

# Operation & Service

## Model 30 CAR-FRESHNER® Vender



### UNPACKING

Remove vender from the shipping carton. The cardboard top pad of the carton holds the Hanger Bracket (A), Lower Stiffener(C), two Side Bars(6) and the Security Frame fasteners. Open the vender door and remove the 21" cardboard filler that is located behind the shelves. Remove the metal Magazine Support Bracket that rests on top of the five Magazine Assemblies (7). Remove the 4" cardboard filler above the Coin Mechanism (12).

### VENDER INSTALLATION

The vender can be wall mounted without disassembling any part of the unit. The vender weighs 150 lbs. so it is essential that the Hanger Bracket be mounted securely. Use heavy-duty anchor or toggle bolts to secure the Hanger Bracket to brick, concrete or wood studs.

Two people should lift the vender to hang it on the mounted Hanger Bracket. The top edge of the Hanger Bracket will enter the open area at the back of the Cabinet (4). Open the Door (1) and note the two  $\frac{3}{8}$ " round holes in the back of the Cabinet, 11" from the bottom. Mark the holes on the wall, remove vender, drill and install appropriate anchors. Re-hang the vender and insert fasteners in these  $\frac{3}{8}$ " holes. These fasteners will secure the bottom of the Cabinet to the wall.

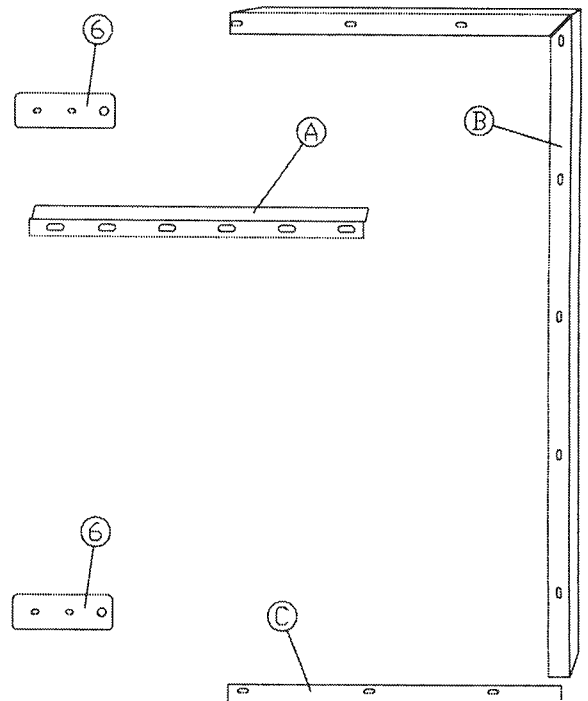
### SECURITY FRAME INSTALLATION

Attach the Main Frame (B) to the Door using the carriage bolts provided, then attach the Lower Stiffener to the Door at the bottom. Now attach the Side Bars to the right side of the Cabinet. Two padlocks should be used to lock the Main Frame to the Side Bars.

**Important-** adjust the Side Bars so the Door closes tightly when locked.

### PRODUCT LOADING

Before loading, all shelves should be in the 'up' or horizontal position. If any shelves are down, lift them with your finger until the shelf wire snaps into the open-ended slots in



NUMBER	DESCRIPTION	PART #
A	HANGER BRACKET	30-81
B	MAIN FRAME	30-83
C	LOWER STIFFENER	30-84
6	SIDE BAR (<1)	2100-64

the Magazine Frame. The air fresheners can then be placed on top of each shelf.

If any of the five Magazine Assemblies are being partially filled, **always** load the top shelf and the successive shelves immediately below. The empty shelves must be dropped by unlatching their respective latch wires with your finger or by 'pumping' the Pull Rod (9) for that column. To drop the shelves by 'pumping', hold up the Lock Lever (22) on the Coin Mechanism with the index finger of your right hand and, with your left hand, pull and release the Pull Rod until all empty shelves are dropped.

When the top shelf in any column drops (the column is sold out) the Empty Lock Rod falls and the attached Empty Lock Lever (28) drops into lock position to block any further vending of that column.

### **COIN MECHANISM**

The Coin Mechanism accepts US quarters only and is pre-set to vend at \$1.00 unless otherwise requested. Optional coin mechanisms: Canadian & US quarters, .984" token & US quarter, .984" token only and some foreign coinage.

