AX808 OPERATORS SECTION

INTRODUCTION

The AX808 is a test simulator for the relay panel AR161. This unit (AX808) completely bench tests the relay panel AR161 which is part of the AN/FRT-39 transmitter.
The test simulator AX808 has been designed to facilitate testing of the AR161 externally from the transmitter. This method of testing enables the technician to trouble shoot and repair without the presence of high voltage, thus reducing the possibility of a high voltage related accident, also the transmitter will not be subject to the rigors of high voltage and high current overloads, thus increasing the life of the transmitter. The test simulator AX808 is approximately 9 1/2 inches high by 9 1/2 inches deep by 16 inches wide and weighs approximately twenty pounds. In order to clearly describe the functions of the AX808, it is necessary to briefly state the purpose of the AR161 relay panel. The following paragraph provides a brief explaination of the AR161 relay panel.

AR161 RELAY PANEL

The AR161 relay panel is the overload control for the AN/FRT-39 transmitter. AR161 features a time delya M701. This time delay allows the transmitter to warm-up prior to operation and is usually set for 30 seconds.

M702 is a plate and filament timer. This timer records the hours that the 4CX5000 tube has been in operation.

A total of (9) nine relays are present in the AR161, K700 through K708. K701 is the PA plate overload, K702 is the PA screen overload, K707 is the IPA plate overload, K706 is the IPA screen overload and K704 is the zener diode protect relay. The function of these relays are to remove high voltage, if excessive current flows in the plate or screen of the Power Amplifier or the Intermediate Power Amplifier and also to protect against excessive current in the zenier diodes. K700 is the PA bias protection relay and K708 is the IPA Bias Protection relay. These relays will remain unenergized if the PA or IPA Bias voltage is not present on either of the relay coils. If either K700 or K708 is not energized, the interlock circuit will be rendered inoperative and thus prevent the high voltage from being turned on. K703 is the PA screen ON/OFF relay. The function of K703 is to remove the screen voltage from the PA final tube, while the IPA is tuning. The last relay K705 is the tune operate relay. This relay places the PA and IPA is the tune position, by lowering PA and IPA screen voltages for tuning at reduced output. K700, K701, K702, K706, K707 and K708 relays have light indicators to show status of each relay.

Four (4) of the previous mentioned relays ahve overload adjustments that are accessible from the AR161 Front Panel. K700 and K708 operate on the presents of Bias voltage. If the voltage drops below safe level, relays deenergize. Certain functions of the transmitter are protected by fuses located on the AR161 Front Panel. Six (6) fuses protect the following transmitter functions. F700, F701 and F702 protects the three (3) AC phases that operate the main blower. F703 protects the rear Fan, F704 protects the M701 time delay and F705 is used to protect the PA final tube.

S700 slarm switch located on the AR161 Front Panel turns alarm ON/OFF.

