GENERAL ELECTRIC

QUALITY STANDING INSTRUCTION

SPEED VARIATOR PRODUCTS OPERATION

2866

TITLE REGULATOR / BUFFER
193X566AAG01

REVISION
0

1.0 APPLICABLE DOCUMENTS

Elementary Diagram - 36D871030AA
Material List - 193X566AAG01

2.0 EQUIPMENT

SAMS II Test Stand
566 Patch
Special Fixture

3.0 PROCEDURE

Preset instruments per set-up sheets

4.0 TEST PROCEDURE

Proceed with SAMS II Test.

2/2/84

See Lee for DRAWINGS.

Low USAGE CARD. DRAWINGS NOT Re-LEASED

5024T/az

*Change or Addition

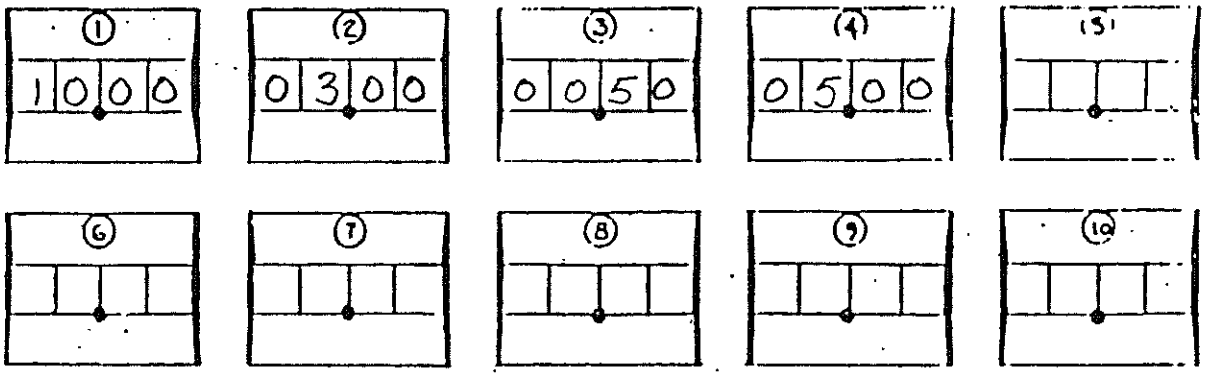
PREP/
L. S.
9/29/...

SV-100 (3-79)

