

### **790 ACCEPTOR**

The 790 is an adjustless coin acceptor designed to accept both American and Canadian coins. Each coin as it passes thru the acceptor is given a thorough test of its physical dimensions to determine its validity. These tests check for proper diameter, thickness, weight, hardness, and in the case of the dime and quarter section, a check is also made of the metallic content and presence of serrations.

#### **QUARTER PATH**

When a quarter is inserted it is directed to the quarter transfer cradle assembly and the quarter undersize lever. Here the quarter is checked for maximum and minimum diameter, perforations, proper weight, and deformity. Any coins which fail these tests are rejected as slugs.

If all of these requirements are met, the coin continues and rolls down the quarter rail. As the coin rolls down this rail it passes over a slanted indentation where it is checked for minimum thickness. Coins which are too thin will fall into this indentation and stop. Coins which pass this undersize test continue to roll down the rail and pass between a raised portion of the mainplate and the 5-25¢ magnet bracket. Coins which are too thick will not pass between these points and will be stopped.

Coins which pass these tests continue to roll down the rail and pass over the magnetic rail end.

AMERICAN QUARTERS, which have no magnetic properties, roll off the rail end in an arc uneffected by it's magnetism. American quarters leave the rail in an arc which causes them to come into contact with the 25¢ serration detector. This serration detector consists of a thin wire which when coming into contact with the edge of the

quarter grabs or "picks" on the serrations on a quarter coin. When a serration is picked the forward momentum of the quarter is stopped.

This causes the quarter to drop straight down and pass between the 25¢ deflector and the 25¢ separator into the accept chute of the quarter section. Coins without serrations will not be stopped by the serration detector and will continue on their arc and hit the 25¢ deflector which will inturn cause the coin to bounce over the 25¢ separator and be rejected.

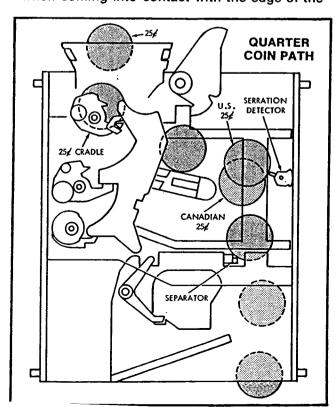
CANADIAN QUARTERS are attracted by the magnetic rail end and do not leave the rail end in the same arc as an American quarter. The path of the Canadian coin is changed by the magnetic rail end so that it falls between the 25¢ deflector and 25¢ separator into the quarter accept path.

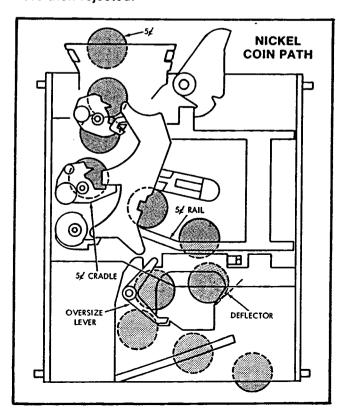
NOTE: THE PRESENCE OF SERRATIONS ARE NOT TESTED ON CANADIAN QUARTERS.

#### **NICKEL PATH**

When a nickel is inserted it passes thru the legs of the quarter cradle and to the nickel transfer cradle where it is checked for diameter, perforations, proper weight, and deformity. Coins meeting these dimensions are then transferred to the nickel rail where it is tested for proper thickness as in the quarter section.

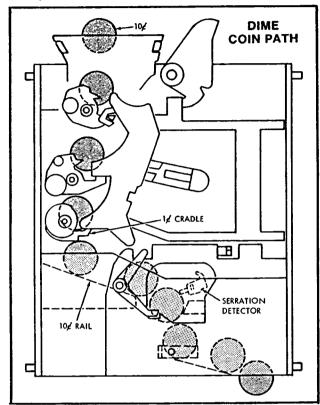
The nickel then rolls off of the rail in as arc which causes it to hit the nickel deflector. A good nickel coin will bounce off the deflector, thru the legs of the 5¢ oversize lever, and into the nickel section accept path. Coins such as lead do not bounce the same as a good coin, therefore, they will not pass between the legs of the 5¢ oversize lever and are then rejected.





