Beissbarth Workshop Equipment
Recommended by Volvo Cars

- Wheel Alignment on Lifts
- Wheel Service: Changing Tyres and Balancing Wheels
- Brake Testing and Test Lanes
A workforce of over 200 produces modern testing and service equipment for automotive workshops in compliance with the increasingly strict demands of the automotive industry. For decades, we have been focusing on wheel alignment, brake testers, test lanes, and tyre service equipment.

**Tradition**
Beissbarth has been based in Munich for over 115 years. At the end of the 19th Century, merchants Daniel and Hermann Beissbarth were automotive pioneers in Bavaria. From 1951, the sons of the company founder developed the first automotive service equipment.

**Innovation**
Beissbarth service equipment included in this brochure has been approved and recommended Volvo Cars. Their extreme precision and measurement accuracy in conjunction with correspondingly efficient test procedures are valued in particular. A high level of research and development continues to create innovative products for the market.
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Wheel Alignment

EASY 3D WLAN 6-7
ML TECH+ 8-9

Beissbarth is among the pioneers of wheel alignment. The almost legendary optical “P5” wheel alignment unit was launched on the market in 1967. At the beginning of the 1990s, this was followed by CCD camera technology with infrared rays, which enabled measurement accuracy within the angular minute range.

Nowadays, 3D technology with digital image processing represents the benchmark technology in wheel alignment. And looking ahead, non-contact wheel alignment will completely save the set-up times for wheel adapters and instrument panels.

Beissbarth provides workshops with 30,000 target data records from almost 130 vehicle manufacturers – including a large number of helpful setup illustrations.
EASY 3D WLAN

- Fast
- Precise
- Easy to handle
- Mobile
- Low space requirement

Maximum measurement accuracy with Volvo-specific adjustment data

Easy 3D WLAN – a new generation of wheel alignment equipment that meets the requirements of a modern workshop: fast, precise, easy to handle, and mobile, as well as compact to save space. 3D 12-camera measuring technology applies an innovative stereo camera system to measure with an accuracy of +/- 2 angular minutes.

The reference system with 2 CCD cameras in each sensor heads ensures highly accurate, reproducible test results. WLAN box and Bluetooth communication allow workshops to use existing, individual tablets (Windows), notebooks, or individual standard PCs to provide the full range of wheel alignment services.

Equipment is installed on wheel alignment lifts or at ground level in inspection pits. Vehicles with a wheelbase between 180 cm to 430 cm are suitable for wheel alignment.

When using measurement boards with magnetic holders, it is possible to provide fast and comprehensive measurements including a print-out of the log in a very short timeframe. Measured values are permanently displayed in real time and compared with target data.

Advantages

- We guarantee a measurement accuracy and reproducibility of two angular minutes at all working heights
- No need of axle/wheel lift for rolling or driving run out compensation (during initial measurement).
- Innovative magnetic holders for fast and simple adaptation on all magnetic wheel bolts without causing damage
- Flexibly controlled by tablet or notebook – supports Windows XP and Windows 7, you may also use individual workshop equipment for this purpose
Scope of delivery

Article Number 1 690 700 067

- PC trolley with 27” TFT monitor, WLAN color printer, and trolley cover
- Two sensor heads with stereo cameras and reference system
- Two aluminium turntables and filler pieces
- Four Multi-Fit clamps (clamping range of between 13”– 22”) with special clamps (RFT, Soft-line); click-in extensions for 28” for trucks and XXL rims as optional accessory (1 690 311 113)
- Four magnetic holders with measurement boards
- Platform adaptations with two positions for sensor heads
- Cable set for platform wiring, 15 m
- Brake pedal lock and steering wheel lock
ML TECH+

**Completely wireless with CCD technology**
Measurements are based on 8 CCD sensors and radio data transmission between the sensor heads and the equipment cabinet. The robust sensor heads with two CCD sensors each and integrated camber pendulum provide an enhanced measurement accuracy and enable caster measurements at 20° or 10°. This results in a 360° measuring range around the car. The advantage of this technology: very high measuring accuracy and reproducibility. The test results are displayed in real time and shown with a selection of vehicle-specific target data. Additionally, the system can show large setup and adjustment illustrations.

**Advantages**
- As required, you can select between program-guided alignment, quick alignment, or individual alignment
- Absolute accuracy and reproducibility of +/- 2 angular minutes
- Exact run-out compensation with encoder
- Comprehensive target value database (> 30,000 vehicles / 130 manufacturers) with adjustment support

**Beissbarth CCD precision**
- 360° measurement
- Finely adjusted camber pendulums
- Beissbarth reference system
Scope of delivery

Article Number 1 690 570 019

- PC cabinet with 19” TFT monitor and WLAN color printer
- Four CCD sensor heads with radio technology
- Two aluminium turntables
- Four Multi-Fit clamps with a clamping range of between 13 – 22”
- Brake pedal lock and steering wheel lock
Lifts

VLS 3132 H 12-13
VLH 4145 14
VLH 4245 LA /
VLH 4345 LA 15

Beissbarth supplies a complete vehicle lift range that complies with high quality and safety standards for flexible and smooth vehicle servicing.

