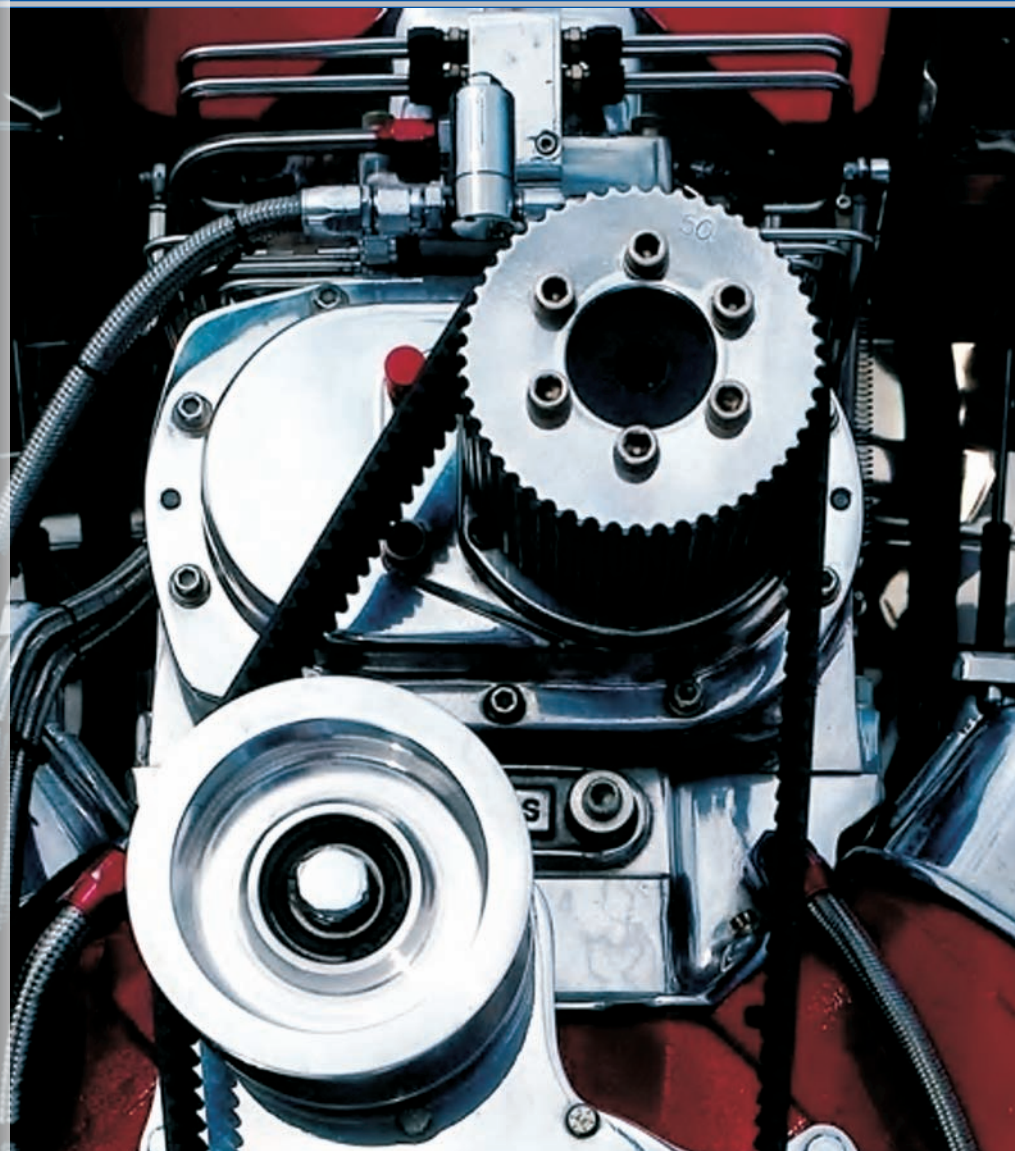


TECHNO GRAM

**KARL STORZ Motospection –
Visual Inspection of All Vehicle Types**



KARL STORZ Motospection - Visual inspection of all vehicle types

The KARL STORZ Motospection set is an endoscopic system for the visual inspection of hollow spaces and hard to reach examination areas of all vehicle types.

Motospection from KARL STORZ is a fully developed, tried and tested procedure used to diagnose damage without the extensive disassembly of components.

The dimensions, optical properties and workmanship of all endoscopes and components from KARL STORZ designed for visual inspection have been specially optimised for use with vehicles. Versatile and perfected working is thus possible, even under cramped conditions.



