

Perfect wheel alignment: CCD, 3D or non-contact by Beissbarth



Wheel alignment for Your workshop

- **CCD:** the entry-level solution
- **3D:** 3D technology with plus-functions
- **Touchless:** non-contact wheel alignment

Recognise revenue opportunities in wheel alignment

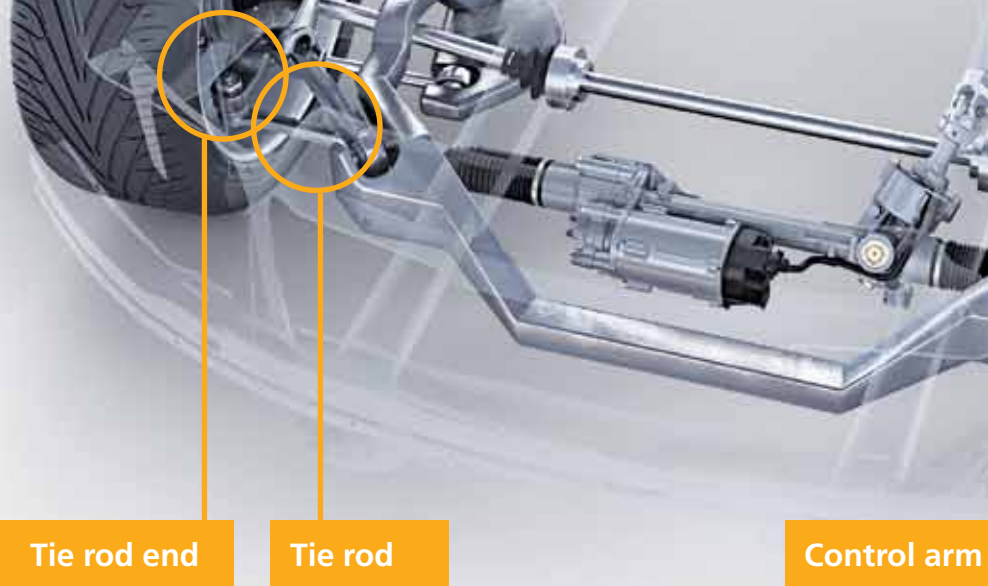
Workshop tests have shown that the running gear of up to 75 % of tested vehicles was misaligned. Usually, this is the result of high mileage, bad roads and accidental run-ins with the kerb. All this can easily damage the tie rods, tie rod ends, ball joints, control arm bearings or link rods.

Signs that alignment might be necessary based on customer complaints

- poor directional stability of the vehicle
- steering wheel noticeably off centre
- tyres in bad condition or unevenly worn

Diagnosis by a workshop employee

- test drive: vehicle pulls to one side
- visual inspection: required work on the running gear such as changing the bearings or tie rods



Tie rod end

Tie rod

Control arm



Benefits of wheel alignment:

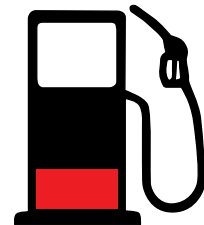
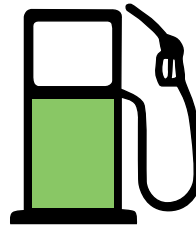
Increased road safety

- due to precise directional stability
- due to the prevention of tyre damage



Increased customer satisfaction

- due to reduced wear
- due to a more comfortable ride
- due to lower fuel consumption



Increase in workshop revenue

- revenue from wheel alignment measurement and adjustment
- replacing tyres
- wheel alignment measurement is a prerequisite for the adjustment of driver assistance systems
- additional revenue from running gear work (e.g. changing shock absorbers or suspension struts)



To the highest standards: wheel alignment by Beissbarth



Quick and easy operation, measurement and display of precise readings

With modern wheel alignment equipment by Beissbarth, a workshop can adjust the relevant components with precision and deliver exact steering wheel alignment, great ride comfort and safe road-holding characteristics

Faster measurements and better combinations

- simple operation and convenient adjustment illustrations save time
- the right equipment for any workspace
- maximum precision and repeatability
- networked systems in the workshop
- combination with driver assistance system adjustment, tyre tread depth measurement and headlight adjustment
- all in one place

