

35 EDGE PUNCHED CARD TYPING REPERFORATOR

(1A CARD REPERFORATOR)

LUBRICATION

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1. GENERAL

1.01 This section contains the specific lubrication requirements for the 35 Edge Punched Card Typing Reperforator (1A CARD REPERFORATOR — Figure 1). The section has been reissued to incorporate null generator contact mechanism lubrication requirements. Arrows in the margin indicate changes and additions.

1.02 The lubrication information in this section is arranged to minimize shifting and handling of the equipment for lubrication. Lubrication should be performed with the unit in its normal upright position whenever possible.

1.03 References made to left or right, front or rear, top or bottom, etc, consider the unit to be viewed in its normal operating position with the top plates toward the viewer.

1.04 The general lubrication areas are illustrated by photographs. Specific points to receive lubricant are indicated on line drawings with appropriate textual instructions. The line drawings which follow each photograph are keyed to the photograph by paragraph numbers. The symbols in the text indicate the following directions:

- D Keep dry — no lubricant permitted.
- O1 Apply one drop of oil.
- O2 Apply two drops of oil.
- O3 Apply three drops of oil.
- G Apply thin film of grease.
- SAT Saturate with oil (felt oilers, felt washers, wicks, etc).
- OFIL Fill with oil.

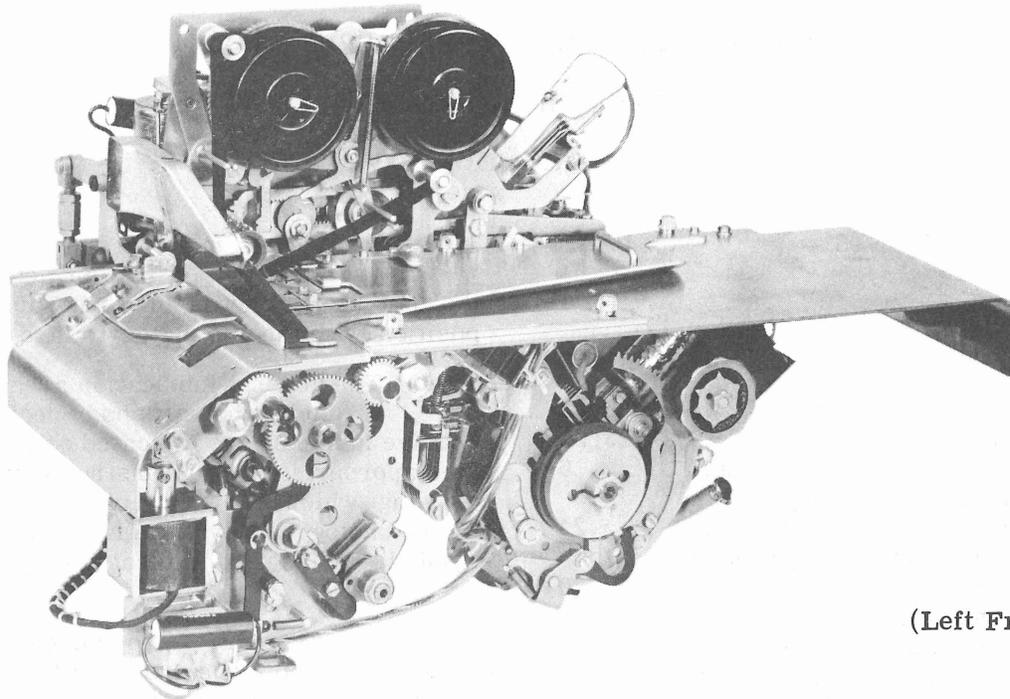
1.05 Use oil (KS7470) at all locations where oil is specified and grease (KS7471) on all surfaces where grease is specified.

1.06 The equipment should be thoroughly lubricated, but overlubrication which might allow oil to drip or grease to be thrown on other parts should be avoided.

**CAUTION: THE FOLLOWING AREAS MUST BE KEPT DRY — NO LUBRICATION IS PERMISSIBLE:**

- (1) MAGNET ARMATURES AND POLE FACES
- (2) ELECTRICAL CONTACT POINTS
- (3) DRIVE BELTS AND PULLEYS

1.07 The unit should be lubricated before being placed into service or prior to storage. After a few weeks of service, relubricate to make certain that all specified points have received lubricant. Thereafter, lubricate after every 1500 hours of operation or 6 months, whichever comes first.



(Left Front View)

Figure 1 - 35 Edge Punched Card Typing Reperforator

1.08 In general, all camming surfaces, sliding surfaces, pivot points, and spring hooks should be lightly oiled. Bearings should be oiled at each end. All felt washers, oilers, wicks, etc, should be saturated with oil. Unless otherwise specified, a thin film of grease should be applied to all gears, rollers, and points of heavy pressure.

1.09 If necessary, refer to the appropriate disassembly and reassembly section for removal of top plates. For any further information regarding location of parts, refer to exploded views in the appropriate parts section.

1.10 Refer to Section 570-005-800 covering tools which also gives a description of various lubricants to be used in lubricating the typing reperforator.

1.11 After lubrication, excess oil or grease which may have run onto surfaces not requiring lubrication should be removed. Exercise care so that old lubricant or dirt does not get between bearing surfaces.

1.12 Equipment that has been in operation should be cleaned before it is relubricated. Refer to Section 570-004-703.

1.13 Oil should be applied with an oiler to a point where it will adhere or where pressure is nominal. In lubricating small parts,

only a single drop of oil should be applied so that the oil remains on the part and does not run off.

Note: Excessive oil tends to work onto contacts and magnet pole faces where it has a harmful effect. It also tends to cause deterioration of rubber parts. Capillary action and vaporization due to heat of motor tend to keep a film of oil on the machine, preventing rust and giving sufficient lubrication to many minor points, such as the ends of small springs.

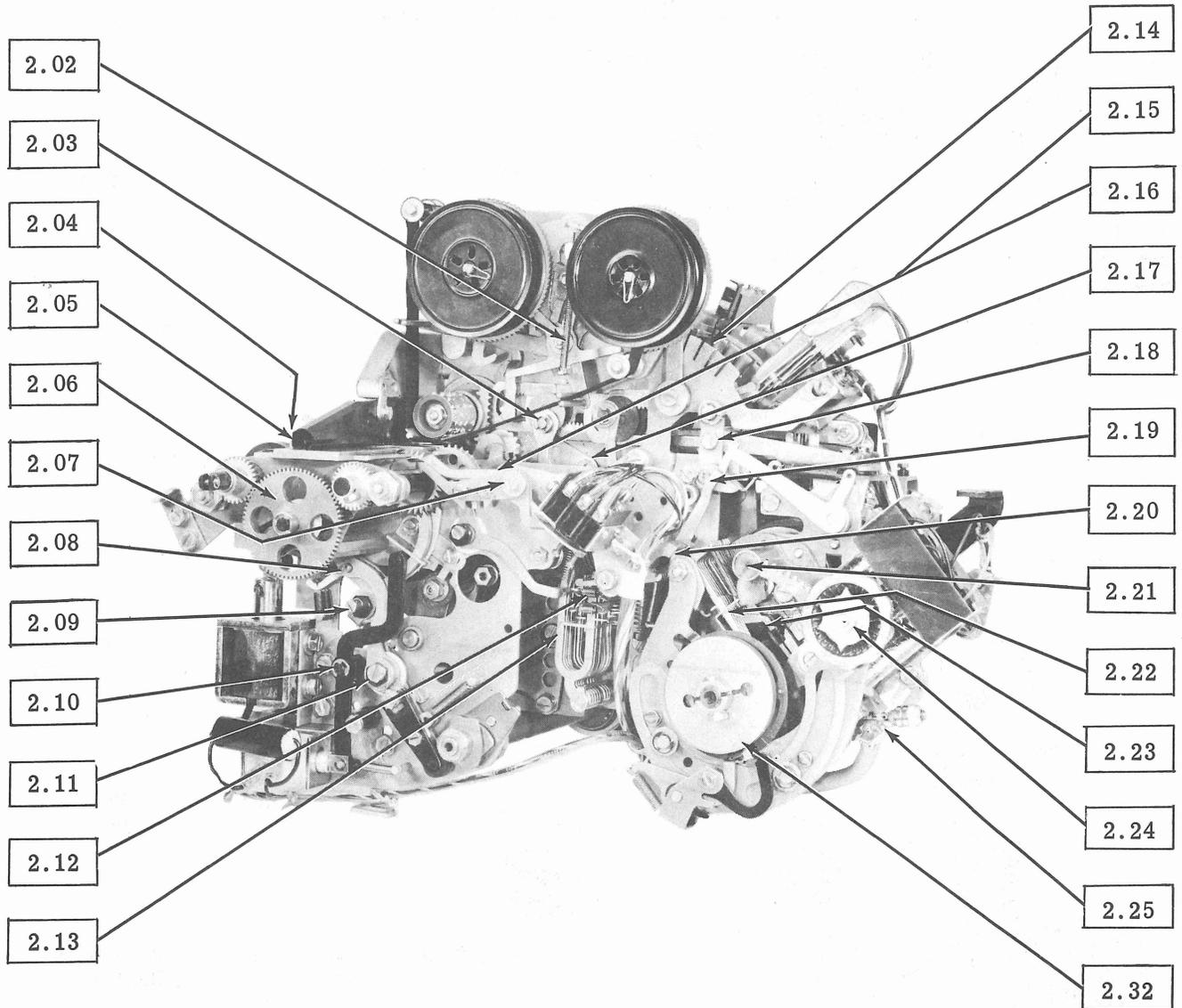
1.14 Grease should be applied with the nozzle of a grease gun, a brush, fiber spudger, or orange stick to all parts where the pressure is too great for effective lubrication with oil. Old grease should not be reused.

1.15 The oil-proof maintenance pad TP124828 is available to protect furniture and floor from oil, grease, and dirt during lubrication. The pad should always be used with the same side down.

1.16 When mechanisms and parts; such as the cover, are removed, set them aside in some location where they will not be damaged and where they will not be a hazard to personnel around the area.

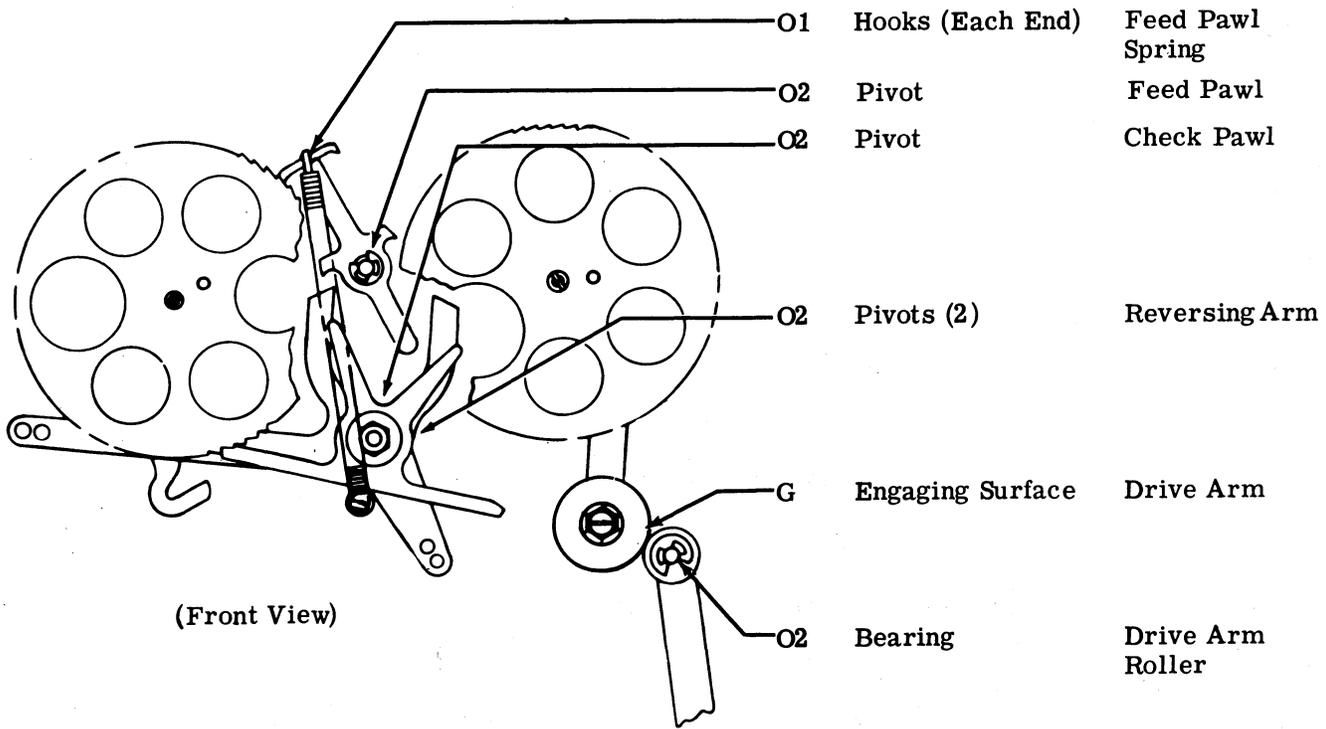
2. BASIC UNIT

2.01 Edge Punched Card Typing Reperforator (Right Front View)

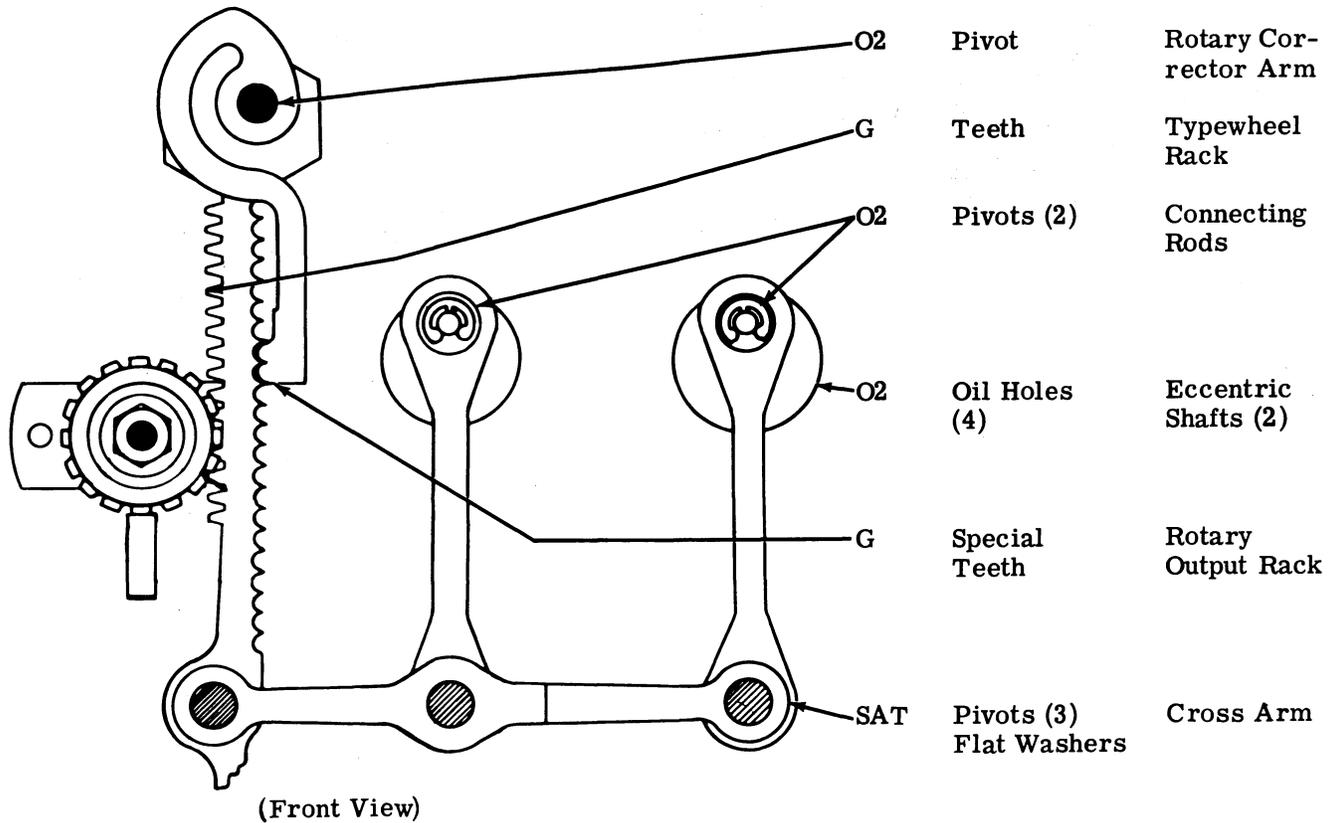


(Top Plates Removed)

