



MADe in Holland

Welcome to the World of MAD

Since 1976 MAD has been developing solutions for the automotive industry, with continuing focus on drivers. Whether it is suspension systems, clever loading solutions or brake disc aligners. Nowadays, everyone wants to drive in comfort and safety, but especially to be able to enjoy the pleasure of being behind the wheel.

MAD is a specialist company with the emphasis on customised work and quality. We start with an experienced research team and we never stop. That MAD is the choice of professionals and, incidentally, of the major inspection authorities, is confirmation of this fact. Success is not a matter of chance.

MAD products are fitted by garages throughout the world. Select distributors ensure quick delivery and after-sales service. They provide short lines of communication and quick responses to market needs. Why not put us to the test?

MAD's products come with maximum support for the car manufacturer, importer, wholesaler, garage and consumer. We're always there when you need us!

MAD is more than just a manufacturer. MAD registers, innovates and presents its products for automotive applications. Beside the MAD suspension systems MAD develops equipment and tools for optimizing brake discs. Twenty leading car manufacturers have officially chosen MAD.

In all countries of the world there are professional engineers working with this equipment. Also in this area MAD equipment is used for saving time, cost and environment in the interests of car manufacturers, importers and workshops. Ultimately, of course, consumers also benefit from this, both in safety, comfort and financially. Whoever is looking for a reliable partner chooses MAD



Guide



- | | | | |
|-----------|------------------------------------|-----------|-----------------------------------|
| 2 | Welcome to the World of MAD | 17 | Interactive Air Suspension |
| 3 | Guide | 21 | Sportive Suspension |
| 5 | Brake disc aligners | | |
| 9 | EasyLoad | | |
| 13 | Power Springs | | |





BRAKE DISC ALIGNERS



MAD Brake Disc Aligning

The most profitable solutions

Disc Aligning with MAD, still fully in demand:

As before, MAD Disc Aligners are still setting the benchmark for machining of brake discs. Whether they are used on cars, vans, trucks, busses or trailers. The many approvals from manufacturers confirm our high quality and reliability. Unique to the MAD Disc Aligners is the system of parallel mounting which guarantees precise results. The mounting on the calliper ears ensures absolute parallelism between the discs and the brakes. Other machines that use hub mounting can only achieve our exact results with strenuous external techniques.

Most car manufacturers agree that the only correct method to eliminate brake problems is to realign the brake disc on the car. However, it is vital that the aligning should be done from the mounting surface of the brake calliper ears. Like its predecessor, the DA8700, the MAD DA2002 and DA9000 are designed in consultation with the leading car manufacturers for machining to be done on the vehicle.

Characteristics of the MAD on the car brake aligners

1. Completely eliminates Run-out, DTV and excessive brake noise
2. Saves dismantling, re-assembly and adjustment of the brake disc
3. Guarantees perfect contact between the brake pads and brake disc
4. Can be used everywhere, both on a car lift or on the ground
5. Assembly on the brake calliper ears with Universal Slide Mounting
6. Fits 99% of all passenger cars and light commercial vehicles, with or without ABS



The result

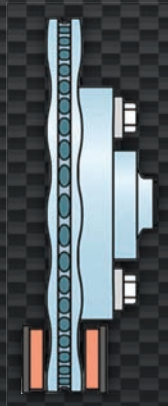
All brake problems solved in one action, requiring about 20 minutes for each brake disc, including dismantling and re-assembling the wheel.

The MAD Brake Disc Aligner has been approved and often even prescribed by most car manufacturers. The savings in repair costs, and especially the long-term satisfaction of the customer, are the decisive factors in making your choice.





Run-out



Disc Thickness Variation (DTV)



Roughness





mad

EASYLOAD



EasyLoad I No more heavy lifting!

Revolution in loading: the MAD EasyLoad onboard loading system.

The MAD EasyLoad is set to drastically alter the daily routine for companies dealing with transport issues. From now on, heavy and difficult types of loads can be loaded and unloaded by just one person. Safely and quickly and with the minimum of effort.

New opportunities present themselves. What was until now extremely difficult to load, can be handled with ease.

Invest in increased flexibility without costing the earth, and lighten the load for you and your personnel with the MAD EasyLoad. Eases lifting loads in and out and positioning them in the vehicle load area.

The MAD EasyLoad stands out against all the other loading systems. Using the electrically powered extending boom you can easily lift loads up to 250 kg and then position them in the loading area of the vehicle.

The boom and winch are operated electrically with a single press of the button. The handy mobile control unit can be operated very simply with one hand. You don't require any other equipment and you don't have to rely on the facilities available at the delivery point.



