35 CABINET FOR AUTOMATIC SEND RECEIVE
TELETYPEWRITER SET
ADJUSTMENTS

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1. GENERAL

1.01 This section is reissued to incorporate recent engineering information. Changes and additions are indicated by arrows placed in the margins.

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.

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.

1.04 Where adjustment instructions call for removal of components, assemblies, subassemblies or parts, all adjustments which the removal of the 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 pie-up can be made when the part is replaced.

1.05 References made to left or right, up or down, or front or rear apply to the unit in its normal operating position as viewed from the operator's position in front of the unit.
2. ADJUSTMENT

2.01 Opening and Closing of Cover

(A) MINIMUM CLEARANCE
13 INCHES TO OPEN COVER
3 FEET TO REMOVE COVER

(B) UNFASTEN LOWER COVER
LOCK SCREWS

(C) REMOVE THE BEZEL MOUNTING
SCREW AND REMOVE THE CALL
CONTROL UNIT BEZEL.

(D) OPEN THE UPPER COVER AND DISCONNECT THE
COPYRIGHT PLUG. TEMPORARILY HANG THE
PLUG BY LOOPING IT UNDER THE COPYRIGHT
CABLE AT THE HINGE AS SHOWN.

HINGE

(E) LOWER THE UPPER COVER TO
ITS DETENT POSITION.

(F) PUSH ON LOWER COVER LATCH
AND LIFT THE FRONT OF THE
LOWER COVER WITH FINGERS
IN GRIPS. RAISE TO VERTICAL
LOCK POSITION.

(G) TO CLOSE COVER PUSH
HERE FIRST TO UNLOCK
LEFT STOP ARM.
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).

(C) REMOVE THE UPPER RETAINING SHOULDER SCREW FROM THE RIGHT HAND STOP ARM BRACKET.

(D) LOOSEN HINGE LOCK BRACKET MOUNTING SCREW AND SLIDE BRACKET AWAY FROM HINGE.

(E) SUPPORT COVER FROM REAR. REMOVE ACORN TYPE NUT AND DISENGAGE STOP ARM FROM 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)

Requirement:
Clearance between upper cover and lower cover at point of least clearance should be
Min. 0.015 inch
Max. 0.090 inch

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

(A) Upper Cover Position (Front to Rear)

Requirement:
Clearance between front of upper cover and edge of keyboard opening in lower cover should be 4-9/16 inches.

To adjust:
Position cover with three screws, at each hinge that mount upper cover, loosened. See figure below.

(C) Latch

Requirement:
Upper cover should latch closed with slight compression of rubber bumpers.
Clearance between upper cover and lower cover at closest point should be
Min. 0.015 inch
Max. 0.090 inch

To adjust:
Position both latches with their pivot screws loosened.

(D) Counterbalance Arm

1. Requirement - There should be no free fall of upper cover from any position to which it is opened.
2. Requirement - It should require some pressure to close upper cover.

To adjust - Tighten spring tension adjusting screws.
2.04 Copyright and Line Guide Copyholder

COPYRIGHT BRACKET

REQUIREMENT
CLEARANCE BETWEEN COPY LAMP BULBS AND THE
CABINET SHOULD BE 1/16 INCH.

TO ADJUST
LOOSEN THE TWO BRACKET MOUNTING NUTS AND
POSITION THE BRACKET.

LINE GUIDE COPYHOLDER

COPYHOLDER TRAY

FRONT VIEW

RIGHT VIEW

MOUNTING SCREW
LINE GUIDE TORSION SPRING
BUSHING
SHAFT
MOUNTING POST
MOUNTING SCREW

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
RE-INSTALL ON COVER.
--- 2.05 Bubble & Window Position

NOTE: ADJUSTMENTS ON THIS PAGE ARE PRELIMINARY. FINAL ADJUSTMENTS TO BE MADE WITH TYPING UNIT IN PLACE.

(C) WINDOW (PRELIMINARY)
REQUIREMENT
CLEARANCE BETWEEN REAR EDGE OF WINDOW AND FRONT EDGE OF PAPER GUIDE ON BUBBLE SHOULD BE APPROXIMATELY 1/16 INCH.

TO ADJUST
LOosen FOUR SCREWS WHICH MOUNT TWO WINDOW CLAMPS AND POSITION WINDOW.

(b) BUBBLE LATCH PLATE (PRELIM.)
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 (PRELIM.)
REQUIREMENT
THE BUBBLE SHOULD BE IN THE CENTER OF ITS FRONT-MOST AND REAR-MOST POSITIONS.

