INSTRUCTIONS FOR CONFIGURATION AND ASSEMBLY OF

FEATURE GROUPS AND KEYTOPS FOR THE 43 BUFFERED

TELEPRINTERS USED IN THE BELL SYSTEM

1. GENERAL

1.01 The 43 Teleprinter Buffered Sets consist of standard units and components, except that the controllers are not equipped with application program cards.

1.02 The addition of an application program card (circuit card portion of feature group) from a stock of several variations of feature groups, provides an operable set for a specific service.

1.03 Only a few 43 Teleprinter Buffered Sets consequently need to be stocked, with the various feature groups giving a multiplicity of arrangements to meet user's needs. Arrangements may be made up as required per USOC service order.

1.04 To provide a variety of keyboard arrangements, only the most common sets of keytops are furnished on the keyboards of the stocked sets. Other operable arrangements are supplied by substituting different keytops from designated set of parts.

1.05 A set is not operable until equipped with the application program card. The application program card is a "piggyback" plug-in to the large circuit card in the set controller. Although self-test features for major components are operable before the set is completely assembled, they are intended for use during trouble analysis of assembled sets and are specified in the appropriate service manual. However, controller self-test procedures are shown in this specification, Page 9 to assure the feature group card is properly assembled.

Note: When ordering replaceable parts or components, unless otherwise specified, prefix each part number with the letters "TP" (ie, TP410055).

1.06 The labels accompanying the application program card in a feature group are applied to the set directory card and to the cover of the cabinet. (Refer to 2.01 and 2.02.) See paragraph 5. for definition of abbreviations.

KEYTOP MODIFICATION KITS

1.07 Keytop modification kits supplied for converting keytop arrangements include:

411379 — Converts 43K202/GAB to 43K202/GAG (8-Level BSR to 5-Level BSC)
411380 — Converts 43K202/GAB to 43K202/GAF (8-Level BSR to 8-Level BSC)

USOC CODES

1.08 USOC codes consisting of feature groups and keytop modification kits are as follows:

USOC	Feature Group**	Keytop Modification Kit	Use**
*4BKXT	= 43FG110/BA/03 +	411379	Buff 43 5-Level BSC (T) w/EF
*4BKXF	= 43FG110/BA/03 +	—	Buff 43 5-Level BSC (F) w/EF
4BQ	= 43FG210/AA/02 +	—	Buff 43 8-Level BSR w/ER
4BU	= 43FG210/BA/02 +	411380	Buff 43 8-Level BSC w/EC

*(T) = Tractor Feed, (F) = Friction Feed

1.09 Coded 43 Teleprinter Buffered Sets without feature groups include:

USOC	Set Code	Set Description
4BE	4240BZD	Buff 43 5-Level BSC (F) w/o FG†
4BF	4340BZD	Buff 43 8-Level BSR (F) w/o FG
4BG	4340BZJ	Buff 43 8-Level BSR (T) w/o FG‡

† Buffered 43 5-level selective calling, friction feed without feature group.
‡ Buffered 43 8-level send/receive, tractor feed without feature group.
**Substitute (Old) Versions without enhanced features ("Use" suffixes) are listed in PART 3, FEATURE GROUPS.

OPERABLE SETS

1.10   Operable sets assembled in the field from the above components include:

(Refer to Fig. 1 and 2.)

USOC		USOC**		Set Description**	Set Description — Label Designation**
4BE	+	4BKXF	=	43 Teleprinter 5-Level Buffered Selective Calling (BSC) Station, Friction Feed With or Without Unshift on Space, With Enhanced Features	Buff 43 5-Level BSC (F) w/EF
4BG	+	4BKXT	=	43 Teleprinter 5-Level Buffered Selective Calling (BSC) Station, Tractor Feed With or Without Unshift on Space, With Enhanced Features	Buff 43 5-Level BSC (T) w/EF
4BG	+	4BQ	=	43 Teleprinter 8-Level Buffered Send/Receive (BSR) Station, Tractor Feed With Enhanced Retrieve	Buff 43 8-Level BSR (T) w/ER
4BG	+	4BU	=	43 Teleprinter 8-Level Buffered Selective Calling (BSC) Station, Tractor Feed With Enhanced Contention	Buff 43 8-Level BSC (T) w/EC
4BF	+	4BQ	=	43 Teleprinter 8-Level Buffered Send/Receive (BSR) Station, Friction Feed With Enhanced Retrieve	Buff 43 8-Level BSR (F) w/ER
4BF	+	4BU	=	43 Teleprinter 8-Level Buffered Selective Calling (BSC) Station, Friction Feed With Enhanced Contention	Buff 43 8-Level BSC (F) w/EC

1.11   Refer to 3. PARTS LISTS and verify that the items listed in each USOC are included with the service order and are present at the installation location after the boxes are unpacked. Remove the Specification which is included with feature groups and keytop modification kits. If the set configuration for your application is not covered in this specification, refer to the specifications which are included with the feature group, keytop modification kit or other devices present at the installation location.

**Substitute (Old) Versions without enhanced features suffixes and those with unshift on space (USOC WES97) are provided by use of old feature groups listed in PART 3, FEATURE GROUPS.
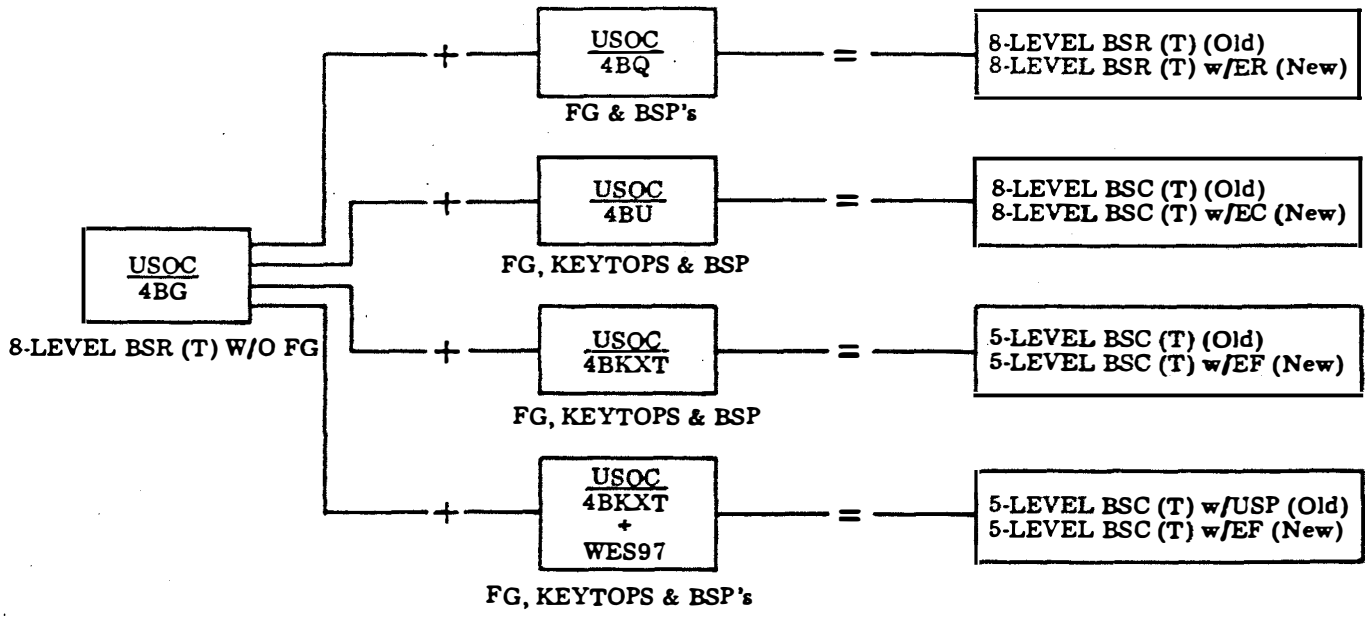
Tractor Feed Set Configurations

