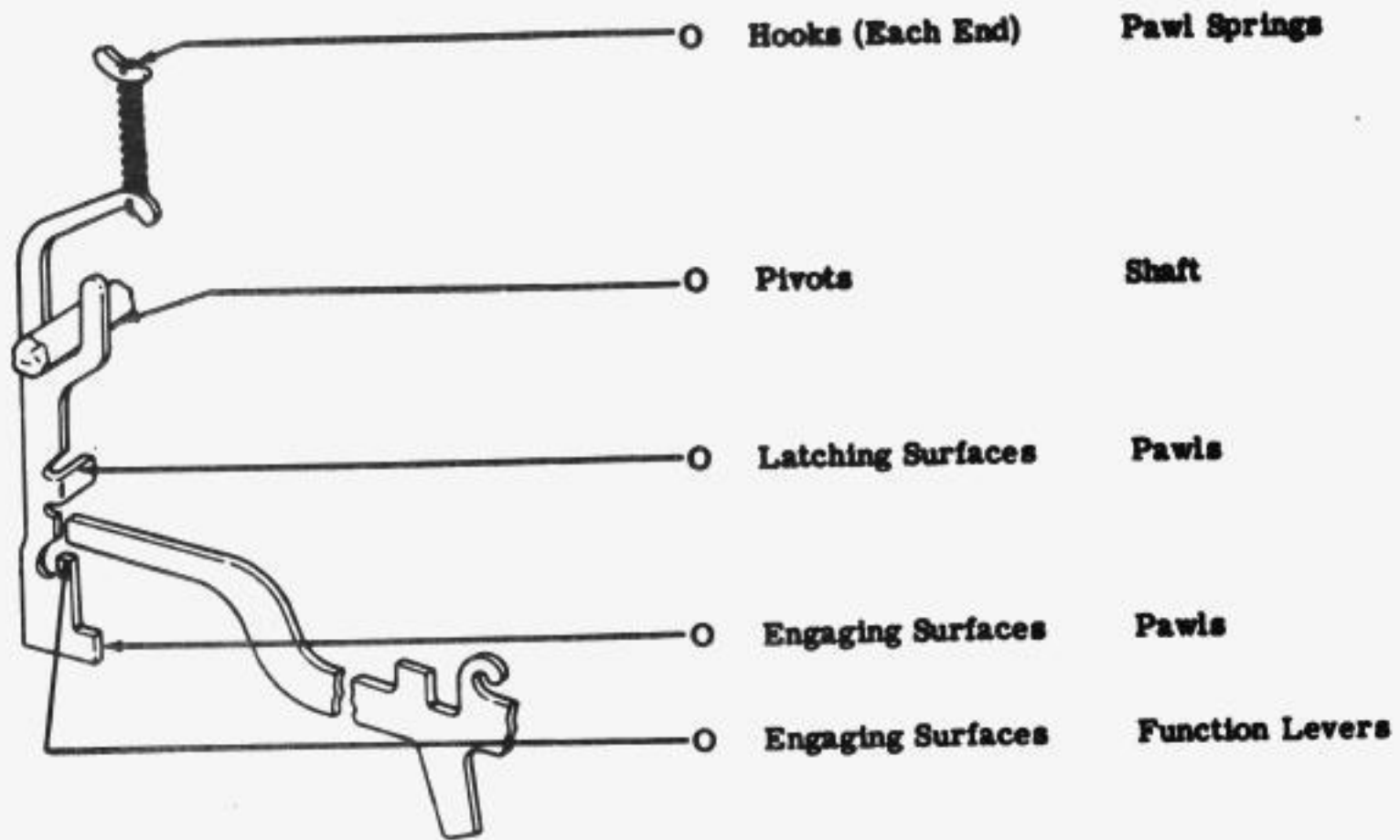


(Front View)

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

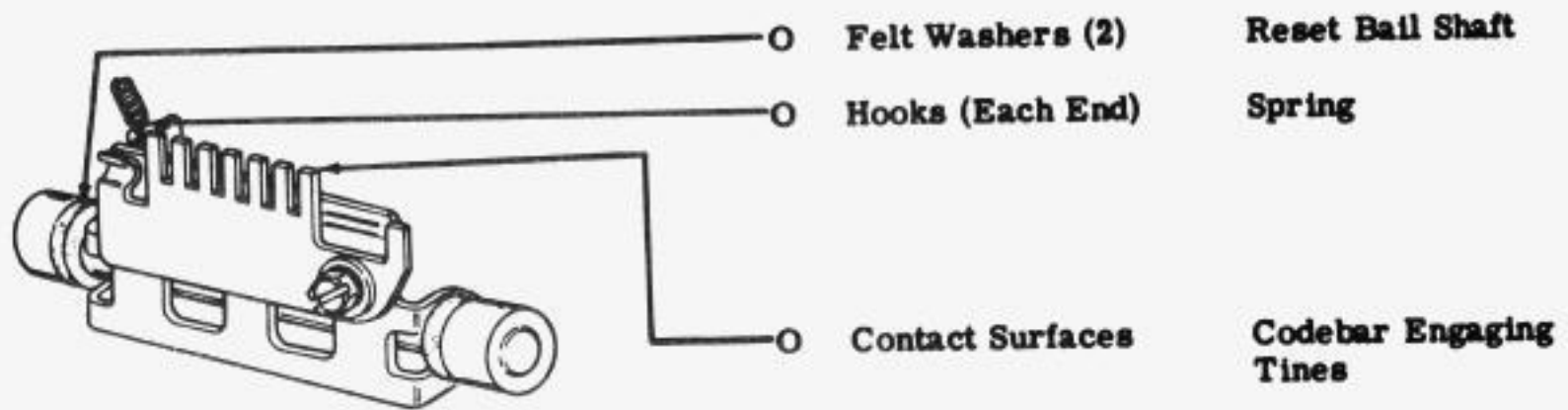
*Refer to 1.05.

2.19 Rocker and Pawls



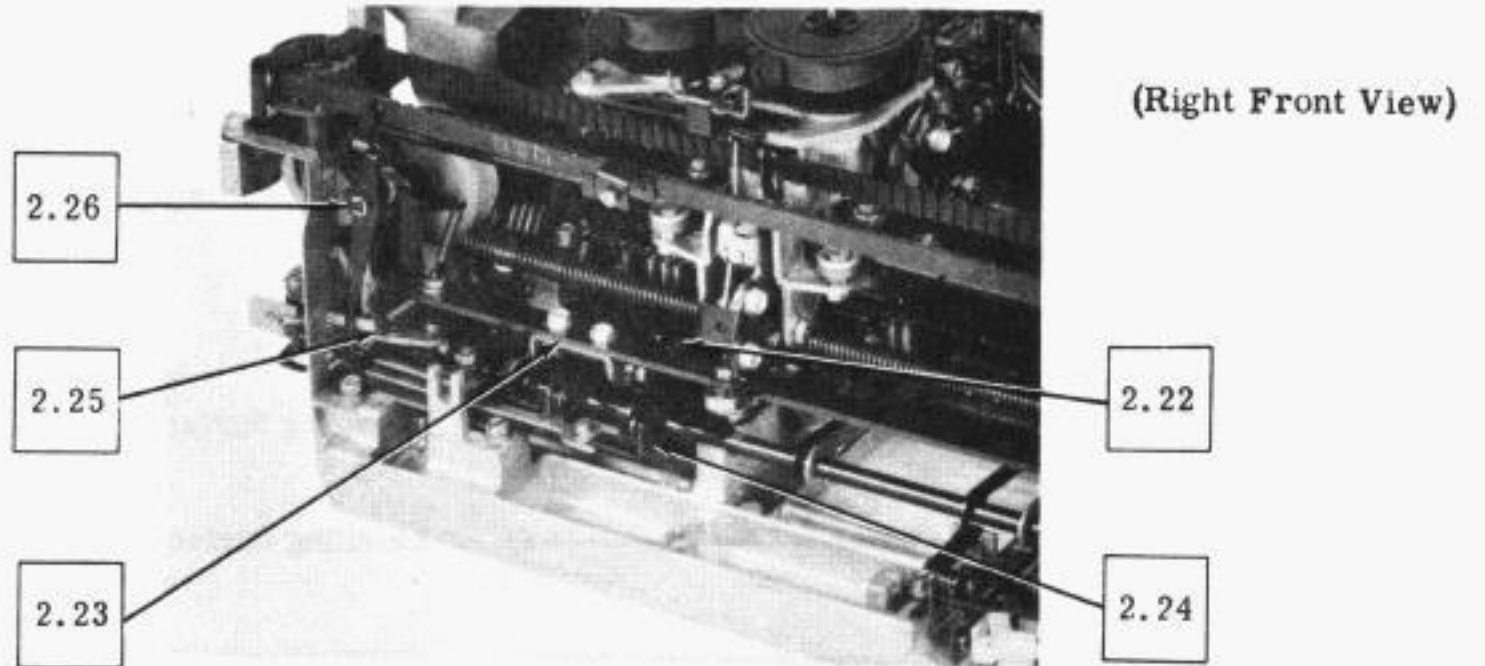
(Left Front View)

2.20 Reset Ball

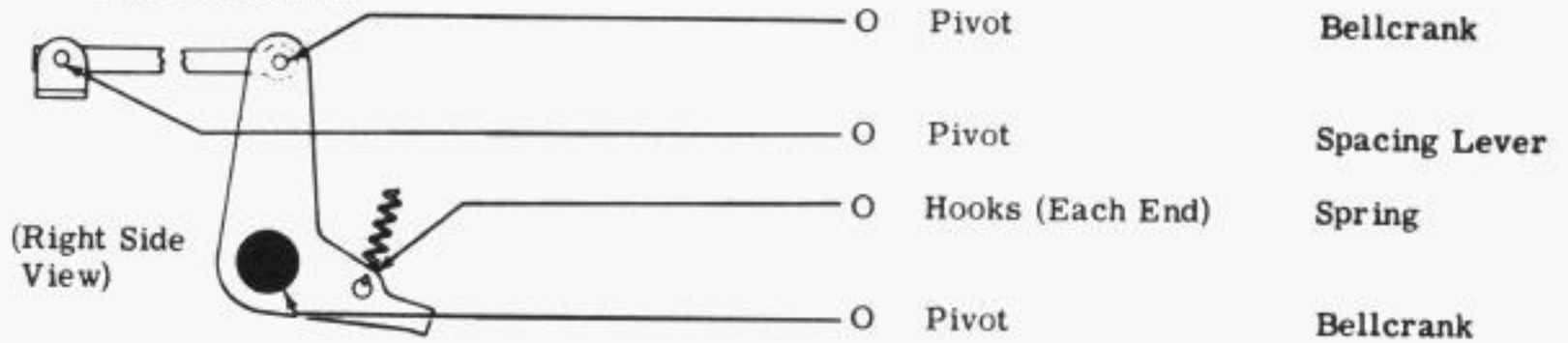


(Left Front View)