To change the vend price, remove the Coin Mechanism by taking out the two screws on its front flange. Tilt the top edge of the Coin Mechanism to the right to disengage the tongue of the Drive Plate (on the right upright) from the slot in the Ratchet Slide (19). Slide the Coin Mechanism toward you and remove it from the vender.

Note the price label on the Coin Gate (21). Remove the screw from the \$1.00 hole and place it in your desired location.

When replacing the Coin Mechanism, reverse the order of the removal steps and be sure to place the bottom rear edge of the Coin Mechanism in between the two riveted stacks of washers. **Important:** Make sure the tongue of the Drive Plate enters the slot in the Ratchet Slide.

### **MAGAZINE REMOVAL**

To remove any of the 5 Magazines, first drop all the shelves in the column and remove the screw at the top rear and the screw at the bottom front of the Magazine. Now raise the top and bottom shelves **only** up into vend position. Pull the unit forward approximately ¼" and lift the rear Bottom Bracket up and then pull the Magazine out.

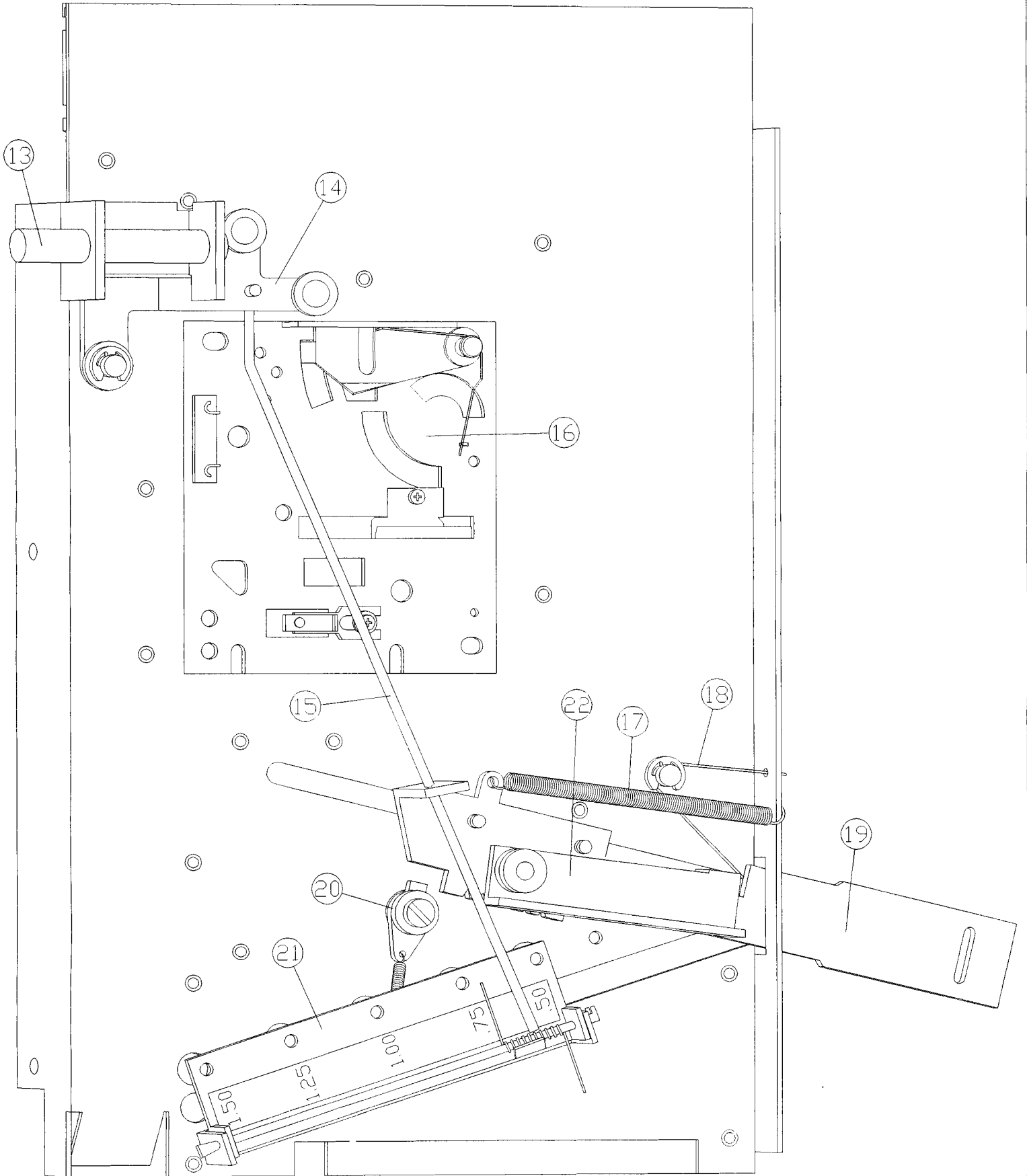
Notice the two 1" locating tongues on the Bottom Bracket that came out of the slots in the Vend Mechanism platform. Make sure both tongues are in the slots when re-installing.

