



PH 1506UK PH 1506UK/HGV

HEADLIGHT BEAM TESTER

**Installation
Operation
Maintenance**

Changes to this manual are as shown below. Revised or additional issues of this manual are available from Werther international S.p.a. , Via F. Brunelleschi 12, 42124 CADE' (RE) ITALY
Minor changes are indicated by the use of a broad line adjacent to the affected text.

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**WARNING: CLASS 2 LASER
FOLLOW ALL SAEFTY PRECAUTIONS**

INSTALLATION

Site

The floor area designated for headlamp testing requires careful selection and preparation. For MOT requirements the vehicle standing area and the equipment area where the rails are to be fitted must be level as follows:

Rails +/-2mm
Standing Area +/-6mm over 3 meters.

For non MOT requirements the vehicle standing area does not need to be precisely level as a slight continuous gradient, maximum 0.4% will not affect accuracy.

NOTE: Preparation of the site to these standards is the customer's responsibility.

Installing Rails

Two sets of rails, each secured to the floor by screws and plastic raw plugs. The rails are positioned at right angles to the vehicle's longitudinal axis. The two rails must be leveled with each other, shimmed as necessary, and re-checked after tightening down. In the final position the rails must be level within +/-2 mm.

Where the vehicle tested, or any other traffic, will pass over the rails, each rail must be recessed into the floor and fully supported along its entire length by grouting as necessary, see Fig. 2. It is helpful if lines are painted on the floor at 90 degrees to the Tester's rails to enable the accurate positioning of vehicles for testing.

Leveling the trolley

The two rear wheels are equipped with an integral cams which are factory set and normally do not require adjustment. The level can be checked placing a spirit level on the trolley base together with the use of a plumb line attached to the column. Should any adjustment be required the cams can be adjusted as follows (See Fig. 3):

Loosen screw 1 and just slacken screw 2.

Raise or lower the wheel as necessary.

- Fully tighten both screws.

Re-check level of trolley base using a spirit level.

Re-check that the column is vertical, using a plumb line.

GENERAL INSTALLATION

The PH 1506UK comes ready assembled, with exception of the column, which are fitted as follows:

Column

- Insert the column into the appropriate hole of the base .
- Check column locks correctly when the pedal is operated.
- Retain column in position with the lower screw.

Alignment Laser

- Ensure that it rotates smoothly and that the leading edge of the optical box aligns correctly with the line of the laser.

METHOD OF INSPECTION

Positioning the vehicle (See Fig. 7)

To check headlamp aim:

1 Refer to the Tester's Manual for guidance on test procedures, types of headlights and pass/fail criteria.

2 Position the vehicle as accurately as possible at 900 to the tester rails. The headlamp lens should be positioned 350mm (+/- 150mm) from the lens of the beam tester. Ensure that the headlight lens is clean.

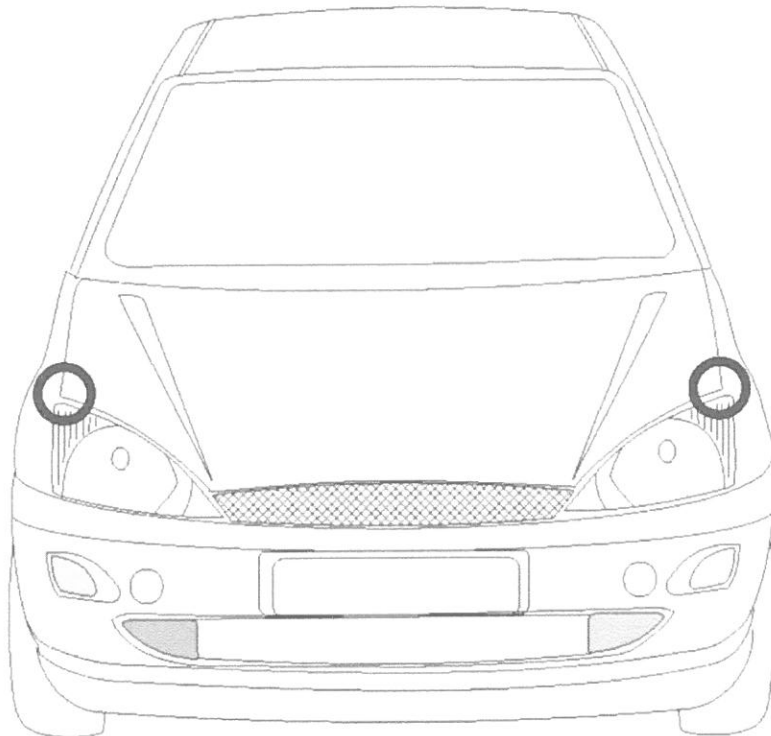
3 Measure the height to the centre of the headlight lens from the floor and adjust the height of the optical box to the same height. If the rails are recessed then this must be added to ensure the optical box is at the correct height. There is a tolerance of +/- 10mm.

