

**NUMERICAL INDEX — DIVISION 332  
VOICE FREQUENCY TELEPHONE REPEATERS, PILOT WIRE REGULATORS,  
ECHO SUPPRESSORS, COMPOSITE SETS AND ASSOCIATED EQUIPMENT**

**1. GENERAL**

- 1.01** This section provides an index of System-issued sections in Division 332.
- 1.02** A bullet (●) indicates an item that has been added or changed since the previous issue of the index.
- 1.03** A square (□) indicates a canceled item. Information relating to the cancellation, if necessary, will be shown in a note following the item. Canceled items and related notes will be deleted upon reissue of the index.
- 1.04** "Add" is the abbreviation for Addendum, and "Sup" is the abbreviation for Supplement.

**2. LAYERS**

- 2.01** This division is arranged in layers as follows:
- 332-0 Indexes, Equipment Test Lists and General Information
    - 1 Amplifier Type Telephone Repeaters
    - 2 Negative Impedance Telephone Repeaters
    - 3 Special Service Lines — Line-Up
    - 4 Pilot Wire Regulators, Echo Suppressors, Toll Conference Grouping Circuits and Auxiliary Equipment
    - 6 Voice Frequency Consolidated Equipment Arrangements
    - 7 4-Wire Extension
    - 8 4-Wire Terminating Sets and Precision Balancing Networks
    - 9 Combined Transmission and Signaling Repeaters

**3. INDEXES**

Section Number	Issue	Subject
<b>332-0 INDEXES, EQUIPMENT TEST LISTS AND GENERAL INFORMATION</b>		
● 332-000-000	49	Numerical Index — Division 332 — Voice Frequency Telephone Repeaters, Pilot Wire Regulators, Echo Suppressors, Composite Sets and Associated Equipment
Sup 332-001-011	1	
332-001-011	3	ETL
<b>General Information</b>		
332-010-010	3	Test Results on Voice Repeaters
332-010-011	4	Forms for Recording Results of Singing Point and Office Cabling Balance Tests
332-010-012	4	Circuit Order Tests Circuit Units
332-010-015	2	Telephone Repeaters — Jack Field Designations and Assignment Directory
Add332-010-100	1	
332-010-100	2	Voice Frequency Telephone Repeaters — General Instructions
332-010-101	2	Procedure for Investigating Gains of Telephone Repeaters

Section Number	Issue	Subject
Add332-011-100	1	
332-011-100	1	Repeater Attendant's Telephone Set
332-011-101	1	4-Wire Telephone Order Wire — Hybrid Coil Bridging
332-011-102	1	4-Wire Telephone Order Wire — Hybrid Coil Bridging — Equipment Arrangements
332-015-100	2	Simplified Theory of Singing Point Tests
332-015-300	3	Singing Point Tests
332-015-500	3	Singing Point Tests for Voice Frequency Trunks
332-016-010	3	Location of Irregularities on Loaded Cable Pairs Through Analysis of Impedance and Impedance Unbalance Curves

**332-1 AMPLIFIER TYPE TELEPHONE REPEATERS**

**22 Type Repeaters**

Add332-100-100	3	
332-100-100	1	22A1
332-100-101	1	22A2 and D-87797
Add332-100-102	2	
332-100-102	1	Circuits and Apparatus Associated with 22A1, 22A2 and D-87797
332-100-103	2	Modified for 4-Wire Operation
332-100-104	1	Arranged for AC Operation
Add332-100-300	2	
332-100-300	3	22A1, 22A1 (HE), D-87797 and 22A2 — Operating Requirements and Limits
Add332-100-500	3	
332-100-500	2	22A1, D-87797 and 22A2 — Tests and Adjustments
Add332-100-501	1	
332-100-501	2	Arranged for AC Operation — Tests and Adjustments

**44 Type Repeaters**

Add332-101-100	3	
332-101-100	1	44A1
Add332-101-101	1	
332-101-101	1	Circuits and Apparatus Associated With the 44A1
332-101-102	2	Regulating Network Lockup Circuit for Telephoto Services

