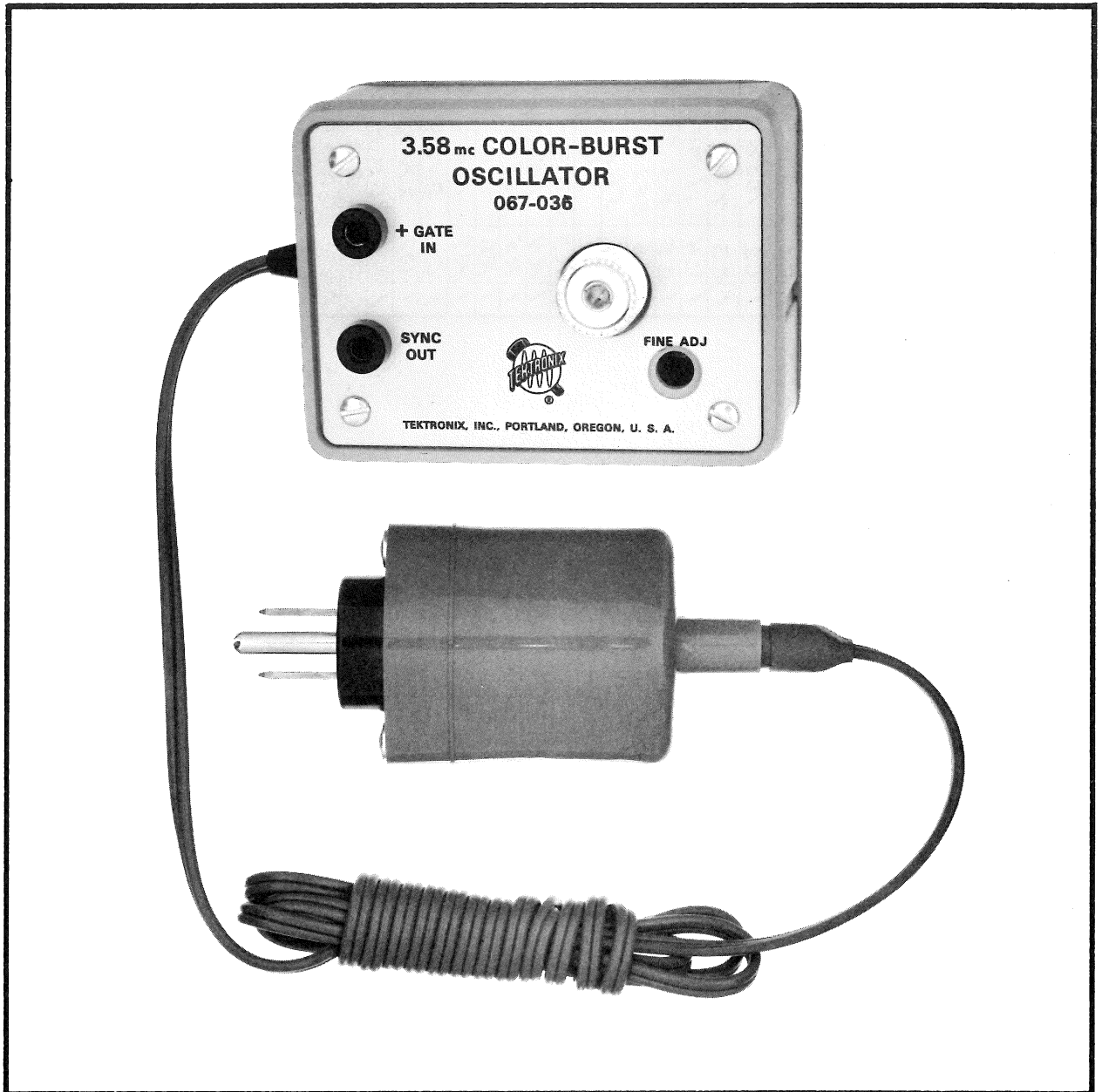
