## PITSCH ELEKTRONIK ZÜNDANLAGEN und DREHZAHLMESSER

## MOUNTING & CONNECTING INSTRUCTIONS FOR THE "KRÖBER" LZ13 REV-COUNTER

The LZ13 is a universal rev-counter.

This rev-counter is not suitable for direct connection to capacitor discharge (C.D.I.) type ignition coils.

## It can be used: -

- (1) On motors with battery ignition which produces ONE spark for every revolution of the <u>crankshaft</u> e.g.2-stroke single with c.b. points etc. (Also on 4-stroke motors with a camshaft driven ignition & wasted spark.) The ignition may be either a 6 or 12 volt system.
- (2) On motors with a magneto type ignition where the magneto runs at engine speed & where a spark occurs once per revolution of the crank or where it runs at half engine speed & the contact breaker opens twice per revolution.
- (3) On Kröber battery ignition systems if the system produces one spark for every revolution of the crankshaft.
  (It may also be used on older Kröber self-generating systems where the stator has a rev-counter facility (black lead) & where the same spark rate as above applies.)

In use the rev-counter may vibrate vigorously on its mounting rubbers, which is normal. It is important, therefore, that when mounted there is sufficient clearance around the instrument so that no damage can occur. It is recommended that a minimum clearance of 25mm exists at all times around the unit & such that nothing can come into contact with the casing. If this safety precaution is not adhered to then failure of the unit may occur within a short period of time & any guarantee will thus become invalid. Also, do not attach any other item to the rev-counter, under any circumstances.

The connection of the rev-counter is always via the lead from terminal 1 to the ignition contact breaker (-ve) or similar point of the system, whether it be a battery or magneto type, never to the +ve terminal of a coil. The base plate (which is connected to terminal 4, via an integral small cable) is connected to the chassis (earth). Where there is not good earth continuity, such as when the rev-counter is mounted on fibre-glass or a painted surface, then a suitable lead must be run from the baseplate to the chassis.

On most Kröber ignitions a special lead exists for the rev-counter connection.

The terminal 3 of the rev-counter is used to power the internal light, if required. Connect this point to a suitable +12 volt supply.

For connection of the rev-counter to an ignition which is positive earth, a case which seldom occurs, then the leads to terminals 1 & 4 must be reversed. Under these conditions the scale lamp cannot be used & any lead on terminal 3 should be disconnected.

General care of the rev-counter instrument is important & cleaning should be undertaken using a soft damp cloth or sponge. Alternatively, it is recommended that a good quality lens (or visor) cleaner be used to keep the cover free from grime. (Never clean with a dry cloth as this will cause an electrostatic charge to build up in the casing which may in turn lead to the needle pointer rising from its normal position at rest & thus cause inaccurate readings!) DMPORTANT NOTE: Never allow the instrument to come into contact with petrol or brake fluid as this may cause permanent damage to the cover of the unit.