

work in conjunction with this equipment. Cable clamps should be used at all locations where there is undue strain on the connections. Interconnecting cables should be enclosed in a conduit whenever practical. Reference should be made to the Electronic Installation Practices Manual, NAVSHIPS 900171, chapter 9 for general interconnection instructions. After cable connectors and the multiconductor cables have been fabricated as directed in paragraph 2-4*b* in this section, refer to the interconnection diagram, figure 2-8, and proceed in the following manner:

Step 1. Refer to figure 2-2 and reconnect terminal boards TB101A and TB101B, to the junction box.

Step 2. Refer to figure 2-8 and attach the fanning strip portion of the incoming cable to the corresponding terminals on TB101A and TB101B and the fanning strip at the other end of the cable to Radiophone Unit 23400 and to Radio, Modulator 1B plus T-1 MD-168/UX.

Step 3. Connect the three power supply leads to TB102.

Step 4. Refer to the wiring diagram of Electrical Equipment Cabinet CY-2558/WRT-2, figure 6-47, and check to see if all wires and cables between all drawers (excluding the bottom drawer), and terminal junction box are reconnected.

Step 5. Attach Power Supply PP-2222/WRT to its sliding tracks in Electrical Equipment Cabinet CY-2558/WRT-2 and also reinstall Radio Frequency Amplifier AM-2121/WRT-2.

Step 6. Reconnect all wiring to the chassis and push the drawer back into the cabinet.

Step 7. Attach the junction box to Electrical Equipment Cabinet CY-2558/WRT-2.

Step 8. Connect the interconnecting cable plugs P101, P102, P103 and P104 to the respective jacks. These jacks are located at the rear of Electrical Equipment Cabinet CY-2558/WRT-2 just above the junction box as shown in figure 2-7.

2-5. INSPECTION AND ADJUSTMENTS.

a. GENERAL INSPECTION.— Before inspecting the equipment of Radio Transmitting Set AN/WRT-2 make sure that EMERGENCY STOP switch on the front panel of Power Supply PP-2222/WRT is in the OFF position. Then make a visual inspection of all the units of Radio Transmitting Set AN/WRT-2 as follows:

Step 1. Inspect all incoming and outgoing lines for proper terminal placement and secure connections.

Step 2. Examine all terminal boards for signs of solder or other foreign material that could cause shorts.

Step 3. Check cables and make sure they are in their proper receptacles.

Step 4. Examine all external switches and controls for signs of damage. Make sure all indicating meters and controls have no broken glass covers or any other signs of damage.

Step 5. Check all indicator lamps and make sure they are intact.

Step 6. Check all tubes for signs of damage, for proper location and for secure seating in their sockets.

Step 7. Open each drawer to its full length of travel and then close it. There must be no undue binding or sticking.

Step 8. Close all five drawers, and secure them.

b. LINE FUSES AND PRIMARY POWER TERMINATIONS.—Radio Transmitting Set AN/WRT-2 may be operated from either a 115-volts, a 220-volts, or a 440-volts 3-phase, 60-cps, power supply. Primary power connections and line fuses must therefore be adjusted. To perform the adjustments proceed as follows:

Step 1. Pull out Amplifier-Power Supply AM-2122/WRT-2 (fourth drawer from the top).

Step 2. On the front panel of the drawer observe the current values for fuses F501, 155-volts 5A; F502, 115-volts 3A, F503, 115-volts 5A; F504, 24-volts 4A and F505, 12-volts 2A. For sets serials 1 to 263 these fuses are the pop-up type; for sets serials 264 and up they are the indicator lamp type.

Step 3. Check to make sure that the value of the fuses corresponds to the values noted in step 2. If fuses are missing select from the set of fuses supplied with the equipment five fuses with the values noted in step 2 and proceed with steps 4 and 5. If fuses are installed, check their values and omit steps 4 and 5.

Step 4. Insert the five fuses in the proper fuse clips on the back of the front panel according to the values shown on the front panel.

Step 5. Refer to figure 2-4 and from the fuses supplied with the equipment insert the four spare fuses according to the values stamped next to each fuse clip.

Step 6. Determine the ship's supply voltage.

Step 7. Refer to figure 2-4, and on the righthand side of the drawer locate the cover board stamped CAUTION 440 VAC INPUT POWER ADJUSTMENTS.

