Champs are made by MOTON

2 way Clubsport
3 way Pro Motorsport
4 way Pro Motorsport

Your Local Dealer

M-Pro Racing
SUSPENSION SERVICE

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MOTON
SUSPENSION TECHNOLOGY

Contents

Company Profile

Moton is a renowned damper company headquartered in Uden, The Netherlands, with more than 40 years of experience in damper design and manufacturing that started its activities in 1999. Moton Suspension Technology develops, manufactures and markets a full range of high quality, easy to use and state of the art adjustable dampers. Moton has become a Worldwide provider of high performance shock absorbers used by many prominent manufacturers and racing teams worldwide.

With our dedicated team of specialists we can make the handling of your car live up to all your expectations. We are specialized in custom-made damper solutions, our applications are mainly used in GT- and Touring cars as well as in High Performance street cars. We provide user-friendly and efficient technology. Flexibility and hi-tech solutions are the real added values of our company.

By June of 2000, 30% of the starting field at the famous 24 hours race of Le Mans was equipped with Moton dampers and since that time many Championships were won on Moton dampers like the FIA GT and FIA Sportcar Championship, FIA ETCC and FIA WTCC Championship, Grand-Am and World Challenge Championship, 24 Hours of Spa, 24 Hours of Le Mans, 12 hours of Sebring and 10 hours of the Petit Le Mans, and not to mention numerous national GT, Touring and Club Racing events all over the world.

New for 2012!
Moton has created many product updates for 2012. With new seals and shaft coatings, Moton has reduced internal friction in the dampers often found in larger shaft dampers. Building on our new DDP technology developed from GRAND-AM road racing, a new piston design is being created that offers larger low speed control and adjustment range. Also, refinement in the rebound adjustment assembly provides more consistent adjustment with each click, easier assembly during rebuilds and choices in adjustment control. Users can choose the range of adjustment, an industry first.
These improvements take the proven Moton design into the future while preserving the history and legendary performance created a decade ago.

Maserati	
GT 3200	Aluminium, coil-over front and rear
MC12	Aluminium, coil-over front and rear

Mazda	
Protege	Steel struts front and rear
Mazda 6	Aluminium, coil-over front and rear
RX-7	Steel front struts, aluminum non coil-over rear
MX-5 Miata	Aluminium, coil-over front and rear
RX-8	Aluminium, coil-over front and rear

Mercedes	
C230	Steel front struts, aluminum coil-over rear

Mini	
Cooper / Cooper S	Steel front struts, aluminum coil-over rear

Mitsubishi	
Lancer EVO 7/8/9	Steel front struts, aluminum coil-over rear

Morgan	
Aero 8	Aluminum, coil-over front and rear

Mosler	
MT900R	Aluminum, coil-over front and rear

Nissan	
240 SX	Steel front struts, aluminum coil-over rear
Sentra	Steel front struts, aluminum coil-over rear
350 Z	Aluminium, coil-over front and rear

Pagani	
Zonda	Aluminum, coil-over front and rear

Panoz	
Esperante	Aluminium, coil-over front and rear
GTLM	Aluminium, coil-over front and rear

Pontiac	
GTO	Steel front struts, aluminum non coil-over rear
Solstice	Aluminium, coil-over front and rear

Porsche	
944	Steel struts front, aluminium coil-over rear
944 Turbo / 968	Steel struts front, aluminium coil-over rear
Early 911	Steel struts front, aluminium coil-over rear
993 RS/RSR	Steel front struts, aluminium coil-over rear
993 GT2	Steel front struts, aluminium coil-over rear
993 Turbo	Steel front struts, aluminium coil-over rear
964 RS America	Steel front struts, aluminium coil-over rear
928	
935	Steel struts front, aluminium coil-over rear
962	Steel struts front, aluminium coil-over rear
Boxser / Boxster S	Steel struts front, aluminium coil-over rear
996 GT3 Cup	Steel front struts, aluminium coil-over rear
996 GT3-R / GT3-RS	Steel front struts, aluminium coil-over rear
996 GT3-RSR	Steel front struts, aluminium coil-over rear
996 GT2 Twin Turbo	Steel front struts, aluminium coil-over rear
997 GT3	Steel front struts, aluminium coil-over rear
997 GT3 Super Cup	Steel front struts, aluminium coil-over rear
997 RS	Steel front struts, aluminium coil-over rear
997 RSR	Steel front struts, aluminium coil-over rear
Cayman / Cayman S	Steel struts front and rear
Carrera GT	Aluminium, coil-over front and rear
GT1	Aluminium, coil-over front and rear

