

EQUIPMENT TEST LIST
J-CODE RECTIFIERS
POWER SYSTEMS EQUIPMENT

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NOTICE

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26.50 J87249A,B	12	1. GENERAL	
26.51 J87275	13	1.01 This section provides an index and information access system to locate the standard tests applicable to equipment listed in the preceding table of contents. Test classification and frequency of periodic routine are also provided.	
26.52 J87320A	13	1.02 This Equipment Test List (ETL) is reissued to incorporate changes which are indicated by an arrow to the left of each line which has been changed.	
26.53 J87346	13	1.03 Comments on this section should be made by following the instructions in Bell System Practices (BSP), Section 000-010-015.	
26.54 J87358	13	1.04 Routine test information is arranged in the following order from left to right: Section number, issue/addendum, test letter or paragraph number, test title, test class, frequency, and the last space is for a locally assigned job number.	
26.55 J87434A L1 & L3	13	1.05 Section 010-300-011 provides Equipment Test List instructions.	
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26.0 RECTIFIERS, J-CD

26.1 RECTIFIERS, J-CD; J86207(ADGHKLMU)

FOR ALL UNITS

169-230-301 (8/1)	1.10	CLEAN VENTILATING PASSAGES	MW 12M	-----
	4.01	(A) CHECK OUTPUT CURRENT AND VOLTAGE	MW 3M	-----
	4.01	(E) CHECK GRID BATTERY VOLTAGE	MW 12M	-----
	4.01	(F) INSPECT CONDITION & ADJMT OF RELAY CONTACTS	MW 12M	-----

TROUBLE TESTS

169-230-301 (8/1)	4.01	(D) CONDITION OF ELECTRON TUBES	TT	-----
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26.2 RECTIFIERS, J-CD; J86207B, J86207R, J86207T & J86216A

FOR ALL UNITS

169-603-302 (5/0)	1.06	CLEAN VENTILATING PASSAGES	MW 12M	-----
	3.03	CHECK OUTPUT VOLTAGE	MW 3M	-----
	4.01	(B) INSPECTION OF RELAYS	MW 6M	-----

TROUBLE TESTS

169-603-302 (5/0)	4.01	(A) ELECTRON TUBES	TT	-----
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26.3 RECTIFIERS, J-CD; J86207C & J86207F

FOR ALL UNITS

169-603-303 (7/0)	1.07	CLEAN VENTILATING PASSAGES	MW 12M	-----
	4.01	(A) CHECK TIME DELAY RELAY	MW 12M	-----
	4.01	(F) CHECK OUTPUT VOLTAGE	MW 3M	-----

OPTIONAL FEATURES

E/W ELECTRON TUBES

169-603-303 (7/0)	4.01	(E) CHECK GRID BATTERY	MW 12M	-----
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TROUBLE TESTS

169-603-303 (7/0)	4.01	(B) ELECTRON TUBES	TT	-----
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26.4 RECTIFIERS, J-CD; J86207E L4&L5, J86207J L4&L5

FOR ALL UNITS

169-232-301 (5/0)	1.08	CLEAN VENTILATING PASSAGES	MW 12M	-----
	4.01	(A) CHECK OPERATING TIME OF TD RELAYS	MW 3M	-----
	4.01	(B) J86207E AND J86207J, L4, L5 RECTIFIERS OUTPUT CURRENT AND VOLTAGE	MW 3M	-----
	4.01	(D) READJUST ADJ VOLTS CONTROL	MW 12M	-----

TROUBLE TESTS

169-232-301 (5/0)	4.01	(C1) ELECTRON TUBES	TT	-----
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	4.01	(C3) GRID BATTERY VOLTAGE	TT	-----
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26.5 RECTIFIERS, J-CD; J86207J, L6

FOR ALL UNITS

169-232-301 (5/0)	1.08	CLEAN VENTILATING PASSAGES	MW 12M	-----
	4.01	(A) CHECK OPERATING TIME OF TD RELAYS	MW 3M	-----
	4.01	(D) READJUST ADJ VOLTS CONTROL	MW 12M	-----

TROUBLE TESTS						
◆	169-232-301	(5/0)	4.01	(C1) ELECTRON TUBES	TT	-----
◆			4.01	(C3) GRID BATTERY VOLTAGE	TT	-----
26.6 RECTIFIERS, J-CD; J86209P & J86207S						
FOR ALL UNITS						
	169-603-319	(6/0)	1.05	CLEAN VENTILATING PASSAGES	MW 12M	-----
			4.01	CHECK OL AND RB RELAYS	MW 12M	-----
			4.03	MOTOR LUBRICATION	MW 12M	-----
TROUBLE TESTS						
◆	169-603-319	(6/0)	4.02	ELECTRON TUBES	TT	-----
26.7 RECTIFIERS, J-CD; J86207W						
FOR ALL UNITS						
	169-234-301	(4/0)	1.07	CLEAN VENTILATING PASSAGES	MW 12M	-----
			4.01	(D) CHECK TD RELAY OPERATE TIME	MW 12M	-----
			4.01	(E) READJUST REG CONTROL	MW 12M	-----
			4.01	(F) TEST AUTO MAN CONTROL	MW 12M	-----
TROUBLE TESTS						
◆	169-234-301	(4/0)	4.01	(A&C) ELECTRON TUBES	TT	-----
◆			4.01	(B&C) GRID BATTERY	TT	-----
26.8 RECTIFIERS, J-CD; J86217A						
FOR ALL UNITS						
	169-604-301	(2/0)	4.01	(A) CHECK OUTPUT VOLTAGE	MW M	-----
26.9 RECTIFIERS, J-CD; J86218A						
FOR ALL UNITS						
	169-605-301	(2/0)	0.01	CHECK FOR NORMAL OUTPUT VOLTAGE	MW M	-----
◆			3.02	CHECK (V2 - V3) LOAD DIVISION	MW 6M	-----
26.10 RECTIFIERS, J-CD; J86219A						
FOR ALL UNITS						
◆	169-606-301	(2/0)		CHECK FOR NORMAL OUTPUT VOLTAGE	MW M	-----
◆			3.01	CHECK (V1 - V5) LOAD DIVISION	MW 6M	-----
26.11 RECTIFIERS, J-CD; J86219B L1 - L3						
FOR ALL UNITS						
◆	169-606-302	(4/0)		CHECK FOR NORMAL OUTPUT VOLTAGE	MW M	-----
			1.08	CLEAN VENTILATING PASSAGES	MW 12M	-----
TROUBLE TESTS						
◆	169-606-302	(4/0)	4.01	(B) (V3 - V6) LOAD DIVISION	TT	-----
26.12 RECTIFIERS, J-CD; J86221A						
FOR ALL UNITS						
	169-607-301	(5/0)	4.01	(A) CHECK OUTPUT VOLTAGE	MW M	-----
TROUBLE TESTS						
◆	169-607-301	(5/0)	4.01	(B) CAPACITORS	TT	-----

