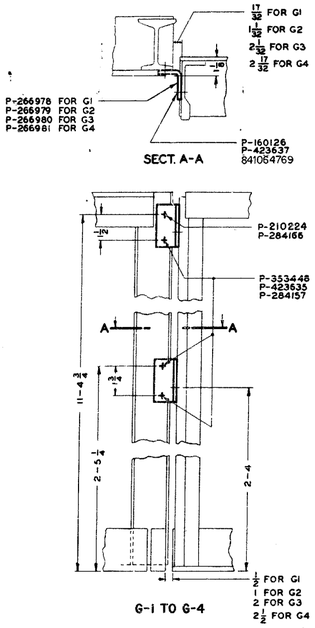
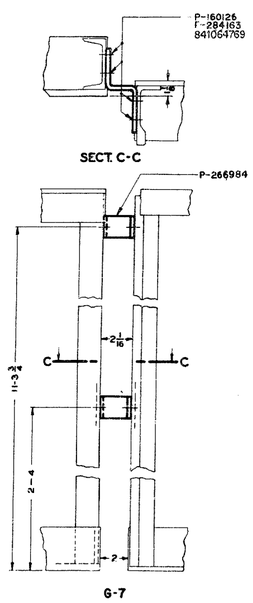
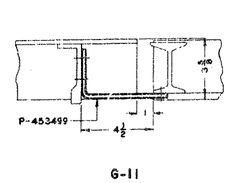
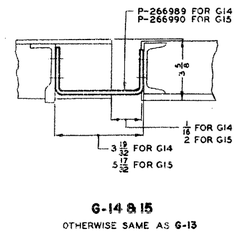




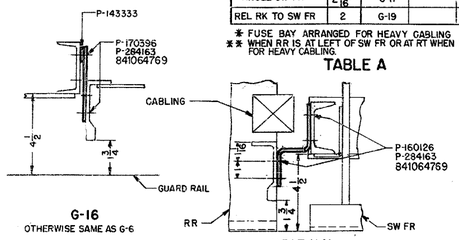


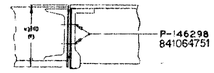


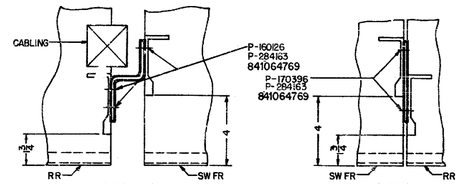
APPLICATION OF VARIOUS GROUPS				
SEPARATION BETWEEN FLOOR ANGLES		GUARD RAIL WIDTHS		
		1-0	1-3	1-8
FUSE BAY TO I BEAM RELAY RACK	1/2	G1		
	1	G2	G10	G10
	2	G3		
	2 1/2	G4		
	1 *	G5	G11	G11
FUSE BAY TO CHANNEL RELAY RACK	1/16	G6	G12	G12
	2	G7	G13	G13
	1/16 *	G8	G14	G14
	2 *	G9	G15	G15
REL. RK. TO SW. FR.	3/32	G-16		
ANGLE RR TO ANGLE SW FR	1/8	G-18		
	2 1/16 **	G-17		
REL. RK TO SW FR	2	G-19		

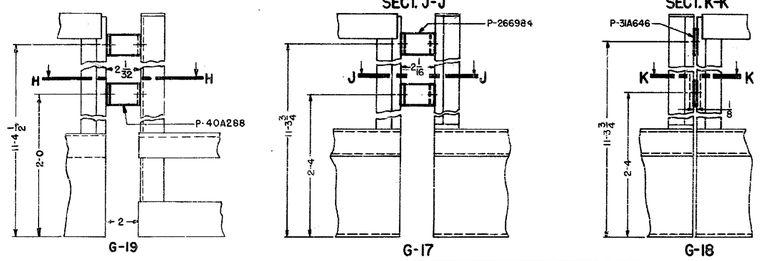
* FUSE BAY ARRANGED FOR HEAVY CABLING
** WHEN RR IS AT LEFT OF SW FR OR AT RT WHEN ARRANGED FOR HEAVY CABLING.