**SECTION 332-000-000**

Section Number	Issue	Subject
Add332-101-300	1	
332-101-300	5	Operating Requirements and Limits
Add332-101-500	1	
332-101-500	2	Tests and Adjustments
<b>V1 Type Repeaters</b>		
Add332-102-100	1	
332-102-100	2	V1 Telephone Repeater and Associated Equipment
332-102-101	1	Repeater Switching Circuit
332-102-300	6	Circuit Order and Periodic Tests
Add332-102-500	2	
332-102-500	4	Tests and Adjustments
<b>V3 Type Repeaters</b>		
332-103-100	1	V3 Telephone Repeater
332-103-101	1	Bay Arrangements
332-103-300	2	Circuit Order and Periodic Tests
332-103-500	3	Tests and Adjustments on V3 Amplifier
332-103-501	2	V1 and V3 Telephone Repeaters — Associated Equipment Tests and Adjustments
332-103-502	2	Adjustment of Battery Supply Circuits
<b>V4 Type Repeaters</b>		
Add332-104-100	1	
332-104-100	1	V4 Telephone Repeater
332-104-102	2	24V4B Telephone Repeater
332-104-500	1	Initial Line-up
332-104-501	2	227 Type Amplifiers — Tests and Adjustments
332-105-101	1	24V4A Repeater Mounting Shelf — Description
332-105-102	1	24V4B Repeater Mounting Unit — Description
Add332-105-103	1	
332-105-103	1	24V4C Repeater Mounting Shelf — Description
332-106-101	1	44V4A Repeater Mounting Shelf — Description
332-106-102	1	44V4B Repeater Mounting Shelf — Description
332-115-101	1	849A Network — Description
332-115-102	1	849B Network — Description
332-115-103	1	849C Network — Description
332-115-104	1	849D Network — Description
332-115-105	1	849E Network — Description
332-115-106	1	849F Network — Description
332-115-107	1	849G Network — Description
332-116-101	1	359A Equalizer — Description

Section Number	Issue	Subject
332-116-102	1	359B Equalizer — Description
332-116-103	1	359C Equalizer — Description
332-116-104	1	359D Equalizer — Description
332-116-105	1	359E Equalizer — Description
332-116-106	1	359F Equalizer — Description
332-116-107	1	359G Equalizer — Description
332-116-108	1	359H Equalizer — Description
332-116-109	1	359J Equalizer — Description
332-116-110	1	359K Equalizer — Description
332-116-111	1	359L Equalizer — Description
332-116-112	1	359M Equalizer — Description
332-116-113	1	359N Equalizer — Description
332-117-101	1	648A Filter — Description
332-119-101	1	332A Relay — Description

**332-2 NEGATIVE IMPEDANCE TELEPHONE REPEATERS**

**E Type Repeaters**

332-200-000	3	E1 Telephone Repeater — General Information
332-200-100	1	General Information On Placing Repeaters In Service
332-200-101	1	Taking Repeater Out of Service and Analyzing Trouble
332-200-102	1	Taking an E1 or E3 Repeater Out of Service and Preparing for Trouble Analysis
332-200-103	1	Taking E2 or E23 Repeater Out of Service and Preparing for Trouble Analysis
332-200-104	1	General Procedures for Trouble Analysis for a Line Equipped with an E1, E2, E13 or E23 Repeater When Little Gain, No Gain or Poor Transmission is Indicated
332-200-105	1	General Procedures for Trouble Analysis for a Line Equipped with an E1, E2, E13 or E23 Repeater When Instability Or Excessive Gain Is Indicated
Add332-200-106	1	
332-200-106	1	Network Strapping by Use of Charts — E13 or E23 Bridged Repeaters
332-200-108	1	Application of Test Terminations Using Test Termination Circuit SD-96476-01 or Trunk Terminating and Patching Jacks at Master Test Frame
332-200-300	1	Placing E1 or E13 Repeaters In Service Using E-Repeater Test Set
332-200-301	1	Placing E2 or E23 Repeaters In Service Using E-Repeater Test Set

