

OVERALL SIGNALING ARRANGEMENTS AND TESTING

PULSING TESTS ON DIAL TIE TRUNKS

CONTENTS	PAGE
1. GENERAL	1
2. DIAL TIE TRUNKS	1

1. GENERAL

1.01 This section covers dial pulsing tests on dial tie trunks or other circuits having identical signaling layouts.

1.02 This section is made up of a family of pulsing requirements diagrams which are to be used in making circuit order tests and for trouble shooting on single and multi-link signaling layouts.

1.03 Test set application and testing methods to be used with the pulsing requirements diagrams in this section are covered in Section 333-122-501. The test values specified in this practice are based on the use of the 2B or the 2B-1 signaling test sets and the pulse repeating adapter (SD-56134-02).

1.04 The pulsing requirements diagrams specify pulsing test values to be used at the customer's premises, at serving test centers, and at intermediate offices.

1.05 In some cases the test points shown on the pulsing requirements diagrams may not

physically exist in the form of jack circuits. In this instance, a decision must be made by the Plant Forces as to the best location to make the desired pulsing tests. (See Section 333-121-500.)

2. DIAL TIE TRUNKS

2.01 A dial tie trunk is a type of special service arrangement which is furnished between two Private Branch Exchanges (PBXs) to interconnect these PBXs directly without going through the regular telephone switching network. Tie trunks may be switched together at PBXs so that a private network for a particular customer can be created.

2.02 Dialing on a tie trunk may be required in either one or both directions depending on the specifications by customers. When dialing is required in both directions (2-way dial repeating tie trunk) a pulsing requirements diagram will need to be selected for each direction.

2.03 Table A is an index of those pulsing requirements diagrams for dial tie trunks covered in this section. Table B provides a legend of symbols used in the pulsing requirements diagrams. When special arrangements not covered on the attached diagrams are encountered, the proper testing values for the particular layout should be submitted to AT&T Co., using form E-3973 in accordance with Section 000-010-010.

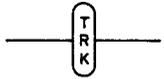
TABLE A
INDEX OF
PULSING REQUIREMENTS DIAGRAMS
FOR DIAL TIE TRUNKS

One Link Diagrams			Page	
DX			5	
SF (E&M)			6	
Two Link Diagrams				
First Link	Second Link			
DX	DX		7	
DX	SF (E&M)		8	
SF (E&M)	DX		9	
Three Link Diagrams				
First Link	Second Link	Third Link		
DX	CX	DX	10	
DX	CX	SF (E&M)	10	
DX	O/N CARR	DX	11	
DX	O/N CARR	SF (E&M)	11	
DX	SF (E&M)	DX	12	
DX	T CARR (E&M)	DX	13	
DX	T CARR (E&M)	SF (E&M)	13	
SF (E&M)	CX	DX	14	
SF (E&M)	O/N CARR	DX	15	
SF (E&M)	T CARR (E&M)	DX	16	
Four Link Diagrams				
First Link	Second Link	Third Link	Fourth Link	
DX	CX	CX	DX	17
DX	CX	CX	SF (E&M)	17
DX	CX	DX	SF (E&M)	18
DX	CX	O/N CARR	DX	19
DX	CX	O/N CARR	SF (E&M)	19
DX	CX	SF (E&M)	DX	20
DX	CX	T (E&M)	DX	21
DX	CX	T (E&M)	SF (E&M)	21
DX	O/N CARR	CX	DX	22
DX	O/N CARR	CX	SF (E&M)	22
DX	O/N CARR	DX	SF (E&M)	23
DX	O/N CARR	O/N CARR	DX	24
DX	O/N CARR	O/N CARR	SF (E&M)	24
DX	O/N CARR	SF (E&M)	DX	25

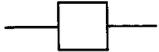
TABLE A (cont'd)

Four Link Diagrams (cont'd)				Page
First Link	Second Link	Third Link	Fourth Link	
DX	O/N CARR	T CARR (E&M)	DX	26
DX	O/N CARR	T CARR (E&M)	SF (E&M)	26
DX	SF (E&M)	CX	DX	27
DX	SF (E&M)	O/N CARR	DX	28
DX	SF (E&M)	T CARR (E&M)	DX	29
DX	T CARR (E&M)	CX	DX	30
DX	T CARR (E&M)	CX	SF (E&M)	30
DX	T CARR (E&M)	DX	SF (E&M)	31
DX	T CARR (E&M)	O/N CARR	DX	32
DX	T CARR (E&M)	O/N CARR	SF (E&M)	32
DX	T CARR (E&M)	SF (E&M)	DX	33
DX	T CARR (E&M)	T CARR (E&M)	DX	34
DX	T CARR (E&M)	T CARR (E&M)	SF (E&M)	34
SF (E&M)	CX	CX	DX	35
SF (E&M)	CX	O/N CARR	DX	36
SF (E&M)	CX	T CARR (E&M)	DX	37
SF (E&M)	DX	CX	DX	38
SF (E&M)	DX	O/N CARR	DX	39
SF (E&M)	DX	T CARR (E&M)	DX	40
SF (E&M)	O/N CARR	CX	DX	41
SF (E&M)	O/N CARR	O/N CARR	DX	42
SF (E&M)	O/N CARR	T CARR (E&M)	DX	43
SF (E&M)	T CARR (E&M)	CX	DX	44
SF (E&M)	T CARR (E&M)	O/N CARR	DX	45
SF (E&M)	T CARR (E&M)	T CARR (E&M)	DX	46

TABLE B
LEGEND OF SYMBOLS



Trunk Circuit



Signaling Unit — Type denoted in box as follows:

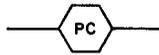
CX CX Signaling (long or short haul) or SX.

DX DX Signaling (DX-1 or DX-2 type units will be noted).

O/N Out of band signaling used for N1, ON and O type carrier systems.
CARR

T T Carrier PCM signaling (Loop or E & M type will be noted).
CARR

E & M "E" type single frequency signaling units, E & M type, (E2B, E3B, E4B)
SF



M Lead Pulse Corrector



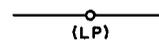
Pulse Link Repeater (relay type)



M Lead Testing Point

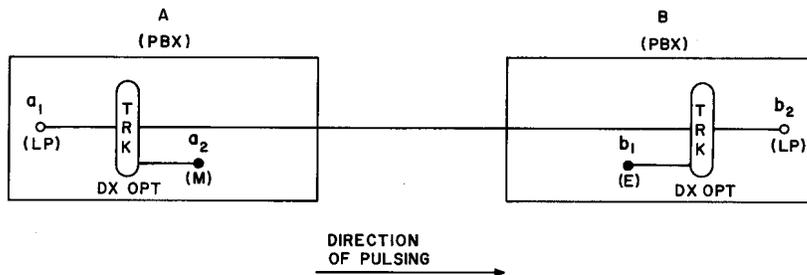


E Lead Testing Point



Loop Signaling Testing Point

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



PERCENT BREAK SENDING VALUES

SEND POINT (NOTE 1)	a_1	a_2
TEST 1 (12 PPS)	66	68
TEST 2 (12 PPS)	66	57
TEST 3 (8 PPS)	57	59
TEST 4 (8 PPS)	52	46
SEE NOTE	9	4

PERCENT BREAK RECEIVING VALUES

RCV POINT (NOTE 2)	b_1	b_2
MAX @ 12 PPS	72	66
MIN @ 12 PPS	53	54
MAX @ 8 PPS	62	58
MIN @ 8 PPS	43	46
SEE NOTE	4	3

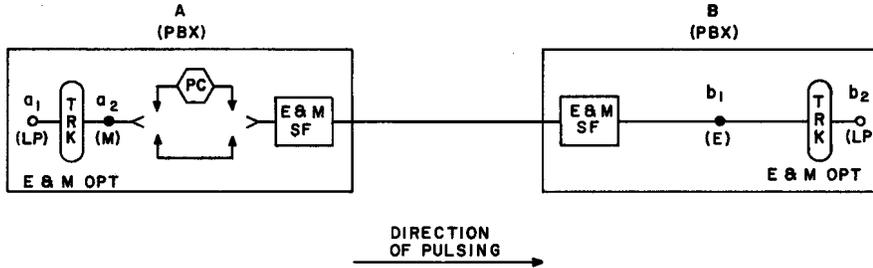
TRUNK TYPE

SD-65718-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A AND B

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω .
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



PERCENT BREAK SENDING VALUES

SEND POINT (NOTE 1)	a ₁	a ₂
TEST 1 (12 PPS)	66	68
TEST 2 (12 PPS)	66	57
TEST 3 (8 PPS)	57	59
TEST 4 (8 PPS)	52	46
SEE NOTE	9	4

WITHOUT M LEAD PULSE CORRECTION

PERCENT BREAK RECEIVING VALUES

RCV POINT (NOTE 2)	b ₁	b ₂
MAX @ 12 PPS	71	66
MIN @ 12 PPS	51	54
MAX @ 8 PPS	74	58
MIN @ 8 PPS	33	46
SEE NOTE	4	3

PERCENT BREAK SENDING VALUES

SEND POINT (NOTE 1)	a ₁	a ₂
TEST 1 (12 PPS)	67	69
TEST 2 (12 PPS)	58	48
TEST 3 (8 PPS)	67	69
TEST 4 (8 PPS)	58	51
SEE NOTE	9	4

WITH M LEAD PULSE CORRECTION

PERCENT BREAK RECEIVING VALUES

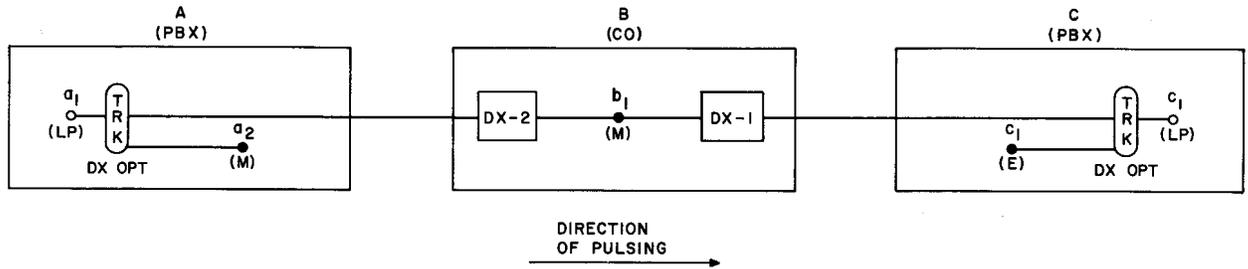
RCV POINT (NOTE 2)	b ₁	b ₂
MAX @ 12 PPS	71	66
MIN @ 12 PPS	51	54
MAX @ 8 PPS	74	58
MIN @ 8 PPS	33	46
SEE NOTE	4	3

TRUNK TYPE
SD-65718-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A AND B

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
5. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



PERCENT BREAK SENDING VALUES

SEND POINT (NOTE 1)	a ₁	a ₂	b ₁
TEST 1 (12 PPS)	66	68	72
TEST 2 (12 PPS)	66	57	53
TEST 3 (8 PPS)	57	59	62
TEST 4 (8 PPS)	52	46	43
SEE NOTE	9	4	4

PERCENT BREAK RECEIVING VALUES

RCV POINT (NOTE 2)	b ₁	c ₁	c ₂
MAX @ 12 PPS	72	76	66
MIN @ 12 PPS	53	49	54
MAX @ 8 PPS	62	65	58
MIN @ 8 PPS	43	40	46
SEE NOTE	4	4	3

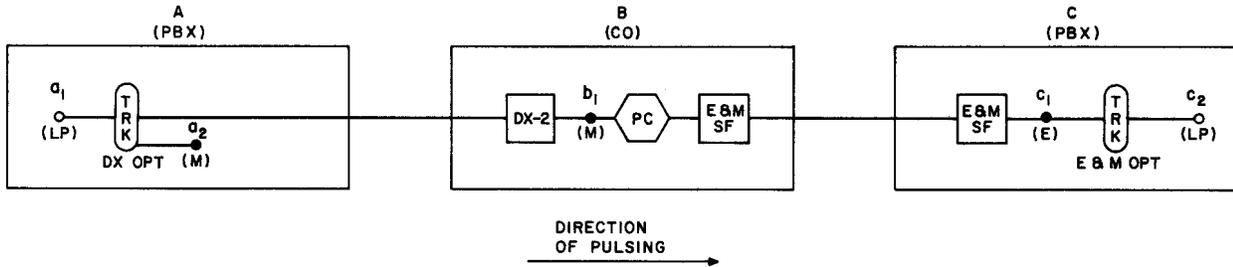
TRUNK TYPE

SD-65718-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A AND C

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



PERCENT BREAK SENDING VALUES

SEND POINT (NOTE 1)	a ₁	a ₂	b ₁
TEST 1 (12 PPS)	66	68	72
TEST 2 (12 PPS)	66	57	53
TEST 3 (8 PPS)	57	59	62
TEST 4 (8 PPS)	52	46	43
SEE NOTE	9	4	4

PERCENT BREAK RECEIVING VALUES

RCV POINT (NOTE 2)	b ₁	c ₁	c ₂
MAX @ 12 PPS	72	71	66
MIN @ 12 PPS	53	51	54
MAX @ 8 PPS	62	74	58
MIN @ 8 PPS	43	33	46
SEE NOTE	4	4	3