Our portfolio includes:
• Small scissor lifts for tyre services and quick repairs
• 4-column platforms designed specifically for wheel alignment

All our lifts comply with the strictest standards and enable easy working.
VLS 3132 H

Double scissor lift
Ultra-slim double scissor lift with a ramp height of just 105 mm and a capacity of 3.2 tons. Set the runway length to between 1470 mm and up to 1990 mm to perfectly adapt equipment to vehicles with short or long wheelbase. There is no mechanical link between runways. Each scissor mechanism features a dual cylinder. Optimized lubrication of all pivot pins ensures a long service life. The powerful hydraulic unit with an output of 3.0 kW has been integrated into the operating unit.

Advantages
- 1945 mm lifting height to conveniently work under the vehicle
- Hot-galvanized base plate
Scope of delivery

Article Number 1 692 852 322

- Lift with operating unit
- Zinc-coated cover on the ground for hydraulic hoses
- Four elastomer pick-up pads, 250 x 150 x 20 mm
- Hydraulic fluid
4-column lift for servicing and repair work
High-quality, space-saving lift with a capacity of 4.5 tons and electro-hydraulic control.
Extra short and ultra-slim runways with dimensions of 4,400 mm x 500 mm and a ramp height of just 135 mm.
External dimensions: 3,220 mm x 5,570 mm.
Can optionally be enhanced by pneumatic axle lift with a lifting capacity of 2 tons or 2.6 tons.

Advantages
• Installed on the ground
• Runway width can be continuously adjusted
• Ergonomic control unit with pushbuttons

Article number
VLH 4145 1 692 841 412
4-column lift for wheel alignment
High-quality, precise lift with a capacity of 4.5 tons and electro-hydraulic control. Designed for wheel alignment with integrated wheel-free scissor lift (lifting capacity of 3.5 tons, lifting height of 450 mm) and front / rear table extensions to provide an available surface of 1,400 – 1,900 mm.
The runway features recesses for turntables with a height of 50 mm and locking sliding plates at the rear.
The distance between the columns is 2,780 mm. Precision lowering rods across the entire lifting height with latching mechanisms every 10 cm guarantee excellent measuring accuracy. Maximum safety ensured by mechanically locking the runways using pneumatic locks.

Advantages
- Slim, anti-corrosion runway with a low ramp height of just 185 mm
- An ideal solution for wheel alignment
- Preparation for installing Easy 3D sensor heads
- Runway width can be continuously adjusted
- Safety features like wheel stopper and protection against slack cables, cable ruptures

Versions:
- VLH 4245 LA: runway 500 x 4,810 mm (W x L)
- VLH 4345 LA: runway 630 x 5,070 mm (W x L)

Options:
- Non-slip surface
- Power Grip

Scope of delivery
Article number
VLH 4245 LA 1 692 841 482
VLH 4345 LA 1 692 841 502
- 4-column lift
- Runway with integrated sliding plates and recesses for turntables
- Integrated runner for optional axle lifter
- Extended, hot-galvanized drive-on ramps for performance vehicles
Wheel Balancers

MT 837 D 18
MT 847 AD 19
MT 867 ADT 20-21

Guide to product names:
Key:

A = With Outer Arm
D = Inner Data Arm
P = Pneumatic Clamping Flange
T = TFT Screen
MT 837 D

Introductory machine with Easyfit®
Electronic wheel balancer with dual LED display to show weight dimensions and LED indicator arrows to show the compensation positions. The balancing unit supports wheels up to 70 kg with a diameter of up to 1,200 mm, a maximum rim width of 24”, and a rim diameter of 6” to 40”. A pedal brake has been designed to secure the shaft when fitting the wheel or balancing.

The associated software package includes 6 balancing programs for car rims, three of which are suitable for concealed attachment of external adhesive weights on the inside of the rim, and three special programs for concealed attachment of separated adhesive weights behind the rim spokes. For motorcycle wheels, the system provides 3 static balancing programs and 2 dynamic programs for all types of aluminium and steel rims.

The Easyfit® data arm quickly and accurately provides the rim distance and rim diameter (10 – 26”). Optionally available: external measuring arm to determine the rim width automatically (1 to 18”).

Advantages
- Electronic Easyfit® data arm to determine rim data and fit weights
- Eleven balancing programs with automatic measuring runs
- Simple attachment of concealed adhesive weights using the data arm and optical / acoustic operator control
- Split program for precise positioning of weights behind the spokes
- (1PH – 230V / 50-60Hz)
- QSP function allow to select quickly and easily the main balancing programs.