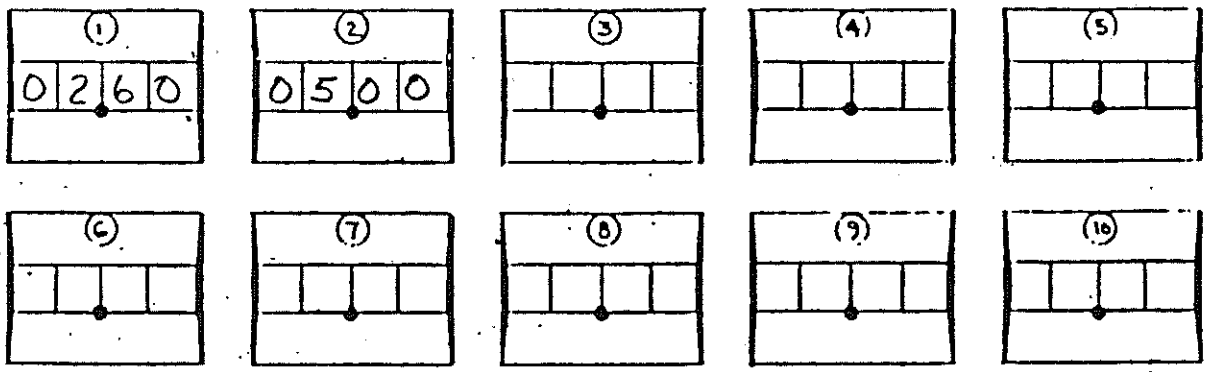
THUMBWHEEL SET-UP

SAMS-2

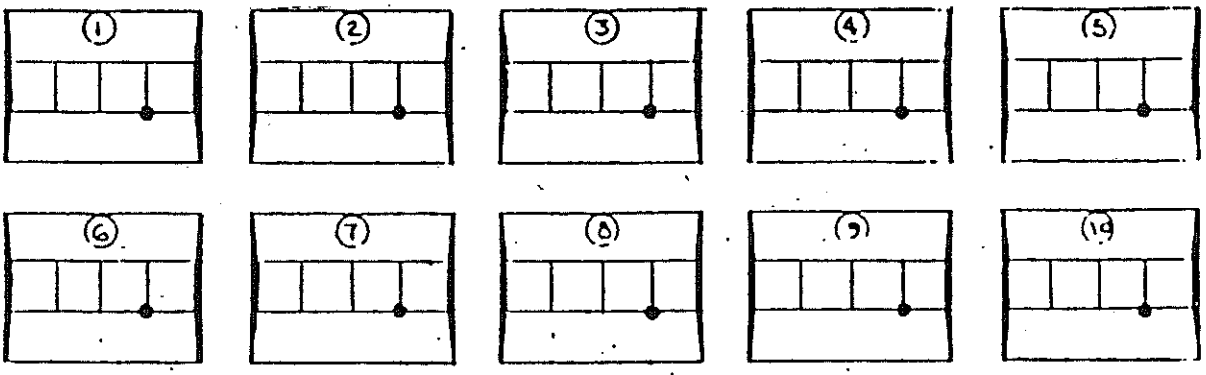
PS1



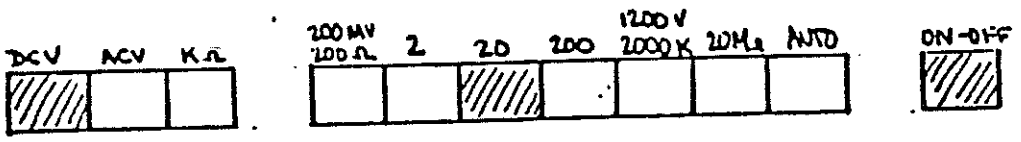
PS2



PS3



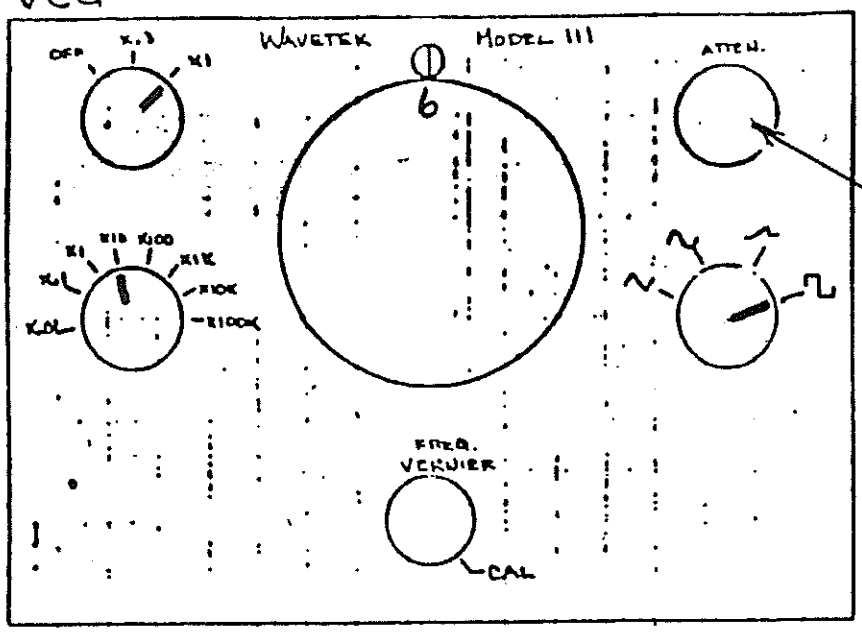
FLUKE 8800A



INSTRUMENT SET-UP

SAMS-8

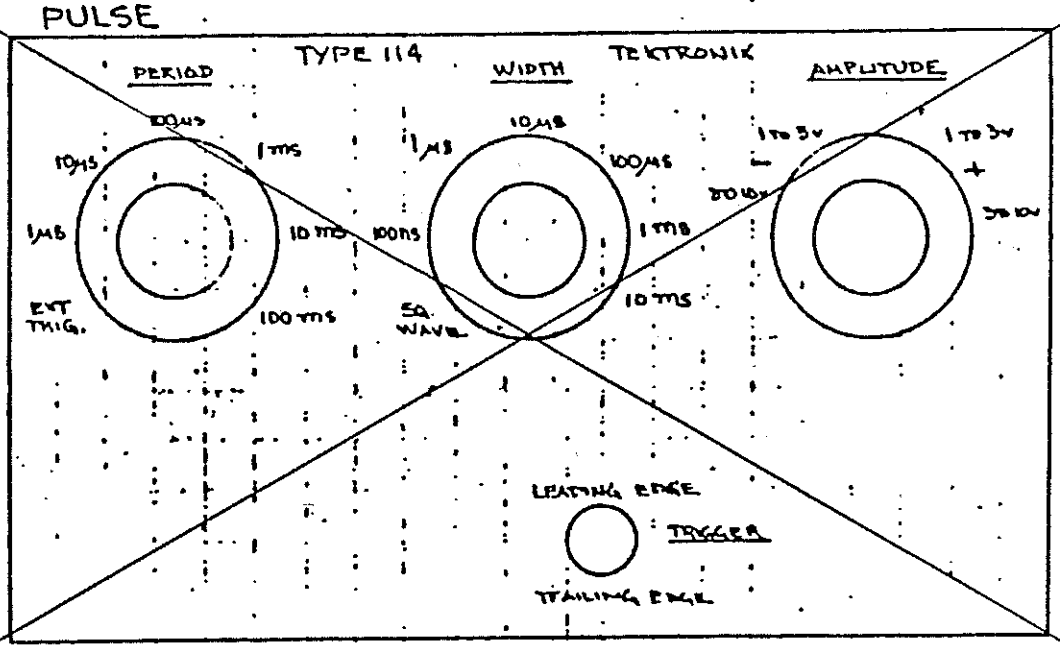
VCG



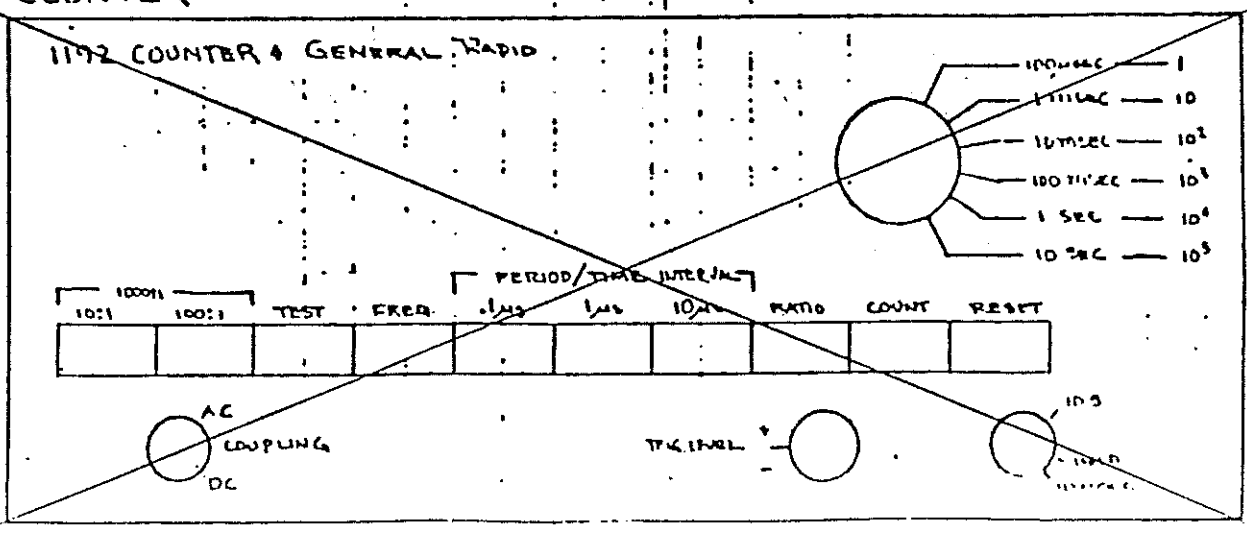
10V P.P.
STEP 1-1

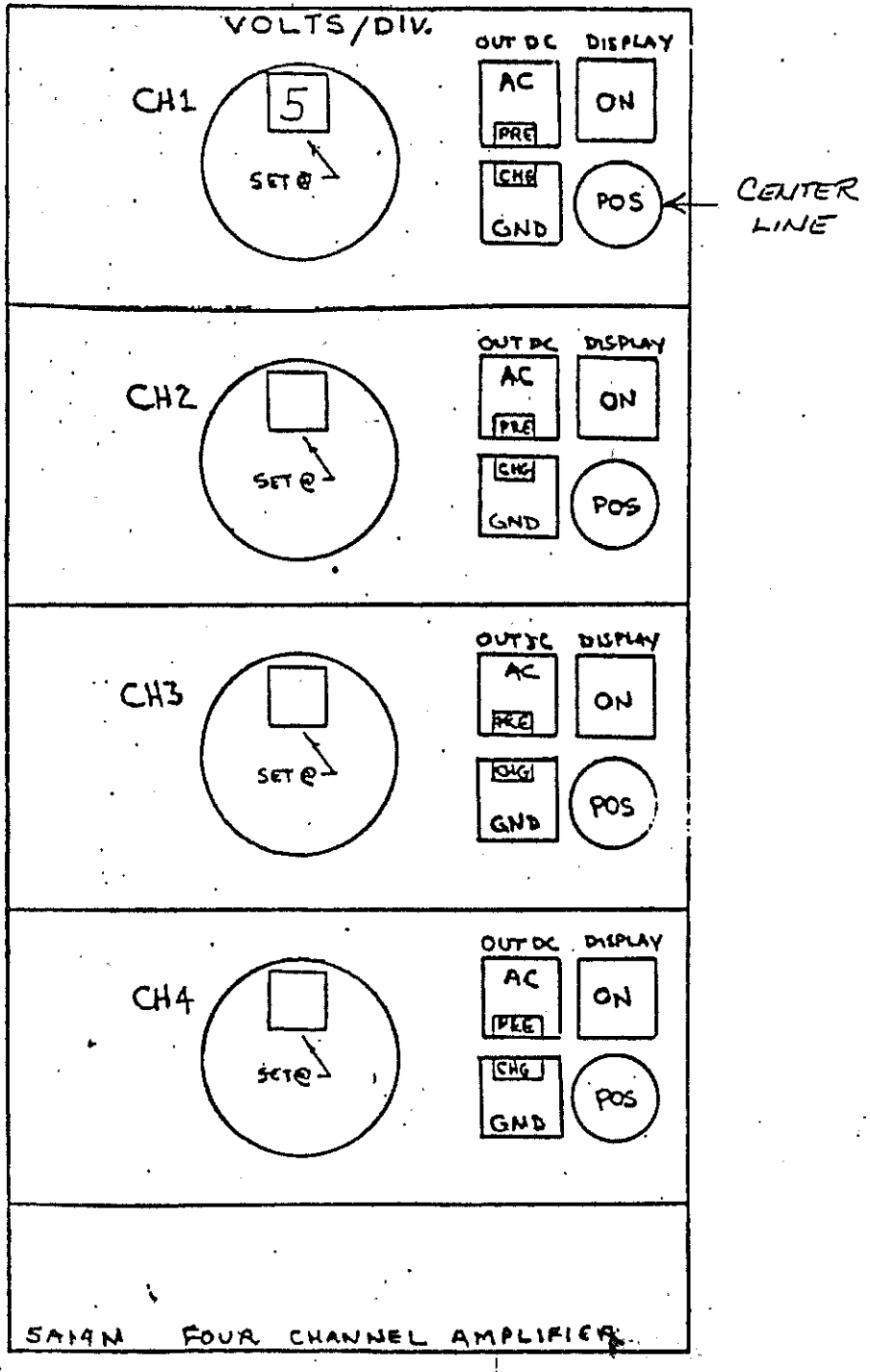
QSI 2866
REV^d 0
PAGE 4 OF 15

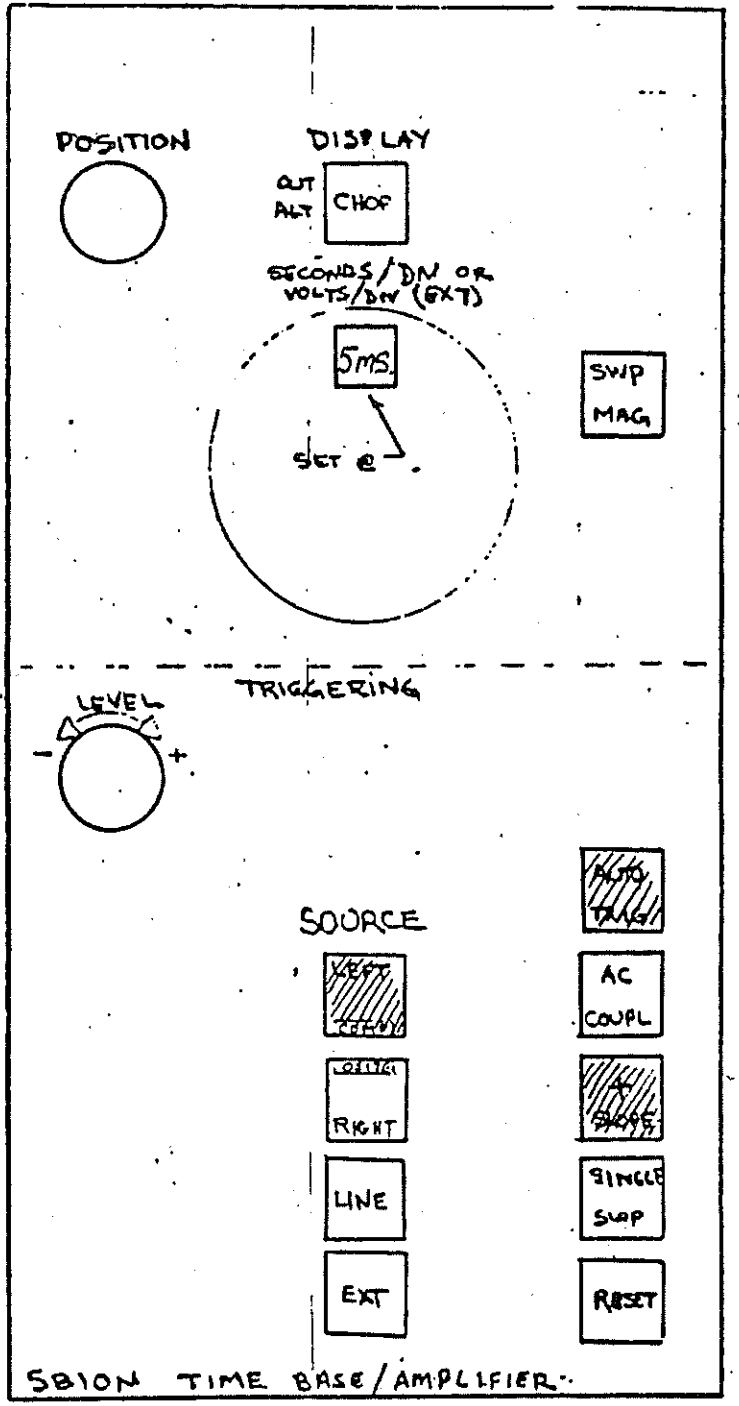
PULSE



COUNTER







SCOPE SET UP.

QSI # 2846
REV # 8
PAGE 2 OF 15

GENERAL ELECTRIC

QUALITY STANDING INSTRUCTION

SPEED VARIATOR PRODUCTS OPERATION

QSI NUMBER 2866

TITLE REGULATOR / BUFFER
193X566AAG01

REVISION 0

1.0 APPLICABLE DOCUMENTS

Elementary Diagram - 36D871030AA
Material List - 193X566AAG01

2.0 EQUIPMENT

SAMS II Test Stand
566 Patch
Special Fixture

3.0 PROCEDURE

Preset instruments per set-up sheets

4.0 TEST PROCEDURE

Proceed with SAMS II Test.

2/2/84

See Lee for DRAWINGS.

