# 32 TAPE READER

# LUBRICATION

CONTENTS



## 1. GENERAL

1.01 This section provides lubrication requirements for the 32 tape reader. It is reissued to make corrections, and change the lubrication interval. Marginal arrows indicate changes. To remove the tape reader from the teletypewriter set as a unit, refer to Section 574-160-702TC.

1.02 Lubrication of the tape reader is presented by mechanisms. Photographs show numbered callouts that correspond to paragraphs containing line drawings. These drawings show specific points of each mechanism to be lubricated.

1.03 References to front, rear, left, right, etc, are made viewing the tape reader 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 Tape Reader | | | |
|---|---|---|---|
| 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:

| | |
|---|---|
| Feed Wheel | 2.02 |
| Spring Post | 2.02 |
| Magnet Brackets | 2.02 |
| Armature Pivot Shaft | 2.02 |
| Sensing Pins | 2.02 |
| Armature | 2.04 |
| Reader Trip Lever | 2.12 |

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

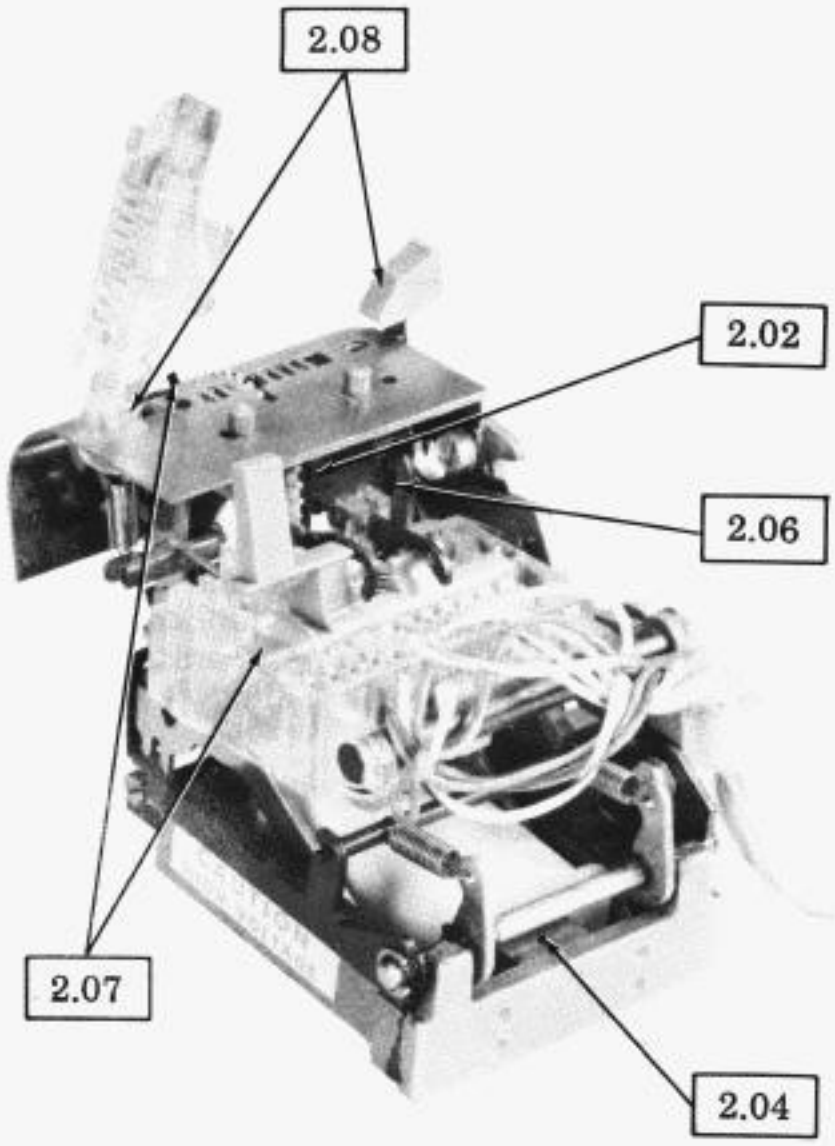
→ Note: The amount of lubricant applied is → at the discretion of maintenance personnel.

| SYMBOL | MEANING |
|---|---|
| D | Dry — no lubricant permitted |
| G | Grease — apply TKS7471 grease |
| O | Oil — apply TKS7470 oil |

