

Date: **July, 1989**

Subject: **HIGH FLUTTER WHEN USING "EXT SRC" INPUT**

Model: **APR-5001/5002/5003**

Serial No: **20,201 AND HIGHER (APR-5001)**
20,201 AND HIGHER (APR-5002)
20,401 AND HIGHER (APR-5003)

DESCRIPTION

High flutter may occur when using the EXT SRC input. Flutter is caused by a slow rising edge on the output of IC7 on the CNX Board. To correct this problem, modify the CNX Board as described in the following procedure.

NOTE: This modification is only necessary when using an external capstan source input.

PARTS REQUIRED

Part No.	Description	Qty.
T-9413-636-1	IC, HCPL 2531	1
1-249-425-11	Resistor, 4.7kΩ, 1/6W, 5%	2

MODIFICATION PROCEDURE

CNX Board

1. To access the CNX Board, first remove five pop-in fasteners on rear panel (A).
2. Remove hex screws (6) located on rear panel (B).

3. Open lower rear panel by removing screws (2) located in upper left- and right-hand corners (C). (See Figure 1.)
4. Remove CNX board by first removing screws (2) holding board in place (A). (See Figure 2.)
5. Push connectors out through cutouts so CNX Board can clear lip of outer panel when being lifted out.
6. If CNX board is numbered T-9412-316-1, it will have a 5-pin resistor network (RN1) instead of discrete resistors at R80 and R81. If so, remove IC7 (HCPL-2730) and replace with HCPL-2531 (T-9413-636-1). No resistor changes are needed.
7. If CNX board is numbered T-9412-316-2 through T-9412-316-4, or 1-619-162-11, proceed with steps a and b.
 - a. Remove IC7 (HCPL-2730) and replace with HCPL-2531 (T9413-636-1).
 - b. Remove R80 and R81 (470Ω) and replace with 4.7kΩ resistors.
8. Reinstall CNX Board by repeating steps 1 and 2 in reverse order.

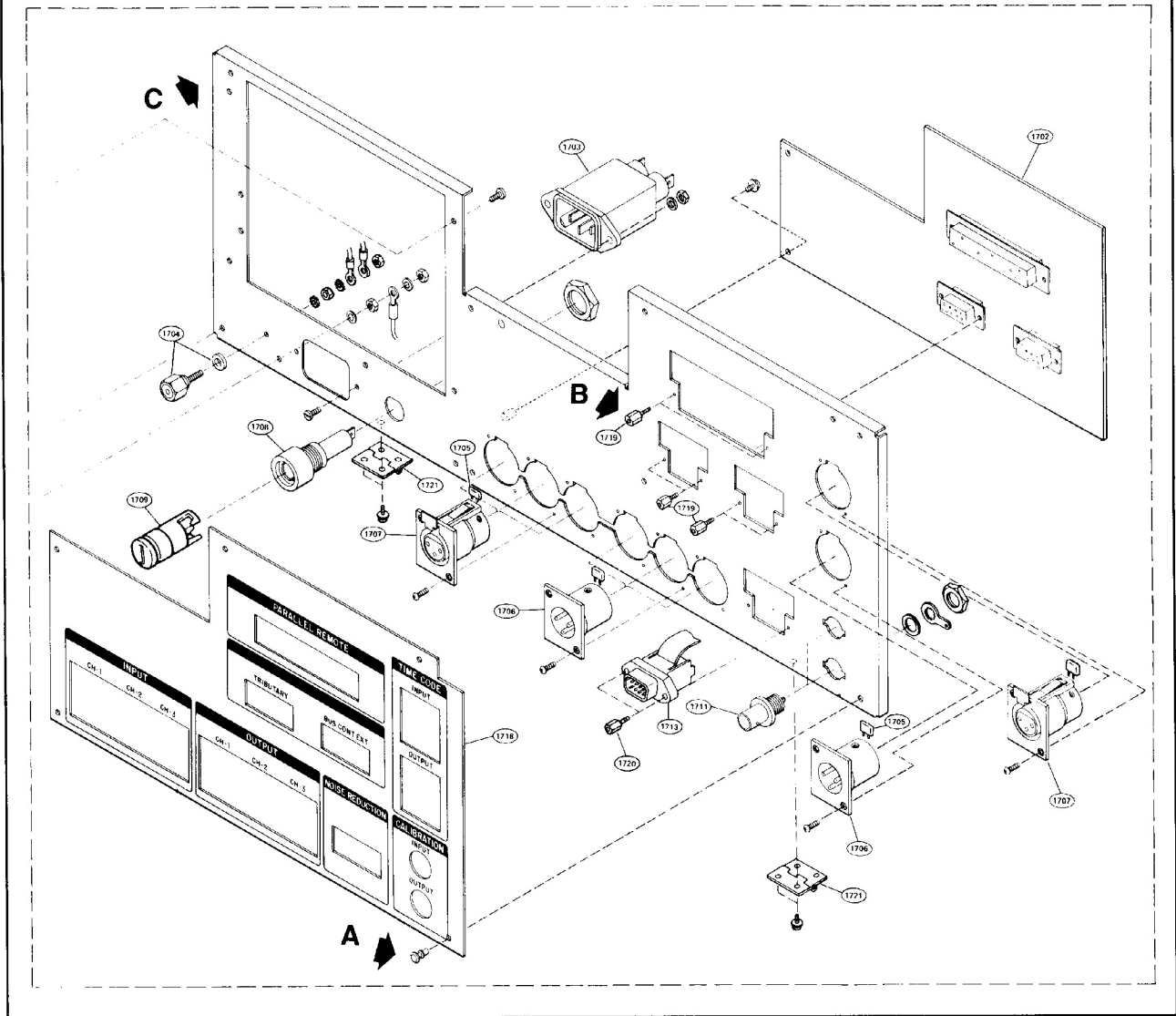
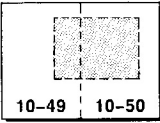