Low USAGE CARD. DRAWINGS NOT Re-Leased

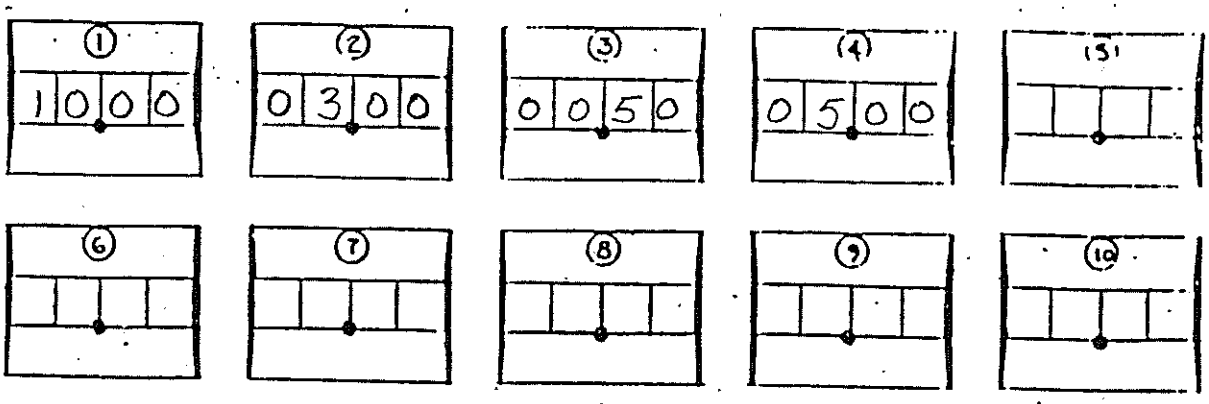
5024T/az

*Change or Addition

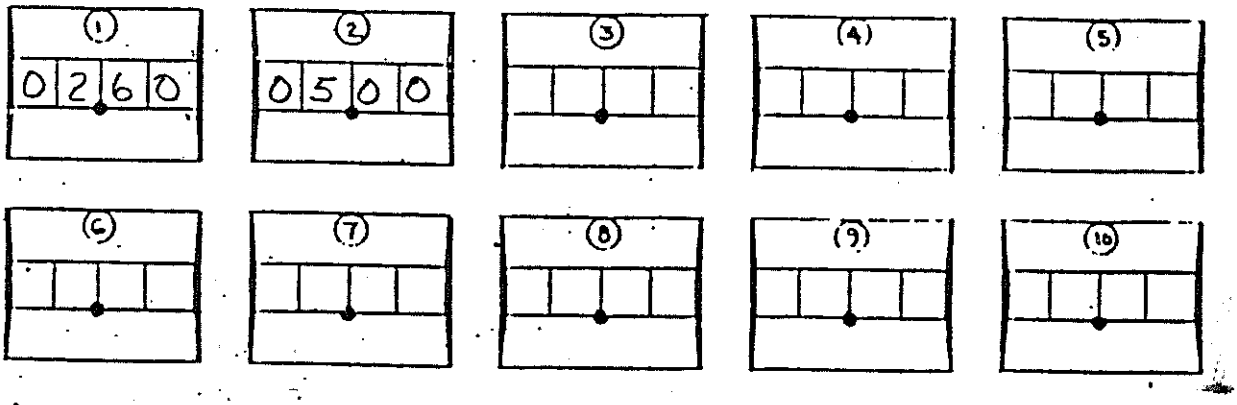
PREPAR
L. Silv
9/29/83

SAMS-2

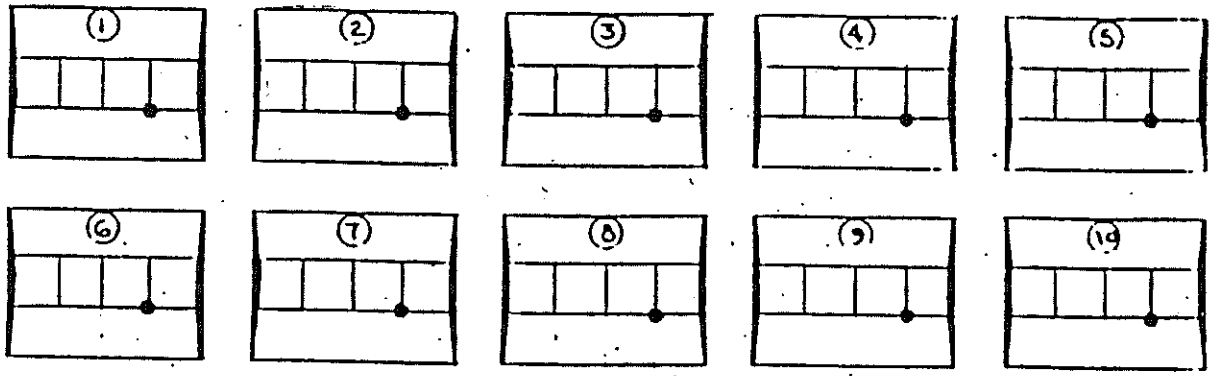
PS1