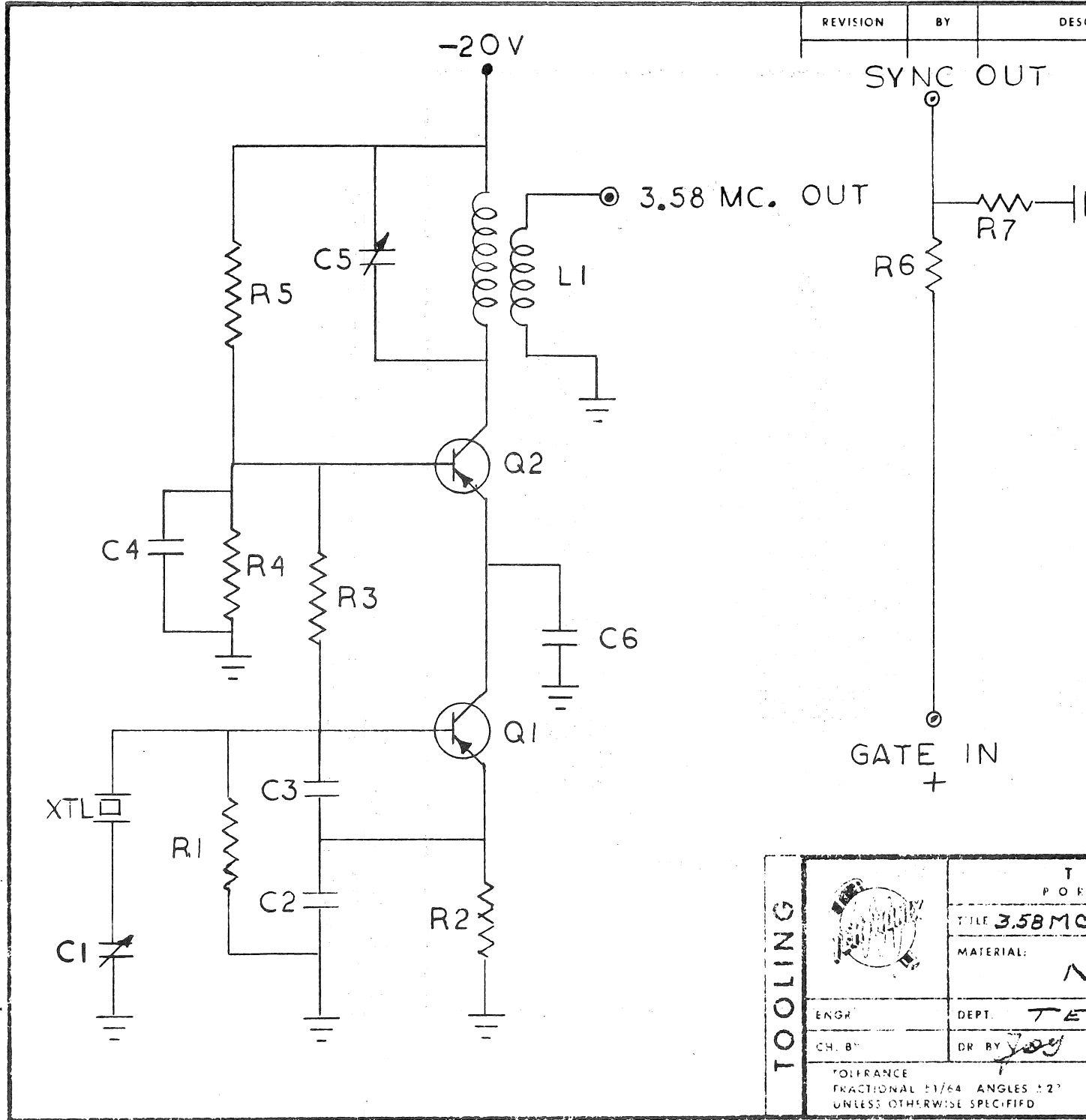


