

Beissborth Easy 2-Cam

WHEEL ALIGNMENT USING ML 33, 34, 35

 BEISSBARTH



3D technology with 2 cameras – wheel alignment

ML 33

Compact version



ML 34

Version with trolley



Simple workshop installation

- Test-equipment in front of the vehicle
- No calibration at the initial installation
- Height adjustable camera beam
- Adjustable working heights
- For wheel alignment lifts and pits
- From small cars to utility vans
- Smart LEDs as adjustment aid



t within just 3 minutes



ML 35

Version with trolley
and autotracking



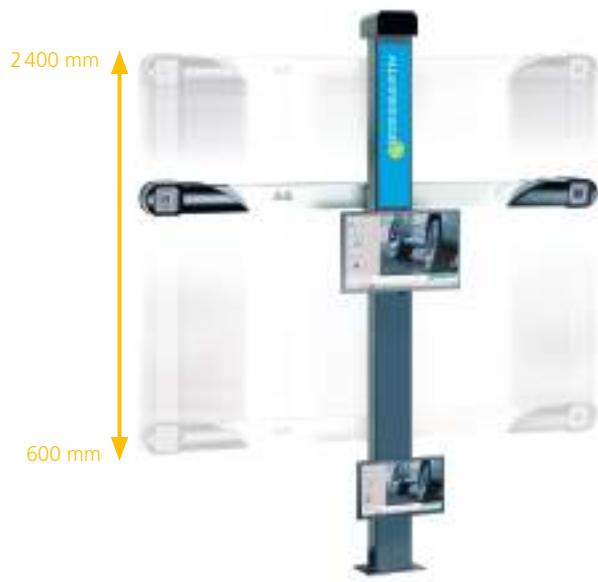
Increased storage space
thanks to separate trolley

Automatic detection
of targets and height
adjustment of the
camera beam





Precise and quick wheel alignment



Height adjustment of the camera beam:

between 600 and 2 400 mm for variable working heights (even on ground level)

ML 33: manually adjustable

ML 34: electronic at the push of a button

ML 35: automatic tracking of the targets

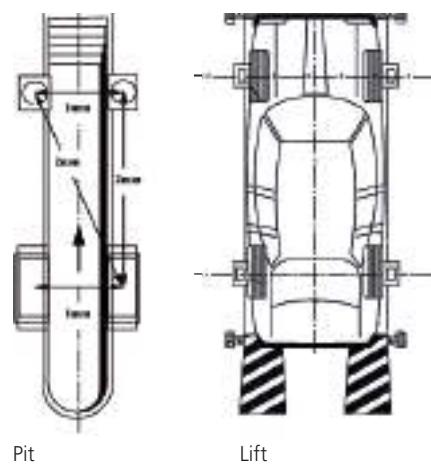


Exchangeable displays:

- Wall mount, post fitting or fixture on the trolley – as preferred
- Adjustment tasks made easy

ML 34, 35 trolley:

- More storage than with ML 33
- Increased mobility
- Data transfer via cable
- For PC and (optional) printer
- Attachment rack for clamps and targets



For all professionally levelled wheel alignments bays:

4-post lifts*, scissor lifts, inground lifts, workshop pits

Admissible height deviation	Maximum
Left to right	1 mm
Front to rear	2 mm
Transverse front left to rear right	2 mm

* note the clearances (see back page)





Easy 2-Cam software



Main menu



Overview of standard measured values

Wheel alignment software

- Dell PC running on Windows 10
- User-friendly, intuitive interface
- Program-controlled measurement routines: standard, quick & random
- Comprehensive Autodata vehicle database with editor
- Camber indication in lifted condition eases the adjustment

Standard measurement parameters

• Total toe (front + rear axle)	$\pm 50^\circ$
• Individual toe (front + rear axle)	$\pm 25^\circ$
• Camber (front + rear axle)	$\pm 15^\circ$
• Setback (front + rear axle)	$\pm 9^\circ$
• Thrust line	$\pm 9^\circ$
• Caster	$\pm 22^\circ$
• Steering axis inclination	$\pm 22^\circ$
• Wheelbase	1800-4500 mm
• Track width	1100-1900 mm

Additional measurement parameters

- Side offset
- Axle spacing
- Longitudinal offset
- Difference: axle spacing
- Difference: track width

All measured values at a glance



**For large and small wheelbases**

Suitable for wheelbases between 1800 and 4500 mm.

