

35 EDGE PUNCHED CARD READER

LUBRICATION

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to lubricate a part in the position specified, the unit should be turned to a position in which the part is accessible.

1.03 Refer to Section 574-242-702 for removal of cover and any internal mechanisms associated with the reader. For any further information regarding location of parts, refer to the exploded views in Section 574-242-800.

1.04 The lubrication information in this section is arranged so as to minimize the shifting and handling of the reader unit.

1.05 The general lubrication areas are illustrated by photographs. The specific points to receive lubricant are indicated on line drawings with appropriate textual instructions. Line drawings and textual instructions follow each photograph and are keyed to the photograph by paragraph numbers.

1.06 Illustrations in this section are for current design units. Early and intermediate design units differ from current design units mainly in the top plate and cover arrangements, and to some extent in the internal mechanisms. Where necessary, differences in units are noted.

1.07 The symbols in the text indicate the following directions:

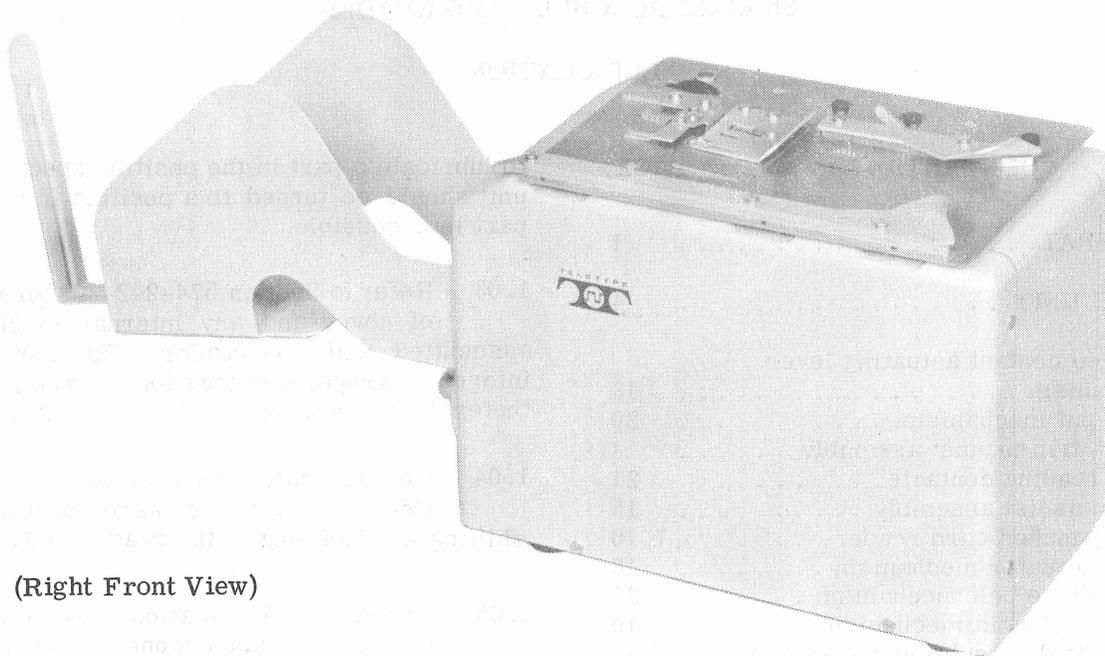
- O1 Apply 1 drop of oil.
- O2 Apply 2 drops of oil.
- O3 Apply 3 drops of oil, etc.
- G Apply thin film of (KS7471) grease.
- GO Apply thin film of grease and then oil.
- SAT Saturate (felt oiler, washers, wicks) with oil.
- OFIL Fill with (KS7470) oil.

1. GENERAL

1.01 This section provides instructions for the 35 edge punched card reader (3A READER) (Figure 1). It is reissued to accommodate engineering changes. Changes and additions are indicated by marginal arrows.

1.02 References made to left, right, front or rear, etc apply to the reader in its normal operating position as viewed from the operator's position in front of the reader. If it is difficult

1.08 Lubricate the reader before placing it into service or prior to storage. After a short period of service, relubricate to make sure no points have been missed. Thereafter,



(Right Front View)

Figure 1 - 35 Edge Punched Card Reader

lubricate the reader at regular intervals as indicated below:

<u>Operating Speed</u> (Words per Minute)	<u>Lubrication</u> <u>Interval</u>
100	1500 hr or 6 mo*

*Whichever comes first.

1.09 Refer to appropriate section covering tools which also gives a description of various lubricants to be used in lubricating the reader.

1.10 Overlubrication, which would permit oil to drip or be thrown on other parts, should be avoided.

CAUTION: SPECIAL CARE SHOULD BE TAKEN TO PREVENT ANY LUBRICANT FROM GETTING BETWEEN THE CLUTCH TRIP MAGNET ARMATURE AND ITS MAGNET POLE FACES OR BETWEEN ELECTRICAL CONTACTS.

1.11 Oil should usually be applied by means of 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 oil remains on the part and does not run off.

Note: Excessive oil tends to work onto contacts and pole faces where it has a harmful effect. It also tends to cause deterioration of pressure rollers and wiring insulation. Capillary action and vaporization due to heat of the 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.

1.12 In general, oil should be used in such locations as hollow shafts, oil cups, felt washers, and in most locations where parts rub, slide, rotate, or move with respect to each other. In particular, and unless otherwise specified in the individual lubrication sections, oil should be used in the following applications.

- (a) Lightly oil all cam surfaces, sliding surfaces and pivot points.
- (b) Lubricate all spring eyes with one drop of oil.
- (c) Fill all oil cups.

(d) Saturate all oil retainers (felt lubricating washers and felt or leather wicks).

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

1.14 In general, grease should be used on gears, rollers, ends of points of heavy pressure. In particular, and unless otherwise specified in the individual lubrication sections, a thin film of grease should be applied to all gears.

1.15 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.

1.16 Special care should be taken to avoid accidents if the reader is to be operated when it is separated from its housing. Special

card should also be taken to avoid electrical shock when working near polarized electrolytic capacitors.

CAUTION: POWER SHOULD BE DISCONNECTED. WHERE PROCEDURES CALL FOR POWER TO BE CONNECTED, APPROPRIATE PRECAUTIONARY MEASURES SHOULD BE TAKEN TO AVOID ACCIDENT.

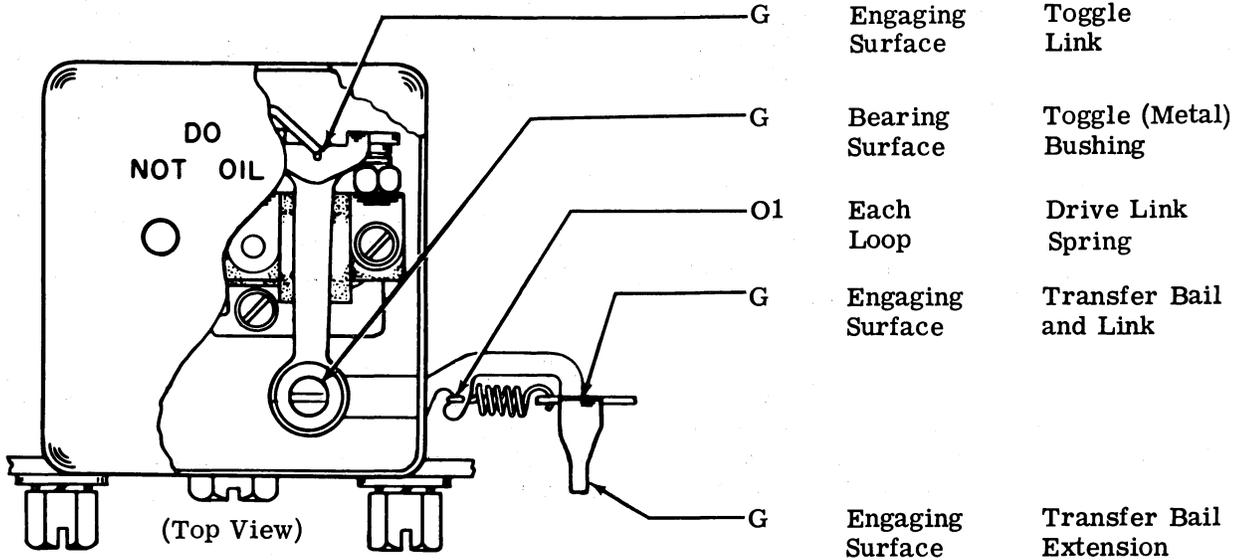
1.17 The TP124828 oil-proof maintenance pad is available to protect furniture and floor covering from oil, grease, and dirt during lubrication. The pad should always be used with the same side down.

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

1.19 Equipment that has been in operation should be cleaned before it is relubricated. Refer to appropriate section that gives general cleaning information.