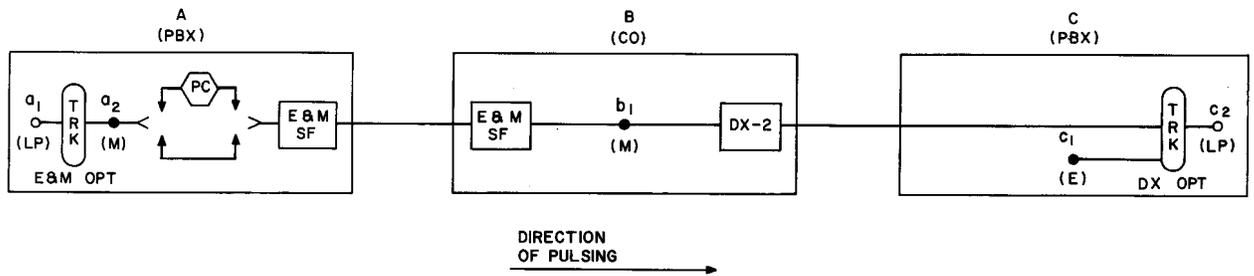
TRUNK TYPE

SD-65718-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A AND C

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



WITHOUT M LEAD PULSE CORRECTION

PERCENT BREAK SENDING VALUES			
SEND POINT (NOTE 1)	a ₁	a ₂	b ₁
TEST 1 (12 PPS)	66	68	71
TEST 2 (12 PPS)	66	57	51
TEST 3 (8 PPS)	57	59	74
TEST 4 (8 PPS)	52	46	33
SEE NOTE	9	4	4

PERCENT BREAK RECEIVING VALUES

PERCENT BREAK RECEIVING VALUES			
RCV POINT (NOTE 2)	b ₁	c ₁	c ₂
MAX @ 12 PPS	71	75	66
MIN @ 12 PPS	51	47	54
MAX @ 8 PPS	74	77	58
MIN @ 8 PPS	33	30	46
SEE NOTE	4	4	3

WITH M LEAD PULSE CORRECTION

PERCENT BREAK SENDING VALUES			
SEND POINT (NOTE 1)	a ₁	a ₂	b ₁
TEST 1 (12 PPS)	67	69	71
TEST 2 (12 PPS)	58	48	51
TEST 3 (8 PPS)	67	69	74
TEST 4 (8 PPS)	58	51	33
SEE NOTE	9	4	4

PERCENT BREAK RECEIVING VALUES

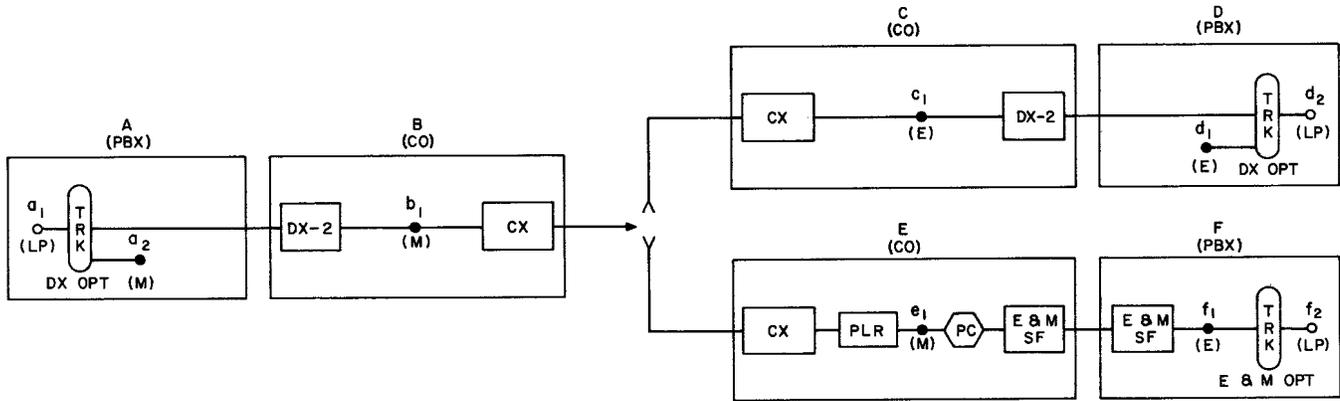
PERCENT BREAK RECEIVING VALUES			
RCV POINT (NOTE 2)	b ₁	c ₁	c ₂
MAX @ 12 PPS	71	75	66
MIN @ 12 PPS	51	47	54
MAX @ 8 PPS	74	77	58
MIN @ 8 PPS	33	30	46
SEE NOTE	4	4	3

TRUNK TYPE
SD-65718-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A AND C

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
5. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



DIRECTION OF PULSING →

PERCENT BREAK SENDING VALUES

SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	e ₁
TEST 1 (12 PPS)	66	68	72	76	78
TEST 2 (12 PPS)	66	57	53	51	49
TEST 3 (8 PPS)	57	59	62	65	67
TEST 4 (8 PPS)	52	46	43	41	39
SEE NOTE	9	4	4	4	4

PERCENT BREAK RECEIVING VALUES

RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	d ₂	e ₁	f ₁	f ₂
MAX @ 12 PPS	72	76	80	66	78	71	66
MIN @ 12 PPS	53	51	47	54	49	51	54
MAX @ 8 PPS	62	65	68	58	67	74	58
MIN @ 8 PPS	43	41	38	46	39	33	46
SEE NOTE	4	4	4	3	4	4	3

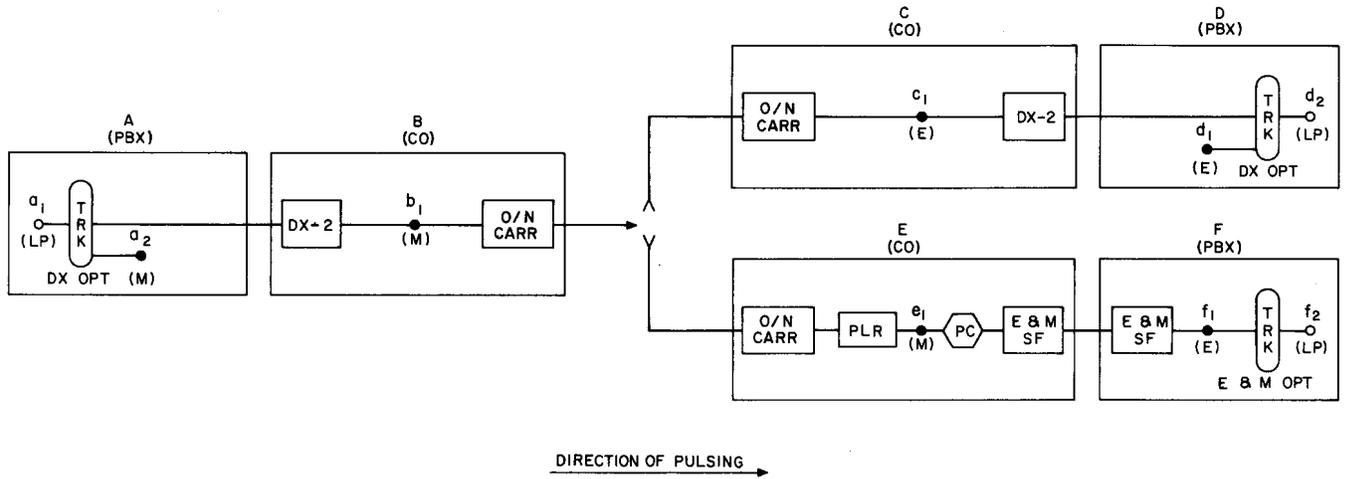
TRUNK TYPE

SD-65718-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A, D AND F

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



PERCENT BREAK SENDING VALUES

SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	e ₁
TEST 1 (12 PPS)	66	68	72	78	80
TEST 2 (12 PPS)	66	57	53	51	49
TEST 3 (8 PPS)	57	59	62	66	68
TEST 4 (8 PPS)	52	46	43	41	39
SEE NOTE	9	4	4	4	4

PERCENT BREAK RECEIVING VALUES

RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	d ₂	e ₁	f ₁	f ₂
MAX @ 12 PPS	72	78	82	66	80	71	66
MIN @ 12 PPS	53	51	47	54	49	51	54
MAX @ 8 PPS	62	66	69	58	68	74	58
MIN @ 8 PPS	43	41	38	46	39	33	46
SEE NOTE	4	4	4	3	4	4	3

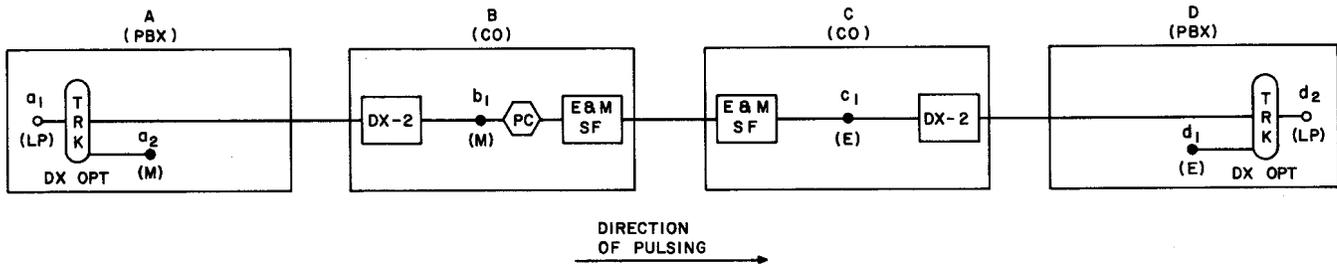
TRUNK TYPE

SD-65718-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A, D AND F

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



PERCENT BREAK SENDING VALUES

SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁
TEST 1 (12 PPS)	66	68	72	71
TEST 2 (12 PPS)	66	57	53	51
TEST 3 (8 PPS)	57	59	62	74
TEST 4 (8 PPS)	52	46	43	33
SEE NOTE	9	4	4	4

PERCENT BREAK RECEIVING VALUES

RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	d ₂
MAX @ 12 PPS	72	71	75	66
MIN @ 12 PPS	53	51	47	54
MAX @ 8 PPS	62	74	77	58
MIN @ 8 PPS	43	33	30	46
SEE NOTE	4	4	4	3

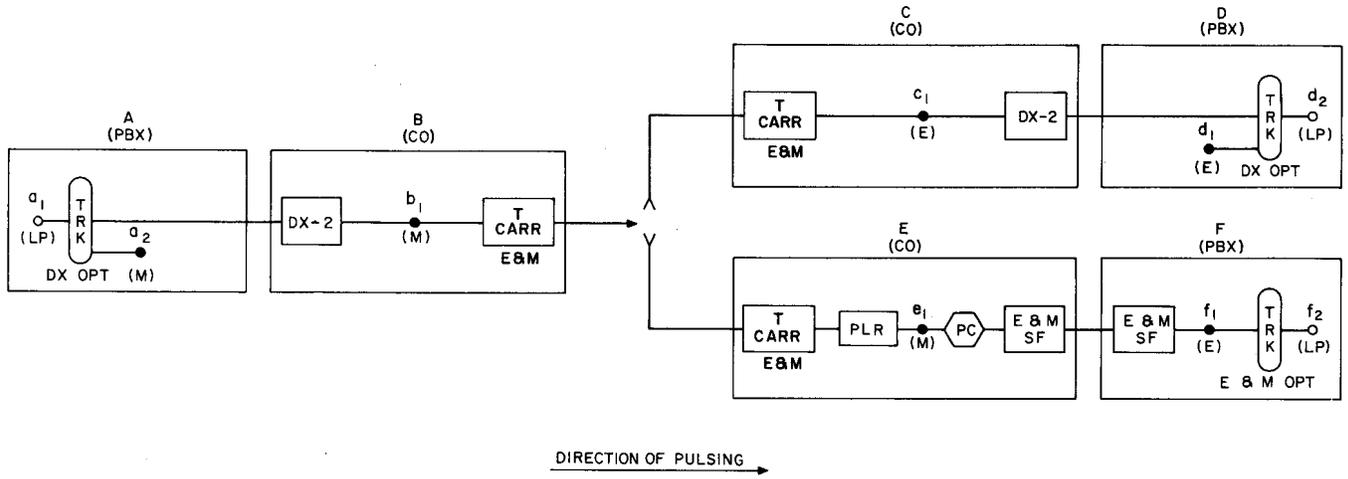
TRUNK TYPE

SD-65718-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A AND D

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



PERCENT BREAK SENDING VALUES

SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	e ₁
TEST 1 (12 PPS)	66	68	72	74	76
TEST 2 (12 PPS)	66	57	53	51	49
TEST 3 (8 PPS)	57	59	62	64	66
TEST 4 (8 PPS)	52	46	43	41	39
SEE NOTE	9	4	4	4	4

PERCENT BREAK RECEIVING VALUES

RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	d ₂	e ₁	f ₁	f ₂
MAX @ 12 PPS	72	74	78	66	76	71	66
MIN @ 12 PPS	53	51	47	54	49	51	54
MAX @ 8 PPS	62	64	67	58	66	74	58
MIN @ 8 PPS	43	41	38	46	39	33	46
SEE NOTE	4	4	4	3	4	4	3

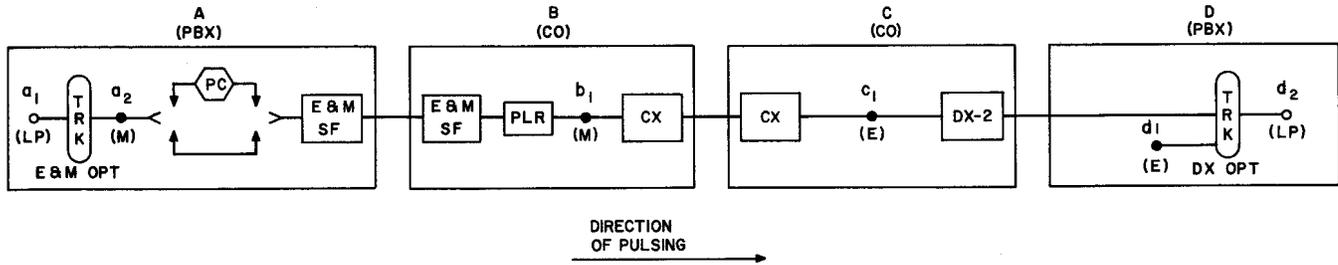
TRUNK TYPE

SD-65718-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A, D AND F

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



WITHOUT M LEAD PULSE CORRECTION

PERCENT BREAK SENDING VALUES				
SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁
TEST 1 (12 PPS)	66	68	73	77
TEST 2 (12 PPS)	66	57	49	47
TEST 3 (8 PPS)	57	59	76	79
TEST 4 (8 PPS)	52	46	31	29
SEE NOTE	9	4	4	4