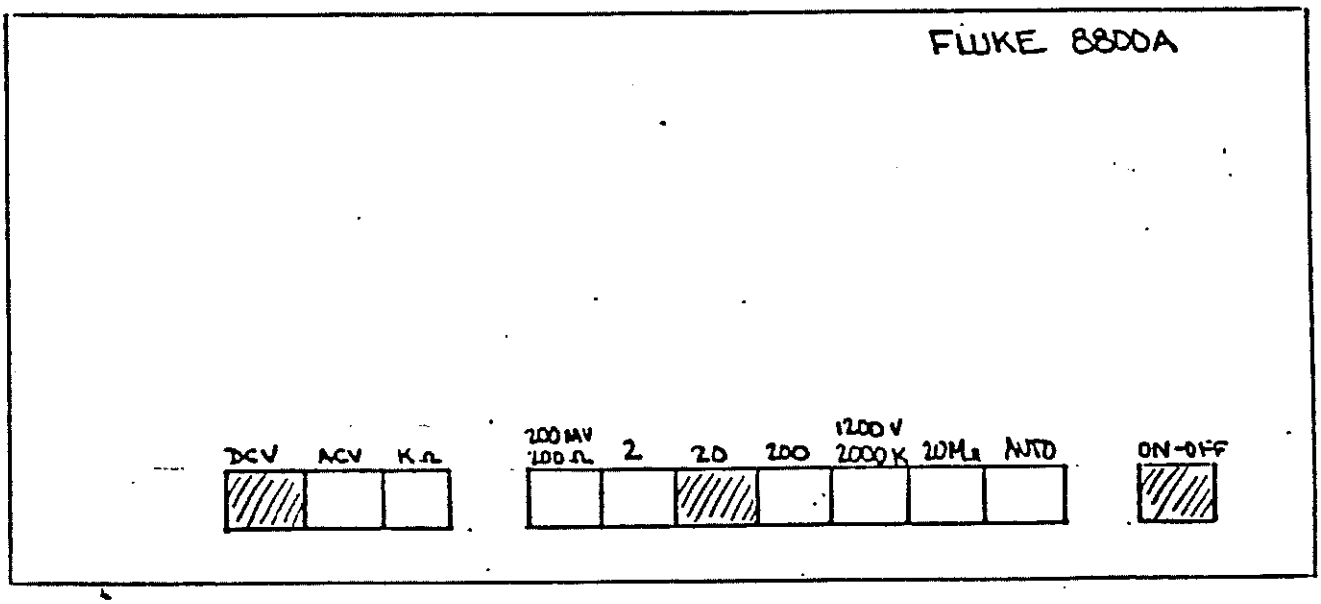


PS2



PS3



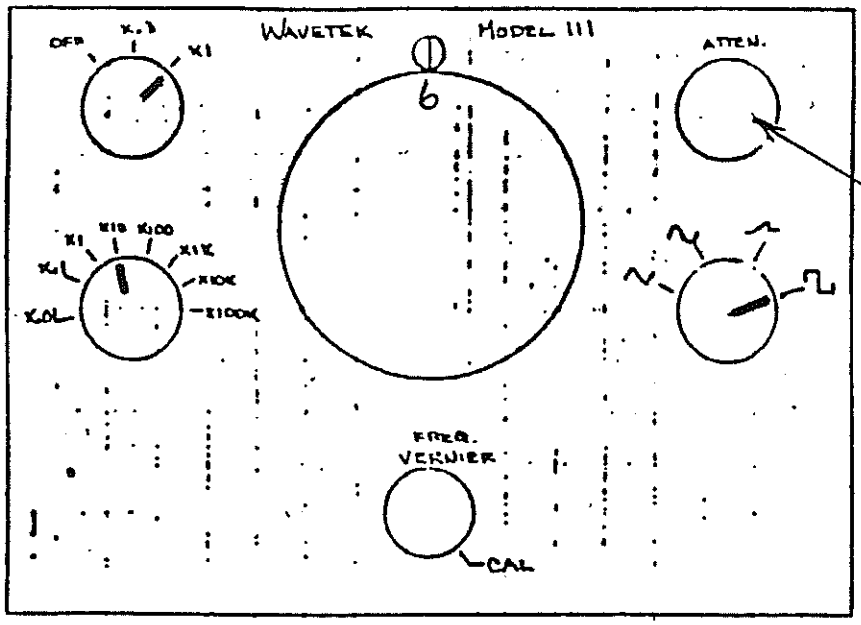

FLUKE 88DDA
DCV
ACV
K Ω
200 MV 100 Ω
2
20
200
1200 V 2000 K
20MΩ
AUTO
ON-OFF

INSTRUMENT SET-UP

SAMS-1

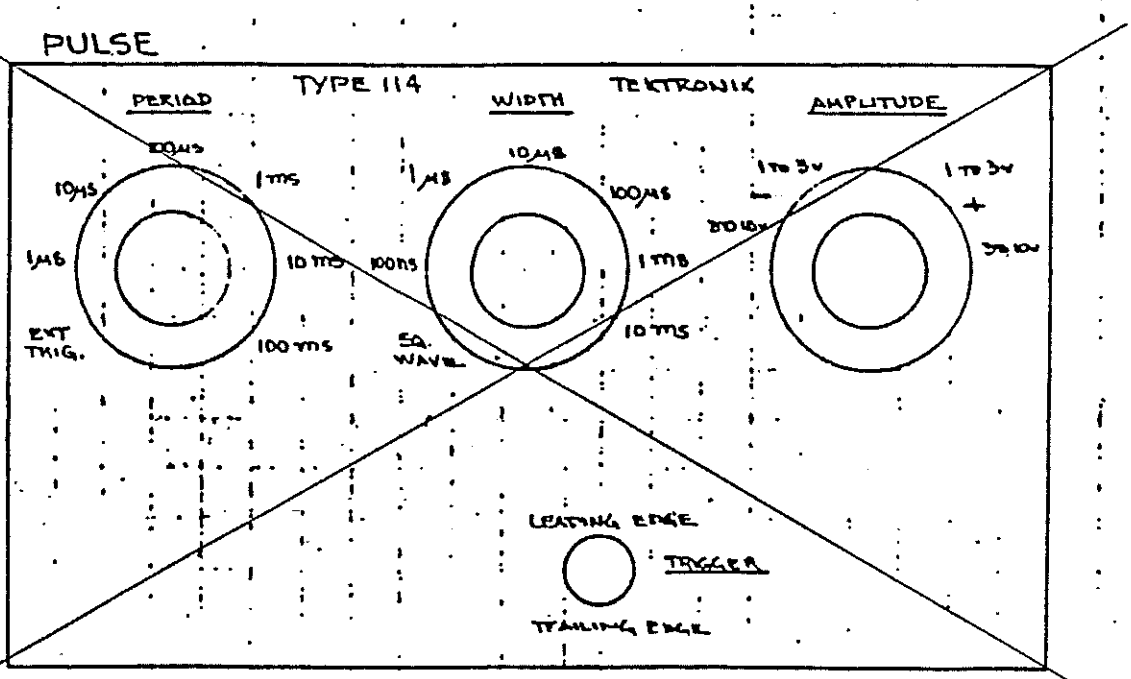
QSI 2866
REV d 0