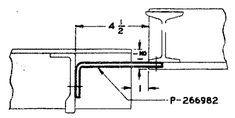
TABLE A

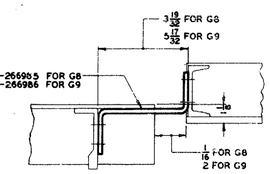


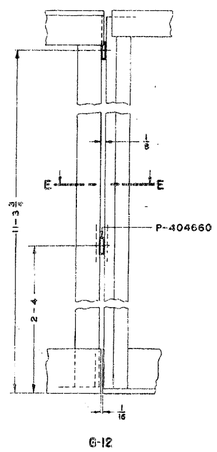


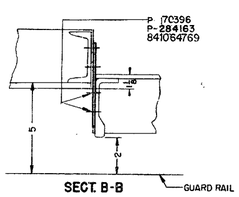


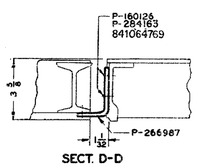


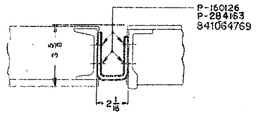


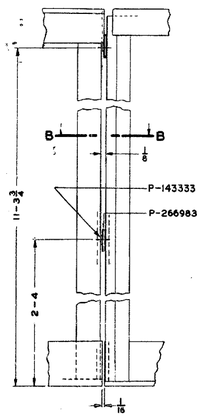


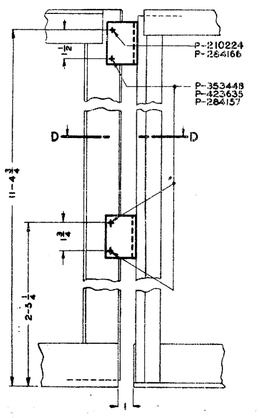


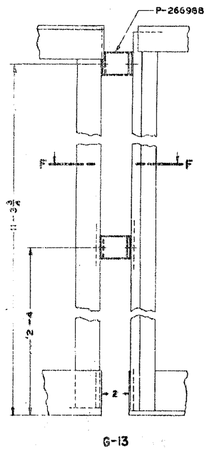












MANUFACTURING NOTES

1. IN STOCKLIST: PARTS DESIGNATED "S" SHALL BE SHIPPED SEPARATELY.
   ☒ MISC. ITEMS REQUIRED FOR INSTALLATION.
2. ADJACENT UPRIGHTS ON DIFFERENT TYPES OF RACKS SHALL BE JUNCTIONED PER G-1 TO G-15 AS REQUIRED AT TOP AND BOTTOM POINTS.
3. THE INSTALLER SHALL DRILL REQUIRED HOLES FOR JUNCTION DETAILS WHEN MOUNTING HOLES IN ADJACENT FRAMEWORKS DO NOT CORRESPOND.

SHOP INST.	
	N.O.D. 97025-4 4-30-46
	1
	IN VIEW OF G-6 & SECT. B-B, P-143333 WASHERS WERE NOT SHOWN PICTORIALLY. IN NOTE 51, ISSUE WAS 2. 1-24-50 210396-D
X	2
	G-16 ADDED. IN SECT B-B THE 5 & 2 DIM WEBE NOT SHOWN. DWG TITLE READ "COMMON SYS METHOD OF JOINING UPRIGHTS FOR DIFFERENT TYPES OF RELAY RACKS." 12-13-51 211214-B
	3
	G-18 ADDED. IN NOTE 51, ISS WAS 3. 5-11-53 211358-D
	4
	G-17 & G-18 ADDED. IN SL & VIEWS FOR G-6 & G-16, P-170396 WAS P-146263. 10-11-54 212056-B
	5
	A.T.&T. CO. RATING ADDED. NOTE 51 LINED OUT. 3-17-60 213524-B
X	6
	IN GROUP 18 ADD REF TO 10" OR 12" GUARD RAIL AND NOTE 35 ADDED. AT&T CO NONE 6-29-73 WE CO CL. B
	7
	IN SL LINES 28 & 29 NON-STD FASTENERS WERE SPECIFIED. 8-21-75 75HW0021-B1C
	8

