

VOLVO GROUP WHEEL ALIGNMENT

INCLUDING STATIC LPOS & FLS CALIBRATION



BAD WHEEL ALIGNMENT WILL RUIN YOUR CUSTOMER'S ECONOMY!

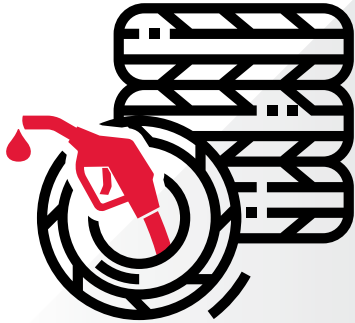
A properly aligned vehicle can reduce fuel consumption costs by up to 5%. Bad wheel alignment also increases tire wear. A wheel alignment diagnosis gives you the opportunity to plan ahead. With the help of the wheel angle measurements from a diagnosis, necessary adjustments can be made and you can avoid unnecessarily high fuel consumption and tire wear costs.

CALCULATION EXAMPLE 1

Fuel cost reduction: 3%
Mileage/year: 200 000 km
Fuel price: 1.1 EUR/litre
Fuel consumption: 4 litres/10 km
Total cost reduction/year:
 $0.03 * 200\ 000 * 1.1 * 0.4 = 2\ 640\ \text{EUR}$

CALCULATION EXAMPLE 2

Premature tire change, 2 tires/year
Tire cost: 350 EUR/tire
Cost reduction/year:
 $350 * 2 = 700\ \text{EUR}$



Estimated
fuel/tire cost
reduction per year:
3 340 EUR*

* Cost for wheel alignment not included in the calculation

Source, fuel cost reduction:
Survey performed during 2013 on 500 vehicles from 12 different companies
by the research institute TNO, Holland

WHAT HAPPENS WHEN THE WHEELS ARE MISALIGNED?



BAD STEERING CAPABILITY AND DRIVING DISCOMFORT



MECHANICAL WEAR



INCREASED AIR RESISTANCE



INCREASED TRACKING SENSITIVITY



INCREASED FUEL CONSUMPTION



TRAFFIC HAZARDOUS VEHICLE



INCREASED TIRE WEAR

VOLVO GROUP WHEEL ALIGNMENT

This compact wheel alignment system enables truck and bus workshops, as well as tire service centers, to offer wheel alignment services quickly and accurately. With our patented camera technology with the chassis center line of the vehicle as reference, the following wheel angles can be measured:

- Toe, steering box position, camber, out of square, parallelism and axle offset
- Caster, KPI, Toe Out On Turns and max turn

Enabled by the unique rolling method, toe and camber measurements may be taken while the vehicle is in driving position. No lifting of the axles with run-out compensation is required, alternatively the system can also be operated with standard run-out procedure.

Wireless technology is used for transmitting data between measuring units and the computer. The computer software guides the user through the measuring process and prints out measurement reports of values, before and after alignment.



HEAVY VEHICLE ALIGNMENT WITH CAMERA TECHNOLOGY



Description	Specification
Measuring range	
Toe	±40 mm/m
Camber	±6°
Caster	±20°
KPI	±20°
Max. turn	65°
Measuring accuracy	
Toe	±0.2 mm/m (for each camera)
Camber	±3 min (for each camera)
Operational time	14 h
Charging time	3 h
Computer requirements	See latest updated information on www.josam.se



MEASURING CASTER, KPI AND TURN ANGLES

This measurement is based on a single continuous movement of the wheels, from a straight ahead position to maximum left, via maximum right and back to the starting position.

During this procedure the built-in gyroscope and inclinometer are constantly transmitting data to the computer, which calculates the caster, KPI and turn angles in different wheel positions. The entire process can be carried out in a matter of minutes.

STATIC LPOS & FLS CALIBRATION

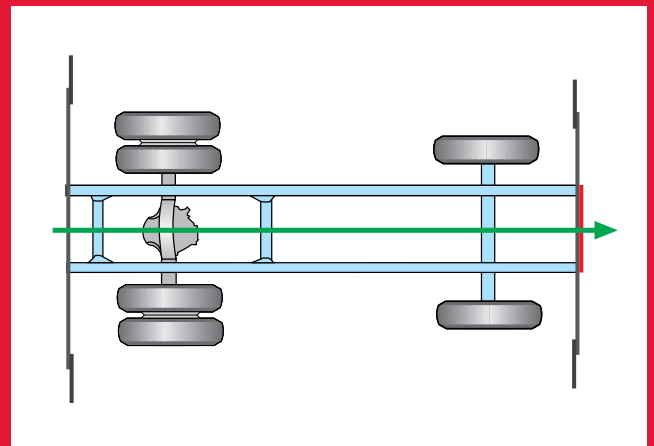
To calibrate the ADAS (LPOS & FLS) without having to drive the vehicle has many advantages:

- Only one operator is required.
- Safer, as the truck remains in the workshop.
- Avoiding traffic jams and bad road conditions.
- Supports OEM requirements on correct wheel alignment before calibration.
- Simple positioning for calibrating with Tech Tool.

