

DESCRIPTION, INSTALLATION, AND ADJUSTMENTS
FOR TELETYPE AC243** AND AC244**
APPARATUS CABINETS

Issue 2 of Specification 5687S consists of Issue 1 modified by the following changes:

Page 2, Paragraph 2B (2)

Add the following to the end of this paragraph:

Remove the hexagon cover locating stud from the front of the typing reperforator base. Install the 122864 tape chute and 122863 cover in place of the present tape chute on the typing reperforator.

Page 3, Paragraph 2c (8)

Change the designation "MXB212**" to read: "MXB213"

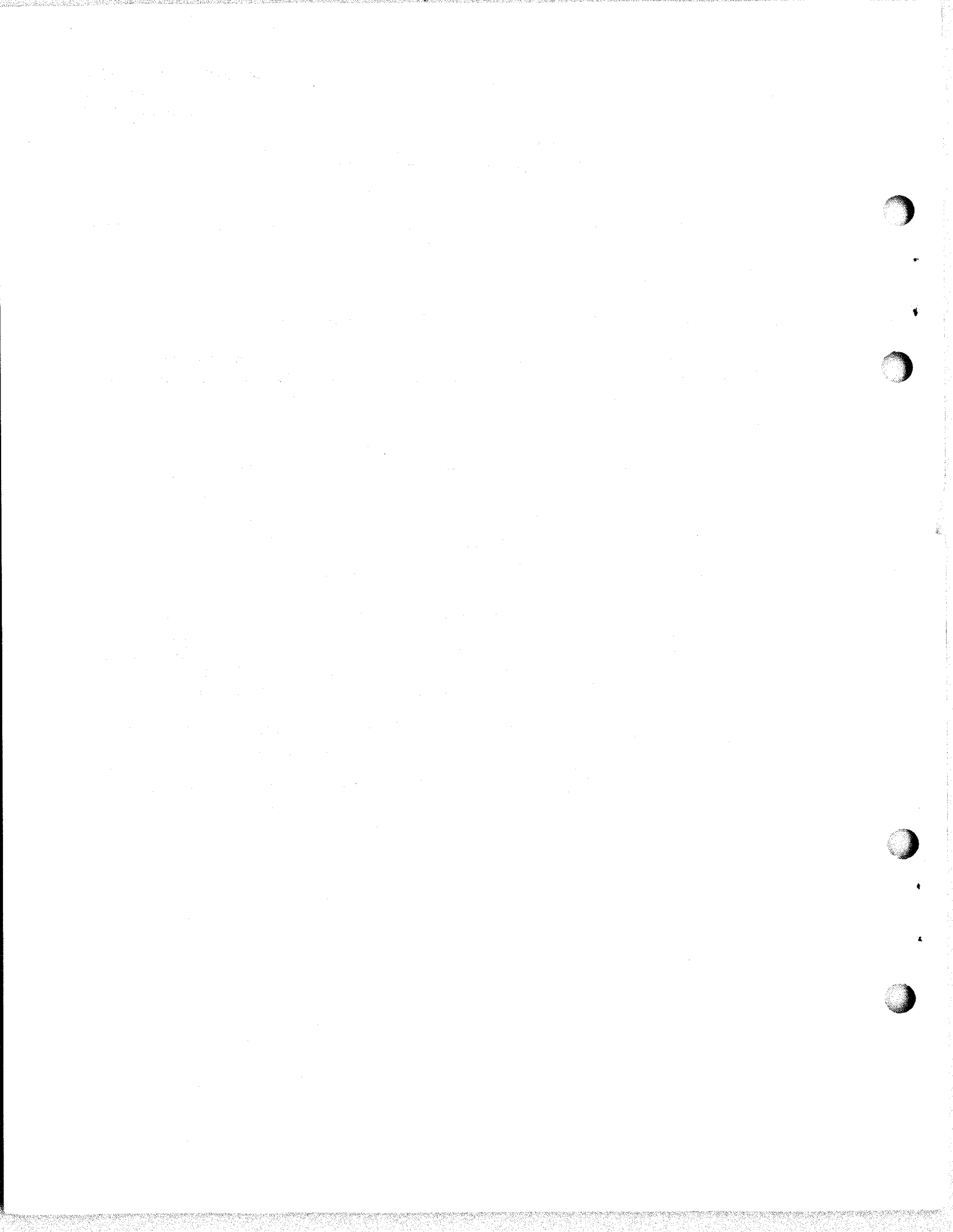
Page 6, Paragraph 3a (17)

Add the following adjustment after paragraph (17):

(18) TAPE BAFFLE PLATE ADJUSTMENT (AC243**)

(a) The leading edge of the 117850 tape baffle plate should be flush or within $3/32$ " beyond the outside surface of the door. To adjust, loosen the four screws which fasten the 117804 mounting plate to the sliding shelf. Take up the play of the mounting plate in the forward direction. Tighten the screws. If necessary, bend to meet the above requirement.

