

DESIGNATION CARDS FOR SELECTOR MULTIPLE

METHOD OF USING

STEP-BY-STEP SYSTEMS

1. GENERAL

1.01 This section covers the method of using P-30B490, P-30B492, P-40G182 through P-40G196, and E-2139 selector multiple designation cards in step-by-step and community dial offices.

1.02 This section is reissued to include the use of P-40G182 through P-40G196 cards (Fig. 1 through 10) and to revise the figures showing examples of the methods for filling out the cards. Since this reissue covers a general revision, arrows ordinarily used to indicate changes have been omitted.

1.03 The P-30B490, P-30B492, and P-40G182 through P-40G196 cards are made of laminated vinylite. The format is printed on an opaque white base bonded to a clear mat surface overlay on which the tracing entries are placed. These cards are designed for typewritten or hand-lettered entries. Hand lettering is preferred and, when employed, a Dixon 368 ultramarine pencil should be used. Black India ink may also be used. The cards should first be rubbed with draftsman pounce if India ink is to be used. This treatment will assure better adherence of the ink to the plastic surface.

1.04 The E-2139 selector multiple designation card (Fig. 11 and 12) is made of cellulose acetate. The ruling and common information are printed on the back so that erasures made on the front of the card in connection with trunking changes will not affect this ruling. A white card for use as a background and a transparent cellulose acetate faceplate are supplied with the designation card. Black India ink should be used for the lettering on the face to show the trunking arrangements.

1.05 The typewritten and hand-lettered entries can be erased. The hand-lettered India ink entries can also be removed with a damp cloth. When removing a small portion of the entries, an erasing shield may be desirable.

1.06 Where P-30B490 and P-30B492 cards (Fig. 13 and 14) are still in use, the method of making entries is the same as for making entries on P-40G182 through P-40G196 cards.

2. USE OF P-40G182 THROUGH P-40G196 CARDS

2.01 Fig. 1 through 8 cover typical examples of the methods of filling out P-40G182 through P-40G196 selector multiple designation cards which are used on distributing terminal assembly-type selector frames. These cards provide for the tabulation of forward tracing information from the banks of all half-shelves on a selector level. Columns 1 through 10 on the designation card represent 1 through 10 bank terminals for the 32 halves indicated by the letters at the sides. The letters on the left side of the card are for the left half-shelves in the odd numbered left bay, and those at the right are for the right half-shelves in the even numbered right bay. The intersections of the horizontal half-shelf spaces and the vertical columns form the reference points for the forward tracing information. However, forward tracing entries are placed only in horizontal spaces corresponding with the uppermost half-shelves where outgoing trunks are multiplied without a reversal. Therefore, if at a given intersection of a half-shelf space and a terminal column there is no entry, the procedure is to follow upward in that terminal column to the first entry, which is the desired forward tracing information.

2.02 The entries in the "Misc" column for succeeding bay numbers, position numbers, type of equipment, class of service, etc are entered in spaces for first and last equipped half-shelves to which a given entry applies. A maximum of three succeeding selector bay numbers or two connector frame numbers may be entered in this column in the same horizontal shelf space; in cases of more than one bay number, the succeeding circuit numbers are placed in the same horizontal line as the associated bay number. The same is true of a maximum of two lines of position numbers as illustrated in Fig. 6. If such entries per horizontal space exceed these numbers, the additional frame numbers only are dispersed horizontally among the terminal columns as indicated in Fig. 3 for connector bays. Those numbers in excess of three succeeding selectors or two connector frames are placed on the first line in the terminal column as can be seen in Fig. 3 on half-shelf A in selector frame 543, terminal column 9. This number in excess is connector frame number C110. The connector shelf and switch number, E5, is placed under the frame number. Connector frame numbers C108 and C109 filled the "Misc" column and made it necessary to place C110 in the terminal column. Fig. 4 gives the same information with all the connector frames placed in the terminal columns and none in the "Misc" columns. If there is no frame number entry in the terminal column, the frame numbers in the "Misc" column apply.

2.03 The forward tracing information for trunks to desks and switchboards in Fig. 6, 7, and 8 is set up by positions and trunk numbers in the positions, or panel and jack numbers. If it is preferred to put information in the form of relay rack bay and trunk circuit numbers, it is considered as optional standard.

