

**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**

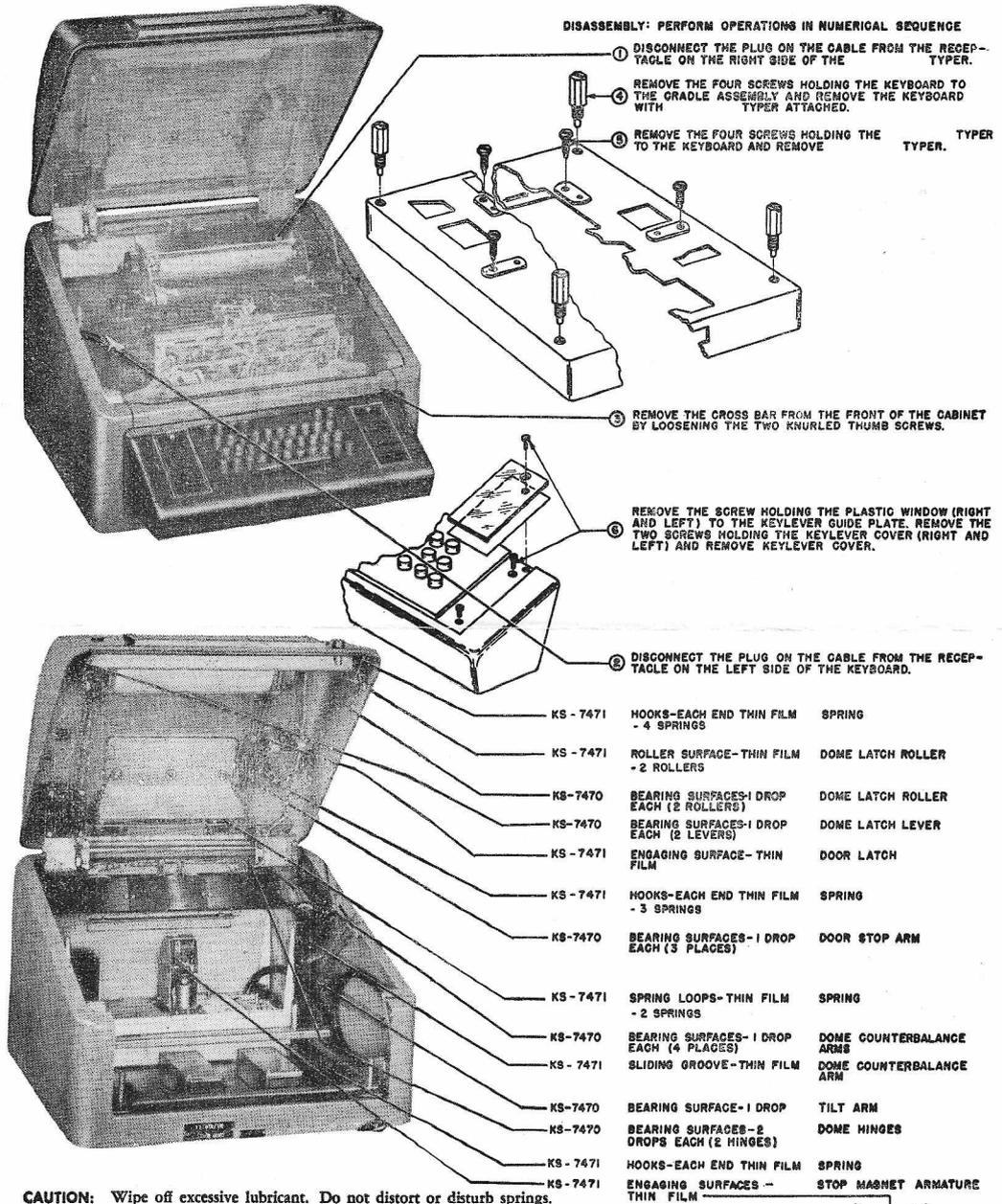
1.01 This section covers the lubrication of the 28 teletypewriter.

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**

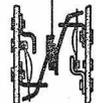
2.01 The succeeding figures show the parts needing lubrication, where and how to lubricate. The half tone prints show the location of a particular part in relation to the whole unit.

# CABINETS



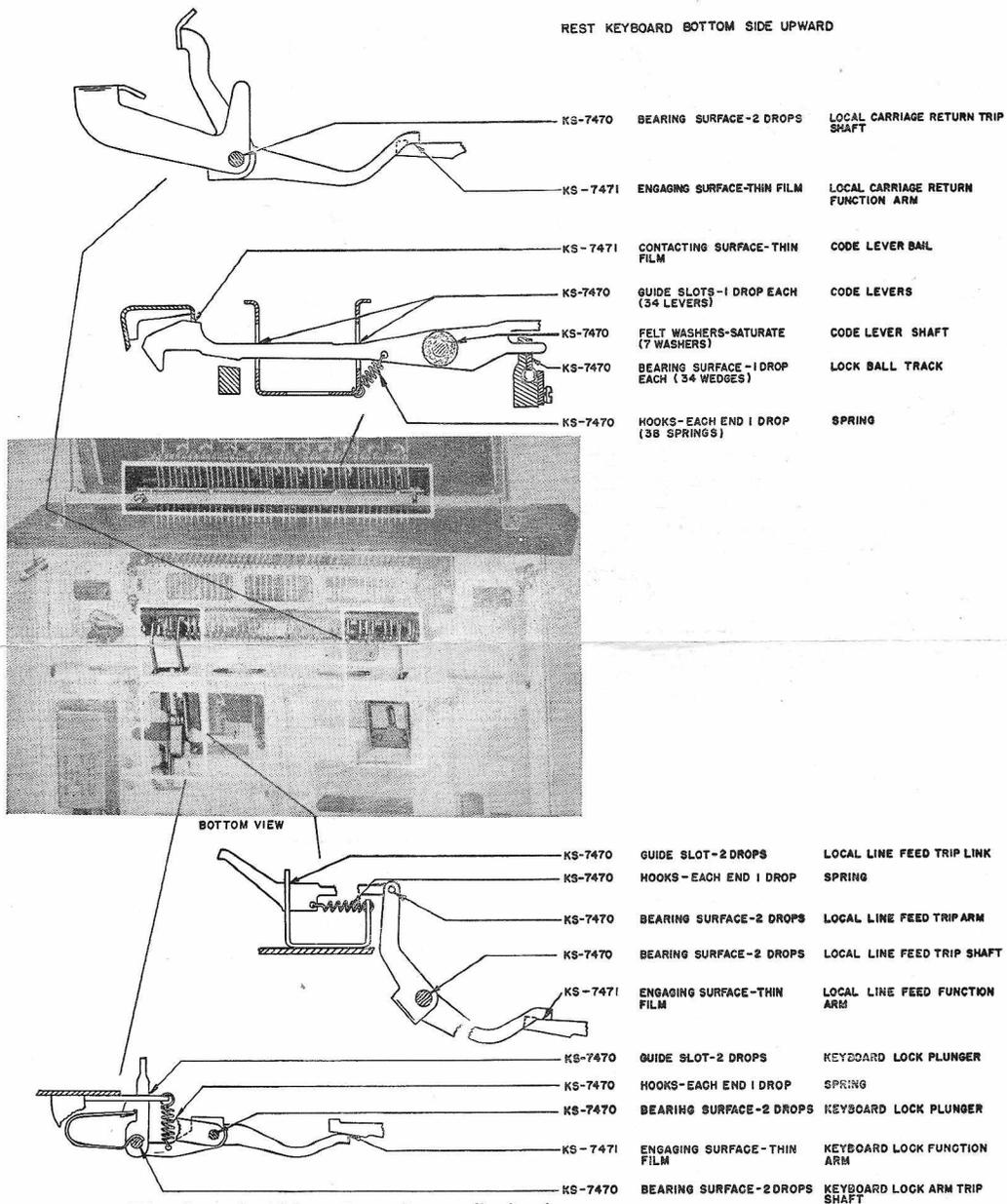
**CAUTION:** Wipe off excessive lubricant. Do not distort or disturb springs.