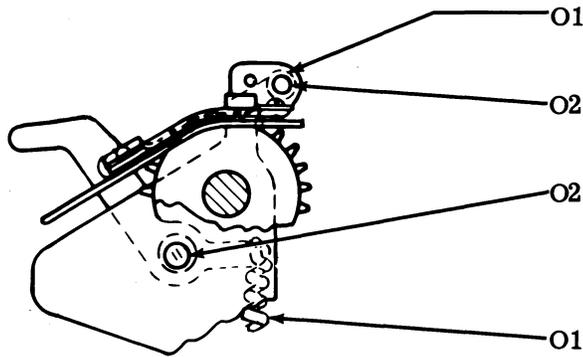
2.02 Ribbon Feed Mechanism



2.03 Rotary Positioning Mechanism



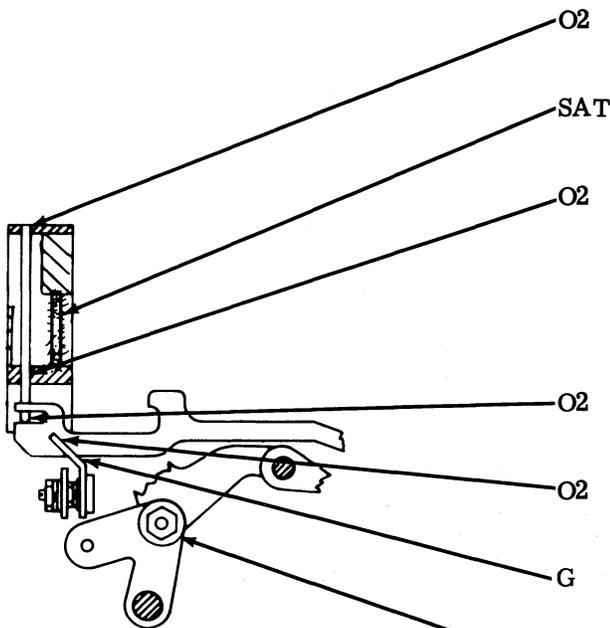
2.04 Left Top Plate Mechanism



(Front View)

- |    |                  |                          |
|----|------------------|--------------------------|
| O1 | Ends and Coils   | Lid Hinge Torsion Spring |
| O2 | Pivots (2)       | Lid Hinge                |
| O2 | Pivot            | Lid Latch                |
| O1 | Hooks (Each End) | Latch Spring             |

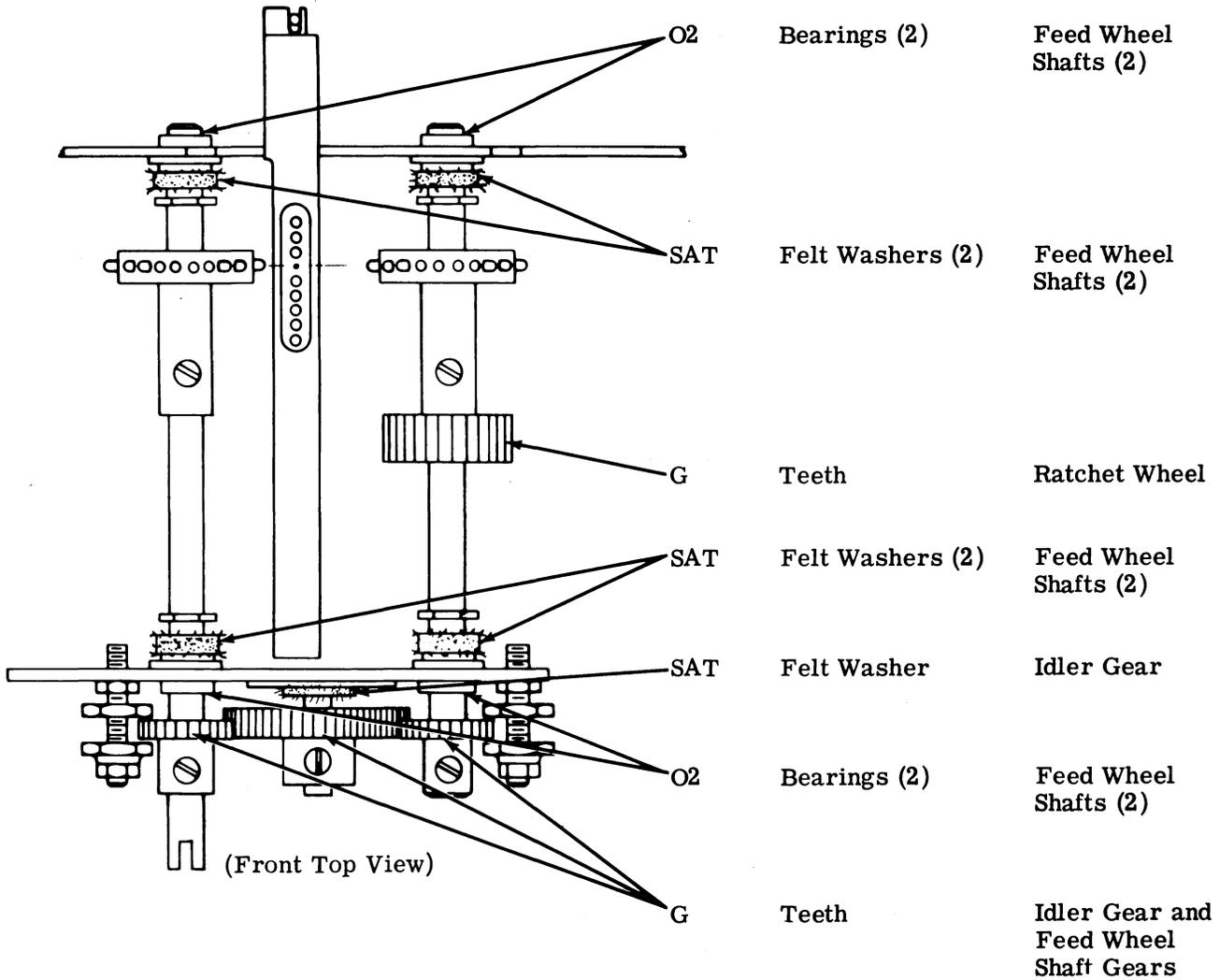
2.05 Punch Mechanism



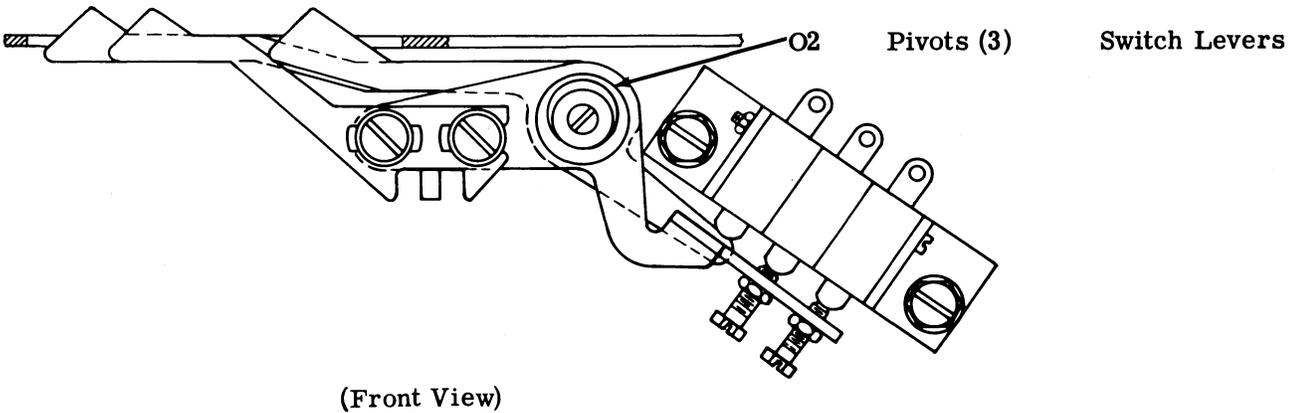
(Front View)

- |     |                           |   |
|-----|---------------------------|---|
| O2  | Upper Guide               | Punch Pins (9)                                |
| SAT | Felt Wick                 | Punch Block                                   |
| O2  | Lower Guide               | Punch Pins (9)                                |
| O2  | Engaging Surface          | Punch Pins (9)                                |
| O2  | Surface of Slide at Guide | Punch Slides (9)                              |
| G   | Sliding Surface           | Punch Slides (9)                              |
| SAT | Felt Washers (2)          | Toggle Links (2)<br>(Front and Rear Bearings) |

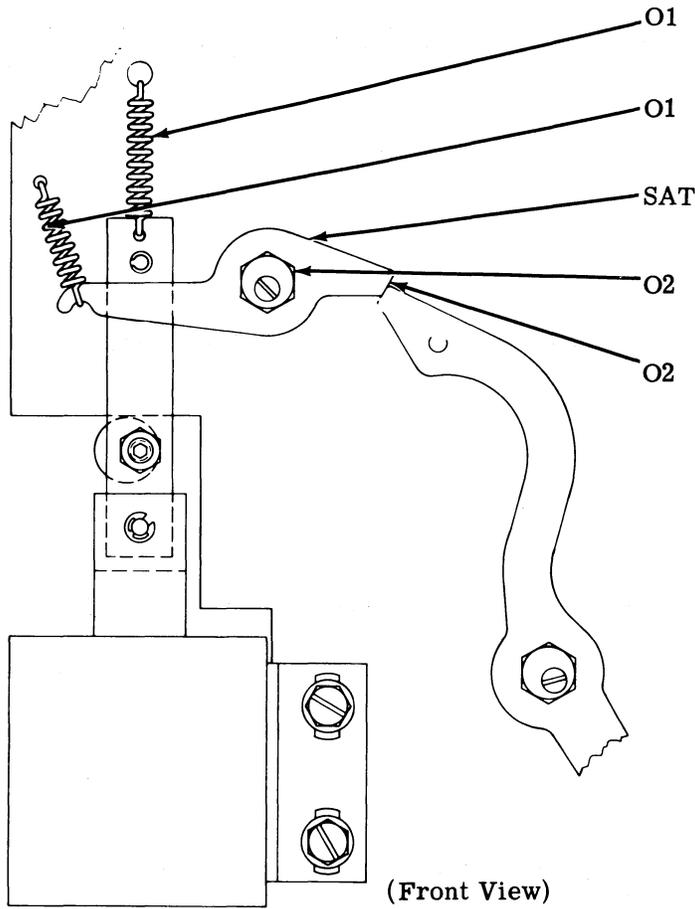
2.06 Punch Mechanism (continued)



2.07 Card Sensing Switch Mechanism



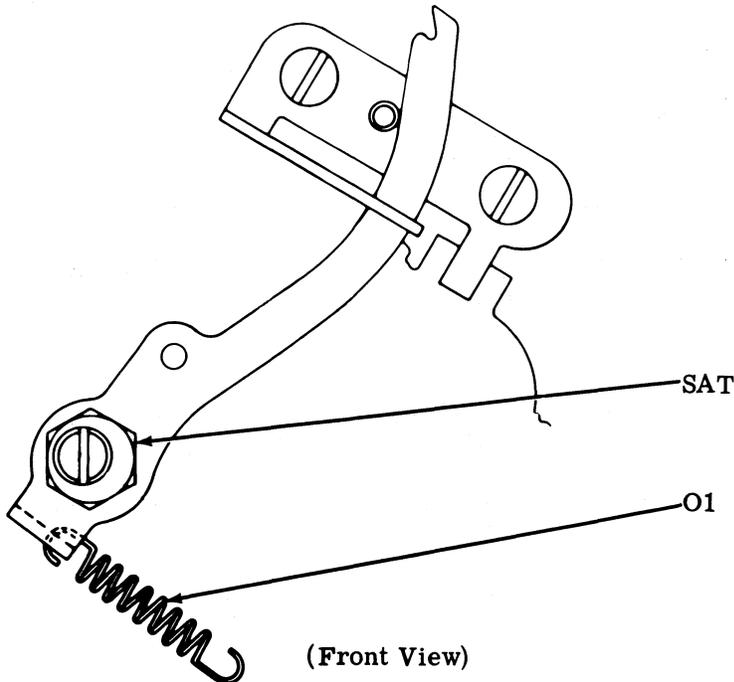
2.08 Rapid Feed Mechanism



- |     |                  |                               |
|-----|------------------|-------------------------------|
| O1  | Hooks (Each End) | Eject Solenoid Link Spring    |
| O1  | Hooks (Each End) | Cam Follower Latch Spring     |
| SAT | Felt Washer      | Cam Follower Latches          |
| O2  | Pivot            | Cam Follower Latches          |
| O2  | Engaging Surface | Cam Followers and Latches (2) |

(Front View)

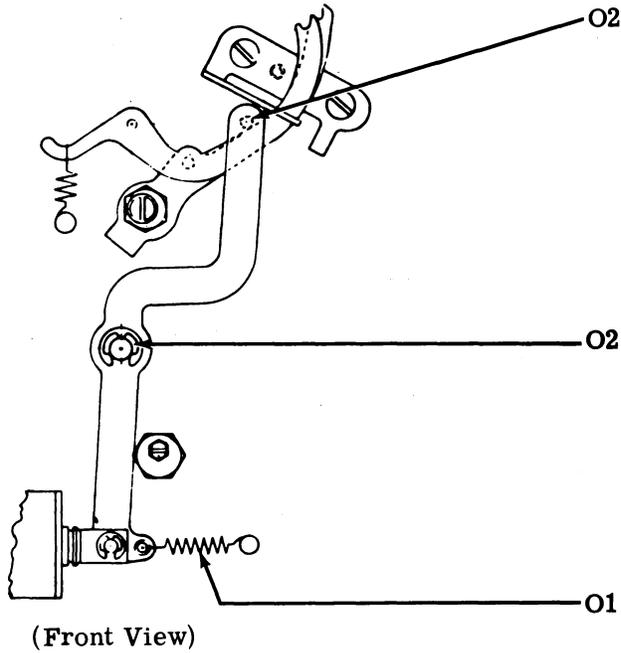
2.09 Punch Mechanism (continued)



