

43 KSR STATION

TESTING

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1. GENERAL

- 1.01 This section provides station testing information for the 43 KSR Station.
- 1.02 Whenever this section is reissued, the reason for reissue will be listed in this paragraph.
- 1.03 An installation checkout should be performed after installation to make sure the station is operable.
- 1.04 On trouble calls an installation checkout should be performed after trouble correction to make sure the station is operable and a trouble verification test should be performed under the direction of the test center to isolate specific troubles not covered in the installation test. After correction of a trouble the test may be confined to the specific area that was failing.
- 1.05 Following routine maintenance calls at a location, an installation checkout should be performed.

1.06 The checkout routines are presented in chart form with test conditions arranged in a specific sequence. A response is given to verify the test condition has passed.

1.07 Refer to Section 574-500-300 for Station Troubleshooting information.

1.08 If the indicated response is not obtained in any step of a test procedure, repeat the step to make sure that the procedure has been performed properly. If the results are still unsatisfactory refer to the Station Troubleshooting Section 574-500-300.

1.09 Always perform the tests in the order given. The Test Steps are based on satisfactory results of all previous steps.

PRELIMINARY CHECK

1.10 Before proceeding with the checkout procedure check the following:

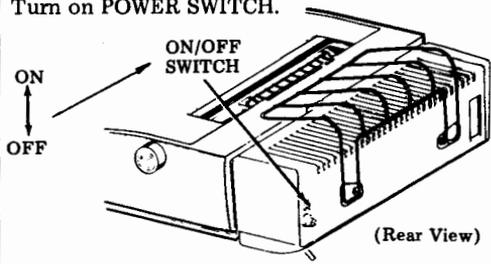
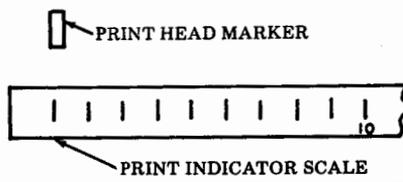
- (a) Is station connected to a properly grounded and polarized ac service?
- (b) Are all cable connectors fully seated?
- (c) Are printer paper and ribbon properly installed?

Note: All references to columns are after a one second delay, to allow the print head to index two character spaces to the right. The print head indicates next character to be printed.

1.11 On-line tests can be performed with test centers equipped with a 43 Teleprinter or equivalent using Section 668-130-500.

2. TESTING PROCEDURES

OFF-LINE TESTS (Installation and Trouble Call Checkout)

TEST	STEP	PROCEDURE	RESPONSE
Power On/Off	1.	Turn on POWER SWITCH.  (Rear View)	Print head is indexed to the left-hand margin. Printer performs (1) line feed. AUTO ANSW turns on.
	2.	 PRINT HEAD MARKER PRINT INDICATOR SCALE	Print head marker points to first mark on indicator scale.
Printer	3.	Hold PRINTER TEST key depressed until approximately eight lines are printed.	ALARM and LOCAL TALK turn on. Characters printed as in Fig. 3 Page 7. Bell rings at end of each line.
	4.	Release PRINTER TEST key.	ALARM turns off. Character printing stops.
Operator Console	5.	Depress RETURN and then LINE FEED key.	Print head is indexed to left-hand margin and indicates beginning of next line.
	6.	Place CAPS LOCK key in DOWN position. Starting with top row and moving from left to right, depress each unshaded key in Fig. 1.	Characters printed as in Fig. 4.
	7.	Depress RETURN and then LINE FEED key.	Print head is indexed to left-hand margin and indicates beginning of next line.
	8.	Depress and release CAPS LOCK key so it returns to UP position. Starting with top row and moving left to right, depress each unshaded key in Fig. 1.	Characters printed as in Fig. 5.
	9.	Depress RETURN and then LINE FEED key.	Print head is indexed to left-hand margin and indicates beginning of next line.

OFF-LINE TESTS (Cont)