PERCENT BREAK RECEIVING VALUES

PERCENT BREAK RECEIVING VALUES				
RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	d ₂
MAX @ 12 PPS	73	77	81	66
MIN @ 12 PPS	49	47	43	54
MAX @ 8 PPS	76	79	81	58
MIN @ 8 PPS	31	29	26	46
SEE NOTE	4	4	4	3

WITH M LEAD PULSE CORRECTION

PERCENT BREAK SENDING VALUES				
SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁
TEST 1 (12 PPS)	67	69	73	77
TEST 2 (12 PPS)	58	48	49	47
TEST 3 (8 PPS)	67	69	76	79
TEST 4 (8 PPS)	58	51	31	29
SEE NOTE	9	4	4	4

PERCENT BREAK RECEIVING VALUES

PERCENT BREAK RECEIVING VALUES				
RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	d ₂
MAX @ 12 PPS	73	77	81	66
MIN @ 12 PPS	49	47	43	54
MAX @ 8 PPS	76	79	81	58
MIN @ 8 PPS	31	29	26	46
SEE NOTE	4	4	4	3

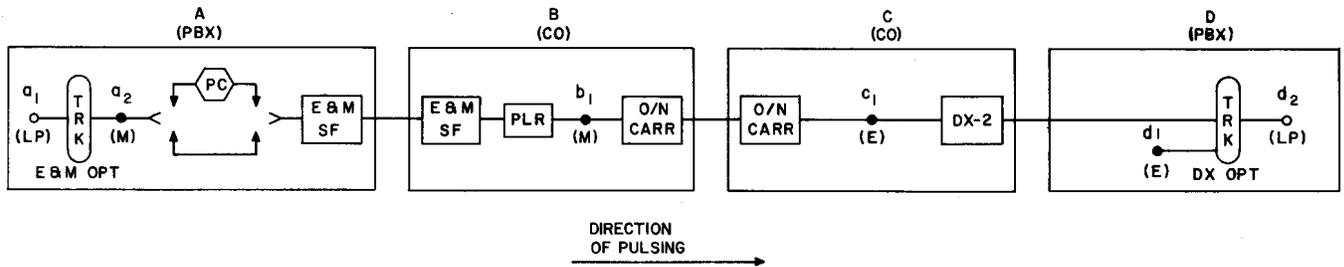
TRUNK TYPE

SD-65718-01 OR-02 OR SD-66799-01 TIE TRUNKS IN PBX A AND D

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



WITHOUT M LEAD PULSE CORRECTION

PERCENT BREAK SENDING VALUES				
SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁
TEST 1 (12 PPS)	66	68	73	79
TEST 2 (12 PPS)	66	57	49	47
TEST 3 (8 PPS)	57	59	76	80
TEST 4 (8 PPS)	52	46	31	29
SEE NOTE	9	4	4	4

PERCENT BREAK RECEIVING VALUES

PERCENT BREAK RECEIVING VALUES				
RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	d ₂
MAX @ 12 PPS	73	79	83	66
MIN @ 12 PPS	49	47	43	54
MAX @ 8 PPS	76	80	83	58
MIN @ 8 PPS	31	29	26	46
SEE NOTE	4	4	4	3

WITH M LEAD PULSE CORRECTION

PERCENT BREAK SENDING VALUES				
SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁
TEST 1 (12 PPS)	67	69	73	79
TEST 2 (12 PPS)	58	48	49	47
TEST 3 (8 PPS)	67	69	76	80
TEST 4 (8 PPS)	58	51	31	29
SEE NOTE	9	4	4	4

PERCENT BREAK RECEIVING VALUES

PERCENT BREAK RECEIVING VALUES				
RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	d ₂
MAX @ 12 PPS	73	79	83	66
MIN @ 12 PPS	49	47	43	54
MAX @ 8 PPS	76	80	83	58
MIN @ 8 PPS	31	29	26	46
SEE NOTE	4	4	4	3

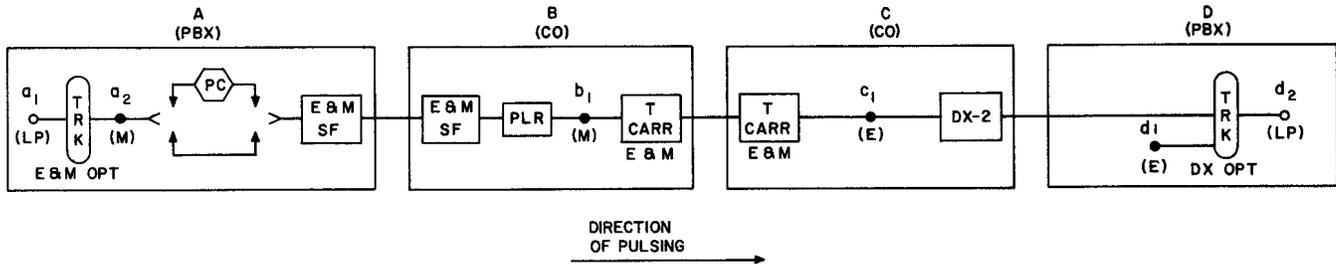
TRUNK TYPE

SD-65718-01 OR-02 OR SD-66799-01 TIE TRUNKS IN PBX A AND D

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



WITHOUT M LEAD PULSE CORRECTION

PERCENT BREAK SENDING VALUES				
SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁
TEST 1 (12 PPS)	66	68	73	75
TEST 2 (12 PPS)	66	57	49	47
TEST 3 (8 PPS)	57	59	76	78
TEST 4 (8 PPS)	52	46	31	29
SEE NOTE	9	4	4	4

PERCENT BREAK RECEIVING VALUES

PERCENT BREAK RECEIVING VALUES				
RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	d ₂
MAX @ 12 PPS	73	75	79	66
MIN @ 12 PPS	49	47	43	54
MAX @ 8 PPS	76	78	81	58
MIN @ 8 PPS	31	29	26	46
SEE NOTE	4	4	4	3

WITH M LEAD PULSE CORRECTION

PERCENT BREAK SENDING VALUES				
SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁
TEST 1 (12 PPS)	67	69	73	75
TEST 2 (12 PPS)	58	48	49	47
TEST 3 (8 PPS)	67	69	76	78
TEST 4 (8 PPS)	58	51	31	29
SEE NOTE	9	4	4	4

PERCENT BREAK RECEIVING VALUES

PERCENT BREAK RECEIVING VALUES				
RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	d ₂
MAX @ 12 PPS	73	75	79	66
MIN @ 12 PPS	49	47	43	54
MAX @ 8 PPS	76	78	81	58
MIN @ 8 PPS	31	29	26	46
SEE NOTE	4	4	4	3

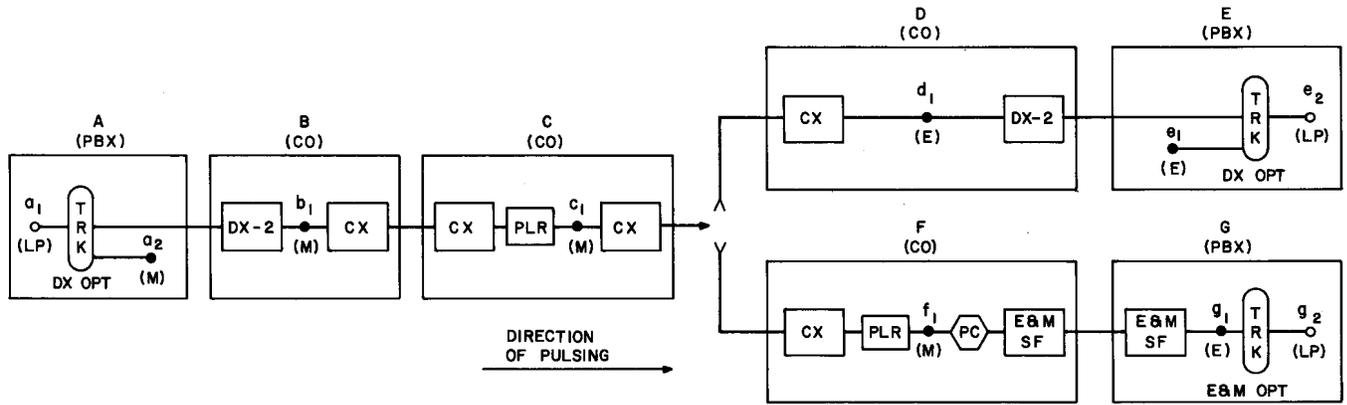
TRUNK TYPE

SD-65718-01 OR-02 OR SD-66799-01 TIE TRUNKS IN PBX A AND D

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



PERCENT BREAK SENDING VALUES

SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁	f ₁
TEST 1 (12 PPS)	66	68	72	78	82	84
TEST 2 (12 PPS)	66	57	53	49	47	45
TEST 3 (8 PPS)	57	59	62	67	70	72
TEST 4 (8 PPS)	52	46	43	39	37	35
SEE NOTE	9	4	4	4	4	4

PERCENT BREAK RECEIVING VALUES

RCV POINT (NOTE-2)	b ₁	c ₁	d ₁	e ₁	e ₂	f ₁	g ₁	g ₂
MAX @ 12 PPS	72	78	82	86	66	84	71	66
MIN @ 12 PPS	53	49	47	43	54	45	51	54
MAX @ 8 PPS	62	67	70	73	58	72	74	58
MIN @ 8 PPS	43	39	37	34	46	35	33	46
SEE NOTE	4	4	4	4	3	4	4	3

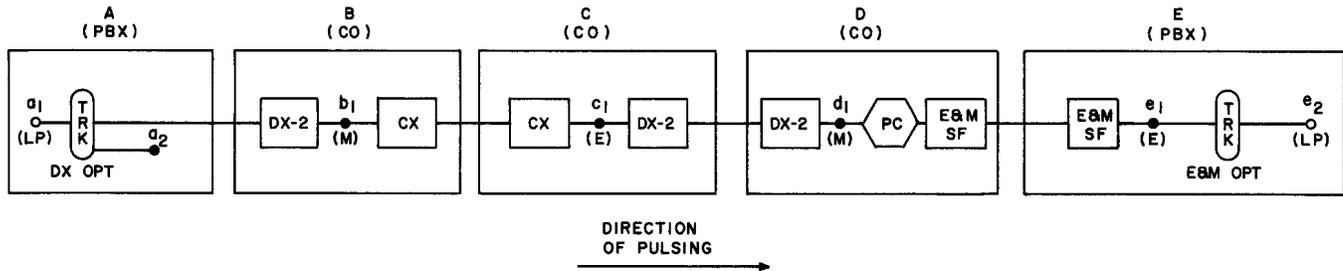
TRUNK TYPE

SD-6571B-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A, E AND G

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



PERCENT BREAK SENDING VALUES

SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁
TEST 1 (12 PPS)	66	68	72	76	80
TEST 2 (12 PPS)	66	57	53	51	47
TEST 3 (8 PPS)	57	59	62	65	68
TEST 4 (8 PPS)	52	46	43	41	38
SEE NOTE	9	4	4	4	4

PERCENT BREAK RECEIVING VALUES

RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂
MAX @ 12 PPS	72	76	80	71	66
MIN @ 12 PPS	53	51	47	51	54
MAX @ 8 PPS	62	65	68	74	58
MIN @ 8 PPS	43	41	38	33	46
SEE NOTE	4	4	4	4	3

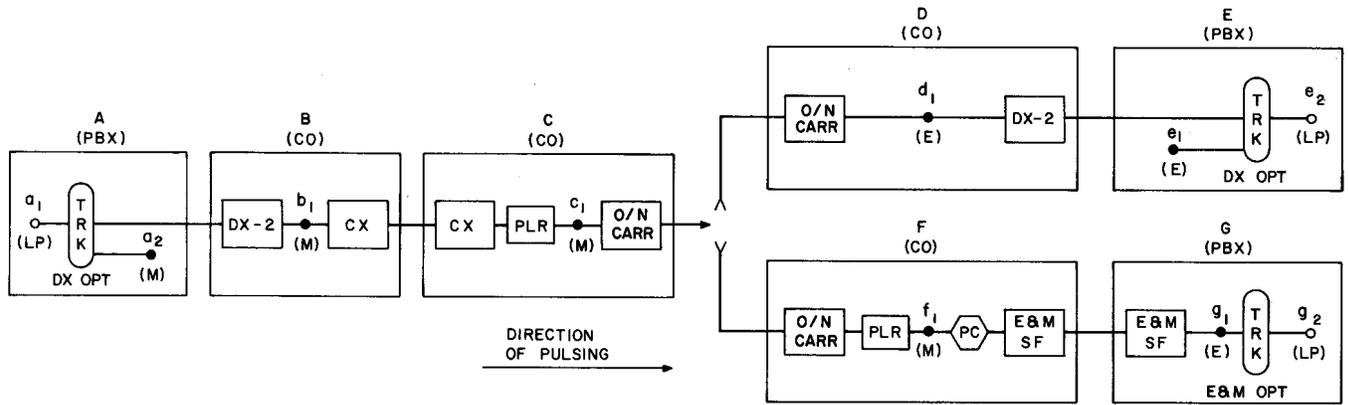
TRUNK TYPE

SD-65718-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A AND E

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3—Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4—Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