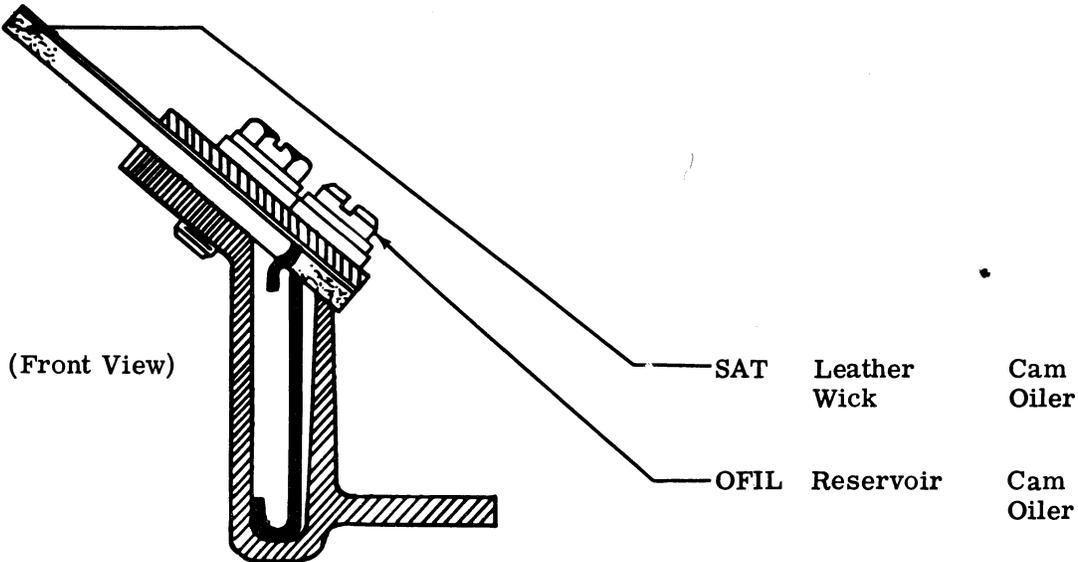
2. BASIC UNIT

2.01 Signal Contact Assembly



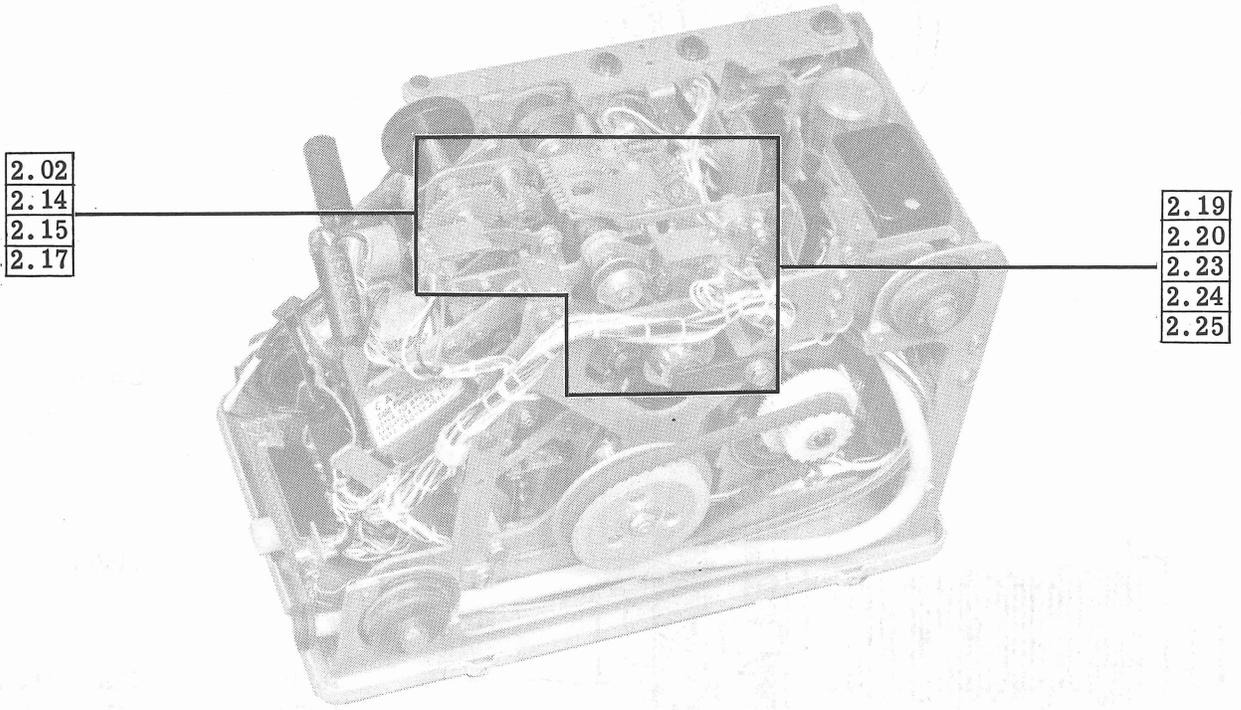
Note: The marking "DO NOT OIL" on the signal contact box should be interpreted literally. Portions of the mechanism should be greased as indicated, but no oil should be used.

2.02 Oil Reservoir



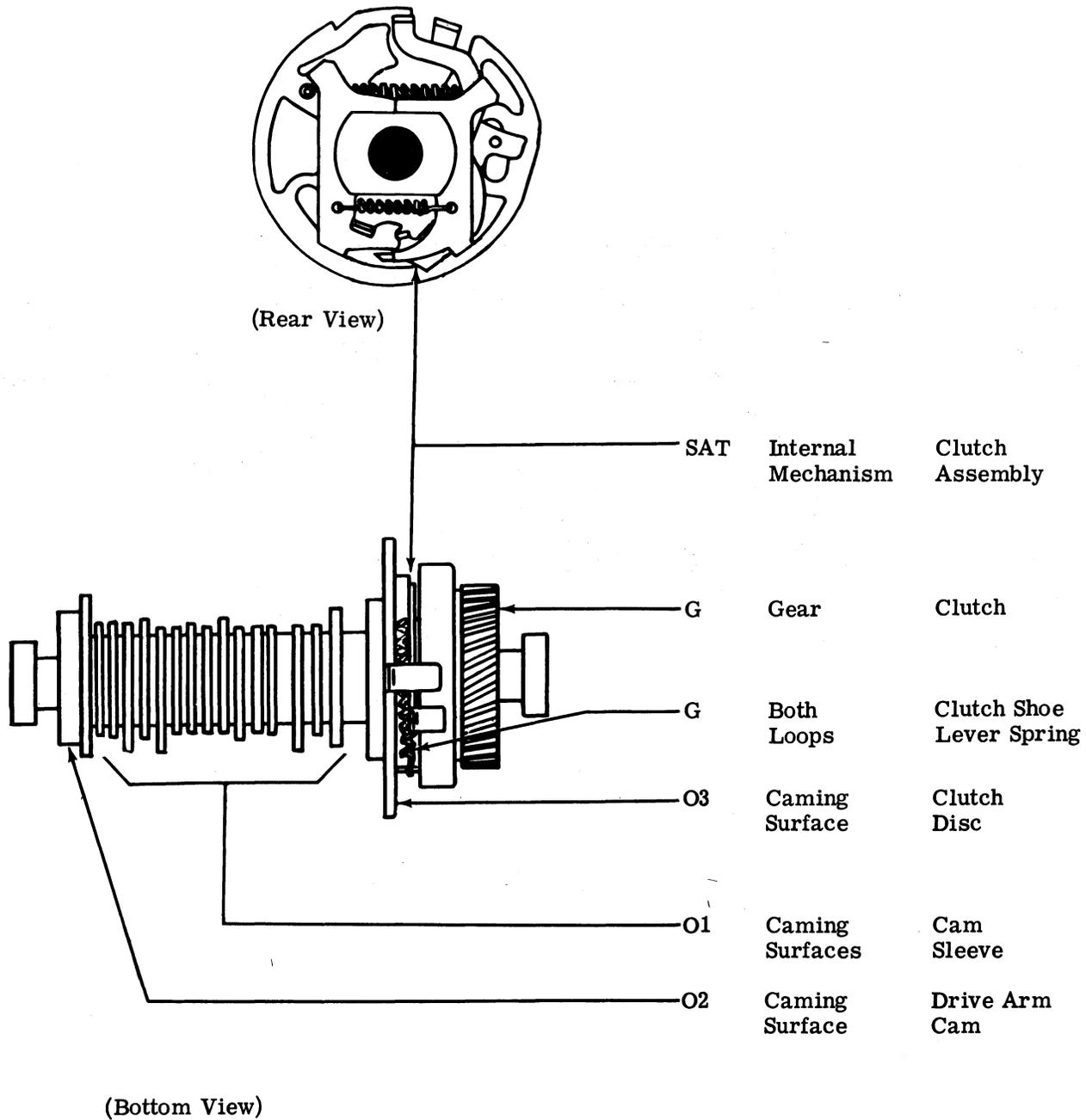
Note: The oil reservoir should be filled to a maximum depth of 3/4 inch.

2.03 Edge Punched Card Reader



(Left Front View)

