

3129.



*Radio &
Television*

KOLSTER, BRANDES LIMITED

FOOTSCRAY

KENT

ENGLAND

Cablegrams :

"Matchtone, Sidcup"

Telegrams :

Kolster, Phone, Sidcup

Telephone :

Footscray 3333



**INSTRUCTION
BOOK**

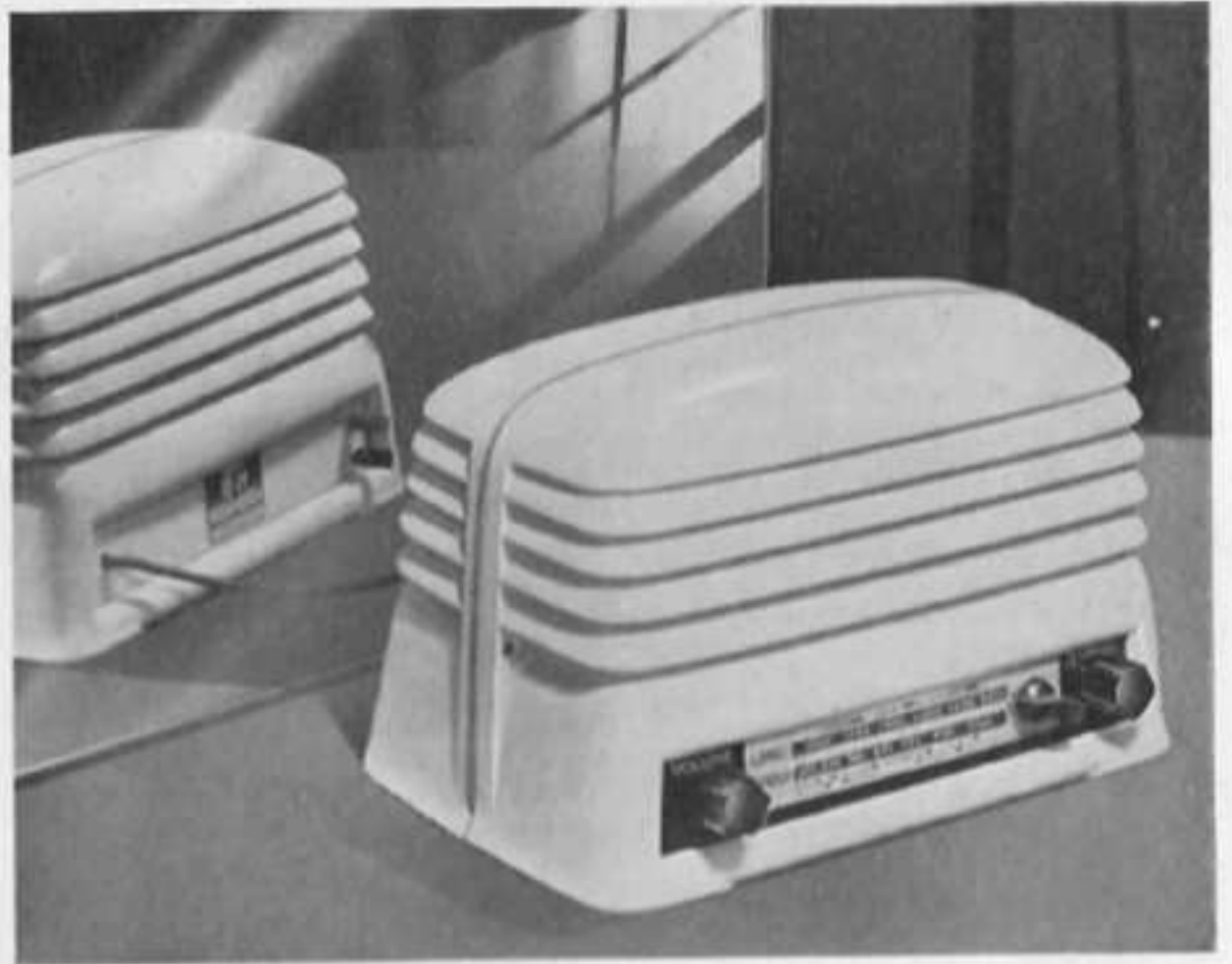


"CONS"
RADIO — CYCLES,
11, WIDEMARSH STREET,
HEREFORD.
PHONE: HEREFORD 2093

MODELS BM20 & BM20E



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GENERAL
INSTRUCTIONS

INSTALLATION AND OPERATION

OF THIS RECEIVER

Important Note—Read all the instructions carefully before you attempt to instal or operate this Receiver.

It is strongly recommended that the installation be carried out by your K-B Authorized Dealer, who has a thorough knowledge of the conditions under which the Receiver will operate to the best advantage.

The Aerial.