Renault	
Clio	Steel front struts, aluminum coil-over rear
Clio Cup	Steel front struts, aluminum coil-over rear
Clio (mid-engine)	Steel struts front and rear
Megane	Steel front struts, aluminum coil-over rear

Saleen	
S7R	Aluminum, coil-over front and rear

Skoda	
Octavia RS	Steel front struts, aluminum non coil-over rear

Suzuki	
Swift	Steel front struts, aluminum non coil-over rear

Subaru	
Impreza STI 2004	Steel struts front and rear
Impreze STI 2005 >	Steel struts front and rear

Toyota	
Celica	Steel front struts, aluminum coil-over rear
Supra	Aluminum, coil-over front and rear
MR-2 Spider	Steel struts front and rear

Ultima	
GTR	Aluminum, coil-over front and rear

Volkswagen	
Golf R32	Steel front struts, aluminum coil-over rear
Jetta / Bora	Steel front struts, aluminum coil-over rear
Passat V8 star	Aluminium, coil-over front and rear

* please contact us for other applications, many more available. Everything can be custom build to your requirements, please sent samples or drawings

Motorsport applications

Motorsport 3/4 - Way adjustable

Acura	
Integra Type R	Aluminium, coil-over front and rear
Integra GSR	Aluminium, coil-over front and rear
RSX Type R	Steel struts front, aluminium coil-over rear
NSX	Aluminium, coil-over front and rear
TSX	Aluminium, coil-over front and rear

Alfa Romeo	
147	Steel struts front and rear
155 STW	Steel struts front, aluminium coil-over rear

Audi	
A4 Quattro	Aluminium, coil-over front and rear
S4	Aluminium, coil-over front and rear
TT	Aluminium, coil-over front and rear

Aston Martin	
DB4 MK1	Aluminium, coil-over front and rear
DBRS9	Aluminium, coil-over front and rear
DBR9	Aluminium, coil-over front and rear

BMW	
E30 - E30 M3	Steel struts front, aluminium coil-over rear
E36 - E36 M3	Steel struts front, aluminium coil-over or non coil-over rear
E46 - E46 M3	Steel or Aluminium struts front, aluminium coil-over or non coil-over rear
E60 - E60 M5	Steel front struts, aluminium coil-over rear
E63 - E63 M6	Steel front struts, aluminium coil-over rear
E87 - E87 diesel	Aluminium front struts, aluminium coil-over rear
E90	Steel or Alu. front struts, alu. coil-over rear
E92 - E92 M3	Steel or Alu. front struts, alu. coil-over rear
Z3 - Z3M	Steel front struts, aluminium coil-over rear
Z4 - Z4M	Steel front struts, aluminium coil-over rear

Chevrolet	
Camaro	Aluminium non-coil over front and rear
Corvette C4	Aluminium, coil-over front and rear
Corvette C5 - C5 Z06 - C5-R	Aluminium, coil-over front and rear
Corvette C6 - C6 Z06 - C6-R	Aluminium, coil-over front and rear
Lacetti WTCC	Steel struts front and rear

Chrysler / Dodge	
Neon SRT-4	Steel struts front and rear
Viper SRT-10	Aluminium, coil-over front and rear
Viper RT-10	Aluminium, coil-over front and rear
Viper GTS / GTS-R	Aluminium, coil-over front and rear
Viper Comp. Coupe	Aluminium, coil-over front and rear