G-19	G-18	G-17	G-16	G15	G14	G13	G12	G11	G10	G9	G8	G7	G6	G5	G4	G3	G2	G1	CODE	DESCRIPTION		LINE
	2																		P-31A646	JUNCTION SPACER	S	30
8	4	6	4	8	8	8		4	4	8	8	8	8	2	2	2	2	2	841064769	HEX. NUT (SPECIAL) 5/16-18	X	
							4												841064751	HEX. NUT 1/4-20	X	
								3	3					3	3	3	3	3	P-234157	WASHER .258 X 9/16 X .063	X	
								1	1					1	1	1	1	1	P-284166	WASHER .446 X 7/8 X .071	X	
8	4	6	4	8	8	8		4	4	8	8	8	8						P-284163	WASHER .383 X 3/4 X .071	X	25
														2	2	2	2	2	P-423637	S.PL.WASHER .312 X 19/32 X .030	X	
								3	3					3	3	3	3	3	P-423635	S.PL.WASHER 7/16 O.D.	X	
			2										4						P-143333	WASHER .359 X 3/4 X .031	X	
								1	1					1	1	1	1	1	P-210224	HEX.H. CAP SCR. 3/8-16 X 5/8	X	
8		6		8	8	8		4	4	8	8	8		2	2	2	2	2	P-160126	HEX.H. CAP SCR. 5/16-18 X 7/8	X	20
	4		4										8						P-170396	HEX.H. CAP SCR. 5/16-18 X 3/4	X	
							4												P-146298	HEX. H. CAP SCR. 1/4-20 X 1	X	
								3	3					3	3	3	3	3	P-353448	R.H.M. SCR. .216-24 X 5/8	X	
2																			P-40A288	JUNCTION TIEBAR	S	
							2												P-404660	SPACER	S	15
								2											P-453499	ADAPTER	S	
				2															P-266990		S	
					2														P-266989		S	
						2													P-266988		S	
									2										P-266987	JUNCTION TIEBAR	S	10
										2									P-266986		S	
											2								P-266985		S	
		2										2							P-266984		S	
			2										2						P-266983	JUNCTION SPACER	S	
														2					P-266982		S	5
															2				P-266981		S	
																2			P-266980	JUNCTION TIEBAR	S	
																	2		P-266979		S	
																		2	P-266978		S	1

ENGINEERING NOTES:
~~51. MADE FROM ED-91839-01, ISSUE 6~~
52.
53. SEE ED-90266-70 FOR ASSOCIATED GUARD RAIL JUNCTIONING DETAILS.
54. SEE TABLE A FOR APPLICATION OF VARIOUS GROUPS ON THIS DRAWING.
55. SEE H-242-652 FOR SUPPLEMENTARY GUARD RAILS.