PAGE 4 OF 15

VCG

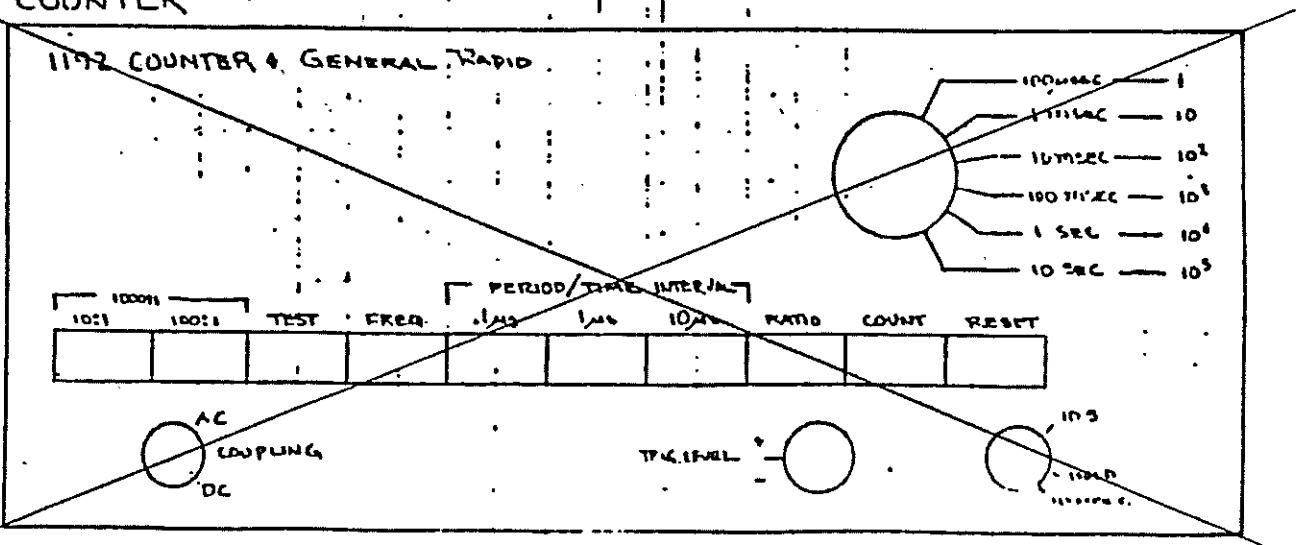


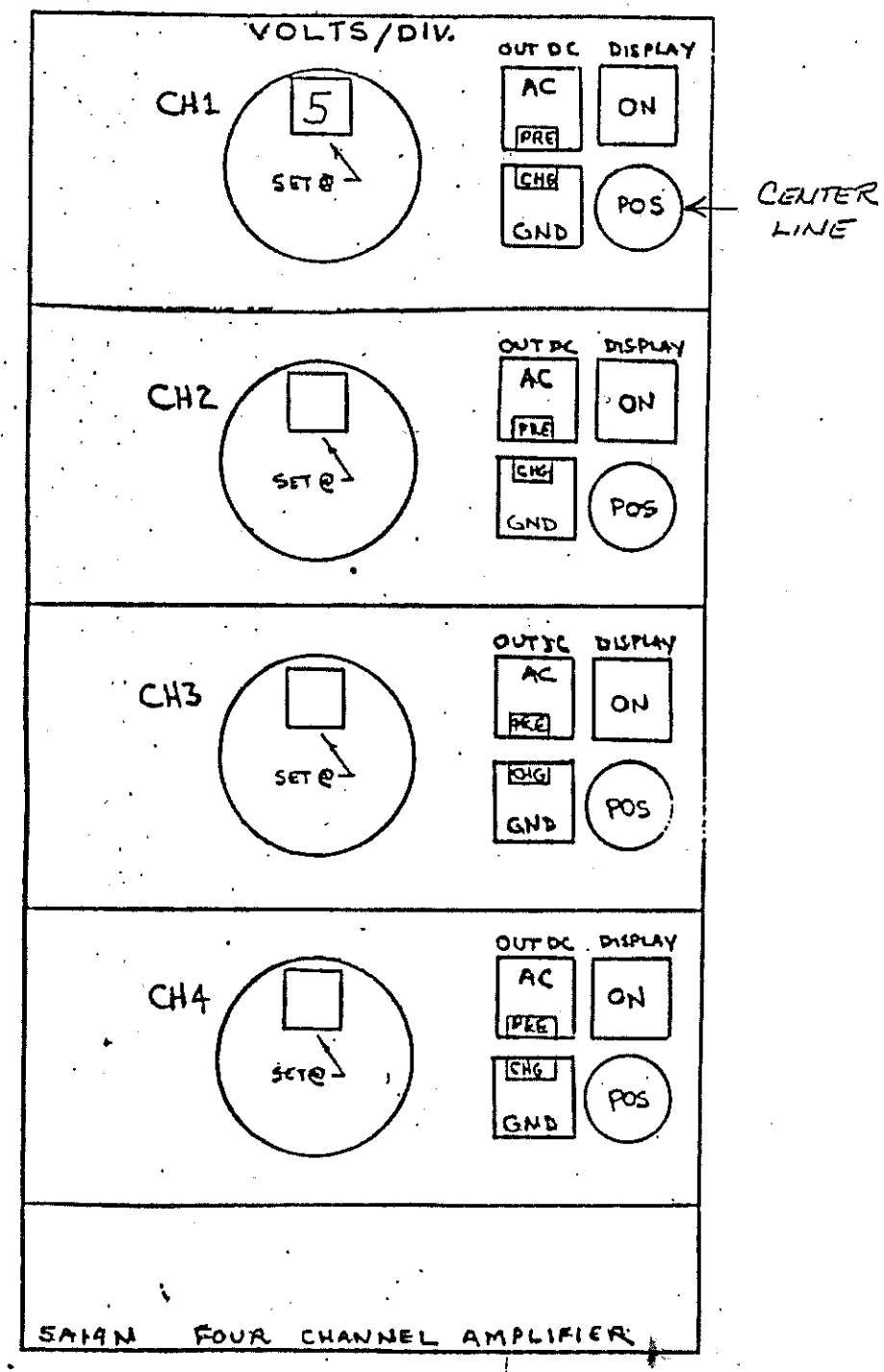
10V P.P.
STEP 1-1

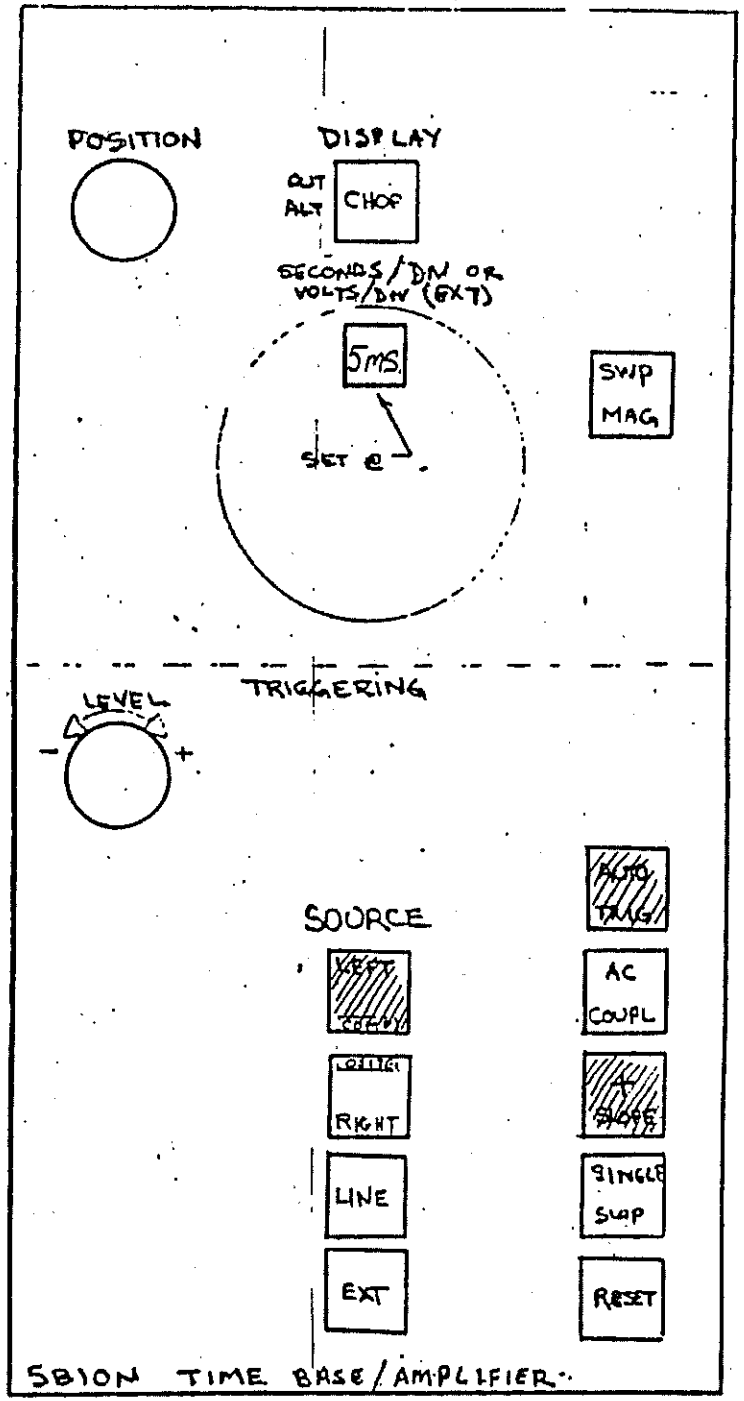
PULSE



COUNTER







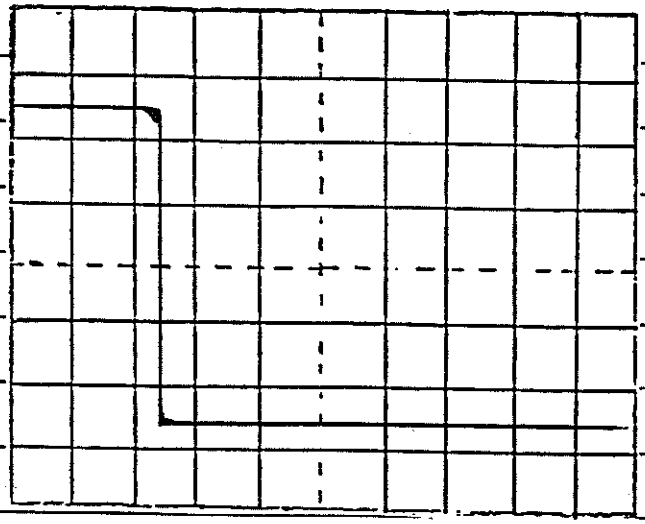
SCOPE SET UP.

