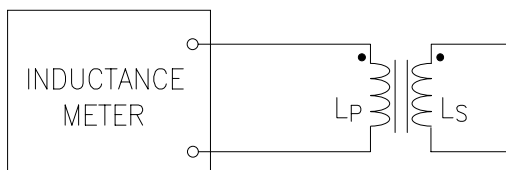


## TESTING INDUCTANCE

### INDUCTANCE ( $L_p$ ):

Inductance is most often measured with sine wave on a suitable bridge. In the case of transformers it is an Open Circuit Inductance (OCL). The primary winding is measured with an open secondary. The voltage and frequency of the test signal is important and varies with different type of Inductors and Transformers. Individual data sheets must be referenced. Rhombus Industries OCL measurements have been standardized on a Wayne Kerr 3245.

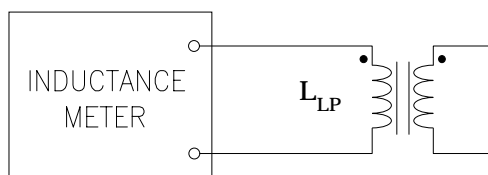


Circuit for Measurement of the Primary Inductance  $L_p$

## TESTING LEAKAGE INDUCTANCE

### LEAKAGE INDUCTANCE ( $L_{LP}$ and $L_{LS}$ ):

The leakage inductance of the primary winding ( $L_{LP}$ ) is the inductance measured on the primary winding with the secondary winding shorted. The leakage inductance of the secondary winding ( $L_{LS}$ ) is the inductance measured on the secondary winding with the primary winding short circuited. Lead lengths should be kept as short as possible to minimize lead length inductance. A suitable bridge which will measure the effective series inductance must be used. The measurement frequency chosen must be high enough to overcome the influence of the shorted windings resistance. Individual data sheets must be referenced. Rhombus Industries Leakage Inductance measurements have been standardized on a Wayne Kerr 3245 for measurements 300 KHz and under. When higher frequencies are required, a Hewlett Packard 4192A is used.



Circuit for Measurement of the Primary Leakage Inductance  $L_{LP}$

Reverse the circuit to measure the Secondary leakage inductance  $L_{LS}$