Fig. 1
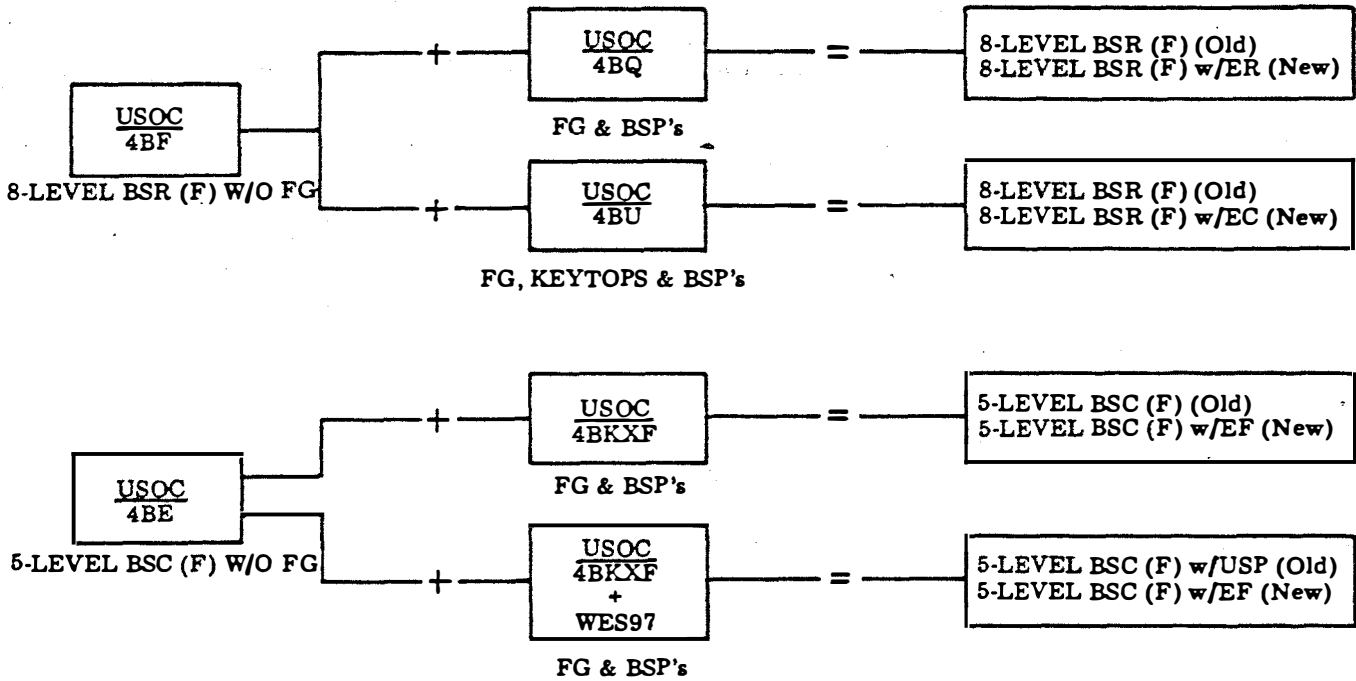
Friction Feed Set Configurations

Fig. 2

2.   ASSEMBLY INFORMATION

LABELS

2.01   Peel the protective backing from the option's label of the feature group. Apply the label to the side of the directory card assembly opposite the "frequently called numbers" list. Install the directory card assembly into its holder.

2.02   Pull the protective backing from the press with controls (keyboard) label and apply the label to the cover strip located between the two top rows of keyboard keys. Press the label firmly in place.
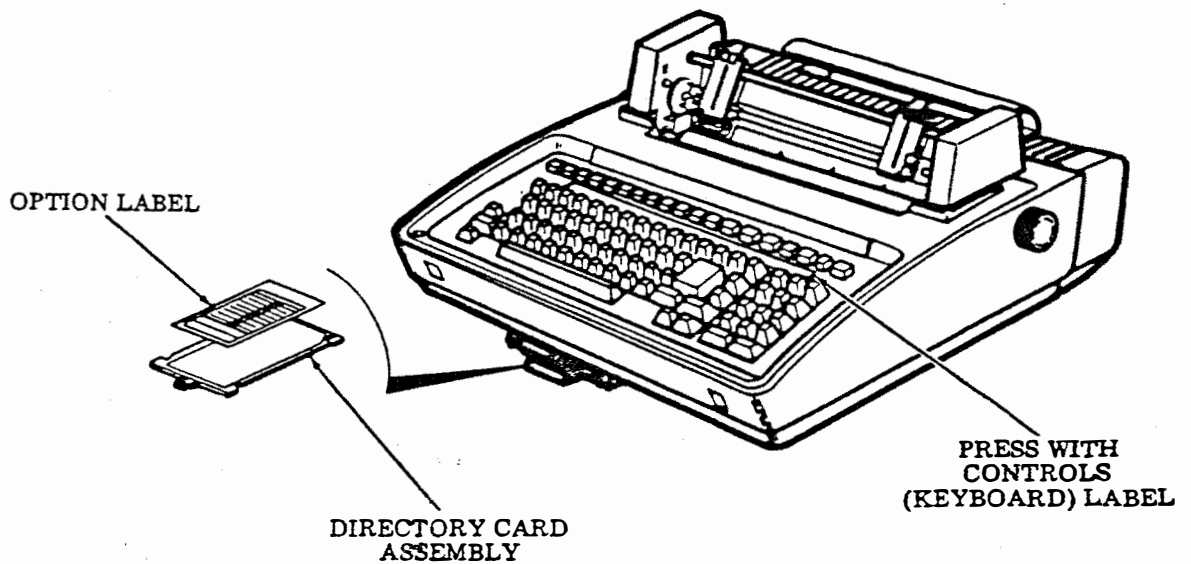
Fig. 3.

APPLICATION PROGRAM CARD

2.03   Remove the controller card assembly as follows:

(a)   Pin Feed or Tractor Feed

CONTROLLER CARD
ASSEMBLY

⑦ Lift and tilt power supply slightly forward towards printer and remove controller card assembly. Grasp each end and pull straight up.

④ Disconnect controller card assembly plug from connector located on top of card (452811 cable used on table-top with 430700 power supply).

⑥ Use screwdriver and pry two clips (left and right) outward.

⑤ Remove four 341797 screws.

