

neighborhood delivery and collection boxes



Maintenance Handbook Series MS-55/August 1974

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I. INTRODUCTION

A. Equipment Description

The neighborhood delivery and collection box consists of the mailbox unit, mounting pedestal and loose details on hardware for installation. The mailbox unit contains 18 individually locked compartments for delivery of mail. Each compartment is six inches which by nine inches high by eighteen inches deep. Two of the individual boxes may be eliminated to provide sixteen individually locked compartments for delivery of mail and one compartment for deposit and collection of outgoing mail. Four boxes may be eliminated to provide fourteen individually locked mail compartments and two compartments for deposit and collection of outgoing mail. See part I, section D for instructions to provide mail drops.

B. Functional Description

- 1. The neighborhood delivery and collection box is a pedestal-mounted unit for delivery and collection of mail. These units are installed conveniently throughout the neighborhood, at locations approved by the local postmaster, so that the individual customer will not be required to travel unnecessarily long distances from his place of residence for his mail. More than one unit may be installed at a particular location when the quantity of individual boxes required warrant it.
- 2. Customers will obtain their mail from individually locked boxes from the front of the unit, while the delivering carriers service the boxes from the rear.

C. Unpacking

Each unit is packaged in two cartons, one containing the assembled mailbox unit and the other containing the pedestal and loose hardware required for instablation. Care should be exercised in unpacking to eliminate the possibility of losing the loose hardware. A listing of loose details is as follows:

- 4 1/2-13 hex nuts
- 4 1/2 lockwashers
- 4 $3/8-16 \times 3/4$ " hex bolts
- 4 3/8 lockwashers
- 4 $1/2-13 \times 15$ " anchor bolts
- 1 12" x 6" x 10 ga. steel baseplate

Care should also be exercised when unpacking the assembled mailbox unit to prevent loss of the keys for the individual doors. Instructions from the local postmaster should be reviewed prior to unpacking to meet the requirements for key control.

NOTE: Four anchor bolts shall be removed from the parton and supplied to the concrete footing contractor if the footing is precast.

D. Installation - FIGURE 1

1. Site Preparation

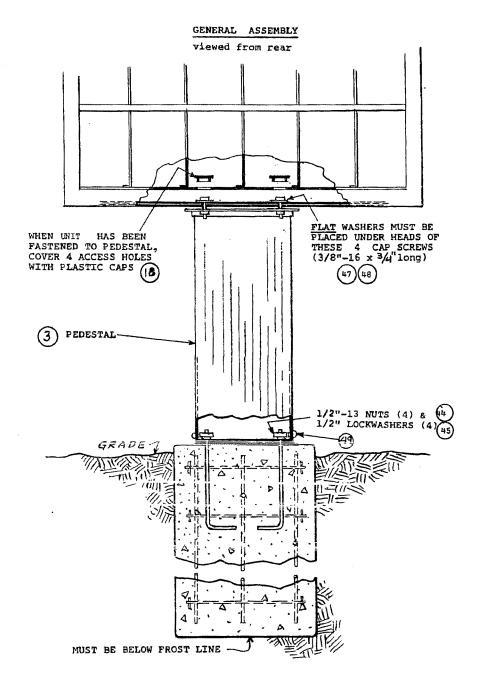
After site selection, prepare the site for concrete footing by excavating as illustrated in Figure 1. Concrete footing may be pre-cast or poured on-site. In either case, the footing should be properly back-filled and tamped to assure non-shifting. Concrete footing to be reinforced with 1/4 inch diameter steel tie rods and 1/2 inch diameter reinforcing bars (supplied by the concrete footing contractor) as illustrated. Four anchor bolts, item 43, supplied as loose parts, shall be located in the footing as indicated. The baseplate, item 50, may be used as a template to locate the anchor bolts. Each anchor bolt should project 1 1/2 inch above the concrete.

2. Baseplate leveling and pedestal mounting

Set baseplate, item 50, over projecting anchor bolts in the concrete footing. Note: Leveling washers or shims are not supplied as loose parts and must be furnished by the contractor. Having leveled the baseplate, place pedestal, item 3, upon baseplate and check for perpendicularity/levelness, making any minor adjustments to the baseplate to assure the pedestal is properly located. Fill under the baseplate with grouting material as required. After grouting has hardened, place pedestal over projecting anchor bolts and baseplate and secure with four hex nuts and washers, items 44 & 45. A 3/4 inch socket wrench with an extension approximately 36 inches long should be used to tighten the hex nuts.