#### DIME PATH

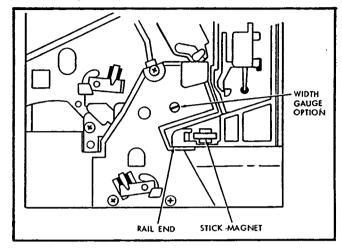
When a dime is inserted it passes thru the quarter and nickel cradles to the penny cradle. At this point any inserted pennies will hit the penny cradle, rotate it, and be rejected. Dimes, however, are directed by the penny cradle, thru an opening in the mainplate on to the 10¢ Rail for further testing. These tests are the same as the ones in the quarter section.



In its basic configuration the 790 is designed to give a high degree of slug protection. However, if a greater degree of slug rejection is required the following can be added:

- WASHER CATCHER WIRES Washer catcher wires are available for both the quarter and nickel sections. They can be installed quickly and easily when increased protection is desired.
- NICKEL SECTION MAGNET This stick magnet can be added to reject nickel size steel slugs. This magnet is easily installed by snapping it into the 5-25¢ magnet bracket.
- 3). ADJUSTING 10¢ & 25¢ STICK MAGNET The stick magnets in the 10¢ & 25¢ sections are factory set for proper acceptance of Canadian dimes and quarters, and good rejection of steel slugs. Problems with steel slugs can be solved by adjusting this stick magnet. Sliding the stick magnet towards the rail end will increase steel slug rejection. REMEMBER: Since American quarters are not magnetic they will not be affected, however, a decrease in Canadian quarter acceptance will be noted.
- ADDITIONAL 10¢ SLUG REJECTION Certain dime slugs could possibly be accepted if they had serrated or rough

edges. Because of this an optional width gauge can be installed on the 10¢ magnet bracket assembly to aid in rejecting slugs. Simply insert the special screw (part # 325-4-4) in the hole provided (refer to figure). Adjust it by tightening the screw down or backing it off. Test until it accepts genuine dimes and rejects the slug that was being accepted.



5). QUARTER SERRATION DETECTOR — can be made more sensitive by removing the small bump on the plastic base. This repositions the angle at which the serration dectector sits. The wire springs then "picks" at a higher position on the coin. Good serrations must be present or the coin's momentum will not be stopped and it is rejected.

To make this modification, simply remove the gate assembly and the serration detector cover. Lift off the serration detector and carefully cut off the small bump on the lower right side of the plastic base. Reassemble and test with a variety of quarters.

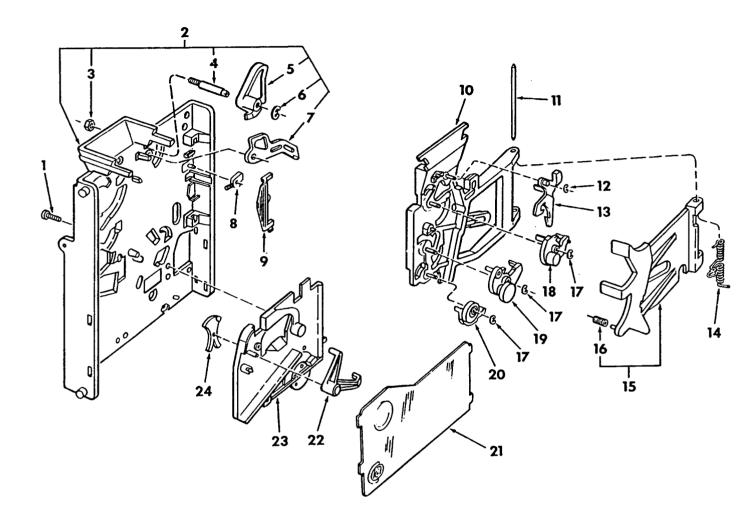


**NOTE:** Some genuine quarters will be rejected because of worn serrations on the edges.

- 6). Increased slug rejection can also be accomplished by changing the 790 acceptor to accept only U.S. Coins. Changing to U.S. coins only allows more critical checks to be made on coin diameter as well as 100% rejection of steel slugs. This change is accomplished as follows.
  - Change the standard 790 25¢ cradle assembly to a #403269-2 assembly. Also change the undersize lever to #904761 undersize lever. This will stop acceptance of coins and slugs which are slightly smaller in diameter than the American quarter. Example: Diez Centavos.
  - Change the standard 790 5-25¢ magnet bracket to a #404365-1 magnet bracket. This new bracket gives a 100% rejection of both Canadian quarters and steel slugs.