(NOTE 1) The above information is based on the criteria published in the MOT Inspection Manual which is an HMSO publication and is available from most bookshops. Always refer to the current edition for any amendments or changes to current legislation.

Checking the optical box alignment.

It is very important to align the optical box with the longitudinal axis of the vehicle. This is to ensure that the aim of the headlight to the left or to the right is correct. To verify and adjust the position of the optical box is as follows:

- Position the laser so that it is facing downwards towards the optical box.
- Identify two symmetrical points as close to the sides of the vehicle as possible. See Fig.8
- Check that the line of the laser accurately bisects both points. See Fig. 9



Adjusting the alignment of the optical box.

If the line of the laser does not accurately bisect the two points, then the optical box has to be realigned. To realign the optical box, release column by pressing the foot pedal and rotate the optical box and column until the correct alignment is obtained. Lock column by pressing the foot pedal. Re-check that the alignment is correct..

CHECKING THE HEADLIGHT AIM.

With an assistant sitting on the driving seat switch on the headlamps to the beam on which the headlamp is to be checked. Note: When checking headlamp aim on vehicles with hydro-pneumatic suspension systems, it may be necessary to have the engine idling. If this is required, ensure that the handbrake has been applied and the transmission is in neutral or park before starting the engine. To check headlight aim, proceed as follows:

- Determine the appropriate headlamp beam image and its aim.

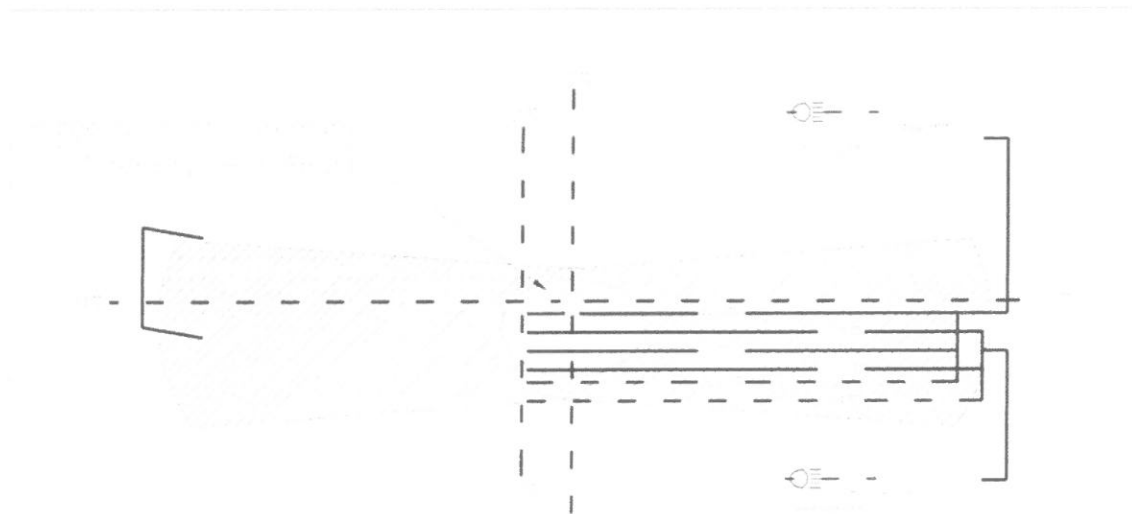
NOTE: Pre C.1950 headlamp beam images may not conform to either diagrams 12, 13 or 14. In such cases check that dip beam headlamps are aimed so they do not dazzle, i.e. the beam image brightest part is aimed at least 0.5% below the horizontal or for headlamps which cannot be checked on dip beam, check that the main beam headlights are aimed so that the beam image centre is on or slightly below the horizontal 0% Line If the outline of the hot spot is difficult to determine then move the optical head and observe the readings on the Luxmeter, until the highest reading is obtained.

