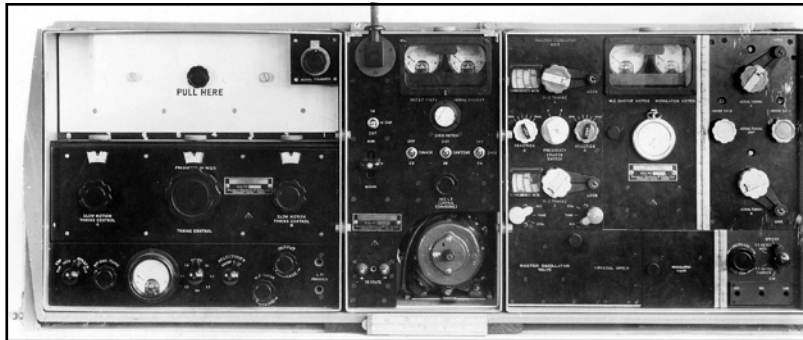


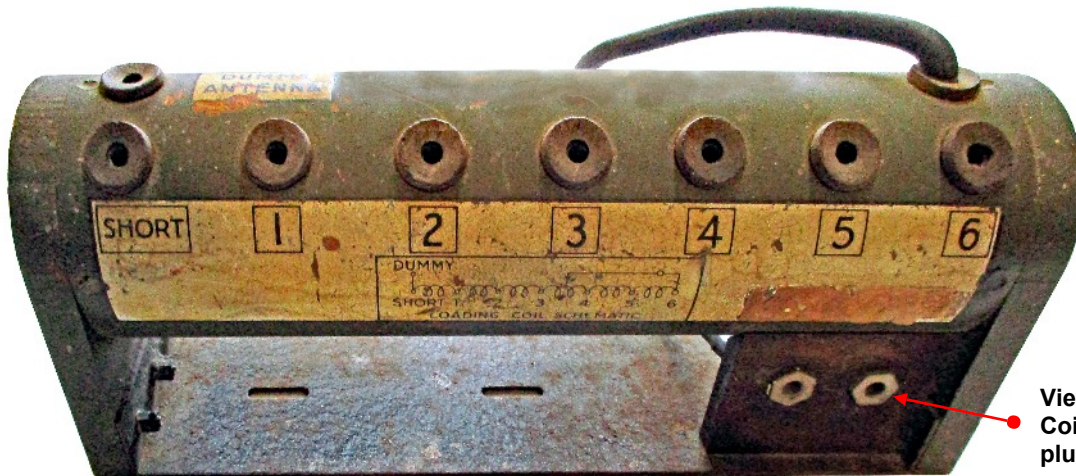
# AMENDMENT No. 3

## Canadian Wireless Set No. 9 Aerial Loading Coil.



British No. 9 Set.

Introduced in 1937, 4,000 units were produced until 1941, when it was considered to have a very restricted frequency range and to be difficult to manufacture in large quantities. Although it had already been replaced by other sets (e.g., No. 12 and 19), it still remained in use, known to be reliable and providing very good service. The transmitter RF output circuit was designed so that it could match any aerial over the whole frequency range.



View of the Aerial Loading Coil. Notice the sockets for a plug-in RF Ammeter.

