

3.58 MC OSCILLATOR CALIBRATION PROCEDUREEQUIPMENT REQUIRED:

Test Scope with plug-in. (Good to 15MC)
75 Ω coax, approximately 3 feet long.
75 Ω Termination.
Known 3.58MC trigger signal. (Counter can be used if available)

PROCEDURE:A. ADJUSTING OUTPUT AMPLITUDE.

Connect output of the Oscillator to the input of the test scope thru the 75 Ω cable and terminated in 75 Ω 's at the input.

Adjust C5 (C5 can only be reached when top cover of Oscillator is removed) for approximately 1.5 volts of 3.58 out. The value of C6 is selected for nominal drive for Q2 and may have to be changed if Q1 or the or the crystal is changed. This is due to the difference in Beta or crystal activity. A short clip lead should be used between the cover and any one of the cover studs for this adjustment.

B. FREQUENCY ADJUSTMENT.

Replace the cover on the Oscillator and secure the four corner screws.

If a Frequency counter is available, connect the output of the Oscillator to the counter and adjust the Oscillator as close to 3.579545MC as possible by adjusting the "Fine Adjust" cap. (C1) on the top cover.

C. A known 3.58MC signal can be used in place of the frequency counter by the following method:

Trigger the test scope on the known 3.58MC signal and connect the output of the Oscillator to the input of the test scope. Due to the difference in the known 3.58 and the Oscillator output, the presentation will appear to free-run. Adjust the "Fine Adjust" (C1) on the front cover of the Oscillator for the most stable display that can be obtained.

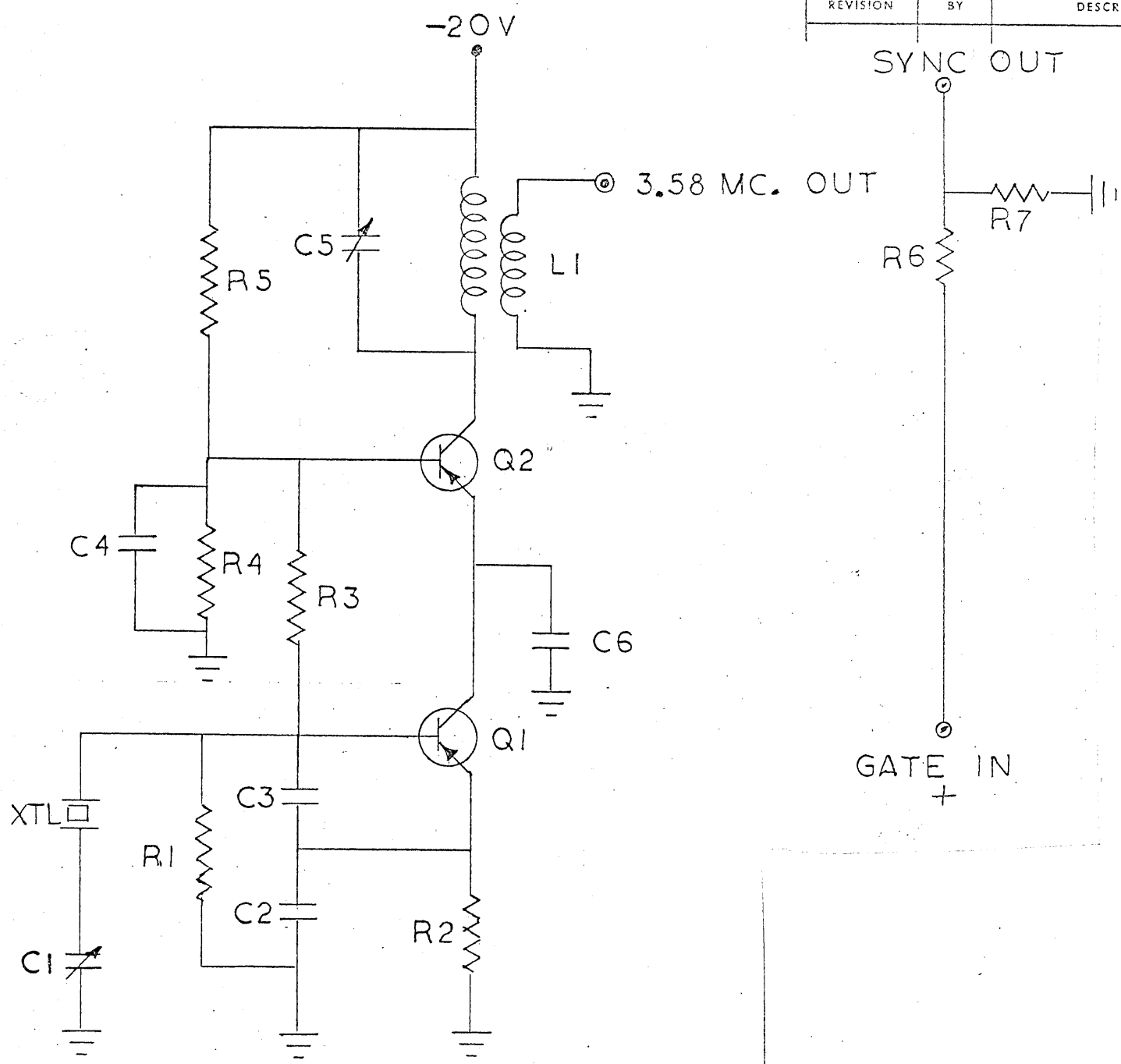
The frequency should be checked by either of the above methods as often as possible to assure the best accuracy.

067-0036-00

3.58 MC Crystal Oscillator

Part Number	Quan.	Description	
	1	Chassis	Dwg. #1130-B
	1	Casting, front	Dwg. #1129-B
	1	Casting, rear	Dwg. #1128-B
	1	Panel, front	Dwg. #1141-B, Film #2648
108-0237-00	1	Coil, 80µh	(Loc. 76)
124-0148-00	2	Strip, ceramic, 7 notch	
131-0049-00	2	Connector, CRT	
131-0051-00	1	Connector, UHF	
136-0138-00	2	Socket, banana jack, black	
151-0063-00	1	Transistor, 2N2207	
151-0089-00	1	Transistor, 2N962	
158-0017-00	1	Crystal, 3.58MC	
161-0020-00	1	Cord, pwr	
162-0543-00	2	Thermofit, #14 1/2"	
175-0068-00	1	Cable, coax 50Ω 4 1/2"	
175-0529-00	1	Wire, #26 solid 9-N 6"	
175-0529-00	2	Wire, #26 solid 9-N 1 1/2"	
200-0076-00	1	Cover, banana plug	
210-0202-00	1	Lug, solder SE #6	
210-0204-00	2	Lug, solder DE #6	
210-0223-00	2	Lug, solder, 1/4"	
210-0586-00	4	Nut, #4 keps	
210-0465-00	2	Nut, hex 1/4-32 x 3/8	
210-0802-00	1	Washer, steel, #6	
210-0895-00	2	Washer, insulating, black	
211-0008-00	6	Screw, 4-40 x 1/4 PHS	
211-0097-00	8	Screw, 4-40 x 5/16 PHS	
211-0099-00	4	Screw, 4-40 x 5/16 FHS 100°	

REVISION	BY	DESCRIPTION OF CHANGE	DATE



DO NOT SCALE DRAWING

DWG. NO.
1068-A