2.04 Main Shaft and Clutch Mechanism

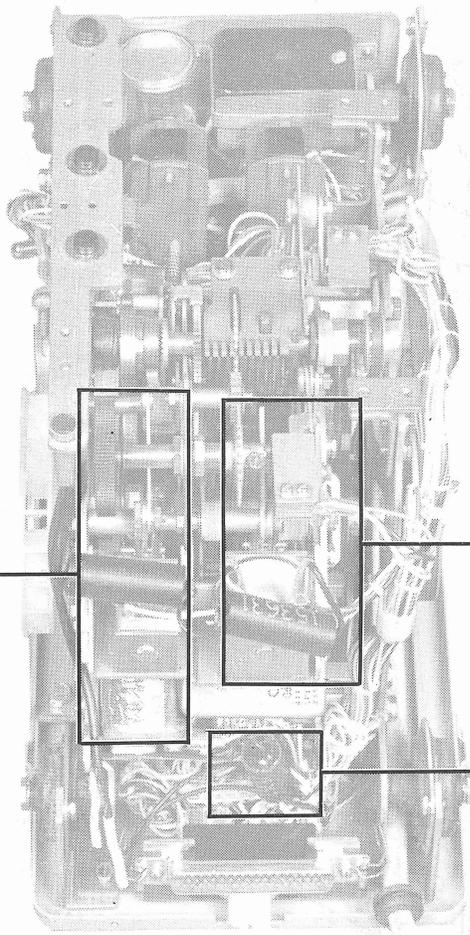


2.05 Edge Punched Card Reader

- 2.04
- 2.13
- 2.26
- 2.21
- 2.06

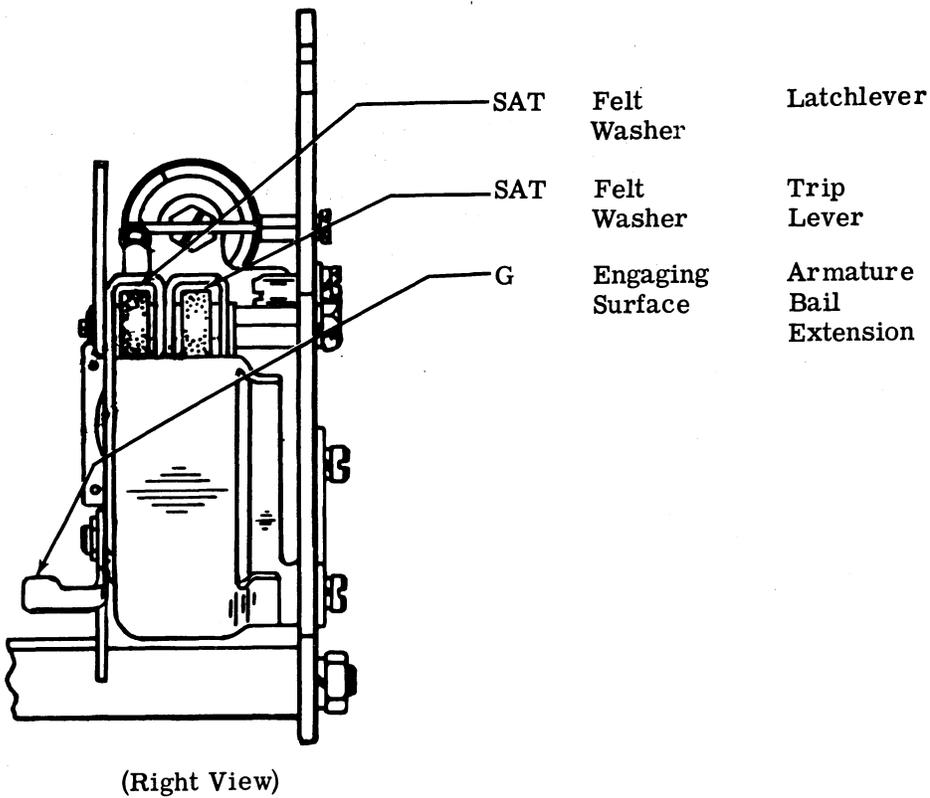
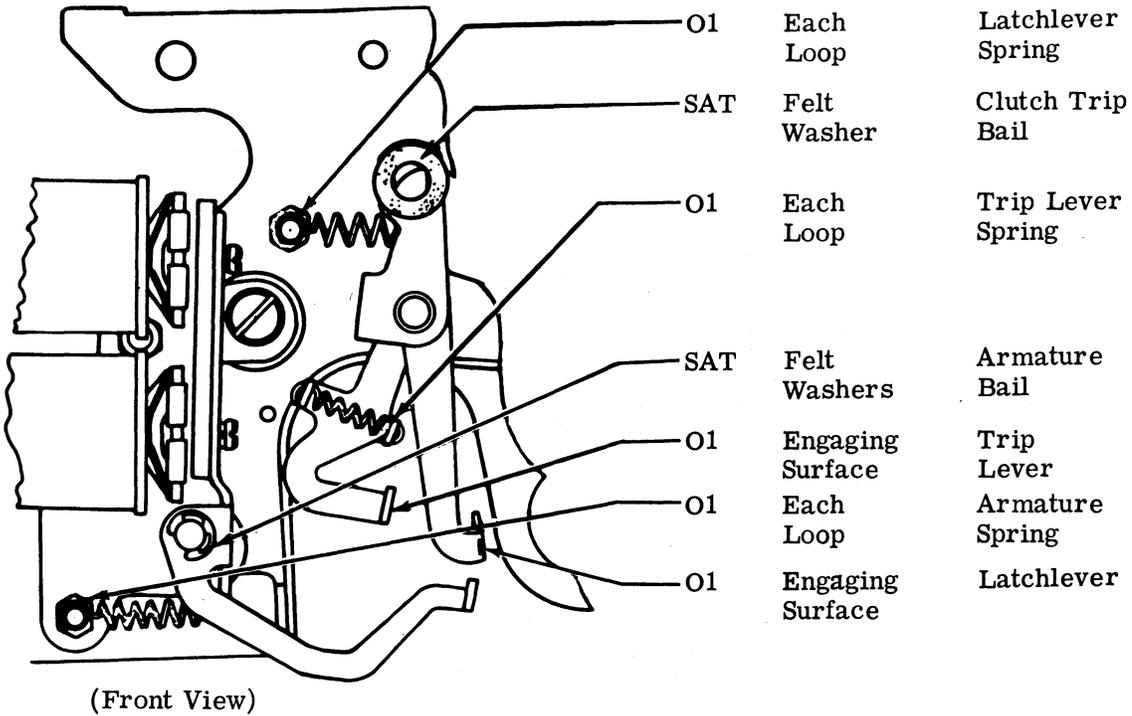
- 2.09
- 2.10
- 2.11
- 2.12
- 2.01

- 2.25

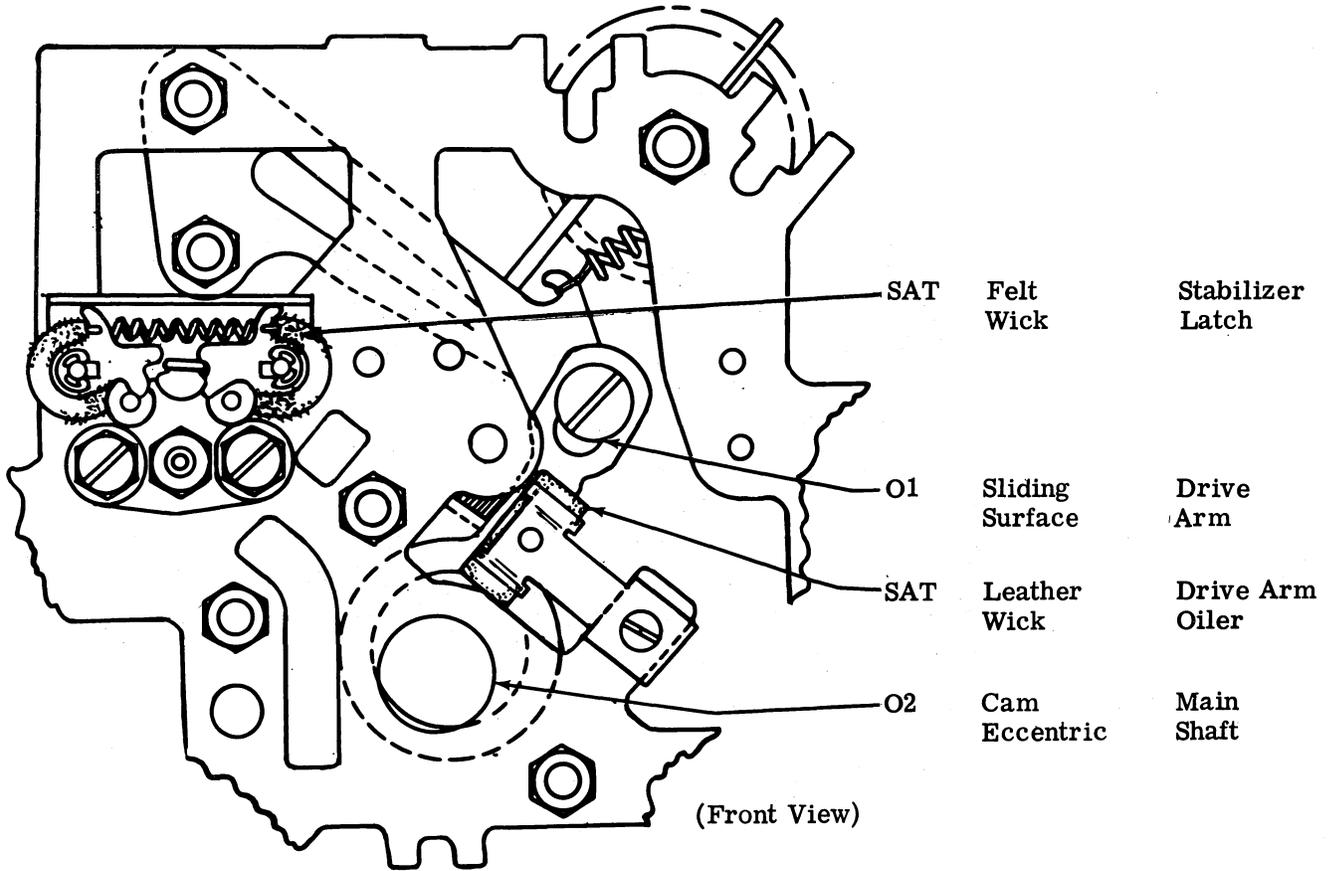


(Top Left View)