BRITISH AMERICAN TYPE (CHECKED ON MAIN BEAM) - CHARACTERISTICS: (NOTE: 1)

1. Headlamps tested on main beam have a symmetrical main beam pattern with a central area of maximum intensity (hot spot)
2. This type of lamp generally has a circular lens which may be marked with a figure 1 followed by an arrow indicating the direction of dip

Reason for Rejection

1. The 'hot spot' centre is above the horizontal 0% line.
2. The 'hot spot' centre is to the right of the vertical 0% line, or to the left of the vertical 2% line.
3. For headlamps whose centre is not more than 850 mm from the ground, the 'hot spot' centre is below the horizontal 2% line.
4. For headlamps whose centre is more than 850 mm from the ground, the 'hot spot' centre is below the horizontal 2.75% line.



MAINTENANCE

The PH 1506UK requires a minimal amount of maintenance.

Weekly

- Clean external paintwork and lens with a damp cloth.
- Check the operation of the Luxmeter.
- Check security of rails.

Six Monthly

- Check calibration.

MAINTENANCE - LUXMETER

If the Luxmeter is damaged or defective the Optical Box should be returned for a Service repair or replacement.

DISPOSAL

The PH1506UK must be disposed of in accordance with Local Authority regulations.

STEEL: Optical box, Column, trolley and rails.

LENS: Glass.

COPPER: Wiring and Luxmeter coils.

PLASTIC: Observation panel and miscellaneous small components.

PAPER: Packaging and instruction manual.

BATTERIES Not recyclable

CODE LIST

Part Code	Sugg	Descrizione	Description
W3723		MOLLA DI CONTRASTO PH2084/D	RETURN SPRING
W3724		MANIGLIA PH2084/D	HANDLE
W3725		LIVELLA PH2084/D	LEVEL
W3726XX		COPERCHIO CAMERA OTTICA	VARNISHED OPTICAL CAMERA COVER
W3727		DEVIATORE LUXMETRO PH2084/D	LUX SWITCH
W3728		LUXMETRO DIGITALE PH2084/D	LUXMETER
W3729		SUPPORTO SCHERMO PH2084/D	SUPPORT PANEL
W3731		MOLLA DEL FRENO PH2084/D	BRAKE SPRING
W3732XX		LEVA FRENO CARREL.PH2084/D	VARNISHED BRAKE LEVER
W3733		COPERCHIO IN PLEXIGLASS PH2084	PLEXIGLAS COVER
W3756		RUOTA PER CAVO PH2066	CABLE TRUNDLE
W3757		CAVO SOLLEVAMENTO PH2066	CABLE
W3758		GRUPPO LASER LINEA PH2066	COMPLETE LINE LASER
W3759XX		COLONNA PH2066	VARNISHED COLUMN
W3760XX		BASE PH2066	VARNISHED BASE
W3761		RUOTA PER RAIL PH2066	RAIL WHEEL
W3762		PERNO PER PEDALE PH2066	PEDAL HUB
W3763XX		PEDALE PH2066	RAIL WHEEL
W3766		PATTINO DI SCORRIMENTO PH2066	FLAT SLIDE
W3767		LENTE IN VETRO PH2066	LENS
W3768XX		CORPO CAMERA OTTIC.PH2066	VARNISHED OPTICAL CAMERA BODY
W3769		GRUPPO SPECCHIO PH2066	MIRROR GROUP
W3770XX		GRUPPO CARRELLO PH2066	VARNISHED CART GROUP
W3771		SCHERMO PH1506 UK	SCREEN
W3772		SCHEDA FOTODIODI PH1506 UK	PHOTODIODES CARD