- |     |                   |                  |
|-----|-------------------|------------------|
| SAT | Pivot Felt Washer | Feed Pawl        |
| O1  | Hooks (Each End)  | Feed Pawl Spring |

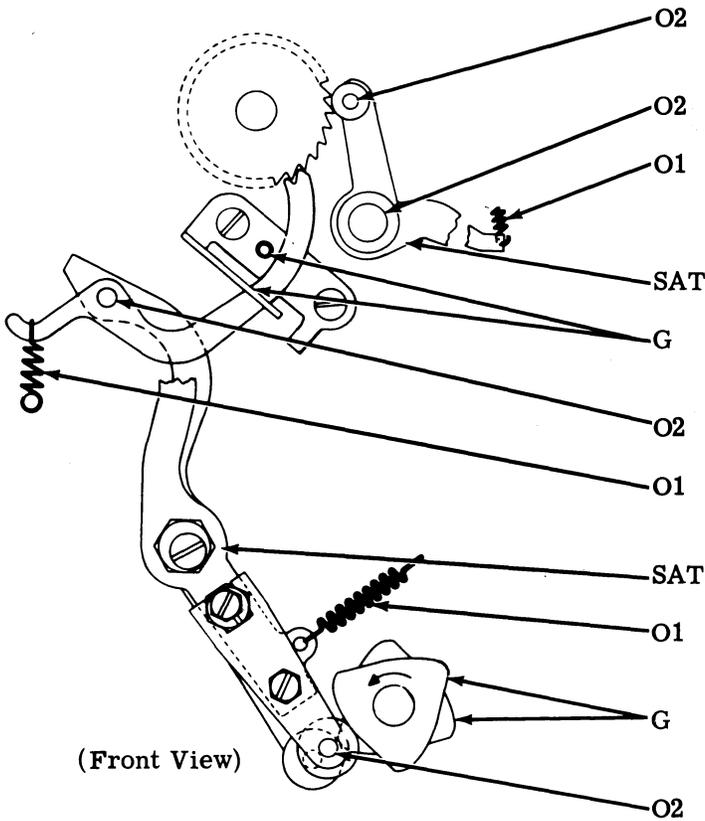
(Front View)

2.10 Manual Backspace Mechanism



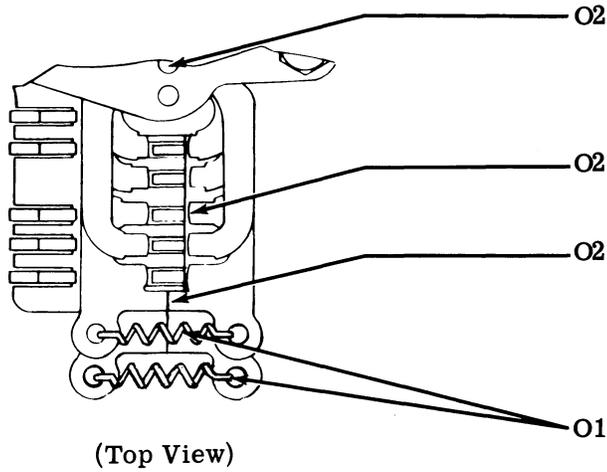
- |    |                   |                                |
|----|-------------------|--------------------------------|
| O2 | Engaging Surfaces | Feed Pawls and Feed Pawl Lever |
| O2 | Pivot             | Feed Pawl Lever                |
| O1 | Hooks (Each End)  | Feed Pawl Lever Spring         |

2.11 Rapid Feed Mechanism (continued)



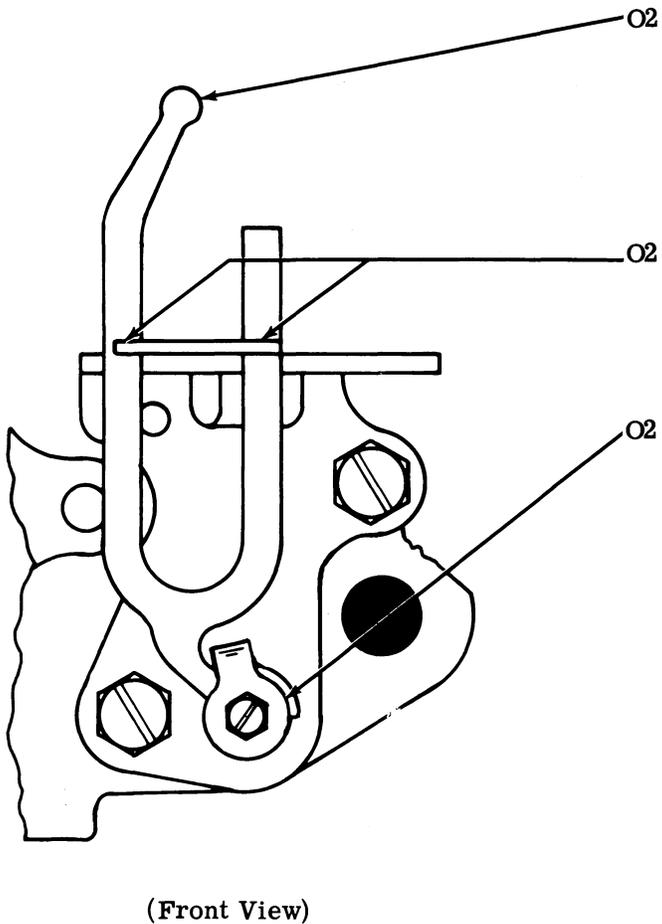
- |     |                   |                          |
|-----|-------------------|--------------------------|
| O2  | Bearing           | Detent Roller            |
| O2  | Pivot             | Detent                   |
| O1  | Hooks (Each End)  | Detent Spring            |
| SAT | Felt Washer       | Detent                   |
| G   | Engaging Surfaces | Feed Pawls               |
| O2  | Pivots            | Feed Pawls               |
| O1  | Hooks (Each End)  | Feed Pawl Springs (2)    |
| SAT | Felt Washer       | Cam Follower Pivot       |
| O1  | Hooks (Each End)  | Cam Follower Springs (2) |
| G   | Camming Surface   | Rapid Feed Cams          |
| O2  | Bearings (2)      | Cam Follower Rollers (2) |

2. 12 Typing Mechanism



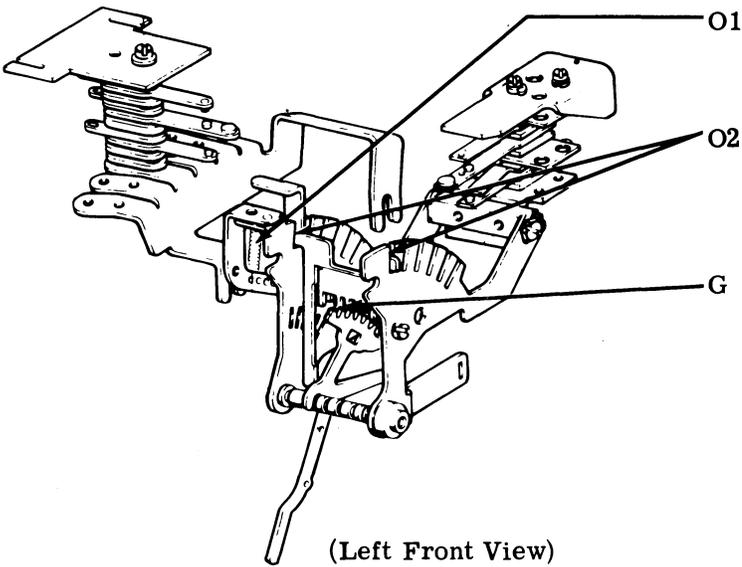
- |    |                  |                         |
|----|------------------|-------------------------|
| O2 | Pivots           | Pulse Levers (8)        |
| O2 | Engaging Surface | Transfer Levers (8)     |
| O2 | Engaging Points  | Pulse Levers            |
| O1 | Hooks (Each End) | Pulse Lever Springs (2) |

2. 13 Typing Mechanism (continued)



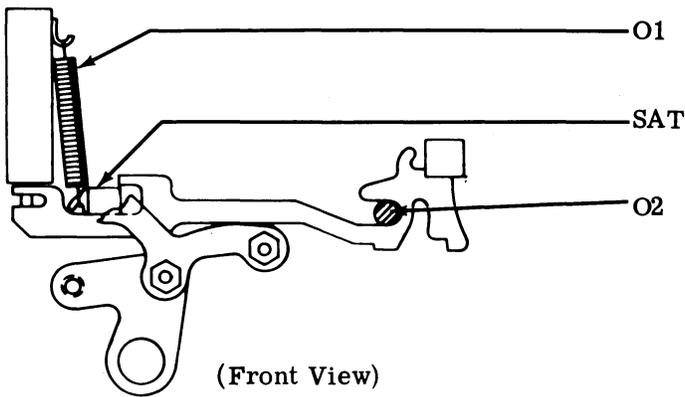
- |    |                       |                     |
|----|-----------------------|---------------------|
| O2 | Engaging Surfaces (8) | Transfer Levers (8) |
| O2 | Slots (8) (Each Side) | Guide Bracket       |
| O2 | Pivots (8)            | Transfer Levers (8) |

2.14 Function Box Mechanism



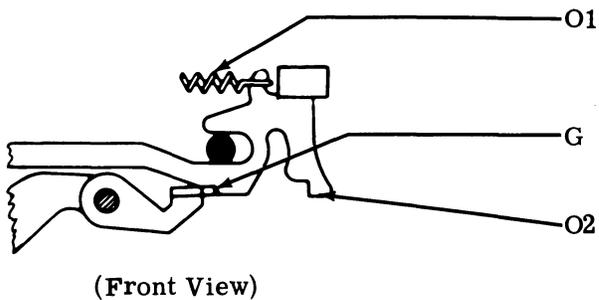
- |    |                              |                       |
|----|------------------------------|-----------------------|
| O1 | Hooks (Each End)             | Function Blade Spring |
| O2 | Sliding Surfaces (Each Side) | Function Blade        |
| G  | Engaging Tines               | Function Blade        |

2.15 Punch Mechanism (continued)



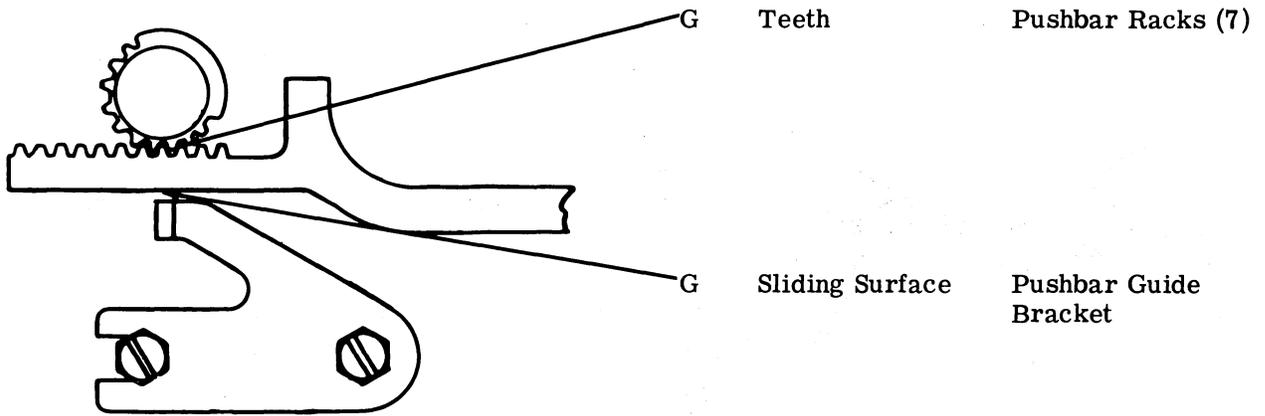
- |     |                  |                        |
|-----|------------------|------------------------|
| O1  | Hooks (Each End) | Slide Post Springs (4) |
| SAT | Felt Wick        | Slide Post             |
| O2  | Pivots           | Punch Slides (9)       |

2.16 Punch Mechanism (continued)



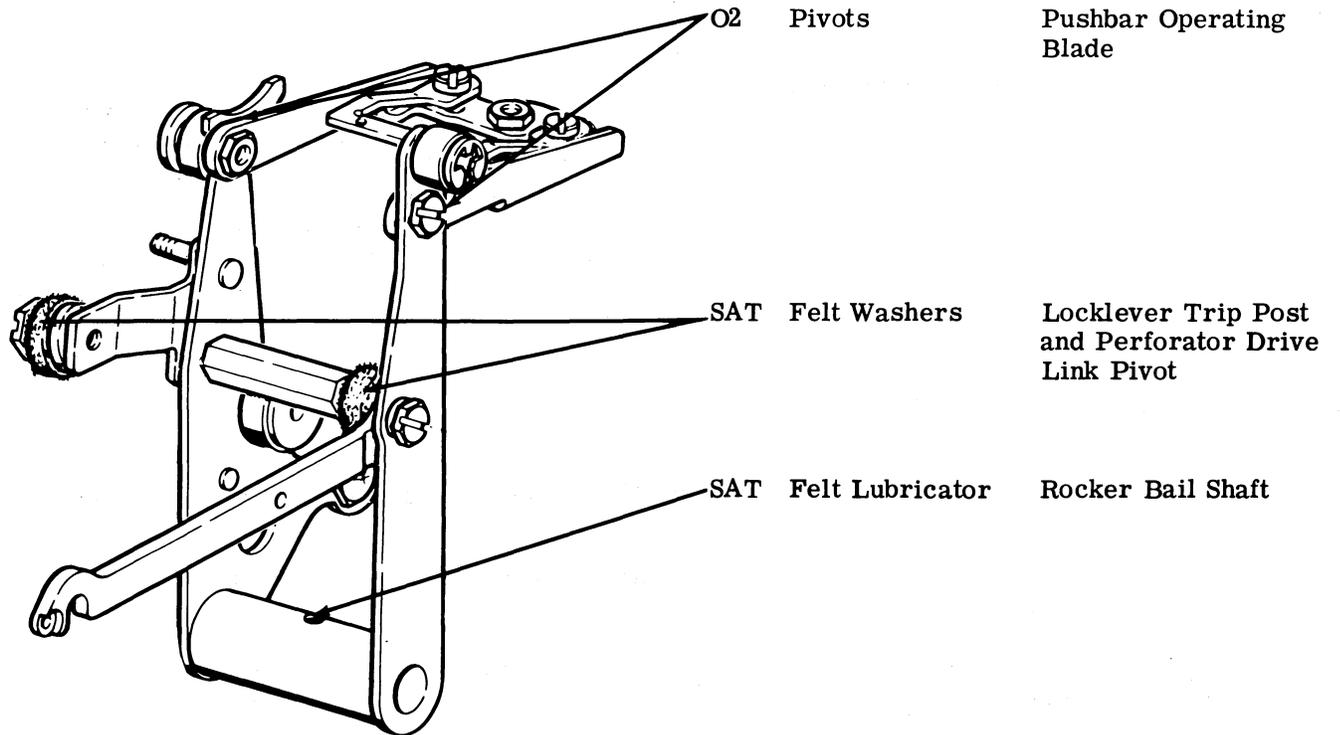
- |    |                  |                         |
|----|------------------|-------------------------|
| O1 | Hooks (Each End) | Punch Slide Springs (9) |
| G  | Engaging Surface | Reset Ball              |
| O2 | Latching Surface | Punch Slide             |

