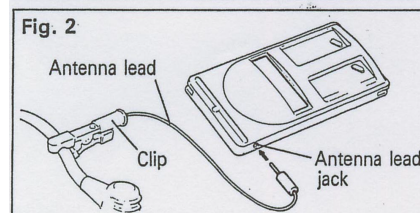
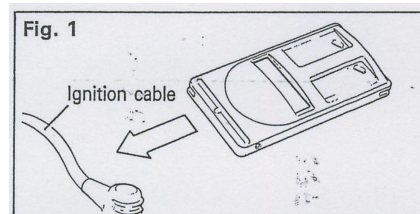
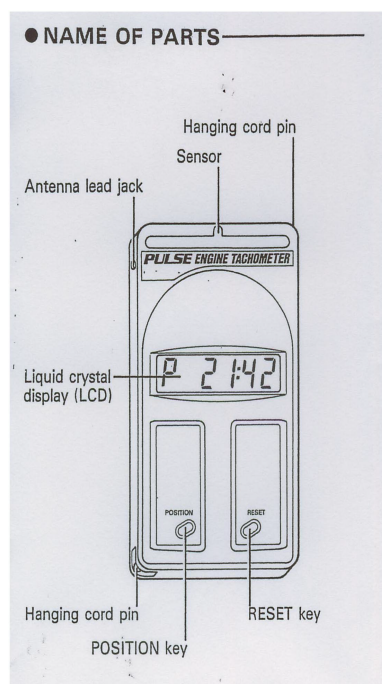


Pulse engine tachometer PET-1000 / EG920-4694

The PET-1000 is a pulse-activated tachometer: It detects and counts electric pulses produced at the time of ignition of gasoline engines. It also processes the detected signals into rpm readings according to the type of engines being monitored. This unit is designed for use with 2-stroke single-cylinder, twin-cylinder and 4-stroke twin-cylinder, four-cylinder engines.

NAME OF THE PARTS

1. Antenna lead jack
2. Sensor
3. Hanging cord pin
4. LCD
5. Hanging cord pin
6. POSITION key
7. RESET key



POSITION TABLE

Position No. (on LCD)	Monitorable Engines		Monitorable RPM Range
	Strokes	Cylinders	
P 21:42	2	1	100 – 19000
	4	2	
P 22:44	2	2	100 – 9500
	4	4	

SPECIFICATIONS

Monitorable engines	2-stroke 1- and 2-cylinder 4-stroke 2- and 4-cylinder
RPM display interval	0,5 sec.
Accuracy	+ - 10 rpm
Battery	Lithium (CR2032) x 1 ea.
Battery life	Approx. 20000 hrs
Ambient temperature	-10°C - +60°C
Storage temperature	-20°C - +60°C
Dimensions (L x W x H)	120 x 62 x 13 mm
Weight	73 g
Accessories	Antenna lead with clip – 1 ea. Hanging cord – 1 ea. Instruction manual – 1 ea.

HOW TO USE

(1) Non-contact method (Fig. 1)

1. Turn ON the unit by pressing the POSITION key.
2. Select the POSITION number applicable to the engine to be monitored, referring to the Position table.
3. Press the POSITION key as many times as necessary until the selected POSITION number appears on the LCD.
4. Hold the unit in that way that the sensor end is at an appropriate distance (1cm – 50cm) from the active ignition cable of the running engine (or on a multiple cylinder engine: from the spot where all the ignition cables are clustered). Appropriate monitoring distance varies with the signal strength and the type of engines being monitored. It is established when the rpm readings appearing on the LCD have become stabilized within a +- 10 - +- 15% rpm range. The engine's rpm readings will continue to appear at 0,5 sec intervals as long as the unit is held at the proper monitoring distance. (CAUTION: do not allow the unit to touch any active ignition cable, or the unit's failure my result.)
5. Move the unit away from the running engine or stop the engine and the POSITION number will appear on the LCD. The unit will automatically turn OFF one minute later.

(2) Antenna lead method (Fig. 2)

1. Attach the antenna lead to the unit as illustrated.
2. Get the unit ready for use, following steps (1) 1-3.
3. Connect the antenna lead to the ignition cable by using the clip as shown. On a multi-cylinder engine: attach the antenna lead clip to one of the ignition cables where all of them are clustered.
4. Start the engine and its rpm readings will appear on the unit's LCD at 0,5 sec intervals.
5. Remove the antenna lead clip from the ignition cable or stop the engine and the POSITION number will appear on the LCD. The unit will automatically turn OFF on minute later.

NOTES AND CAUTIONS

1. Some engines employ a 'double spark' ignition method where the number of sparks per revolution is doubled than those of ordinary engines. Since rpm readings given are based on the count of spark-generated electric pulses they represent two times the actual correct readings. To obtain correct rpm readings on a double-spark ignition engine, the POSITION number to select the number of cylinders must be doubled. Example given: The POSITION number for a "double-spark" ignition, 2-stroke 1-cylinder or 4-stroke 2-cylinder engine should be **P 22:44** instead of **P 21:42**.
2. Very rarely, strange figures or symbols happen to appear on the LCD. This does not represent the unit's failure but in case it occurs, press the RESET key. The figures **8888:88** will appear temporarily, afterwards, the POSITION number **P 21:42** will follow indicating that the unit is working in normal conditions.
3. When the antenna lead is used, be sure to keep it free from contact with metallic surfaces to avoid possible errors in rpm readings.
4. Keep this unit away from strong physical shocks.
5. Never touch the inner circuit to prevent any unnecessary trouble or malfunction.
6. Battery replacement isn't a great necessity under normal use. However, if necessary, remove six small screws from the back of the unit, remove the back panel and replace the battery.