

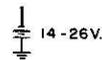
CIRCUIT NOTES:

101. (A) WHEN A KEY TEL. SET IS USED AT THE KEY STATION, CONNECT THE GREEN-WHITE AND RED-WHITE CONDUCTORS OF THE KEY TEL. SET TO THE "CT" TERMINAL.
 (B) WHEN A HAND TEL. SET WITH SEPARATELY MOUNTED KEYS IS USED AT THE KEY STATION, STRAP THE "CT" AND "LR" TERMINALS OF THE KEY.

FEATURE OR OPTION	PROVIDE	
	FIGS.	APP OR WIR QUANTITY
"M" STATION	1	1 PER STA.
"C" STATION	2 3	1 PER STA.
SIDETONE BALANCE IN ACCORDANCE WITH LOCAL INSTRUCTIONS.		A OR C

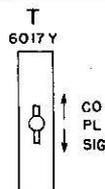
103. CONNECT RINGER AND CONDENSER OF KEY TEL. SET TO "T" AND "R" TERMINALS IN SET.

RECORD OF FIGURES, WIRING & APPARATUS CHANGES						
CHANGED ON ISS.	IF JOB RECORDS DO NOT SPECIFY	THIS OPTION WAS FURN.	SEE NOTE	USE IN CIRCUIT		
				STD.	ABM	M. D.
5-D	Z OR Y	Z		Y		Z
6-A				FIG.3		FIG.2
6-A				W		X



WORKING LIMITS

	"M" STATION TO C.O.	"M" STATION TO "C" STATION	"C" STATION TO "M" STATION			"C" STATION TO CENT. OFFICE
			BAT	A	M	
			14 V.	16 V.	18 V.	
MIN. INS. RES.	20,000 ^Ω	20,000 ^Ω				
SUPERVISION						1200 ^Ω
DIALING & RINGING						SAME AS CENT. OFF. RANGE
MAX. EXTERNAL CONDUCTOR LOOP	PRIVATE LINE RINGING	A-C RING SUPPLY				1200 ^Ω
		HAND GENERATOR				
	HOLDING	SEE RANGE CHART FOR IA KEY TEL. SYSTEM - WITH HOLD ONLY				
	BUZZER SIGNALING		830 ^Ω	1080 ^Ω	1330 ^Ω	
EARTH POTENTIAL			-6V	-6V	-6V	
			+20V	+20V	+20V	

