

CIRCUIT NOTES:

101. CONTACT PROTECTING NETWORKS

DESIG	OPTION	LOC	RES IN CTS	CAP IN UF	RES IN CTS	CAP IN UF	A OR B CAP. OR BLK WIRE TO	C OR D RES. OR TEL WIRE TO	PROTECTS CONTACTS	SEE NOTE
R REG	R,V,Y,Z M,K	1	470	0.1			RB1,2(R)	LT1,1(R)	IN CONN	
	S		150	0.5			WDG(R)	WDG(R)	IN CONN	
C MAG CTR		*2	150	0.5			WDG OF (C) MAG CTR	WDG OF (C) MAG CTR	IN CONN	

102. FEATURE OR OPTION

FEATURE OR OPTION	FIG	APP OR WRG	QUANTITY
TRAFFIC REGISTER AND INDIVIDUAL JACK & CORD	1	R	AS REQ SEE NOTES 301, 302 & 303
4 DIGIT REG. CAMERAS		Y	
4 DIGIT MANUALLY RESETTABLE MAG CTR		R	
5 DIGIT MAG CTR		S	
5 DIGIT MANUALLY RESETTABLE MAG CTR		M	
COMMON JACK AND CORD	2		1 PER MAX 10 FIGS. 1
PULSE JACK	3		1 PER "P" LEAD
SUPPLY JACK	4		1 PER S, S1, S2, S3 OR S4 LEAD
CONTROL SWITCH	5		AS REQ SEE NOTE 302
FRAME LINE OR SWITCHMAN'S TELEPHONE JACKS FOR TRAFFIC REG CABINETS LOCATED IN OPERATING ROOM	6		AS REQ SEE NOTE 302
TELEPHONE JACKS TO INTERTOLL SWITCHMAN FOR TRAFFIC REG CABINETS LOCATED IN OPERATING ROOM	6		AS REQ SEE NOTE 302
RECORDER'S TALKING LINE JACKS	7		AS REQ SEE NOTE 302
TRAFFIC REGISTER CAMERA	10		ONE PER MAX 150 REQ ON ADJ MTG TWO PER CAB
GUARD LAMP FOR DIAL TONE SPEED REGISTER CKT	15		ONE PER CABINET
SXS ROUTE CLASS PEG COUNT SWITCHES	18		ONE PER IDENTIFIER GROUP
CAMERA POWER RECEPTACLES AND CAMERA CONTROL RELAY FOR CABINETS WHERE BOTH CAMERAS ARE TO BE CONTROLLED FROM THE TRAFFIC USAGE RECORDER CIRCUIT	11, 16		ONE PER CABINET
CAMERA POWER RECEPTACLE AND CAMERA CONTROL RELAY FOR CABINETS WHERE BOTH CAMERAS ARE TO BE CONTROLLED FROM THE TRAFFIC REGISTER CAMERA CONTROL CIRCUIT	17	Q	ONE PER CAMERA MAX. TWO PER CAB
CAMERA POWER RECEPTACLE AND CAMERA CONTROL RELAYS FOR CABINETS THAT CONTAIN A MIXTURE OF REGISTERS REQUIRING THAT ONE CAMERA BE CONTROLLED FROM THE TRAFFIC USAGE RECORDER CIRCUIT AND THE OTHER FROM THE TRAFFIC REGISTER CAMERA CONTROL CIRCUIT	11, 19		ONE PER CABINET
	17	N	ONE PER CABINET

CIRCUIT NOTES: (CONT)

103. RECORD OF FIGURES, WIRING AND APPARATUS CHANGES

CHANGED ON ISS	IF JOB RECORDS DO NOT SPECIFY	THIS OPTION WAS FURN	SEE NOTE	USE IN CIRCUIT
3D	Y OR Z	Z	201	Y
5D	H OR X	X		W
7D	V	Y OR Z	201, 303	V, Y
7D	T	NONE	102	T
7D			102	FIGS. 8, 9, 10, 11
8D				T
8D				FIGS. 12, 13, 14
10D	S	V, Y OR Z	102, 108	S
10D			102	FIG. 15
12B			107	FIGS. 8, 9
12B			102	FIGS. 16, 17
13D			102	FIG. 18
13D				FIGS. 12, 13, 14
14D				FIGS. 8, 9
14D	R, S, V, OR Y	S, V OR Y	102	R, S, V, OR Y
16D	Q OR N	Q OR NONE	102	Q, N
16D			102	FIG. 19
16D	M OR K	R, V, Y OR S	102, 303	M, K

104.

