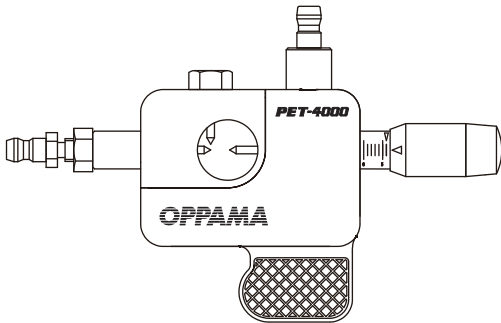


Instruction Manual

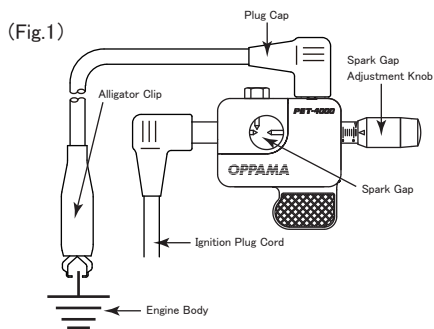
PULSE IGNITION CHECKER PET-4000



D. HOW TO USE

D-1. When the ground terminal is connected to the engine body(Fig.1):

1. Turn the spark gap adjusting knob on the PET-4000 and set the spark gap to 6 mm (since the required voltage varies according to the engines. Change the gap as required).
2. Connect one of the spark plug caps of the engine to the high-tension terminal on the checker, Connect the plug cap of the accessory cord to the ground terminal on the checker, and connect the alligator clip to the engine body.
3. Crank the engine by actuating the starter and evaluate the performance of the ignition system according to the condition of the spark that can be seen through the spark window.



This instruction manual is commonly prepared for both PET-1100R type of pulse engine tachometers.

YOUR RECORD OF PURCHASING (You can use this form to record your purchase details.)

Date of Purchase : Year _____ / Month _____ / Date _____
 Shop Name : _____
 Shop Contact Number : _____
 Shop Address : _____
 Your Name and Contact Information : _____

SAMPLE

This warranty is provided by Oppama Industry Co., Ltd.
 14-2, Natsushimacho, Yokosuka, Kanagawa 237-0061, Japan
 Phone +81-46-866-2139, Fax +81-46-866-3090
 E-mail info@oppama.co.jp / http://www.oppama.co.jp

Distributor Details:

WARRANTY STATEMENT

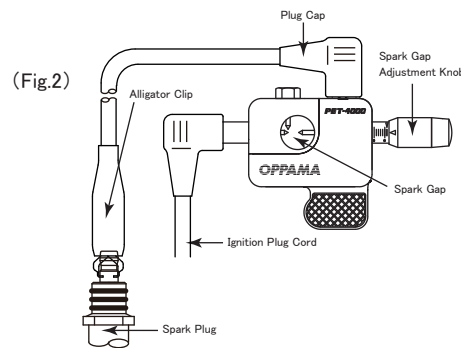
Oppama Industry Co., Ltd. agree to repair or replace Oppama tachometer with free of charge any when it was found to be defective under normal use and care. Meanwhile, warranty stands void in case of the following :

1. Lack of evidence of purchasing in fairly, such as Invoice, Receipt or others.
2. Remove the component, such as unscrew a screw, opening the cover etc.
3. Given a shock, such as dropping etc. (It is very sensitive product)
4. It has been waterlogged. (It is not water proof products)

This warranty is for one year from the date of purchase, and is extended to the original purchaser only and is not transferable.

D-2. When the ground terminal is connected to the spark plug on the engine(Fig.2):

1. Turn the spark gap adjusting knob on the unit and set the spark gap to 4 mm (since the required voltage varies according to the engine. Change the gap as required.)
2. Connect one of the spark plug caps of the engine to the high-tension terminal on the checker, Connect the plug cap of the accessory cord to the ground terminal on the checker, and connect the alligator clip to one of the spark plugs.
3. Crank the engine by actuating the starter and evaluate the performance of the ignition system according to the condition of the spark that can be seen through the spark window.
 (Be careful When the ignition system works all right, the engine will run as soon as the starter is actuated)



Important to claim the warranty.

- (1) Keep receipt or invoice and fill in the details in this warranty card in every time when you purchase our products.
- (2) Contact with the shop owner or a Oppama distributor in your country or Oppama home page, and inform your problem.
- (3) Provide the products to the person in charge of shop or the distributor with evidence or details of your purchasing.