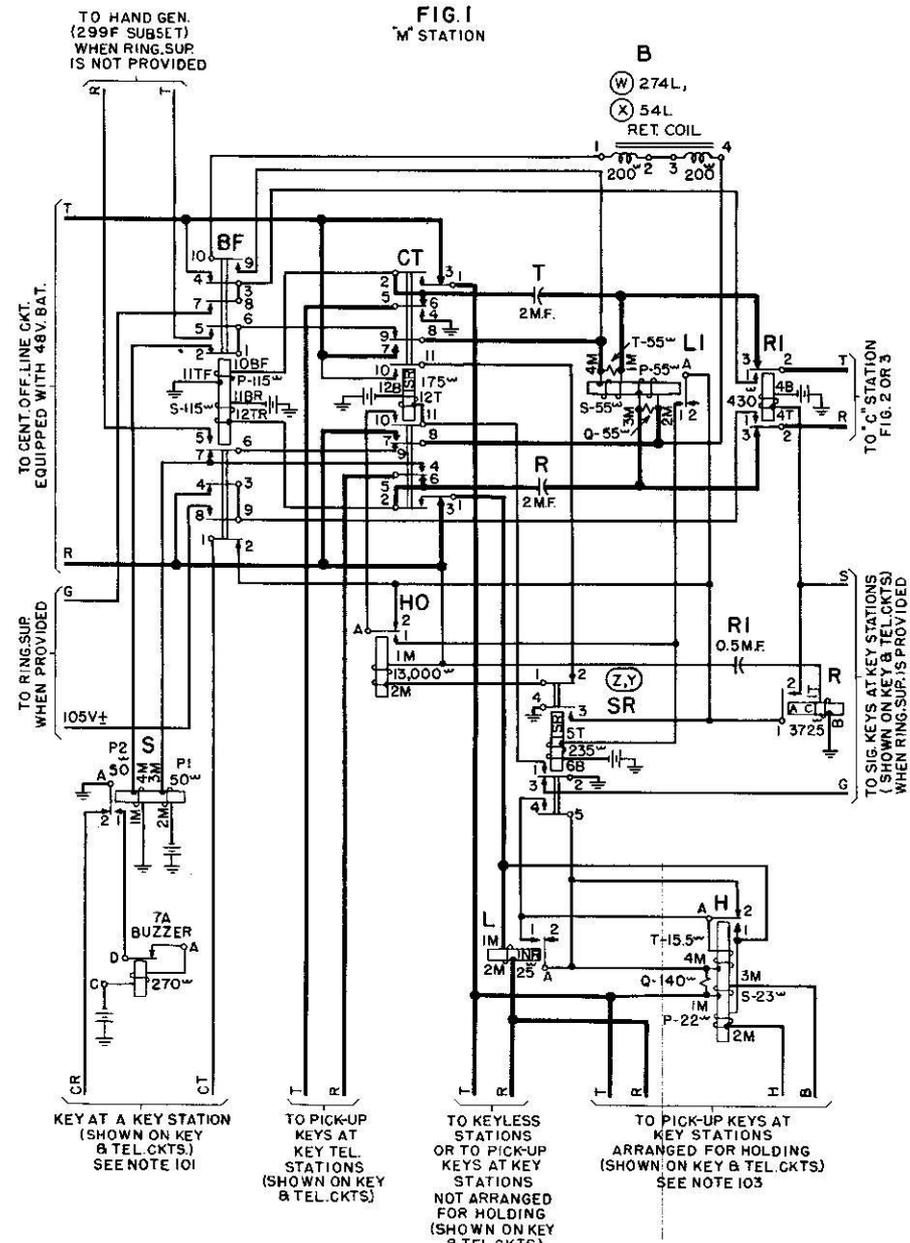


OPTIONS USED	
FIGS.	APP OR WIRING
1	Z
2	Y
3	X
	W
	C
	A

KEY TELEPHONE SYSTEM NO. 1A
PRIVATE LINE CIRCUIT

SD-69105-011

FIG. 1
M STATION