PERCENT BREAK SENDING VALUES

SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁	f ₁
TEST 1 (12 PPS)	66	68	72	78	84	86
TEST 2 (12 PPS)	66	57	53	49	47	45
TEST 3 (8 PPS)	57	59	62	67	71	73
TEST 4 (8 PPS)	52	46	43	39	37	35
SEE NOTE	9	4	4	4	4	4

PERCENT BREAK RECEIVING VALUES

RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂	f ₁	g ₁	g ₂
MAX @ 12 PPS	72	78	84	88	66	86	71	66
MIN @ 12 PPS	53	49	47	43	54	45	51	54
MAX @ 8 PPS	62	67	71	74	58	73	74	58
MIN @ 8 PPS	43	39	37	34	46	35	33	46
SEE NOTE	4	4	4	4	3	4	4	3

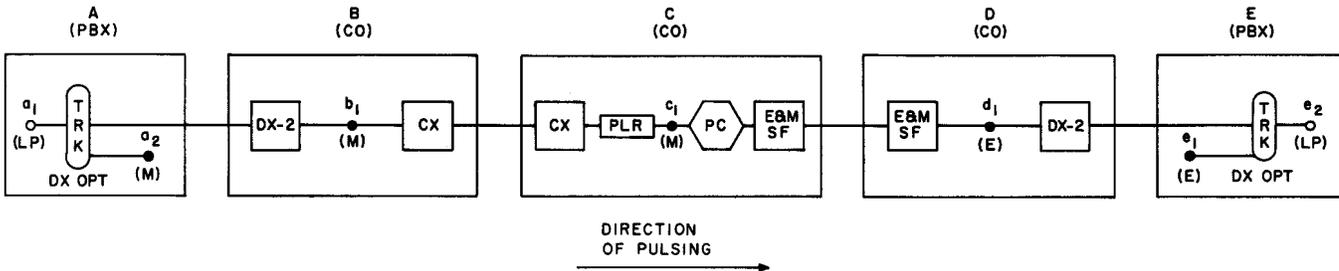
TRUNK TYPE

SD-65718-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A, E AND G

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



PERCENT BREAK SENDING VALUES

SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁
TEST 1 (12 PPS)	66	68	72	78	71
TEST 2 (12 PPS)	66	57	53	49	51
TEST 3 (8 PPS)	57	59	62	67	74
TEST 4 (8 PPS)	52	46	43	39	33
SEE NOTE	9	4	4	4	4

PERCENT BREAK RECEIVING VALUES

RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂
MAX @ 12 PPS	72	78	71	75	66
MIN @ 12 PPS	53	49	51	47	54
MAX @ 8 PPS	62	67	74	77	58
MIN @ 8 PPS	43	39	33	30	46
SEE NOTE	4	4	4	4	3

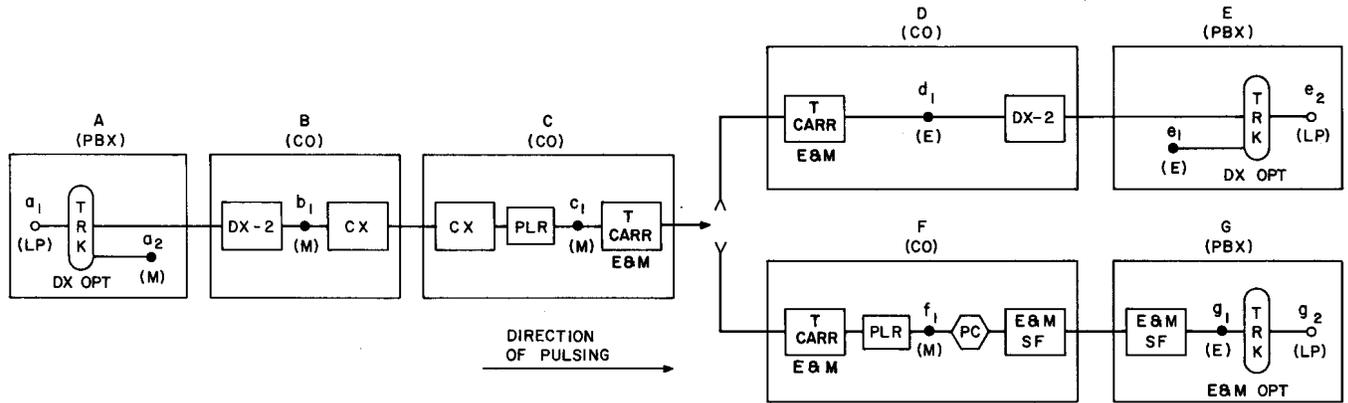
TRUNK TYPE

SD-65718-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A AND E

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
5. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



PERCENT BREAK SENDING VALUES

SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁	f ₁
TEST 1 (12 PPS)	66	68	72	78	80	82
TEST 2 (12 PPS)	66	57	53	49	47	45
TEST 3 (8 PPS)	57	59	62	67	69	71
TEST 4 (8 PPS)	52	46	43	39	37	35
SEE NOTE	9	4	4	4	4	4

PERCENT BREAK RECEIVING VALUES

RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂	f ₁	g ₁	g ₂
MAX @ 12 PPS	72	78	80	84	66	82	71	66
MIN @ 12 PPS	53	49	47	43	54	45	51	54
MAX @ 8 PPS	62	67	69	72	58	71	74	58
MIN @ 8 PPS	43	39	37	34	46	35	33	46
SEE NOTE	4	4	4	4	3	4	4	3

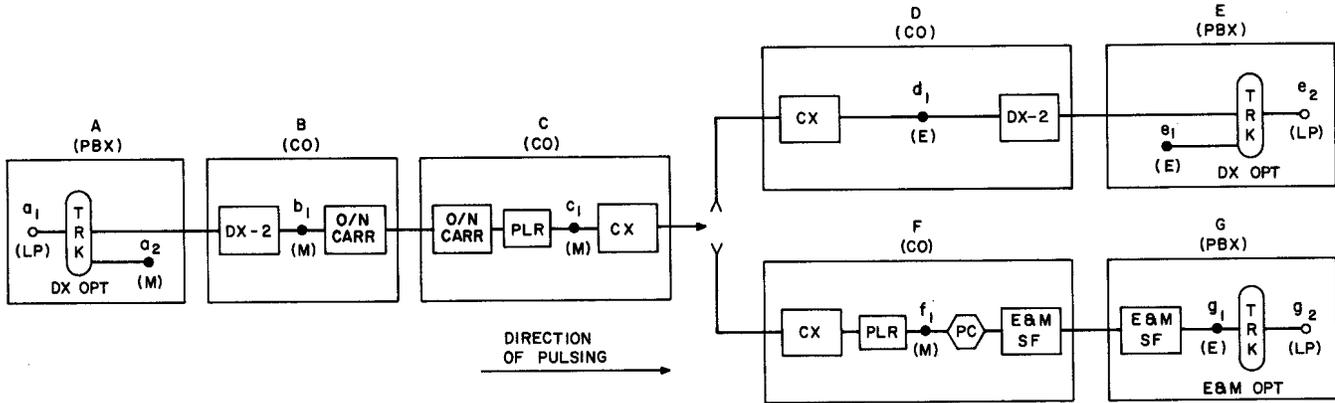
TRUNK TYPE

SD-65718-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A, E AND G

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



PERCENT BREAK SENDING VALUES

SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁	f ₁
TEST 1 (12 PPS)	66	68	72	80	84	86
TEST 2 (12 PPS)	66	57	53	49	47	45
TEST 3 (8 PPS)	57	59	62	68	71	73
TEST 4 (8 PPS)	52	46	43	39	37	35
SEE NOTE	9	4	4	4	4	4

PERCENT BREAK RECEIVING VALUES

RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂	f ₁	g ₁	g ₂
MAX @ 12 PPS	72	80	84	88	66	86	71	66
MIN @ 12 PPS	53	49	47	43	54	45	51	54
MAX @ 8 PPS	62	68	71	74	58	73	74	58
MIN @ 8 PPS	43	39	37	34	46	35	33	46
SEE NOTE	4	4	4	4	3	4	4	3

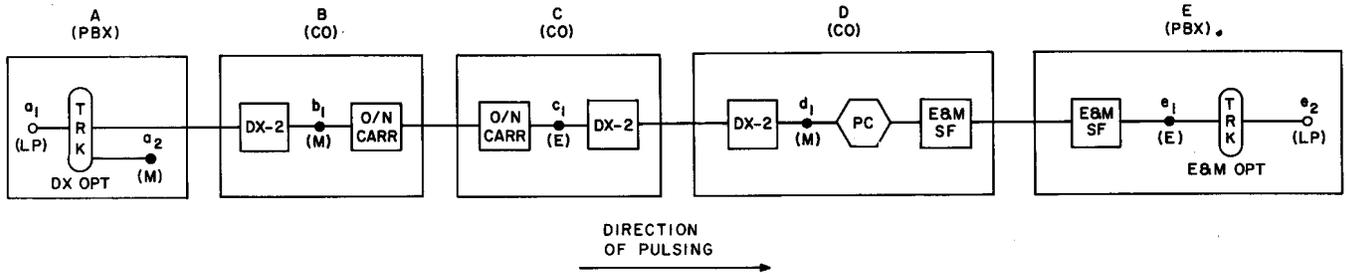
TRUNK TYPE

SD-65718-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A, E AND G

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



PERCENT BREAK SENDING VALUES

SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁
TEST 1 (12 PPS)	66	68	72	78	82
TEST 2 (12 PPS)	66	57	53	51	47
TEST 3 (8 PPS)	57	59	62	66	69
TEST 4 (8 PPS)	52	46	43	41	38
SEE NOTE	9	4	4	4	4

PERCENT BREAK RECEIVING VALUES

RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂
MAX @ 12 PPS	72	78	82	71	66
MIN @ 12 PPS	53	51	47	51	54
MAX @ 8 PPS	62	66	69	74	58
MIN @ 8 PPS	43	41	38	33	46
SEE NOTE	4	4	4	4	3

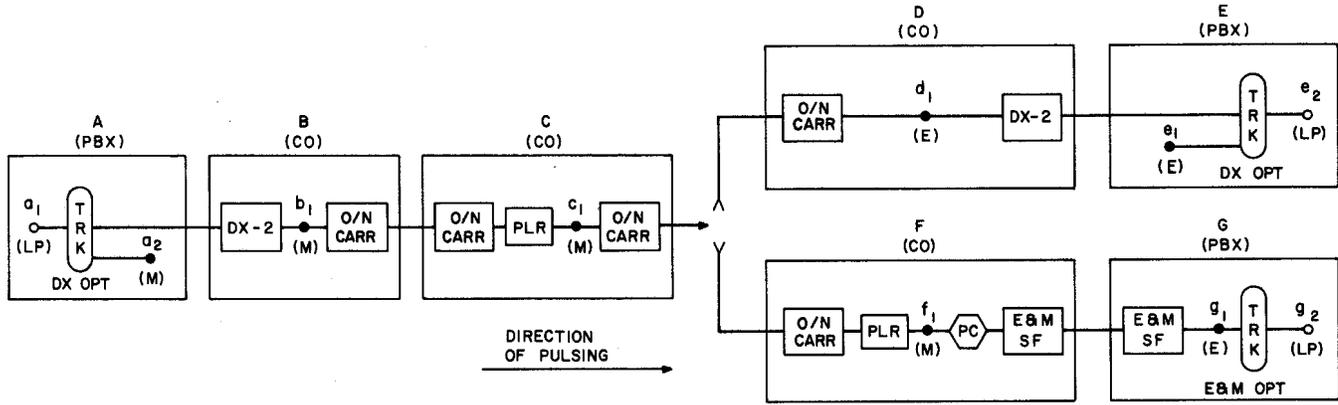
TRUNK TYPE

SD-65718-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A AND E

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



PERCENT BREAK SENDING VALUES

SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁	f ₁
TEST 1 (12 PPS)	66	68	72	80	86	88
TEST 2 (12 PPS)	66	57	53	49	47	45
TEST 3 (8 PPS)	57	59	62	68	72	74
TEST 4 (8 PPS)	52	46	43	39	37	35
SEE NOTE	9	4	4	4	4	4

PERCENT BREAK RECEIVING VALUES

RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂	f ₁	g ₁	g ₂
MAX @ 12 PPS	72	80	86	90	66	88	71	66
MIN @ 12 PPS	53	49	47	43	54	45	51	54
MAX @ 8 PPS	62	68	72	75	58	74	74	58
MIN @ 8 PPS	43	39	37	34	46	35	33	46
SEE NOTE	4	4	4	4	3	4	4	3

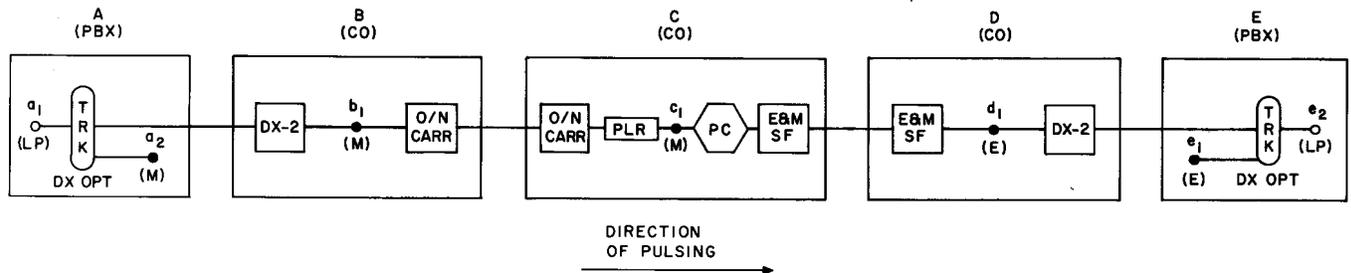
TRUNK TYPE

SD-65718-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A, E AND G

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



PERCENT BREAK SENDING VALUES

SEND POINT (NOTE 1)	a_1	a_2	b_1	c_1	d_1
TEST 1 (12 PPS)	66	68	72	80	71
TEST 2 (12 PPS)	66	57	53	49	51
TEST 3 (8 PPS)	57	59	62	68	74
TEST 4 (8 PPS)	52	46	43	39	33
SEE NOTE	9	4	4	4	4

