

100 SERIES COIN MECHANISM



OPERATION EXPLANATIONS

The 100 Series Mechanical Coin Mechanism is designed to require a minimum of maintenance and field adjustment. Acceptance and rejection of coins or tokens is determined by size (both diameter and thickness), weight, metallic content and bounce.

- **The function of the Cradle** — Cradles are used to test the size and weight of the coin. Undersize diameter coins will pass between the legs of the cradle and will be returned. Oversize diameter coins will fail to pass between the cradle and the diameter gauge and will be returned by actuating the wiper lever. In the case of the U.S. quarter acceptor, an undersize lever must first be pivoted to unlock the cradle. Undersize diameter coins will fail to unlock the cradle and will be returned by actuating the wiper lever. Underweight coins will fail to overcome the cradle counterweight and will be returned by actuating the wiper lever. Coins that are oversize in thickness will fail to pass between the magnet gate and the mainplate and will have to be dislodged and returned by actuating the wiper lever.
- **The function of the Magnet** — A magnet is used to test the metallic content of the coin. Highly magnetic coins, such as steel or iron, will be retained by the magnet and will be returned by actuating the wiper lever. Coins having comparatively high magnetic properties, such as copper, will be slowed down by the magnet and will drop off the end of the rail, short of the kicker, and be returned. Coins having less magnetic properties, such as brass or zinc, will pass through the magnetic field quickly and will overshoot the separator and be returned.
- **The U.S. Nickel Mechanism** — In the case of the U.S. nickel mechanism a bounce anvil is used to test the bounceability of the coin. Due to its magnetic properties, a genuine nickel passes quickly through the magnetic field and drops off the end of the rail in an arc that causes it to hit the bounce anvil at just the right angle which, because of the coin's elasticity, bounces it into the accept

slot. A counterfeit coin, passing through the magnetic field at the same speed as a genuine nickel, will not have the same hardness or bounce characteristic as a genuine nickel and will miss the accept slot and be returned.

Serration Detector Assembly (U.S./Canadian 25¢ mechanisms only)

The serration detector is simply a very small spring located at the entrance of the mechanism. As coins pass the detector spring it senses the serration on the edge of the coin thereby directing coins to the accept side of the mechanism.

MAINTENANCE

Depending upon the environment in which the 100 Series Mechanism is used, periodic preventive maintenance should be performed.

The mainplate may be cleaned with any household cleanser. It is also possible to clean the entire mechanism by putting it in through the cycles in your dishwasher. The extreme heat used in the dry cycle will not harm the parts on the mech. In all cases, thorough rinsing and drying are necessary to remove deposits and/or film. Remove all filings and coin dust from the magnet by guiding the point of a screwdriver along the edges of the magnet. You will notice filings will cling to the point of the tool. Remove the cradle and undersize lever and clean the bushings. A pipe cleaner makes a good bushing cleaner. Also clean the pivot pin. Apply powdered graphite or pencil lead sparingly to the pivot pin and bushing and reassemble.

Do not apply oils, grease or WD-40 to the mechanism as these are dirt collectors.

For mechanisms using a bounce anvil, make certain all foreign matter is removed from the bounce anvil. Also make certain the bounce anvil fastening screws are tight. In the event the recommended adjustment and maintenance procedures do not render your 100 Series Mechanism serviceable, check for worn or damaged parts and replace as necessary.

For additional service assistance or sales requirements, please contact our office.