Figure 1

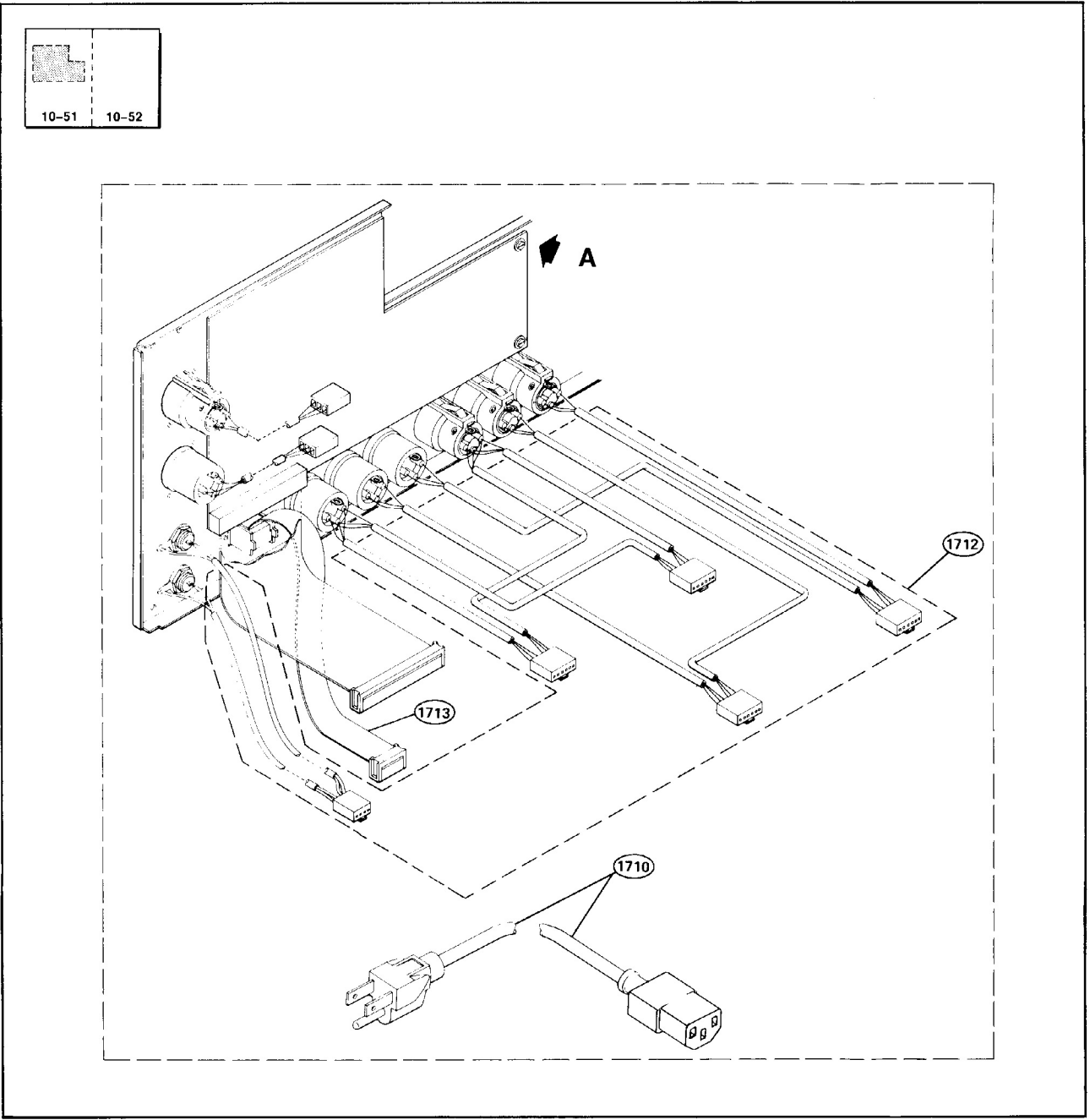


Figure 2