TO ADJUST
LOosen TWO MOUNTING SCREWS THAT MOUNT EACH PIVOT BRACKET AND POSITION BUBBLE, TIGHTEN SCREWS.
2.06 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
BUSHINGS FROM BENEATH CABINET
THRU ACCESS HOLES, TIGHTEN
CRADLE MOUNTING SCREWS.

(C) CRADLE FRONT TO REAR
REQUIREMENTS (MOTOR AND TYPING
UNIT IN PLACE)
1. CLEARANCE BETWEEN COVER AND
FRONT EDGE OF KEYBOARD SHOULD
BE 1/16 INCH.
2. TOP OF FRONT EDGE OF KEYLEVER
GUIDE PLATE SHOULD BE FLUSH WITH
UNDER SURFACE OF COVER.
TO ADJUST
WITH CRADLE MOUNTING SCREWS LOOSENED,
MOVE CRADLE FROM FRONT TO REAR
UNTIL REQUIREMENTS ARE MET. REFINE
CRADLE HEIGHT IF NECESSARY. TIGHTEN
SCREWS.

(B) CRADLE HEIGHT (FINAL)
REQUIREMENTS (MOTOR AND TYPING
UNIT IN PLACE)
1. TOP OF KEYLEVER GUIDE PLATE
SHOULD BE FLUSH WITH LOWER
EDGE OF COVER.
2. TOP OF BASE AT REAR CORNERS
SHOULD BE 3 INCHES ABOVE PAN.
TO ADJUST
REFINE ADJUSTMENT (A) ABOVE.
2.07 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
THRU 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 3 INCHES.
TO ADJUST
LOOSEN FOUR CRADLE MOUNTING SCREWS,
TURN ADJUSTMENT BUSHINGS FROM
BENEATH CABINET THRU ACCESS HOLE UNTIL
REQUIREMENT IS MET.

(C) CRADLE FRONT TO REAR
REQUIREMENT
CLEARANCE BETWEEN COVER AND FRONT
EDGE OF KEYBOARD SHOULD BE 1/16 INCHES.
TO ADJUST
MOVE CRADLE TO FRONT OR REAR
UNTIL REQUIREMENT IS MET. TIGHTEN CRADLE
MOUNTING SCREWS.

(D) FRONT HEIGHT OF LOWER COVER
REQUIREMENT
LOWER EDGE OF COVER AND TOP
EDGE OF KEYLEVER GUIDE PLATE SHOULD
BE FLUSH.
TO ADJUST
LOOSEN LOCK NUT ON HEIGHT ADJUSTMENT
SCREW. TURN SCREW UNTIL REQUIREMENT
IS MET. TIGHTEN LOCK NUT.
2.08 Control Panel

CONTROL PANEL REQUIREMENT

THE TOPS OF THE CONTROL PANELS SHOULD JUST TOUCH THE UNDER SURFACE OF LOWER COVER. CLEARANCE BETWEEN KEYTOP GUIDE PLATE AND ADJACENT CONTROL PANELS SHOULD BE

MIN 0.060 INCH
MAX 0.090 INCH

TO ADJUST (EARLIER DESIGN)
LOOSEN LOWER BRACKET MOUNTING SCREWS TO FRICTION TIGHT AND POSITION BRACKETS FROM LEFT TO RIGHT AND FRONT TO REAR. LOOSE 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. REFINISH CRADLE HEIGHT ADJUSTMENT IF NECESSARY UNTIL TOP OF KEYLEVER GUIDE PLATE IS FLUSH WITH TOP CONTROL PANELS.

TO ADJUST (LATER DESIGN)
LOOSE LOWER BRACKET MOUNTING SCREWS TO FRICTION TIGHT AND POSITION BRACKETS FROM LEFT TO RIGHT AND FRONT TO REAR. LOOSE 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.
2.09  Paper and Form Guides

(D) WINDOW (FINAL)
1. REQUIREMENT - FRICTION FEED PAPER GUIDE.
   CLEARANCE BETWEEN EDGE OF WINDOW AND PAPER GUIDE SHOULD BE 1/16 INCH.
   TO ADJUST
   LOOSEN FOUR SCREWS THAT FASTEN WINDOW CLAMPS (SEE 2.03) AND POSITION WINDOW. TIGHTEN SCREWS.
2. REQUIREMENT - SPROCKET FEED FORM GUIDE.
   CLEARANCE BETWEEN EDGE OF WINDOW AND FORM GUIDE SHOULD BE
   MIN 0.060 INCH
   MAX 0.080 INCH
   IF STAPLED STATIONERY IS USED, STAPLES SHOULD PASS FREELY THROUGH PAPER EMISSION SLOT.
   TO ADJUST
   SAME AS ADJUSTMENT ABOVE.

