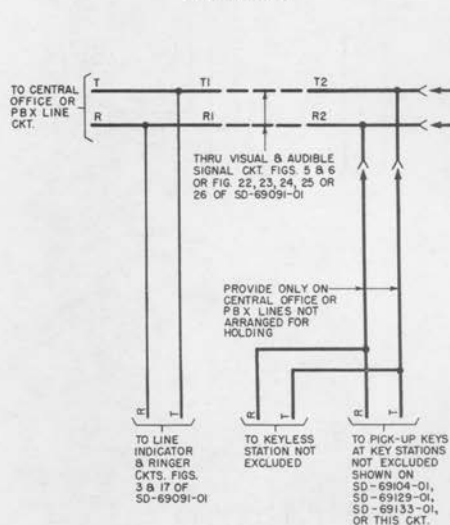
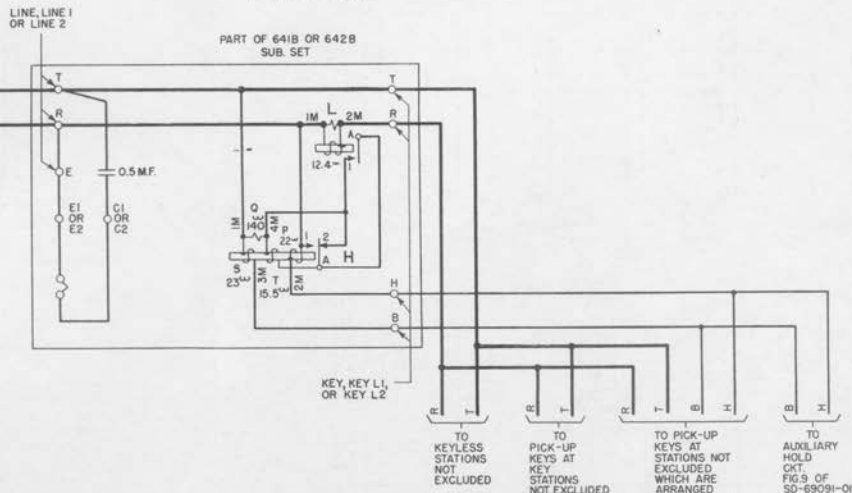


# KEY TELEPHONE SYSTEM NO. 1A STATION CIRCUITS

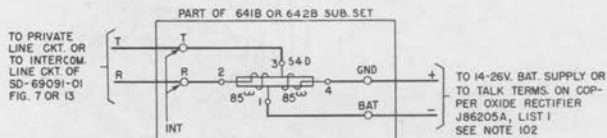
### FIG. 1 LINE CIRCUIT



### FIG. 2 HOLDING CKT.



### FIG. 3 BATTERY SUPPLY FOR INTERCOMMUNICATING LINE OR PRIVATE LINE



OPTIONS USED			
FIGS.	LOC.	APP. OR WIRING	LOC.
1		Z	FIG. 10
2		Y	FIG. 10
3		X	FIG. 8
4		W	FIG. 8
5		V	FIG. 8
6			
7			
8			
9			
10			
11			

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2D I DWG. ISS.  
2D I C.D. ISS.

