Piconocorder Reproducing System

model number ALL	bulletin number
for serial numbers ALL	00025

subject

CLICKING SOLENOID PLUNGERS

SERVICE BULLETIN

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Occasionally on the PIANOCORDER SYSTEM you may hear some solenoids click when they are energized. The usual cause is a loose plunger shaft in the solenoid slug. The simplist way of solving this problem is replacing the entire plunger. If a replacement plunger is not available do either of the following rework procedures:

PROCEDURE #1 - Remove solenoid and plunger from the solenoid rail. With your fingers clasp firmly the botton portion of the slug. (SEE FIGURE "A"). With a pair of pliers clasp the lower portion of the plunger shaft and turn as much as possible until the slug spins in your fingers. Be careful not to bend the shaft while doing this.

Then, using a good two part epoxy glue, put a  $\underline{\mathsf{SMALL}}$  amount where the plunger shaft enters the slug. (SEE FIGURE "B").  $\underline{\mathsf{CAUTION}}$ : Be sure not to use too much glue and have it overflow onto the sides of the slug. This will cause the slug to bind in the solenoid core. Work the solenoid shaft up and down and spin it to allow glue to enter the slug.  $\underline{\mathsf{NOTE}}$ : Make sure that the shaft is fully inside the solenoid slug. Let dry and replace plunger and solenoid onto rail.

PROCEDURE #2 - Another method used is to "re-crimp" the slug/sharp joint. Using a block of wood with a hole drilled into it (hole size just slightly larger in diameter than the slug) to hold the slug firmly. Put the solenoid slug into the block. Use a sharp center punch or other sharp hardened object, tap the slug right at the base of the shaft where it joins the slug. This will cause the shaft to seat itself firmly in the slug. (SEE FIGURE "C"). NOTE: Make sure that the shaft is fully inside the solenoid prior to crimping. Check that the shaft is tight in the plunger and replace plunger and solenoid onto the /