The MAD EasyLoad is not only very reliable, but it's also very cleverly designed. There is special lifting gear available such as metal clamps, hoisting straps and slings for virtually every type of load. As well as drum clamps and pallet hooks, right through to hoisting magnets.

Spare the backbone of your business.

The MAD EasyLoad relieves drivers and employees and helps avoid Health & Safety at Work problems. Especially the avoidance of back complaints which crop up as a rule with repeated lifting and sliding heavy loads.



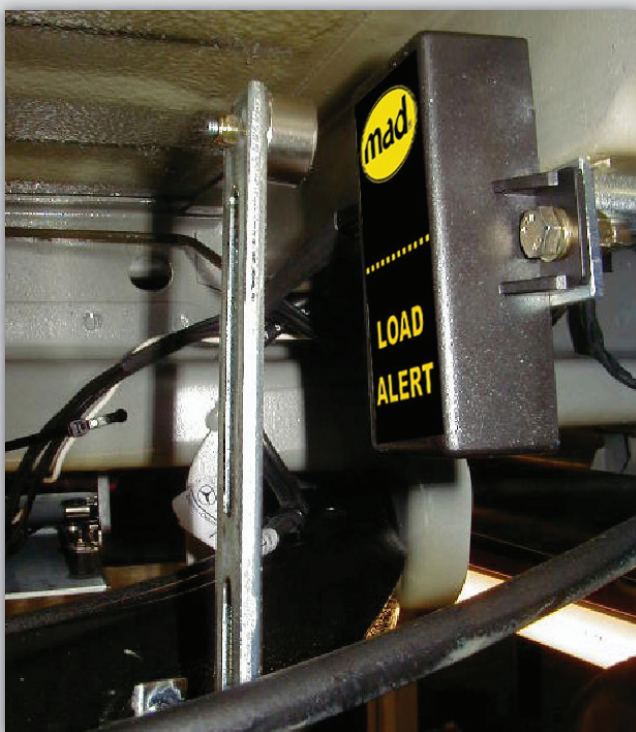


MAD Load Alert

The MAD Load Alert is an indicator which will warn the driver when the vehicle is too heavily laden.

This is done by measuring the ride-height of the vehicle. When load is added to the vehicle, the compression of the suspension will be measured.

This is done by measuring the height of the vehicle. If the vehicle is loaded, the degree of sag is measured. A sensor reads the height of the vehicle in three positions. If the height of the car is good, the green LED is activated. At maximum load, the orange LED is activated. If the car is overloaded the red LED will be activated and the driver hears a warning tone. The driver is more aware of the weight of his load.





AUXILIARY SPRINGS



MAD Auxiliary Springs

MAD Auxiliary Springs provide auxiliary suspension for any car, made to measure. They complement standard springs precisely, neither more nor less than necessary. Even though they are always there, you will never notice it. You will only miss them when they are no longer there.

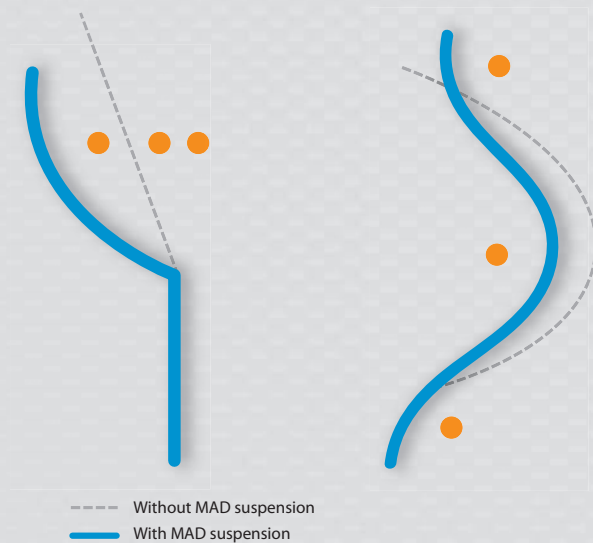
That is why experts recommend MAD, professionals install MAD and drivers who want to combine safety and comfort choose MAD Auxiliary Springs. They are designed for any type of extra load on standard car springs.

Benefits:

1. Reliability - MAD products come with lifetime warranties
2. Low cost - quick to install, no worries or construction work
3. Quality - recommended for by manufacturers
4. Specially developed for each car model.
5. Convenient, no adjustments of original springs
6. Saves on maintenance and repair costs.
7. Production in accordance with ISO and TÜV requirements



Slalom and evasive movement test with 300 Kg additional load.