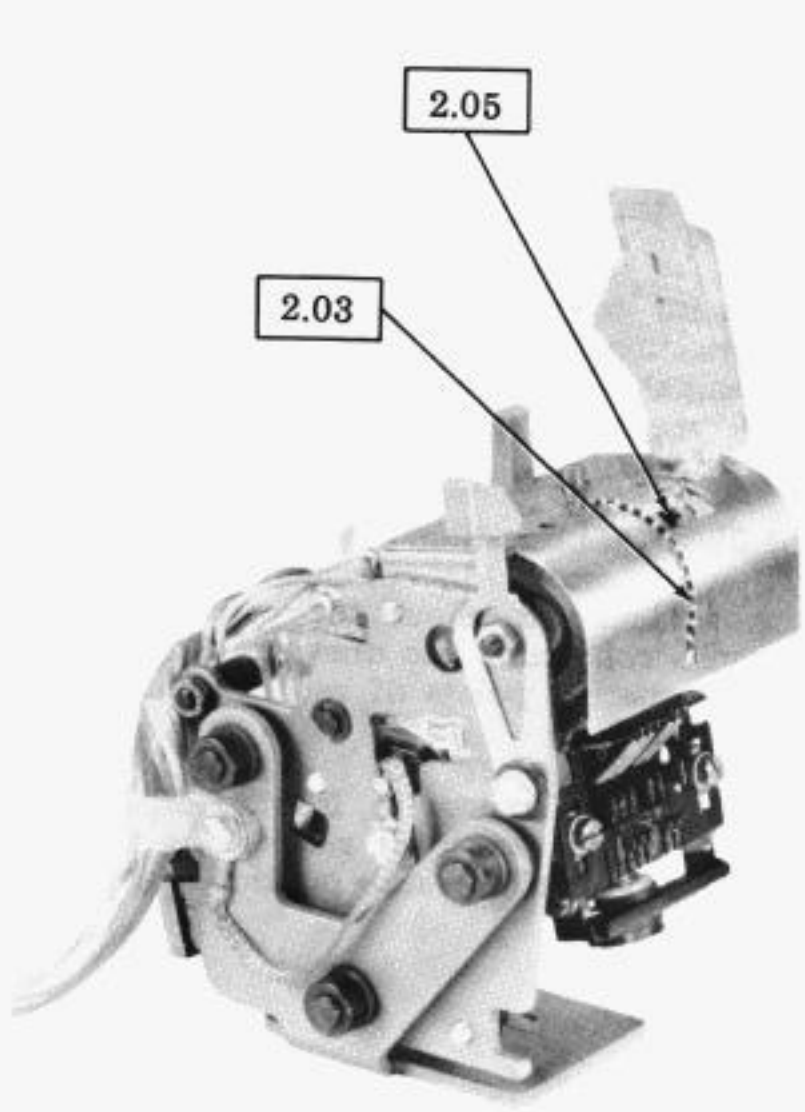
→ 1.07 Lubricate the tape reader thoroughly. Apply oil to each end of all springs, and to points where it will adhere and not run off. Avoid overlubrication. Keep electrical contacts and wire insulations free of lubricants. In general, apply oil to locations where parts rub, slide, or move with respect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

## 2. BASIC UNIT

2.01 Tape Reader

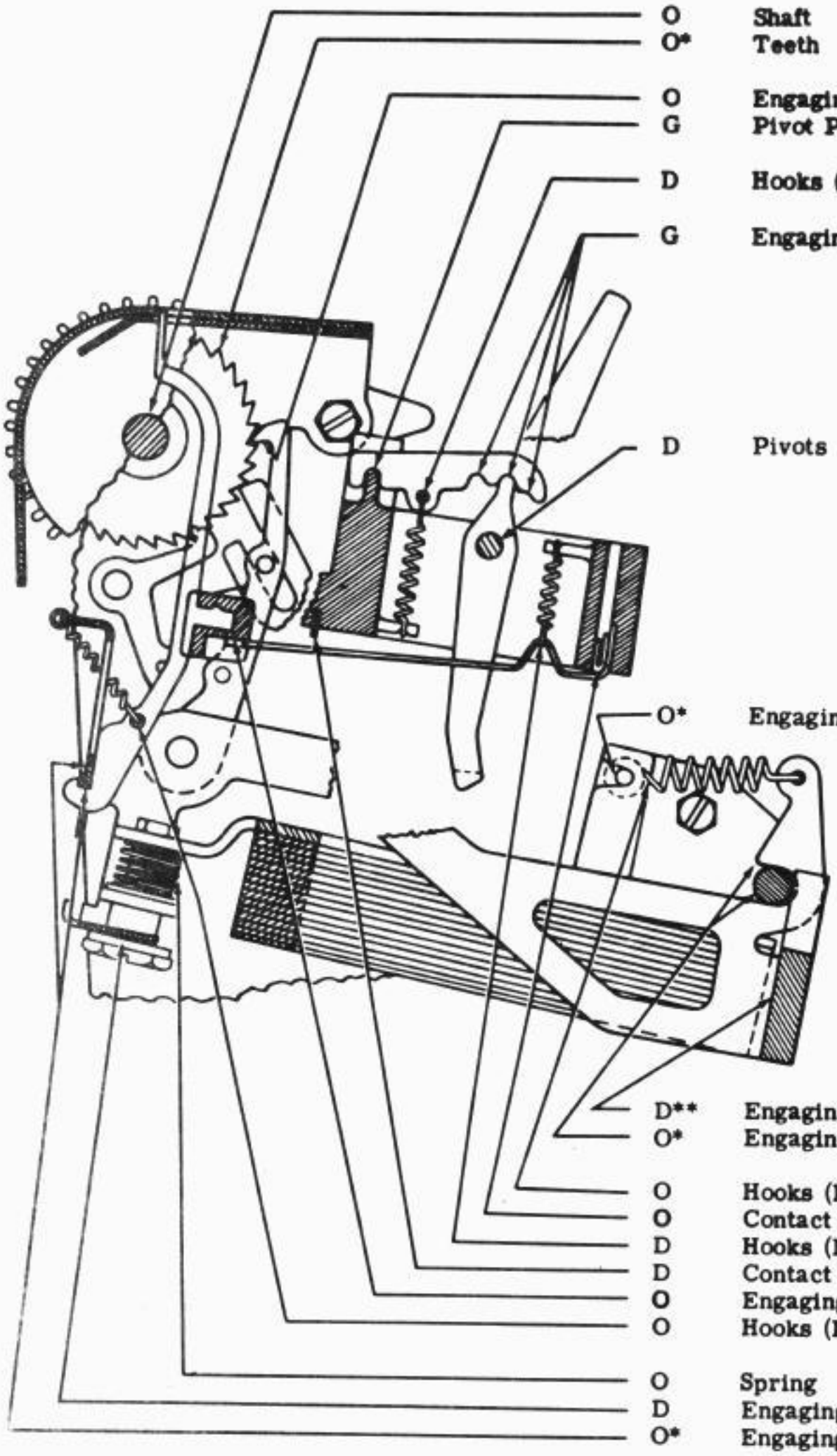



(Left Front View)