DESIG	FUSE AMP	POTENTIAL	ONE PER
A	1-1/3	48V SIG	MAX 16 FIGS. 11 OR FIGS. 11 AND ONE FIG. 17 WITH N OPTION
B	1-1/3	48V SIG	CABINET FOR MAX OF TWO FIGS. 9 OR TWO FIGS. 17 WITH Q OPTION
	15	110V 60~	ONE FIG. 8 OR FIG. 16
	15	110V 60~	TWO FIGS. 9 OR TWO FIGS. 17 OR ONE FIG. 19 AND ONE FIG. 17 WITH N OPTION

105.
106. ON ISSUE 10D, FIGURES 12, 13, AND 14 ARE RATED "A&M ONLY" FOR NO. 4 TYPE TOLL OFFICES; "MFR DISC." FOR ALL OTHERS.

107. (A&M ONLY)

FEATURE OR OPTION	FIG.	APP OR WRG	QUANTITY

EQUIPMENT NOTES:

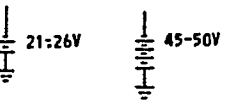
201. WHERE THE 12E OR 14M MESSAGE REGISTER IS MOUNTED ON A MOUNTING PLATE POSITION DRILLED FOR THE 14A MESSAGE REGISTER ONLY, THE 117A ADAPTER MUST BE PROVIDED.
- 202.
203. SEPARATE FIGS. 11 MUST BE FURNISHED FOR CONN TO THE CCU & CCP LEADS.
204. WHEN BOTH USAGE AND OTHER REGISTERS ARE IN THE SAME CABINET AND BOTH CAMERAS ARE TO BE CONTROLLED BY THE TRAFFIC USAGE RECORDER CIRCUIT, THE ASSOCIATED (CCU) RELAY SHALL BE CONNECTED TO THE CCU LEAD.

ISS	CD	DATE	ISSUE	DATE	ISSUE	DATE	ISSUE
1	1	2A	2A	3D	2A	3D	2A
4D	2A	APP 2D	2A	APP 3D	6D	3D	
7D	4D	8D	5D	9A	6A		
10D	7D						
11A	8A	5-15-61	6-18-61	7-18-61	8-18-61	9-18-61	10-18-61
12B	8A	APP 1B	5-15-61	6-18-61	7-18-61	8-18-61	9-18-61
13D	8A	APP 2D	5-15-61	6-18-61	7-18-61	8-18-61	9-18-61
14D	8A	APP 3D	5-15-61	6-18-61	7-18-61	8-18-61	9-18-61
15D	8A	APP 4D	5-15-61	6-18-61	7-18-61	8-18-61	9-18-61
16D	9D	11-16-73	12-16-73	1-16-74	2-16-74	3-16-74	4-16-74

