



# **INTERACTIVE SPRINGS**

AIR SUSPENSION









# Air is more than just for breathing!

Although you can't grasp air, compressed air generates a lot of power. MAD is using this for Interactive Air Suspension. Interactive Air Suspension Systems has the advantage that by simply adjusting the air pressure, the system gives exactly the support that is required for each specific load.

Interactive Air Suspension systems give the vehicle more stability and more comfort! With the system you can eliminate the negative effects of a heavily laden vehicle very easily. Simply pressing the operating button and you can create more travel for the original suspension. You will create:

- 1. More comfort due to longer spring travel
- 2. Less side wind effect
- 3. Improved stability and improved road holding
- 4. Maximum increase in ride-height at maximum load
- 5. Better brake performance due to an optimal distribution of the brake pressure
- 6. Less wear of tyres

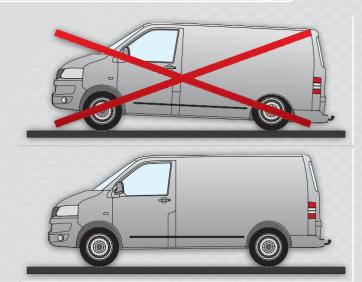
#### MAD - more than 35 years

MAD a worldwide known suspension specialist, supplies not only the valued Powersprings (Auxiliary springs) and reinforced new main springs, also a complete program of Interactive Air Suspension Systems is available. The MAD products are known due to the quality, long lifetime and improved stability and safety of laden vehicles.

With the new Interactive Air Suspension Systems no compromises are made and customer made solutions are integrated in the final products so customers are getting more value for their money. Quality, innovation and custom friendly operating are the main issues, half solutions are no solutions! The usage of MAD products is growing, with MAD you can breathe a sigh of relief!





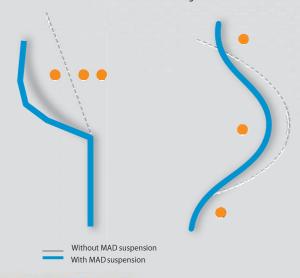


#### The tests and results are demonstrable

Specially for MAD the influence of the MAD Suspension Systems in extreme manoeuvres were tested. A heavily loaded vehicle will perform much better when equipped with MAD.

In extreme manouevres, such as a sudden evasive movement, a heavily laden vehicle will react better if equipped with MAD Interactive Air. Despite the extra weight, the vehicle is easy to steer and balance. In dangerous situations, this can make the difference between an accident or a narrow escape.

Slalom and evasive movement test with 300 Kg additional load.









#### MAD Double Chamber Air Bellow

The double chamber air bellow is used in most of the MAD Interactive Air Suspension Systems for vans and mobile homes. Fully adjustable the double chamber air bellow quarantees a comfortable and safe ride under all circumstances, laden and unladen. No minimum pressure is required and the double chamber air bellow has perfect "limp-home" qualities. Completely deflated, the bellow acts as a bump stop. Because of it's enormous power, durability and safety reserves our double chamber air bellow is used for helper air suspension kits and full air suspension kits as well. Full air suspension kits replaces the original steel coil spring. The double chamber air bellow comes with a 5 year warrantee.

- robust double chamber air bellow for the perfect support of your vehicle
- adjustable from 0,5 bar up to 6,8 bar for maximum power and comfort
- · Extremely durable

#### **SUITABLE FOR:**

Light Commercial Vehicles and Motor Homes with a restricted fitting space.



# MAD Black Air Bags

With the MAD Black Air Bags we keep your Van, passenger Van or Pick Up comfortable and safe on the road. The mentioned types of vehicles have more and more the comfort-suspension as in a passenger car. This is no problem when the vehicle is slightly laden. When heavily laden or the use of a tow bar the road holding and stability could be negatively influenced. For these situations the MAD Black Air Bags give the solution for a better ride comfort and improved safety.



#### **SUITABLE FOR:**

Light Commercial Vehicles, Pick-Ups and Motor Homes with a restricted fitting space.



## MAD Red Air Bags

The MAD Red Bags provide additional support to the original main springs preventing them from blocking and sagging. The use of the red bags will improve the stability and road holding of your vehicle. The red Air Bag is fitted as a helper (air) spring inside the open original coil spring. It doesn't matter if your vehicle is unladen, laden, is towing a trailer or caravan or is carrying a bicycle rack, by simply the adjustment of the air pressure it will provide just the extra support that is needed in all circumstances. This can be done by using a single filling valve (like a tyre) or even with a on-board compressor. The MAD red Air Bag is a flexible bellow made from durable and strong Polyurethane.



#### **SUITABLE FOR:**

Passenger cars, small light commercial vehicles and 4x4 off road vehicles.

# **MAD Basic system**

Interactive Air Suspension with one or two filling valves, the adjustment is simple, filling the system up like a regular tyre.

### **MAD Comfort System**

Interactive Air Suspension with an onboard compressor and a single or dual gauge operating panel. By pushing just one button you can regulate the inflation and deflation of the system comfortably from behind the steering wheel.

# **MAD Smart Air System**

Interactive Air Suspension System with automatic height leveling system including a compressor. With this system the vehicle maintain a programmed standard ride height under all circumstances. Laden or unladen, including a height sensor and cable looms.

# **MAD Quality**

The MAD Interactive Air Suspension Systems and allused fittingparts are made from high quality materials and fulfill all European safety regulations. MAD Holding BV is ISO-9001-NEN2008 certified and has a TÜV manufacturers certificate (approval)

All mounting brackets are laser-cut and zinc phosphated. The brackets have a excellent fitting shape and are well protected against rust.



















# International product approvals

For all sellable suspension systems MAD has a German TÜV or a Dutch RDW approval available. By testing the suspension system, by an in depended institute, the function and fitting of the supplied sets is confirmed. This underlines the quality of the MAD suspension systems and the quality image of the company.







# The alternatives from MAD.: Coil springs

To give additional support to the original suspension MAD offers a complete program of Power springs (Auxiliary springs), Cross Country Springs (to raise ) and also original replacement coil springs. Information regarding this program you can find on www.tjkarrosseri.dk