28 KEYBOARD, BASE, COVER, AND MOTOR

FOR COMPACT KSR AND RO TELETYPewriter SETS

LUBRICATION

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1. GENERAL

1.01 This section is issued to provide lubrication instructions for the keyboard, base, cover, and motor used on the 28 Compact Keyboard Send-Receive and Receive-Only Teletypewriter Sets.

1.02 The general lubrication areas are illustrated by photographs. The specific points to receive lubricant are indicated by line drawings with text, which follow the photographs. The drawings are keyed to the photographs by paragraph numbers. Figure 1 illustrates the general location of the major mechanisms to be lubricated. When lubricating the Receive-Only base, use Paragraphs 2.15 through 2.19 which are applicable to both the keyboard and base units.

Note: References made to left or right, top or bottom, and front or rear apply to the mechanism in its normal operating position as viewed by the operator facing the unit.

1.03 All felt lubricating washers and all moving surfaces should be thoroughly lubricated. However, over lubrication which would allow oil to drip or grease to be thrown on other parts should be avoided. Exercise special care to avoid getting oil or grease on electrical contact surfaces.

1.04 Lubricate the base or keyboard, motor, and cover before putting the set into service or before placing it in storage. After a short period of service, relubricate the set to
make certain that no areas have been missed. Thereafter, lubricate the mechanisms and units according to the following schedules:

(a) Keyboard Transmitter Mechanism (Par. 2.01 through Par. 2.10)

<table>
<thead>
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<th>Baud</th>
<th>Lubrication Interval</th>
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<tr>
<td>45.5, 50.0</td>
<td>1000 hr or 1 yr*</td>
</tr>
<tr>
<td>74.2, 75.0</td>
<td>500 hr or 6 mo*</td>
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*Whichever occurs first.

(b) Motor Unit

Lubricate the motor unit every 4 months or 1500 hours, whichever occurs first.

(c) All Other Mechanisms and Units

<table>
<thead>
<tr>
<th>Baud</th>
<th>Lubrication Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>45.5</td>
<td>3000 hr or 1 yr*</td>
</tr>
<tr>
<td>50.0</td>
<td>2400 hr or 9 mo*</td>
</tr>
<tr>
<td>74.2, 75.0</td>
<td>1500 hr or 6 mo*</td>
</tr>
</tbody>
</table>

*Whichever occurs first.

1.05 The following list of symbols apply to the specific lubrication instructions given in each paragraph.

D  Keep dry - no lubricant permitted.
G  Apply thin coat of grease.
O  Apply 1 drop of oil.
O2  Apply 2 drops of oil.
O3  Apply 3 drops of oil, etc.
OS  Oil sparingly (1 or 2 drops only).
OSD Oil sparingly or leave dry.
OSL Oil sparingly or liberally.
SAT Saturate with oil.

# Applies to all areas not contacted by other parts.

CAUTION: DO NOT CLEAN THE KEYBOARD CONTACT BLOCK WITH SOLVENTS.

1.06 Use KS-7470 oil at all locations where the use of oil is indicated. Use KS-7471 grease on all surfaces where grease is indicated.

Figure 1 - Keyboard with Motor Unit and Time Delay Mechanism
2. BASIC UNITS

KEYBOARD

2.01 Keyboard Transmitter Mechanism - Guide Plate Removed - Front Top View

2.02 Keylevers

D Top Surface  Keytops and Keytop Guide Plate
OSD Guide Slots  Frame
OSL Contact Surface  Codebars
(RIGHT SIDE VIEW)  Keylever Springs
2.03 Spacebar

(RIGHT SIDE VIEW)

OSL Contact Surfaces (5) Space Lever
OSD Surface Engaging Codebars Keylevers
OSL Seat (Each End) Springs (2)

2.04 BREAK and REPT Keylevers

(RIGHT SIDE VIEW)

OSL Contact Surfaces Keylevers
OSL Seat (Each End) Springs
OSL Contact Point REPT Keylever

2.05 Contact Block

CAUTION: DO NOT CLEAN THE KEYBOARD CONTACT BLOCK WITH ALCOHOL, MINERAL SPIRITS, OR OTHER SOLVENTS.

