

1.0 APPLICABLE DOCUMENTS

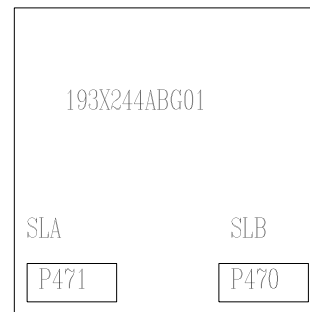
Elementary Diagram 36C762865AD
Material List

2.0 EQUIPMENT

Test Stand and correct Logic Board

3.0 INITIAL SETUP

1. For G01 & G02 **ONLY**
Set Scope amplifier to Chop, Ch. 1 and Ch. 2 to AC; .1V/Div.
Time base to 5msec./Div.; Line sweep; AC coupling.
2. RS1 (1)
3. All switches up.
3. Turn all Card Pots Max. CW.
4. Set V5 Max. CW, at 10V, Polarity switch to minus position.
5. Test stand on.
6. Set VR for 104VAC on M2. (G01, G02 only)
7. Test stand off.
8. Lights 1, 2, 3, 4 referred to in test are on the Patchboard
9. RS1 (3) V5 output; RS1 (4) DVM + Red Panel Jack.



4.0 TEST PROCEDURE

1. **Test for 193X244AB G01**
2. Jumpers on A and C.
3. Test on
Ch. 1 and Ch.2 ripple LT 2 Div.
DVM -19 to -21VDC
Light 1, 3 **ON**
Light 2, 4 **OFF**
4. RS1 (2)
DVM +19 TO +21 VDC
5. Adjust SLA Pot until
SLA LED **ON**
Light 3 **OFF**
Light 4 **ON**
6. Adjust SLB Pot until
SLB LED **ON**
Light 1 **OFF**
Light 2 **ON**
7. Adjust V5 for 9.5 on Dial
Light 2, 4 **ON**

DISTRIBUTION LIST

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| 4.0 | 8. | Adjust V5 for 8.5 on Dial | Light 2, 4 OFF |
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9. Adjust V5 for 10 on Dial
 Range 1 Volt
 Adjust SLA Pot until Light 4 **ON**
10. Adjust SLB Pot until Light 2 **ON**
11. Adjust V5 for 9.5 on Dial Light 2, 4 **ON**
12. Adjust V5 for 5 on Dial Light 2, 4 **OFF**
13. S1 **DOWN**
 V5 Polarity Plus
 Adjust V5 for 10 on Dial light 4 **ON**
14. V5 Polarity Minus Light 4 **OFF**
15. Test **OFF**

5.0 TEST For 193X244AB G02

1. Jumper on A
2. Test ON. Scope Ch. 1 ripple LT 2 Div.
 Ch. 2 ripple LT 2 Div.
 DVM -19 to -21VDC
 Light 1 **ON**
 Light 2 **OFF**
3. RS1 (2) DVM +19 to +21VDC
4. Adjust SL Gain Pot until SL LED **ON**
 Light 1 **OFF**
 Light 2 **ON**
5. Adjust V5 for 9.5 on Dial Light 2 **ON**
6. Adjust V5 for 8.5 on Dial Light 2 **OFF**
7. Adjust V5 for 10 on Dial
 Range 1 Volt
 Adjust SL Gain Pot until Light 2 **ON**
8. Adjust V5 for 9.5 on Dial Light 2 **ON**
9. Adjust V5 for 5 on Dial Light 2 **OFF**
10. Test **OFF**

6.0 Test for 193X244AB G03

1. Jumper on C.

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|-----|--|---|
| 2. | Test ON | Light 3 ON
Light 4 OFF |
| 3. | Adjust SL Gain POT ccw until | SL LED ON
Light 3 OFF
Light 4 ON |
| 4. | Adjust V5 for 9.5 on Dial | Light 4 ON |
| 5. | Adjust V5 for 8.5 on Dial | Light 4 OFF |
| 6. | Adjust V5 for 10 on Dial
Range 1 Volt
Adjust SL Gain Pot until | Light 4 ON |
| 7. | Adjust V5 for 9.5 on Dial | Light 4 ON |
| 8. | Adjust V5 for 5 on Dial | Light 4 OFF |
| 9. | S1 DOWN
V5 Polarity Plus
Adjust V5 for 10 on Dial | Light 4 ON |
| 10. | V5 Polarity Minus | Light 4 OFF |
| 11. | Test OFF | |