FIGURES AND TABLES

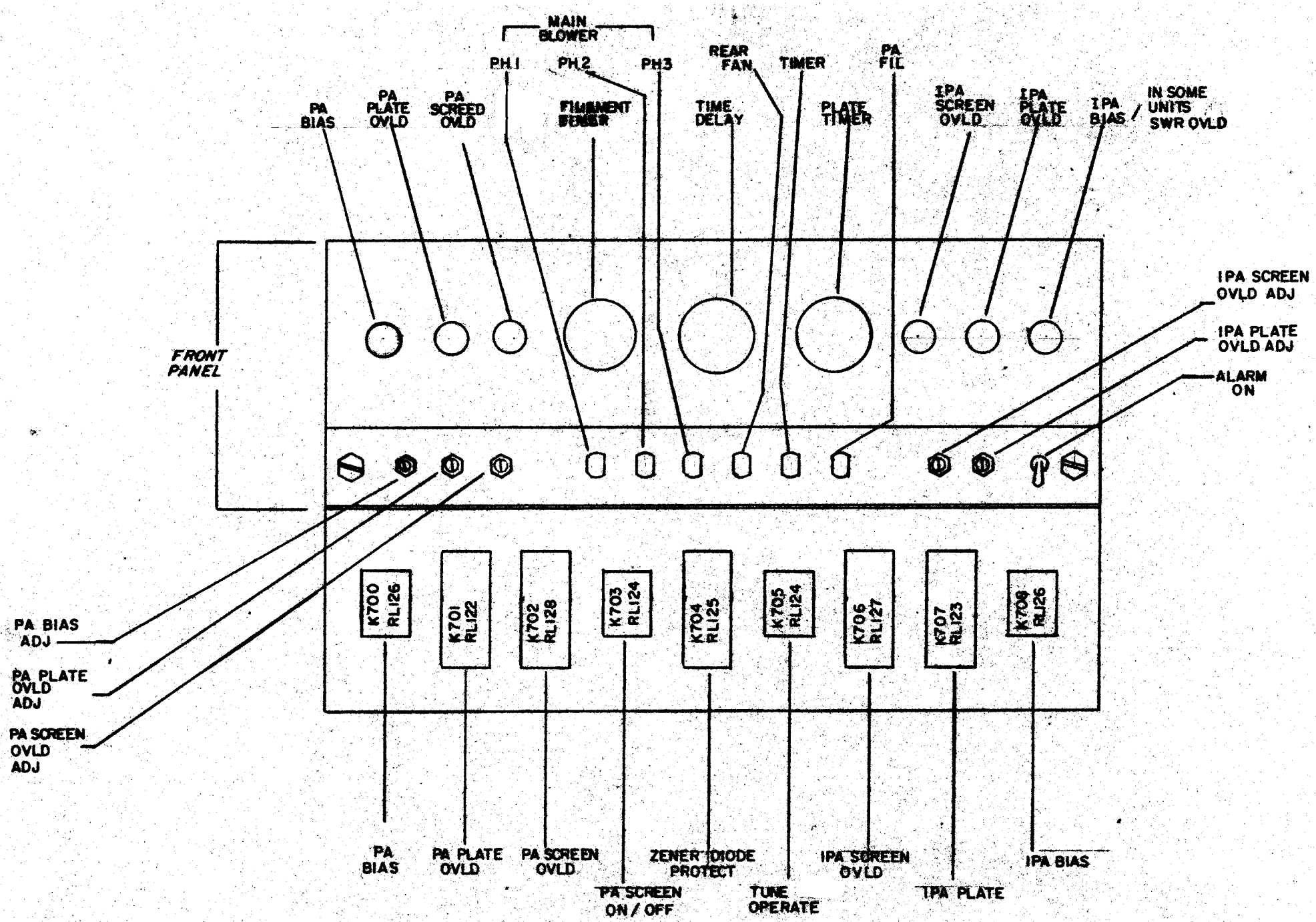


FIGURE 1-1

AR161 IDENTIFICATION

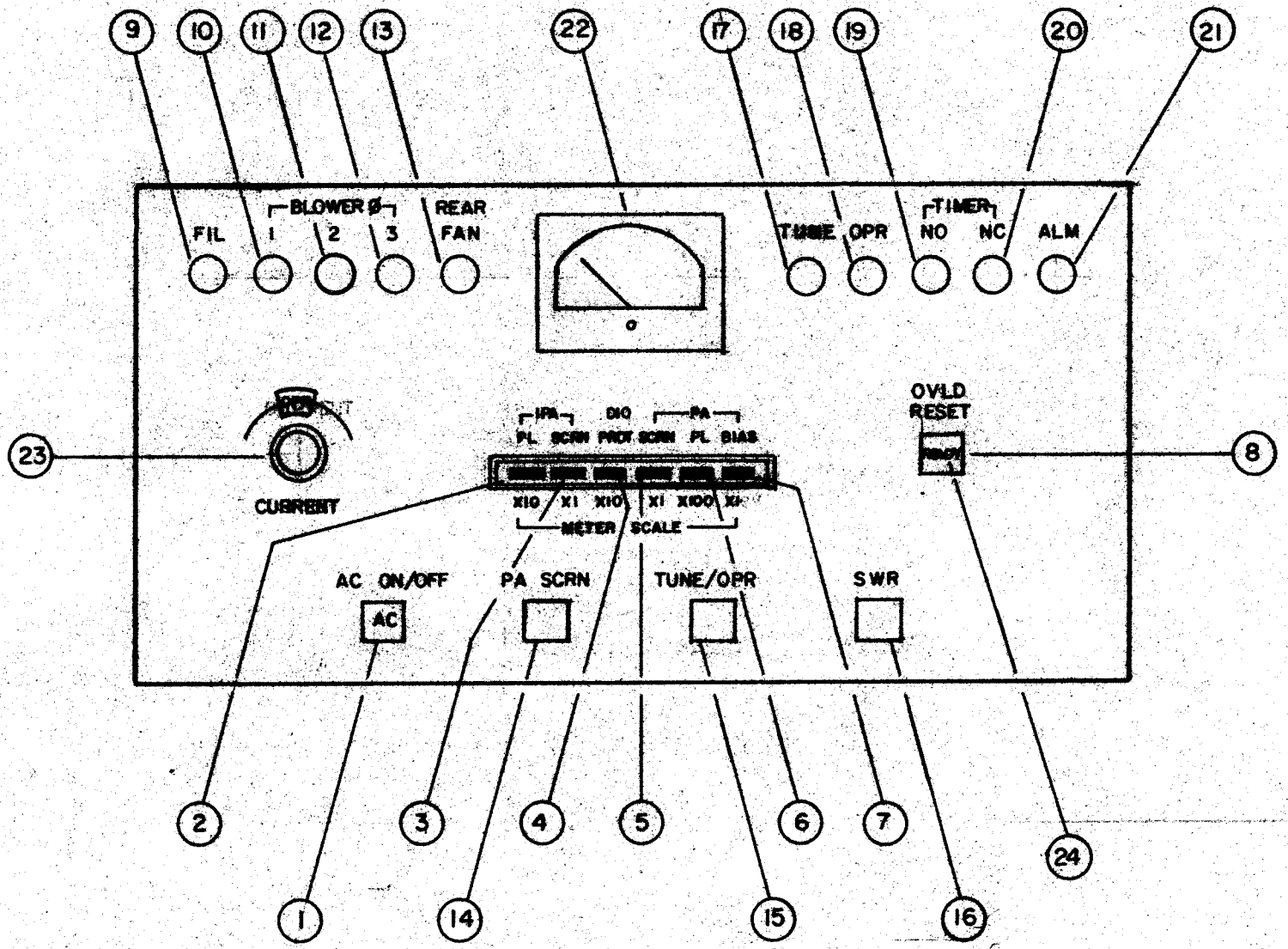


FIGURE 1-2

AX808 FRONT PANEL LOCATIONS

TABLE 1-1

AX808 FRONT PANEL FUNCTIONS

ITEM NO.	PANEL DESIGNATION	FUNCTION
1	AC SWITCH/AC INDICATOR	When depresse, applies AC to units circuits lights button.
2	IPA PLATE SWITCH	When depressed, and current ADJ is rotated between 400 ma and 500 ma, an IPA plate overload will be simulated.
3	IPA SCREEN SWITCH	When depressed, is rotated between 30 ma and 60 ma, and IPA screen overload will be simulated.
4	DIODE PROTECT SWITCH	When depressed is rotated between 125 ma and 175 ma, a zener diode overload will be simulated.
5	PA SCREEN SWITCH	When depressed is rotated between 40 ma and 80 ma, a PA screen overload will be simulated.
6	PA PLATE SWITCH	When depressed is rotated between 1.8 amps and 3 amps a PA plate overload will be simulated.
7	PA BIAS SWITCH	When depressed, verifies the presents of PA Bias volts located on the AR161 Relay Panel. Observe current ADJ meter.
8	OVLD RESET SWITCH	When depressed, will clear previously positioned overload, NOTE: Must be rotated fully counterclockwise before depressing.
9	PA FIL INDICATOR	When lit, indicates that the AR161 PA filiment circuit is operational.
10	BLOWER PHASE 1 INDICATOR	When lit, indicates that the AR161 phase 1 circuit for the main blower is operational.
11	BLOWER PHASE 2 INDICATOR	When lit, indicates that the AR161 phase 2 circuit for the main blower is operational.

ITEM NO.	PANEL DESIGNATION	FUNCTION
12	BLOWER PHASE 3	When lit, indicates that the AR161 phase 3 circuit for the main blower is operational.
13	REAR FAN INDICATOR	When lit, indicates that the AR161 rear fan circuit is operational.
