

DATE 3 December 1963

SHEET 1 OF 3

TMC SPECIFICATION NO. S - 794

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TITLE:

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BP

ELECTRICAL INSPECTION OF TMC CORES

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This specification covers the following types of cores:

Core, Tuning
Core, Minimum Bead
Core, Slug
Core, Rod
Core, Toroid

EQUIPMENT REQUIRED:

Boonton Type 260A Q-Meter
Standard Core
Standard Coil

NOTE: All readings taken using low Q Scale.

PROCEDURE:

1. Turn Q-Meter on and allow to warm up for a minimum of 20 minutes.
2. Plug Standard Coil into Q-Meter.
3. Insert Standard Core in Standard Coil.
4. Adjust capacitance on Q-Meter to 100 uufd.
5. Compensate Q-Meter for permeability deviation of the Standard Core, as indicated on tag attached to Standard Core, by adjusting vernier capacitance on Q-Meter.

Example #1:- If permeability deviation is plus (+) 2.9%,
set vernier at minus (-) 2.9 uufd.

Example #2:- If permeability deviation is minus (-) 0.34%,
set vernier at plus (+) 0.34 uufd.
6. Resonate Standard Coil by tuning Q-Meter frequency, adjusting the XQ course control if meter goes off scale.
7. Adjust XQ controls so that meter indicates a circuit Q of 50.
8. Compensate Q-Meter for Q deviation of the Standard Core, as indicated on tag attached to Standard Core, by adjusting XQ of fine control.

Example: If Standard Core Q deviation is minus (-) 1.3%,
adjust vernier capacitor so that indicated Q is 50
Minus (-) 1.3% or 49.35.

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9. Remove Standard Core and insert core(s) to be tested.

10. Adjust vernier capacitance for maximum indication on Circuit Q Meter. Do not touch any other controls.

11. Read permeability tolerance directly from the vernier capacitance scale.

Example: If indicated vernier capacitance is 2.9 uufd, the permeability tolerance is 2.9%.

12. Read Q tolerance as a percentage.

Example: If the Q, using a test core, is 47, the Q tolerance is $(50-47)/50 = 3/50$ or 6.0%.

Example: If the Q, using a test core, is 52, the Q tolerance is $(52-50)/50 = 2/50$ or 4.0%.