②Remove two 184061 screws.

③Remove bustle cover.

①Remove ac cord (late design only).

Fig. 4

(b) Friction Feed

CONTROLLER CARD
ASSEMBLY

⑩ Lift and tilt power supply slightly forward towards printer and remove controller card assembly. Grasp each end and pull straight up and away from low paper sensor cable.

Note: Cable routed under power supply and controller card assembly on late design sets.

⑦ Disconnect controller card assembly plug from connector located on top of card (452811 cable used on table-top with 430700 power supply).

② Remove paper and spindle, if present.

LOW PAPER SENSOR

⑨ Use screwdriver and pry two clips (left and right) outward.

⑧ Remove four 341797 screws.

⑤ Remove paper holder mounting posts.

⑥ Remove bustle cover.

① Remove ac cord (late design only).

③ Disengage latch from mounting posts. Pull straight up if present.

④ Remove paper holder assembly. Pull toward rear and slide off of mounting posts, if present.

Note: In reassembly, align low paper sensor mounting hole with mounting hole in rear frame.

MOUNTING HOLE

LOW PAPER SENSOR

REAR FRAME
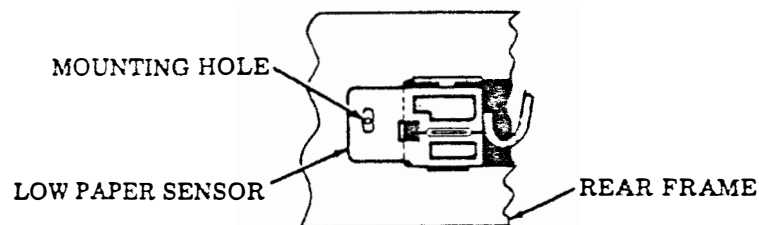
Fig. 5

2.04   Disassemble the controller card assembly as follows:

①Remove eight 410761 mounting screws (do not remove end shield). Retain the two flat washers between the end shield and circuit board shield.

②Slide the circuit board shield and the circuit board to the left until they clear the end shield.

③Remove the circuit card shield. (Note the eight 411118 fiber washers between the shield and the circuit card. Retain these for reassembly).

FIBER
WASHERS (8)

411376
END SHIELD

MOUNTING SCREW
AND FLAT WASHER (2)

411370 CIRCUIT
BOARD SHIELD

410761 MOUNTING
SCREWS (8)
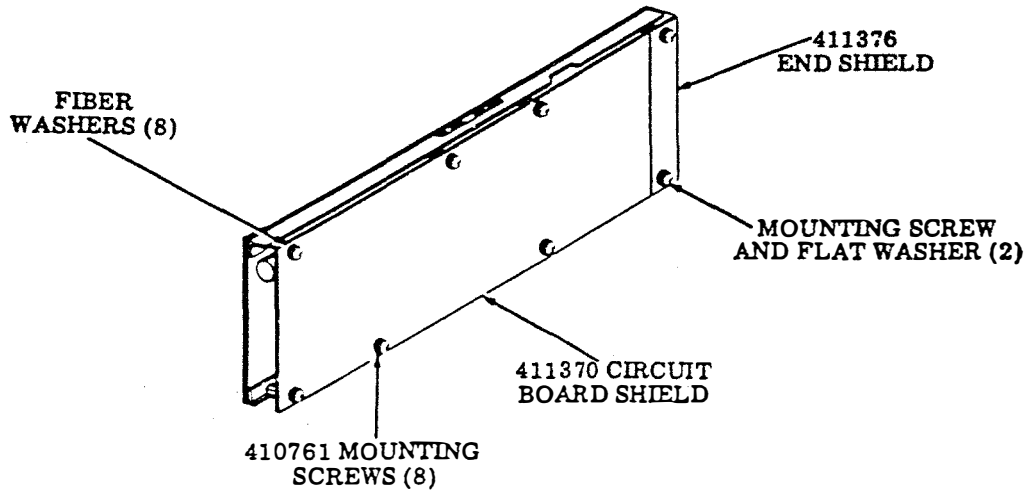
Fig. 6

④Open the controller cards as shown below.

⑤Assemble the applications program card (place over interconnecting pins as shown below and carefully push down).

Component side up.

APPLICATIONS
PROGRAM CARD

INTERCONNECTING
CABLE
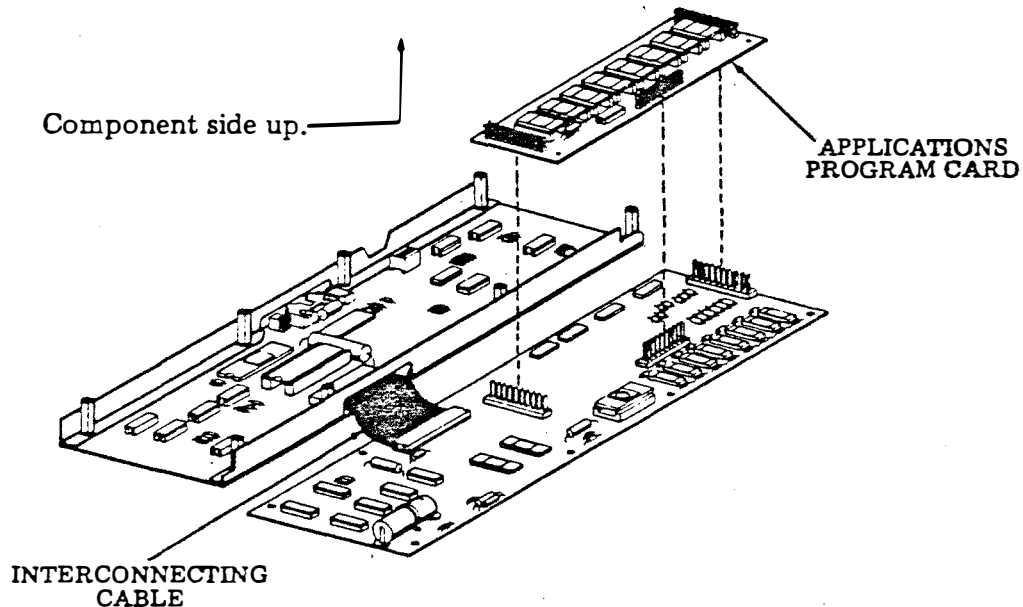
Fig. 7

2.05   Place SPA7 switches to ON position.

2.06   Reassemble controller card assembly and place into rear frame of teleprinter. (Refer to 2.03.)

Note: In reassembly, copper clad side of circuit board shield to face away from controller card assembly.
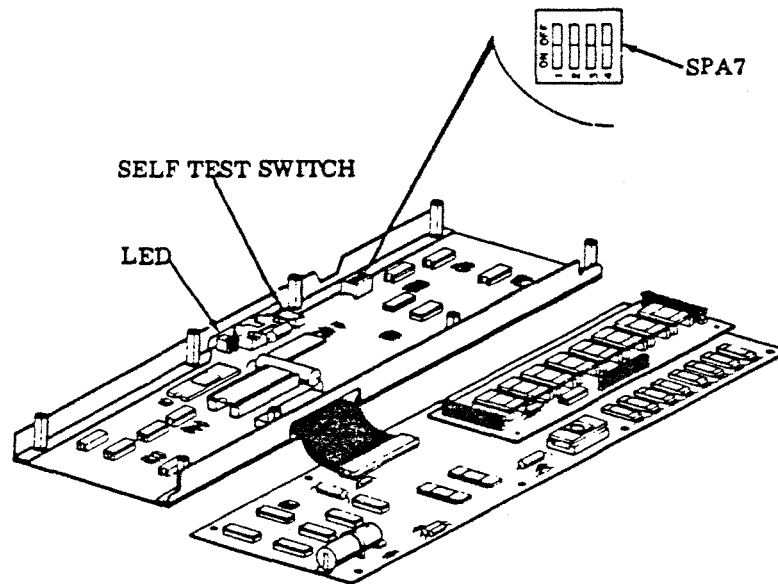
Fig. 8