Fig. 1



# KEYBOARD

REST KEYBOARD BOTTOM SIDE UPWARD

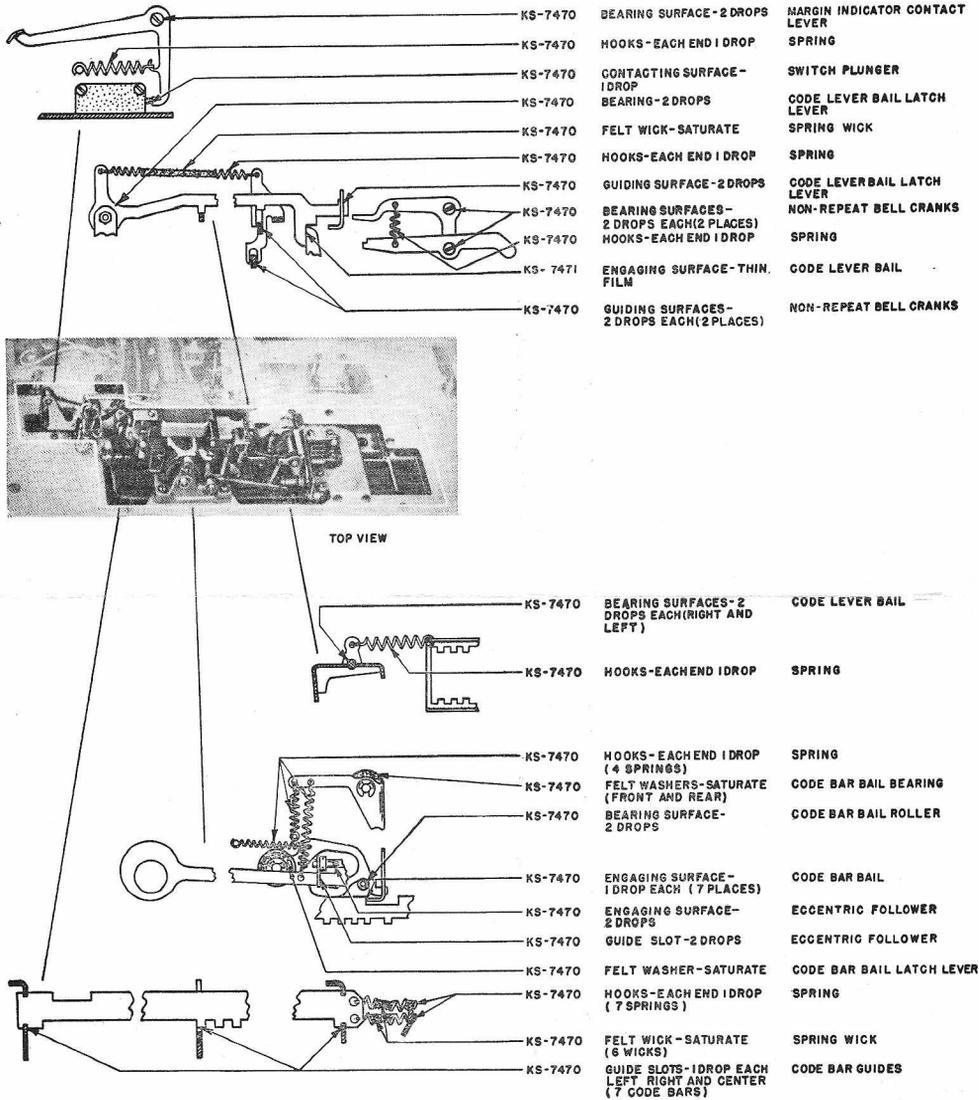


**CAUTION:** Wipe off excessive lubricant. Do not distort or disturb springs.

Fig. 2

# KEYBOARD

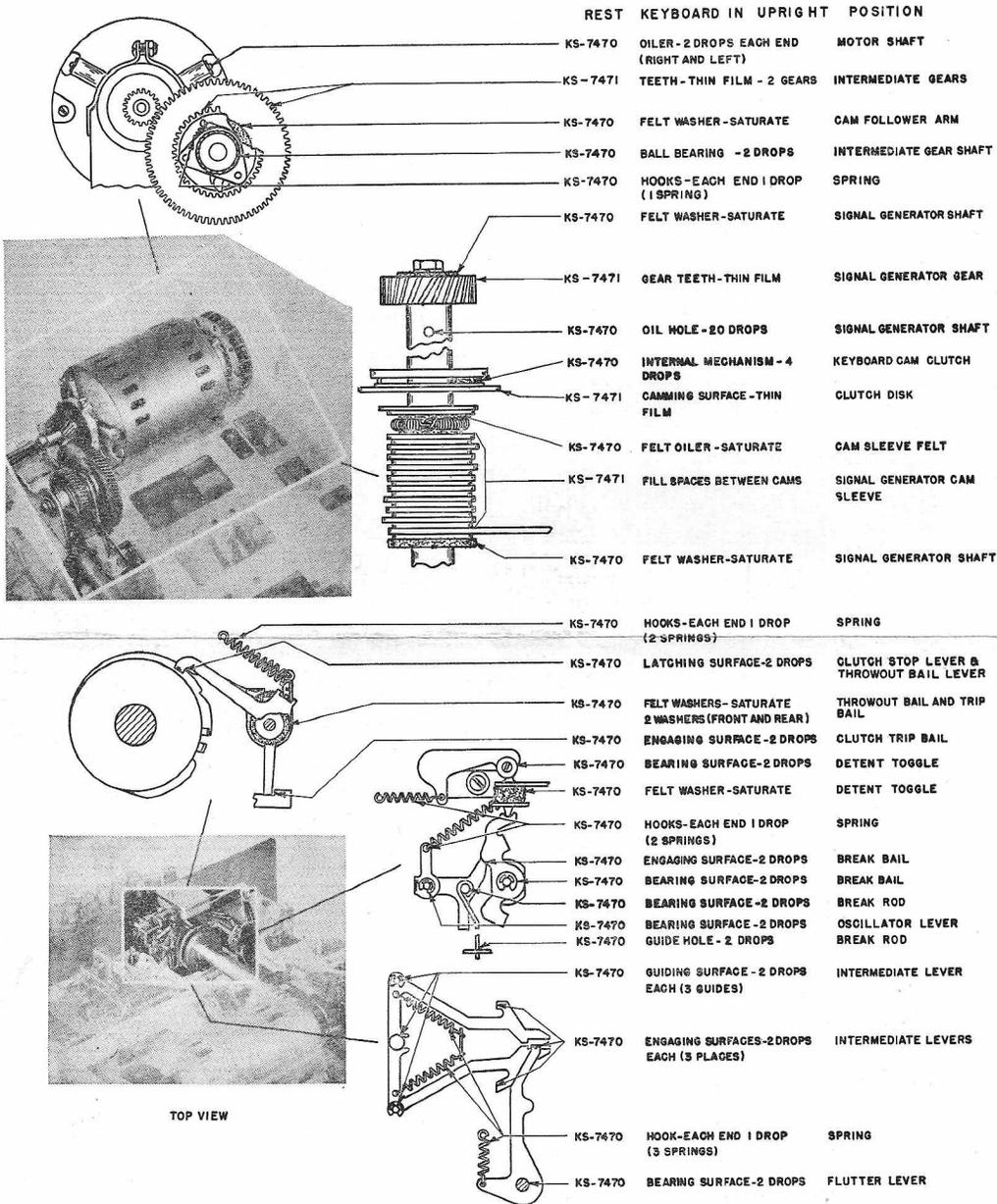
## REST KEYBOARD IN UPRIGHT POSITION



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

Fig. 3

# KEYBOARD

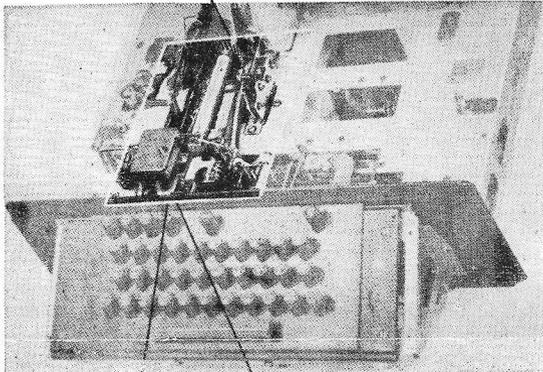
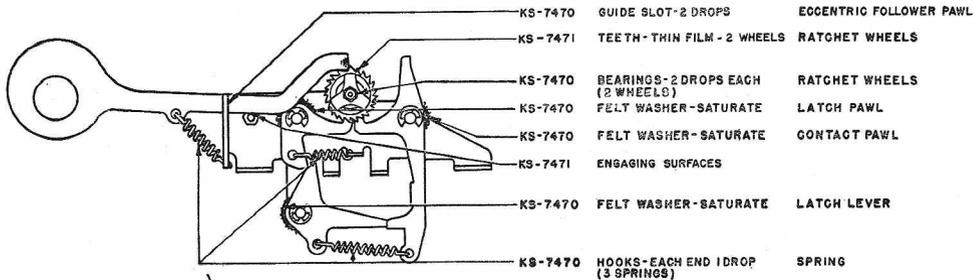