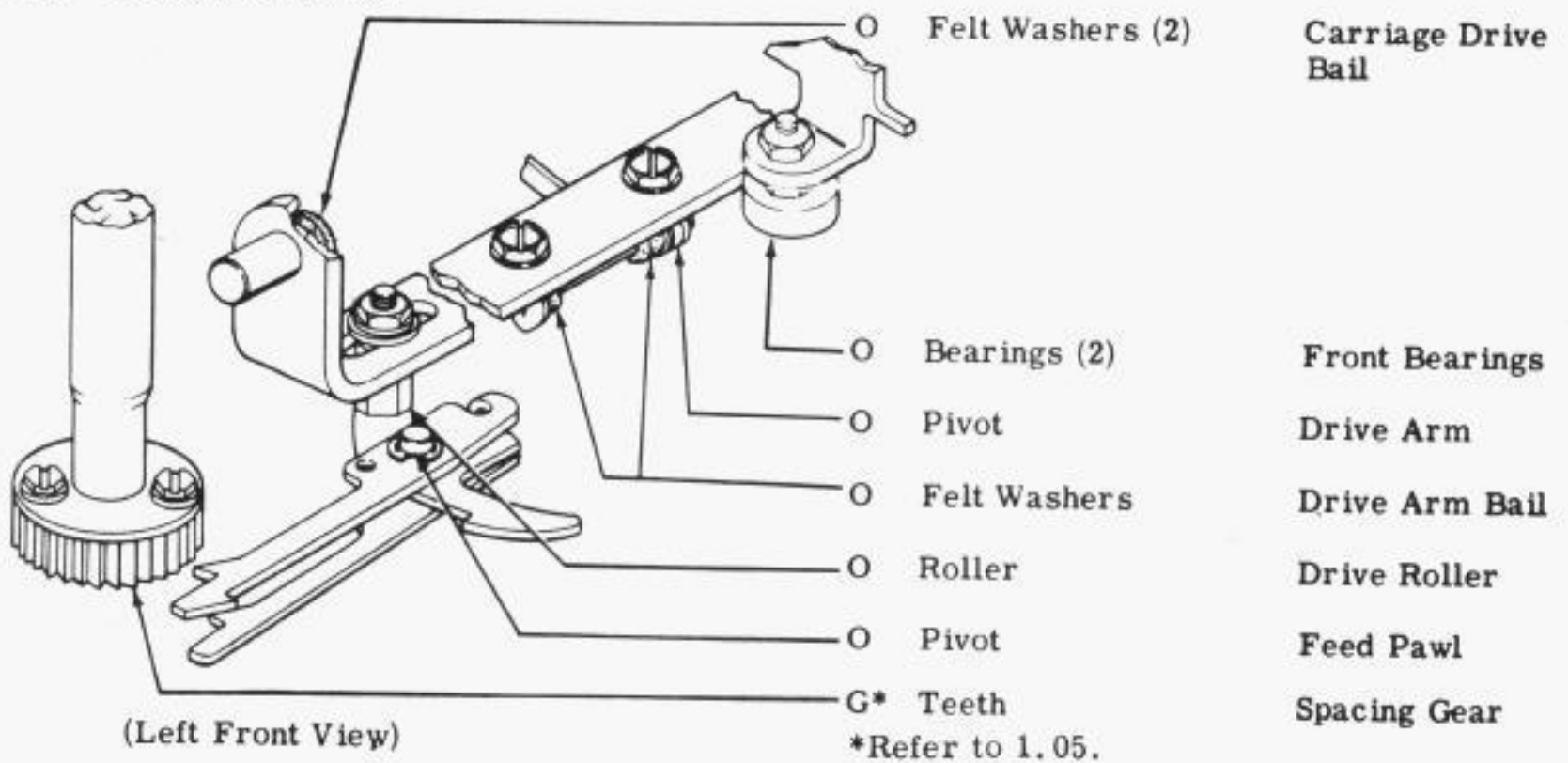
2.21 Spacing Area



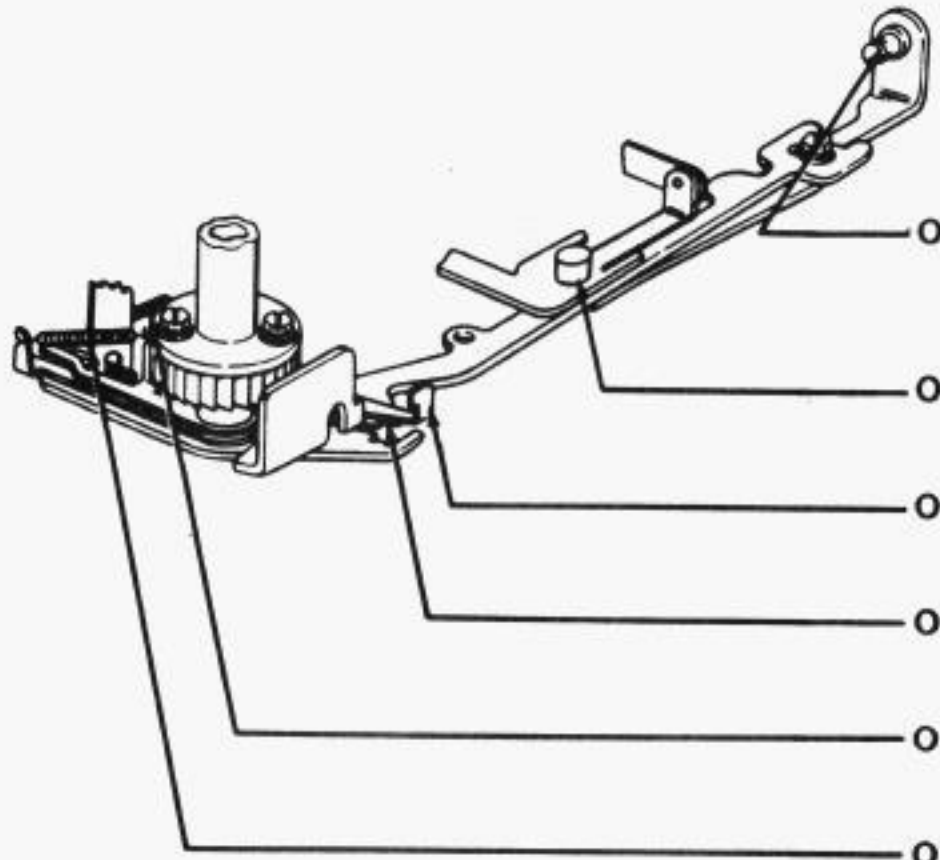
2.22 Space Bellcrank



2.23 Drive Mechanism



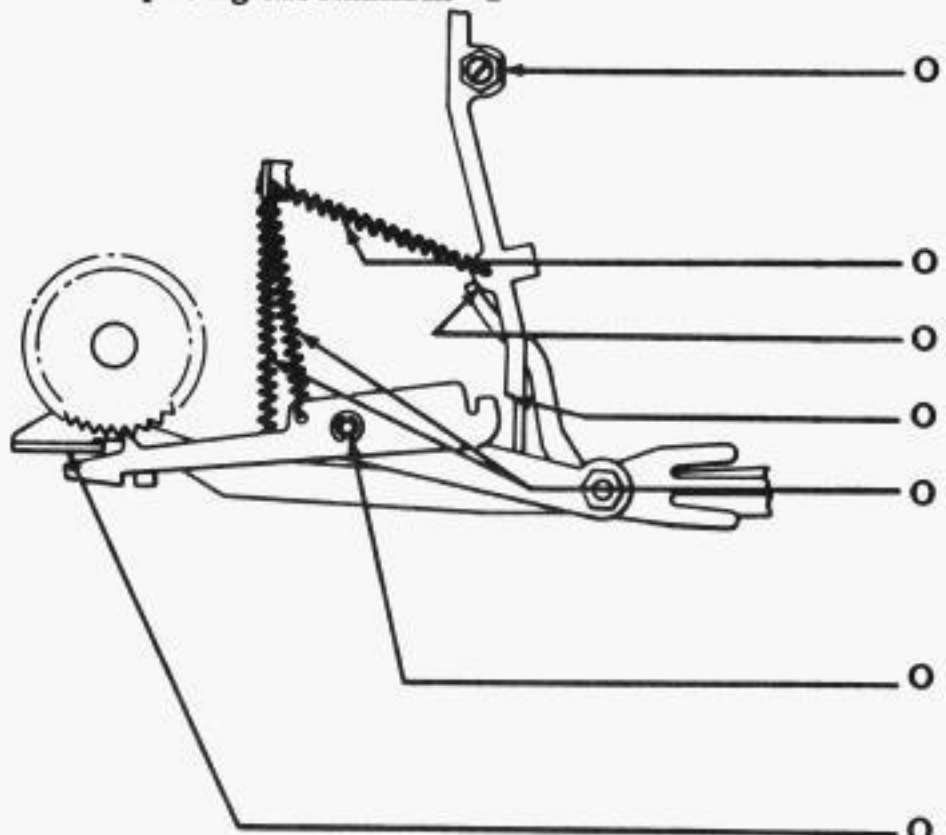
2.24 Carriage Return and Spacing Levers



(Left Front View)

- Pivot Carriage Return Lever
- Pivot Spacing Mechanism
- Engaging Surface Latch
- Latching Surface Latch
- Hooks (Each End) Latch Spring
- Hooks (Each End) Latch Spring