◆	169-607-301 (5/0)	4.01 (C) ELECTRON TUBES	TT	-----
	26.13 RECTIFIERS, J-CD; J86225 (A,B,C,D,E)			
	FOR ALL UNITS			
◆	169-608-301 (5/0)	CHECK FOR NORMAL OUTPUT VOLTAGE	MW M	-----
	OPTIONAL FEATURES			
	E/W ELECTRON TUBES			
	169-608-301 (5/0)	4.01 CHECK ELECTRON TUBES	MW 12M	-----
	26.14 RECTIFIERS, J-CD; J86226 (A,B,C,D)			
	FOR ALL UNITS			
◆	169-609-301 (5/0)	CHECK FOR NORMAL OUTPUT VOLTAGE	MW M	-----
	OPTIONAL FEATURES			
	E/W ELECTRON TUBES			
	169-609-301 (5/0)	4.01 CHECK ELECTRON TUBES	MW 12M	-----
	26.15 RECTIFIERS, J-CD; J86227(A,B,C,D)			
	FOR ALL UNITS			
◆	169-610-301 (4/0)	CHECK FOR NORMAL OUTPUT VOLTAGE	MW M	-----
	OPTIONAL FEATURES			
	E/W ELECTRON TUBES			
	169-610-301 (4/0)	4.01 CHECK ELECTRON TUBES	MW 12M	-----
	26.16 RECTIFIERS, J-CD; J86228A & B			
	FOR ALL UNITS			
	169-611-301 (2/0)	4.02 CHECK OUTPUT VOLTAGE	MW M	-----
	26.17 RECTIFIERS, J-CD; J86231A			
	FOR ALL UNITS			
	169-238-301 (3/0)	1.09 CLEAN RECTIFYING ELEMENTS	MW 12M	-----
		4.06 CHECK RECTIFIER FAILURE ALARM	MW 12M	-----
		4.08 CHECK CHARGE FUSE ALARM	MW 12M	-----
	OPTIONAL FEATURES			
	E/W MANUAL CONTROL			
	169-238-301 (3/0)	4.05 CHECK MANUAL OPERATION	MW 12M	-----
	TROUBLE TESTS			
	169-238-301 (3/0)	5.02 RECTIFYING ELEMENT (STACK) CR1-CR4 RPLCMT	TT	-----
		5.03 PRINTED CKT BOARD (CPS-1, CPS-2 & CPS-3) RPLCMT	TT	-----
		5.04 TROUBLE CHART	TT	-----
	26.18 RECTIFIERS, J-CD; J86239A			
	FOR ALL UNITS			
◆	169-612-301 (2/0)	CHECK FOR NORMAL OUTPUT VOLTAGE	MW M	-----
		1.06 CLEAN VENTILATING PASSAGES	MW 12M	-----
		3.01 CHECK ELECTRON TUBES	MW 12M	-----
		3.02 CHECK LOAD BALANCE	MW 6M	-----

26.19 RECTIFIERS, J-CD; J86239C

FOR ALL UNITS

◆	169-612-303	(3/0)	CHECK FOR NORMAL OUTPUT VOLTAGE (WHEN USED AS BATTERY CHARGER)	MW M	-----
		1.05	CLEAN VENTILATING PASSAGES	MW 12M	-----
		4.02	CHECK HV RELAY OPERATION	MW 12M	-----

OPTIONAL FEATURES

◆	RECTIFIER NOT USED AS BATTERY CHGR				
◆	169-612-303	(3/0)	CHECK FOR NORMAL OUTPUT VOLTAGE	MW M	-----

26.20 RECTIFIERS, J-CD; J86240A,B

FOR ALL UNITS

	169-613-301	(12/0)	4.01	CLEAN VENTILATING PASSAGES	MW 12M	-----
◆			4.02	CHECK OUTPUT FLOAT VOLTAGE AND CURRENT	MW 3M	-----

TROUBLE TESTS

◆	169-613-301	(12/0)	4.03	RELAY CONTACT CONDITION & ADJMT	TT	-----
◆			4.04	FLOAT VOLTAGE ADJMT	TT	-----
◆			4.05	OVERCHARGE ADJMT	TT	-----
◆			4.06	ANTI-HUNT ADJMT	TT	-----