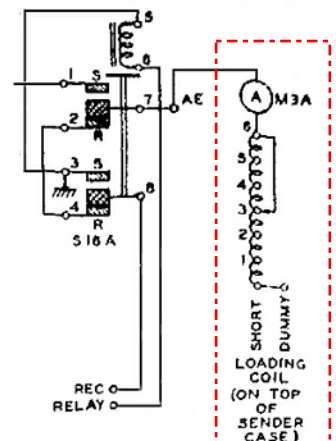
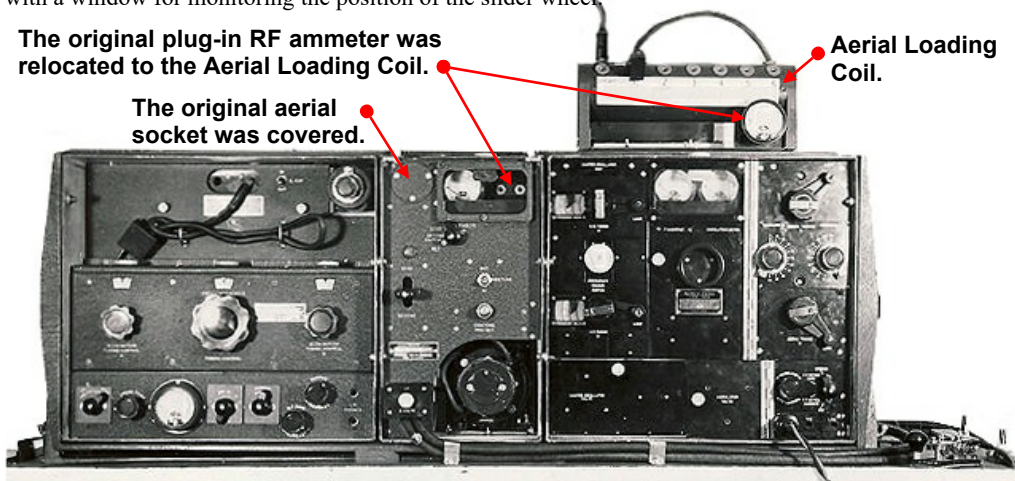
The RF output circuit of the Canadian-built No. 9 Set differed electrically from the British parent set, sometimes necessitating the use of an aerial loading coil, especially when operating at low frequencies with a short vertical rod aerial. In the initial Canadian No. 9 Set, this was achieved through an external device known as Aerial Loading Coil. This coil featured multiple taps connected in series with the original plug-in RF ammeter, which was relocated from its original position on the front panel. This involved a modification that required changes in both the power unit and transmitter.

In the later Canadian No. 9 Mk.I model, which incorporated numerous improvements, the cumbersome and exposed Aerial Loading Coil was replaced by the 'Coil, Aerial Tuning, No. 2'. This updated coil featured a continuously variable design, housed in a closed metal box, complete with a window for monitoring the position of the slider wheel.

The original plug-in RF ammeter was relocated to the Aerial Loading Coil.

The original aerial socket was covered.

Aerial Loading Coil.



Circuit diagram of the Aerial Loading Coil.

Canadian Wireless Set No. 9 with Aerial Loading Coil mounted on top of the transmitter case. Notice that the RF ammeter in the top right hand side of the power unit (centre) was removed and plugged in sockets on the Aerial Loading Coil.

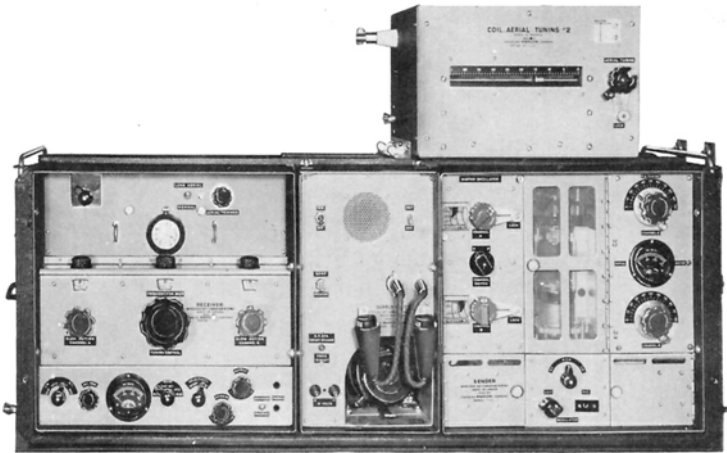
### Acknowledgements

With many thanks to John McKim from Christchurch, New Zealand, for drawing attention to the rare Aerial Loading Coil of his Canadian No. 9 Set and taking photos of this unit.

### References

- Photographs courtesy Royal Signals Museum, Blandford Forum, U.K.
- Working Instructions Wireless Set No. 9 Mk.I, ZAC 00008, Aug. 1943.
- Signal training Vol.III, Pamphlet No. 25, Wireless Set No. 9, Jan. 1940.
- Wireless for the Warrior, Vol. 1, Chapter WS 9, L. Meulstee, 1995, isbn 1898805 08 3.
- Wireless for the Warrior, Vol. 2, Chapter WS 52, L. Meulstee, 2001, isbn 1898805 10 5.