3. Box unit mounting

Before mounting the box on the pedestal, remove four hole plugs, items 18. Mount the box upon pedestal and install four 3/8-16x3/4 hex bolts and lockwashers, items 47 & 48. Secure to pedestal by using a socket with appropriate ratchet wrench with a short extension. Replace plugs as illustrated.



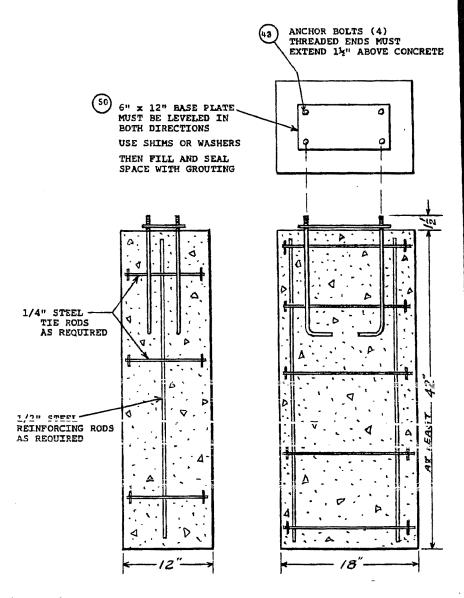


FIGURE 1

4. Community mail drop conversion - FIGURE 2

One or two mail collection compartments are provided by eliminating two or four individual delivery compartments. This is accomplished as follows: Open tambor door at the rear of the unit. Items 42 as shown on Figure 2 are removable vertical dividers. One is to be removed if one letter drop is required; both are removed if two letter drops are required. With a screwdriver and wrench remove the first three screws, nuts and washers, items 22, 23 and 24, from the rear in the bottom of the vertical divider. Remove one screw, nut and washer from the top front of the same divider and one sheet metal tapping screw from the top rear. The divider and plate assembly can now be removed by sliding it toward the outside of the unit about 3/4 inch and then turning it about 45 degrees. Looking upward from the rear of the unit where the divider has just been removed, remove the two screws, nuts and washers from the mailslot cover, item 25. The cover can now be removed from the front of the unit. Using a flat blade screwdriver, so as not to scratch the finish on the unit, pry the mail slot cover down and out just enough to clear the hem on the underside of the rain shield. The cover will now slide forward out of the unit. Conversion is now complete.

II. OPERATING PRINCIPLES

Operation of the neighborhood delivery and collection boxes consists of customers unlocking, opening, closing and locking their individual mail receptacles from the front of the unit; and mail carriers unlocking, opening, closing and locking the tambor door at the rear of the unit.

III. SAFETY

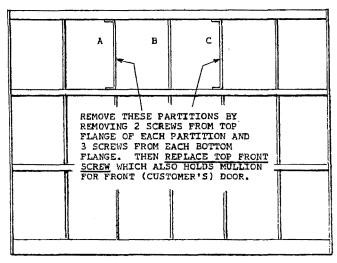
Normal safety precautions should be exercised during installation. It is recommended that one month after installation and six months thereafter the unit be checked by the carrier or postmaster's designated representative to assure safe and satisfactory operation. Check the unit to assure that the anchor bolts are still tight and that the footing is solid. There should be no movement between the pedestal and the footing which will eventually cause the unit to fail and possibly fall. A visual inspection should be made for vandalism that has caused sharp corners or burns which present a potential hazard. Refer to the repair section of this manual for the procedure for required corrections.

IV. PREVENTIVE MAINTENANCE/WARRANTY OF SUPPLIES

A. Preventive Maintenance

- 1. Other than paint touch-up, little or no preventive maintenance is required except periodic visual check for broken, missing or worn parts. Necessary repairs should be made as outlined in the repair section of this handbook.
- 2. Chips or scratches in the enamel finish should be touched up to prevent corrosion. Surfaces must be cleaned first removing dirt, corrosion or other foreign matter exposing the bright aluminum surface. Depending upon the extent of the damage, this may be done with a solvent such as enamel thinner, aluminum wool or fine grit sandpaper. The area then should be coated with zinc chromate vinyl wash primer or a suitable equal for use on aluminum. Apply a coating of enamel of a matching color over the primed surface. These units are painted with a polyurethane enamel. Contact a local industrial paint supply distributor for a product suitable for the required touch-up. NOTE: No Harsh chemical cleaning solutions should be used to remove corrosion.