END OF TESTS

7.0 SCOPE OF TEST

SCOPE OF TEST FOR 193X244AB G01

1. Step 4.3. Scope Ch. 1 checks ripple of +20Volt Power Supply with a 1450 ohm load. -20V limits are checked on DVM. Scope Ch. 2 checks ripple of -20V Power Supply with a 560 ohm load. Lights 1 & 2 check the N.C. and N.O. contacts of SLB relay. Light 3 & 4 check the N.C. and N.O. contacts of SLA relay.
2. Step 4.4. +20V limits are checked on DVM.
3. Step 4.5. -10V is applied to the input of the non-polarized relay (SLA). The SLA Gain Pot is adjusted until the SLA relay is energized.
4. Step 4.6. -10V is applied to the input of the polarized relay SLB thru an external 10K resistor. The SLB Gain Pot is adjusted until the SLB relay is energized.
5. Step 4.7, 4.8. The polarized and non-polarized inputs are reduced to approximately 9.5 Volts and the SLB and SLA relays should remain energized. Both inputs are reduced to approximately 8.5 Volts and both relays should be de-energized.
6. Step 4.9, 4.10. The polarized and non-polarized inputs are set at 1V. The SLA Gain Pot is adjusted until the SLA relay is energized, and the SLB Gain Pot is adjusted until SLB relay is energized.
7. Step 4.11, 4.12. Both inputs are reduced to .95 Volts and both relays should remain energized. Both inputs are reduced to .5 Volts and both relays should de-energize.
8. Step 4.13, 4.14. S1 down removes jumper between tabs 2 and 3. The input of the non-polarized relay is set at +1 Volt and SLA relay should be energized. The input is made Negative and the SLA relay should be de-energized.

8.0 SCOPE OF TEST FOR 193X244AB G02

1. Step 5.2 Scope Ch. 1 checks ripple of +20 Volt Power Supply with a 1450 ohm load. Ch. 2 checks ripple of -20 Volt Power Supply with a 560 ohm load. +20 Volt is checked on DVM. Light 1 & 2 check the N.C. and N.O. contacts of SL relay.
2. Step 5.3 +20 Volts is checked on DVM.
3. Steps 5.4, 5.5, 5.6 SL Gain Pot is adjusted until SL relay energized, LED is on when relay is energized, the input is adjusted for approximately 9.5 Volts; SL relay should remain energized. The input is adjusted for approximately 8.5 Volts, SL relay should be de-energized.

- 8.0** 4. Steps 5.7, 5.8, 5.9 The input is set at 1 Volt, SL Gain Pot is adjusted until SL relay is energized. The input is adjusted for .95 Volts. Relay should remain energized. The input is adjusted for .5 Volts, relay should be de-energized.

9.0 SCOPE OF TEST FOR 193X244AB G03

1. Step 6.2 Lights 3 & 4 checks the N.O. and N.C. contacts of SL relay.
2. Steps 6.3, 6.4, 6.5. SL Gain Pot is adjusted until SL relay is energized. The input is adjusted for 9.5 Volts; the relay should remain energized. The input is adjusted for 8.5 Volts; relay should be de-energized.
3. Steps 6.6, 6.7, 6.8. The input is set at 1Volt, SL Gain Pot is adjusted until SL relay is energized. The input is adjusted for .95 Volts; relay should remain energized. The input is adjusted for .5 Volts; relay should be de-energized.
4. Step 6.9. S1 down removes jumper between tabs 2 & 3. Input is set at +1 Volt SL relay should remain energized.
5. Step 6.10. Input is made negative and relay should de-energize.

END OF TESTS

<u>REV.</u>	<u>INIT.</u>	<u>DESCRIPTION OF CHANGE</u>	<u>DATE</u>
001		Erie Version	
002		Erie Version	
003		Erie Version	06/21/77
004	AWE	Erie/Salem Version with markup	07/17/86
005	JJW	Converted to new format with changes included	04/25/96