**CAUTION:** Wipe off excessive lubricant. Do not distort or disturb springs.

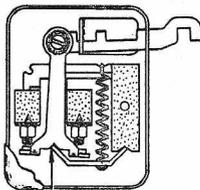
Fig. 4

# KEYBOARD

REST KEYBOARD IN UPRIGHT POSITION

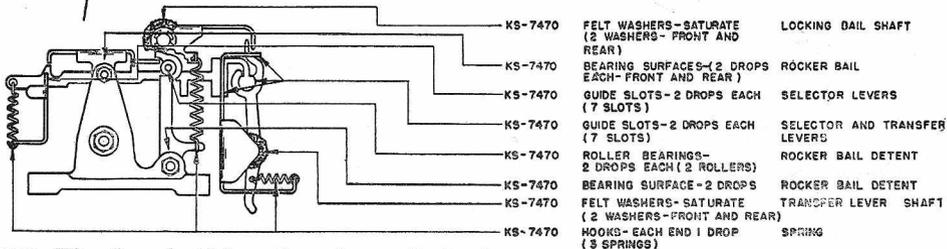


TOP VIEW



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

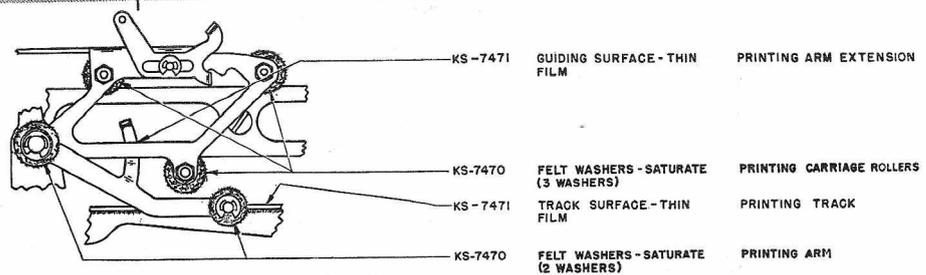
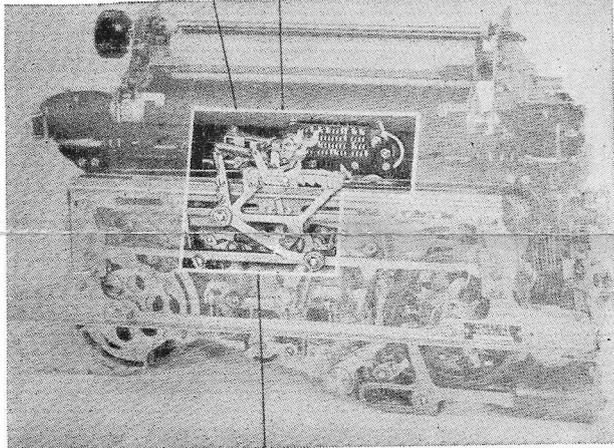
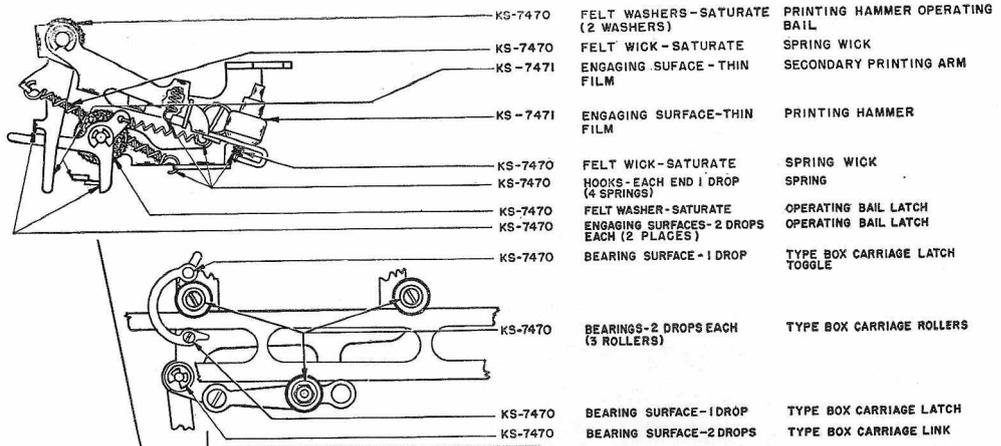
KS-7471 ENGAGING SURFACE-THIN FILM CONTACT TOGGLE



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

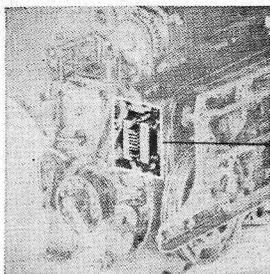
Fig. 5

TYPYR IN UPRIGHT POSITION



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

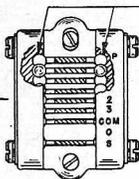
Fig. 6



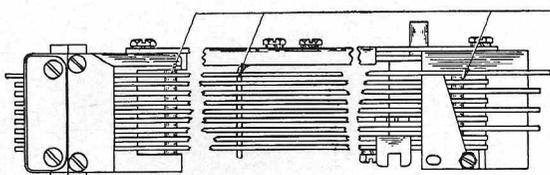
LEFT SIDE VIEW

REST

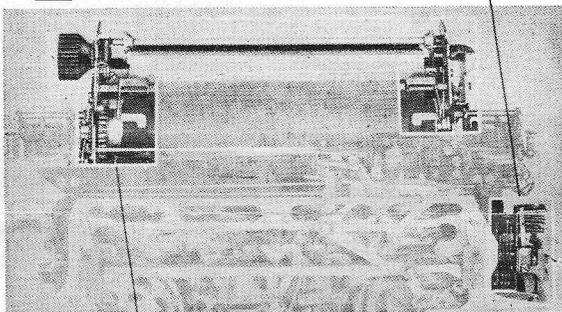
TYPER IN UPRIGHT POSITION



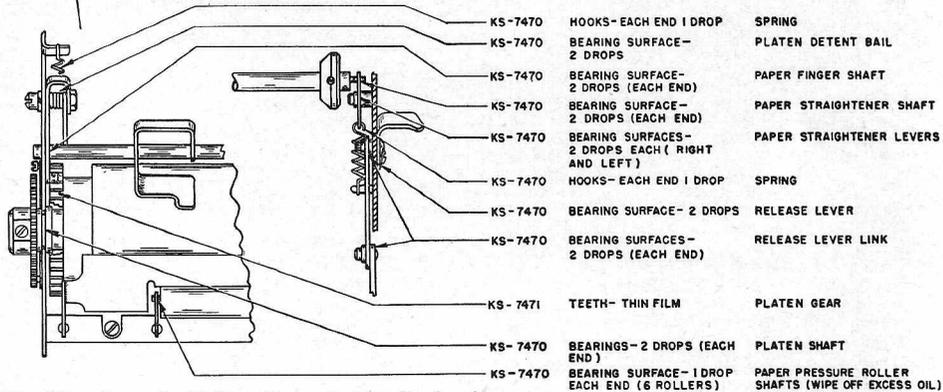
KS-7470

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)

PAPER STRAIGHTENER LEVERS

KS-7470

BEARING SURFACES -  
2 DROPS EACH (RIGHT  
AND LEFT)

PAPER STRAIGHTENER LEVERS

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-7470

BEARING SURFACES -  
2 DROPS (EACH END)

RELEASE LEVER LINK

KS-7470

BEARING SURFACES -  
2 DROPS (EACH END)

