CAN-GEB-06211.0551-A

1. PURPOSE

Testing of: INPUT BRIDGE (DC TACH) 621L551G1

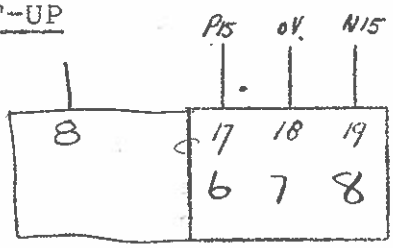
2. ELEMENTARY

S&C Data Bk 1190 sect 551 Dwg 266A9872

3. EQUIPMENT

a) PN15VDC Reg Power Supply
   15VDC Variable Power Supply
b) Multimeter John Fluke 8300 or equiv.
c) Resistor 1 M ohm 1% 177A1017P17
d) Resistor 10K 1% 177A1015 P 023
e) Resistor 620 2W

4. SET-UP



5. TESTS

a) Power Supply

1) Apply PN15VDC
2) Adjust R9 for +10V ± 0.1V at P10V (CP13)
3) Adjust R10 for -10V ± 0.1V at N10V (CP14)

LET WARM UP FEW MINS

b) Switch operation

1) Connect CP21 to CP22 and measure the voltage at CP17 for the following conditions.

Prepared By	Section and Unit	Type Names	Signatures
H. Keyzers	IC 910	Prod. Engineering J.T. Strong	
Date Issued: 30 Aug 78	Supersedes Issue Dated: New	Manuf. Eng. J. Legros	
SIGNATURES PRINTED AS SHOWN		Quality Control H. Marksfield	
		Eng'g. Lab.	

SET +& -10V

CONNECT		PB1	R8	ITB13	ITB16	CP 17
CP 15 To:	CP 16	DOWN	CW	OPEN	OPEN	+ 5 4.8
	CP14	DOWN				-5V
		UP				0V
					0V	-5V
CP 12 To:	CP 13				OPEN	0V
	CP 13			0V		+5V
	CP 11			0V		-5V
	CP 11	UP	CCW	0V		0V

2) Measure voltage at TB-11 for O.P.

	TB-10	TB-12	R7	R6	TB-11
i)	OPEN	OPEN	CW	CCW	0
ii)	0 VOLTS	OPEN	CCW	CCW	0
iii)	OPEN	0 VOLTS	CCW	CW	-0.75 V
iv)	OPEN	OPEN	CCW	CW	0
	0 VOLTS	OPEN	CW	CCW	+0.75V

c) Tach input

1) Connect 1 M ohm 1% resistor in place of R31
2) With R1 CW and TB-1 connected to 0V
   Adjust R3 for 0V ± 1 mV at CP3
3) Similarly adjust R4 for 0V ± 1mV at TB2.
4) Apply +1V to TB-1
5) With R1 CW CP3 should be -5.5V ± .55V and TB-2 should be +5.5V ± 0.55.
6) With R1 CCW CP3 should be -0.5V ± .2V and TB-2 should be +0.5V ± .2V. (Rev input for same results)

d) Tach Amp

1) Connect CP2 to CP3. Connect 10K 1% resistor inplace of R80.
2) Apply approx 1V to TB-1 and adjust R1 until CP3 is -5.0V.
3) Voltage at CP5 should then be +5.0 ± .1V (Rev input + check)
4) Connect ammeter between TB-6 and 0V
5) With CP5 at 5V current should be 1 mA for R5 CW and 0.33 mA for R5 CCW 900 µA
6) Connect ammeter between TB-4 and 0V
7) Current should be-1mA for R2 CW and-0.33 mA for R2 CCW

ROUTE

Prepared By	Section and Unit
H. Keyzers	IC 910
Date Issued	Supersedes Issue Dated
30 Aug 78	New

SIGNATURES REQUIRED AS SHOWN →

	Type Names	Signatures
Prod. Engineering	J.T. Strong	
Manuf. Eng.	J. Iegros	25/09/78
Quality Control	H. Marksfield	
Engg. Lab		

1222-DM

e) Absolute value op-amp and relay driver connect TB2 to TB5

1) Connect 620 ohm resistor between TB-8 and 0V or jig
2) Connect CP5 to CP6
3) Adjust voltage at TB-1 to 0V
4) Voltage at TB-8 should be P15 ≈ 12V +12.7V
5) Increase voltage at TB-1 until TB-8 is 0V (I/P or -12V+)
6) Voltage at CP6 should be > +1V. 9V
7) Decrease voltage at TB-1 to 0V and TB-8 should go to P15V again ≈ 12V

[redacted]

f) Reference Clamp

INTERACT
1) Connect TB-21 & TB-22 to 0V
2) Adjust R11 for 0V ± .1 mV at CP19
3) Adjust R12 for 0V ± .1 mV at CP23 Repeat 2+3 till 0 ± .1mV
4) Connect TB-22 to -10.000V. Leave TB-21 at 0V
5) Note: In the following test it is imperative that that same meter is used on the same scale and the same input lead configuration.
   a) Connect DVM (−) of meter to TB-18 (0V)
   b) " DVM (+) " " " TB-22
   c) Note this reading -10V
   d) Connect DVM (−) of meter to TB-18 (0V)
   e) " DVM (+) " " " CP-19
   f) Adjust R13 to read 10.000V (+ 1mV) ADJ TO READ AS C
   g) Connect DVM (+) of meter to CP23
   h) " DVM (−) " " " TB18 (0V)
   i) Adjust R14 to read 0V ± 1mV

g) Measure resistance from:

CP20 to CP23	@ 10K ohm	
CP20 " TB20	@ 15K [redacted]	RH1 CW
CP20 " TB20	@ 65K [redacted]	RH1 CCW
CP20 " CP18	@ 165K	RH1 CCW

6. SEALING

The following pots are to be sealed
R3, R4, R9, R10, R11, R12, R13, R14

ROUTE