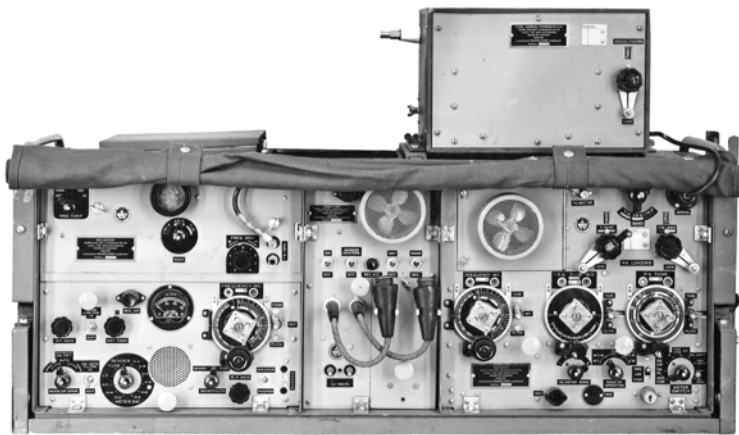
Later versions of the Canadian No. 9 Set with different Aerial Tuning Coils.



Canadian Wireless Set No. 9 Mk.I replaced the Canadian Wireless Set No. 9.



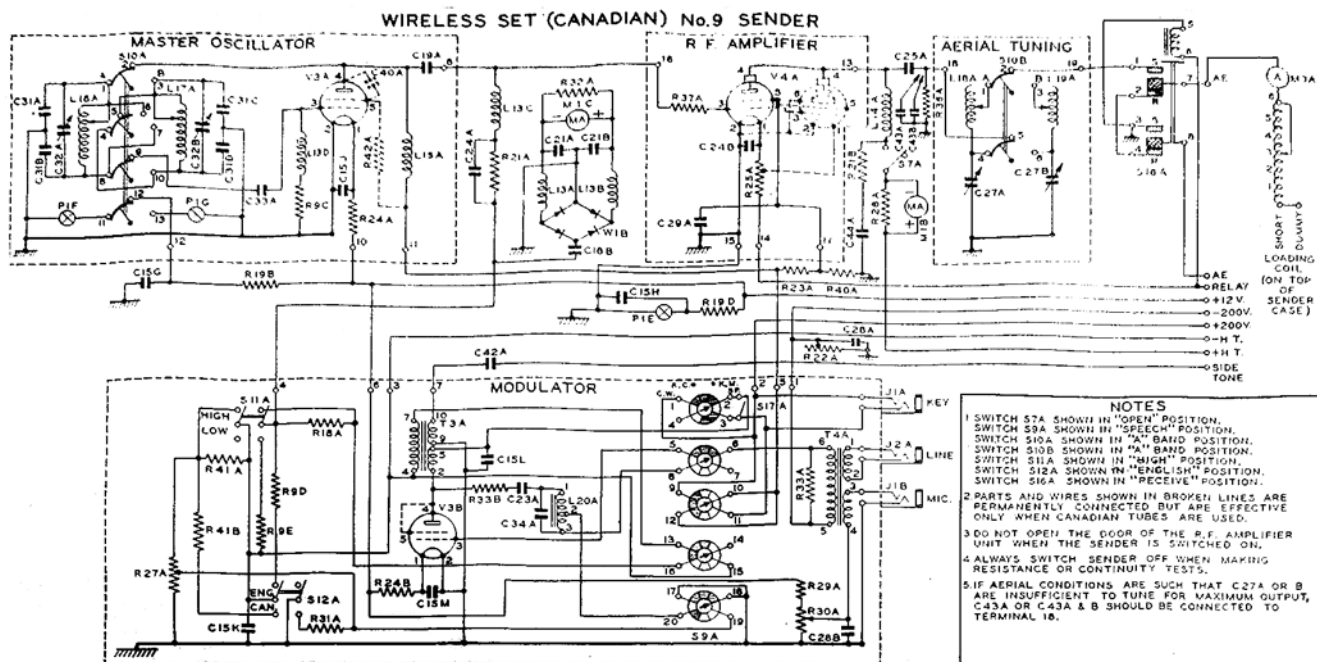
Aerial Tuning Coil No. 2 replaced the Aerial Loading Coil in Canadian Wireless Set No. 9 Mk.I. This unit had a variable inductor with a window showing the position of the slider wheel of the coil.



Canadian Wireless Set No. 52 was originally known as Canadian Wireless Set No. 9 Mk.II.



Aerial Tuning Coil No. 2A was electrically similar to the No. 2 Aerial Tuning Coil, but the variable inductor had a different and more accurate counter mechanism.



Circuit diagram of the transmitter section of Canadian Wireless Set No. 9 with Aerial Loading Coil modification.