REMOVE ONE OR BOTH PARTITIONS A & C



REAR VIEW

WHEN REPLACING PARTITIONS, TOP PLATES OF A & C MUST REST ON TOP FLANGE OF B

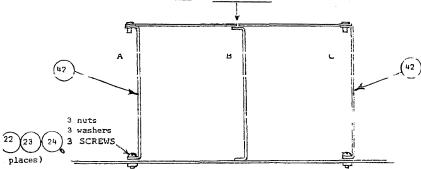
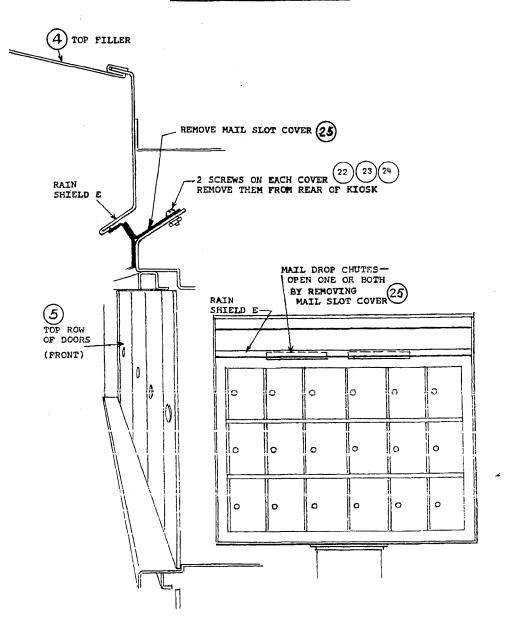


FIGURE 2



Warranty of supplies

The manufacturer warrants that for one year after delivery, all supplies furnished according to specification USPS-B-556A (latest revision in effect as of contract late) will be free from defects in material and workmanship and will conform to all requirements of the specifications, and the preservation, packaging, packing and marking, and the preparation for, and method of shipment will also conform to the same specification. Warranty claims shall be submitted to the manufacturer as shown on the nameplate on the rear of the unit. Ref: USPS form number 4756 Postal Equipment Defect Report.

V. Repairs - FIGURE 3

- A. Defective lock Figure 3
 - 1. Unlock and open the tambor door at the rear of the unit.
 - 2. As illustrated in figure 3, remove the screw from the back of the lock.
 - 3. Remove the locking cam from the lock allowing the door to open.
 - 4. With a 7/8 inch wrench remove the nut from the lock and remove the lock from the door.
 - 5. IMPORTANT: Before installing a new lock, item 17, the key from it should be tried in all of the other doors in the unit to prevent duplication.
 - 6. With the new lock in the unlocked position and the hex nut removed, insert the cam first then in an upward turning motion insert the lock in to the door.
 - 7. Install and tighten hex nut on rear of the lock.

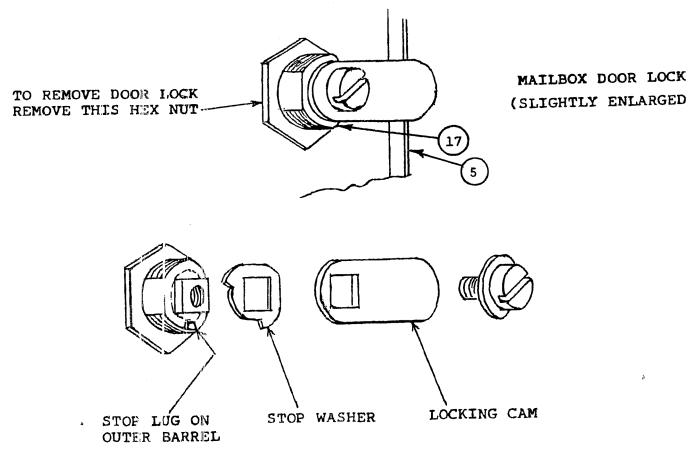


FIGURE 3

B. Mullion insert - FIGURE 4

- 1. Unlock and open mailbox door covering defective mullion insert, items 10, 11, or 12.
- 2. With a small screwdriver or other appropriate tool, pry the bottom end of the insert out of the grooves of the mullion and pull out and down until it is removed.
- 3. Insert top end of new insert approximately 3/8 inch into the opening in the bottom side of the shelf at the top end of the mullion.
- 4. Push one edge of the insert into the groove in the mullion, item 6,
- 5. Using aputty knife or similar object, push the other edge into the mullion.