2.17 Typing Mechanism (continued)



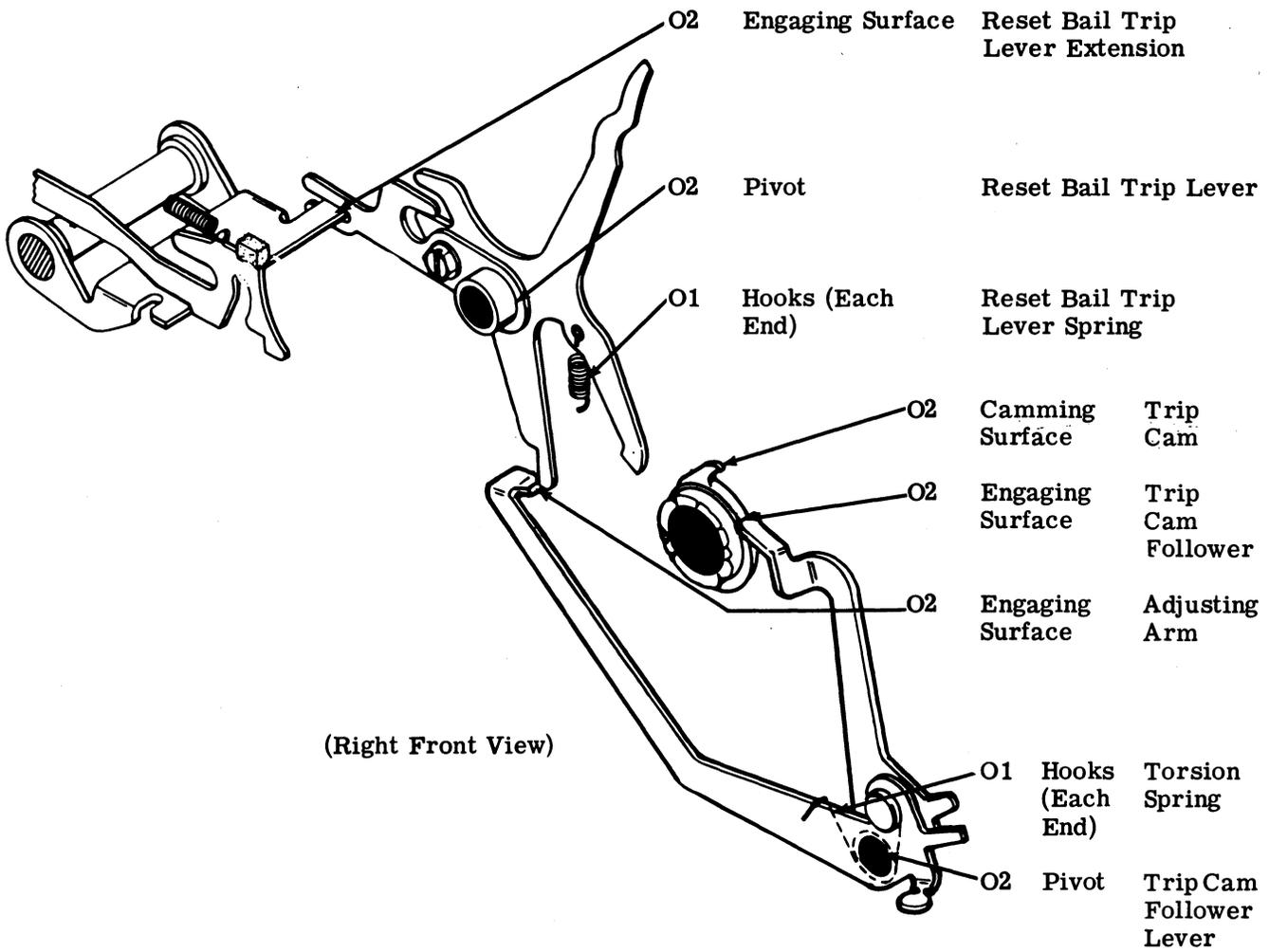
(Front View)

2.18 Rocker Bail Mechanism

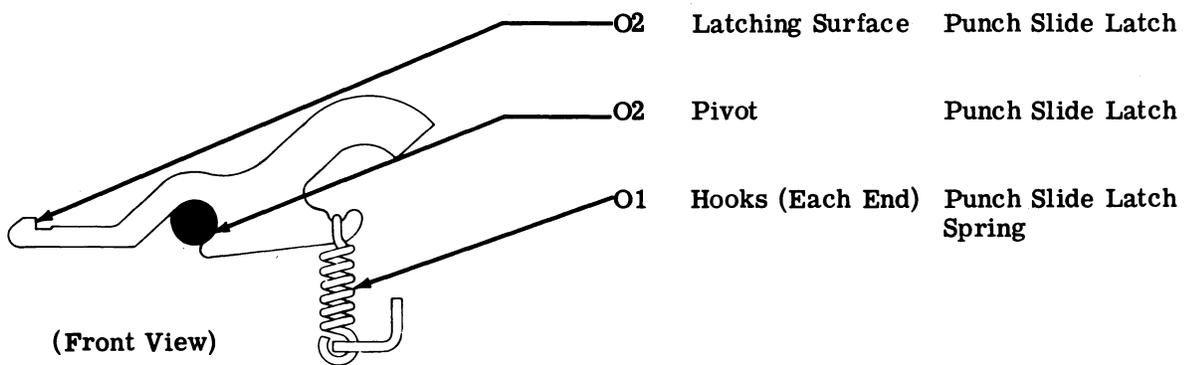


(Left Front View)

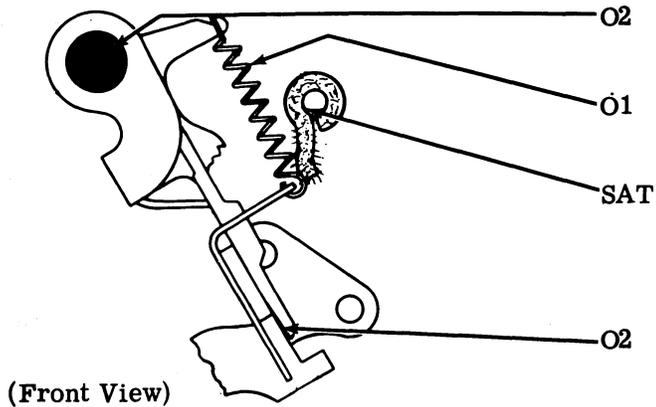
2.19 Function Mechanism



2.20 Punch Mechanism (continued)

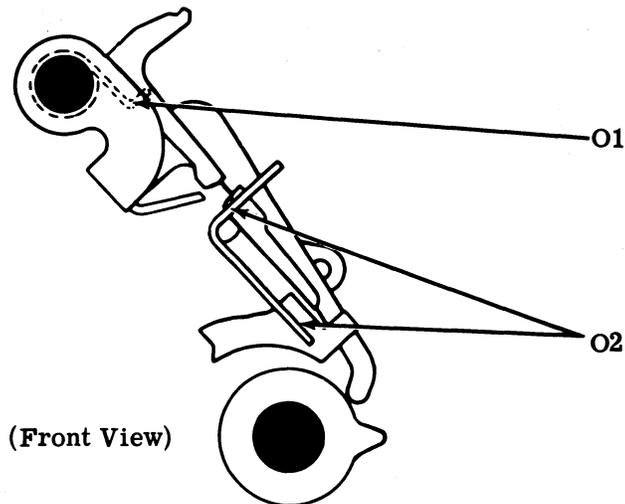


2.21 Selector Mechanism



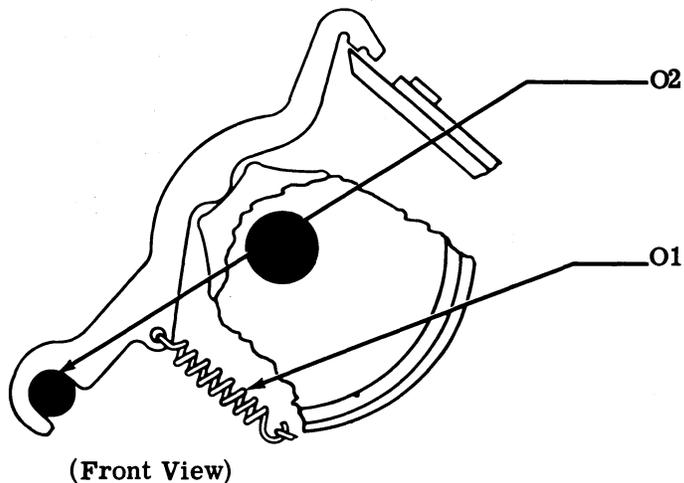
- |     |                  |                                |
|-----|------------------|--------------------------------|
| O2  | Pivots           | Selector Pushlevers            |
| O1  | Hooks (Each End) | Selector Push-lever Springs    |
| SAT | Felt Wick        | Selector Lubrica-tor           |
| O2  | Engaging Surface | Pushlevers and Selector Levers |

2.22 Selector Mechanism (continued)



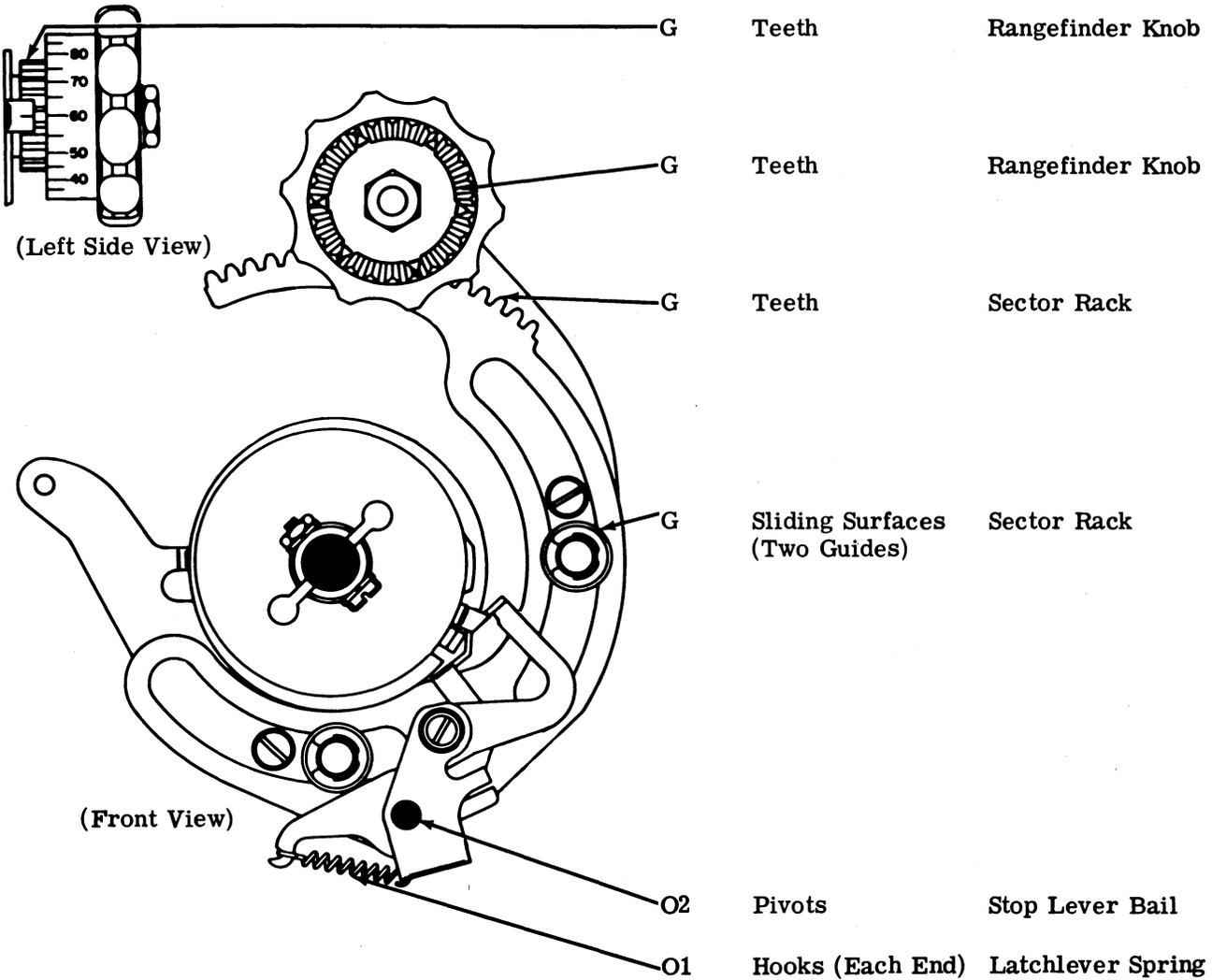
- |    |                                     |                              |
|----|-------------------------------------|------------------------------|
| O1 | Each End and Coils (Torsion Spring) | Pushlever Reset Bail Spring  |
| O2 | Slots                               | Selector and Pushlever Guide |

2.23 Selector Mechanism (continued)

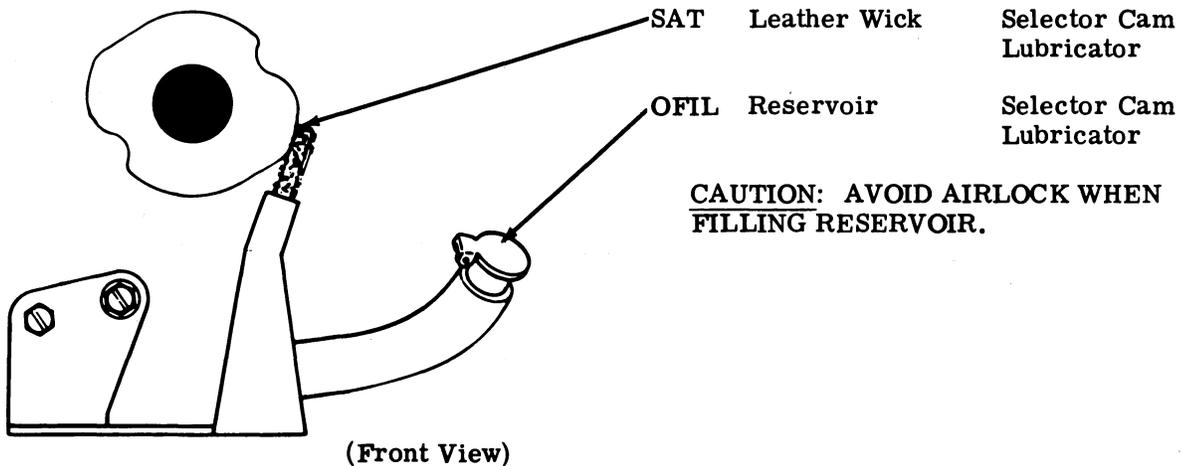


- |    |                  |  |
|----|------------------|--|
| O2 | Pivots           | Spacing Locklever and Selector Levers        |
| O1 | Hooks (Each End) | Spacing Locklever and Selector Lever Springs |