OSD Engaging Surfaces T-Levers (6)
D Contact Surface Contact Wires (6)
D Springs Contact Wires (7)
D Contact Surface Contact Wires (7)
OSL Seat (Each End) Springs (2)
2.06 Latchlever

G Holes (Each End)  Latchlever Spring

OSL Pivot  Latchlever and Nonrepeat Lever

G Camming Surface  Nonrepeat Lever

G Hooks (Each End)  Nonrepeat Spring

2.07 Reset Bail

G Contact Surface  Universal Lever

OS Pivots (2)  Reset Bail

OSD Camming Surface  Reset Bail

OSL Hooks (Each End)  Link Spring

2.08 Codebar Mechanism

OSD Pivots  T-Levers (13)

OS Pivots (3 Each Lever)  T-Levers (13)

G Camming Surface  Universal Extension

OSL Contact Surface  Universal Link

OSL Hooks (Each End)  Link Spring
2.09 Universal Lever

- O4 Felt Washers (2) Universal Lever
- OSL Engaging Surfaces Universal Lever
- OSL Hooks (Each End) Spring

2.10 Solenoid Reset Mechanism

- G Pivot Solenoid Plunger
- G Slots (2) Front and Rear Guide Slots
- G Engaging Surface Reset Lever
- SAT Felt Washers (2) Reset Shaft
2.11 Distributor Mechanism - Front Right View

2.12 Cam Follower and Contact Levers

- O Hooks (Each End) | Spring (8)
- G Pivot Points (8) | Contact Lever
- G Camming Surface (8) | Cam Follower
- G Pivot Points (8) | Contact Lever
- O Hooks (Each End) | Spring (8)
- O Bearing Surfaces (8) | Cam Follower
- O Flats (Each End) | Compression Spring (8)
2.13 Cam Sleeve

- O4 Internal Mechanism
- SAT Felt Washers (9)
- O4 Oilers (2)
- G Teeth
- O2 Cam (11)

Clutch: Cam Assembly
Cam Shaft: Idler and Drive Gears
Cam Sleeve

2.14 Clutch Trip Magnet Assembly

- SAT Felt Washers (2)
- SAT Felt Wick
- O Hooks (Each End)
- SAT Felt Washer
- G Stop Surface
- G Cam Surface
- O Hooks (Each End)

Armature Hinge
Spring
Trip Lever Shaft
Clutch Trip Lever
Clutch Latch Lever
Clutch Disc
Spring
2.15 Gear Shift Assembly - Front Left View

2.16 Gear Shift Linkage

SAT  Felt Washer  Shift Collar

G  Pivot Points  Shift Link
2.17 Gear Assembly

G Gears (4)                      Drive Shaft
SAT Felt Washer                  Idler Shaft
G Gears (4)                      (KSR Only)
G Gears (2)                      Idler Shaft
SAT Felt Washers (6)             (KSR Only)
                                Idler Shaft
                                Variable Speed
                                Shaft

2.18 Local Carriage Return Mechanism

G Pivot Points (2)               Bail
O Spring (Each End)              Bail
G Pivot Point                    Bail

2.19 Local Line Feed Mechanism

G Pivot                        Trip Link
G Pivot                        Lever
G Pivot                        Bail
O Spring (Each End)             Trip Link

2.20 Margin Indicator Switch

G Pivot                        Lever
O Spring (Each End)             Lever
2.21 Motor Unit - Front View

2.22 Motor Lubrication Points

Note: Apply 6 drops of oil in one oiler at each end of the motor.
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COVER

2.23  Cover Unit - Front Left View

2.24  Cover Latch Mechanism

[Diagram showing parts 2.24, 2.25, 2.26, 2.27, labeled O Spring (Each End), Pivot, Latch (2)]
2.25 Dome Stop Arm

2.26 Window Door Hinge

2.27 Dome Hinge
3. VARIABLE FEATURES
TIME DELAY MECHANISM

3.01 Time Delay Mechanism - Front Right View

3.02 Trip and Reset Mechanism

- G Teeth
- SAT Felt Washer
- SAT Felt Washer
- O Spring (Each End)
- O2 Bearing (Each End)
- O Spring (Each End)
- SAT Felt Washer
- Ratchet Wheels
- Trip Pawl
- Latchlever
- Trip Pawl
- Ratchet Wheel Shaft
- Latchlever
- Contact Pawl
3.03 Cam Follower and Feed Mechanism

- SAT  Felt Washer (2)  Follower Lever
- O    Spring (Each End)  Follower Lever
- O    Spring (Each End)  Feed Pawl
- O2   Bearing  Cam Follower