2.07   Reconnect cable plug to top of controller assembly.

CONTROLLER SELF-TEST

2.08   Temporarily remove the packing detail securing the print head and the ribbon in place. Apply power to the teleprinter and momentarily depress self-test switch.

(a)   The controller LED turns on and will flash periodically during the test (approximately 30 seconds) indicating the test is in progress.

(b)   When the test is concluded, the LED will flash six times then turn ON indicating that the controller passed the self-test.

2.09   If the self-test passed, proceed to paragraph 2.11. If the self-test failed, remove the application program card from the controller assembly. Reassemble and place the controller without the application program card into the rear frame. Reconnect cable plug to top of controller assembly. Place SPA7 switches as follows and repeat the self-test (refer to paragraph 2.03).

1, 2, and 3 — OFF
4 — ON

2.10   If the LED is ON at the end of the test, replace the defective application program card. If the LED is OFF at the end of the test, replace the teleprinter or refer to the appropriate service manual and perform the troubleshooting procedures.

2.11   Verify SPA7 switches are in ON position and replace the print head packing detail and reassemble the remaining components removed in paragraph 2.03.

KEYTOPS

2.12   For installations requiring new keytop arrangements, replace individual keytops per the following
        lists using the 346260 keytop extractor (supplied in each kit).

A.   411379 Modification Kit

(Converts 43K202/GAB to 43K202/GAG — 8-Level BSR to 5-Level BSC)

| TERM LOCAL | TERM ON LINE | TERM READY | INTRPT | FULL DUPLEX | ALARM | KP ON-S/R OFF LCL | REC MSG WTG | | | | BUFFER ENTER | INSERT | STRING ENTER | SND RDY / SEND | NUM PAD | | MSG CLEAR |

| | HORZ TAB | | RESTORE PRESET TABS | HERE IS | VERT TAB | | MARGINS SET | | | RELEASE | OPTIONS | | | (ASSOCIATED PRESS W/ CONTROLS LABEL) |
| SET | CLEAR | | | | SET | CLEAR | LEFT | RIGHT | CLEAR | RIGHT | PREP | LOAD |

```
ESC   !    @    #    $    %    ^    &    *    (    )    —    ]    BACK    ~         -7         8        9
      1    2    3    4    5    6    7    8    9    0    -    +   SPACE   `       PRINT    ↑⌐     PRT/W
                                                                              EDBUF            CTRLS

      DCI  ETB  ENQ  DC2  DC4  EM   NAK  HT   SI   DLE  [                 i  G    4         5        6
TAB   Q    W    E    R    T    Y    U    I    O    P    =          RETURN  `  S   ←       HOME      →

      SOH  DC3  EOT  ACK  BEL  BS   RS   VT   FF   :    "                 }  U    1         2        3
CAPS  A    S    D    F    G    H    J    K    L    ;    ,                 {  S   RETRV      ↓      SRCH
LOCK

      SUB  CAN  ETX  SYN  STX  SO   FS   <    >    ?                      '         0        .
SHIFT Z    X    C    V    B    N    M    ,    .    /    SHIFT  LINE      CHAR              REPRT
                                                             FEED       DLETE              REC

CTRL                                                          REPT  DEL  NUL  RETURN       —
                                                                           RECALL       STORE
```
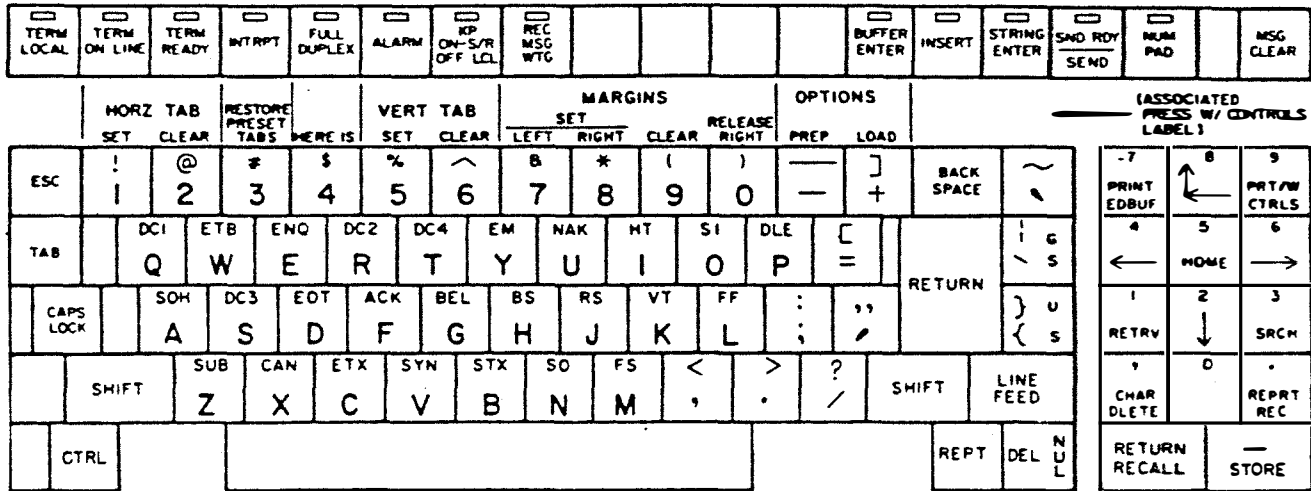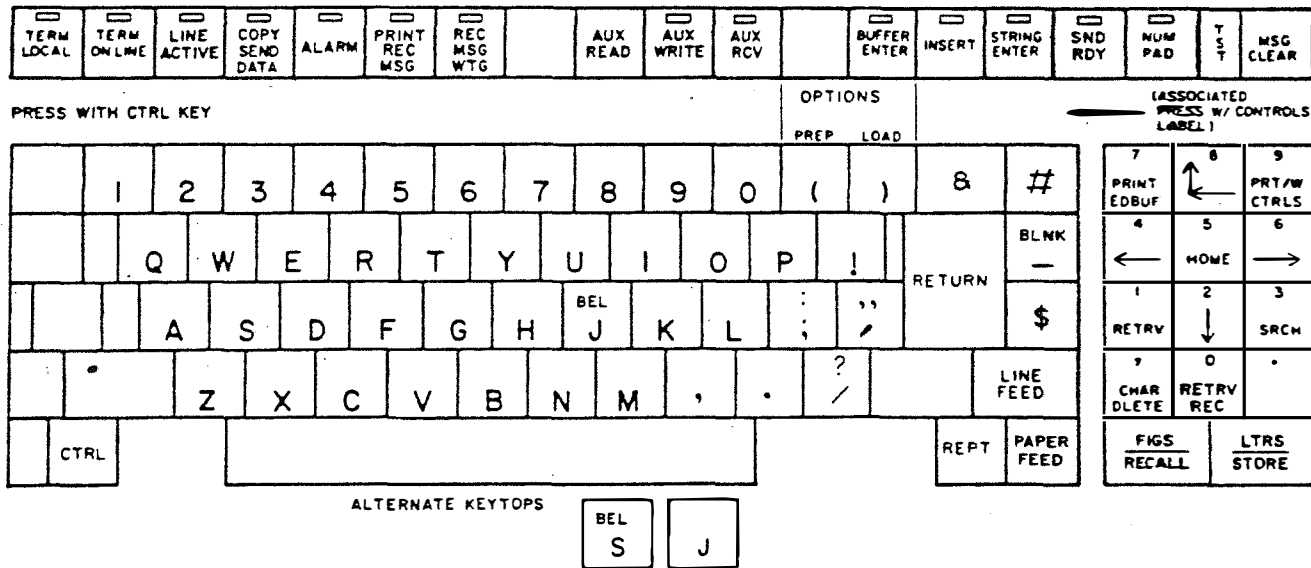
43K202/GAB (Before Conversion)