2.04 Fig. 3, 4, and 5 representing selector level trunks to connector shelves are on the basis of multi-shelf hundreds groups and show different methods of indicating forward tracing information on the card. In the case of single shelf groups, the shelf letter prefixes are omitted, and the connector frame number in the "Misc" column and the connector numbers in columns 1 through 10 are placed on the center in the horizontal spaces as for selectors in Fig. 1.

2.05 The types of digit absorbing and blocking information to be entered in the "C" column are indicated at the bottom of each card,

and examples of such entries are illustrated in Fig. 1 and 2. If there are no such entries in any of the horizontal shelf spaces, all selectors trunk hunt on the level represented. To avoid repeating these entries in all half-shelf spaces on a frame having these requirements, but at the same time providing information as to which shelves are involved, the symbol specified at the lower right of the card is adopted (Fig. 2). This symbol indicates that all shelves between the upper and lower entries in the "C" column are the same. In the same of four or less consecutive half-shelves, the digit absorbing or blocking symbols are entered for each half-shelf as in Fig. 1. The entries "A2" and "B2" for absorb or block on the second digit apply to the "2 digit" absorbing and blocking features. Entries in the "C" column for a particular horizontal shelf space are placed in the same relative position as shown on the bottom of the card.

2.06 These cards are contained in a bin-type P-30B493 card holder. One such card holder holds all of the cards for the ten levels and is mounted in the same way as the present left card holder on the front of the distributing terminal assembly bay.

2.07 Fig. 9 and 10 illustrate P-40G182 through P-40G186 cards for use on universal switch frames with ten capacity selector shelves to be mounted in card holder P-30B491 (similar to P-30B493 but shorter). The shelf letters for the eight shelves of an 11-foot 6-inch frame are indicated at the left of the card. The same principles apply to filling out these cards as for the P-40G187 through P-40G196 cards, but since each card contains information for two levels, additional individual level entries are required as indicated in Fig. 9.

3. USE OF E-2139 CARD

3.01 The dimensions of the form, the white background card, and the transparent face-plate fit, without modification, in the standard two-unit card holders on selector frames arranged to accommodate 10 switches per shelf on universal selector frames or 20 switches per shelf on DTA type selector frames. (See Fig. 11).

3.02 For use in single-unit card holders on certain other frames with selector shelves arranged to accommodate ten switches, cut the

form in half at the mark designated B (Fig. 11) and use the left portion. Also cut the white card and the transparent faceplate to the same size.

3.03 In those installations of step-by-step equipment where the trunking arrangements require triple-unit card holders, two E-2139 cards can be combined for use in place of the paper designation D-53112 card. This can be done by

cutting one card at marks A and D, and by cutting a second card in half at mark C and trimming this portion of the card at D. This portion of the second card can then be combined with the first card to make the triple-unit designation card, as illustrated in Fig. 12. The white cards and faceplates should be cut so that their seams will not coincide with that formed by the two portions of E-2139 card.

[illegible]

Fig. 1 — Example of First Selector Frame 101-102 — Level 1, Shelves A Left to B Right — FR 1st Selectors, Shelves C Left to D Right — Digit Absorbing Serv Code Selectors, Shelves E Left to O Left — CB 1st Selectors, Shelves P Left to R Right — MR 1st Selectors

LEVEL 7													
HALF SHS IN BAY - 249		TERMINATION - LOCAL 4TH SELECTORS										HALF SHS IN BAY - 250	
A	MISC	1	2	3	4	5	6	7	8	9	10		
A	445 447 448	81	83	92	23	55	28	93	88	24	90		
B	H / H												
		89		87									
			51										
C		86			96								
			22	21									
D													
		95	94	97									
E		62	91	84	52	25	24	88	93	28			
F													
			99										
		26		30									
G		54	98	100	85								
H		27	29	53									
	445 447 448												
I	446 447 448	81	83	32	43	56	48	33	88	44	90		
J													
		89		87									
			60										
K		86	42	41	36								
L													
		35	34	37									
M		82		84	59	45	44	88		48			
N			31						33				
		46		50									
			39										
O		57			85								
			38	40									
P													
	H / H												
		47	49	58									
	A 446 447 448												
IND IN C COLUMN FOR DIG ABS		1	2	3	4	5	6	7	8	9	10		
B BLKG - SPACE CHARACTERS		A R				ABSORB ONCE ONLY, ABSORB REPEATEDLY OR BLOCK ALSO				ABSORB ORN SAME ON BLOCK ON / INTERV			
VERTICALLY AS INDICATED						ABSORB OR BLK ON 1ST DIG. 2				2ND DIG. 3 SHELVES			
P-406193													