(C) PAPER AND FORM GUIDE
1. REQUIREMENT - FRICTION FEED PAPER GUIDE.
   BOTTOM EDGE OF PAPER GUIDE SHOULD BE FLUSH WITH BOTTOM SURFACE OF WINDOW.
2. REQUIREMENT - SPROCKET FEED FORM GUIDE.
   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 1/8 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 2.03). TIGHTEN SCREWS.

(B) BUBBLE LATCH PLATE (FINAL)
   REFINE 2.03 (B) IF NECESSARY.
2.10 Call Control Unit
Apparatus Mounting Rack

(b) Call Control Unit Height Requirement
Enlarged bases of six push buttons 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.

(a) Call Control Unit Mounting Bracket Requirement
Push buttons 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)
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.
2.11 Transmitter Cover and Control Panel

(A) COVER REQUIREMENT
CLEARANCE BETWEEN PAPER FENCE AND TRANSMITTER UNIT SHOULD BE 1/8 INCH.
TO ADJUST
LOosen TWO PAPER TRAY MOUNTING SCREWS AND POSITION FENCE UNTIL REQUIREMENT IS MET.

(B) TRANSMITTER CONTROL PANEL REQUIREMENTS
1. CLEARANCE BETWEEN TRANSMITTER CONTROL PANEL AND TRANSMITTER UNIT SHOULD BE 1/8 INCH.
2. THE PANEL SHOULD JUST TOUCH THE UNDER SURFACE OF THE LOWER COVER. THE COVER SHOULD NOT REST ON THE PANEL.
TO ADJUST
SEE CONTROL PANEL ADJUSTMENT (PARAGRAPH 2.06) FOR INSTRUCTIONS.
2.12 Tape Chute

1. REQUIREMENT - RIGHT SURFACE OF LEFT SIDE OF TAPE CHUTE SHOULD BE FLUSH WITH RIGHT EDGE OF TRANSMITTER.

2. REQUIREMENT - REAR SURFACE OF FRONT SIDE OF TAPE CHUTE SHOULD BE FLUSH WITH REAR EDGE OF TRANSMITTER CONTROL PANEL.

3. REQUIREMENT - TOP OF LEFT SURFACE OF CHUTE SHOULD CLEAR TRANSMITTER BY A MINIMUM OF 1/8 INCH.

4. REQUIREMENT - THERE SHOULD BE SOME CLEARANCE BETWEEN THE BOTTOM OF THE TAPE CHUTE AND THE PAN.

TO ADJUST
LOosen THE TWO SCREWS WHICH FASTEN THE TAPE CHUTE MOUNTING BRACKET TO THE PAN AND ADJUST HORIZONTALLY. TIGHTEN SCREWS.
 LOosen THE TWO SCREWS WHICH FASTEN THE TAPE CHUTE TO THE BRACKET AND ADJUST VERTICALLY. TIGHTEN SCREWS.
TAPE TEARING EDGE

1. REQUIREMENT - TAPE TEARING EDGE SHOULD BE APPROXIMATELY 1/16 INCH ABOVE TAPE AS IT EMERGES FROM PERFORATOR.

2. REQUIREMENT - TAPE TEARING EDGE SHOULD NOT INTERFERE WITH THE END OF TAPE COMING FROM PERFORATOR AND PERMIT TEARING TAPE WITH STRAIGHT EDGE.

TO ADJUST - WITH MOUNTING NUTS LOOSE POSITION TAPE TEARING EDGE UNTIL REQUIREMENT IS MET.

---

UPPER COVER

TAPE TEARING EDGE (INSIDE VIEW)

TAPE TEARING EDGE

TAPE

PERFORATOR
2.14 Lower Cover Latch (Later Design Only)

LOWER COVER LATCH

REQUIREMENTS
1. LATCHING SURFACES SHOULD BE PARALLEL
   AS JUDGED BY EYE.
2. CLEARANCE BETWEEN LOWER COVER LATCH
   AND LATCHING SURFACE SHOULD BE
   MIN SOME
   MAX 0.030 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.