

CIRCUIT NOTES:

FEATURE OR OPTION	FIG.	PROVIDE	
		APP OR WIR.	QUANTITY
VISUAL AND AUDIBLE SIGNAL CKT.	1		1 PER STATION
AUDIBLE ONLY SIGNAL CKT.	2		1 PER STATION
RINGER CUT-OFF KEY	3		1 PER RINGER TO BE CUT OFF
RINGER CUT-OFF FEATURE	REQ. NOT REQ.	Y Z	
CONTROL STATION DIAL	4		1 PER CONTROL STATION
EXTENSION RINGER	5		MAX. 2 PER LINE
CONNECTING CIRCUIT	DIAL PULSE RECEIVING AND CODE DISTG. CKT. (2-WIRE OPERATION)	X	
	DIAL PULSE RECEIVING & CONTROL CKT. FOR MAX. CAPACITY 5 LINES (4-WIRE OPERATION)	W	

SIGNAL (VISUAL)	2-WIRE OPERATION		4-WIRE OPERATION	
	RINGING SUPPLY	RING G. ON	±-ON	RING G. ON
1	±-ON R	T	R	T, TI, RI
2	±+ON R	T	T, TI, RI	R
3	±-ON T	R	T	R, TI, RI
4	±+ON T	R	R, TI, RI	T

CIRCUIT NOTES (CONT):

RECORD OF FIGURES, WIRING, AND APPARATUS CHANGES						
CHANGED ON ISSUE	IF JOB RECORDS DO NOT SPECIFY	THIS OPTION WAS FURN.	SEE NOTE	USE IN CIRCUIT		
	X OR W	X	101	X, W	A&M	M.D.
2D				U, W		
4D	V OR U	V		U		V
6D	T OR S	T		S		T

EQUIPMENT NOTES:

201. MODIFY THE 531A-3 SUBSCRIBER SET FOR FIG. 1 IN ACCORDANCE WITH ED-69231-01.
202. B1AL RINGERS SHALL BE EQUIPPED WITH 2-41B GONGS AND 101A GONG ATTACHMENTS WITH KNOCK-OUTS REMOVED.
203. MODIFY THE 531A-3 SUBSCRIBER SET FOR FIG. 5 BY MOVING THE YELLOW CONDENSER LEAD FROM TERMINAL "K" TO TERMINAL "E" AND CONNECTING A 3600Ω KS-13490, L1 RESISTOR, OR EQUIV., BETWEEN TERMINALS "K" AND "E".
204. MODIFY THE 687A-49 SUBSCRIBER SET FOR FIG. 1 IN ACCORDANCE WITH ED-69231-01.
205. MODIFY THE 687A-49 SUBSCRIBER SET FOR FIG. 5 BY MOVING THE YELLOW CONDENSER LEAD FROM TERM. "K" TO TERM. "E" AND CONNECTING A 3600Ω KS-13490, L1 RES. OR EQUIV., BETWEEN TERM. "K" AND "E".

TABLE A

LINE TO CONN. CKT.		MIN. VOLTS		MAX. EARTH POTENTIAL	MAX. COND. LOOP		
		AC	DC		NO EXTENSION	ONE EXTENSION INDICATOR*	ONE EXTENSION RINGER
2-WIRE	65	45V.	0	600	50	300	200
	70	45V.	0	1300	400	700	600
	70	45V.	±5	800	150	400	200
	70	45V.	±10	300			
	75	45V.	0	1800	800	1200	1000
	75	45V.	±5	1300	400	800	600
	75	45V.	±10	900	200	400	300
	80	45V.	±10	1300	400	900	700
4-WIRE	65	45V.		500		200	100
	70	45V.		1000	200	500	400
	75	45V.		1500	600	1000	900

TABLE B

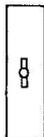
LINE TO CONN. CKT.		MIN. VOLTS		MAX. EARTH POTENTIAL	MAX. COND. LOOP		
		AC	DC		NO EXTENSION	ONE EXTENSION INDICATOR*	ONE EXTENSION RINGER
2-WIRE	65	45V.	0	1000	200	600	200
	70	45V.	0	1800	700	1200	700
	70	45V.	±5	1300	300	800	400
	70	45V.	±10	600		300	
	75	45V.	0	2600	1000	1700	1200
	75	45V.	±5	2000	700	1300	800
	75	45V.	±10	1600	400	800	500
	80	45V.	±10	2400	800	1500	900
4-WIRE	65	45V.		800	100	500	300
	70	45V.		1500	400	800	700
	75	45V.		2000	700	1500	1100

* THE ADDITION OF AN EXTENSION INDICATOR OR TWO EXTENSION RINGERS WILL REDUCE BY ONE THE NUMBER OF LINES WHICH MAY BE SERVED BY A GIVEN CENTRAL OFFICE UNIT.

WORKING LIMITS

THE FOLLOWING LIMITS ARE BASED ON THE USE OF A 13C OR EQUIVALENT RESISTANCE LAMP IN SERIES WITH THE RINGING SUPPLY. RANGES SHOWN FOR EXTENSION STATIONS OR RINGERS APPLY TO THE MOST DISTANT INDICATOR OR RINGER.