To remove the Vend Mechanism (after all 5 Magazines are out), take out the screw holding the left upright to the 'hat-shaped' bracket on the left inner side of the Cabinet. Also, remove the screw holding the Closure at the bottom left corner of the Cabinet. Remove the Closure and Coin Box Door (5) and slide the Vend Mechanism toward you.

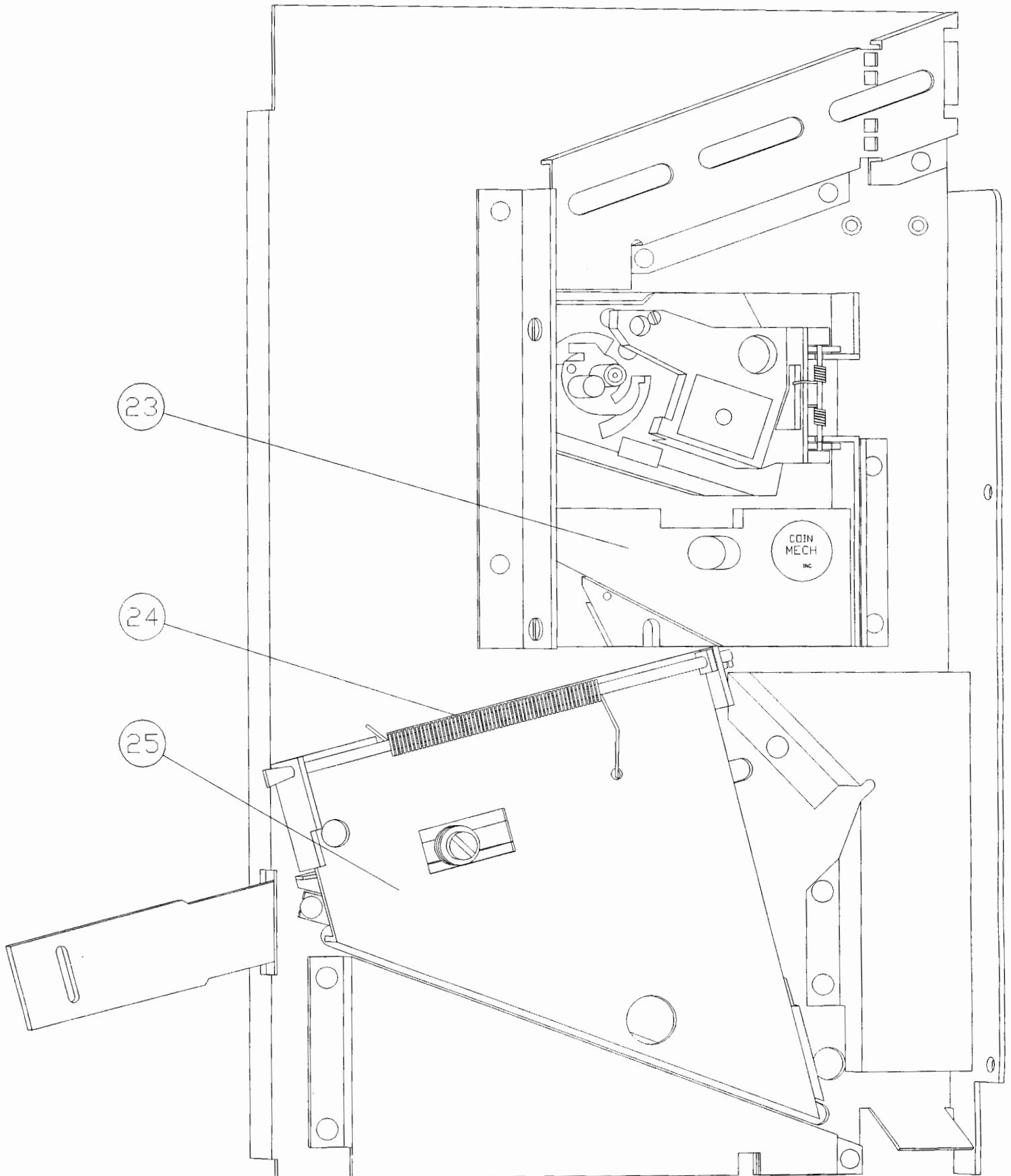
