

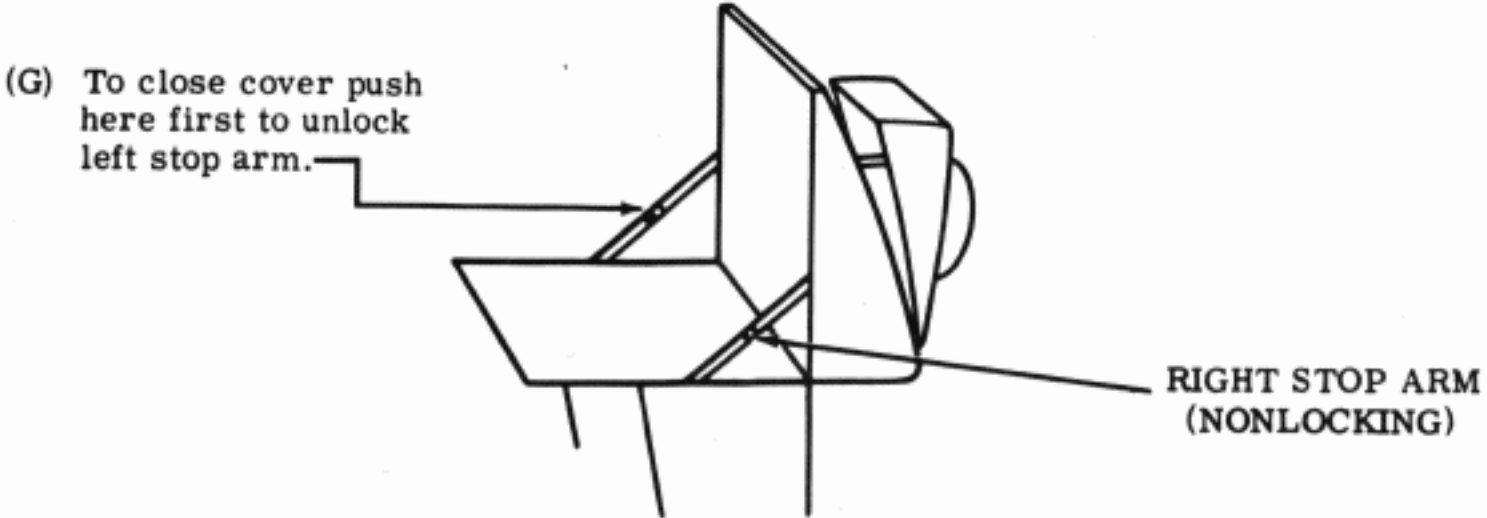
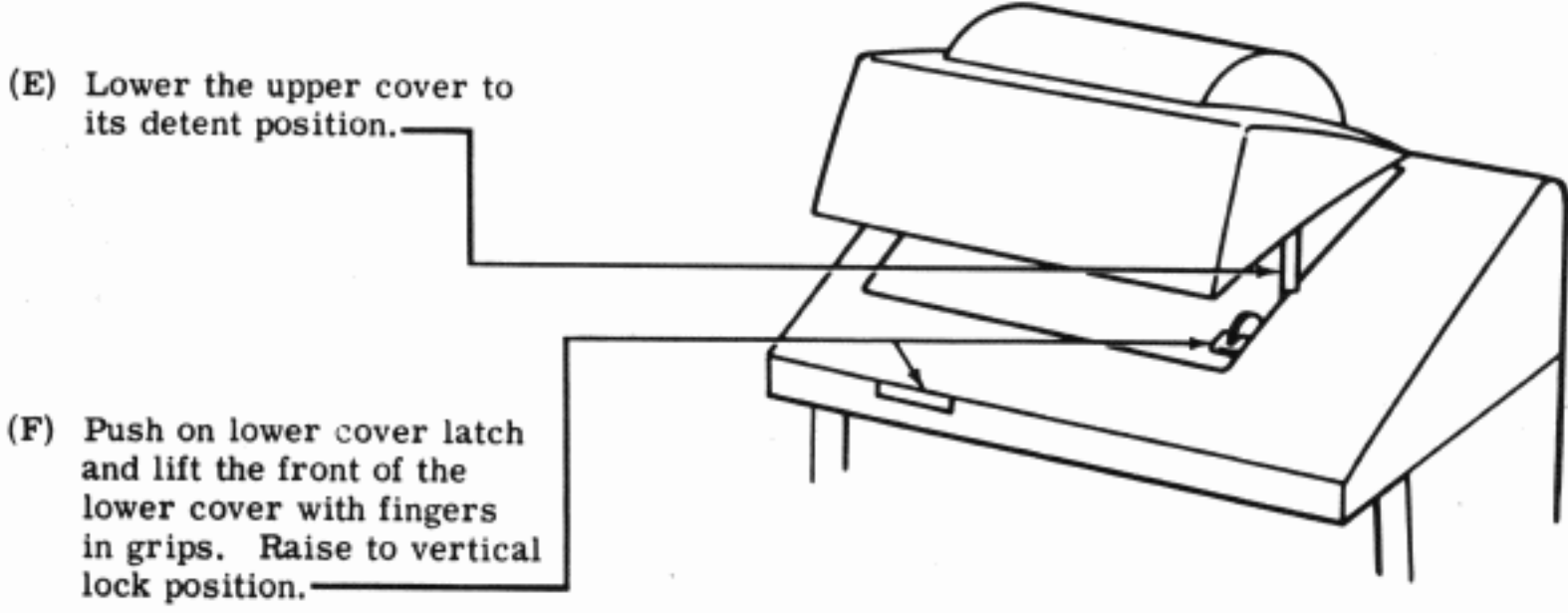
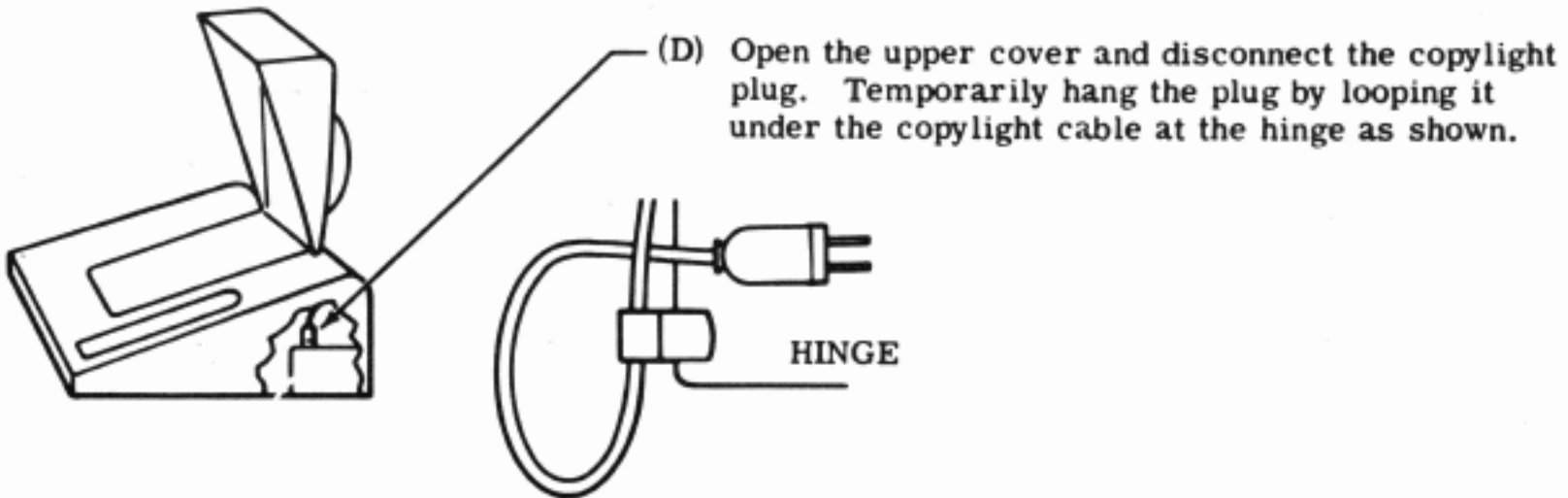
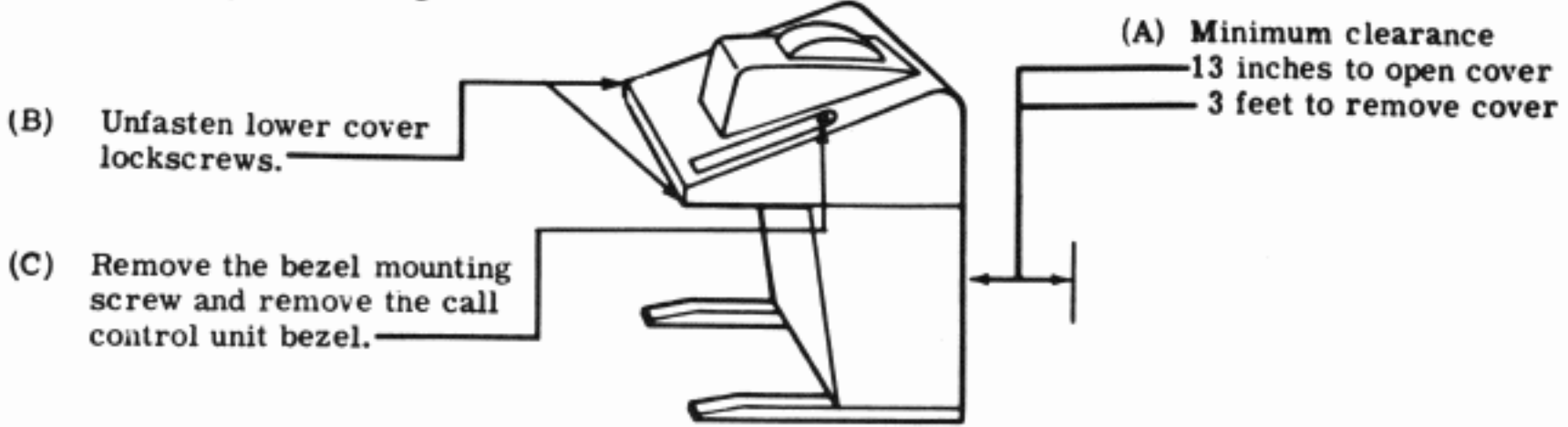
35 CABINETS FOR KEYBOARD SEND-RECEIVE AND RECEIVE-ONLY SETS

ADJUSTMENTS

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Call control unit height . . . . .	12		
Call control unit mounting bracket . . . . .	12	1. GENERAL	
Carriage return, line feed, and break lever (receive-only unit) . . . . .	18	1.01 This section is reissued to include recent engineering changes and to add the 35 wall mounted cabinet. Since this is a general revision, marginal arrows are omitted.	
Cleaning cabinets . . . . .	12	1.02 The adjustments in this section are arranged in a sequence that should be followed if a complete readjustment is undertaken. A complete adjusting procedure should be read before attempting to make the adjustment. After an adjustment is completed, be sure to tighten any nuts or screws that may have been loosened, unless otherwise instructed.	
Control panel . . . . .	10	1.03 The adjusting illustrations indicate tolerances, positions of moving parts, spring tensions and the angle at which scales should be applied. The tools required to make adjustments and check spring tensions are not supplied with the equipment, but are listed in another section. Springs which do not meet the requirements, and for which there are no adjusting procedures, should be discarded and replaced by new springs.	
Copylamps . . . . .	19	1.04 Where adjustment instructions call for removal of components, assemblies, sub-assemblies or parts, all adjustments which the removal of these parts might facilitate should be made before the parts are replaced or as the equipment is reassembled. When a part mounted on shims is removed, the number of shims and their location should be noted so that the identical pile-up can be made when the part is replaced.	
Copyright bracket and end-of-line lamp . . . . .	5	1.05 References made to left or right, up or down, front or rear, etc apply to the unit in its normal operating position as viewed from the operator's position in front of the unit.	
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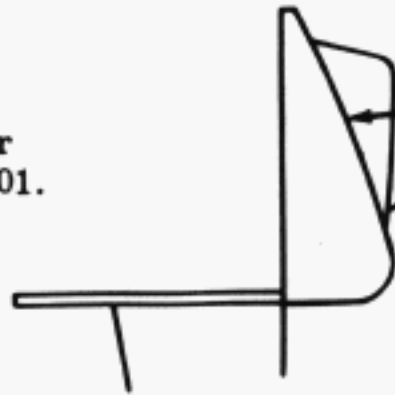
2. ADJUSTMENTS

2.01 Opening and Closing of Cover



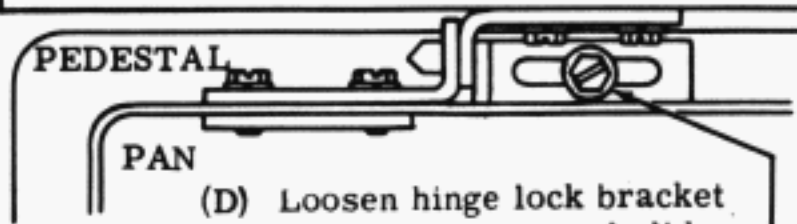
2.02 Opening and Closing of Cover (continued)

(A) Follow instructions for opening of cover in 2.01.



