



DISC ALIGNER DA9000

THE MOST PROFITABLE SOLUTION



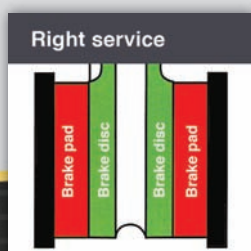
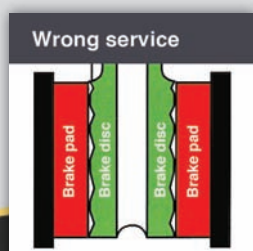
One of the major systems of a truck or bus is its brake system



Modern trucks, buses and trailers are fitted with a brake system using disc brakes. This system guarantees weight reduction, simpler inspection and maintenance, and excellent brake deceleration. The developers of new vehicles are paying increasing attention to safety, mileage cost and comfort. Balancing the brakes is essential to achieve these objectives. To keep up with these current developments MAD offers the DA 9000, the On the Truck Lathe. This machine will give your workshop a leading market position and will create extra workshop turnover and profit. Friction between the brake pads and the disc causes heat and wear on both components. Because of constant refinement of materials, assembly tolerances and quality awareness, even minor defects in disc brakes are noticed by the driver. Vibration in the steering wheel or brake pedal can be felt immediately and brake noise is audible.

Brake maintenance

A frequently heard comment is that by machining the brake discs they will be too thin. Since only about 0.2 mm is removed during the process, this is not a problem. At an average disc thickness of 45 mm, with a prescribed minimum thickness of 35 mm, this is a very small percentage. The effect is much greater, the customer does not need to be warned that his brakes have to be bedded in. The driver can immediately drive safely on the road again. Machining the brake discs creates an optimal braking surface, save new discs and there is no need to dispose off the old discs so the environment is spared.



Brake problems

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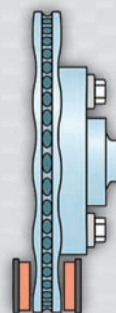
Run-out:

Is oscillation of the brake disc. This may be caused by tolerance in the brake disc and hub or by distortion of these parts by shock loads. The oscillation of the brake disc can be felt in the steering wheel. The brake disc and the brake pads are not in line!



Disc Thickness Variation (DTV):

Is the difference in thickness of the brake disc, is measured at different points in the radial plane. This phenomenon is the logical consequence of differences in material structure, run out and constant changes in brake conditions such as ambient temperature, humidity and load on materials. DTV can be clearly felt in the brake pedal. Once again, brake disc and brake pads are out of line!



Roughness:

Of the brake disc surface leads to high or low frequency vibration of the brake components. The differences in surface structure do not conform to the manufacturer specification and will result in excessive brake noise.





The right Solution The On the Truck Lathe, DA9000

The Disc Lathe DA9000, produced by MAD, avoids replacing the brake disc by realigning it while mounted on the truck, bus or trailer. Because the disc is already under thermal stress, after realigning the disc, the high temperatures will have no further effect on the disc. Replacing the disc with a new one means a high risk of thermal distortion and vibration is likely to reoccur. The only correct method to eliminate these brake problems is to realign the brake disc on the truck, bus or trailer. However, it is vital that the alignment is carried out absolutely parallel to the mounting surface of the brake calliper. This concept is ensured by the DA9000, the On the Truck Lathe. Development in accordance with leading truck manufacturers



Advantages

- Reduction of brake disc inventory, repair instead of replacement
- Completely eliminates Run-out, DTV and excessive brake noise
- Saves dismantling, re-assembly and adjustment of the brake disc, materials as well as labor costs
- Guarantees a perfect parallel adjustment between the brake pads and brake disc
- Optimal brake deceleration and safety with new brake pads
- Accepts disc thicknesses up to 50 mm
- Extra workshop turnover from vehicle maintenance, annual inspection (TÜV, MOT, RDW etc)
- No longer dependent on other firms for subcontracting work
- With repair and maintenance contracts realigning the disc on the vehicle reduces the cost price for each kilometer by realignment instead of replacement (preventive maintenance)
- A return on your investment possible within one year
- Reliable concept which has been sold to the automotive industry since 1984 and resulted in 18 worldwide homologations/ recommendations/approvals
- Developed and produced according to the ISO-9001 quality standard

Technical specifications DA9000:

Disc Lathe DL9000

Weight	7.4 kg
Maximum brake- Disc thickness	50 mm
Incremental cutting scale	0.05 mm. per click.
Feed speed	10 mm/min.
Electrical specification	230V / 50 Hz
Power	3.9 W / 18 mA
Safety class	IP.41.

Drive unit DU9000

Weight	70 kg
Working height min./max.	47 cm / 60 cm
Spindle drive speed	70 Rpm
Electrical specifications	380V / 50 Hz 5 Ph
Power	0.75 kW / 2A

Service

MAD works in conjunction with car manufacturers and so keeps up-to date with all new developments.

MAD research division tests all new car types in relation to aligning equipment. The Vehicle Information database is being updated regularly on our website:

www.mad-tooling.com

Our international service desk in the Netherlands supports a worldwide network of distributors and workshops.