An internal aerial is incorporated in this Receiver for the reception of local stations, but for better results the Receiver is designed for use with a short aerial which may be either indoor or outdoor.

It should be erected as far as possible from any source of interference such as overhead tram or trolley wires and power supply lines.

It should be noted that indoor or internal aerials may not operate satisfactorily in steel-framed or similar buildings.

The Earth.

An efficient earth is a great aid to satisfactory reception and can be effected by use of an earth rod or copper plate buried

about three feet in moist ground. In very dry conditions it is an advantage to provide some means of moistening the ground surrounding the earth rod or plate. A vertical pipe with the upper end protruding above the ground is suitable and when the ground is very dry, water should be poured into the pipe. Alternatively, a good earth connection can be made to a rising water main. Use fairly heavy gauge copper wire from earth to Receiver. Do not use a gas pipe, telephone cable or the pipe of a hot-water system for earthing purposes. If an efficient earth connection, as outlined above, is not fitted, a safety earth is recommended, which can be effected by a connection to the earth pin of a 3-pin power supply plug.

Aerial and Earth Connections.

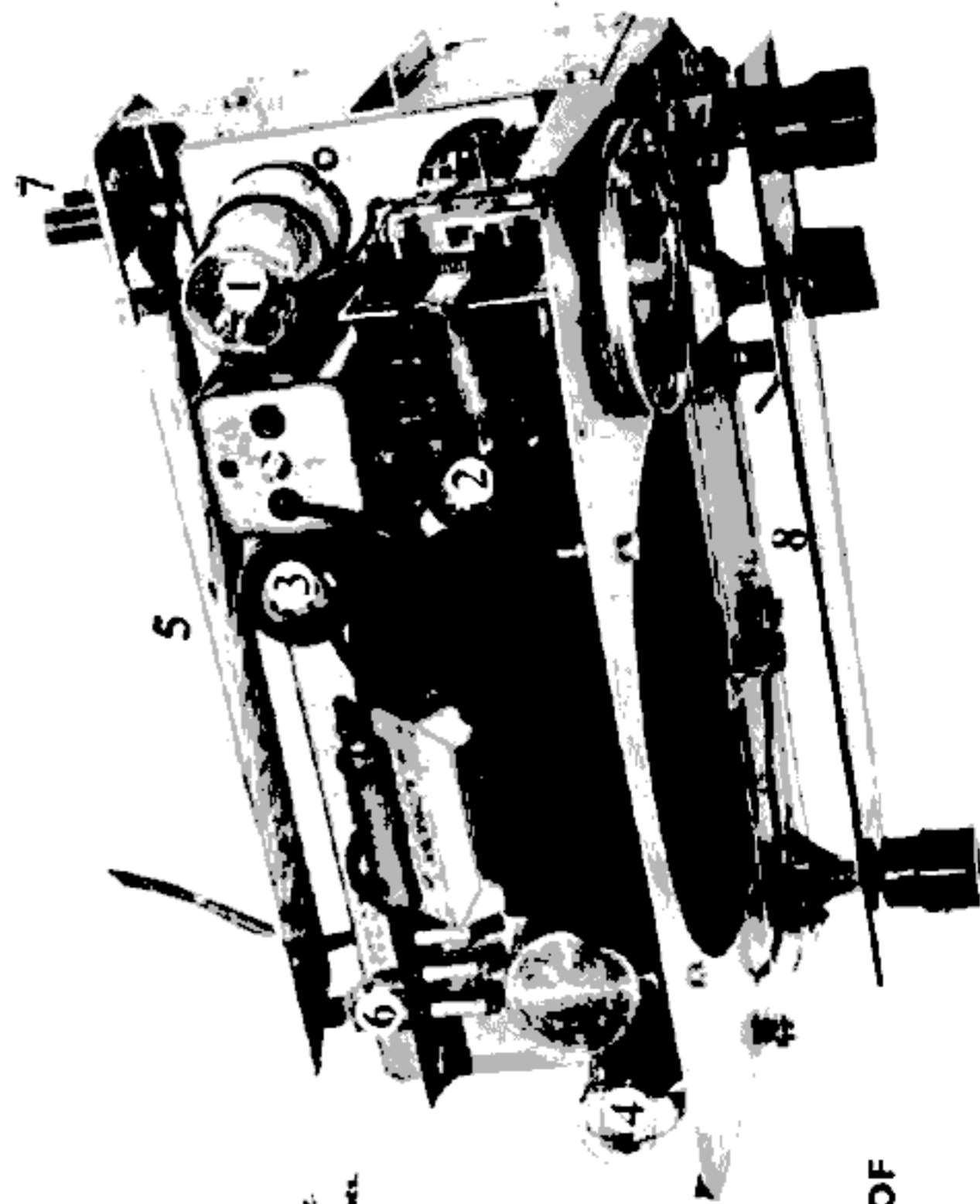
Insert the Aerial plug into the top socket on the Aerial Panel and the Earth plug into bottom socket.