Step 8. Remove the top board by loosening the two screws and expose terminal board E506.

Step 9. On E506 connect the link in the manner indicated by the voltage stenciled between the terminals and according to the particular supply voltage.

Step 10. Replace the cover board and tighten the screws.

Step 11. Push the drawer back into the cabinet.

Step 12. Pull out Power Supply PP-2222/WRT.

Step 13. Refer to Table 2-1 and figure 2-5 and determine the fuse rating for fuses F201, F202, F203, F205 and F206, as dictated by the ship's supply voltage.

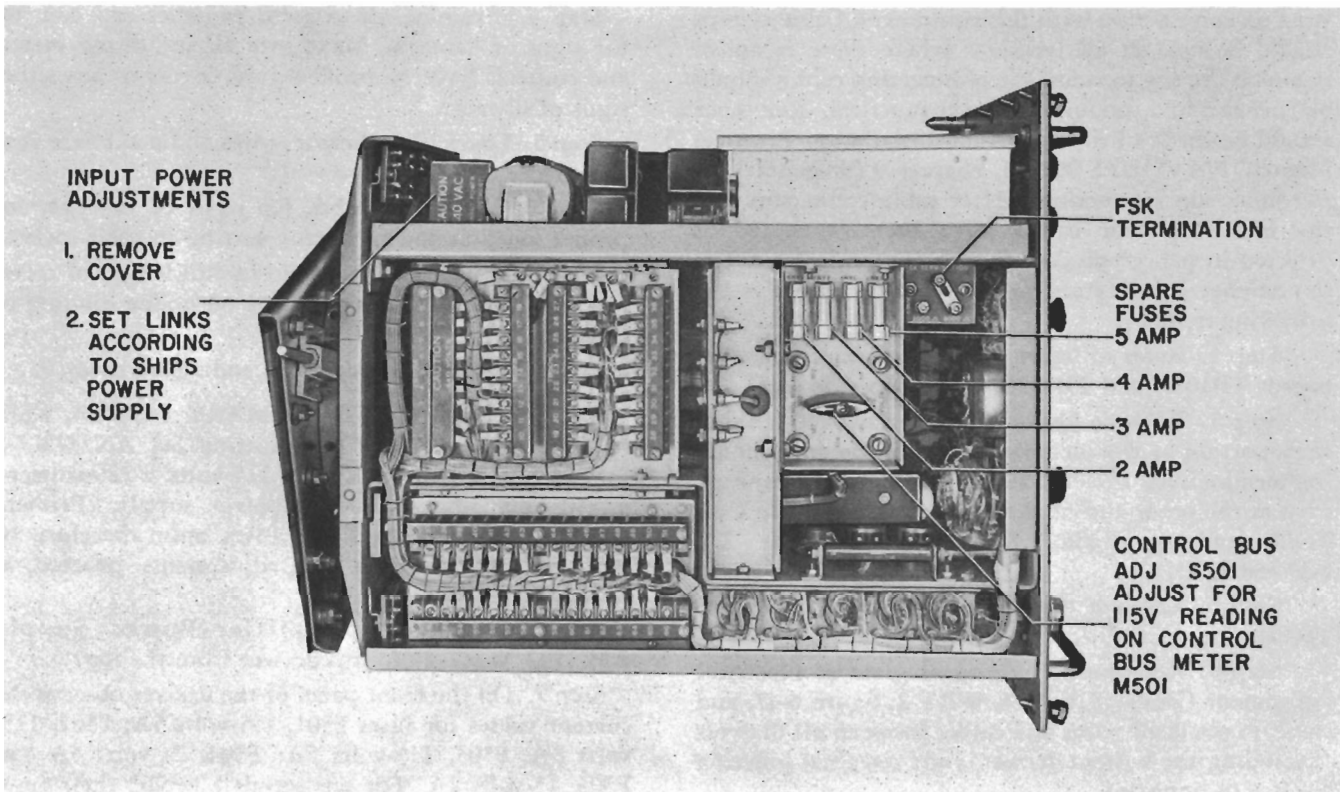


Figure 2-4. Amplifier-Power Supply AM-2122/WRT-2, Electrical Adjustments and Location of Spare Fuses