Fig. 9

| TERM LOCAL | TERM ON LINE | LINE ACTIVE | COPY SEND DATA | ALARM | PRINT REC MSG | REC MSG WTG | | AUX READ | AUX WRITE | AUX RCV | BUFFER ENTER | INSERT | STRING ENTER | SND RDY | NUM PAD | TST | MSG CLEAR |

PRESS WITH CTRL KEY   OPTIONS   (ASSOCIATED PRESS W/ CONTROLS LABEL)
                                                                  PREP   LOAD

```
      1    2    3    4    5    6    7    8    9    0    (    )    &    #       7         8        9
                                                                           PRINT    ↑⌐     PRT/W
                                                                           EDBUF            CTRLS

      Q    W    E    R    T    Y    U    I    O    P    !          BLNK       4         5        6
                                                            RETURN  —        ←       HOME      →

                                      BEL                                    1         2        3
      A    S    D    F    G    H    J    K    L    :    "          $        RETRV      ↓      SRCH
                                                    ;    ,

      •                              ?                                       '         0        .
      Z    X    C    V    B    N    M    ,    .    /          LINE         CHAR     RETRV
                                                             FEED         DLETE     REC

CTRL                                             REPT  PAPER               FIGS      LTRS
                                                       FEED              RECALL    STORE
```

ALTERNATE KEYTOPS

| BEL S | J |

43K202/GAG (After Conversion)

Fig. 10

PART NO.	DESCRIPTION	REPLACES	DESCRIPTION
Remove 346409 spacer under TERM ON LINE lamp.			
454353	LINE ACTIVE	346127	TERM READY
454351	COPY SEND DATA	346106	INTRPT
§ 346163	ALARM (from next position to right)	346841	FULL DUPLEX
454352	PRINT REC MSG	346163	ALARM (just moved above)
§ 346843	REC MSG WTG (from next position to right)	346842	KP/ON-S/R/OFF-LCL
§ 340701	BLOCKING from next position to right	346843	REC MSG WTG (just moved above)
454366	AUX READ	340701	BLOCKING (just moved above)
454367	AUX WRITE	340701	BLOCKING
454365	AUX REC	340701	BLOCKING
454355	SND RDY	346847	SND RDY/SEND
340714	BLOCKING	340975	ESC
346536	1	340821	!/1
346537	2	340822	@/2
346538	3	340823	#/3
346539	4	340824	$/4
346540	5	340825	%/5
340990	6	340826	^/6
346541	7	340827	&/7
346542	8	340828	*/8
346543	9	340829	(/9
346544	0	340830	)/0
346675	(	340831	_/-
346676	)	340889	] /+
347236	&	340976	BACK SPACE
347237	#	340977	~/^
340714	BLOCKING	346589	TAB
340993	Q	340838	DC1/Q
340994	W	340839	ETB/W
340995	E	340840	ENQ/E
340996	R	340841	DC2/R
340997	T	340842	DC4/T
340998	Y	340843	EM/Y
340999	U	340844	NAK/U
341000	I	340978	HT/I
341001	O	340846	SI/O
341002	P	340979	DLE/P
347238	!	340890	[/=
347172	BLNK/-	340981	¦ / \ /GS
340714	BLOCKING	340894	CAPS LOCK
346682	A	340852	SOH/A
346683	S	340853	DC3/S
341005	D	340854	EOT/D
341006	F	340855	ACK/F
341007	G	340856	BEL/G

§ Not part of modification kit.

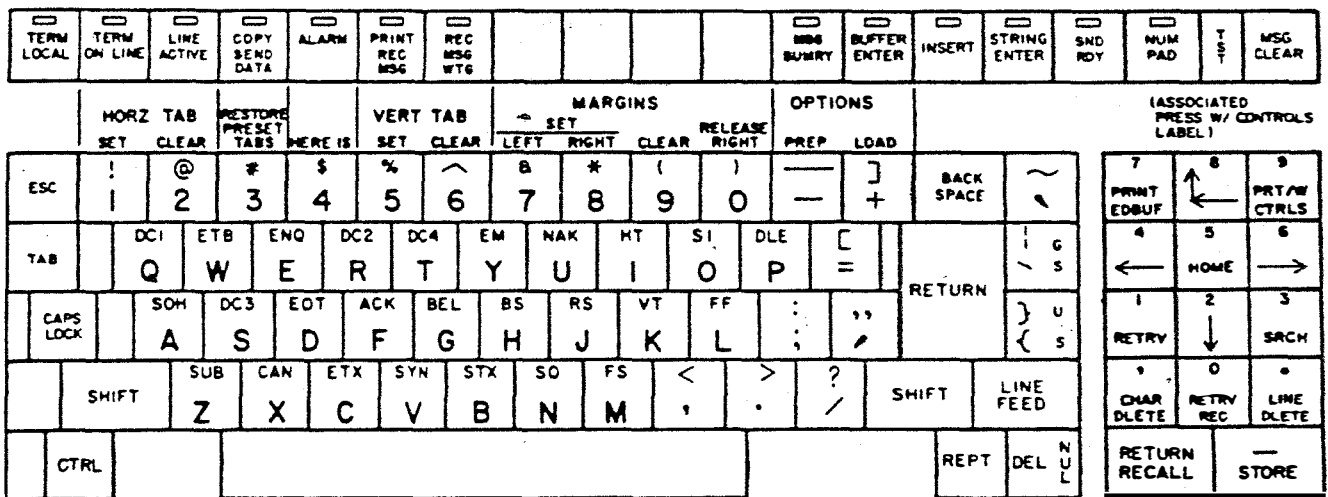| PART NO.	DESCRIPTION	REPLACES	DESCRIPTION
341008	H	340982	BS/H
346694	BEL/J	340858	RS/J
341009	K	340859	VT/K
341010	L	340860	FF/L
347239	$	340983	}/{ /US
341020 (2 Plcs)	BLANK	340867	SHIFT (2 Pls)
341012	Z	340984	SUB/Z
341013	X	340869	CAN/X
341014	C	340870	ETX/C
341015	V	340985	SYN/V
341016	B	340872	STX/B
341017	N	340873	SO/N
346558	M .	340874	FS/M
346548	,	340875	</,
346549	.	340876	>/.
347218	O/RETRV REC	346601	O
347255	.	346602	./REPRT/REC
347177	PAPER FEED	346590	DEL/NULL
347241	FIGS/RECALL	346603	RETURN/RECALL
347242	LTRS/STORE	346604	-/STORE
340701	BLOCKING		Spare , for optional use
346559	J		Spare , for optional use
347240	BEL/S		Spare , for optional use