Ferrari	
308 - 328	Aluminium, coil-over front and rear
348	Aluminium, coil-over front and rear
355	Aluminium, coil-over front and rear
360 Challenge - GT	Aluminium, coil-over front and rear
430 Challenge - GT	Aluminium, coil-over front and rear
550 - 550 prodrive	Aluminium, coil-over front and rear
575	Aluminium, coil-over front and rear
F40	Aluminium, coil-over front and rear
F50	Aluminium, coil-over front and rear
333 SP	Aluminium, coil-over front and rear

Ford	
Focus	Steel struts front, aluminium coil-over rear
Mondeo	Steel struts front, aluminium coil-over rear
GT40	Aluminium, coil-over front and rear
Mustang	Steel struts front, aluminium coil-over rear

Honda	
Civic SI	Aluminium, coil-over front and rear
Civic Type R	Steel struts front, aluminium coil-over rear
Civic	Steel struts front, aluminium coil-over rear
Prelude	Aluminium, coil-over front and rear
Accord Type R	Aluminium, coil-over front and rear
S2000	Aluminium, coil-over front and rear

Hyundai	
Tiburon	Steel struts front and rear

Infinity	
G35	Aluminium, coil-over front and rear

Lamborghini	
Diablo	Aluminium, coil-over front and rear
Gallardo	Aluminium, coil-over front and rear

Lexus	
IS 250 - IS 300	Aluminium, coil-over front and rear
GS 350	Aluminium, coil-over front and rear
SC 430	Aluminium, coil-over front and rear

Lotus	
Elise MK 1,2,3	Aluminium, coil-over front and rear
Exige	Aluminium, coil-over front and rear
Esprit Turbo	Aluminium, coil-over front and rear
GTP	Aluminium, coil-over front and rear

Marcos	
Mantis	Steel struts front, aluminium coil-over rear
LM600	Aluminium, coil-over front and rear

Design Philosophy

Large piston rod diameter for more fluid displacement

Since suspension travels are so small on most modern race cars the Moton damper compensates for less travel by increasing the diameter of the piston rod and thus the displacement of fluid, making it much more responsive at low damping velocities and making the adjustments done to the damper very responsive and noticable to the driver.

Gas pressure for an added lifting force

In other damper designs the function of gas pressure is to keep the fluid compressed and to prevent it from cavitations. In the Moton damper it serves a different function. When the gas pressure in the adjustable reservoir works against the cross section of the piston rod it results in an added lifting force on each corner of the car. This lifting force is offering a support to the main spring. The Moton damper is able to carry part of the weight of the car, permitting the use of softer main springs.

External reservoir with integrated blow off valve system

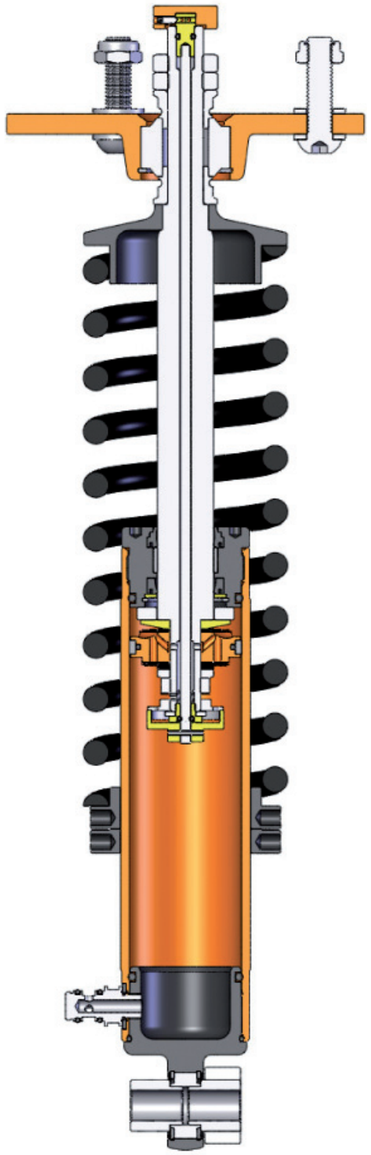
The bump adjuster is located on top of the reservoir. The internal blow off valve system is designed to handle the large fluid displacements caused by the large piston rod diameter and responds to the smallest movements of the rod. It makes the car handle very smoothly over curb stones and bumpy tracks without upsetting it.