Revised: 8/25/10

NUMBER	DESCRIPTION	PART #
13	COIN RETURN ROD	2100-119
14	SCAVENGER LEVER	2100-114
15	LINK - COIN GATE	30-59
16	SLUG REJECTOR	2100-29
17	SPRING - RATCHET	2100-124

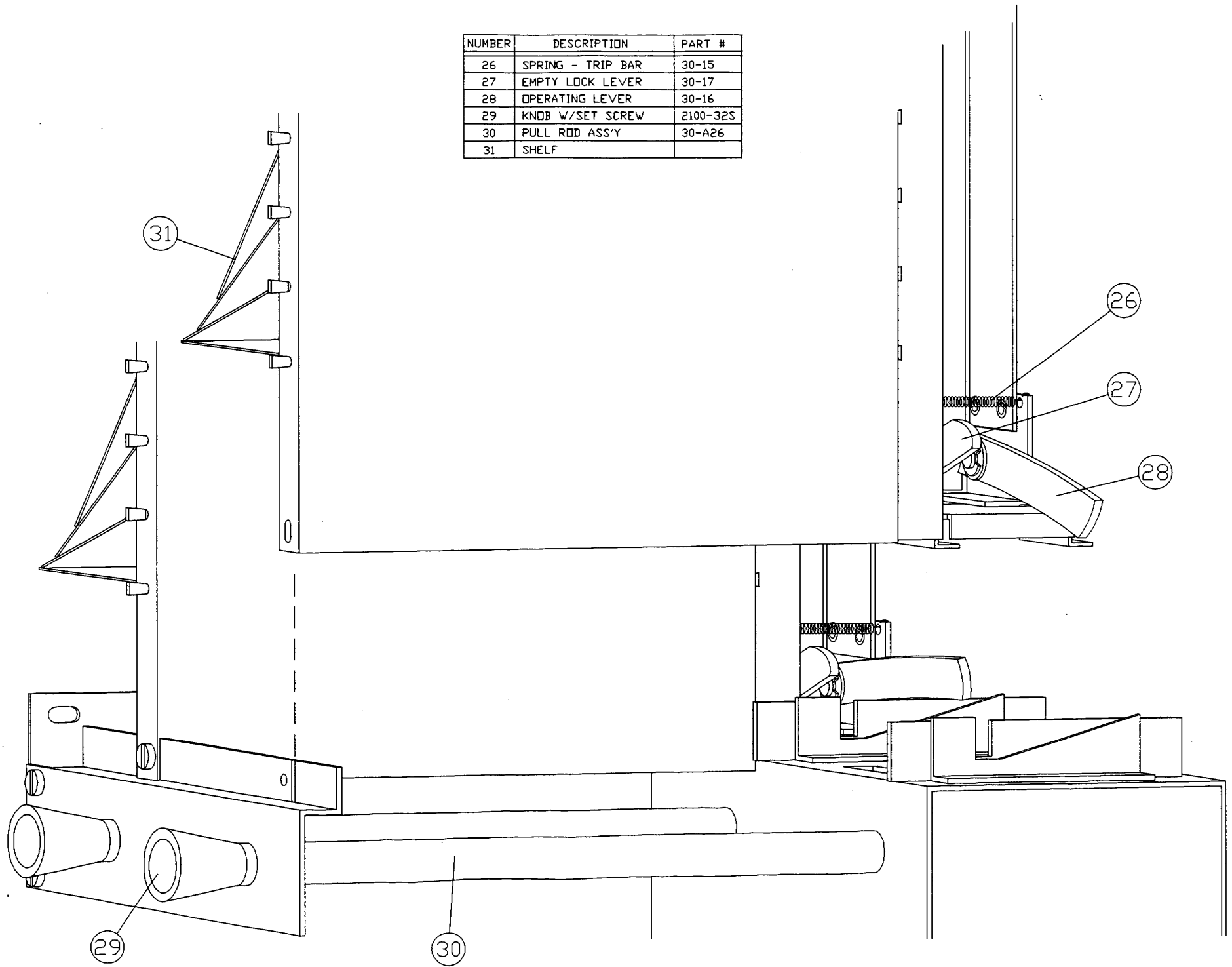
NUMBER	DESCRIPTION	PART #
18	SPRING - LOCK LEVER	95-67
19	RATCHET SLIDE	30-A48
20	RATCHET PAWL ASS'Y	2100-23
21	COIN GATE	30-56
22	LOCK LEVER	30-50