Measurements for precise running gear adjustment

CCD, 3D or non-contact wheel alignment measurement delivers precise readings:

- toe (individual and total toe)
- toe-out on turns
- axle angle
- camber
- castor
- king pin angle
- wheel setback
- wheelbase difference
- side offset
- track width difference and axle offset



Fit for the future: wheel alignment measurement as a preparation for the adjustment of driver assistance systems

CCD: the entry-level solution

- economical access to wheel alignment: also with CCD kits
- flexible: wheel alignment based on a mobile trolley – an option that can serve multiple measuring stations
- saves space: an especially good fit for small workshops

Wheel alignment in less than five minutes

**3D: the all-round solution**

- cost-effective: increases service quality, customer satisfaction and revenue
- expandable: space for the adjustment of advanced driver assistance systems (ADAS) and headlight testing
- practical: fixed installation at the wheel alignment station
- mobile: wireless operation
- efficient: fully automatic measuring process

Quick measurement in just 90 seconds

**Non-contact: the profit-maximising solution**

- profitable: wheel alignment becomes a revenue generator right from the check-in
- proactive: no room for human error
- fast and working on four wheels simultaneously – no time-consuming setup of holders or sensors

Quick measurement in just 60 seconds

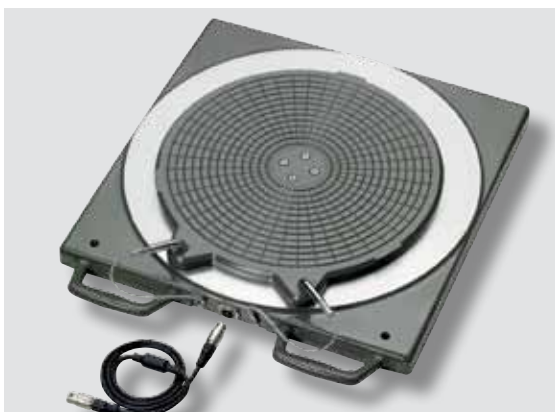


CCD wheel alignment: economical, flexible, space-saving



Precision and great measuring range angle – CCD wheel alignment by Beissbarth:

- 360° measurement with eight-sensor systems
- permanent system self-regulation for high-precision measurements
- 20°-CCD camera technology for easier castor measurement
- integrated rolling runout compensation without lifting the vehicle
- narrow-tolerance measuring precision thanks to perfected CCD sensor technology
- great flexibility: enables wheel alignment procedures for multiple measuring stations with a mobile trolley
- economical access to wheel alignment with small CCD kits
- optional kits make the use of existing hardware (PC, tablet) possible
- space-saving and feasible for smaller workshops



Turnplates/multi-fit clamps: optional connection of electronic turnplates mechanical turnplates and universal multi-fit clamps in the basic version



CCD wheel alignment: the entry-level solution

Wheel alignment using CCD measuring technology
is the ideal entry-level solution by Beissbarth:

- Are you interested in expanding your service offerings and looking for an economical way to start providing wheel alignment services?
- You want to be flexible and perform wheel alignment measurements at multiple measuring stations?
- You need space-saving equipment?

Variants of CCD wheel alignment: PC trolley, radio or as an entry-level kit



Easy CCD:
trolley with PC

CCD entry-level kits: Easy CCD

All Kit-variants enable you to use an existing workshop PC for wheel alignment, so you don't have to buy an additional computer.

The CCD entry-level kits contain:

- CCD sensors
- measuring box with communication processor
- target value database
- Bluetooth® USB adapter

Easy CCD with PC trolley

Beissbarth offers customised mobile solutions with convenient PC trolleys.