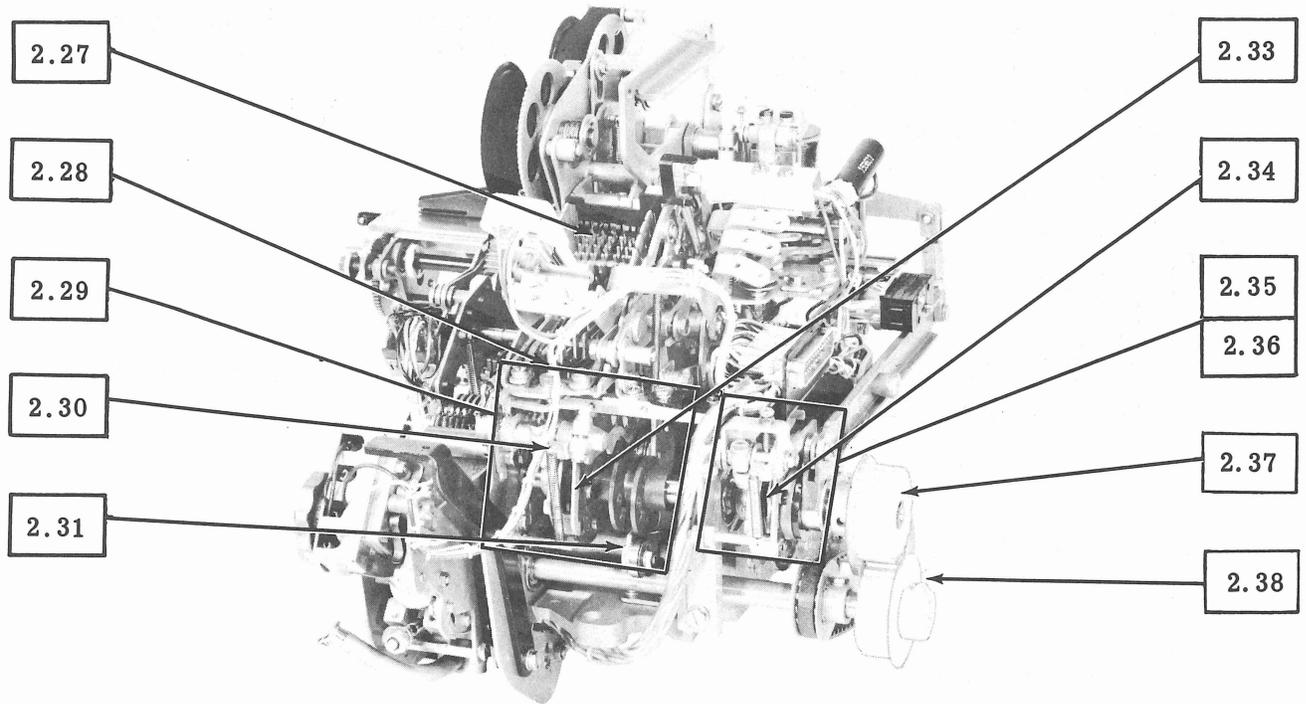
2.24 Selector Mechanism (continued)



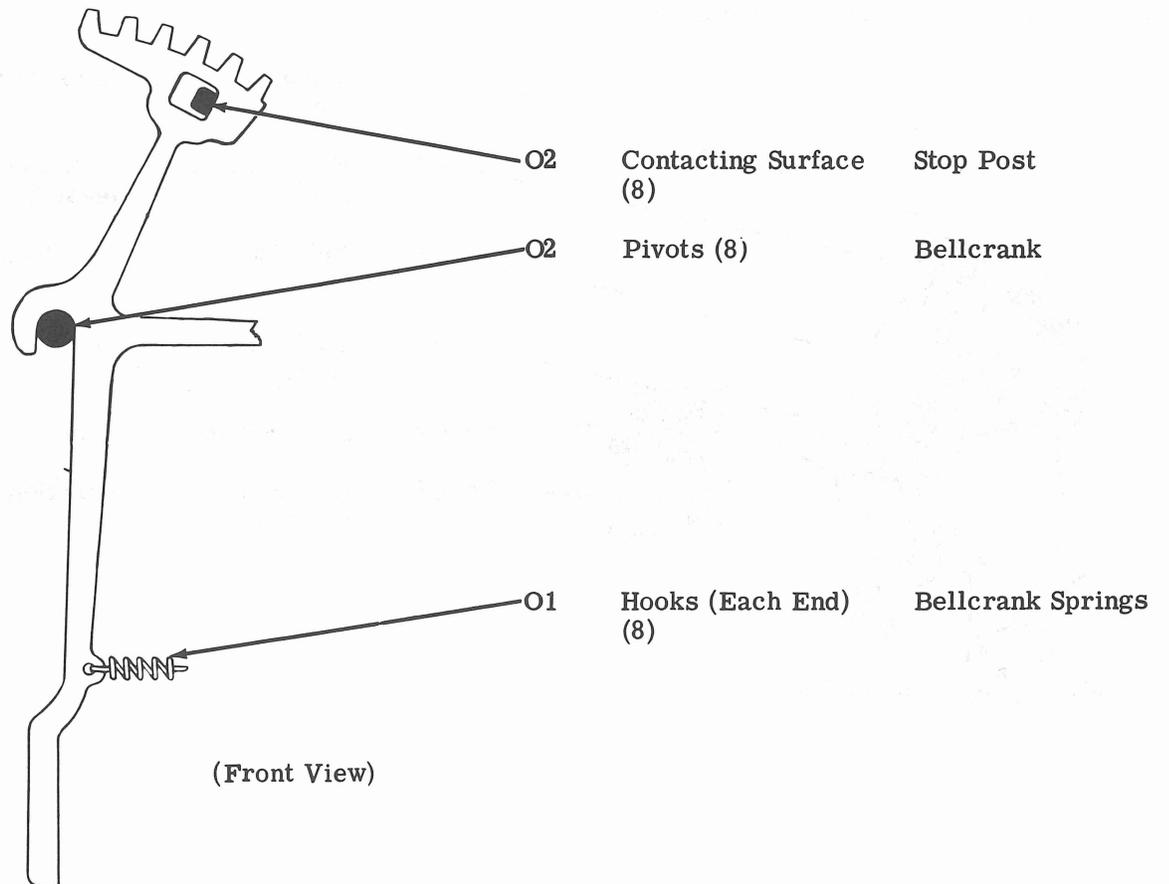
2.25 Selector Mechanism (continued)



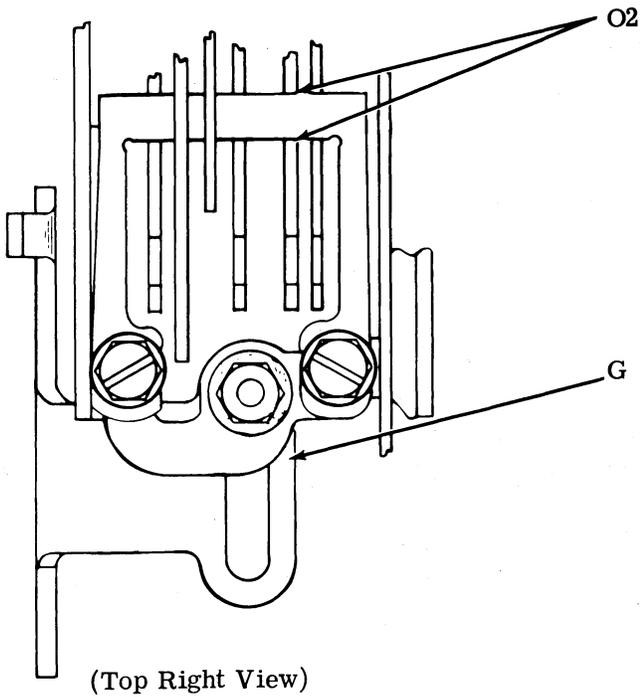
2.26 Edge Punched Card Typing Reperforator (Right Rear View)



2.27 Typing Mechanism (continued)

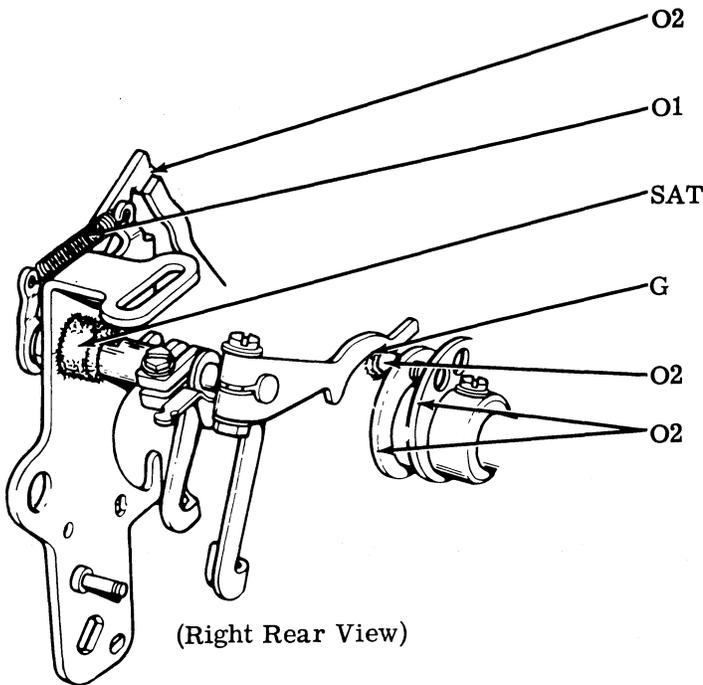


2.28 Rocker Bail Mechanism (continued)



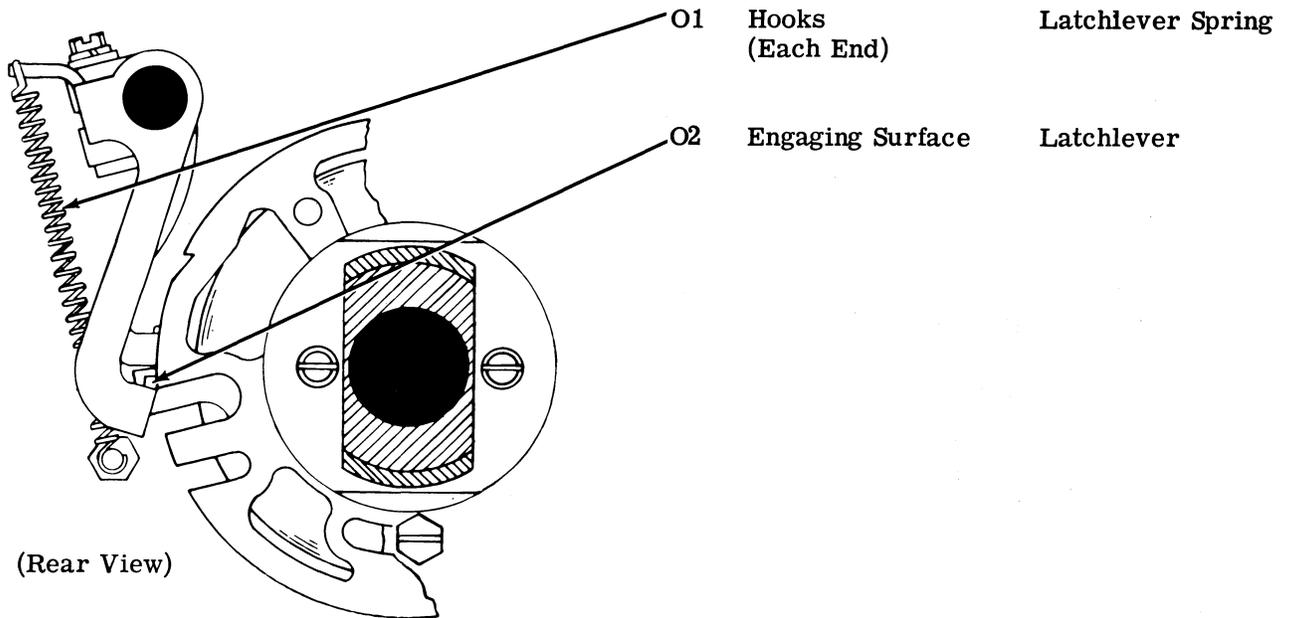
- |    |                   |                         |
|----|-------------------|-------------------------|
| O2 | Engaging Surfaces | Pushbar Operating Blade |
| G  | Sliding Surface   | Rocker Bail Pilot Stud  |

2.29 Function Mechanism (continued)

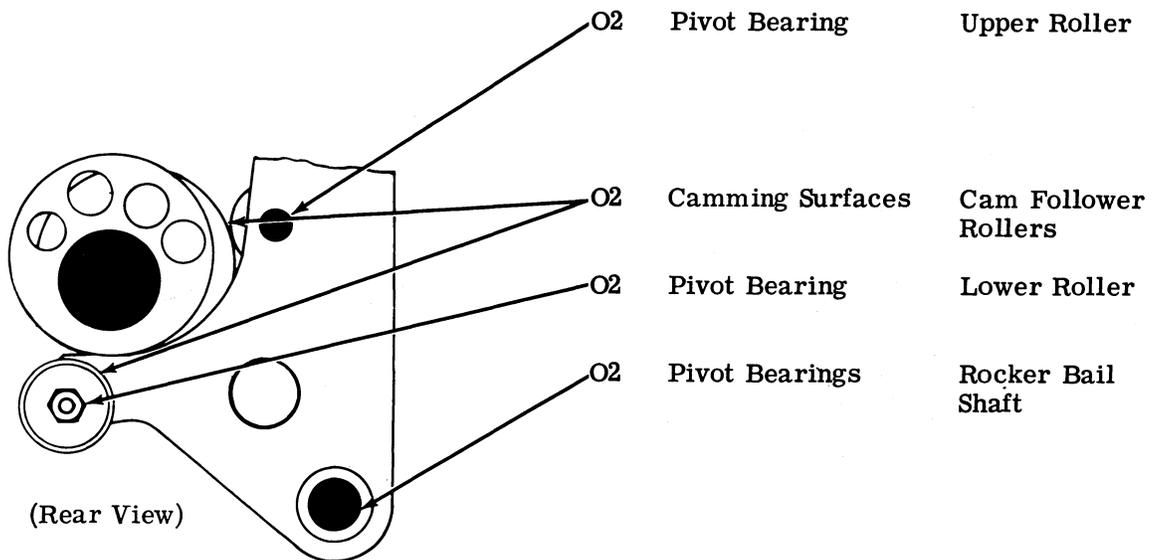


- |     |                    |                                      |
|-----|--------------------|--------------------------------------|
| O2  | Engaging Surface   | Release Lever                        |
| O1  | Hooks (Each End)   | Function Clutch Release Lever Spring |
| SAT | Felt Washers (2)   | Trip Shaft Bearing                   |
| G   | Contacting Surface | Reset Lever                          |
| O2  | Roller Pivot       | Reset Lever Cam Pin                  |
| O2  | Camming Surface    | Function Cams (2)                    |