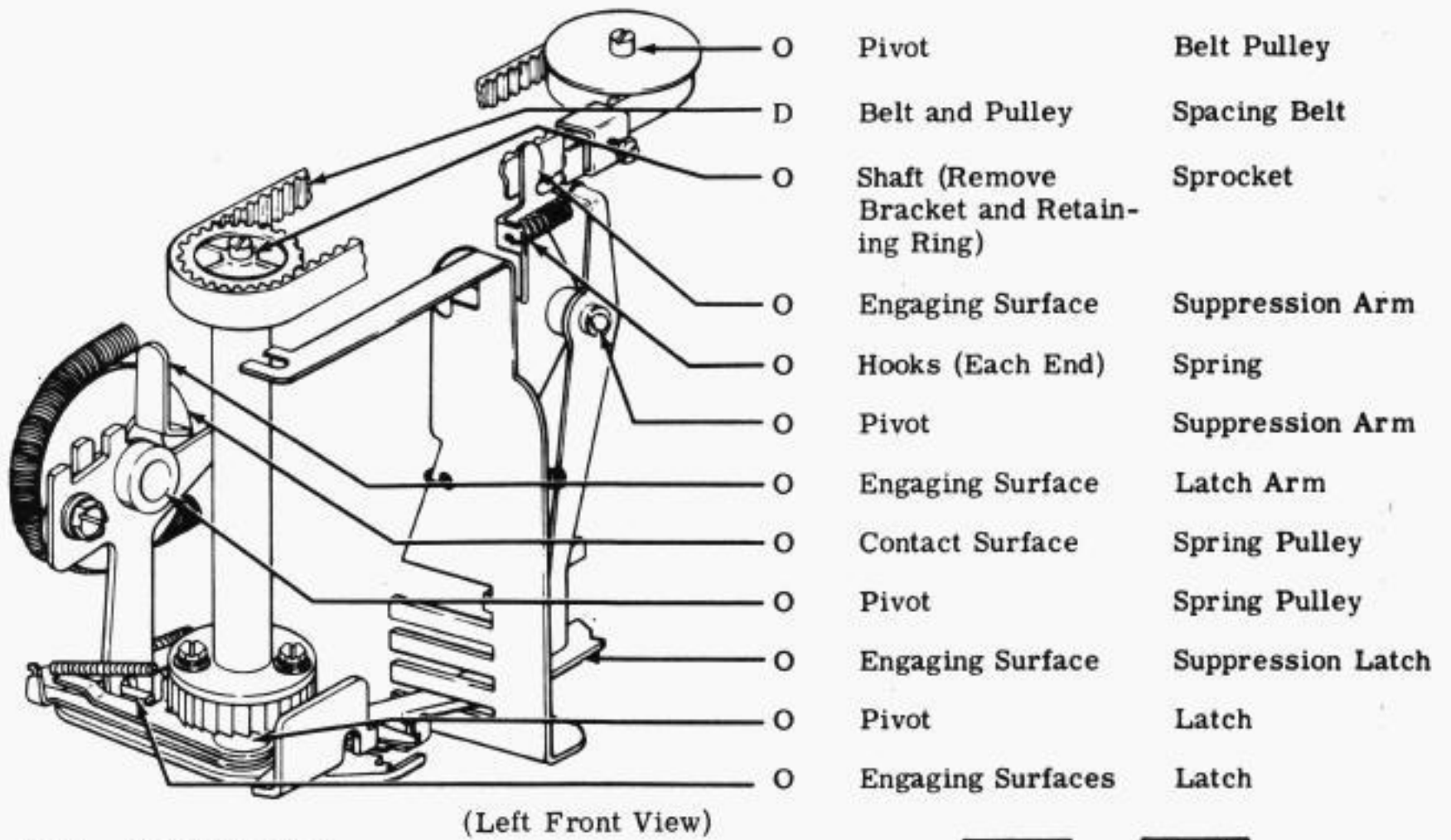
2.25 Spacing Mechanism - 1



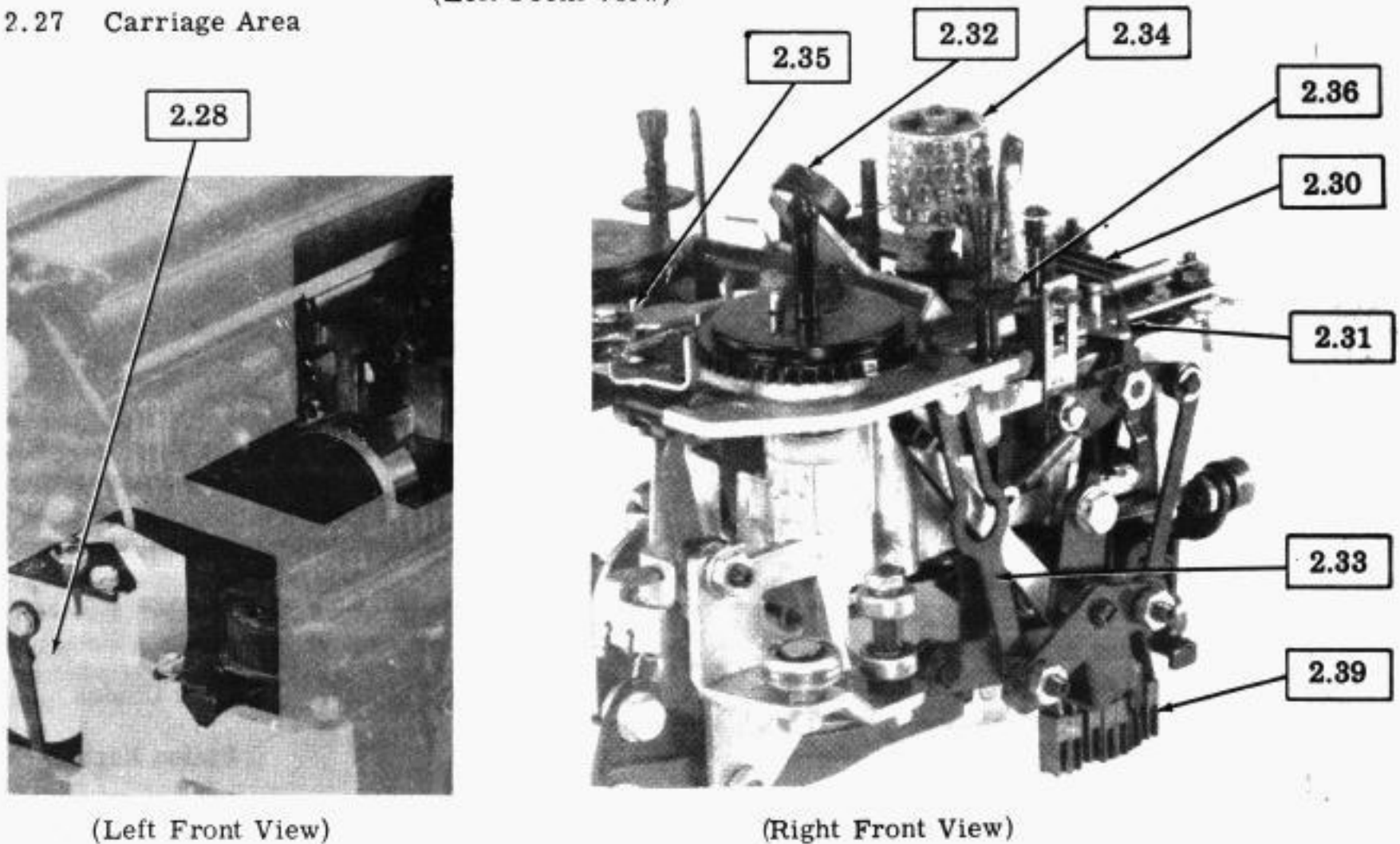
(Top View)

- Pivot Eccentric
- Hooks (Each End) Spring
- Engaging Surface Spacing Lever
- Latching Surface Suppression Lever
- Hooks (Each End) Springs (3)
- Pivot Feed Pawl
- Engaging Surfaces Feed and Check Paws

2.26 Spacing Mechanism - 2

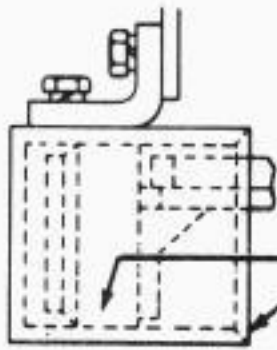


2.27 Carriage Area



Note: Remove ribbon mechanism and carriage return spring before lubricating. For instructions, see Section 574-172-702TC.

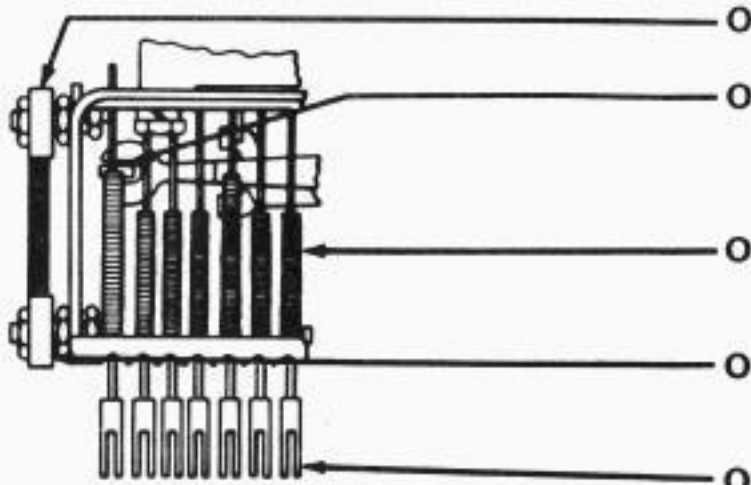
2.28 Dashpot



(Front View)

Sliding Surfaces Dashpot and
Cylinder
(Apply with oil dampened cloth. Too
much lubricant will cause malfunction.)

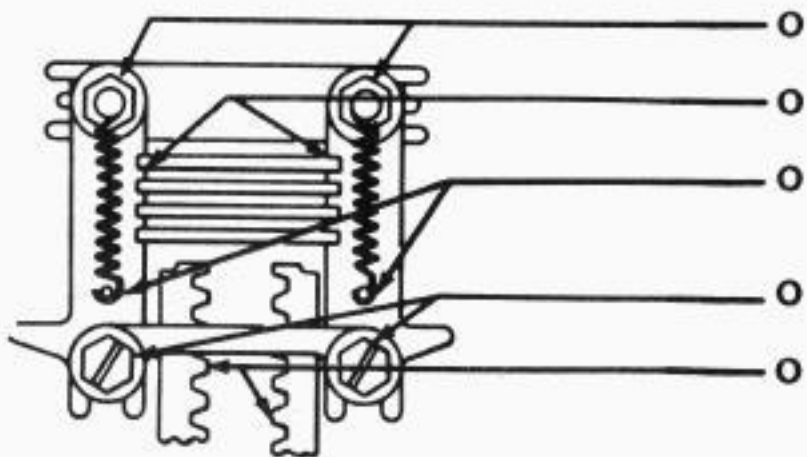
2.29 Slides



(Left Side View)

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

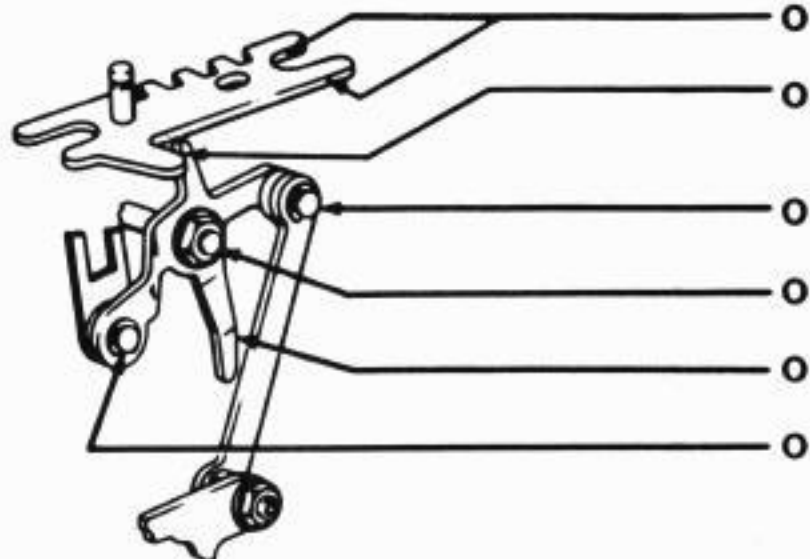
2.30 Slide Guideplates



(Top View)

Sliding Contacts	Stop Plate
Engaging Surfaces	Stop Slides
Hooks (Each End)	Springs
Contact Points	Slide Guides
Teeth	Pinion Racks

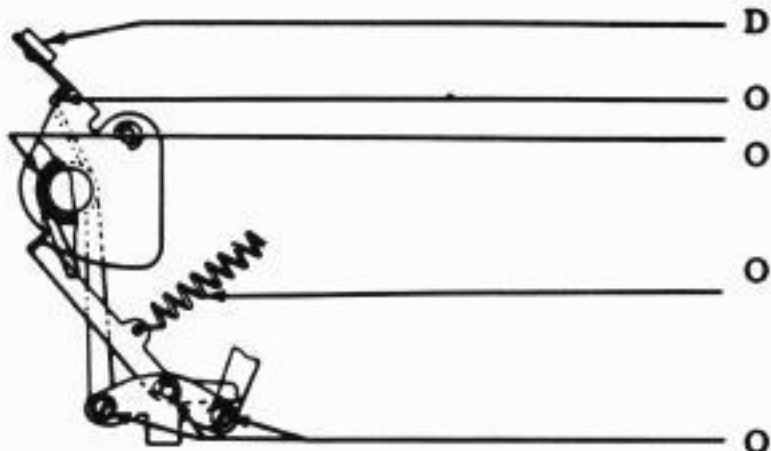
2.31 Drive Arm



(Right Side View)

- | | | |
|---|------------------|---------------------|
| 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 |

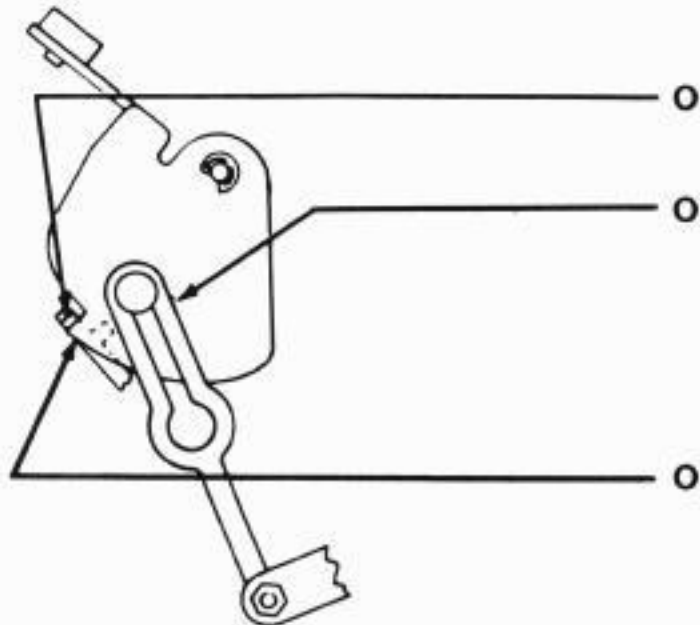
2.32 Print Hammer



(Right Side View)