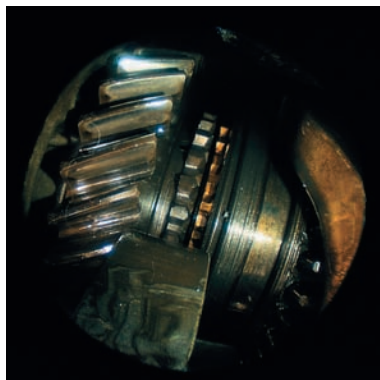
Advantages of endoscopic inspection

1. **Fast diagnosis.**
2. **Precise diagnosis with targeted repair preparations.**
3. **Commercial vehicles can be put back to use quicker due to significantly shorter stays at the workshop.**
4. **Reduced material consumption through omission of unneeded disassembly work.**

KARL STORZ Motospection gives you a direct insight into engines, gears, compressors and bodywork components. For example, it is possible to reliably evaluate damage to the engine block, as caused by the effect of heat, blister formation and abrasion. The relevant component can be immediately selected.



KARL STORZ Motospection offers very sharp images with application-optimized directions of view



No unnecessary disassembly work required for visual inspection, e.g. view through the opening of the oil drain plug



Excellent imaging of the inspection area with KARL STORZ endoscopes

Considerably improved cost-benefit ratio with KARL STORZ Motospection e.g. in the case of engine damage

Motospection

Diagnosis: Cause of damage found

- e.g. – on valves
– on piston crown
– on cylinder

Advantages:

- fast and reliable diagnosis
- no unnecessary disassembly work
- shorter vehicle downtime
- fast provision of information to Scheduling on the expected downtime of the vehicle
- optimum preparation for repair work (e.g. procurement of spare parts)

Motospection

Diagnosis: Write-off of engine

Advantages:

- fast and reliable diagnosis
- no unnecessary disassembly work
- fast provision of information to Scheduling on the expected downtime of the vehicle

Motospection

Diagnosis: No damage detected via endoscope

Advantages:

- no unnecessary disassembly work

Further troubleshooting is also possible using endoscopes: e.g. valve train, connecting rod bearing, compressor

KARL STORZ Motospection - Components



86290 CF **Borescope** with **HOPKINS**® rod lens telescope, with fiberoptic light transmission for fiberoptic illumination, can be focused.
 Direction of view: 70°
 Angle of field of view: 90°
 Outside diameter: 6.5 mm
 Working length: 200 mm

86590 CF **Borescope** with **HOPKINS**® rod lens telescope, with fiberoptic light transmission for fiberoptic illumination, can be focused.
 Direction of view: 70°
 Angle of field of view: 90°
 Outside diameter: 6.5 mm
 Working length: 560 mm

84584 CF **Borescope** with **HOPKINS**® rod lens telescope, with fiberoptic light transmission for fiberoptic illumination, can be focused.
 Direction of view: 70°
 Angle of field of view: 80°
 Outside diameter: 3.8 mm
 Working length: 280 mm

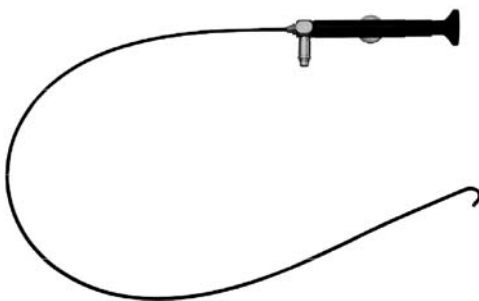
Particularly suitable for diesel engines



K03506 AJ1 **Flexoscope**
 Working length: 570 mm
 Outside diameter: 3.5 mm
 Direction of view: 0°
 Angle of field of view: 100°
 Length of rigid end: 11 mm.
 Min. bend radius
 Tube: 15 mm
 Lens: 8 mm,
 twofold deflection (180°/ 90°).

Deflection can be fixed in either position.

This flexoscope features an eyepiece lens for diopter compensation which can be focused. The exterior of the flexoscope consists of easy-glide plastic. The sheath is watertight and very stable thanks to its threefold structure.



KA03508 AJ1 **Autoscope**
 Working length: 800 mm
 Outside diameter: 3.5 mm
 Direction of view: 0°
 Angle of field of view: 100°
 Length of rigid end: 4 mm
 Min. bend radius
 Tube: 15 mm
 Sheath: 8 mm
 twofold deflection (180°/ 90°).

The exterior of the flexoscope consists of easy-glide plastic. With reinforced Bowden wires and integrated light guide.



81472 B **Cold light projector**, 150 W, halogen lamp, operating voltage: 100/120/230/240 V~, 40-60 Hz, infinitely adjustable light intensity, weight approx. 3.2 kg, dimensions: 235 mm x 100 mm x 230 mm. Excellent lighting power due to high-quality optical system, integrated carrying handle at the back.



81594 GV **Fiberoptic light cable**, length: 250 cm, outside diameter: 6.5 mm, active diameter: 3.4 mm. The optical fiber bundle is enclosed in flexible casing made of stainless steel, fiberglass braiding and silicone cladding on the outside. The light cable is watertight, mineral oil-resistant and crushproof.

