

**BELL SYSTEM PRACTICES**  
**Teletypewriter and Data Stations**

**ADDENDUM P34.601**  
**Issue 2, June, 1958**  
**AT&T Co Standard**

## **28 TELETYPEWRITER**

### **LUBRICATION**

#### **1. GENERAL**

1.001 This addendum supplements Section P34.601, Issue 3.

1.002 This addendum is reissued to include the lubrication procedures for the maintenance of the 28F and 28G teletypewriter cabinets which are a part of the 28 automatic sending-receiving sets. The 28F teletypewriter cabinet is used in the 82 teletypewriter switching system.

#### **3. CABINET AND ELECTRICAL SERVICE UNIT**

The following change applies to Part 3 of the section:

- (a) 3.03—added

#### **5. TYPING UNIT**

The following changes apply to Part 5 of the section:

- (a) 5.07, 5.50, and 5.55—revised

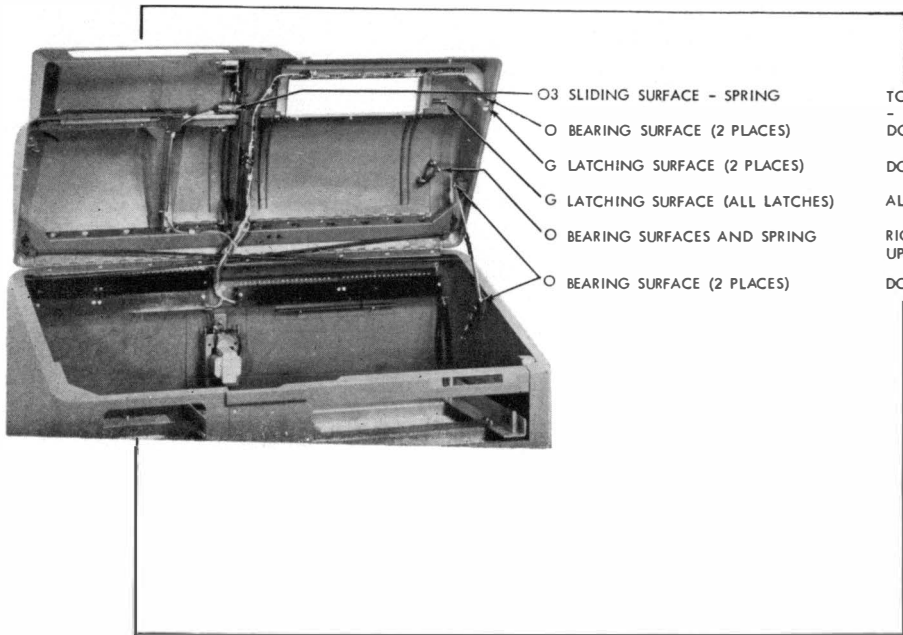
#### **6. MISCELLANEOUS FEATURES**

The following changes apply to Part 6 of the section:

- (a) 6.10—revised  
(b) 6.13 to 6.16, incl—added

### 3. CABINET AND ELECTRICAL SERVICE UNIT

#### 3.03 28F AND 28G CABINETS



O3 SLIDING SURFACE - SPRING

O BEARING SURFACE (2 PLACES)

G LATCHING SURFACE (2 PLACES)

G LATCHING SURFACE (ALL LATCHES)

O BEARING SURFACES AND SPRING

O BEARING SURFACE (2 PLACES)

TORSION SPRING  
- UPSTOP  
DOME LATCH

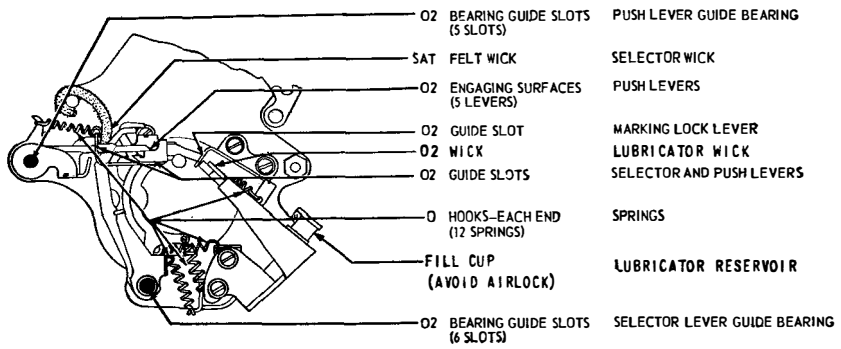
DOME LATCH

ALL DOORS

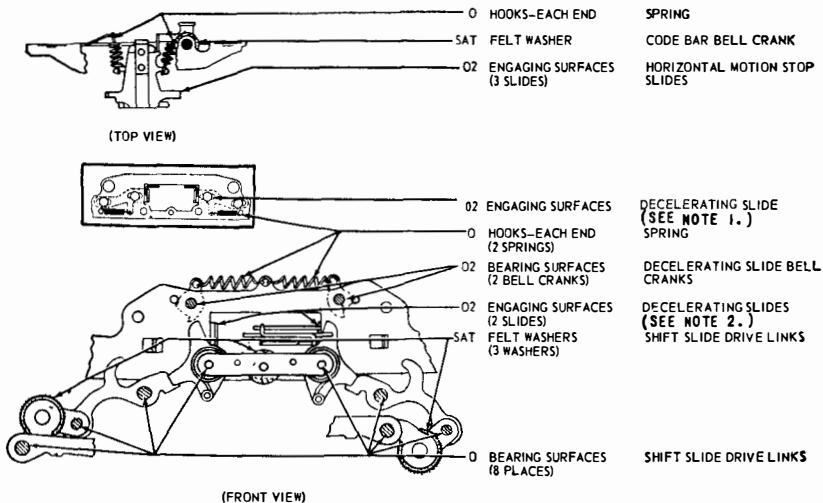
RIGHT TOP DOOR  
UPSTOP ARM

DOME UPSTOP ARM

5. TYPING UNIT  
5.07 SELECTOR MECHANISM



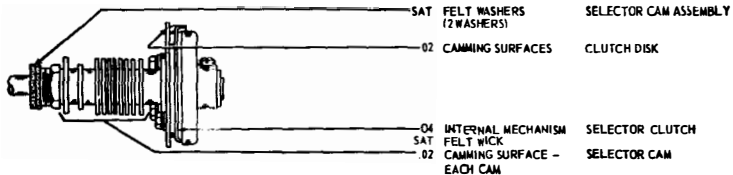
## 5.50 HORIZONTAL POSITIONING MECHANISM (Continued)



### NOTES:

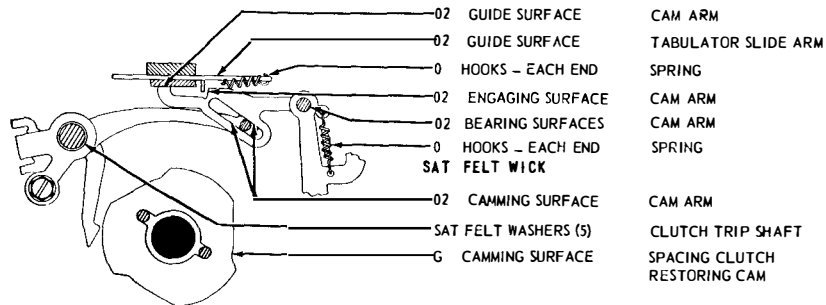
1. WITH SPRINGS LOCATED ON REAR SIDE OF THE SLIDE.
2. WITH SPRINGS LOCATED ABOVE THE SLIDE.

### 5.55 SELECTOR CAM, CLUTCH ASSEMBLY



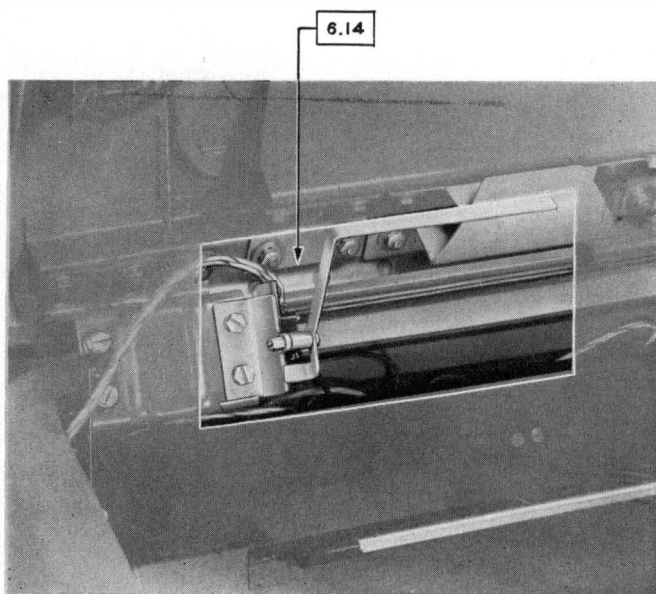
## 6. MISCELLANEOUS FEATURES

### 6.10 SPACING CLUTCH MECHANISM

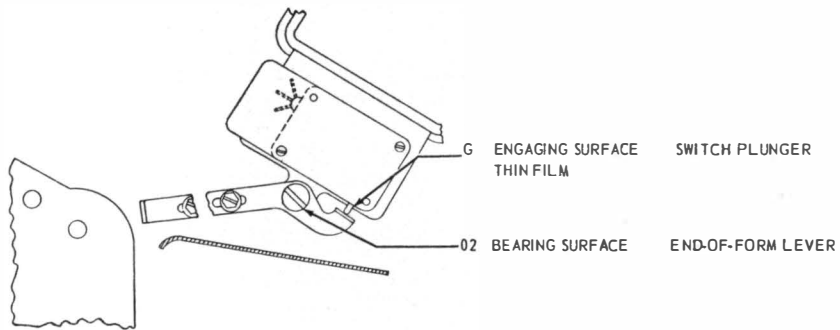


**Note:** The cabinet should be upright for the lubrication shown in 6.13 and 6.14.

6.13 END-OF-FORM ALARM MECHANISM(Front View)



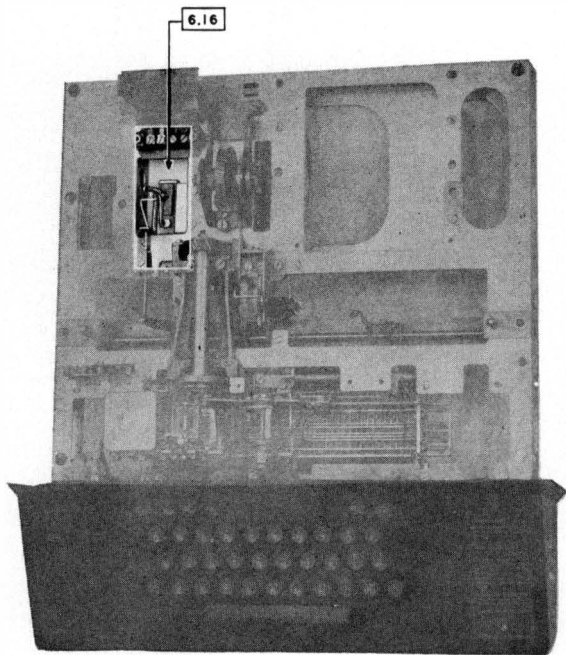
## 6.14 END-OF-FORM ALARM MECHANISM (Continued)



