## TROUBLE SHOOTING INFORMATION

## TACHOMETER, PROXIMITY SENDER SIGNAL, INBOARDS & STERN DRIVES

This tachometer is for diesel engines having a sender mounting point (3/6"-16) in the bell housing (or adjacent to some other rotating gear) and 12 VDC minimum.

With Ignition Turned ON, pointer must zero +/- 50 rpm. If not, recheck connections.

Caution: some older style tachometers operate from only ground and sender connections. Veethree Tachometers have three connections necessary: +ignition , -ground and sender.

## Voltage tests:

Ign to Gnd - positive 12 V DC minimum

Send to Gnd - 1.2 V AC minimum at idle with increasing voltage at increasing rpm.

At approximately 1000 rpm the proximity sender should put our 6 volts peak to peak (AC sine wave) with the tachometer NOT connected

Rotary switch on the rear of tachometer must be set to the range that includes the number of gear teeth that pass by the proximity sender in one revolution of the crankshaft. Gear teeth information can be obtained from the engine distributor or manufacturer's literature. Arrow on slot must point directly at correct setting. If in between settings, the pointer will rotate to full scale. Pointer will return with proper setting.

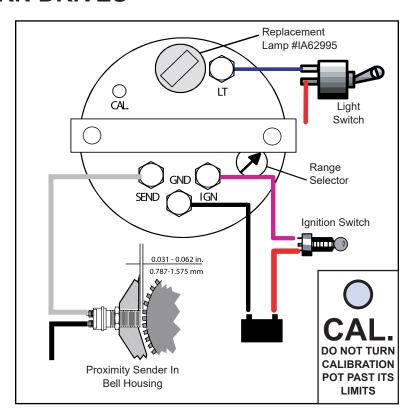
Final calibration requires the use of a remote Master

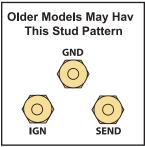
Tachometer. Connect Master Tachometer and start engine. At about 1500-2000 rpm, use a jeweler's screwdriver to carefully adjust the potentiometer in the "CAL hole, bringing the tachometer in agreement with the Master Tachometer. Do not over torque potentiometer. If the tachometer can not be brought into calibration, the range selector may not be in the correct setting.

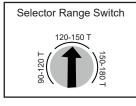
The end of the sender must be within 1/32" to 1/16" from the gear teeth, but not touching the gear teeth. To adjust (engine NOT running) loosen the sender's lock nut and gently turn the sender clockwise until the sender touches the gear teeth. Back off (counterclockwise) one turn, and secure with lock nut.

A buildup of rust on the end of the gear teeth can cause a lose of signal from the sender.

Dual stations- the sender will drive two tachometers.







Simply connect IGN to IGN, SEND to SEND, etc. Mixing brands/types (such as a 2-wire and 3-wire tachometers) may cause problems.

24 volt systems can be accommodated with a voltage reducing resistor, 100 ohms, 5 watt power rating installed between the power wire and the IGN terminal.

Gauge part number is on the side of the gauge housing.