

2000-TYPE SELECTOR BANKS

Check of Alignment and Method of Re-adjustment

[Maintenance Adjustment Instruction (M.A.I.) No. 63]

[NOTE :—As this Instruction has been completely revised, individual paragraphs have not been “starred”]

1. General.—This Instruction describes the method of checking the alignment and re-adjustment of 2000-type selector banks, using “Gauges, Selector-bank, No. 1 and No. 2” and “Adjuster, Selector-bank”, which have been specially developed for this purpose.

2. A badly-aligned bank results in unnecessary strain on the frame columns and will probably cause faulty operation of the selector, difficulty in removing and replacing the selector, and in aligning the wipers on the bank. In any of these circumstances, or when the alignment of the bank relative to the cradle has been disturbed, the bank should be checked for alignment and re-adjusted, if necessary, by means of the appropriate gauge.

3. Description of Gauges.—The gauge is available in two sizes, viz.:—

(a) “Gauge, Selector-bank, No. 1” for use on 2-3 banks

(b) “Gauge, Selector-bank, No. 2” for use on 4-5 banks.

Figs. 1 and 2 show views of a “Gauge, Selector-bank, No. 1”. Each gauge is packed in a wooden box.

“Adjuster, Selector-bank” (see Fig. 3) for the alignment of the banks is available and is contained in a separate box.

4. Purposes of Gauges.—The gauges have been designed to check the following conditions of selector-banks and cradles :—

(a) That the front face of the two lugs on the lower bank plate and the frame-column locating faces on the cradle are in the same vertical plane and that this plane is at right angles to the base of the cradle (see Fig. 4).

(b) The minimum distance between the sides of the cradle and the width of the locating slots (see Fig. 5).

(c) That the selector frame columns will register with the locating surfaces on the cradle.

5. To fit the gauge to a bank proceed as follows :—

(a) Remove the selector from the cradle, as described in B 5156.

(b) Hold the gauge horizontally and insert it in the shelf cradle, by engaging the reduced ends of the locating shaft with the slots in the cradle. The reduced ends should enter the slots without binding (see Fig. 6).

(c) Lower the gauge until the locating shaft is supported by the bottom of the cradle slots.

(d) Hinge the gauge downwards until either both or one of the upper alignment surface(s) is (are) in contact with the frame-column locating faces on the cradle. To ensure that the gauge is located correctly on the faces, it may be necessary to raise the gauge and move it sideways in either direction.

6. With the gauge correctly located, the following conditions apply :—

(a) With a “Gauge, Selector-bank, No. 1” (2-3 banks) in position, there must be a clearance not greater than 20 mils between each of the lower alignment faces of the gauge and the front faces of the lower bank-plate lugs (see Fig. 7).

(b) With a “Gauge, Selector-bank, No. 2” (4-5 banks) in position, there must be a clearance not greater than 32 mils between each of the lower alignment surfaces of the gauge and the front faces of the lower bank-plate lugs.

If the gauge is resting on one frame-column locating surface only, the clearance between the other locating surface and the cradle should not be greater than 8 mils.

7. If the clearance between both alignment surfaces and the bank-plate lugs is greater than that specified in par. 6, it indicates that the bank is set too-far back.

If no clearance exists, the bank is set too-far forward. If the clearance at one point is greater than the clearance at the other point, it indicates that the bank is twisted. Uniformity of clearance of both alignment surfaces is not expected, and variations of clearance between one end and the other are permissible, provided the conditions described in par. 6 are met.