(Right Rear View)

## 2.02 Tape Reader Mechanism



| | | |
|---|---|---|
| O | Shaft | Feed Wheel |
| O* | Teeth | Feed Wheel Ratchet |
| O | Engaging Surface | Feed Pawl |
| G | Pivot Point | Control Detent Lever |
| D | Hooks (Each End) | Detent Lever Spring |
| G | Engaging Surface | Detent Lever |
| D | Pivots (2) | Control Detent Lever Shaft |
| O* | Engaging Surfaces (2) | Spring Post and Magnet Brackets |

(Left Side View)

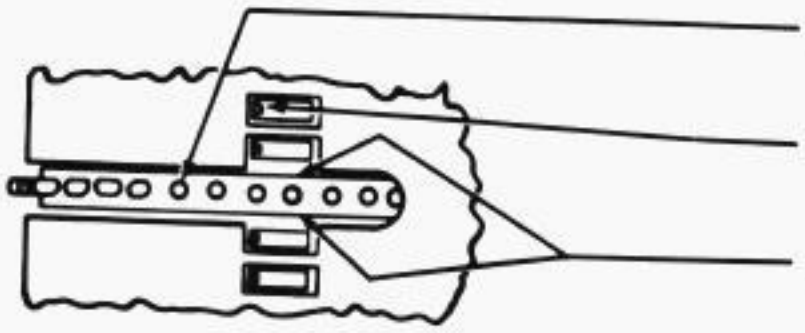
| | | |
|---|---|---|
| D** | Engaging Surface | Armature |
| O* | Engaging Surface | Armature Pivot Shaft |
| O | Hooks (Each End) | Armature Springs |
| O | Contact Pivot | Contact Wires ← |
| D | Hooks (Each End) | Contact Spring |
| D | Contact Surface | Contact Wires |
| O | Engaging Surface | Insulator ← |
| O | Hooks (Each End) | Sensing Pin Springs |
| O | Spring | Upstop Spring |
| D | Engaging Surface | Buffer |
| O* | Engaging Surface | Sensing Pins |

←

*Refer to 1.05.

**Some oil leakage on this surface is permissible.

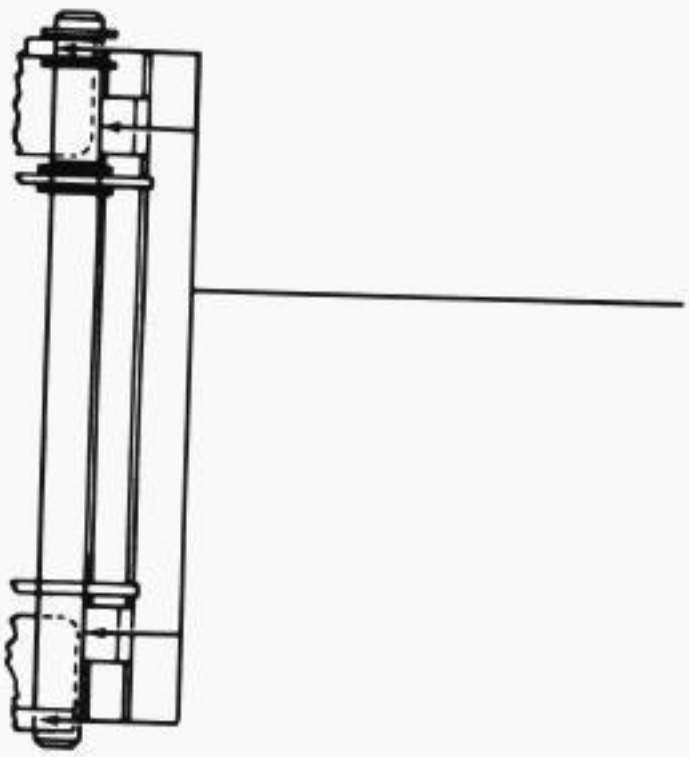
2.03 Feed Wheel



| | | | |
|---|---|---|---|
| D | Pins | Feed Wheel |
| D | Sliding Surface | Sensing Pins |
| D | Sides | Feed Wheel |

(Top View)

2.04 Armature Shaft

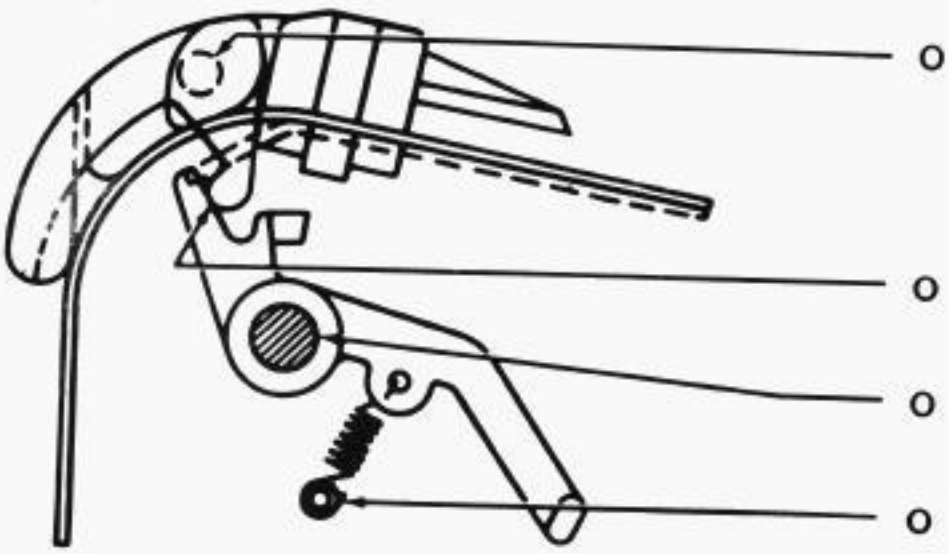


| | | |
|---|---|---|
| O* | Stops | Armature |

*Refer to 1.05.