RELAY-TYPE CONTROL

◆	169-613-301	(12/0)	4.07	OL RELAY ADJMT	TT	-----
◆			4.08	CONSTANT CURRENT ADJUSTMENT	TT	-----

ELECTRONIC-TYPE CONTROL

◆	169-613-301	(12/0)	4.09	ELECTRONIC CURRENT-LIMITING ADJUSTMENT	TT	-----
◆			4.10	OL RELAY ADJMT	TT	-----

26.21 RECTIFIERS, J-CD; J86241

FOR ALL UNITS

	169-614-301	(2/0)	1.06	CLEAN VENTILATING PASSAGES	MW 12M	-----
			3.01	CHECK OUTPUT VOLTAGE	MW M	-----
			3.02	CHECK PF RELAY OPERATION	MW 12M	-----

26.22 RECTIFIERS, J-CD; J86242

FOR ALL UNITS

	169-615-301	(2/0)	1.03	CLEAN VENTILATING PASSAGES	MW 12M	-----
			3.01	CHECK PF RELAY OPERATION	MW 12M	-----

26.23 RECTIFIERS, J-CD; J86243A

FOR ALL UNITS

	169-616-301	(2/0)	1.04	CLEAN VENTILATING PASSAGES	MW 12M	-----
			3.01	CHECK PF RELAY OPERATION	MW 12M	-----

26.24 RECTIFIERS, J-CD; J86244A

FOR ALL UNITS

	169-617-301	(7/3)	1.05	CLEAN VENTILATING PASSAGES	MW 12M	-----
			4.05	CHECK RELAYS	MW 12M	-----

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169-617-301 (7/3)	4.06	CHECK OUTPUT VOLTAGE	MW M	-----
TROUBLE TESTS				
169-617-301 (7/3)	4.08	REGULATOR BY-PASS	TT	-----
	4.09	FLOAT VOLTAGE AND LOAD ADJUSTMENT	TT	-----
	4.10	OVERCHARGE VOLTAGE ADJUSTMENT	TT	-----
	4.11	MAXIMUM CURRENT ADJUSTMENT	TT	-----
	4.12	OUTPUT CURRENT RELAY	TT	-----
	4.13	V2 AND V6 ELECTRON TUBES	TT	-----
26.25 RECTIFIERS, J-CD; J86249A,B,C				
SELECT ONLY ONE CATEGORY				
E/W J86249E L1				
169-618-303 (4/2)	1.04	CLEAN VENTILATING PASSAGES	MW 12M	-----
	3.02	OPERATE TEST SWITCHES TO CHECK RECTIFIER OPERATION	MW 12M	-----
	4.04	(1-12) CHECK OVERLOAD LIMIT OL RELAY OPRN	MW 12M	-----
	4.04	(13-22) CHECK MAXIMUM CURRENT LIMIT ADJMT	MW 12M	-----
	4.04	(23) CHECK ANTI-HUNT ADJMT	MW 12M	-----
	4.04	(24-25) CHECK OVERCHARGE VOLTAGE	MW 12M	-----
	4.05	CHECK OUTPUT CURRENT (AR) AMMETER RELAY OPRN	MW 12M	-----
	4.06	CHECK CALIBRATION OF OUTPUT VOLTS METER	MW 12M	-----
E/W J86249E L2				
169-618-301 (5/0)	4.03	CLEAN VENTILATING PASSAGES	MW 12M	-----
	4.05	CHECK CALIBRATION OF OUTPUT VOLTS METER	MW 12M	-----
	4.06	CHECK OUTPUT CURRENT AMMETER RELAY OPRN	MW 12M	-----
	4.07	CHECK OVERLOAD LIMIT	MW 12M	-----
	4.08	CHECK AHR AND AHL POTENTIOMETER ADJUSTMENT	MW 12M	-----
	4.09	CLEAN SWITCH	MW 6M	-----
E/W J86249E L3				
169-618-305 (3/3)	1.05	CLEAN VENTILATING PASSAGES	MW 12M	-----
	4.07	CHECK OUT VOLTS VOLTMETER ADJMT	MW 12M	-----
TROUBLE TESTS				
169-618-301 (5/0)	4.01	ELECTRON TUBES	TT	-----
	4.02	CONTACTOR AND RELAYS	TT	-----
169-618-303 (4/2)	4.01	RELAYS	TT	-----
	4.02	REGULATION	TT	-----
	4.03	TEST OPERATION	TT	-----
169-618-305 (3/3)	4.01	RELAYS	TT	-----
	4.02	CONT KEY	TT	-----
	4.03	RECTIFIER OPERATION	TT	-----
	4.04	CON CUR TST MILLIVOLTMETER CALIBRATION	TT	-----
	4.06	CONSTANT CURRENT (CON CUR) CIRCUIT AND OL RELAY ADJUSTMENT	TT	-----

26.26 RECTIFIERS, J-CD; J86263A,B

FOR ALL UNITS

169-620-301	(2/0)	3.01	CHECK OPERATION OF OL AND RB RELAYS	MW 12M	-----
		3.02	CHECK CHARGE FUSE ALARM	MW 12M	-----

26.27 RECTIFIERS, J-CD; J86266A

FOR ALL UNITS

169-622-301	(6/0)	1.07	CLEAN VENTILATING PASSAGES	MW 12M	-----
		4.01	CHECK OPERATION OF RAISE KEY AND LOWER KEY	MW 12M	-----
		4.02	CHECK ALARM OPERATION	MW 12M	-----
		4.05	CHECK OPERATION OF OL, OLA, FL, AND FLA RELAYS	MW 12M	-----

TROUBLE TESTS

◆	169-622-301	(6/0)	4.04	RELAY CONTACT CONDITION & ADJMT	TT	-----
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26.28 RECTIFIERS, J-CD; J86273

SELECT ONLY ONE CATEGORY

W/CURRENT REGULATED OUTPUT

◆	169-623-301	(4/1)	4.05	CHECK AUTOMATIC OPERATION	MW 12M	-----
◆			4.06	CHECK MANUAL OPERATION	MW 12M	-----
◆			4.07	CHECK OL RELAY CIRCUIT OPRN	MW 12M	-----
◆			4.08	CHECK OL RELAY ADJMT	MW 12M	-----
◆			4.09	CHECK FAN FAILURE ALARM	MW 12M	-----
◆			4.10	CLEAN RECTIFIER CELLS & CHANGE AIR FILTER	MW 12M	-----