Section Number	Issue	Subject	Section Number	Issue	Subject
332-200-302	1	Placing E1 or E13 Repeaters In Service Using 2G Repeater Test Set	332-207-301	1	E7 Repeaters — Line-Up
332-200-303	1	Placing Repeaters In Service Without the Use of a Repeater Test Set	332-207-311	1	E7 Repeaters — Maintenance
332-200-500	3	General Information on Tests and Inspections	<b>332-3 SPECIAL SERVICE LINES — LiNE-UP</b>		
332-200-501	3	Electron Tubes — Visual Checks, Measurements and Adjustment of Applied Voltages	332-310-510	1	E6 Repeater Lineup — Subscriber Loops — Long Route Design
332-200-502	2	Monitoring Tests	<b>332-4 PILOT WIRE REGULATORS, ECHO SUPPRESSORS, TOLL CONFERENCE GROUPING CIRCUITS AND AUXILIARY EQUIPMENT</b>		
332-200-503	2	Effective Gain Measurement — Method A — Using E Repeater Test and Test Oscillator	<b>Pilot Wire Regulators</b>		
332-200-504	2	Effective Gain Measurement — Method B — Using E Repeater Test Set and Noise Generator	Add332-400-100	1	
332-200-505	2	Effective Gain Measurement — Method C — Using 2G Repeater Test Set and Test Oscillator	332-400-100	2	4A Pilot Wire Transmission Regulating System
332-200-506	2	Effective Gain Measurement — Method D — Using 2G Repeater Test Set and Noise Generator	332-400-300	2	4A and 5A System — Initial Line-Up and Maintenance Procedures
332-200-507	1	Effective Gain Measurement — Method E — Measurements of Gain Peaks and Valleys — Using E Repeater Test Set	332-400-500	3	4A System — Tests and Adjustments
332-200-508	1	Effective Gain Measurements — Method F — Measurements of Gain Peaks and Valleys — Using 2G Repeater Test Set	Add332-401-100	1	
332-200-509	2	Circuit Net Loss Measurement — Method A — Using A Test Oscillator	332-401-100	1	5A System — Description
332-200-511	3	Gain Tests for Repeater In A Standard 600 Ohm Circuit — Method A — Using the E Repeater Test Set	332-401-500	3	5A System — Tests and Adjustments
332-200-512	2	Gain Tests for Repeater In A Standard 600 Ohm Circuit — Method B — Using the 2G Repeater Test Set	332-402-100	1	Regulated Circuit Units — Gain Corrections
Add332-206-100	1		<b>Echo Suppressors</b>		
332-206-100	1	E6 Repeater	332-410-101	1	1A Suppressor — With Enabler and Disabler
332-206-101	1	E6 Repeater Disabler (J99253L) — Description	332-410-102	3	1A Suppressor — Modification for Use On Telephotograph Circuits
332-206-123	1	830C Network — Description	332-410-103	1	1A Suppressor — With Enabler and Disabler — Equipped with 326-Type Mercury Relays — Description
332-206-125	1	820E Network — Description	332-410-301	2	1A Suppressor — Test from Trunk Terminals
332-206-153	1	837C Network — Description	332-410-500	5	1A Suppressor and Disabler — Tests and Adjustments
332-206-154	1	837D Network — Description	332-410-501	1	1A Echo Suppressor and Disabler Equipped with 326-Type Mercury Relays — Tests and Adjustments
332-206-155	1	837E Network — Description	332-412-101	2	3A Echo Suppressor — Description
332-206-156	1	837F Network — Description	332-412-102	2	3B Echo Suppressor — Description
332-207-100	1	E7 Repeaters — Introduction	332-412-500	2	3A Echo Suppressor — Lineup
332-207-101	1	E7 Repeater — Theory	332-412-502	2	3B Echo Suppressor — Lineup
332-207-121	1	E7 Repeater — Application to MTWX Circuits	332-414-100	1	4A Echo Suppressor — Description
			332-414-105	1	4A Echo Suppressor — J68914TA Test Extender — Description
			332-414-500	1	4A Echo Suppressor — Trouble Location
			<b>1A Compander</b>		
			Add332-420-100	1	
			332-420-100	1	Description
			332-420-300	1	Circuit Order and Periodic Tests

