

CHAPTER 2 OPERATION

2-1. INTRODUCTION. This chapter describes the operation of Model 28 CPP KSR and RO teletypewriter sets from a maintenance standpoint. Operation of a CPP teletypewriter set when installed as part of a system is covered in the appropriate system manual.

2-2. CONTROLS AND INDICATORS. CPP KSR and RO teletypewriter set controls and indicators are shown in figure 2-1 and briefly described in table 2-1. Controls applicable to both KSR and RO are indicated. All others apply to KSR only.

2-3. OPERATING PROCEDURES. Procedures for operating the CPP KSR and RO sets are provided in table 2-2. If abnormal indications are encountered, refer to Chapter 5 for troubleshooting information.

NOTE

If set is a low-level configuration, the proper switch on the associated electrical service assembly (ESA) must be operated to the appropriate position for turn-on and turn-off.

2-4. OPERATOR MAINTENANCE. Operator maintenance is limited to replacing paper and installing a new ribbon.

a. Installing Paper. To insert paper, proceed as follows:

(1) Insert spindle (supplied with typing unit) in a roll of paper.

(2) Mount spindle in spindle retainers so that paper unwinds from underneath.

(3) Route paper over straightener shaft, under platen, between paper fingers, and through opening between window door and dome.

b. Installing Ribbon. To thread ribbon, proceed as follows:

(1) Refer to figure 2-2.

(2) Remove both spools from ribbon spool shafts.

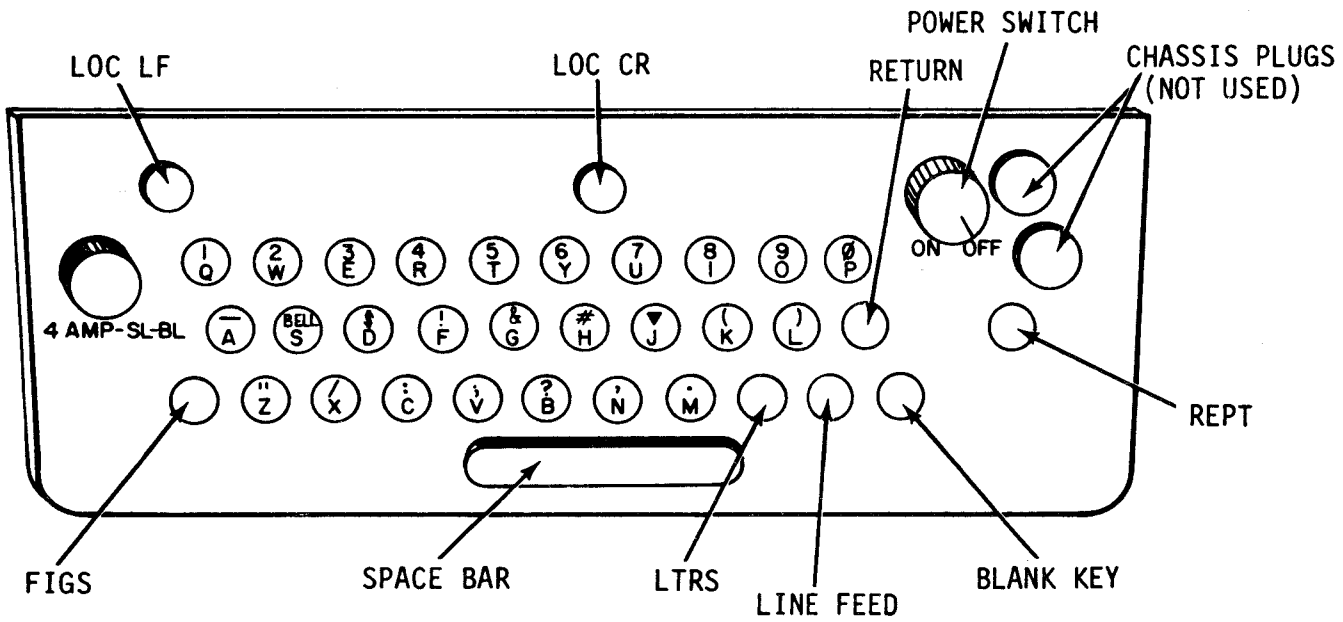
(3) Engage hook, on end of new ribbon, in hub of new spool.

(4) Wind a few turns of ribbon onto empty spool in same direction it comes off full spool.