2.30 Function Mechanism (continued)

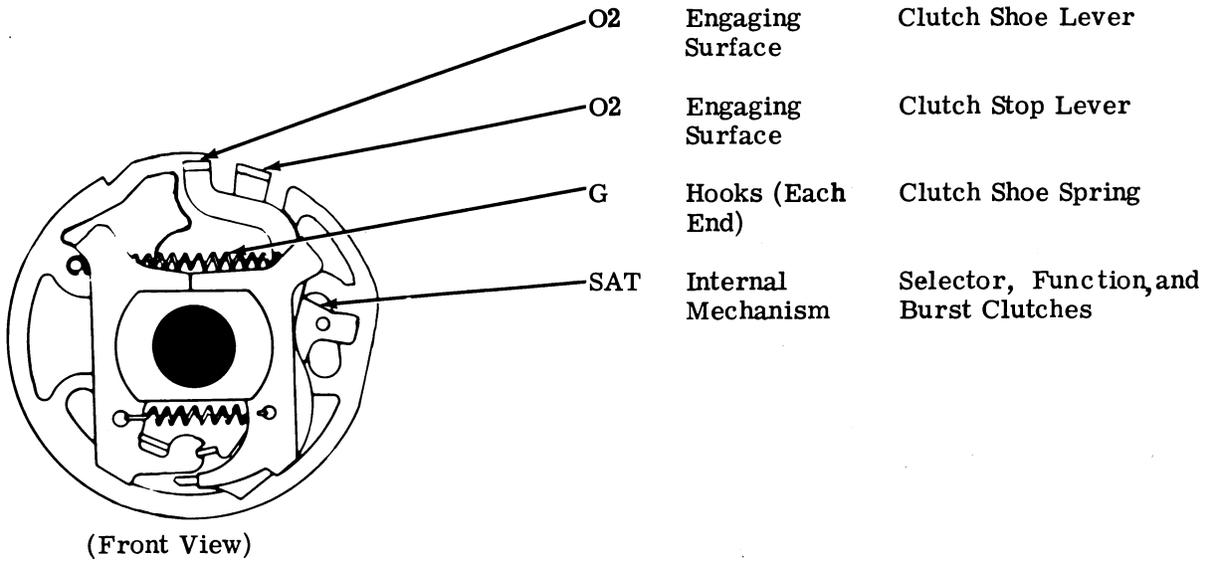


2.31 Rocker Bail Mechanism (continued)

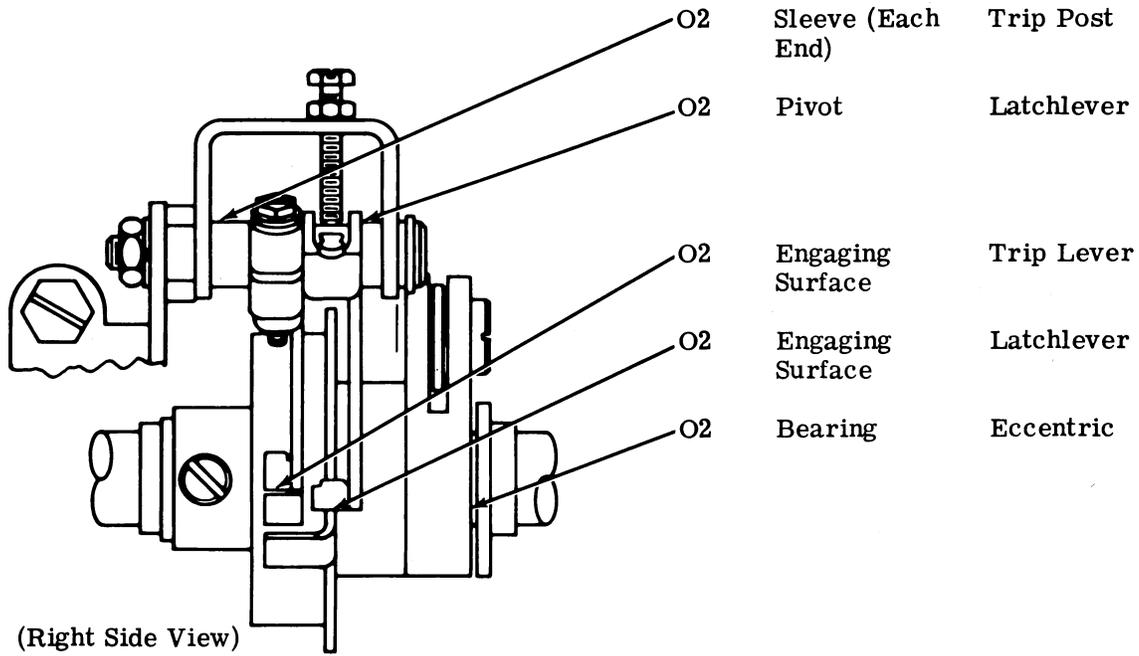


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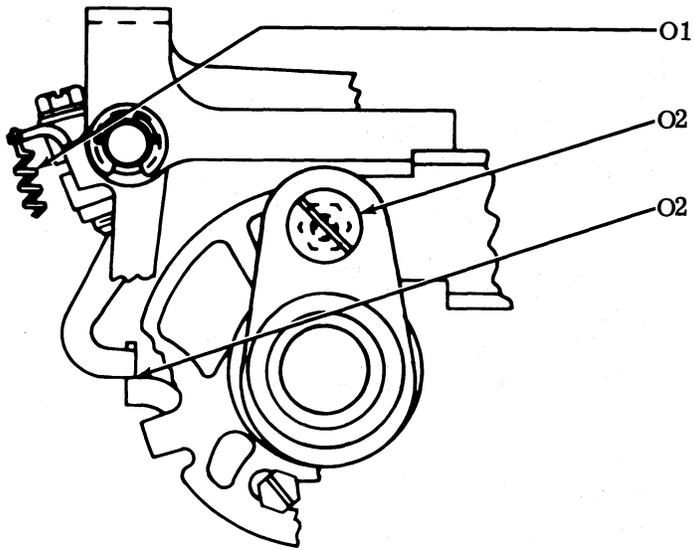
- 2.32 Selector Clutch Mechanism
- 2.33 Function Clutch Mechanism
- 2.34 Burst Clutch Mechanism



2.35 Burst Clutch Mechanism (continued)



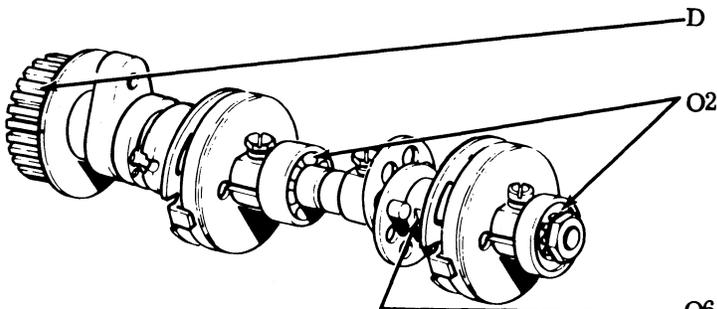
2.36 Burst Clutch Mechanism (continued)



(Rear View)

- |    |                  |                   |
|----|------------------|-------------------|
| O1 | Hooks (Each End) | Latchlever Spring |
| O2 | Pivots (2)       | Actuating Lever   |
| O2 | Engaging Surface | Trip Lever        |

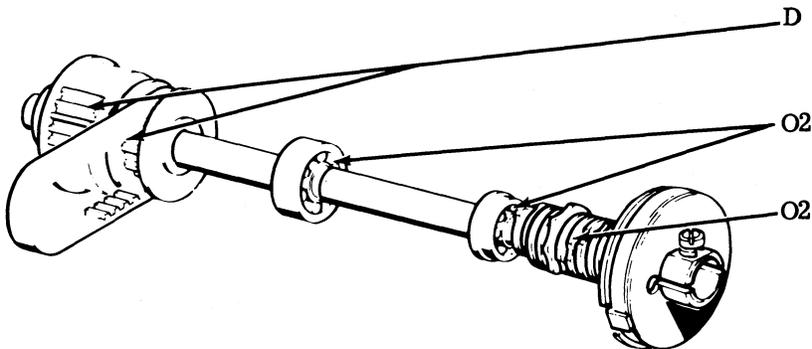
2.37 Function Mechanism (continued)



(Left Front View)

- |    |  |                                    |
|----|--|------------------------------------|
| D  | Teeth                                      | Function Shaft Pulley              |
| O2 | Ball Bearings (2) (In Casting)             | Function Shaft                     |
| O6 | Both Ends of Sleeve and Oil Hole in Sleeve | Function Cam Needle Bearing Sleeve |

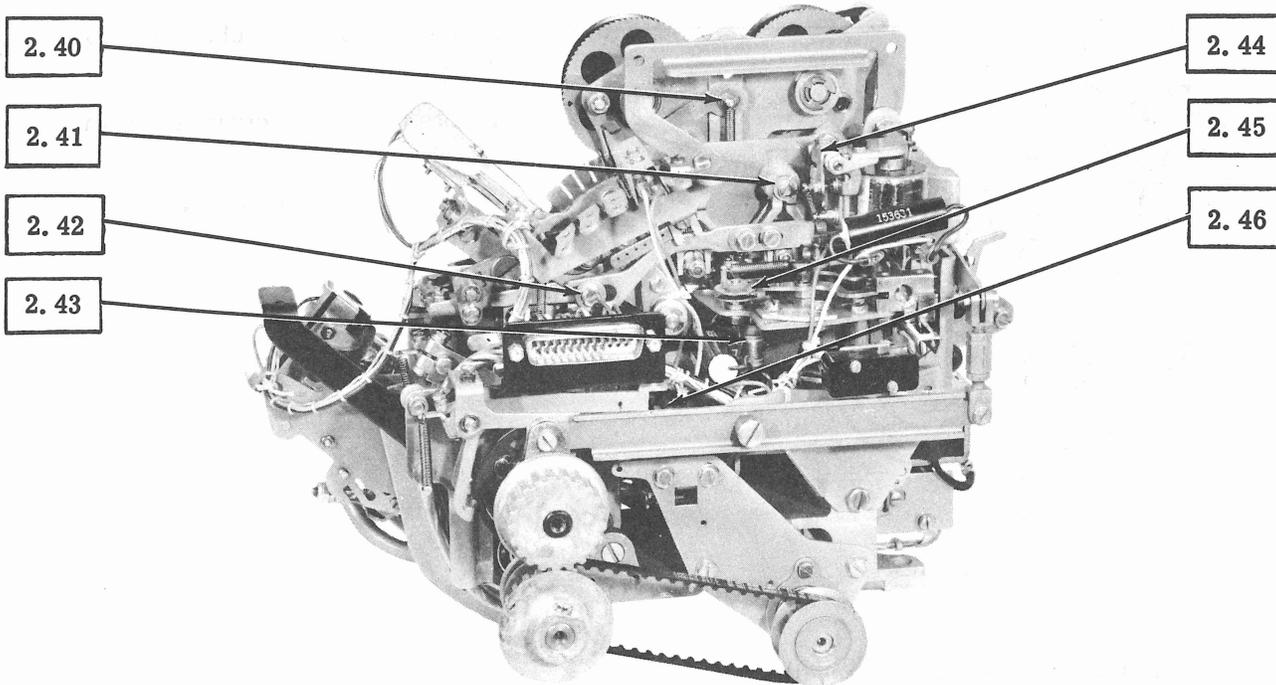
2.38 Selector Mechanism (continued)



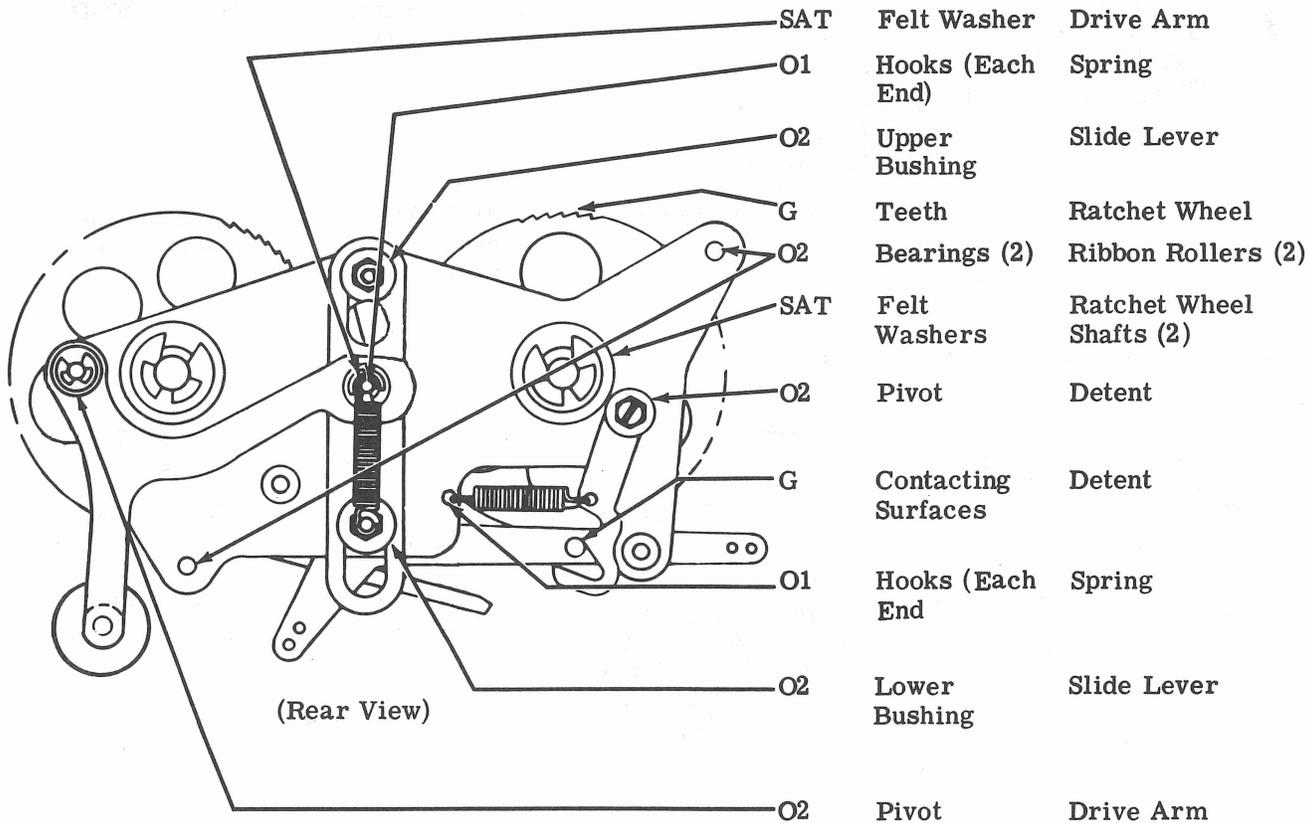
(Left Front View)