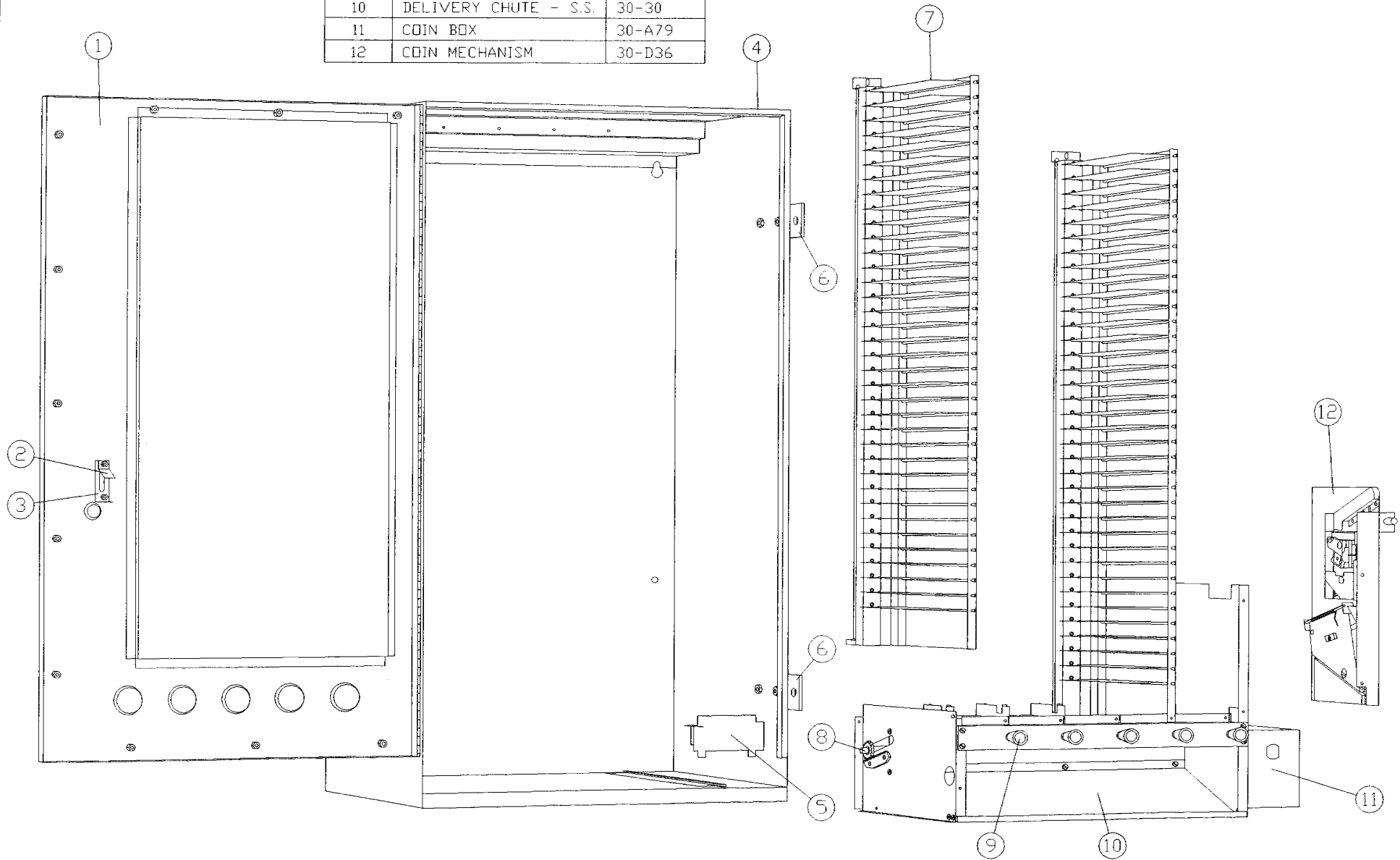
NUMBER	DESCRIPTION	PART #
23	SLUG REJECTOR	2100-29
24	SPRING - COIN PLATFORM	2100-111
25	COIN PLATFORM	30-53



