

| REV NO.                  | TITLE                      | CONT ON SHEET | SH NO. |
|--------------------------|----------------------------|---------------|--------|
| 6 8 A 9 9 9 4 1 6        | Test Specifications        | 2             | 1      |
| CONT ON SHEET 2 SH NO. 1 | SRV DRIVE                  |               |        |
|                          | FIRST MADE FOR IC3600SSVD1 |               |        |

  

| REVISION                 |
|--------------------------|
| REV-4 BUA68AV 8-2-78 REH |
| REV-5 BUA41EP 5/16/79    |
| REV-6 30APR86 JMT        |

  

1. Visually check the following components:

|                     |                         |
|---------------------|-------------------------|
| C7, C8              | 0.1MFD                  |
| C4, C6              | 0.01MFD                 |
| C13                 | 0.22MFD                 |
| C15                 | 4.7MFD (Check Polarity) |
| C17, C19            | 10MFD (Check Polarity)  |
| R7, R9              | 390 Ohms                |
| CR1, CR2, CR3, CR27 |                         |

2. Make the following resistance checks:

OUT (22) to SCA (13) 440 to 500 Ohms  
OUT (22) to SCB (19) 440 to 500 Ohms  
TPE (40) to LC (41) 2.6K to 3.1K Ohms (TC R97 CCW)  
HG (33) to SJA (34) 69K to 79K Ohms  
LC (41) to TPE (40) 50K to 60K Ohms (TC R97 CW)

3. Attach the following loads:

FLT (6) 7 - 20 KC Loads  
OFLT (10) 7 - 20 KC Loads  
1000 Ohm Resistor SCA (13) to ACOM.  
1000 Ohm Resistor SCB (19) to ACOM.  
Connect a 6.81K resistor from NHP (35) to P12V.  
Connect a 330K resistor from TPE (40) to SJA (34).  
Turn R97 (T.C.) fully CW and R90 fully CCW.  
Connect ACOM (2) to DCOM (STAB-LO) (1).  
Apply +12 Volts to (27) and -12 Volts to (29). Connect COMMONS to (2,50), (1,51).

4. Short INH (4) to +12V through an ammeter and check that current is less than 1 $\mu$ A.  
Short INH (4) to COM. through an ammeter and check that current is 0.2 to 0.4MA.  
Check that the voltage on SR (38) is 5 to 6V. S.M.  
Check that the voltage on TPD (45) is 0  $\pm$  0.2 Volts. For Rev. D and earlier.  
+ .8  $\pm$  .2 Volts. For Rev. E and later.

|                             |                     |                                    |                          |                   |                          |
|-----------------------------|---------------------|------------------------------------|--------------------------|-------------------|--------------------------|
| MADE BY<br>RE Hannah 780801 | APPROVALS<br>E. GrW | DRIVE SYSTEMS<br>Salem, VA. U.S.A. | DIV OR DEPT.<br>LOCATION | 6 8 A 9 9 9 4 1 6 | CONT ON SHEET 2 SH NO. 1 |
| ISSUED<br>8-3-78            |                     |                                    |                          |                   |                          |

FF-803 WF (7-77)  
PRINTED IN U.S.A.