C. Door mullion - FIGURE 4

- 1. Unlock and open the door of the defective mullion and the door adjacent to it covering same.
- 2. Remove insert as outlined in V-B-182.
- 3. With a 1/8" drill bit and a hand or electric drill, drill the heads off of the exposed 4 rivets and drive out the rivet body with a 1/8" pin punch.
- 4. Grasping the door and mullion, items 5 & 6, at the bottom, pull outward approximately 1 1/2" and then down until it is removed from the unit.
- 5. Replace defective mullion with new one.
- 6. Place door and mullion back on unit by doing step 4 in reverse being sure to line up the rivet holes.
- 7. Replace the 4 rivets, item 20, using the appropriate riveting tool.
- 8. Replace mullion insert as outlined in V-B-3 thru 5.

D. Mailbox door - FIGURE 4

- Use the same procedure as V-C-1 thru 8 except replace door, item 5, instead of mullion.
- 2. Remove lock from defective door and install on the rew door as outlined in V-A-4 thru 7.

E. Mailbox unit--loose on pedestal - FIGURE 1

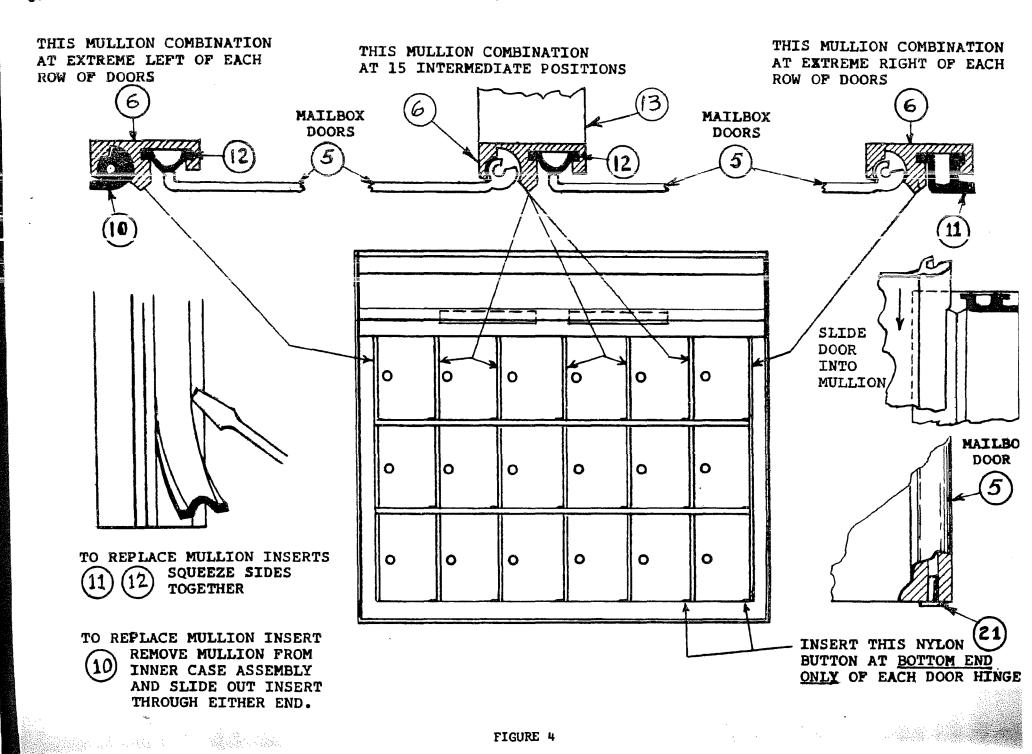
- 1. Unlock and open tambor door and remove 4 hole plugs, item 18, in the bottom shelf inside the mailbox unit.
- 2. Tighten the 4 bolts as instructed in I-D-3.

F. Pedestal--loose on footing. - FIGURE 1

- 1. Same as V-E-1.
- 2. Using tools as described in V-E-2, remove the 4 holts and washers, items 47 & 48 that secure the unit to the pedestal. Use extreme caution to prevent the unit from falling. Set the unit aside.
- 3. Tighten four hex nuts, items 44, as in I-D-2
- 4. Reinstall mailbox unit as in I-D-3.

G. Pedestal--damaged or defective - FIGURE 1

- 1. Same as V-F-1 & 2.
- 2. Using tools as in T-D-2 remove four hex nuts, item 41, that secure the pedestal to the footing. Remove defective pedestal.
- 3. Install new pedestal, item 3, as in I-D-2.
- 4. Reinstall mailbox unit as in I-D-3.