NUMBER	DESCRIPTION	PART #
26	SPRING - TRIP BAR	30-15
27	EMPTY LOCK LEVER	30-17
28	OPERATING LEVER	30-16
29	KNOB W/SET SCREW	2100-32S
30	PULL ROD ASS'Y	30-A26
31	SHELF	



NUMBER	DESCRIPTION	PART #
1	DOOR ASSEMBLY	30-C69
2	COIN DEFLECTOR	30-90
3	FORK - COIN MECH.	30-73
4	CABINET	30-B61
5	COIN BOX DOOR	30-93
6	SIDE BAR (1)	2100-64
7	MAGAZINE (1)	30-C1
8	MAIN SHAFT W/GEARS	30-32
9	KNOB W/SET SCREW	2100-32S
10	DELIVERY CHUTE - S.S.	30-30
11	COIN BOX	30-A79
12	COIN MECHANISM	30-D36



# 100 SERIES COIN MECHS

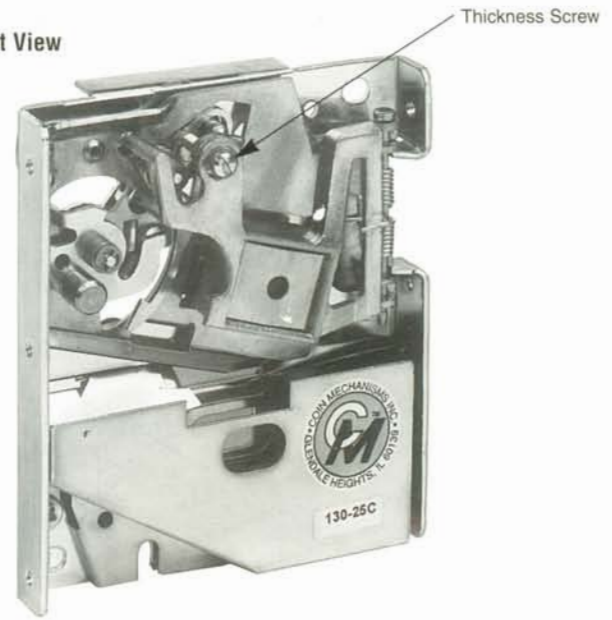


## OPERATION EXPLANATIONS

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.

Front View



## MAINTENANCE

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

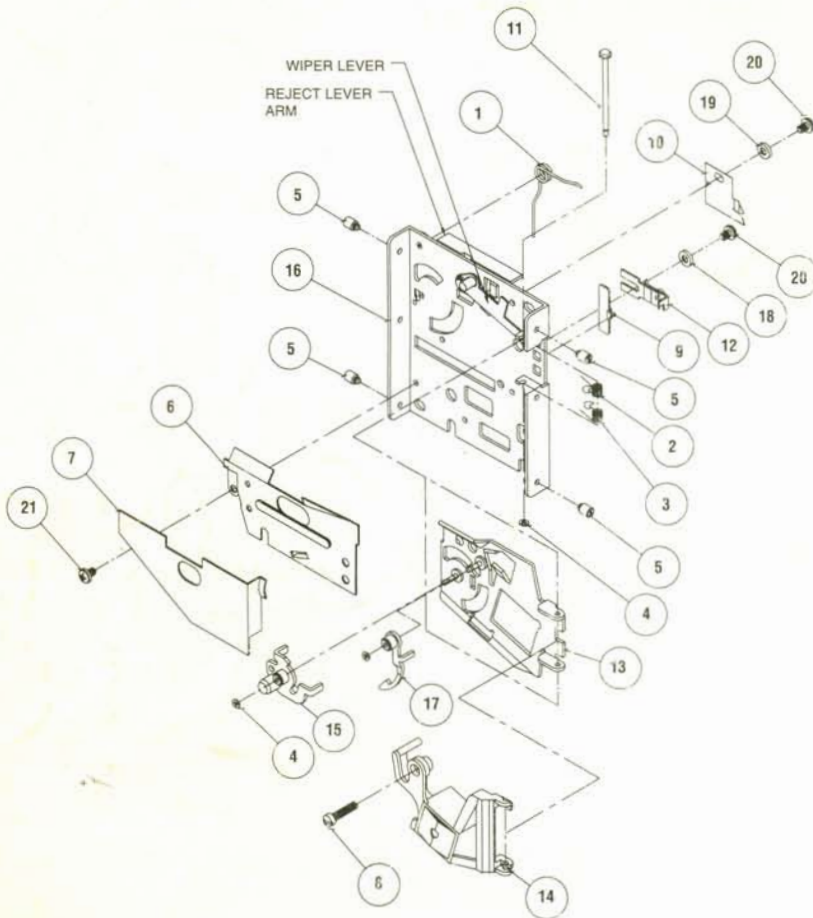
The mainplate may be cleaned with any household cleanser. It is also possible to clean the entire mechanism by putting it in through the cycles in your dishwasher. The extreme heat used in the dry cycle will not harm the parts on the mech. In all cases, thorough rinsing and drying are necessary to remove 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 and bushing reassemble.