PRINTS TO

2520  
DL22

CARS

| REV<br>NO.   | TITLE                          |                    | 6 8 A 9 9 9 4 1 6 |                                   |            |              |                              |             |                               |         |                                |  |
|--|--------------------------------|--------------------|-------------------|-----------------------------------|------------|--------------|------------------------------|-------------|-------------------------------|---------|--------------------------------|--|
|  | Test Specifications            |                    |                   |                                   |            |              |                              |             |                               |         |                                |  |
|  | SRV DRIVE                      |                    |                   |                                   |            |              |                              |             |                               |         |                                |  |
| CONT ON SHEET 2.1 SH NO. 2   | FIRST MADE FOR IC3600SSVD1     |                    |                   |                                   |            |              |                              |             |                               |         |                                |  |
| <p>4. (Continued)</p> <p>Short SR (38) to COM. through an ammeter and check that current is 0.9 to 1.5MA.</p> <p>5. Connect a signal generator, 3000 HZ Sine Wave to SA (31) and SC (21). Set it to +10V (P to P) and check that the voltage at TPC (12, 44) is correct for the following conditions:</p> <table border="1"> <thead> <tr> <th>POSITION FBK VOLTAGE TPC (12, 44)</th> <th>CONDITIONS</th> </tr> </thead> <tbody> <tr> <td>-10 to -11.5</td> <td>(ZERO) R95 CW, (GAIN) R92 CW</td> </tr> <tr> <td>-10 → -11.5</td> <td>(ZERO) R95 CCW, (GAIN) R92 CW</td> </tr> <tr> <td>-1 → -3</td> <td>(ZERO) R95 CCW, (GAIN) R92 CCW</td> </tr> </tbody> </table> <p>Turn R92 (GAIN) fully CW and adjust the signal generator amplitude to give -2V at TPC (12, 44).</p> <p>(SWI ON AUX. CARD)</p> <p>Short INH (4) thru 3 external diodes to COM and verify that FLT (6) is 0 to 0.4V, OFLT (10) is 5 to 7V and Lamp LTI is OFF.</p> <p>Slowly adjust the voltage on TPC (12, 44) toward Zero via sig. gen. until the lamp comes On. Check that FLT (6) is 5 to 7V, OFLT is 0 to 0.4V, and TPC is between -1V and -1.6V.</p> <p>Set TPC (12, 44) to -2V again and verify that LTI goes Out. Adjust the voltage on TPC (44) more Negative until LTI comes on again. Check that the voltage on TPC (12, 44) is -2.5 to -3V.</p> <p>Connect ADJ1 to ADJ2 and turn REF R89 fully CW. Set TPC(12,44) to -2V again and verify that LTI goes out. Adjust the voltage on TPC (44) move negative until LTI comes on again. Check that the voltage on TPC (12,44) is -2.5V to -3.0V volts. Turn R89 fully CCW and set TPC (12,44) to -1.8V ± 50MV and verify that LTI goes out. Adjust the voltage on TPC (44) move negative until LTI comes on again. Check that the voltage on TPC (12,44) is -2.0V to -2.4V. Remove the short from ADJ1 to ADJ2.</p> <p>(SWI ON AUX. CARD)</p> <p>Remove the short from INH (4) to COM. Adjust the voltage on TPC (12,44) to -10V and verify that LTI remains off.</p> |                                |                    |                   | POSITION FBK VOLTAGE TPC (12, 44) | CONDITIONS | -10 to -11.5 | (ZERO) R95 CW, (GAIN) R92 CW | -10 → -11.5 | (ZERO) R95 CCW, (GAIN) R92 CW | -1 → -3 | (ZERO) R95 CCW, (GAIN) R92 CCW | <p>REVISIONS</p> <p>REV. 4 BUGGPAV 8-2-78 RIM</p> <p>REV. 5 BUGHIED 1/26/79 SBY</p> <p>REV. 6 BUGHIED 12/4/81 CWF</p> <p>REV. 7 30APR86 JMT</p> <p>DL22</p> <p>2520</p> <p>PRINTS TO</p> |
| POSITION FBK VOLTAGE TPC (12, 44)  | CONDITIONS                     |                    |                   |                                   |            |              |                              |             |                               |         |                                |  |
| -10 to -11.5   | (ZERO) R95 CW, (GAIN) R92 CW   |                    |                   |                                   |            |              |                              |             |                               |         |                                |  |
| -10 → -11.5  | (ZERO) R95 CCW, (GAIN) R92 CW  |                    |                   |                                   |            |              |                              |             |                               |         |                                |  |
| -1 → -3  | (ZERO) R95 CCW, (GAIN) R92 CCW |                    |                   |                                   |            |              |                              |             |                               |         |                                |  |
| MADE BY<br>RE Hannah   | 780801                         | APPROVALS<br>E 4 W | DRIVE SYSTEMS     | DIV OR<br>DEPT                    |            |              |                              |             |                               |         |                                |  |
| ISSUED<br>8-3-78   |                                |                    | Salem, VA. U.S.A. | LOCATION                          |            |              |                              |             |                               |         |                                |  |
|  |                                | 6 8 A 9 9 9 4 1 6  |                   | CONT ON SHEET 2.1 SH NO. 2        |            |              |                              |             |                               |         |                                |  |

REV  
NO.