PERCENT BREAK RECEIVING VALUES

RCV POINT (NOTE 2)	b_1	c_1	d_1	e_1	e_2
MAX @ 12 PPS	72	80	71	75	66
MIN @ 12 PPS	53	49	51	47	54
MAX @ 8 PPS	62	68	74	77	58
MIN @ 8 PPS	43	39	33	30	46
SEE NOTE	4	4	4	4	3

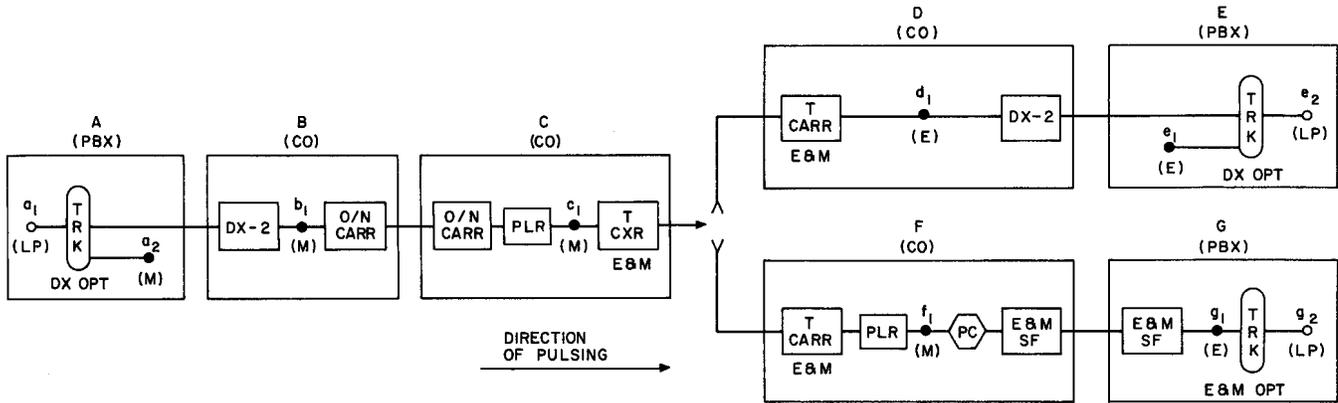
TRUNK TYPE

SD-65718-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A AND E

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω .
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



PERCENT BREAK SENDING VALUES

SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁	f ₁
TEST 1 (12 PPS)	66	68	72	80	82	84
TEST 2 (12 PPS)	66	57	53	49	47	45
TEST 3 (8 PPS)	57	59	62	68	70	72
TEST 4 (8 PPS)	52	46	43	39	37	35
SEE NOTE	9	4	4	4	4	4

PERCENT BREAK RECEIVING VALUES

RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂	f ₁	g ₁	g ₂
MAX @ 12 PPS	72	80	82	86	66	84	71	66
MIN @ 12 PPS	53	49	47	43	54	45	51	54
MAX @ 8 PPS	62	68	70	73	58	72	74	58
MIN @ 8 PPS	43	39	37	34	46	35	33	46
SEE NOTE	4	4	4	4	3	4	4	3

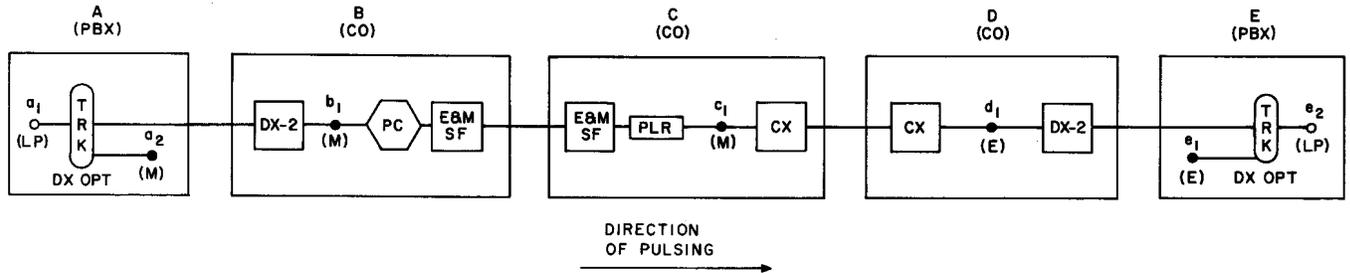
TRUNK TYPE

SD-65718-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A, E AND G

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



PERCENT BREAK SENDING VALUES

SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁
TEST 1 (12 PPS)	66	68	72	73	77
TEST 2 (12 PPS)	66	57	53	49	47
TEST 3 (8 PPS)	57	59	62	76	79
TEST 4 (8 PPS)	52	46	43	31	29
SEE NOTE	9	4	4	4	4

PERCENT BREAK RECEIVING VALUES

RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂
MAX @ 12 PPS	72	73	77	81	66
MIN @ 12 PPS	53	49	47	43	54
MAX @ 8 PPS	62	76	79	82	58
MIN @ 8 PPS	43	31	29	26	46
SEE NOTE	4	4	4	4	3

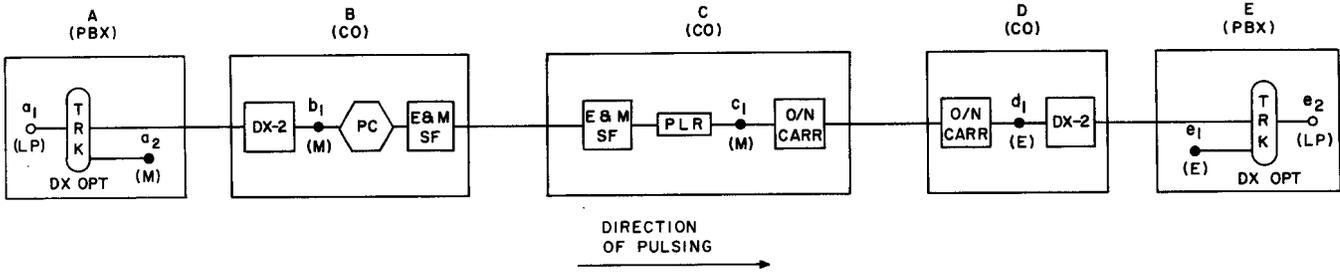
TRUNK TYPE

SD-65718-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A AND E

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



PERCENT BREAK SENDING VALUES

SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁
TEST 1 (12 PPS)	66	68	72	73	79
TEST 2 (12 PPS)	66	57	53	49	47
TEST 3 (8 PPS)	57	59	62	76	80
TEST 4 (8 PPS)	52	46	43	31	29
SEE NOTE	9	4	4	4	4

PERCENT BREAK RECEIVING VALUES

RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂
MAX @ 12 PPS	72	73	79	83	66
MIN @ 12 PPS	53	49	47	43	54
MAX @ 8 PPS	62	76	80	83	58
MIN @ 8 PPS	43	31	29	26	46
SEE NOTE	4	4	4	4	3

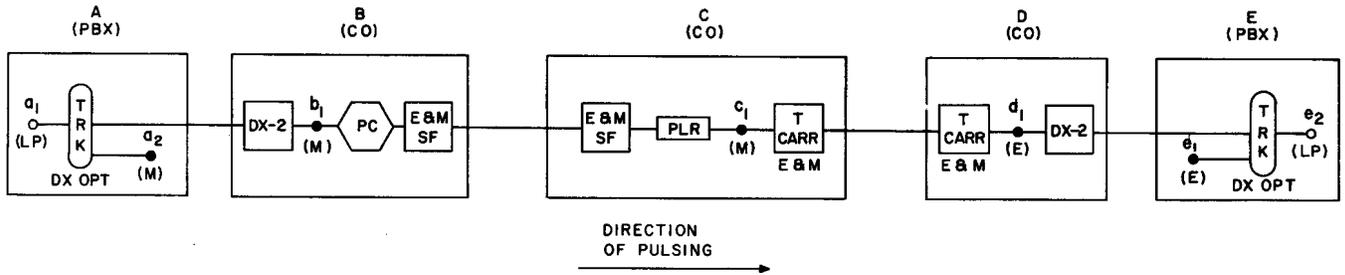
TRUNK TYPE

SD-65718-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A AND E

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



PERCENT BREAK SENDING VALUES

SEND POINT (NOTE 1)	a_1	a_2	b_1	c_1	d_1
TEST 1 (12 PPS)	66	68	72	73	75
TEST 2 (12 PPS)	66	57	53	49	47
TEST 3 (8 PPS)	57	59	62	76	78
TEST 4 (8 PPS)	52	46	43	31	29
SEE NOTE	9	4	4	4	4

PERCENT BREAK RECEIVING VALUES

RCV POINT (NOTE 2)	b_1	c_1	d_1	e_1	e_2
MAX @ 12 PPS	72	73	75	79	66
MIN @ 12 PPS	53	49	47	43	54
MAX @ 8 PPS	62	76	78	81	58
MIN @ 8 PPS	43	31	29	26	46
SEE NOTE	4	4	4	4	3

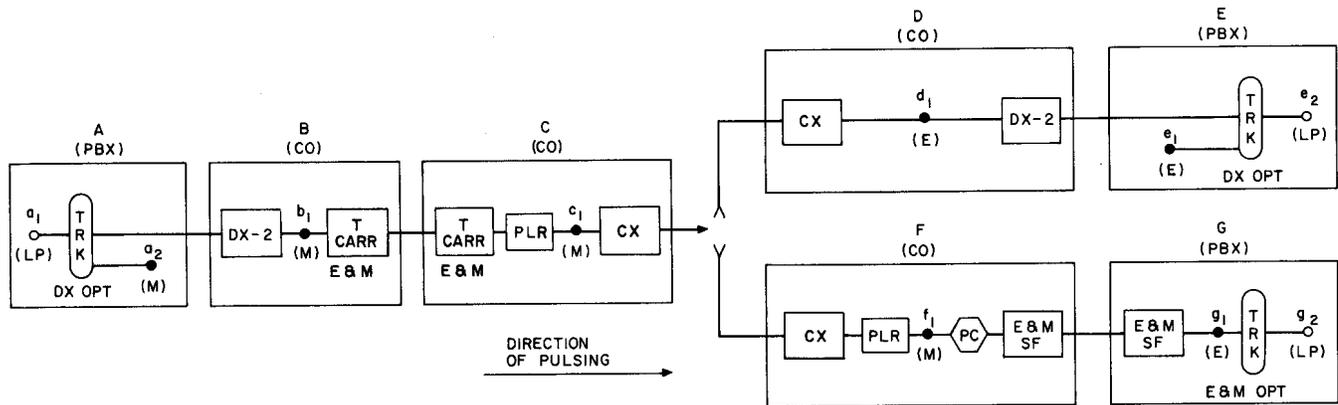
TRUNK TYPE

SD-65718-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A AND E

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω .
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



PERCENT BREAK SENDING VALUES

SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁	f ₁
TEST 1 (12 PPS)	66	68	72	76	80	82
TEST 2 (12 PPS)	66	57	53	49	47	45
TEST 3 (8 PPS)	57	59	62	66	69	71
TEST 4 (8 PPS)	52	46	43	39	37	35
SEE NOTE	0	4	4	4	4	4

PERCENT BREAK RECEIVING VALUES

RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂	f ₁	g ₁	g ₂
MAX @ 12 PPS	72	76	80	84	66	82	71	66
MIN @ 12 PPS	53	49	47	43	54	45	51	54
MAX @ 8 PPS	62	66	69	72	58	71	74	58
MIN @ 8 PPS	43	39	37	34	46	35	33	46
SEE NOTE	4	4	4	4	3	4	4	3

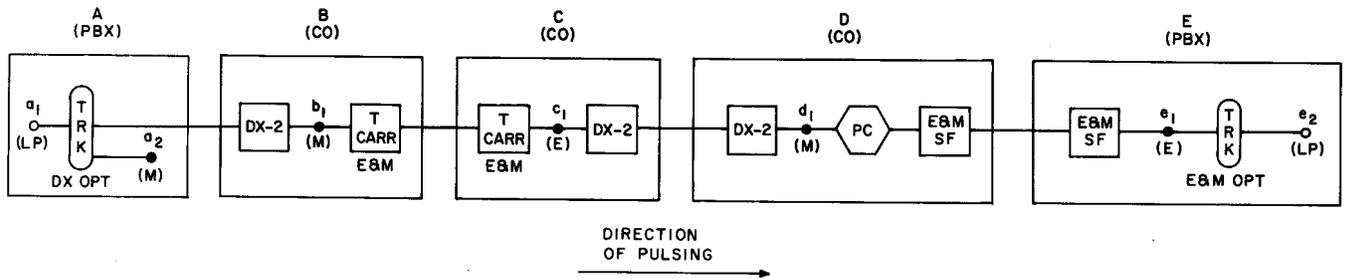
TRUNK TYPE

SD-65718-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A, E AND G

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



PERCENT BREAK SENDING VALUES

SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁
TEST 1 (12 PPS)	66	68	72	74	78
TEST 2 (12 PPS)	66	57	53	51	47
TEST 3 (8 PPS)	57	59	62	64	67
TEST 4 (8 PPS)	52	46	43	41	38
SEE NOTE	9	4	4	4	4