WORK DRAWING REPRODUCED WITHOUT CHANGE 11-16-73

FIGURES AND OPTIONS ON THIS DWG

CKT FIG.	APP OR WIRING
1	17
2	17
3	19
4	W
5	V
6	
7	T
8	S
9	R
10	Q
11	
12	
13	N
14	M
15	
16	K



REPLACING SD-95606-01

SD-95531-01 1N99

COMMON SYSTEMS

TRAFFIC REGISTER CABINET CIRCUIT

AT&T CO STANDARD

SD-95531-01-1

4 SHEETS

BELL TELEPHONE LABORATORIES

FIG. 3
JACK FIELD PULSE JACK
SEE NOTE 301

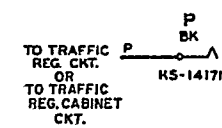


FIG. 1
TRAFFIC REG. & INDIVIDUAL JACK & CORD
SEE NOTE 301, 303

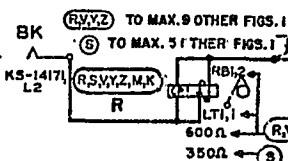


FIG. 2
COMMON JACK & CORD
SEE NOTE 301

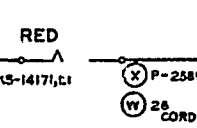


FIG. 4
JACK FIELD SUPPLY JACKS
SEE NOTE 301

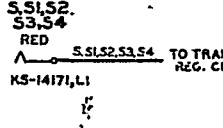


FIG. 5
CONTROL SWITCH
SEE NOTE 102, 301

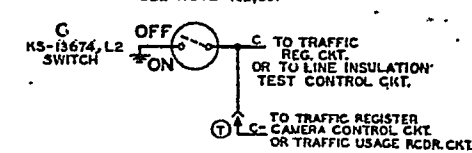


FIG. 6
FRAME LINE OR SWITCHMAN'S
TELEPHONE JACKS

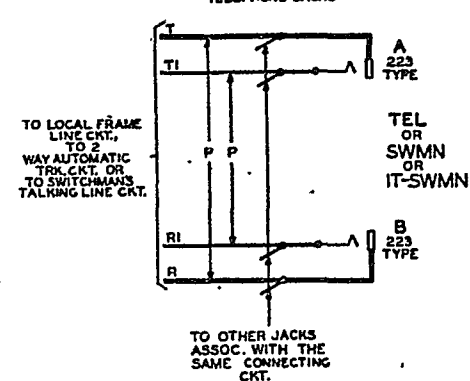


FIG. 7
RECORDER'S TALKING LINE
JACKS

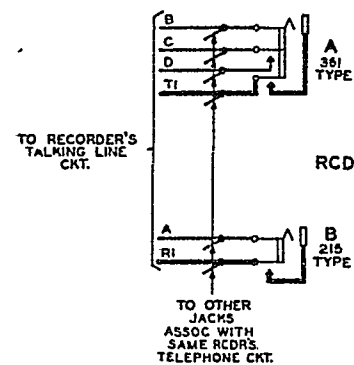


FIG. 8 (MFR DISC)
CAMERA POWER RECEPTACLES

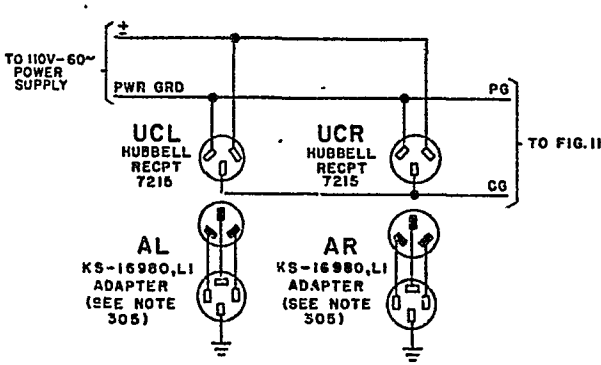


FIG. 11