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

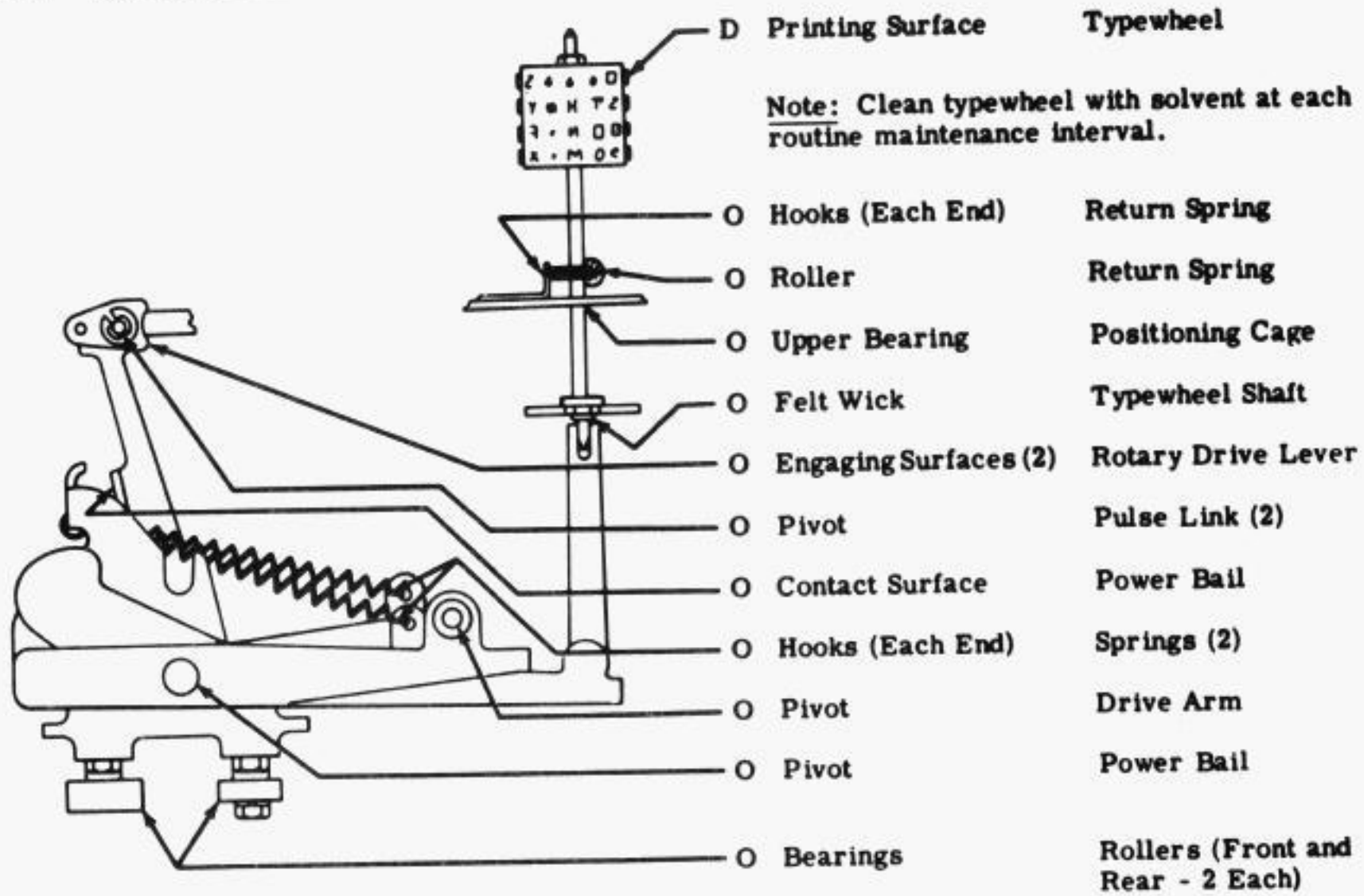
2.33 Reset Arm



(Right Side View)

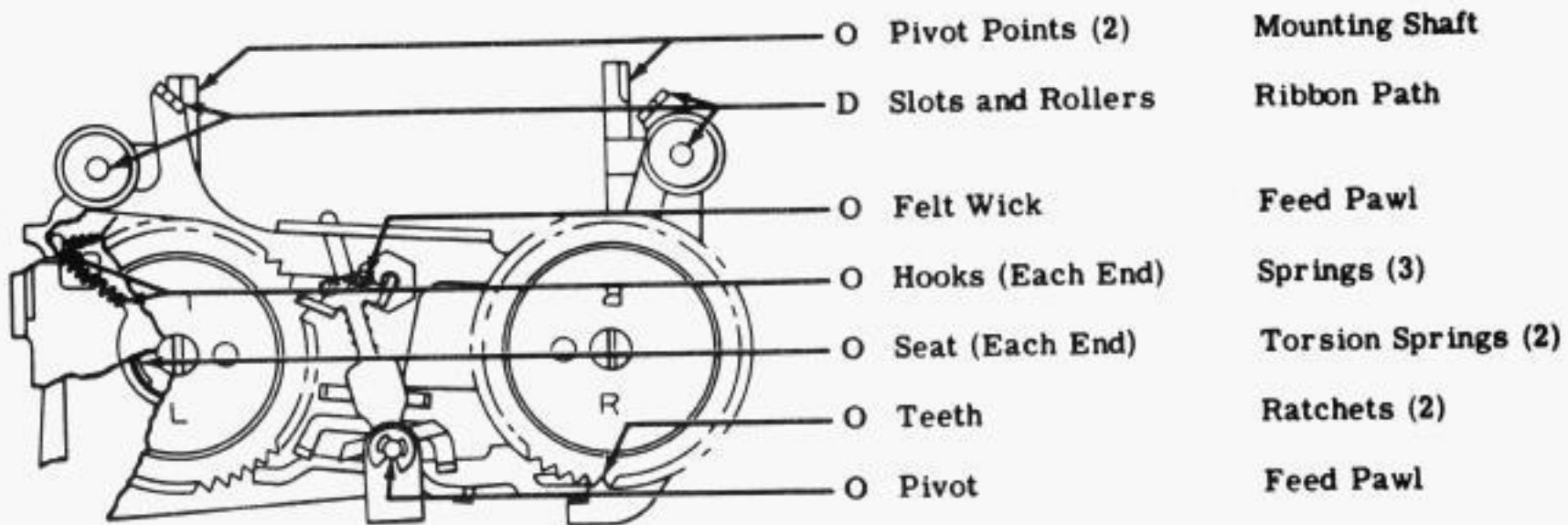
- | | | |
|---|------------------|-------------------|
| O | Latching Surface | Trip Lever |
| O | Sliding Contacts | Reset Arm |
| O | Camming Surface | Print Hammer Ball |

2.34 Typewheel Mechanism



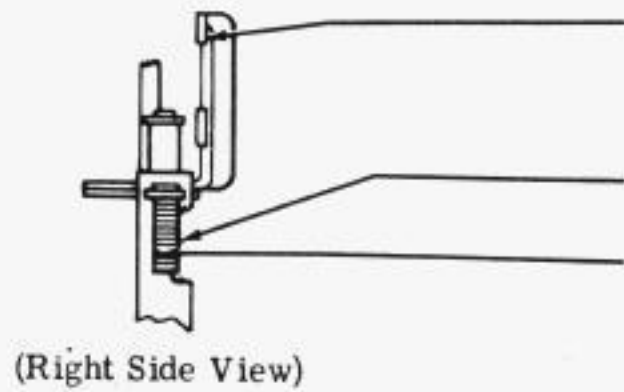
(Right Side View)

2.35 Ribbon Mechanism



(Top View)

2.36 Ribbon Guide Spring



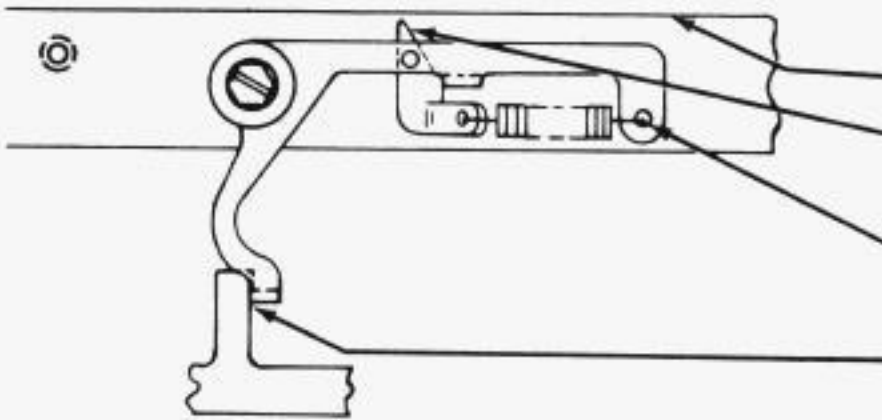
(Right Side View)

- D Surfaces in Contact with Ribbon Ribbon Guide
- O Seat (Each End) Springs (2)
- O Sliding Contacts (2) Lifter Arm

Replace ribbon mechanism and carriage return spring.

2.37 Carriage Rear Rail

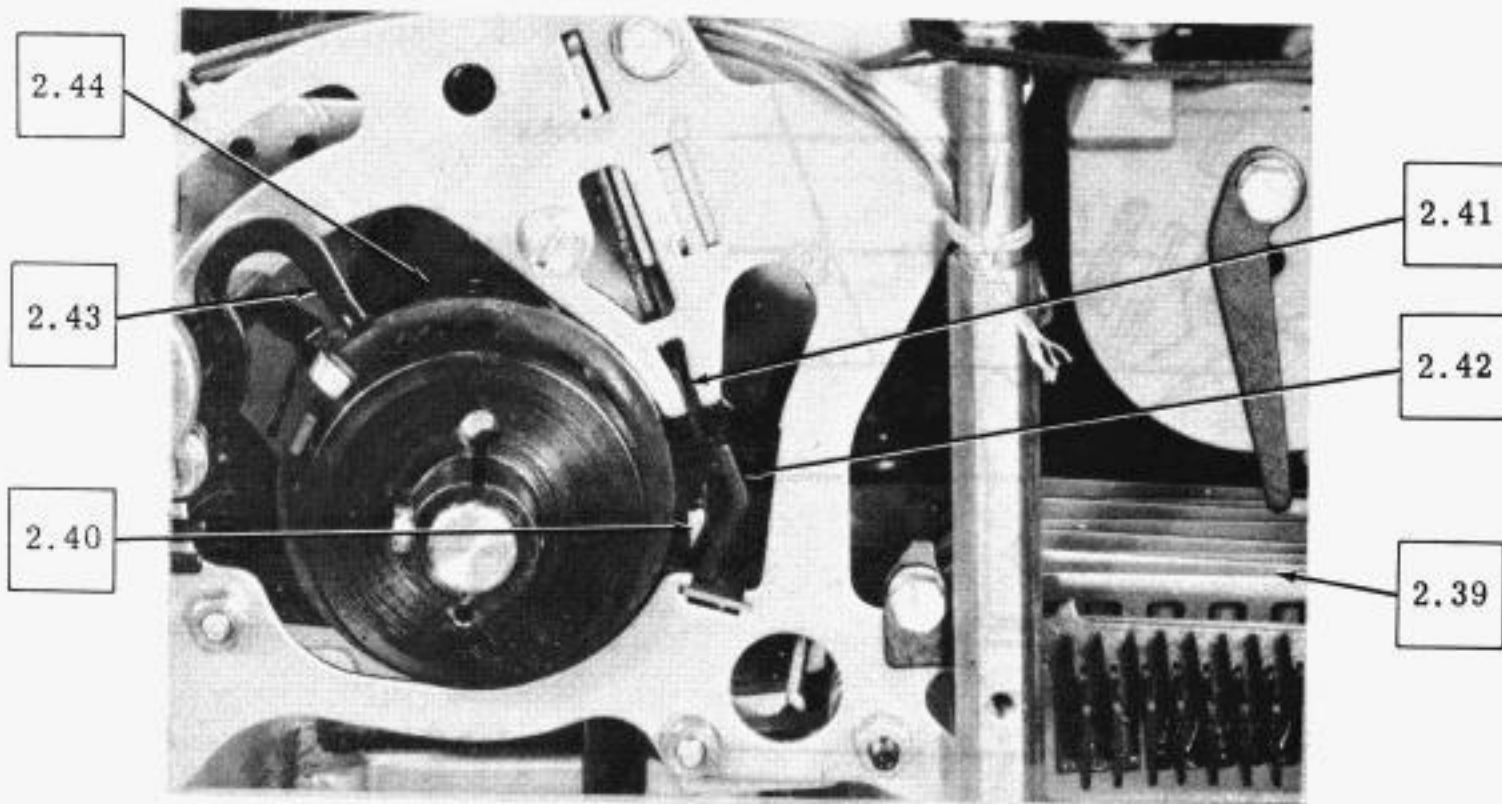
Note: For typing units equipped with a TP181304 latch (early design).