RCO
6017C



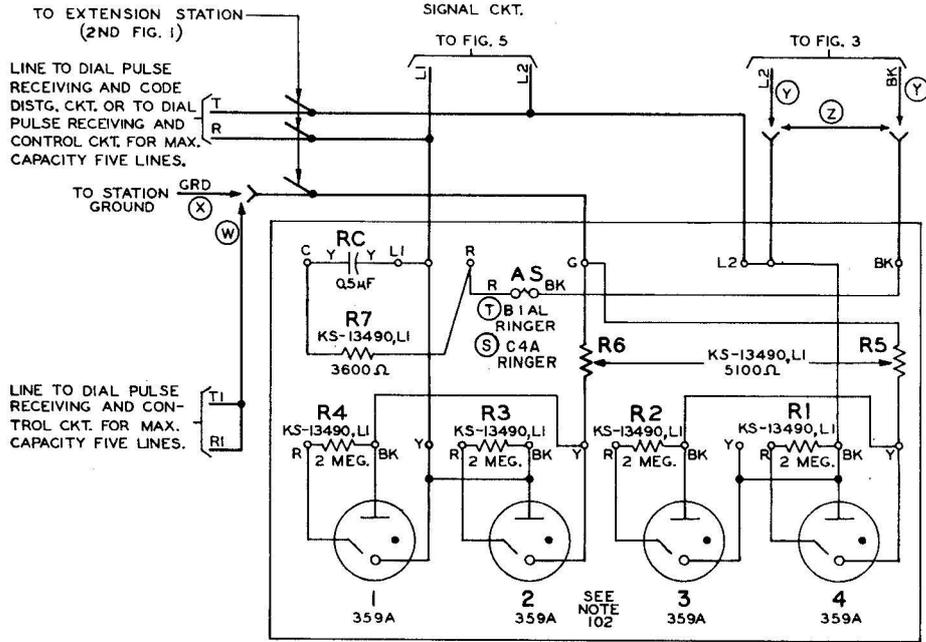
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DWG ISS	CD ISS	DWG ISS	CD ISS	DWG ISS	CD ISS
1	1	2D	2D	3D	3D
4D	4D				
DWG ISS	EE OR CD ISSUE	DATE ISSUE	DRAWN	APP	
5D	4D APP ID	3-30-59	LITH	WFW	
6D	4D APP 2D	2-23-71	JP	PEC	US

ED-69245-01
ED-69231-01
EQUIPMENT INFO.

SD-69211-01	1K99	AT&TCO STANDARD
Station Systems		
CIVIL AIR DEFENSE WARNING SYSTEMS STATION SIGNAL INDICATOR AND CONTROL STATION DIAL CIRCUIT		
BELL TELEPHONE LABORATORIES INCORPORATED		SD-69211-011
3S		2 SHEETS
PRINTED IN U.S.A.		

FIG. 1
VISUAL AND AUDIBLE
SIGNAL CKT.



- Ⓣ 531A-3 SUBSET MODIFIED SEE NOTES 201 & 202
- Ⓢ 687A-49 SUBSET MODIFIED SEE NOTE 204

FIG. 4
CONTROL STATION DIAL

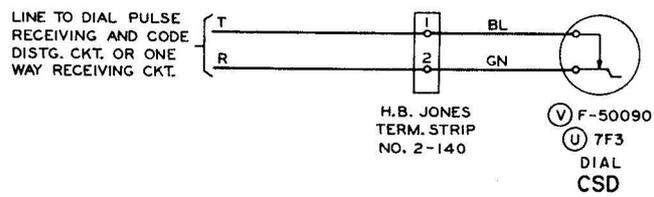


FIG. 3
RINGER CUT-OFF KEY

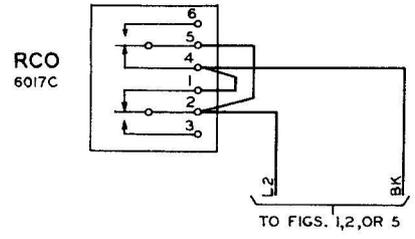


FIG. 2
AUDIBLE ONLY SIGNAL CIRCUIT

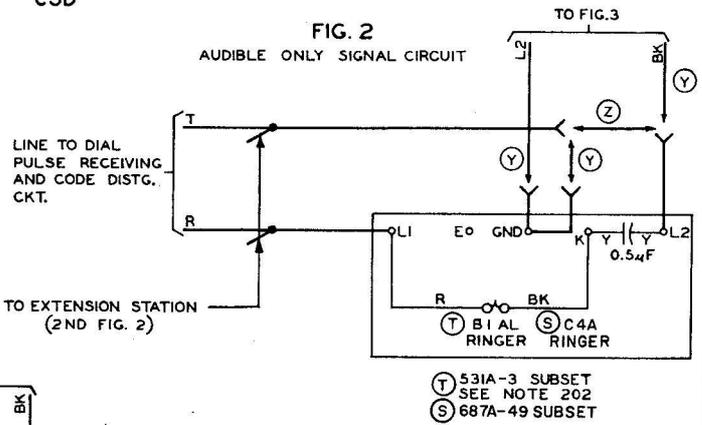
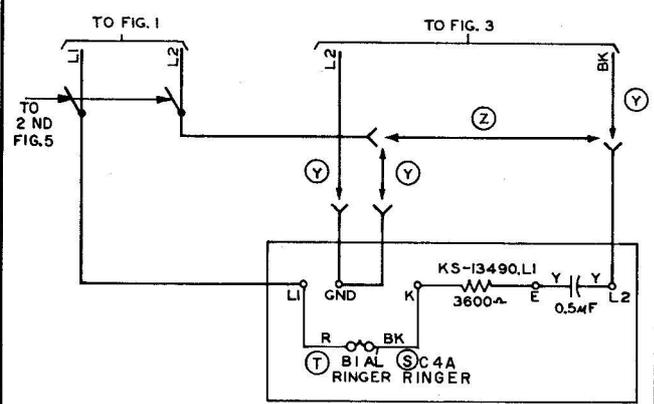


FIG. 5
EXTENSION RINGER



- Ⓢ 687A-49 SUBSET MODIFIED SEE NOTE 205
- Ⓣ 531A-3 SUBSET MODIFIED SEE NOTES 202 & 203