SEPARATION DETAILS FOR 2 1/32 SPACING OF UPRIGHTS BETWEEN ANGLE TYPE R R
SEPARATION DETAILS FOR 1/8 SPACING OF UPRIGHTS BETWEEN ANGLE TYPE RR 10" OR 12" BASE, AND ANGLE TYPE SW FRAME FOR S X S OFFICES
SEPARATION DETAILS FOR 2 1/16 SPACING OF UPRIGHTS BETWEEN ANGLE TYPE RR AND ANGLE TYPE SW FRAME FOR S X S OFFICES
SEPARATION DETAILS FOR 1/8 SPACING OF UPRIGHTS BETWEEN ANGLE TYPE R.R. AND CHANNEL SW FRAME FOR S X S OFFICES
SEPARATION DETAILS FOR 2 1/16 SPACING OF UPRIGHTS BETWEEN RIGHT END OF FUSE BAY WITH HEAVY CABLING AND CHANNEL RELAY RACK, 1-3 OR 1-8 GUARD RAIL WIDTH.
SEPARATION DETAILS FOR 3 3/32 SPACING OF UPRIGHTS BETWEEN RIGHT END OF FUSE BAY WITH HEAVY CABLING AND CHANNEL RELAY RACK, 1-3 OR 1-8 GUARD RAIL WIDTH.
SEPARATION DETAILS FOR 2 1/16 SPACING OF UPRIGHTS BETWEEN FUSE BAY AND CHANNEL RELAY RACK, 1-3 OR 1-8 GUARD RAIL WIDTH.
SEPARATION DETAILS FOR 1/2 SPACING OF UPRIGHTS BETWEEN FUSE BAY AND CHANNEL RELAY RACK, 1-3 OR 1-8 GUARD RAIL WIDTH.
SEPARATION DETAILS FOR 1 17/32 SPACING OF UPRIGHTS BETWEEN RIGHT END OF FUSE BAY WITH HEAVY CABLING AND I BEAM RELAY RACK, 1-3 OR 1-8 GUARD RAIL WIDTH.
SEPARATION DETAILS FOR 1/2 SPACING OF UPRIGHTS BETWEEN FUSE BAY AND I BEAM RELAY RACK, 1-5 OR 1-8 GUARD RAIL WIDTH.
SEPARATION DETAILS FOR 3 17/32 SPACING OF UPRIGHTS BETWEEN RIGHT END OF FUSE BAY WITH HEAVY CABLING AND CHANNEL RELAY RACK, 1-0 GUARD RAIL WIDTH.
SEPARATION DETAILS FOR 3 19/32 SPACING OF UPRIGHTS BETWEEN RIGHT END OF FUSE BAY WITH HEAVY CABLING AND CHANNEL RELAY RACK, 1-0 GUARD RAIL WIDTH.
SEPARATION DETAILS FOR 2 1/16 SPACING OF UPRIGHTS BETWEEN FUSE BAY AND CHANNEL RELAY RACK, 1-8 GUARD RAIL WIDTH.
SEPARATION DETAILS FOR 1 1/2 SPACING OF UPRIGHTS BETWEEN FUSE BAY AND CHANNEL RELAY RACK, 1-8 GUARD RAIL WIDTH.
SEPARATION DETAILS FOR 4 1/2 SPACING OF UPRIGHTS BETWEEN RIGHT END OF FUSE BAY WITH HEAVY CABLING AND I BEAM RELAY RACK, 1-0 GUARD RAIL WIDTH.
SEPARATION DETAILS FOR 2 17/32 SPACING OF UPRIGHTS BETWEEN ANGLE FUSE BAY AND I BEAM RELAY RACK, 1-0 GUARD RAIL WIDTH.
SEPARATION DETAILS FOR 3 1/32 SPACING OF UPRIGHTS BETWEEN ANGLE FUSE BAY AND I BEAM RELAY RACK, 1-0 GUARD RAIL WIDTH.
SEPARATION DETAILS FOR 1 1/32 SPACING OF UPRIGHTS BETWEEN ANGLE FUSE BAY AND I BEAM RELAY RACK, 1-0 GUARD RAIL WIDTH.
SEPARATION DETAILS FOR 17/32 SPACING OF UPRIGHTS BETWEEN ANGLE FUSE BAY AND I BEAM RELAY RACK, 1-0 GUARD RAIL WIDTH.

ISSUE 8

NOTICE
NOT FOR USE OR DISCLOSURE OUTSIDE THE BELL SYSTEM EXCEPT UNDER WRITTEN AGREEMENT

1N99 FM

COMMUN SYSTEMS
JUNCTION DETAILS
ANGLE TYPE RELAY RACK
METHOD OF JOINING UPRIGHTS
TO DIFFERENT TYPES OF FRAMES

A.T.&T. CO. RATING
A.T.&T. CO. STANDARD
W.E. CO. RATING
STANDARD

WESTERN ELECTRIC COMPANY, INC.

ED-91839-70

ED-91839-70