

DATASPEED TAPE-TO-TAPE SYSTEM  
TYPE 1 AND TYPE 2 TAPE SENDERS AND RECEIVERS  
TEST, ADJUSTMENT, AND TROUBLE SHOOTING GUIDE

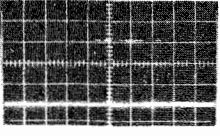
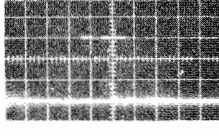
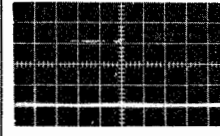
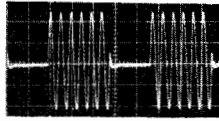
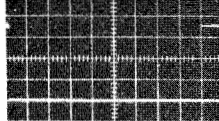
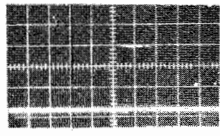
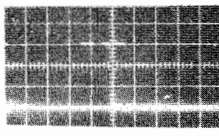
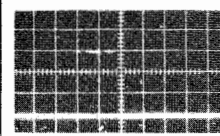

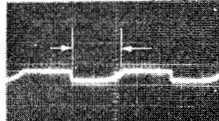
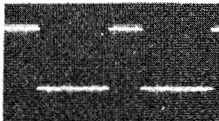

1. GENERAL

- 1.001 This addendum supplements Section 592-805-501, Issue 3. The attached page must be inserted into the section in accordance with the filing instructions above.
- 1.002 This addendum is issued to include information concerning the response time of the tape punch code and feed magnets.

Attached:  
Page 4 dated January 1965, revised

TABLE B

Tape Receivers-Electronic Tests and Adjustments

Test No.	Signal Monitor Selector Switch Setting	TRIGGER Setting for Scope	General Purpose Oscilloscope Setting		Signal Test Points in Tape Receiver		Trigger Test Points in Tape Receiver		Requirements	Adjustments	Scope Displays		
			H	V	Receiving Distributor	Signal Converter	Receiving Distributor	Signal Converter					
1	4	EXT +	100 usec/D	2 V/D	CF-2		CP-1		Receiving reversals consisting of (0, 2, 4, 6) marking adjust oscillator to 1050 cps $\pm 0.3\%$ frequency	Adjust frequency by variable inductor L1 on card CH(EC394).  Note: Due to data set jitter the adjustment should center jitter pulses around steady pulse.			
2	7	EXT +	2 msec/D	2 V/D	CH-2		CL-3		All cycles of operation equal in amplitude.	Adjust feedback resistor of oscillator R6 on card CH (EC394). Recheck Test 1.	Type 1 display shown. For Type 2 add 3 cycles to each burst.		
3	4	EXT -	100 usec/D	2 V/D	CP-1		CP-1		Proceed to Step 4 without changing scope setup.	Adjust using horizontal control on scope.			
4	4	EXT -	100 usec/D	2 V/D	CF-2		CP-1		Pulse occurs midpoint of bit.	Adjust start delay resistor R11 on card CM(EC473).			
5	6	EXT +	2 msec/D	2 V/D	CM-4 (level 1) CN-4 (level 2) CP-4 (level 3) CQ-4 (level 4) CR-4 (level 5) CS-4 (level 6) CK-4 (level 7) CL-4 (level 8)		CH-2		The tape punch motor must be on. Magnet pulsers should have respective time-outs of 4.5 + msec. Slight jitter is normal.	Adjust feedback resistor R5 on cards CM, CN, CP, CQ, and CR (EC396).  See *Note concerning response of tape punch code and feed magnets.			
6	6	EXT +	2 msec/D	2 V/D		CJ-4	CH-2		The tape punch motor must be on. Feed magnet pulser should have time-out of 5 +0.2 msec. Slight jitter is normal.	Adjust feedback resistor R5 on card CJ(EC396).  See *Note concerning response of tape punch code and feed magnets.			
7a	6	INT +	2 msec/D	2 V/D	MOD. TRD603 CN-1				Type 1 - Stop insert-er should have time-out of 2.9 msec $\pm 0.1$ msec.	Adjust resistor R11 on card CN(EC475).			
7b	4	INT +	100 usec/D	2 V/D	MOD. TRD804 CN-1				Type 2 - Time-out 950 usec $\pm 100$ usec.	Adjust resistor R11 on card CN(EC365).			

\*Note: Production tape punch units are adjusted to a standard optimum input signal of 4.5 msec with an expected operational tolerance requirement of approximately  $\pm 8\%$  margin; ie, the unit will operate through an approximate range of 4.15 to 4.85 msec without readjustment of armature gap and/or spring tension. Field applications having control equipment generating signals other than that of an optimum 4.5 msec pulse length may therefore require refinement of the magnet armature adjustments and spring tensions to provide some operating margin of the pulse length being used.