TEST	STEP	PROCEDURE	RESPONSE
Operator Console (Cont)	10.	Hold left SHIFT key depressed and starting with top row and moving from left to right, depress each unshaded key in Fig. 2. Hold right shift key depressed and depress  key.	Characters printed as in Fig. 6.
	11.	Depress RETURN and then LINE FEED key.	Print head is indexed to left-hand margin and indicates beginning of next line.
	12.	Hold CTRL key depressed and depress key. 	SUB prints . .
	13.	Hold CTRL key depressed and depress key. 	Signal bell rings.
	14.	Hold CTRL key depressed and depress key. 	Print head moves one character position to the left.
	15.	Depress SPACE BAR.	Print head moves one character position to the right.
	16.	Depress BACK SPACE key.	Print head moves one character position to the left.
	17.	Depress LINE FEED key. Depress and hold REPT and  keys.	Print head indicates beginning of next line. Continuous Ks are printed until end of line is reached. Signal bell rings at end of line.
Cover Interlock	18.	Depress AUTO ANSW key. Raise cover.	AUTO ANSW goes off. LOCAL and ALARM turns on.
	19.	Close cover.	ALARM goes off.
Right Margin & Signal Bell	20.	Depress RETURN and the LINE FEED key.	Print head is indexed to left-hand margin and indicates beginning of next line.
	21.	Space print head to Column 125. Depress key. 	Signal bell operates as character b is being printed.
	22.	Depress SPACE BAR six times.	Signal bell does not operate. Print head moves six character position to the right.
	23.	Depress SPACE BAR two times.	Signal bell operates two times.

2.01 OFF-LINE TESTS (Cont)

TEST	STEP	PROCEDURE	RESPONSE
Margin Set and Clear	24.	Depress ESC and then  key. (ESC _x)	Print head is indexed to left-hand margin and indicates beginning of line.
	25.	Depress SPACE BAR nine times. Depress ESC and then  key. (ESC _L lower case.)	Print head moves to Column 10.
	26.	Space print head to Column 71. Depress ESC and then  key. (ESC _r) Depress RETURN key.	Print head moves to left margin (Column 10).
	27.	Depress BACK SPACE key.	Signal bell rings.
	28.	Space print head to Column 70. Depress SPACE bar.	Signal bell operates. Print head indicates Column 71.
	29.	Depress SPACE BAR.	Signal bell rings. Print head remains at Column 71.
	30.	Depress ESC and then  key. (ESC _x) Depress AUTO ANSW key.	Print head moves to Column 1. AUTO ANSW turns on.
Analog Test	31.	Place CPS key in UP position (30 CPS). Depress ESC key. Hold SHIFT key depressed and depress  key.	ALARM flashes. DATA turns on.
	32.	Depress and release PARITY key to UP position (PARITY ON). Place DUPLEX key in UP position (HALF-DUPLEX). Place CAPS LOCK key in DOWN position. Type the following: ANALOG Depress SPACE BAR.	AANNAALLOOGG is printed.
	33.	Place DUPLEX key in DOWN position (FULL DUPLEX). Type the following: TEST	TEST is printed.
	34.	Watch AUTO ANSW key, then hold CTRL key depressed and depress  key.	DATA and AUTO ANSW flash as EOT key is depressed.
	35.	Depress INTRPT key.	INTRPT turns on momentarily. Signal bell rings.

2.01 OFF-LINE TESTS (Cont)

TEST	STEP	PROCEDURE	RESPONSE
Analog Test (Cont)	36.	Depress RETURN and then LINE FEED key. Depress REPT and K keys. Hold down until two lines of Ks are printed.	Continuous Ks will be printed across entire line. Bell rings at end of line and automatic return and line feed will be performed. One printed line plus return will occur in approximately four seconds.
	37.	Place CPS key in DOWN position (10 CPS). Depress REPT and K keys. Hold down until two lines of Ks are printed.	Continuous Ks will be printed across entire line. Bell rings at end of line and automatic return and line feed will be performed. One printed line plus return will occur in approximately 14 seconds. First part of line (approx. 18 characters) will be printed at a faster rate of speed.
	38.	Remove the paper.	Signal Bell rings. ALARM remains on, stops flashing.
	39.	Depress LINE FEED key eight times.	DATA turns off. LOCAL-TALK turns on as 8th LINE FEED is sent.
	40.	Replace the paper.	ALARM flashes.
	41.	Depress DATA key.	DATA turns on. LOCAL-TALK turns off.
	42.	Depress ESC and then  key.	ALARM and DATA turn off. AUTO ANSW turns on.
	43.	Place CPS key in UP position (30 CPS). Place DUPLEX key in UP position (HALF-DUPLEX).	

This completes the OFF-LINE test of the 43 KSR Station. Proceed to the ON-LINE Testing Procedures found in 2.02.

