FULL-LENGTH / RIDE HEIGHT ADJUSTABLE

Full-length ride height adjustment system allows shock absorber overall length and spring preload to be adjusted separately. In Fig. 1. the ride height adjustment bracket (B) can adjust sitting position without changing preload adjustment lock nut (A). The stroke length (C) remains full stroke even after changing ride height.

In Fig. 2, the preload spring rate can be adjusted without changing any ride height.

Fig. 1

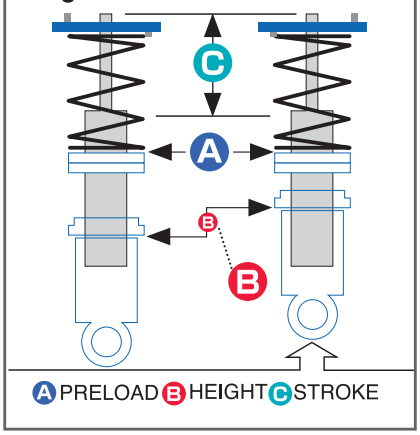
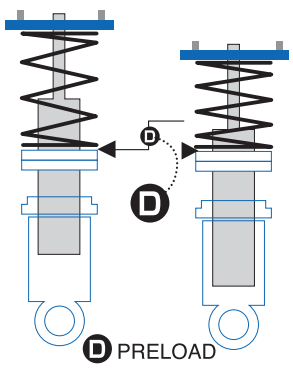
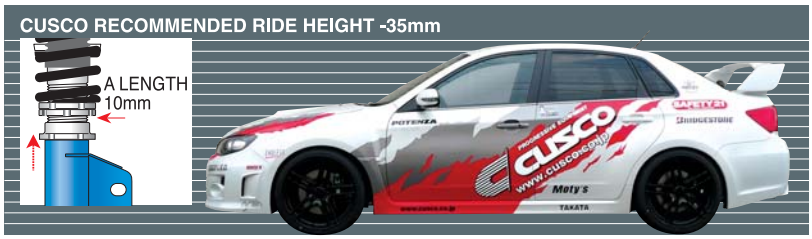
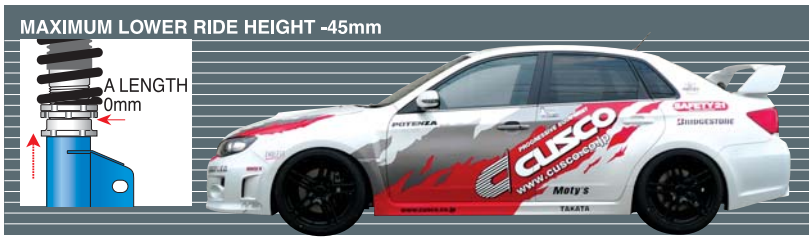