Fig. 2 — Example of Digit Absorbing 2nd Selector Frame 249-250 — Level 7 to Local 4th Selectors

LEVEL 1		HALF SHS IN BAY - 543								HALF SHS. IN BAY - 544	
		TERMINATION - CONNECTORS									
	C MISC	1	2	3	4	5	6	7	8	9	10
A	SP731 C108 C109	A10	B9	C8	D7	C6	B5	C5	D5	C110 E5	A4
B											
		B10	C9	D8							A
					C110 E7	D6					B
C		C10	D9	E8							
D											
		D10	C110 E9	A7	A6	C110 E6	C110 E5	D5	C5	B5	C
											D
E		C110 E10	A8	B7							
F					B6 B6	A5					
		A9	E8	C7							E
	SP731 C108 C109										F
											P
IND. IN "C" COLUMN FOR DIG. ABS. & BLKG-SPACE CHARACTERS VERTICALLY AS INDICATED		A1A1		ABSORB ONCE ONLY, ABSORB REPEATEDLY OR BLOCK-ALSO				ABSORB OR BLOCK ON		SAME ON / INTERVNG	
				ABSORB OR BLK ON 1ST DIG. 2ND DIG.				2ND DIG.		SHELVES	

P-40G187

Fig. 3 — Example of Fifth Selector Frame 543-544 — Level 1 to Connectors on More Than Two Connector Frames, 2 Frame Numbers in Misc Column — Remaining Frame Numbers Dispersed Through Terminal Columns

LEVEL 1

HALF SHS. IN BAY - 543		TERMINATION - CONNECTORS								HALF SHS. IN BAY - 544	
C	MISC	1	2	3	4	5	6	7	8	9	10
A	SP731	C108 A10	C109 B9	C8	D7	C6	B5	C5	C109 D5	C110 E5	C109 A4
B		C109 B10	C9	C109 D8		C110 E7	C109 D6				A
C		C108 C10	C108 D9	C109 E8							
D											
		C109 D10	C110 E9	C108 A7	C108 A6	C110 E6	C110 E5	C109 D5	C5	C109 B5	C
											D
E		C110 E10	C108 A8	C109 B7							
F					C109 B6	C108 A5					
		C108 A9	C109 B8	C109 C7							E
	SP731										F
											P
IND. IN "C" COLUMN FOR DIG. ABS. & BLKG-SPACE CHARACTERS VERTICALLY AS INDICATED		A1A1		ABSORB ONCE ONLY, ABSORB REPEATEDLY OR BLOCK-ALSO		ABSORB OR BLOCK ON 1ST DIG. 2ND DIG.		ABSORB OR BLOCK ON 1ST DIG. 2ND DIG.		SAME ON / INTERVNG SHELVES	

P-40G187

Fig. 4 — Example of Fifth Selector Frame 543-544 — Level 1 to Connectors on More Than Two Connector Frames — All Frame Numbers Entered in Terminal Columns

LEVEL 2

HALF SHS IN BAY - 541		TERMINATION - CONNECTORS								HALF SHS IN BAY - 542	
MISC		1	2	3	4	5	6	7	8	9	10
A	SP702 C103	B1	C1	C6	C8	C10	D1	D2	D3	D4	D5
B		B2									
		B3	C2								A
		B4									B
C		B5	C3								
D		B6									
		B7	C4	C7	C9	D4	D3	D2	D1	C10	C
		B8									D
E		B9	C5								
F		B10									
	SP702 C103										E
	SP712 C104 C105	B1	C1	C6	C8	C10	D1	D2	D3	D4	D5
G		B2									
H		B3	C2								
		B4									G
		B5	C3								H
I		B6		C7	C9	D4	D3	D2	D1	C10	
J		B7	C4								
		B8									I
		B9	C5								J
K		B10									
L	SP712 C104 C105										
	SP722 C106	B1	C1	C6	C8	C10	D1	D2	D3	D1	D5
		B2									L
M		B3	C2								
N		B4									
		B5	C3								M
		B6		C7	C9	D4	D3	D2	D1	C10	N
O		B7	C4								
P		B8									
		B9	C5								O
	SP722 C106	B10									P

SHELF LETTER

CONN NO.