B.   411380 Modification Kit

(Connects 43K202/GAB to 43K202/GAF — 8-Level BSR to 8-Level BSC)
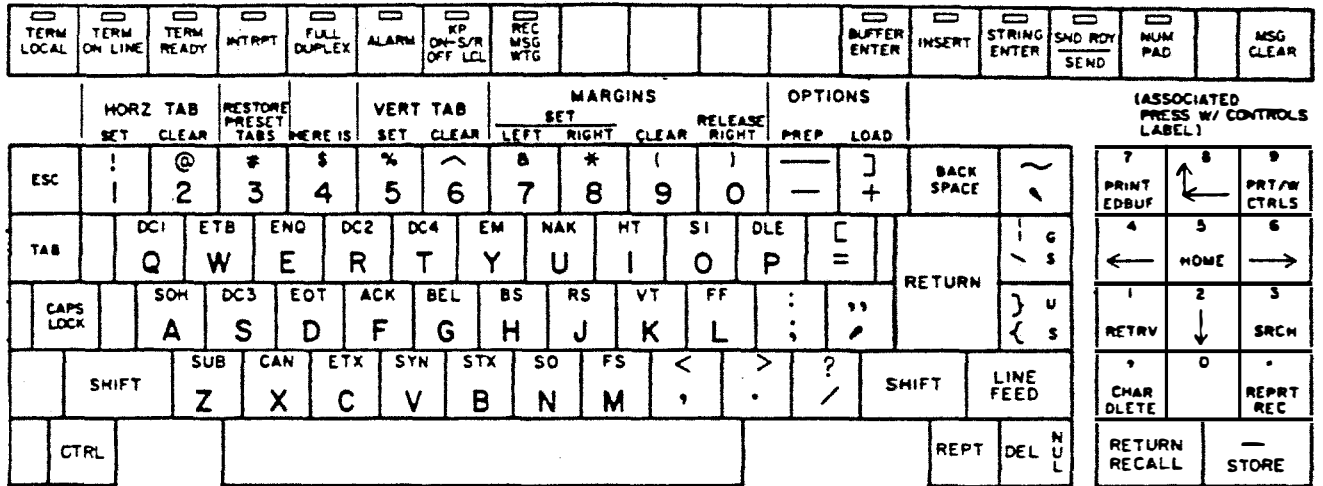

43K202/GAB (Before Conversion)

Fig. 11

43K202/GAF (After Conversion)

Fig. 12

PART NO.	DESCRIPTION	REPLACES	DESCRIPTION

Remove 346409 spacer under TERM ON LINE lamp.

PART NO.	DESCRIPTION	REPLACES	DESCRIPTION
454353	LINE ACTIVE	346127	TERM READY
454351	COPY SEND DATA	346106	INTRPT
§ 346163	ALARM (from next position to right)	346841	FULL DUPLEX
454352	PRINT REC MSG	346163	ALARM (just moved above)
§ 346843	REC MSG WTG (from next position to right)	346842	KP/ON-S/R/OFF-LCL
§ 340701	BLOCKING from six positions to right	346843	REC MSG WTG (just moved above)
454354	MSG SUMRY	340701	BLOCKING (just moved above)
454355	SND RDY	346847	SND/RDY/SEND
347218	O/RETRV REC	346601	O
347219	./LINE DLETE	346602	./REPRT REC

§ Not part of modification kit.

C.   Keytop in 43FG/210/AA/02 (Converts 43K202GAB − 43 SR to 43 SR w/ER
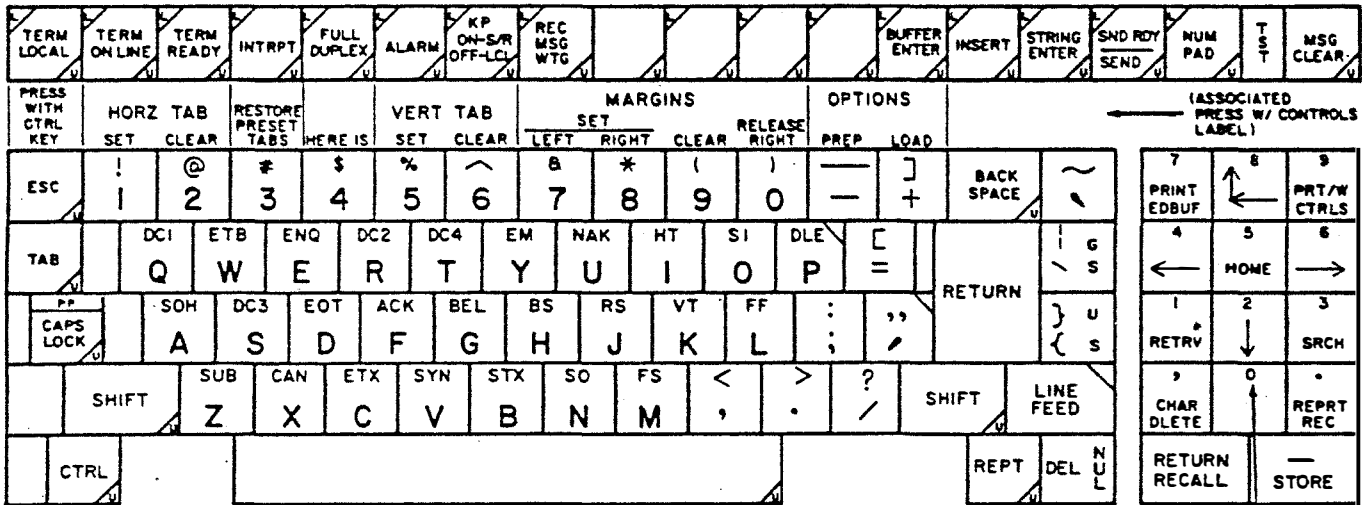
43K202GAB

New Keytop

PART NO.	DESCRIPTION	REPLACES	DESCRIPTION
347218	O/RETRV REC	346610	O

SET DESCRIPTION AND KEYBOARD LABELS

2.13   After the teleprinter is equipped with the feature group and keytop modification kit, peel the protective backing from the correct set description label and affix as shown in Fig. 13 (refer to 1.10).