- trolley with holders for the entire basic equipment to be flexible and mobile around the workshop
- intelligent charging solution: batteries to be charged directly at the trolley
- multi-functional printer (with scan/copy function)
- wireless version
- encoder for rolling runout compensation



Easy CCD Kit: the basic version



Rolling runout compensation (Easy CCD)

All Easy CCD (Excellence, Flex and Kit) with an encoder for rolling runout compensation included in the scope of delivery

- time-saving thanks to simplified processes
- basic measuring without lifting the vehicle
- vehicle stays on the ground, readings remain unchanged
- measurement process protects lowered vehicles
- vehicles don't have to be driven to re-compress the suspension (required by some manufacturers)
- raised runout compensation still an option

Fig. of rolling runout compensation, especially for short automotive lifts with limited runoff in tight spaces

Start and end on the turnplate:

- | | |
|----------------|---------------------|
| ① 30° backward | ② 30° forward |
| ③ 30° forward | ④ then 30° backward |

Technical data:

Scope of delivery	Easy CCD Excellence	Easy CCD Flex	Easy CCD Kit
Order number	1 690 310 070 Wireless version	1 690 310 073 Wireless version	1 690 310 071 Wireless version
Charging station for CCD sensor head	●		
CCD sensor head	●	●	●
CCD runout compensation sensor	●	●	●
Rolling runout compensation	●	●	●
CCD measuring box	●	●	●
Software package	●	●	●
Target value database	●	●	●
Bluetooth® USB adapter			●
Trolley with charging station for sensor head	●	●	
Brake tensioner	●	●	
Steering wheel brace	●	●	
PC	●		
19" monitor	●		
Printer	●		
4 x Multi-Fit clamps (incl. standard claws)	●		
16 x special Multi-Fit claws	●		
2 x mechanical aluminium turnplates	●		
4 x plastic filling pieces	●		
CCD cable set (spare)	●		

Technical data	Easy CCD Excellence	Easy CCD Flex	Easy CCD Kit
Supply voltage	110 to 240 V	110 to 240 V	110 to 240 V
Power supply	10 A	10 A	10 A
Frequency	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz
Power	500 W	500 W	500 W
Weight	110 kg	110 kg	

● = included in scope of delivery

3D wheel alignment with a functional plus: practical, quick, expandable



Fast and efficient wheel alignment thanks to 3D technology with 12 cameras:

- fully automatic testing procedure with Smart Test
- new intuitive user interface
- great repeatability of results – safety and competence when repeating measurements
- shorter setup times as measurement panels and sensor heads can be more easily attached – no recalibration
- rolling runout compensation without lifting the vehicle
- high mobility thanks to WLAN
- existing hardware can be used (PC, tablet)
- working area in front of the vehicle cleared – use of headlight-adjustment devices and calibration sets for adjusting driver assistance systems possible
- designed for convenience in day-to-day workshop handling down to the smallest detail



New software with a functional plus:

Simple and quick operation thanks to the new intuitive guided user interface (GUI) and automatic testing procedures (Smart Test)



New software
 Intuitive user interface for simple and quick operation

More space for versatility:
 The lateral positioning of the sensor heads leaves room for adjusting measures of DAS systems in front.



3D+ wheel alignment: The all-round solution

Wheel alignment analysis with 3D measuring technology for regular wheel alignment procedures

- You would like to increase service quality, customer satisfaction and workshop revenue?
- You are interested in taking advantage of fully automatic 3D testing procedure to handle more vehicles?
- You need space in front of the vehicle for adjusting driver assistance systems and testing headlights?

Variants of 3D wheel alignment: PC trolley, WLAN or as an entry-level kit



Wheel aligners Easy 3D+ Excellence, Easy 3D+ Standard and Easy 3D+ Flex

3D wheel alignment is comprised of the following components:

- 3D sensor head
- 3D measurement panels (4 x)
- 3D measuring box (WLAN version)
- software package
- target value database

Working faster with WLAN data transmission

The wheel aligners Easy 3D+ are equipped with a Bluetooth® and WLAN USB adapter.

- no wires between the trolley and the automotive lift
- the radio/Bluetooth® measuring box can be attached to the automotive lift, which increases flexibility, e.g. when a second measuring station is used

Easy 3D+: trolley with PC

The economical solution – the basic kit:

With the basic kit, it is not necessary to buy an additional computer as an existing workshop PC can be used for wheel alignment.