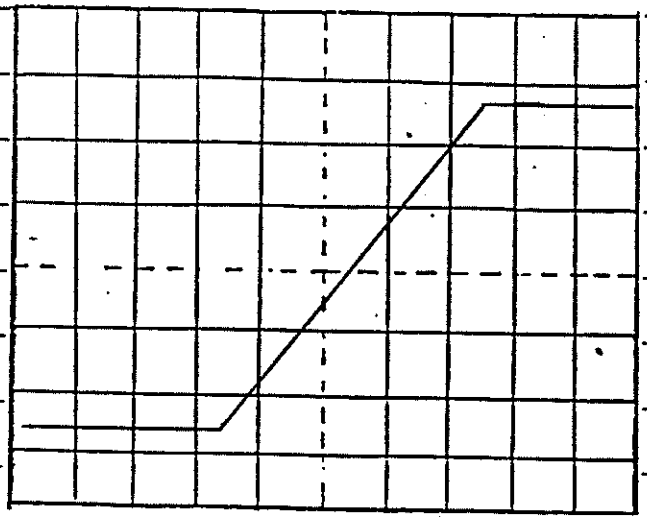
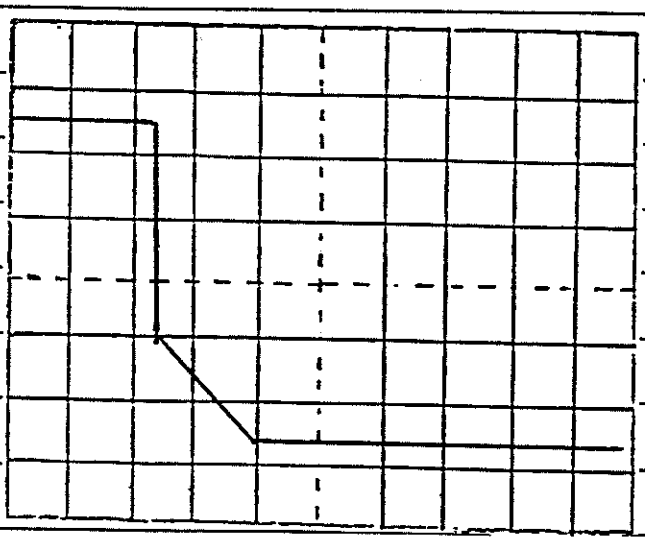
QSI # 2846
REV B
PAGE 2 OF 15

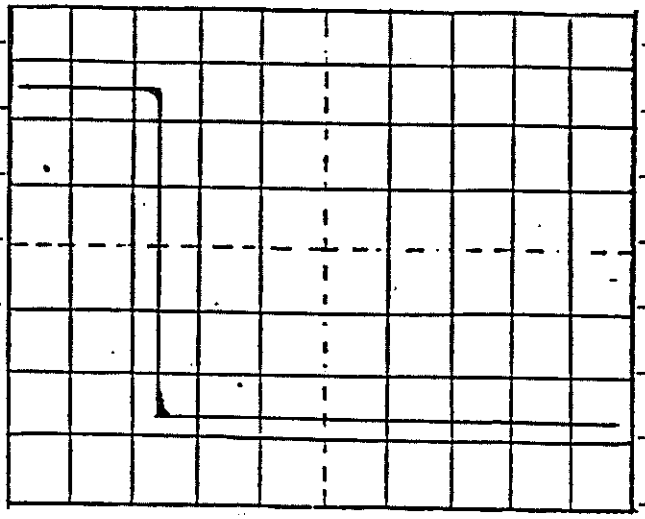
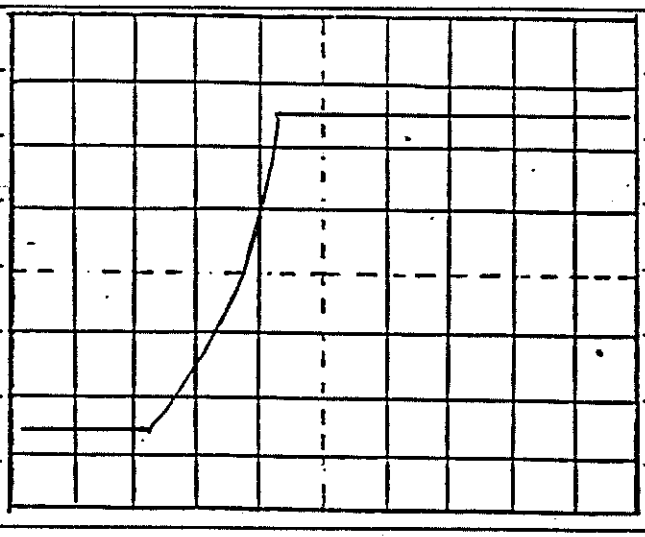
ST	SCAN	OTHER	RESULT	LOC.
			Remove all jumpers	
			All card switches OFF	
			All pots full CW	
1	1	Adj Wavetek	Scope 10V P.P.	
	2		DVM (+9.9) (+10.1)	CFBX
		TS1	DVM (-9.9) (-10.1)	
	3		DVM (-9.9) (-10.1)	SP4X
		TS2	DVM (+9.9) (+10.1)	
	4		DVM (+9.9) (+10.1)	SP3X
		TS1	DVM (-9.9) (-10.1)	
	5		DVM (-9.9) (-10.1)	DRX1
		TS2	DVM (+9.9) (+10.1)	
		SW1-3 "ON"	DVM (0)	
		SW1-3 "OFF"	DVM (+9.9) (+10.1)	
	6		DVM (+9.9) (+10.1)	SP1X
		TS1	(-9.9) (-10.1)	
	7		DVM (-9.9) (-10.1)	SPX2
		TS2	DVM (+9.9) (+10.1)	
	8		DVM (+9.9) (+10.1)	TRX