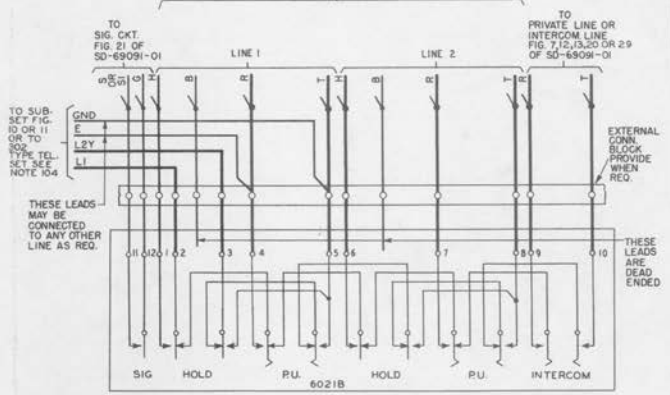
SD-69165-01  
ISS. I | 2D

KEY TELEPHONE SYSTEM NO. 1A STATION CIRCUITS

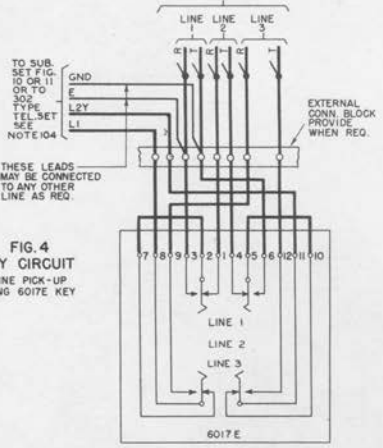
**FIG. 6  
KEY CIRCUIT**

2 LINE PICK-UP WITH HOLDING, 1 LINE PICK-UP WITHOUT HOLDING FOR PVT. LINE OR INTERCOM. AND 1 SIGNALING KEY USING 6021B KEY

TO FIG. 1 OR 2 OF THIS CKT., TO FIG. 7, 8 OR 9 OF SD-69091-01 OR TO EXCLUSION KEY OR CUT-OFF KEY AT OTHER STATION OMIT 'B', 'H' LEADS WHEN HOLDING CKT. IS NOT PROVIDED ON A LINE

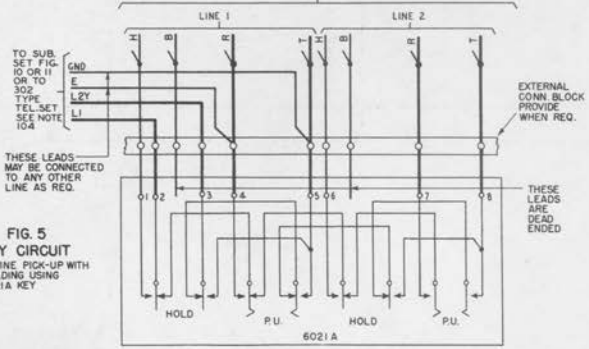


TO FIG. 1, 2 OR 3 OF THIS CKT., TO FIG. 7, 8, 9, 12, 13, 20 OR 29 OF SD-69091-01 OR TO EXCLUSION KEY OR CUT-OFF KEY AT OTHER STATION



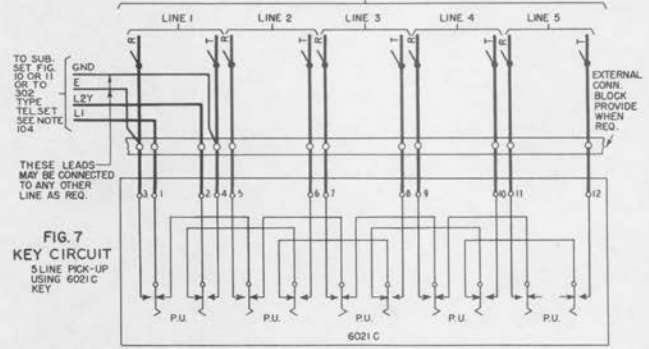
**FIG. 4  
KEY CIRCUIT**  
3 LINE PICK-UP USING 6017E KEY

TO FIG. 1, 2 OR 3 OF THIS CKT., TO FIG. 7, 8, 9, 12, 13, 20 OR 29 OF SD-69091-01 OR TO EXCLUSION KEY OR CUT-OFF KEY AT OTHER STATION OMIT 'B', 'H' LEADS WHEN HOLDING CKT. IS NOT PROVIDED ON A LINE



**FIG. 5  
KEY CIRCUIT**  
2 LINE PICK-UP WITH HOLDING USING 6021A KEY

TO FIG. 1, 2 OR 3 OF THIS CKT., TO FIG. 7, 8, 9, 12, 13, 20 OR 29 OF SD-69091-01 OR TO EXCLUSION KEY OR CUT-OFF KEY AT OTHER STATION



**FIG. 7  
KEY CIRCUIT**  
5 LINE PICK-UP USING 6021C KEY

2D	1	DWG. ISS.
2D	1	C.D. ISS.