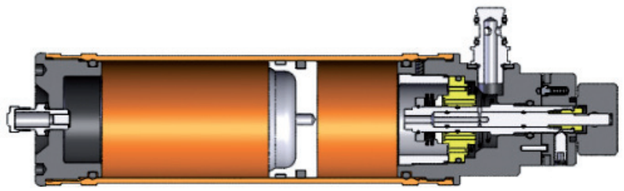
Rebound adjuster closing of precisely drilled orifices

The rebound adjuster is located on top of the piston rod. Turning the knob opens or closes precisely drilled orifices one by one below the piston. Closing off pre-measured orifices is a secure way of keeping the adjustments equal between dampers on the right and left side of the car.

Non pre-loaded double valve stack

The rebound and compression stack are non pre-loaded and build up in two phases. The primary stack controls the low speed dampening and the secondary stack the mid- and high speed velocities. Both are seperated by a small valve to work independably from each other. Non preloading the stacks results in better tire wear, tire temperatures and traction.





4-Way Pro Motorsport dampers

Introduction

The 4-Way adjustable Motorsport damper has been developed over the last few years in conjunction with many professional racing teams all over the World.

After winning the FIA European Touring Car Championship (ETCC) in 2004 with our Triple adjustable damper, we designed and developed this unique 4-Way damper with Andy Priaulx's Team in preparation of the 2005 FIA World Touring Car Championship (WTCC). The rest is history and the 2005, 2006 and 2007 FIA WTCC title was clinched by Andy Priaulx running the Moton 4-Way damper system.

The 4-Way adjustable Motorsport damper is available as a McPherson Strut in either Aluminum or Steel or as a Aluminum Coil-over damper. It can be custom built to your specifications. The Moton 4-Way damper features seperate low- and high speed bump and rebound control. The 2 rebound adjusters are located on top of the piston rod and adjust completely independably from each other. Both low- and high speed rebound do have a adjustment range of 20 clicks each. The 2 bump adjusters are located on top of the reservoir, the low speed bump can be adjusted into 6 different settings by turning the small knob on top of the reservoir. The high speed bump can be adjusted into 15 different settings by turning the large knob on top of the reservoir

The 4-Way damper is featuring a unique double piston design. The primary large main piston does have a double non preloaded valve stack on it for bump and rebound control and is designed for quick reponse during the smallest movement of the piston. The secondary piston is designed with the use of a unique blow off valve system for high speed rebound control. The low speed rebound is controlled by adjusting an internal needle valve.

Features

- Seperate Low- (6) and High (15) speed bump control
- Seperate Low- (20) and High (20) speed rebound control
- Double piston design
- Unique blow off valve system in both bump and rebound
- Large piston rod diameter for more fluid displacement
- Adjustable gas pressure for added lifting force
- Large main piston for quick response
- No preloaded valve stacks needed for low speed damping control
- Swivel banjo hoses for easy installation of remote reservoirs
- Optional DLC anti-friction coating
- DDP Technology piston options for adjustable shim preload, provides variable low speed adjustment for more body control

Benefits

- Improved traction, higher grip level
- Improved curn stone and bumpy track control
- Improved tyre wear over race distance
- Easy to adjust and work with
- Every single adjustment done is very noticable to the driver
- Proven reliability

2way ClubSport applications

Audi		
Part #	Model	Remarks
M 511 000	A4 Quattro / S4 (B5)	Struts front, coil-over rear

BMW		
Part #	Model	Remarks
M 505 104	E30 - E30 M3	Struts front, coil-over rear
M 505 060	E36 - E36 M3	Struts front, non coil-over rear
M 505 061	E36 - E36 M3	Struts front, coil-over rear
M 505 030	E46 - E46 M3	Struts front, non coil-over rear
M 505 031	E46 - E46 M3	Struts front, coil-over rear
M 505 106	E60 - E60 M5	Struts front, non coil-over rear
M 505 120	E63 - E63 M6	Struts front, non coil-over rear
M 505 107	E90	Struts front, non coil-over rear
M 505 114	E92	Struts front, non coil-over rear
M 505 115	E92 M3	Struts front, coil-over rear
M 505 110	Z4 - Z4M	Struts front, coil-over rear

