Inductive senders contain a magnet with a coil around the magnet.

When a tooth on a gear passes in front of the magnet, a small current is generated in the coil. This current is sensed by the users control unit to indicate that the gear tooth is in front of the magnet.

The air gap between the end of the magnet and the top of the gear tooth should be 1mm +/- 0.1mm. (Typically this is done by turning in the sender until you just touch the tooth gear, than back sender out by 1/2 turn) This is always referenced from the highest tooth on the gear to prevent unwanted contact between sender and gear tooth.

Inductive senders are very robust and are potted to be protected from environmental effects. There must be no contacts between the gear tooth and the sender magnet.

If the magnet is damaged, there will be a loss of signal.

Demonstrates proximity of sender to toothed gear
Inductive Sender with Speedometer Application.

Tachometers without an engine hourmeter CANNOT be used with Inductive Senders.