pico
Technology

PicoDiagnostics®
Optical balancing kit

Quick Start Guide

1.   Introduction

Thank you for buying the PicoDiagnostics Optical Balancing Kit. Please read the following information in conjunction with on-screen guidance within PicoDiagnostics when using the equipment.

2.   Safety warnings

Please review the following safety precautions to avoid injury and prevent damage to the Optical interface unit and Propshaft balancing equipment.

A **WARNING** identifies conditions or practices that could result in injury or death.

A **CAUTION** identifies conditions or practices that could result in damage to the product or equipment to which it is connected.

WARNING

Strong magnetic fields may affect or disable the operation of pacemakers, ICDs and other implanted medical devices. To avoid injury or death do not use this product if you or other people nearby are fitted with such devices.

The magnet can attract metallic objects or other magnets from large distances, causing trapping injuries unless care is taken when handling.

WARNING

To avoid an accident do not operate the PicoDiagnostics kit while driving the vehicle. Take a passenger with you to operate the software.

CAUTION

To avoid entrapment take care to route any cables away from moving parts when using the propshaft balancing accessories.

To avoid melting of cables take care to route them away from hot engine components when using this product.

To conserve battery life do not store the Optical sensor interface with a sensor connected. The interface is powered on whenever the sensor is connected.

Do not apply a voltage to the BNC or 3.5 mm jack connector on the Optical sensor interface. The BNC connector is an output only.

Strong magnetic fields can damage sensitive electronic devices and magnetic material such as credit cards or portable storage media.

Your help and efforts are required to protect and keep our environment clean. Therefore either return this product at the end of life to the manufacturer or ensure WEEE compliant collection and treatment yourself. Do not dispose of as unsorted municipal waste.

3.   Battery replacement

To replace the batteries:

1. Place the unit face down and remove the four securing screws.

2. Remove the base cover.

3. Remove the 3 AAA batteries and replace with new ones.

4. Replace the base cover and secure.

5. Do not dispose of the batteries as unsorted municipal waste. Contact a qualified recycler for disposal.

4.   Magnetic base mounting instructions

1. Verify the mounting surface is flat and free from contamination.

2. Postion the unit in the desired location.

3. Turn the locking switch to secure.

4. Adjust position of sensor as required using the adjustment knob.

5.   Storage

Turn off the magnetic base when in storage. Disconnect the optical sensor from the interface box to avoid draining the batteries.

6.   Troubleshooting

Problem	Check		Action
Optical sensor interface not working	Is LED on?	Yes	Refer to edge detection check below
		No	Check power is on, replace battery
	Does green edge detection indicator LED work when tested?	Yes	Check BNC lead
		No	Check sensor

7.   Specifications (excluding scope)

Optical sensor interface battery type	3 x AAA, user-replaceable
Optical sensor interface (typical) battery life	15 hours
Output BNC	0 to 2 V, DC-coupled
Optical sensor type	LED
Optical sensor operating distance	<1 m
Optical sensor speed range	1 to 250 rpm
Approvals	CE: Meets EN50581:2012 (RoHS)

8.   Pack contents

Part Number	Description
PA100	Optical kit carry case
TA185	Optical interface and battery
TA186	Optical sensor, 3.5mm jack
TA187	Magnetic base for optical sensor
TA188	Directional tape measure for propshaft balancing
TA240	Reflective tape
TA260	BNC to BNC 0.5 m Yellow