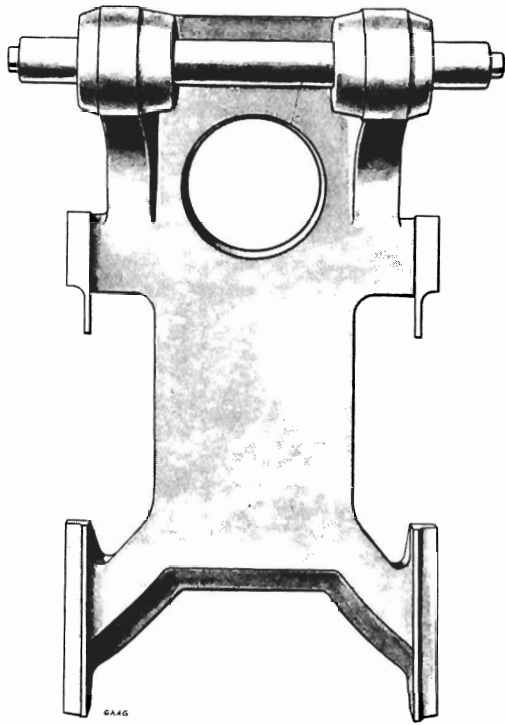


FIG. 1. " GAUGE, SELECTOR-BANK, NO. 1 "

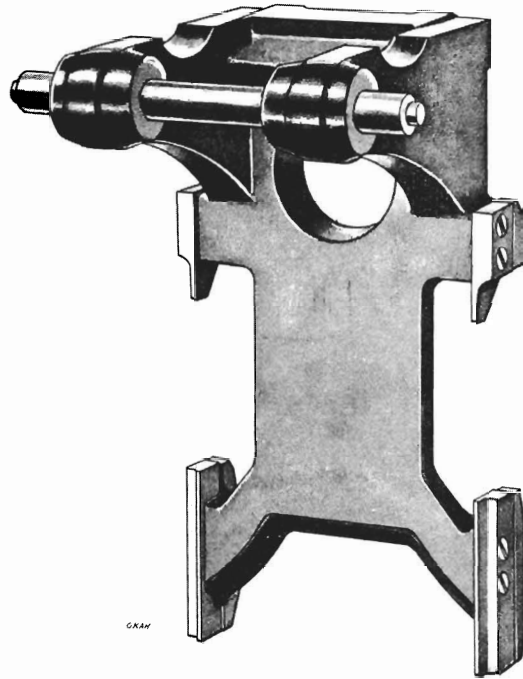


FIG. 2. " GAUGE, SELECTOR-BANK, NO. 1 "

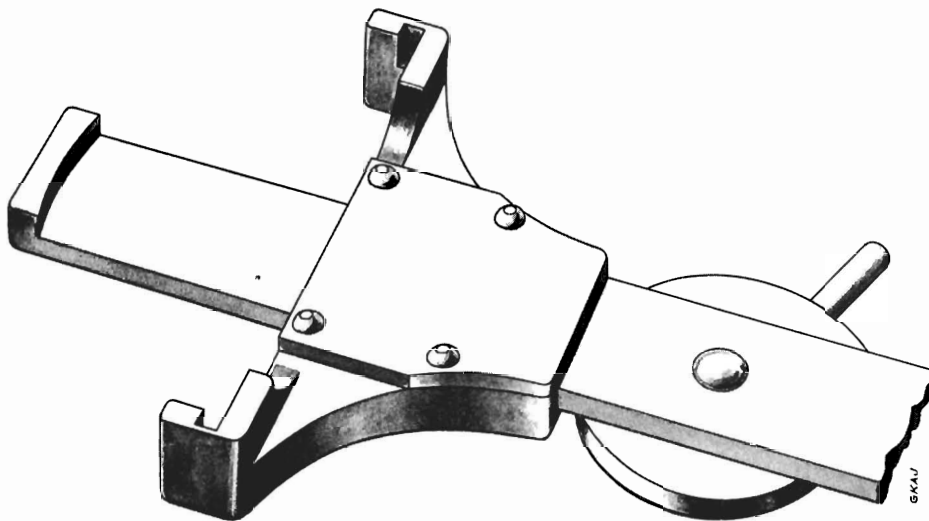


FIG. 3. " ADJUSTER, SELECTOR-BANK "