2.14   If any keytops on the keyboard were changed, affix the keyboard label to the front of the keyboard. Place tape over the keyboard code plate.

For sets with New Enhanced feature groups.

```
BUFF 43 8-LEVEL BSR (T) w/ER
       PER 51055S
    43FG210/AA/02

BUFF 43 8-LEVEL BSC (T) w/EC
       PER 51055S
    43FG210/BA/02

BUFF 43 8-LEVEL BSC (F) w/EC
       PER 51055S
    43FG210/BA/02

BUFF 43 8-LEVEL BSR (F) w/ER
       PER 51055S
    43FG210/AA/02
```

```
BUFF 43 5-LEVEL BSC (F) w/EF
       PER 51055S
    43FG110/BA/03

BUFF 43 5-LEVEL BSC (T) w/EF
       PER 51055S
    43FG110/BA/03
```

Set Description Labels   **Cut out labels on dotted lines.**

```
MODIFIED PER 51055S
    411379 MOD. KIT

MODIFIED PER 51055S
    411380 MOD. KIT

MODIFIED PER 51055S
    RETRV REC
```

Keyboard Labels

For sets with Substitute (Old) Version feature groups.

```
BUFF 43 5-LEVEL BSC (F)
       PER 51055S

BUFF 43 5-LEVEL BSC (F) w/USP
       PER 51055S

BUFF 43 5-LEVEL BSC (T)
       PER 51055S

BUFF 43 5-LEVEL BSC (T) w/USP
       PER 51055S

BUFF 43 8-LEVEL BSR (T)
       PER 51055S
```

```
BUFF 43 8-LEVEL BSC (T)
       PER 51055S

BUFF 43 8-LEVEL BSC (F)
       PER 51055S

BUFF 43 8-LEVEL BSR (F)
       PER 51055S
```
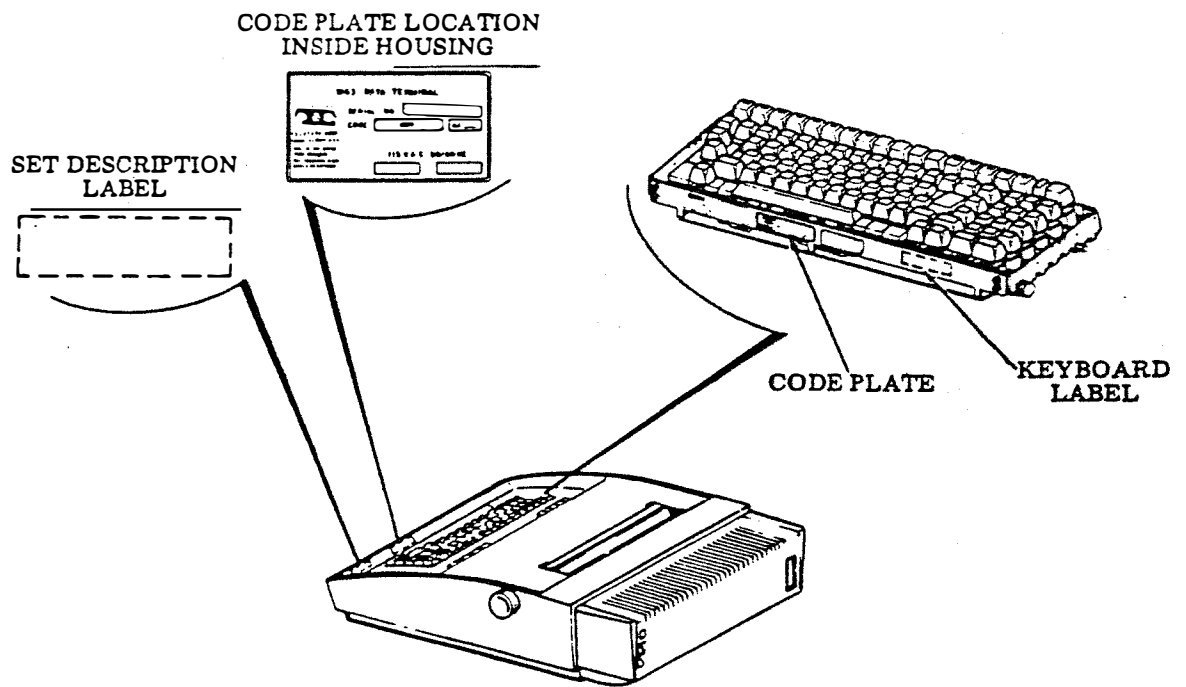
Cut out labels on dotted line.

Set Description Labels

```
MODIFIED PER 51055S
```

Keyboard Label

CODE PLATE LOCATION
INSIDE HOUSING

SET DESCRIPTION
LABEL

CODE PLATE

KEYBOARD
LABEL

Set Description Label Location

Fig. 13

3.   PARTS LISTS

Following is a list of the USOC codes, feature groups and keytop modification kits covered in this specification and their parts lists:

USOC CODES

A.   USOC 4BG Buff 43 8-Level BSR (T) Without FG

Qty	Part or Code No.	Description
1	4340BZJ	8-Level Tractor Feed Printer With BSR Style Keyboard

B.   USOC 4BE Buff 43 5-Level BSC (F) Without FG

Qty	Part or Code No.	Description
1	4240BZD	5-Level Friction Feed Printer With BSC Style Keyboard
1	KS 8621	Paper 5-Inch Roll 8-1/2 Inch White

C.   USOC 4BF Buff 43 8-Level BSR (F) Without FG

Qty	Part or Code No.	Description
1	4340BZD	8-Level Friction Feed Printer With BSR Style Keyboard
1	KS 8621	Paper 5-Inch Roll 8-1/2 Inch White

D.   USOC 4BU Feature Group and Keytop Conversion Kit for 8-Level BSR to 8-Level BSC w/EC

Qty	Part or Code No.	Description
1	411380	Keytop Conversion Kit for BSR to BSC
1	43FG210/BA/02	8-Level Selective Calling Feature Group
1	574-500-202	Installation Section, Issue 2 or Later
1	574-500-303	Troubleshooting Section
1	574-500-503	Testing Section
1	999-300-137	How to Operate Manual
1	999-302-137	Optioning Manual

E.   USOC 4BQ Feature Group for 8-Level BSR w/ER

Qty	Part or Code No.	Description
1	43FG210/AA/02	8-Level Send/Receive Feature Group
1	574-500-201	Installation Section, Issue 2 or Later
1	574-500-302	Troubleshooting Section, Issue 2 or Later
1	574-500-502	Testing Section, Issue 2 or Later
1	999-300-135	How to Operate Manual, Issue 2 or Later

F. USOC 4BKXF Feature group for 5-Level BSC w/EF

Qty	Part or Code No.	Description
1	43FG110/BA/03	5-Level Selective Calling Feature Group
1	574-500-203	Installation Section, Issue 2 or Later
1	574-500-304	Troubleshooting Section, Issue 2 or Later
1	574-500-504	Testing Section, Issue 2 or Later
1	999-300-136	How to Operate Manual
1	999-302-136	Optioning Manual