W/VOLTAGE REGULATED OUTPUT

	169-623-306	(4/1)	4.01	CHECK CONTACTOR AND RELAYS	MW 12M	-----
◆			4.03	CHECK AUTOMATIC OPERATION	MW 12M	-----
◆			4.04	CHECK CURRENT-LIMITING CIRCUIT OPRN	MW 12M	-----
◆			4.05	CHECK MANUAL OPERATION	MW 12M	-----
◆			4.06	CHECK FLOAT AND CHARGE VOLTAGE	MW 12M	-----
◆			4.07	CHECK OL RELAY CIRCUIT OPRN	MW 12M	-----
◆			4.08	CHECK OL RELAY ADJMT	MW 12M	-----
◆			4.09	CHECK VR NETWORK OPRN	MW 12M	-----
◆			4.10	CHECK CONSTANT CURRENT SETTING	MW 12M	-----
◆			4.11	CHECK FAN FAILURE ALARM	MW 12M	-----
◆			4.12	CLEAN RECTIFIER CELLS & CHANGE AIR FILTER	MW 12M	-----

TROUBLE TESTS

◆	169-623-301	(4/1)	4.01	ELECTRON TUBES	TT	-----
◆			4.02	CONTACTOR AND RELAYS	TT	-----

26.29 RECTIFIERS, J-CD; J86277A

FOR ALL UNITS

	169-624-301	(1/0)	4.01	(A) CHECK OUTPUT VOLTAGE	MW M	-----
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26.30 RECTIFIERS, J-CD; J86277B

FOR ALL UNITS

169-624-302 (1/0) 4.01 (A) CHECK OUTPUT VOLTAGE MW M -----
 26.31 RECTIFIERS, J-CD; J86278A

FOR ALL UNITS

169-625-301 (3/0) 4.01 (A) CHECK OUTPUT VOLTAGE MW M -----
 26.32 RECTIFIERS, J-CD; J86278B

FOR ALL UNITS

169-625-302 (2/0) 4.01 (A) CHECK OUTPUT VOLTAGE MW M -----
 26.33 RECTIFIERS, J-CD; J86280A

FOR ALL UNITS

169-626-301 (3/0) 4.01 (A) CHECK OUTPUT VOLTAGE MW M -----
 26.34 RECTIFIERS, J-CD; J86286A

FOR ALL UNITS

169-627-301 (1/0) 4.01 (A) CHECK OUTPUT VOLTAGE MW M -----
 26.35 RECTIFIERS, J-CD; J86288A

FOR ALL UNITS

169-628-301 (1/0) 4.01 (A) CHECK OUTPUT VOLTAGE MW M -----
 26.36 RECTIFIERS, J-CD; J86295A

SELECT ONLY ONE CATEGORY

CURRENT REG,R&E CELLS

169-630-303 (5/1) 4.02 CLEAN VENTILATING PASSAGES MW 12M -----
 4.04 CHECK MAGNETIC AMPLIFIER RANGE ADJMT MW 12M -----
 4.05 CHECK MAXIMUM CURRENT LIMIT MW 12M -----
 4.07 CHECK RAISE AND LOWER RATE MW 12M -----
 4.08 CHECK HIGH AND LOW SETTING OF AR1 MW 12M -----
 4.10 CHECK CONTACTOR AND RELAYS MW 12M -----

VOLTAGE REG,R&E CELLS

169-630-301 (5/1) 4.02 CLEAN VENTILATING PASSAGES MW 12M -----
 4.05 CHECK MAGNETIC AMPLIFIER RANGE ADJMT MW 12M -----

VOLTAGE REG,REG CELLS ONLY

169-630-302 (5/1) 4.02 CLEAN VENTILATING PASSAGES MW 12M -----
 4.05 CHECK MAGNETIC AMPLIFIER RANGE ADJMT MW 12M -----

TROUBLE TESTS

VOLTAGE REG, R&E CELLS

169-630-301 (5/1) 4.03 AUTOMATIC OPERATION TT -----
 4.04 CURRENT-LIMITING CIRCUIT TT -----
 4.06 FLOAT AND CHARGE VOLTAGE TT -----
 4.07 OL RELAY CIRCUIT TT -----
 4.08 GAIN AND ANTI-HUNT ADJUSTMENT TT -----
 4.09 HIGH AND LOW SETTING OF AR1 AND AR2 TT -----
 4.10 CONTACTOR AND RELAYS TT -----