14	PA SCREEN INDICATOR SWITCH	When (momentarily) depressed will remove PA screen current.
15	TUNE SEITCH	When (momentarily) depressed will place (AR161-K715) in the tune position. Operate light will go out and tune light on. IPA and PA screen current will drop to approximately ½.
16	SWR SWITCH	When depressed the AR161 indicator will light signifing an SWR overload. NOTE: Some AR161 modesl may have an IPA Bias indicator in place of the SWR overload indicator. Disregard SWR indicator AR161 has an IPA Bias indicator.
17	TUNE	The AC indicator will illuminate when tune/opp relay is in tune position.
18	OPR INDICATOR	Will light continually in the operate (OPR) condition.
19	TIMER N.O. (NORMALLY OPER) INDICATOR	Illuminates when the time delay (M701) of the AR161 has completed its timing cycle.
20	TIMER N.C. (NORmally closed) INDICATOR	Illuminates when the time delay (M701) of the AR161 has <u>not</u> completed its timing cycle.
21	ALARM INDICATOR	The alarm indicator will light if the alarm switch of the AR161 is in the ON position. If the switch is in the OFF position the indicator will extinguish.
22	METER	Indicates current level for each of the simulated overload conditions.
23	TUNE IND.	Tune will light when Tune/Opp switch is depressed.

ITEM NO.	PANEL DESIGNATION	FUNCTION
23	CURRENT ADJUST	Increases or decreases the amount of voltage thus increasing or decreasing the amount of current, as read on the AX808 meter.
24	READY INDICATOR	Will light when all AR161 relay contacts are operational, and no overloads exists. Front panel settings for the READY indicator are as follows Set to operate (OPR) position, push push overload reset (momentary). This light also indicates that all series contacts on the relays are completed and current load is being drawn through completed interlock circuits.

