TITLE
PROCESS INSTRUCTIONS FOR TESTING THE BYPASS VALVE TEST AMPLIFIER CIRCUIT BOARD
FIRST MADE FOR DRAWING 945D829G1

REVISIO

SCOPE

This process instruction provides a method for performing a functional check with the necessary adjustments for the subject circuit board prior to installation in the EHC cabinet. The circuit board should not require re-adjustment when it is installed in the EHC cabinet.

G5

TEST PROCEDURE

(1) Examine the circuit board to see that the electrical components and printed circuits are not physically damaged.

(2) Measure the resistance between pin 41 and pins 28, 29, 30, 31, 32, 33, 34, 35, and 36. Each should measure between ~~147K~~ and ~~153K~~ ohms. ±10 167.3K 170.7K

(3) Plug circuit board 945D829G1 into the test fixture.

(4) Use an ohmmeter to check that there are no short circuits between any combination of pins 17, 19, 21, 38, and 40.

(5) Connect pins 28 29, 30, 31, 32, 33, 34, 35, and 36 10 to ~~signal ground~~, pin 19. Load each valve 3.33K to com.

(6) ~~Connect a 30K ohm resistor between pins 28 and 19.~~

(7) ~~Connect a SPST switch, S1, between pins 28 and 19.~~

(8) Connect a SPST switch, S2, between pins 1 and 15.

(9) Connect a SPST switch, S3, between pins 18 and 20.

(10) Connect the input of a high gain d-c operational amplifier to pin 25 and the output to pin 37.

(11) Connect a well regulated plus (+) 30.0 volt d-c power supply to pins 17 and 38. The negative voltage terminal should be connected to pin 19.

(12) Connect a well regulated minus (-) 22.0 volt d-c power supply to pins 21 and 40. The positive voltage should be connected to pin 19.

(13) All voltage measurements will be made with respect to testpoint TP11.

TPC

273-1
273-2
273-1
273-1
273-1
R
PRINTS

Plate FL-1 Fuse

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(14) Place S1, S2, and S3 in the open position.

(15) Turn R20 to the full clockwise position.

(16) Adjust R21 for -1.0 volts at TP4. Wait until the voltage at TP4 stabilizes before further adjustment of R21.

(17) Adjust R20 for +1.0 volts at TP2.

(18) Adjust R19 for -2.0 volts at TP1.

(19) Close S2. The voltage at TP4 should increase linearly with time. Clock the time required to increase from 0.00 to +5.0 volts.

(20) Open S2. The voltage at TP4 should decrease linearly with time. Clock the time required to decrease from +5.0 to 0.00 volts.

(21) Repeat steps 19 and 20. Adjusting R19 for increasing voltages and R20 for decreasing voltages, until both of the times are between 10.0 and 10.5 seconds. An adjustment of R20 may require a readjustment of R19.

(22) Close switches S1 and S3.

(23) Adjust R22 for -0.75 volts at TP4.

(24) Remove all test equipment.

(25) Remove the circuit board from the test fixture and identify it with a suitable mark to indicate that it has been tested and adjusted in accordance with this instruction.

PREPARED BY: P E malone DATE: march 27, 1968

P. E. MALONE
Turbine Control Engineering

APPROVED BY: L.H. Johnson DATE: March 27, 1968

L. H. JOHNSON, SUPERVISOR
Turbine Control Engineering

FL
FL4
FBC
273-7
273-2
273-12
273-13
273-13
R
PRINTS