RELEASE LEVER LINK

KS-7470

BEARING SURFACES -  
2 DROPS (EACH END)

RELEASE LEVER LINK

KS-7471

TEETH - THIN FILM

PLATEN GEAR

KS-7470

TEETH - THIN FILM

PLATEN GEAR

KS-7470

TEETH - THIN FILM

PLATEN GEAR

KS-7470

BEARINGS - 2 DROPS (EACH  
END)

PLATEN SHAFT

KS-7470

BEARINGS - 2 DROPS (EACH  
END)

PLATEN SHAFT

KS-7470

BEARINGS - 2 DROPS (EACH  
END)

PLATEN SHAFT

KS-7470

BEARINGS - 2 DROPS (EACH  
END)

PLATEN SHAFT

KS-7470

BEARINGS - 2 DROPS (EACH  
END)

PLATEN SHAFT

KS-7470

BEARINGS - 2 DROPS (EACH  
END)

PLATEN SHAFT

KS-7470

BEARINGS - 2 DROPS (EACH  
END)

PLATEN SHAFT

KS-7470

BEARINGS - 2 DROPS (EACH  
END)

PLATEN SHAFT

KS-7470

BEARINGS - 2 DROPS (EACH  
END)

PLATEN SHAFT

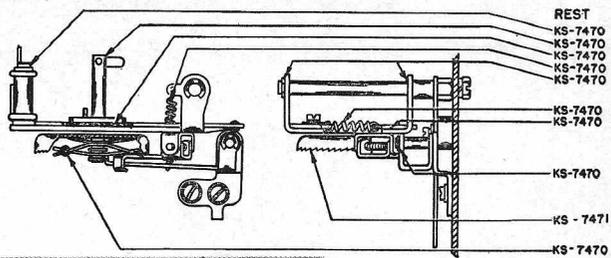
KS-7470

BEARINGS - 2 DROPS (EACH  
END)

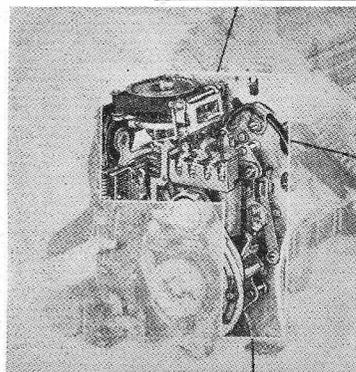
PLATEN SHAFT

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

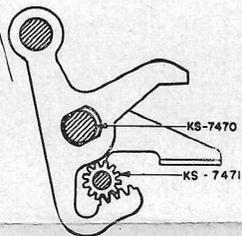
Fig. 7



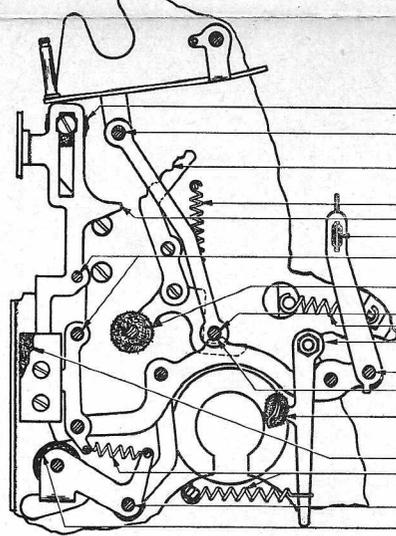
- |           |  |                          |
|-----------|--|--------------------------|
| REST      | TYPYR IN UPRIGHT POSITION                  |                          |
| KS-7470   | BEARING SURFACE - 2 DROPS                  | RIBBON ROLLER SHAFT      |
| KS-7470   | BEARING SURFACE - 1 DROP                   | RIBBON SPOOL TOGGLE      |
| KS-7470   | FELT WASHER - SATURATE                     | RIBBON SPOOL SHAFT       |
| KS-7470   | HOOKS - EACH END 1 DROP                    | SPRING                   |
| KS-7470   | BEARING SURFACES - 2 DROPS EACH (2 PLACES) | RIBBON FEED LEVER BAIL   |
| KS-7470   | HOOKS - EACH END 1 DROP                    | SPRING                   |
| KS-7470   | BEARING SURFACE - 1 DROP                   | RIBBON REVERSE LEVER     |
| KS-7470   | BEARING SURFACES - 2 DROPS EACH (2 PLACES) | RATCHET FEED LEVER SHAFT |
| KS - 7471 | TEETH - THIN FILM                          | RIBBON RATCHET WHEEL     |
| KS-7470   | HOOKS - EACH END 1 DROP                    | SPRING                   |



RIGHT SIDE VIEW



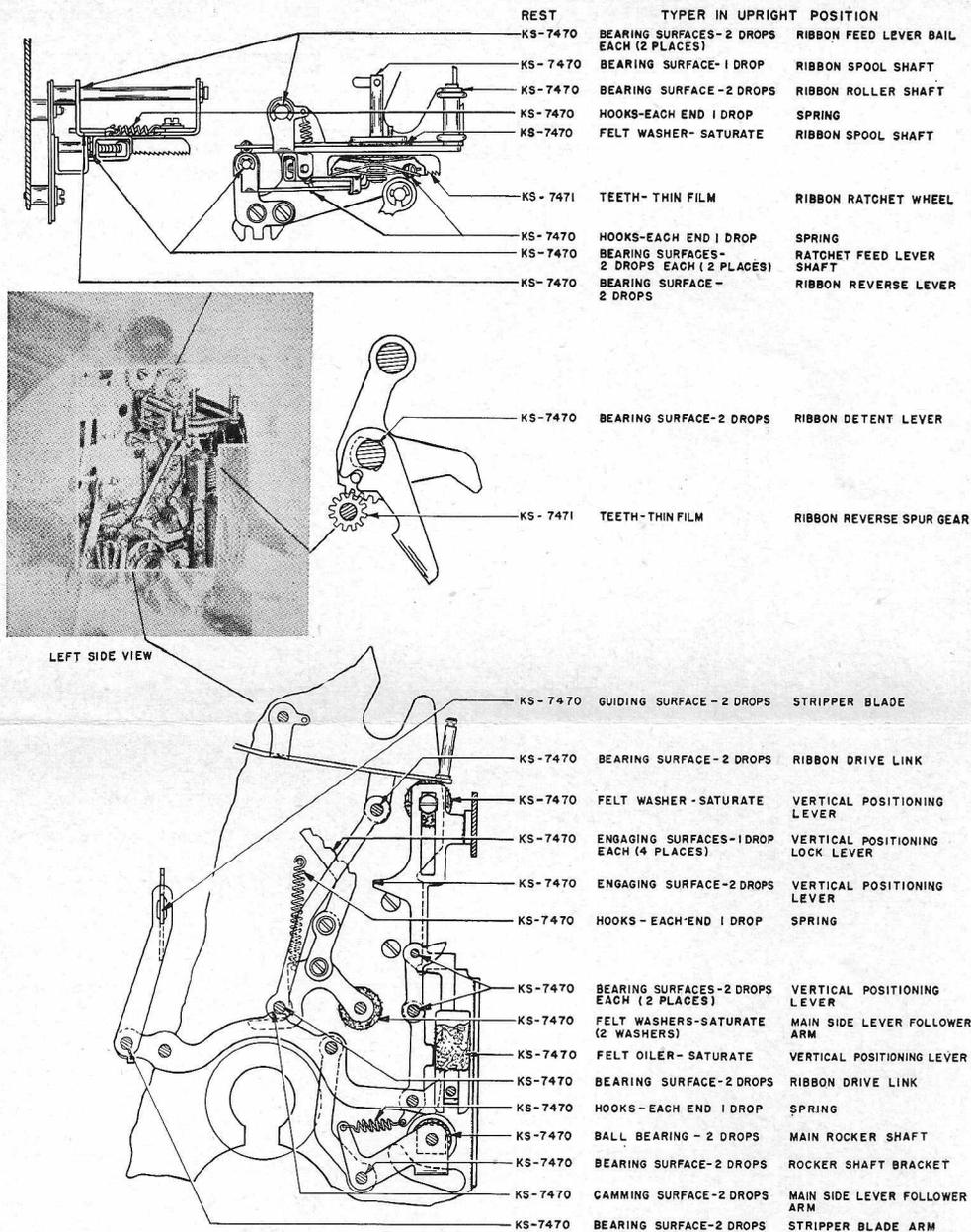
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|-----------|---------------------------|--------------------------|
| KS-7470   | BEARING SURFACE - 2 DROPS | RIBBON DETENT LEVER      |
| KS - 7471 | TEETH - THIN FILM         | RIBBON REVERSE SPUR GEAR |