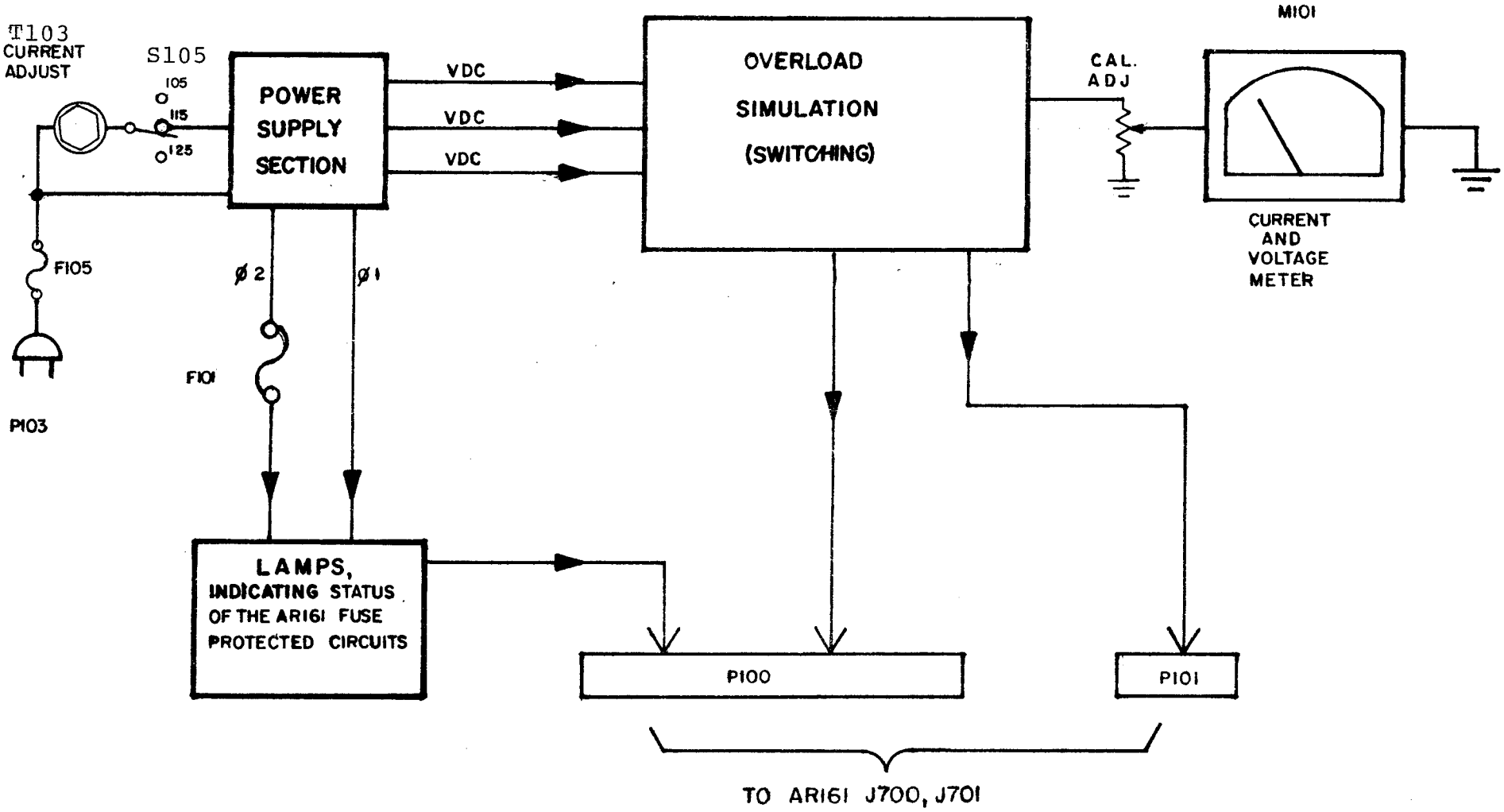


FIGURE 1-3

SCHEMATIC BLOCK DIAGRAM

OPERATORS GUIDE (Reference TABLE 1-1.)

Connect the AX808 AC cord into a 105, 115 or 125 VAC 50/60 Hz source. Place the rear panel VAC adjustment switch to coincide with the actual AC line input voltage. The rear panel AC adjustment switch is marked 105 VAC, 115 VAC or 125 VA. Insure that the AX808 connectors P100 and P101 are connected into the AR161 J100 and J101 connectors. Before switching item 1 AC Power ON, the PA Bias pushbutton must be depressed and the current adjust knob must be placed in the operate (OPR) position. On the AR161 relay panel the time delay must be set for approximtely 30 seconds.

Depress the AC ON/OFF switch, observe the AC lamp illuminate. The timer lamp marked NC will illuminate indicating the TIME DELAY in the AR161 has started its timing cycle. After approximately 30 seconds, the time delay will time out and will extinguish. The timer lamp marked NO will now illuminate signifing the end of the timing cycle. NOTE: The AR161 time delay can be set from 0 to 5 minutes. The READY lamp will also illuminate signifing that all of the AR161 relay contacts are operational and that no overloads exists. Items 9 through 13 should also be illuminated signifing their circuits in the AR161 are operational. The plate timer and filiment timer will start timing indicating that their circuits are operational. Refer to Table 1-1.

PA BIAS

Observe the PA Bias lamp on the AR161 Front Panel. The lamp should be extinguished. This signifies a proper PA Bias voltage at K700 relay. Observe the AX808 current meter. A reading of approximately 25 should appear. Rotate the "PA BIAS ADJ" potentiometer, located at the AR161 Front Panel for a reading of from 25 to 5. Final adjust to be approximately 25 or fully clockwise. This signifies that the "PA BIAS ADJ" circuit is operational.

IPA BIAS

Observe the IPA Bias Lamp located on the AR161 relay panel. The lamp should not be illuminated. This will indicate that the IPA BIAS voltage is present at K708 and is reacting correctly. Some AR161 Front Panels may not have a IPA BIAS indicator. If this is the case, the operator must observe K708 relay on initial AX808 AC turn on. K708 relay must be energized, indicating that a proper IPA BIAS voltage is present. Some AR161 front panels may be equipped with an SWR OVLD indicator in place of the IPA BIAS indicator. If the SWR OVLD indicator is present in the unit, depress the SWR pushbutton on the AX808 unit. Observe the SWR lamp on the AR161 front panel. The lamp should light.

ALARM

The AR161 Front Panel is equipped with an ON/OFF toggle switch. Place this switch in the ON position and observe the ALARM lamp on the AX808 unit illuminate. Placing this switch in the OFF position will extinguish ALARM lamp. This procedure determines that the ALARM circuitry which is used in arming the buzzer alarm DS3000 is operational.

OVERLOAD ADJUSTMENT

NOTE: On the AR161 Relay Panel all of the overload adjustments should be placed at minimum or CCW.

PA PLATE OVERLOAD

NOTE: After every overload, turn current ADJ fully CCW, then press ovld reset. The adjust current to correct setting.
On the AR161 front panel, turn the "PA PLATE OVLD ADJ" fully counterclockwise. On the AX808 front panel turn the current adjust knob fully counterclockwise. Depress the PA PLATE pushbutton. Turn slowly, until the PA PLATE OVLD relay trips. With the PA PLATE OVLD ADJ turned fully counterclockwise, the PA PLATE OVLD relay (K701) should trip at approximately 1.8 AMPS as read on, the AX808 current meter. When K701 trips, a simulated overload condition exists and the PA PLATE OVLD lamp located on the AR161 front panel will illuminate. Turn back (counter-clockwise) and depress the OVLD RESET button. This will extinguish the PA PLATE OVLD lamp and the overload will be cleared. 2 AMPS is the actual overload setting which the operator must now adjust to. On the AR161 front panel, slightly turn the PA PLATE OVLD ADJ potentiometer. On the AX808 front panel turn until K701 trips and the PA PLATE OVLD LAMP LIGHTS. Observe the AX808 meter, a reading of 2 AMPS should appear. If it does NOT, it may be necessary to readjust the "PA PLATE OVLD ADJ" and repeat the final adjustment procedure.

