

PERIODIC TESTS AND TROUBLE INVESTIGATIONS
TOLL CONFERENCE GROUPING CIRCUIT
SIX-OUTLET ARRANGEMENT WITH REPEATERS
SWITCHING PAD, NON-GAIN AND CORD CIRCUIT REPEATER OFFICES

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1.04 Another section of this series of practices covers a description of this equipment.

1.05 The repeaters associated with this circuit should be maintained in accordance with other sections of these practices covering the maintenance of 22A1 telephone repeaters. The volcas circuits maintenance tests are covered in Section 332-432-300.

1. GENERAL

1.01 This section lists the circuit order and periodic tests to be made on a toll conference grouping circuit having a six-outlet arrangement with repeaters at the switching pad, non-gain and cord circuit repeater offices.

1.02 This issue replaces issue 2 and includes tests on the new features of the bridge.

1.03 Section 332-430-500 covers the methods of making the tests listed in this section.

2. SUMMARY OF TESTS

2.01 Table I summarized the tests to be made on the toll conference grouping circuit and indicates their application as circuit order or periodic tests. The intervals specified should be followed in the absence of other intervals authorized in accordance with Company practices. Tests not indicated with a periodicity, may be applied as service adjustment procedures.

2.02 The operating requirements and limits are also given in the table, opposite each test, for the convenience of the test-man.

TABLE I
SUMMARY OF TESTS
TOLL CONFERENCE GROUPING CIRCUIT

<u>Type of Test</u>	<u>Test to be Made</u>		<u>Requirements and Limits</u>	<u>Reference Par. in 332-430-500</u>
	<u>Circuit Order</u>	<u>Periodically</u>		
<u>1000-Cycle Measurements</u>				
Resistance Multiple - Loss between each 2 legs of multiple	X	-	14.0 ± 0.5 db	3.01
Repeater Gain - Each repeater	X	Monthly	As specified on ckt. layout record card ± 0.3 db	3.02
Drop Circuit - (Sw. pad out)	X	-	Nominal value for office	3.03
Switching Pad	X	Annually	Designated value ± 0.4 db	3.03
Overall Ckt. - Loss between each 2 legs of the ckt. with both pads in	X	Monthly	10.0 db plus twice the nominal office drop loss ± 1.0 db	3.04

SECTION 332-430-300

TABLE I (Cont'd)

<u>Type of Test</u>	<u>Test to be Made</u>		<u>Requirements and Limits</u>	Reference Par. in 332-430-500										
	<u>Circuit Order</u>	<u>Periodically</u>												
<u>Overall Ckt. - Disabled Condition</u>														
Loss between each 2 legs of the ckt. with both pads in	X	Quarterly	At least 30 db	3.05										
<u>Overall Ckt. - One-Way Condition</u>														
Loss from incoming leg to each outgoing with both pads in	X	Quarterly	10.0 db plus twice the nominal office drop loss \pm 1.0 db	3.06										
Loss from any outgoing leg to each of the other legs	X	Quarterly	At least 30 db	3.06										
<u>Gain-Frequency Measurements</u>														
Each Repeater	X	Annually	(Note A)	3.07										
<u>Passive Singing Point Tests</u>														
Each leg of Resistance Multiple - With passive repeater termination on other legs	X	-	At least 30 db	3.10										
Each Drop Ckt.														
1. To test drop - pad out	X	-	At least 15 db	3.14(1)										
2. To idle drop - pad in	X	-	At least 15 db	3.14(2)										
3. From test drop - pad out	X	-	At least 20 db	3.14(3)										
<u>Active Singing Point Tests</u>														
Each leg of Grouping Circuit - Pad out - With other legs in idle drop condition	X	Quarterly	<table border="0"> <tr> <td><u>Non-Volcas Leg</u></td> <td><u>Volcas Leg</u></td> </tr> <tr> <td>Switching Pad and Non-Gain Off. -</td> <td></td> </tr> <tr> <td>15 db</td> <td>16 db</td> </tr> <tr> <td>Cord Circuit Rep. Office. -</td> <td></td> </tr> <tr> <td>6 db</td> <td>8 db</td> </tr> </table>	<u>Non-Volcas Leg</u>	<u>Volcas Leg</u>	Switching Pad and Non-Gain Off. -		15 db	16 db	Cord Circuit Rep. Office. -		6 db	8 db	3.17
<u>Non-Volcas Leg</u>	<u>Volcas Leg</u>													
Switching Pad and Non-Gain Off. -														
15 db	16 db													
Cord Circuit Rep. Office. -														
6 db	8 db													
<u>Service Performance Tests</u>														
With one local and five toll connections	X	-	(Acceptable (transmission (between all (stations	3.18										
With six local connections		-												

Note A - The repeater shall meet the following gain-frequency requirements:

Freq.	DB Deviation from 1000-Cycle Gain					
	Minimum		Normal		Maximum	
	W-E	E-W	W-E	E-W	W-E	E-W
300	-1.0	-1.0	-0.4	-0.4	+0.2	+0.2
500	-0.2	-0.2	0	0	+0.2	0.2
1600	-0.2	-0.2	0	+0.1	+0.2	+0.3
2200	-0.4	-0.2	0	+0.2	+0.3	+0.6
2600	-5.2	-0.1	-2.2	+0.5	-0.2	+1.1

Note The typical equalizer setting to give the above characteristics is: Leads "L", "F" and "R" are all connected to terminal 1 of the 82G retard coil.