Chevrolet		
Part #	Model	Remarks
M 503 017	Corvette C4/C5/C6 Z06	Coil-over front and rear (can be used as non coil-over)

Dodge		
Part #	Model	Remarks
M 501 052	Viper SRT-10	Coil-over rear front and rear

Ferrari		
Part #	Model	Remarks
M 508 111	308	Coil-over front and rear
M 508 090	355	Coil-over front and rear
M 508 100	360	Coil-over front and rear
M 508 113	430	Coil-over front and rear
M 508 110	550 / 575	Coil-over front and rear

Ford		
Part #	Model	Remarks
M 517 003	Mustang '99 - '04	Struts front, non coil-over rear
M 517 005	Mustang '99 - '04	Struts front, coil-over rear
M 517 006	Mustang '05 >	Struts front, non coil-over rear
M 517 004	Mustang '05 >	Struts front, coil-over rear

Honda		
Part #	Model	Remarks
M 504 090	S2000	Coil-over rear front and rear

Mazda		
Part #	Model	Remarks
M 521 002	RX-8 / MX-5 Miata	Coil-over front and rear

Mitsubischi		
Part #	Model	Remarks
M 526 000	Lancer EVO 7/8/9	Struts front, coil-over rear

Nissan		
Part #	Model	Remarks
M 502 023	350Z	Coil-over front and rear

Porsche		
Part #	Model	Remarks
M 500 065	944 Turbo / 968	Struts front, coil-over rear
M 500 072	993	Struts front, coil-over rear
M 500 012	964	Struts front, coil-over rear
M 500 042	996 road / track version	Struts front, coil-over rear
M 500 040	996 track version	Struts front, coil-over rear
M 500 041	996 Turbo	Struts front, coil-over rear
M 500 126	997 road / track version	Struts front, coil-over rear
M 500 129	997 track version	Struts front, coil-over rear
M 500 133	997 Turbo	Struts front, coil-over rear
M 500 052	Boxster / Boxster S	Struts front and rear
M 500 131	Cayman / Cayman S	Struts front and rear

Subaru		
Part #	Model	Remarks
M 531 000	Impreza WRX STI '04	Struts front and rear
M 531 001	Impreza WRX STI '05 >	Struts front and rear

Volkswagen		
Part #	Model	Remarks
M 532 000	Golf (IV) R32	Struts front, coil-over rear

Corvette Z06

Clubsport dampers

Introduction

The Club Sport line is designed for the serious Club racer and high performance street driver. This ulimate suspension system is by far the finest quality and best handling suspension system on the market today.

Featuring remote reservoirs for superior fluid temperature control, quick release hydraulic lines (on most models) for easy installation, seperate compression and rebound damper valving adjustment and height adjustable spring perches, this kit is beyond the more common coil-over systems on the market. If your driving can benefit for the ultimate in suspension tuning, then this kit is for you.

The Cubsport damper features 15 positions of bump adjustment on the remote reservoir and 15 positions of rebound on top of the piston rod. Each adjustment done to the damper is very noticable to the driver. Our Clubsport dampers are designed to be uncomplicated, easy to use and to deliver the absolute best performance. The Clubsport dampers perform really well at low speed as well as high speed velocities which gives you total control regardless of the conditions. The reservoir is connected by a high pressure hose and is equipped with swivel banjo's for easy installation of the canisters in the car regardless of the position. The damper bodies are produced from the highest quality steel or aluminium. The shaft are induction hardened and chrome plated. The canister pressure can be varied between 6 - 18 bar (100 - 300 psi) to help support the car in high speed cornering with soft springs.

