

Philips 930A by John Pether

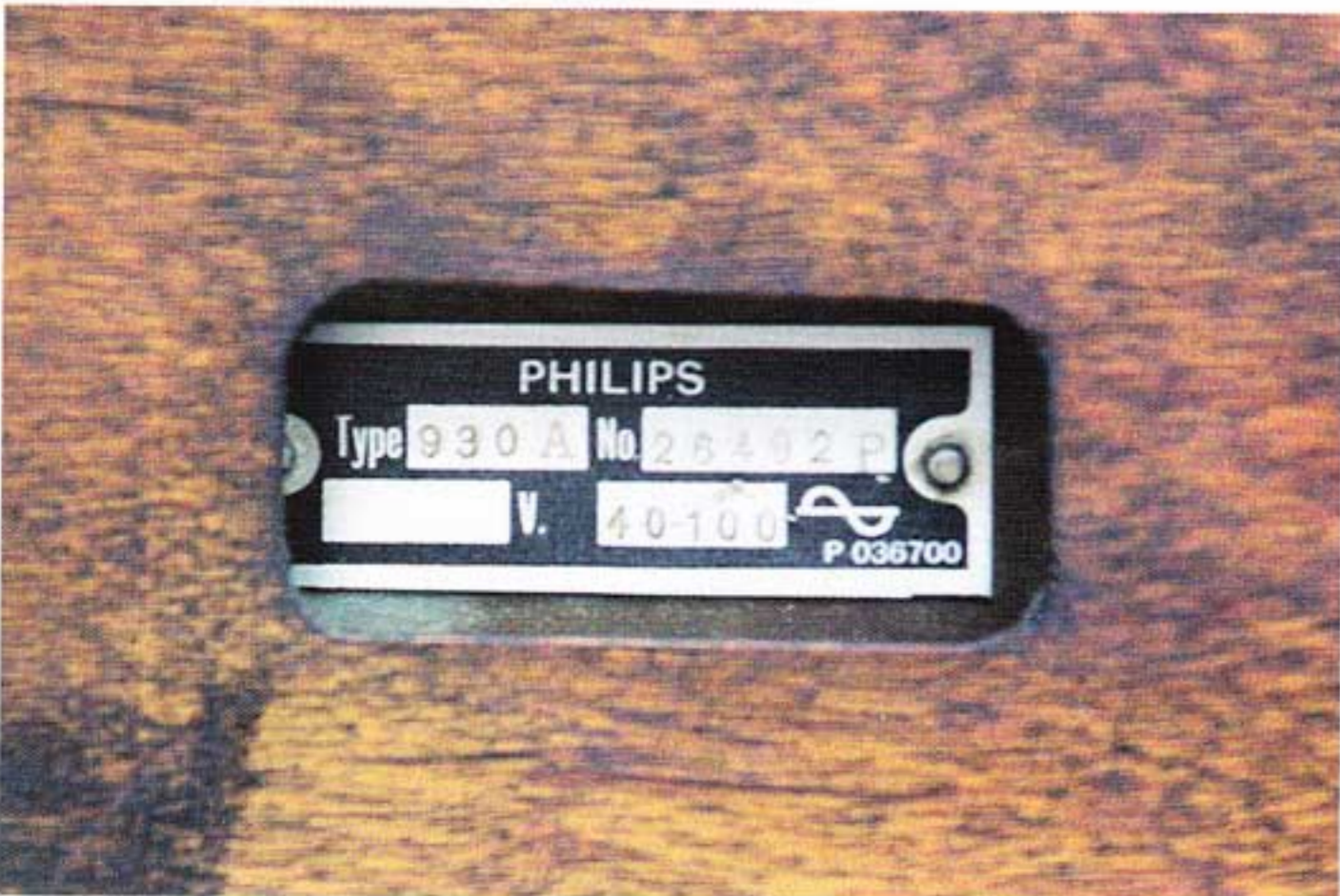


The set before restoration

I found this receiver at an amateur radio car boot sale, and from its appearance it seemed to have spent many years in a damp shed. The cabinet had no veneer on the top and very little on the sides. I decided to purchase it and one day attempt to re-veneer the cabinet. I have spent my working life repairing radios and televisions but have nothing to do with the outside. I started reading as many articles as I could find; luckily a friend who restores antique furniture was able to inform me what type of veneer and dye I would require. He also loaned me a glue pot and a special tool for squeezing out any lumps of glue before clamping the veneer in place. There was a good source of veneer in Aylesbury; £18 gave me a roll large enough to cover the radio twice which allowed a broad margin for error.

My first problem was how to clamp the veneer to the top of the set? This was solved by sawing two pieces of old fencepost

Below: Philips information panel



and glueing them together with packing to achieve the correct width. I cut a shape to match the top with a band saw and lined it with felt to apply equal pressure on the top.

Having prepared everything, I cut and glued the veneer for the top and sides of the cabinet, clamping one side at a time and leaving it to dry for a week between stages.