- |    |                                |                                       |
|----|--------------------------------|---------------------------------------|
| D  | Teeth                          | Selector Shaft Drive Belt and Pulleys |
| O2 | Ball Bearings (2) (In Casting) | Selector Shaft                        |
| O2 | Camming Surfaces               | Selector Cams                         |

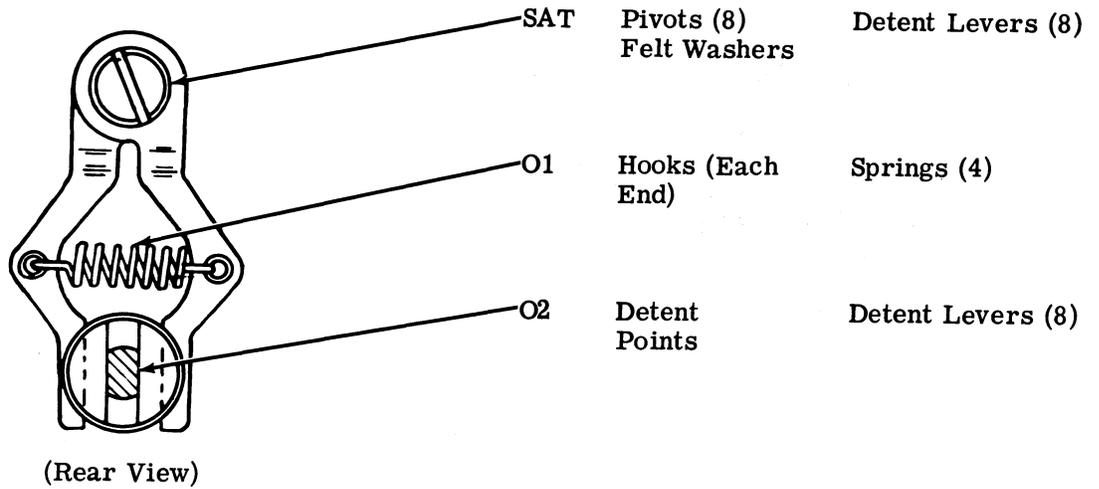
2.39 Edge Punched Card Typing Reperforator (Rear View)



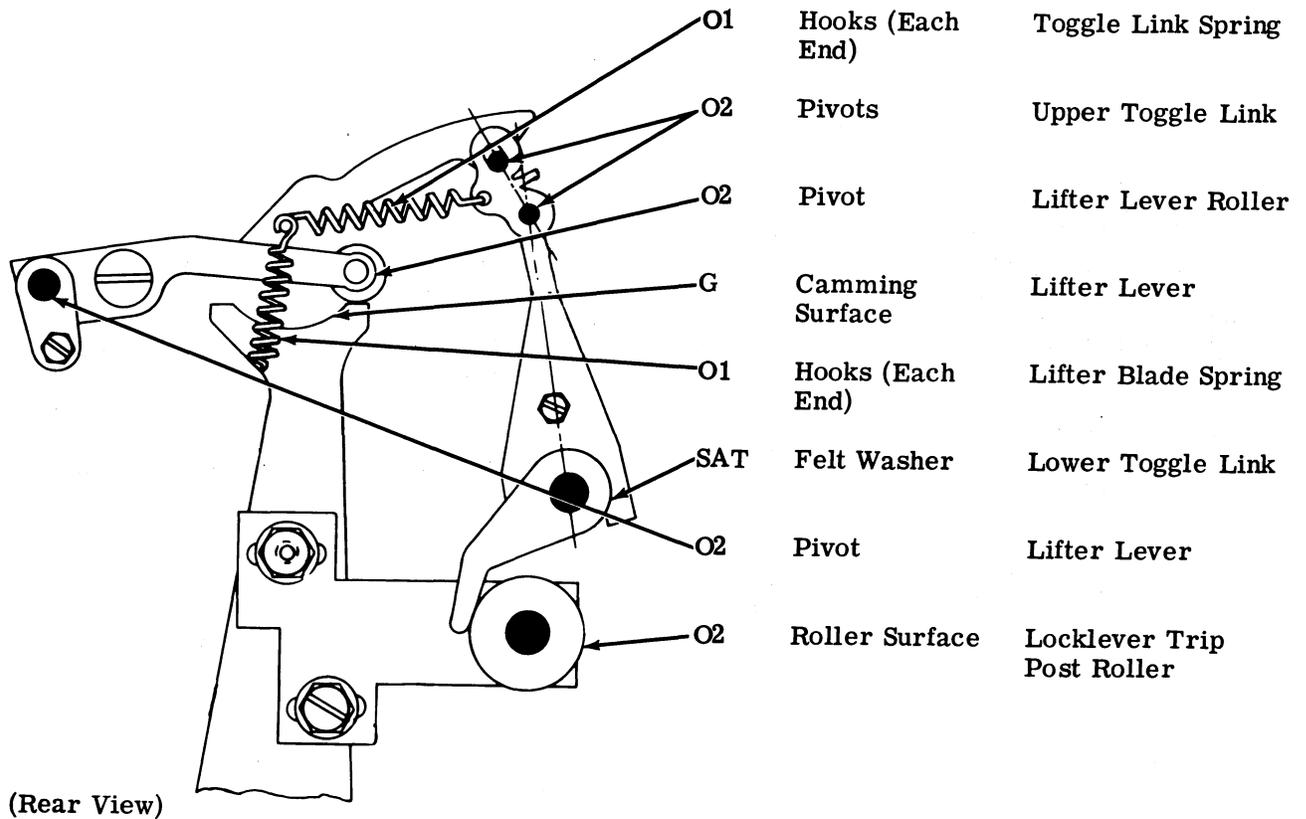
2.40 Ribbon Feed Mechanism (continued)



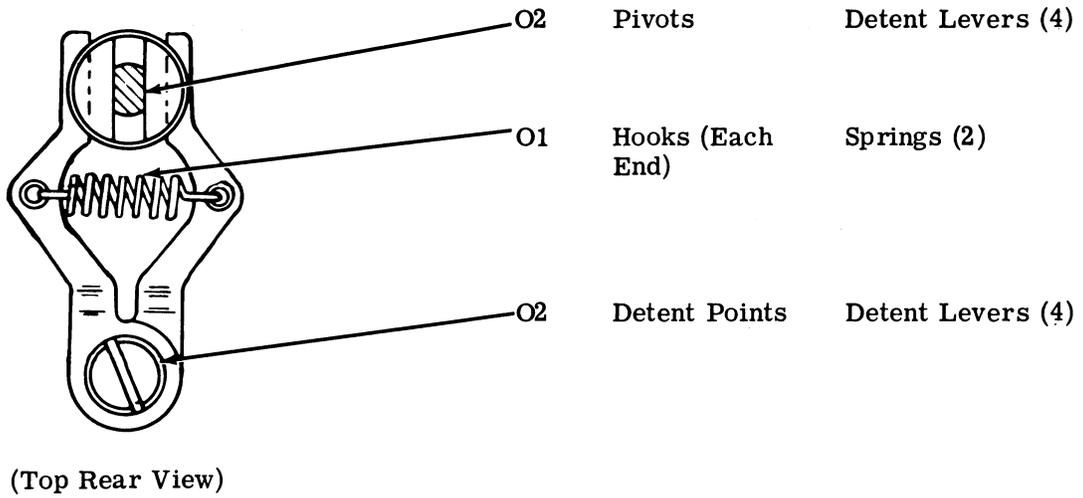
2.41 Rotary Positioning Mechanism (continued)



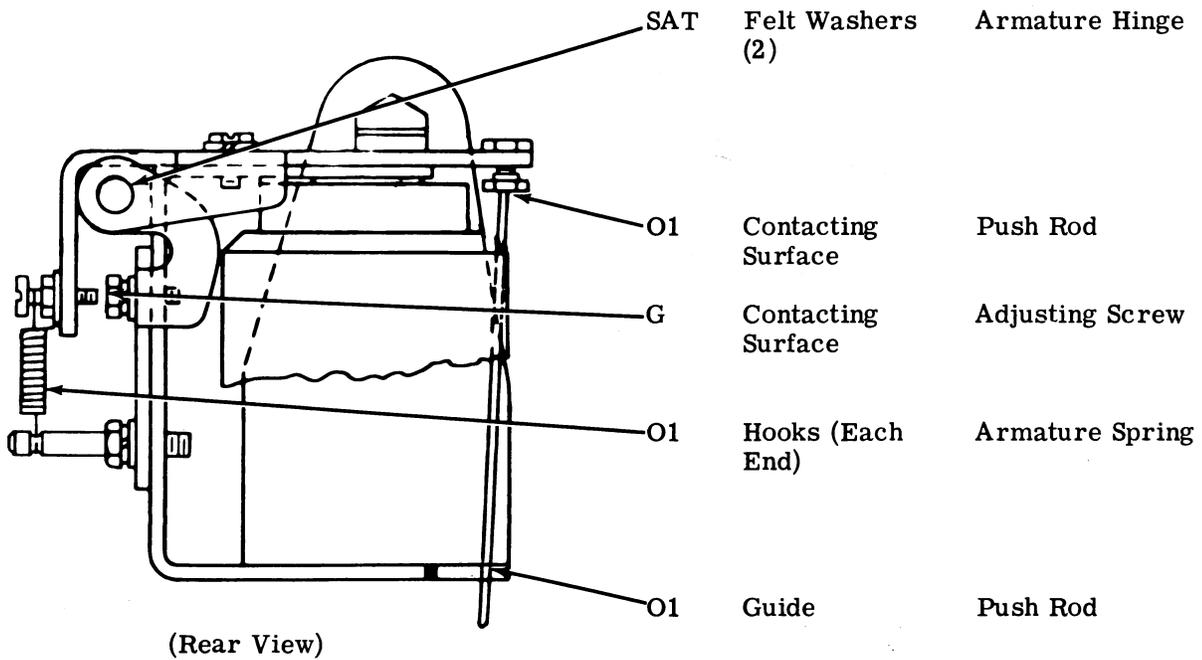
2.42 Rocker Bail Mechanism (continued)