067-0036-00  
COLOR BURST OSCILLATOR



Provides continuous 3.58 MHz signal for checking proper functioning of burst controlled oscillator in Type 526 in absence of color TV signal. Uses power supply designed for current probe, 015-0027-00.

2  
9-17-65  
TEK  
Cal Fixtures RB  
Vol. 2



PARTS LIST	
1	XTL 3.579545 MC
1	C1 7-45 PF
1	C2 1000 PF
1	C3 470 PF
1	C4 .1 MFD-10V
1	C5 4.5-25 PF
1	C6 SELECTED (.0047 NOM)
1	R1 56K-1/4W-10%
1	R2 1K-1/4W-10%
1	R3 33K-1/4W-10%
1	R4 1K-1/2W-10%
1	R5 4.7K-1/2W-10%
1	R6 10.K-1/2W-10%
1	R7 1.K-1/2W-10%
1	Q1 2N962
1	Q2 2N2207
1	L1 80MH W/6T WIRE
POWER SUPPLY	
1	015-027
1	161-020
1	358-103

TOOLING	TEKTRONIX, INC. PORTLAND, OREGON, U.S.A.		
	TITLE 3.58MC CRYSTAL OSCILLATOR		
	MATERIAL: C067-036		
	NOTED		
ENGR	DEPT. TEST	TYPE 526	
CH. B	DR BY Joy	SCALE	DATE 12-10-64
TOLERANCE FRACTIONAL 1/64 ANGLES .2° UNLESS OTHERWISE SPECIFIED		PART NO. 067-036	DWG. NO. 1068-A

POWER SUPPLY

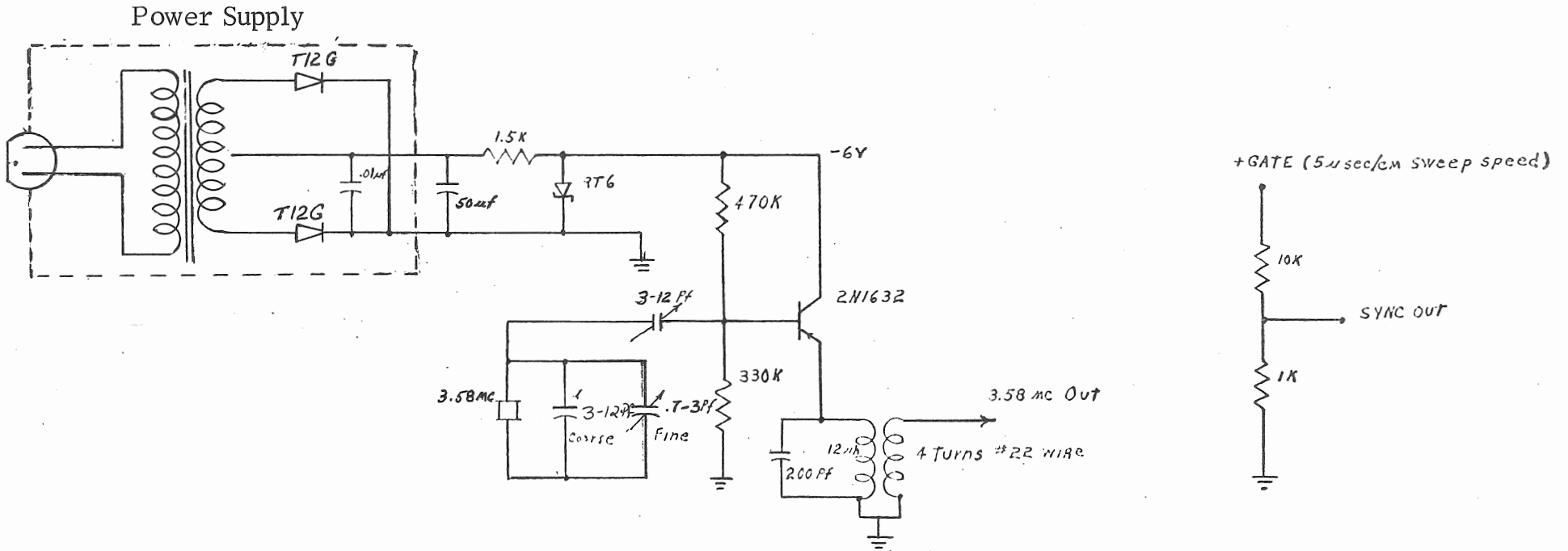
1 ea 015-027 P. S.

1 ea 161-020 Cord

1 ea 358-103 Strain relief

EARLY MODEL

(Had no identifying number)



**3.58 MC CRYSTAL OSCILLATOR  
FOR CALIBRATING TYPE 526**



067-0036-00

3.58 MC CRYSTAL OSCILLATOR ADJUSTMENT (Early Model)

INSTRUCTIONS:

- ( ) 1. Connect a composite color signal from a Conrac TV Tuner or other similar source to the Channel A Input of the Type 526.
- ( ) 2. Terminate the remaining end of the Channel A Input loop in 75  $\Omega$ .
- ( ) 3. Connect the 3.58 MC Oscillator Output to the 3.58 MC Subcarrier Input of the Type 526.
- ( ) 4. Terminate the remaining end of the 3.58 MC Subcarrier Input in 75  $\Omega$ .
- ( ) 5. Switch Subcarrier Selector to External CW position.
- ( ) 6. Switch Display Selector to Test Circle Oscillator Off position.
- ( ) 7. Switch Input Selector to Channel A and adjust Channel A Gain for a normal display.
- ( ) 8. Adjust the 3.58 MC Crystal Oscillator "Freq. Adj." (use a non-metallic adjustment tool) for a null in a single rotating vector.