OFF. CODE & HUNDS. NO.

CONN FRAME NO.

IND IN 'C' COLUMN FOR DIG ABS
& BLKG - SPACE CHARACTERS -
VERTICALLY AS INDICATED

A | ABSORB ONCE ONLY, ABSORB | ABSORB OR SAME ON
R | REPEATEDLY OR BLOCK-ALSO | BLOCK ON / INTERV
ABSORB OR BLK ON 1ST DIG | 2ND DIG | SHELVES

P-406188

Fig. 5 — Example of Fifth Selector Frame 541-542 — Level 2 to Connectors on One or Two Connector Frames



LEVEL 7

HALF SHS. IN BAY-101		TERMINATION-LOC. 2ND SELS.-CENT. TST										HALF SHS. IN BAY-102	
C/MISC	1	2	3	4	5	6	7	8	9	10			
A	241 242	31	33	42	37	35	44	43	38	116	40		
B		39											
		36	115	45	46							A	
	241 242	46										B	
C	C TST 4-7	0	1	2	3	4	4	4	4	4	4	← TRK NO. IN POS	
D													
	C TST 4-7											C	
												D	
E	248 241 242	51	53	42	57	55	44	43	58	59	60	← SEL NO.	
F													
		52		54			59	58				E	
			41		44				43	44		F	
G													
		61	63	49	67	65	66	48	68	69	90		
H													
		62	50	64	47		89	88	48	86		G	
												H	
I		101	103	112	107	105	106	113	108	109	110		
J													
		102	111	104	114		109	108	113	106		I	
												J	
K		101	103	119	107	105	106	118	108	109	110		
L													
		102	120	104	117	105	109	108	118	106		K	
												L	
M		91	93	112	97	95	114	113	98	99	100		
N		96	119										
		92	111	94	117	115	99	98	113	114		M	
		116	118									N	
O		32	41	34	47	120	116	38	43	44	40		
P													
		35	36									O	
	248 241 242	45	48	50	49							P	
C/MISC	1	2	3	4	5	6	7	8	9	10			

IND IN "C" COLUMN FOR DIG. ABS.

A/B ABSORB ONCE ONLY, ABSORB REPEATEDLY, OR BLOCK ALSO A/B ABSORB OR BLK ON 1ST DIG. 2ND DIG. 3RD DIG.

A/B ABSORB ONCE ONLY, ABSORB REPEATEDLY, OR BLOCK ALSO A/B ABSORB OR BLK ON 1ST DIG. 2ND DIG. 3RD DIG.

B BLKS - SPACE CHARACTERS VERTICALLY AS INDICATED

A/B ABSORB ONCE ONLY, ABSORB REPEATEDLY, OR BLOCK ALSO A/B ABSORB OR BLK ON 1ST DIG. 2ND DIG. 3RD DIG.

A/B ABSORB ONCE ONLY, ABSORB REPEATEDLY, OR BLOCK ALSO A/B ABSORB OR BLK ON 1ST DIG. 2ND DIG. 3RD DIG.

P-40G193

Fig. 7 — Example of First Selector Frame 101-102 — Level 7 to Local 2nd Selectors and Trunks to Central Test Desk — Same Shelves as in Fig. 1