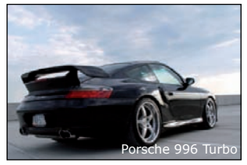
Features

- Seperate Bump (15) and rebound (15) control
- Ride height adjustable
- Unique blow off valve system in remote reservoirs
- Large piston rod diameter for more fluid displacement
- Adjustable gas pressure for added lifting force
- Large main piston for quick response
- No preloaded valve stacks needed for low speed damping control
- Swivel banjo hoses for easy installation of remote reservoirs

Benefits

- Comfortable on daily roads
- Easy to adjust to a real race setup
- Easy to work with
- Every single adjustment done is very noticable to the driver
- Proven reliability
- Wide range of spring rates can be used
- Improved platform stability
- Improved traction, higher grip level
- Improved curb stone and bumpy track control
- Improved tyre wear

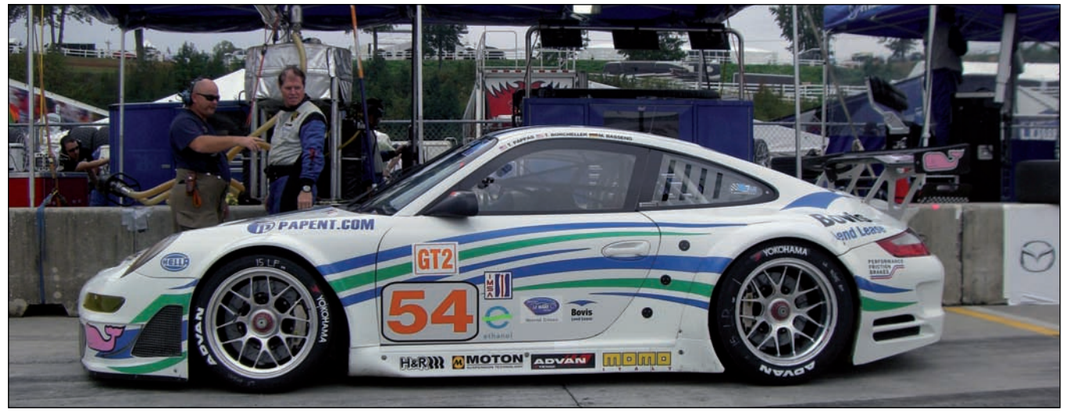
MOTON CLUB SPORT


Porsche 996 Turbo

3-Way Pro Motorsport dampers

3-Way Pro Motorsport

The 3-Way adjustable Moton damper features 15 positions of high speed bump, 6 positions low speed bump and 15 positions of rebound adjustment. The low speed bump adjuster is located on top of the high speed bump adjuster and can be adjusted independably. The low speed bump adjuster is very effective in helping to control body roll while adding to turn in and is effective in controlling pitch and squat. The 3-Way adjustable Moton damper is using, like the double adjustable damper, a unique blow off valve system in the canister to totally control curb stones and bumpy track conditions.
The reservoir is connected by a high pressure hose and is equipped with swivel banjo's for easy installation of the canisters in the car regardless of the position. The damper bodies are produced from the highest quality steel or aluminium. The shaft are induction hardened and chrome plated. The canister pressure can be varied between 6 - 18 bar (100 - 300 psi) to help support the car in high speed cornering with soft springs.



Features

- Seperate Bump and Rebound control
- Unique blow off valve system in canister for high speed bump control
- Large piston rod diameter for more fluid displacement
- Adjustable gas pressure for added lifting force
- Large main piston for quick response
- No preloaded valve stacks needed for low speed damping control
- Swivel banjo hoses for easy installation of remote reservoirs
- Optional DLC anti-friction coating
- DDP Technology piston options for adjustable shim preload, provides variable low speed adjustment for more body control

Benefits

- Improved platform stability
- Improved traction, higher grip level
- Improved curn stone and bumpy track control
- Improved tyre wear over race distance
- Easy to adjust and work with
- Every single adjustment done is very noticable to the driver
- Proven reliability

Pressure Gauge

Customers should never go to the track without a nitrogen gauge.
Simple tools can help you tune your dampers at the track.
Moton rebuild tools are available for advanced technicians who choose to perform service work.

NOTE: You must be trained by Moton to purchase rebuild parts or service tools.