PERCENT BREAK RECEIVING VALUES

RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂
MAX @ 12 PPS	72	74	78	71	66
MIN @ 12 PPS	53	51	47	51	54
MAX @ 8 PPS	62	64	67	74	58
MIN @ 8 PPS	43	41	38	33	46
SEE NOTE	4	4	4	4	3

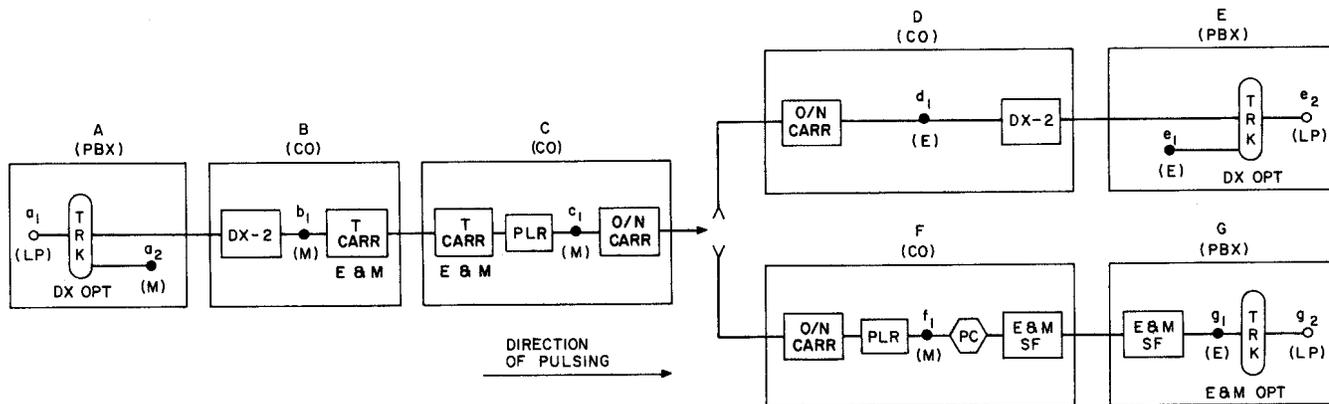
TRUNK TYPE

SD-65718-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A AND E

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



PERCENT BREAK SENDING VALUES

SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁	f ₁
TEST 1 (12 PPS)	66	68	72	76	82	84
TEST 2 (12 PPS)	66	57	53	49	47	45
TEST 3 (8 PPS)	57	59	62	66	70	72
TEST 4 (8 PPS)	52	46	43	39	37	35
SEE NOTE	9	4	4	4	4	4

PERCENT BREAK RECEIVING VALUES

RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂	f ₁	g ₁	g ₂
MAX @ 12 PPS	72	76	82	86	66	84	71	66
MIN @ 12 PPS	53	49	47	43	54	45	51	54
MAX @ 8 PPS	62	66	70	73	58	72	74	58
MIN @ 8 PPS	43	39	37	34	46	35	33	46
SEE NOTE	4	4	4	4	3	4	4	3

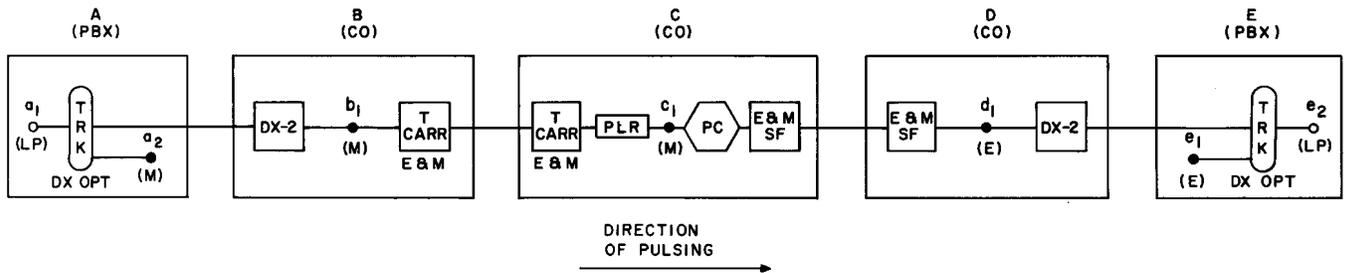
TRUNK TYPE

SD-65718-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A, E AND G

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



PERCENT BREAK SENDING VALUES

SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁
TEST 1 (12 PPS)	66	68	72	76	71
TEST 2 (12 PPS)	66	57	53	49	51
TEST 3 (8 PPS)	57	59	62	66	74
TEST 4 (8 PPS)	52	46	43	39	33
SEE NOTE	9	4	4	4	4

PERCENT BREAK RECEIVING VALUES

RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂
MAX @ 12 PPS	72	76	71	75	66
MIN @ 12 PPS	53	49	51	47	54
MAX @ 8 PPS	62	66	74	77	58
MIN @ 8 PPS	43	39	33	30	46
SEE NOTE	4	4	4	4	3

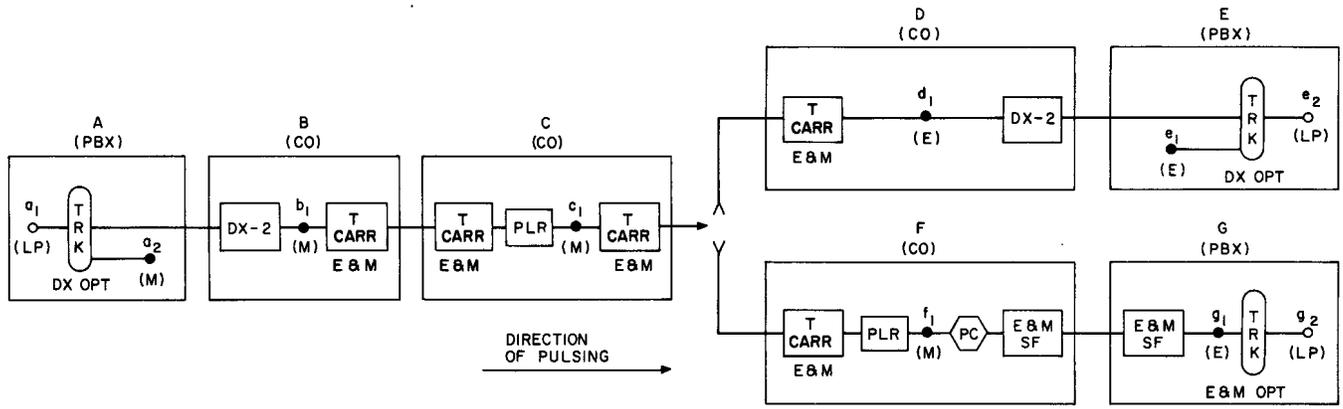
TRUNK TYPE

SD-65718-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A AND E

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



PERCENT BREAK SENDING VALUES

SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁	f ₁
TEST 1 (12 PPS)	66	68	72	76	78	80
TEST 2 (12 PPS)	66	57	53	49	47	45
TEST 3 (8 PPS)	57	59	62	66	68	70
TEST 4 (8 PPS)	52	46	43	39	37	35
SEE NOTE	9	4	4	4	4	4

PERCENT BREAK RECEIVING VALUES

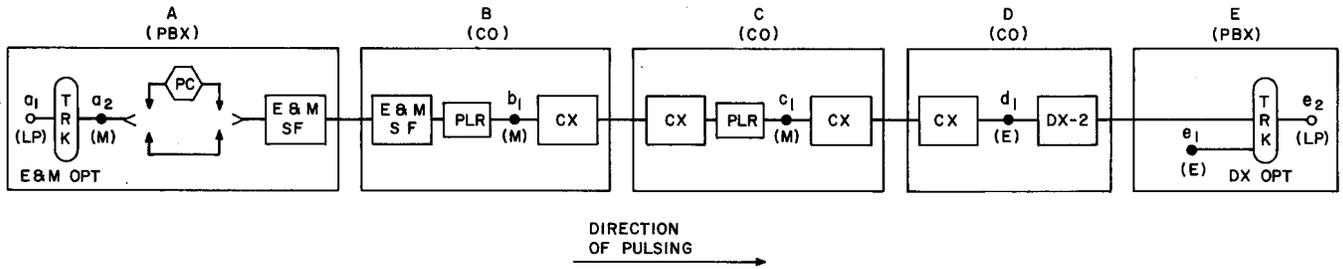
RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂	f ₁	g ₁	g ₂
MAX @ 12 PPS	72	76	78	82	66	80	71	66
MIN @ 12 PPS	53	49	47	43	54	45	51	54
MAX @ 8 PPS	62	66	68	71	58	70	74	58
MIN @ 8 PPS	43	39	37	34	46	35	33	46
SEE NOTE	4	4	4	4	3	4	4	3

TRUNK TYPE
SD-65718-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A, E AND G

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



WITHOUT M LEAD PULSE CORRECTION

PERCENT BREAK SENDING VALUES					
SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁
TEST 1 (12 PPS)	66	68	73	79	83
TEST 2 (12 PPS)	66	57	49	45	43
TEST 3 (8 PPS)	57	59	76	81	84
TEST 4 (8 PPS)	52	46	31	27	25
SEE NOTE	9	4	4	4	4

PERCENT BREAK RECEIVING VALUES

PERCENT BREAK RECEIVING VALUES						
RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂	
MAX @ 12 PPS	73	79	83	87	66	
MIN @ 12 PPS	49	45	43	39	54	
MAX @ 8 PPS	76	81	84	87	58	
MIN @ 8 PPS	31	27	25	22	46	
SEE NOTE	4	4	4	4	3	

WITH M LEAD PULSE CORRECTION

PERCENT BREAK SENDING VALUES					
SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁
TEST 1 (12 PPS)	67	69	73	79	83
TEST 2 (12 PPS)	58	48	49	45	43
TEST 3 (8 PPS)	67	69	76	81	84
TEST 4 (8 PPS)	58	51	31	27	25
SEE NOTE	9	4	4	4	4

PERCENT BREAK RECEIVING VALUES

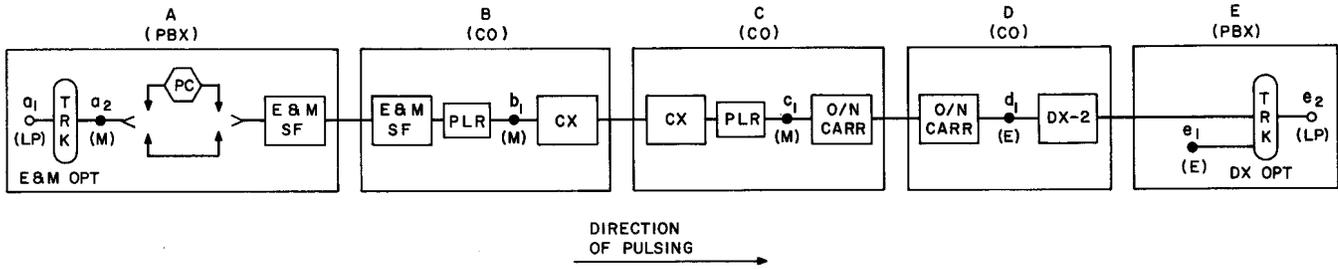
PERCENT BREAK RECEIVING VALUES						
RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂	
MAX @ 12 PPS	73	79	83	87	66	
MIN @ 12 PPS	49	45	43	39	54	
MAX @ 8 PPS	76	81	84	87	58	
MIN @ 8 PPS	31	27	25	22	46	
SEE NOTE	4	4	4	4	3	

TRUNK TYPE
SD-65718-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A AND E

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



WITHOUT M LEAD PULSE CORRECTION

SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁
TEST 1 (12 PPS)	66	68	73	79	85
TEST 2 (12 PPS)	66	57	49	45	43
TEST 3 (8 PPS)	57	59	76	81	85
TEST 4 (8 PPS)	52	46	31	27	25
SEE NOTE	9	4	4	4	4

PERCENT BREAK RECEIVING VALUES

RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂
MAX @ 12 PPS	73	79	85	89	66
MIN @ 12 PPS	49	45	43	39	54
MAX @ 8 PPS	76	81	85	88	58
MIN @ 8 PPS	31	27	25	22	46
SEE NOTE	4	4	4	4	3

WITH M LEAD PULSE CORRECTION

SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁
TEST 1 (12 PPS)	67	69	73	79	85
TEST 2 (12 PPS)	58	48	49	45	43
TEST 3 (8 PPS)	67	69	76	81	85
TEST 4 (8 PPS)	58	51	31	27	25
SEE NOTE	9	4	4	4	4

PERCENT BREAK RECEIVING VALUES

RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂
MAX @ 12 PPS	73	79	85	89	66
MIN @ 12 PPS	49	45	43	39	54
MAX @ 8 PPS	76	81	85	88	58
MIN @ 8 PPS	31	27	25	22	46
SEE NOTE	4	4	4	4	3

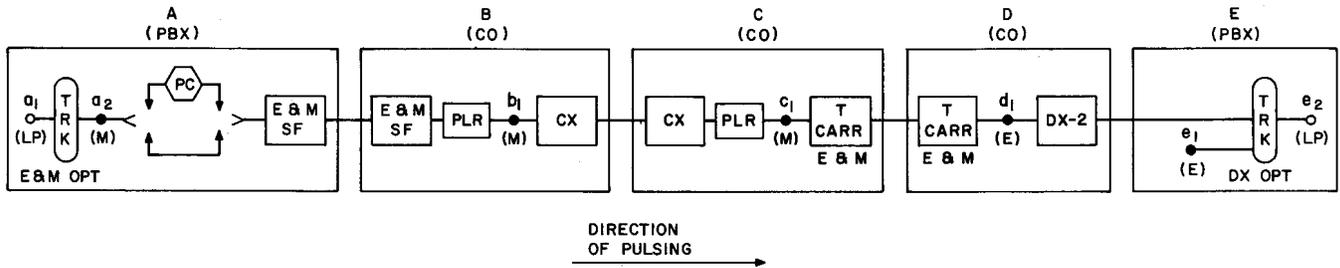
TRUNK TYPE
SD-65718-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A AND E