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



**COIN MECHANISMS INC.** *The Name in Validation Systems*

P.O. Box 5128, 400 Regency Drive, Glendale Heights, IL 60139-5128  
630/924-7070 • 1-800/323-6498 (In USA & Canada) • FAX 630/924-7088



MATERIAL COLUMN			
ITEM	P/N	QTY	MATL DESCRIPTION
1	04050001	1	SPRING, OPERATING LEVER
2	04050002	1	SPRING, GATE, UPPER
3	04050003	1	SPRING, GATE, LOWER
4	04050007	3	RETAINER, "C" WASHER
5	04060005-01	4	STUD, #6 MTG
6	04100006-02	1	COVERPLATE, RETURN
7	04100012-02	1	COVERPLATE, 25C, "C", OVAL HOLE
8	04100040	1	SCREW, THICKNESS, 6-32 x 5/8
9	04100100-51	1	CLIP, SPRING SECURITY
10	04100104-11	1	CUTTER, STRING
11	04100114	1	PIN, GATE PIVOT
12	05100001	1	SEPARATOR, ASSY
13	05100010	1	GATE, ASSY, STAKED, 25C
14	05100017	1	GATE, ASSY, MAGNET, GRN, 2LEG
15	05100021	1	CRADLE, ASSY, STAKED, .955
16	05100088	1	MAINPLATE, ASSY, STAKED, UNIVERSAL III
17	05100139	1	LEVER, ASSY, UNDERSIZE, 25C
18	FJ0-6	1	WASHER, FLAT, 5/16 x 5/32, PHIL, #6
19	600-6-1	1	WASHER, FLAT, DOUBLE THICKNESS, #6
20	P-108-6-2-1/2	2	SCREW, 6-32 x 5/32, PHIL, BIND HEAD
21	P-190-6-2	1	SCREW, 6-32 x 1/8, PHIL, PH

## ADJUSTMENTS

All 100 Series Mechanical Coin Mechanisms leave the factory adjusted for maximum performance. If more critical adjustments are desired, or if the unit has been completely disassembled for service, the following adjustment procedures are recommended:

*Set the mechanism with the front of the unit facing you in the test position.*

### 1. Magnet Casting Thickness Screw

*This screw will only need to be turned if coins are getting stuck as they roll out of the cradle. To adjust, turn thickness screw counter clockwise several turns or until coin, when dropped in, hangs up near the magnet area. Then turn screw clockwise until coin just passes. Then turn screw 1/4 to 1/2 turn more.*

### 2. Undersize Lever Adjustment (all mechanisms)

With a coin resting in the cradle slowly pivot the coin & cradle toward the undersize lever. The leg of the undersize lever should clear the cradle leg by a 1/16". To increase the clearance of the cradle, slightly bend the tab on the undersize lever toward the cradle.

### 3. Separator Assembly

- 1.) Loosen the screw holding the separator and move as far to the right as it will go. Tighten the screw.
- 2.) Insert several coins and note that some may miss or slightly touch the separator.
- 3.) Loosen the separator screw and move the separator a slight amount to the left. Tighten the screw.
- 4.) Insert the coins again and, if some of them are still returned, repeat Step 3 until all of the coins are accepted.