## **790-7 ACCEPTOR PARTS LIST**

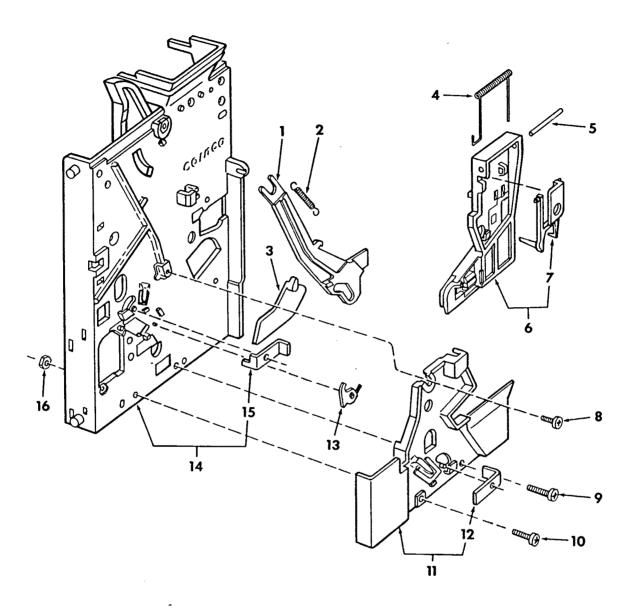
(FRONT VIEW)



INDEX NO.	PART NO.	DESCRIPTION	QTY.	INDEX NO.	PART NO.	DESCRIPTION	QTY.
1	345S6R8	#6x1/2 pan head screw, philips Plastite	. 1	13	904223	Undersize Lever	. 1
2	403874	Mainplate Assembly		14	903335	5-25¢ Gate Spring	. 1
3	406C8	Hex Nut		15	903095	5-25¢ Magnet Bracket	. 1
4	904547	Gate Lever Pivot Screw		16	903135	1¢ Knockout Wire	. 1
5	903372	Gate Lever		17	751S9X	Retaining Ring	. 3
6	751S18	Retaining Ring		18	403832	25¢ Cradle Assembly	. 1
7	904377	25¢ Wiper Blade	1	19	403024	5¢ Cradle Assembly	. 1
8	404260	25¢ Serration Detector Assembly	1	20	404382	1¢ Transfer Cradle Assembly	. 1
9	904007	Serration Detector Cover		21	903343	Coverplate	. 1
10	403869-2	Gate & Cradle Pin Assembly		22	903340	5¢ Oversize Lever	. 1
	903307-3	Stick Magnet (Included with Item 10)		23	404262	5¢ Flipper Coverplate Assembly	. 1
11	901086-1	Gate Pivot Pin		24	903421	5¢ Flipper	. 1
12	751S6	Retaining Ring		_		• •	

# 790-7 ACCEPTOR PARTS LIST

(REAR VIEW)



INDEX NO.	PART NO.	DESCRIPTION	QTY.	INDEX NO.	PART NO.	DESCRIPTION	QTY.
1	903306	10¢ Wiper Actuator	1	9	345S4R10	#4X5/8 Pan Head Screw, Plastite, Phillips	1
ż	903375	Gate Lever Return Spring		10	116S6R6	#6-32X3/8 Pan Head Screw, Phillips	. 1
3	903305	10¢ Wiper Blade		11	403870	10¢ Magnet Bracket Assembly	. 1
4	903106	10¢ Gate Spring		12	901071-3	Separator	. 1
5	902127-1	10¢ Gate Pivot Pin		13	404199	10¢ Serration Detector Assembly	. 1
6	404181	10¢ Gate & Washer Catcher Assembly		14	403874	Mainplate Assembly	. 1
•	903307-3	Stick Magnet (Included with Item 6)		15	903081	25¢ Separator	. 1
7	904032	10¢ Washer Catcher		16	901512	Pal Nut	. 1
Ř	345S4R4	#4X1/4 Pan Head Screw Plastite Phillips					