Comprehensive Autodata vehicle database – with editor

The screenshot shows a software interface for a vehicle database. At the top, there are search bars and a toolbar with various icons. The main area is a table with two columns. The left column lists vehicle manufacturers and years, and the right column lists specific vehicle models with their years and descriptions. The 'BMW' row is currently selected, with the year '2010' highlighted in blue. The table includes rows for Alfa Romeo, Astra, Austin, Bedford, Cadillac, Chevrolet, Chrysler, Citroen, Dacia, and Daewoo, along with their respective model years and descriptions.

Manufacturer	Years	Model
Alfa Romeo	2016	A8 (PR=2MA/B) 4.2 TDI/6.3 FSI Sport
Alfa Romeo	2015	A3 (-12) Sportback (-13) (PR=UA2) HD
Astra	2014	A3 (-12) Sportback (-13) Cabrio (PR=UA0/4) std
Austin	2013	A8/S8 (PR=2MA/2MB) Sport
Bedford	2012	A3 quattro (PR=UA3/UB3) Sport
BMW	2011	A8 (PR=1BK)
BMW	2010	A6 (PR=1BA/B) std
Cadillac	2009	A6/alroad Sport/quattro (PR=1BV)
Chevrolet	2008	A6 (PR=1BR) HD
Chrysler	2007	36 (PR=1BD)
Chrysler	2006	A6/alroad (PR=1BK/Y) A/S
Citroen	2006	TT (PR=1BA/1BL) std/Sport
Dacia	2004	S3 (PR=UBS/UAT)
Dacia	2003	TT quattro (PR=1BV/1BD)
Daewoo	2002	TT (PR=1BQ) Sport
Daewoo	2001	Q7 (PR=1BA) std



Smart LED indicator system on the camera beam – a



Alignment of the targets with virtual spirit levels

on a TFT screen or via LED indicators on the camera beam. There is a LED line for each wheel with target (1–4).



Runout compensation routine

LEDs 1 and 3 indicate the processing progress, 2 and 4 the direction to push in. Left and right indicators are identical.



Notes on the steering lock routine

LEDs 1 and 3 indicate the direction to steer in, 2 and 4 the processing progress. Left and right indicators are identical.





- as additional adjustment aid





Scope of delivery and accessories

ML 33, 34, 35 standard scope of delivery

ML 33	Description	Order number
	ML 33 Post with camera beam RAL 5015 (blue) RAL 7040 (grey)	1 692 000 026 1 692 000 149
	Post tray with PC, mouse, keyboard (US) and standard accessories RAL 5015 (blue) RAL 7040 (grey)	1 692 000 027 1 692 000 150
ML 34	Description	Order number
	ML 34 Post with camera beam RAL 5015 (blue) RAL 7040 (grey)	1 692 000 028 1 692 000 151
	Trolley with PC, mouse, keyboard (US) and standard accessories RAL 5015 (blue) RAL 7040 (grey)	1 692 000 029 1 692 000 152
ML 35	Description	Order number
	ML 35 Post with camera beam RAL 5015 (blue) RAL 7040 (grey)	1 692 000 030 1 692 000 153
	Trolley with PC, mouse, keyboard (US), an extra 19" monitor and standard accessories RAL 5015 (blue) RAL 7040 (grey)	1 692 000 031 1 692 000 154

Standard accessories included in scope of delivery

Illustration	Description	Order number
	24" monitor	Upon request
	19" monitor (only for ML 35)	Upon request
	Target: front left Target: front right	1 692 000 116 1 692 000 117
	Target: rear left Target: rear right	1 692 000 118 1 692 000 119
	Turntable <i>2 pieces already included</i> (1 piece)	1 692 000 122
	Filling bars for turntables (2 pieces)	1 692 000 155
	Universal clamp 13-25" 4 pieces (incl. standard car clamps) already included (1 piece)	1 692 000 134
	Brake lock	1 692 000 120
	Steering lock	1 692 000 121
	Brake chocks (2 pieces)	1 692 000 156