- |         |  |  |
|---------|--|--|
| KS-7470 | FELT WASHER - SATURATE                     | VERTICAL POSITIONING LEVER                           |
| KS-7470 | BEARING SURFACE - 2 DROPS                  | RIBBON DRIVE LINK                                    |
| KS-7470 | ENGAGING SURFACES - 1 DROP EACH (4 PLACES) | VERTICAL POSITIONING LOCK LEVER                      |
| KS-7470 | HOOKS - EACH END 1 DROP                    | SPRING   |
| KS-7470 | ENGAGING SURFACE - 2 DROPS                 | VERTICAL POSITIONING LEVER                           |
| KS-7470 | GUIDING SURFACE - 2 DROPS                  | STRIPPER BLADE                                       |
| KS-7470 | BEARING SURFACES - 2 DROPS EACH (2 PLACES) | VERTICAL POSITIONING LEVER                           |
| KS-7470 | FELT WASHERS - SATURATE (2 WASHERS)        | MAIN SIDE LEVER FOLLOWER ARM                         |
| KS-7470 | BEARING SURFACE - 2 DROPS                  | RIBBON DRIVE LINK                                    |
| KS-7470 | HOOKS - EACH END 1 DROP                    | SPRING   |
| KS-7470 | BEARING SURFACE - 2 DROPS                  | CODE BAR CLUTCH TRIP SHAFT OPERATING LEVER           |
| KS-7470 | BEARING SURFACE - 2 DROPS                  | STRIPPER BLADE ARM                                   |
| KS-7470 | ENGAGING SURFACE - 2 DROPS                 | MAIN SIDE LEVER FOLLOWER ARM                         |
| KS-7470 | FELT WASHER - SATURATE                     | CODE BAR CLUTCH TRIP SHAFT OPERATING LEVER EXTENSION |
| KS-7470 | FELT OILER - SATURATE                      | VERTICAL POSITIONING LEVER SPRING                    |
| KS-7470 | HOOKS - EACH END 1 DROP (2 SPRINGS)        |  |
| KS-7470 | BEARING SURFACE - 2 DROPS                  | ROCKER SHAFT BRACKET                                 |
| KS-7470 | BALL BEARING - 2 DROPS                     | MAIN ROCKER SHAFT                                    |

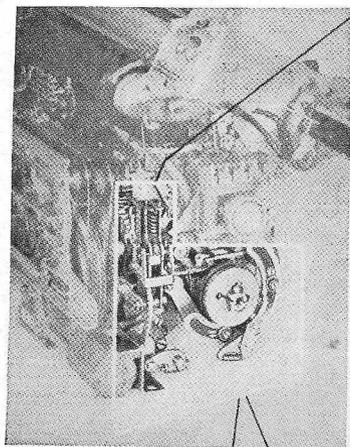
CAUTION: Wipe off excessive lubricant. Do not distort or disturb springs.

Fig. 8

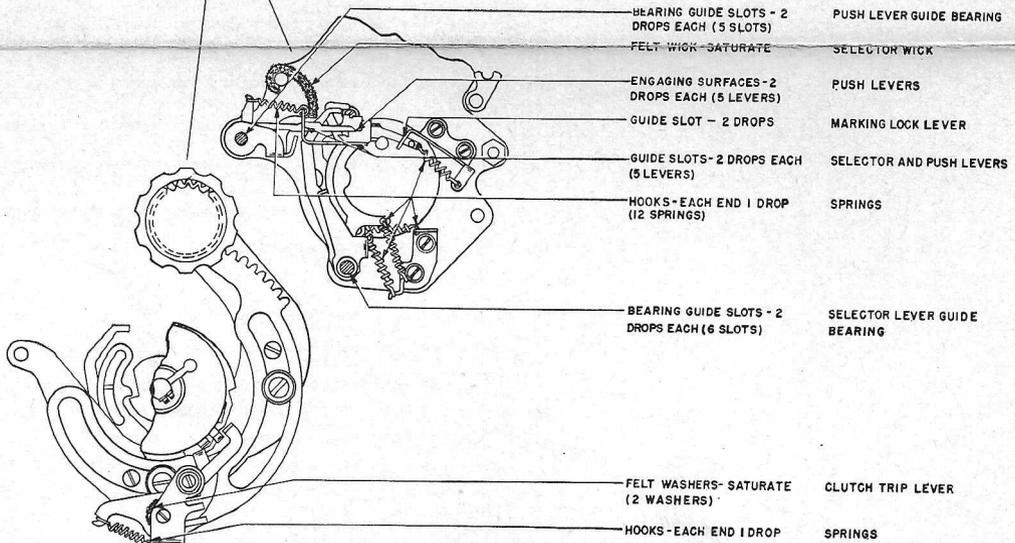
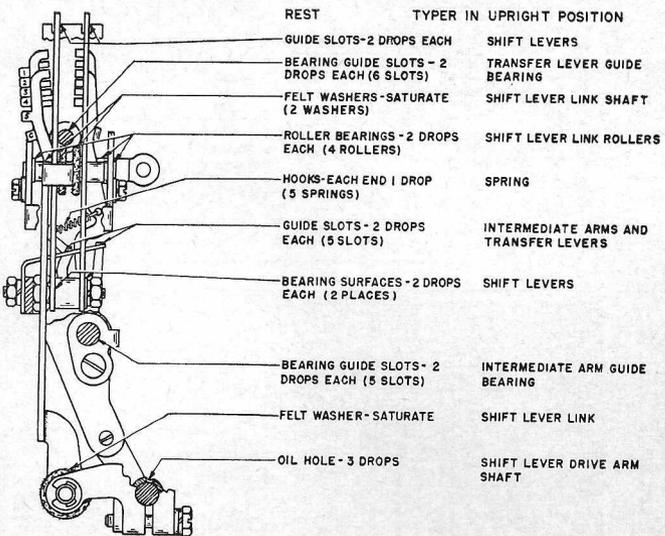