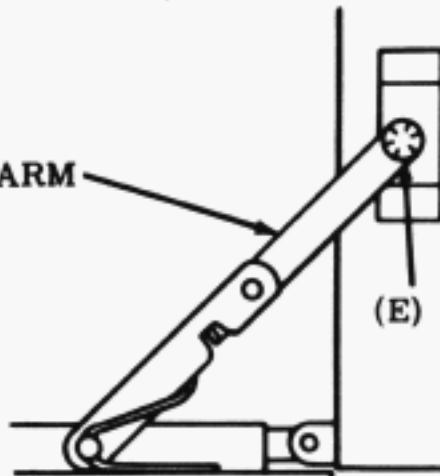
(B) Close upper cover to fully closed latched position.

INSIDE BACK OF COVER IN OPEN POSITION  
(VIEW LOOKING STRAIGHT DOWN)



(D) Loosen hinge lock bracket mounting screw and slide bracket away from hinge.

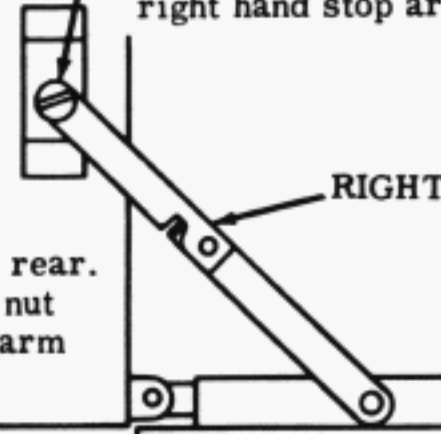
LEFT STOP ARM



(E) Support cover from rear. Remove acorn type nut and disengage stop arm from cover.

LEFT SIDE OF COVER

(C) Remove the upper retaining shoulder screw from the right hand stop arm bracket.



RIGHT STOP ARM

RIGHT SIDE OF COVER



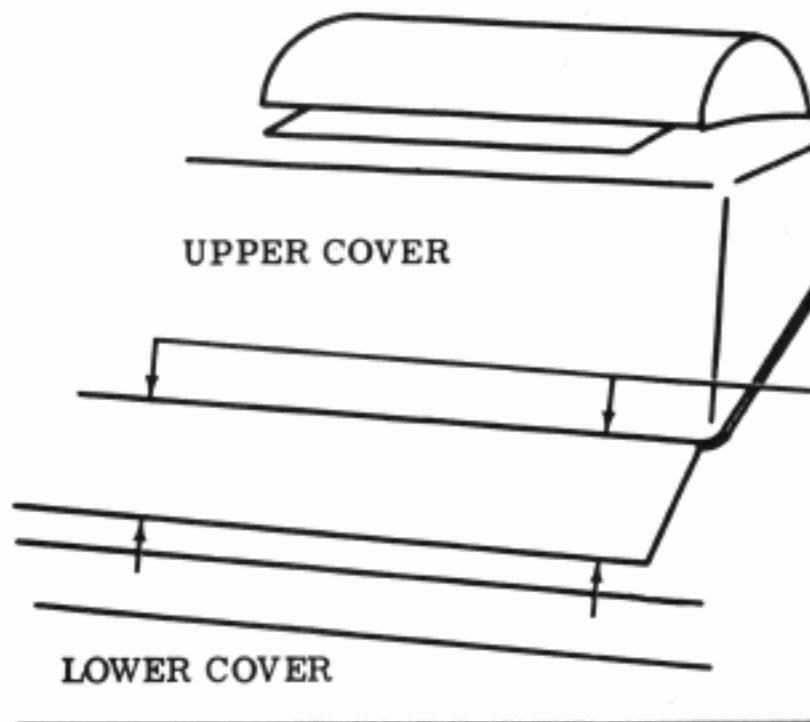
(F) Supporting the cover from the rear, remove by sliding sideways to separate hinges. The cover may be grasped as shown.

Note: Cover weighs approximately 39 pounds.

To replace cover, reverse removal procedure.

2.03 Upper Cover Arrangement

(B) UPPER COVER CLEARANCE (LATCHED)



- (1) Requirement  
Rubber grommets should be slightly compressed.
- (2) Requirement  
There should be no metal-to-metal contact between upper and lower covers.
- (3) Requirement  
Clearance between upper cover and lower cover should be  
0.090 inch maximum at sides and 0.200 inch maximum at rear.

To Adjust  
Position cover with two screws, that mount each hinge to lower cover, loosened.

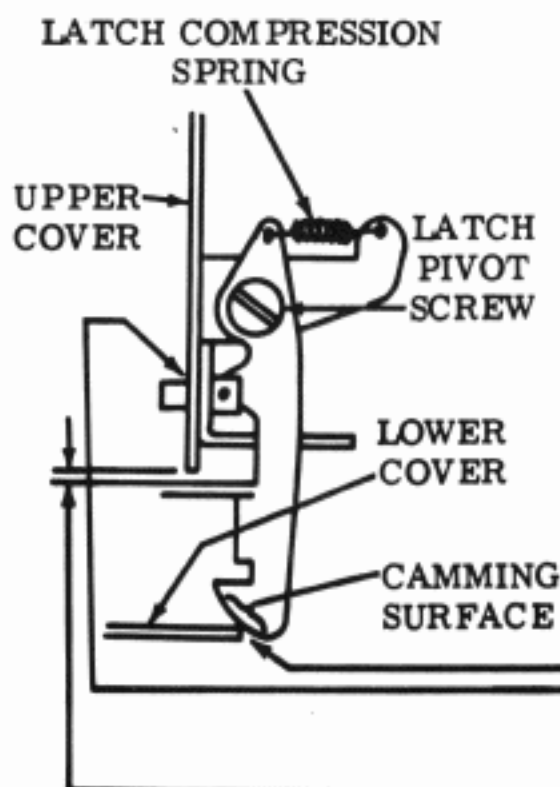
Note: This adjustment should be made in conjunction with the latch adjustment.

(A) UPPER COVER POSITION (FRONT TO REAR)

Requirement  
Clearance between front of upper cover and edge of keyboard opening in lower cover (right and left ends of window depression) should be  
Min 4-1/2 inches---Max 4-5/8 inches

To Adjust  
Position cover with three screws, at each hinge that mounts upper cover, loosened. See COUNTERBALANCE ARM illustration.

(C) LATCH



- (1) Requirement  
Without depressing latch buttons as upper cover is lowered, camming surfaces of latches should contact lower cover.
- (2) Requirement  
Latch button should not become disengaged from guide slot in cover when fully depressed.
- (3) Requirement  
All requirements of upper cover clearance adjustment should be met. Upper cover should latch closed with slight compression of rubber bumpers and no metal-to-metal contact.

To Adjust  
Position both latches with their pivot screws loosened.

Note: This adjustment should be made in conjunction with the UPPER COVER CLEARANCE adjustment.



2.04 Upper Cover Arrangement (continued)

(D) COUNTERBALANCE ARM

(1) Requirement

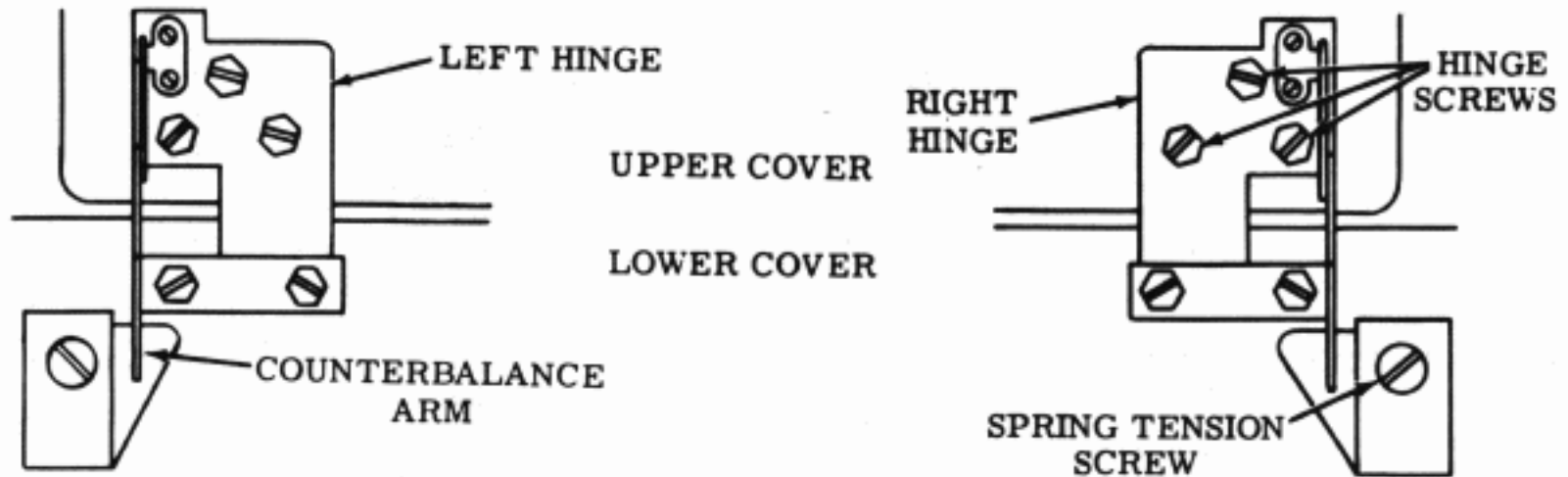
There should be no free fall of upper cover from any position to which it is opened.

(2) Requirement

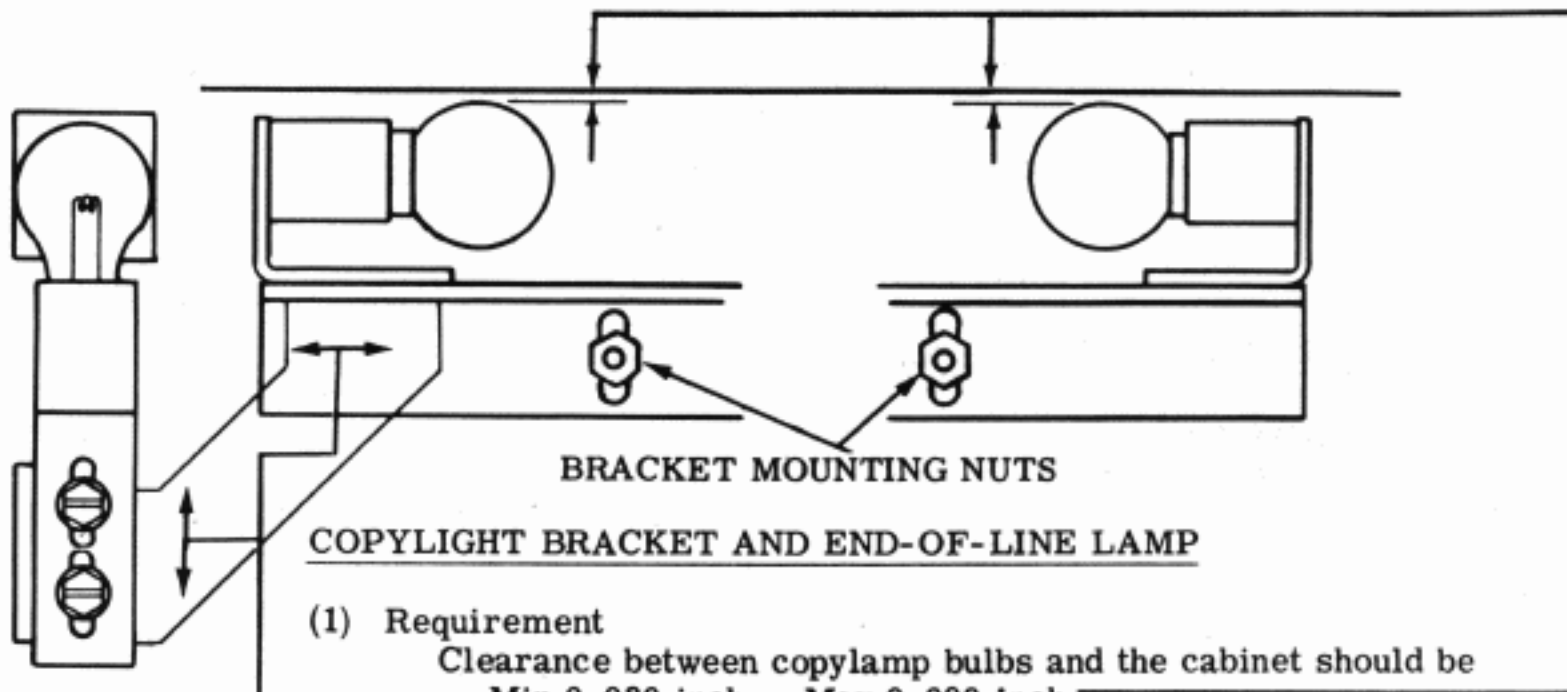
There should be some pressure required to close upper cover.

To Adjust

Tighten spring tension adjusting screws.



2.05 Copyright and Line Guide Copyholder



(1) Requirement

Clearance between copylamp bulbs and the cabinet should be  
Min 0.030 inch---Max 0.090 inch

To Adjust

Loosen the two bracket mounting nuts and position the copylamp bracket.