MEASUREMENT PRINCIPLE AND SCALABILITY

The Volvo Group wheel alignment system uses the centerline principle to determine the position of axles and individual wheels in relation to the centerline of the vehicle.

The system is designed to measure wheel angles on commercial vehicles such as trucks, trailers, buses and light commercial vehicles.



JOSAM I-TRACK II

Wheel alignment as it should be, advanced yet simple

Josam i-track II is able to measure every vehicle from vans and buses to heavy-duty trucks and trailers, alone or in combination. It is even able to align huge construction vehicles such as cranes. The wheel alignment procedure is guided by an animated software, minimizing all possible operator's mistakes.



I-TRACK II PREMIUM

I-track II premium allows you to measure a truck with up to five axles (three steered and two rigid), or a combined vehicle with up to six axles, with the base kit.

Universal magnetic wheel adapters are quickly attached to the wheel nuts, thereby easing operation on vehicles with aluminum rims. With additional wheel adapters, even more axles can be measured.



I-TRACK II CLASSIC

I-track II classic allows you to measure a truck or combined vehicle with up to five axles with the base kit.

Universal wheel adapters are attached to the wheel rims. With additional wheel adapters, even more axles can be measured.

Technical data

Description	Specification
Measuring range	
Toe	±25°
Camber	-5° ... +10°
Caster	±20°
KPI	±20°
Max. turn	60°
Measuring accuracy	
Toe	±0.25 mm/m*
Camber	±3 min*
Operational time	12 h
Charging time	5 h

* For each measuring head

Note: To fulfill the Volvo Group demand to use the centerline as reference during wheel alignment, either centerline tool JT718 or TRAILER KIT CLASSIC should be added to the kits 16499 or 16651. See accessories on next spread.

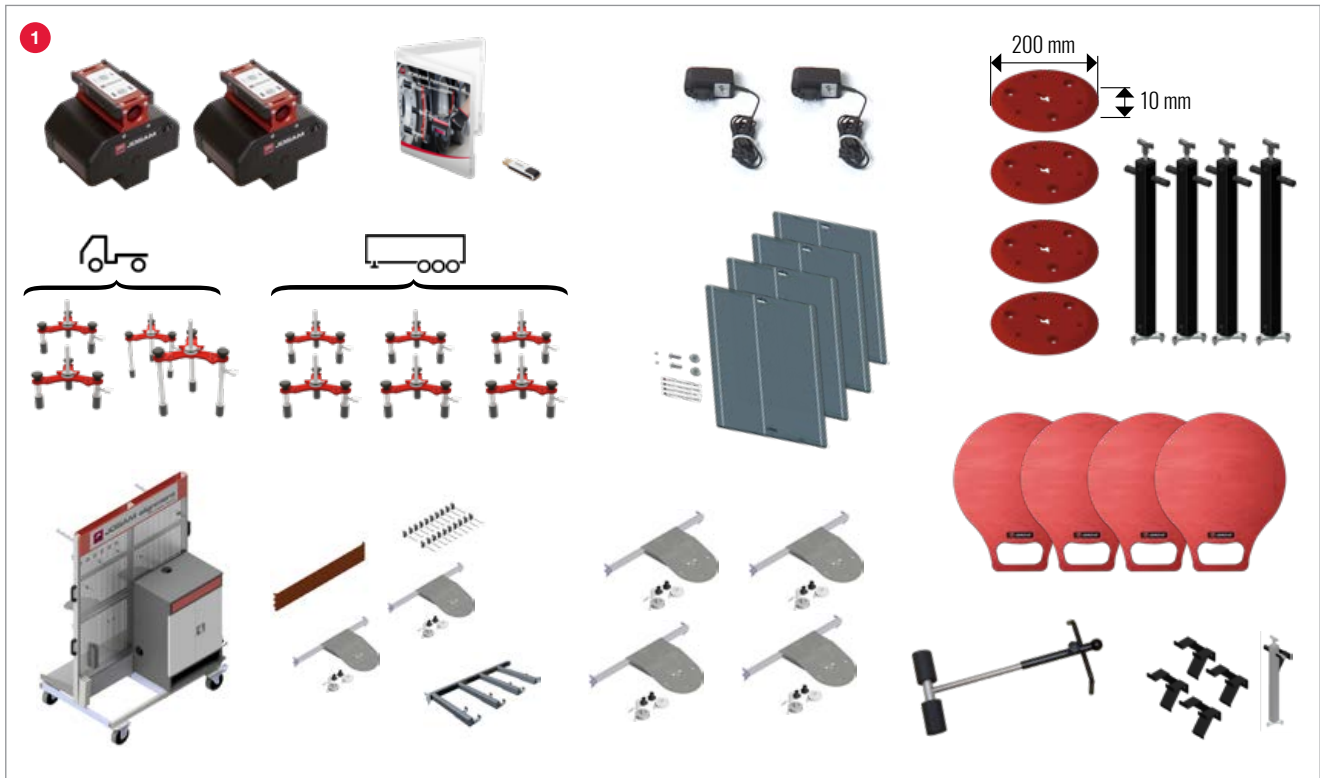
Note: Static calibration of FLS & LPOS is supported by the I-track software. Only calibration stand AM1874 needs to be added. See previous page.