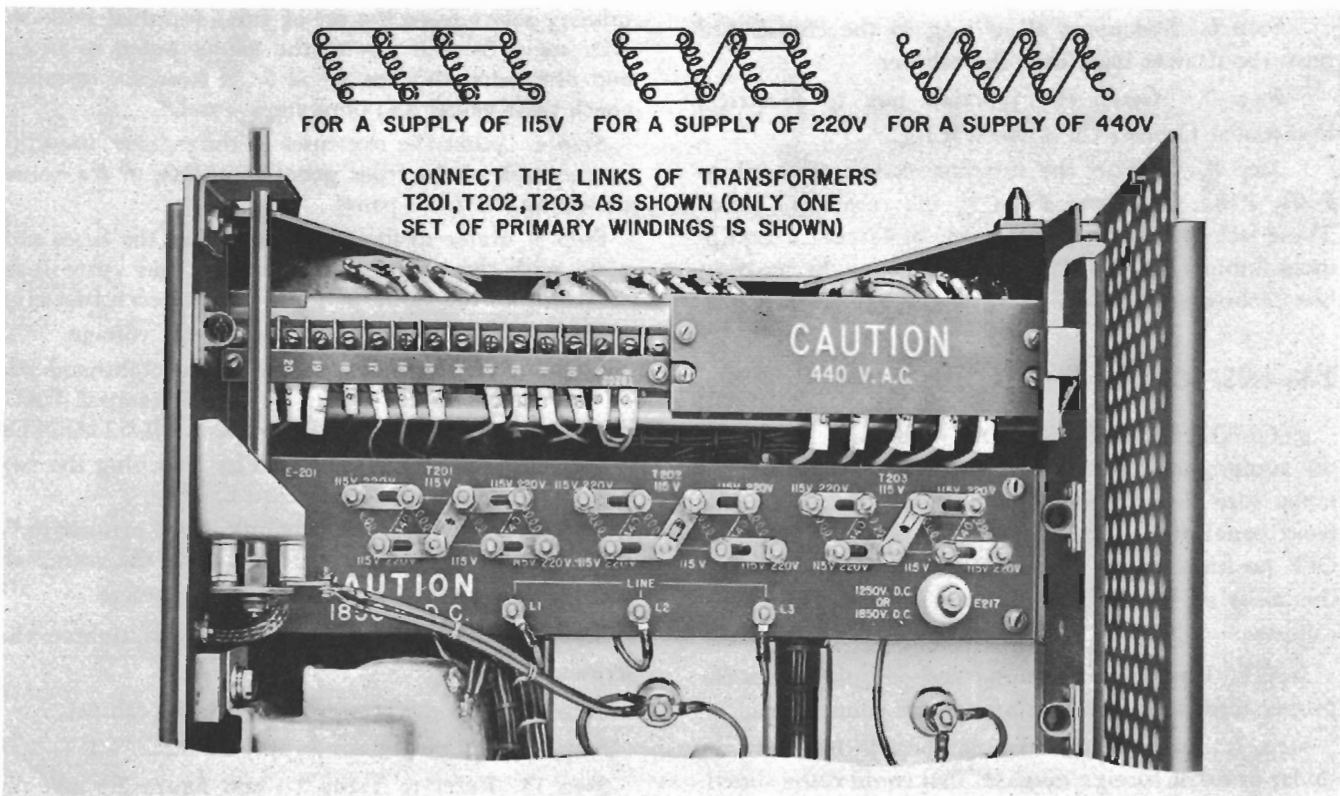


Figure 2-5. Power Supply PP-2222/WRT, Power Input Adjustments

TABLE 2-1. FUSE CURRENT RATING VERSUS LINE VOLTAGE

FUSE SYMBOL	LINE VOLTAGE		
	115V	220V	440V
F201	12A	6A	3A
F202	12A	6A	3A
F203	12A	6A	3A
F205	20A	10A	5A
F206	20A	10A	5A

Step 14. From the set of fuses supplied with the equipment select the seven line fuses (five active and two spares) of the rating determined from Table 2-1.

Step 15. Insert the seven fuses in the proper fuse clips located on the back of the front panel of Power Supply PP-2222/WRT as shown in figure 2-5.

Note

The fuse warning indicating lamp circuit must also be set according to the ship's supply voltage. The adjustment for the indicating lamp circuit is located on board E202. E202 is mounted on the left side of Power Supply PP-2222/WRT near the front of the drawer as shown in figure 2-5.

Step 16. Refer to figure 2-6 and locate the link connections on board E202 according to the ship's supply.