(b) The top edge of the channel on the bottom of the door should clear the rear edge of the cut-out in the 117850 tape baffle plate by at least $1/16$ " and not more than $3/32$ " when the door is being swung open or closed. To adjust, position the tape baffle plate by means of its mounting screws.



DESCRIPTION, INSTALLATION, AND
ADJUSTMENTS FOR TELETYPE
AC243** AND AC244**
APPARATUS CABINETS

1. GENERAL

a. TRANSMITTING CABINET (AC244**) (Figure 1)

(1) The transmitting cabinet has a four-shelf arrangement for supporting four three-gang multiple transmitter distributors. The two lower multiple transmitter distributor sets are used for message transmission while the two upper sets are used for message numbering and station identification. The space occupied by the upper numbering unit is closed by a door which disappears within the cabinet when raised. Message number card holders are located on the front of this cover. The lower compartment provides tape space sectionalized as regards transmitters and partitioned for front and rear storage. Tape utilized by the lower message transmitters falls into corresponding sections of the front storage space within the cabinet. Tape utilized by the upper message transmitters drops into corresponding sections at the rear of the lower compartment. Latching the lower message transmitter shelf in the forward one of two latchable positions, and the upper message transmitter shelf in the rearmost latchable position, enables the tape to reach its proper compartment. A tape bin for unsent tape is attached externally to the front door of this compartment.

(2) For the description and adjustments of multiple transmitter distributors refer to Bulletin 185.

b. RECEIVING CABINET (AC243**)(Figure 2)

(1) The receiving cabinet has a three-shelf arrangement for supporting three typing reperforators, with bases to which 114178 tape reels are mounted. The space occupied by each typing reperforator is closed by a door which disappears within the cabinet when raised. An aperture in each of these doors permits the perforated tape to emerge and settle in the external tape bin attached to the front door of the lower compartment.

(2) For the description and adjustments of the typing reperforator refer to Bulletins 172 and 165 respectively.

c. ADDITIONAL FEATURES

The Teletype AC244** transmitting and AC243** receiving cabinets are both equipped with a horizontal wiring duct that extends the width of the base and connects with a vertical duct extending upward along the left-hand wall. The vertical duct provides electrical service facilities at each apparatus level. A control panel hinged to swing outward occupies the upper section in each cabinet. Control panels differ with regard to transmitting and receiving cabinets. A lower compartment provides storage space. Between the upper section and the lower compartment, apparatus shelves are arranged on sliding rails and rollers that permit withdrawal of the apparatus for greater accessibility. Each shelf is equipped with an adapter plate of a

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type appropriate for the particular apparatus involved. The adapter plate mounts on the shelf by means of resilient fittings. Electrical interconnections to signal lines are made from a terminal block located at the rear of the upper section. A full-length door swings outward at the rear of each cabinet. The cabinets are approximately 78 inches high, 27 inches wide and 24 inches deep. They may be securely anchored to the floor if desired.

d. The double asterisk (**) designates a two-letter suffix which indicates the paint finish. The following four standard wrinkle finishes are now available:

AA - Black	AC - Light-Brown
AB - Gray-Green	AD - Dark-Brown

2. INSTALLATION AND INITIAL ADJUSTMENTS

a. GENERAL INSTRUCTIONS

(1) Unpack all parts and units with care. Muslin bags and small parts should be kept with their associated pieces of apparatus until used in the installation.

(2) Two 1/2 inch holes are provided in the horizontal duct of the cabinet base for the purpose of securing the cabinet to the floor. Suitable holes should be provided in the floor where the cabinet is to be located in accordance with dimensions shown on Figure 3.

(3) Place the cabinet in position, remove the two lower duct covers inside the cabinet, and secure the cabinet in position. It is recommended that one-inch (outside diameter) washers be used over the 1/2 inch holes in the base.