NOTE: When ovld adjustment is made for 2 amp tripout potentiometer should be somewhere close to mid range to allow for ± readjustments; it might be necessary to adjust spring tension on relays to accomplish this. This procedure holds true for all relays. See figure 1-4.

PA SCREEN OVERLOAD

On the AR161 front panel, turn the "PA SCREEN OVLD ADJ" fully counterclockwise. On the AX808 front panel turn the current adjust knob fully counterclockwise. Depress the PA SCREEN pushbutton. Turn slowly until the PA SCREEN OVLD relay trips. With the PA SCREEN OVLD ADJ turned fully counterclockwise, the PA SCREEN OVLD relay (K702) should trip at approximately 40 ma as read on the AX808 current meter. When K702 trips a simulated overload condition exists and the PA SCREEN OVLD lamp located on the AR161 front panel will illuminate. Turn back (counterclockwise) and depress, the OVLD RESET button. This will extinguish the PA PLATE OVLD lamp and the overload will be cleared. 50 ma is the actual overload setting which the operator must now adjust for.

On the AR161 front panel, slightly turn the PA SCREEN OVLD ADJ Potentiometer. On the AX808 front panel turn until K702 trips and the PA SCREEN OVLD lamp lights. Observe the AX808 meter, a reading of 50 ma should appear.

If it does NOT, it may be necessary to readjust the "PA SCREEN OVLD ADJ" and repeat the final adjustment procedure.

PA SCREEN ON-OFF

Set the AX808 unit to initiate a PA SCREEN OVLD, refer to the paragraph titled PA SCREEN OVERLOAD. Observe the current meter, it should read 50 ma. The PA SCRN ON/OFF is a monentary push button which controls K703, the PA SCREEN ON/OFF relay. The PA SCREEN ON/OFF pushbutton should be illuminated, this signifies an ON condition at K703, AR161 relay.

Press the PA SCRN pushbutton. The light should extinguish and the current meter should swing to zero (0). Release the PA SCRN pushbutton. The light should reappear and the current meter should reflect 50 ma once again. This procedure determines that the PA SCREEN ON/OFF relay is operational.

DIODE PROTECTION

On the AX808 unit, represents a DIODE PROTECT function. Turn current adjust knob fully counterclockwise. Depress the OVLD Reset button. This will clear any previously set overloads. Depress the "DIO PROT" pushbutton. Slowly turn clockwise the current adjust knob. An overload should occur between 115 ma and 150 ma. The AR161 relay panel is not equiped with a Diode Protect indicator. The only indication the operator has to insure that the "DIODE PROTECT" relay K704 is operating properly is the actual sound of the relay switching. Also the Ready Indicator will extinguish. When K704 trips a definite clicking occurs, at this point the operator should observe the current meter. The relay should have tripped between 115 ma and 150 ma.

If this does not occur the operator must adjust the contact tension at the K704 relay. See figure 1-4 for relay maintenance.

IPA SCREEN OVERLOAD

On the AR161 front panel, turn the "IPA SCREEN OVLD ADJ" fully counterclockwise. On the AX808 front panel turn the current adjust knob fully counterclockwise. Depress the IPA SCREEN push-button. Turn slowly, until the IPA SCREEN OVLD relay trips. With the IPA SCREEN OVLD ADJ turned fully counterclockwise, the IPA SCREEN OVLD relay (K706) should trip at approximately 30 ma as read on the AX808 current meter. When K706 trips, a simulated overload condition exists and the IPA SCREEN OVLD lamp located on the AR161 front panel will illuminate. Turn back (counter-clockwise) and depress the OVLD RESET button. This will exting-uish the IPA SCREEN OVLD lamp and the overload will be cleared. 40 ma is the actual overload setting which the operator must now adjust for. On the AR161 front panel, slightly turn the IPA SCREEN OVLD ADJ potentiometer. On the AX808 front panel turn until K706 trips and the IPA SCREEN OVLD LAMP LIGHTS. Observe the AX808 meter, a reading of 40 ma should appear. If it does NOT, it may be necessary to readjust the "IPA SCREEN OVLD ADJ" and repeat the final adjustment procedure.

IPA PLATE OVERLOAD

On the AR161 front panel, turn the "IPA PLATE OVLD ADJ" fully counterclockwise. On the AX808 front panel turn the current adjust knob fully counterclockwise. Depress the IPA PLATE pushbutton. Turn slowly until the IPA PLATE OVLD relay trips. With the IPA PLATE OVLD ADJ turned fully counterclockwise, the IPA PLATE OVLD relay K707 should trip at approximately 400 ma as read on the AX808 current meter. When K707 trips, a simulated overload condition exists and the IPA PLATE OVLD lamp located on the AR161 front panel will illuminate. Turn back (counterclockwise) and depress the OVLD lamp and the overload will be cleared.

450 ma is the actual overload which the operator must now adjust for. On the AR161 front panel, slightly turn the IPA PLATE OVLD ADJ potentiometer. On the AX808 front panel turn until K707 trips and the IPA PLATE OVLD LAMP LIGHTS.