(Rear View)

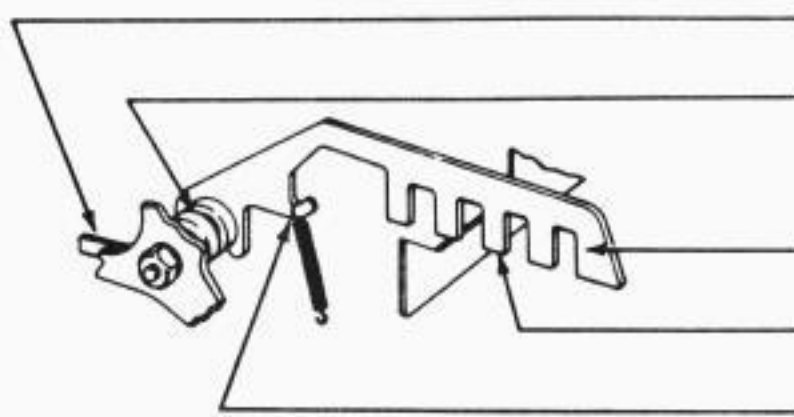
- O Rolling Surface Rear Rail
- O Engaging Surface Latch
- O Hook Spring
- O Engaging Surface Codebar Tab

2.38 Selector Area



(Left Side View)

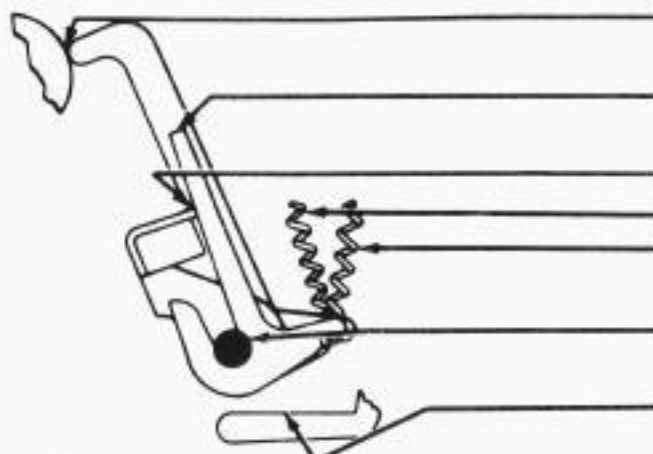
2.39 Blocking Levers



(Left Front View)

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

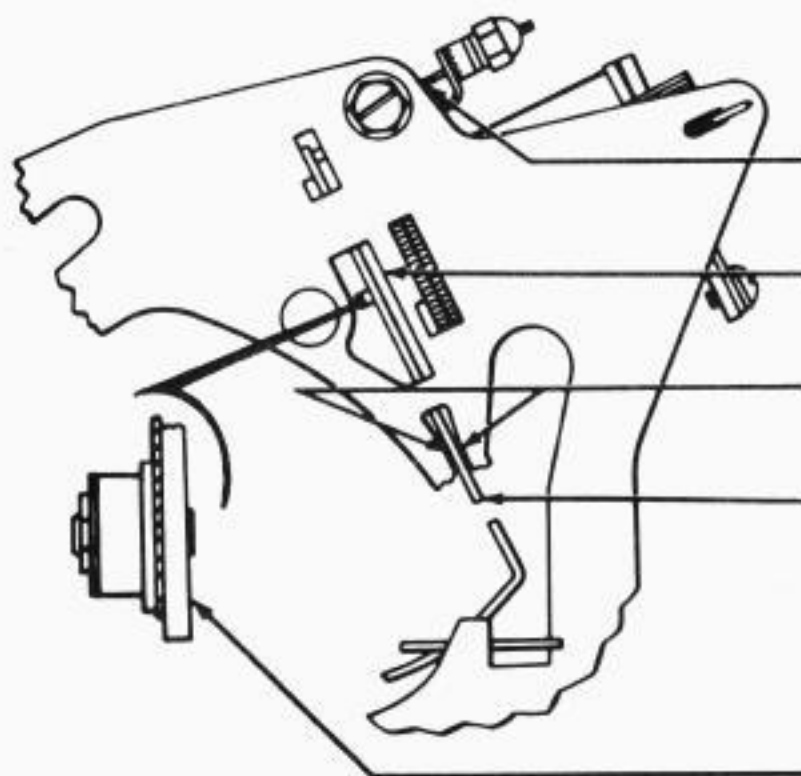
2.40 Pushlevers and Stripper Bail



(Left Side View)

- O Camming Surface Cam Follower
- O Latching Surface Pushlevers
- O Contact Surface Stripper Bail
- O Hooks (Each End) Bail Spring
- O Hooks (Each End) Pushlever
- O Pivots Springs
- O Contact Surfaces Pushlevers
- O Contact Surfaces Blocking Levers

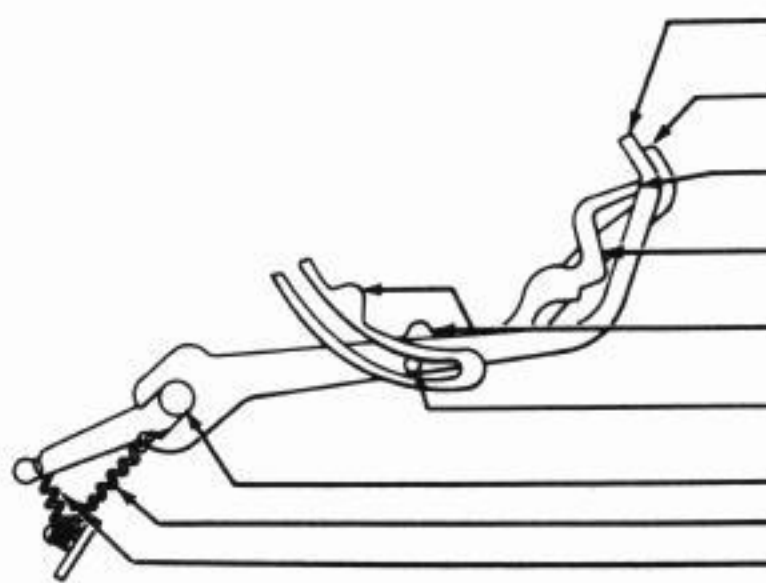
2.41 Armature



(Left Side View)

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

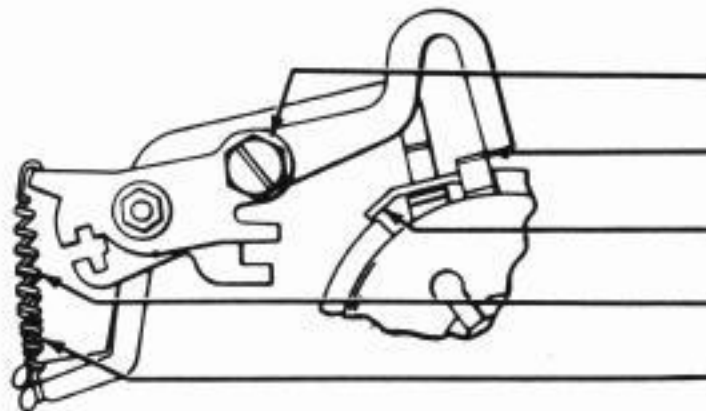
2.42 Selector Levers



(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)