(4) Bring in signal line and power circuits either through openings provided in the top of the cabinet or through ducts provided at the sides of the base and openings in the floor of the bottom compartment. Remove duct covers accordingly. Connect the line and power circuits to the terminal block located at the rear of the top compartment as shown on Wiring Diagrams 2713WD and 2714WD but do not apply power until installation is completed. If the wires are brought into the cabinets at the bottom, they should be passed upward through the vertical ducts in the sides of the cabinets.

b. INSTALLATION OF EQUIPMENT IN RECEIVING CABINET (AC243**)

(1) Remove the tape bin from the inside of the bottom front door and place it in position on the outside of the door.

(2) Attach the 114178 tape reel assembly to the rear side of the FPR base by means of the screws and washers in the muslin bag tied to the tape reel assembly.

(3) Pull out the bottom shelf and place the base in position on the shelf plate. Place a typing reperforator on the base. Likewise, pull out the middle and top shelves and place a typing reperforator set on each.

(4) See that all switches are in their OFF position. Plug the line and power cords from each typing reperforator into their respective receptacles.

c. INSTALLATION OF EQUIPMENT IN TRANSMITTING CABINET (AC244**)

(1) Remove the tape bin from the bottom shelf and place it in position on the outside of the front bottom door.

(2) Remove the front cover and top plate from the message transmitter distributor base (MXB213**). Place three message transmitter distributors (MXD13) on the base and press each unit toward the counter-shaft. Insert the mounting screws, washers and lock washers from the muslin bag through the transmitter mounting holes and into the base. Position the units to provide a barely perceptible amount of backlash between the gears. Check the backlash throughout a complete revolution of the larger gear. Tighten the mounting screws.

(3) Replace the front cover and install the top plate on the transmitter.

(4) Pull out the lower shelf and place the assembled transmitting set in position on the shelf plate.

(5) Pull out the lower middle shelf, assemble the second message transmitter set as outlined in Paragraph (2) and (3) above, and place the assembled set in position on the shelf plate.

(6) Pull out each of the two upper shelves. Mount three transmitter distributors (MXD17) on each of the MXB208** bases as outlined in Paragraphs (2) and (3) above. Remove the spring latch assemblies, MXD top covers, screws, and washers from the attached muslin bags. Install the top covers on each MXD fastening to it the spring latch assemblies. Position the bracket to which the spring latch is attached so that each tape winder shaft pivot arm latches securely by means of the long pin falling into the spring latch hole.

(7) Place the assembled sets in position on the shelf plates.

(8) Fasten the 27 conductor cord which extends from both the MXB212** and MXB208** numbering and message transmitter bases by a cable clamp. This cable clamp is mounted by the left hand rear screw of the drawer slide which is also used for holding the roller bracket. The 27 conductor cord should be run underneath the tie bar which extends across the rear of the drawer slide on the two lower slides and above the tie bar on the two upper slides. Tie the power cord to the 27 conductor cord just ahead of the cable clamp and run the power cord over the tie bar mentioned above.

(9) See that all switches are in their OFF position and plug the line and power cords from each multiple transmitter set into their respective receptacles.

CAUTION To avoid damage to the tape lids of the MXD13 transmitter distributors mounted on the lower shelf of the cabinet, make sure that the tape lids are in their latched position when closing the drawer.

3. MAINTENANCE

a. TAPE FEED OUT KEY (117736) RECEIVING CABINET CONTROL PANEL.

(1) All keys should move freely and return to the center position when released.

(2) When the key is slowly operated, the MAKE springs should move at least $1/64$ ". Gauge by eye. With the key either operated or unoperated the contact gaps should be at least $.010$ ".

(3) To adjust, bend the contact springs as required.

b. CABINET ADJUSTMENTS - TRANSMITTING AND RECEIVING

(1) BASE WIRE DUCT ADJUSTMENT

The wire duct in the base of the cabinet should be adjusted in line with the front and rear base frames so that the three base parts are flush on each side and on the bottom. Adjust by means of the 8 mounting screws. The fuse receptacle for the convenience outlet is provided but is not wired in either cabinet.

(2) DOOR RAIL ADJUSTMENT

The left rail (116022) and right rail (116024) should be adjusted to the $19-7/16$ " dimension as shown on Figure 4. To adjust, add or remove an equal number of shims (116020) between the rails and the cabinet at the mounting screws (front and rear).

(3) DOOR AND LEADER ADJUSTMENTS

The door and leader should be centered in relation to the opening in the cabinet. With the door in this position the 116033 guides should be adjusted as shown on Figure 4A so as to provide a perceptible clearance between the guide and rail throughout the full travel of the door (front to rear). Lock the slides in position by means of the eccentrics (89963).