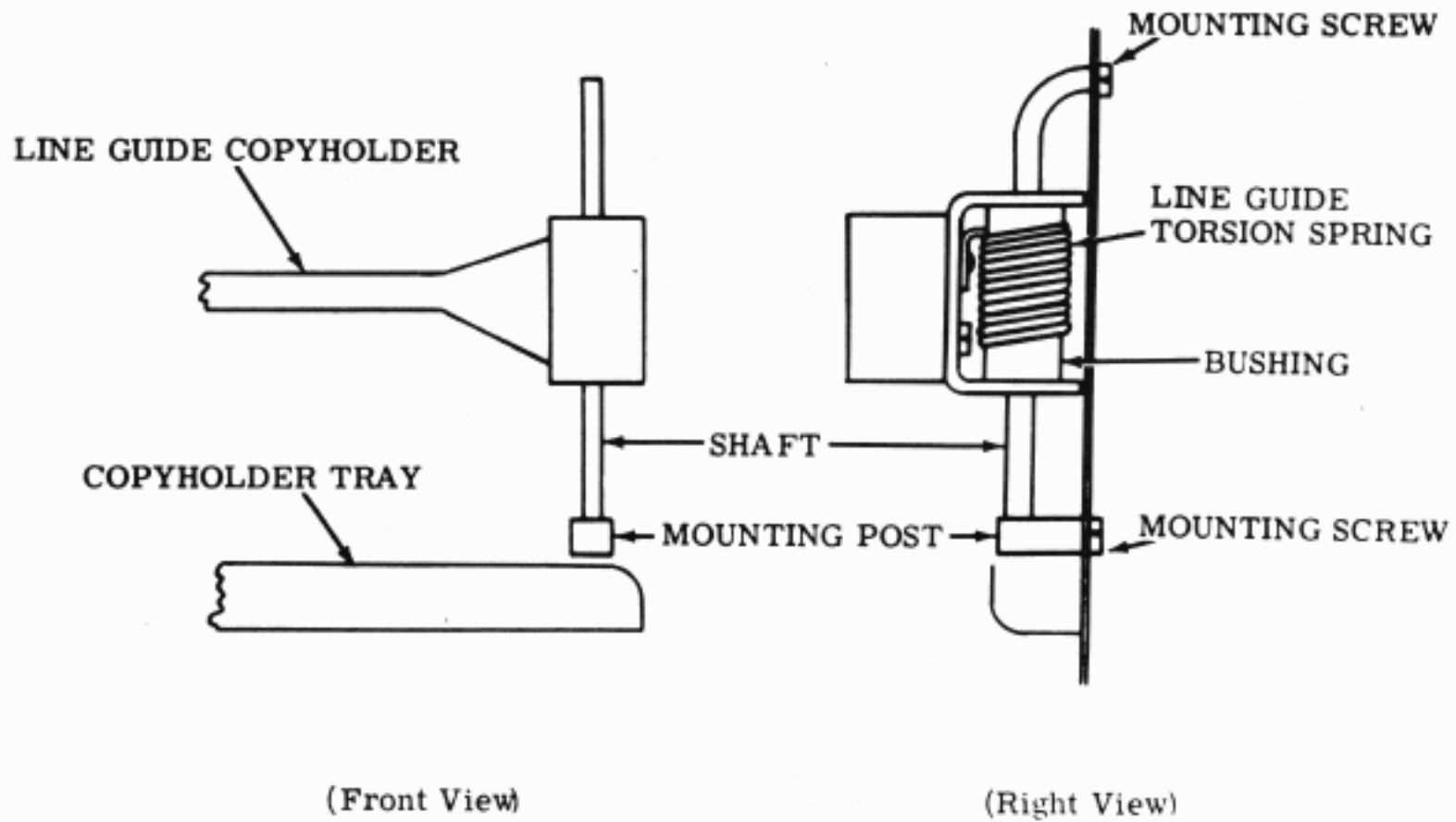
(2) Requirement

Filament of end-of-line lamp bulb should be centered under red lamp cover.

To Adjust

Loosen the two bracket mounting screws and position the end-of-line lamp bracket.

2.06 Copyright and Line Guide Copyholder (continued)



LINE GUIDE COPYHOLDER

**Requirement**

Tension of line guide copyholder should be just sufficient to hold copy in place and prevent the line guide copyholder from slipping down the shaft.

**To Adjust**

Remove two shaft mounting screws from inside cover and take off line guide copyholder. Remove line guide from shaft and rotate bushing in direction to increase or decrease torsion spring tension against line guide. Reassemble line guide and reinstall on cover.

2.07 Bubble and Window Position

Note: Adjustments on this page are preliminary. Final adjustments to be made with typing unit in place.

(C) WINDOW (PRELIMINARY)

(1) Requirement

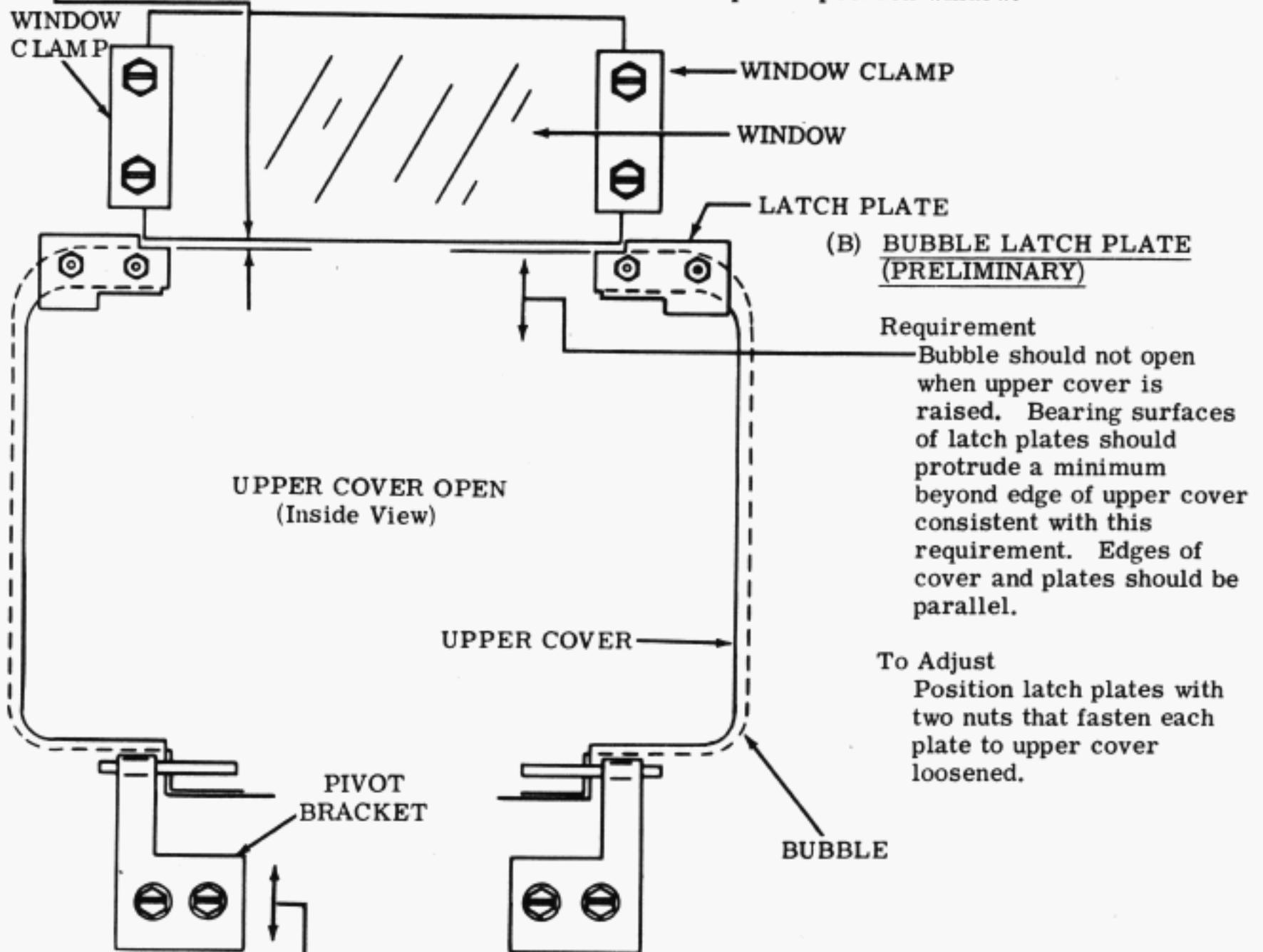
Clearance between rear edge of window and front edge of paper guide on bubble should be Min 0.045 inch---Max 0.095 inch

(2) Requirement

Clearance should not differ at each end of paper guide by more than 0.030 inch.

To Adjust

Loosen four screws which mount two window clamps and position window.



(B) BUBBLE LATCH PLATE (PRELIMINARY)

Requirement

Bubble should not open when upper cover is raised. Bearing surfaces of latch plates should protrude a minimum beyond edge of upper cover consistent with this requirement. Edges of cover and plates should be parallel.

To Adjust

Position latch plates with two nuts that fasten each plate to upper cover loosened.

(A) BUBBLE POSITION, FRONT AND REAR (PRELIMINARY)

Requirement

This bubble should be in the center of its frontmost and rearmost positions.

To Adjust

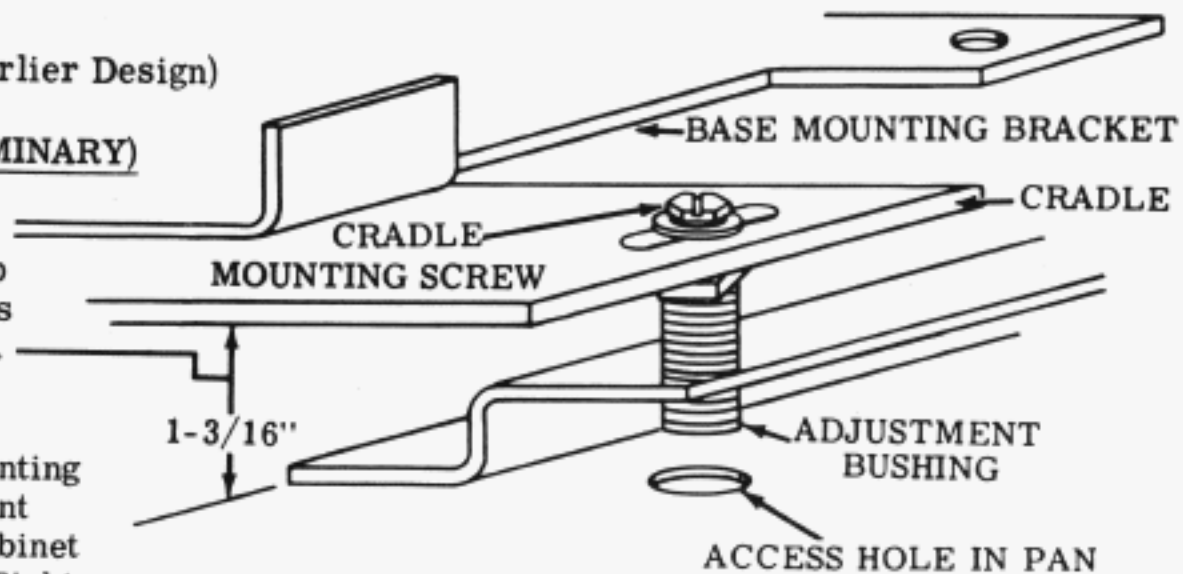
Loosen two mounting screws that mount each pivot bracket and position bubble, tighten screws.

2.08 Cradle Adjustments (Earlier Design)

(A) CRADLE HEIGHT (PRELIMINARY)

**Requirement**  
Distance from pan to top of cradle at four corners should be 1-3/16 inches.

**To Adjust**  
Loosen four cradle mounting screws. Turn adjustment bushing from beneath cabinet through access holes. Tighten cradle mounting screws.



**Note:** CRADLE FRONT TO REAR adjustment may be disturbed by jarring the cabinet or base. Before making adjustment, seat keyboard base firmly on centers of rubber mounts.

(C) CRADLE FRONT TO REAR

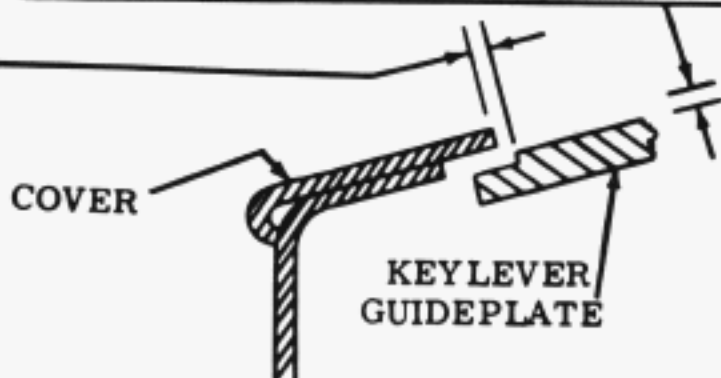
**KSR Requirement (Motor and Typing Unit in Place)**

- (a) Clearance between cover and front edge of keyboard should be  
Min 0.060 inch---Max 0.090 inch
- (b) Clearance between top front edge of keylever guideplate and upper surface of cover should be  
Min 0.047 inch---Max 0.090 inch

**RO Requirement (Motor and Typing Unit in Place)**

- (a) Cradle should be approximately in center of its front to rear adjustment.
- (b) Front edge of base should be parallel to front edge of cover.

**To Adjust**  
Move cradle front or rearward with cradle mounting screws loosened. Refine cradle height if necessary. Tighten screws.