Note: Normally, the 3.58 MC Crystal Oscillator will not drift more than  $\pm 10$  cycles in an 8 hour period. To insure greatest accuracy, the oscillator should be checked against a composite color burst signal each day it is used. Failure to terminate unused input loops can cause oscillator frequency change of  $\pm 5$  cycles or more.

LINE SWEEP OPERATION

- ( ) 1. Connect the +Gate Output of any 500 Series scope (5  $\mu$ sec/cm sweep speed) to the +Gate Input of the 3.58 MC Crystal Oscillator.
- ( ) 2. Connect the Sync Pulse Output of the oscillator to the Ext. Sync Input of the Type 526 and switch Sync Selector switch to External.
- ( ) 3. Switch Display Selector to Line Sweep.

BF  
5/4/62

PROCEDURE FOR ADJUSTING OR CHECKING THE INTERNAL BURST CONTROLLED  
OSCILLATOR IN THE TYPE 526 IN THE ABSENCE OF A COLOR PROGRAM

Equipment Required

Composite Video (black and white) Signal  
Test Scope (533/543)  
CA Plug-in  
3.58 mc Crystal Oscillator (early model)  
X10 Probes (2 ea)

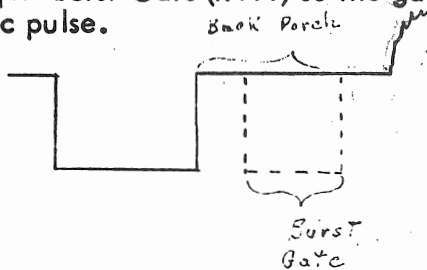
Setup

- Apply video signal (black and white) to the ChA INPUTS of the 526 and the CA plug-in.
- Externally trigger the test scope (-AC EXT) through a X10 probe from pin 1 of V494.
- Connect Ch.B of CA through a X10 probe to pin 1 of V494.
- Set controls as follows:

V/CM Ch A	--	0.2
Ch B	--	0.5
TIME/CM	--	0.2msec
MAGNIFIER	--	X100
SYNC SELECTOR (526)	--	INTERNAL
INPUT SELECTOR (526)	--	ChA

Adjustment

- Adjust Burst Gate (R411) so the gate occurs midway of the back porch on the horizontal sync pulse.



- Remove the composite video and connect the output of the 3.58 mc Crystal Oscillator to the SUBCARRIER INPUT and to the ChA INPUT (both inputs unterminated).
- Set the SUBCARRIER SELECTOR switch to INTERNAL-BURST CONTROLLED OSCILLATOR, and the DISPLAY SELECTOR switch to VECTOR DISPLAY. Set A GAIN to maximum and adjust the amplitude of the 3.58 mc Crystal Oscillator for a normal vector. (The display may or may not be 'locked in' depending on the degree of misadjustment of the Subcarrier Regenerator circuit).
- Short the wiper arm of the DC Bal pot to ground and adjust L145 to obtain near lock-in of the burst vector. Remove the short.
- Short pin 7 of V150 to ground and adjust DC Bal pot for zero volts at its center arm.
- Short pin 2 of V134 to ground and adjust T152 for lock-in of the vector. Switch SUBCARRIER SELECTOR to FREE RUNNING OSC and back and readjust T152 for lock-in.
- Recheck Step h (steps k and h interact).
- Short pin 7 of V150 to ground and adjust T132 and L102 for maximum amplitude (use test scope) at pin 7 of V142. Vector should lock-in when short is removed.
- Switch SUBCARRIER SELECTOR from INT BURST CONTROLLED OSC to FREE RUNNING OSC and back. Vector should lock-in.

NOTE: The accuracy of the Subcarrier Regenerator adjustments can be determined by the speed with which the oscillator locks-in on a burst sample when SUBCARRIER SELECTOR is switched from the FREERUN to the INT BURST CONTROLLED OSC position.

BF  
1/14/64