

QUALITY STANDING INSTRUCTION

SPEED VARIATOR DEPARTMENT

QSI NUMBER

#2081

TITLE

PREAMPLIFIER - 193X227BBG01 AND G02
193X227BCG01 AND G02

REVISION

3

1.0 Applicable Documents

- 1.1 Material List
- 1.2 Elementary diagram

2.0 Equipment

- 2.1 Test stand
- 2.2 Patchboard

3.0 Procedure (General)

- 3.1 Set V5 dial at (7.50) and lock
- 3.2 Set V5 polarity (+)
- 3.3 Set V5 range (10 volts)
- 3.4 Set scope CH1 & CH2 to 0.1V/Div, AC, and 5msec/div, line sync. mode - CHOP
- 3.5 Turn card pots max. CCW and check shaft and label orientation per Figure #1.
- 3.6 Check polarized capacitors for correct polarity orientation per Figure #2.

Set up on BB G01 + BCG01

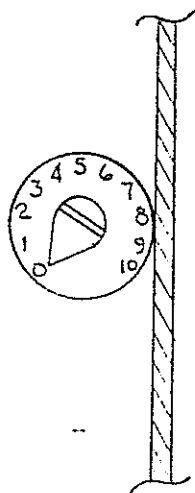


FIGURE NO. 1

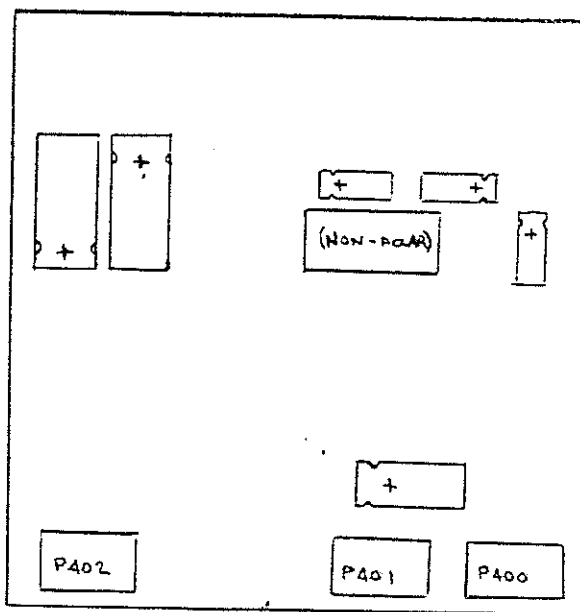


FIGURE NO. 2

DISTRIBUTION	QTY.
Mgr. Eng.	
Mgr. Mfg.	
Mgr. Prod. Eng.	
Mgr. Mat.	
Mgr. Sys. Eng.	
Eng. Supv.	
Foreman-Test	
Foreman-Insp.	