(B) CRADLE HEIGHT (FINAL)

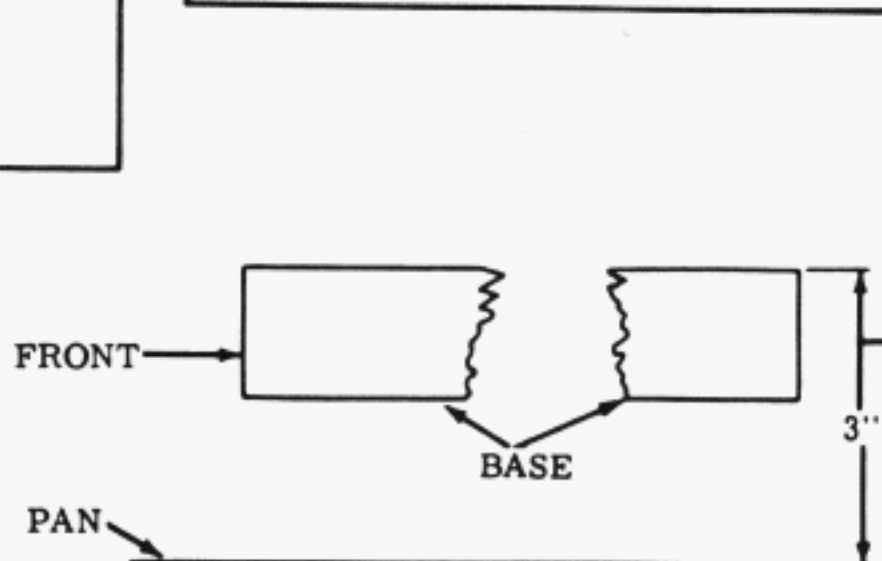
**KSR Requirement (Motor and Typing Unit in Place)**

- (a) Clearance between top of keylever guideplate and upper edge of cover should be  
Min 0.047 inch---Max 0.090 inch
- (b) Top of base at rear corners should be 3 inches above pan.

**RO Requirement (Motor and Typing Unit in Place)**

Top of base should be 3 inches above pan at four corners.

**To Adjust**  
Refine CRADLE HEIGHT (PRELIMINARY) adjustment.

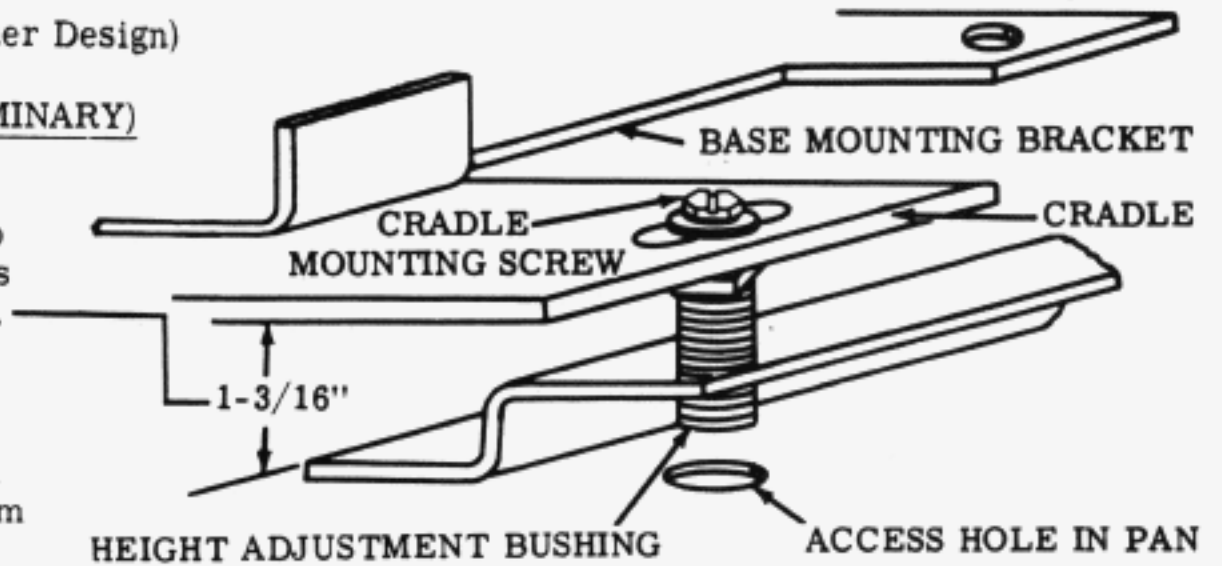


2.09 Cradle Adjustments (Later Design)

(A) CRADLE HEIGHT (PRELIMINARY)

**Requirement**  
Distance from pan to top of cradle at four corners should be 1-3/16 inches.

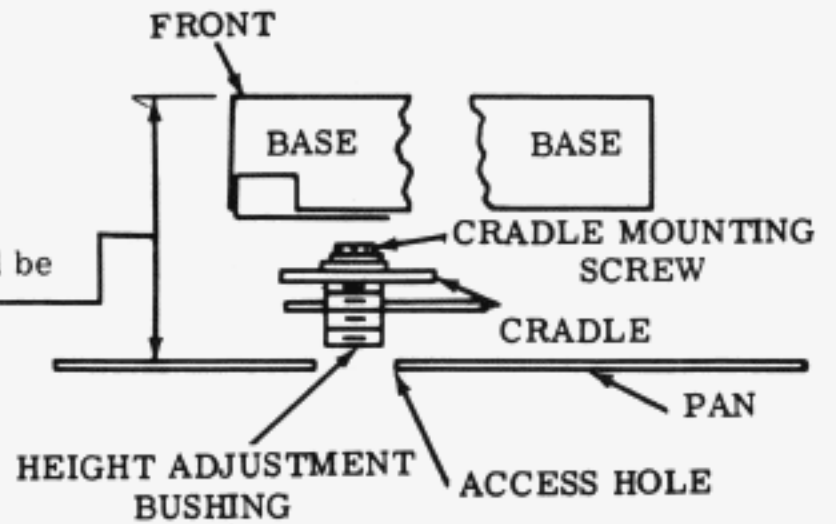
**To Adjust**  
Loosen four cradle mounting screws. Turn adjustment bushings from beneath cabinet through access holes. Tighten cradle mounting screws.



(B) CRADLE HEIGHT (FINAL)

**Requirement**  
Motor and typing unit in place, distance from pan to top of base at four corners should be  
Min 2-15/16 inches---Max 3-1/16 inches

**To Adjust**  
Loosen four cradle mounting screws. Turn adjustment bushings from beneath cabinet through access hole until requirement is met.

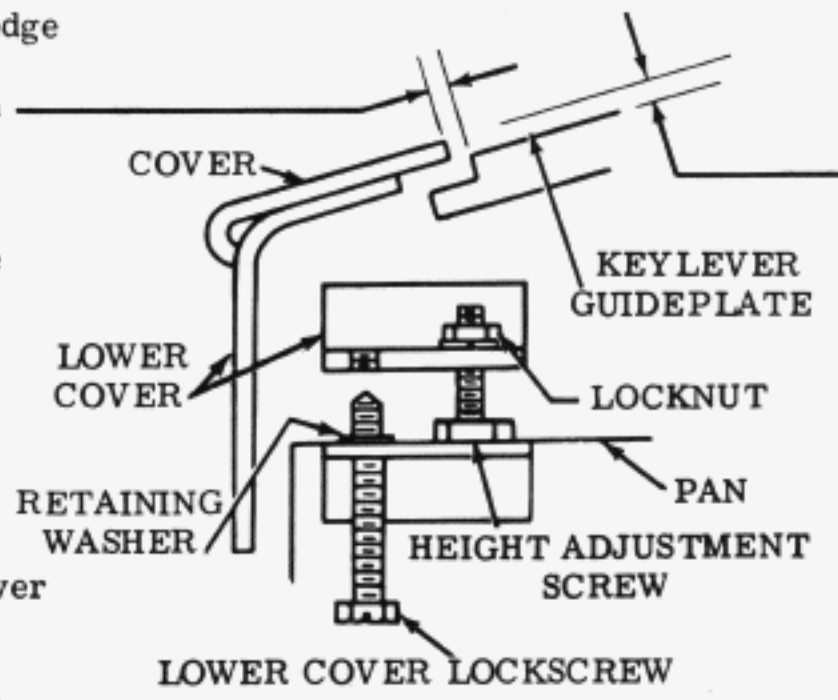


**Note:** CRADLE FRONT TO REAR adjustment may be disturbed by jarring the cabinet on base. Before making adjustment, seat keyboard base firmly on center of rubber mounts.

(C) CRADLE FRONT TO REAR

**Requirement**  
Clearance between cover and front edge of keyboard should be  
Min 0.060 inch---Max 0.090 inch

**To Adjust**  
Move cradle to front or rear until requirement is met. Tighten cradle mounting screws.

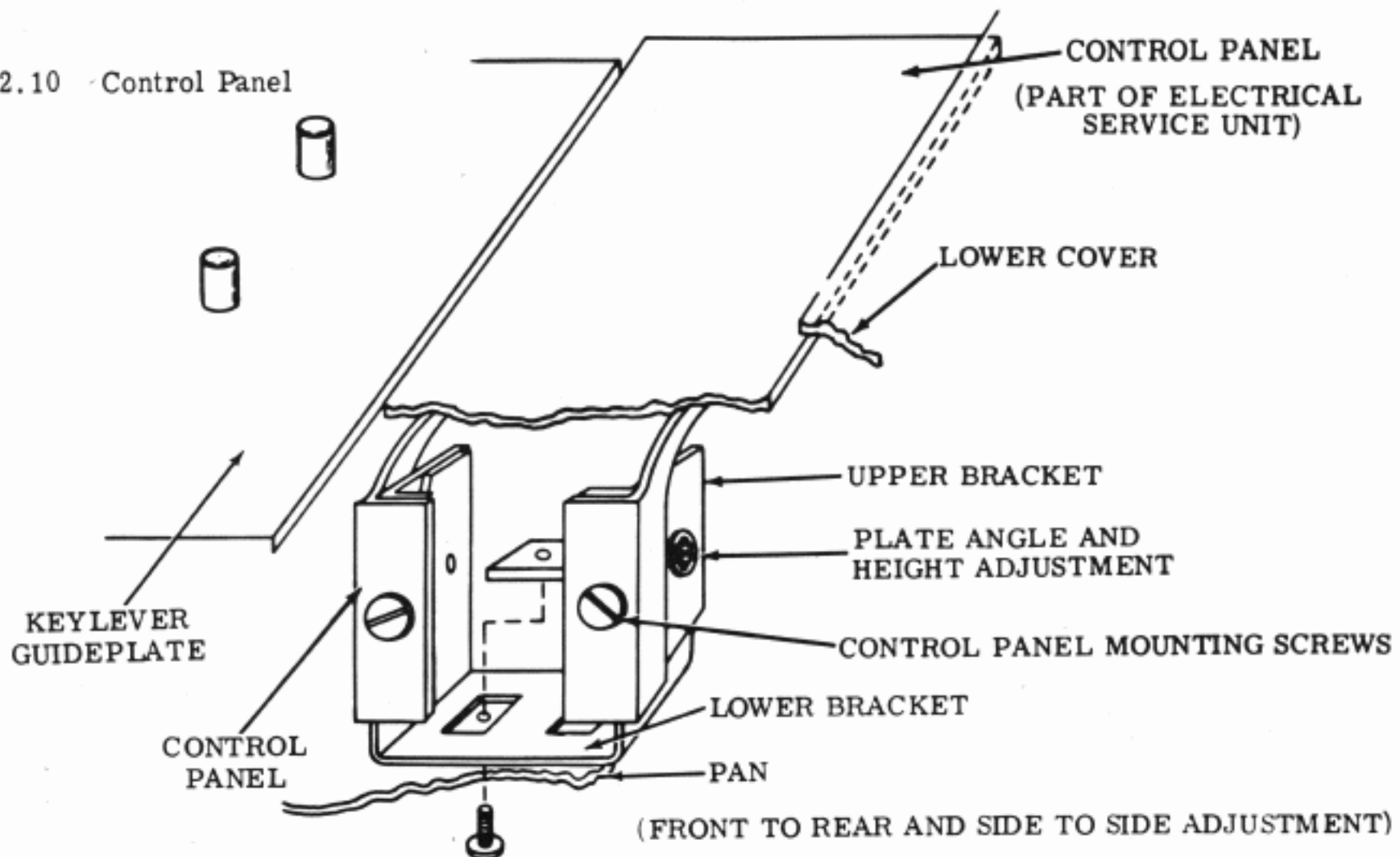


(D) FRONT HEIGHT OF LOWER COVER

**Requirement**  
Clearance between upper edge of cover and top edge of keylever guideplate should be  
Min 0.047 inch---Max 0.090 inch

**To Adjust**  
Loosen locknut on height adjustment screw. Turn screw until requirement is met. Tighten locknut.

## 2.10 Control Panel



Note: Adjustments on this page may be disturbed by jarring the cabinet or base.  
Before making adjustment seat keyboard base firmly on centers of rubber mounts.

CONTROL PANEL**KSR Requirements**

- (a) Clearance between control panel tops and under surface of lower cover should be  
Min Panels may touch but not moved in excess of 0.015 inch by cover  
Max 0.060 inch
- (b) Clearance between keytop guideplate and adjacent control panels should be  
Min 0.060 inch---Max 0.090 inch

**RO Requirements**

- (a) Clearance between control panel tops and under surface of lower cover should be  
Min Panels may touch but not moved in excess of 0.015 inch by cover  
Max 0.060 inch
- (b) Keylevers that protrude through panel should be vertical and should not bind in openings in panel.

