(vi) Readjust, if necessary, the frequency of the trimmers as described in para. 165.

(vii) If the operation (iv) above has damaged the valve identification label, use shellac varnish to fix a new label to the rear inside face of the receiver case in the most suitable position for reading, or in the position described in para. 117 (iii).

(viii) Apply a thin coat of shellac varnish over the label.

(ix) Replace the receiver in its case.

Alignment of incorrectly calibrated receivers

121. A number of receivers of versions other than L and N were incorrectly calibrated at the high frequency end of the scale. Arrangements were made for these to be realigned in accordance with leaflet A.P.1186/B.68 dated 8/7/43. Receivers which have been examined for this defect will bear a label stating either "Calibration checked in accordance with A.P.1186/B.68 dated 8/7/43" or "Recalibrated in accordance with A.P.1186/B.68 dated 8/7/43".

122. Where any doubt exists as to the accuracy of calibration of a receiver not bearing one of the labels mentioned, the receiver calibration should be checked against a wavemeter W.1191 (Stores Ref. 10T/31), or W.1191A, if available, and re-calibrated when the errors are greater than those shown below:—

Range	*Error*
1 (18·5 Mc/s 7·5 Mc/s)	±100 kc/s
2 (7·5 Mc/s–3·0 Mc/s)	± 50 kc/s
3 (1500 kc/s–600 kc/s)	± 6 kc/s
4 (500 kc/s–200 kc/s)	± 3 kc/s
5 (200 kc/s– 75 kc/s)	± 1·5 kc/s

If recalibration is not necessary affix a label with the inscription "Calibration checked in accordance with A.P.2548A, Vol. I, Chap. 2, para. 122" to the case in a prominent position.

123. *The instructions detailed in para. 122 are on no account to be applied when the calibration is incorrect over the entire scale on one or more ranges, or is wrong at the low frequency end only.*

124. The following table gives a comparison of the numbering of the trimmers. Reference is made to figs. 3, 3A, and 17 and to the numbering on the cover of the trimmers in the receiver.

R.F. Oscillator trimmers (first group of five)

Figs. 3, 3A, and 17	...	C_{69}	C_{70}	C_{63}	C_{71}	C_{72}
Receiver Range No....	...	4	3	5	2	1

2nd R.F. trimmers (second group of five)

Figs. 3, 3A, and 17	...	C_{63}	C_{64}	C_{65}	C_{62}	C_{66}
Receiver Range No....	...	4	3	2	5	1

1st R.F. trimmers (third group of five)

Figs. 3, 3A, and 17	...	C_{59}	C_{60}	C_{61}	C_{58}	C_{57}
Receiver Range No....	...	3	2	1	4	5

125. The following is the sequence of operations:—

(i) Withdraw the receiver from its case and connect the power supplies.

(ii) Set receiver master switch to OMNI and volume control to maximum.

(iii) Put receiver range switch to range 1.

(iv) Set the wavemeter to 16 Mc/s.

(v) Set the receiver tuning pointer to 16 Mc/s.

(vi) Adjust trimmer osc.1 (C_{72}) for loudest signal. (Reduce volume if necessary during this operation.)

Note.—In most of these operations it will be found necessary to turn the trimmer in a counter-clockwise direction.

(vii) Decrease volume until signal is very weak and adjust 2ND RF 1 (C_{66}) for loudest signal.

(viii) Again decrease volume control and adjust 1ST RF 1 (C_{61}) for loudest signal.

(ix) (*a*) Adjust wavemeter to 7 Mc/s.

(*b*) Receiver to range 2.

(*c*) Tuning pointer to 7 Mc/s.

(*d*) Volume control.

(x) Repeat tuning operations as in (vi), (vii), and (viii) above for:—
OSC. 2 (C_{71}) 2ND RF 2 (C_{65}) 1ST RF 2 (C_{60})

(xi) Repeat similarly, using the appropriate trimmers (para. 124) for ranges 3, 4, and 5 and the frequencies:—

Range 3	1430 kc/s
Range 4	500 kc/s
Range 5	185 kc/s

(xii) Seal trimmers with bakelite varnish. Care should be taken to ensure that sealing material does not penetrate between the trimmer nut and metal washer, or between the ceramic spacer and condenser plate. The sealing material should be smeared only on top of the trimmer nut and that part of the trimmer screw which emerges from the nut. ***Adjustment in service is only permissible of those trimmers referred to above.***

(xiii) Replace the receiver chassis in its case.

(xiv) Affix a label prominently to the case bearing the inscription:—"Recalibrated in accordance with A.P.2548A, Vol. I, Chap. 2, para. 125". Cover the label with clear varnish.

Periodic inspections

126. In addition to the inspections called for in the aircraft inspection schedule, i.e. Vol. II, Part 2 of the appropriate aircraft Air Publication, the following items must be attended to at the intervals shown. The receiver and transmitter will normally be serviced at the same time. The transmitter inspections are given in Chap. 1 of this publication.

Minor inspections

(i) Remove all deposits of carbon and copper dust from the commutators and brush-gear of the power unit by dry air blast. Examine the commutators for scoring and clean as necessary with carbon tetrachloride.

(ii) Lubricate the bearings of the power unit with two drops of oil (Stores Ref. 34A/60) for each bearing.

(iii) Check the starting relay for correct operation. Adjust the relay contacts as necessary.

(iv) Test all valves in the valve tester.

(v) Examine control knobs, dial, and switches for slackness.

(vi) Check the calibration of the receiver tuning scale for accuracy. Ensure that the noise level is not abnormal, the volume control operates smoothly and that the tuning indicator functions correctly.

"One star" inspections

(vii) Remove the L.T. power unit from the aircraft for overhaul and operational check on the test bench as follows:—

(*a*) Examine the rotary transformer bearings for excessive wear and for lack of lubrication.

(*b*) Examine the brushes for excessive wear and check for freedom of movement. Ensure that the brushes bed correctly on the commutators.

(*c*) Check the brush springs for correct tension.

Note.—Do not disturb the seating of the brushes unnecessarily otherwise bad contact may result.