TITLE

CONT ON SHEET 3

SH NO. 2.1

6 8 A 9 9 9 4 1 6

CONT ON SHEET 3 SH NO. 2.1

Test Specifications  
SRV DRIVE  
FIRST MADE FOR IC3600SSVD1

REVISIONS

6. Short Pin (45) to COMMON.  
Short D (46) to TPC (44), connect VCE (49) to a  $5 \pm 0.1$  volt source.  
Jumper J1 to J2 on the card front. Turn R92 (GAIN) fully CCW.  
Adjust the voltage on TPC so that OUT (22) is  $0 \pm 1$  Volt. Check that  
the voltage on TPC is  $-5 \pm 0.1$  volts. Remove short from 45 to COMMON.
7. Leave D (46) shorted to TPC (44). Leave VCE (49) connected to 5 Volt  
source and then jumper J1 to J2. Connect C (3) to SCA (13). Check  
that output FLT (6) is a  $0$  and OFLT (10) is a  $1$ , and that Lamp LED  
is Off. (Input INH (4) should be floating).

NOTE: SW1 off  
R92 gain CCW  
R89 ref CCW  
R95 zero CCW  
R97 tc CW  
R90 stab lo CCW

OK to continue to next page of test.

1) 27Aug86 JMT

DL22

2520

PRINTS TO

MADE BY RE Hannah 790126

ISSUED 1/26/79

APPROVALS

RE Hannah

Drive Systems

DIV OR  
DEPT.

Salem, Va.

LOCATION

6 8 A 9 9 9 4 1 6

CONT ON SHEET 3 SH NO. 2.1

|                          |
|--------------------------|
| REV NO.                  |
| 6 8 A 9 9 9 4 1 6        |
| CONT ON SHEET 4 BN NO. 3 |

|                            |
|----------------------------|
| TITLE                      |
| Test Specifications        |
| SRV DRIVE                  |
| FIRST MADE FOR IC3600SSVD1 |

7. (Continued)

Adjust the voltage on TPC (12,44) (by means of the 3000 NZ signal generator to -2 Volts. Turn (STAB HI) R98 CW. Check that the voltage on OUT (22) is between -9.0 and 10.1 Volts, and that LTI is Off.

Adjust the voltage on TPC so that the voltage on OUT (22) is fully Positive. Check that this voltage is between +8 and +9 Volts, and that LTI is Off.

Remove the jumper from C (3) to SCA (13) and connect C (3) to OUT (22). Adjust the signal generator so that OUT (22) goes fully Positive and check that Lamp LTI remains Off.

Adjust the signal generator so that OUT (22) goes fully Negative, short SCB (19) to COM, and check that Lamp LTI comes On.

8. Remove jumper from (19) to COM. Remove jumper from J1 to J2.

Remove the jumper from D (46) to TPC (44), short D (46) to N12 and check that LTI comes On. Short SR (38) to COM. Connect a variable voltage to input PI (32). For each Step below adjust the variable voltage source to give  $2 \pm 0.5V$  at output TPD (45), and check that the voltage on PI (32) is per the the table below.

VOLTAGE PI (32)

CONDITIONS

|            |   |
|------------|---|
| 3 to 5     | (SPAN) R93 CW, R96 (OFST) CW, HG (33) shorted to SJA (34)   |
| 0.5 to 1.5 | (SPAN) R93 CCW, R96 (OFST) CW, HG (33) shorted to SJA (34)  |
| 1.5 to 2.5 | (SPAN) R93 CCW, R96 (OFST) CCW, HG (33) shorted to SJA (34) |
| 1.0 to 2.2 | (SPAN) R93, CCW, R96 (OFST) CCW                             |

With R93 (SPAN) CCW, R96 (OFST) CCW and HG (33) shorted to SJA (34), adjust the voltage source on PI (32) to give  $4 \pm 1V$  at output TPD (45). Connect a 5V P-P, (3.54VRMS) 60HZ Sine Wave to input SJAA (34) through a 270K resistor. Turn R97 (TC) CW, R90 (STAB-LO) CCW and check that the AC voltage at output TPD (45) is  $1 \pm 0.5V$  P-P.(0.353-1.06VRMS). Turn R96 (STAB-LO) CW, readjust the voltage source to give 4V output at TPD (45) and check that the AC voltage at TPD (45) is  $4 \pm 1V$  P-P (2.12-3.54VRMS).

REVISIONS

1) JBA BUQUED 126/79  
2) 30APR86 JMT

DL22

2520

PRINTS TO

|         |                  |
|---------|------------------|
| MADE BY | RE Hannah 780801 |
|---------|------------------|

|        |        |
|--------|--------|
| ISSUED | 8-3-78 |
|--------|--------|

APPROVALS

E. G. W

DRIVE SYSTEMS

DIV OR DEPT

Salem, VA. U.S.A.

LOCATION

CODE IDENT NO