- 3D sensor head
- 3D measurement panels (4 x)
- 3D measuring box
- software package
- Bluetooth® USB adapter
- WLAN USB adapter



Scope of delivery for the Easy 3D+ Kits

Technical data:

*available from 10/2016

Scope of delivery	Easy 3D+ Excellence	Easy 3D+ Standard	Easy 3D+ Flex	Easy 3D+ Kit*
	Corded version	Corded version	Corded version	Wireless version
Order number	1 690 700 076	1 690 700 078	1 690 700 080	1 690 700 082
3D sensor head	●	●	●	●
3D measurement panels (4 x)	●	●	●	●
3D measuring box	●	●	●	●
Software package	●	●	●	●
Bluetooth® USB adapter				●
WLAN USB adapter				●
Trolley	●	●	●	
Brake tensioner	●	●	●	
Steering wheel brace	●	●	●	
PC	●	●		
27" monitor	●	●		
Printer	●	●		
4 x Multi-Fit clamps (incl. standard claws)	●			
16 x special Multi-Fit claws	●			
2 x mech. aluminium turnplates	●			
4 x plastic filling pieces	●			
Lift adapter	●			
3D cable set (15 m)	●			
Magnetic holder	●			
Remote control	●			
Trolley cover	●			

Technical data	Easy 3D+ Excellence	Easy 3D+ Standard	Easy 3D+ Flex	Easy 3D+ Kit*
Radio frequency				2,4 or 5 GHz
Weight and dimensions				
Sensor head (H x W x D) mm	150 x 370 x 650	150 x 370 x 650	150 x 370 x 650	150 x 370 x 650
Sensor head weight	9,4 kg	9,4 kg	9,4 kg	9,4 kg
Trolley with sensor (H x W x D) mm	1 520 x 1 180 x 770	1 520 x 1 180 x 770	1 520 x 1 180 x 770	
Trolley without sensor head (H x W x D) mm	1 520 x 880 x 770	1 520 x 880 x 770	1 520 x 880 x 770	
Total tray weight	approx. 110 kg	approx. 110 kg	approx. 110 kg	
Power supply unit				
Input voltage	110 to 240 V AC (10 A)	110 to 240 V AC (10 A)	110 to 240 V AC (10 A)	110 to 240 V AC (10 A)
Input frequency	50 to 60 Hz	50 to 60 Hz	50 to 60 Hz	50 to 60 Hz
Power	500 W	500 W	500 W	500 W

● = included in scope of delivery

Non-contact wheel alignment: easy, fast, profitable



Fast and profitable wheel alignment – non-contact

- quick measurement on four wheels simultaneously in just 60 seconds
- no setup time for holders or sensors
- revenue generator for large workshops directly from check-in
- 10° steering lock routine (on the fly)
- high system accuracy for precise and accurate running gear adjustment
- working area in front of the vehicle cleared – use of headlight-adjustment devices and calibration sets for adjusting driver assistance systems possible
- Smart Link adapter for quick adaptation to different automotive lifts
- Smart Align software with a user-friendly interface for intuitive operation
- class-1M laser for maximum safety

Touchless Smart Test

The time-saving running gear check for the customer, completed in seconds: drive on, measure, done. By livemeasuring all four wheels simultaneously, Touchless is more precise and faster than systems with multi-stage two-wheel measuring capability.



High-frame-rate digital image processing generates a 3D model of the wheel.



Reference system



3D stereo cameras

All four wheels measured

For precise and unambiguous axle readings

The new Touchless software

New and clear graphical user interface (GUI)

**Saving space**

The sensor heads of Touchless are attached to the automotive lift. No additional rails or robots in front or behind the lift.

Touchless Smart Link

Lift adaptation compensates for various wheelbases and track widths. No need to move turn-plates etc. on the lift.

Non-contact

Touchless does away with the time-consuming process of attaching wheel holders or panels. No damage to the rims, no measuring

Non-contact wheel alignment: the profit-maximising solution

Touchless – measuring with non-contact precision using lasers and 3D stereo cameras:

- You want to eliminate vehicle and rim damage caused by clamp installation?
- You want to take measurements on 4 wheels simultaneously, in seconds, without any setup?
- You want to generate more revenue starting right at check-in?