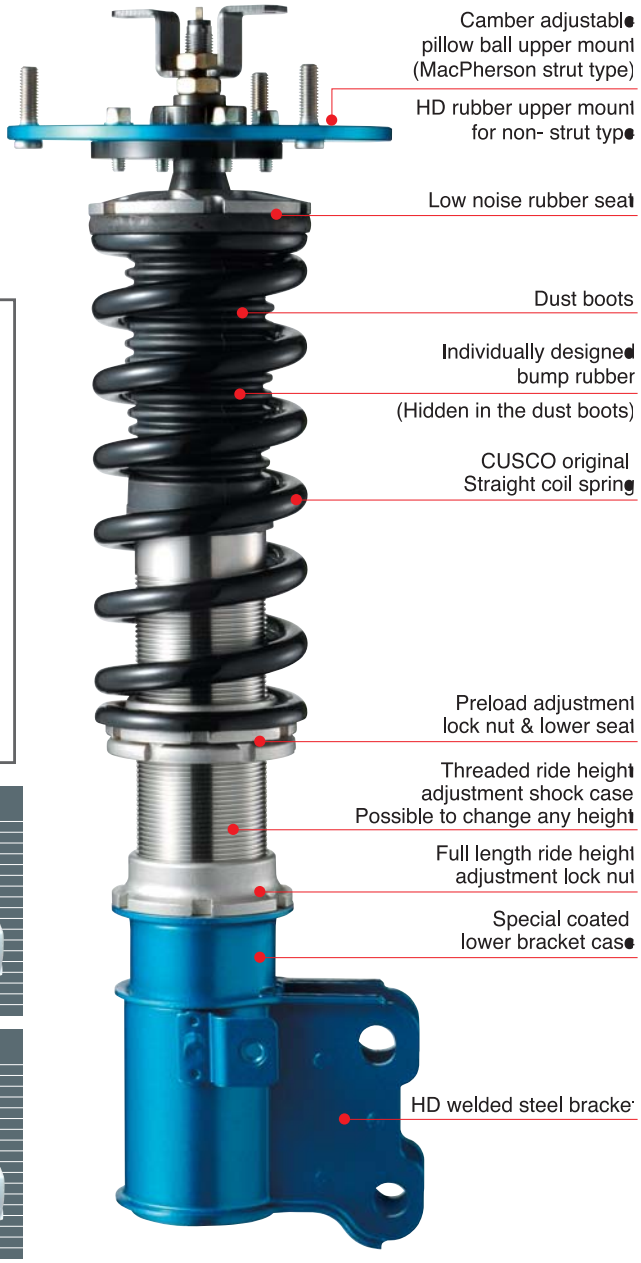
Fig. 2

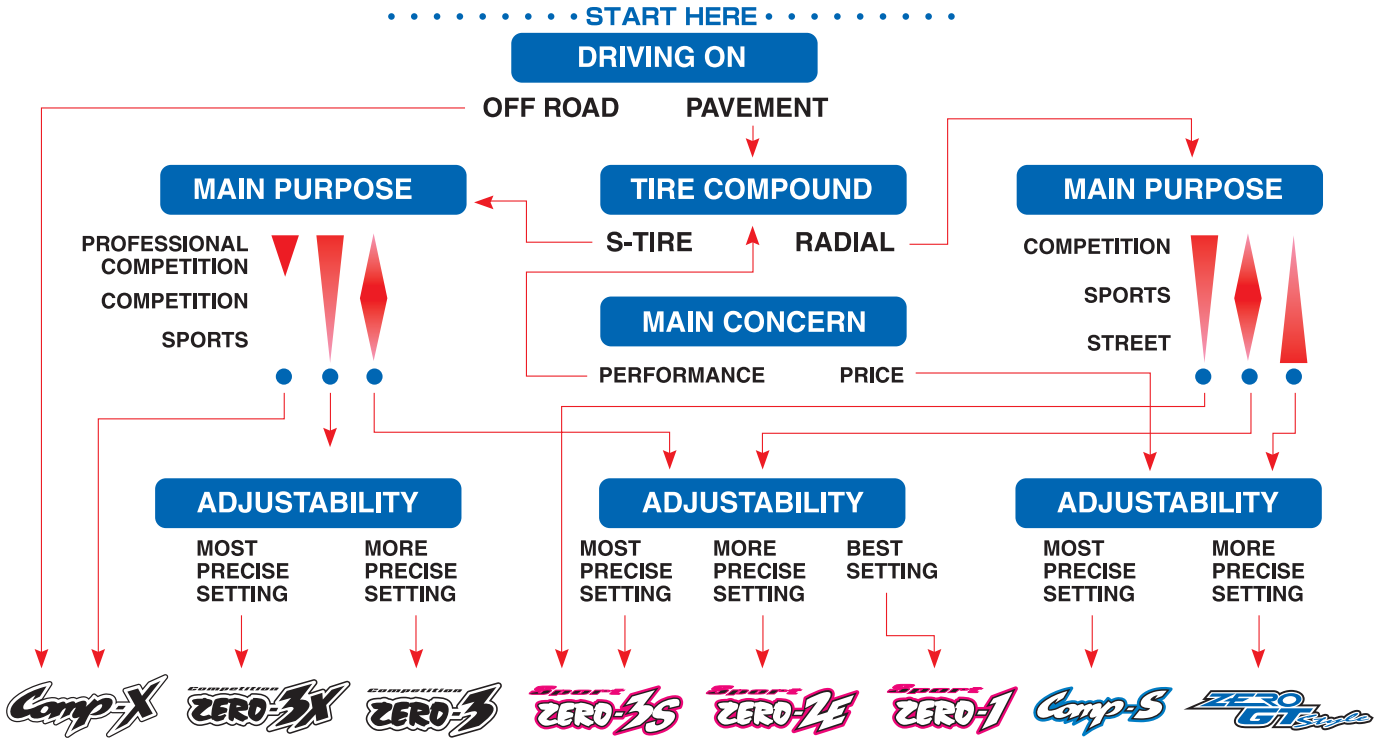


Preload can be changed without changing ride height.