H. Malibox unit-damaged or defective - FIGURE 1

1. To replace complete mailbox unit repeat V-F-1,2,1.

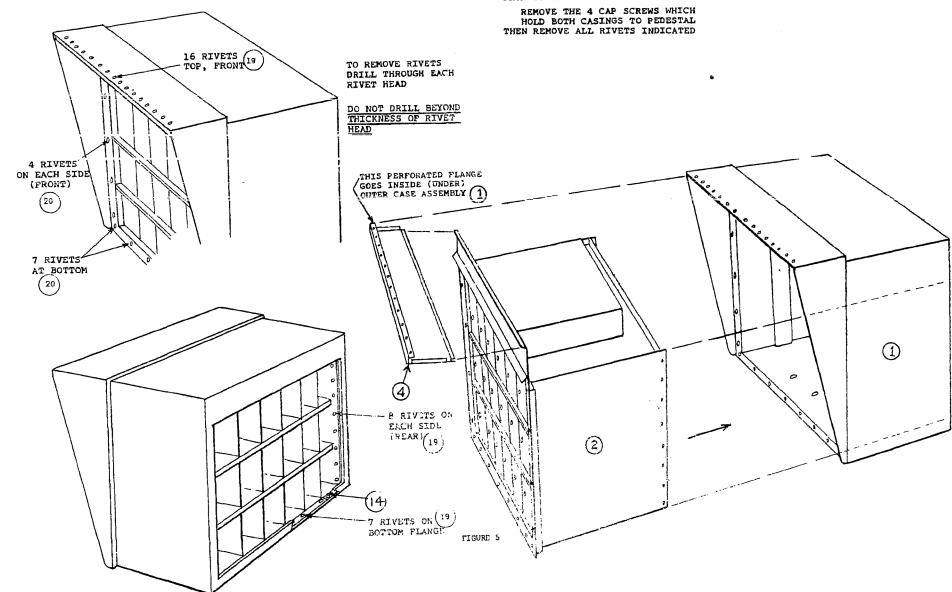
J. Inner case removal-when required for repairs - FIGURE 51

- 1. With a 3/16" drill bit in a hand or electric drill, drill the heads off the 16 rivets, item 19, across the top front of hood assv. Fig. 5.
- 2. With a 3/16" pin punch drive the rivet bodies through the hood.
- 3.Insert a putty knife or flat blade screwdriver between the top filler assy., item 4, and the top front of the hood; pry down, being careful not to scratch the finish. Hold the filler to prevent it from falling when it comes loose. When the filler and hood are separated enough to place your fingers between them, grasp the filler and pull forward thus removing it.
- 4. Using a 1/8" drill bit drill the heads off of 15 rivets, item 20, along each side and the bottom front face of the unit.
- 5. With a 1/8" pin punch, drive the rivet bodies from the unit.
- 6. Unlock and open tambor door at the rear of the unit.
- 7. With a 3/16" drill bit, drill the heads off of the rivets, item 19, just inside the rear of the unit.
- 8. With a 3/16" pin punch drive the rivet bodies from the unit.
- 9.Unlock and open the individual doors at the front of the unit. Grasp the shelves of the inner case through the doors and lift slightly, then pull forward thus sliding the inner case assy. out of the outer case. Extreme care must be exercised in this operation to prevent scratching the finish on the unit.

K. Inner case reinstallation - FIGURE 5

- 1. Inspect interior of outer case to make certain that all foreign materials have been removed. Also inspect unit for worm, loose, defective, etc. parts and make necessary repairs at this time.
- 2. With 2 people, slide inner case, item 2, into outer case, item 1, from the front of the unit. One person should support the inner case from the front while the other guides it from the rear. Extreme care must be exercised to prevent scratching the finish inside the hood.
- 3. With an awl or other tool line up the rivet holes. With the proper riveting tool, install the rivets at the rear of the unit, items 19.
- 4.At the front of the unit, line up the rivet holes and install the rivets, item 20, along each side and across the bottom face.
- 5.Place top filler, item 4, underneath the hood, making certain that the flange which protrudes across the face of the inner case about four inches from the top, is inserted inside of the open reverse hem along the bottom edge of the filler. Hold top filler assembly in place and install 16 rivets, item 19, across the top front of the hood.

NOTE: Avoid using chisel for removal of rivet heads unless absolutely necessary.