(Top View)

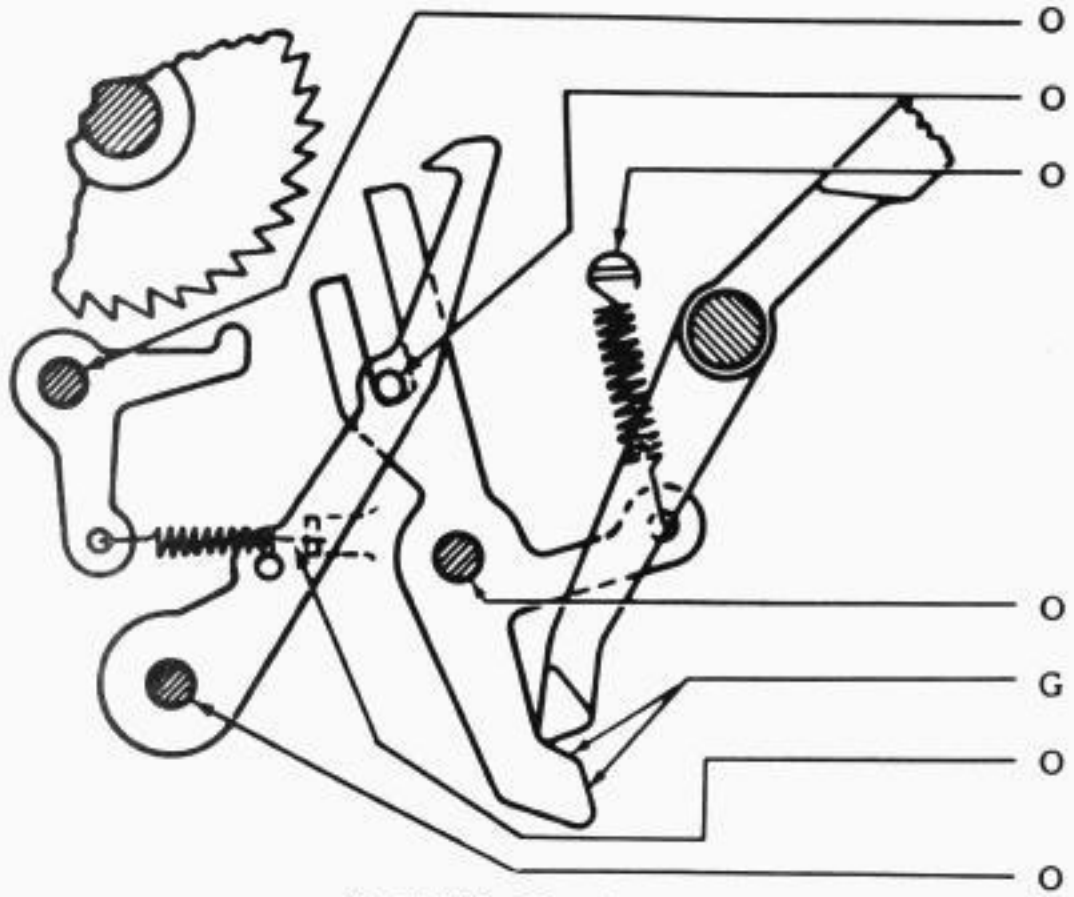
2.05 Tight Tape Mechanism



| | | |
|---|---|---|
| O | Pivots (2) | Tight Tape Bail |
| O | Engaging Surface | Tight Tape Bail Extension |
| O | Pivots (2) | Tight Tape Lever Shaft |
| O | Hooks (Each End) | Tight Tape Lever Spring |

(Left Side View)