**To Adjust (Earlier Design)**

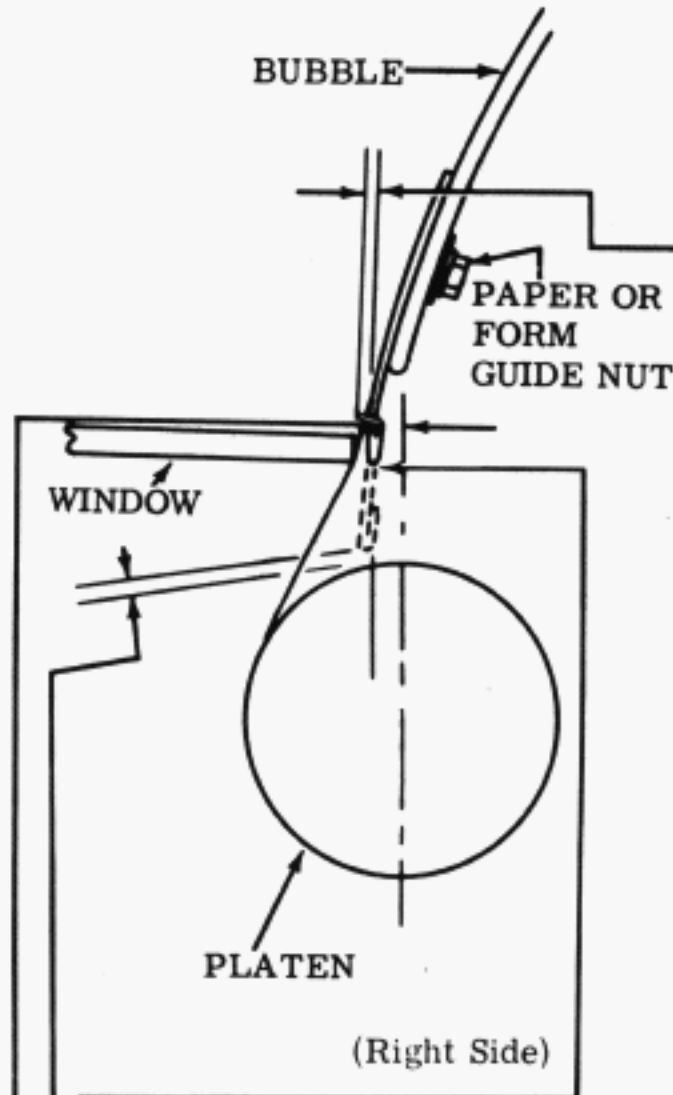
Loosen lower bracket mounting screws to friction tight and position brackets from left to right and front to rear. Loosen upper bracket mounting screws and adjust height and angle of control panels. Tighten screws. Make certain that cover rests on its support surfaces and not on control panels.

**To Adjust (Later Design)**

Loosen lower bracket mounting screws to friction tight and position brackets from left to right and front to rear. Loosen upper bracket mounting screws to friction tight and raise brackets to uppermost position. Lower the cover to push control panels down to proper positions. Raise cover and tighten mounting screws.



2.11 Paper and Form Guides



(D) WINDOW (FINAL)

Friction Feed Paper Guide Requirement

- (a) Clearance between rear edge of window and front edge of paper guide on bubble should be  
Min 0.045 inch---Max 0.095 inch
- (b) Clearance should not differ at each end of paper guide by more than 0.030 inch.

To Adjust

Loosen four screws that fasten window clamps (see 2.05) and position window. Tighten screws.

Sprocket Feed Form Guide Requirement

- (a) Clearance between rear edge of window and front edge of form guide on bubble should be  
Min 0.045 inch---Max 0.095 inch
- (b) Clearance should not differ at each end of paper guide by more than 0.030 inch. If stapled stationery is used, clearance should be increased to allow four or more copies to pass freely through paper emission slot.

To Adjust

Same as adjustment above.

(C) PAPER AND FORM GUIDE

Friction Feed Paper Guide Requirement

Bottom edge of paper guide should be flush with bottom surface of window.

Sprocket Feed Form Guide Requirement

Clearance between form guide and platen should be  
Min 3/64 inch---Max 5/64 inch

To Adjust

Position guide with three paper or form guide nuts loosened. Tighten nuts.

(A) BUBBLE POSITION FRONT AND REAR (FINAL)

Requirement

Front edge of paper or form guide should be about 1/4 inch in front of approximate center of platen. Form guide and bubble should clear all typing unit parts by at least 1/8 inch.

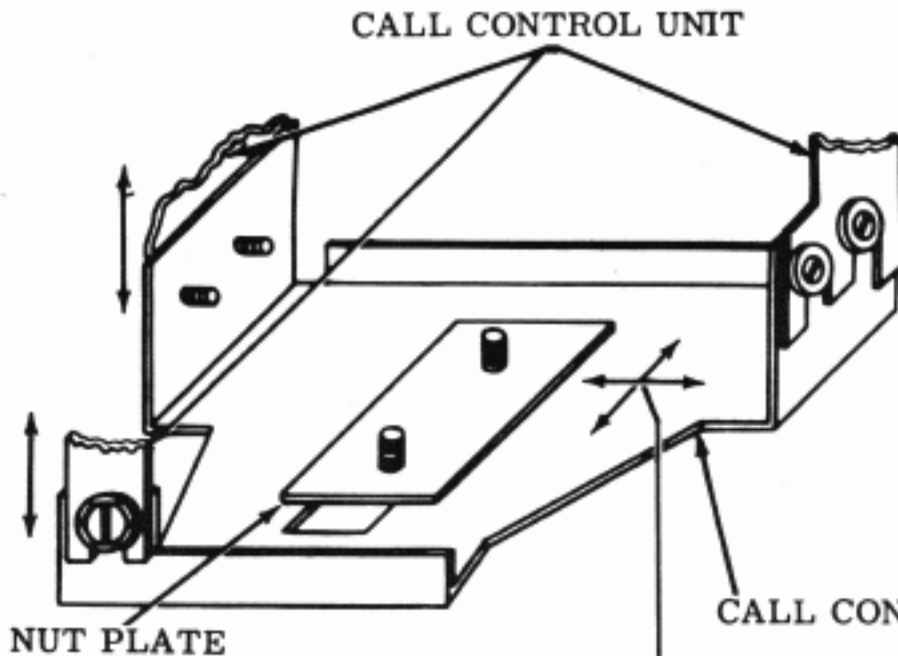
To Adjust

Loosen four mounting screws that mount bubble pivot brackets and position bubble (see 2.05). Tighten screws.

(B) BUBBLE LATCH PLATE (FINAL)

Refine 2.05, BUBBLE LATCH PLATE (PRELIMINARY), if necessary.

2.12 Call Control Unit Apparatus Mounting Rack



(Front View)

**(B) CALL CONTROL UNIT HEIGHT**

**Requirement**

Enlarged bases of six pushbuttons on call control unit should protrude an equal amount through bezel. Call control lights should protrude through bezel equal amounts.

**To Adjust**

Loosen five screws that mount front part of call control unit to adjustable bracket on pan and adjust height of front part of call control unit.

**CALL CONTROL UNIT MOUNTING BRACKET**

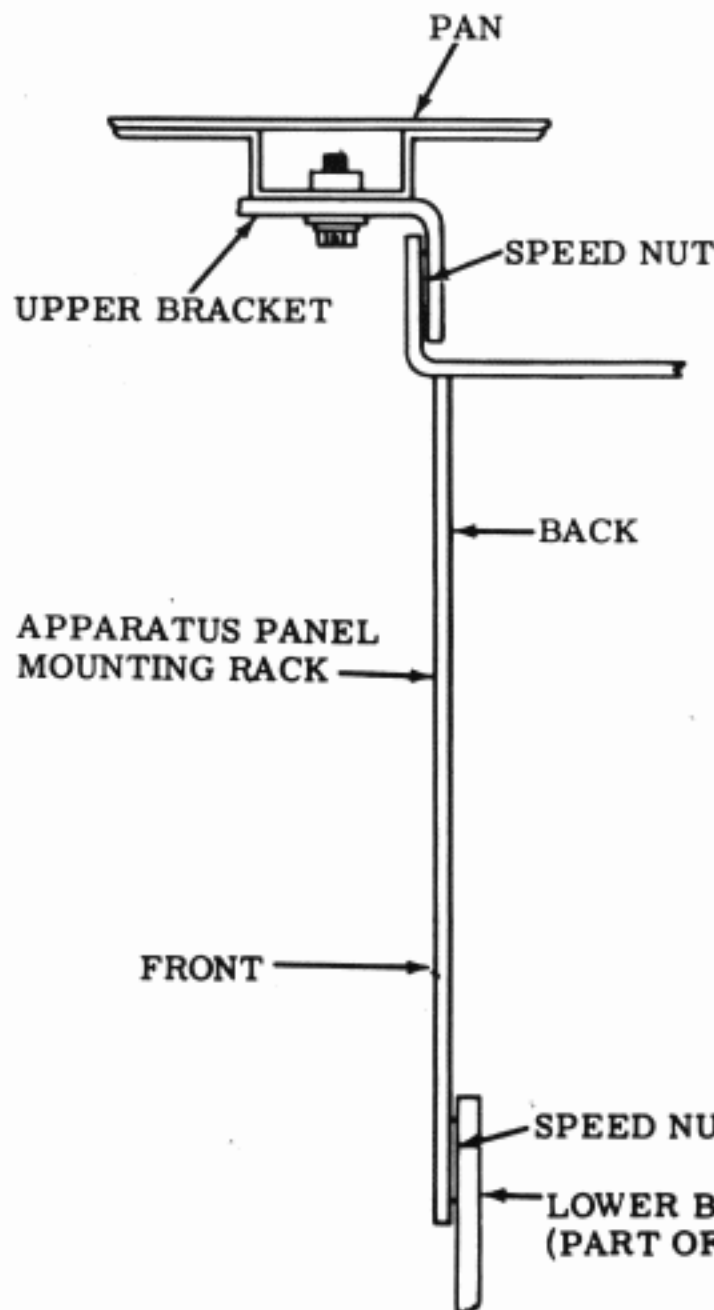
**(A) CALL CONTROL UNIT MOUNTING BRACKET**

**Requirement**

Pushbuttons and lights on call control unit should be centered in their respective openings in bezel.

**To Adjust**

Loosen two screws that fasten front call control bracket and position the bracket. Tighten screws.



**(C) UPPER APPARATUS MOUNTING RACK BRACKET (FLOOR STANDING CABINETS ONLY-OLD STYLE ONLY)**

**Requirement**

Speed nut on upper rack bracket should touch back of apparatus mounting racks when bottom of rack is touching two lower brackets with pedestal and racks resting on floor.

**To Adjust**

Loosen bracket mounting screws and position the bracket. Tighten screws.

**CLEANING CABINETS**

A soft dry cloth should be used to remove dust, oil or grease from the cabinet. If necessary, a soft damp cloth and mild soap may be used. Rinse cabinet with damp cloth and buff with a dry cloth.

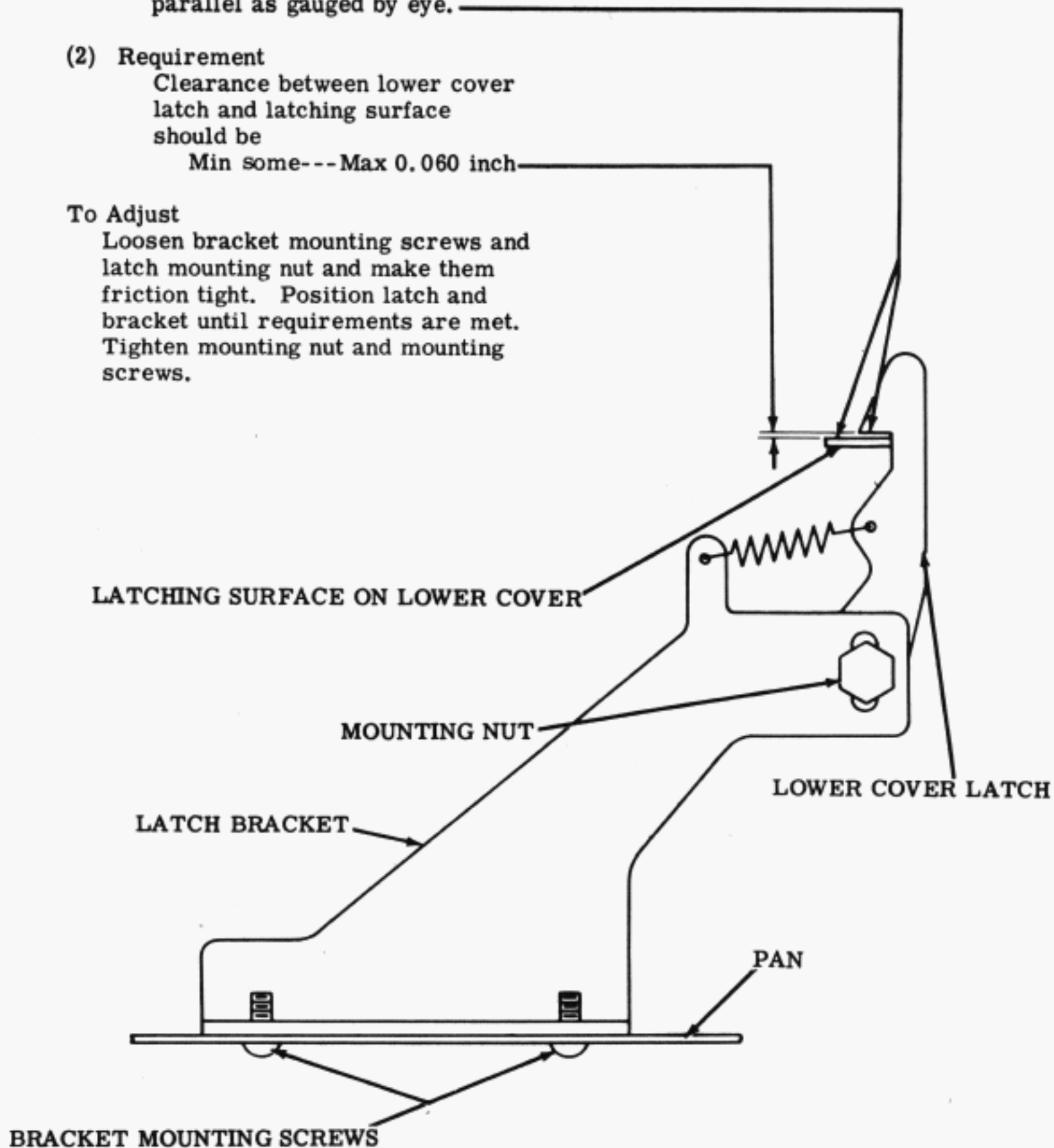
**CAUTION: DO NOT USE ALCOHOL, MINERAL SPIRITS OR OTHER SOLVENTS FOR CLEANING THE CABINET.**