FIG. 8  
KEY CIRCUIT

ONE LINE PICK-UP WITH HOLDING  
ONE LINE PICK-UP WITHOUT HOLDING  
FOR PRIVATE LINE OR INTERCOMMUNICATING LINE  
ONE CUT-OFF KEY AND ONE SIGNALING KEY USING 6022A KEY

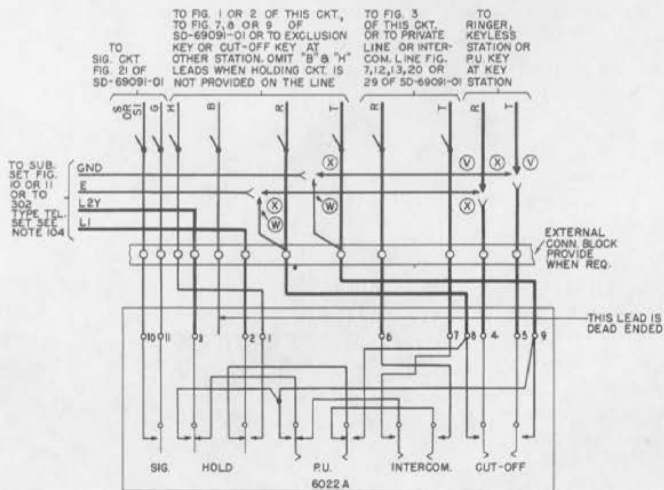
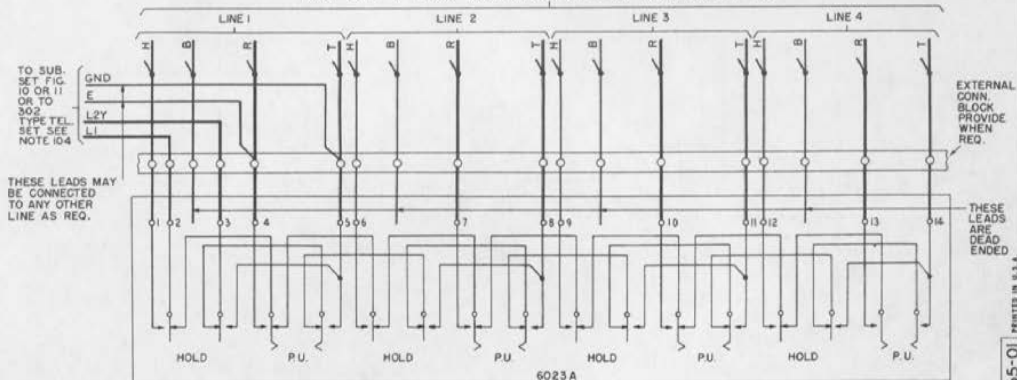


FIG. 9  
KEY CIRCUIT

4 LINE PICK-UP WITH HOLDING USING 6023A KEY

TO FIG. 1, 2 OR 3 OF THIS CKT., FIG. 7, 8, 9, 12, 13, 20 OR 29 OF SD-6909I-01  
OR TO EXCLUSION KEY OR CUT-OFF KEY AT OTHER STATION  
OMIT "B" & "H" LEADS WHEN HOLDING CKT. IS NOT PROVIDED ON A LINE



2D 1 DWG. ISS.  
2D 1 C. D. ISS.