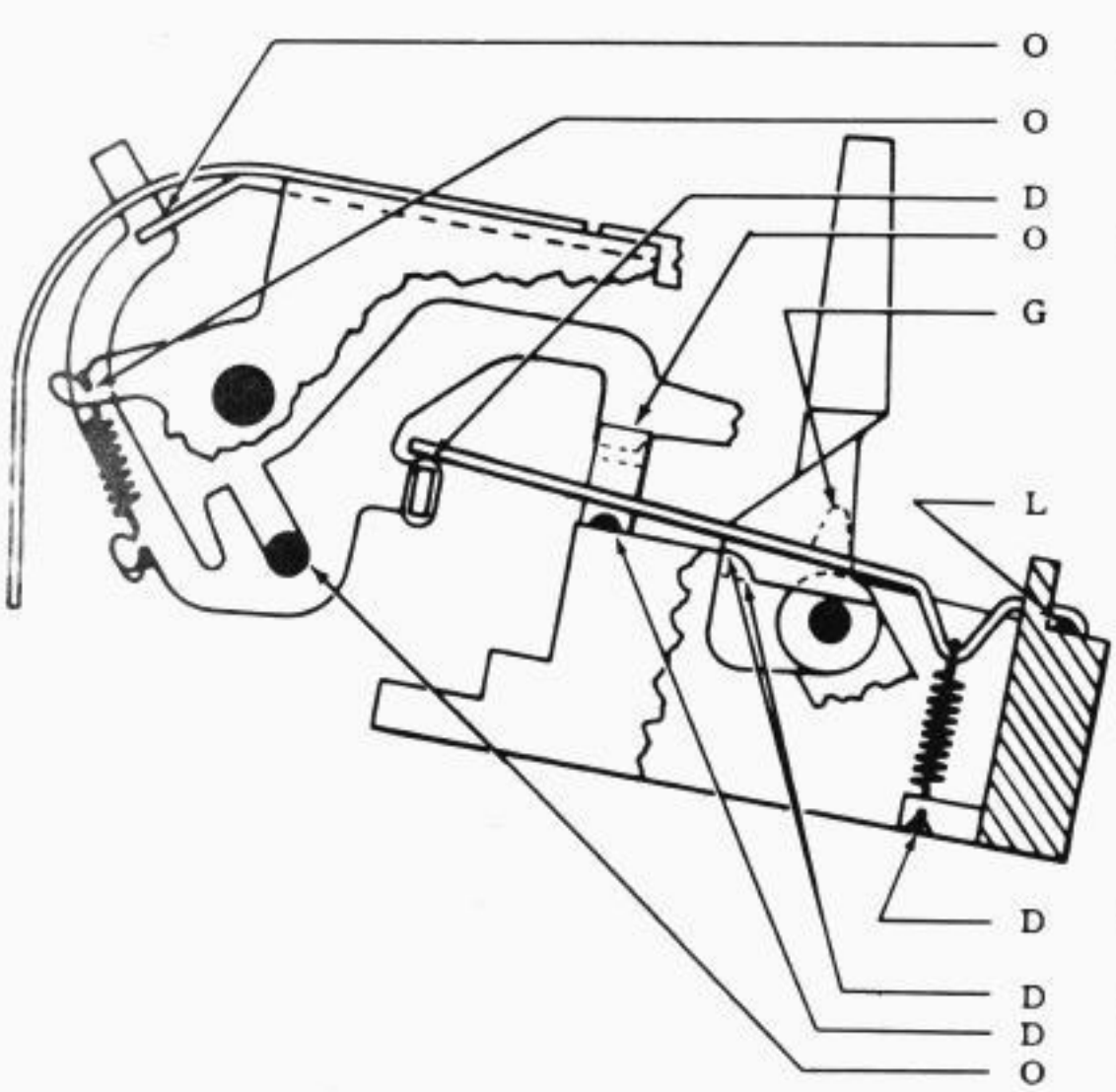
2.06 Feed Pawl Mechanism



| | | |
|---|---|---|
| O | Pivot | Detent Lever Shaft |
| O | Pivot | Feed Pawl Stud |
| O | Hooks (Each End) | Blocking Pawl Spring |
| O | Pivot | Blocking Pawl |
| G | Engaging Surface | Blocking Pawl |
| O | Hooks (Each End) | Detent Lever Spring |
| O | Pivot | Feed Pawl |

(Left Side View)