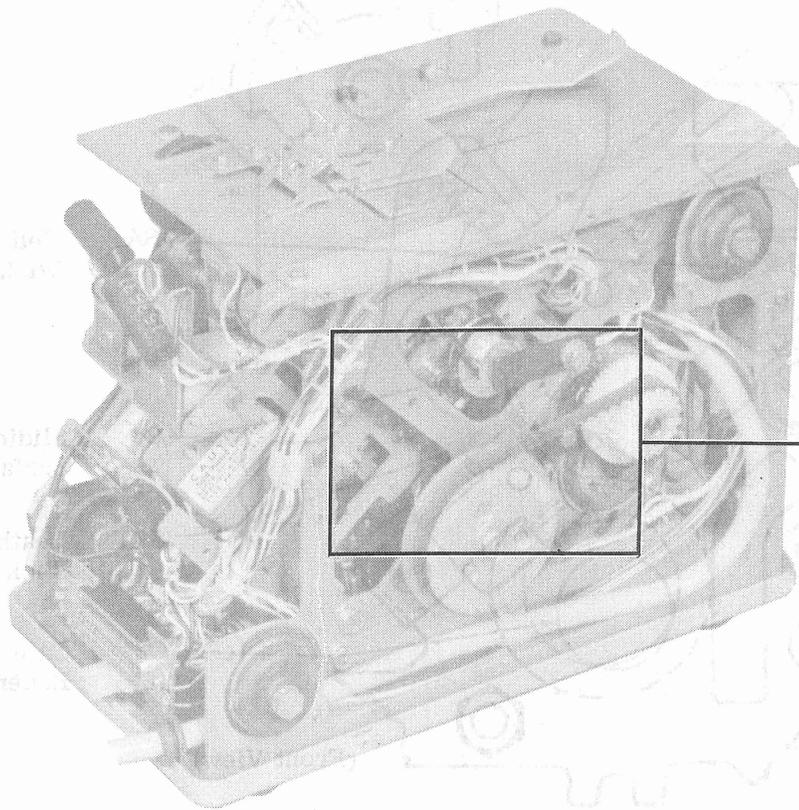
2.06 Clutch Trip Magnet Assembly



2.07 Front Plate Assembly



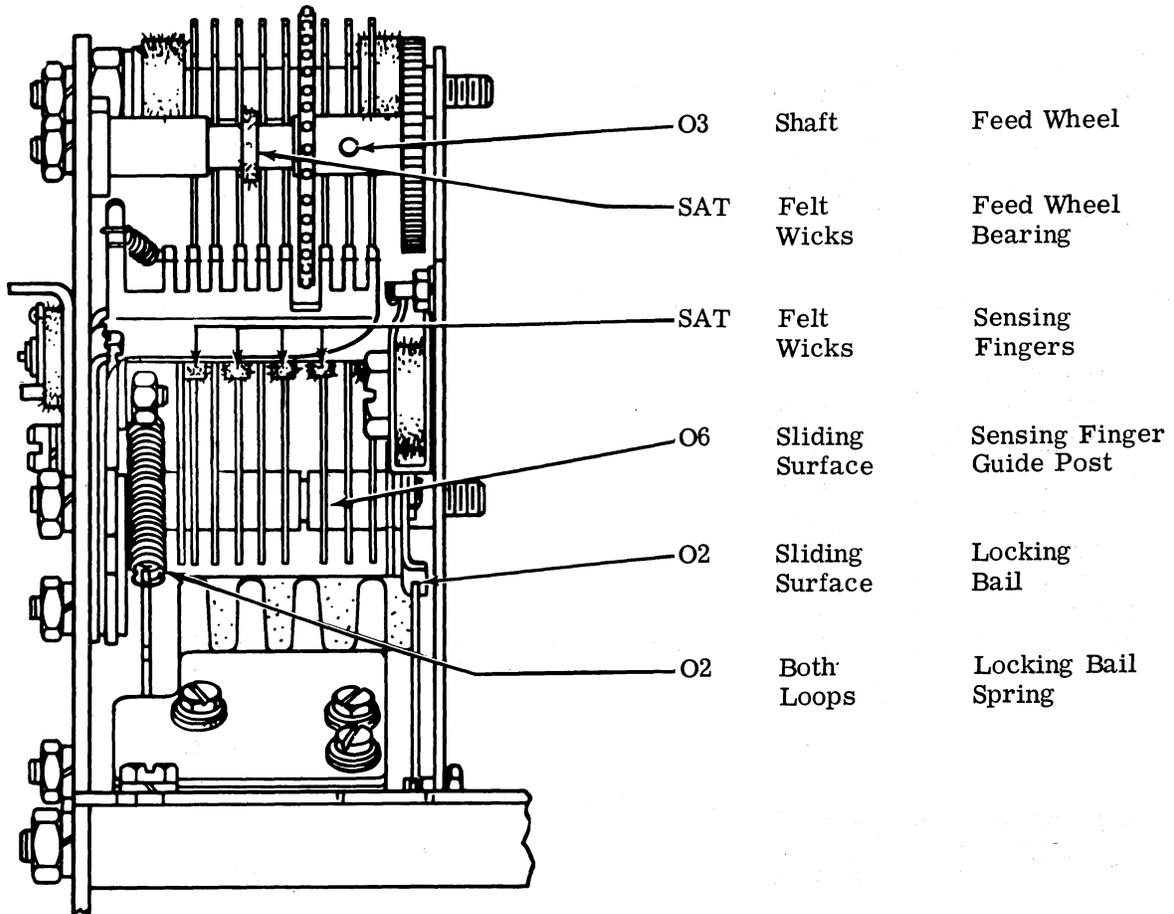
2.08 Edge Punched Card Reader



2.07
2.12
2.25
2.27

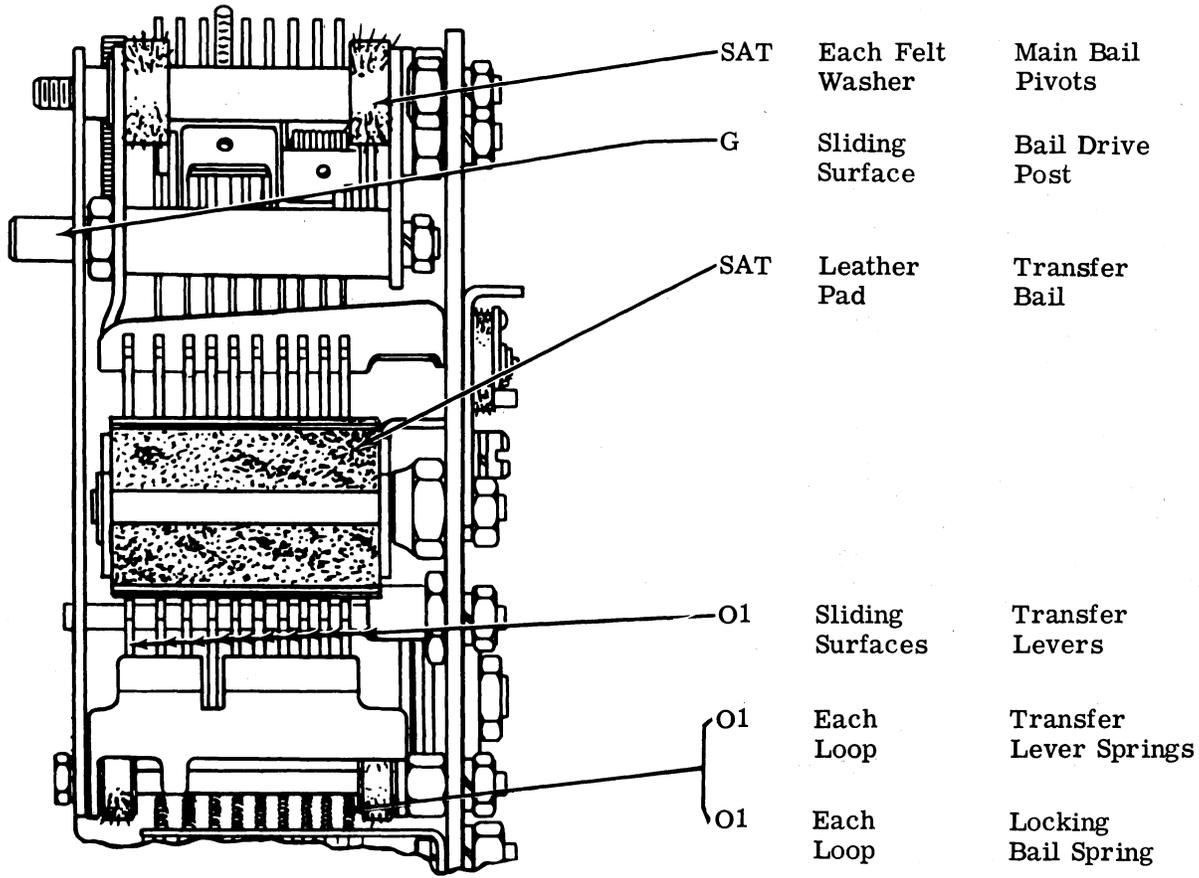
(Left Front View)

2.09 Sensing and Feed Mechanism



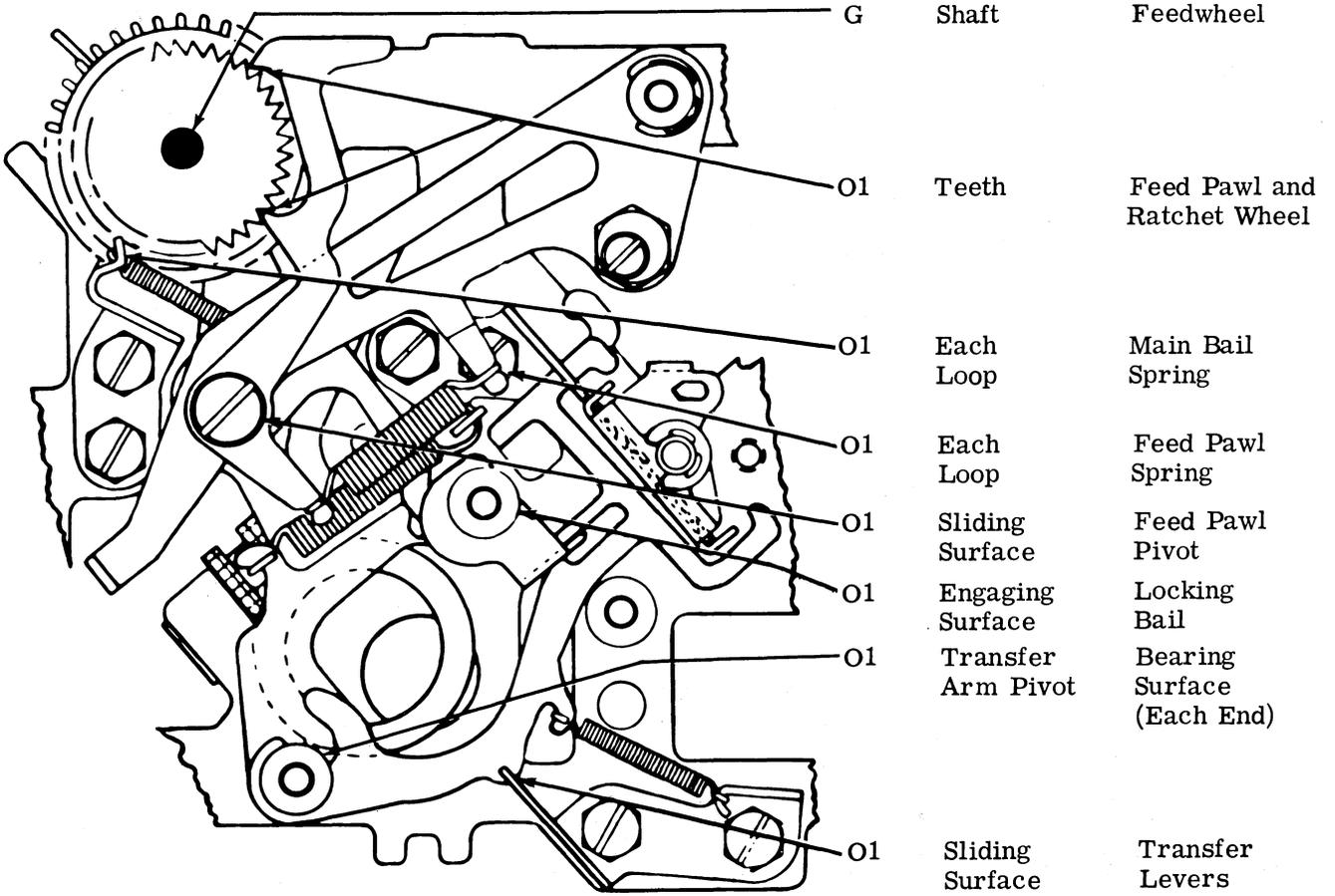
(Right Side View)

2.10 Transfer Mechanism



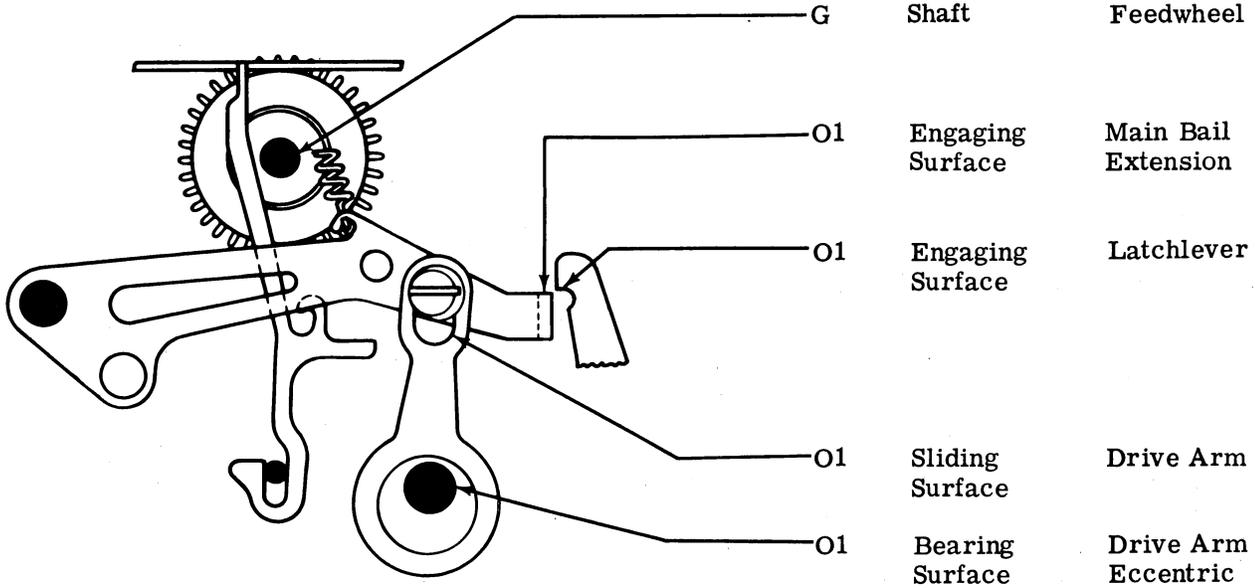
(Left Side View)

