

- ②. Adjust Phase 2 (red) using VR1 (16Vac)  
*note. Also pot will adjust both phases.*
- ③. Adjust Phase 1 (blue) using VR2 (16Vac)

22-3-93

## XPS1

### Xerxes Power Supply

#### Instructions For Setting The XPS1 Output

Be careful to execute the following steps in the exact order specified.

- 1) Set the speed selector switch to 45 rpm.
- 2) Adjust VR1 (see figure overleaf) such that the Phase 1 output to the motor (blue wire) reads 16Vac on a multimeter.
- 3) Adjust VR2 such that the Phase 2 output to the motor (red wire) reads 16Vac on a multimeter.
- 4) Switch to 33 1/3 rpm and check that each output reads about 21Vac.

*(Back Page)*

Check, using an oscilloscope, that the two outputs are 90° out of phase with each other. You should measure a frequency of 50Hz for a speed of 33 1/3 rpm and a frequency of 67 1/2 Hz for 45 rpm.

#### Troubleshooting

All of the following tests can be carried out with a multimeter. Voltage levels mentioned are approximations only.

- 1) Check the regulated dc supply by testing pins 5 and 7 of chip RCA195 (fig 2) for -15Vdc and +15Vdc respectively.
- 2) Check dc supply to chip M706 (fig. 1), +15Vdc on pin 8, 0Vdc on pins 1 and 4.
- 3) Set speed selector switch to 45 rpm and look for an output of approximately 8Vac on pin 2 of the M706. Replace chip if output does not appear.
- 4) Check dc supply to chip CA324 (fig. 4), +15Vdc on pin 4 and -15Vdc on pin 11. Check for an input of 2Vac on pin 5, then check for output of 5Vac on pins 14 and 8. Try replacing the chip if no such output appears in the presence of a valid input.

#### Phase 1:

- 5) Test R26 with an ohmmeter, replace if necessary.
- 6) Check for input of 2.5Vac on pin b of T1. Test for 0.44Vac on pin c and 2.4Vac on pin e. Try replacing T1 if no signal appears on pin c, otherwise replace T2 and check again for the above signal levels.
- 7) Check for output of 16Vac on pin e of T5.