I-TRACK II PREMIUM, 16651

Electronic wheel alignment and diagnostic tool
(trucks, buses and combined vehicles)



Item #	Qty #	Ref nr	Name
1	1	16651	Basic kit i-track II premium



Disclaimer: the magnetic wheel adapters JT732-1 and JT732-2 are designed to fit virtually all Volvo trucks (with standard flat nuts M22 and M24, as well as spanner sizes 33.0–37.5 mm). For domed nuts and smaller dimensions, a firm attachment can not be guaranteed.

TWO FREE WHEEL ADAPTERS!

When ordering the I-track II premium kit, two additional wheel adapters JT732-2 are provided free of charge.

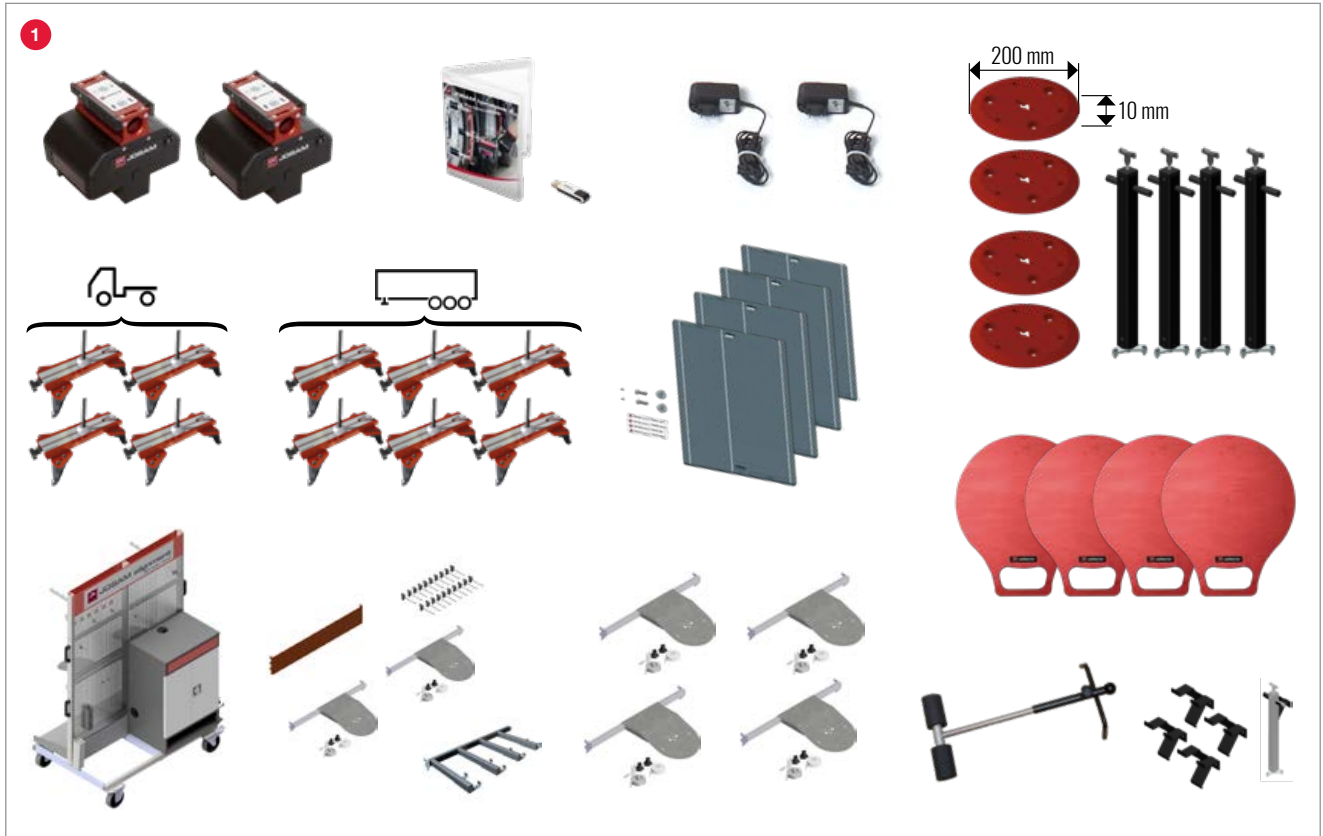


I-TRACK II CLASSIC, 16499



Electronic wheel alignment and diagnostic tool
(trucks, buses and combined vehicles)

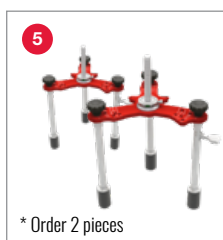
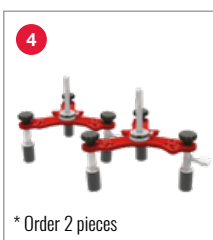
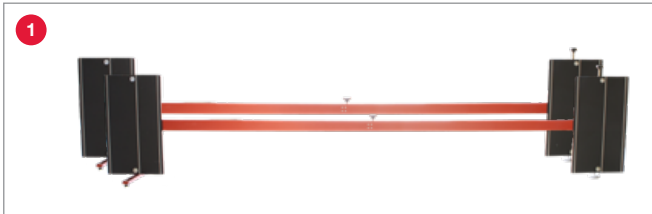
Item #	Qty #	Ref nr	Name
1	1	16499	Basic kit i-track II classic



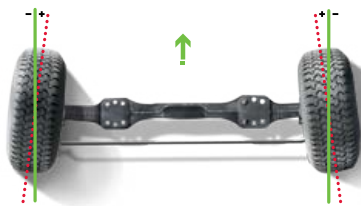
I-TRACK II, OPTIONS AND ACCESSORIES

Electronic wheel alignment and diagnostic tool (trucks, buses and combined vehicles)