2.11 Transfer Mechanism (continued)



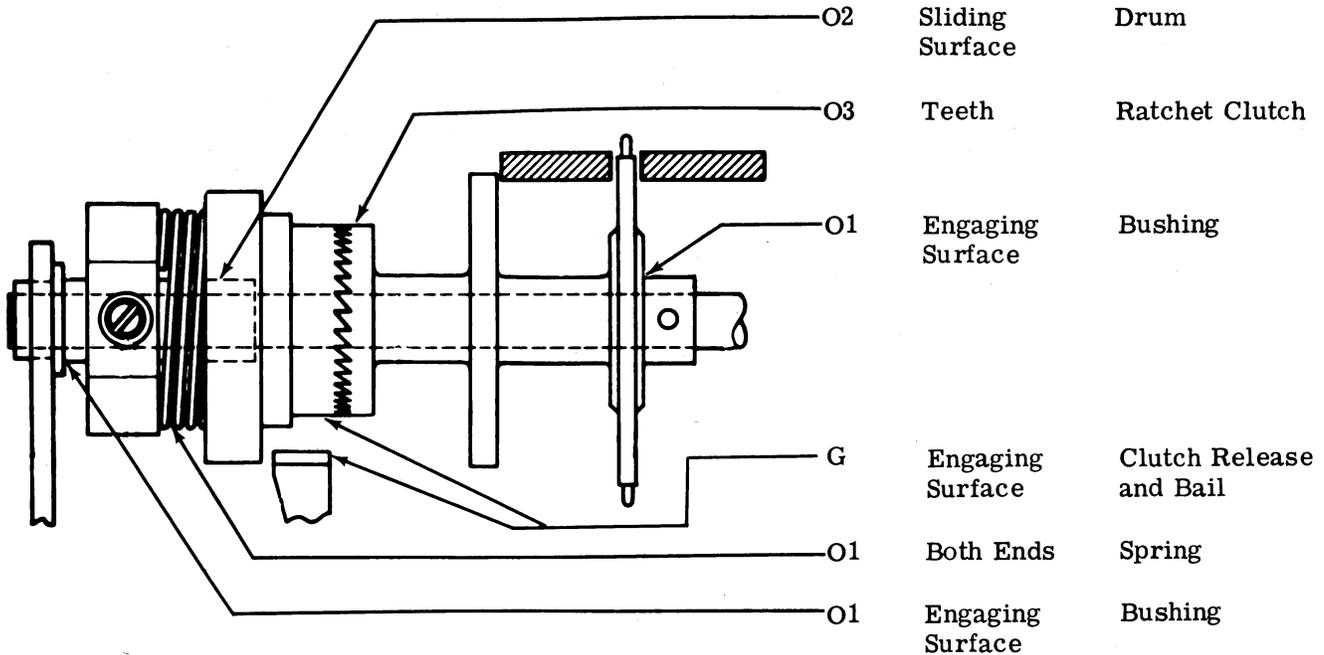
(Rear View)

2.12 Main Bail Mechanism



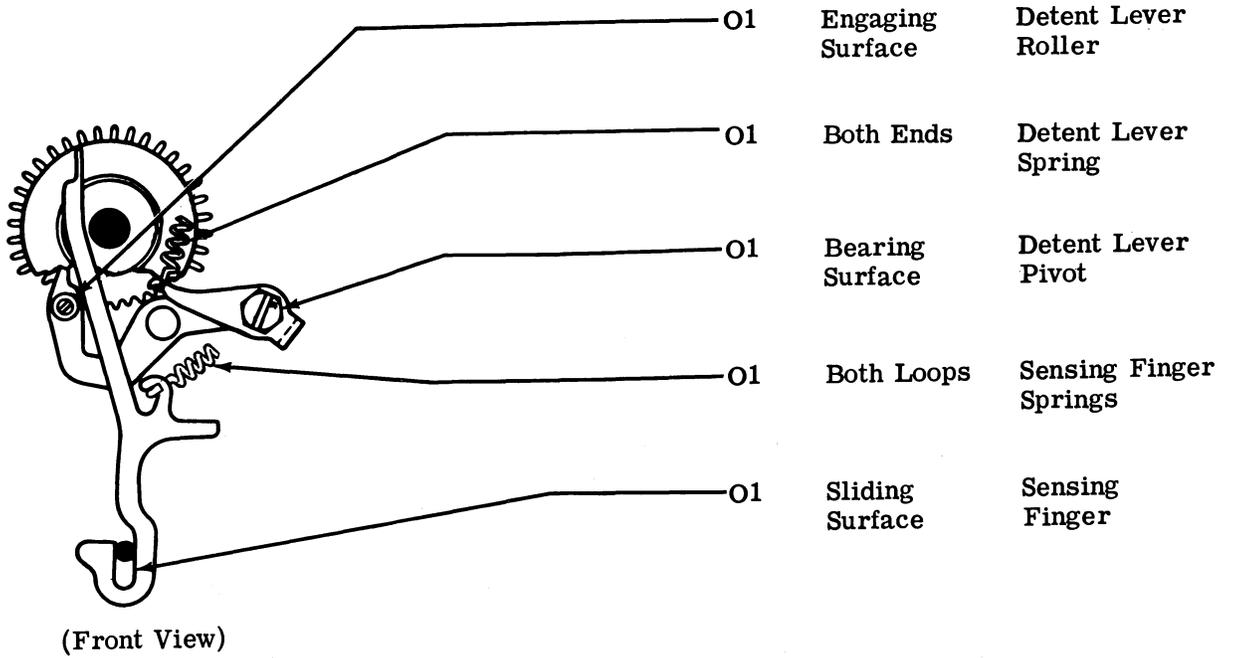
(Front View)

2.13 Ratchet Clutch Mechanism

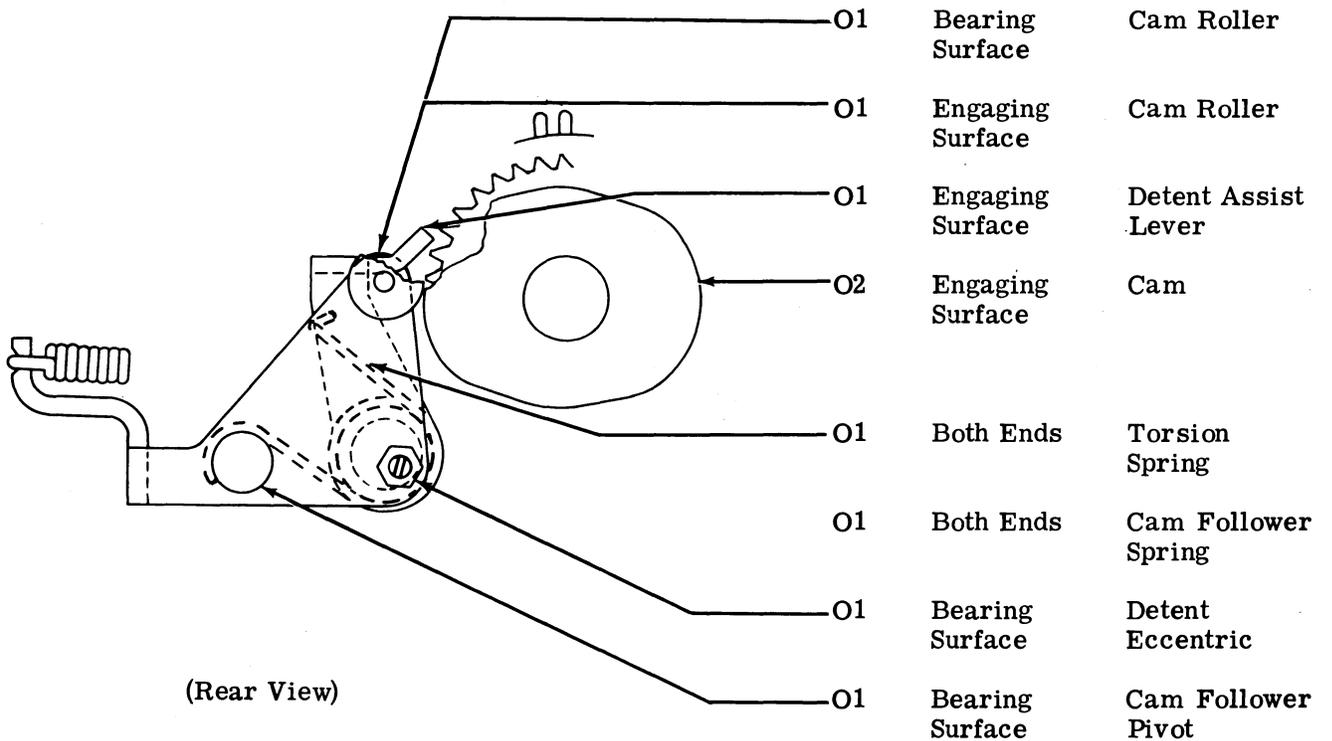


(Left Side View)