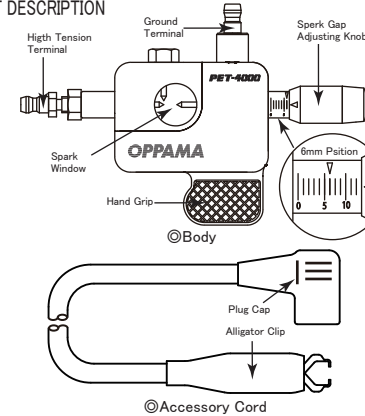
IMPORTANT

Complete this warranty card at the time of purchase and keep a copy for your records.

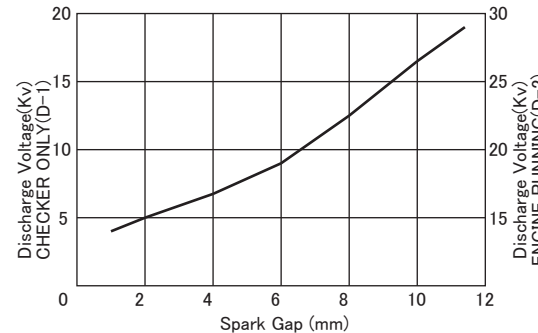
A. FUNCTIONS

The PET-4000 PULSE IGNITION CHECKER checks and diagnoses any problem in the ignition system of a gasoline engine. It allows easy diagnosis of potential problems without removing the ignition system parts from the engine.

B. PART DESCRIPTION



E. Spark Discharge Voltage



CAUTION.

1. Do not check spark in area where gasoline is spilled or flammable gases may exist.
2. Do not touch ignition checker while performing the test to avoid receiving electrical shock. More than 2 centimeter (one inch) away from ignition checker.
3. Do not operate ignition checker with wet hand.
4. Do not allow using this ignition checker for any child or any person who is not trained usage of this checker.

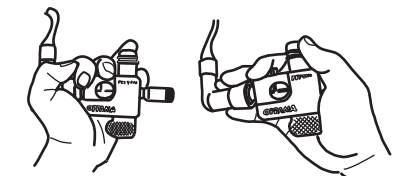
IMPORTANT.

1. Do not set the spark gap unnecessarily wider than the required gap or high voltage may cause damage to the ignition coil
2. Do not screw in the spark gap adjusting knob beyond its end, on damaging of electrodes may result.
3. Do not operate for a long time connecting alligator clip with spark plug, or vinyl cover of the may burn by heat from engine

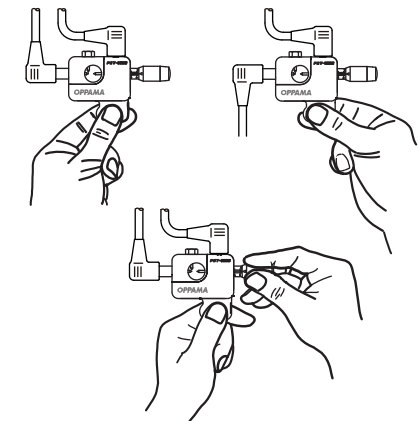
C. TROUBLE SHOOTING OF IGNITION SYSTEM USING PULSE IGNITION CHECKER

SPARK CONDITION	TROUBLE	CAUSE OF TROUBLE	REMEDY
Strong spark appears	Spark pulg	Spark plug may be defective	C&R
Spark appears but very weak	Ignition coil	Breakage of insulation or short circuit in coil	R
		Cirth or worn contact points	C&R
	Contact breaker points	Incorrect point gap	C&R
		Worn cam follower	R
Condenser	Broken insulation Open circuit	Play between arm and shaft	R
			R
No spark at all	Magnet	Demagnetized	C&R
	Wiring	Defective key switch	C&R
		Defective stop switch	C&R
	Ignition coil	Breakage insulation or short circuit in coil	C&R
		Bad grounding	R
	Contact breaker	Defective internal circuit	R
		No contact point gap	C
		Contact point came off	R
Condenser	Short circuit or open circuit	Dirty contact points or any foreign material came in	C
			R

C = Correct, R = Replace



Dangerous way of holding



Proper way of Holding & Connection