2.13 Lower Cover Latch (Later Design Only)

LOWER COVER LATCH

- (1) Requirement  
Latching surface should be parallel as gauged by eye.
- (2) Requirement  
Clearance between lower cover latch and latching surface should be  
Min some---Max 0.060 inch

To Adjust  
Loosen bracket mounting screws and latch mounting nut and make them friction tight. Position latch and bracket until requirements are met. Tighten mounting nut and mounting screws.



2.14 Lower Panel Pivot Post

LOWER PANEL PIVOT POST

(1) Requirement

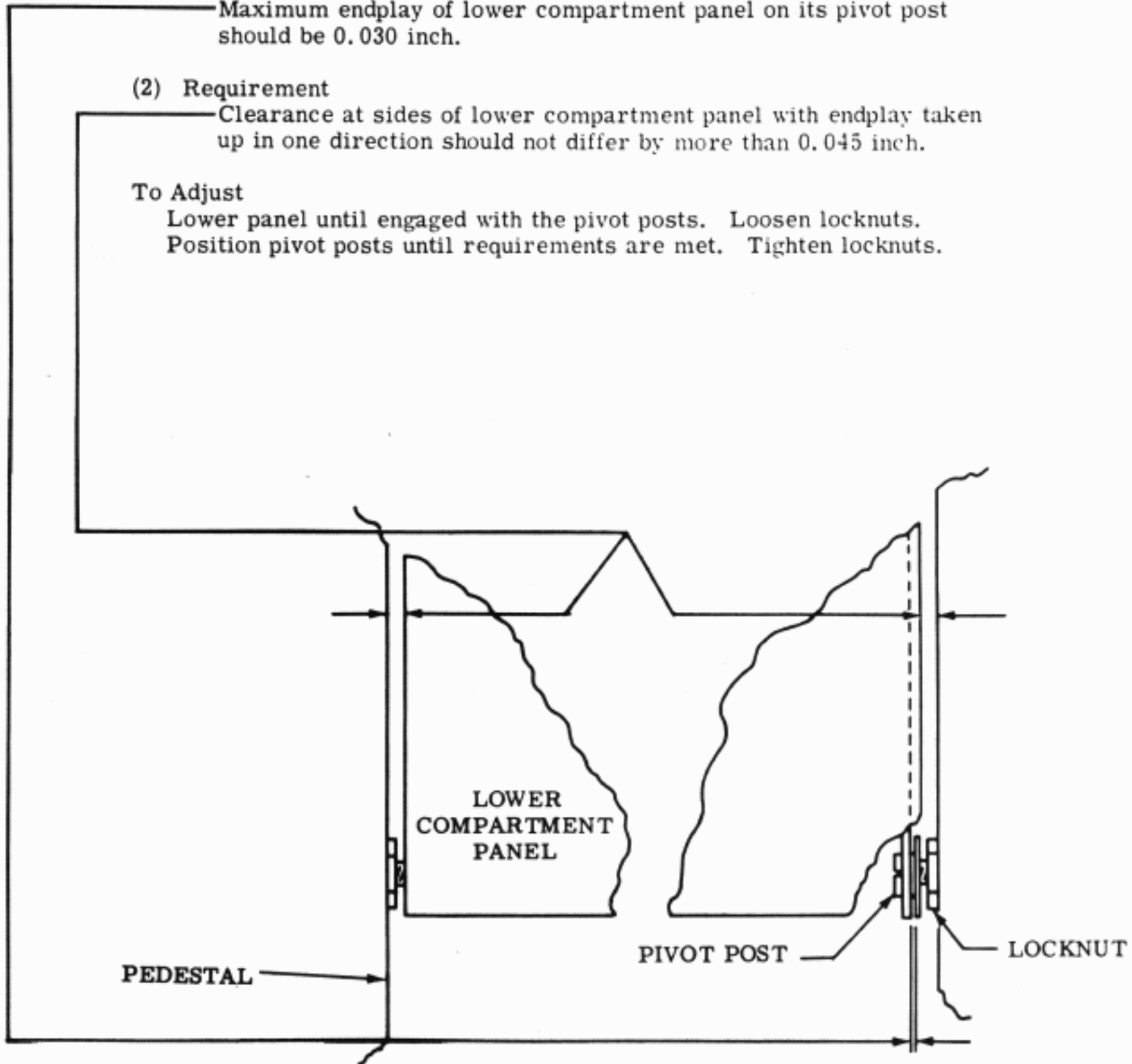
Maximum endplay of lower compartment panel on its pivot post should be 0.030 inch.

(2) Requirement

Clearance at sides of lower compartment panel with endplay taken up in one direction should not differ by more than 0.045 inch.

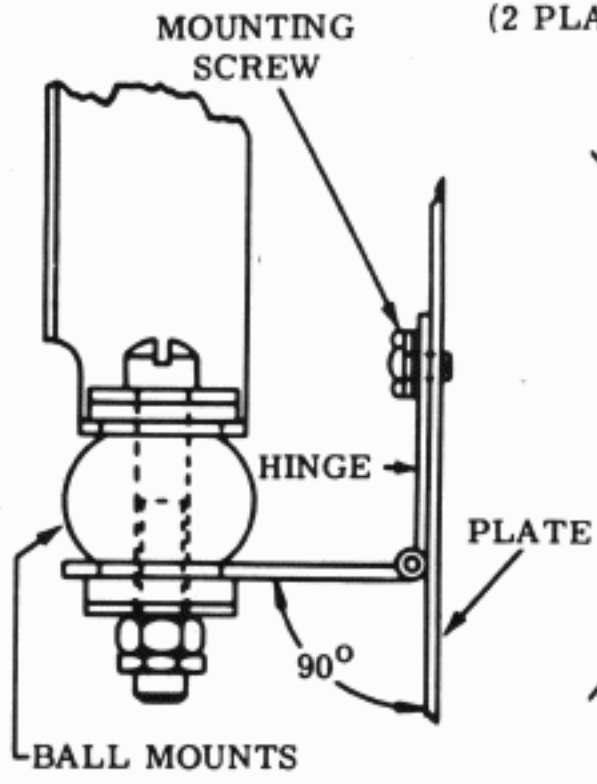
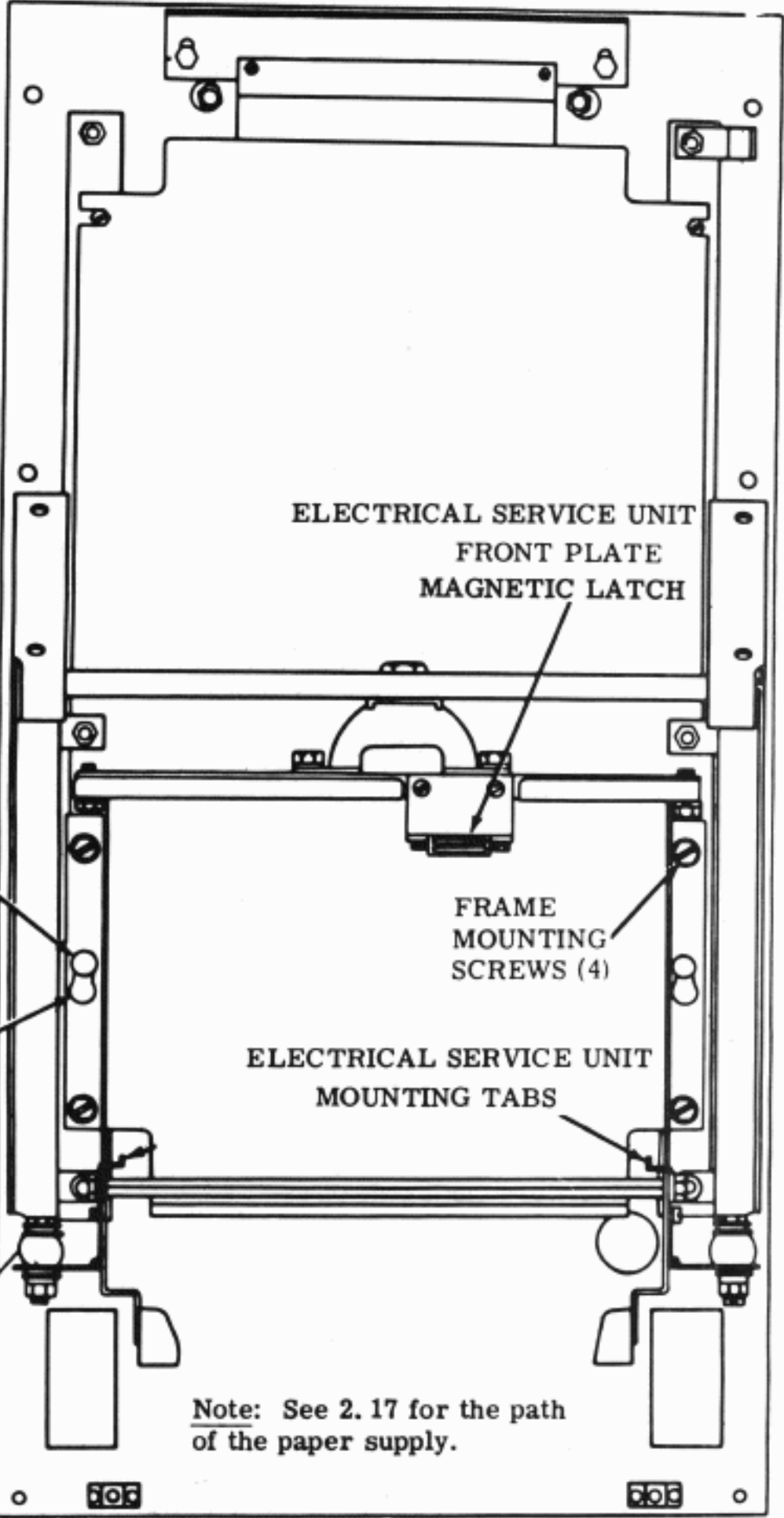
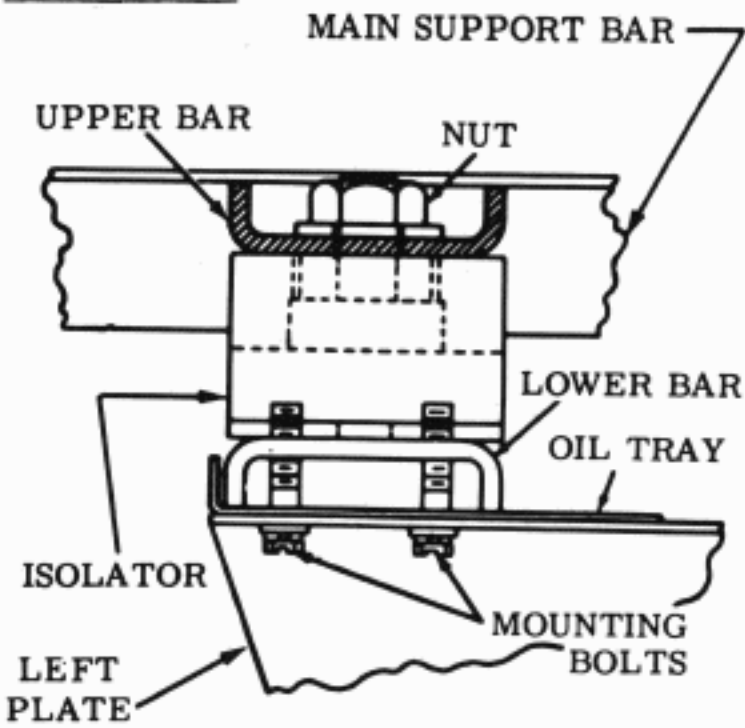
To Adjust

Lower panel until engaged with the pivot posts. Loosen locknuts.  
Position pivot posts until requirements are met. Tighten locknuts.