Mains Supply.

This model is suitable for operating on an A.C. power supply only, between frequencies of 50 to 100 cycles and 200 to 250 volts.

Mains Voltage Adjustment.

It is essential that, before being connected to the electricity supply, the Receiver be adjusted to the voltage of the supply



1. Primary Valve 6A80T.
2. Brimar Valve 6B80T.
3. Brimar Valve 6V6GT.
4. Brimar Valve 6X5GT.
5. Internal Aerial.
6. Mains Adjustment Plug.
7. Aerial and Earth Sockets.
8. Pilot Lamp.

CHASSIS VIEW OF
MODEL BM20

on which it is to be used as otherwise the Receiver and valves will be seriously damaged or the performance of the Receiver impaired. First ascertain your mains voltage, and if in doubt this can be obtained from the local Electricity Company. Adjust the Receiver to the correct voltage on the adjustment panel located on the chassis of the Receiver (see page 7). Insert the plug into the socket which indicates the figure which is the nearest to your mains voltage, i.e., on 230 volt mains voltage, the adjustment plug should be inserted in socket marked 225 v.

Valves.

Make sure that the valves are pushed down into their holders and that the top connections are pushed firmly on the valve caps.

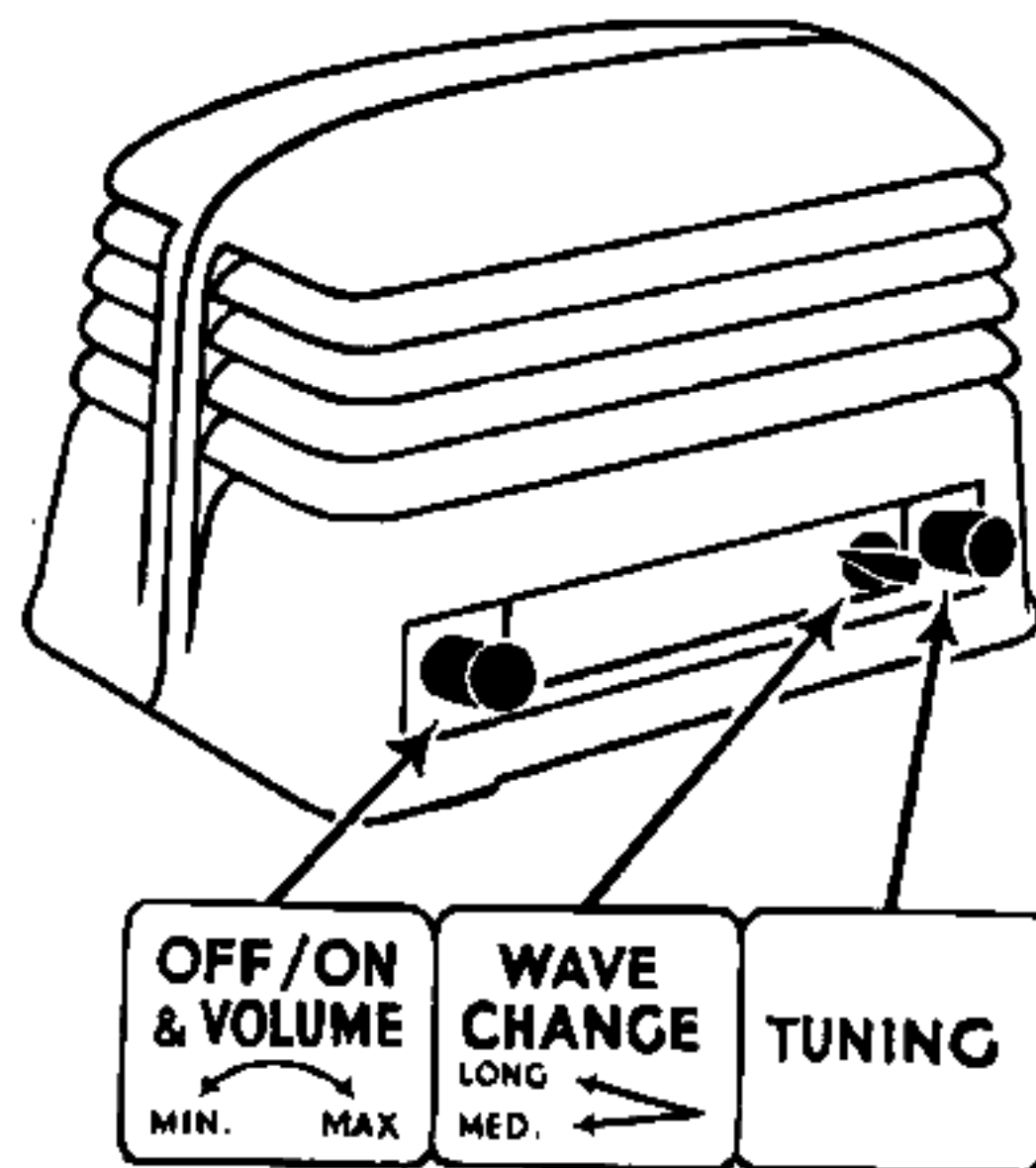
Brimar B.V.A. valves of the type indicated in the illustration on page 7 are used in this Receiver. To maintain maximum efficiency of the Receiver only valves of the types specified must be fitted as replacements, and these can be obtained from your K-B Authorized Dealer. In case of difficulty write to the Manufacturers, Standard Telephones & Cables Ltd., Brimar Valve Works, Footscray, Kent. (Telephone : Footscray 3333).