Scope of delivery

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Article number   1 694 200 373
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- Weight plier
- Basic flange with centering cone set for a central hole from 42 – 111.5 mm
- Gauge to position weights and measure width
- Weight scraper
- Aluminium rubber ring protection
MT 847 AD

Fast with Easyfix®, light and laser
Electronic wheel balancer with dual LED display to show weight dimensions and the compensation positions (LED arrows).
Light ring and laser support enable convenient adhesion or striking of the weights in all kinds of rim.
The balancing unit supports wheels up to 80 kg with a diameter of up to 1,200 mm, a maximum rim width of 24”, and a rim diameter of between 6” and 40”. A electromagnetic pedal brake has been designed to secure the shaft when fitting the wheel or balancing.
The software package includes eleven programs for static and dynamic balancing including three special programs for concealed attachment of separated adhesive weights behind the rim spokes.
The Easyfix® data arm quickly and accurately provides the rim distance and rim diameter (12 – 30”), locking the arm in the right position and avoid any kind of positioning errors.
The ergonomic data arm to measure the rim width operates within a range of between 1 – 18”.

Advantages
- Balancing in six seconds with automatic wheel brake
- Targeted and accurate attachment of all concealed adhesive weights using the Easyfix® data arm. The arm is blocked upon reaching the respective compensation level
- Integrated match program with operator control

Scope of delivery
Article number 1 694 200 797
- 3 Position laser and light ring
- Weight plier
- Basic flange with centering cone set for a central hole of 42 – 111.5 mm
- Weight scraper
- Aluminium rubber ring protection
MT 867 ADT

**Fast with TFT Monitor, light and laser**

Electronic wheel balancer with WINDOWS CE, 19” TFT monitor with appealing, easy-to-operate visualization. Light ring and laser support enable convenient adhesion or striking of the weights in all kinds of rim. The balancing unit supports wheels up to 80 kg with a diameter of up to 1200 mm, a maximum rim width of 24”, and a rim diameter of 6” to 40”. An electromagnetic pedal brake has been designed to secure the shaft when fitting the wheel or balancing. The software package includes eleven programs for static and dynamic balancing including three special programs for concealed attachment of separated adhesive weights behind the rim spokes. The Easyfix® data arm quickly and accurately provides the rim distance and rim diameter (12 – 30”), locking the arm in the right position and avoid any kind of positioning errors. The ergonomic data arm to measure the rim width operates within a range of between 1 – 18”.

**Advantages**
- Balancing in six seconds with automatic braking directly in the compensation position
- Targeted attachment of all concealed adhesive weights using the Easyfix® data arm. The arm is blocked upon reaching the respective compensation level
- Integrated match program with operator control

**Scope of delivery**

**Article Number** 1 694 200 798
- 3 Position laser and light ring
- Weight plier
- Basic flange with centering cone set for a central hole of 42 – 111.5 mm
- Weight scraper
- Aluminium rubber ring protection
The wdk-certification ensures that the required installation technology as well as training for the installation staff is inspected and certified on the basis of binding installation/removal instructions for UHP and run-flat tyres across all sectors of the industry.

As a result, wdk-certified specialist tyre retailers can call on the required, special and neutrally certified installation technology as well as specially trained and certified installation staff. To this end, particularly those retailers certified by neutral organizations are considered the specialists for UHP and run-flat high-tech tyres – and, of course, any other tyre types.
MS 65 RAC.NG ADH

With automatic demounting head and wdk certificate
Professional tyre changer with tilting, height-adjustable post. Suitable for steel and aluminium rims up to a size of 26” or a wheel diameter of 1,000 mm. Use of Tecnoroller enables you to also easily install highly developed UHP and RFT tyres up to a width of 12”.
The machine is equipped with an ADH (automatic demounting head). Operators can load the bead onto the tool without having to apply any force and without the risk of causing damage, all at the press of a button.

Advantages
• Automatic demounting head (ADH) for effortless installation and removal of even the hardest of tyres without a mounting lever
• Pneumatic tilting-back post allow for the installation of wheels with a maximum width of 12”
• Pneumatically controllable Tecnoroller auxiliary arm with two integrated pneumatic cylinders for double the power
• Flexibility and safety thanks to clamping table forward and return motions with two rotational speeds
• 3PH - 400V / 50Hz

Scope of delivery
Article number 1 692 400 001
• Roller board and inflation gun with pressure gauge
• Tecnoroller SL with wdk kit
• Bead lever
• Bead pressing device
• Plastic covers for clamping jaws demounting head and bead breaker
The brake test performed during the periodical technical inspection (PTI) helps to check the actual status of the service and parking brake. In this process, the system determines the braking force difference between the left and the right wheel of each axle.