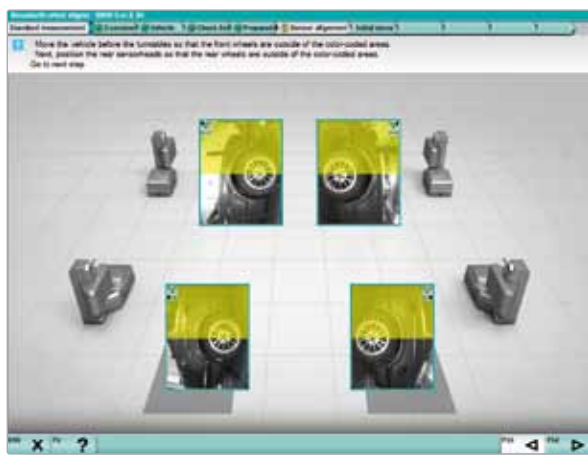
Non-contact wheel alignment: Quick measurements with precision



Touchless: wheel alignment from the driver's seat



Touchless: reference system and 3D stereo cameras



Smart Align: intelligent alignment software

Non-contact, fast and simple measurements

Touchless performs non-contact four-wheel simultaneous measurements with great precision. Safe and easy to operate thanks to user-friendly software and user interface. That way, the measurement is completed in no time without the need to leave the vehicle.

Reference system and 3D stereo camera

Two stereo cameras (top and bottom) per sensor head generate 3D data for the reference system (triangulation principle). A total of eight high-performance cameras make the system extremely vibration-tolerant and deliver precision and repeatability.

Precision through laser technology

- In poor lighting conditions, infrared lighting is used to illuminate the wheel.
- The use of class-1M lasers guarantees highest safety standards for employees and customers.

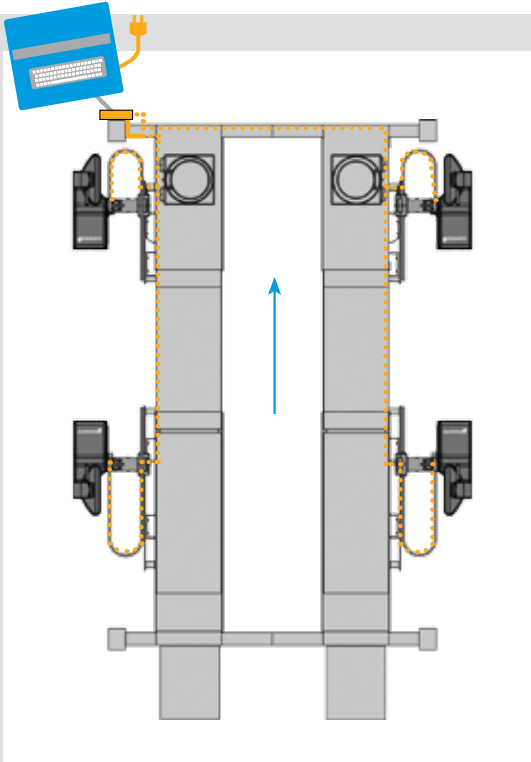
It's under control: Smart Align helps with positioning

The new Smart Align software shows live images of the wheels on the screen, among other things. That way, sensor head position can be monitored and mechanically controlled from the monitor.

Fast sensor head positioning

With the aid of the camera feed, the setup of the sensor heads can be completed accurately, easily and quickly.

Technical data:



Recommendation for automotive lift installation (wiring)

Control box Power/LAN cables

Scope of delivery

Touchless Excellence

Order number	1 690 900 000
Trolley with PC, Windows 7, keyboard, mouse, printer	●
4 sensor heads	●
Smart Align software and target values	●
Control box	●
Lift cable set, trolley-lift cable (10 m)	●
Brake tensioner and steering wheel brace	●
27" monitor	●
2 aluminium precision turnplates with aluminium filling pieces and rubber covers	●
Remote control	●
Trolley covers	●
Sensor head cover	●
Smart Link adapter for VLH 4345 A/LA 1 690 900 003	optional accessory