(4) GUIDE AND RAIL VERTICAL ADJUSTMENTS

There should be a perceptible clearance between the extrusions on the 116033 guides and 116022 and 116024 guide rails throughout the entire travel. See Figure 4 for location of parts. To adjust, bend the guides.

(5) DOOR ROLLER ADJUSTMENT

With the door in position as shown by dotted line on Figure 4B there should be approximately $1/16$ inch between the roller and the door. To adjust, rotate the eccentric.

(6) DOOR STOP ADJUSTMENT

With the door in its closed position, there should be at least $1/16$ inch clearance between the lug on the rail and the door stop 72019. Refer to Figure 4. To adjust, position the door stop.

(7) SIDE-PANEL STRIP FOR MOUNTING SLIDES ADJUSTMENT

The 117741 and 117742 slides which are mounted to the 117811 and 117812 panel strips should be adjusted to the 19-9/32" dimension shown on Figure 5A. To adjust, add or remove an equal number of 117824 shims between the special nuts on the side panels and the side-panel strips on both sides of the cabinet (front and rear).

(8) METHOD OF ASSEMBLING PARTS TO MAKE WIRE DUCT See Figure 5A.

(9) STOP STRIP ADJUSTMENT

All stop strips or similar parts used as stop strips should be mounted 7/32 of an inch from either the front or rear face of the cabinet shelf. To adjust, position by means of their mounting holes. When the doors are closed make certain that they are recessed 5/32 of an inch from the face of the shell.

(10) REAR DOOR LATCHING ADJUSTMENT

When the door is closed, it should be held firmly against the stop strips. To adjust, bend the latches at the top and bottom of the cabinet as shown in Figure 5B.

(11) FRONT DOOR STUD ADJUSTMENT

The detenting studs on all front doors of the cabinet should be positioned so that the doors may be opened by a pull of 9 to 12 lbs. when a 12 lb. spring scale is hooked in the hand grip and pulled outward. To adjust, rotate the detent stud.

(12) SLIDING SHELF ADJUSTMENT

The 117743 slide rollers mounted on the 117805 sliding shelves should roll freely on the slide track. To adjust, refine adjustment (7) above by adding or removing shims. See Figure 5A.

(13) SHELF PLATE ADJUSTMENT (RECEIVING AC243**)

The 117804 mounting plate (Figure 2) assembled in the forward position of the 117805 sliding tray should be adjusted so that the 117850 baffle plate is centered with the tape notch in the disappearing door. To adjust, loosen the mounting-plate mounting screws and position the mounting plate to right or left by means of its elongated mounting holes. Tighten the mounting screws.

(14) FRONT BAFFLE PLATE ADJUSTMENT (AC244**)

The disappearing door should clear the front baffle plate (Figure 2) by approximately 1/16" when being opened or closed. To adjust, position the baffle by means of its mounting screws.

(15) MOUNTING PLATE ADJUSTMENT (AC244**)

The 117801 shelf plate for numbering transmitter sets should be centered (right to left) between the sides of the sliding shelf and mounted in the rear position. Adjust, by means of the elongated mounting holes.

(16) The shelf plate for the message transmitter set should be mounted in the forward position of the sliding shelf and should be adjusted so that the latch release rod is centered with relation to the notch in the tape baffle attached to the shelf plate.

(17) REAR BAFFLE ADJUSTMENT (AC244**)