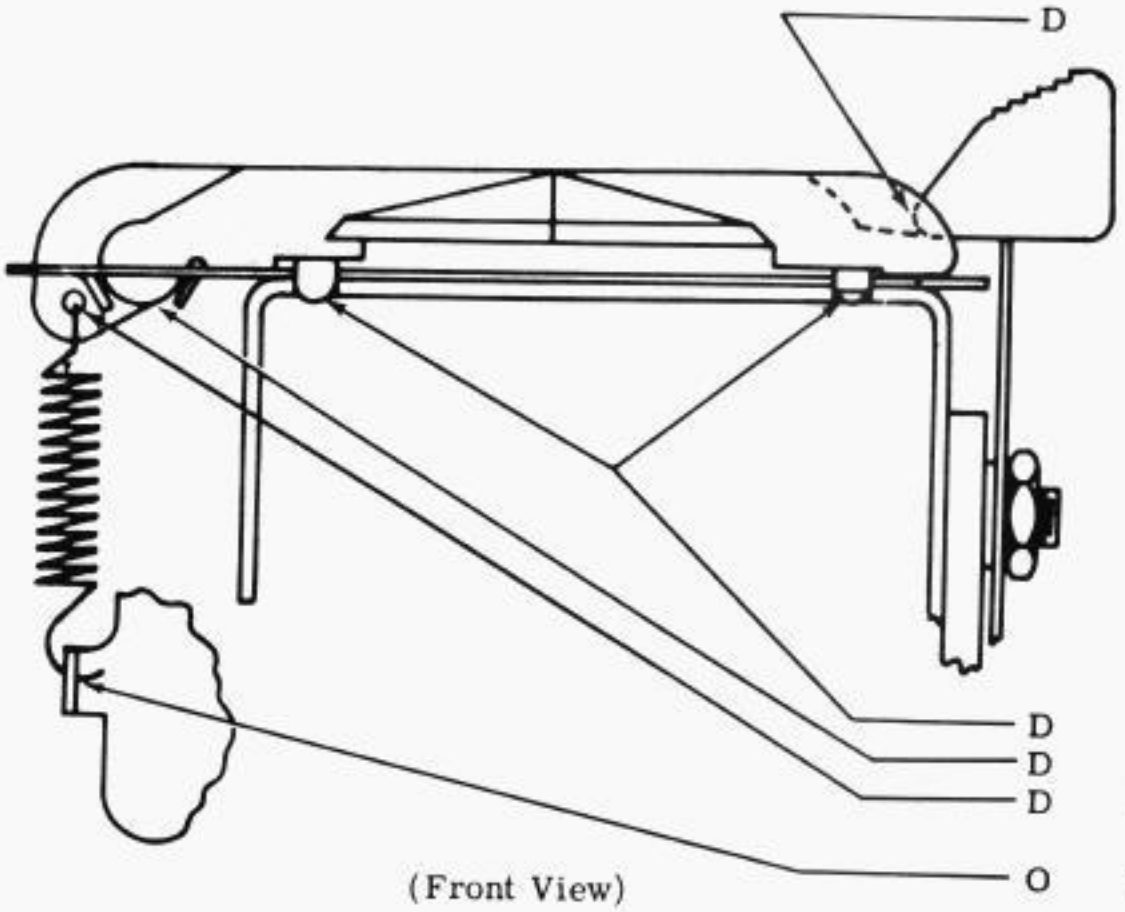
2.07 Control Mechanism



| | | |
|---|---|---|
| O | Sliding Surface | Tape-Out Pin Guide |
| O | Hooks (Each End) | Tape-Out Pin Spring |
| D | Engaging Surface | Insulator |
| O | Sliding Surface | Tape-Out Lever Guide |
| G | Camming Surface | Tape-Out Lever Cam |
| L | Pivot | Contact Wire |
| D | Hooks (Each End) | Contact Wire Springs |
| D | Camming Surface | Control Lever |
| D | Contact Surface | Terminal |
| O | Pivot | Tape-Out Lever |

(Left Side View)

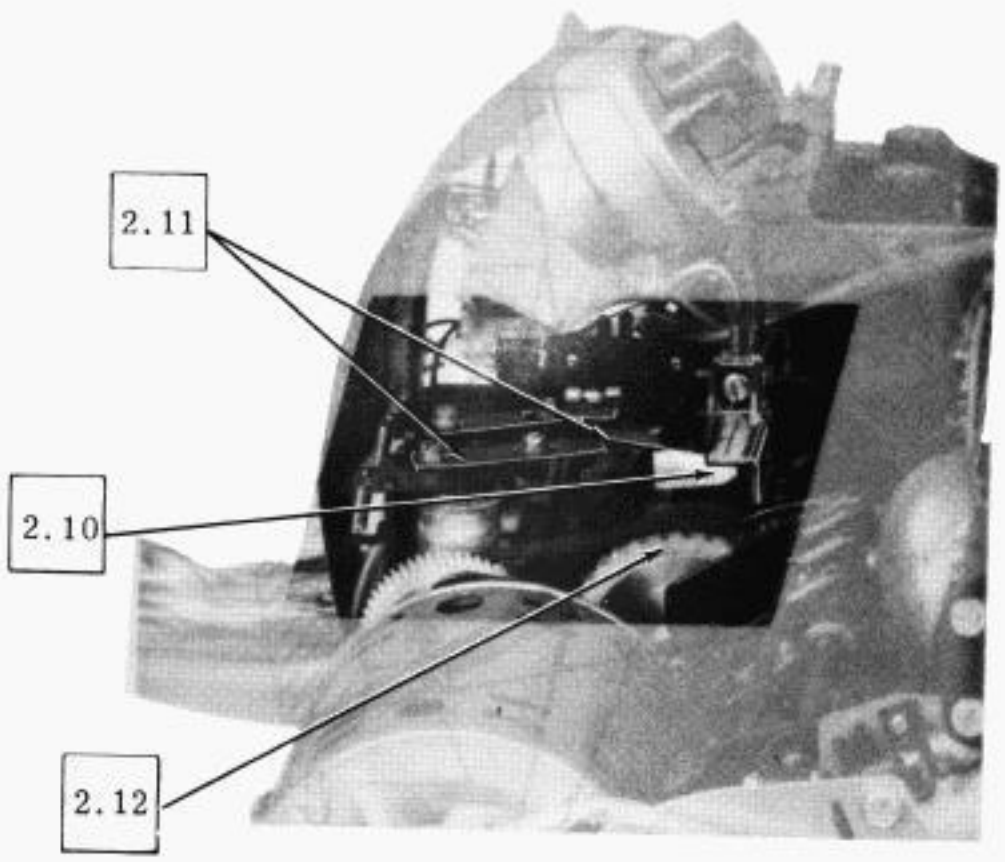
2.08 Tape Lid Mechanism




| | | |
|---|---|---|
| D | Engaging Surface | Lid Latch |
| D | Projections (2) | Tape Lid |
| D | Pivot | Tape Lid |
| D | Hook | Tape Lid<br>Spring |
| O | Hook | Tape Lid<br>Spring |