**mad**[®]

Cross Country

Cross Country Springs are a highly specialised addition to the MAD Suspension Systems catalogue. Used for raising the ground clearance of the vehicle, a Cross Country Set offers the ultimate solution for anyone travelling across off-road or bad conditions. Also, a MAD Cross Country set enables a driver to negotiate obstacles like a sleeping policeman or a road curb. This applies to ambulance drivers, firemen, doctors, policemen and many more. For each set the specific car model is brought into our workshops for exact measurements and design. Here our engineers work on designing the best solution. A MAD Cross Country Set maximizes the usability of a vehicle, while maintaining both comfort and road handling.

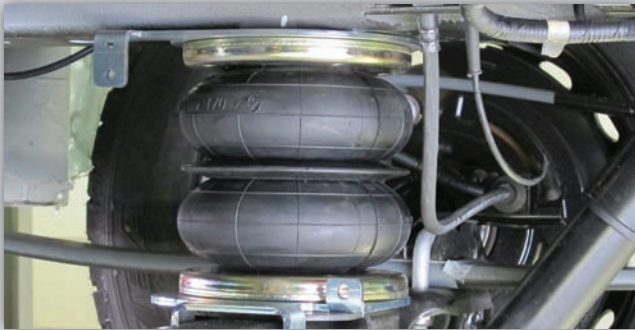


AIR SUSPENSION



Interactive Air Suspension

This is the incomparable secret of MAD Auxiliary Springs. No steel springs, only two air bellows installed with existing springs ensure that the car can be adjusted to meet the driver's needs - hard or soft spring action, high or low car, MAD Interactive Air Suspension makes it happen.



Increased comfort through optimum interactive air suspension. This can be operated easily from the dashboard while driving or en route at a petrol station. It is also possible to mount a height sensor which keeps the car level at all times. Besides the complete standard package, MAD also develops customised kits for fleets that regularly carry alternating loads.



Benefits:

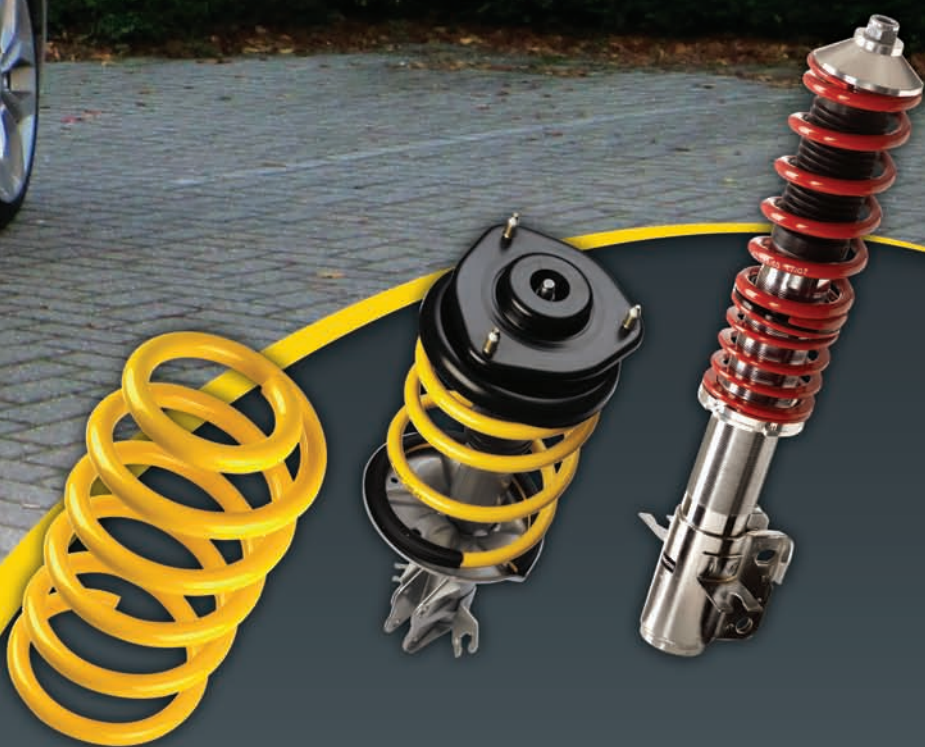
1. Original springs remain active
2. Quick installation, without construction work
3. Easy to operate
4. Gives a "warning signal" if the pressure is too low
5. Variable setting depending on load
6. Production in accordance with ISO and TÜV requirements







SPORTIEVE VERING



Lowering springs

For those who are young at heart and are looking for a sporty image without sacrificing comfort, MAD has developed a new generation of sport springs. With a single kit, you can lower the car, retain comfort and increase looks!