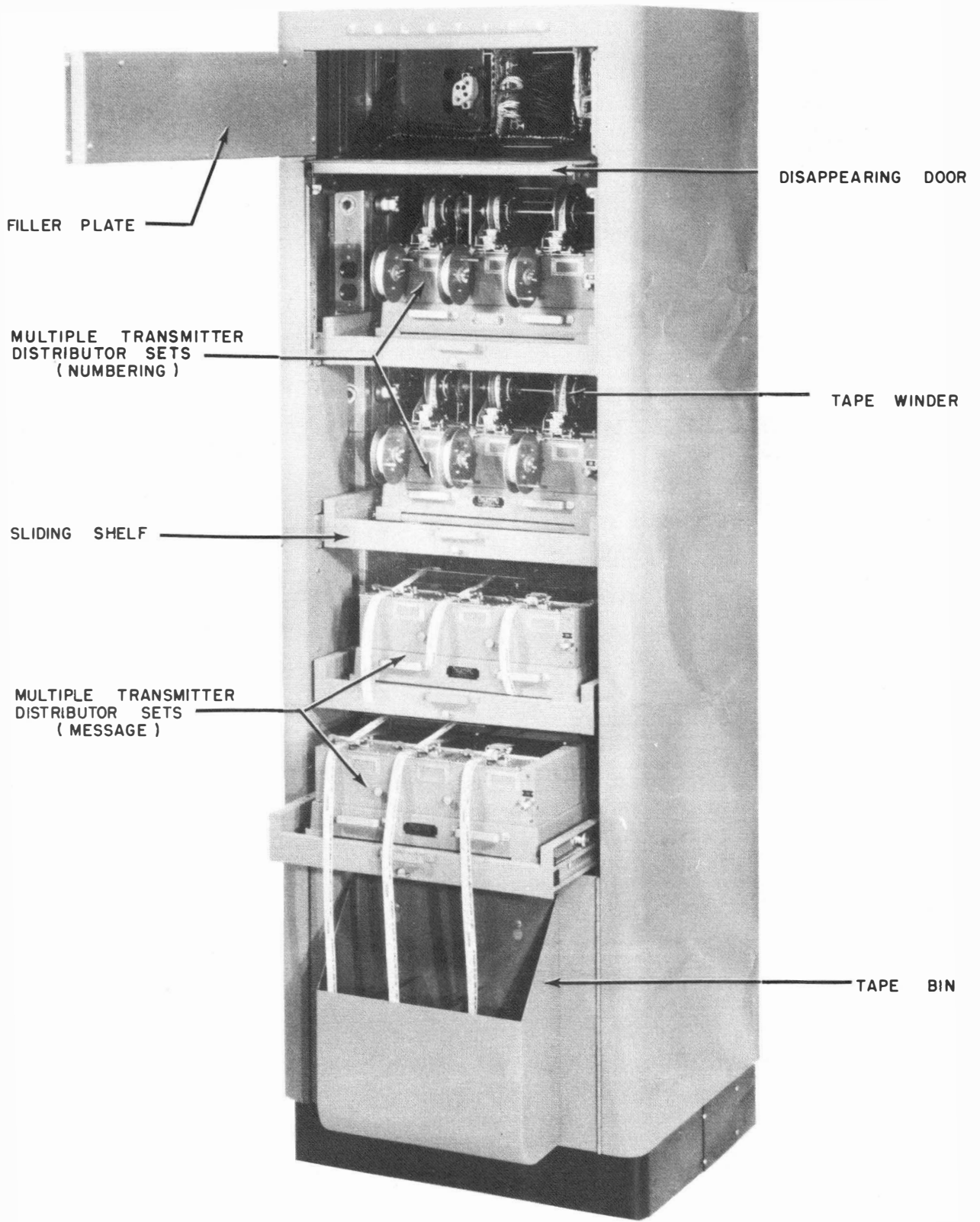
The 117814 rear baffle should be adjusted to the extreme right-hand position on the sliding shelf (viewed from front).