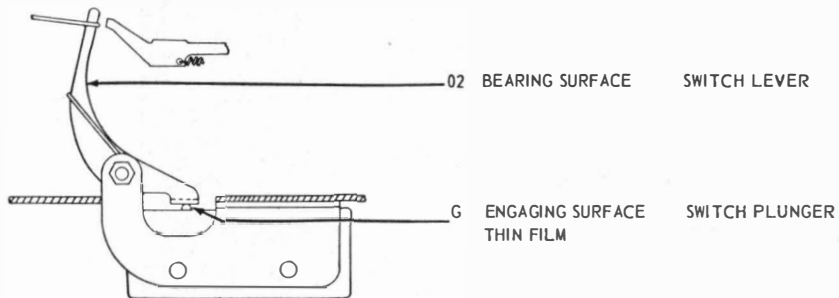


**Note:** The keyboard should be upright for the lubrication shown in 6.15 and 6.16.

6.15 PAPER-FEEDOUT MOTOR-START MECHANISM  
(Top View)



6.16 PAPER-FEEDOUT MOTOR-START MECHANISM (Continued)



**BELL SYSTEM PRACTICES**  
Teletypewriter Stations

**SECTION P34.601**  
Issue 1, August, 1953  
AT&T Co Standard

## 28 TELETYPEWRITER LUBRICATION

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## **1. GENERAL**

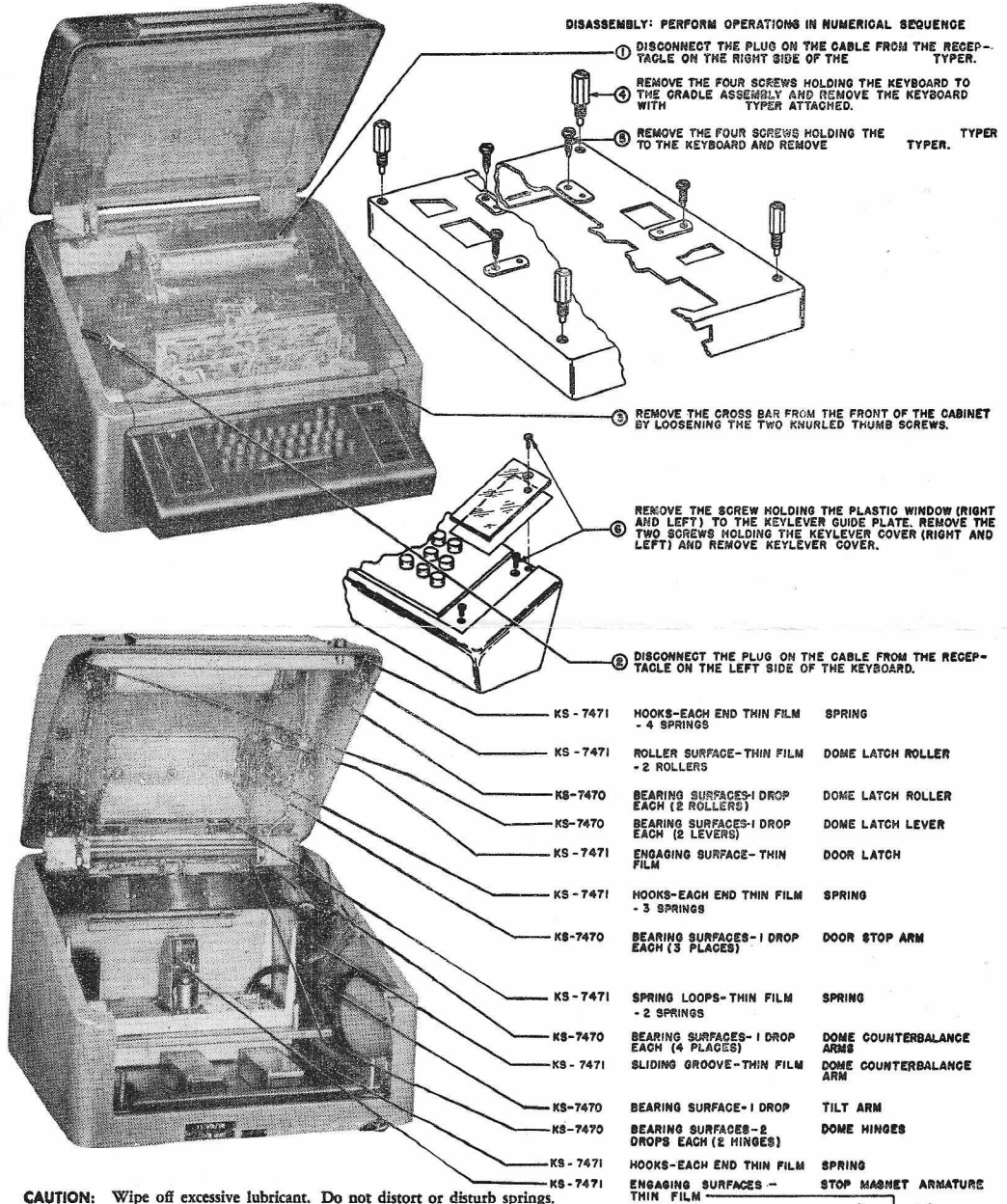
1.01 This section covers the lubrication of the 28 teletypewriter.

1.02 The lubricants and methods of lubrication are those specified in Section P30.011—Teletypewriter Apparatus Lubrication—General Requirements.

## **2. PARTS TO BE LUBRICATED**

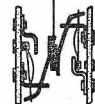
2.01 The succeeding figures show the parts needing lubrication, where and how to lubricate. The half tone prints show the location of a particular part in relation to the whole unit.

# CABINETS



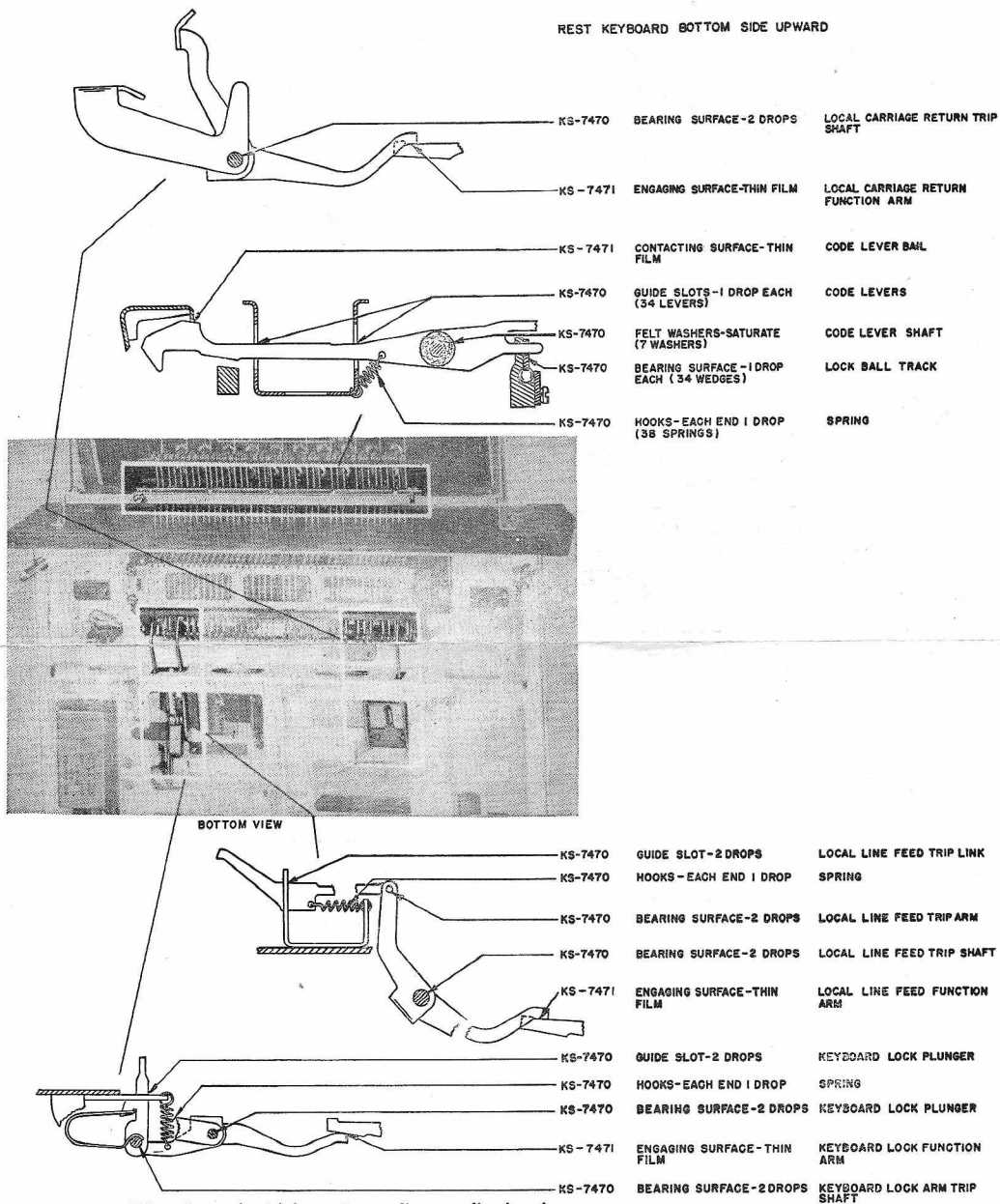
**CAUTION:** Wipe off excessive lubricant. Do not distort or disturb springs.