2.15 Vibration Hinge Mounts, Wall Mounted Printer Cabinet

FRAMEWORK MOUNTED ON BACKPLATE



HINGE MOUNTS

**Requirement**

With keyboard (or receiving-only base), printer and motor unit in place, hinges should be perpendicular to side plate as gauged by eye. Check both sides.

**To Adjust**

Position hinges up or down with mounting screws loosened. Tighten screws.

2.16 Cover and Hood, Wall Mounted Printer Cabinet

(A) KEYTOP GUIDEPLATE HOOD (SEND-RECEIVE UNIT)

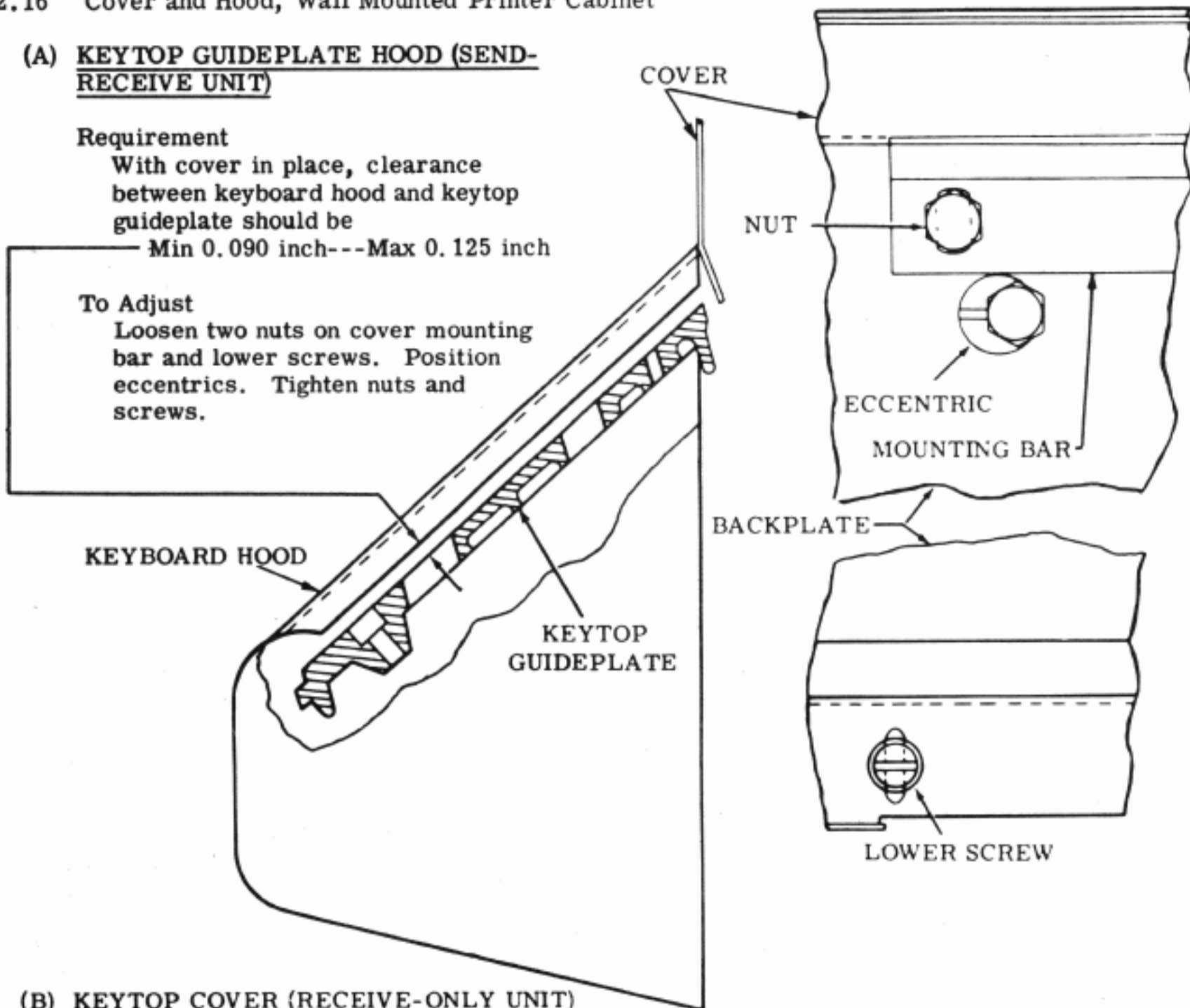
**Requirement**

With cover in place, clearance between keyboard hood and keytop guideplate should be

Min 0.090 inch---Max 0.125 inch

**To Adjust**

Loosen two nuts on cover mounting bar and lower screws. Position eccentrics. Tighten nuts and screws.



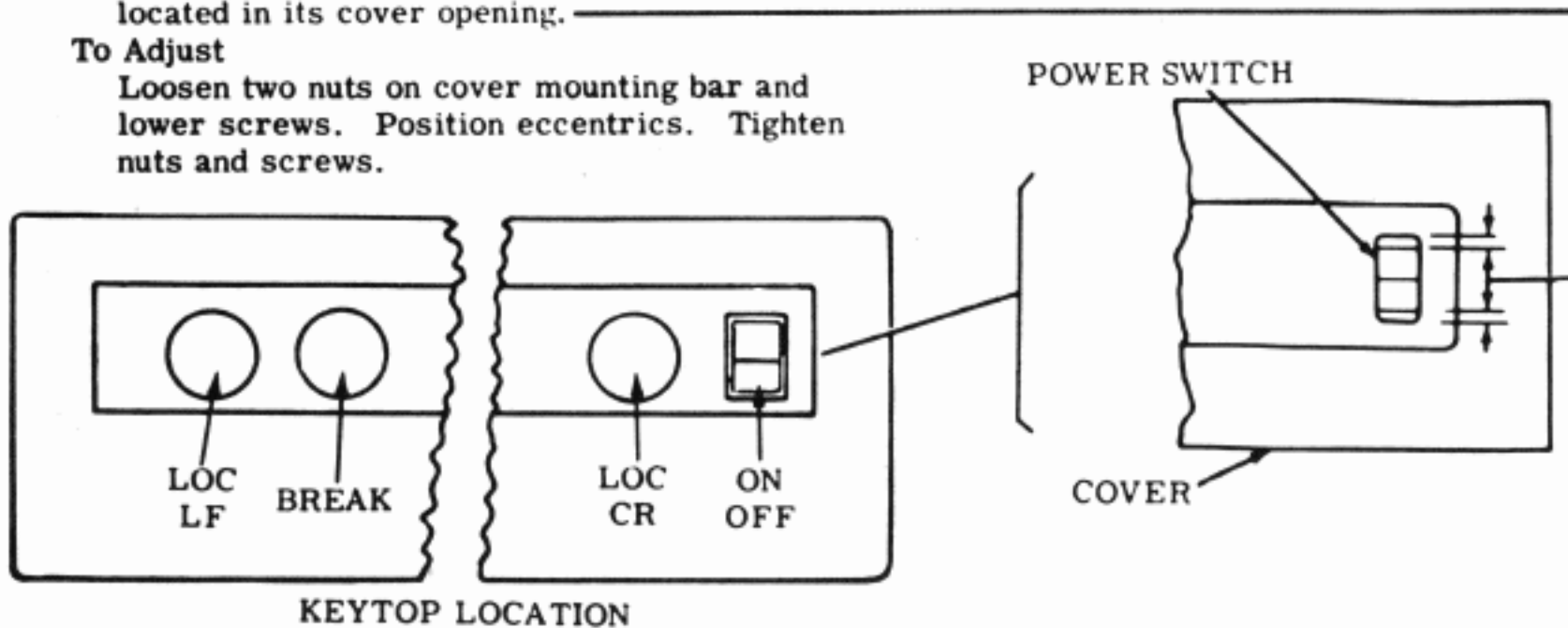
(B) KEYTOP COVER (RECEIVE-ONLY UNIT)

**Requirement**

With cover in place, power switch should be centrally located in its cover opening.

**To Adjust**

Loosen two nuts on cover mounting bar and lower screws. Position eccentrics. Tighten nuts and screws.





2.17 Cover and Power Switch, Wall Mounted Printer Cabinet

(A) KEYTOP GUIDE AND COVER (SEND-RECEIVE UNIT)

(1) Requirement

With cover in place, clearance between rear edge of keytop guide and lip of cover should be  
Min 0.090 inch---Max 0.125 inch

(2) Requirement

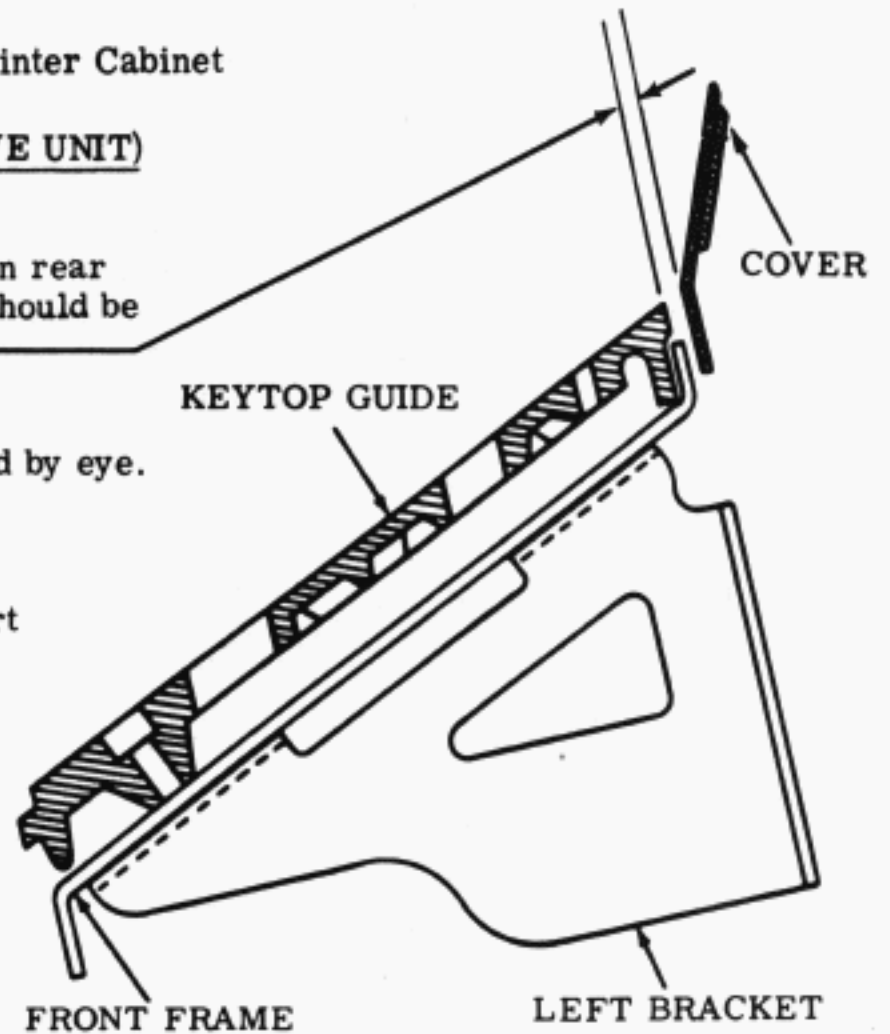
Clearance should be parallel as gauged by eye.

To Adjust

With nut which secures large central mount loosened, position upper support bar by means of its elongated slot. Tighten nut.

To Adjust

If parallel condition is not met by above adjustment, loosen four bolts securing lower support bar. Position lower support bar. Tighten bolts.