The front of the cabinet was in fairly good condition but had pieces missing from the top and the bottom of the columns. These were easily made from hardwood and glued into place. The old varnish was removed from the front and was cleaned and sanded. The rest of the cabinet was sanded and the corners and edges were sprayed with dark oak varnish. After the varnish had cured for a few days the entire cabinet was sprayed with light oak. As I have another of these sets I had the advantage of a good match regarding colour.

The next step was to make a new Back-



board for the set. this was made by using the remains of the old board as a template, using a scroll saw to cut out the design. The paper badges on the rear of the set were recreated on a computer using Paint Shop and printed and stuck to the rear of the cabinet. The rear was then sprayed with dark oak varnish to match the original colour. I then cleaned the chassis and decided at this stage not to restore it.

I decided to wash the original speaker cloth and after drying, it was re-fitted to the cabinet using Copydex glue.

The radio was reassembled and for a first attempt at cabinet restoration I managed to achieve a good result, and although it took many weeks it was well worth the effort! Compared with the instruction card which came with my original receiver, the columns on the left and right of the cabinet have been simplified on my receiver which has a later serial number.

Below: Former to help veneer keep shape on curved top of Philips set



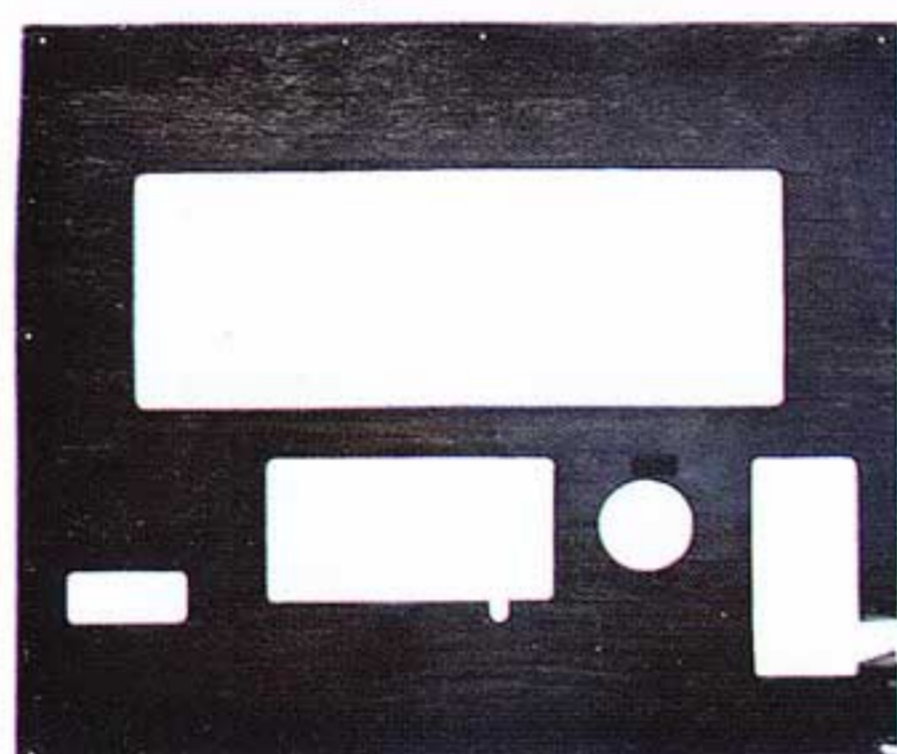


Set before varnishing

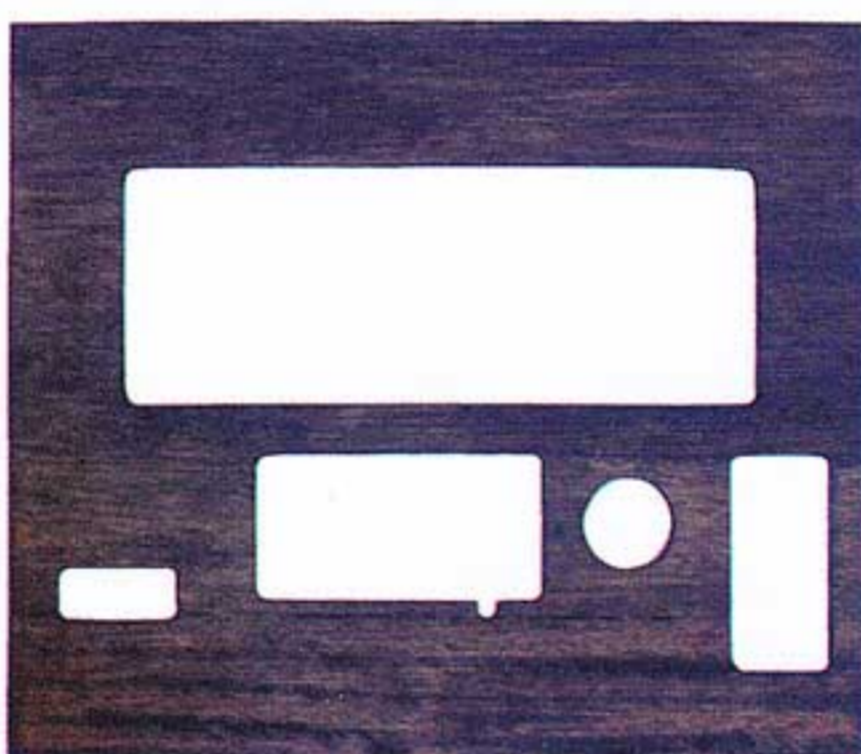


Above: Reproduction Philips label for back of set

Left: Set after varnishing using an airbrush and compressor



Original radio back



Reproduction radio back

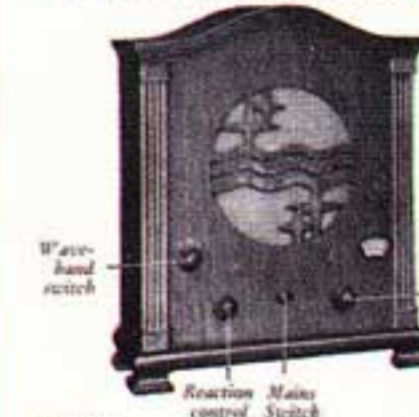


The finished set

INSTRUCTIONS FOR OPERATING PHILIPS RADIO RECEIVER MODEL 930 A

PERFORMANCE

This receiver is designed primarily for the reception of local and regional transmitters. Under normal conditions a choice of programmes is available in all but the most outlying districts. Provided the set is not installed very close to a transmitter, a number of Continental programmes can also be heard after dark if the set is coupled to a good aerial.



ADJUSTMENT

The positions of the controls can be seen in the figure. In order to switch on the set, depress the mains switch. Adjust the waveband switch to one of the following positions:

"S" (short) 200-450 metres,
"M" (middle) 400-950 metres,
"L" (long) 900-2,100 metres.

*) These values are approximate and depend upon the length of aerial used and the number of the aerial socket. Changing from a socket of higher number to one of a lower number will lower the wavelength range in each position of the waveband switch.

TUNING

First turn the reaction control as far as possible to the left. Then turn the tuning control slightly to the right in order to increase the sensitivity of the set. This control should, however, never be turned so far to the right as to cause oscillation (whistling). If it is not possible to obtain the required volume without causing oscillation, insert the aerial plug in a socket with a different number (see under "Connection" on the other side of this card) and re-adjust the tuning control until the station is again received at its maximum strength.