CAMERA CONTROL RELAY FOR TRAFFIC
USAGE RECORDER CIRCUIT
SEE NOTES 203 & 204

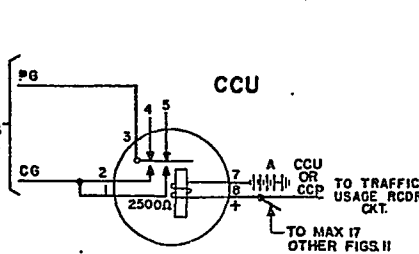


FIG. 10
CAMERA

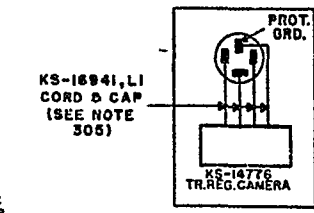


FIG. 9 (MFR DISC)
CAMERA POWER RECEPTACLE WITH CAMERA CONTROL
RELAY FOR TRAFFIC REGISTER CAMERA CONTROL CIRCUIT

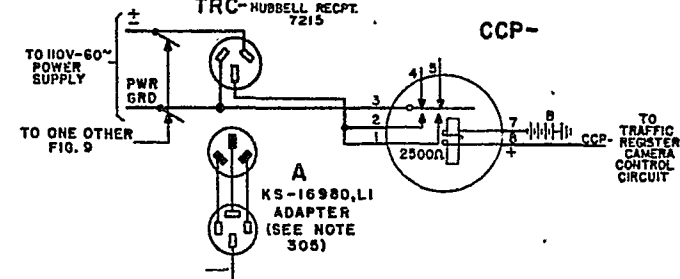


FIG. 13 (MFR DISC)
JACK FIELD PULSE JACK
SEE NOTES 301 & 304

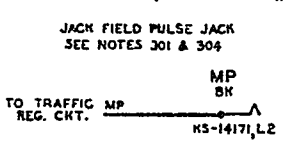


FIG. 12 (MFR DISC)
MAGNETIC COUNTER, JACKS AND CORDS
SEE NOTES 301 & 304

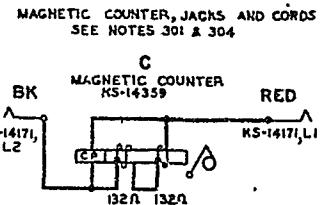


FIG. 14 (MFR DISC)
JACK FIELD SUPPLY JACKS
SEE NOTES 301 & 304

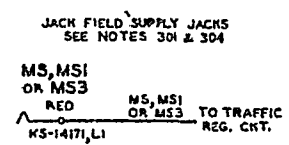


FIG. 15
GUARD LAMP FOR DIAL TONE
SPEED REGISTER CKT

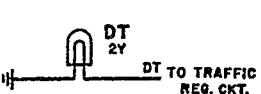


FIG. 16
CAMERA POWER RECEPTACLES

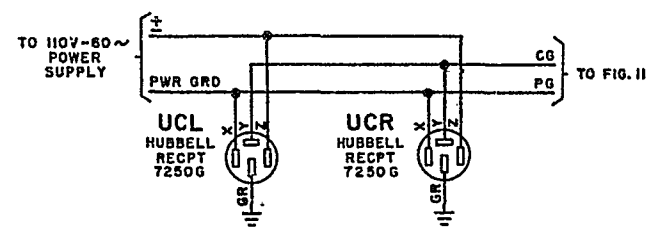


FIG. 17
CAMERA POWER RECEPTACLE WITH CAMERA CONTROL
RELAY FOR TRAFFIC REGISTER CAMERA CONTROL CIRCUIT

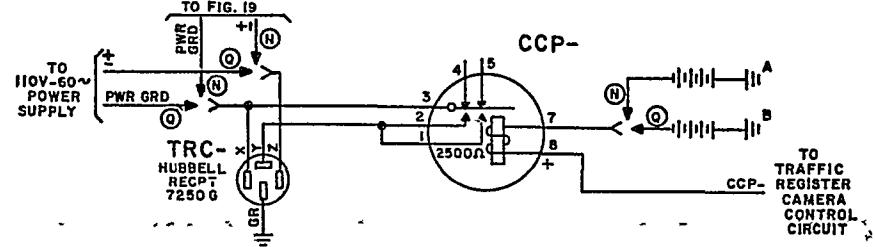
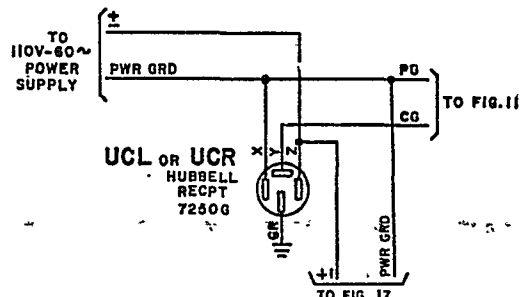
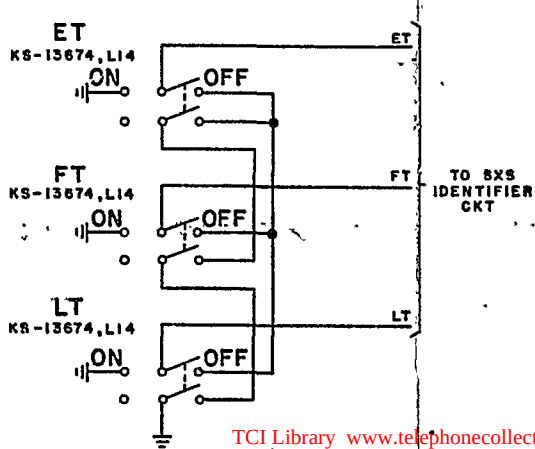