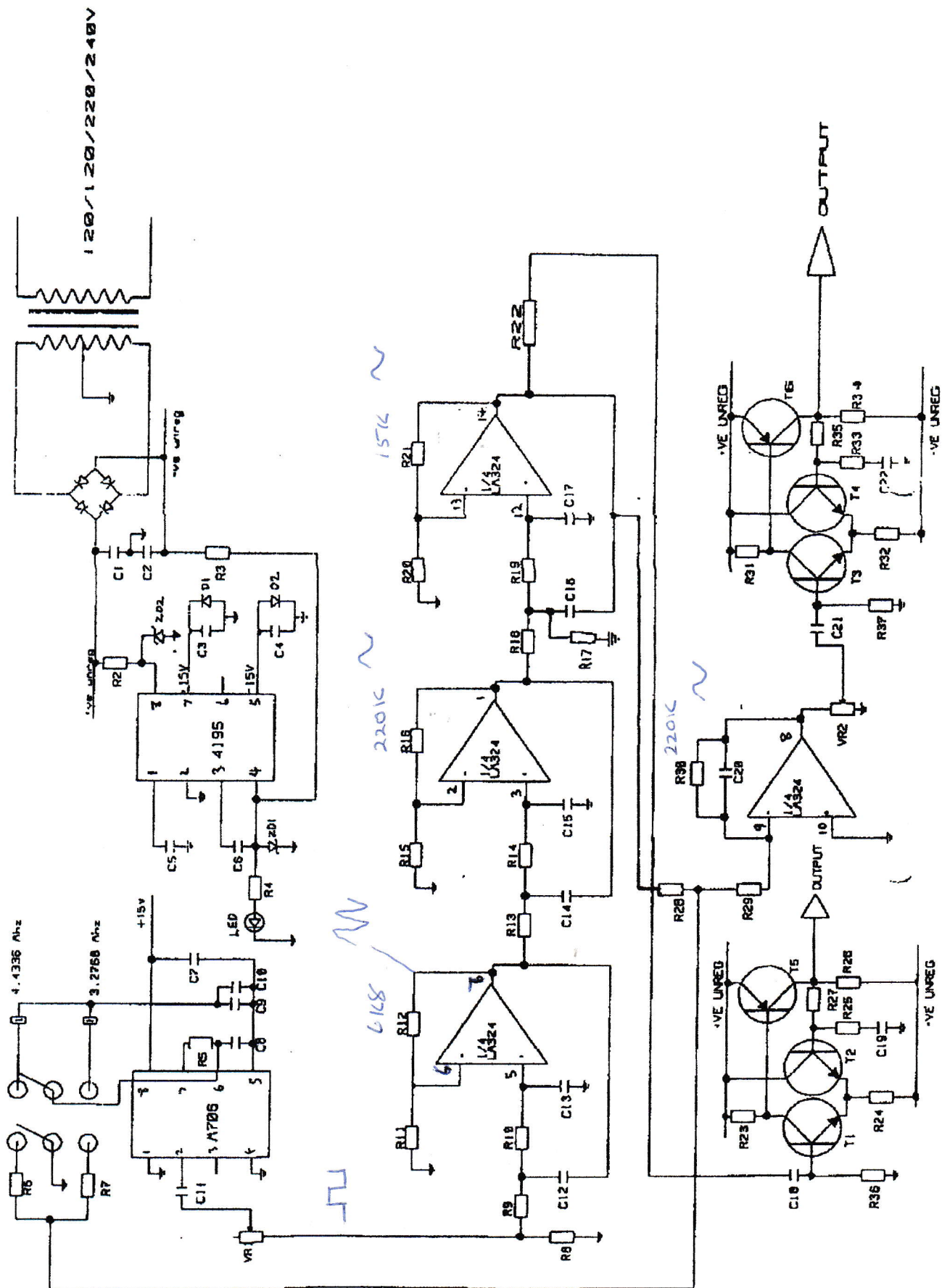
#### Phase 2:

- 8) Test R34 with ohmmeter and replace if necessary.
- 9) Check for input of 2Vac on pin b of T3. Test for 0.44 Vac on pin c and 2Vac on pin e. Try replacing T3 if no signal appears on pin c, otherwise replace T4 and check again for the above levels.
- 10) Check for output of 16Vac on pin e of T6.





the mixer XPS



# ROKSAN XPS1 PSU COMPONENT LIST

C1 2200uF 50 V	R1 470R	T1 BD139
C2 2200uF 50V	R2 1K	T2 BD139
C3 10uF 35V	R3 470K	T3 BD139
C4 10uF 35V	R4 2K2	T4 BD139
C5 0.1uF	R5 19K	T5 BD140/TIP32C
C6 0.1Uf	R6 10K	T6 BD140/TIP32C
C7 1uF Poly	R7 5K6	D1 1N4004
C8 47pF Car Plate	R8 100K	D2 1N4004
C9 18pF Car Plate	R9 220K	ZD1 BZY88C24
C10 47pF Car Plate	R10 220K	ZD2 BZY88C24
C11 1uF Poly	R11 100K	
C12 0.01uF Poly	R12 6K8	
C13 0.01uF Poly	R13 220K	
C14 0.01uF Poly	R14 220K	
C15 0.01uF Poly	R15 10K	
C16 0.01uF Poly	R16 5K6	
C17 0.01uF Poly	R17 390K	
C18 2.2uF 63V	R18 220K	
C19 47uF 10V	R19 220K	
C20 2.2uF 63V	R20 10K	
C21 2.2uF 63V	R21 15K	
C22 47uF 10V	R22 100K	
	R23 10K	
	R24 15K	
	R25 10K	
	R26 330R 11W	
	R27 100K	
	R28 15K	
	R29 100K	
	R30 10M	
	R31 10K	
	R32 15K	
	R33 15K	
	R34 330R 11W	
	R35 100K	
	R36 100K	
	R37 100K	
	VR1 100K	
	VR2 100K	