32 AND 33 TAPE READER

LUBRICATION

CONTENTS PAGE

1. GENERAL .......................... 1

2. BASIC UNIT ........................ 2

Armature shaft ........................ 4
Clutch trip area ....................... 6
Control mechanism ..................... 5
Feed pawl mechanism .................. 5
Feed wheel ............................ 4
Tape lid mechanism .................... 6
Tape reader ........................... 2
Tape reader mechanism ............... 3
Tight-tape mechanism ................. 4
Trip magnet mechanism - 1 ........... 7
Trip magnet mechanism - 2 ........... 7
Trip magnet mechanism - 3 ........... 8

1.04 Lubricate the tape reader before placing it into service or prior to storage. After a short period of service, relubricate it to make sure no areas have been missed. Thereafter, lubricate the tape reader at regular intervals as indicated below:

<table>
<thead>
<tr>
<th>Operating Speed (Words per Minute)</th>
<th>Lubrication Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 or 66</td>
<td>1000 hr* or 1 yr**</td>
</tr>
<tr>
<td>100</td>
<td>500 hr* or 6 mo**</td>
</tr>
</tbody>
</table>

*Station Set operating hours.
**Whichever comes first.

1.05 The textual instructions that accompany the line drawings consist of abbreviated directions, specific lubrication points, and parts affected. The meanings of the abbreviated directions (symbols) are given below:

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>Keep dry - no lubricant permitted</td>
</tr>
<tr>
<td>G</td>
<td>Apply thin coat of KS7471 Grease</td>
</tr>
<tr>
<td>GOL</td>
<td>Brush on well a mixture of 50% KS7471 Grease and 50% KS7470 Oil</td>
</tr>
<tr>
<td>L</td>
<td>Apply a thin coat of 108805 Grease</td>
</tr>
<tr>
<td>OL</td>
<td>Oil liberally (3 or more drops)</td>
</tr>
<tr>
<td>OS</td>
<td>Oil sparingly (1 or 2 drops only)</td>
</tr>
<tr>
<td>OSD</td>
<td>Oil sparingly or leave dry**</td>
</tr>
<tr>
<td>OSL</td>
<td>Oil sparingly or liberally</td>
</tr>
</tbody>
</table>

**Applies to all areas not contacted by other parts.
1.06 References to "left," "right," "front," or "rear," etc consider the tape reader to be viewed from a position where the feed wheel faces up and the lid latch is to the viewer's right. Orientation references in the clutch trip area consider the armature extension to be facing up with the contact bracket pry points located to the viewer's right.

CAUTION: DO NOT USE ALCOHOL, MINERAL SPIRITS, OR OTHER SOLVENTS TO CLEAN PLASTIC PARTS OR PARTS WITH PROTECTIVE - DECORATIVE FINISHES. NORMALLY, A SOFT, DRY CLOTH SHOULD BE USED TO REMOVE DUST, OIL, GREASE OR OTHERWISE CLEAN PARTS OR SUBASSEMBLIES. IF NECESSARY, A SOFT CLOTH DAMPENED WITH SOAP OR MILD DETERGENT MAY BE USED. AFTERWARDS, RINSE EACH CLEANED PART OR SUBASSEMBLY WITH A SOFT, DAMP CLOTH AND BUFF WITH A SOFT, DRY CLOTH.

2. BASIC UNIT

2.01 Tape Reader

(LEFT FRONT VIEW)  (RIGHT REAR VIEW)
2.02 Tape Reader Mechanism

OSD  Shaft
GOL  Teeth
OSL  Engaging Surface
G    Pivot Point
OSD  Hooks (Each End)
G    Engaging Surface
OSD  Pivots (2)

Feed Wheel
Feed Wheel
Ratchet
Feed Pawl
Control Detent
Lever
Detent Lever
Spring
Detent Lever
Control Detent
Lever Shaft

Note: Dashed line (---) indicates configuration of control detent lever for readers with automatic reader control.

D*  Engaging Surface
GOL  Engaging Surface
OS   Hooks (Each End)
L    Contact Pivot
D    Hooks (Each End)
D    Contact Surface
GOL  Engaging Surface
OS   Hooks (Each End)
OS   Spring
D    Engaging Surface
GOL  Engaging Surface

Armature
Armature Pivot
Shaft
Armature Spring
Contact Wire
Contact Spring
Contact Wire
Insulator
Sensing Pin
Spring
Up-Stop Spring
Buffer
Sensing Pin

*Some oil leakage on this surface is permissible.
2.03 Feed Wheel

(TOP VIEW)

2.04 Armature Shaft

(TOP VIEW)

2.05 Tight-Tape Mechanism

(LEFT SIDE VIEW)
2.06 Feed Pawl Mechanism

- OSL: Pivot
- OSL: Pivot
- OS: Hooks (Each End)
- OSL: Pivot
- G: Engaging Surface
- OS: Hooks (Each End)
- OL: Pivot

Detent Lever Shaft
Feed Pawl Stud
Blocking Pawl Spring

(LEFT SIDE VIEW)

2.07 Control Mechanism

- D: Opening Sliding Surface
- OS: Hooks (Each End) Engaging Surface Sliding Surface
- G: Camming Surface
- L: Pivot

Top Plate Tape-Out Pin Guide
Tape-Out Pin Spring
Insulator Tape-Out Lever Guide
Tape-Out Lever Cam

(LEFT SIDE VIEW)

- D: Hooks (Each End) Camming Surface Contact Surface Pivot
- OL: Contact Wire
- D: Contact Wire Spring
- D: Control Lever Terminal
- D: Tape-Out Lever
2.08 Tape Lid Mechanism

2.09 Clutch Trip Area

2.11
2.10
2.12

(FRONT VIEW)

(LEFT SIDE VIEW)
2.10 Trip Magnet Mechanism - 1

(TOP VIEW)

(DIAGRAM)

2.11 Trip Magnet Mechanism - 2

(RIGHT SIDE VIEW)
2.12 Trip Magnet Mechanism - 3

OSL Engaging Surface
GOL Engaging Surface

OS Pivot

OS Hooks (Each End)

(RIGHT SIDE VIEW)

Reader Trip Lever
Reader Trip Lever
Reader Trip Lever
Reader Trip Lever Spring