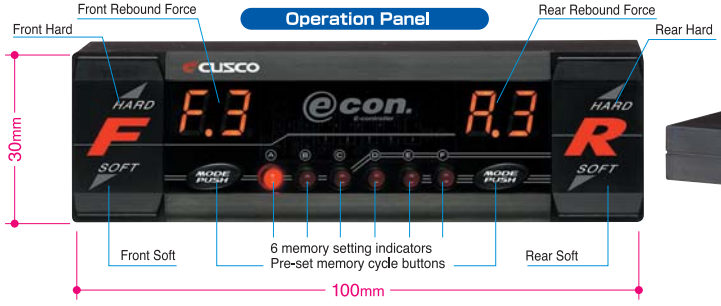


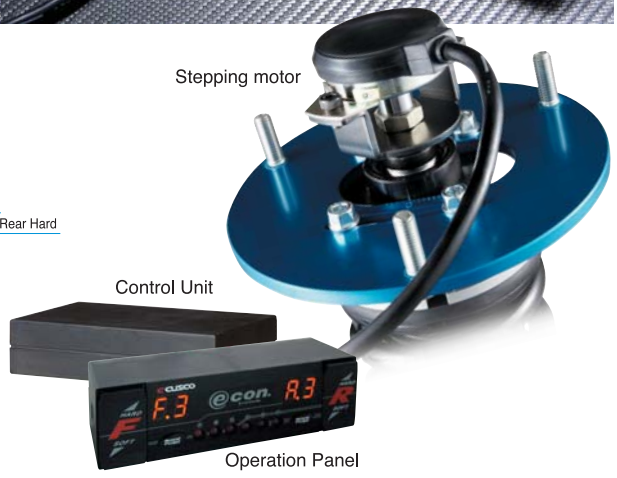




Large buttons for simple and easy operation

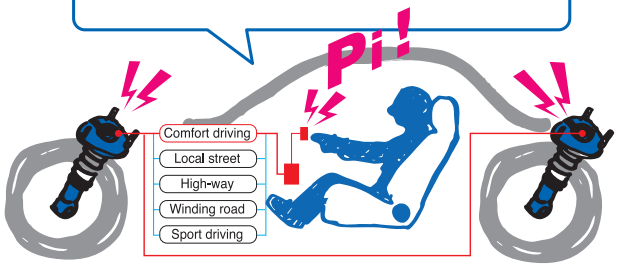
E-con can be used with ZERO-2E even already installed on the car





*Correspond to ZERO-2E

"E-Con" is possible to select damping force for the driver to select driver's driving preference and style from street to sport while in the driver's seat.



Pre-set memory system (Soft to Hard)
6 preset memories available.
Only a push of a button needed to fit any style.

Damping force adjustable
5 stage adjustment for the front and rear independently. Each shock is designed specifically for the vehicle application.(one by one adjustment operation)

Simple & easy operation panel
With the operation panel thickness being a mere30mm, installation and location options are increased. The compact control unit can easily be hidden away and out of sight.
Dimensions: W x D x H
Operation Panel: 100mm x 30mm x 30mm
Control Unit: 125mm x 82mm x 30mm

Large buttons for easy operation

Adjustment motor
The e-con uses high quality adjustment motors to control the rebound force quickly and accurately. The motor utilizes a special rubber cover to shield itself from dust, moisture caused from the extreme humidity and temperatures found in the engine bay. Installation is a cinch with the specially designed bracket on the ZERO-2E coilovers.

Beep sound adjustable
Confirmation sounds can be turned on or off.

Display brightness adjustable
Brightness of the operation panel can be adjusted.(also can be turned off)

Can be used with CUSCO tower brace as set
Will fit CUSCO strut bars.(Except some models. Please ask)

Function icon

FULL-LENGTH / RIDE HEIGHT ADJUSTABLE

FRONT FULL-LENGTH / RIDE HEIGHT ADJUSTABLE

Full-length / ride height adjustment system allowshock stroke length to adjust ride height and coilspring's preload to adjust initial spring rate separately. Ride height can be changed by twisting threaded shock absorber case while maintaining optimal suspension stroke. Preload can be adjusted by lower spring seat.

LOCK NUT RIDE HEIGHT ADJUSTABLE

FRONT LOCK NUT RIDE HEIGHT ADJUSTABLE

Simply adjust vehicle ride height by using lock nuts, yet giving maximum performance at entry level price.