FIG. 18
SXS ROUTE CLASS PEG COUNT SWITCHES



CIRCUIT REQUIREMENTS														
TRAFFIC REGISTER CABINET CKT (TR)														
SD-95531														
APPARATUS			MECH. DET.			CIRCUIT PREPARATION			TEST SET			DIRECT CURRENT FLOW		
DESIG	CODE	OPTION	FIG.	BSF FIG.	CONT. PRESS.	ARM. TATL.	BLOCK OR INSULATE	TEST CLIP DATA	TEST SET PREP	TEST SET NOTE	TEST WDG.	TEST FOR	TEST MA.	REAR MA.
REMARKS														
RELAYS														
C	KS-10359		12					ASSOC (BK) JK	G/V 2,3	0		45V		
	MAG. CTR								G/V 2,3		R	0V		
CCP-CCU	275A		9, 11, 17		1						0	10.1		SEE BSP
											R	4.5		
R	14A	Z	1					ASSOC (BK) JK	GRD	1	0	44.5	42	
	MR								GRD	1	R	6.6	7	
R	14E	Y	1					ASSOC (BK) JK	GRD	1	0	31.5	30	
	MR								GRD	1	R	3.8	4	
R	14M	V	1					ASSOC (BK) JK	GRD	1	0	31.5	30	
	MR								GRD	1	R	3.8	4	
R	KS-16493	S	1					ASSOC (BK) JK	G/V 1,4	0		28V		
	L1								G/V 1,4		R	0V		
	MAG. CTR													
R	KS-19798	R	1					ASSOC (BK) JK	G/V 5,6,7	0		-48V		
	L1								G/V 5,6,7		R	0V		
	MAG. CTR													
R	KS-20206	M	50							8				
	L1													
	MAG. CTR													
R	14AD	K	1					ASSOC (BK) JK	GRD	1	0	31.5	30	
									GRD	1	R	3.8	4	

TEST NOTES:

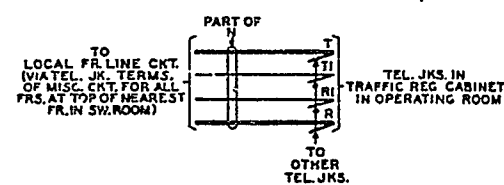
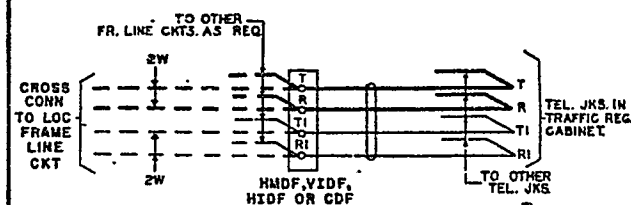
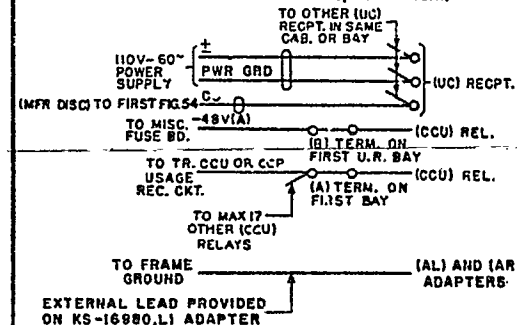
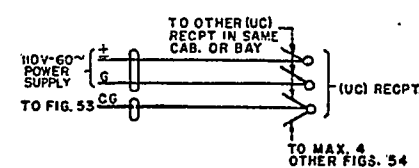
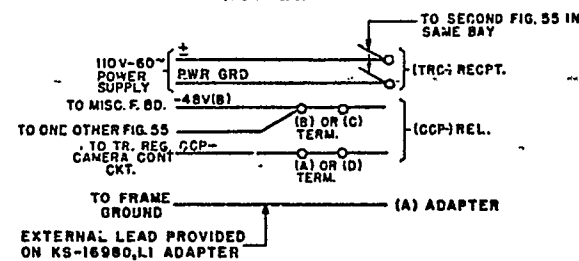
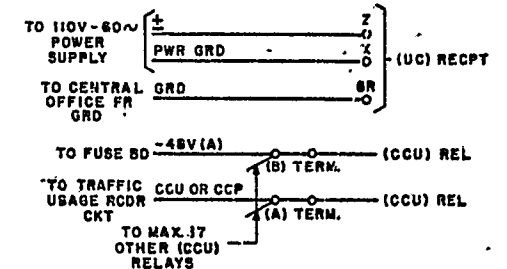
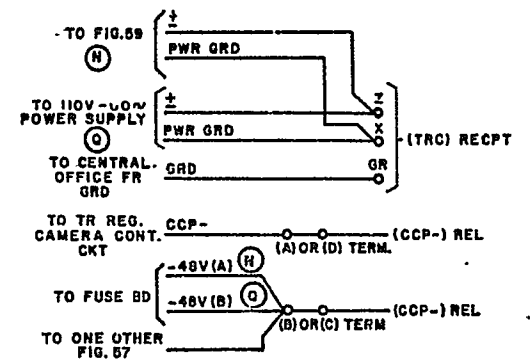
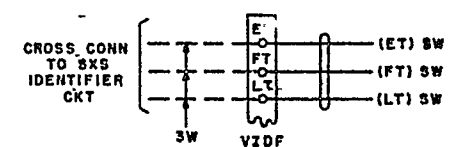
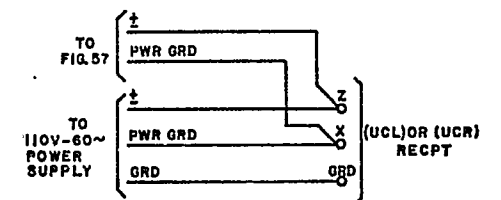
- CONNECT ASSOCIATED (RED) JACK TO (S) JACK HAVING DIRECT 48V.
- CONNECT ASSOCIATED (RED) JACK TO (MS) JACK HAVING DIRECT 48V.
- THE COUNTER SHALL FULLY OPERATE WITH A .030 SECOND CLOSURE AND SHALL ACCURATELY FOLLOW PULSES OF .030 CLOSURE AND .030 OPEN AT 45V D.C.
- THE COUNTER SHALL FULLY OPERATE WITH A .025 SECOND CLOSURE AND SHALL ACCURATELY FOLLOW PULSES OF .025 SECOND CLOSURE AND .025 SECOND OPEN AT 28V D.C.
- CONNECT B/G JACK OF TEST SET TO -48V AND GROUND RESPECTIVELY.
- CONNECT T OF TEST SET TO RB1, AND R OF TEST SET TO LT1 OF MAG CTR UNDER TEST.
- THE COUNTER SHALL FULLY OPERATE WITH A .020 SECOND CLOSURE AND SHALL ACCURATELY FOLLOW PULSES OF .020 SECOND CLOSURE AND A .020 SECOND OPEN AT 48 VOLTS DC.
- REFER TO BSP 030-313-101.

TRAFFIC REGISTER CABINET CIRCUIT

SD-95531-01-3

BELL TELEPHONE LABORATORIES
INCORPORATED

PRINTED IN U. S. A.

FIG. 51
(FOR FIG. 6)
CROSSBAR NO. 5FIG. 52
(FOR FIG. 6)FIG. 53 (MFR DISC)
(FOR FIRST FIG. 8 (MFR DISC), FIG. 8 & FIG. 11)FIG. 54 (MFR DISC)
(FOR FIG. 8 OTHER THAN FIRST)FIG. 55 (MFR DISC)
(FOR FIG. 9)FIG. 56
(FOR FIG. 11 & FIG. 16)FIG. 57
(FOR FIG. 17) Q, N OPTIONFIG. 58
(FOR FIG. 18)FIG. 59
(FOR FIG. 17, 18) N OPTION

COMMON SYSTEMS

TRAFFIC REGISTER CABINET CIRCUIT

BELL TELEPHONE LABORATORIES
INCORPORATED

SD-95531-01-3

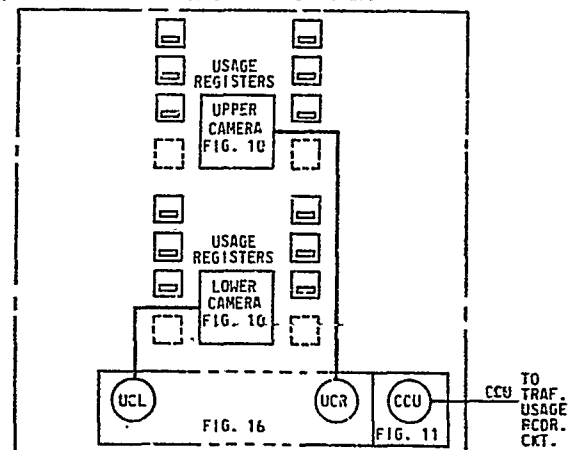
BELL TELEPHONE LABORATORIES
INCORPORATED