**SECTION 332-000-000**

Section Number	Issue	Subject
332-420-500	2	Testing Methods
<b>Toll Conference Grouping Circuits — 6 Outlet Arrangement</b>		
332-430-100	3	Switching Pad Non-Gain and Cord Circuit Repeater Offices
332-430-300	3	Periodic Tests and Trouble Investigations — Switching Pad Non-Gain and Cord Circuit Repeater Offices
<b>Toll Conference Grouping Circuits — 6 Outlet Arrangement With Repeaters</b>		
332-430-500	3	Tests and Adjustments — Switching Pad Non-Gain and Cord Circuit Repeater Offices
332-431-100	2	Six Outlet V Repeated Volcas Arrangement
332-431-300	2	Periodic Tests and Adjustments — Six Outlet V Repeated Volcas Arrangement
332-431-500	3	Six Outlet V Repeated Arrangement — Tests and Adjustments — Volcas for 22 Type Repeaters Used with Toll Conference Grouping Circuits
332-432-100	2	Volcas for 22 Type Repeaters Used with Toll Conference Grouping Circuits
332-432-300	2	Periodic Tests and Trouble Investigation
<b>Toll Conference Grouping Circuits — 6 Outlet Arrangement Without Repeaters</b>		
332-432-500	2	Tests and Adjustments — Non-Repeated Toll Conference Grouping Circuit
332-433-100	1	Three Outlet Arrangement — Non-Repeated
332-435-100	1	Multiport Conference Bridge — Description
332-435-500	1	Multiport Conference Bridge — Tests and Adjustments
<b>Auxiliary Equipment</b>		
332-450-100	3	Composite Sets and Associated Hybrid Transformers
332-450-500	1	Testing and Balancing Composite Sets and Associated Line or Hybrid Transformers
<b>332-6 VOICE FREQUENCY CONSOLIDATED EQUIPMENT ARRANGEMENTS</b>		
332-600-101	1	Using E-Type SF Signaling Units — Description and Application of J98617J-2 Bay

Section Number	Issue	Subject
<b>332-7 4-WIRE EXTENSION</b>		
332-700-101	1	4182A Network — Description
332-700-102	1	4182B Network — Description
332-700-103	1	4182C Network — Description
<b>332-8 4-WIRE TERMINATING SETS AND PRECISION BALANCING NETWORKS</b>		
<b>Terminating Sets</b>		
332-800-101	2	1A and 1K — Description
332-800-102	2	1B and 1L — Description
● 332-800-103	3	1C, 1F, and 1M — Description
332-800-104	1	1D — Description
332-800-105	1	1G — Description
332-800-106	1	1H — Description
332-800-107	1	1J — Description
<b>Data on Balancing Equipment</b>		
● 332-851-101	2	115-Type Networks for Toll Message and Program Circuits
<b>Networks</b>		
332-852-100	1	4066 — Description
332-852-101	2	4066A — Description
332-852-102	1	4066B — Description
332-852-103	1	4066C — Description
332-852-104	1	4066D — Description
332-852-105	1	4066E — Description
332-852-106	1	4066F — Description
332-852-107	1	4066G — Description
332-852-108	1	4066H — Description
<b>332-9 COMBINED TRANSMISSION AND SIGNALING REPEATERS</b>		
332-906-110	2	J98619A Subscriber Loop
332-906-510	2	J98619A Subscriber Loop — Tests and Adjustments