## BELL SYSTEM PRACTICES Plant Series

## 14 TRANSMITTER-DISTRIBUTOR

## LUBRICATION

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## 1. GENERAL

1.01 This section contains the lubrication procedures for 14 transmitter-distributors and their auxiliary features.

1.02 This section is reissued to add the lubrication instructions for four additional modification kits and to bring up to date the lubrication instructions for the 14 transmitterdistributor.

1.03 The lubricants to be used and their methods of application are those specified in the section covering general lubrication of teletypewriter apparatus. The lubrication symbols used herein are the same as those given in the general section except that, in this section, the symbol O is used to mean only one drop of oil, O2 to mean two drops of oil, and G to mean that a thin film of grease should be applied at the points indicated.  1.04 For information on lubricating the motor unit refer to the section covering the detailed lubrication procedures for motor units.
 2. PARTS TO BE LUBRICATED
 2.01 Transmitten distributors Equipped with a

2.01 Transmitter-distributors Equipped with a  $\frac{Friction Clutch}{Friction Clutch}$  shall be lubricated as follows:

SAT and Apply Coat of Grease	Clutch felt washers
0	Main-shaft bearings
0	Operating lever bearing (oil hole which runs between top of base casting and operating lever bear- ing)
0	Tight-tape or auto-stoplever shaft bearings
0	Contact-lever bail bearings
0	Contact-lever bearings
0	Feed-pawl bearings
0	Feed-lever bearings
0	Feed-wheel bearings
0	Detent-lever bearings
0	Detent-roller bearings
0	Retaining lid bearings
OGO	Stopcam: Periphery of cam
OGO	<ul> <li>Stoparm:</li> <li>(a) Bearings</li> <li>(b) End of arm at point of engage- ment with cam</li> </ul>
G	Motor pinion
G	Main-shaft gear teeth

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- G Operating cam: Periphery of cam
   O Helical springs (that exert a nominal tension of less than 2-1/2 pounds): Loops
- G Helical springs (that exert a nominal tension of 2-1/2 pounds or more): Loops
- G Operating lever adjusting screw: Head of screw
- G Governor spark-protection contact assembly (TP86960 on units with ac-governed motors): Engaging surface of bakelite buffer.
- O Bell-on-blank contact operating lever bearing
- OS End-of-tape stop-contact pin: At guide bracket
- G (Use Motor bearing lubrication holes greasegun) (2)
- G Long contact spring: Engaging surface of bakelite buffer
- $\begin{array}{c} \textbf{2.02} \quad \underline{\text{Transmitter-distributors Equipped with}}\\ \underline{\text{an All-steel Clutch}} \text{ shall be lubricated as}\\ \textbf{follows:} \end{array}$ 
  - O4 Clutch: Internal mechanism
  - OGO Latchlever bearings
  - OGO Stoplever:
    - (a) Bearings
    - (b) End of lever at point of engagement with shoe-release lever
    - (c) Camming surface
  - SAT Clutch-drum bearing felt oiler
  - G Clutch disc: Periphery of disc
  - GO Armature lever:
    - (a) End of armature lever
    - (b) Armature bearing
  - G Armature retractive spring: Entire length

- 2.03 <u>Torn Feed-hole Tape-stop Mechanism</u> shall be lubricated as follows:
  - O Feed-roll shaft: Both ends
    - Feed-roll: (a) Ratchet (b) Gear

G

- O Detent lever
- O Detent roller
- O Idler-gear shaft: (a) Both sides of gear (b) End of shaft
- O Feed wheel: Both sides
- O Feed-wheel spring clutch
- O Feed-wheel shaft: Both ends of block
- O Reset wheel: Both sides
- O Reset-wheel spring clutch
- G Contact operating arm: (a) Cam (b) Gear
- O Contact operating arm shaft: Both sides of block
- O Retaining lid:
  - (a) Each end
    - (b) Latch
- 2.04 Single-step Tape-feed-Suppression Mechanism shall be lubricated as follows:
  - G Restoring blade: Upper edge
  - G Restoring lever: Stepped end
  - G Nonrepeat lever: Step
  - G Tripoff lever: Step
  - G Tripoff latch: Projection which extends between the nonrepeat lever and the tripoff lever
  - G Feed latchlever: Tooth
  - G Tape feed-pawl extension: Contact surface

- 2.05 Tape-stop Magnet Contact Assembly shall be lubricated as follows:
  - G Bakelite tip: Contact surface

<u>Note:</u> To prevent sticking of the end-of-tape contact pin, remove excess oil at position of its guide.

- 2.06 <u>Tape-feed Withhold Mechanism</u> shall be lubricated as follows:
  - GS Armature bearing
  - O Feed-lever bearing
  - O Feed-pawl bearing
  - G Feed-pawl upper and lower engaging surfaces
- $\begin{array}{ccc} \textbf{2.07} & \underline{\text{Tape Feed-wheel Release Modification Kit}}_{for use on 14 transmitter-distributor} \\ equipped with an end-of-tape stop contact shall \\ be lubricated as follows: \end{array}$ 
  - O Tape-release lever bearing

- O Tape feed-pawl pin extension
- G Release-lever detent spring: At point of contact

<u>CAUTION:</u> DO NOT LUBRICATE END-OF-TAPE STOP PIN OR PIN GUIDE.

- 2.08 <u>Modification Kit to Convert End-of-tape</u> <u>Stop Contact Assembly from a BREAK to</u> <u>a BREAK-MAKE Type</u> shall be lubricated as follows:
  - OS End-of-tape stop contact pin: At guide bracket
  - O Switch-operating lever stud

2.09 <u>14AA, AB, ABM, and AD Transmitterdistributors</u> shall be lubricated in the same way as the other coded 14 transmitterdistributors. In addition, Dixon's 677 Graphite Gear Lubricant shall be liberally applied to the two felt lubricant retainers of the stoparm, to the stoplug, to the latching surfaces at the lefthand end of the stoparm, and to the armature retractive spring throughout its length.