▶	VOLTAGE REG, REG CELLS ONLY				
	169-630-302 (5/1)	4.03	AUTOMATIC OPERATION	TT	-----
		4.04	CURRENT-LIMITING CIRCUIT	TT	-----
		4.06	FLOAT AND CHARGE VOLTAGE	TT	-----
▶		4.06	OL RELAY CIRCUIT	TT	-----
		4.08	GAIN AND ANTI-HUNT ADJUSTMENT	TT	-----
		4.09	SHUTDOWN FEATURE-CHG(F8) FUSE FAILURE	TT	-----
		4.10	SHUTDOWN FEATURE-PLANT TR LEAD	TT	-----
		4.11	CONTACTOR AND RELAYS	TT	-----
▶	CURRENT REG, R & E CELLS				
	169-630-303 (5/1)	4.03	AUTOMATIC OPERATION	TT	-----
▶		4.06	OL RELAY CIRCUIT	TT	-----
▶		4.09	ELECTRON TUBES	TT	-----
	26.37 RECTIFIERS, J-CD; J86296				
	SELECT ONLY ONE CATEGORY				
	CURRENT REG,R&E CELLS				
	169-631-303 (5/0)	4.02	CLEAN VENTILATING PASSAGES	MW 12M	-----
	VOLTAGE REG,R&E CELLS				
	169-631-301 (6/0)	4.02	CLEAN VENTILATING PASSAGES	MW 12M	-----
	VOLTAGE REG,REG CELLS ONLY				
	169-631-302 (6/0)	4.02	CLEAN VENTILATING PASSAGES	MW 12M	-----
	TROUBLE TESTS				
▶	VOLTAGE REG, REG CELLS ONLY				
▶	169-631-302 (6/0)	4.03	AUTOMATIC CONTROL CIRCUIT	TT	-----
▶		4.04	CURRENT LIMIT CIRCUIT	TT	-----
		4.05	CHECK MAGNETIC AMPLIFIER RANGE ADJUSTMENT	TT	-----
		4.06	FLOAT AND CHARGE VOLTAGE ADJUSTMENT	TT	-----
		4.07	OVERLOAD (OL) RELAY ADJUSTMENT	TT	-----
		4.08	GAIN AND ANTI-HUNT ADJUSTMENT	TT	-----
▶	VOLTAGE REG, R&E CELLS				
▶	169-631-301 (6/0)	4.03	CONTACTOR AND RELAYS	TT	-----
▶		4.04	AUTOMATIC CONTROL CIRCUIT	TT	-----
▶		4.05	CURRENT LIMIT CIRCUIT	TT	-----
		4.06	MAGNETIC AMPLIFIER RANGE ADJUSTMENT	TT	-----
		4.07	FLOAT AND CHARGE VOLTAGE ADJUSTMENT	TT	-----
		4.08	OVERLOAD (OL) RELAY ADJUSTMENT	TT	-----
		4.09	GAIN AND ANTI-HUNT ADJUSTMENT	TT	-----
		4.10	HIGH AND LOW SETTINGS OF AR1 AND AR2 AMMETER RELAYS	TT	-----
▶	CURRENT REG, R&E CELLS				
▶	169-631-303 (5/0)	4.03	AUTOMATIC CONTROL CIRCUIT	TT	-----

SECTION 169-001-011

◆	169-631-303 (5/0)	4.04	MAXIMUM CURRENT LIMIT	TT	-----
◆		4.05	OVERLOAD (OL) AND OLF RELAY ADJUSTMENT	TT	-----
◆		4.06	RAISE AND LOWER RATE	TT	-----
		4.07	HIGH AND LOW SETTINGS OF AR1 AMMETER RELAY	TT	-----
◆		4.08	ELECTRON TUBE (V1)	TT	-----
◆		4.09	CONTACTOR AND RELAYS	TT	-----
26.38 RECTIFIERS, J-CD; J86298A					
FOR ALL UNITS					
◆	169-633-301 (3/0)	4.01	CHECK OUTPUT VOLTAGE ADJMT	MW 3M	-----
		4.02	CHECK OUTPUT CURRENT	MW 3M	-----
		4.03	CHECK VENTILATING PASSAGE	MW 12M	-----
TROUBLE TESTS					
	169-633-301 (3/0)	4.04	ELECTROLYTIC CAPACITOR	TT	-----
26.39 RECTIFIERS, J-CD; J87200A					
FOR ALL UNITS					
◆	169-635-301 (1/0)	4.01	CHECK OUTPUT VOLTAGE ADJMT	MW M	-----
TROUBLE TESTS					
	169-635-301 (1/0)	5.02	TROUBLE LOCATING CHART	TT	-----
◆		6.01	(6.01 - 6.04) POINT TO POINT VOLTAGE MEASUREMENTS	TT	-----
26.40 RECTIFIERS, J-CD; J87201AL1 & BL1					
FOR ALL UNITS					
	169-636-301 (3/0)	1.06	CLEAN VENTILATING PASSAGES	MW 12M	-----
		4.01	CHECK HIGH AND LOW ALARMS	MW 12M	-----
		4.02	CHECK MANUAL OPERATION	MW 12M	-----
		4.03	INSPECT RELAY CONTACT CONDITION AND ADJMT	MW 12M	-----
TROUBLE TESTS					
	169-636-301 (3/0)	5.02	DEFECTIVE PRTD CKT BOARD	TT	-----
		5.03	TROUBLE LOCATING CHART	TT	-----
26.41 RECTIFIERS, J-CD; J87207AL1 & BL1					
FOR ALL UNITS					
	169-642-301 (3/0)	4.03	CLEAN VENTILATING PASSAGES	MW 12M	-----
◆		4.04	CHECK OUTPUT VOLTAGE ADJMT	MW M	-----
26.42 RECTIFIERS, J-CD; J87211A,B					
FOR ALL UNITS					
	169-245-301 (4/0)	4.01	CHECK AC INPUT AND DC OUTPUT VOLTAGE	MW 3M	-----
TROUBLE TESTS					
	169-245-301 (4/0)	5.01	DEFECTIVE RECT STACK CR2	TT	-----
		5.02	DEFECTIVE REGULATOR UNIT	TT	-----
		5.04	NO DC OUTPUT	TT	-----
		5.05	HV OUTPUT--CKT BRKR TRIPS	TT	-----

