

For Model(s): LS, LSA, LSB, DS, SSSchematic Ref: P-6613Date: February 1961 2/61-1Subject: P-0075 PEDAL SWITCH MECHANISM - RELAY ADJUSTMENT AND REPAIRSELIMINATION OF PEDAL RELAY CLICK

A rather loud mechanical click, noticeable just as pedals are played, can probably be corrected by replacing a small foam disc inside the relay. Remove the relay from the round can in front of the switch mechanism. Take off the nuts on top of the relay and slide off the metal top, the top deck of contacts and lift out the plunger. (Take care not to bend or damage any of the contact blades). In the bottom of the hole in which the plunger travels, there is a small foam disc that may be pounded flat. Remove this (it can be pushed out from the bottom with a toothpick passed through the hole that goes all the way through). Install the replacement disc (Part #FW 206) and upon reassembly, the relay should be quiet. Do not use more than just one replacement disc, as additional thickness will interfere with proper electrical operation of the relay.

CONTACT BREAKAGE - RUMBLING OR DEAD PEDALS

In cases of rumbling or dead pedals, remove metal top of relay (see above) and inspect contacts for breakage.

In the bottom row, a broken contact will cause one pedal, when played and released, to create a rumble in any pedal played afterward. Every relay has spare contacts. The earlier type P-6112 has 2 spares and the later type P-5781 has 18 spares. Thus when breakage occurs, the black wire can be removed and installed onto a spare. The spares are not vacant, but can be made so by breaking jumpers between adjoining contacts that have only one wire coming to them. (The yellow wire on P-6112).

The top row contains 8 contacts, but only 2 are required. (6 spares). Dead pedals will result if all contacts connected to either the green or orange wire break. If this happens, remove the green or orange wire from the broken contacts, break jumper wire between two good contacts and solder wire to contact so vacated.

RELAY CURRENT ADJUSTMENT

Whenever any pedal problem is reported, whether it be the click described above, or any damage to contacts, it is desirable to check the adjustment of R4, the 7500 ohm (10K ohm on older instruments) variable resistor on the pedal switch mechanism. To check its adjustment, put a DC voltmeter across R5, the 1000 ohm 1 W resistor on the 5th and 6th terminal lugs in from the high C end of the switch. Play any pedal and the reading should be between 25 to 30 volts. If not, adjust the slider on R4 until it is within these limits. Note: If this resistor is open, relay will not activate when a pedal is played and all pedals will be dead. Place hand on pedal relay can and depress pedal. If relay activates, the plunger motion will be felt.