KEY TELEPHONE SYSTEM NO. 1A
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FIG. 2
(MFR. DISC)
"C" STATION

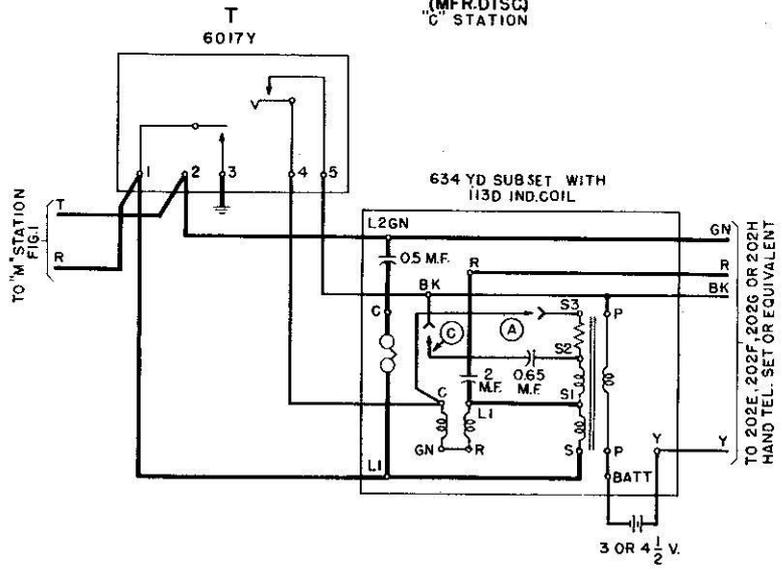
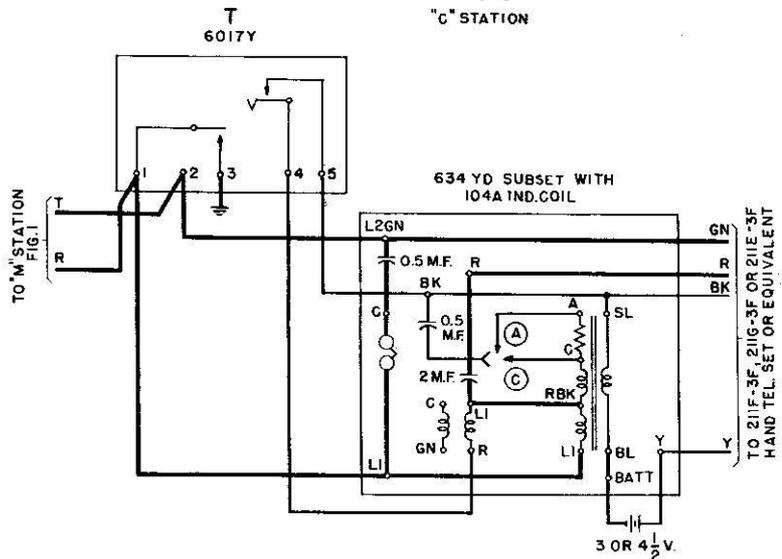


