

Radio Wiring Regulations

An Important Announcement



IN pursuance and exercise of the powers and authorities conferred on him by the Public Works Act, 1928, and of every other power and authority enabling him in that behalf, his Excellency the Governor-General of the Dominion of New Zealand, acting by and with the advice and consent of the Executive Council of that Dominion, doth hereby make the following regulations for the purposes of the said Act.

Regulations.

1. (1) These regulations may be cited as the Radio Wiring Regulations, 1932.

(2) These regulations shall form part of and be read together with the Electrical Wiring Regulations, 1927 (hereinafter referred to as "the principal regulations").

(3) These regulations shall come into force on the day following the date of publication hereof in the "Gazette."

2. (1) These regulations shall apply—

- (a) To apparatus which is used or adapted for radio reception or radio transmission or both and which is or is intended to be connected directly or indirectly with a source of supply of electricity used for lighting, heating, or motive power;
- (b) To battery chargers and apparatus of a similar nature used for charging or recharging batteries or accumulators forming part of apparatus used for radio reception or radio transmission or both.

(2) These regulations shall not apply to the fixed wiring on any premises where such apparatus as aforesaid may be installed or to any part of such apparatus as aforesaid beyond the secondary side of the power transformer.

(3) In these regulations—"Radio apparatus" means all such apparatus as aforesaid to which these regulations are hereinbefore declared to apply:

"Connected" means connected directly or indirectly with a source of supply of electricity or with an electrical installation which (in either case) is used for lighting, heating, or motive power:

"Non-reversible" in respect of any accessory device in the nature of a lamp-holder, adaptor, or a plug and socket, for connecting apparatus with a source of supply means so constructed and installed that when the device is in use the switch directly controlling such apparatus must always be connected with the live wire.

3. Nothing in Regulations 26, 27, 28, 66 (m), 90, 91, 98 (6), 119, 179 (1), 207, 212, 215, 252 (g), and 260 of the principal regulations shall apply to radio apparatus.

4. No person shall manufacture for sale or sell or offer for sale, and no person shall install or cause or permit to be installed or assist to install on any premises, or use or maintain or cause or permit to be used or maintained on any premises, any radio apparatus which does not comply with the requirements, or which is not of the character specified by these regulations in respect of such radio apparatus.

5. No person shall install or cause or permit to be installed or assist to

THE Radio Wiring Regulations are to be gazetted this month. They have been prepared as a result of a special commission working in conjunction with the Electrical Wiring Regulations Advisory Committee.

The radio dealers had three representatives on the special committee, and it is understood their findings were unanimous. Note the following important aspects:—

(1) If the installation of a set involves wiring work, the electrical supply authority must be notified.

(2) Before the set is connected to the supply it must be inspected by the electrical supply authority and permission obtained to make the connection whether or not wiring work has been done.

The regulations are to be printed in booklet form, and will probably cost about 9d. Supplies can be obtained from the Secretary, Radio Dealers' Section, N.Z.E.F., in about ten days' time.

install, or use or maintain or cause or permit to be used or maintained, on any premises any radio apparatus in a manner contrary to these regulations.

6. No person shall knowingly continue to use or maintain any radio apparatus, or cause to permit any radio apparatus to continue to be used or maintained, for or in connection with the consumption of electrical energy from a source of supply of electricity used for lighting, heating, or motive power if for any reason such apparatus has ceased to comply with the requirements or to be of the character specified by these regulations in respect thereof.

7. Any person committing a breach of these regulations shall be liable to a fine not exceeding five pounds.

8. Every connected transformer shall be of the double-wound type in which the winding connected to the source of supply is effectively separated from all other windings either by an earthed metallic screen or by adequate insulation capable of withstanding for one minute a test pressure of 1000 volts (root-mean-square value) alternating current or twice the maximum working pressure, whichever is the greater.

9. Every connected transformer shall be of such design, construction, and material that when the surrounding atmospheric temperature does not exceed 90deg. F. the working temperature of the transformer shall not exceed 176 deg. F.