REAR SPACER TYPE ADJUSTABLE

Simply adjust rear vehicle ride height by changing spacer of coil springs which are mounted separately from shock absorber.

PILLOW-BALL UPPER MOUNT

CUSCO Pillow Ball Upper Mount will replace the soft factory rubber upper strut mounts with solid high strength metal mounts and spherical (pillow ball) bushings. It gives quick steering response and precise driving & braking control. Especially stable steering response in assess and lane changing improved stability over bumps and holds roll in corners. Enables linear handling and keeps you on the trace line better. Camber adjustable upper plate is set for MacPherson strut suspension only.

HD RUBBER UPPER MOUNT

CUSCO Heavy-Duty Rubber Upper Mount can be used in Double Wishbone type suspension which upper mount material won?ft affect alignment change. To reduce road noise and unnecessary stress to the body & chassis, CUSCO HD rubber upper mount gives you better advantage than pillow-ball upper mount. As for needs of comfortable ride feel and affordable price range, HD rubber upper mount is one of the choice to give you wide variety of tuneability with our coil-over suspension kit.

UPPER MOUNT LESS

For someone who want to keep maximum comfort and/or save initial cost, we line-up less upper mount kit for some coil-over models.

5-STEP DAMPING FORCE ADJUSTABLE

Basic 5-step damping force adjustable model. Our precisely engineered Rotary-Valve offers wider adjustable range of selection than ordinal needle valve type shock absorbers. It gives you different options from smooth ride to high performance driving by clicking dial to change damping force.

BEST PRE-SET DAMPING FORCE

Our "Best Pre-set Damping Force" is determined by measuring and road testing many factors such as corner weight, vehicle weight transfer rate to find the best setting for each vehicle's specification and characteristics. Our best Pre-set Damping Force absorber offers you "Fun to Drive" at affordable price range.

24-STEP DAMPING FORCE ADJUSTABLE

Our newly developed mono-tube shock absorber offers 24-step damping force adjustable system. It gives you wide precise and detailed settings from street to professional competition use.

3-WAY DAMPING FORCE ADJUSTABLE
REBOUND : 24-STEPS
COMPRESSION : LOW SPEED - 24-STEPS
HIGH SPEED - 24-STEPS

CUSCO's top model shock absorber which offers 3-way major damping force adjustable as set. Low speed compression adjustment system affects body motions such as roll and pitch. High speed compression adjustment system affects fast/sudden shock movement like when hitting curb at circuit or rough road undulation. This wide range of adjustable system is able to cover from professional competition to comfort street use.

REAR 8-STEP DAMPING FORCE ADJUSTABLE

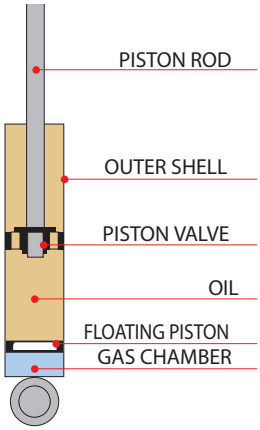
Rear 8-step damping force adjustable shock absorber is Twin-tube construction for giving both durability and performance. Our rotary valve gives you wide range adjustment from comfortable ride to competition use in any situations. The adjustment dial is located lower side of shock case and it makes easy to access to adjust damping force setting from the bottom of the vehicle. This type of shock absorber is designed and prepared for the vehicles which are hard to reach from inside of cabin or to avoid major interior modifications to reach to the adjustment dial which are mounted on the top of shock absorbers.

INVERTED TYPE SHOCK ABSORBER

Inverted type Mono-tube damper is possible to reduce the unsprung suspension weight and acquire higher rigidity of shock body construction. Also this system is possible to improve tire contact with the ground during high speed cornering or breaking than normal damper. Inverted type shock absorber is available for strut type suspension only.

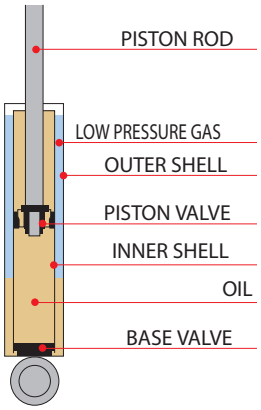
MONO-TUBE SHOCK ABSORBERS

Mono-tube shock absorbers has single cylinder which divided into a fluid area and a gas chamber. Unlike the twin-tube shock, fluid and gas is completely separated by floating piston to prevent foaming oil. The diameter of outer shell directly influence to piston valve size. It has advantage to make bigger piston valve, make stronger outer shell, and make more heat radiation than twin-tube design. The high pressure gas and the floating piston makes steady damping force, it also provides additional damping force by pushed further into the gas chamber when in aggressive movement.



