

WIRELESS SET NO. 19 (CDN)

Instruction No. 2

DESCRIPTION: This instruction deals with the failures occurring in supply units of Canadian manufacture, due to short circuits in the 500V. and 275V. windings on the armatures of the rotary converters. In addition to damaging the armatures, the consequent heavy currents in the primary circuits burn out the series chokes L.16.A. and L.17.A.

There are, at present, two types of supply units in use, namely, Carter and Eicor. Although the majority of failures have occurred in Eicor units, both types are suspects and must be treated accordingly.

When materials become available, further improvements will include better wire insulation and vacuum impregnation of all armatures. In the meantime, however, all models should receive the same precautionary treatment.

Investigations reveal that the insulation of the windings is inadequate because of insufficient impregnation, but it has been found that the trouble can be considerably reduced by subjecting the converters to a drying out process.

Corrective action is being taken on converters now being made and these bear the following numeral stamped on the frame below the nameplate:

- (a) The figure "2" - indicates improved insulation between the coil sides.
- (b) The figure "3" - indicates improved coil side insulation, plus pre-wound 500 volt windings.

ITEMS AFFECTED: Supply Unit (Canadian) No. 1

ACTION REQUIRED: By R.C.O.C. 2nd, 3rd and 4th Echelon Personnel as sets come in for repair: Units concerned who have:

- (a) New sets received from stores.
- (b) Old sets out of action for a period of 30 days.

DETAIL

1. Supply units of Canadian manufacture will be dried out in the following manner before use:

- (a) Short circuit both H.T. windings at the brushes.

- (b) Place supply unit in a small, totally enclosed box and run for a minimum period of 4 hours, with 3 volts input.
2. For convenience, converters may be connected in series for drying out. This treatment will be applied to:
- (a) Supply units which have been out of service for 30 days.
  - (b) If time permits, all supply units.

END

AS/CH