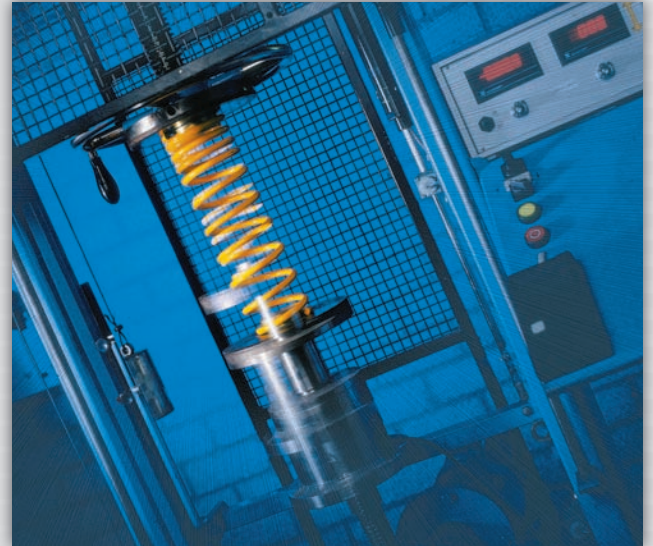
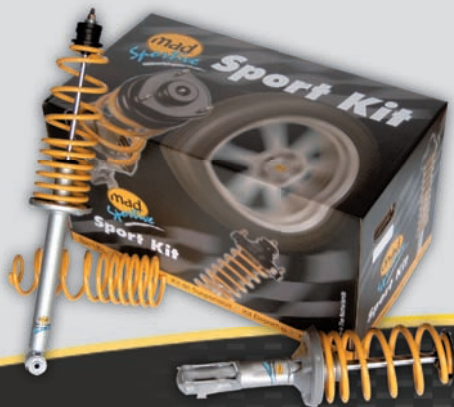
MAD can supply this new solution without any adjustment to the original shock absorbers. Sporty driving without high cost.



Sport Kits

This is the ultimate combination of aesthetics and sporty handling. MAD combines its lowering kit with a precision-tailored MAD sport damper. Lowering the centre of gravity and compensation of the spring track produces maximum interactive suspension and sharper steering.

Modification of the suspension system gives drivers unparalleled control over their vehicles. Nevertheless, a certain degree of comfort remains a condition! MAD combines all this in the sport kit. The shorter damper guarantees a larger spring travel, enabling better and longer spring action of the car.



Coil-over kits

What determines the ultimate in looks and performance of a car? What makes a ride truly yours? What makes your car really stand out in a way that only you determine? What does it take to make your car as extreme as you want? Well.....we say it's your unique idea of styling and adjustment.. Free yourself from factory presets and standard springs. Choose the freedom that Mad Maxx Coil Over suspension by MAD will offer you...

The degree of lowering can be easily and quickly altered by adjusting the position of the spring collar on the specially designed exterior thread. Using the included adjustment tool, the height can be adjusted at any time on all four points with a 20 - 80 mm range (look at the TÜV approval for the maximum lowering). This gives you the freedom to alter the appearance and driving performance of your car ...any time....any place. That's what MAD calls Maxx freedom.





The best quality

Only the best quality will do for your car! We couldn't agree more, so we place the highest demands on our development process, the materials we use and the production process. MAD Sportive is ISO 9001 certified while the Lowering Springs have been approved by both TÜV.



By matching the springs, we always put the perfect set together. All MAD lowering springs are therefore delivered with a lifetime warranty. MAD designs sets for a wide range of car models. Once a new model is on the market, our research team measures it in our workshop. Look quickly www.mad-springs.com to view our large program of spring kits.



Replacement Springs

MAD Suspension Systems is proud to present the latest addition to the suspension catalogue, Replacement Coil Springs. Through thoughtful consolidation only 1100 sets cover for more than 32.000 car models. This makes MAD even more the premier supplier of suspensions systems covering supportive, sportive and replacement demand. The new Replacement Coil Springs offer extra commercial opportunities by opening new markets and offering a complete solution for customers.

- Shorter supplies and faster revenue
- Less transport costs through 1-stop shopping
- Catalogue covers the market
- 3 years warranty *
- No copies, all technical specifications and support from our research department
- Excellent price/quality ratio
- Chrome Silicon or Chrome Vanadium springs
- Cold wound for maximum preservation of original form
- Perfect surface and anti-corrosion treatment, phosphated and powder coated (epoxy)
- TÜV and ISO 9001 certified
- Springs individually packaged in easy recognizable MAD packaging including EAN (bar) codes

* only valid with both springs on axle replaced





MAD Holding B.V.
P.O. Box 760 · 3900 AT Veenendaal · The Netherlands
Tel. (+31) 318 58 61 00 · Fax (+31) 318 54 12 13 · info@mad-tooling.com
www.mad-tooling.com