ON-LINE TESTS (Installation Checkout)

TEST	STEP	PROCEDURE	RESPONSE
Full Duplex Send & Receive Data (Originating Station)	1.	With power on and AUTO ANSW lit, depress LOCAL-TALK key and place DUPLEX key in DOWN position (FULL DUPLEX). Place CAPS LOCK key in DOWN position. Depress RETURN and LINE FEED keys.	LOCAL-TALK lights.
	2.	Call Data Test Center and request a 43 Teleprinter test. Provide test center with phone number of station and operating speed. Agree that test center will call back after disconnect.	
	3.	When instructed by Data Test Center operator, go to DATA mode by depressing DATA key.	DATA turns on. LOCAL-TALK goes off.
	4.	Type the following message request on the operator console: SEND THE QUICK BROWN FOX TEST MESSAGE	Test message request will be received by the Data Test Center.
	5.	Data Test Center will send 'The Quick Brown Fox' test message ending with EOT.	'The Quick Brown Fox' test message will be printed. Station will disconnect. DATA goes off. AUTO ANSW goes on.
Automatic Answer	6.	Depress and release DUPLEX key so it returns to upper position. (HALF-DUPLEX)	Data Test Center will call station. Phone rings once. DATA turns on. AUTO ANSW goes off.
Half-Duplex Send & Receive Data (Answering Station)	7.	Test Center will send the following test message: NOW IS THE TIME FOR ALL GOOD MEN	Test message will be printed.
	8.	Depress the SPACE BAR. Send the following test message from the operator console: TO COME TO THE AID OF THEIR COUNTRY.	Printed copy at the station will be: NOW IS THE TIME FOR ALL GOOD MEN TO COME TO THE AID OF THEIR COUNTRY. Data Test Center will receive the test message sent from the operator console.
	9.	Test center will send TEST OK message if test was satisfactory and disconnect call. Test center will send GO TO TALK message if test was unsatisfactory. Pick up handset, depress LOCAL-TALK key and evaluate results.	Station will disconnect. AUTO ANSW goes on. DATA goes off.

This completes the ON-LINE test of the 43 KSR Station.

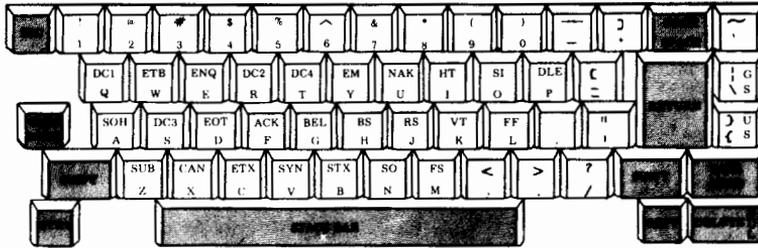


Fig. 1

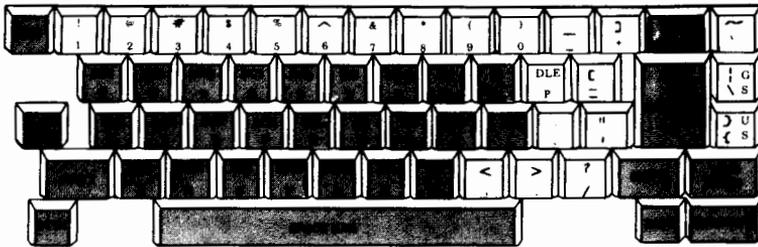


Fig. 2

Note: First line may start with any character.

```
lmnopqrstuvwxyz{;}
! " # $ % ^ & * ( ) = ~ ` _ abcdefghijklmnopqrstuvwxyz{;}~
! " # $ % ^ & * ( ) = ~ / 0 1 2 3 4 5 6 7 8 9 : ; < = > ? @ A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ \ ] ^ _ ` abcdefghijklmnopqrstuvwxyz{;}~
! " # $ % ^ & * ( ) = ~ / 0 1 2 3 4 5 6 7 8 9 : ; < = > ? @ A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ \ ] ^ _ ` abcdefghijklmnopqrstuvwxyz{;}~
! " # $ % ^ & * ( ) = ~ / 0 1 2 3 4 5 6 7 8 9 : ; < = > ? @ A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ \ ] ^ _ ` abcdefghijklmnopqrstuvwxyz{;}~
! " # $ % ^ & * ( ) = ~ / 0 1 2 3 4 5 6 7 8 9 : ; < = > ? @ A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ \ ] ^ _ ` abcdefghijklmnopqrstuvwxyz{;}~
! " # $ % ^ & * ( ) = ~ / 0 1 2 3 4 5 6 7 8 9 : ; < = > ? @ A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ \ ] ^ _ ` abcdefghijklmnopqrstuvwxyz{;}~
! " # $ % ^ & * ( ) = ~ / 0 1 2 3 4 5 6 7 8 9 : ; < = > ? @ A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ \ ] ^ _ ` abcdefghijklmnopqrstuvwxyz{;}~
```

Fig. 3

```
1234567890-+`qwertyuiop=\ASDFGHJKL;`ZXCvbnm,./
```

Fig. 4

```
1234567890-+`qwertyuiop=\asdfghjkl;`zxcvbnm,./
```

Fig. 5

```
!@#%&*^&()_J"PC!:"<>??
```

Fig. 6