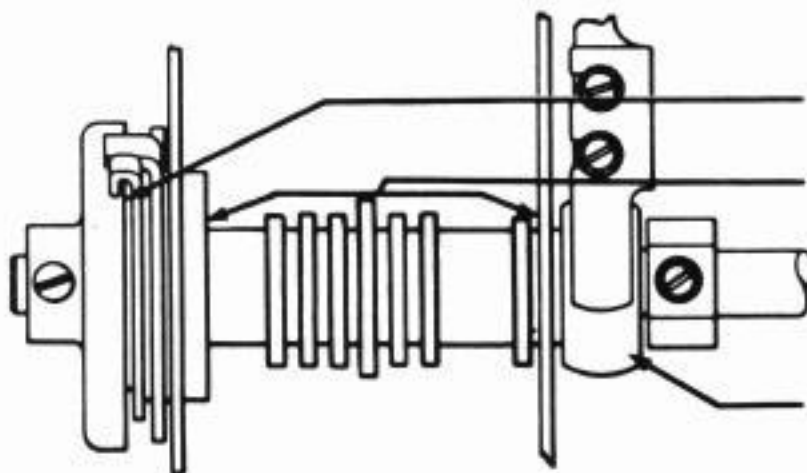
2.43 Latchlever and Trip Lever



(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



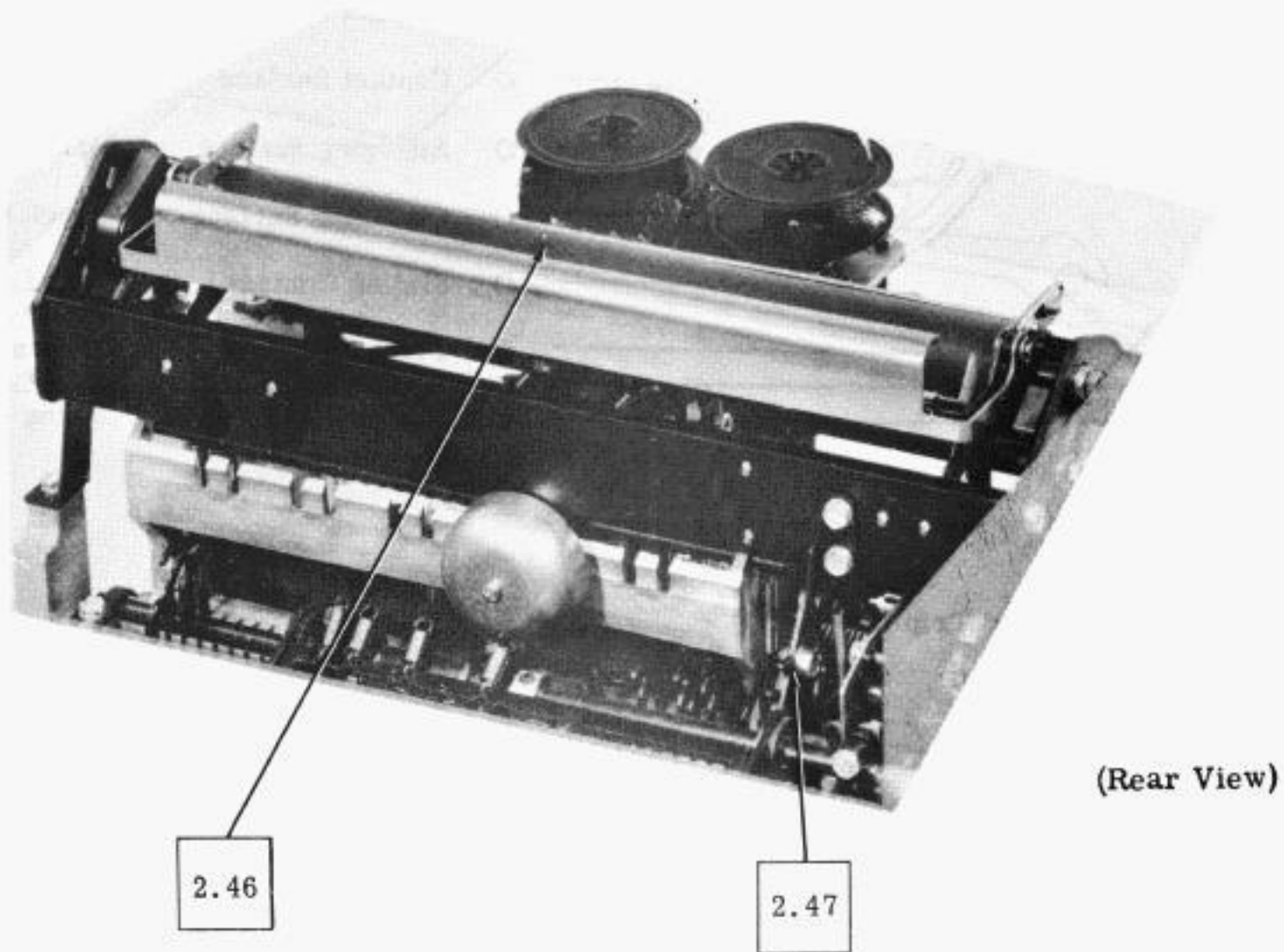
(Top View)

- O* Internal Mechanism Selector Clutch
- O* Camming Surface Selector Clutch
- O Bearing (Each End) Main Shaft

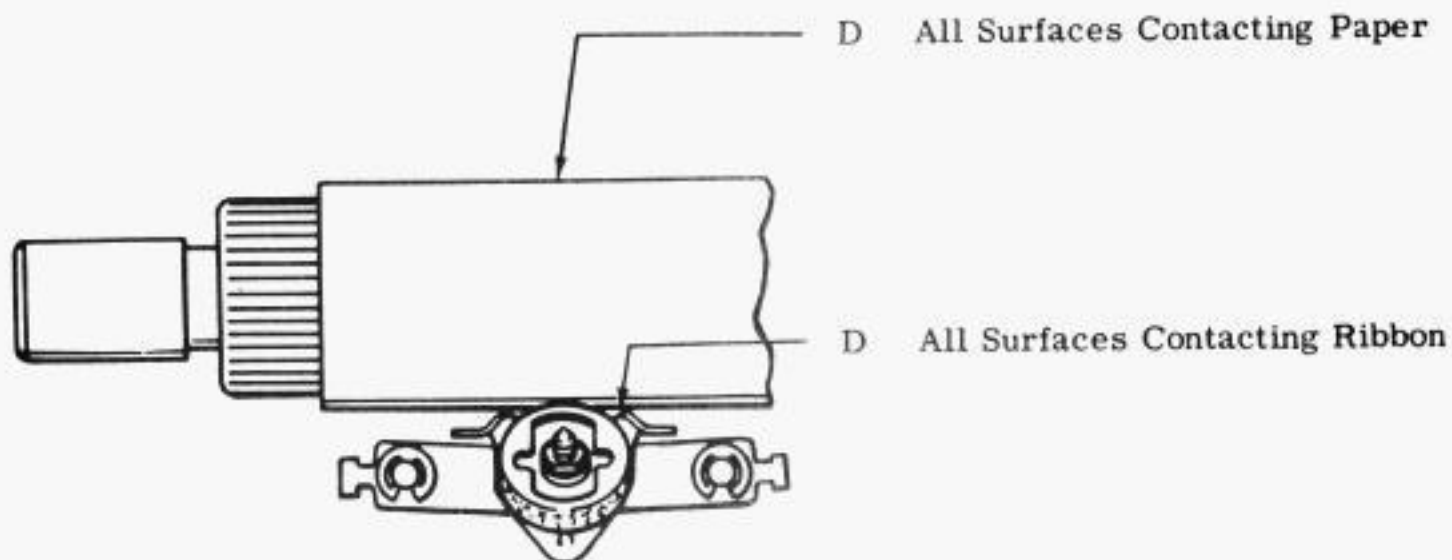
*Refer to 1.05.

FRICION FEED MECHANISMS

2.45 Paper Feed Area

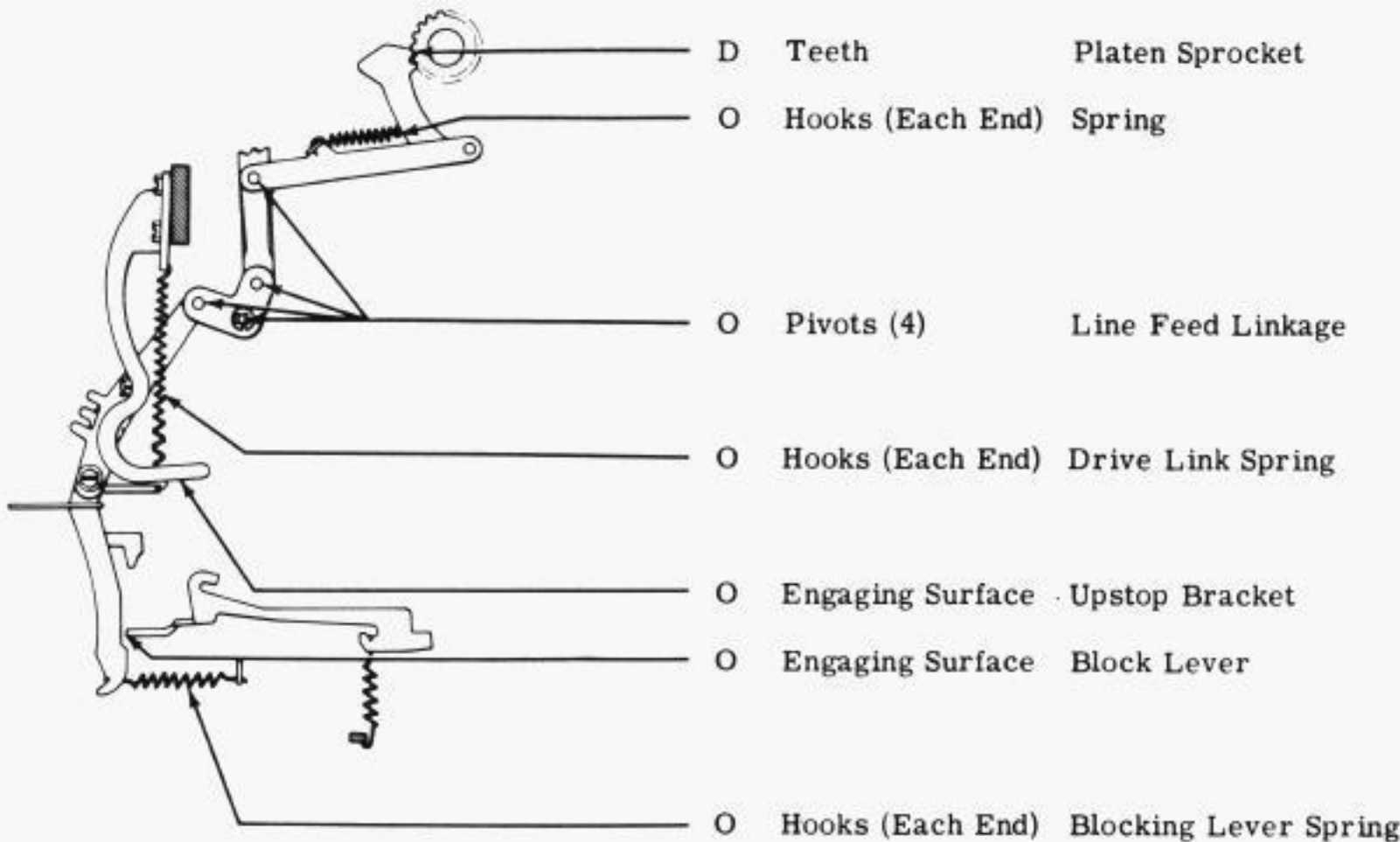


2.46 Platen



CAUTION: DO NOT CLEAN PLATEN WITH SOLVENTS.

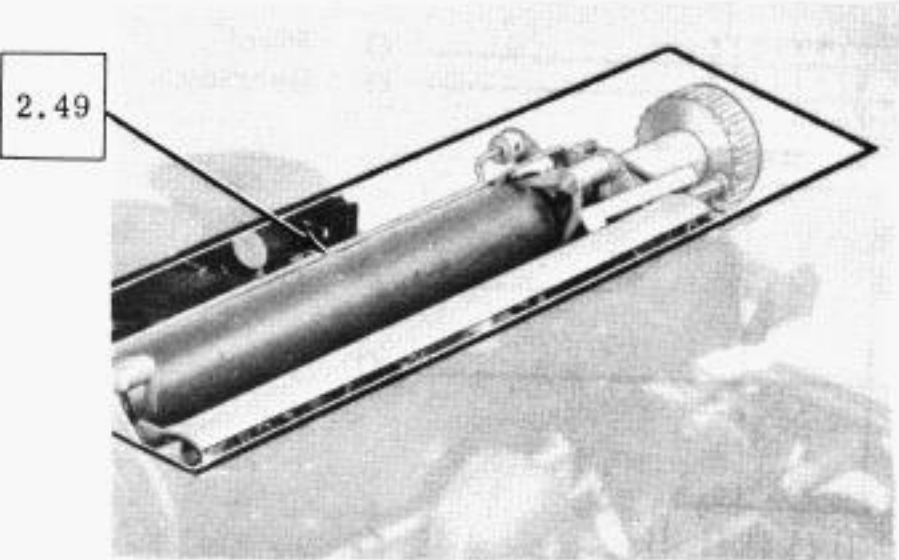
2.47 Line Feed Mechanism



(Left Side View)