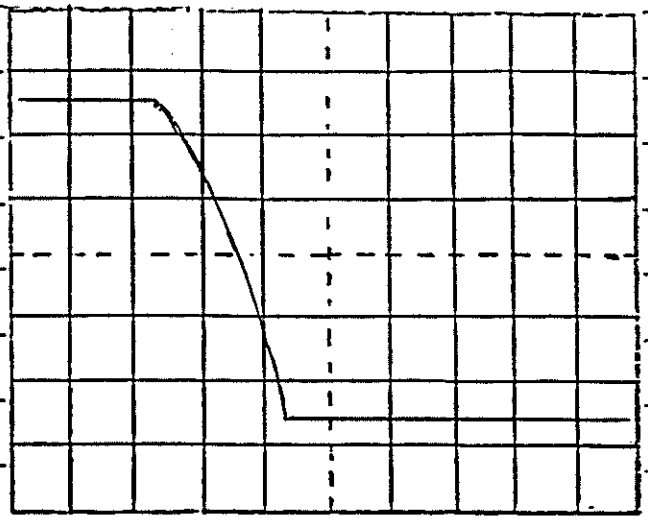
ST	SCAN	OTHER	RESULT	LOC.
		TS1	DVM (-9.9) (-10.1)	
	9		DVM (-9.9) (-10.1)	SFBX
		TS2	DVM (+9.9) (+10.1)	
	10		DVM (+9.9) (+10.1)	VFBX
		TS1	DVM (-9.9) (-10.1)	
	11		DVM (-9.9) (-10.1)	PREX
		TS2	DVM (+9.9) (+10.1)	
	12		DVM (+9.9) (+10.1)	CEMFX
		TS1	DVM (-9.9) (-10.1)	
		TS2		
2	13	SW 2-3 "ON"	DVM (+0) (-.8)	IXT
	14		DVM (0)	TOC
		Note:	Timing will start with Step 3	
3			DVM > (+12) within (32) (38) SEC	TOC
	15		DVM > (+12)	SYS
		SW2-3 "OFF"	DVM (0)	SYS
4	16	SW1-1 "ON"	DVM (+ - .1)	DR2
5			DVM (+9.4) (+9.8)	DR2
		TS1	DVM (-9.4) (-9.8)	DR2
		TS2		

TEST	SCAN	OTHER	RESULT	LOC.
		P5 Full CCW		
		P6 Full CCW		
6	17		Scope no pulses	CR1
		P5 Full CW	Scope > 26V P.P.	
7			Scope 10V P.P.	
		SW2-1 "ON"	Scope positive half of waveform clipped	
		SW2-1 "OFF"		
8	18		Scope no pulses	VL1
		P6 Full CW	Scope > 26V P.P.	
9			Scope 10V P.P.	
		SW2-2 "ON"	Scope negative half of waveform clipped	
		SW2-2 "OFF"		
10	19	SW1-2 "ON"	DVM (0)	VL1
11			DVM (0)	
12			DVM (-.96) (-1.1)	

TST	SCAN	OTHER	RESULT	LOC.
13			DVM (+5.1) (~~+5.5~~) +.68 +.75 JB 10-9-83	
		TS1	DVM (-5.1) (~~-5.5~~) -.68 -.75	
		SW 1-2 "OFF"	DVM (+.1) (-.1)	
			TS1 Note: Toggle ~~TS1~~ and 2 when scope beam is at left of screen.	
		Scope .1 Sec Div Store ON		
14	20		DVM (-2.45) (-2.55)	RJR2
		Erase		
	TS2			CR1
		P2 full CCW Erase		

TEST	SCAN OTHER	RESULT	LOC.
	TS1		CR1
	P1 Full CCW Erase		
	TS2		CR1
21		DVM (+4.9) (+5.1)	EAOX

ST	SCAN	OTHER	RESULT	LOC.
		Erase		
		TS1		VL1
			DVM (-4.9) (-5.1)	EAOX
		P4 Full CCW Erase		
		TS2		VL1

_ST	SCAN OTHER	RESULT	LOC.
	P3 Full CCW Erase		
	TS1		
			VL1
		End of Test Serialize Test and Date Stamp	
		Scope 5 MS. Store Off	

566
SCOPE OF TEST

Test	Scan	
1	1	Scan 1 monitors Wavetek
	2	Set-up
	3	+ - 10V is applied to CFB, SP4
	4	and SP3 and DVM monitors CFBX, SP4X, and SP3X.
	5	+ - 10V is applied to SP2
	6	SP1, DR and TR and DVM
	7	monitors SP2X, SP1X, DRX1 and TRX.
	8	SW1-3 shorts out supply. Output through a resistor.
	9	+ - 10V is applied to SFB,
	10	VFB, PRE and CEMF and DVM
	11	monitors SFBX, VFBX, PREX
	12	and CEMFX.
2	13	Applies -2.6V to IABS and DVM monitors IXT.
	14	DVM monitors TOC to insure with a -2.6V input at IABS TOC is Ø.
3		DVM monitors TOC to insure with a -5V input at IABS TOC saturates positive within 32 to 38 seconds.
	15	DVM monitors sys with SW 2-3 open and closed.
4	16	Applies +20 to DPI and OV to EAO. SW1-1 is closed. DVM monitors DR2 for entire regulator offset.
5		Applies 3V to EAO a DVM monitors the gain at DR2.
6	17	Applies Wavetek to EAO and +20 to DP2 and removes +20 from DP1 causing open loop gains by opening T2 and 3. Scope CH1 monitors CR1 clamped by current limit circuitry. With P5 CCW CR1 is checked again for minimum clamping.
7		Applies -20 to DFPX closing T2 and scope monitors CR1 SW 2-1 is closed and opened to observe positive clipping of scope waveform.
8	18	Removes -20 from DFPX. Scope CH1 monitors VL1 clamped by volt limit circuitry. With P6 CCW VL1 is checked again for minimum clamping.
9		Applies -20 to DFPX closing T3 and scope monitors VL1. SW 2-2 is closed and opened to observe negative clipping of scope waveform.
10	19	Applies Ø V to EAO and .5VDC to CFB with SW 1-2 on. T1 is closed by +20 at DP2. DVM monitors VL1.

566
SCOPE OF TEST

Test	Scan	
11		Remove +20 from DP2 and applies +20 to DP1. DVM monitors VL1.
12		Applies .5VDC to XCB. DVM monitors VL1.
13		Remove +20 from DP1 and apply .5VDC to CFB. DVM monitors VL1. SW 1-2 is checked open and closed.
14	20	Removes -20 from DFPX. Applies +5V to EA0, +20 to DP2 and shorts CRA to CRB and VRA to VRB. No test. Scope CH1 monitors CR1 and DVM monitors RJR2.
	21	Scope CH1 monitors VL1 and DVM monitors EA0X.

_ST STEP SWITCHES ENERGIZED

1	SI0	SIL	PSI	(1)	TS1 TS2	PICKS UP S6 DROPS OUT S6		COM	+20	-20	
2						PS2	(1)				
3						PS2	(2)				
4	S1	S12									
5	S1	S7				PS1	(2)				
6	S2	S8									
7	S2	S3	S8								
8	S2	S8									
9	S2	S3	S8								
10	S2	S3	S10	S12		PS1	(3)				
11	S1	S3	S10	S12		PS1	(3)				
12	S1	S3	S9	S12		PS1	(3)				
13	S3	S10	S12			PS1	(3)				
14	S2	S4	S5	S7		PS1	(4)				
15											
16											
17											
18											
19											
20											
21											
22											
23											