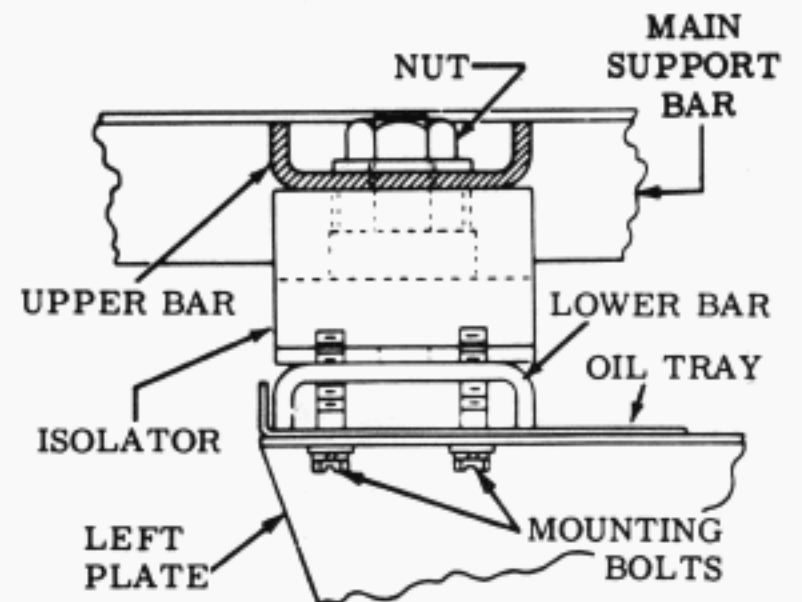
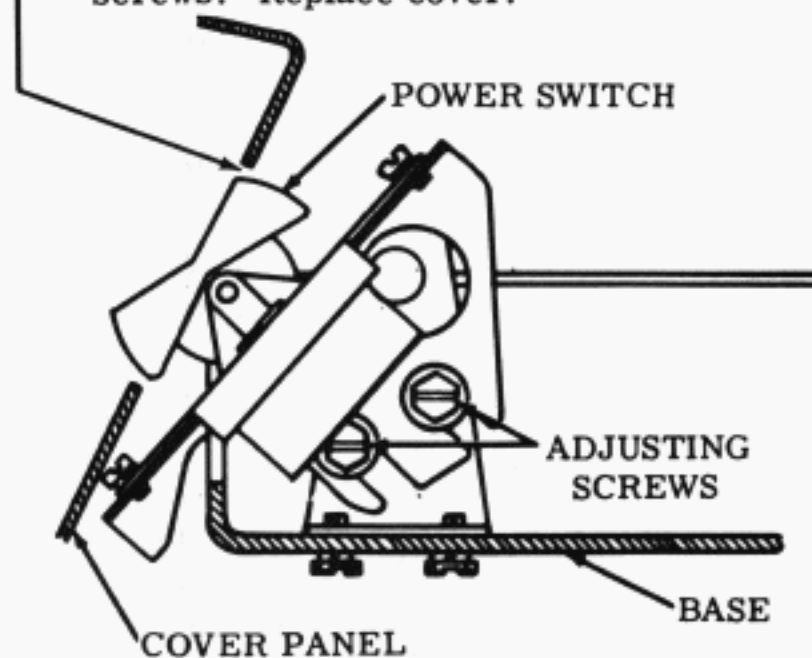
(B) POWER SWITCH (RECEIVE-ONLY UNIT)

Requirement

With cover in place, deflected surface of power switch, indicating either on or off, should be flush with cover surface.

To Adjust

With cover removed and adjusting screws friction tight, position switch. Tighten screws. Replace cover.



Note: Should additional adjustment be needed, loosen bolts securing large central mounting bracket and position upper bar.

2.18 Cover Door Latches and Hinge Mounts, Wall Mounted Printer Cabinet

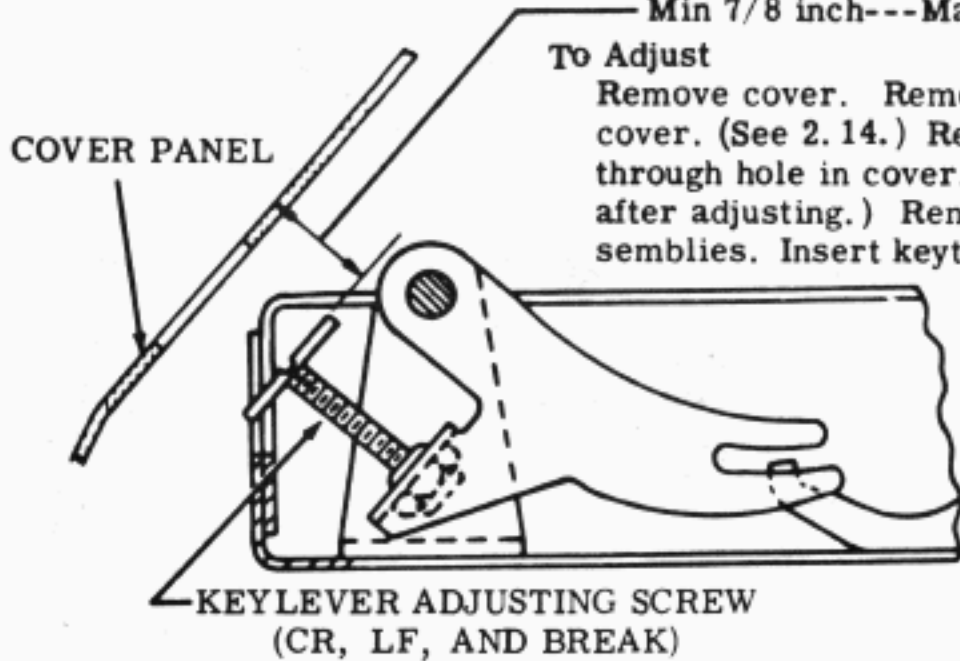
(A) CARRIAGE RETURN, LINE FEED, AND BREAK LEVER  
(RECEIVE-ONLY UNIT)

**Requirement**

With cover in place, clearance between surface of lever adjusting screw and outer surface of cover should be  
Min 7/8 inch---Max 15/16 inch

**To Adjust**

Remove cover. Remove keylever assemblies (3) from cover. (See 2.14.) Replace cover and turn adjusting screw through hole in cover. (Slot in screw should be horizontal after adjusting.) Remove cover and replace keylever assemblies. Insert keytops in their proper opening.



Remove keylever assembly (2 nuts, lockwashers, and flat washer).



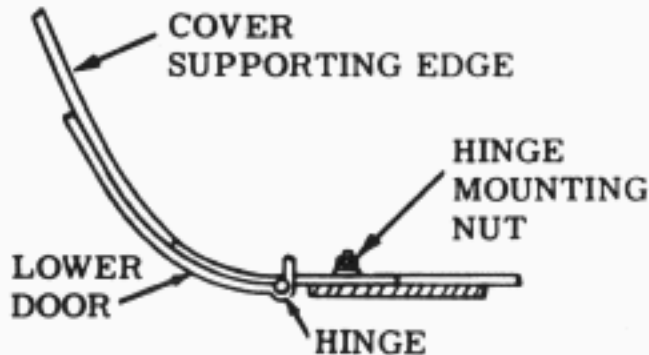
(B) WINDOW DOOR HINGE MOUNTS

**Requirement**

Window door should lie flat on supporting edges of cabinet as gauged by eye.

**To Adjust**

Loosen two nuts on each hinge. Position door. Tighten nuts.



(C) LOWER DOOR HINGE MOUNTS

**Requirement**

Door should lie flat against cover.

**To Adjust**

Loosen two nuts on each hinge. Position door. Tighten nuts.

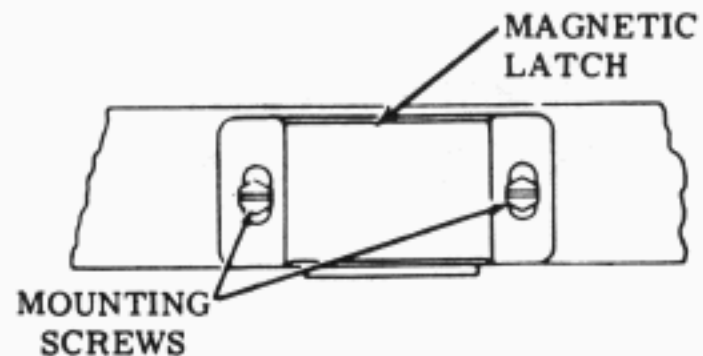
(D) LOWER DOOR LATCHES

**Requirement**

Door should latch solidly with magnetic latch and lie flat against cover.

**To Adjust**

Loosen latch screws. Position latches. Tighten screws.



SMALL COPYHOLDER (WITH LINE GUIDE)

**Requirement**

See 2.04.

2.19 Paper Guide, Window, and Copylamps, Wall Mounted Printer Cabinet

**(B) WINDOW**

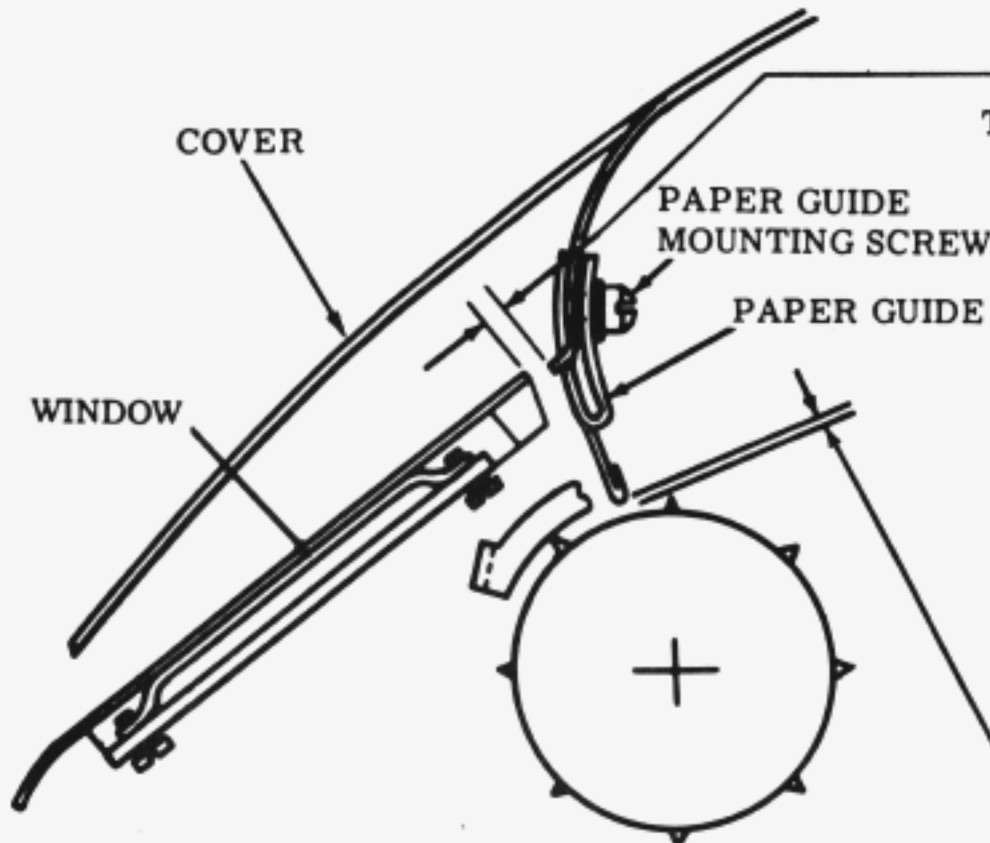
**Requirement**

With small door closed, parallel clearance between paper guide and edge of window should be

Min 0.080 inch---Max 0.110 inch

**To Adjust**

Loosen four mounting screws holding window clamps in position. Position window. Tighten screws.



**(A) PAPER GUIDE**

**Requirement**

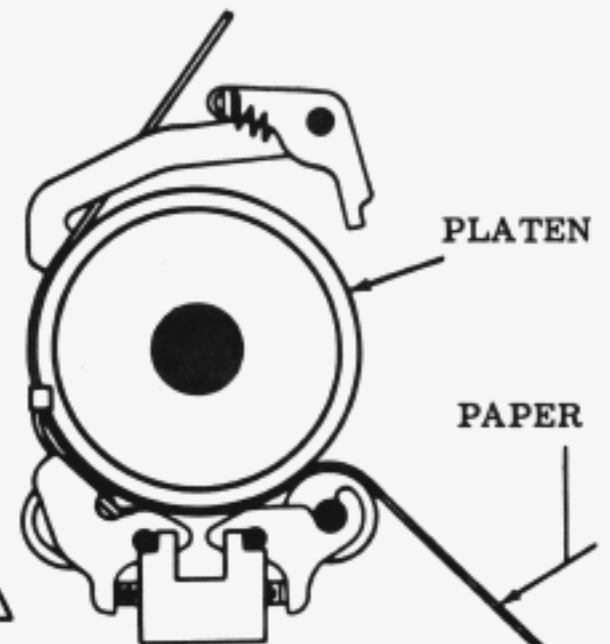
With typing unit in place, large and small doors latched, clearance between paper guide and platen should be

Min 3/64 inch---Max 5/64 inch

**To Adjust**

Loosen guide mounting screws and position guide parallel to platen. Tighten screws.

**PATH OF PAPER**



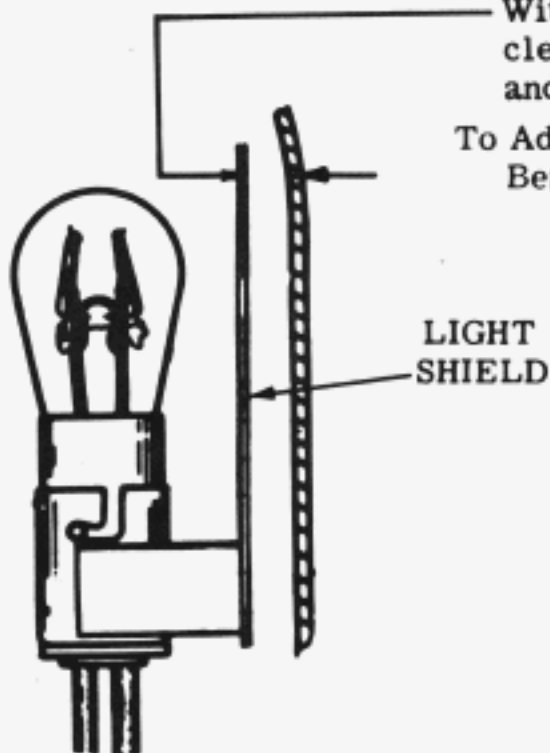
**(C) COPYLAMPS**

**Requirement**

With cover and light shield in place, clearance between lamp assembly and cover should be at least 1/16 inch.

**To Adjust**

Bend the bracket.



**RIGHT END VIEW OF PAPER ROLL**