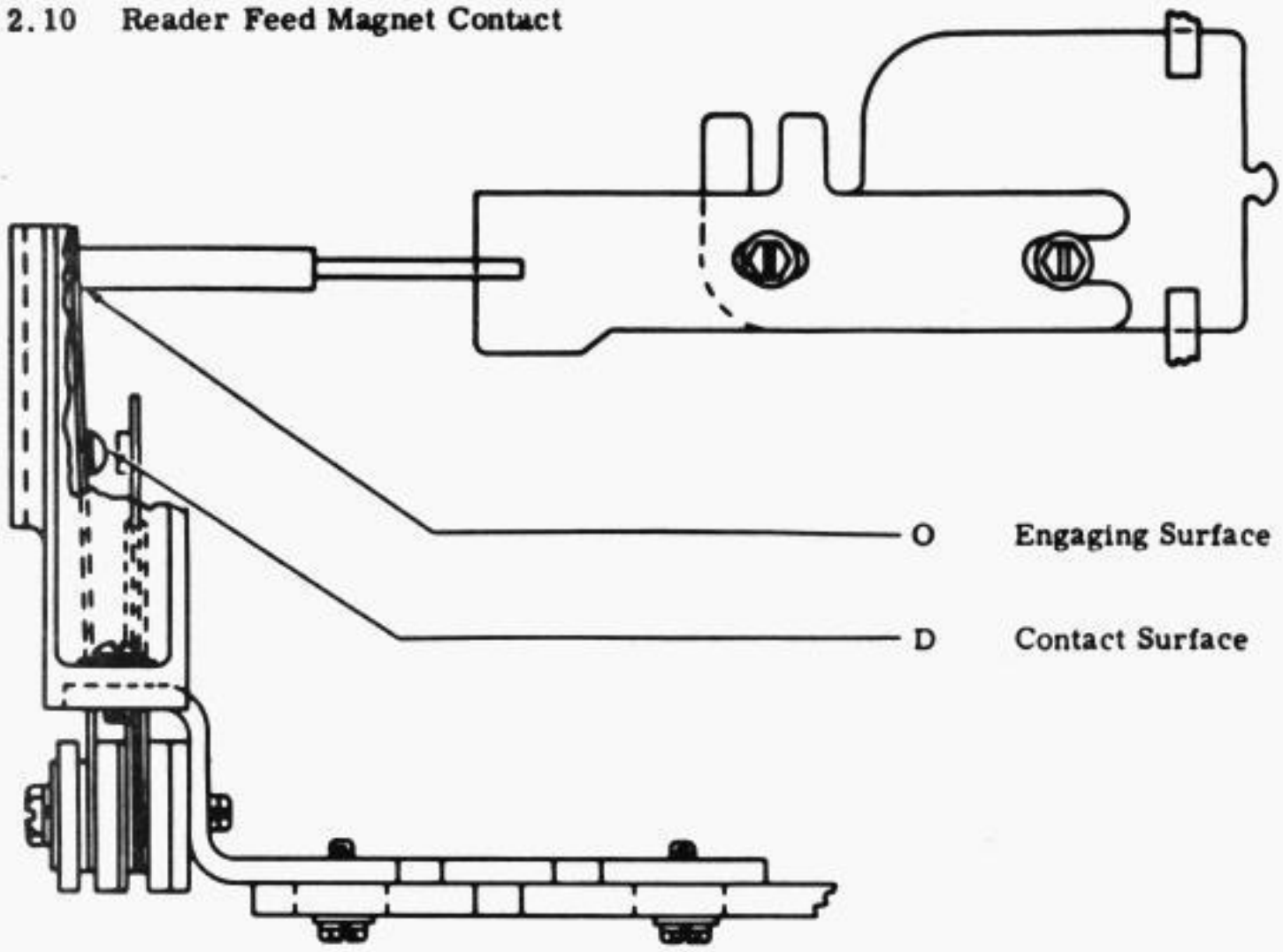
(Front View)

