

Parts4Marx Tech Tips 010

Marx Glendale Talking Station Record Player

Courtesy of Ron LeClaire

Some of the large Marx lithographed Glendale stations are equipped with a miniature crank-operated record player that announces stations and provides train sounds. These stations are easily identified by a crank on the roof.

Often these are found in a non-working condition. In several cases a repair can be made to bring the record player back into working condition.

Often the thick paper cover is loose or missing. This is a key element in how the record player works, as it both provides tension to keep the record player needle in the record grove and provides sound amplification.



Further examination of the interior of the record player reveals the needle attached to the tone arm, which pivots on an eyelet attached to the extension in the plastic base. An additional arm is attached above the needle and contains a small, round, raised surface that comes in contact with the thick paper cover that provides the tension that keeps the needle in the record groove. It also transmits the sound vibrations from the record groove to the needle to the thick paper cover that acts like a speaker. The sound is greatly amplified when everything is connected. Low volume can result if the connections are interrupted.

Attached to the axle formed by the crank is a pivoting arm with a light wire spring. The spring fits in a small grove in the pivoting arm ad rests upon the axle as shown. When the needle moves to the inside grooves after playing the sounds it contacts the small tab at the bend which pulls the pivoting arm away from the axle and increases the tension on the spring. Once the tension is sufficient, the pivoting arm snaps from the needle, propelling the tone arm back to the starting groove of the record, to cycle through the sound once again. If the sound is not cycling continually, either the spring is broken, misplaced or missing, or the needle is not moving to the most inner grooves.

The most common and easiest repair it to replace the heavy paper cover. It was originally glued to the plastic base, and can come loose, bend, tear or deteriorate. While a replacement can be shaped and glued, an alternate solution is to use strong rubber bands that go across the paper and loop over the plastic mounting tabs that screw into the station roof. This enables the thick paper cover to be removed easily should further adjustment or repairs be needed, yet still retains the sound amplification properties.