Step 17. Refer to figure 2-5 and locate interconnection boards E201 on top of Power Supply PP-2222/WRT toward the rear of the drawer.

Step 18. Connect the links on E201 as shown in figures 2-6, 5-47 and 6-29 according to the voltage supplied. Link positions are stenciled on the board for each of the three possible supply voltages.

Step 19. Push the drawer containing Power Supply PP-2222/WRT back into the cabinet to its extreme travel limit.

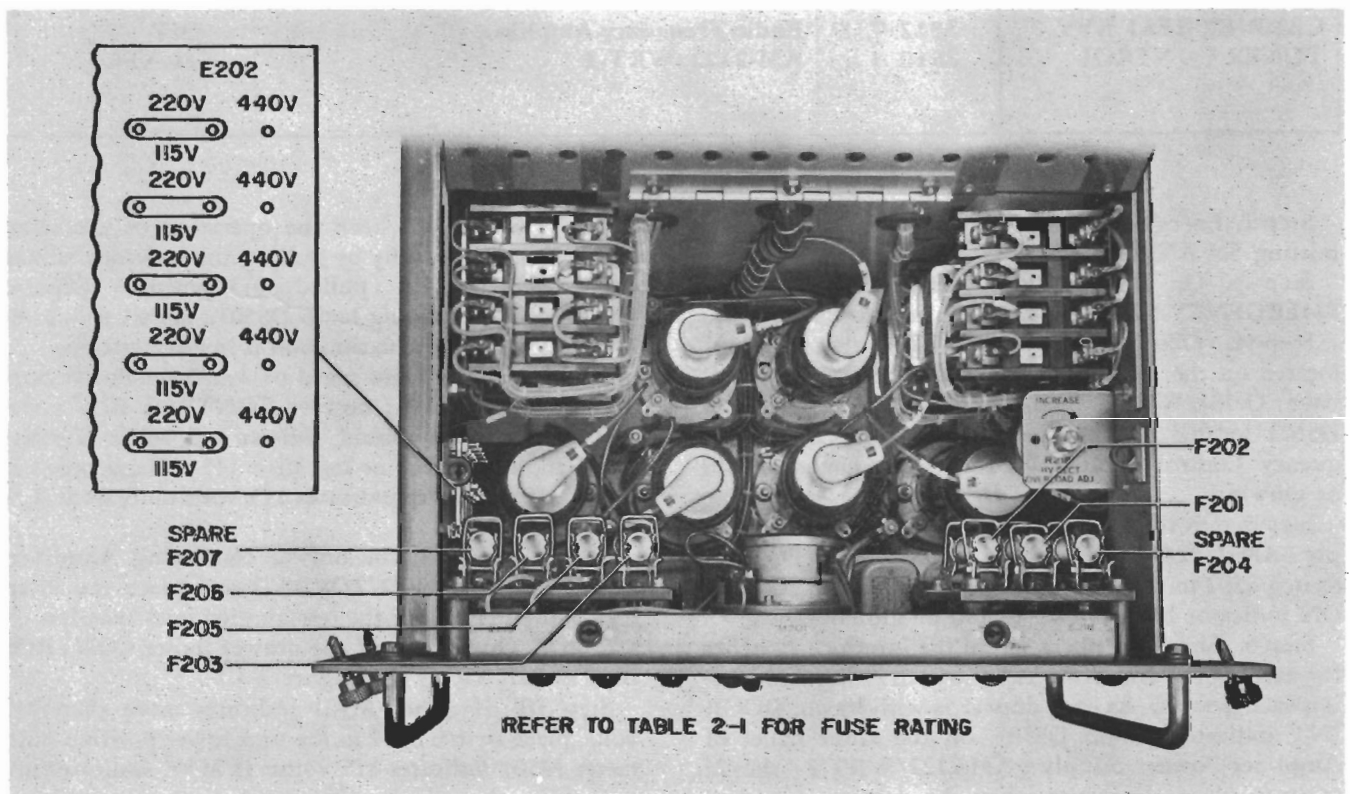
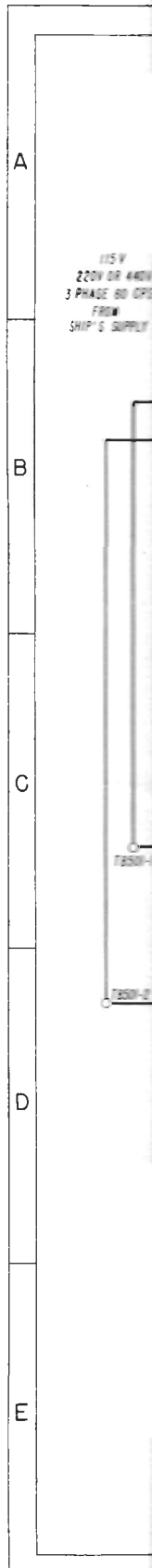
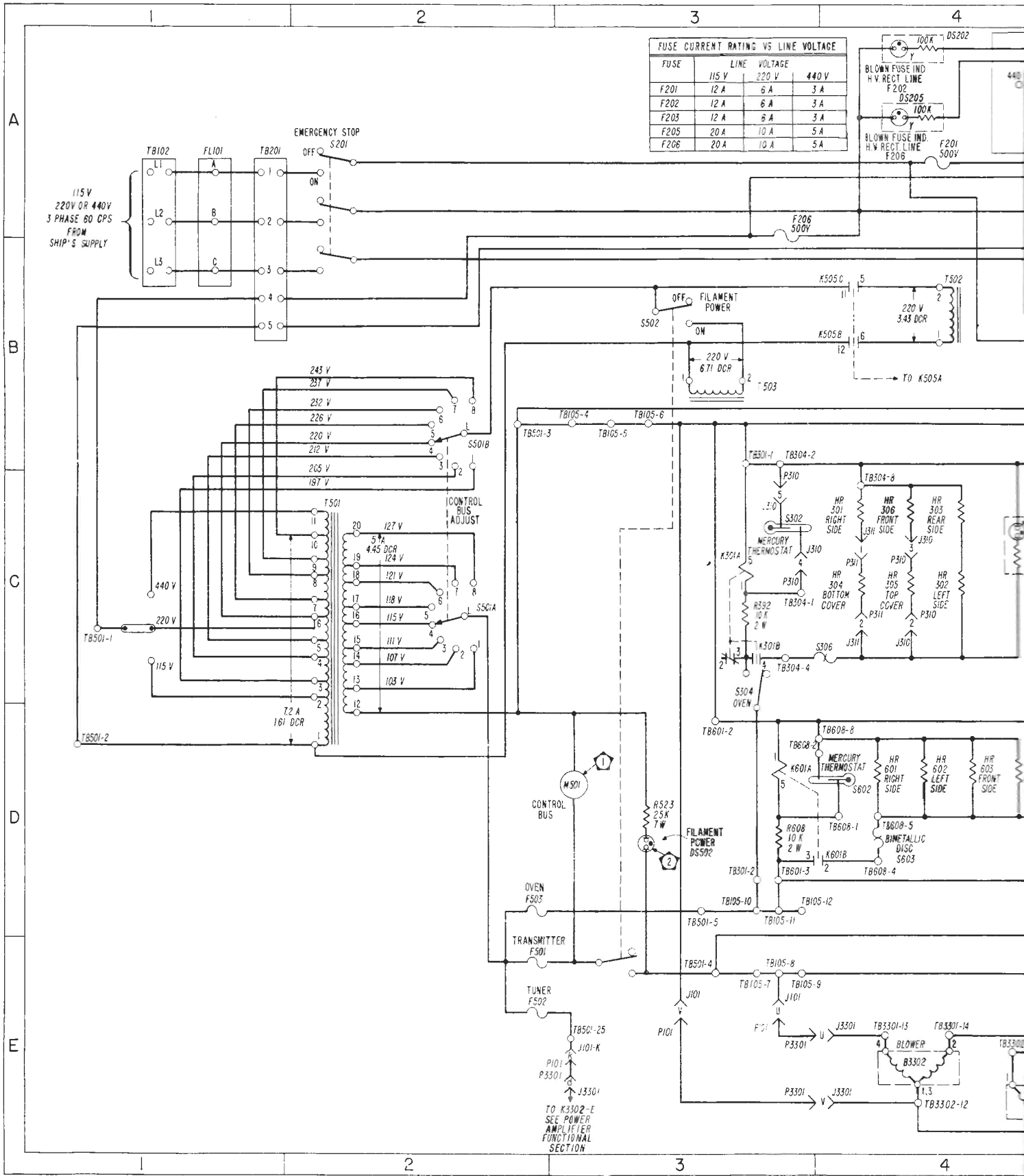


