

Technical Bulletin Capacitor Upgrade for the DSX

This bulletin describes the installation of a capacitor to the DSX decoder board. This may be useful when the DSX encounters dirty track, long, plastic frogs in switches, or other instances that may cause the decoder to “skip.”

Note ☞ - DSX Decoders built prior to 4/1/00 must be altered at the SoundTraxx facility. If you complete Step 1 and you DO NOT see a circle, a square, or a + symbol, then you will have to send this DSX to the factory for a free capacitor upgrade.

Materials and tools needed:

Capacitor – 220 μ F 25V or greater such as Radio Shack item #272-1029 or SoundTraxx #631007
Hook up wire – 28 Gauge 6” or more, if needed
Heat shrink tubing – 1/16” x 1”
Insulative Tubing - 24awg SoundTraxx # 810036
Low wattage soldering iron and rosin core solder
Hobby knife
Wire Cutters
Wire Strippers

1. Using a sharp hobby knife, carefully trim 1/8” off the white heat shrink tubing on the DSX at the plug end. Be very careful not to cut the wires. This will not void your warranty as long as you only expose this area.
2. Locate the solder pads on the PC board on the side opposite the plug (see the drawing). One of the pads is a circle, the other one is a square. Next to the square is a “+” symbol.
3. Cut the capacitor leads to the desired length. Slip an appropriate length of 24awg Insulative Tubing over each leg. Bend the ends of the capacitor leads into an “L” shape about 1/32” long. If you are using wire to lengthen the leads on the capacitor, use 1/16” heat shrink tubing to insulate the solder joints.
4. Solder the capacitor leads to the pads. REMEMBER the minus (-) side of the capacitor attaches to the round pad and the plus (+) side of the cap attaches to the square pad. Work quickly so as not to heat the board too much or damage any of the components on the circuit board.
5. That’s all there is to it. Install or re-install the DSX and enjoy!!