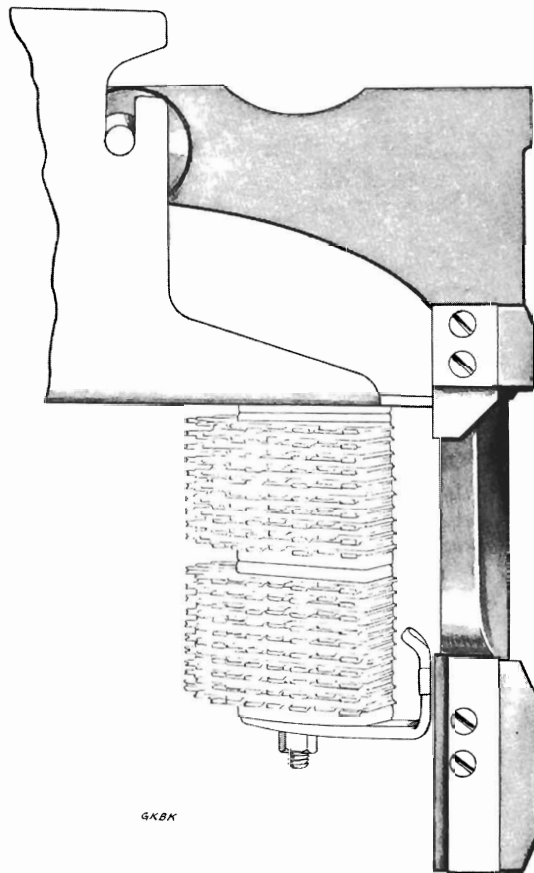


FIG. 4. SHOWING VERTICAL ENGAGEMENT FACES
AT RIGHT ANGLES TO BASE OF CRADLE

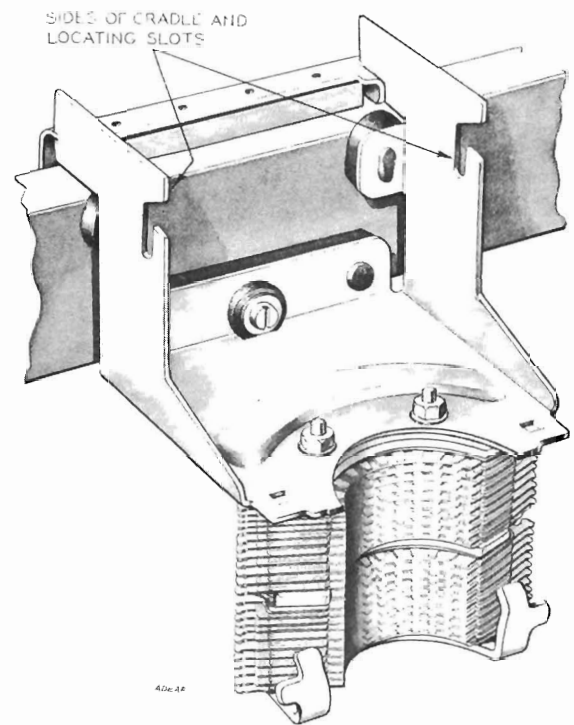


FIG. 5. CHECK POINTS FOR DISTANCE BETWEEN
SIDES OF CRADLE AND WIDTH OF LOCATING SLOTS

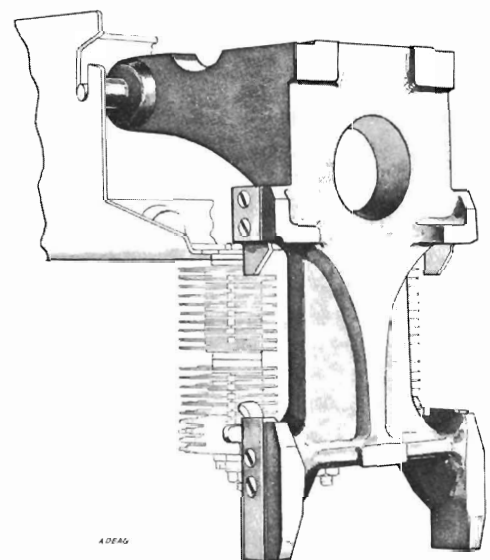


FIG. 6. GAUGE LOCATED IN SHELF CRADLE

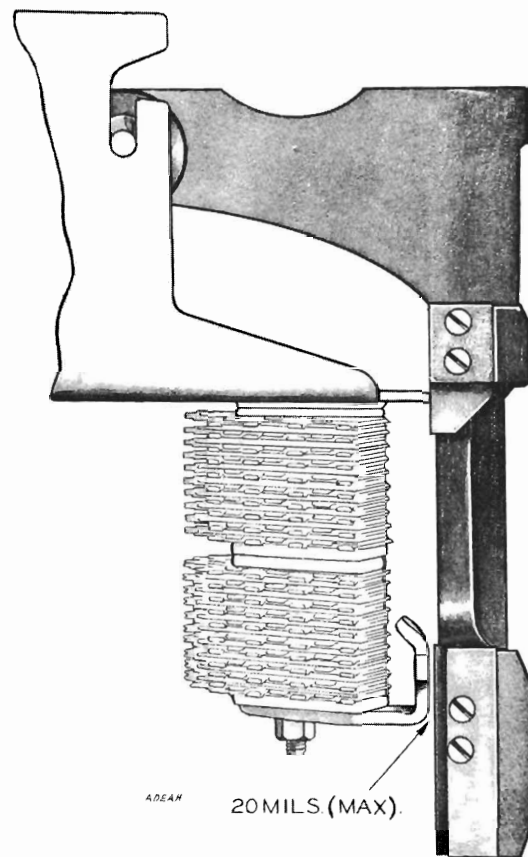


FIG. 7. CLEARANCE BETWEEN LOWER ENGAGEMENT FACE ON "GAUGE, SELECTOR-BANK, No. 1" AND FACE OF LOWER BANK-PLATE LUGS

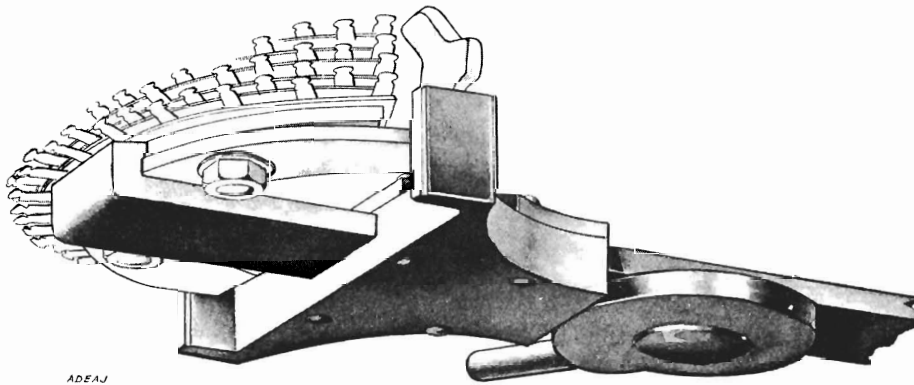


FIG. 8. "ADJUSTER, SELECTOR-BANK" IN POSITION UNDER, AND BEHIND, THE LOWER BANK PLATE

8. Adjustment of Banks.—If banks on the upper shelves have to be adjusted, a firm platform is essential so that the necessary pressure and leverage can be applied to the adjusting tool. Adjustments can be made with the gauge in position ; this avoids the removal and replacement of the gauge for each attempt at adjustment. The following gauge values should be used when adjustment is required :—

2-3 bank selectors	10 ± 5 mils
4-5 bank selectors	15 ± 10 mils

Proceed as follows :—

- (a) Before making any adjustment to a bank, verify that the bank-fixing bolts are *tight*.
- (b) Hinge the gauge forward, and away, from the lugs on the lower bank-plate sufficiently to allow the adjuster to be placed in position under, and behind, the lower bank-plate, as shown in Fig. 8.
- (c) Lock the tool in this position by operating the locking cam.
- (d) The gauge can be allowed to rest on the tool during adjustment.
- (e) Holding the tool firmly in position, the bank can be forced backwards or forwards until the required adjustment is obtained ; operating the tool to the right, or left, as required will correct a bank if it is found to be twisted.

NOTE :—Care should be taken to avoid damage to the bank wiring.

Reference :—B 5156
(Tp2/8)

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