(Optional) special accessories

Printer

Illustration	Description	Order number
	Printer	Upon request

Multi-Fit clamp

Illustration	Description	Order number
	Multi-Fit clamp 13-22" 4 standard claws for Multi-Fit clamps already included (1 piece) (Set 4 pieces)	1 690 311 089 1 690 311 112
	Extension to 28" for Multi-Fit clamp (4 pieces)	1 690 311 113
	Standard claw for Multi-Fit clamp for normal steel rims (4 pieces)	1 690 311 116
	Special claw 2 for Universal clamp for standard alloy and alloy softline rims (1 piece) (16 pieces)	1 692 000 136 1 692 000 140
	Special claw 3 for Universal clamp for alloy softline rims (1 piece) (16 pieces)	1 692 000 137 1 692 000 141
	Truck claw for Multi-Fit clamp (4 pieces)	1 690 311 115

Claws for the Universal clamp

Illustration	Description	Order number
	Standard claw for Universal clamp for normal steel rims (1 piece)	1 692 000 135
	Special claw 1 for Universal clamp for standard alloy and alloy softline rims (1 piece) (16 pieces)	1 692 000 138 1 692 000 142
	Special claw 2 for Universal clamp for standard alloy and alloy softline rims (1 piece) (16 pieces)	1 692 000 136 1 692 000 140
	Special claw 3 for Universal clamp for alloy softline rims (1 piece) (16 pieces)	1 692 000 137 1 692 000 141



Technical data

Area of application

Rim size	13"-25"
Track width	1100-1900 mm
Wheelbase	1800-4500 mm
Clearance between post and turntable	1800-2400 mm
Clearance between left and right camera	2240 mm

Power supply

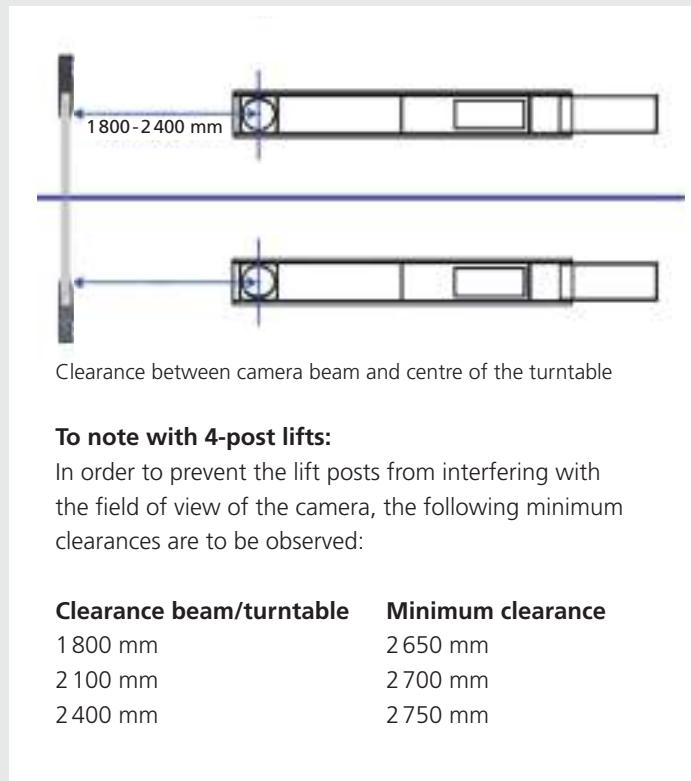
Voltage	120-220 V
Frequency	50/60 Hz
Power	0.72 kW

Dimensions

Post height	2600 mm
Length of camera beam	2500 mm
Post weight	47 kg
Weight of camera beam	15 kg

Language versions

German, English, French, Italian, Spanish, Portuguese, Russian, Polish, Hungarian, Bulgarian, Turkish, Arabic, Chinese, Thai, Japanese, Korean.



To note with 4-post lifts:

In order to prevent the lift posts from interfering with the field of view of the camera, the following minimum clearances are to be observed:

Clearance beam/turntable	Minimum clearance
1800 mm	2650 mm
2100 mm	2700 mm
2400 mm	2750 mm

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