**CAUTION:** Wipe off excessive lubricant. Do not distort or disturb springs.

Fig. 9

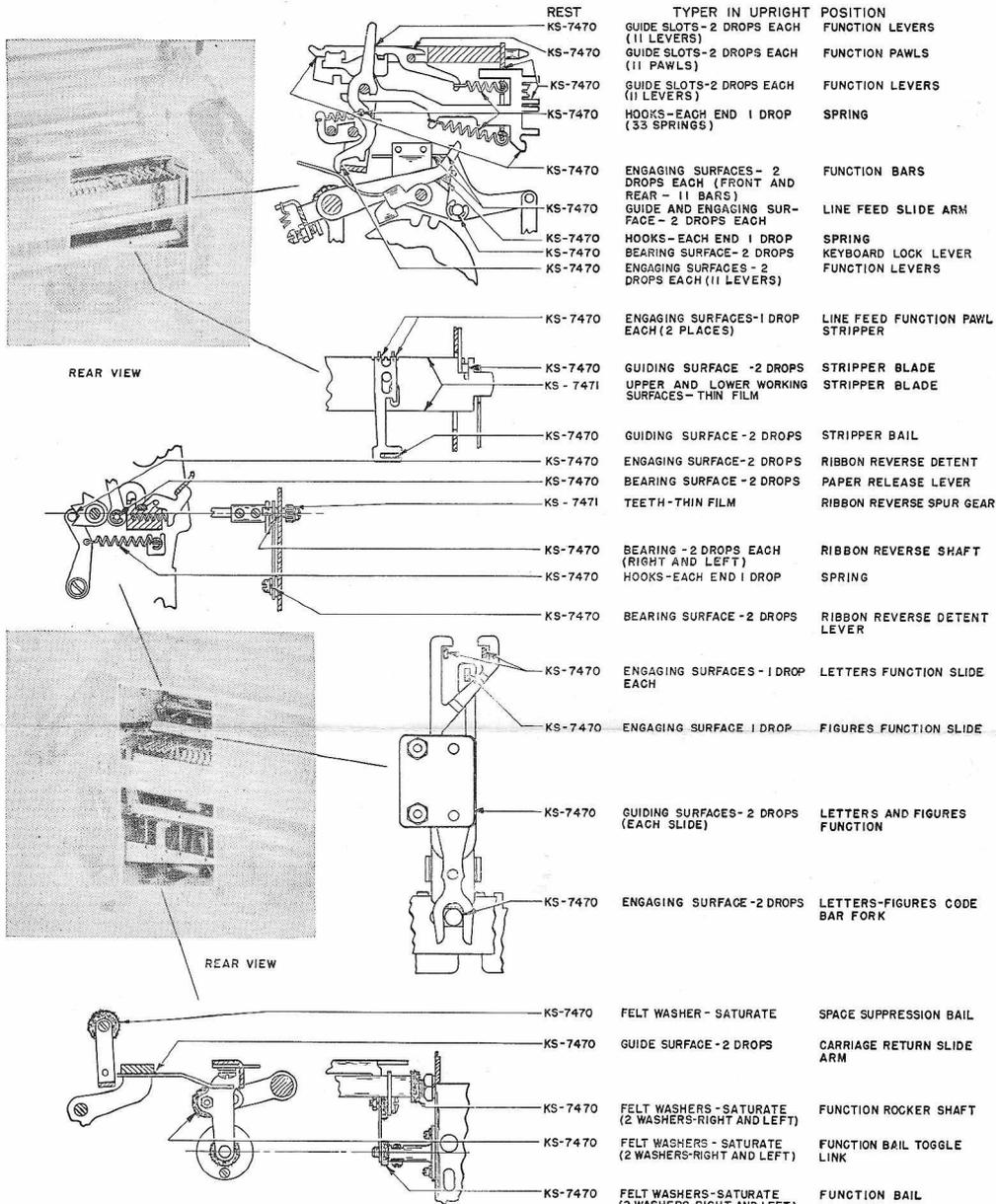


RIGHT SIDE VIEW



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

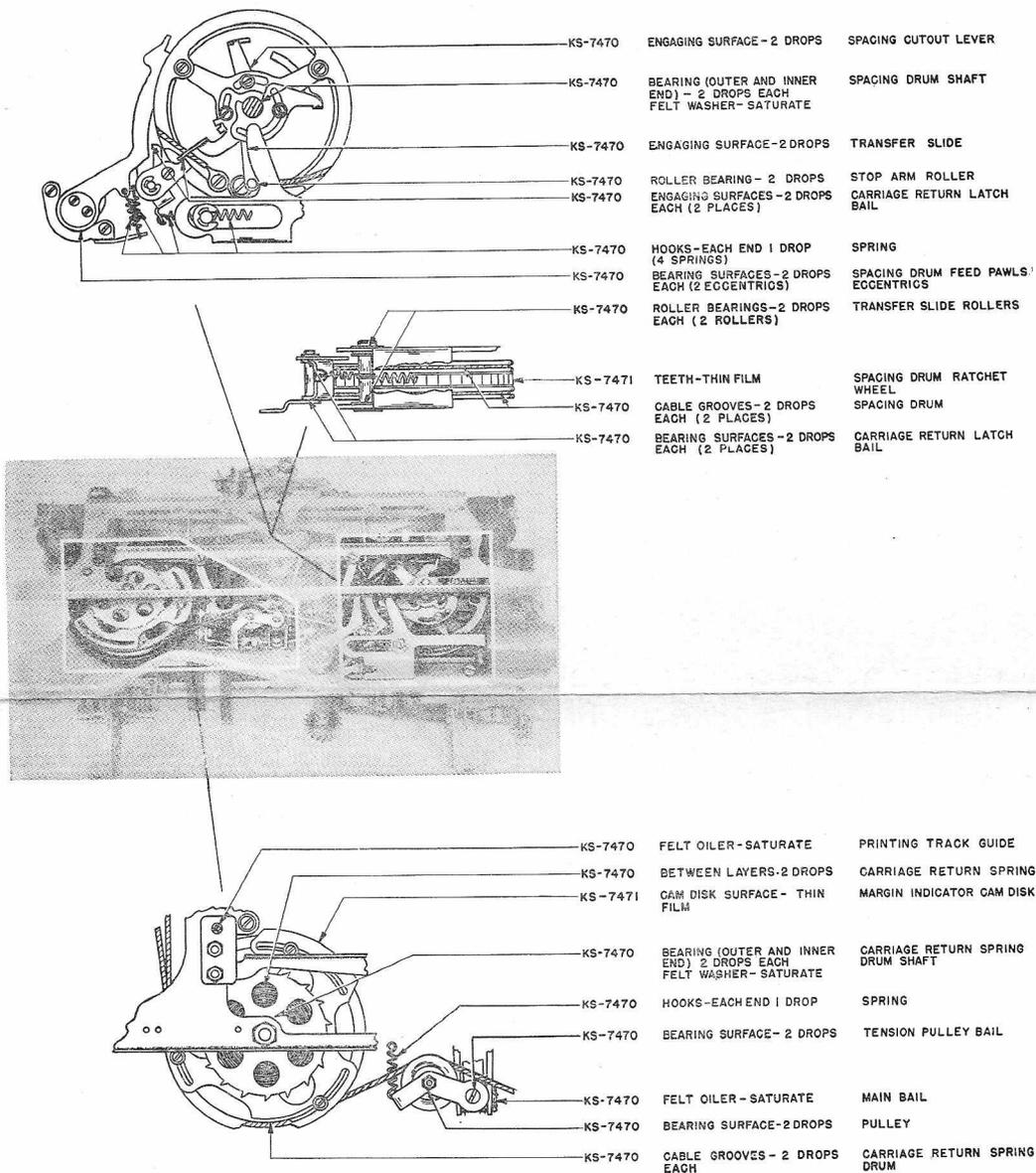
Fig. 10



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