Automotive lifts for Touchless (Touchless-ready)

	VLH 4345 A	VLH 4345 LA
Order number	1 692 841 542	1 692 841 543
Auxiliary lift	–	Included
Weight	1 800 kg	2 000 kg
Load capacity	4 500 kg	
Length	6 190 mm	
Width	3 220 mm	
Width including Smart Link	3 610 mm	
Width with Smart Link extended	4 110 mm	

Technical data

Touchless Excellence

Wheelbases	Passenger cars and light commercial vehicles 1 800 to 3 750 mm
Input voltage	100-240 V AC (10 A)
Input frequency	50-60 Hz
Power	0,5 kW
PC trolley	Dimensions: 1 520 x 880 x 770 mm Weight: 80 kg
Sensor head	Dimensions: 650 x 880 x 330 mm Weight: 21 kg
Laser projector	Laser class 1M DIN EN 60825-1: 2007

Key Card software updates: Up-to-date target values at all times



Accessible by card: 35 000 vehicle setup data sets from 130 manufacturers



Just scratch until the access information is visible and log in.

Key Card: vehicle data for wheel alignment











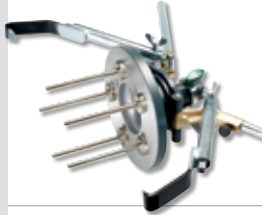

To perform accurate wheel alignment services according to manufacturer specifications, the workshop must have access to current vehicle information. With the Key Card, more than 35 000 vehicle setup data sets from 130 vehicle manufacturers are available for use.

Regular updates for the workshop

As vehicle manufacturers bring new vehicles to market regularly and update vehicle data several times a year, the Beissbarth wheel alignment vehicle data packages are updated three times a year. Using the Key Card, the most recent vehicle setup data can be accessed online at any time. That way, the workshop is prepared to perform wheel alignment services for practically any vehicle.








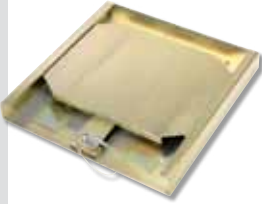

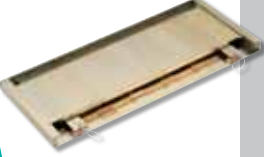


System prerequisites: To activate the code, access to the internet and an internet browser are required.

Accessories:









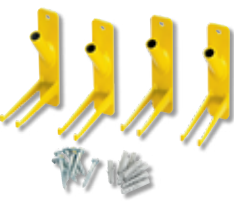


Figure	Item /order number	CCD	3D	TL*	Figure	Item /order number	CCD	3D	TL*
	Multi-Fit clamps (incl. standard passenger car claws), 4 pieces Order number: 1 690 311 112	●	●	●		Extension arm for Multi-Quick clamp (19" bis 26"), 1 Set (12 pieces) Order number: 1 690 401 032			For Multi-Fit clamps
	Special claws for Multi-Fit clamps, 4 pieces Order number: 1 690 311 164			For Multi-Fit clamps		Clamp arm set, long (for tyres from 10" to 38") 4 left arms and 4 right arms Order number: 1 690 401 033			For Multi-Fit clamps
	Lorry claws for Multi-Fit clamps, 4 pieces Order number: 1 690 311 115			For Multi-Fit clamps	no figure	Plastic sleeves with spacer rings for Softline rims (for Multi-Quick clamp), 12 pieces Order number: 1 690 401 055			For Multi-Fit clamps
	28" extension set for Multi-Fit clamps, 4 pieces Order number: 1 690 311 113			For Multi-Fit clamps		Plastic-coated aluminium sleeves for Softline rims (for Multi-Quick clamps), 12 pieces Order number: 1 690 401 010			For Multi-Fit clamps
	Magnetic holder for magnetic wheel nuts, 4 pieces Order number: 1 690 701 051	-	●	-		Spacer pins for Multi-Quick clamps (for Daimler and BMW) 5 pieces Order number: 1 690 401 019			For Multi-Fit clamps
	Extension magnets (75 mm) for magnetic holders, 3 pieces Order no. 1 690 701 128 12 pieces Order no. 1 690 701 097			For magnetic holders		BMW clamp with spacer pins, 1 piece Order number: 1 690 801 001	●	●	-
	Multi-Quick clamp, 1 piece Order number: 1 690 501 250	●	-	-	no figure	Daimler clamp with spacer pins, 1 piece Order number: 1 690 801 002	●	●	-

