

S E R V I C E N O T E

SUPERSEDES: None

37914A Card in 37900B/C/D Signaling Test Set**Serial Numbers:** 37914A cards datecoded A3045 or below**Occasional CRC errors when using the 37914A card on DS-0 links****To Be Performed By:** Customer**Parts Required:**

121 Kohm resistor, 1/8W, Part No 0757-0467. Quantity: 2 per 37914A.

Situation

In some applications, where a 37900 is monitoring #7 signaling on a DS-0 link but is sited close to the transmitter port of the link, the 37900 may register a small % of CRC errors in the direction outgoing from the transmitter. There is no other indication that these errors exist on the link.

DDS definition of electrical signal levels:

Amplitude magnitude of transmitted signal at the output port:

zero: less than 0.7V;

one: greater than 3.0V and less than or equal to 5.5V;

The problem (not a fault of the 37900) is probably caused by certain bit patterns which occasionally cause zero “bounce”, ie the amplitude magnitude of transmitter output port exceeds +/-0.7V for a “zero”.

Continued

DATE: 09 March 1992

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:		
MODIFICATION AVAILABLE		
ACTION CATEGORY:	AGREEABLE TIME	<input type="checkbox"/> PERFORMANCE ENHANCEMENT <input type="checkbox"/> SERVICE/RELIABILITY ENHANCEMENT
LOCATION CATEGORY:	<input type="checkbox"/> CUSTOMER INSTALLABLE <input checked="" type="checkbox"/> ON-SITE <input checked="" type="checkbox"/> SERVICE CENTER	AVAILABLE UNTIL:
AUTHOR: MFK	ENTITY: 1400	ADDITIONAL INFORMATION:

The solution is to raise the threshold at which a data “1” is recognized from +/-0.8V to +/-1.0V by changing the value of 2 resistors.

Action

Caution:

When handling the 37914A assembly, take precautions against electro-static damage.

1. Switch off and disconnect the 37900 from the power outlet. Undo 2 securing screws and remove the 37914A assembly.
2. Looking down on the component side of the 37914A card, with the backplane socket on the right, locate R342 and R343. They lie within a bunch of components just to the right of center and between the edge of the card and the pair of chips U1603 and U1703 (whose identification legends are printed on the under-side of the card). The components are in 2 columns as follows:

_____	_____	U1603	_____	_____	U1703
-R340-	-R342-	-CR308-	-R344-	-CR309-	-R345-
-R341-	-R343-	_____			edge of
					card

3. Change R342 and R343 from 162 Kohms to 121 Kohms.
4. Remove the soldered datecode label on the 37914A card. In its place, write the new datecode 3206 with an indelible marker pen.
5. Re-insert the 37914A card in the rear of the 37900 and replace the securing screws.
6. Power-on. When the 37900 Main Menu appears, select self test. Run the alignment test (external connections from Port A to Port B) for each 37914A assembly as described in the Self Test and Diagnostics section of the 37900 User Manual.