GENERAL ELECTRIC

REV NO. 0	TITLE SYNCHRONIZER CARD TEST INSTRUCTION	CONT ON SHEET FL SH NO. 1
224X671AC		
CONT ON SHEET FL SH NO. 1	FIRST MADE FOR 193X183ACG01	

REVISIONS

1.0 SCOPE

This instruction covers the test procedure for production testing of the 193X183ACG01 synchronizer card. Test conditions are given in Section 3.0. Performance is covered in Engineering Specification 224X327AC.

2.0 INSTRUCTIONS

2.01 Place a high-low square wave on tab 11 at 3200 Hz. Tabs 17 & 29 should be high-low square waves at 1600 Hz; tab 28 should be at 800 Hz; tab 26 should be at 400 Hz, and tab 27 should be at 200 Hz.

2.02 Tab 13 should be a triangle wave the same frequency as tab 29. Apply a voltage to tab 5. As the voltage is increased the triangle wave (tab 13) and the triangle synch (tab 17) will shift to synch with tab 28 at 3.85V (±.10V) and again with tab 26 at 6.18V (±.15V). Repeat with tabs 3 & 8 connected to tab 5. This time the shift points should be at 3.08V (±.1V) and 5.62V (±.15V) verify .10 to .20 volts hysterysis at each shift point.

2.03 With zero volts on tab 5 apply a low to tabs 24 & 25. Now apply 5V to tab 5 and note no change in T.W. freq. Pulse tab 25 high and note T.W. shift as in 2.02. Now apply 10V to tab 5. Note no change in T.W. freq. till tab 24 is pulsed high. Now decrease tab 5 to 5V and then to zero noting no T.W. change till tabs 24 & 25 are pulsed.

2.04 Note that tab 28 changes state every time tab 29 goes low. Apply a low to tabs 6 & 30 and note that now tab 28 changes state every time tab 29 goes high. Repeat with a low to tabs 9 & 30 with the same results.

2.05 With no signal applied to tab 5 vary the frequency at tab 11 from 200 Hz to 3.6K Hz. The triangle wave should synch in at half frequency over the full range.

2.06 Apply 1.44 volts to tabs 14, 20 & 22. Tabs 12, 18 & 21 should be -5.4 to -5.6 volts.

2.07 Tab 10 should oscillate between 5.4V (±.4) and -.6V (±.3V) with a 1K ohm load. The low pulses should be 5.5 to 7.5 μsec. wide with a rep. rate of 27 to 30K Hz.

3.0 TEST CONDITIONS

3.01 DC Supply Voltages:	+19.8 to 20.2V	TAB 31
	-19.9 to 20.2V	TAB 2
	4.9 to 5.1V	TAB 4
	COM	TAB 15

4.0 REQUALIFICATION

This card should be requalified by Quality Control every 18 months or every 200 production cards, whichever comes first.

5D (BW)
5E (BW)
5K (BW)
5QC (BW)
5L (BW)
5P (BW)
5R (BW)
PRINTS TO

MADE BY J.G. Tracy 8/21/73	APPROVALS EPS	SPEED VARIATOR DIV OR DEPT.	224X671AC
ISSUED E. Shoaglin 22774		Erie, Pa. LOCATION	CONT ON SHEET FL SH NO. 1