Fig. 1



# KEYBOARD

REST KEYBOARD BOTTOM SIDE UPWARD

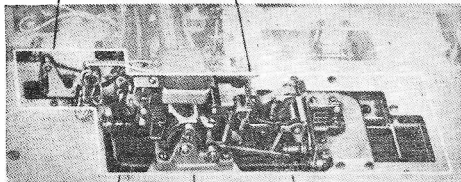
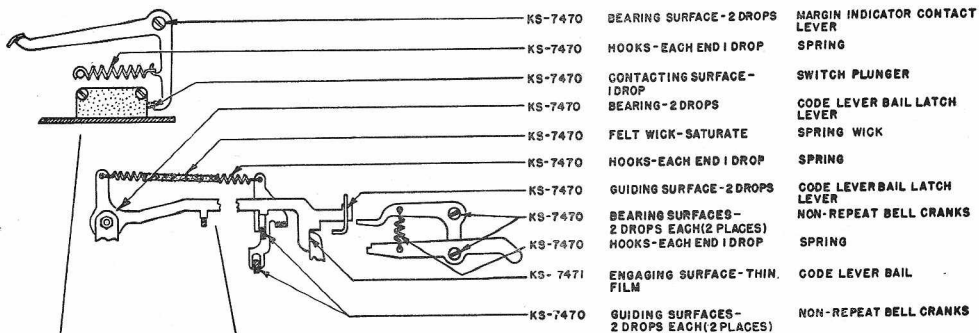


**CAUTION:** Wipe off excessive lubricant. Do not distort or disturb springs.

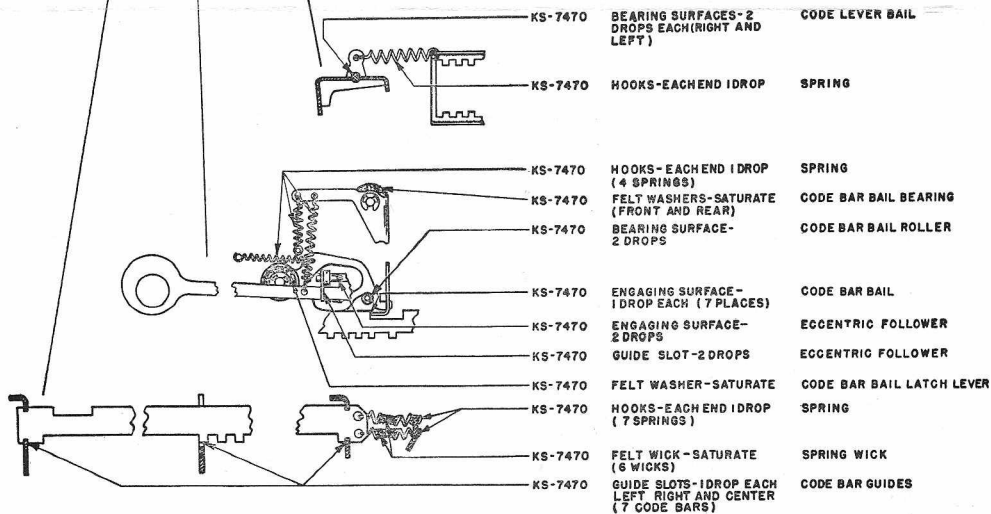
Fig. 2

# KEYBOARD

## REST KEYBOARD IN UPRIGHT POSITION



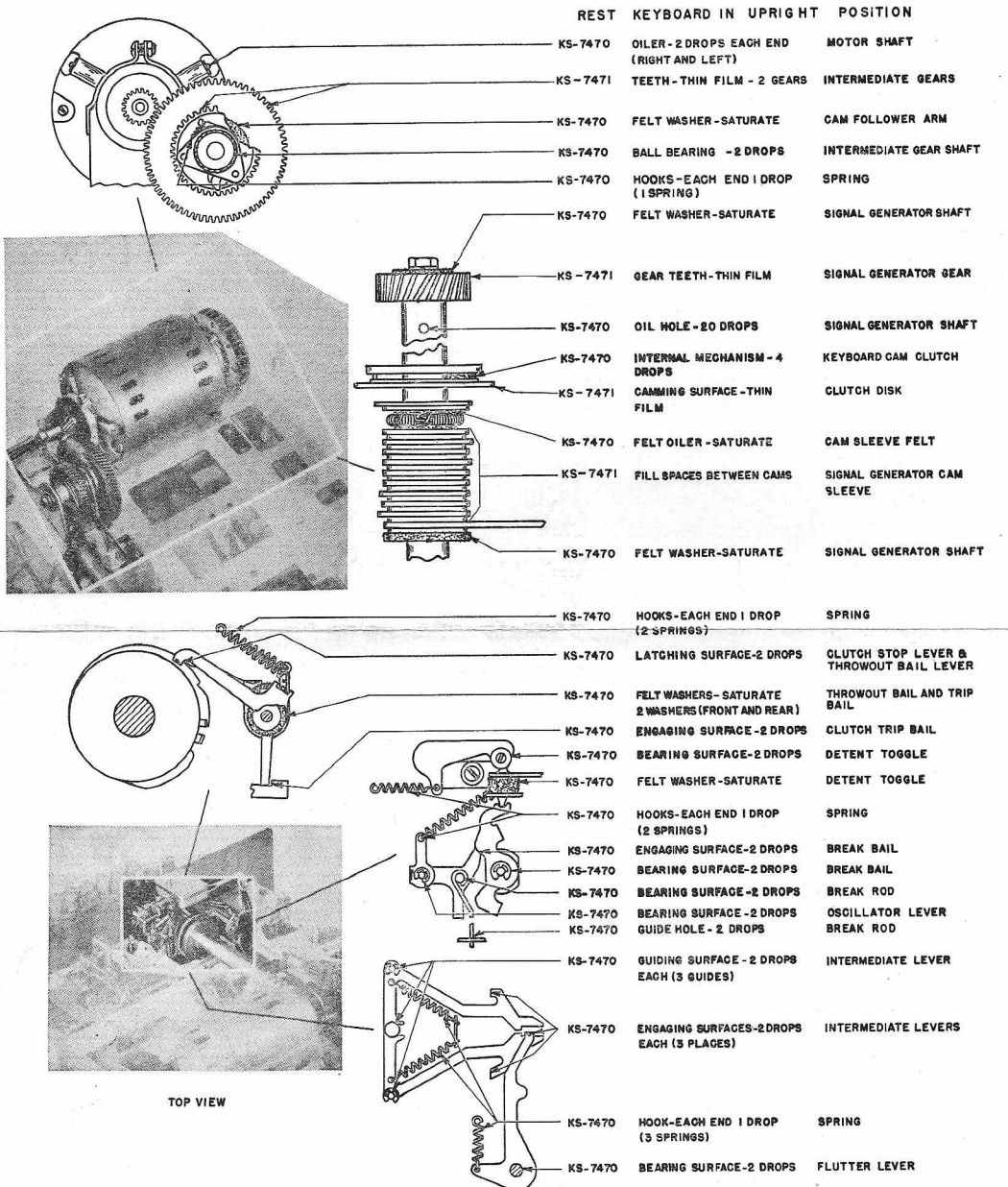
TOP VIEW



**CAUTION:** Wipe off excessive lubricant. Do not distort or disturb springs.

Fig. 3

# KEYBOARD



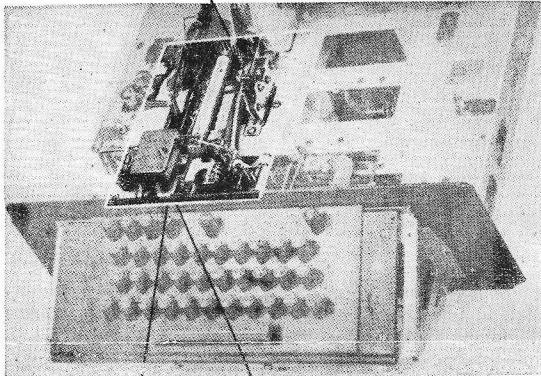
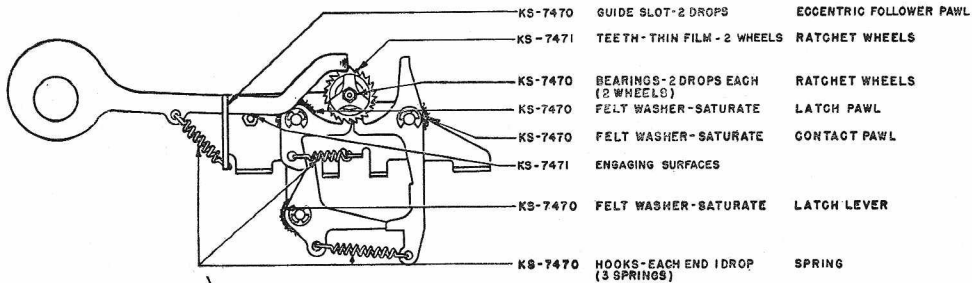
**CAUTION:** Wipe off excessive lubricant. Do not distort or disturb springs.