Optional accessories:



80226 **Rigid attachment for 60° deflection of image**, length 350 mm. Can be fitted to the eyepiece of an endoscope. The endoscope remains freely rotatable when the rigid attachment is fitted. The rigid attachment allows endoscopy to be carried out at locations that are not easily accessible when direct vision into the eyepiece of the endoscope is not possible, e.g. under cramped conditions.



80231 **Magnification attachment**, which is fixed to the eyepiece of a flexoscope or rigid borescope using a claw coupling. It magnifies the endoscopic image to twice the size. When used with a rigid borescope, this results in a corresponding increase in detail recognition.



81103 **Spare halogen lamp**, 150 W, 15 volt, for cold light projector 81472 B

80609 **Attachable rubber eyepiece**
 The rubber eyepiece is attached to the eyepiece of the flexoscope or rigid borescope using a spherical catch coupling. It provides protection from disturbing foreign light. Unlike the metal body of the eyepiece, the rubber eyepiece can be turned, so that rotation of the endoscopic is not impeded during inspection. The rubber eyepiece can also accommodate a prescription lens; which means spectacles do not have to be worn when carry out endoscopic inspections.

KARL STORZ INDUSTRIAL GROUP offers an extensive range of equipment and accessories for DOCUMENTATION in combination with the listed components.

One of our technical advisors would be pleased to provide you with information.

KARL STORZ MOTOSPECTION

Our sets designed for your work



80900 **Motoscope Mercedes-Benz**, endoscopic set approved by Daimler-Chrysler AG, **consisting of:**

- 1x 86290 CF Rigid borescope with **HOPKINS**® rod lens telescope 70°, 6.5 mm Ø, length 200 mm (s.p. 4)
- 1x 86590 CF Rigid borescope with **HOPKINS**® rod lens telescope 70°, 6.5 mm Ø, length 560 mm
- 1x 80226 Rigid attachment
- 1x 81594 GV Fiberoptic light cable, length 2.5 m
- 1x 81472 B Cold light projector 150 W
- 1x 81103 Spare lamp
- 1x 80130 D1 Storage and carrying case

80902 **Flexoscope Mercedes-Benz**, endoscopic set approved by Daimler-Chrysler AG, **consisting of:**

- 1x K03506 AJ1 Flexoscope, 3.5 mm Ø, length 570 mm, twofold deflection (s.p. 4)
- 1x 81472 B Cold light projector, 150 W
- 1x 81103 Spare lamp 15 V/150 W
- 1x 81594 GV Fiberoptic light cable, length 2.5 m
- 1x 80130 F Storage and carrying case



80910 Dieselscopic set, for use with diesel and V-
 engines, **consisting of:**

- 1x 84584 CF Rigid borescope with
HOPKINS® rod lens
 telescope 70°, 3.8 mm Ø,
 length 280 mm (s.p. 4)
- 1x 84584 CQ Protective sheath
- 1x 84584 EF Rigid borescope with
HOPKINS® rod lens
 telescope with fiberoptic
 light transmission for fiberoptic
 illumination, can be focused.
 Direction of view: 120°
 Angle of field of view: 80°
 Outside dia.: 3.8 mm
 Working length: 280 mm
- 1x 84584 EQ Protective sheath
- 1x 81594 GV Fiberoptic light cable,
 length 2.50 m
- 1x 81472 B Cold light projector, 150 W
- 1x 81103 Spare lamp
- 1x 80130 D1 Storage and carrying case

80912 Autoscopic set, consisting of:

- 1x KA03508 AJ1 Autoscope, 3.5 mm Ø,
 length 800 mm
- 81594 GV Fiberoptic light cable,
 length 2.50 m
- 81472 B Cold light projector, 150 W
- 81103 Spare lamp
- 80130 F Storage and carrying case

80911 Dieselscope, for use with diesel and V-
 engines, **consisting of:**

- 1x 84584 CF Rigid borescope with
HOPKINS® rod lens
 telescope 70°, 6.5 mm Ø,
 length 320 mm
- 1x 84584 CQ Protective sheath
- 1x 81594 GV Fiberoptic light cable,
 length 2.50 m
- 1x 81472 B Cold light projector, 150 W
- 1x 81103 Spare lamp
- 1x 80130 D1 Storage and carrying case

Eight reasons why you should choose KARL STORZ

1. KARL STORZ is a stable, family owned company with over 60 years experience in the field of endoscopy.
2. Unparalleled depth and breadth of product line.
3. Commitment to high-quality cost-effective instruments.
4. Our telescopes feature genuine **HOPKINS**® rod lens technology.
5. An inventory of over 180 rigid telescopes for all areas.
6. We design, engineer and manufacture what we sell.
7. We offer optimum service for our products.
8. Advice is provided by a responsible company employed salesfore.

Service

Our customers expect optimum performance from our endoscopes. KARL STORZ guarantees this standard not only with respect to its products, technology and user convenience but also with regard to the service it offers. Before, during and after purchase, KARL STORZ is committed to providing a first-class service, which goes well beyond the repair of products.

**Your partner for expert solutions and
experienced service in the industrial endoscopy sector.**



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