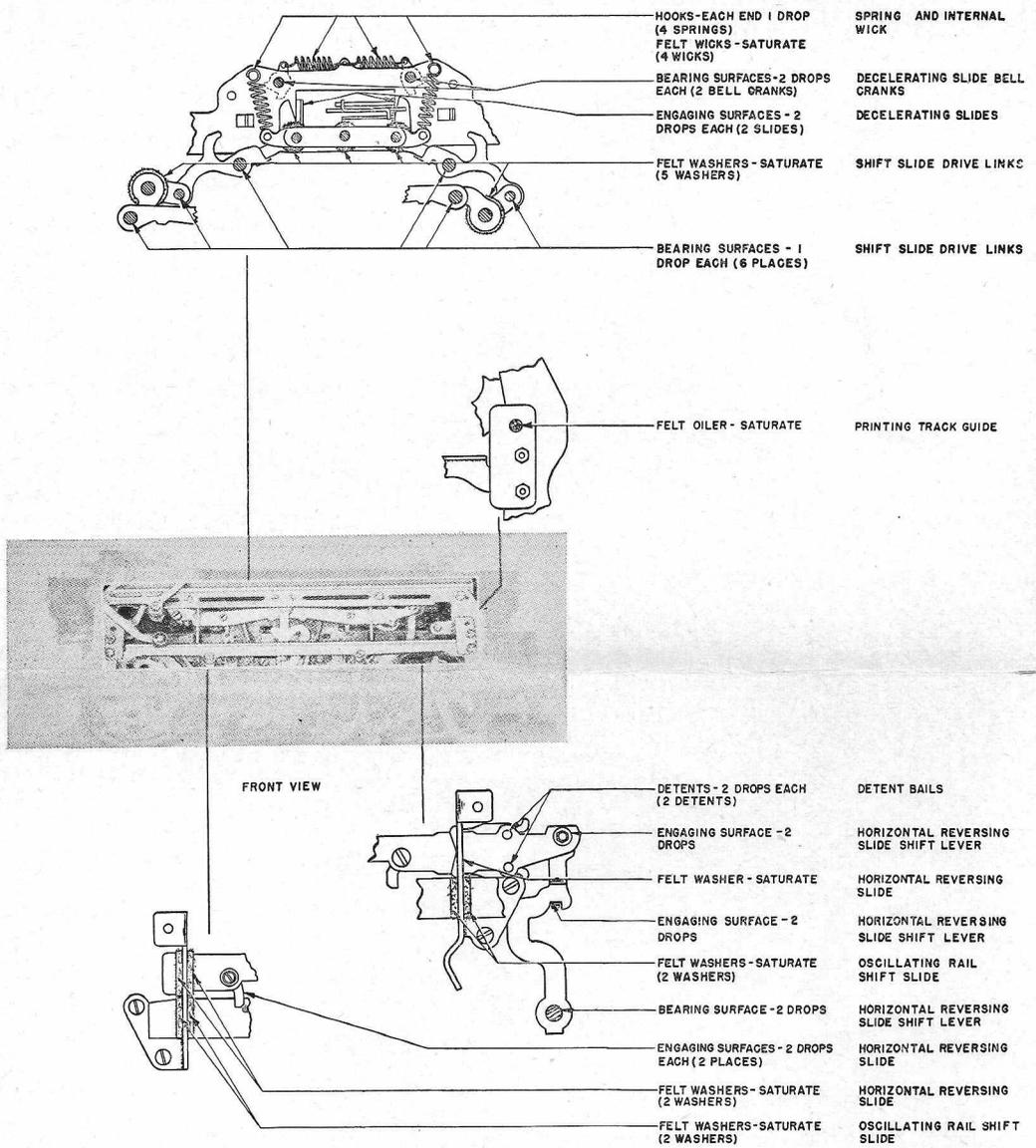
Fig. 11

## REST TYPYR 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

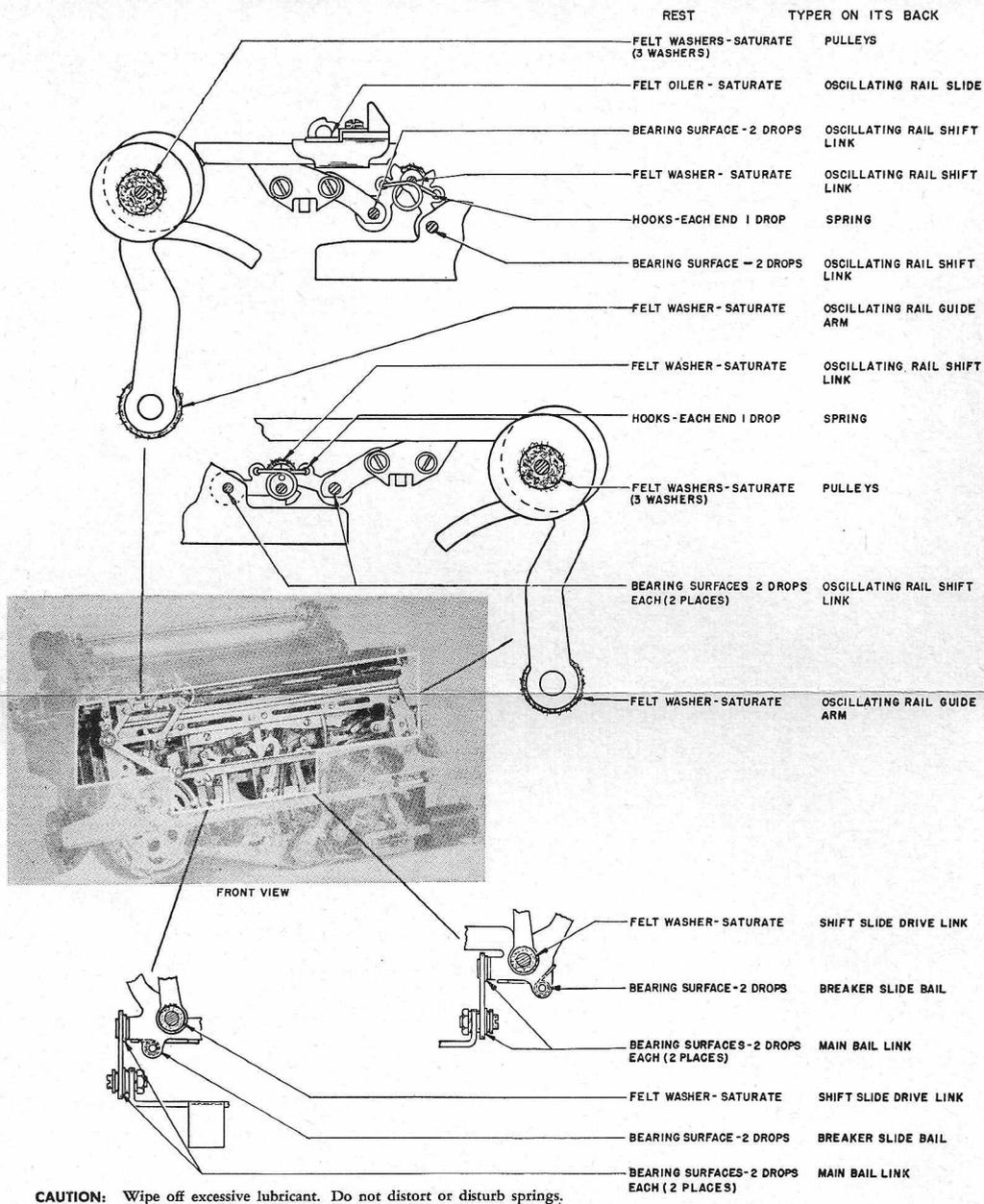
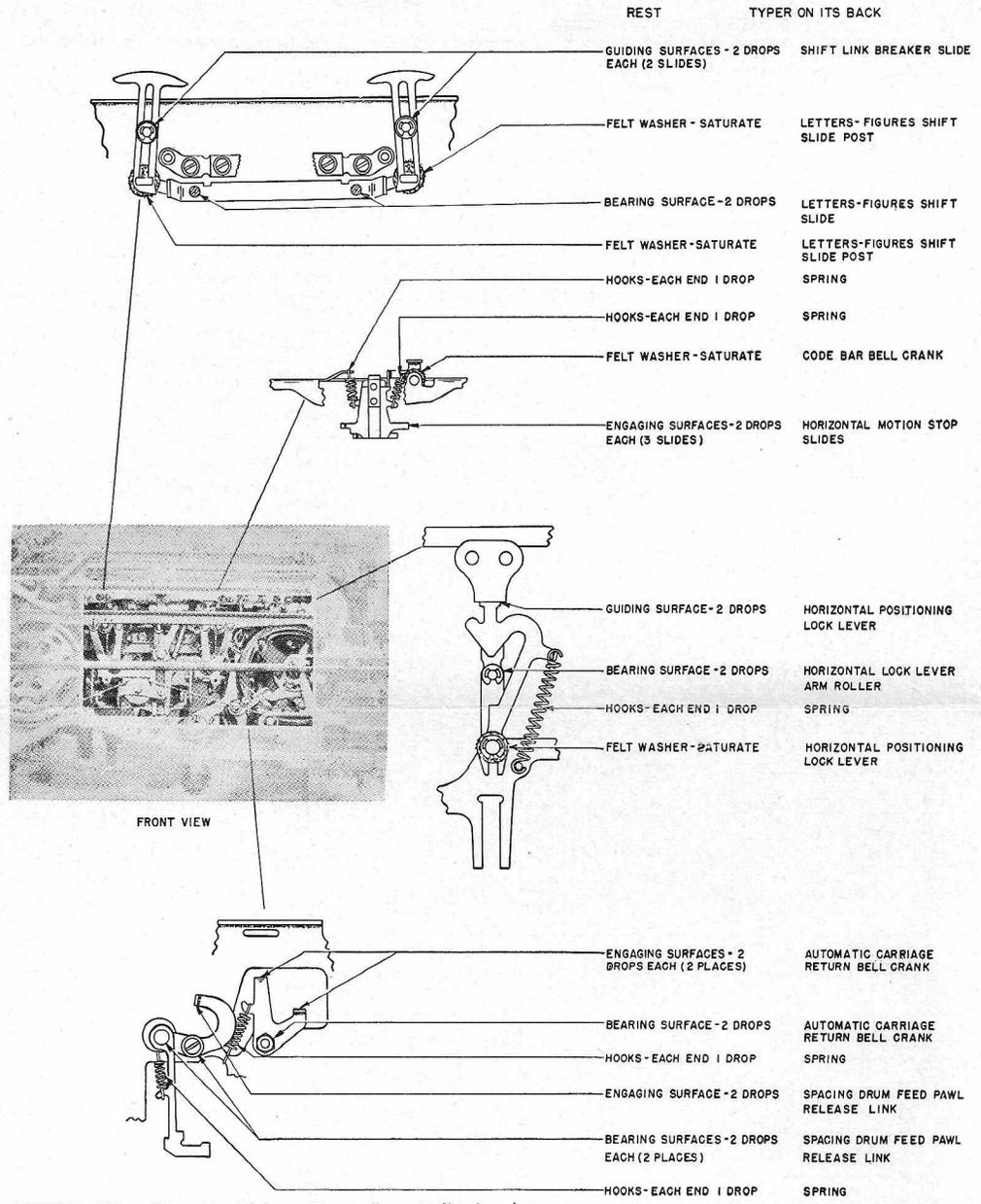
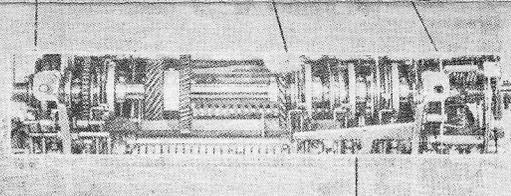
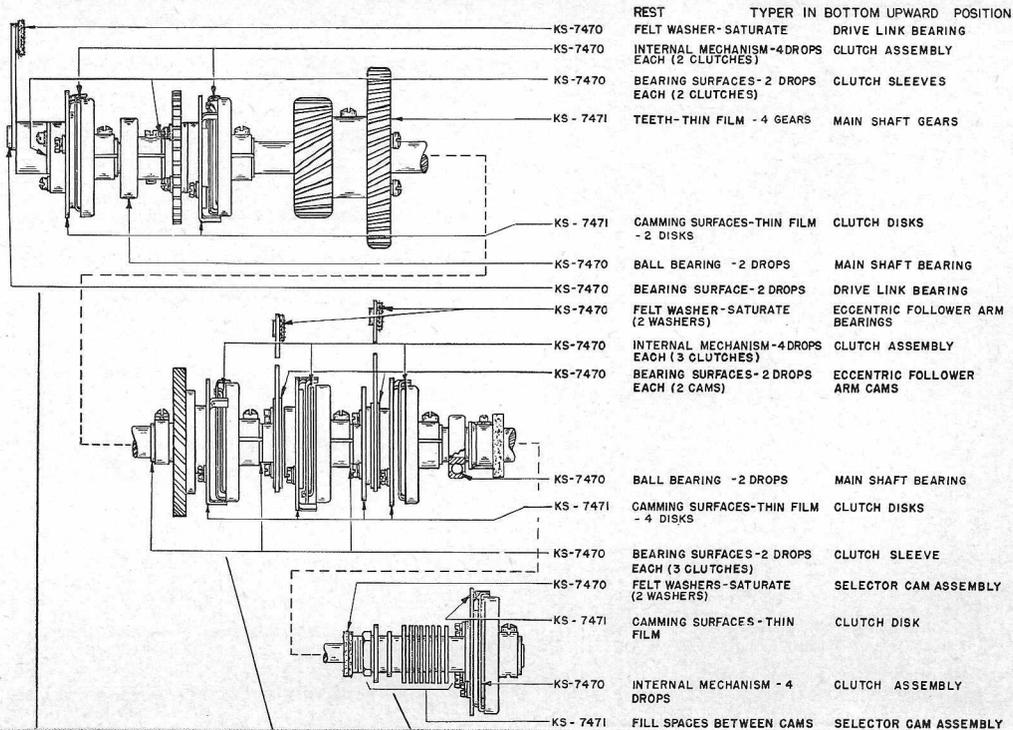