Fig. 4

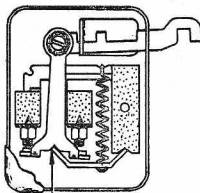


# KEYBOARD

REST KEYBOARD IN UPRIGHT POSITION

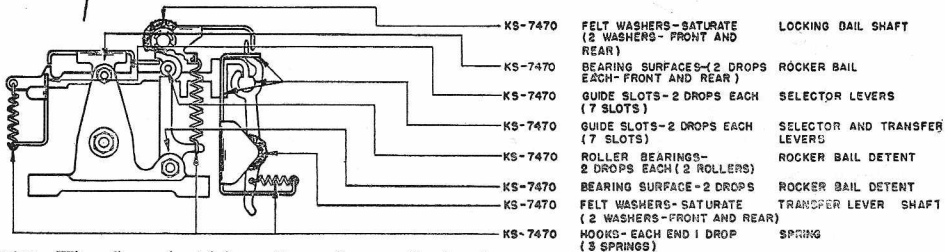


TOP VIEW



DISASSEMBLY: REMOVE NUT AND LOCK WASHER SECURING CONTACT BOX COVER AND REMOVE COVER

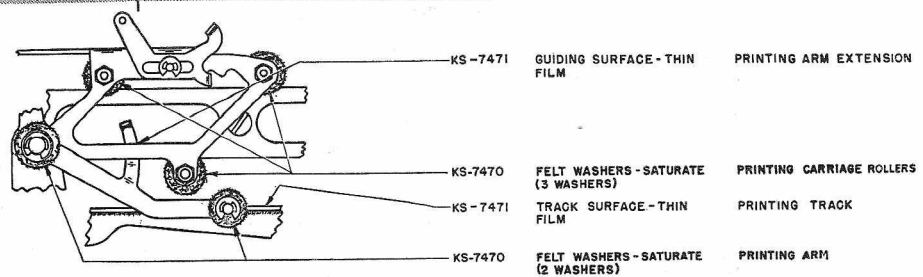
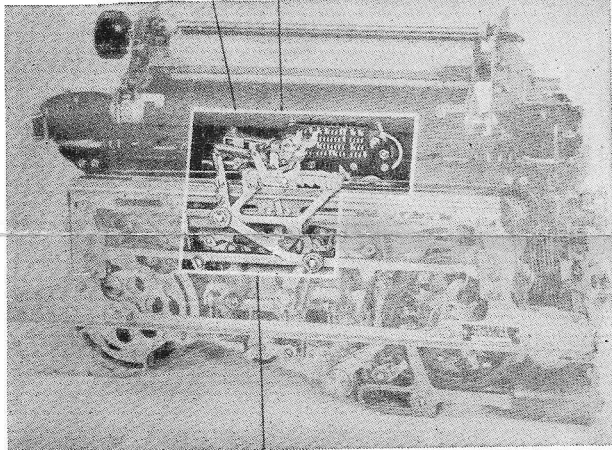
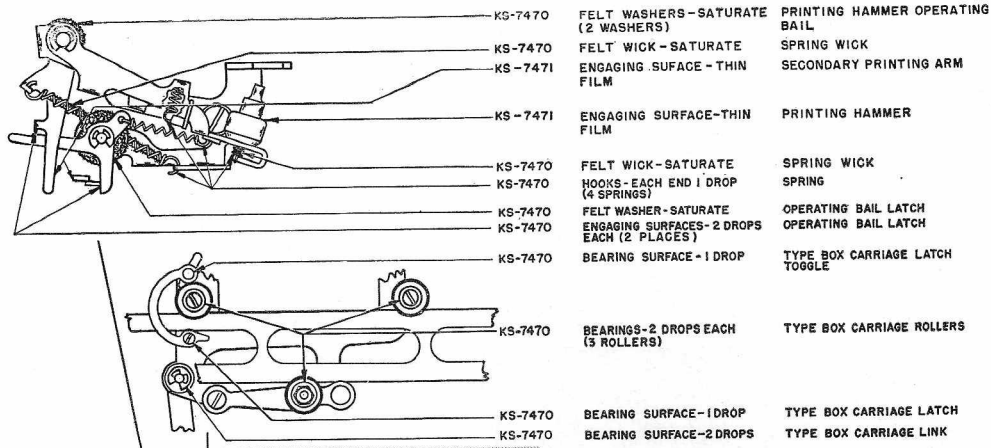
KS-7471 ENGAGING SURFACE-THIN FILM CONTACT TOGGLE



CAUTION: Wipe off excessive lubricant. Do not distort or disturb springs.

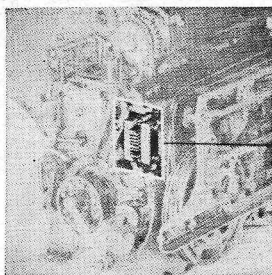
Fig. 5

TYPYR IN UPRIGHT POSITION



CAUTION: Wipe off excessive lubricant. Do not distort or disturb springs.

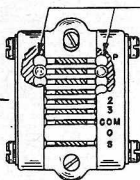
Fig. 6



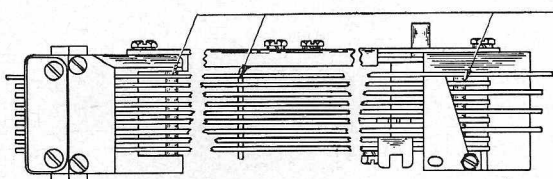
LEFT SIDE VIEW

REST

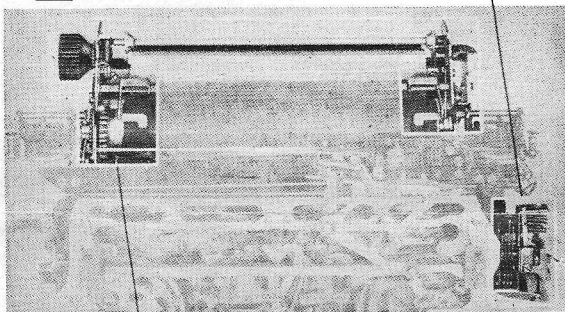
TYPER IN UPRIGHT POSITION



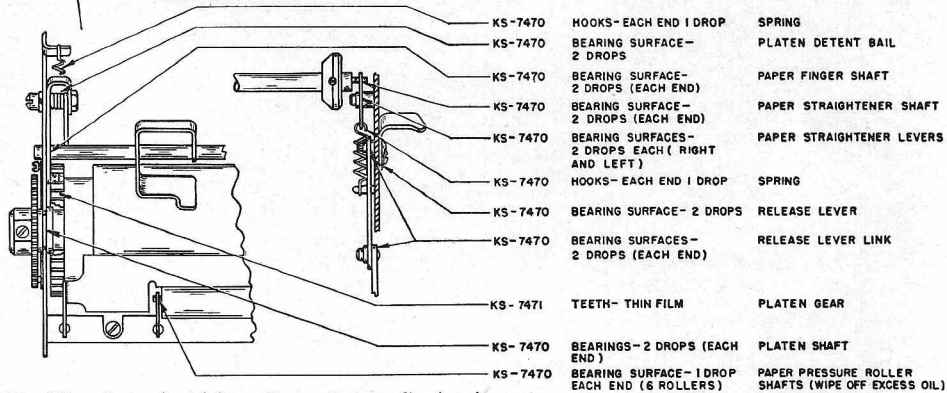
KS-7470

BEARING BALLS - 2 DROPS  
EACH ( 9 BALLS ) CODE BAR DETENT

KS-7470

GUIDE SLOTS - 2 DROPS  
EACH ( RIGHT, CENTER, AND  
LEFT ) 9 BARS CODE BARS

FRONT VIEW



KS-7470

HOOKS - EACH END 1 DROP

SPRING

KS-7470

BEARING SURFACE -  
2 DROPS

PLATEN DETENT BAIL

KS-7470

BEARING SURFACE -  
2 DROPS ( EACH END )

PAPER FINGER SHAFT

KS-7470

BEARING SURFACE -  
2 DROPS ( EACH END )

PAPER STRAIGHTENER SHAFT

KS-7470

BEARING SURFACES -  
2 DROPS EACH ( RIGHT  
AND LEFT )

PAPER STRAIGHTENER LEVERS

KS-7470

BEARING SURFACES -  
2 DROPS EACH ( RIGHT  
AND LEFT )

SPRING

KS-7470

HOOKS - EACH END 1 DROP

SPRING

KS-7470

BEARING SURFACE - 2 DROPS

RELEASE LEVER

KS-7470

BEARING SURFACES -  
2 DROPS ( EACH END )

RELEASE LEVER LINK

KS-7471

TEETH - THIN FILM

PLATEN GEAR

KS-7470

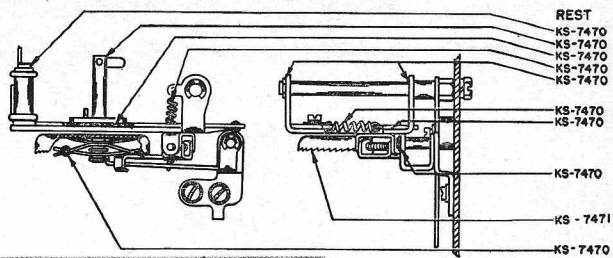
BEARINGS - 2 DROPS ( EACH  
END )

PLATEN SHAFT

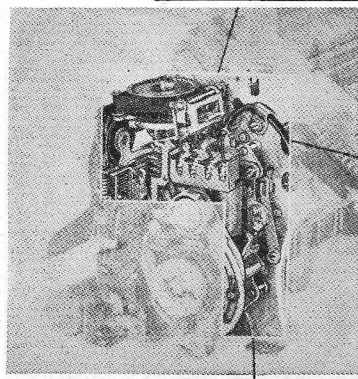
KS-7470

BEARING SURFACE - 1 DROP  
EACH END ( 6 ROLLERS )PAPER PRESSURE ROLLER  
SHAFTS ( WIPE OFF EXCESS OIL )**CAUTION:** Wipe off excessive lubricant. Do not distort or disturb springs.