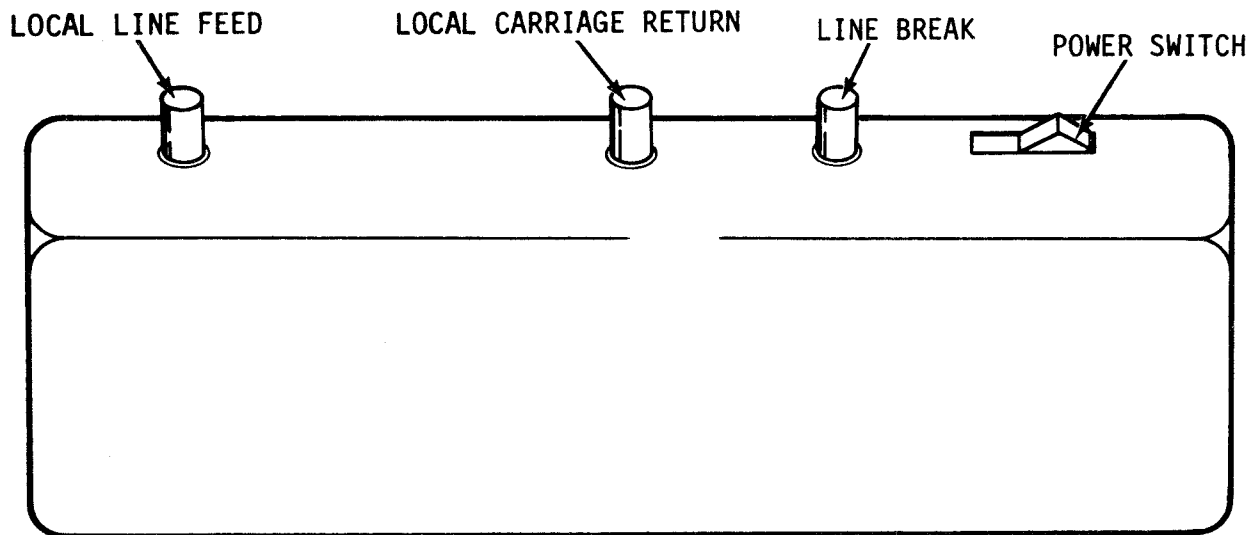
(5) Ensure that reversing eyelet has been wound up on empty spool.

(6) Place spools on spool shafts so that ribbon on right spool unwinds from right side and ribbon on left spool unwinds from left side without twisting.

(7) Thread ribbon around and through reverse lever slots.



KSR KEYBOARD



RO CONTROL HOOD

Figure 2-1. CPP (KSR and RO) Controls and Indicators

Table 2-1. Control and Indicator Functions

Control/Indicator	Function
4AMP-SL-BL fuse	Provides electrical circuit overload protection.
ON/OFF Switch (KSR and RO)	Applies primary ac power to motor unit and margin indicator circuit. Refer to paragraph 3-4 for additional power distribution information.
Function keys	When pressed, manually sets code bar mechanism to signal code combination for function selected. Signal code combination is photoelectrically distributed to signal line. Signal code is transmitted to local typing unit, for monitoring, and to remote typing unit. Signal code combination, received by typing units, activates mechanism corresponding to function selected.
FIGS key	Selects figures signal code combination. Figures shift function initiated at typing units. Results in positioning of type box, through related mechanisms, for printing of figures.
LTRS key	Selects letters signal code combination. Letters shift function initiated at typing units. Results in positioning of type box, through related mechanisms, for printing of letters.
RETURN key	Selects carriage return signal code combination. Carriage return function initiated at typing units. Results in returning printing type box carriage, through related mechanisms, toward left side of typing unit.
LINE FEED key	Selects line feed signal code combination. Line feed function initiated at typing units. Results in advancing platen, through related mechanisms, either one line or two lines depending on position of single-double line feed lever.
Local function keys (KSR and RO)	Linked directly to typing unit. Mechanically initiates functions normally initiated by signal code combination.

Table 2-1. Control and Indicator Functions - Continued

Control/Indicator	Function
LOC LF key	When pressed, operates line feed mechanism with same results as described for LINE FEED key.
LOC CR key	When pressed, operates carriage return mechanism with same results as described for RETURN key.
Character keys	When pressed, manually sets code bar mechanism to code combination for character selected. Signal code combination is photoelectrically distributed to signal line. Signal code is transmitted to local typing unit, for monitoring, and to remote typing unit. Signal code combination, received by typing units, activates printing mechanism to print letter or figure character selected, depending on which shift function has been previously selected.
REPT key	When pressed, together with any other key (except local function keys), causes repeated transmission of function or character selected.
Space Bar	Manually sets code bar mechanism to space signal code combination. Signal code combination received by typing unit activates spacing mechanism.
Margin indicator	Illuminates when typing unit carriage reaches preset end of line and activates margin indicator switch on base.
BAUD-45.5-50-74.2 selector switch	Selects operating speed of teletypewriter set. Manually operates gear shift assembly.
Break (blank) key (KSR and RO)	When pressed, interrupts signal line causing typing units to run "open."