2.09 Clutch Trip Area



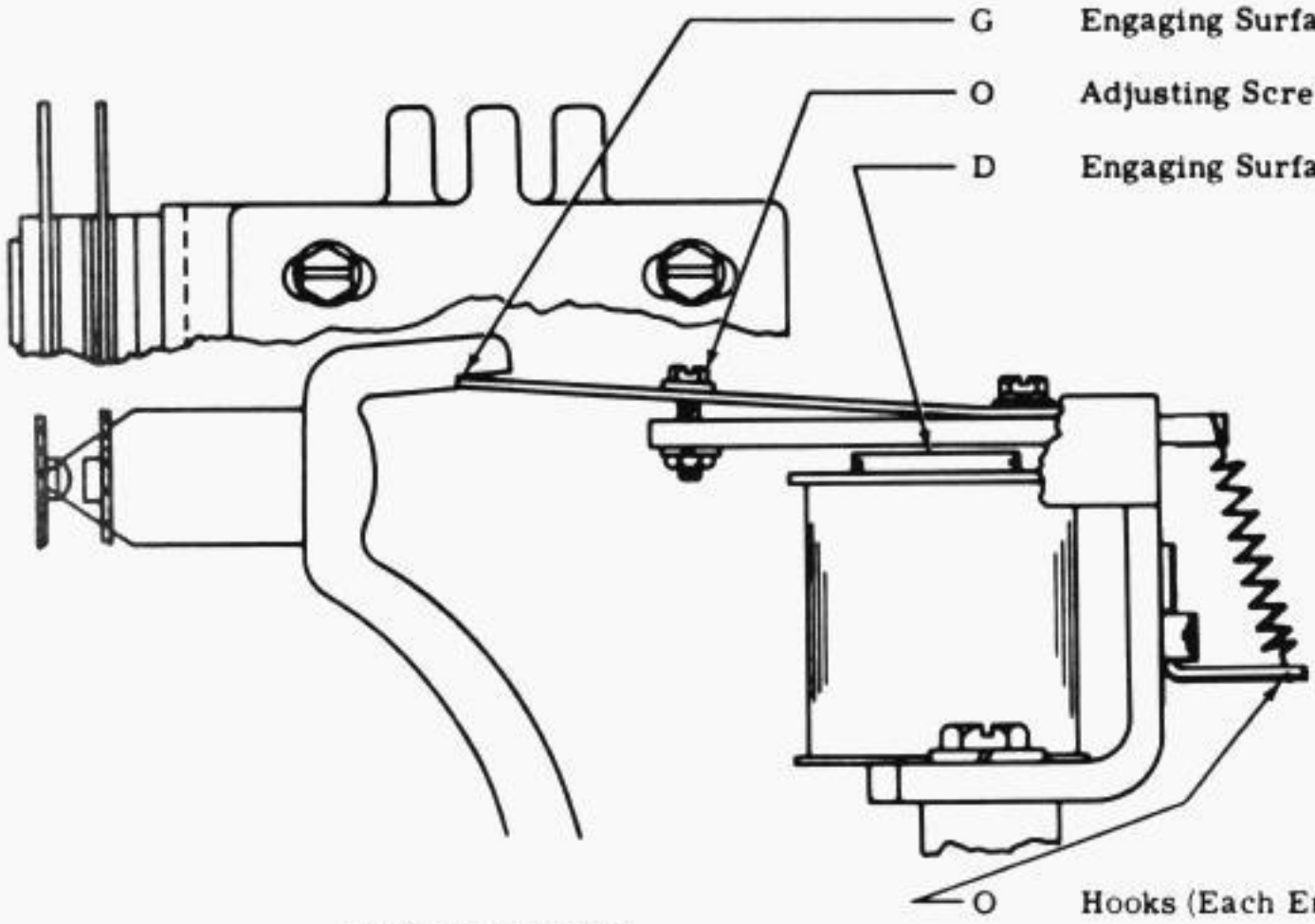

(Left Side View)

2.10 Reader Feed Magnet Contact




(Top View)

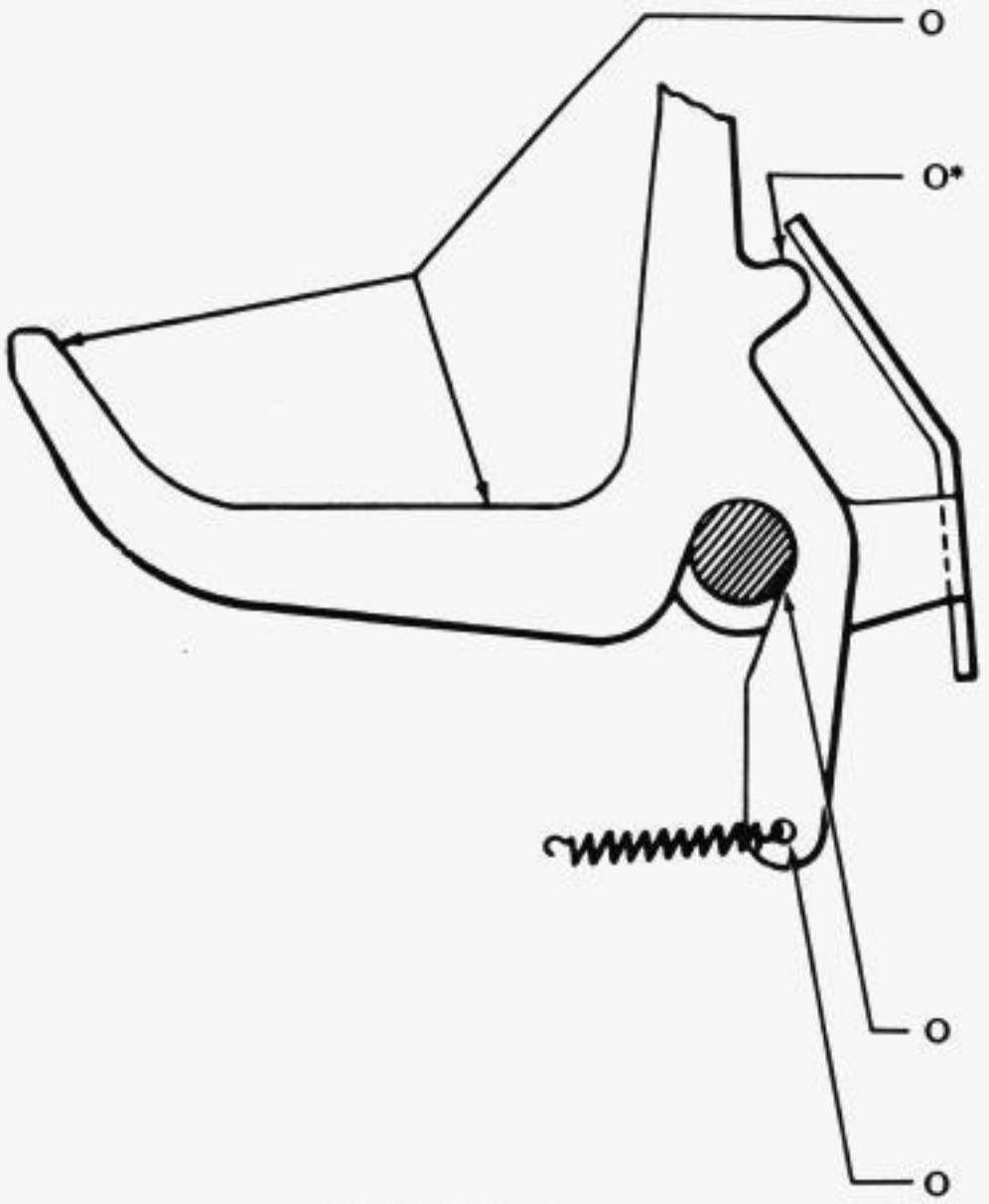
2.11 Distributor Clutch Trip Magnet




(Right Side View)

## 2.12 Reader Trip Lever

(Remove answer-back drum.)



| | | |
|---|---|---|
| O | Engaging Surface | Reader Trip Lever |
| O* | Engaging Surface | Reader Trip Lever |
| O | Pivot | Reader Trip Lever |
| O | Hooks (Each End) | Reader Trip Lever Spring |

(Right Side View)

(Replace answer-back drum.)

*Refer to 1.05.