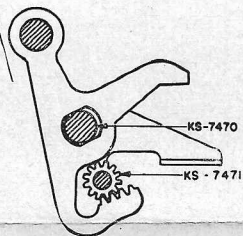
Fig. 7



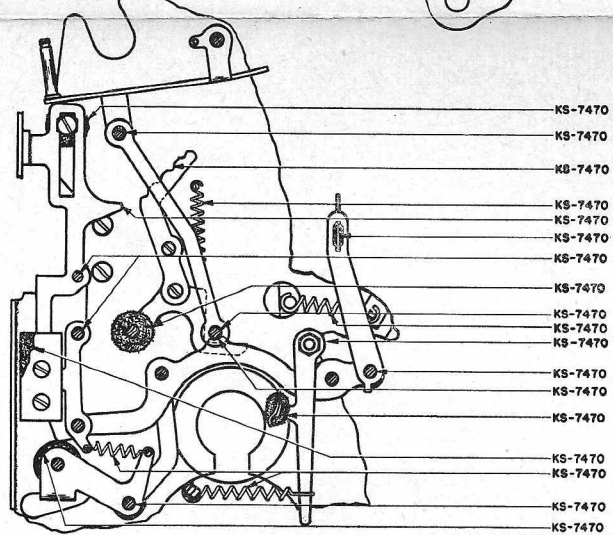
- |                           |  |
|---------------------------|--|
| TYPYR IN UPRIGHT POSITION |  |
| RIBBON ROLLER SHAFT       |  |
| RIBBON SPOOL TOGGLE       |  |
| RIBBON SPOOL SHAFT        |  |
| SPRING                    |  |
| RIBBON FEED LEVER BAIL    |  |
| SPRING                    |  |
| RIBBON REVERSE LEVER      |  |
|                           |  |
| RATCHET FEED LEVER SHAFT  |  |
|                           |  |
| RIBBON RATCHET WHEEL      |  |
|                           |  |
| SPRING                    |  |



RIGHT SIDE VIEW



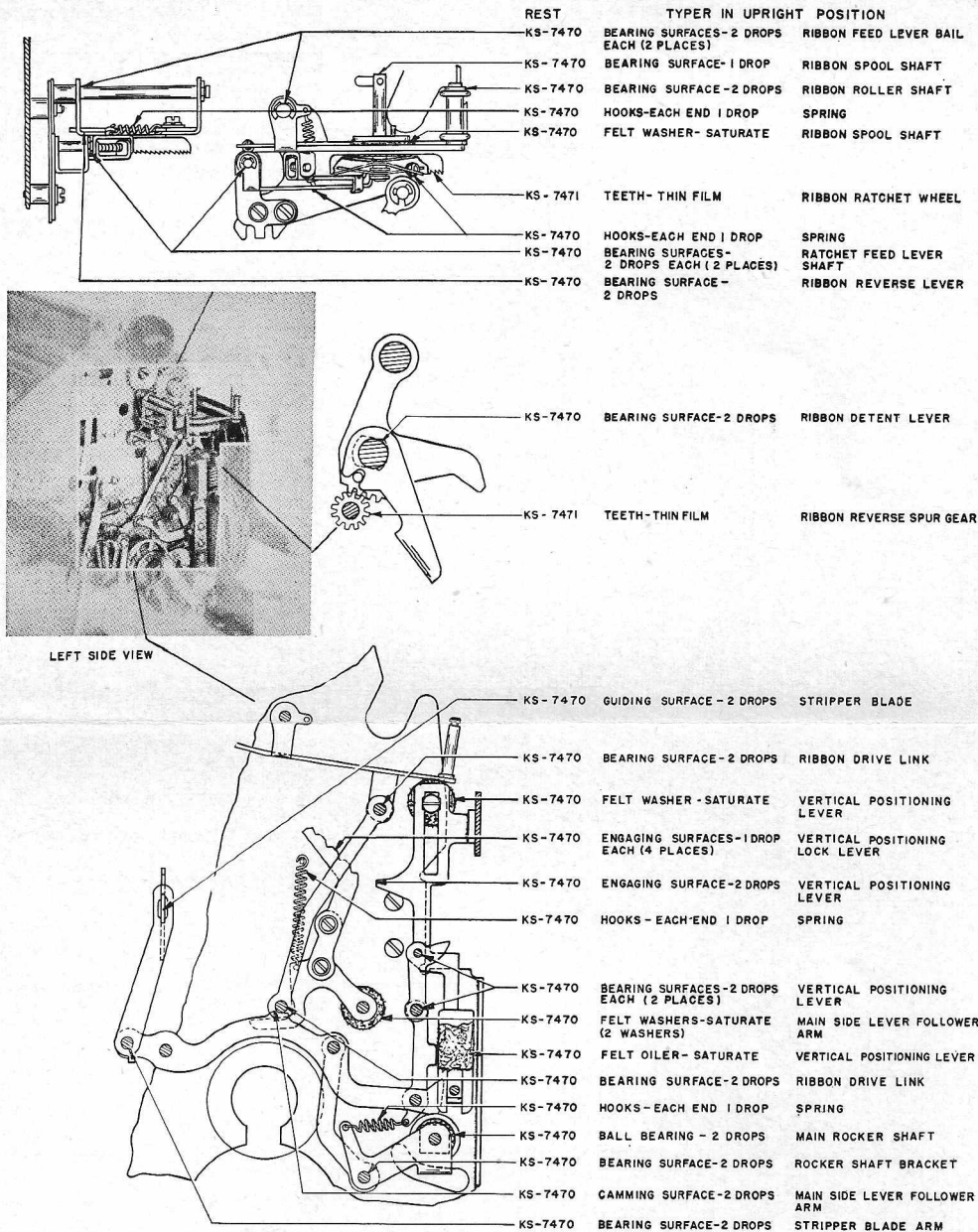
- |                           |                          |
|---------------------------|--------------------------|
| BEARING SURFACE - 2 DROPS | RIBBON DETENT LEVER      |
|                           |                          |
| TEETH - THIN FILM         | RIBBON REVERSE SPUR GEAR |



- |  |  |
|--|--|
| FELT WASHER - SATURATE                     | VERTICAL POSITIONING LEVER                           |
| BEARING SURFACE - 2 DROPS                  | RIBBON DRIVE LINK                                    |
| ENGAGING SURFACES - 1 DROP EACH (4 PLACES) | VERTICAL POSITIONING LOCK LEVER                      |
| HOOKS - EACH END 1 DROP                    | SPRING   |
| ENGAGING SURFACE - 2 DROPS                 | VERTICAL POSITIONING LEVER                           |
| GUIDING SURFACE - 2 DROPS                  | STRIPPER BLADE                                       |
| BEARING SURFACES - 2 DROPS EACH (2 PLACES) | VERTICAL POSITIONING LEVER                           |
| FELT WASHERS - SATURATE (2 WASHERS)        | MAIN SIDE LEVER FOLLOWER ARM                         |
| BEARING SURFACE - 2 DROPS                  | RIBBON DRIVE LINK                                    |
| HOOKS - EACH END 1 DROP                    | SPRING   |
| BEARING SURFACE - 2 DROPS                  | CODE BAR CLUTCH TRIP SHAFT OPERATING LEVER           |
| BEARING SURFACE - 2 DROPS                  | STRIPPER BLADE ARM                                   |
| ENGAGING SURFACE - 2 DROPS                 | MAIN SIDE LEVER FOLLOWER ARM                         |
| FELT WASHER - SATURATE                     | CODE BAR CLUTCH TRIP SHAFT OPERATING LEVER EXTENSION |
| FELT OILER - SATURATE                      | VERTICAL POSITIONING LEVER SPRING                    |
| HOOKS - EACH END 1 DROP (2 SPRINGS)        |  |
| BEARING SURFACE - 2 DROPS                  | ROCKER SHAFT BRACKET                                 |
| BALL BEARING - 2 DROPS                     | MAIN ROCKER SHAFT                                    |

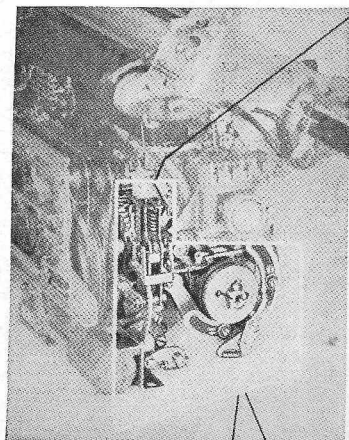
CAUTION: Wipe off excessive lubricant. Do not distort or disturb springs.