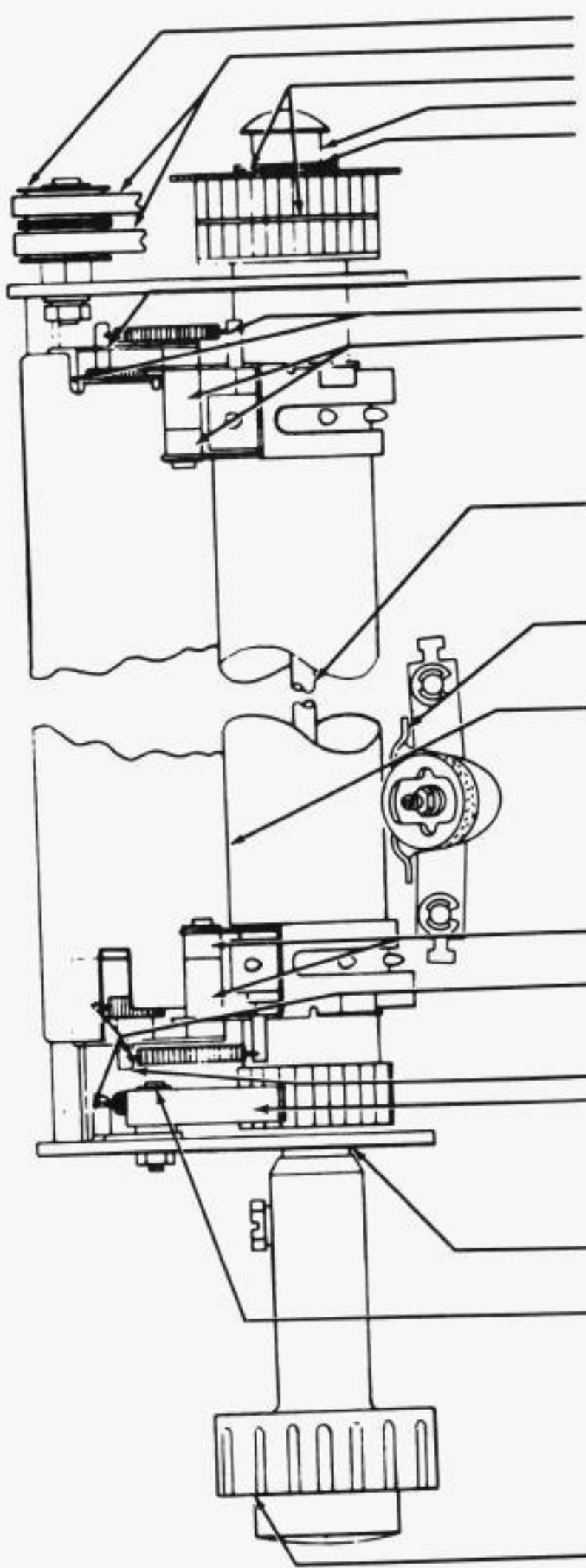
SPROCKET FEED MECHANISMS

2.48 Paper Feed Area



(Right Rear View)

2.49 Platen Mechanism



- O Bearing
- D Belts
- O Bearing
- O Bearing
- O Felt Washers
(2 Within Shaft)

- Idler
- Drive
- Pulley
- Button
- Shaft

Note: Shaft must be disassembled.

- O Pivot
- O Hooks (Each End)
- O Bearing

- Paper Guide
- Spring
- Paper Guide

- O* Bearings (Both Ends) Shaft

Note: Reassemble shaft.

- D All Surfaces Contacting Ribbon

- D All Surfaces Contacting Paper

- O Bearing
- O Hooks (Each End)

- Paper Guide
- Spring

- O Pivot
- O Bearing

- Paper Guide
- Pawl

- O* Bearing

- Left and Right Plate

- O Pivot

- Detent Lever

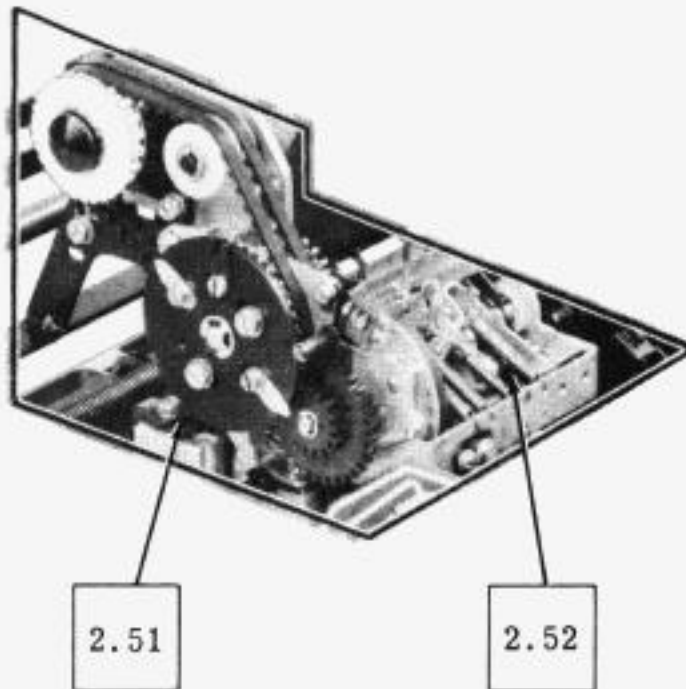
- D Bearing

- Knob

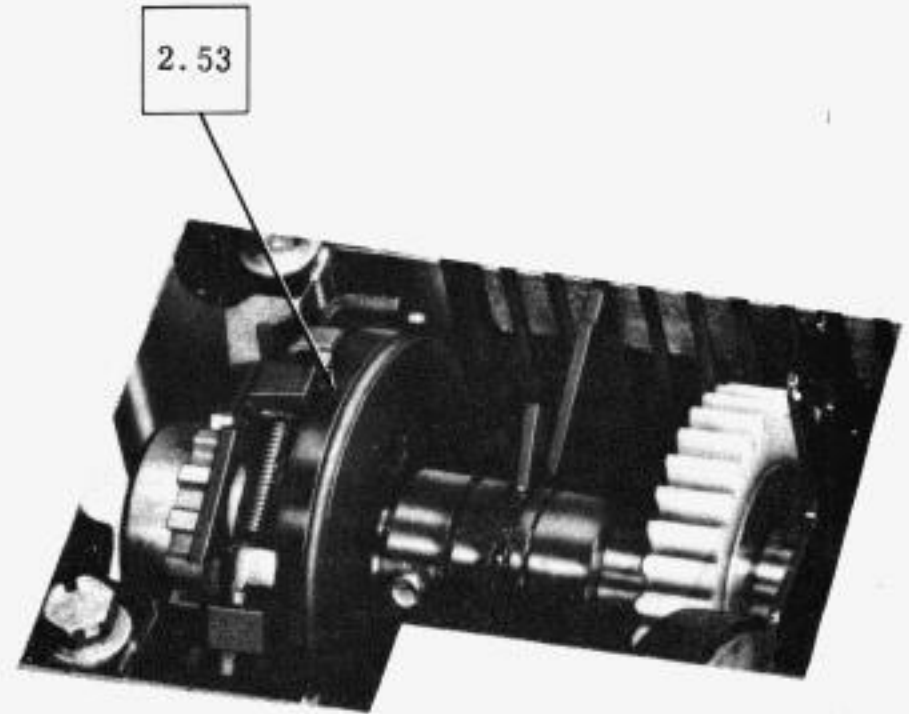
*Refer to 1.05.

(Top View)

2.50 Platen Drive Area



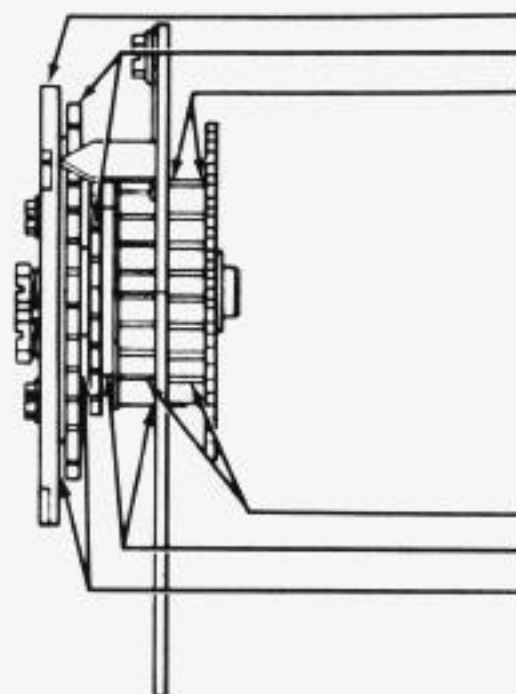
(Right Rear View)



(Left Rear View)

