

Malfunctions

The biggest factors causing machine malfunctions are dust and greasy dirt collecting on sensitive parts of the mechanism. (It is interesting to note that a player's hands are quite dirty as well. This will add to any problems in a coin-actuated slot machine. Also, a player tends to dump things into a coin mech instead of coins: tacks, pins, water and other liquids of questionable origin.)

To a large degree, much of the dust is generated from the coins sifting around in the hopper scoop. This "coin dust" has a metallic quality which circulates within the interior the machine combining with grease and oil from the mechanism. This greasy dirt has a tendency to collect on the warm electrical units: relays, switches, solenoids, wipers, and contact plates, which can cause an electrical malfunction. In addition, dust collects in the entry to the coin mech; over time, it will jam and coins will stick to its dirty openings.

Clean the hopper, reel mechanism and the interior of the game every six months. A good solvent or spray degreaser (NOT WD-40) should be used, and then wiped off immediately with a clean, soft cloth. Particularly, clean the area where the coins are dispensed (hopper, knife, roller and solenoid.) Also, check the pivot arm for a positive stepping action (mechanical type) and the payout stepper for damaged ratchet teeth and positive switch contacts.

When all parts are cleaned and renewed, lightly lubricate the mechanism with a fine premium sewing machine oil. The payout counter's contact plate disc (and all contact plates in general should be kept absolutely clean and free of grease. Contact plates should be cleaned with contact cleaner every couple of months.

The spiral cam of the hopper (if present) must be kept clean and shiny with a dry silicone spray and contact cleaner. Use a clean soft cloth to dry the surface thoroughly. Do not use steel wool, sandpaper, grit-like sponges or pencil erasers.

Please refer to the [Bally EM Troubleshooting Guide](#) for more information.

Lubrication Guide

Hopper Payout Assembly

- Payout Hopper Unit

- Payout Counter Assembly

Handle Mechanism Assembly

- Handle Mechanism

Reel Mechanism Assembly

- Clock Assembly

- Coin Relay Assembly

- Reel Assembly

- Timer Shaft Assembly

- Trip Shaft Assembly

- Index Lever and Wiper Assemblies

- 3rd Reel Variator (Timer Link Assembly)

- Connecting Rod and Operating Lever Assembly

- Left Side of Reel Mechanism

- Right Side of Reel Mechanism

- Reel Mechanism - General

- Hold and Draw Mechanism (if present)

On the above regions and assemblies and on all metal-to-metal contacts, pivot points, linkage, chains, rollers, gears, levers, and other regions where there are points of potential wear, use degreaser first. Let it soak for a minute or so. Wipe clean with a soft clean cloth, then use (SPARINGLY) a fine premium sewing machine oil. **DO NOT OIL or use any "water displacement" sprays on ANY relays, coils, solenoids or switches! Use contact cleaner for these electrical/physical connections.**

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