TPA- 531 151

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



WITHOUT
M LEAD
PULSE
CORRECTION

PERCENT BREAK SENDING VALUES

SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁
TEST 1 (12 PPS)	66	68	73	79	81
TEST 2 (12 PPS)	66	57	49	45	43
TEST 3 (8 PPS)	57	59	76	81	83
TEST 4 (8 PPS)	52	46	31	27	25
SEE NOTE	9	4	4	4	4

PERCENT BREAK RECEIVING VALUES

RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂
MAX @ 12 PPS	73	79	81	85	66
MIN @ 12 PPS	49	45	43	39	54
MAX @ 8 PPS	76	81	83	86	58
MIN @ 8 PPS	31	27	25	22	46
SEE NOTE	4	4	4	4	3

WITH
M LEAD
PULSE
CORRECTION

PERCENT BREAK SENDING VALUES

SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁
TEST 1 (12 PPS)	67	69	73	79	81
TEST 2 (12 PPS)	58	48	49	45	43
TEST 3 (8 PPS)	67	69	76	81	83
TEST 4 (8 PPS)	58	51	31	27	25
SEE NOTE	9	4	4	4	4

PERCENT BREAK RECEIVING VALUES

RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂
MAX @ 12 PPS	73	79	81	85	66
MIN @ 12 PPS	49	45	43	39	54
MAX @ 8 PPS	76	81	83	86	58
MIN @ 8 PPS	31	27	25	22	46
SEE NOTE	4	4	4	4	3

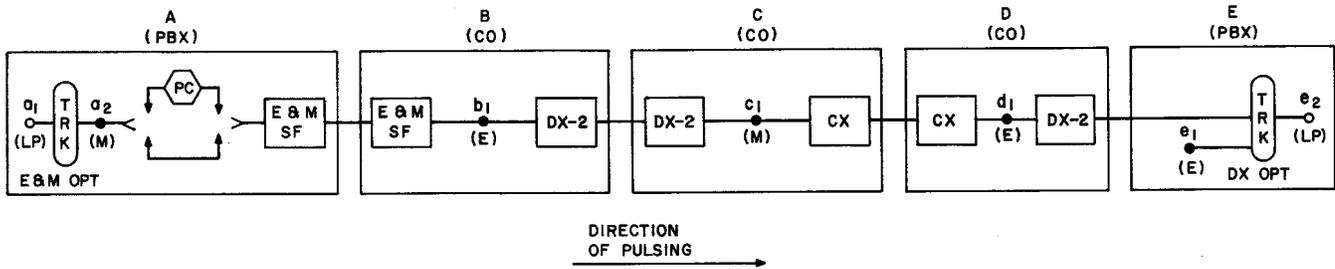
TRUNK TYPE

SD-65718-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A AND E

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3—Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4—Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



WITHOUT M LEAD PULSE CORRECTION

PERCENT BREAK SENDING VALUES					
SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁
TEST 1 (12 PPS)	66	68	71	75	79
TEST 2 (12 PPS)	66	57	51	47	45
TEST 3 (8 PPS)	57	59	74	77	80
TEST 4 (8 PPS)	52	46	33	30	28
SEE NOTE	9	4	4	4	4

PERCENT BREAK RECEIVING VALUES

PERCENT BREAK RECEIVING VALUES					
RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂
MAX @ 12 PPS	71	75	79	83	66
MIN @ 12 PPS	51	47	45	41	54
MAX @ 8 PPS	74	77	80	83	58
MIN @ 8 PPS	33	30	28	25	46
SEE NOTE	4	4	4	4	3

WITH M LEAD PULSE CORRECTION

PERCENT BREAK SENDING VALUES					
SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁
TEST 1 (12 PPS)	67	69	71	75	79
TEST 2 (12 PPS)	58	48	51	47	45
TEST 3 (8 PPS)	67	69	74	77	80
TEST 4 (8 PPS)	58	51	33	30	28
SEE NOTE	9	4	4	4	4

PERCENT BREAK RECEIVING VALUES

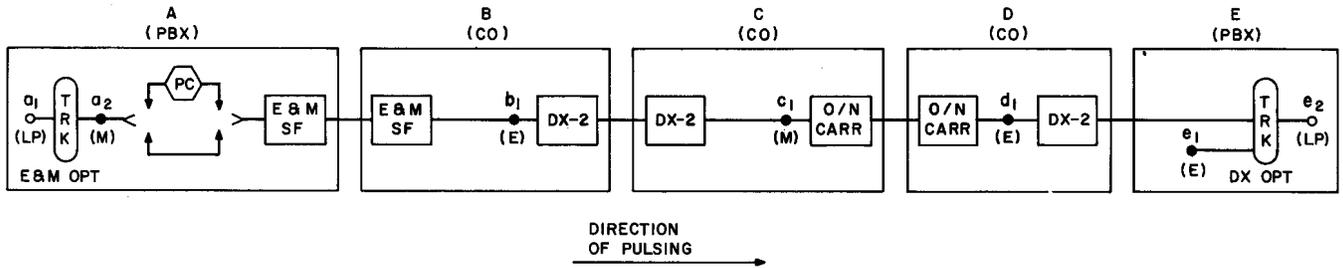
PERCENT BREAK RECEIVING VALUES					
RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂
MAX @ 12 PPS	71	75	79	83	66
MIN @ 12 PPS	51	47	45	41	54
MAX @ 8 PPS	74	77	80	83	58
MIN @ 8 PPS	33	30	28	25	46
SEE NOTE	4	4	4	4	3

TRUNK TYPE
SD-65718-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A AND E

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



WITHOUT M LEAD PULSE CORRECTION

PERCENT BREAK SENDING VALUES					
SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁
TEST 1 (12 PPS)	66	68	71	75	81
TEST 2 (12 PPS)	66	57	51	47	45
TEST 3 (8 PPS)	57	59	74	77	81
TEST 4 (8 PPS)	52	46	33	30	28
SEE NOTE	9	4	4	4	4

PERCENT BREAK RECEIVING VALUES

PERCENT BREAK RECEIVING VALUES						
RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂	
MAX @ 12 PPS	71	75	81	85	66	
MIN @ 12 PPS	51	47	45	41	54	
MAX @ 8 PPS	74	77	81	84	58	
MIN @ 8 PPS	33	30	28	25	46	
SEE NOTE	4	4	4	4	3	

WITH M LEAD PULSE CORRECTION

PERCENT BREAK SENDING VALUES					
SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁
TEST 1 (12 PPS)	67	69	71	75	81
TEST 2 (12 PPS)	58	48	51	47	45
TEST 3 (8 PPS)	67	69	74	77	81
TEST 4 (8 PPS)	58	51	33	30	28
SEE NOTE	9	4	4	4	4

PERCENT BREAK RECEIVING VALUES

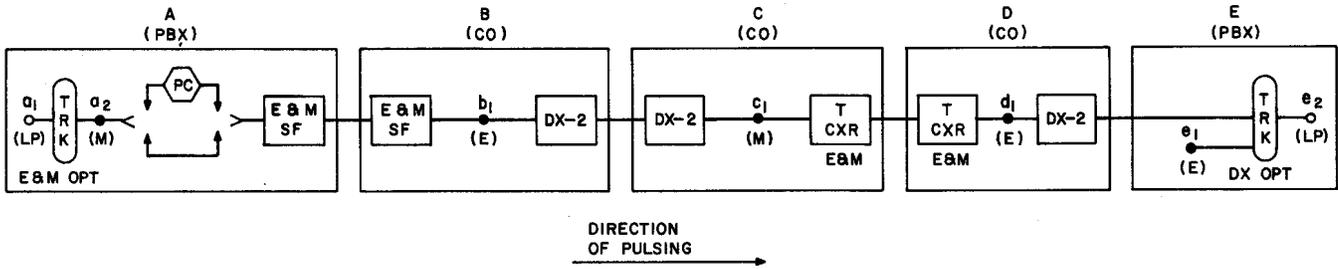
PERCENT BREAK RECEIVING VALUES						
RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂	
MAX @ 12 PPS	71	75	81	85	66	
MIN @ 12 PPS	51	47	45	41	54	
MAX @ 8 PPS	74	77	81	84	58	
MIN @ 8 PPS	33	30	28	25	46	
SEE NOTE	4	4	4	4	3	

TRUNK TYPE
SD-65718-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A AND E

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



WITHOUT M LEAD PULSE CORRECTION

SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁
TEST 1 (12 PPS)	66	68	71	75	77
TEST 2 (12 PPS)	66	57	51	47	45
TEST 3 (8 PPS)	57	59	74	77	79
TEST 4 (8 PPS)	52	46	33	30	28
SEE NOTE	9	4	4	4	4

RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂
MAX @ 12 PPS	71	75	77	81	66
MIN @ 12 PPS	51	47	45	41	54
MAX @ 8 PPS	74	77	79	82	58
MIN @ 8 PPS	33	30	28	25	46
SEE NOTE	4	4	4	4	3

WITH M LEAD PULSE CORRECTION

SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁
TEST 1 (12 PPS)	67	69	71	75	77
TEST 2 (12 PPS)	58	48	51	47	45
TEST 3 (8 PPS)	67	69	74	77	79
TEST 4 (8 PPS)	58	51	33	30	28
SEE NOTE	9	4	4	4	4

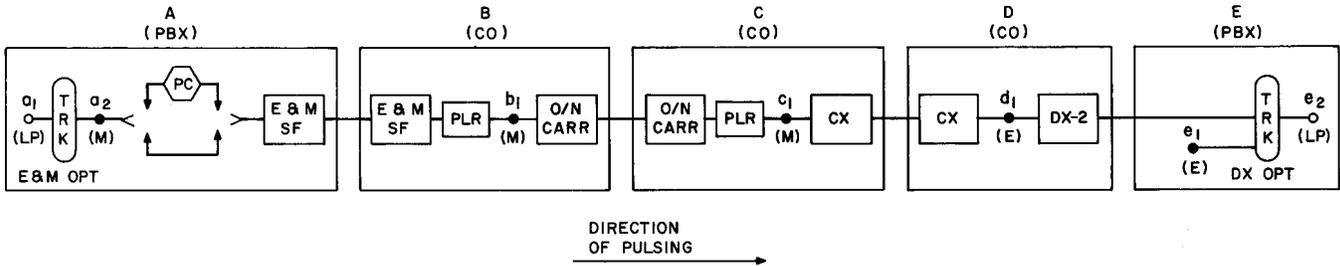
RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂
MAX @ 12 PPS	71	75	77	81	66
MIN @ 12 PPS	51	47	45	41	54
MAX @ 8 PPS	74	77	79	82	58
MIN @ 8 PPS	33	30	28	25	46
SEE NOTE	4	4	4	4	3

TRUNK TYPE
SD-65718-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A AND E

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



WITHOUT M LEAD PULSE CORRECTION

PERCENT BREAK SENDING VALUES					
SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁
TEST 1 (12 PPS)	66	68	73	81	85
TEST 2 (12 PPS)	66	57	49	45	43
TEST 3 (8 PPS)	57	59	76	82	85
TEST 4 (8 PPS)	52	46	31	27	25
SEE NOTE	9	4	4	4	4

PERCENT BREAK RECEIVING VALUES

PERCENT BREAK RECEIVING VALUES					
RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂
MAX @ 12 PPS	73	81	85	89	66
MIN @ 12 PPS	49	45	43	39	54
MAX @ 8 PPS	76	82	85	88	58
MIN @ 8 PPS	31	27	25	23	46
SEE NOTE	4	4	4	4	3

WITH M LEAD PULSE CORRECTION

PERCENT BREAK SENDING VALUES					
SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁
TEST 1 (12 PPS)	67	69	73	81	85
TEST 2 (12 PPS)	58	48	49	45	43
TEST 3 (8 PPS)	67	69	76	82	85
TEST 4 (8 PPS)	58	51	31	27	25
SEE NOTE	9	4	4	4	4

PERCENT BREAK RECEIVING VALUES

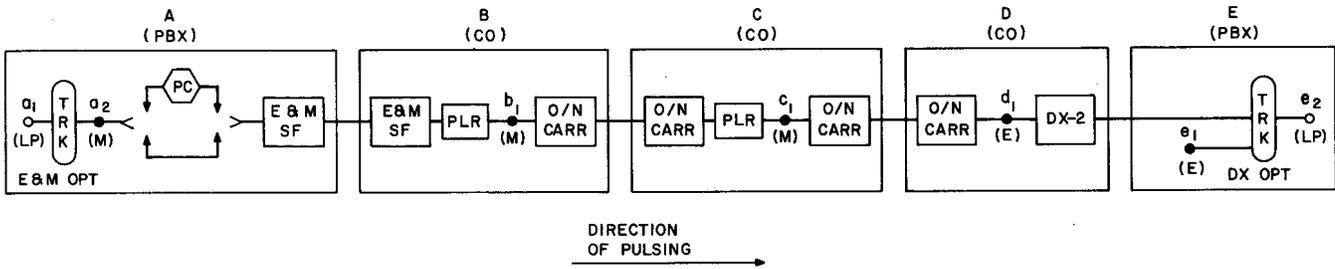
PERCENT BREAK RECEIVING VALUES					
RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂
MAX @ 12 PPS	73	81	85	89	66
MIN @ 12 PPS	49	45	43	39	54
MAX @ 8 PPS	76	82	85	88	58
MIN @ 8 PPS	31	27	25	23	46
SEE NOTE	4	4	4	4	3