Dichiarazione di conformità - Déclaration de conformité
 Declaration of Conformity - Konformitätserklärung
 Declaración de conformidad - Overensstemmelseserklæring
 Överensstämmande intyg - EG-Conformiteitsverklaring



WERTHER INTERNATIONAL S.p.A.
 Via F. Brunelleschi, 12 42124 CADE' (Reggio Emilia) Italy
 Tel. ++/+522/9431 (r.a.) Fax ++/+522/941997

con la presente dichiara che il centrafari	por la presente declara, que le centrafaros
déclare par la presente que le reglophare	Hermed erklærer vi, at lygtetesteren
hereby declare that the centering devices	Härmed försäkrer vi, att lampprovaren
erklären hiermit, daß das Scheinwerfer-Einstellgeräte	met ingang van vandaag verklaren wij dat de koplamptester

PH 1506UK - PH 1506UK/HGV

I	è stato costruito in conformità alle direttive 2004/108/CE - 2006/42/CE - 2006/95/CE - NFR63-801	ha sido fabricado según las directivas 2004/108/CE - 2006/42/CE - 2006/95/CE - NFR63-801	E
F	a été construite en conformité avec les directives 2004/108/CE - 2006/42/CE - 2006/95/CE - NFR63-801	er fremstillet i overensstemmelse med bestemmel- sene i 2004/108/EØF - 2006/42/EØF - 2006/95/EØF - NFR63-801	DK
GB	has been manufactured in conformity with the directives 2004/108/CE - 2006/42/CE - 2006/95/CE - NFR63-801	är framställt i överensstämmelse med bestämmelser i RADETS DIREKTIV 2004/108/CE - 2006/42/CE - 2006/95/CE - NFR63-801	S
D	in Übereinstimmung mit den Richtlinien 2004/108/CE - 2006/42/CE - 2006/95/CE - NFR63-801	Producten zijn gefabriceerd in overeenstemming met de richtlijn 2004/108/CE - 2006/42/CE - 2006/95/CE - NFR63-801	NL

Matricola N° - N° de série
 Serial N° - Maschinenummer

Fascicolo tecnico - Dossier technique
 Technical file - Techn. Dokumentation

WERTHER INTERNATIONAL S.p.A.
 Via F. Brunelleschi, 12
 42124 CADE' (Reggio Emilia) Italy

Iori Werther

Cadè, 27/11/2011

Vice president Iori Werther



GARAGE EQUIPMENT ASSOCIATION LIMITED

2/3 Church Walk, Daventry, Northamptonshire NN11 4BL UK
tel: +44 (0) 1327 312616 fax: +44 (0) 1327 312606
email: info@gea.co.uk website: www.gea.co.uk

**CERTIFICATE OF ACCEPTANCE
HEADLAMP BEAM TESTER (HBT)**

HBT Make and Model:

Werther International PH 1506 UK/HGV

Equipment Identification Number:

EINHB18663A0812038--

**Suitable to test All Classes
including HGV**

This is to certify that the above Headlamp Beam Tester meets the requirements of the VOSA 2005 HBT Specifications for the Classes listed above. It is therefore acceptable for performing beam tests and may be used as part of an Automated Test Lane (ATL).

Chief Executive

22 August 2012

Date

For and on behalf of the Garage Equipment Association (GEA), administrators of the VOSA equipment approval scheme

For Manufacturers/Importers use

I certify that the test equipment of the above make and model, bearing the serial number
is installed in VTS No: and is suitable for MOT testing.

VTS Details:

Name

Address

Postcode

Supplier's Details:

Name Position

Signature Company



Registered in London No. 2891852