*Touchless (Non-contact wheel alignment)

Accessories:

Figure	Item /order number	CCD	3D	TL*	Figure	Item /order number	CCD	3D	TL*
no figure	Quick-release clamp (incl.spoiler adapter) for Porsche Carrera GT & 918 Spider, 4 pieces Order number: 1 690 301 002	●	●	-		Mechanical turnplate, steel, 50° scale, 1 piece Order number: 1 690 311 002	●	●	●
no figure	Quick-release clamp for Porsche 911 GT3 & Turbo 4 pieces Order number: 1 690 380 002	●	●	-		Mechanical turnplate, aluminium Standard version, 1 piece Order number: 1 690 501 001	●	●	●
	Quick-release clamp for Porsche vehicles (incl. Macan) 4 pieces Order number: 1 690 380 010	●	●	-		Mechanical turnplate, aluminium Precision version, 1 piece Order number: 1 690 401 028	●	●	●
	Measurement panels for long wheelbases (> 340 cm) 2 Spieces Order number: 1 690 701 032	-	●	-		Electronic turnplate, aluminium Standard version with cable Order number: 1 690 321 018	●	●	●
no figure	Extension for 3D measurement panels (for vehicles with small track width) 1 piece Order number: 1 690 701 127	-	●	-		Electronic turnplate, aluminium Standard version without cable Order number: 1 690 401 011	●	●	●
	Slip plate, short (45 x 45 x 5 cm) 1 piece Order number: 1 690 401 003	●	●	●		Electronic turnplate, aluminium Precision version without cable Order number: 1 690 401 013	●	●	●
	Slip plate, long (105 x 45 x 5 cm) 1 piece Order number: 1 690 401 004	●	●	●		Electronic turnplate, aluminium Precision version without cable, with weighing unit Order number: 1 690 501 179	●	●	●
		●	●	●		Rubber cover for aluminium turnplates 1 piece Order number: 1 690 402 001	●	●	●

*Touchless (Non-contact wheel alignment)

Figure	Item /order number	CCD	3D	TL*	Figure	Item /order number	CCD	3D	TL*
	Plastic filling piece 1 piece (necessary amount 4 pieces) Order number: 1 690 702 082	●	●	●		3D cable set 5 m/5 m Order no. 1 690 701 204 5 m/7,5 m Order no. 1 690 701 206 7,5 m/7,5 m Order no. 1 690 701 205 12 m/12 m Order no. 1 690 701 029 12 m/15 m Order no. 1 690 701 130 15 m/15 m Order no. 1 690 701 030 25 m/25 m Order no. 1 690 701 163	-	●	-
	Aluminium filling piece for aluminium turnplate 1 piece (necessary amount 4 pieces) Order number: 1 683 391 224	●	●	●		Trolley cover Easy 3D , 1 piece Order number: 1 690 402 021	-	●	-
no figure	Aluminium filling piece for steel turnplate 1 piece (necessary amount 4 pieces) Order number: 1 690 702 157	●	●	●		Trolley cover Easy CCD , 1 piece Order number: 1 690 402 021	●	-	-
	Loading ramps for turnplates and short slip plates 1 piece Order number: 1 690 401 008	●	●	●		Cover for sensor head Touchless , 1 piece Order number: 1 690 902 100	-	-	●
	Loading ramp set for turnplate (incl. connecting piece and protector), 2 pieces Order number: 1 690 701 052	●	●	●		Wall mount for 3D accessories (clamps and measurement panels) 1 piece Order number: 1 690 701 040	-	●	-
no figure	Cable set CCD 1 piece Order number: 1 690 401 012	●	-	-		Wall mount for CCD kit 2 pieces (for 4 sensor heads, without charging socket / distributor box) Order number: 1 690 311 146	●	-	-
no figure	Connection cable between sensor head and turnplate 1 piece Order number: 1 690 403 001	●	-	-		Storage cart for accessories 1 piece Order number: 1 690 401 018	●	●	-