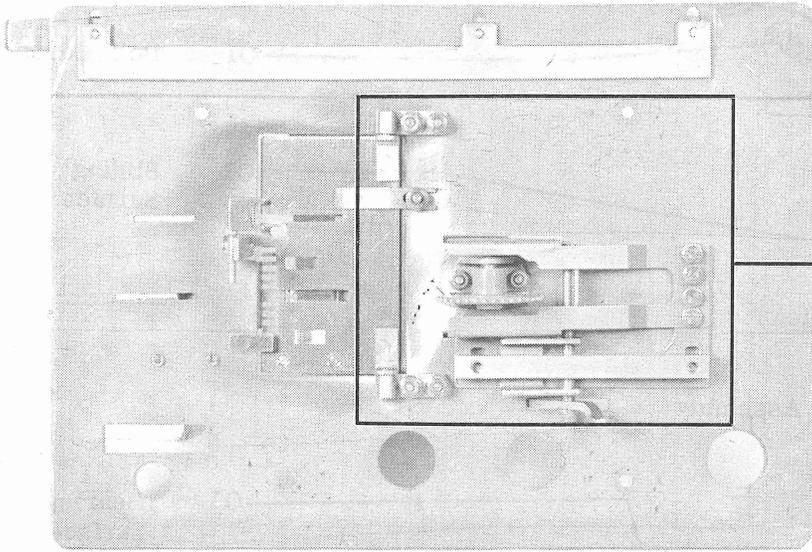
2.14 Feedwheel Detent Lever Assembly



2.15 Detent Assist Assembly



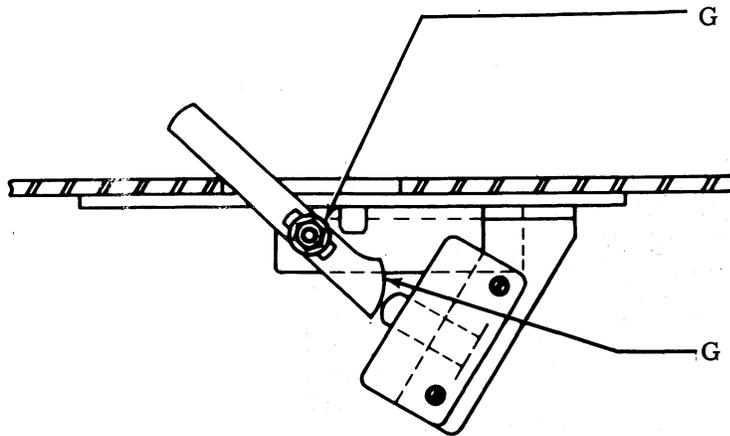
2.16 Top Plate Assembly



2.17
2.18
2.21

(Bottom View)

2.17 Tape Switch Mechanism

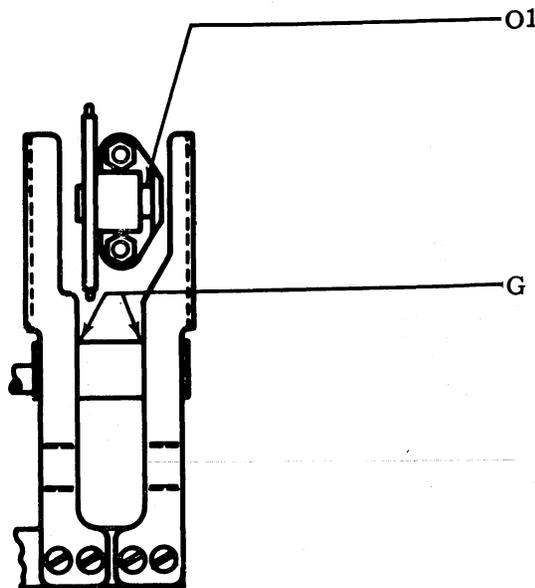


Bearing Holes Bearing Bracket

Camming Surface Switch Lever

(Rear View)

2.18 Idler Feedwheel and Tape Guide Mechanisms

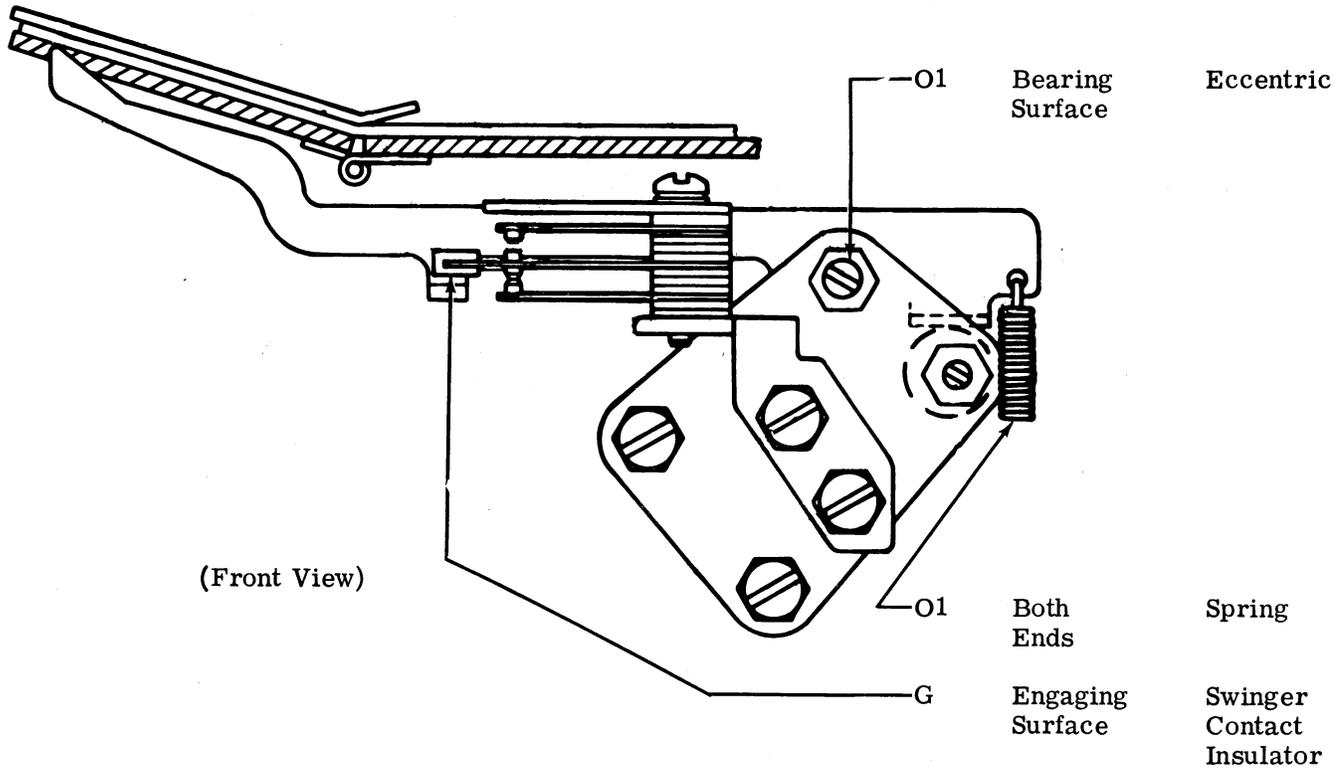


Bearing Surfaces Idler Feedwheel

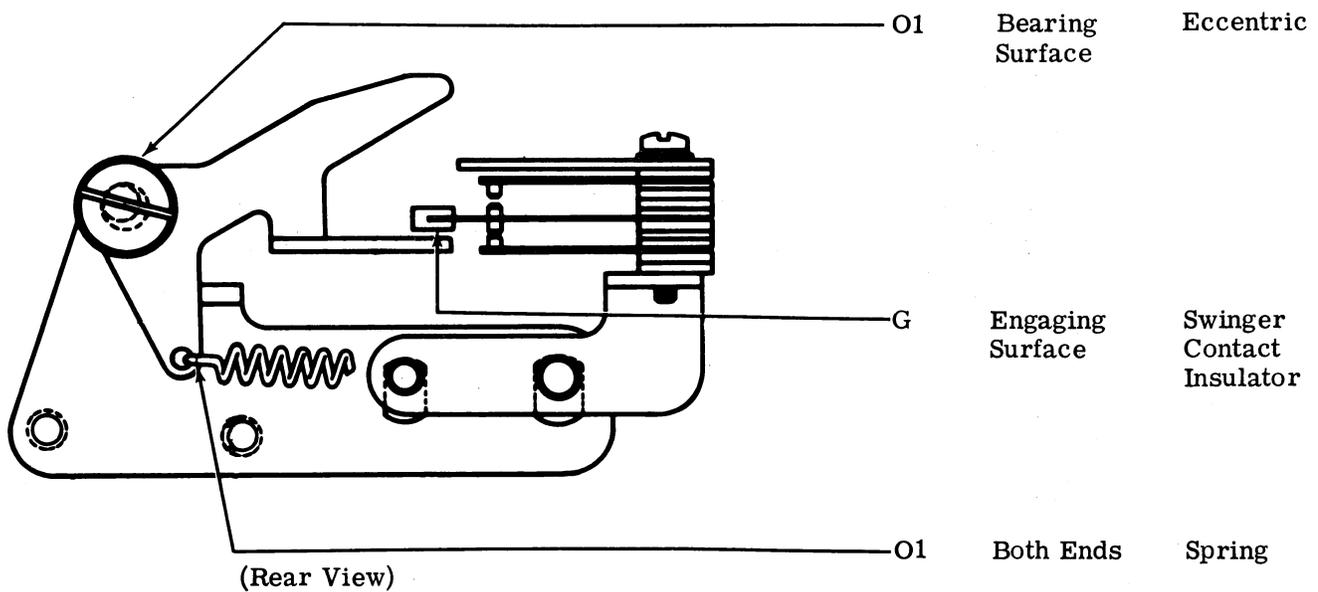
Engaging Surfaces (2 Places) Tape Guides and Cam with Shaft

(Bottom View)

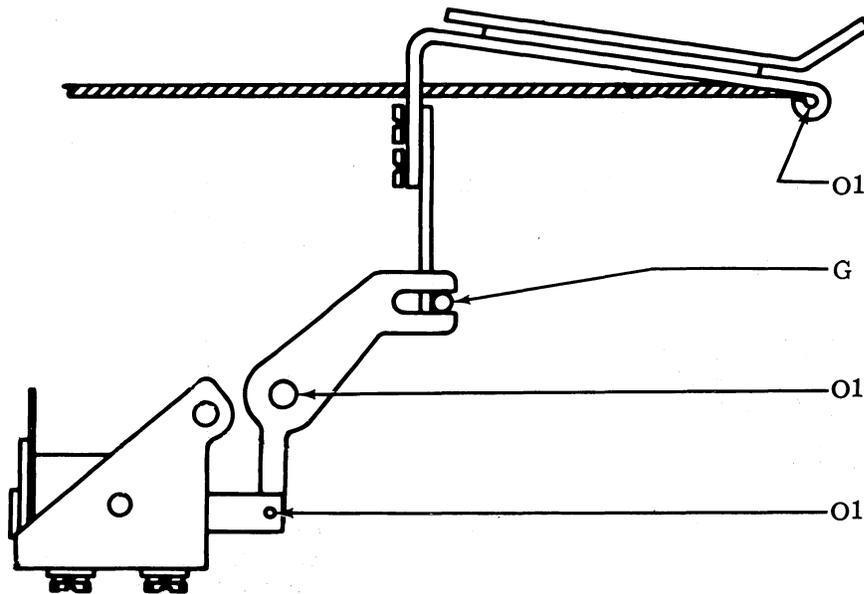
2.19 Card-In Contact Actuating Lever Mechanism



