



## QBT-A QUICK BREAK TESTER P/N N500389001

The Gould-Bass QBT-A Quick Break Tester is used for testing of the quick break feature on stationary wet horizontal magnetic particle inspection machines that have a full wave DC output. It should be noted that ASTM E1444 requires that a quick-break check be accomplished at a maximum interval of six months.

Quick-Break is the rapid breaking of DC current which causes a rapid collapse of magnetic field. The result is a transient current to be induced in the inspection part when longitudinally magnetized. This current assists in finding transverse defects at the ends of the inspection parts, which often would become concealed by the strong polarity at the part ends.

Old style quick-break checking coils required an oscilloscope. The QBT-A Quick Break tester is a hand held unit which contains a neon lamp for proper quick-break indication.

Operation of the Gould-Bass QBT-A Quick Break -Break Tester.

To verify machine quick-break, hold the QBT-A inside the machine's magnetizing coil, neon bulb at top, identification label facing either headstock or tailstock. The mag machine should then be energized in the coil mode at a minimum of 2000 amps. Proper quick-break is indicated by a flash of the neon bulb which appears at the end of the magnetizing shot. The neon bulb may light at the beginning of the magnetizing shot which is nonrelevant, but a flash must appear at the end of the current shot to signify correct quick-break. Changing the position of the tester inside the magnetizing coil and increasing machine amperage can be accomplished for a brighter lamp indication.

QBT-A03