LEVEL 0

TERMINATION - DSA CLR OR ROTS - INCPT											
HALF SHS IN BAY - IO1					HALF SHS IN BAY - IO2						
C/MISC	1	2	3	4	5	6	7	8	9	10	
A	CLR OR ROTS	T-4 12	T-3 30	T-2 46	T-3 41	1 2-19	1 3-19	2 4-17	5-18	2 6-19	4 11-22
B											
	CLR OR ROTS					2 6-19	5-18	2 4-17	1 2-19		
C	INCPT	122 1	122 2	2	2	2	2	2	2	2	2
D											
	INCPT										
E	CLR OR ROTS	T-0 97	T-1 93	T-0 99	11 31-1	4 10-1	11 31-2	4 10-2	11 31-3	4 10-3	11 31-4
F											
		T-1 92	T-0 98								
G		T-1 94	81	T-1 98	4 10-4	11 31-5	4 10-5	11 31-6	4 10-6	11 31-7	4 10-7
H											
		T-4 74	T-1 88	T-4 76	4 10-15	11 31-16	11 31-18	4 10-18	11 31-17	4 10-17	
O											
P		T-4 12	T-3 30	T-2 46	T-3 41	2 6-19	5-18	2 4-17	1 3-49	1 2-19	4 11-22
	CLR OR ROTS										
	C/MISC	1	2	3	4	5	6	7	8	9	10

IND IN "C" COLUMN FOR DIG ABS. / ABSORBS ONCE ONLY, ABSORBS / REPEATEDLY, OR BLOCK-ALSO / ABSORBS OR BLK ON 1ST DIG

B BLKG - SPACE CHARACTERS / VERTICALLY AS INDICATED

A / BLOCK ON / 2ND DIG

SAME ON / INTERVING / SHELVES

P-40G196

Fig. 8 — Example of First Selector Frame 101-102 — Level 0 to DSA CLR Trunks, Rotary Out Trunk Switches, and Intercepting Trunks — Same Shelves as in Fig. 1

LEVELS 9&0											
SHELVES IN FR - 1		LEV - 0 TERMINATION -									
C	MISC	1	2	3	4	5	6	7	8	9	10
A											
B											
C											
D											
E											
F											
G											
H											

LEV - 9 TERMINATION -											
A											
B											
C											
D											
E											
F											
G											
H											

IND. IN "C" COLUMN FOR DIG. ABS. (A) ABSORB ONCE ONLY, ABSORB (B) ABSORB OR SAME ON
 & BLKG - SPACE CHARACTERS (C) REPEATEDLY, OR BLOCK-ALSO (D) BLOCK ON / INTERVNG.
 VERTICALLY AS INDICATED (E) ABSORB OR BLK ON 1ST DIG. (F) 2ND DIG. (G) SHELVES
 P-40G186

Fig. 9 — Designation Card for Universal Switch Frames — Indication of Frame and Level Numbers — Otherwise Same Principles as in Fig. 1, 2, and 3

