SERVICE BULLETIN

UNIT IN QUESTION: TTM 56
AREA CONCERNED: No Contact Magnetic Fader.

(Field inspection and maintenance.)

The TTM 56 uses our proprietary magnetic fader, utilizing hall sensors. Since the fader is a primary area of tampering for customers, it is important to understand what is happening and how to assure correct function during service or repairs.

Pictured below are the two sensors, support rods and carrier. The most important item to confirm is the proximity of the hall sensors to the carrier. The correct distance is about the same thickness as the PCB — minimum 0.062". If the distance is too great (i.e. the sensor has been pushed away from the center of the fader, which commonly happens during cleaning and lubrication, the symptom is typically “bleeds” with slow contour, and failure to turn off with fast contour. This is due to the magnet not coming close enough to the sensor for maximum attenuation. Gently tilt the sensor towards the center of the fader mechanism. Leaning a bit too far inwards is better than the reverse, as it ensures complete turn-off of the fader when using fast contour.

Once the alignment of the sensors has been addressed, clean the two stainless steel rods using a piece of newspaper wrapped around them. Loop the cloth around each rod and polish just as if shining a shoe, but upside down. The newspaper will pick up dust and contaminants from the rods and is easy to use. For stubborn deposits or in situations where the customer has thoroughly contaminated the rods with foreign matter, isopropyl alcohol applied with a Q-tip works well to cleanse the assembly. When all cleaning has been completed a drop of light machine oil should be applied to the support rod only (not the one the torsion-spring rubs against.) Just about any oil with a viscosity of 20W will work, but we recommend pure silicone lubricant. Rane does not provide lubricants or cleaners.