Fig. 8

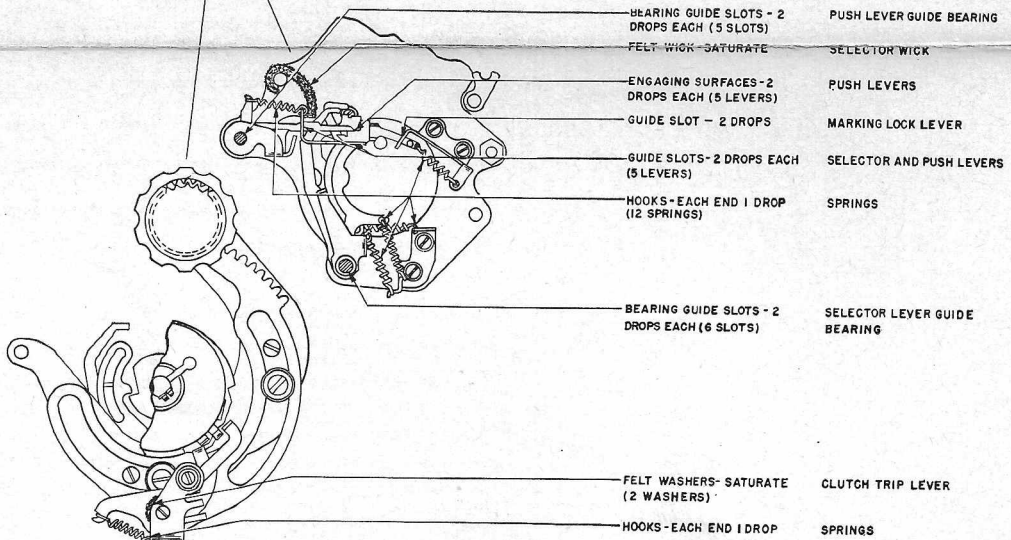
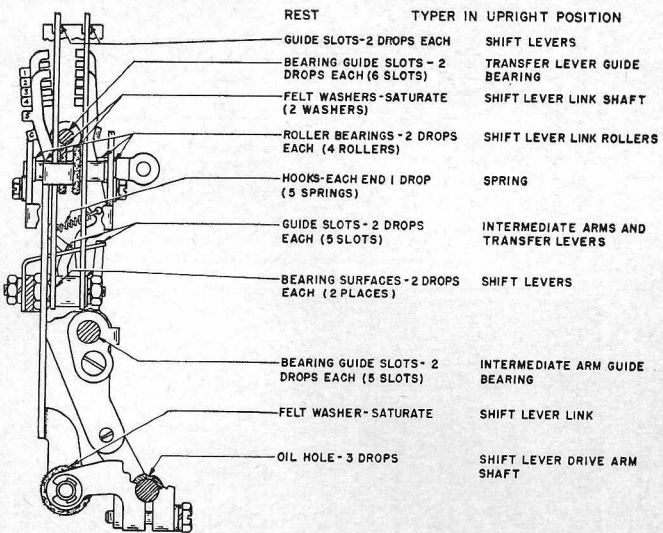


**CAUTION:** Wipe off excessive lubricant. Do not distort or disturb springs.

Fig. 9

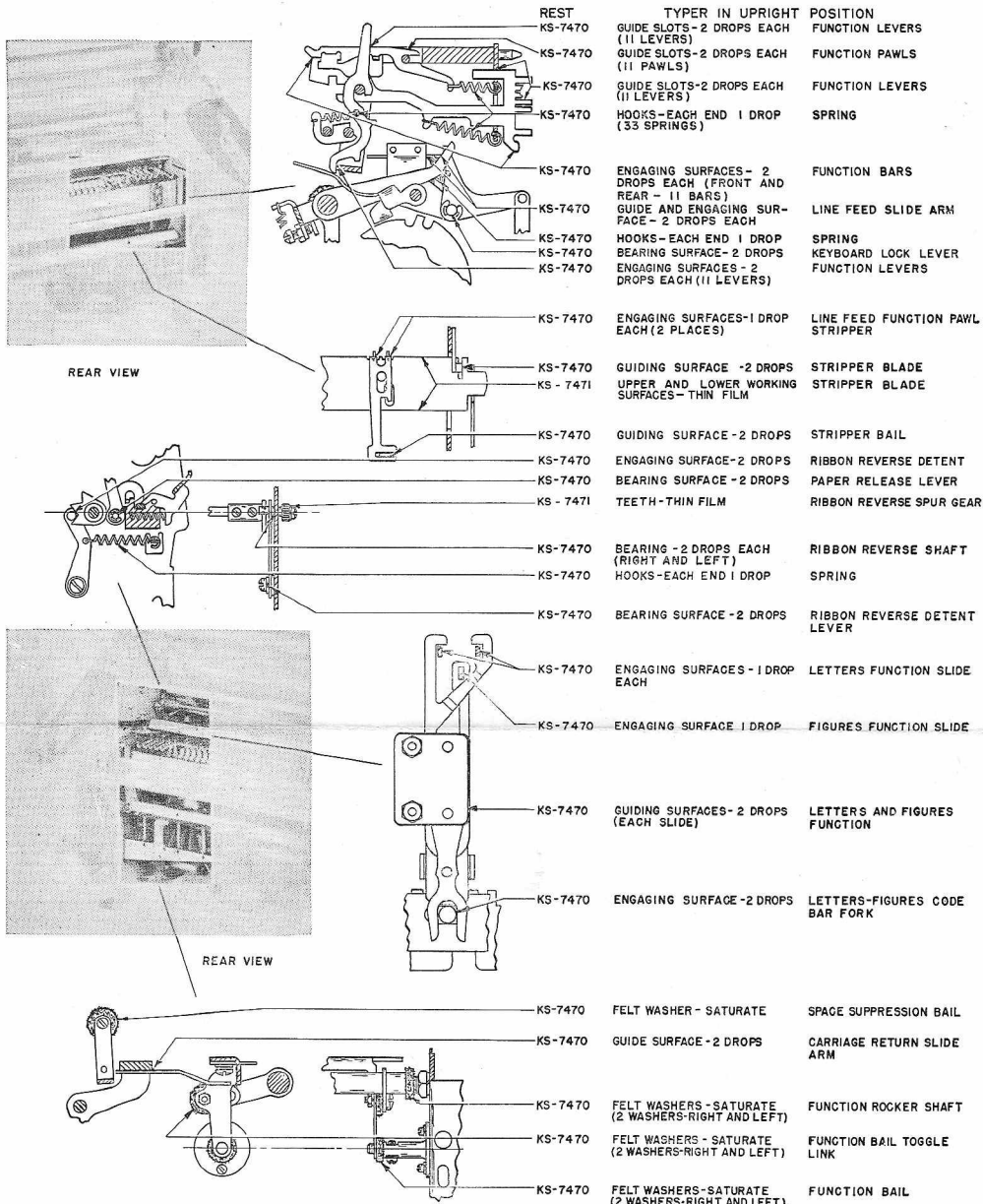


RIGHT SIDE VIEW



CAUTION: Wipe off excessive lubricant. Do not distort or disturb springs.

