ELECTRONIC IGNITION EZM1TI, EZM2TI

The electronic unit EZM1TI and EZM1TIR was developed on the basis of knowledge gained during operation of the previous type EZM1MC as another modernized generation of electronic ignition units VLACH ELECTRONIC. The heart of this new line is made by the very powerful microprocessor TEXAS INSTRUMENTS that enabled to integrate a lot of useful functions into the ignition unit. The ignition units of the EZM TI line are produced in two versions:

EZM1TI, EZM2TI is the basic type of the ignition unit.It is equipped with these functions:

FAIL SAFE 1 - after 90 seconds of inactivity it automatically switches into the iniciative STAND OFF state.

FAIL SAFE 2 - it is activated during the ignition unit battery voltage decrease to 4.4 V. After detecting this critical voltage, the pre-ignition regulation is blocked and the ignition unit is adjusted to the basic pre-ignition given by mechanical adjusting the revolution sensor. The engine will have limited revolutions(about 3000 - 4000 R.P.M.), which draws the pilot´s attention to the necessity of immediate landig with the model.

Apart from these safety functions the ignition unit is equipped with a data output that together with EZM DATA TERMINAL enables to monitor many parameters:

1. Measuring the engine revolutions and the ignition unit battery voltage
2. Measuring the engine revolutions and the pre-ignition corresponding to them
3. Displaying maximal engine revolution
4. Displaying total running time (hrs : min)

EZM1TIR represents a progressive type of ignition units. Apart from the above mentioned functions, in this ignition unit you can also program the pre-ignition regulation curve by a PC. The ignition unit is connected to the PC wirelessly via an infra port.

INSTALLATION INSTRUCTIONS

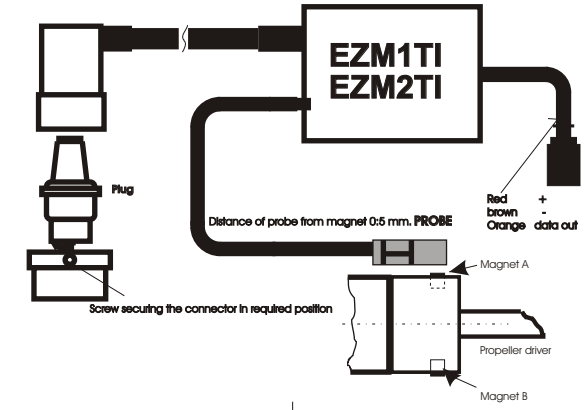
During installing the ignition unit into the model be very careful to have all parts that are connected with the ignition unit and the engine including battery sources and cables for feeding the ignition unit situated as far as possible (20 - 30cm) from the radio set and its battery. Connecting struts of the engine must be made of nonconducting materials (plastic, laminated plastic, wood). The engine-controlling servo must not be situated in a distance which is shorter than the above mentioned one. The aerial must not be led close to the engine installation. The cable leading to the sparking plug must not touch any part of the construction of the model or the engine itself - vibrations may cause damage of the ignition cable. ***The guarantee does not include cables damaged in such a way !! If this requirement cannot be fulfilled, it is necessary to provide the cable with some resilient insulating material.*** Provide the ignition unit with some elastic cover to minimalize the influence of engine vibrations on the electronics of the ignition unit. Protect the ignition unit from the contact with fuel.

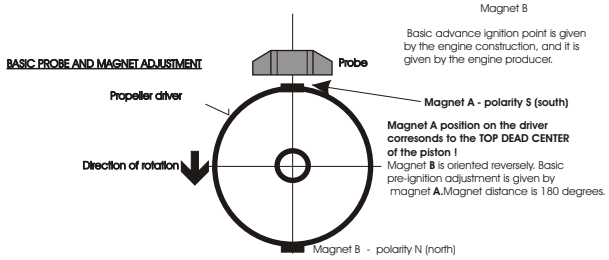
IMPORTANT WARNING

Plug voltage is about 18,000 V! Be very careful manipulating the ignition unit -danger of electrical discharge injury !!

Technical data :	**EZM1TI**	**EZM2TI**
Supply voltage	**4.8 - 6 V 4 to 5 cells NiCd or NiMH****	**4.8 - 6 V 4 to 5 cells NiCd or NiMH****
Current consuption	90 - 120 mA at a still 500 mA/9000 RPM	90 - 120 mA at a still 700 mA/9000 RPM
Plug voltage	cca 18 kV	cca 18 kV
Weight	140 g	260 g
Dimension	55x50x25 mm	60x70x25 mm
Sensor magnet distance	max. 0.5 mm	max. 0.5 mm
Plug electrodes distance	0,6 mm	0.6 mm
Basic advance ignition point	It is given by engine construction, and it is given by the engine producer	
Working temperature range	-10 to 85 °C	-10 to 85 °C

**** We do not recommend to use cells Li Ion or Li Pol** !!





CAUTION !!
The ignition unit works properly only oncondition that an interference-free spark plug is used !!

VLACH ELECTRONIC Jiří Vlach 756 24 Bystřička 291 Czech Republic Tel / fax +420 571 443360 mobil 0420 603 777 522
E - mail : ve@iol.cz