*Change or Addition

SV-100 (2-68)
Revised by: S. J. Rumberger 5/19/75
Rev. #3; DPC/AWE 8/15/77

PREPARED BY
S. J. Rumberger
6/28/72

APPROVED BY
J. D. Campbell

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4.0

4.1 193X227BBG01 & 193X227BCG01 Test

- 4.1.1 Test on DVM $\leq (\pm 0.030)$ volts
- 4.1.2 RS1 (2) DMM TAB 28 DVM $\leq (-0.700)$ volts
- 4.1.3 RS1 (3) DMM TAB 16 DVM $\leq (+0.700)$ volts
- 4.1.4 S1 DN 7.5VDC TO TAB 30 DVM $\leq (+0.700)$ volts
- 4.1.5 RS1 (2) DMM TAB 28 DVM (+5.00) (+10.00) volts
- * 4.1.6 S1 UP TAB 30 TO $\frac{1}{2}$ DVM (-6.00) (-9.00) volts
P400 CW Scope CH1 $\leq (0.2V \text{ P.P.})$ in 8-12 seconds
RS1 (1) DMM TAB 2
S1 ~~SX~~ DN TAB 30 TO 7.5V
- * 4.1.7 V5 Pol (-) DVM (+6.00) (+9.00) volts
Scope CH2 $\leq (0.2V \text{ P.P.})$ in 16-24 seconds
- 4.1.8 P400 CCW
RS1 (2) DMM TAB 28 DVM $\leq (-0.700)$ volts
- 4.1.9 RS1 (3) DMM TAB 16 DVM (-5.00) (-10.00) volts
- 4.1.10 S1 UP TAB 30 TO $\frac{1}{2}$
RS1 (4) DMM TAB 25 DVM (+19.5) (+20.1) volts
- 4.1.11 S2 DN REMOVE GRND FROM TAB 27 DVM $\leq (+0.050)$ volts
- 4.1.12 End of test for production cards with FIXIT stamp. Continue for all others.
- 4.1.13 S2 UP PUT GRND ON TAB 27
S3 DN +20V TAB 23
RS1 (3) DMM TAB 16 DVM (-0.312) (-0.468) volts
- 4.1.14 S3 UP REMOVE +20V FROM TAB 23
S4 DN -20V TO TAB 19
RS1 (2) DMM TAB 28 DVM (+0.312) (+0.468) volts
- 4.1.15 S4 UP REMOVE 20V FROM TAB 19
S5 DN 0-SCOPE CH2 TAB 5 CH1 TAB 9
S6 DN CONNECT 6.3VAC TO TABS 6 and 8
Scope CH1 $\leq (0.25V \text{ P.P.})$
Scope CH2 $\leq (0.25V \text{ P.P.})$
- 4.1.16 RS1 (5) DMM TAB 9 DVM (+3.76) (+5.64) volts
- 4.1.17 P402 (CW) DVM reading should decrease slightly
- 4.1.18 RS1 (6) DMM TAB 5 DVM (-3.76) (-5.64) volts
- 4.1.19 P402 (CCW) DVM reading should decrease slightly

- 4.1.20 S5 UP *SCOPE CH2 TAB 16 CH1 Tab 28*
 S6 UP *Disconnect 6.3V AC*
 V5 (1 volt range)
 RS1 (2) *MM TAB 28*
 RS2 (2) *7.5 TAB 15* DVM (+1.13) (+1.77) volts
- 4.1.21 RS2 (3) *7.5 TAB 14* DVM (+1.78) (+2.75) volts
- 4.1.22 RS2 (4) *7.5 TAB 12* DVM (+0.594) (+0.966) volts
- 4.1.23 RS1 (7) *DMM TAB 21* DVM \leq (+0.010) volts
- 4.1.24 Turn P401 CW DVM reading should momentarily increase and return to \leq (+0.010) volts
- 4.1.25 Turn P400 CW
 RS1 (1) *DMM TAB 2*
 RS2 (1) *Remove 1V FROM TAB 12*
 V5 (10V) range
 S1 DN *7.5 TAB 30* DVM time to (6.0) (9.0) volts in (8) (12) seconds
- 4.1.26 End of test

* 4.2 193X227BBG02, BCG02 Test

- 4.2.1 Test ON DVM \leq (± 0.030) volts
- 4.2.2 RS1 (2)
 Adjust P402 for DVM (zero ± 0.030) volts
- 4.2.3 RS1 (3) DVM \leq (± 0.030) volts
- 4.2.4 S9 DN DVM (-3.07) (-4.10) volts
- 4.2.5 V5 POL (-) DVM (+3.07) (+4.10) volts
- Time* 4.2.6 S9 UP
 P400 CW
 RS1 (1) DVM (+6.00) (+9.00) volts in 8-12 seconds
 S1 DN
- 4.2.7 RS1 (2) DVM (-5.00) (-10.00) volts
- Time* 4.2.8 RS1 (1)
 V5 POL (+) DVM (-6.00) (-9.00) volts in 16-24 seconds
- 4.2.9 RS1 (2) DVM (+5.00) (+10.00) volts
- 4.2.10 RS1 (4) DVM (+19.5) (+20.1) volts
- 4.2.11 S2 DN DVM \leq (+0.050) volts
- 4.2.12 End of test for production cards with FIXIT stamp. Continue for all others.

(V5 SWITCH)
RS2

- 1 TAB 30
V1A S1
- 2 TAB 15
- 3 TAB 14
- 4 TAB 12
- 5 TAB 13

(DVM SWITCH)
RS1

- 1 TAB 2
- 2 TAB 23
- 3 TAB 16
- 4 TAB 25
- 5 TAB 9
- 6 TAB 5
- 7 TAB 21

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