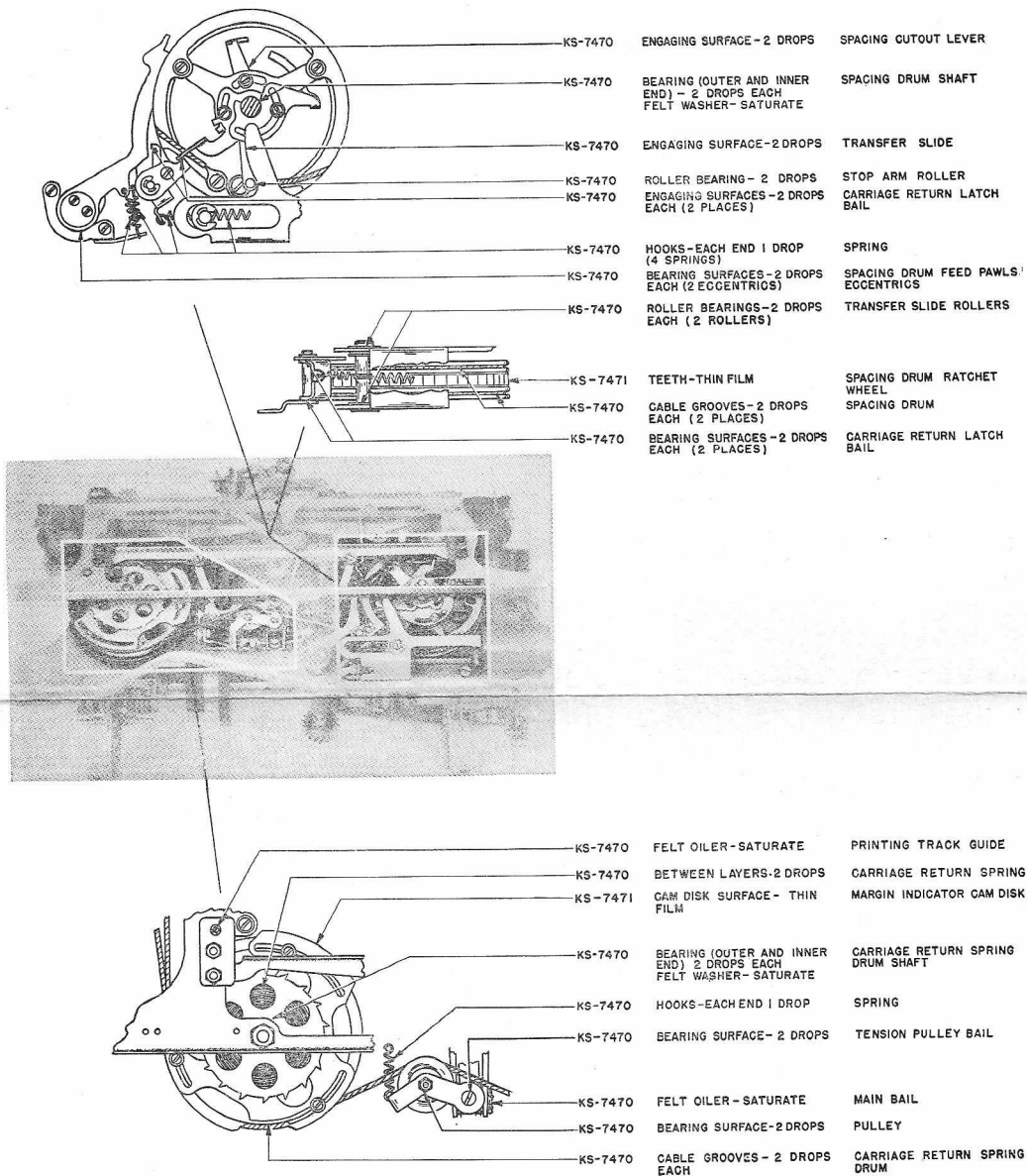
Fig. 10



**CAUTION:** Wipe off excessive lubricant. Do not distort or disturb springs.

**Fig. 11**

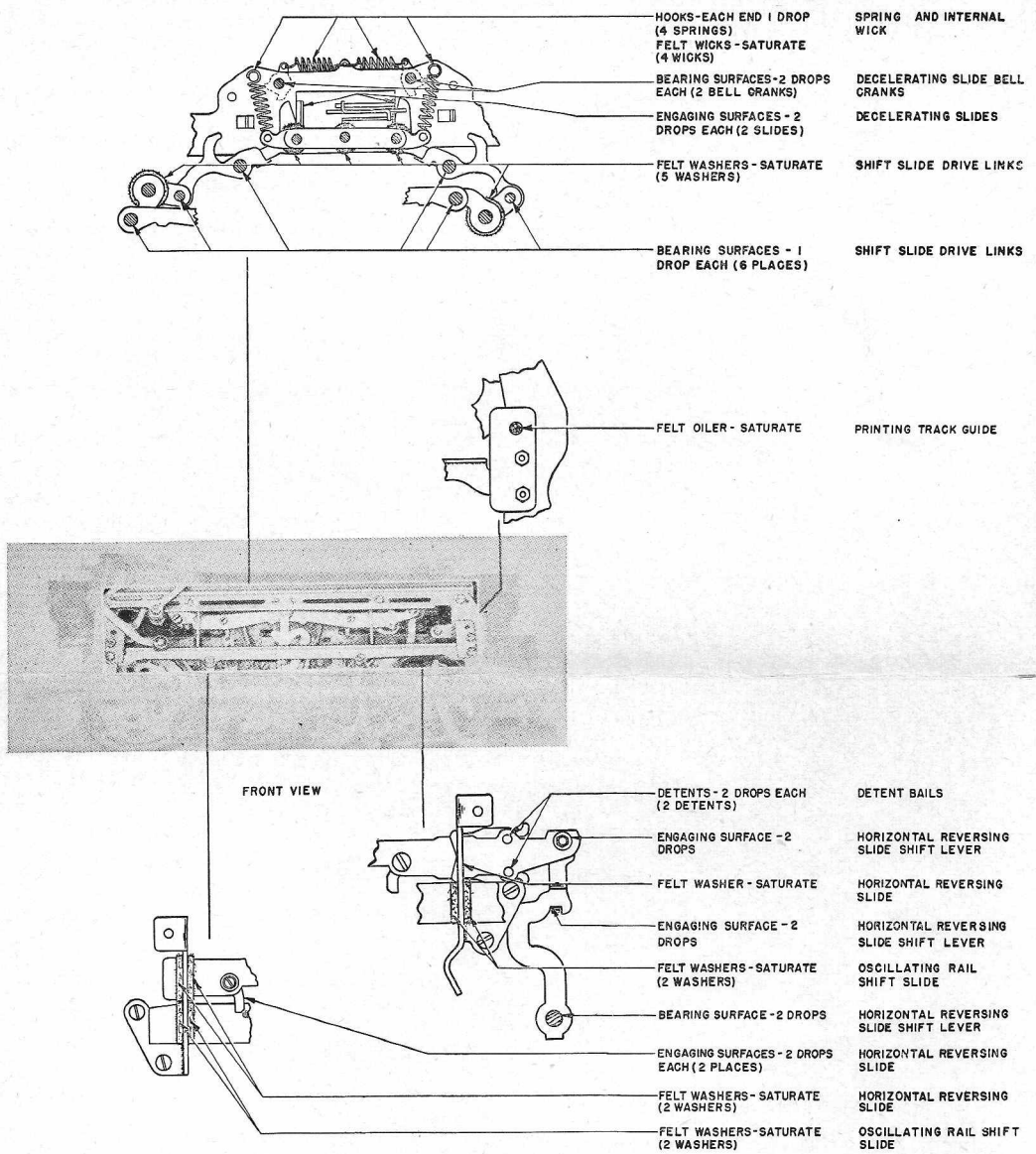
## REST TYPER ON ITS BACK



**CAUTION:** Wipe off excessive lubricant. Do not distort or disturb springs.

Fig. 12





CAUTION: Wipe off excessive lubricant. Do not distort or disturb springs.

Fig. 13

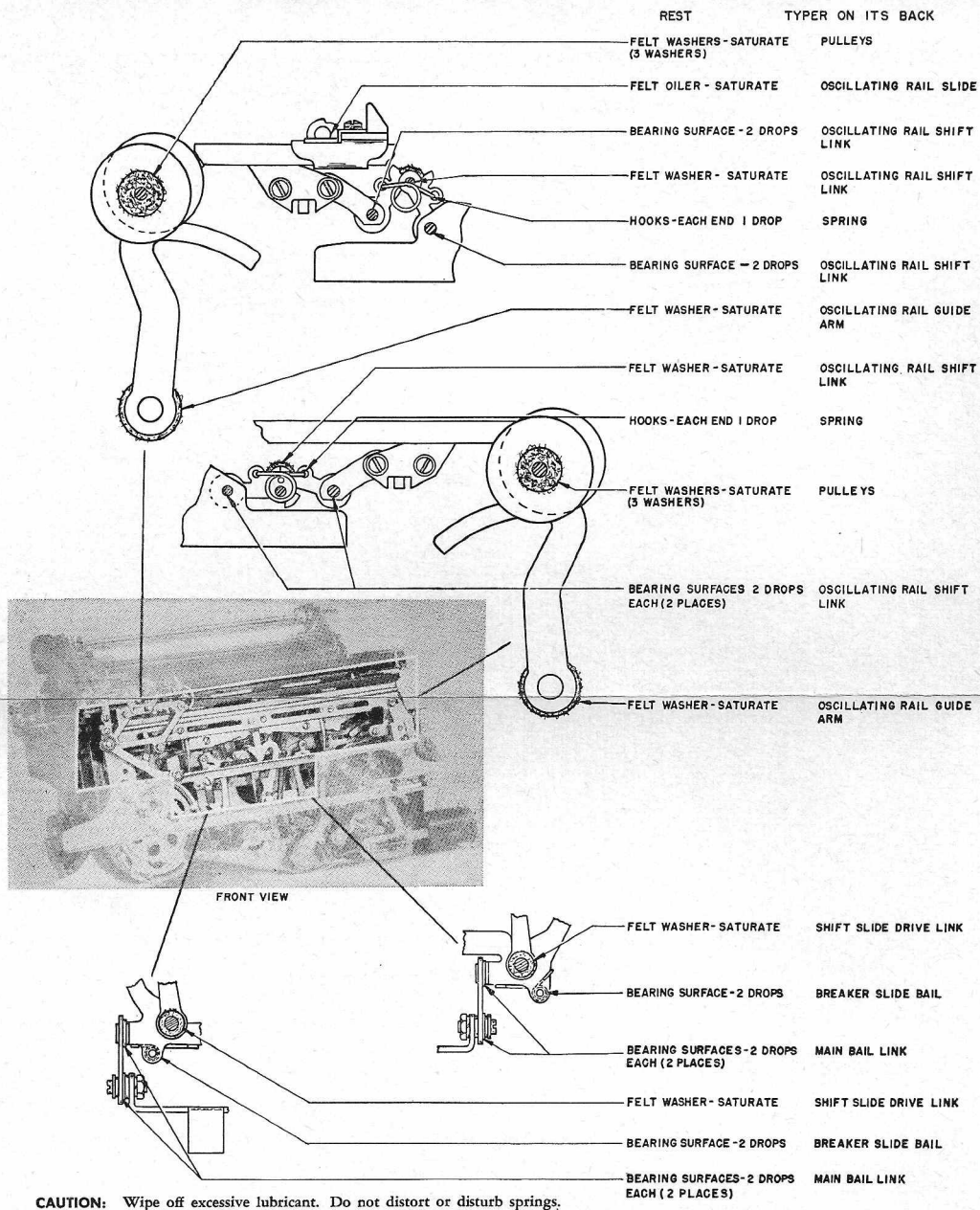
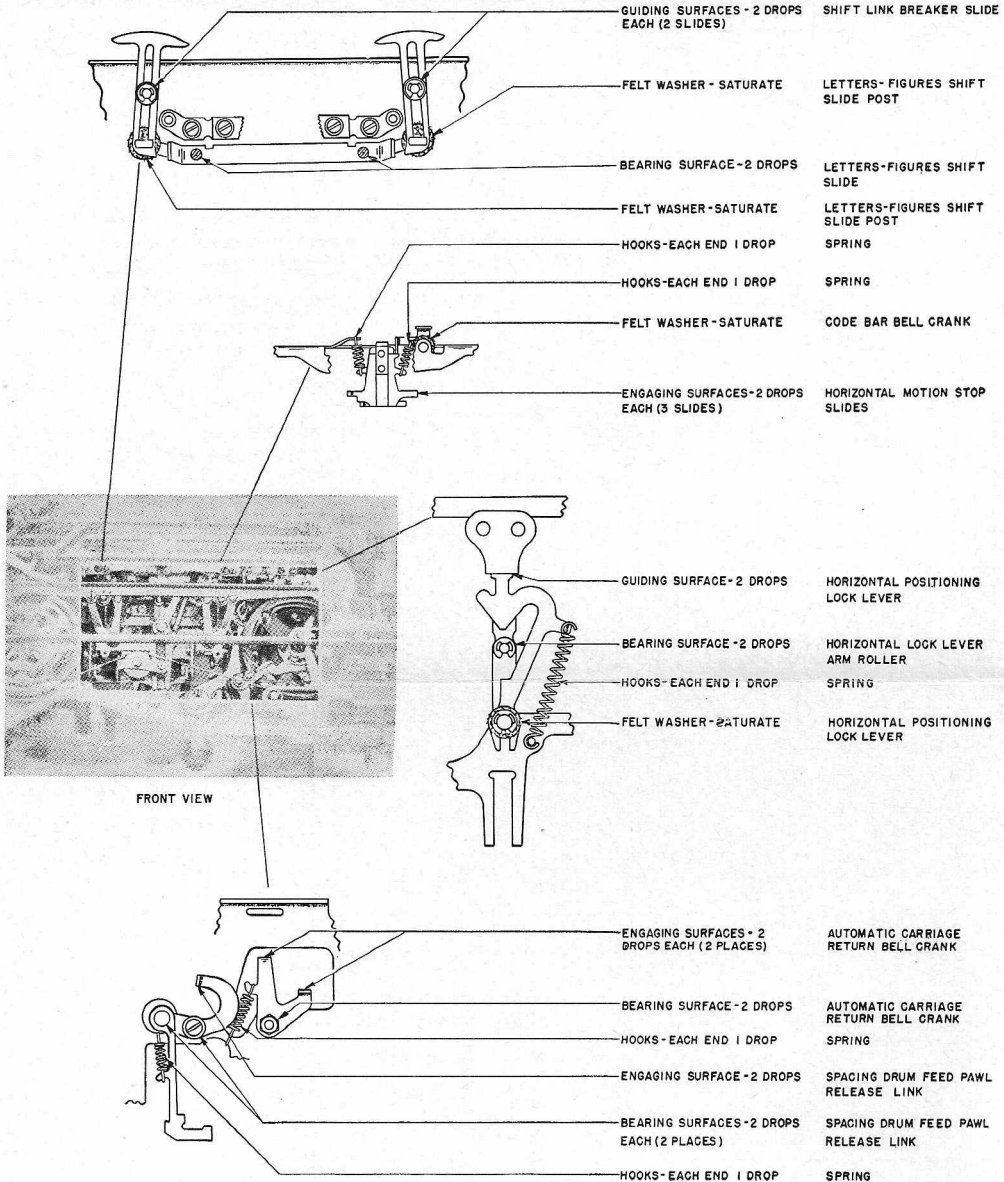