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

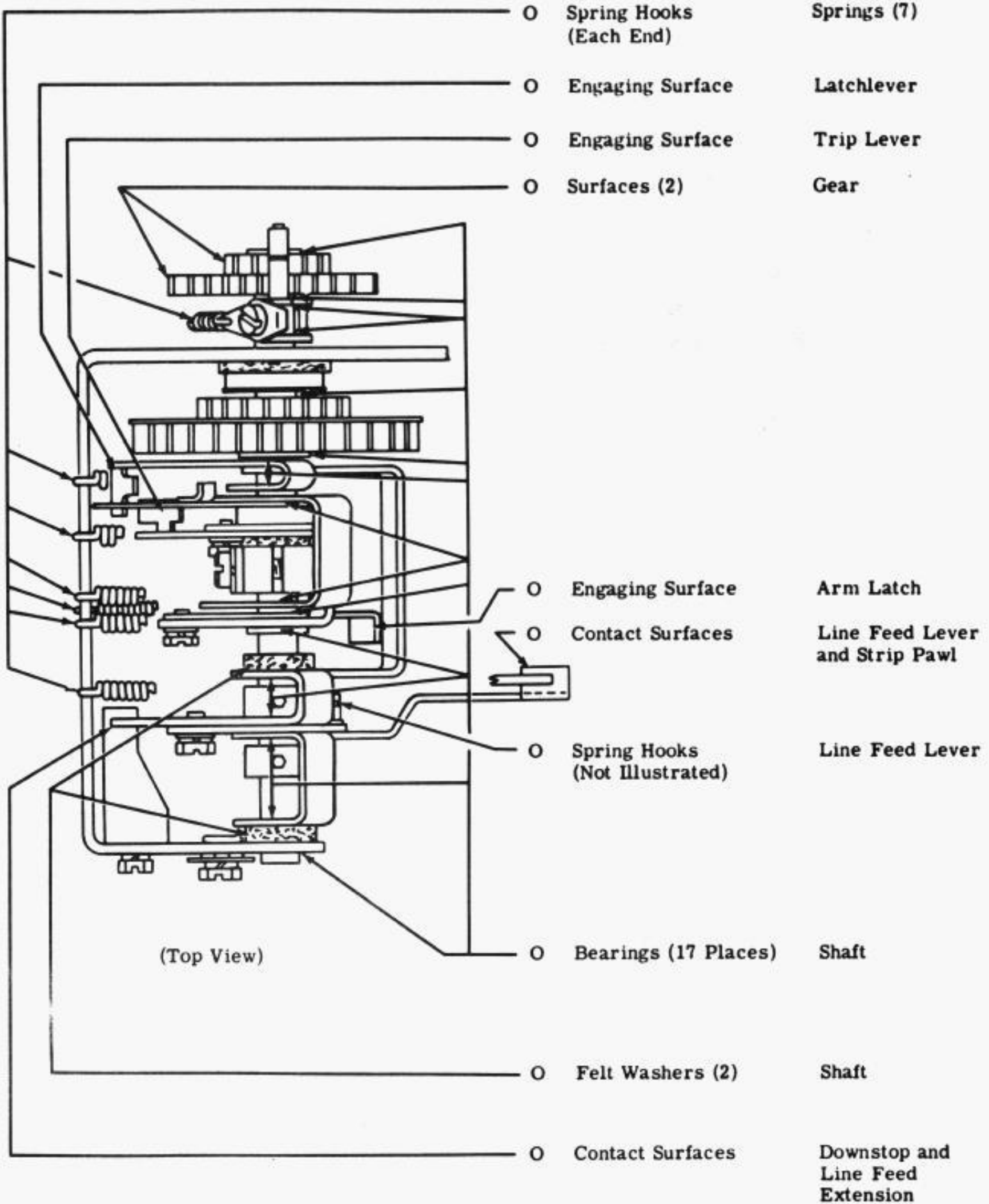
2.51 Cam, Pulley, and Gear Combination



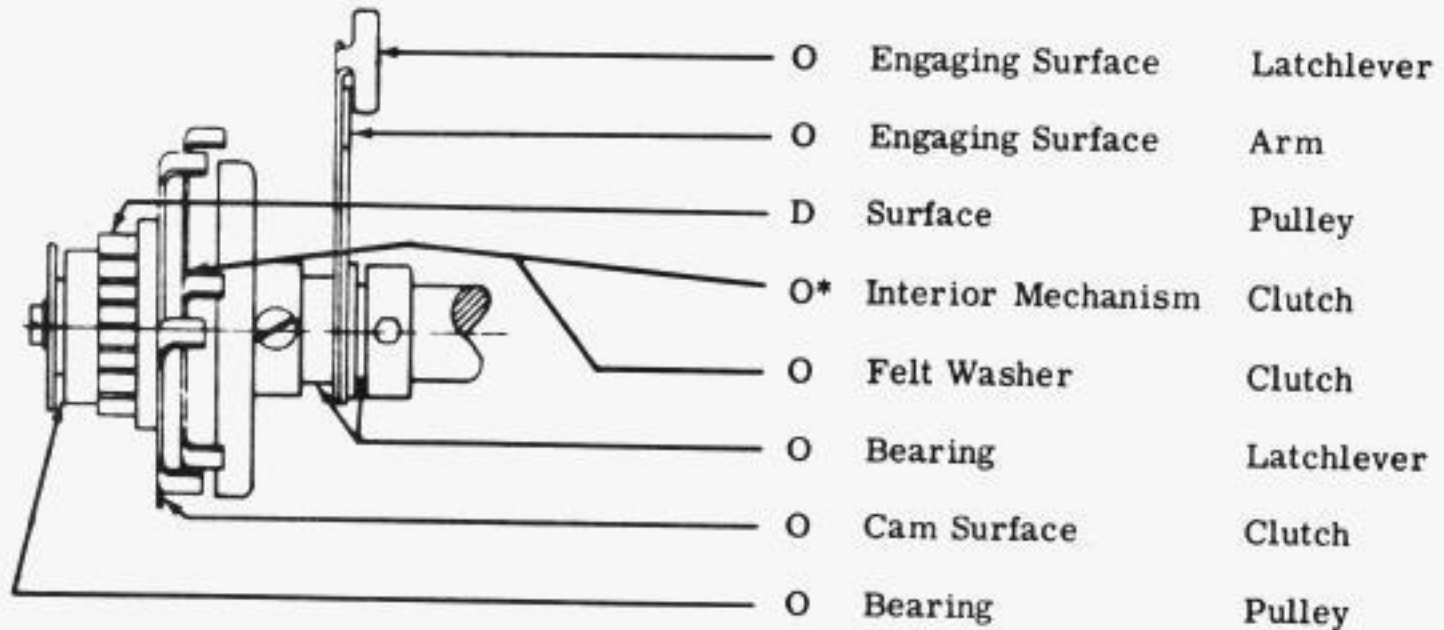
(Top View)

- | | | |
|---|--------------|-----------------|
| 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 |

2.52 Form-Out Mechanism



2.53 Line Feed Clutch

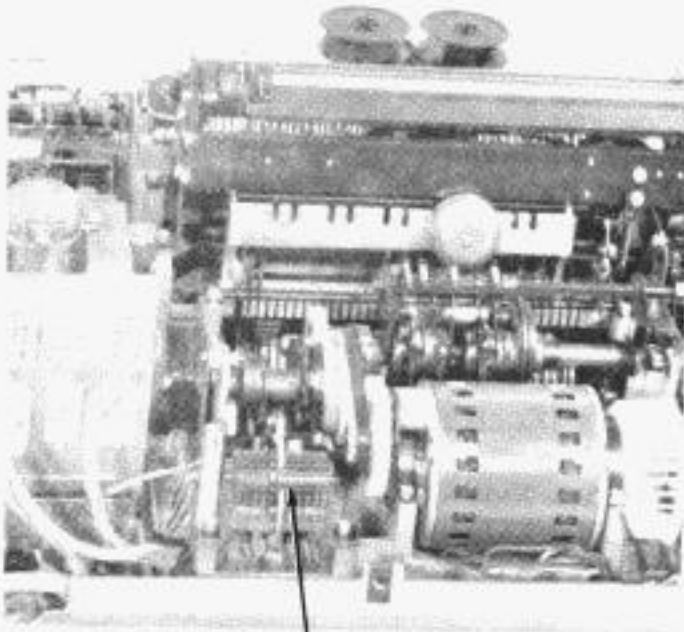


(Top View)

*Refer to 1.05.

3. VARIATIONS TO BASIC UNITS

3.01 Answer-Back Area



3.03

(Rear View)

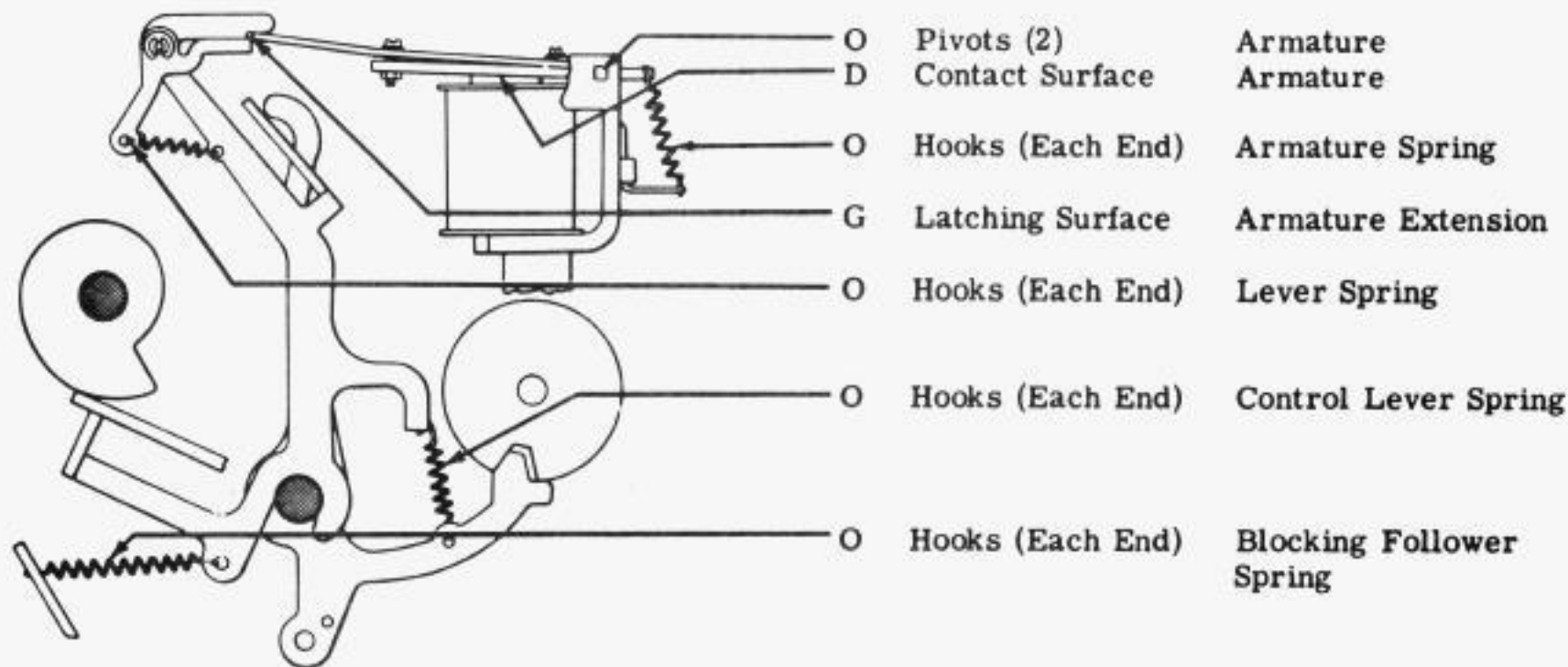


3.02

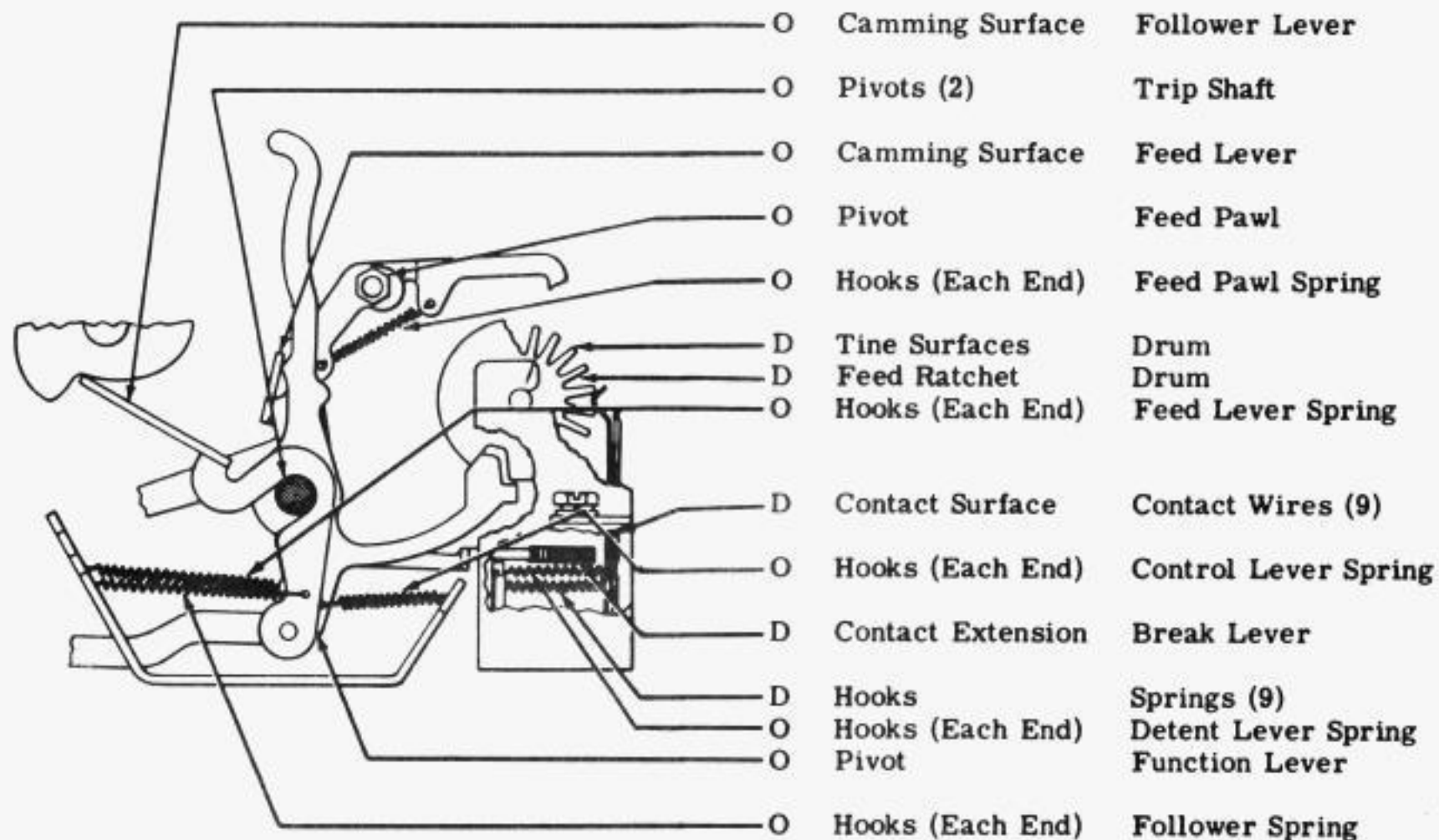
(Left Side View)

3.02 Trip Magnet

Note: Remove answer-back drum.



3.03 Answer-Back Mechanism



Note: Replace answer-back drum.

CAUTION: DO NOT CLEAN CONTACT BLOCK WITH SOLVENTS.