G. USOC 4BKXT Feature Group and Keytop Conversion Kit for 8-Level BSR to 5-Level BSC w/EF

Qty	Part or Code No.	Description
1	411379	Keytop Conversion Kit for 8-Level BSR to 5-Level BSC
1	43FG110/BA/03	5-Level Selective Calling Feature Group
1	574-500-203	Installation Section, Issue 2 or Later
1	574-500-304	Troubleshooting Section, Issue 2 or Later
1	574-500-504	Testing Section, Issue 2 or Later
1	999-300-136	How to Operate Manual
1	999-302-136	Optioning Manual

FEATURE GROUPS

NEW ENHANCED VERSIONS

A. 43FG110/BA/03 5-Level Selective Calling Feature Group w/EF   (Replaces either 43FG110/BA/01 or 02)

Qty	Part No.	Description
1	411960	Circuit Card, Applications Program
1	430234	Label, Options
1	430362	Label, Press With Controls (Keyboard)
1	51049S	Specification (Issue 9 or Later)

B. 43FG210/AA/02 8-Level Send/Receive Feature Group w/ER   (Replaces 43FG210/AA/01)

Qty	Part No.	Description
1	411961	Circuit Card, Applications Program
1	430358	Label, Press With Controls (Keyboard)
1	347218	Keytop, O RETRV REC
1	455031	Label, Options
1	51049S	Specification (Issue 9 or Later)

C. 43FG210/BA/02 8-Level Selective Calling Feature Group w/EC   (Replaces 43FG210/BA/01)

Qty	Part No.	Description
1	411958	Circuit Card, Applications Program
1	430234	Label, Options
1	430358	Label, Press With Controls (Keyboard)
1	51049S	Specification (Issue 9 or Later)

SUBSTITUTE (OLD) VERSIONS

D.   43FG110/BA/01 5-Level Selective Calling Feature Group   (May be replaced with
                                                                    43FG110/BA/03)

Qty	Part No.	Description
1	411955	Circuit Card, Applications Program
1	430234	Label, Options
1	430362	Label, Press With Controls (Keyboard)
1	51049S	Specification (Issue 1 or Later)

E.   43FG110/BA/02 5-Level Selective Calling With Unshift on Space   (May be replaced with
     Feature Group   43FG110/BA/03)

Qty	Part No.	Description
1	411957	Circuit Card, Applications Program
1	430361	Label, Press With Controls (Keyboard)
1	430456	Label, Options
1	51049S	Specification (Issue 1 or Later)

F.   43FG210/AA/01 8-Level Send/Receive Feature Group   (May be replaced with
                                                                    43FG210/AA/02)

Qty	Part No.	Description
1	411952	Circuit Card, Applications Program
1	430358	Label, Press With Controls (Keyboard)
1	430402	Label, Options
1	51049S	Specification (Issue 1 or Later)

G.   43FG210/BA/01 8-Level Selective Calling Feature Group   (May be replaced with
                                                                    43FG210/BA/02)

Qty	Part No.	Description
1	411954	Circuit Card, Applications Program
1	430234	Label, Options
1	430358	Label, Press With Controls (Keyboard)
1	51049S	Specification (Issue 1 or Later)

KEYTOP MODIFICATION KITS

A.   411379 Keytop Modification Kit

QTY	PART NO.	DESCRIPTION
1	454353	Keytop, LINE ACTIVE
1	454351	Keytop, COPY SEND DATA
1	454352	Keytop, PRINT REC MSG
1	454366	Keytop, AUX READ
1	454367	Keytop, AUX WRITE
1	454365	Keytop, AUX REC
1	454355	Keytop, SND RDY
1	346536	Keytop, 1
1	346537	Keytop, 2
1	346538	Keytop, 3
1	346539	Keytop, 4
1	346540	Keytop, 5
1	340990	Keytop, 6
1	346541	Keytop, 7
1	346542	Keytop, 8
1	346543	Keytop, 9
1	346544	Keytop, 0
1	346675	Keytop, (
1	346676	Keytop,)
1	347236	Keytop, &
1	347237	Keytop,
1	340993	Keytop, Q
1	340994	Keytop, W
1	340995	Keytop, E
1	340996	Keytop, R
1	340997	Keytop, T
1	340998	Keytop Y
1	340999	Keytop, U
1	341000	Keytop, I
1	341001	Keytop, O
1	341002	Keytop, P
1	347238	Keytop, !
1	347172	Keytop, BLNK/-
3	340714	Keytop, BLOCKING
1	346682	Keytop, A
1	346683	Keytop, S
1	341005	Keytop, D
1	341006	Keytop, F
1	341007	Keytop, G
1	341008	Keytop, H
1	346694	Keytop, BELL/J
1	341009	Keytop, K
1	341010	Keytop, L
1	347239	Keytop, $
2	341020	Keytop, BLANK
1	341012	Keytop, Z
1	341013	Keytop, X
1	341014	Keytop, C
1	341015	Keytop, V
1	341016	Keytop, B
1	341017	Keytop, N
1	346558	Keytop, M

QTY	PART NO.	DESCRIPTION
1	346548	Keytop, ,
1	346549	Keytop, .
1	347218	Keytop, 0/RETRV REC
1	347255	Keytop, .
1	347177	Keytop, PAPER FEED
1	347241	Keytop, FIGS/RECALL
1	347242	Keytop, LIRS/STORE
1	346260	Keytop, Extractor
1	340701	Keytop, BLOCKING
1	346559	Keytop, J
1	347240	Keytop, BEL/S
1	51049S	Specification

B.   411380 Keytop Modification Kit

QTY	PART NO.	DESCRIPTION
1	454353	Keytop, LINE ACTIVE
1	454351	Keytop, COPY SEND DATA
1	454352	Keytop, PRINT REC MSG
1	454354	Keytop, MSG SUMRY
1	454355	Keytop, SND RDY
1	347218	Keytop, 0/RETRV REC
1	347219	Keytop, ./LINE DLETE
1	346260	Keytop, Extractor
1	51049S	Specification

4.   SUPPLEMENTAL SUPPORT INFORMATION

A.   Testing

4.01   An installation checkout of the Buffered Teleprinter Station with feature group and keytops
       should be performed under direction of the appropriate Testing and Troubleshooting section
supplied with the feature group.

B.   Tools

4.02   The feature groups and keytop modification kits can be installed without the use of any special
       tools. The 346260 keytop extractor is supplied with each keytop modification kit. Other standard
tools required are a screwdriver and a 1/4-inch socket bit with handle.

C.   Disposition of Teleprinter Station

4.03   Refer to the Installation section and install the Teleprinter Station.

5.   GLOSSARY OF ABBREVIATIONS

(F)   —   Friction Feed
(T)   —   Tractor Feed
FG   —   Feature Group
BSC   —   Buffered Selective Calling — Multipoint Private Line
BSR   —   Buffered Send/Receive — Switched Network
USOC   —   Universal Service Order Code
WES   —   Western Electric Service
W/ER   —   With Enhanced Retrieve
W/EF   —   With Enhanced Features
W/EC   —   With Enhanced Contention