LEVELS 1&2											
P-40G182											

LEVELS 3&4											
P-40G183											

LEVELS 5&6											
P-40G184											

LEVELS 7&8											
P-40G185											

Fig. 10 — Cards Same as P-40G186 Except for Number Tabs

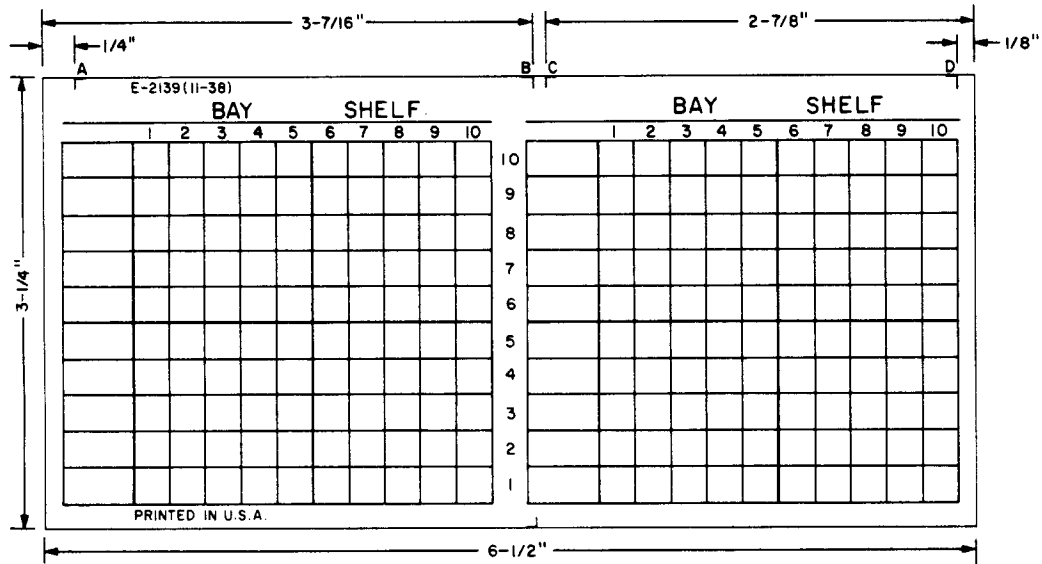


Fig. 11 – Two-Unit E-2139 Card

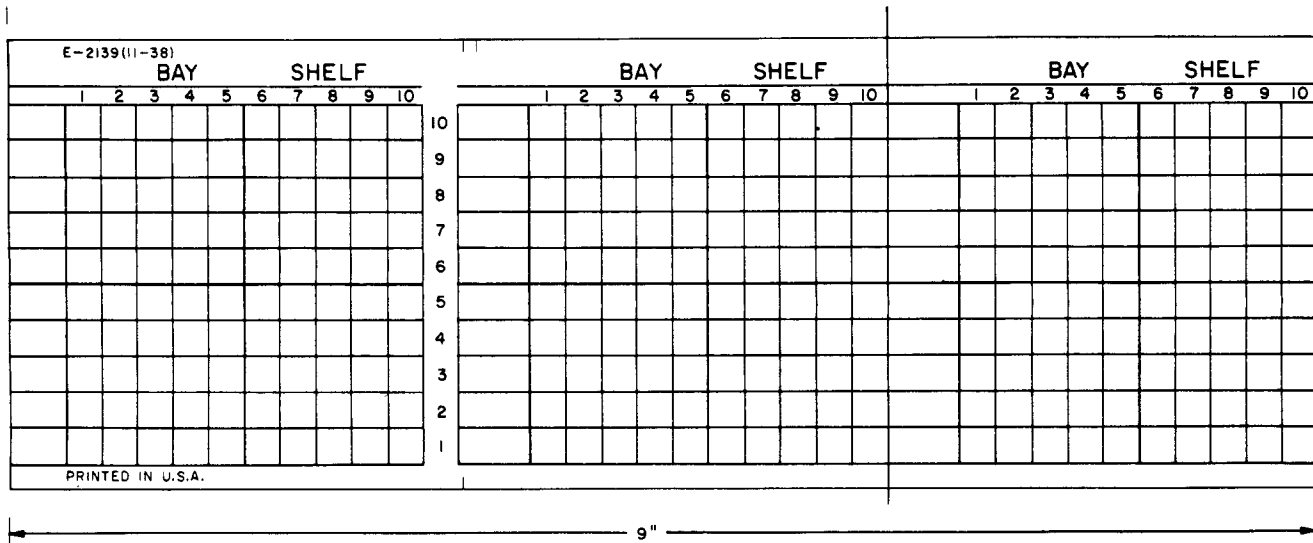


Fig. 12 – Triple-Unit E-2139 Card

LEVS-											
SHELVES IN FR -		LEV - TERMINATION -									
C	MISC	1	2	3	4	5	6	7	8	9	10
A											
B											
C											
D											
E											
F											
G											
H											

LEV - TERMINATION -											
A											
B											
C											
D											
E											
F											
G											
H											

C	MISC	1	2	3	4	5	6	7	8	9	10
IND IN "C" COLUMN FOR DIG ABS					AAB ABSORB ONCE ONLY, ABSORB			I ABSORB OR SAME ON			
8 BLKG - SPACE CHARACTERS -					R REPEATEDLY, OR BLOCK-ALSO			I BLOCK ON // INTERVNG			
VERTICALLY AS INDICATED					R ABSORB OR BLK ON 1ST DIG			2 2ND DIG. 8 SHELVES			

P-308490

CUT HERE FOR LEVS 182

CUT HERE FOR LEVS 384

CUT HERE FOR LEVS 586

CUT HERE FOR LEVS 788

LEV.-

HALF SHS IN BAY -		TERMINATION -								HALF SHS IN BAY -	
CIMISC	1	2	3	4	5	6	7	8	9	10	
A											
B											
C											
D											
E											
F											
G											
H											
I											
J											
K											
L											
M											
N											
O											
P											
Q											
R											
S											
T											
U											
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AA											
AB											
AC											
AD											
AE											
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AI											
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AK											
AL											
AM											
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AP											
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BV											
BW											
BX											
BY											