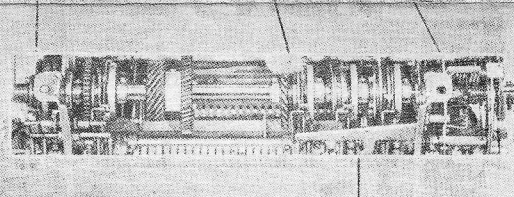
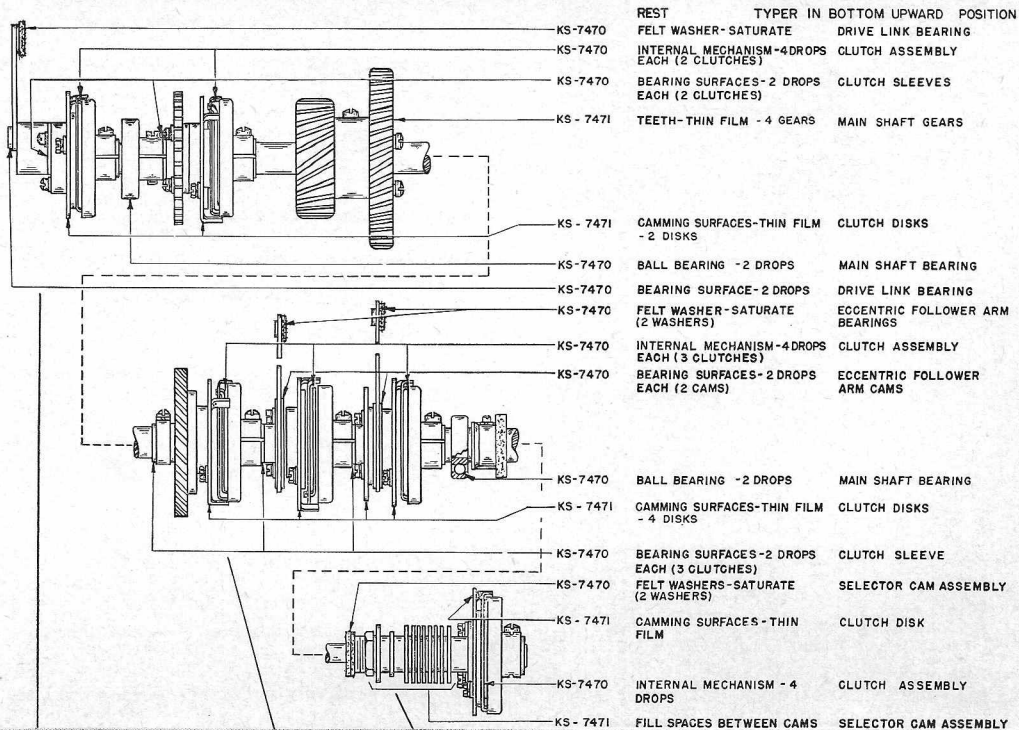
Fig. 14

REST TYPER ON ITS BACK

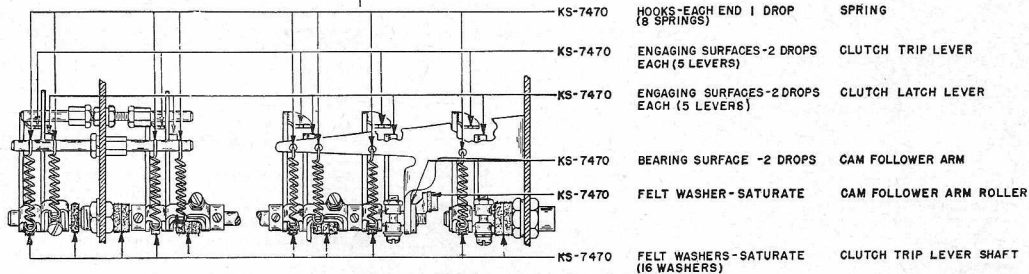


**CAUTION:** Wipe off excessive lubricant. Do not distort or disturb springs.

Fig. 15



BOTTOM VIEW

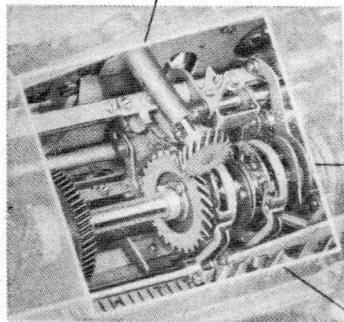
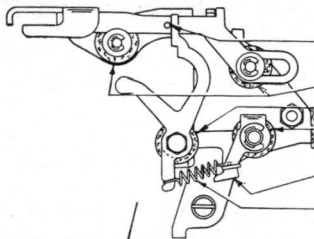


CAUTION: Wipe off excessive lubricant. Do not distort or disturb springs.

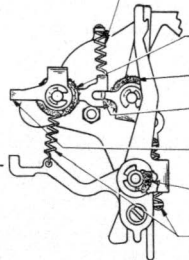
Fig. 16

REST

TYPER IN BOTTOM UPWARD POSITION



BOTTOM VIEW



- |         |                                     |                               |
|---------|-------------------------------------|-------------------------------|
| KS-7470 | ENGAGING SURFACES - 2 DROPS EACH    | SPACING TRIP LEVER            |
| KS-7470 | FELT WASHERS - SATURATE (2 WASHERS) | SPACING SUPPRESSION SLIDE     |
| KS-7470 | FELT WASHER - SATURATE              | SPACING TRIP LEVER            |
| KS-7470 | FELT WASHER - SATURATE              | SPACING TRIP LEVER BAIL SHAFT |
| KS-7470 | ENGAGING SURFACE-2 DROPS            | SPACING TRIP LEVER BAIL       |
| KS-7470 | HOOKS - EACH END 1 DROP (2 SPRINGS) | SPRING                        |
| KS-7470 | FELT WASHERS - SATURATE (2 WASHERS) | SPACING CUT-OUT TRANSFER BAIL |
| KS-7470 | FELT WASHER - SATURATE              | SPACING CUT-OUT BAIL          |
| KS-7470 | ENGAGING SURFACE-2 DROPS            | SPACING CUT-OUT BAIL          |
| KS-7470 | ENGAGING SURFACE-2 DROPS            | SPACING CUT-OUT TRANSFER BAIL |
| KS-7470 | FELT WASHERS - SATURATE (2 WASHERS) | CARRIAGE RETURN BAIL SHAFT    |
| KS-7470 | HOOKS - EACH END 1 DROP (2 SPRINGS) | SPRING                        |
| KS-7470 | OIL HOLE - 2 DROPS                  | SPACING SHAFT                 |
| KS-7471 | TEETH - THIN FILM                   | SPACING SHAFT GEAR            |

Fig. 17A



REAR VIEW

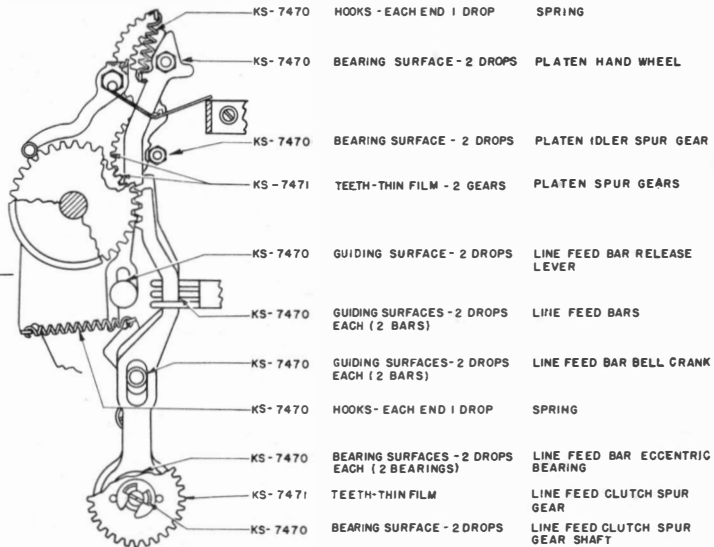


Fig. 17B

**CAUTION:** Wipe off excessive lubricant. Do not distort or disturb springs.