FIG. 3
"C" STATION



CIRCUIT REQUIREMENTS

KEY TELEPHONE SYSTEM NO. 1A, PRIVATE LINE CIRCUIT (PL)

DRAWING ISSUE

7D 456 DMC

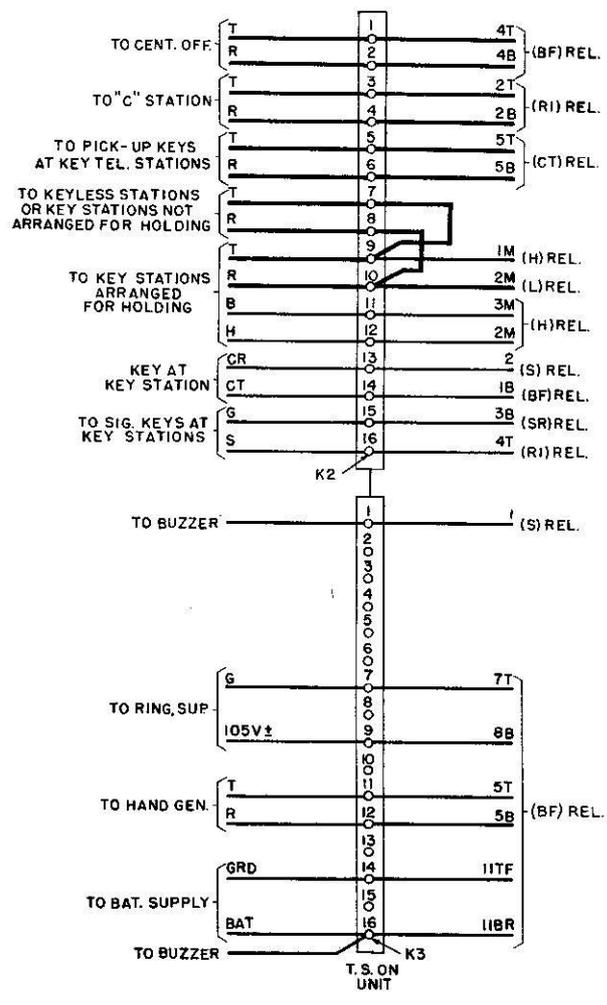
APPARATUS				MECH REQ			CIRCUIT PREPARATION				DIRECT CURRENT FLOW REQ					REMARKS	
DESIG	CODE	OPTION	FIG.	BSP FIG.	CONT PRESS.	ARM. TRVL.	BLOCK OR INSULATE	TEST CLIP DATA		TEST SET PREP	SEE TEST NOTE	TEST WDG	TEST FOR	AFTER SOAK	TEST		READJ
								CONN. BAT.	CONN. GRD								
RELAYS																	
BF	U995		I	193/149	H	47		TR(BF)	BF(BF)	M		P/S	O		33.5	31.5	
CT	Y198		I	163/163	H	59	10B(CT)		T(CT)	GRD	2		O		63	60	
									T(CT)	GRD	2		H		11.9	11.3	
									T(CT)	GRD	2		R		2.5	2.9	
H	B1158		I	14		30	1T(CT)	7T(CT)	2M(H)	M	1	P	O		20	19	
							1T(CT)	7T(CT)	2M(H)	M		P	NO		13.4	14.1	
							1T(CT)	7T(CT)	2M(H)	M		P	R		9.3	9.8	
							1B(CT)	3M(H)	7B(CT)	M		S	O		20		
							1B(CT),2(H)	1(L)	7B(CT)	M		T/Q	O		20		
HO	B1172		I	14		30			1T(SR)	GRD			O		1.2	1.1	
									1T(SR)	GRD			NO		0.7	0.8	
L	B1159		I	14		30		1T(CT)	2M(L)	M			O		8.7	8.2	
								1T(CT)	2M(L)	M			R		3.9	4.1	
LI	B1173		I	8		30	R1(O), (SR)NO	3B(RI)	3T(RI)	M		P/S	O	FS	6.1	5.8	
								3B(RI)	3T(RI)	M		P/S	R	FS	3.2	3.4	
R	I86C		I				(R)NO				3		O		AC	AC	
								1T(R)		BAT.			O		3.2	3	
								1T(R)		BAT.			NO		1.5	1.6	
RI	U994		I	132/132	H	47			T(R1)	GRD			O		22	20.5	
S	B1171		I	14		30	(R)O		7B(BF)	GRD		PI	O	25	14.5	13.8	
							(R)O		7B(BF)	GRD		PI	NO	25	9.7	10.3	
							(R)O		7B(BF)	GRD		PI	R	25	6.9	7.3	
							(R)O	2T(BF)		BAT.		P2	O		16		
SR	Y197	Z	I	188/108	SPL	SPL	(CT)NO		T(SR)	GRD	2,4		O	FS	41.5	39.5	FOR TESTING AND READJUSTING PURPOSES 18V MINIMUM WILL BE REQUIRED.
							(CT)NO		T(SR)	GRD	2,4		H	FS	5.3	5	
							(CT)NO		T(SR)	GRD	2,4		R	FS	1.5	1.8	
SR	Y282	Y	I	188/203	SPL	SPL	(CT)NO		T(SR)	GRD	2,4		O	FS	41.5	39.5	FOR TESTING AND READJUSTING PURPOSES 18V MINIMUM WILL BE REQUIRED.
							(CT)NO		T(SR)	GRD	2,4		H	FS	5.3	5	
							(CT)NO		T(SR)	GRD	2,4		R	FS	2	2.6	

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.
- ADJACENT RELAYS SHALL NOT BE ENERGIZED. SEE BSP.
- TEST AND READJUST RELAY FOR OPERATION ON RINGING CURRENT BY CONNECTING MINIMUM 95V, MAXIMUM 111V, 1100-1200 RPM RINGING CURRENT THRU 8500Ω NONINDUCTIVE RESISTANCE TO 1T(R) AND RING GROUND TO B(R). REPEAT WITH Ω INSTEAD OF 8500Ω. OPEN LINE TOWARDS CENTRAL OFFICE WHILE MAKING RINGING TESTS. IF THE PRECEDING CANNOT BE FOLLOWED, TEST AND READJUST (R) RELAY FOR OPERATION ON AC BY RINGING ON LINE FROM CENTRAL OFFICE.
- ARM. TRVL SPECIAL 41. FRONT CONTACT MAKE 6 READJ, 4 TEST. MIN TENSION 1T, 2B SPRINGS, 10 GRAMS READJ, 8 GRAMS TEST.

KEY TELEPHONE SYSTEM NO. 1A PRIVATE LINE CIRCUIT		SD-69105-014
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FIG. 51



KEY TELEPHONE SYSTEM NO. 1A
PRIVATE LINE CIRCUIT

SD-69105-015

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