The total brake force efficiency of the vehicle is evaluated in relation to the measured vehicle weight. The test results are compared with the PTI limit values for the corresponding vehicle category.

Brake testers integrated in a reception lane concept, can be easily expanded to a complete test lane. The optional suspension tester and side slip plate allows workshops to identify issues related to the suspension system and chassis of the vehicle.
The new German brake tester directive (10/2011) contains a section specifying that all brake testers used for PTI inspections and safety inspections in accordance with Article 29 of the StVZO (German road traffic licensing act) must be equipped with a standardized data interface developed as “asanetwork-livestream”. All Beissbarth brake testers are certified and recommended by German test organizations.
Brake tester for universal use - Ideal for service and repair work and PTI performed in workshops.

Designed for an over-drive load of four tons and for vehicles with a track width of up to 2,200 mm.

Test speeds of 4.9 km/h, compatible with state-of-the-art ESP and all-wheel drive systems. The completely hot-galvanized base unit is equipped with brake rollers coated in a plastic and corundum composite (700 mm in length), whereby the rear test roller has been installed 25 mm higher. This ensures optimum traction while keeping tyre wear to a minimum.

The analog display, brake tester and optional suspension tester can be easily connected via the BNET field bus for Plug & Play installation. The analog display with LCDs guides the operator through the test routines and shows the braking force difference, braking force per wheel, and, if using axle load scales (optional), the total deceleration.

Advantages
- Roller set with electromagnetic brake to exit with care
- Convenient super automatic mode for service and parking brake
- Automatic 4-wheel drive detection and reverse turning mode for 4WD vehicles
- Test lane upgrade for reception lane use with optional suspension tester and side slip plate
- Certified for PTI performed in workshops

BD 640-Kit Article number 1 691 600 432
(3 x 400V / 50Hz), all-wheel drive brake tester with drive-out support, remote control, and ASA livestream

Analog display with LCDs 1 691 601 169
Wall bracket for display cabinet 1 691 601 382

Accessories (optional)
PC-USB kit for connection to the workshop PC 1 691 601 386
Plug-in roller cover panels 1 691 601 010
Radio-controlled pedal force sensor to employ the reference value method (recommended for all-wheel drive vehicles) 1 691 601 401
Swivelling roller cover plates 1 691 601 011
Aluminium main column to install the analog display on the ground 1 691 601 384
Passenger car brake tester - with PC station
For the highest level of usability and efficiency in the workshop, the BD 640 PC comes fully equipped with a complete PC station incl. 19” TFT monitor, printer and PC. Managing the customer database incl. test history reports or connecting to the workshop network has never been easier.
- Automatic operator control – no need for a remote control or to key in commands
- Reference database, vehicle history, and standard values
- Graphically illustrated print-out of vehicle defects

Advantages
- Illustration of limit values to qualify brake and suspension components and provide corresponding recommendations for replacements
- Automatic axle- and vehicle load detection
- Potential vehicle defects can be graphically illustrated on the print-out
- Reference database with vehicle history and generally defined standard values

BD 640 kit Article Number 1 691 600 432
(3 x 400V / 50Hz), all-wheel drive brake tester with drive-out support, remote control, and ASA livestream

PC station (trolley, PC, 19” monitor, printer, IR receiver, BNET/USB kit) 1 691 600 464

Accessories (optional)

Theta SAT 690 axle damping brake tester 1 692 106 690
- Indirect shock absorber test in accordance with BOGE / Theta principle with a high degree of reproducibility
- Illustration of limit values to qualify damping components and provide corresponding recommendations for replacements
- Measuring range of the damping dimension “D” 0.02 – 0.3
- Maximum axle load suitable for testing: 2.2 t

SA 640
EUSAMA suspension tester 1 691 620 400
- The hot-galvanized suspension tester with integrated power electronics determines the relative grip in % in accordance with the EUSAMA measuring principle
- Measuring range: 0-30 Hz, 0-100% grip
- Maximum axle load suitable for testing: 2.2 t
Service from Beissbarth Munich:
• Immediate telephone support
• Rapid replacement parts deliveries
• Individual maintenance contracts

Factory customer service:
Beissbarth and certified partner companies provide on-site assistance with installation, instruction, equipment assembly and maintenance – with partners in more than 90 countries around the world.

Training Centre:
Instruction and training at STC of Robert Bosch GmbH, 73207 Plochingen

Software Centre:
Technical documentation, specified vehicle data and marketing material for immediate download: www.beissbarth.com

Subject to technical modification and changes to scope of delivery. Pictures may sometimes show special accessories or similar versions. Please contact your Beissbarth dealer for a binding up-to-date quotation.