

Service Bulletin

Harman/Kardon Incorporated
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SERVICE BULLETIN #209

AUGUST 1978

TO: ALL AUTHORIZED WARRANTY STATIONS

FROM: LEN GAYNOR, DIRECTOR OF SERVICE OPERATIONS

SUBJECT: ADDENDUM TO SERVICE BULLETIN #208
CITATION 16A - TIME DELAY RELAY

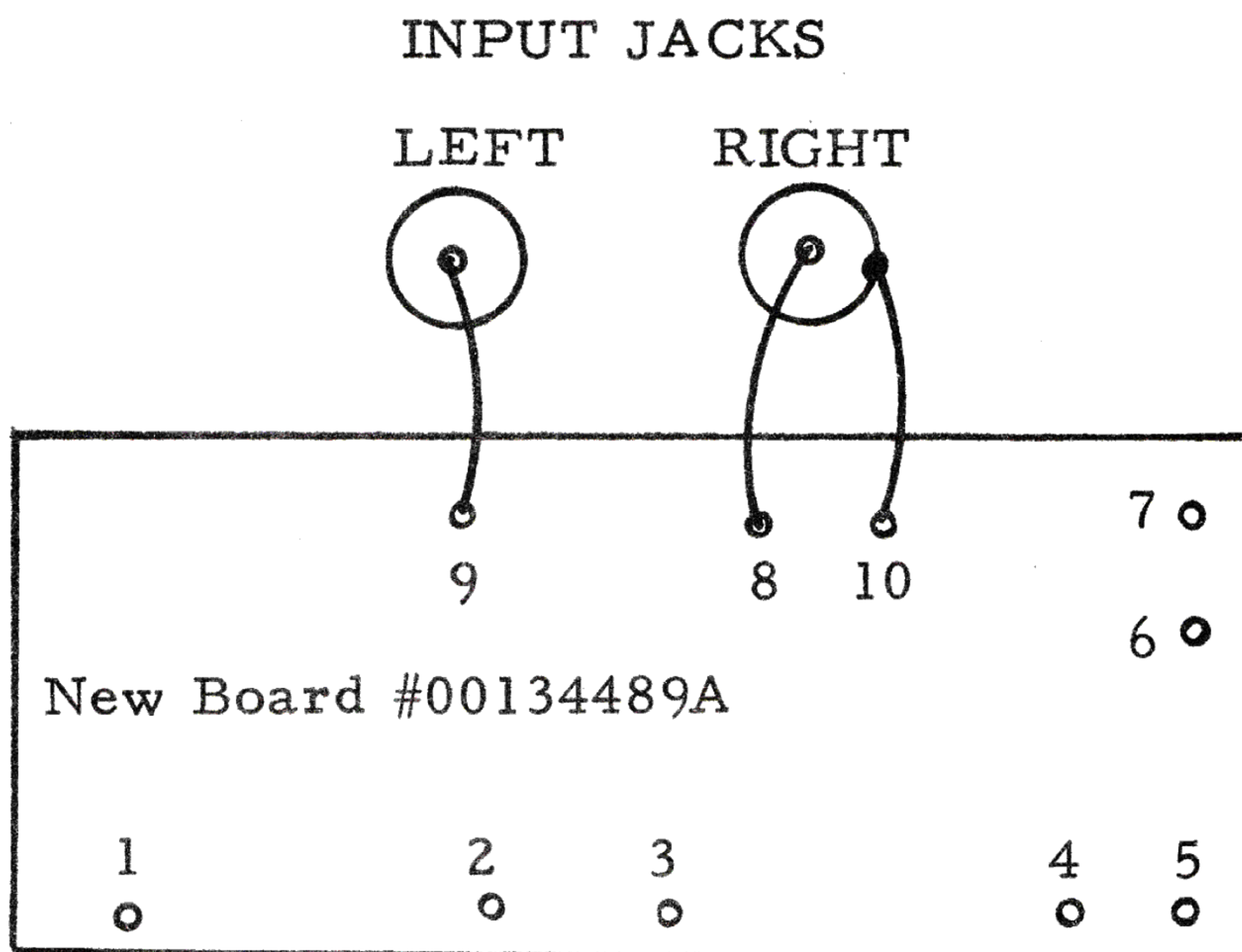
In Bulletin #208 you were advised to clip out resistor R4 (47 ohms) when changing the relay on the Citation 16A Time Delay Printed Circuit Board. This information is valid and still remains in effect but we now offer the following additional information.

1. The cause of the relay failure can be attributed to excessive DC at the output terminals of the amplifier because of:
 - A) Component failure, or
 - B) Input overload.
2. After changing the relay and clipping out the resistor, turn the amplifier "ON" and check if both channels are operational and then measure DC offset voltage.
3. If amplifier is inoperative, relay failure was due to component failure. Troubleshoot amplifier and locate defective part(s) and then adjust VR 1 for "Zero" DC offset voltage.
4. If amplifier is operative and DC offset is between 200 millivolts and 800 millivolts and cannot be adjusted to "zero" with VR 1, then relay failure was due to input overload. In this case we recommend you change Q1 (43034373 - 2N2916) on the driver board and also replace the entire time delay board by ordering new board HK #00134489A which can now prevent input overload.

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5. When replacing the new board, there are seven (7) existing wires connected to Pins #1 thru 7 which are removed from the old board and re-connected to the same Pins #1 thru 7 on the new board. There are also three (3) additional Jumper wires to be added to Pins #8, 9, and 10 on the new board (see drawing).



New Jumper wires are:

- A) Pin #9 to Hot Terminal Left Input Jack
- B) Pin #8 to Hot Terminal Right Input Jack.
- C) Pin #10 to Ground Terminal Right Input Jack.

Sincerely,

HARMAN KARDON, INC.

Len Gaynor

Len Gaynor
Director of Service Operations

8/23/78

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