L. Tambor door, inoperative or defective - FIGURE 6 OR SA

In most cases, problems encountered with the tambor door will require the removal of the inner case from the outer case. If it is determined that this is necessary, proceed with with removal as in V-J-1 thru 9. Inspect the interior of the outer case to determine the cause of the problem. Specific repair procedures are as follows:

1. Tambor door section requiring replacement

- a. Along each side in the rear of the outer case are spring counterbalance mechanisms, items 5 & 6, figure 6. These springs, item 46, must be expanded during removal of the tambor door. This can be accomplished by placing a wood block, as illustrated, against the bottom of the floating (upper) pulley bracket and in between the 2 springs and the push upward until the length of the block can be pushed between the springs. The bottom of the block will then rest on the angle bracket that the lower end of the springs attach to, thus holding the springs extended to about 20". Be sure to repeat this procedure for the other side of the unit.
 - b. Looking from the front toward the rear, raise the tambor door high enough so that the cable attaching screws and washers, items 22 & 26, on the bottom section, are above the top pulleys and are accessible for removal. Block and hold the tambor door in this position.
- c. Pull excess slack cables, item 32, to the tambor door and remove the screws and washers, items 22 & 25.
- d. Grasp top front of the door and pull it from the unit.
- e. Remove the rollers, item 9, from the end of the section or sections, items 7 or 8, that are to be replaced. Slide this section from remaining sections and replace with a new one.
- f. Replace rollers, item 9, by driving in place with a small hammer.
- g. Inspect all rollers on tambor door for defects such as cracks, chips or excessive wear and replace if necessary.
- h. Replace tambor door by doing preceeding steps in reverse.
- i. Reinstall inner case in outer case as in \-K-1 thru 5.

2. Rollers, broken or worn same procedure as V-1-1-a thrui except replace rollers only.

3. Spring, broken or defective

- a. Remove inner case from outer case as in V-J-1 thru 9
- b. Open tambor door and hold or block open to relieve tension on the spring, item 46.
- c. With a pair of pliers straighten the ends of the cotter pin, item 33, that secures the ends of the defective spring and remove the spring and cotter pins from the unit.
- d. Spread the legs of 2 new cotter pins enough to slip them over the loops at the ends of the spring.
- e. With a pair of pliers close the legs of the cotter pins and insert them into the spring brackets in the unit.
- f. With a pair of pliers and a flat blade screwdriver bend the ends of the cotter pins about 90 degrees to secure them.
- g. Reinstall inner case in outer case as in V-K-1 thru 5,

- 4. Pulley, tambor door cable, defective or broken
 - a. Remove inner case as in V-J-1 thru 9.
 - b. Prepare counterbalance mechanism as in V-L-1-a, b, & c.
 - c. If the defective pulley, item 31, is on the floating (lower) pulley bracket, pull it away from the side of the case and turn it 90 degrees. Remove the screws, nut and washer that secure it to the bracket. Replace with a new one being sure to remove the pulley sleeve, item 30, from the old one and inserting it in the new one. It is very important that the screws and nuts securing the pulleys be very tight to prevent them from working loose during normal operation of the tambor door.
 - d. If the defective pulley is one of the pair located on the top stationary bracket proceed as follows: With a 3/16" drill bit drill the heads off of 3 rivets, item 19, just above the pulleys. With a 3/16" pir punch drive the rivet bodies from the bracket. At the top, pull the counterbalance assembly away from the side of the unit just enough to place a wrench behind it and remove the nut on the screw that secures the pulley to the bracket. Replace the pulley in a similar manner as previously described. With the appropriate riveting tool replace the 3 rivets, item 19, at the top of the assembly.
 - e. Reinstall inner in outer case as in V-K-1 thru 5.