*Touchless (Non-contact wheel alignment)

Accessories:

Figure	Item /order number	CCD	3D	TL*	Figure	Item /order number	CCD	3D	TL*
	Storage cart for 3D accessories (clamps and measurement panels) 1 piece Order number: 1 690 701 041	-	●	-		Steering wheel brace 1 piece Order number: 1 690 401 007	●	●	●
	Pit adaptation for sensor head 2 Spieces Order number: 1 690 701 027	-	●	-		Remote control 1 piece Order number: 1 690 563 005	●	●	●
	3D lift adaptation (2 positions) 1 piece Order number: 1 690 701 078	-	●	-		Remote control (incl. transmitter, receiver and Batterie) Order number: 1 690 502 001	●	●	●
	Romess inclinometer for manual data entry 1 piece Order number: 1 693 770 002	●	●	●		Calibration device CCD 1 piece Order number: 1 690 401 056	●	-	-
	Mercedes-Benz toe presser bar 1 piece Order number: 1 693 600 001	●	●	●	no figure	Calibration device 3D 1 piece Order number: 1 690 700 014	-	●	-
	Ballast bags 20 kg, 1 piece Order no. 1 693 740 003 10 kg, 1 piece Order no. 1 693 740 002 5 kg, 1 pieces Order no. 1 693 740 001	●	●	●		Spoiler adapter 50 mm, 1 piece Order number: 1 690 401 005 100 mm, 1 piece Order number: 1 690 121 001	●	-	-
	Brake tensioner 1 piece Order number: 1 690 401 006	●	●	●		Step protection for 3D sensor head 1 piece Order number: 1 690 701 045	-	●	-

*Touchless (Non-contact wheel alignment)

A perfect team: LTB 100 test bay for testing headlights, running gear and driver assistance systems

Leveled test bay LTB 100:

A safe basis for precise measurements

Workshop floors are often steeply sloped and uneven. The leveled test bay LTB 100 meets all requirements for testing stations according to attachment 4, § 29 of the General Inspection Headlight Testing Guideline of the German Road Traffic Approval Regulation.

- suitable for retrofit installation
- modular design (4 m, option to expand to 6 m)
- four wheel setup elements for compensation and fine adjustment (4-m version)

TÜV-certified headlight tester HTD 815 with cross and alignment laser for precise positioning and CMOS camera for digital image processing in real time

- intuitive and simple user interface
- digital LCD touchscreen (5.7") with 262 000 colours
- all types of light sources (xenon, bi-xenon, LED, bi-LED and halogen)
- all types of vehicles (passenger cars, lorries and motorcycles)
- all types of headlights (main, fog and auxiliary)
- digital precision: +/-1 cm to 10 m of measured distance
- integrated printer
- levelable rail system (optional)



Leveled test bay LTB 100 in compliance with § 29 of the General Inspection Testing Guideline of the German Road Traffic Approval Regulation



Headlight tester MLD 815



Easy CCD: CCD wheel alignment



Easy 3D+: 3D wheel alignment



Touchless: non-contact wheel alignment

The Beissbarth wheel alignment series provides the best fit in terms of wheel alignment equipment for any workshop. Whether it's devices with CCD, 3D or non-contact technology – their accuracy always meets the highest of vehicle manufacturers' demands.

Modular access to professional wheel alignment with CCD

- economical due to the compact scope of delivery
- great measuring accuracy due to perfected 8-CCD sensor technology

Simple, precise, fast: wheel alignment with 3D measurement technology

- suitable for workshops handling a high number of wheel alignment cycles
- high-precision automatic measuring due to 3D measurement technology

Faster, more customers, more revenue: non-contact wheel alignment

- live measurements on all four wheels simultaneously, in seconds, no setup time
- Smart Link for almost all vehicle types, treads and wheelbases
- excellent repeatability thanks to laser and 3D stereo camera technology

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