16D

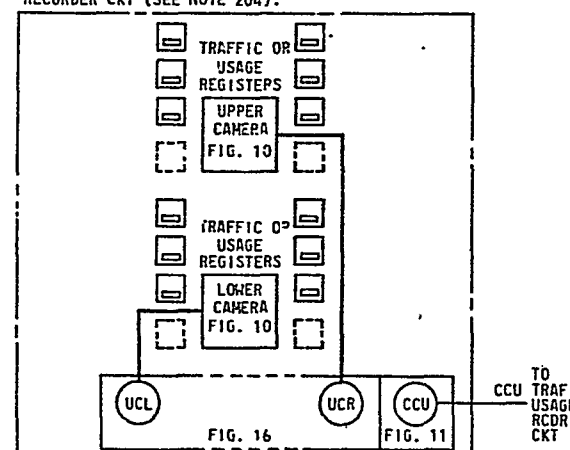
INFORMATION NOTES:

301. THE NUMBER OF REGISTERS OR MAGNETIC COUNTERS ACCORDING TO USE AND THE CONNECTING INFORMATION FOR LEADS P, S, S-C, MP, MS & MS- ARE COVERED IN TABLES ON THE ASSOC. TRAFFIC REGISTER CIRCUITS.
302. THE QUANTITIES ARE FURNISHED AS SPECIFIED ON THE PARTICULAR EQUIPMENT ARRANGEMENT
303. WHERE TRAFFIC REGISTER CAMERAS ARE PROVIDED FOR PHOTOGRAPHING USAGE OR OTHER TRAFFIC REGISTERS, THE PROVISION OF 14M MESSAGE REGISTER PER V OPTION OR THE 14AD REGISTER PER K OPTION IS PRESUMED. THE 14M MESSAGE REGISTER HAS A BLACK COVER WHILE THE 14AD MESSAGE REGISTER HAS A WHITE COVER WHICH IS MORE SUITABLE WHEN AN OPTICAL CHARACTER RECOGNITION SYSTEM IS EMPLOYED.
304. THE SUPPLY VOLTAGE LIMITS AND THE RESISTANCE LIMITS FOR THE LEADS SUPPLYING BATTERY AND GROUND TO THE REGISTERS AND MAGNETIC COUNTERS ARE SPECIFIED ON THE ASSOCIATED TRAFFIC REGISTER CIRCUITS
305. THE SUPPLIER SHALL EQUIP NEW CAMERAS WITH THE 4-WIRE CORD AND CAP PER KS-16941, L1. PRIOR TO CONVERSION OF CAMERA CORDS, THE TELEPHONE CO. SHALL PROVIDE SEPARATE GROUND LEADS TO THE CAMERAS AS A TEMPORARY EXPEDIENT, USING LEAD ASSEMBLY PER KS-16934, L1. WHEN THE W.E.CO IS INSTALLING ADAPTERS PER KS-6980, L1, THE INSTALLER SHALL REPLACE ANY 3-WIRE CORDS AND CAPS PER KS-15017, L1 BY 4-WIRE CORDS AND CAPS PER KS-16941, L1. PLUGS AND RECEPTACLES ARE SHOWN AS VIEWED FROM THE BLADE OR SLOT SIDE. THE KS-16980, L1 ADAPTER IS SECURED TO THE HUBBEL NO.7215 RECEPTACLE BY MEANS OF A BRACKET FASTENED TO THE RECEPTACLE COVER PLATE.
306. THE FOLLOWING SKETCHES SHOW CAMERA ARRANGEMENTS FOR USE WITH THE TR.REG. CAMERA CONT. CKT, OR THE TUR CKT, OR BOTH.