Fig. 14

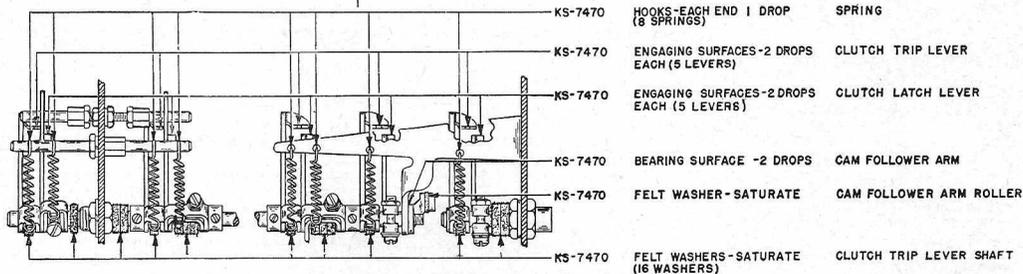


**CAUTION:** Wipe off excessive lubricant. Do not distort or disturb springs.

Fig. 15



BOTTOM VIEW

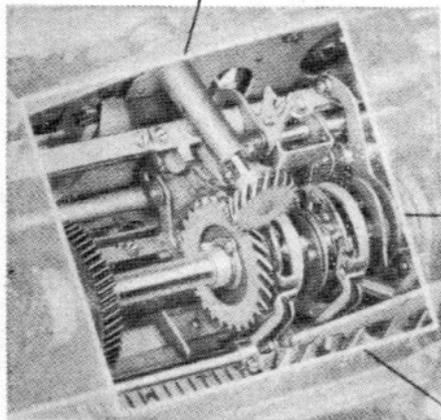
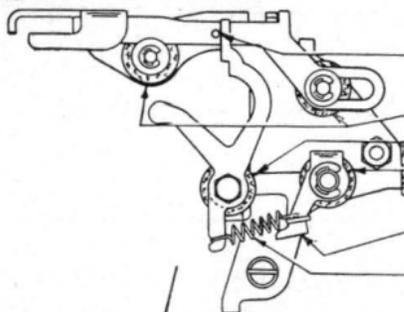


CAUTION: Wipe off excessive lubricant. Do not distort or disturb springs.

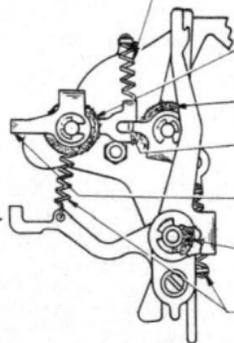
Fig. 16

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

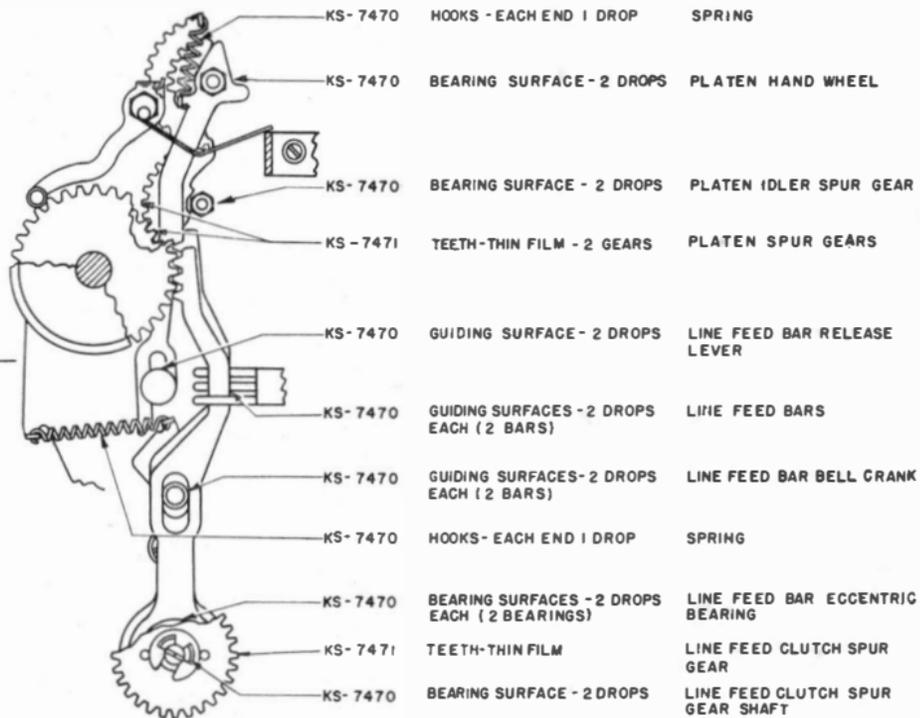


Fig. 17B

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