

# QUICK GUIDE SWA6558

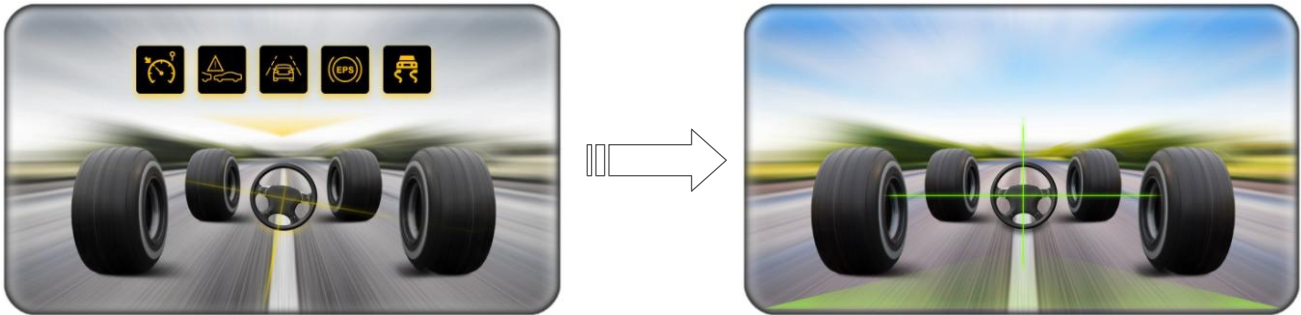
## TECHNICAL ADVANTAGES for laser steering wheel alignment



The major advantages of the product into Wheel alignment field

- **Quick installation** ( less than 7 real seconds ), shorter than all existing systems. Tool used with or without Spacer, with or without extension bar ( THEB ) . The calibration of the product is initial and remains valid regardless of the vehicle , this is one of the most advantage of the tool : fast , easy & accurate
- **Saving money / profitability / RIO inc.** : For the geometry, in addition to save time for typical operation, system provides an absolute 0 error steering wheel in straight position therefore 0 return to workshop / re-intervention. After road tests, 25% alignment operation is affected by a bad initial position of the steering wheel ( unless of course the vehicle also has another problem not detectable in static position )
- **Reliability** : exact steering wheel position regardless of the load distribution in the vehicle, general condition of the vehicle or whatever the operator .. or again, whatever the condition of the lifting system. The steering wheel positioning can be easily and accurately done, in any circumstances and by anyone due to system is clamped on vehicle frame – this is the only way to proceed correctly – then the system is unique
- **3D accuracy** : developed to exploit correctly and fully the latest technologies used in wheel alignment machines, completely “aligned” with 3D technology precision .
- **Quick check vehicle / pre-diagnosis**: workshop entry on the basis of "steering wheel not straight on a straight trajectory": in addition to the visual aspect of tire wear, coupled with a reading of the steering angle value, the tool will allow to define if only electronic angle reset is necessary or if a mechanical intervention is necessary ( *complete wheel alignment operation* )
- **“safe vehicle tool”**: Some wheel alignment procedures are connected to the power steering ECU via the EODB to claim to define a perfectly straight steering wheel. They generally also offer to "reset" the value of the steering angle sensor at the end of the procedure . On the one hand, the use of the SWA6558 makes it possible to check the correct correlation electronic angle value with the correct neutral steering wheel position (even if no DTC is present) AND on the other hand, if the electronic value of the steering wheel angle differs from that of the steering wheel positioned with the SWA6558, in addition to positioning a straight steering wheel, the SWA makes it possible to proceed with a "reset" angle in adequate conditions. A "reset" without being certain of the neutral steering wheel position has the direct consequence of calibrating a new electronic angle value of the vehicle's ECU at 0° , but incorrect. In this case, the vehicle is returned with an erroneous calibration, the consequences of which may be a steering wheel that is not straight in a straight trajectory of the vehicle, a perception of constraints in the steering assisted by the user, up to, according to the

manufacturer's strategies, turning on a DTC warning light and disable certain driver assistance devices. NOTE: A vehicle with no DTC doesn't means absolutely a neutral steering wheel position = electronic steering wheel 0° . The use of SWA is necessary in all cases .



- Handling hazards: **It is almost impossible to place the tool bar incorrectly in the vehicle. Even in the event of an error in the placement of the main bar between the vehicle openings, the steering wheel angle incidence remains less than 0.1% error ( or 0.36° steering wheel error )**

- **Self-checking tool** : 100% of users who had to place a perfectly straight steering wheel will no longer check the steering wheel position after the intervention, before uninstalling the equipment. The steering wheel may have moved despite the use of a steering wheel lock. Only 0.5 second is necessary to carry out this check, recommending the continuous ignition of the tool during the adjustment operation allowed by its extended light autonomy . ( *more than 20 complete operations* )

- **Extended and increased compatibility:** 100% coverage of the car fleet : The Spacer accessory ( <https://pype-industry.fr/spacers/> ) and THEB bar extension contained into the kit ( <https://pype-industry.fr/THEB/> ) allows this : the tool can be used on vehicles with extremely narrow roofs up to trucks. IMPORTANT: In the case of convertible-type vehicles ( without roof frame when the hood is open ), as in the case of vehicles equipped with air deflectors, the tool can be used "upside down" still without re-calibration clamped all around the window aperture , on the door : see image below . The product is particularly adapted for racing cars.



- **Customer feeling / feed back** : Reassured and reinforced on the intervention for brand image. It is more serious to prove to the customer that the garage has used specific equipment as a prerequisite than a steering wheel placement "by eye" or .. nothing. It is also possible to insert a photo of the dashboard captured during the procedure , if possible with the Key ON , proving mileage

- **A tool for the modern time** : New equipment included on cars only needs adapted tools where typically LKA , AEB technology depends directly from the steering wheel coupled to its angle sensor.



Alignment VS leveling  
[https://youtu.be/1\\_9xKbk-o4Y](https://youtu.be/1_9xKbk-o4Y)



SWA6558 Install  
<https://youtu.be/vHX5PTbNGk>



SWA initialisation  
[https://youtu.be/\\_OV\\_dwy\\_APM](https://youtu.be/_OV_dwy_APM)



T-ORG tool support  
<https://youtu.be/SL8qj0Ejn28>