Back Cover.

When the above instructions have been carried out, replace the back cover and make sure it is fitted firmly into position.

Controls.

The positions of the three knobs are shown below and the purpose of each is explained in the following paragraphs.



On and Off Switch and Volume Control.

When this switch is turned in a clockwise direction a click will be heard and the dial lamp will light. This will indicate that the set is switched on, but no signals will be received for a short time, this interval being necessary for the valves to reach their operating temperature.

When this control is rotated in a clockwise direction the volume of the reproduction is increased and when turned anti-clockwise the volume of reproduction is decreased.

The Receiver is switched off by turning the knob anti-clockwise until the click is again heard.

Wave Change Switch.

The wave change switch has two positions and the wave band to which the control is set is clearly shown on the Control Panel below the tuning scale. Commencing with the knob turned fully counter clockwise the wave bands covered are as follows :—

Position 1. Medium wave. 200—550 metres (1540—540 kcs.)

Position 2. Long wave. 900—2,000 metres (320—150 kcs.).

Tuning.

Switch on the Receiver, set the wave band switch to the desired wave band and turn the Volume Control approximately half-way. Tuning in to a particular programme can then be carried out by rotating the control until the indicator reaches the desired wave length. In view of the action of the highly efficient Automatic Volume Control, care must be taken to see that the Receiver is tuned accurately. Reception of any programme will be possible over a narrow band on the tuning

scale but the best quality of reproduction will only be obtained in the exact centre of this position and the Tuning Control should be slightly moved backwards and forwards about the centre of this band until reproduction is well rounded in tone. Any other adjustment will give thin distorted quality.

Only the names of the more popular stations are given on the tuning dial and it will often be possible to receive other stations not specified on the dial.

When the desired station is accurately tuned, obtain the required volume, by adjustment of the control. Never de-tune to reduce volume and never tune with Volume Control fully advanced.



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SERVICE INSTRUCTIONS

IN the event of the Receiver not working satisfactorily, reference should be made in the first instance to the K-B Authorized Dealer from whom the Receiver was purchased. He has been provided with full information for examining and testing K-B Receivers and is usually able to deal promptly with all but exceptional faults.

Should the K-B Authorized Dealer advise the return of the Receiver to Kolster-Brandes Service Department it must be well packed in the original carton, if available, or a strong box, complete with valves and dry batteries (not accumulators) together with a note giving the owner's name and the address to which the Receiver is to be returned, and addressed to: Service Department, Kolster-Brandes Ltd., Footscray, Sidcup, Kent.

A detailed description of the faulty symptoms noted is of considerable help in ensuring that the Set is serviced satisfactorily. It is appreciated that the average owner cannot give a technical report, but he is requested to give what help he can. This information should be included in the note sent with the Set. So as to prevent delay and inconvenience, all correspondence must quote the *Model* and *Serial Number* of the Receiver. This will be found on the label affixed to the chassis at the back of the Receiver. All Receivers returned for Service **MUST** be sent carriage paid.

In cases where the defect traced is not a fault coming within the conditions of the Guarantee, authority will be implied for Kolster-Brandes Ltd. to effect the necessary repairs upon the sender's behalf and the repaired Receiver will be returned carriage forward and delivery only granted against payment by the sender of the cost of effecting the repairs.

If an estimate is desired, this must be clearly stated when forwarding the Receiver and will be given whenever possible by Kolster-Brandes Service Department before commencing the repairs.

SPECIAL OUTSIDE SERVICE.

Where exceptional difficulty is encountered in obtaining satisfactory reception from your Receiver, Kolster-Brandes may agree to send a Service Engineer to investigate the trouble. In such cases a nominal charge for the Engineer's time plus travelling expenses will be made.

RETAIN CARTON AND PACKING MATERIAL FOR POSSIBLE FUTURE USE.