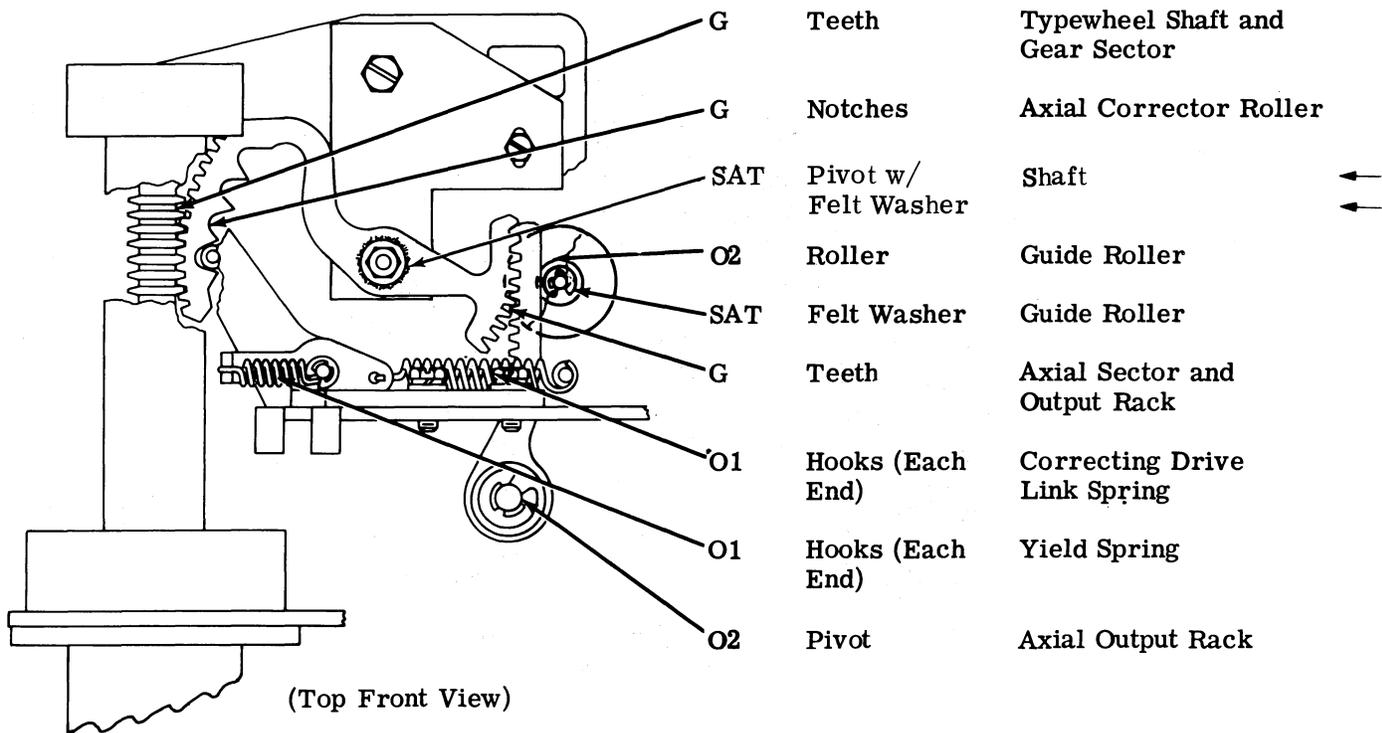
2.43 Axial Positioning Mechanism



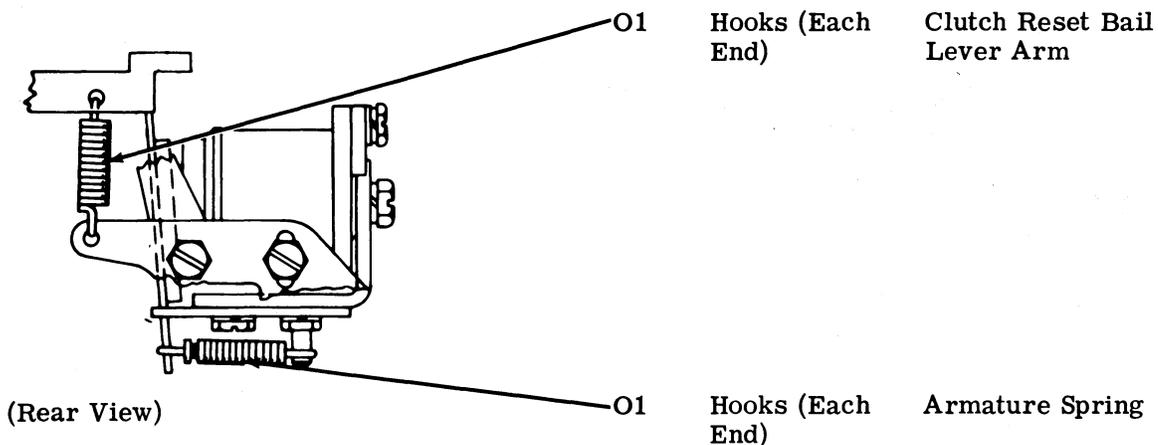
2.44 Print Suppression Mechanism



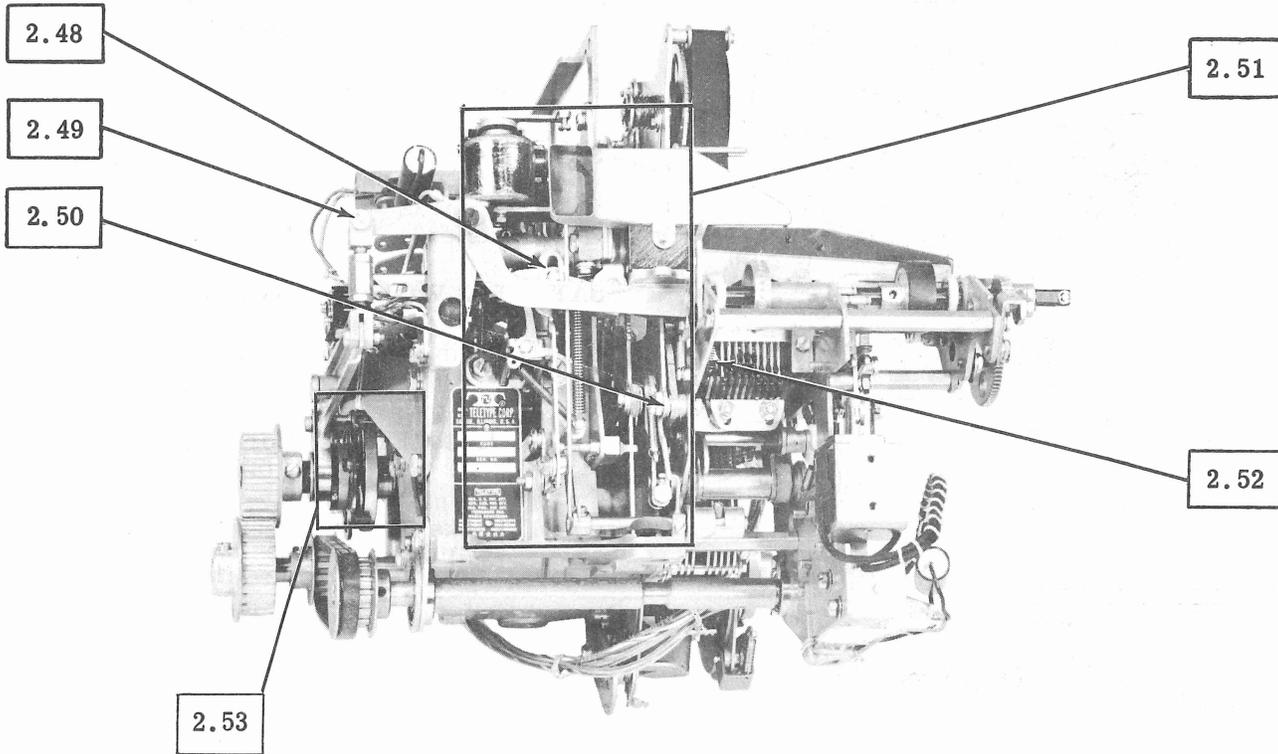
2.45 Axial Positioning Mechanism (continued)



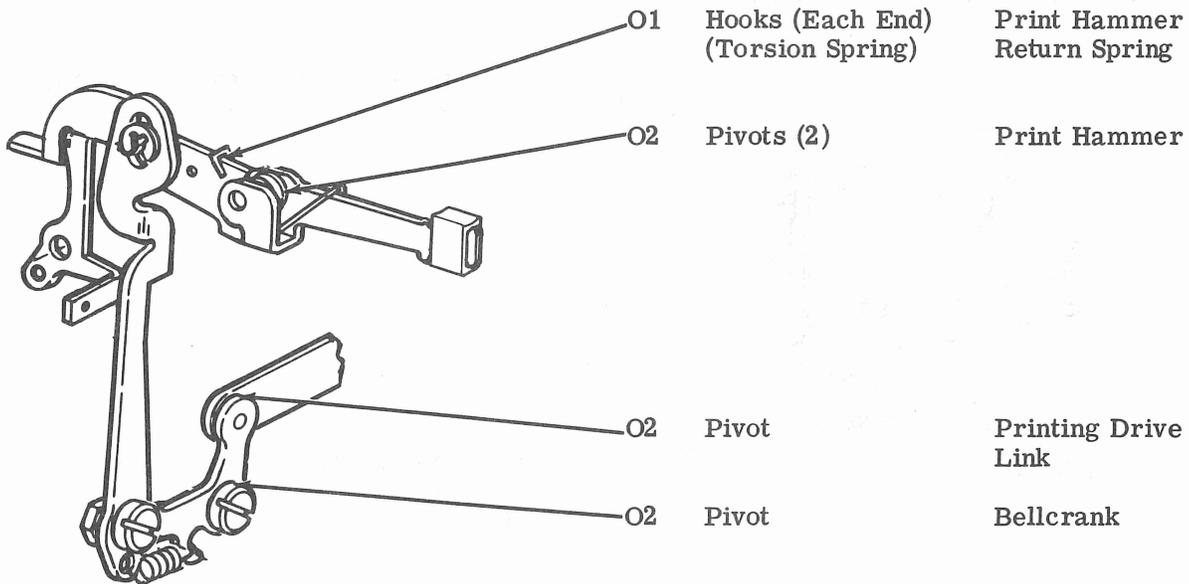
2.46 Burst Clutch Mechanism (continued)



2.47 Edge Punched Card Typing Reperforator (Left Side View)

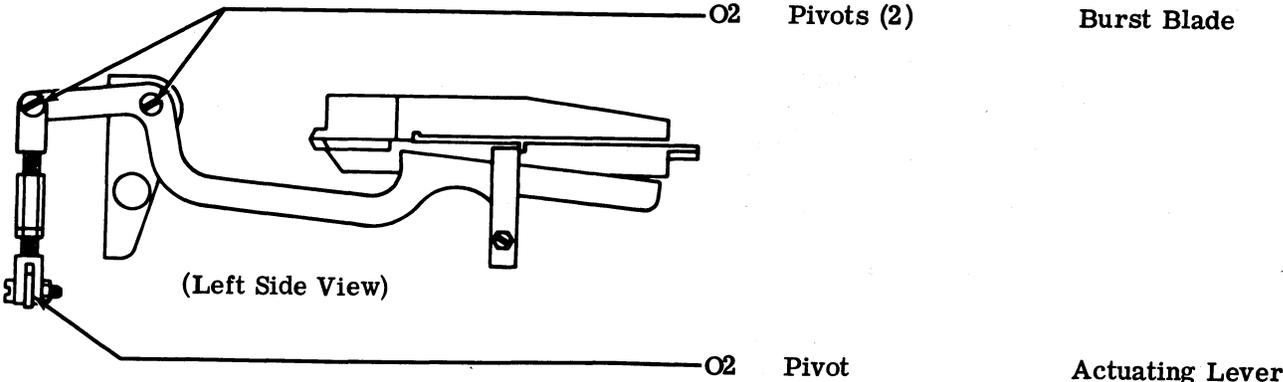


2.48 Typing Mechanism (continued)

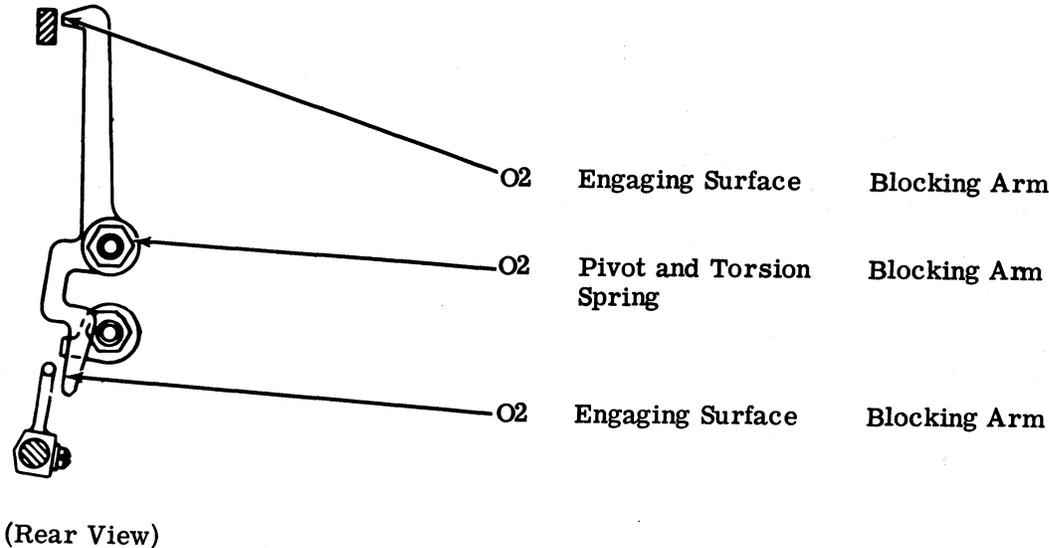


(Left Front View)

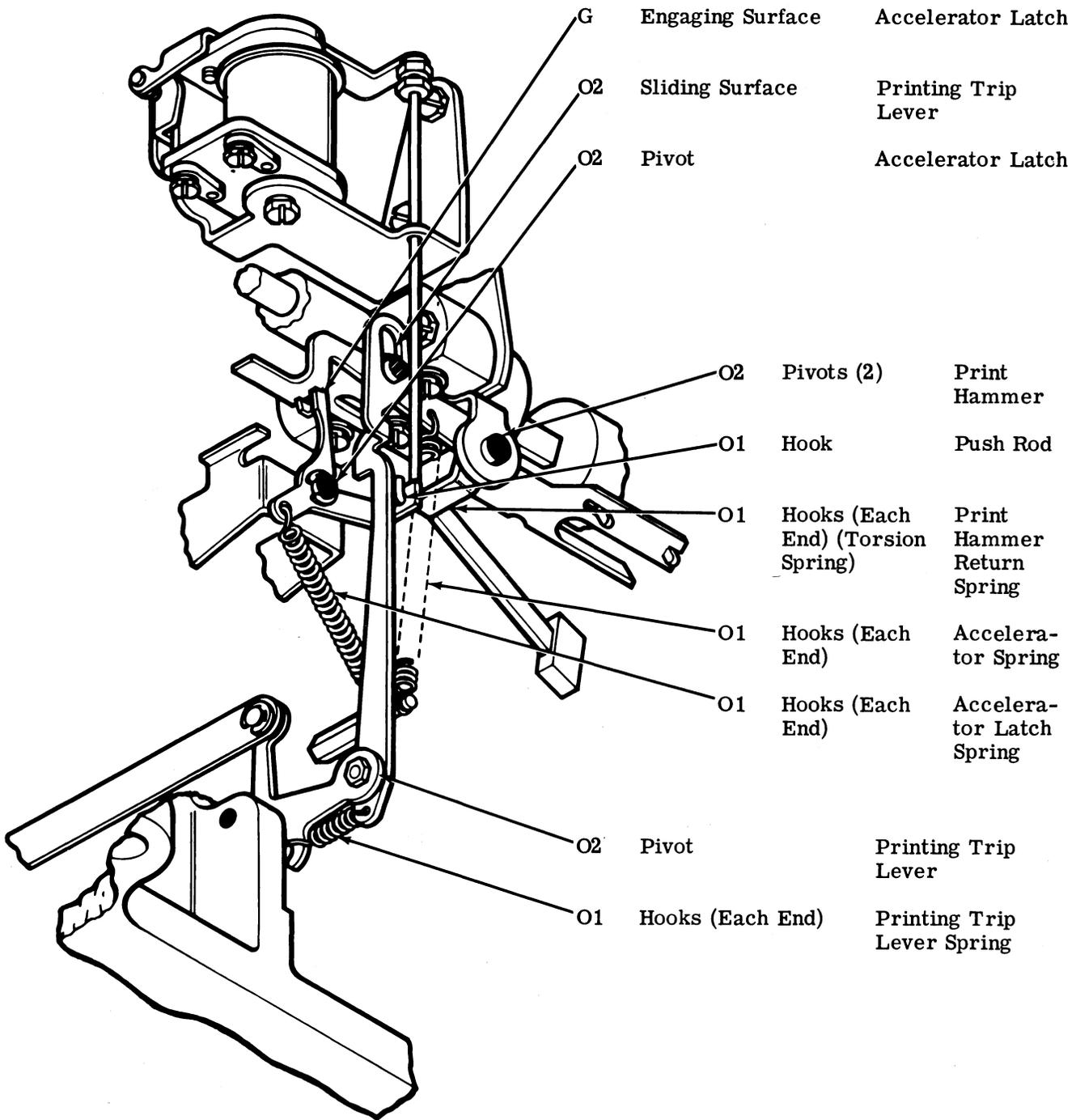
2.49 Burst Clutch Mechanism (continued)



2.50 Print Suppression Mechanism (continued)

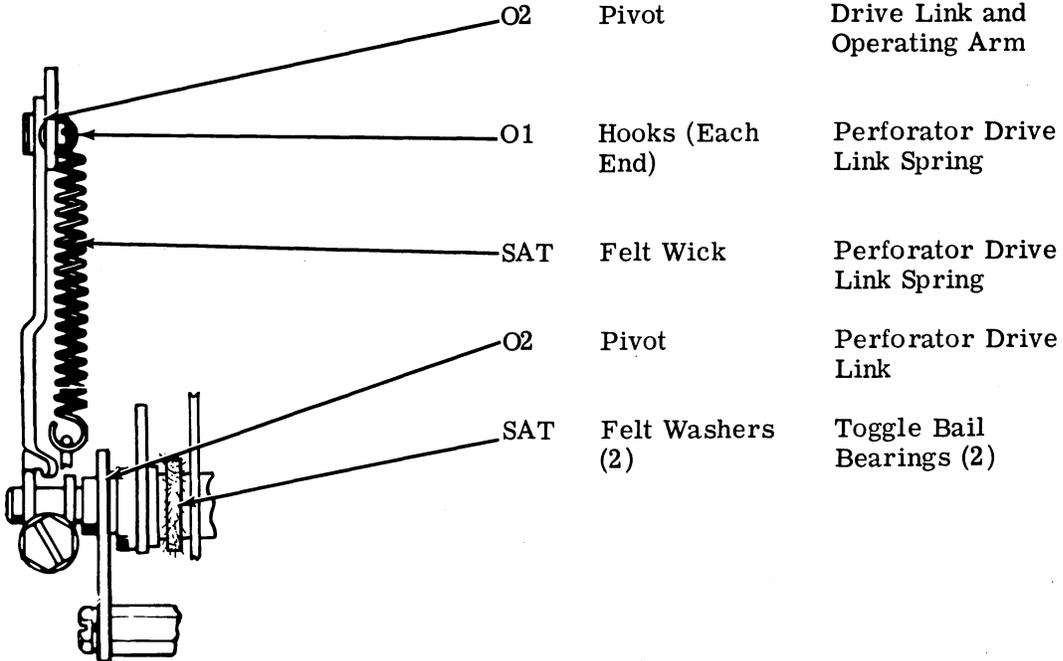


2.51 Typing Mechanism (continued)



(Left Rear View)

2.52 Punch Mechanism (continued)



(Left Side View)

2.53 Null Generator Contact Mechanism