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FIG. 10  
SUBSCRIBER SET  
USING 684BA OR 634CF SUBSCRIBER SET

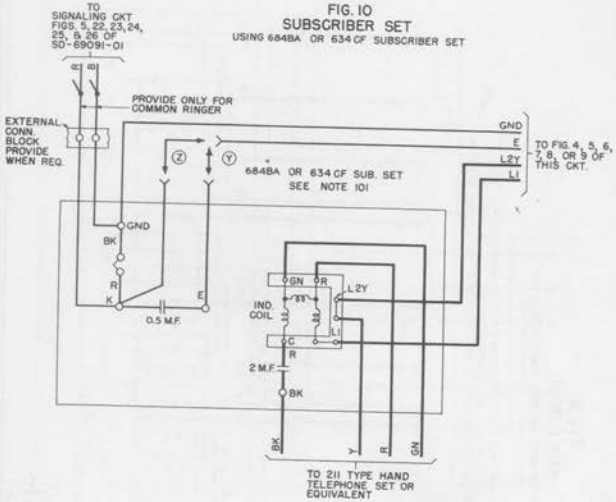
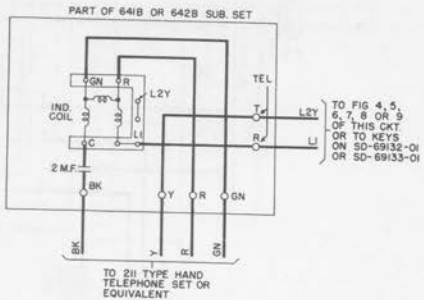
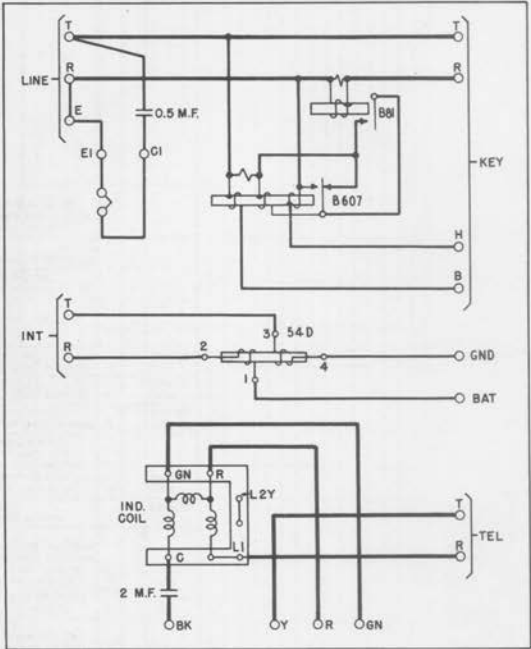


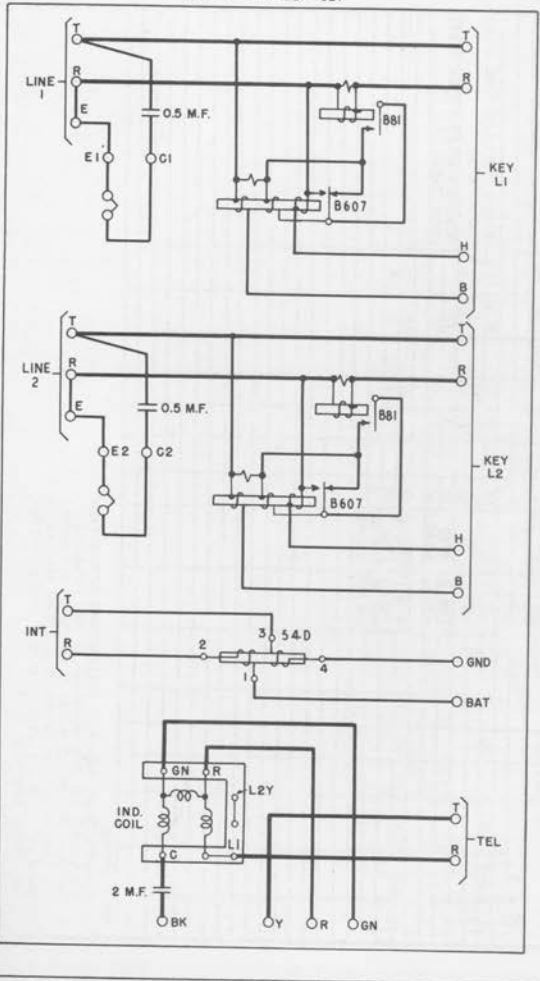
FIG. 11  
SUBSCRIBER SET  
USING 641B OR 642B SUBSCRIBER SET



641B SUBSCRIBER SET



642 B SUBSCRIBER SET



## CIRCUIT NOTES:

101. PROVIDE THE 634 CF SUB. SET WHEN THE RINGER IS USED AS A LINE RINGER, EITHER THE 634 CF OR 684BA SUB. SET MAY BE PROVIDED WHEN THE RINGER IS USED AS A COMMON RINGER.
102. WHEN THE BAT. SUP. FOR FIG. 3 IS OBTAINED FROM A COPPER OXIDE RECTIFIER THE LEAD WHICH MAY BE ON EITHER THE "LO" OR "HI" TERM. IN THE RECTIFIER SHALL BE CONNECTED TO THE "HI" TERM.