2.20 Eject Actuator Mechanism



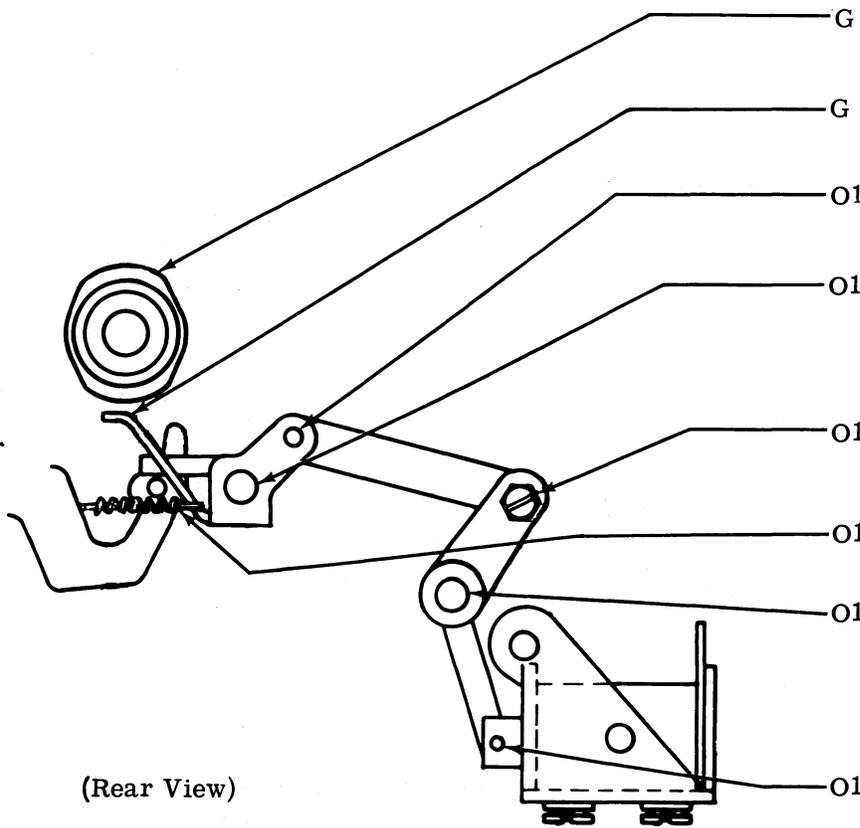
2.21 Lid Solenoid Mechanism



(Front View)

O1	Bearing Surface	Lid
G	Sliding Surface	Solenoid Lever
O1	Bearing Surface	Solenoid Lever
O1	Bearing Surface	Solenoid Pin

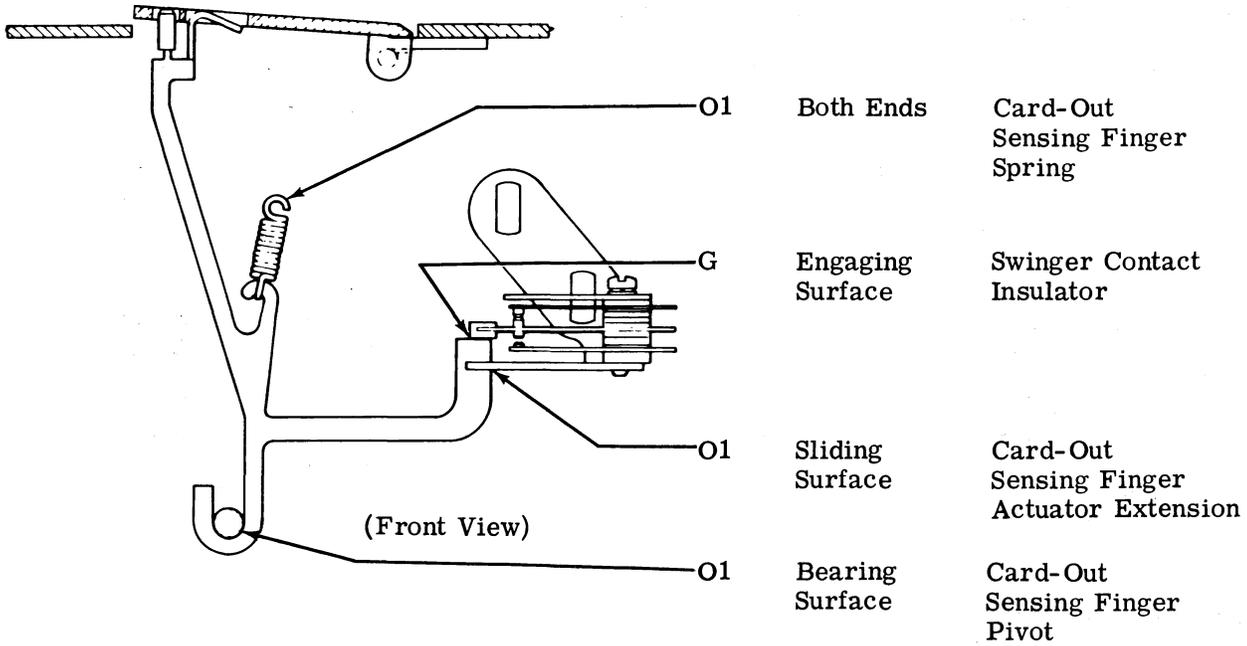
2.22 Eject Solenoid Mechanism



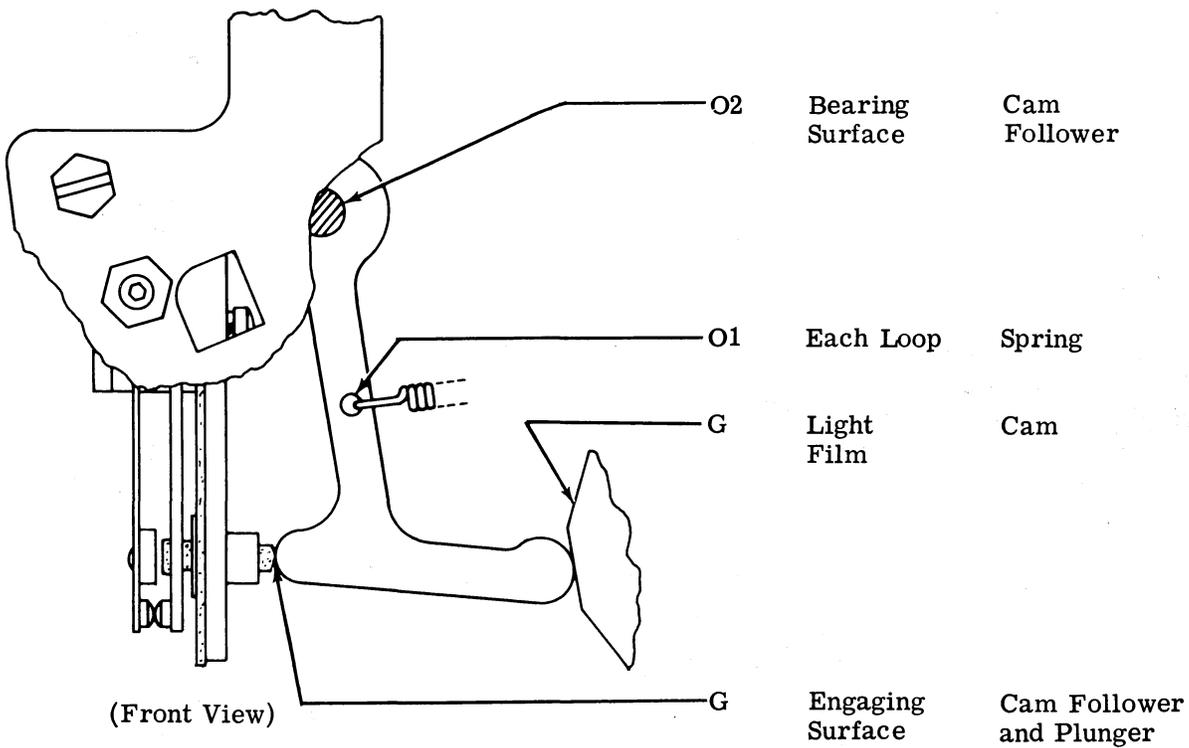
(Rear View)

G	Engaging Surface	Ratchet Clutch
G	Engaging Surface	Clutch Release Bail
O1	Bearing Surface	Link
O1	Bearing Surface	Clutch Release Bail
O1	Bearing Surface	Eccentric
O1	Both Loops	Clutch Release Bail Spring
O1	Bearing Surface	Lever with Hub
O1	Bearing Surface	Solenoid Pin