	169-245-301 (4/0)	5.06	HV SHUTDOWN CKT INOPERATIVE	TT	-----
		5.07	CKT LIMIT INOPERATIVE	TT	-----
		5.08	RESTORATION RECTIFIER AFTER DEEP DISCHARGE	TT	-----
26.43 RECTIFIERS, J-CD; J87222 A,B,C,D					
FOR ALL UNITS					
	169-648-301 (8/0)	4.02	CHECK OUTPUT VOLTAGE ADJMT	MW 3M	-----
		4.03	CHECK J87277 REGULATOR UNIT	MW 3M	-----
		4.06	CHECK 70-TYPE FUSES	MW 3M	-----
TROUBLE TESTS					
	169-648-301 (8/0)	4.01	CONDITION OF RELAY CONTACTS	TT	-----
		4.05	CURRENT LIMITING POTENTIOMETER	TT	-----
26.44 RECTIFIERS, J-CD; J87223 A,B,C,D					
FOR ALL UNITS					
	169-255-301 (9/0)	4.01	CHECK CONDITION OF RELAY CONTACTS	MW 12M	-----
		4.02	CHECK DC OUTPUT VOLTAGE	MW 3M	-----
		4.03	CHECK REGULATOR UNIT	MW 3M	-----
		4.06	CHECK 70-TYPE FUSES	MW 3M	-----
		4.07	CHECK RECTIFIER AMMETER ACCURACY	MW 6M	-----
		4.08	CHECK SURGE PROTECTOR	MW 12M	-----
TROUBLE TESTS					
	169-255-301 (9/0)	4.05	CURRENT LIMITING POTENTIOMETER ADJUSTMENT	TT	-----
		5.01	RFA ALARM INDICATION	TT	-----
		5.02	(5.02 - 5.04) RECT FAILURE	TT	-----
26.45 RECTIFIERS, J-CD; J87224					
FOR ALL UNITS					
	169-256-301 (4/0)	4.02	CHECK BATTERY FLOAT VOLTAGE	MW 3M	-----
OPTIONAL FEATURES					
WITH ZB OPTION					
	169-256-301 (4/0)	4.04	CHECK REGULATOR OPERATION (ZB OPTION)	MW 3M	-----
TROUBLE TESTS					
	169-256-301 (4/0)	5.01	RFA LAMP INDICATION	TT	-----
		5.02	DEFECTIVE RECT STACK	TT	-----
		5.03	DEFECTIVE REGULATOR UNIT	TT	-----
		5.04	TROUBLE CHART	TT	-----
26.46 RECTIFIERS, J-CD; J87228A					
FOR ALL UNITS					
	169-254-301 (4/0)	4.01	CLEAN VENTILATING PASSAGES	MW 12M	-----
		4.03	CHECK RECTIFIER OUTPUT	MW 3M	-----
TROUBLE TESTS					
	169-254-301 (4/0)	4.02	INSPECT AC INPUT CONTACTOR AND RELAYS CONTACT CONDITION & ADJMT	TT	-----

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◆	169-254-301 (4/0)	5.01	(5.01 - 5.02) DEFECTIVE RECT STACK (D1)	TT	-----
		5.03	DEFECTIVE REGULATOR UNIT	TT	-----
		5.04	TROUBLE CHART	TT	-----
26.47 RECTIFIERS, J-CD; J87229					
FOR ALL UNITS					
	169-257-301 (5/0)	4.01	INSPECT ADJMT AND CONDITON OF RELAY CONTACTS (OR PER LOCAL REQUIREMENTS)	MW 12M	-----
		4.02	CHECK DC OUTPUT VOLTAGE	MW 12M	-----
		4.04	CHECK CURRENT LIMITING POTENTIOMETER ADJMT	MW 12M	-----
TROUBLE TESTS					
	169-257-301 (5/0)	5.01	RFA RELAY OPERATION	TT	-----
		5.02	DEFECTIVE RECT STACK	TT	-----
		5.03	DEFECTIVE REGULATOR UNIT	TT	-----
		5.04	TROUBLE CHART	TT	-----
26.48 RECTIFIERS, J-CD; J87232A					
FOR ALL UNITS					
	169-260-301 (2/0)	4.01	INSPECT CONDITION OF RELAY CONTACTS	MW 12M	-----
◆		4.02	CHECK DC OUTPUT VOLTAGE	MW 3M	-----
TROUBLE TESTS					
◆	169-260-301 (2/0)	4.04	CURRENT LIMITING CIRCUIT	TT	-----
◆		4.05	HIGH VOLTAGE SHUTDOWN	TT	-----
◆		4.06	FUSE ALARM	TT	-----
◆		5.01	(5.01 & 5.03) DEFECTIVE RECT STACK	TT	-----
◆		5.02	(5.02 - 5.03) DEFECTIVE REGULATED RECTIFIER CONTROL CKT	TT	-----
		5.04	TROUBLE CHART	TT	-----
26.49 RECTIFIERS, J-CD; J87233A					
FOR ALL UNITS					
◆	169-261-301 (1/1)	4.01	INSPECT CONDITION OF RELAY CONTACTS	MW 12M	-----
◆		4.02	CHECK DC OUTPUT VOLTAGE	MW 3M	-----
TROUBLE TESTS					
◆	169-261-301 (1/1)	4.04	FUSE ALARM	TT	-----
		5.01	DEFECTIVE RECT STACK	TT	-----
		5.02	DEFECTIVE REGULATOR UNIT	TT	-----
		5.03	TROUBLE CHART	TT	-----
26.50 RECTIFIERS, J-CD; J87249A,B					
FOR ALL UNITS					
	169-649-301 (4/0)	4.01	CHECK DC OUTPUT VOLTAGE	MW 3M	-----
		4.02	CHECK OUTPUT CURRENT	MW 3M	-----
◆		4.03	(A) CHECK OUTPUT VOLTAGE ADJUSTMENT	MW 3M	-----
		4.03	(B) CHECK CURRENT (DROOP) LIMIT ADJUSTMENT	MW 3M	-----
TROUBLE TESTS					