4. CABINET LUBRICATION

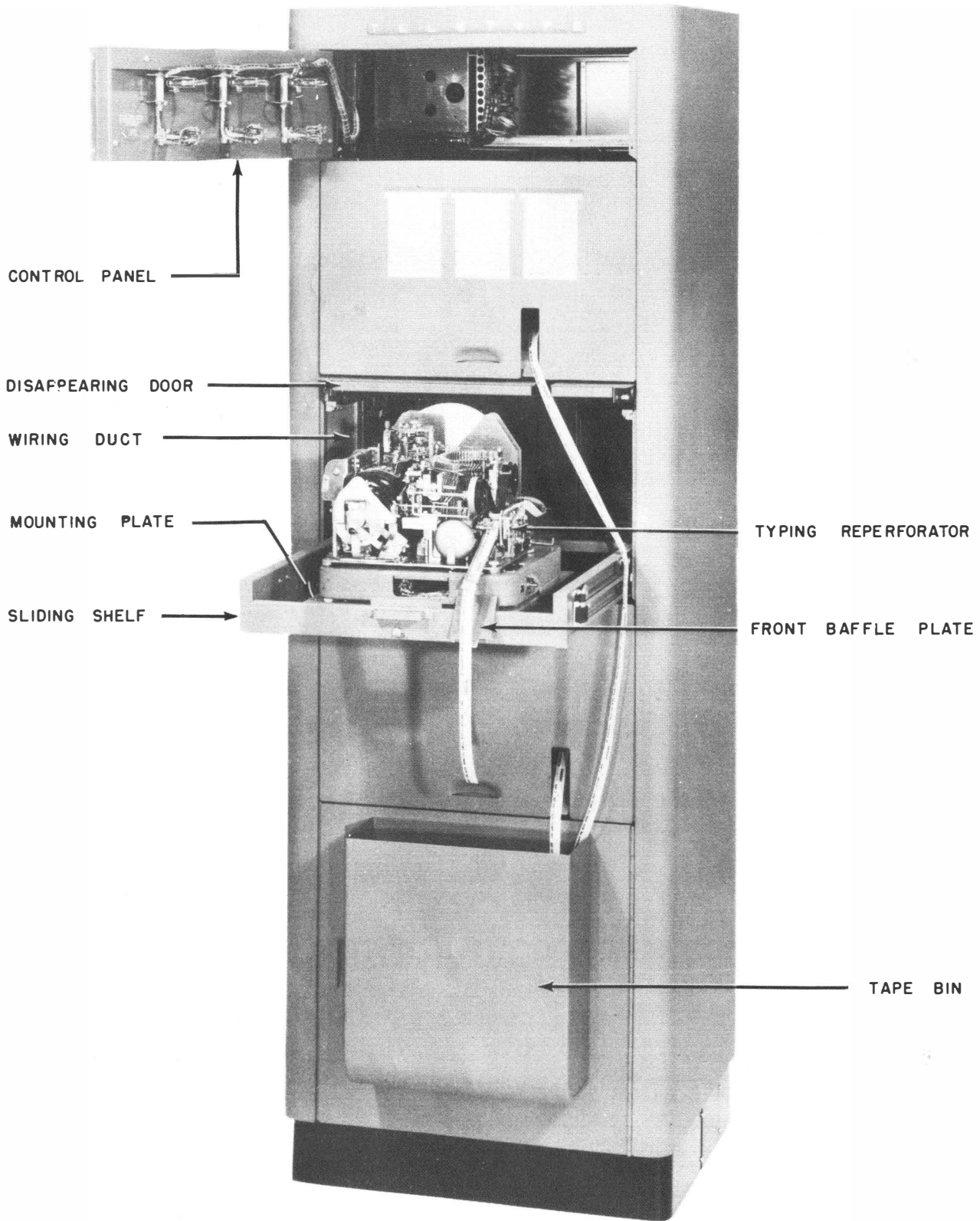
- a. Slides - grease.
- b. Latches - oil
- c. Rollers - oil