10. Every condenser used on the primary side of a connected transformer shall be capable of withstanding for one minute a test pressure of 500 volts (root-mean-square value) alternating current or 750 volts direct current.

11. Every battery-eliminator shall comply with the following requirements:—

(a) It shall be enclosed in a case of metal or of some material that is tough, not readily combustible, and non-hygroscopic.

(b) Such case shall be adequately ventilated and of such design, construction, and material as reasonably to prevent all risk of causing injury to any person.

12. All live parts operating under normal working conditions at a pressure in excess of 100 volts shall be adequately insulated, and so protected that accidental personal contact therewith is impossible.

13. Auto-transformers may be used

only for supply to the primary winding of a double-wound transformer, and provided they are enclosed in a case of metal or some tough, not readily combustible, non-hygroscopic, material, and provided also that all live parts are enclosed.

14. Reactances shall not be used to reduce the pressure of supply.

15. Every connected resistance shall be of such design, construction, and material that when the surrounding atmospheric temperature does not exceed 90deg. F. the working temperature of the resistance shall not exceed 176deg. F.

16. Except where electrical energy is introduced into the apparatus only by a non-reversible accessory device, every single-pole switch controlling the power input to a receiving set and mounted thereon shall either be permanently short-circuited or be removed.

17. Every radio set, battery-charger, or eliminator operated from a direct current supply shall be fitted with a double-pole switch and fuses in each conductor and be supplied with electrical energy only by means of a non-reversible accessory device.

18. Every set of apparatus other than a battery-charger or battery-eliminator shall be provided with a legible warning notice permanently fixed to the set in a conspicuous position where access to the electrical equipment is provided. This notice shall contain a warning that no internal parts shall be touched until the set has been disconnected from the supply by the withdrawal of the plug or adaptor.

19. (1) Every flexible cord used in connecting any set of apparatus, including a battery-charger or eliminator, with the source of supply shall comply in all respects with the requirements of the principal regulations or be manufactured in accordance with the specifications known as "The Canadian or U.S.A. PO-32 or PD standards," and shall be of the under-mentioned colours:—For a two-core cord: Phase or live wire, red; neutral, black. For a three-core cord: Phase or live wire, red; neutral, black; earthing conductor, any other colour or combination of colours than red or black.

(2) Every such flexible cord shall be furnished with a suitable cord-grip, or other means of relieving the strain

from the connections, and the flexible cord shall be connected with the source of supply and with the apparatus respectively in such a manner as will prevent abrasion or damage to the insulation of such cord.

20. Where it is reasonably necessary to protect the supply system from high-pressure surges or feed-back there shall be installed in the supply to each transmitting set exceeding one-quarter kv. input and as near as possible to each radio transformer, rotary converter, or other auxiliary apparatus one of the following:—

(a) A condenser of not less than one-tenth microfarad capacity and capable of withstanding for one minute a test pressure of 500 volts (root-mean-square value) alternating current or 750 volts direct current, and having there-with connected across the line, in parallel with such condenser, a shunting fixed spark-gap capable of not more than 1-32in. separation; or

(b) A protector for the vacuum-tube type across the line; or

(c) A lightning-arrester of the aluminium cell type or other reasonably adequate type.

21. Pieces of flexible cord shall not be joined together otherwise than by means of a substantial coupling or connector properly insulated, and so installed that its live parts are so guarded or recessed as to prevent accidental personal contact therewith both when withdrawn from and when connected to the apparatus.

22. (1) No flexible cord shall be installed in any position where it is liable to mechanical injury, unless such cord is specially designed for the purpose.

(2) Every flexible cord shall be installed in a position as little liable to mechanical injury as the circumstances permit.

(3) Where the flexible cord is taken across or along any wall, ceiling, or similar position it shall be supported by insulated screw-eyes or other adequate insulators.

23. For the purpose of earthing any apparatus, pipes conveying gas, hot water, or an inflammable liquid shall not be used as an earthing system.