▶	169-649-301 (4/0)	5.01	(5.01 - 5.04) TROUBLE LOCATING PROCEDURE	TT	-----
	26.51 RECTIFIERS, J-CD; J87275				
	FOR ALL UNITS				
	169-650-301 (2/0)	4.02	CHECK DC OUTPUT VOLTAGE	MW 3M	-----
	TROUBLE TESTS				
▶	169-650-301 (2/0)	4.01	CONDITION OF RELAY CONTACTS	TT	-----
▶		4.04	(1 - 4) OUTPUT VOLTAGE ADJUSTMENT	TT	-----
▶		4.04	(11) LOW-VOLTAGE ADJUSTMENT	TT	-----
▶		4.04	(12) CH AND CMD OR RFA LEAD	TT	-----
▶		4.04	(5 - 10) HIGH-VOLTAGE SHUTDOWN ADJUSTMENT	TT	-----
	26.52 RECTIFIERS, J-CD; J87320A				
	FOR ALL UNITS				
	169-263-301 (1/0)	4.01	(A) CHECK POSITIVE OUTPUT VOLTAGE	MW 3M	-----
		4.01	(B) CHECK NEGATIVE OUTPUT VOLTAGE	MW 3M	-----
		4.05	INSPECT CONDITION OF RELAY CONTACTS	MW 12M	-----
	TROUBLE TESTS				
	169-263-301 (1/0)	4.02	(A) POSITIVE CROWBAR CKT ADJ	TT	-----
		4.02	(B) NEGATIVE CROWBAR CKT ADJ	TT	-----
▶		4.03	OFFICE ALARM CKT OPRN	TT	-----
▶		4.04	RECTIFIER OUTPUT VOLTAGE RIPPLE	TT	-----
▶		5.01	(5.01 - 5.05) TROUBLE TEST CHART	TT	-----
	26.53 RECTIFIERS, J-CD; J87346				
	FOR ALL UNITS				
▶	169-651-301 (1/0)	4.02	CHECK OUTPUT VOLTAGE ADJMT	MW 3M	-----
	26.54 RECTIFIERS, J-CD; J87358				
	FOR ALL UNITS				
	169-652-301 (1/1)	4.01	(A) CHECK OUTPUT VOLTAGES	MW 3M	-----
		4.01	(B) CHECK OUTPUT CURRENTS	MW 3M	-----
	26.55 RECTIFIERS J-CD; J87434A L1 & L3				
	FOR ALL UNITS				
	169-267-301 (2/0)	4.02	CHECK OUTPUT FLOAT VOLTAGE ADJMT	MW 3M	-----
		4.03	CHECK CONDITION OF RELAY CONTACTS	MW 12M	-----
		4.04	CHECK CURRENT LIMITING CKT ADJMT	MW 12M	-----
	OPTIONAL FEATURES				
▶	'W' OPTION				
	169-267-301 (2/0)	4.05	CHECK WALK-IN FEATURE	MW 12M	-----
▶		4.06	CHECK VOLTAGE REGULATION	MW 3M	-----
	J87434A L1				
	169-267-301 (2/0)	4.10	CHECK OUTPUT VOLTAGE ADJMT	MW 12M	-----
	J87434A L3				
	169-267-301 (2/0)	4.08	CHECK PLANT TR LEAD SHUTDOWN	MW 12M	-----

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169-267-301	(2/0)	4.09	CHECK HV SHUTDOWN FEATURE	MW 12M	-----
		4.10	CHECK OUTPUT VOLTAGE ADJMT	MW 12M	-----
TROUBLE TESTS					
169-267-301	(2/0)	5.01	(5.01 - 5.02) TROUBLE TEST CHART	TT	-----
26.56 RECTIFIER J-CD; J87435A L1, L3, L10 & L30					
FOR ALL UNITS					
169-267-305	(2/0)	4.02	CHECK OUTPUT FLOAT VOLTAGE ADJMT	MW 3M	-----
		4.03	CHECK CONDITION OF RELAY CONTACTS	MW 12M	-----
		4.04	CHECK CURRENT LIMITING CKT ADJMT	MW 12M	-----
OPTIONAL FEATURES					
'W' OPTION					
169-267-305	(2/0)	4.05	CHECK WALK-IN FEATURE	MW 12M	-----
		4.06	CHECK VOLTAGE REGULATION	MW 3M	-----
J87435A L1 & L10					
169-267-305	(2/0)	4.10	CHECK OUTPUT VOLTAGE ADJMT	MW 12M	-----
J87435A L3 & L30					
169-267-305	(2/0)	4.08	CHECK PLANT TR LEAD SHUTDOWN	MW 12M	-----
		4.09	CHECK HV SHUTDOWN FEATURE	MW 12M	-----
		4.10	CHECK OUTPUT VOLTAGE ADJMT	MW 12M	-----
TROUBLE TESTS					
169-267-305	(2/0)	5.01	(5.01 - 5.02) TROUBLE TEST CHART	TT	-----
26.57 RECTIFIER J-CD; J86281A					
FOR ALL UNITS					
169-429-301	(3/0)	1.06	CLEAN VENTILATING PASSAGES & RECTIFIER CELLS	MW 12M	-----
		4.01	(A) CHECK SIGNAL LAMP	MW 6M	-----
		4.01	(B) CHECK PF RELAY CONTACTS AND OPERATION	MW 12M	-----
		4.01	(C) CHECK OUTPUT VOLTAGE ADJMT	MW 3M	-----
TROUBLE TESTS					
169-429-301	(3/0)	5.02	DEFECTIVE SEMI-COND DIODES	TT	-----
		5.03	TROUBLE TEST CHART	TT	-----
		6.01	(6.01 - 6.04) POINT TO POINT VOLTAGES	TT	-----
26.58 RECTIFIER J-CD; J87242A					
FOR ALL UNITS					
169-431-301	(1/0)	4.01	CHECK DC OUTPUT VOLTAGE	MW 3M	-----
		4.02	CHECK CR1 THRU CR8 DIODES	MW 6M	-----
TROUBLE TESTS					
169-431-301	(1/0)	4.03	STUD-MOUNTED DIODE RPLCMT	TT	-----
		5.01	TROUBLE TEST CHARTS	TT	-----
26.59 RECTIFIER J-CD; J87243A					
FOR ALL UNITS					
169-432-301	(1/0)	4.01	CHECK DC OUTPUT VOLTAGE	MW 3M	-----