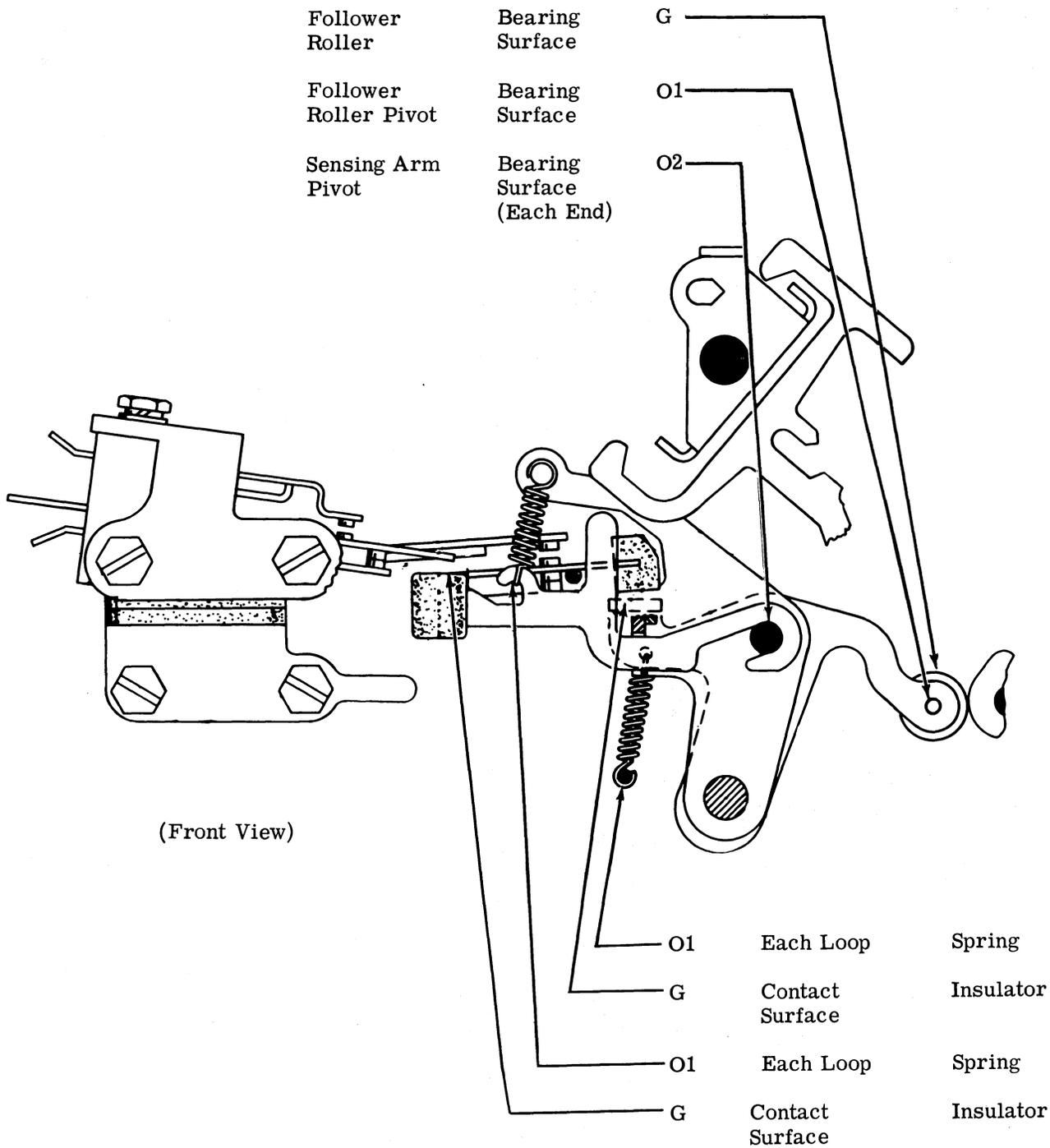
2.23 Card-Out Mechanism



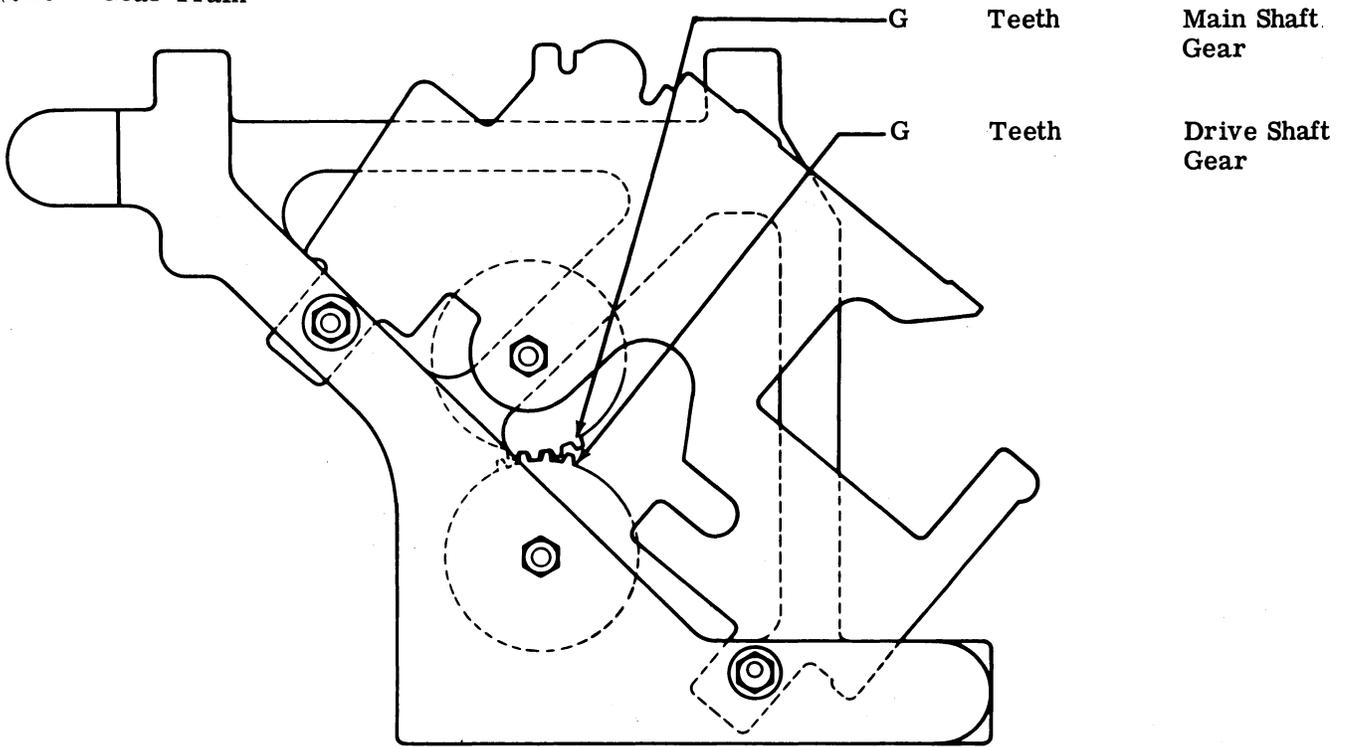
2.24 Timing Contact Mechanism



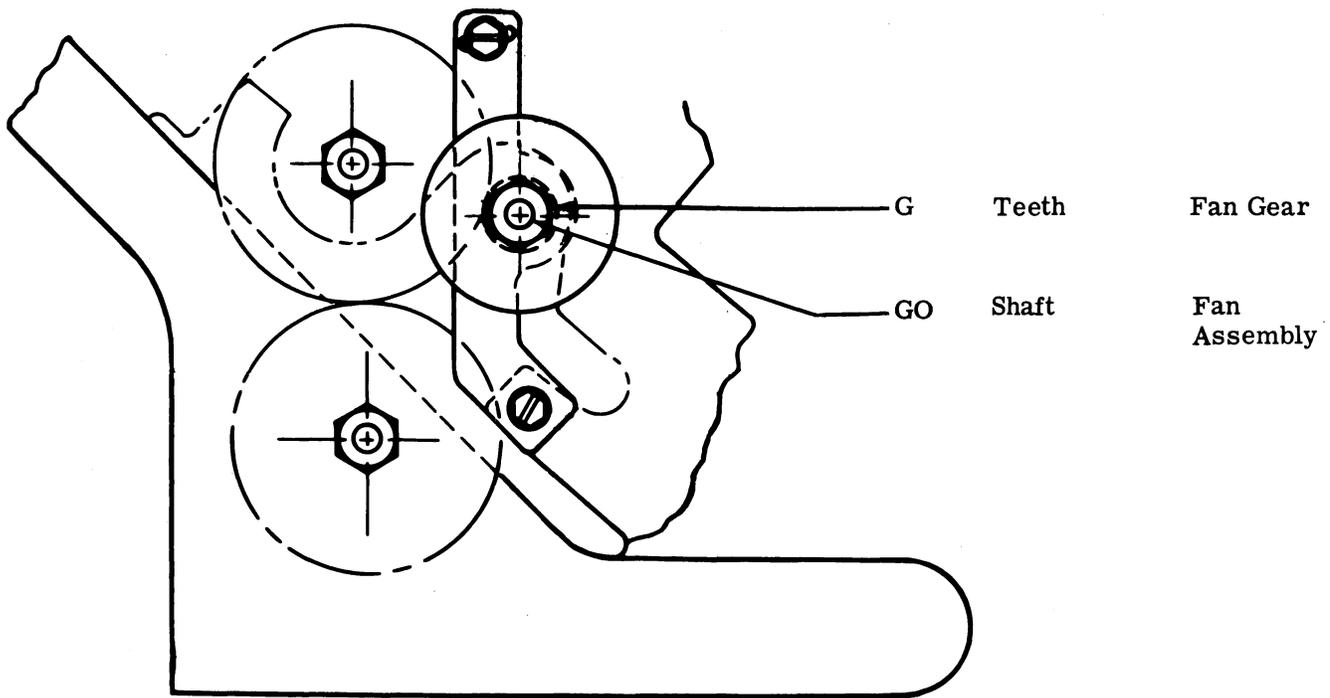
2.25 Code Reading Contacts



2.26 Gear Train

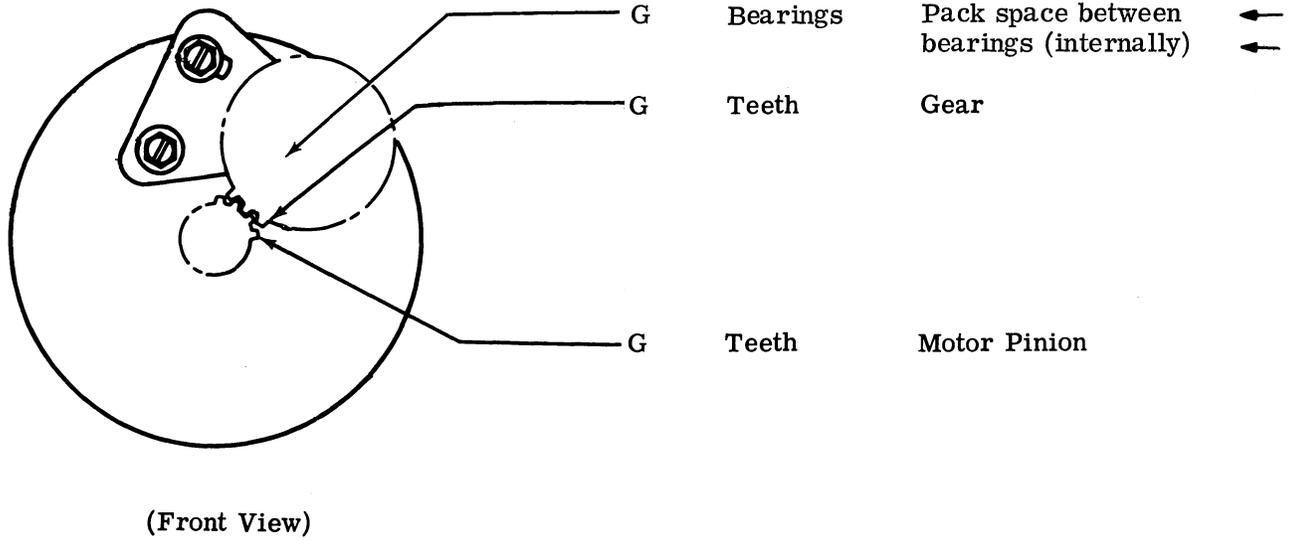


(Front View)



(Rear View)

2.27 Motor Gear Plate Assembly



2.28 Eject Drive Belt Mechanism