TRUNK TYPE
SD-65718-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A AND E

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



WITHOUT M LEAD PULSE CORRECTION

PERCENT BREAK SENDING VALUES					
SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁
TEST 1 (12 PPS)	66	68	73	81	87
TEST 2 (12 PPS)	66	57	49	45	43
TEST 3 (8 PPS)	57	59	76	82	86
TEST 4 (8 PPS)	52	46	31	27	25
SEE NOTE	9	4	4	4	4

PERCENT BREAK RECEIVING VALUES

PERCENT BREAK RECEIVING VALUES					
RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂
MAX @ 12 PPS	73	81	87	91	66
MIN @ 12 PPS	49	45	43	39	54
MAX @ 8 PPS	76	82	86	89	58
MIN @ 8 PPS	31	27	25	22	46
SEE NOTE	4	4	4	4	3

WITH M LEAD PULSE CORRECTION

PERCENT BREAK SENDING VALUES					
SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁
TEST 1 (12 PPS)	67	69	73	81	87
TEST 2 (12 PPS)	58	48	49	45	43
TEST 3 (8 PPS)	67	69	76	82	86
TEST 4 (8 PPS)	58	51	31	27	25
SEE NOTE	9	4	4	4	4

PERCENT BREAK RECEIVING VALUES

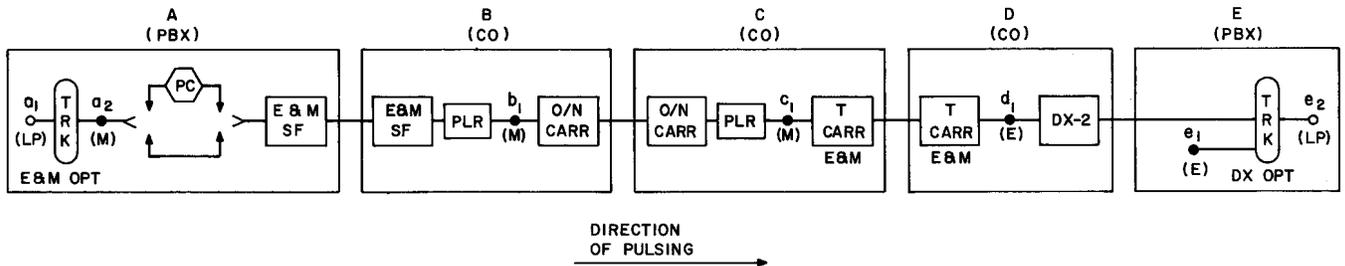
PERCENT BREAK RECEIVING VALUES					
RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂
MAX @ 12 PPS	73	81	87	91	66
MIN @ 12 PPS	49	45	43	39	54
MAX @ 8 PPS	76	82	86	89	58
MIN @ 8 PPS	31	27	25	22	46
SEE NOTE	4	4	4	4	3

TRUNK TYPE
SD-65718-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A AND E

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



WITHOUT M LEAD PULSE CORRECTION

PERCENT BREAK SENDING VALUES					
SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁
TEST 1 (12 PPS)	66	68	73	81	83
TEST 2 (12 PPS)	66	57	49	45	43
TEST 3 (8 PPS)	57	59	76	82	84
TEST 4 (8 PPS)	52	46	31	27	25
SEE NOTE	9	4	4	4	4

PERCENT BREAK RECEIVING VALUES

PERCENT BREAK RECEIVING VALUES					
RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂
MAX @ 12 PPS	73	81	83	87	66
MIN @ 12 PPS	49	45	43	39	54
MAX @ 8 PPS	76	82	84	87	58
MIN @ 8 PPS	31	27	25	22	46
SEE NOTE	4	4	4	4	3

WITH M LEAD PULSE CORRECTION

PERCENT BREAK SENDING VALUES					
SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁
TEST 1 (12 PPS)	67	69	73	81	83
TEST 2 (12 PPS)	58	48	49	45	43
TEST 3 (8 PPS)	67	69	76	82	84
TEST 4 (8 PPS)	58	51	31	27	25
SEE NOTE	9	4	4	4	4

PERCENT BREAK RECEIVING VALUES

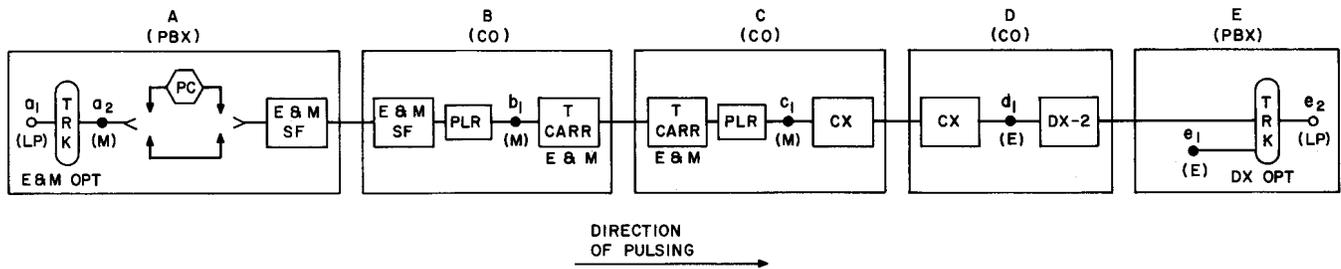
PERCENT BREAK RECEIVING VALUES					
RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂
MAX @ 12 PPS	73	81	83	87	66
MIN @ 12 PPS	49	45	43	39	54
MAX @ 8 PPS	76	82	84	87	58
MIN @ 8 PPS	31	27	25	22	46
SEE NOTE	4	4	4	4	3

TRUNK TYPE
SD-65718-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A AND E

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



WITHOUT M LEAD PULSE CORRECTION

PERCENT BREAK SENDING VALUES					
SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	e ₁
TEST 1 (12 PPS)	66	68	73	77	81
TEST 2 (12 PPS)	66	57	49	45	43
TEST 3 (8 PPS)	57	59	76	80	83
TEST 4 (8 PPS)	52	46	31	27	25
SEE NOTE	9	4	4	4	4

PERCENT BREAK RECEIVING VALUES

PERCENT BREAK RECEIVING VALUES					
RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂
MAX @ 12 PPS	73	77	81	85	66
MIN @ 12 PPS	49	45	43	39	54
MAX @ 8 PPS	76	80	83	86	58
MIN @ 8 PPS	31	27	25	22	46
SEE NOTE	4	4	4	4	3

WITH M LEAD PULSE CORRECTION

PERCENT BREAK SENDING VALUES					
SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁
TEST 1 (12 PPS)	67	69	73	77	81
TEST 2 (12 PPS)	58	48	49	45	43
TEST 3 (8 PPS)	67	69	76	80	83
TEST 4 (8 PPS)	58	51	31	27	25
SEE NOTE	9	4	4	4	4

PERCENT BREAK RECEIVING VALUES

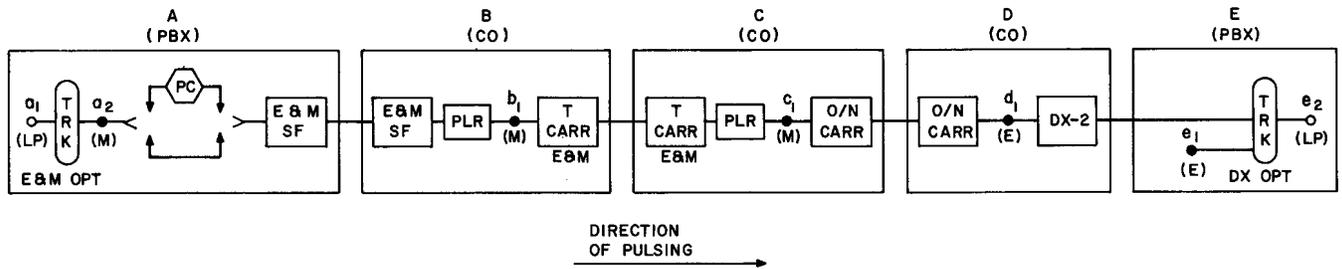
PERCENT BREAK RECEIVING VALUES					
RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂
MAX @ 12 PPS	73	77	81	85	66
MIN @ 12 PPS	49	45	43	39	54
MAX @ 8 PPS	76	80	83	86	58
MIN @ 8 PPS	31	27	25	22	46
SEE NOTE	4	4	4	4	3

TRUNK TYPE
SD-65718-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A AND E

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



WITHOUT M LEAD PULSE CORRECTION

SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁
TEST 1 (12 PPS)	66	68	73	77	83
TEST 2 (12 PPS)	66	57	49	45	43
TEST 3 (8 PPS)	57	59	76	80	84
TEST 4 (8 PPS)	52	46	31	27	25
SEE NOTE	9	4	4	4	4

RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂
MAX @ 12 PPS	73	77	83	87	66
MIN @ 12 PPS	49	45	43	39	54
MAX @ 8 PPS	76	80	84	87	58
MIN @ 8 PPS	31	27	25	22	46
SEE NOTE	4	4	4	4	3

WITH M LEAD PULSE CORRECTION

SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁
TEST 1 (12 PPS)	67	69	73	77	83
TEST 2 (12 PPS)	58	48	49	45	43
TEST 3 (8 PPS)	67	69	76	80	84
TEST 4 (8 PPS)	58	51	31	27	25
SEE NOTE	9	4	4	4	4

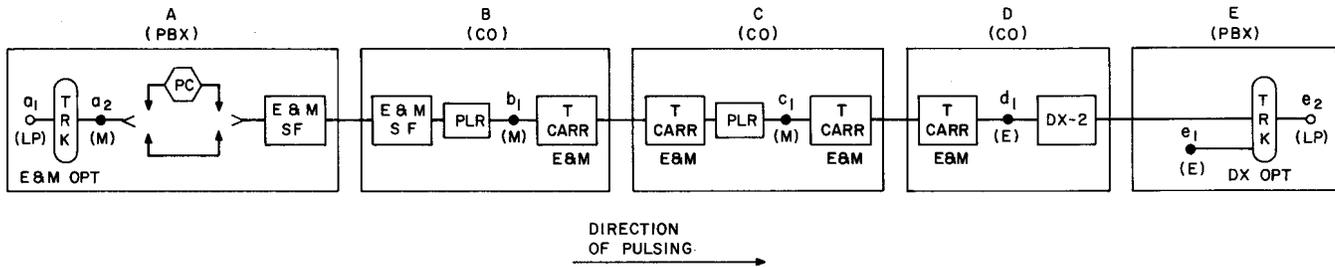
RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂
MAX @ 12 PPS	73	77	83	87	66
MIN @ 12 PPS	49	45	43	39	54
MAX @ 8 PPS	76	80	84	87	58
MIN @ 8 PPS	31	27	25	22	46
SEE NOTE	4	4	4	4	3

TRUNK TYPE
SD-65718-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A AND E

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3 — Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4 — Set LEAK to SF1 and SEND LOOP to OUT.

PULSING REQUIREMENTS DIAGRAM
DIAL TIE TRUNKS



WITHOUT M LEAD PULSE CORRECTION

PERCENT BREAK SENDING VALUES					
SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁
TEST 1 (12 PPS)	66	68	73	77	79
TEST 2 (12 PPS)	66	57	49	45	43
TEST 3 (8 PPS)	57	59	76	80	82
TEST 4 (8 PPS)	52	46	31	27	25
SEE NOTE	9	4	4	4	4

PERCENT BREAK RECEIVING VALUES					
RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂
MAX @ 12 PPS	73	77	79	83	66
MIN @ 12 PPS	49	45	43	39	54
MAX @ 8 PPS	76	80	82	85	58
MIN @ 8 PPS	31	27	25	22	46
SEE NOTE	4	4	4	4	3

WITH M LEAD PULSE CORRECTION

PERCENT BREAK SENDING VALUES					
SEND POINT (NOTE 1)	a ₁	a ₂	b ₁	c ₁	d ₁
TEST 1 (12 PPS)	67	69	73	77	79
TEST 2 (12 PPS)	58	48	49	45	43
TEST 3 (8 PPS)	67	69	76	80	82
TEST 4 (8 PPS)	58	51	31	27	25
SEE NOTE	9	4	4	4	4

PERCENT BREAK RECEIVING VALUES					
RCV POINT (NOTE 2)	b ₁	c ₁	d ₁	e ₁	e ₂
MAX @ 12 PPS	73	77	79	83	66
MIN @ 12 PPS	49	45	43	39	54
MAX @ 8 PPS	76	80	82	85	58
MIN @ 8 PPS	31	27	25	22	46
SEE NOTE	4	4	4	4	3

TRUNK TYPE
SD-65718-01 OR -02 OR SD-66799-01 TIE TRUNKS IN PBX A AND E

Notes:

1. If the signaling mode at the first test point in office A is other than loop, send from the first (M) test point.
2. The percent break of received pulses shall not be greater than the values shown on the MAX lines and not less than the values shown on the MIN lines on TESTS 1 through 4.
3. For measuring received loop pulses, use a 2B or 2B-1 signaling test set and pulse repeating adapter per Section 333-122-501.
4. Use either a 2B or 2B-1 signaling test set. (When sending pulses in excess of 75 percent break see Section 333-122-501.)
9. Use a 2B-1 signaling test set and pulse repeating adapter:
 - A. For MAX TESTS 1 and 3—Set LEAK to OUT and SEND LOOP to 1500 Ω.
 - B. For MIN TESTS 2 and 4—Set LEAK to SF1 and SEND LOOP to OUT.