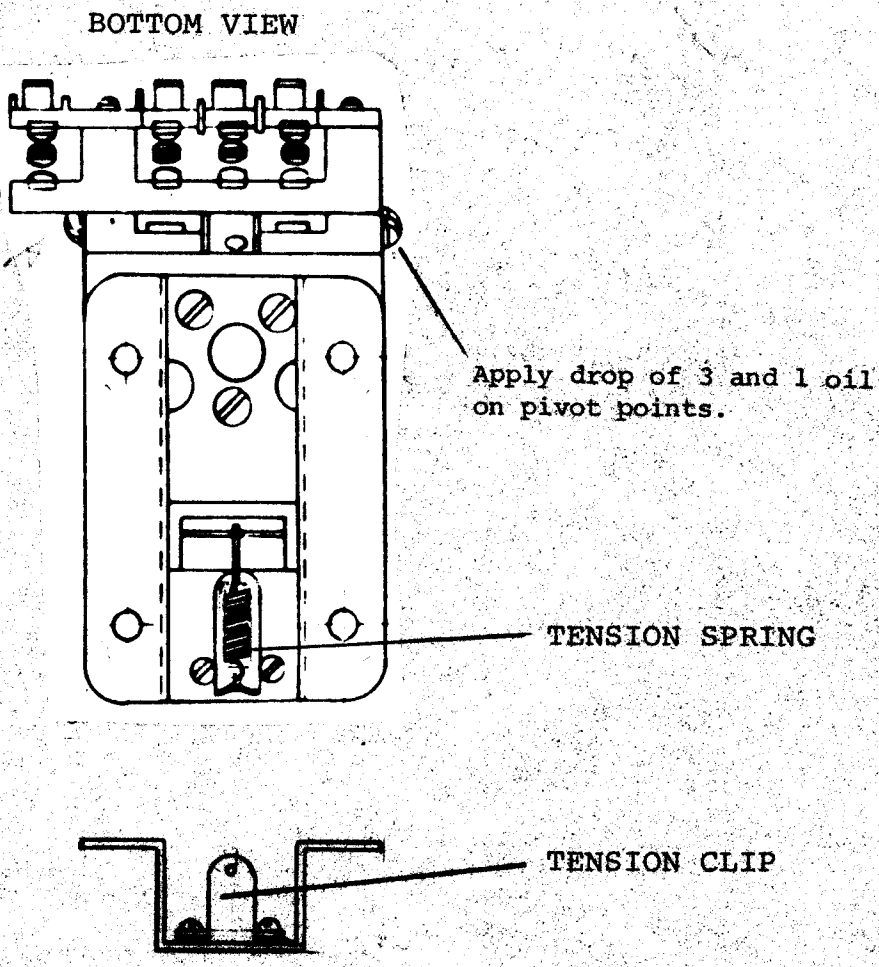
Observe the AX808 meter, a reading of 450 ma should appear. If it does NOT, it may be necessary to readjust the "IPA PLATE OVLD ADJ" and repeat the final adjustment procedure.

TUNE- OPERATE

To varify correct operation of the TUNE-OPERATE Relay K705, the AX808 must be set for a "PA SCREEN OVLD or an "IPA SCREEN OVLD". Refer to their paragraphs to attain these settings.

a) When the PA SCREEN OVERLOAD is accomplished, depress the TUNE/OPR pushbutton. Observe the "OPR" Lamp extingush and the current meter change from 50 ma to approximately 25 ma. Release the TUNE/OPP pushbutton and the OPERATE (OPR) LAMP illumination will be restored also the current meter will now read 50 ma once again. This verifies that a tune condition was simulated and the K705 operated correctly.

b) When the IPA SCREEN OVERLOAD is accomplished depress once again. Observe the "OPR" lamp extinguish and the current meter change from 40 ma to approximately 20 ma. Continue the procedure as stated above (a).



Clean all electrical contacts with burnishing tool.

If the relay is tripping at a lower than desired current reading, bend the tension clip backward to increase the tension spring.

If the relay is tripping at a higher than desired current reading, bend the tension clip forward to releave the tension on the spring.

FIGURE 1-4
RELAY MAINTAINANCE

SECTION 5

MAINTENANCE INSTRUCTIONS

5.1 Introduction

5.1.1 This section presents maintenance information for the Relay Panel Tester and includes both preventive and corrective maintenance instructions. Preventive maintenance consists of periodic inspection and cleaning. Corrective maintenance includes troubleshooting procedures, disassembly instructions, inspection and cleaning of disassembled parts, repair and replacement procedures, reassembly instructions, equipment checks and adjustments, and minimum checks for performance verification.

5.2 Tools and Test Equipment Required

5.2.1 Table 5-1 presents a listing of the tools and test equipment required for maintenance of the Relay Panel Tester.

5.3 Preventive Maintenance

5.3.1 In general, preventive maintenance provides a basis for recognizing future probable causes of equipment malfunction in the early stages of deterioration. Many such causes are apparent to the senses of sight, touch and smell. Therefore, by adhering to a stringent program of preventive maintenance involving periodic inspection and cleaning, the most probable causes of equipment malfunction can be avoided. This results in minimizing downtime and ultimately compromising important schedules.

5.3.2 A most important and least expensive tool in the preventive maintenance program is the sense of sight. A thorough visual inspection of an assembly or component for tell-tale signs of deterioration prior to failure can save hours of test and troubleshooting time after a complete breakdown. Table 5-2 presents an inspection checklist for the Relay Panel Tester.

5.3.3 In general, the Relay Panel Tester should be cleaned once a month using a soft camel's hair brush, forced air pressure of not more than 20psi, and a suitable cleaning agent such as tri-chloro-ethane.