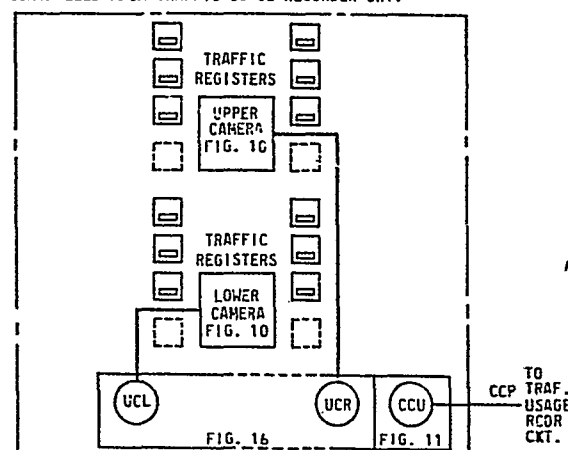
(A) CABINET CONTAINS USAGE REGISTERS ONLY.



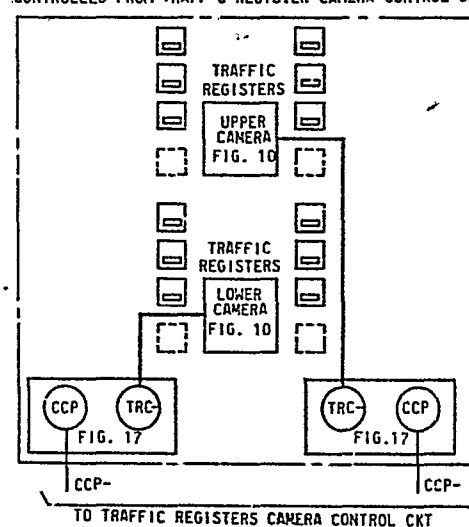
(C) CABINET CONTAINS USAGE AND TRAFFIC REGISTERS- BOTH CAMERAS CONTROLLED FROM TRAFFIC USAGE RECORDER CKT (SEE NOTE 204).



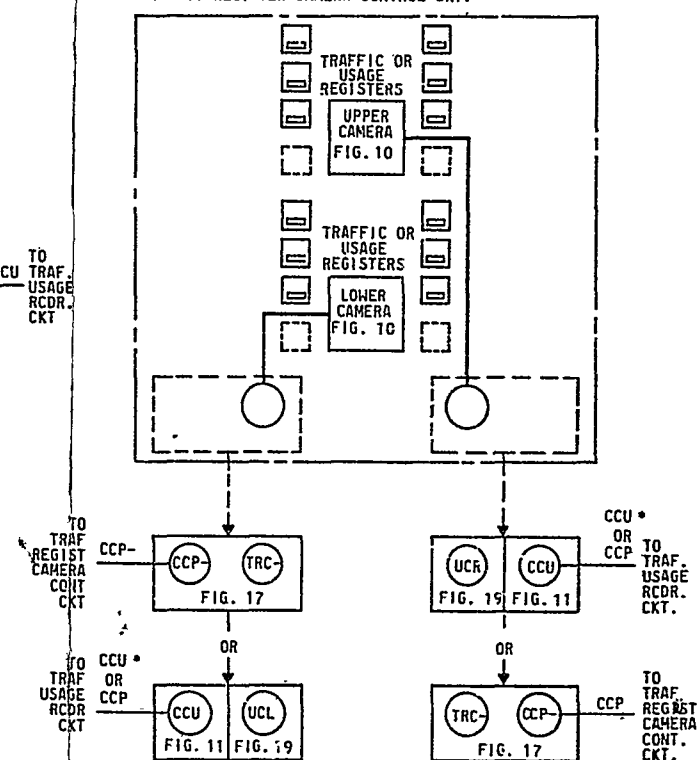
(B) CABINET CONTAINS TRAFFIC REGISTERS ONLY-BOTH CAMERAS CONTROLLED FROM TRAFFIC USAGE RECORDER CKT.



(D) CABINET CONTAINS TRAFFIC REGISTERS ONLY-BOTH CAMERAS CONTROLLED FROM TRAFFIC REGISTER CAMERA CONTROL CKT



(E) CABINET CONTAINS USAGE OR TRAFFIC REGISTERS- ONE CAMERA CONTROLLED FROM THE TRAFFIC USAGE RECORDER CKT. THE OTHER CONTROLLED FROM THE TRAFFIC REGISTER CAMERA CONTROL CKT.



* WHEN CABINET CONTAINS USAGE REGISTERS USE THE CCU LEAD TO THE TRAFFIC USAGE RECORDER CKT.