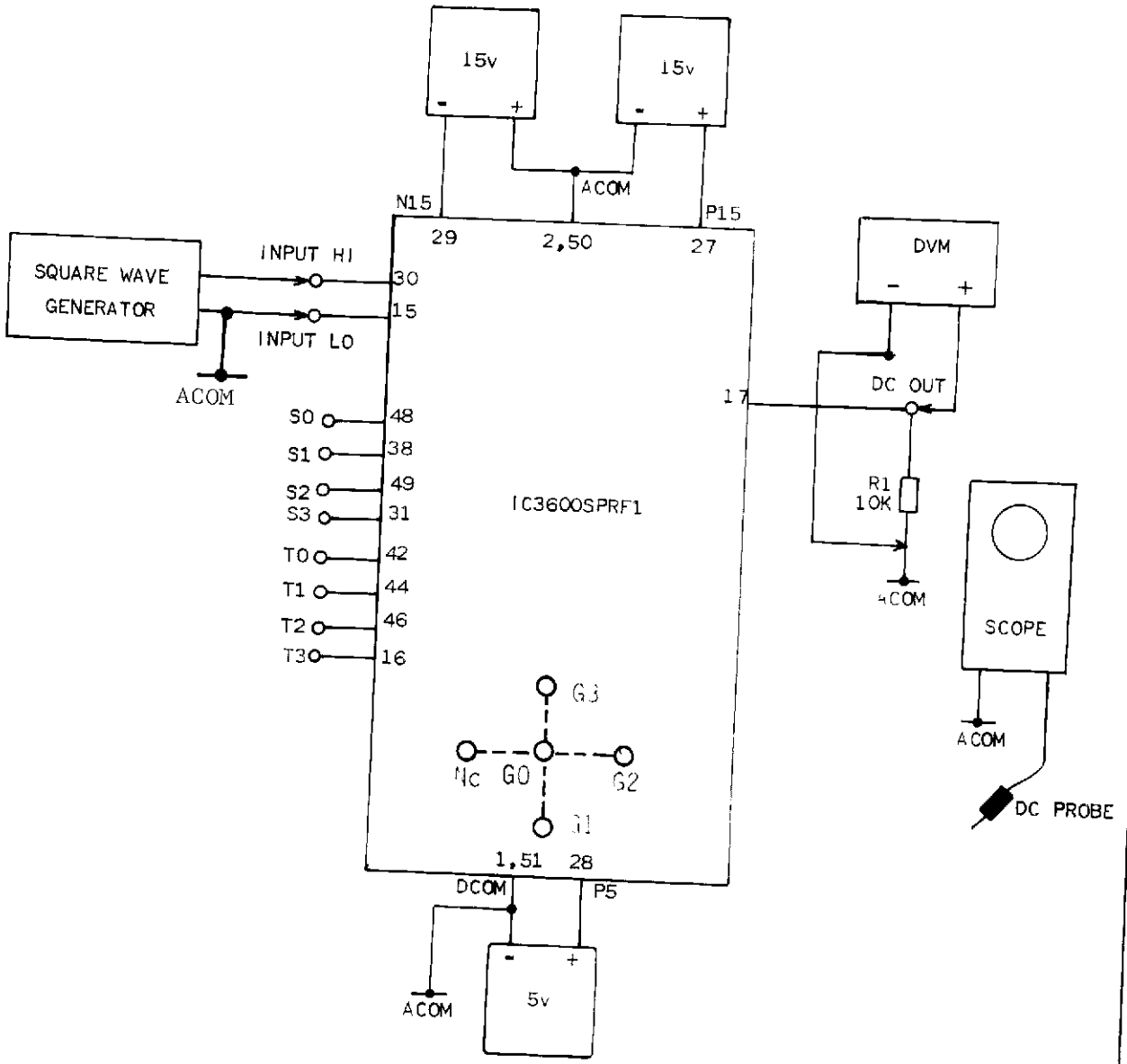
GENERAL ELECTRIC

REV NO.	TITLE	259A3552
259A3552	TEST INSTRUCTIONS PULSE RATE TO ANALOG	CONT ON SHEET 2 SH NO. 1
CONT ON SHEET 2 SH NO. 1	FIRST MADE FOR IC3600SPRF1	

A. TEST SET-UP



REVISIONS

Revi Tes 2/14/77
BU938XF

2. CGL 5/17/77
3. BU945UR JVG 780424

DL42

PRINTS TO

MADE BY	APPROVALS		259A3552
DANNY WRIGHT	D.O.M.	DRIVE SYSTEMS (DIV OR DEPT.)	CONT ON SHEET 2 SH NO. 1
ISSUED 11-26-75		SALEM, VIRGINIA (LOCATION)	CODE IDENT NO.