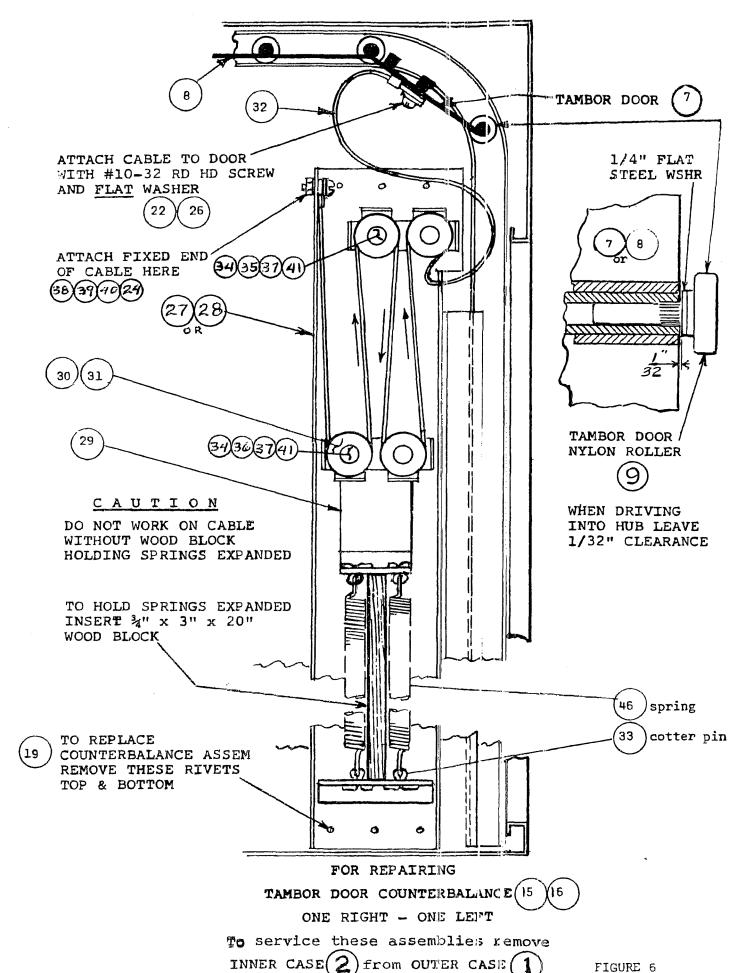
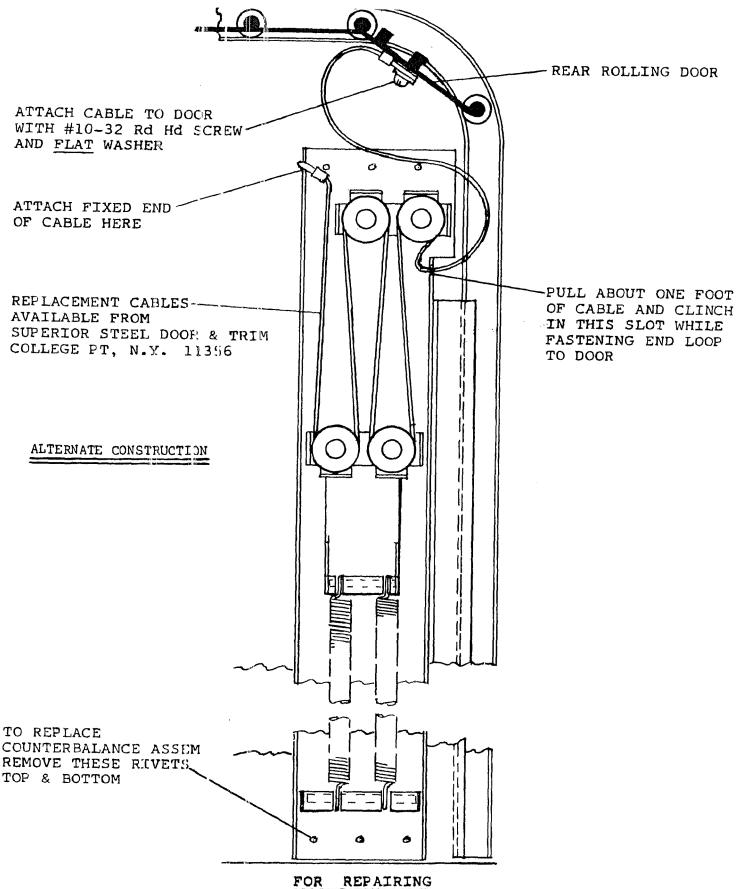