* * * WARNING * * *
The fumes of trichloroethane are toxic. Provide through ventilation whenever used. DO NOT USE NEAR AN OPEN FLAME. Trichloroethane is not flammable but expose of the fumes to an open flame or hot metal forms toxic phosgene gas.
* * * ******* * * *

5.3.3.1 Remove dirt or grease from wiring and chassis surfaces using cleaning solvent. Dry with compressed air.

5.4.5 Inspection of the Relay Panel Tester is covered in this section. The Relay Panel Tester contains no moving mechanical parts and requires no lubrication. The need for intricate mechanical inspection is unnecessary. However, certain electrical components such as terminal boards, switches, resistors, capacitors, transformers, wiring, connectors, etc., can be visually checked for signs of deterioration due to mishandling, overheating or aging through use. The following paragraphs briefly duscuss inspection methods for the electrical components.

5.4.5.1 Inspect all PC boards as follows:

5.4.5.1.1 Check for loose components.

5.4.5.1.2 Check all components for signs of deterioration due to overheating.

5.4.5.1.3 Check for cracks or solder spillage. Cracks and solder bridges cause open and short circuits respectively.

5.4.5.1.4 Check absence of foreign matter which could cause shorts. Check for openings in printed wiring (lands) due to cracks.

5.4.5.2 Inspect all terminal boards as follows:

5.4.5.2.1 Check for signs of component deterioration due to overheating. Check printed wiring for cracks and solder spillage. Check for cleanliness.

5.4.5.2.2 On terminal boards check for cracks. Check that screw terminals are all tight and that all solder connections are clean and solid.

5.4.5.3 Inspect all switches and chassis-mounted electronic components as follows:

5.4.5.3.1 Check switch wiring for nicks, cuts, abrasions, etc. Check switch-mounted components for solid connections or signs of deterioration due to overheating.

5.4.5.3.2 Check all connectors for burred threads, bent or broken pins, dents, and solid mounting.

5.4.5.3.3 Check all chassis-mounted components for signs of deterioration due to overheating. Check for solid connections and mounting.

5.4.6 Cleaning, in general, of electrical parts can be accomplished using a soft camel's hair brush and forced air pressure of not more than 20psi. Metal surfaces can be cleaned using a soft lint-free cloth that is dampened with a mild solution of detergent and water. Cleaning agents such as trichloroethane may also be used on bare metal surfaces.

* * * WARNING * * *
The fumes of tri-chloroethane are toxic. Provide thorough ventilation whenever used. DO NOT USE NEAR AN OPEN FLAME. Trichloroethane is not flammable but exposure of the fumes to an open flame or hot metal forms highly toxic phosgene gas. Do not use trichloroethane on painted surfaces.
* * * ******* * * *

5.4.7 Repair of the chassis-mounted power supply circuitry follows standard laboratory procedures. Repair of board receptacle wiring, however, requires the special tools and techniques as outlined herein. Section 6 contains information on all replacement parts and their circuit symbol numbers. These symbol numbers are also shown on both the schematics and parts lists for cross-referencing.

5.4.7.1 When replacing a part on a board, it is necessary to remove the old part from the board by melting the solder on all the component pins. The new part, however, is soldered to the board using conventional pin-by-pin methods.

TABLE 5-1

MAINTENANCE TEST EQUIPMENT AND TOOLS

1)	VOM	Voltage and Resistance Measurements	Simpson 260
2)	Standard Maintenance Tools	Repair and Replacement of Parts	Kit 17

TABLE 5-2

INSPECTION CHECKLIST

Component/Assembly	Inspect For	Frequency
Use Power Cord	Cracks, nicks or fraying. Check the connector for burred threads or bent/broken pin inserts.	Semi Annual
Front and Rear Panels	1) Check panel surfaces for general cleanliness; check for scratches or nicks.	Semi Annual
	2) Check all control knobs for smooth action from limit to limit; check all switches for positive action.	Semi Annual
	3) Check meter face for cracks, nicks, scratches, etc; check indicator lamps for cracks.	Semi Annual
	4) Check line fuse housings for cracks; remove line fuses and check for the proper value; check for condition.	Semi Annual
	5) Check all input/output connectors for burrs, nicks, dents, etc; check power connector for burred threads, bent or broken pins, etc.	Semi Annual
Chassis Assemblies	1) Remove top and bottom covers from chassis and check overall chassis and components for dirt, dust, or other foreign matter.	Semi Annual
	2) On bottom of chassis, check wiring for nicks, cuts, frays or worn/exposed areas. Check components for looseness, broken contacts, poor solder, cracks and deterioration from possible overheating.	Semi Annual

SECTION 6

PARTS LIST AX808

Part Number	Description	Used On	Qty	Symbol Number	S1200
BI100-51H	Lamp, Neon	AX808	6	DS101, 102, 103, 108, 106, 107	
BI101-47	Lamp, Incand-esant	AX808	7	DS104, 111, 112, 105, 109, 110, 113	
CE105-100-25	Cap.Fxd.Elect.	AX808	2	C103, 102	
CE116-11V	Cap.Fxd.Elect.	AX808	2	C101, 104	
CU102-6	Clamp, Cable	AX808	6		
CU102-8	Clamp, Cable	AX808	3		
DD130-600-4	Diode, Bridge, Rect.	AX808	1	CR101	
DD144-3	Diode, Bridge, Rect.	AX808	1	CR106	
DD144-4	Diode, Bridge, Rect.	AX808	2	CR102, 103	
EY102-6	Grommet	AX808	2		
EY102-8	Grommet	AX808	1		
EY102-11	Grommet	AX808	1		
FU102-1	Fuse, Cart. Slo, Blo.	AX808	2	F101, 106	
FU102-3	Fuse, Cart. Slo, Blo.	AX808	3	F102, 103, 104, 105	
FH103-1	Holder, Fuse	AX808	5		
MP123-5	Knob	AX808	1	S105	
MP127-4	Knob	AX808	1	T103	
MR	Meter	AX808	1	M101	
RC32GF100J	Res,Fxd,Comp.	AX808	1	R114	
RC32GF103J	Res,Fxd,Comp.	AX808	2	R119, 121	