Figure 2-6. Power Supply PP-2222/WRT, Power Input Connections and Fuse Locations

Ref. Desig.	Location	Ref. Desig.	Location	Ref. Desig.	Location	Ref. Desig.	Location
B101	5D	J3301	6C	P3301	3E	T501	2C
B801	5D	J3301	6D	P3301	5E	T502	4B
B3301	4E	K201A	8C	R201	9A	T503	3B
B3302	4E	K201B	8C	R202	9A	T611	5C
C101	5D	K201C	9A	R203	9A	T617	5D
C203	9B	K201D	10B	R205	4A	T806	7B
C324	5C	K201E	10B	R206	5A	T807	7C
C325	5C	K202	8C	R207	5A	TB101	6D
C862	6D	K202A	9C	R208	5A	TB101	7E
C863	6D	K202C	9A	R209	5A	TB101	8E
C866	6D	K202D	10D	R217	9C	TB102	1A
C867	6D	K202E	10B	R219	6A	TB105	3B
C907	7C	K203A	9A	R220	6A	TB105	3D
C908	7B	K203B	9A	R221	6A	TB105	3E
C923	6C	K203C	9A	R222	5A	TB107	5C
C924	6D	K203D	9A	R392	3C	TB107	5D
C925	7C	K203E	9A	R522	6B	TB201	1A
C944	6D	K204A	9A	R523	3D	TB202	8B
C945	6D	K204C	9A	R524	7B	TB202	8C
C947	6D	K204D	9A	R525	8B	TB202	9D
DS201	4B	K204E	9A	R526	8B	TB202	9C
DS202	4A	K207C	9A	R608	3D	TB301	3B
DS203	6A	K301A	3C	S101	5C	TB301	3D
DS204	6A	K301B	3C	S102	5C	TB301	4D
DS205	4A	K503A	6B	S103	5C	TB304	3C
DS207	9B	K503C	8C	S104	5D	TB304	4C
DS301	4C	K504A	7C	S105	5D	TB307	5C
DS501	6C	K504B	7C	S201	2A	TB320	5C
DS502	3D	K504C	8C	S304	3C	TB501	1C
DS503	7C	K504D	8C	S306	4C	TB501	1D
DS504	8C	K505A	8C	S310	3C	TB501	2B
E202	5A	K505B	4B	S501A	2C	TB501	3D
F201	4A	K505C	4B	S501B	2B	TB501	3E
F202	5A	K505D	9D	S503	7C	TB501	6C
F203	6A	K506C	8C	S504	8C	TB501	7D
F205	6A	K601A	3D	S506	8C	TB501	8D
F206	3A	K601B	4D	S507A	7D	TB501	9D
F501	2E	K803A	6C	S509A	7D	TB601	3D
F502	2E	K803B	6C	S509A	8D	TB601	5D
F503	2D	K804B	6D	S509B	8D	TB602	5D
FL101	1A	K3303B	5E	S510A	9D	TB608	3D
HR301	4C	K3303C	5E	S602	4D	TB608	4D
HR303	4C	L1	1A	S805	6C	TB801	6C
HR306	4C	L1	9A	S808	6D	TB801	6D
HR601	4D	L2	1A	S809	6D	TB802	6C
HR602	4D	L2	9A	S825	7D	TB802	6D
HR603	4D	L3	1B	S826	7D	TB803	7C
HR604	4D	M501	3D	S827	7D	TB805	7C
J101	3E	P101	3E	S828	7C	TB805	7D
J101	6C	P101	6C	S3305	6C	TB1201	5C
J101	6D	P101	6D	S3306	6D	TB3301	4E
J101	6E	P101	6E	T201	10A	TB3301	6C
J310	3C	P310	3C	T202	10A	TB3301	6D
J310	4C	P310	4C	T203	10C	TB3302	4E
J311	4C	P311	4C	T204	9D		
J3301	4E	P3301	6C	T306	5C		
J3301	5E	P3301	6D	T307	5C		



Location
2C
4B
3B
5C
5D
7B
7C
6D
7E
8E
1A
3B
3D
3E
5C
9C
3B
3D
4D
3C
5C
1C
1D
2B
3D
3E
6C
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