104. WHEN THE 302 TYPE TEL. SET IS PROVIDED THE "GND" AND "E" LEADS ARE NOT USED AND THE RINGER IN THE SET SHALL BE DISCONNECTED.

FEATURE OR OPTION	PROVIDE		
	FIG.	APP OR WIR.	QUANTITY
LINE CIRCUIT	1		1 PER LINE
HOLDING CIRCUIT	2		1 PER LINE
BATTERY SUPPLY FOR INTERCOM. LINE OR PRIVATE LINE	3		1 PER LINE
KEY CIRCUIT (3 LINE PICK-UP USING 6017E KEY) FOR 2 LINE PICK-UP USING 6017B KEY SEE SD-69133-01 FIG. 3	4		1 PER STATION
KEY CIRCUIT (2 LINE PICK-UP WITH HOLDING USING 6021A KEY)	5		1 PER STATION
KEY CIRCUIT (2 LINE PICK-UP WITH HOLDING, 1 LINE PICK-UP WITHOUT HOLDING FOR PVT. LINE OR INTERCOM. AND 1 SIG. KEY USING 6021B KEY)	6		1 PER STATION
KEY CIRCUIT (5 LINE PICK-UP USING 6021C KEY)	7		1 PER STATION
KEY CIRCUIT (1 LINE PICK-UP WITH HOLDING, 1 LINE PICK-UP WITHOUT HOLDING FOR PVT. LINE OR INTERCOM. LINE, 1 CUT-OFF KEY AND 1 SIG. KEY USING 6022A KEY)	8		1 PER STATION
KEY CIRCUIT (4 LINE PICK-UP WITH HOLDING USING 6023A KEY)	9		1 PER STATION
SUBSCRIBER SET USING 684BA OR 634 CF SUBSCRIBER SET	10		1 PER STATION
SUBSCRIBER SET USING 641B OR 642 B SUBSCRIBER SET	11		1 PER STATION
FOR PRIVATE LINES		Z	
FOR CENTRAL OFFICE OR P B X LINES		Y	
WHEN RINGER AT ASSOCIATED KEY STATION IS TO BE CUT OFF		X	
WHEN RINGER IN FIG. 10 IS NOT TO BE CUT OFF		W	
WHEN A RINGER AT ANOTHER STATION, OR A KEYLESS STATION OR A KEY STATION IS TO BE CUT OFF		V	

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	2D	1	DWG. ISS.
	2D	1	G. D. ISS.

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## CIRCUIT REQUIREMENTS

STATION SYSTEMS KEY TELEPHONE SYSTEM NO. 1A STATION CKTS.USING WIRING PLAN KEYS & SUBSCRIBER SETS																	REMARKS	DWG. 155.
APPARATUS	MECH. REQ.			CIRCUIT PREPARATION				TEST SET PREP.	SEE TEST NOTE NO.	DIRECT CURRENT FLOW REQ.								
DESIG. CODE	BSP FIG	CONT. PRESS.	ARM. TRVL	BLOCK OR INSULATE	TEST CLIP DATA		TEST WDG.			TEST FOR	AFTER SOAK MA	TEST MA	READJ. MA					
					CONN. BAT	CONN. GRD.												
RELAYS																		
FIG. 2																		
H	B607	14	30		TIP LEAD	TERM. "H"	M	I	P	O	16.5	15.5	REMOVE TIP LEAD (LINE SIDE) FROM TERM."T."	1				
							M		P	NO	11	11.6		2				
							M		P	R	3.5	3.7						
				2(H)	TERM. B	RING LEAD	M		S	O	17		REMOVE RING LEAD (LINE SIDE) FROM TERM. "R"					
					A (L)		M		T	O	17							
L	B61	1	30		TERM "T" (KEY SIDE OF SUB.SET)	TERM "R" (KEY SIDE OF SUB.SET)	M			O	13	12						
							M			R	2	4						

## TEST NOTES:

- ADJUST FRONT CONTACT FOLLOW AND SEPARATION AS CLOSE TO THE MINIMUM 5 AS POSSIBLE. TENSION RELAY SO THAT IT FAILS TO OPERATE ON THE READJUST OPERATE CURRENT AND THEN BACK OFF THE ADJUSTING SCREW UNTIL THE RELAY WILL OPERATE.

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