Part Number	Description	Used On	Qty	Symbol Number	S1200
RC32GF104J	Res,Fxd,Comp.	AX808	6	R101, 102, 103, 104, 105, 106	
RC42GF154J	Res,Fxd,Comp.	AX808	3	R122, 123, 124,	
RC42GF330J	Res,Fxd,Comp.	AX808	1	R107	
RR140	Res,Fxd,Wirewnd.	AX808	1	R117	
RW109-6	Res,Fxd,Wirewnd.	AX808	1	R120	
RW109-34	Res,Fxd,Wirewnd.	AX808	1	R118	
RW110-25	Res,Fxd,Wirewnd.	AX808	1	R113	
RW111-1	Res,Fxd,Wirewnd.	AX808	2	R116, 115	
RW111-29	Res,Fxd,Wirewnd.	AX808	3	R110, 111, 112	
RW111-33	Res,Fxd,Wirewnd.	AX808	2	R108, 109	
RV4ATRD501	Res, Variable	AX808	1	R126	
PX1242	Spacer, Switch	SW559-1-6	6		
SW581	Switch, Push Btn.	SW581	3	S102, 103, 107	
SW559-1-6	Switch, Push Btn. Intl.	AX808	1	S106	
TE102-2	Turret, Term.	AX808	19		
TF195	Transf., Power	AX808	1	T102	
TF449	Transf., Step Up	AX808	1	T101	
TF450	Transf., Variable	AX808	1	T103	
TS106-1	Socket, Lamp	AX808	12		

TEST SIMULATOR FOR RELAY PANEL AR161

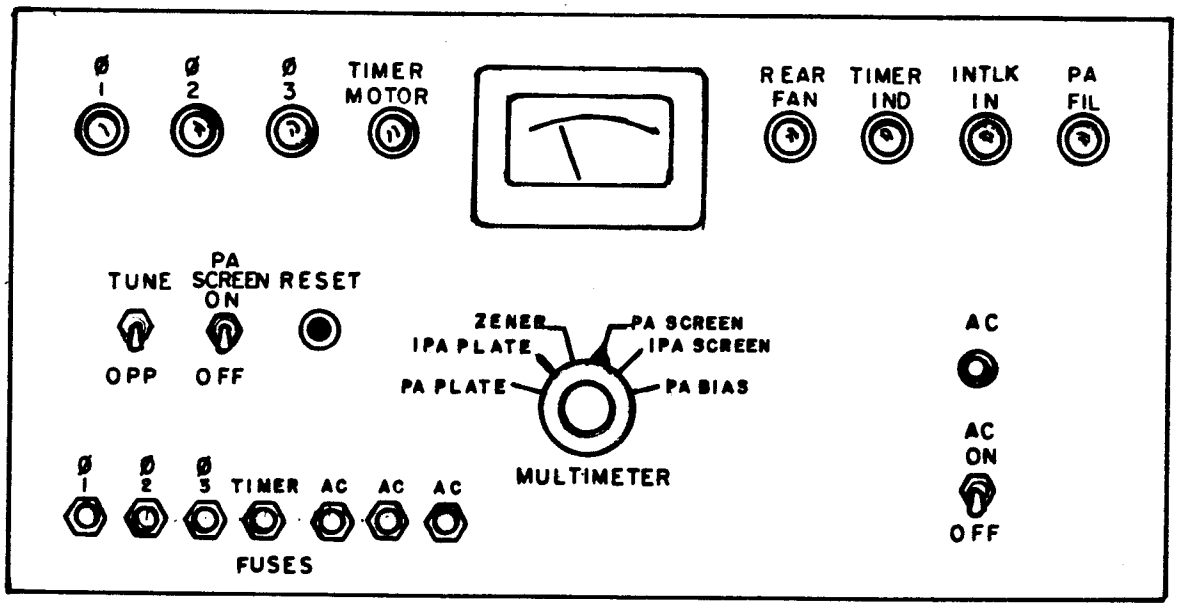
The Technical Materiel Corporation offers a test unit AX808 that completely bench tests relay panels AR161 (part of the AN/FRT-39).

The test unit AX808 has been designed to facilitate testing of the AR161 externally from the transmitter. This method of testing enables the technician to trouble shoot and repair without the presence of high voltage, thus reducing the possibility of a high voltage related accident, also the transmitter will not be subject to the rigors of high voltage and high current overloads, thus increasing the life of the transmitter.

The AX808 has a detailed precise step by step procedure which will test all major functions of the AR161, which include timers, time relays, relay resets, relay trip overloads, all overload functions.

The ability to pretest and stock, working relay panels will greatly reduce transmitter down time, simplify transmitter maintenance and generally increase operating efficiency.

AX808



Depth: 10.50 inches
Front Panel Height: 8.50 inches
Front Panel Lenght: 16.12 inches

THE TECHNICAL MATERIEL CORPORATION

CABLE: TEPEI 700 FENIMORE ROAD, MAMARONECK, NY 10543 U.S.A. TLX: 137-358
TEL.: 914-698-4800 TWX: 710 566 1100