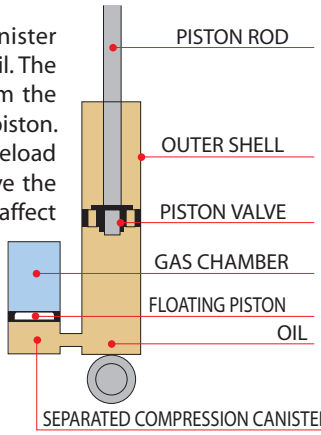
TWIN-TUBE SHOCK ABSORBERS

Twin-tube shock absorbers have two separated fluid areas; inner cylinder controls piston and shaft moving up and down. Outer cylinder works as hydraulic fluid reservoir only. Combination of Low pressure Nitrogen gas and base valves provide fluid flow control between both cylinders while main piston valve control most of damping. Twin-tube shock has longer stroke and life than Mono-tube type. Two valves damping control works great for passenger comfort.



SEPARATED COMPRESSION CANISTER

Separated compression canister contains Nitrogen gas and extra oil. The Nitrogen gas is kept separate from the fluid in the canister by a floating piston. Gas pressure works like spring preload which the force is needed to move the suspension initially but does not affect the spring rate. The extra volume of fluid makes the shocks valving all the more sensitive, even at low shaft speeds, and reduces heat building up.



COMPATIBLE WITH E-CON

It is compatible with CUSCO E-CON unit which is possible to remote control the damping force while driving. This kit especially is designed for our Zero-2E coil-over suspension kit. The kit includes Operation front panel, Control unit, Stepping motor and necessary wirings & brackets. E-CON can be installed solely with Zero-2E kit even it is installed on the vehicle already.

REBUILDABLE SHOCK

All coil-over kits are rebuildable at our own factory in Japan and we can replace internal valves and change stroke by customer's requested specification while rebuilding the shock absorbers (ZERO-3 series only).

ALTERNATIVE SPRING RATE AVAILABLE

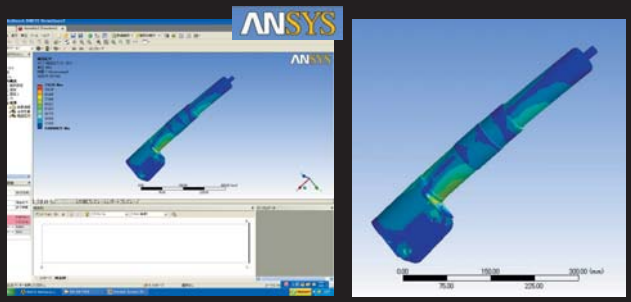
All of CUSCO coil-over kits are available alternative spring rates. Any spring rates can be requested when you order with no extra charge. CUSCO's top end of spring cut flat and smoothly and this makes high adherence to upper spring seat and makes to be able to adjust precise ride height and add helper spring if you need.

ANTI-RUST COATING

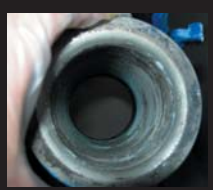
All the components which are used on CUSCO coil-over kits passed more than 500 hours of anti-rust salt spraying test. It ensures to prevent sticking bracket and cartridge together caused by rusting during adjustment work in any time and keep coil-over kit clean and last longer.

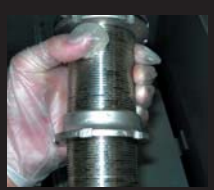
IMPLEMENTATION OF A STRENGTH SIMULATION

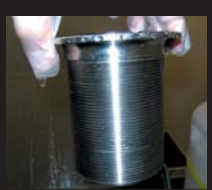
The strength of a designed and developed suspension kit is being simulated carefully by a intensity analysis system of ANSYS.



TESTED OVER 500 HOURS OF RUST AND ADHERENCE PREVENTION


Inside thread of shock body case - After test


Outside thread of shock body case - After test


Threaded spacer - After test


High concentration saltwater direct injection test