5. SEE BULLETIN 185 AND ASSOCIATED CORRECTION SHEETS FOR MAINTENANCE OF THE MULTIPLE DISTRIBUTORS.

6. SEE BULLETIN 165 AND ASSOCIATED CORRECTION SHEETS FOR MAINTENANCE OF THE TYPING REPERFORATORS.



TRANSMITTER CABINET
(OPEN FOR SERVICING)
FIGURE I



RECEIVING CABINET
(OPEN FOR SERVICING)
FIGURE 2

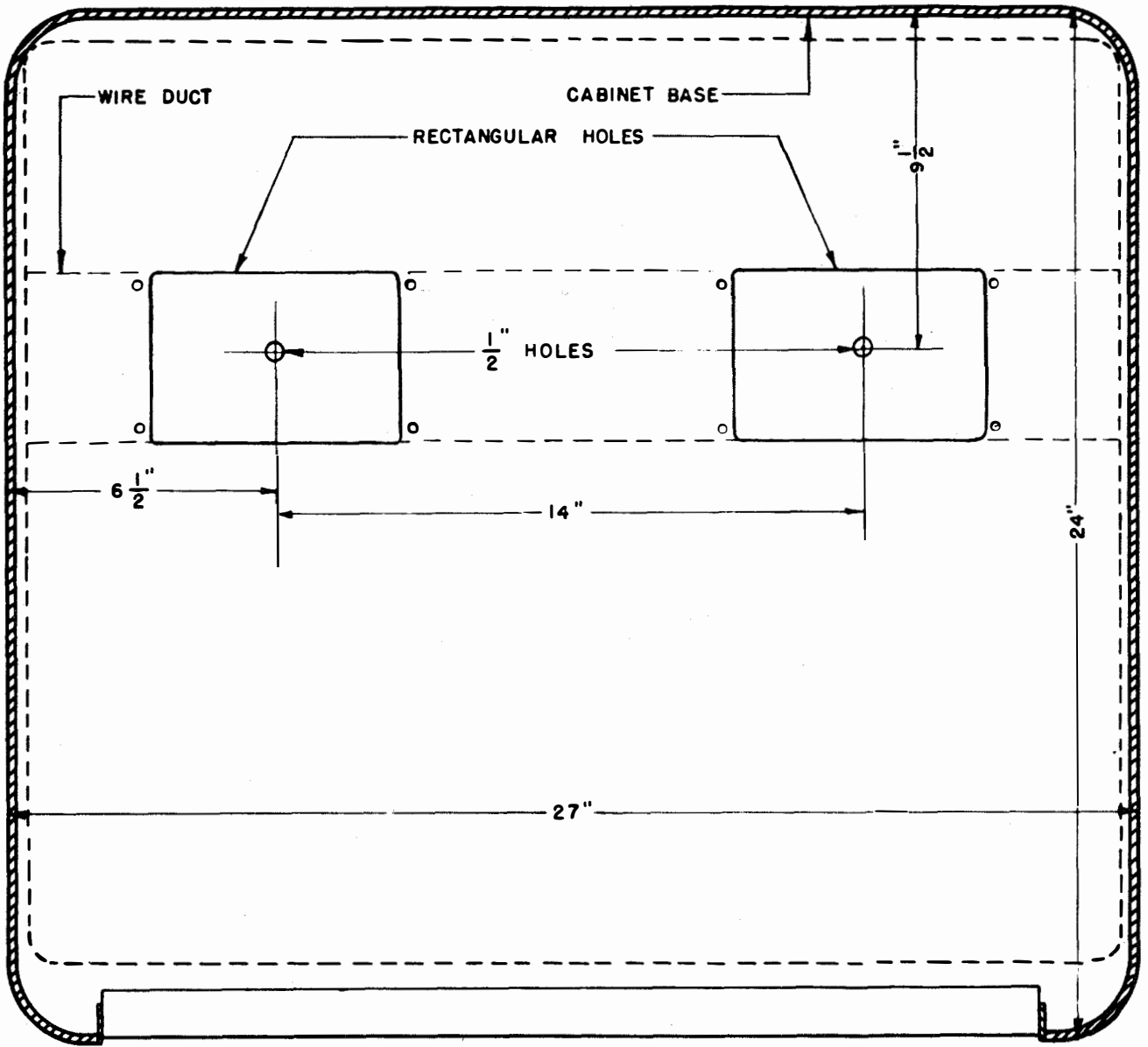
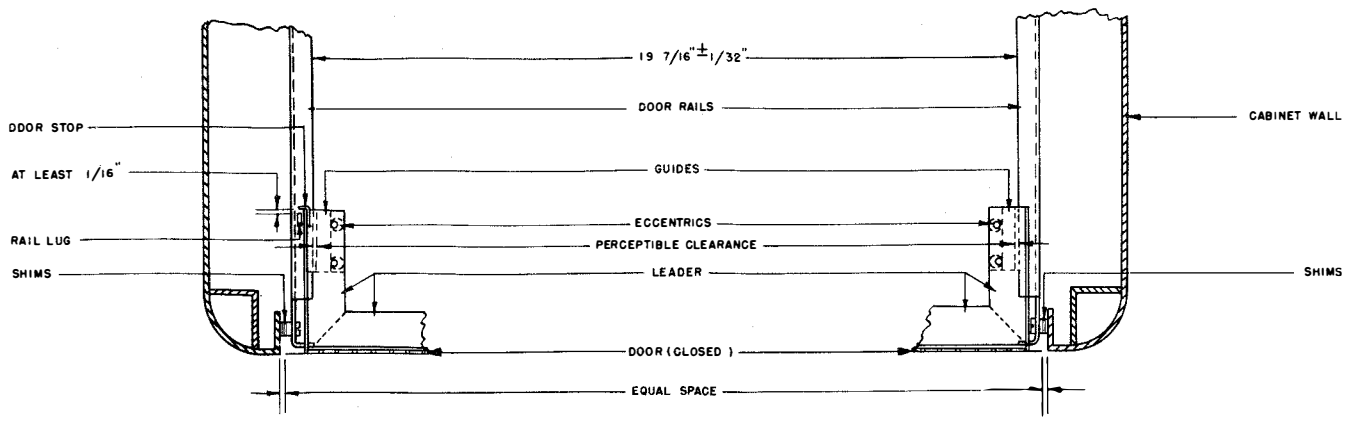
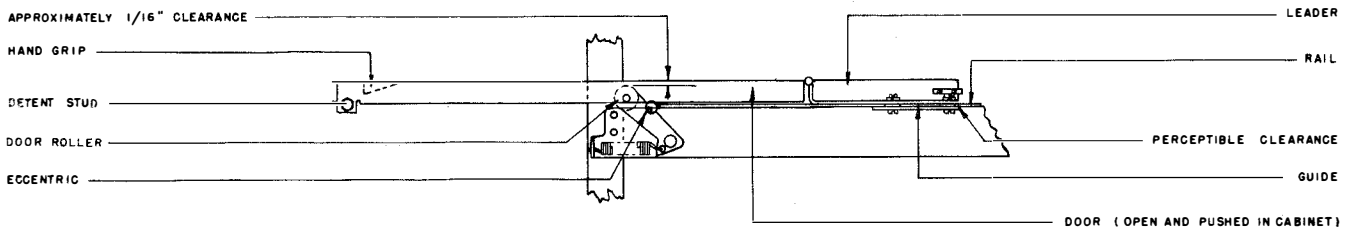