FF-803 WF (5-74)
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REV NO.

259A3552
CONT ON SHEET 3 SH NO. 2

TITLE

TEST INSTRUCTIONS
PULSE RATE TO ANALOG

FIRST MADE FOR IC3600SPRF1

REVISIONS

Rev. 1 JES 2/19/77 BU938XF

REV. 2 8/17/77 CGL

REV. 3 BU945UR JVC 780424

B. EQUIPMENT LIST

1. DIGITAL VOLTMETER 0.01% FREQUENCY
2. SCOPE
3. SQUARE WAVE/SINEWAVE GENERATOR
4. ±15v 100MA 1/2% REG POWER SUPPLY
5. +5v 500MA 5% REG POWER SUPPLY
6. RESISTOR 10K 1/2W 68A7000 OR EQUIV.
7. DIGITAL COUNTER .001% ACCURACY

C. VISUAL CHECKS

1. CHECK FOR LOOSE, BROKEN, OR MISSING COMPONENTS.
2. CHECK FOR BENT COMPONENT LEADS TOUCHING GROUND RUNS, TRANSISTOR CASES, ETC.
3. CHECK THAT CRYSTAL Y1 IS 2.300MHZ AND THAT C2, C15 AND C16 ARE OF PROPER VALUE.

D. XTAL CLOCK

1. CONNECT THE SCOPE AND DIGITAL COUNTER TO TP2 (37).
2. APPLY POWER AND OBSERVE A RELATIVELY "NOISE-FREE" TTL (≈5v) LEVEL PULSE TRAIN. MEASURE THE FREQUENCY AS 2.300 ± .000230MHZ on the digital counter.

E. INPUT SIGNAL CONDITIONER

1. CONNECT SQUARE WAVE GENERATOR AS SHOWN IN TEST SET UP AND CONNECT THE SCOPE TO TP1 (32).
2. APPLY A 100HZ 2V PK TO PK SQUARE WAVE AT THE INPUT AND OBSERVE A TTL (≈5v) LEVEL SIGNAL AT TP1 OF THE IDENTICAL FREQUENCY AND DUTY-CYCLE.
3. REPEAT STEP 2 WITH 18KHZ 2V PK TO PK SQUARE WAVE APPLIED AT THE INPUT.

F. PPPWG

1. STRAP T3(16), T2(46), T1(44), T0(42), S3(31), S2(49), S1(38), S0(48) TO DCOM AND APPLY A 2KHZ 2V PK TO PK SQUARE WAVE AT THE INPUT AND CONNECT THE SCOPE TO TP3 (41)
2. OBSERVE A TTL (≈5v) LEVEL PULSE TRAIN WITH A 2KHZ REPITITION RATE AND A PULSE WIDTH (NEG. PULSE) OF 444 ±44μSEC. (REMOVE STRAPS)
3. STRAP T1(44) AND T0(42) TO DCOM AND REPEAT STEP 2. REPITITION RATE SHOULD BE UNCHANGED BUT THE PULSE WIDTH (NEG. PULSE) SHOULD BE 194 ± 20μSEC. (REMOVE STRAPS)
4. STRAP T0(42) AND S0(48) TO DCOM AND REPEAT STEP 2. SAME REPITITION RATE. PULSE WIDTH (NEG. PULSE) SHOULD BE 250 ± 30μSEC. (REMOVE STRAPS)
5. STRAP T2(46), S1(38), S0(48) TO DCOM AND REPEAT STEP 2. SAME REPITITION RATE. PULSE WIDTH (NEG. PULSE) SHOULD BE 83 ± 8 μSEC. (REMOVE STRAPS)
6. REMOVE SQUARE WAVE SIGNAL FROM INPUT, STRAP AS IN STEP 1.

G. PRECISION AVERAGER

1. CONNECT THE DIGITAL VOLTMETER TO THE DC OUT(17) TERMINAL AS SHOWN IN THE TEST SET-UP.
2. WITH NO INPUT SIGNAL APPLIED, POTENTIOMETER R34 SHOULD BE ABLE TO ADJUST THE OUTPUT VOLTAGE ABOVE AND BELOW ZERO VOLTS BY AT LEAST 5MV.
3. ADJUST R34 FOR DC OUT OF 0v ± .1MV.

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G. PRECISION AVERAGER (CONTINUED)

4. RE-APPLY THE 2KHZ 2V PK TO PK SQUARE WAVE AT THE INPUT.
5. Strap G0 to G1, G2 or G3 to obtain a DC out voltage as close as POSSIBLE TO -10 VOLTS. G0-G3 are on card jumpers
6. ADJUST POTENTIOMET R31 TO FINE TUNE DC OUT TO -10v ± 1MV.

END OF TEST.

CGL 8/17/77

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