Item #	Qty #	Ref nr	Name
1	1	15562 / JT717	Additional kit, mobile targets scales
2	1	15563 / JT718	Additional kit for trailer/centre line
3	1	16522 / TRAILER KIT CLASSIC	Additional kit for (semi-)trailers
4	2*	16476 / JT732-1	Magnet wheel adapter, short
5	2*	16477 / JT732-2	Magnet wheel adapter, long
6	2*	16539	Pair of wheel adapters for light commercial vehicles/vans



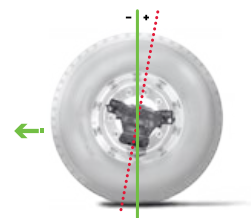
THE VOLVO WHEEL ALIGNMENT SYSTEMS CAN MEASURE THESE WHEEL ANGLES:



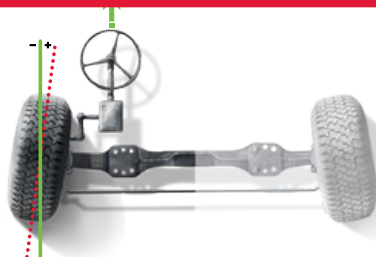
Toe



Camber



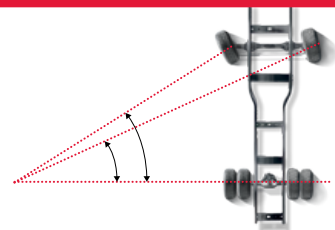
Caster



Steering gear middle position



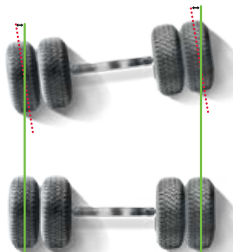
KPI



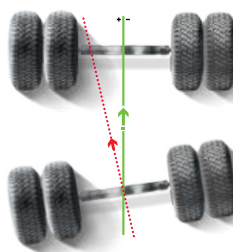
Toe-out on turn



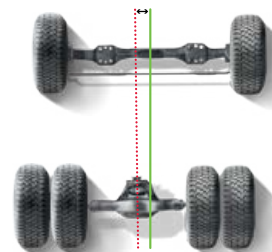
Maximum turn



Parallelism



Out of square



Offset

JOSAM IS REPRESENTED
ALL OVER THE WORLD.
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DISTRIBUTOR, PLEASE
VISIT
WWW.A-E-S-UK.CO.UK



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