FIGURE 3
APPARATUS CABINET BASE



CROSS SECTION-TOP VIEW OF CABINET

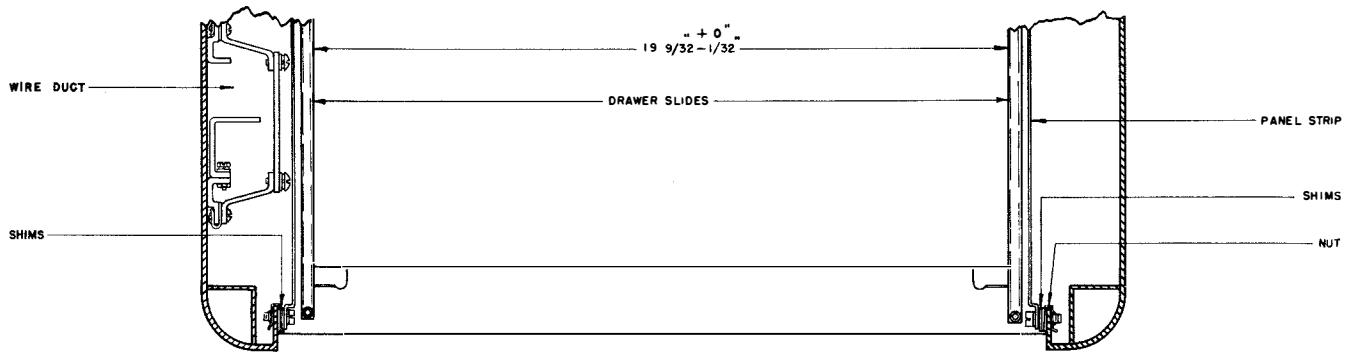
(A)



CROSS SECTION-SIDE VIEW

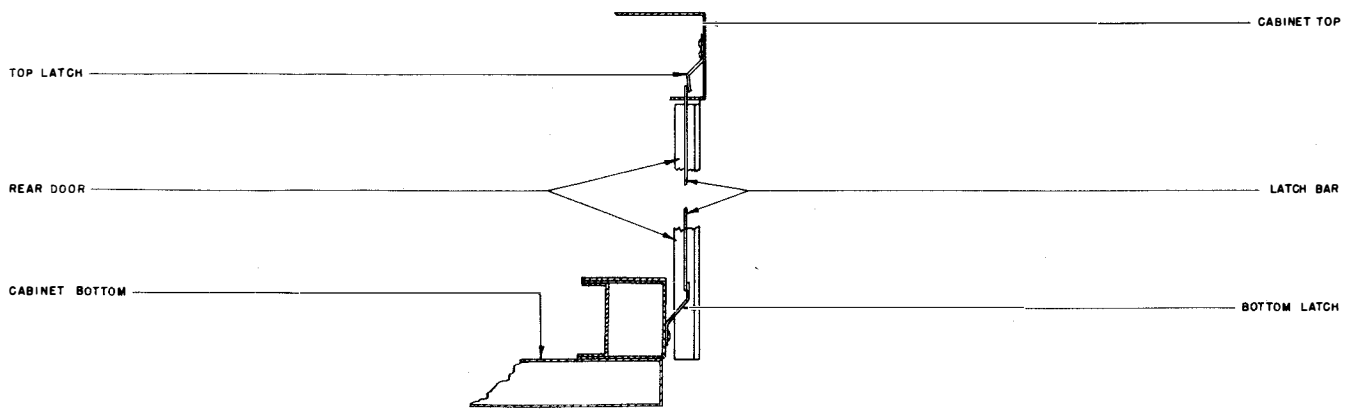
(B)

FIGURE 4
APPARATUS CABINET



CROSS SECTION-TOP VIEW OF CABINET

(A)



CROSS SECTION-SIDE VIEW OF REAR DOOR

(B)

FIGURE 5
APPARATUS CABINET