

# Repair of a Marelli Assab Receiver – Brent Hilpert

(photos by John Sarembo)



This receiver was brought to SPARC by a customer for repair. The cabinet style was immediately recognisable as being unusual for North America and looked more European. Sure enough, it turned out to be an Italian radio: a Marelli Assab from around 1938.

It has an interesting lineage. The fellow who brought it in spotted it in a second-hand store while on vacation in Peru. He purchased it and brought it back with him to Vancouver, Canada.

The Assab tunes long-wave, broadcast, and two shortwave bands. The dial incorporates a long list of broadcast stations of the cities of Europe positioned across it.

Aside from the cabinet esthetics there are several other notable design features of this receiver.



- Although this is an Italian receiver, the tube complement is fully North American. Apparently this is a result of a licensing deal Marelli had with an American tube manufacturer (RCA?).
- The audio output tube is a hefty 6L6 leaving the unit capable of producing a room-filling sound level.
- The tone control is not the typical resistive type, rather it controls both a variable capacitor between the first audio and audio output as well as rotating the primary coil in the 1st IF transformer to change the coupling.

## Repairs

The cabinet was in quite good condition and did not require work. Unfortunately some portions of the dial labeling have been wiped off and it could do with being re-created.

The electronics primarily required re-capping, although there were numerous other repairs required.

The unit had received a sharp jolt somewhere in it's travels, resulting in a broken eye tube, broken volume control and bent chassis. The chassis was bowed where the inside corner of the heavy power transformer was inadequately supported by the surface of the chassis. This also resulted in the tone control shaft being misaligned and no longer fully rotatable. The chassis was straightened and a new metal brace installed along the plane of the top of the chassis.



A new line cord and some cracked wires were also replaced and a line fuse installed.

The schematic was produced before doing repairs and may be obtained upon request.