169-432-301 (1/0)	4.02	CHECK CR1 THRU CR8 DIODES	MW 6M	-----
TROUBLE TESTS				
169-432-301 (1/0)	4.03	STUD-MOUNTED DIODE RPLCMT	TT	-----
	5.01	TROUBLE TEST CHART	TT	-----
26.60 RECTIFIER J-CD; J87244A				
FOR ALL UNITS				
169-433-301 (1/0)	4.01	CHECK DC OUTPUT VOLTAGE	MW 6M	-----
TROUBLE TESTS				
169-433-301 (1/0)	4.02	(4.02 - 4.03) CR1 THRU CR8 DIODES	TT	-----
	4.04	R1 THRU R4 BLEEDER RESISTORS	TT	-----
	5.01	TROUBLE TEST CHART	TT	-----
26.61 RECTIFIER J-CD; J87328A				
FOR ALL UNITS				
169-469-301 (1/0)	4.02	CHECK OUTPUT FLOAT VOLTAGE ADJMT	MW 12M	-----
	4.04	CHECK HV SHUTDOWN CKT ADJMT	MW 12M	-----
TROUBLE TESTS				
169-469-301 (1/0)	5.01	INPUT & OUTPUT FUSES	TT	-----
	5.05	TROUBLE CHART	TT	-----
26.62 RECTIFIER J-CD; J87329A				
FOR ALL UNITS				
169-470-301 (1/0)	4.02	CHECK OUTPUT FLOAT VOLTAGE ADJMT	MW 12M	-----
	4.04	CHECK DC OUTPUT VOLTAGE AND HV SHUTDOWN CKT	MW 3M	-----
TROUBLE TESTS				
169-470-301 (1/0)	5.01	INPUT & OUTPUT FUSES	TT	-----
	5.05	TROUBLE CHART	TT	-----
26.63 RECTIFIER J-CD; J29361F-1				
FOR ALL UNITS				
169-471-301 (1/0)	4.02	CHECK OUTPUT FLOAT VOLTAGE ADJMT	MW 12M	-----
	4.03	CHECK OUTPUT VOLTAGE ADJMT	MW 3M	-----
	4.04	CHECK CURRENT LIMITING ADJMT	MW 3M	-----
	4.05	CHECK HV SHUTDOWN CKT ADJMT	MW 12M	-----
TROUBLE TESTS				
169-471-301 (1/0)	5.02	VISUAL INSPECTION	TT	-----
	5.03	MAIN FRAME TROUBLESHOOTING	TT	-----
	5.04	DEFECTIVE CKT PACK	TT	-----
	5.05	INDICATOR LAMPS SIGNAL	TT	-----
	5.06	TROUBLE LOCATING FLOWCHART	TT	-----
	5.07	AC INPUT	TT	-----
	6.01	(6.01 - 6.05) DEFECTIVE COMPONENT	TT	-----
26.64 RECTIFIERS J-CD; J87436A L1 & L2				
FOR ALL UNITS				

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169-652-305	(2/0)	4.02	CHECK OUTPUT VOLTAGE ADJMT	MW 6M	-----
		4.03	CHECK VOLTAGE REGULATION	MW 6M	-----
TROUBLE TESTS					
169-652-305	(2/0)	5.02	TROUBLE LOCATING CHART	TT	-----
26.65 RECTIFIERS J-CD; J87437A L1 & L2					
FOR ALL UNITS					
169-652-306	(2/0)	4.02	CHECK OUTPUT VOLTAGE ADJMT	MW 6M	-----
		4.03	CHECK VOLTAGE REGULATION	MW 6M	-----
TROUBLE TESTS					
169-652-306	(2/0)	5.02	TROUBLE LOCATING CHART	TT	-----
26.66 RECTIFIERS J-CD; J87438A L1 & L2					
FOR ALL UNITS					
169-652-307	(3/0)	4.02	CHECK OUTPUT VOLTAGE ADJMT	MW 6M	-----
		4.03	CHECK VOLTAGE REGULATION	MW 6M	-----
TROUBLE TESTS					
169-652-307	(3/0)	5.02	TROUBLE LOCATING CHART	TT	-----
26.67 RECTIFIERS J-CD; J87439A L1 & L2					
FOR ALL UNITS					
169-652-308	(3/0)	4.02	CHECK OUTPUT VOLTAGE ADJMT	MW 6M	-----
		4.03	CHECK VOLTAGE REGULATION	MW 6M	-----
TROUBLE TESTS					
169-652-308	(3/0)	5.02	TROUBLE LOCATING CHART	TT	-----
26.68 RECTIFIERS J-CD; J87447A					
FOR ALL UNITS					
169-652-324	(1/0)	4.01	CHECK OUTPUT VOLTAGE ADJMT	MW 3M	-----
TROUBLE TESTS					
169-652-324	(1/0)	5.02	TROUBLE TEST CHART	TT	-----
26.69 RECTIFIERS J-CD; J87448A					
FOR ALL UNITS					
169-652-326	(1/0)	4.01	CHECK OUTPUT VOLTAGE ADJMT	MW 3M	-----
TROUBLE TESTS					
169-652-326	(1/0)	5.02	TROUBLE TEST CHART	TT	-----
26.70 RECTIFIERS J-CD; J86264A SINGLE CELL CHARGER					
TROUBLE TESTS					
169-621-301	(4/0)	4.01	TROUBLES	TT	-----