GRAMOPHONE REPRODUCTION

To adapt the set for gramophone reproduction, withdraw the aerial plug and connect the pick-up leads to the sockets marked "G" at the back of the set. When reverting to radio reception, withdraw the pick-up leads from the receiver.

ADDITIONAL LOUDSPEAKER

An additional loudspeaker can at any time be connected to the set. Sockets marked "LS" at the back of the set are provided for this purpose.

INSTRUCTIONS FOR INSTALLING PHILIPS RADIO RECEIVER MODEL 930 A

INSERTING THE VALVES

Insert the following valves in the correspondingly marked sockets:
Philips rectifying valve 1821;
Mullard P.M. 24 with five-pin base;
Mullard 484 V with five-pin base;
Mullard 484 V with five-pin base.
Inside the set Philips pilot lamp type 8246 illuminates the tuning dial. In order to change this lamp, simply withdraw its holder, which is situated behind the 1821 valve socket, and remove the lamp.
The rubber ring supplied with the receiver should be fitted round the bulb of the detector valve, i.e. the Mullard 484 V valve, in the extreme right-hand valve socket of the receiver, as viewed from the back. Whenever the valve is replaced, the ring should be taken off the old valve and placed on the new one.

CONNECTION

The positions of the various sockets can be seen in the figure. Install a good outdoor aerial with a total length of between 40 and 50 feet in as high and open a position as possible. It is important to place the set as near as possible to the aerial lead-in. If reception of the local transmitter only is desired, the use of a modest outdoor aerial or even an indoor aerial will as a rule be found sufficient. Connect the aerial to one of the sockets marked "A" at the back of the set, as follows:
to "1" for reception of a powerful local transmitter;
to "2" for maximum selectivity;
to "3" under normal conditions;
to "4" for greatest sensitivity.
The best earth is obtained by making connection to an earthing tube or plate. Generally speaking, however, connection to a clean main water-pipe or to the earthing lead of a lightning arrester will be found sufficient. Connect the earth lead to the socket marked "E" at the back of the set.
Finally, insert the two-pin mains plug in a wall-socket.
The receiving set must only be connected to an A.C. mains supply of the voltage for which it is adjusted (this can be seen at the back of the set) and a periodicity of 40-100 cycles. Adaptation of the set to another voltage may be effected only by a radio dealer.

SOME REMARKS

When these instructions have been carried out, the receiver will give entire satisfaction, the set having been thoroughly tested before being packed. If, after being installed, it does not work quite satisfactorily the following possibilities should be considered:
1. The valves may make poor contact; clean their pins and push them well home in their sockets.
2. The aerial, earth or mains connections may make poor contact.
3. The aerial-switching switch, if any, may be in the wrong position.
4. The mains socket may not be alive. This can be tested with a table lamp.
If a valve does not get warm after the set has been switched on for some time, it may have become defective. Make sure by substituting another valve of the same type.
Should the receiver develop a fault consult your dealer, who will if necessary communicate with us.