Table 2-2. KSR Operating Procedures

Step	Action	Normal Indication
	<p>1. <u>Turn-On.</u> To turn on teletypewriter set, proceed as follows:</p>	
*a.	Ensure primary power cord is plugged in to ac outlet.	Copy light photoelectric lamps are illuminated.
*b.	Rotate ON/OFF switch to ON position.	Motor starts running.
	<p>2. <u>Operating Tests.</u> Check for proper operation of teletypewriter set as follows:</p>	
*a.	Press LOC CR key.	Type box carriage returns to left margin.
	<p style="text-align: center;">NOTE</p> <p>In following step, paper should advance approximately three times faster than when LINE FEED key is pressed repeatedly.</p>	
*b.	Press LOC LF key.	Paper advances and continues to advance as long as LOC LF key is held pressed.
c.	Press LTRS key and type several lines of test sentence "The quick brown fox jumps over the lazy dog."	Printing is accurate; spaced equally horizontally; vertically positioned evenly. Margin indicator operates properly.
d.	Press FIGS key and type.	Figures characters are printed.
e.	Press BELL(S) key repeatedly.	Bell rings clearly on single or repeated operations of BELL key.

*Applies to both KSR and RO.

Table 2-2. KSR Operating Procedures - Continued

Step	Action	Normal Indication
f.	Press LTRS key and type test sentence again.	Letters characters are printed.
g.	Press REPT key along with any other key (except local function keys).	Character prints or function occurs, repetitively.
h.	Press RETURN function key.	Type box carriage returns to left margin.
i.	Press LINE FEED key.	Paper advances one or two lines depending on position of single-double line feed lever (located inside).
<p>3. Turn off the teletypewriter set, proceed as follows:</p>		
*a.	Press LOC CR and LOC LF keys.	
*b.	Rotate ON/OFF switch to OFF.	Motor stops running.
<p style="text-align: center;">NOTE</p> <p>If set is to be secured for any length of time, unplug power cord or set primary power circuit breaker to off position.</p>		

*Applies to both KSR and RO.

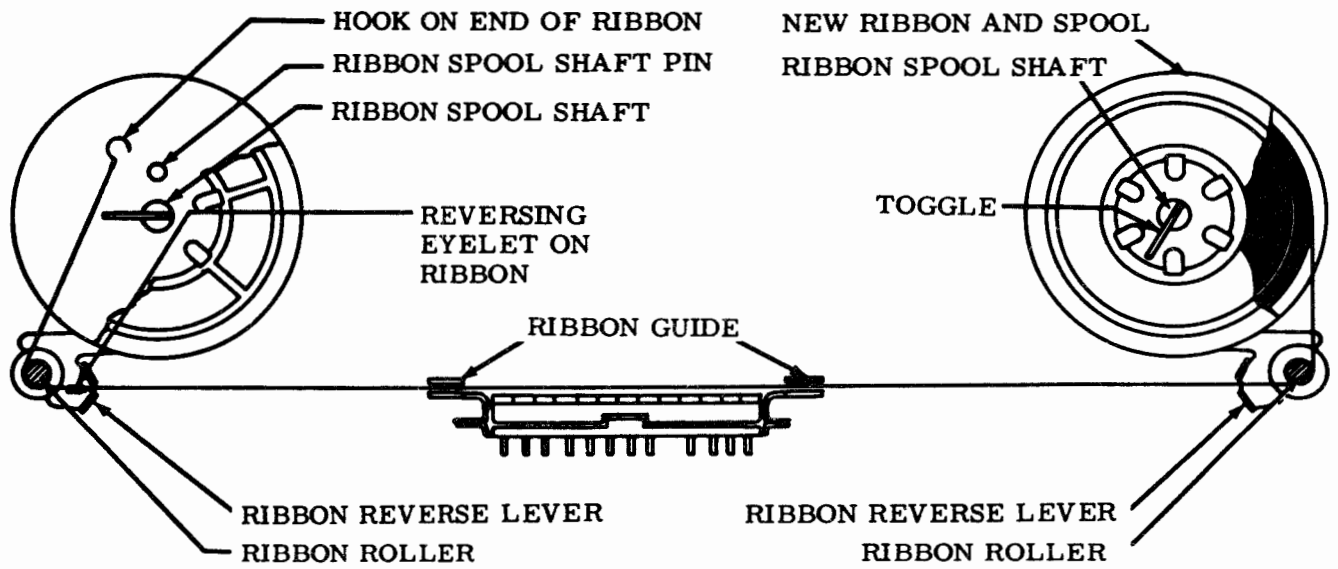


Figure 2-2. Path of Ribbon