FIGURE 6



FOR REPAIRING

COUNTERBALANCE ASSEMBLY for REAR ROLLING DOOR

ONE RIGHT - ONE LEFT

To service these assemblies remove inner core of unit - see Page 9

FIGURE 6A

U.S.P.S. E30500 NEIGHBORHOOD DELIVERY AND COLLECTION BOX

. PART NAME	TECHNICAL DESCRIPTION	QTY	DWG.NO.	ORDERING INFORMATION
Outer Case Assembly	Weldment, outer case	1	E30501	ក់ក់ក់
Innor Case Assembly	Weldment, inner case		E30502	***
Pedestal	Pedestal weldment		E30503	ተ ለተ
Top Filler	Top Filler Assembly		D30510	***
Mailbox Door	Door, Mailbox		D196714	***
Door Mullion	Mullion Door		D196722	***
Tambor Door, Lock mounting	Same		D196716	治 ·允·
Tambor Door	Same		c196718	***
Tambor Door Roller	Bearing, Nylon Roller		B30778	<u> </u>
Mullion Insert	Insert, Mullion		C30558-1	ጵ ጵጵ
Mullion Insert	Insert, Mullion	3	C30559-1	***
Mullion Insert	Insert, Mullion		C30560-1	††
Mullion Support	Support, Mullion	2	C30481	के के के
Tambor Door Bumper	Bumper, Rubber	3	B30542	***
L/H Tambor Door Counterbalance	Door Retainer Assembly, L/H	1	D196704-1	
R/H Tambor Door Counterbalance	Door Retainer Assembly, R/H		D196704-2	
Door Lock	Lock, Door		B30463	***
Hole Plug	Plug, Hole	4	B30563	ŤŘŤ
Rivet	Rivet,Domed Head 3/16 dia. x			USM "pop" AD64BS or
•	.126250 grip	112		equal
Rivet	Rivet, Domed Head 1/8 dia. x			USM "pop" AD43BS or
	.126187 grip	66		equai
Nylon Button	Button, Nylon	18	B30468	***
Screw	10-32 x 1/2" Round Head Mach.Screw			Local Purchase
Hex Nuts	10-32 Hex Nut, steel, cad plated	14		Local Purchase
Lockwasher	#10 Lockwasher, steel, cad plated	21		Local Purchase
Mail Slot Cover	Cover, Mail Slot	2	C30507	***
Flat Washer	washer, flat .219 I.D. x	_		
a	.5000 O.D. x .049 Thick	2		Local Purchase
Counterbalance Channel L/H*	Channel		D196705-1	
Counterbalance Channel R/H*	Channel		D196705-2	
Floating Pulley Bracket*	Bracket, Floating	2	D196703	***

NO.	PART NAME	TECHNICAL DESCRIPTION	ΥTÇ	DWG.NO.	ORDERING INFORMATION
	D. 17	Gleave Dullay	٥	^ 20522	***
30	Pulley Bearing Sleeve*	Sleeve, Pulley	0	c 30532 D30562	***
31 32 33 34 35	Nylon Pulley*	Pulley, Nylon	2	B30565/66	
32	Tambor Door Cable*	Cable, steel with crimp ferrule	_ 7 Q	D302027.00	Local Purchase
<u> </u>	Cotter Fins	Pin, cotter 3/16 D.x3/W L. stainless stee	8 at o		Local Purchase
34	Hex Nuts*	nut, hex, 8-32 steel, cad plated	Ü		Local rurchase
35	Screw*	8-32 x 3/4 Pan Hd. Machine Screw,	4		Local Purchase
0.0	Z	cad plated 8-37 x 3/4 Flat Hd. Machine Screw,	-1		Local Furchase
36	Screw [*]		4		Tonal Dumahaga
2.0	777 a.t1 X	Steel, cad plated	4		Local Purchase
37	Flatwasher*	Washer, flat, .188 I.D. x	4		Leas J. Dumahana
20	77 37 4 S	.37 O.D. x .049 steel, cad plated	2		Local Purchase
38	Hex Nut*	Nut, hex 10-32 steel, cad plated	2		Local Purchase
39	Flatwasher*	Washer, flat .219 I.D. steel,	4		I a a a 3 December a
li a	- V	cad plated	4		Local Purchase
40	Screw*	Screw, Pan Head 10-32 x 5/8"	2		I and I Demokana
1	* 1 . 1 . 2	Steel, Cad Plated	2		Local Purchase
41	Lockwasher*	Washer, Lock #8, Steel, Cad Plated	2	D201100	Local Purchase
42	Removeable Divider	Vertical Divider, portable	2	D30480	****
43	Anchor Bolt**	Anchor Bolt	4	C30533	
44	Hex Nut**	1/2-13 Cad Plated, Steel	- 4		Local Purchase
45	Lockwasher**	Washer, Lock 1/2, steel, cad plated	4		Local Purchase
46	Spring*	Spring	4	B30564	**
47	Bolt	Bolt, Hex $3/8-16 \times 3/4$ " long,			
		cad plated	4		Local Purchase
48	Washer	Washer, lock, 3/8 I.D., steel,			-
		cad plated	4		Local Purchase
49	Rivet	Rivet, Drive 3/8 Dia. x 5/16 Long	8		Southco Fastener'
					38-112-10-91 or equa
50	Base Plate	same	1	D30774	***

^{*}Included in Items 15 and 16
**Part of Pedestal Assembly E30503, Item No. 3
***Contractor as shown on nameplate on rear of mailbox unit