

GAS SPRINGS

Gas Springs are a mechanisms working by gas pressure and operating by pushing and pulling. They can be used everywhere instead of strong springs because of the advantages of working without vibrating, not loosening, slow movement. Besides, They are designed and used with different measurements to lift and lower each mechanism at present.

They are chosen because the manufacture is requiring colour, having good aspects and low cost etc.

Usage Area of Gas Springs

The Usage Area is unlimited by future design limitation and functionality.

At present :

- Luggage and hood carrier parts of vehicles, providing to raise, forward and back movements of passenger seats, cushion of gas pedal.
- Cabin, front and back window and door of tractor and heavy construction equipment.
- Machines, to lift up security doors, to provide movements of operating parts or to brake; instead of mold springs.
- Furniture, Office armchair (swivel), bed and some mechanism of them, kitchen cupboard, cupboard mechanism.
- Health, Hospital Beds
- Airplane sector, Trailer, Bicycle, trains, rail cars, construction

When you use gas springs, you need some knowledge and some rules. You can see some necessary information in our web page. Our technical experts have expressed all important technical details you may need. When you have further information, please do not hesitate to contact us.

When gas springs are assembled, what do we pay attention?

- ❖ Gas Springs are operated at a temperature between -30 C and 80 C.(If you have a different request, please apply to our technical experts for further help). Environmental factors can affect the long service life of gas springs.
- ❖ Gas Springs are filled with pure nitrogen. Nitrogen is an inert gas which does not burn, will not explode and is not poisonous. Gas Springs have very high internal pressure. Do not open without instructions.
- ❖ Disposal / Recycling: Gas Springs are made from metal, and manufactured without pressure and construction so that their recycling is simple.

- ❖ You must adhere to instructions on the surface of gas springs in order that the validity of the guarantee and manufacture date definitely be legible
- ❖ Gas Springs should be installed with the piston rod pointing downwards. The pistons ensure the best dampening effect
- ❖ Gas Springs must not be opened bent or affected vertically by force from one side whilst working. If it is subjected to vertical force from one side or opened, as in bending, there must be new designs for assembling
- ❖ When gas springs are maintained, grease oil, oil or water are not used.
- ❖ The Piston Rod must not be painted and must be protected against shocks, scratching and hitting. If there are unwanted events like the above-mentioned, these sealing systems will be damaged. This results in reducing of pressure inside tube.
- ❖ If Storage of the gas springs is required, the preferred storage position is with the piston rod pointing down. There will occur a stick effect if gas springs are not used for a long time. There may be more force in this situation which does away with gas springs working.
- ❖ We can make the customers's label on surface of the gas springs print free of charge upon their request.
- ❖ Our gas springs are 2 years guarantee and our guarantee period is going to be 3 years from 2006. We will take our products back against manufacturing defects or quality problems.
- ❖ Tornado is able to stock end fittings, but the specific end fittings you order can not be cancelled after manufacturing. Because these products are special and different goods for each customer are required.
- ❖ Gas Springs can be tested for high necessities and safety. While selecting gas springs, our web design panel will assist you (you can draw technical picture yourself without help).
- ❖ By using the design panel on the web page, you can design gas springs that match the measures you require. Our tolerance for extended length is ± 2
- ❖ Gas Springs are not security parts and expose corrosion. It must definitely be protected against outside affects to have a long service life.
- ❖ Do not work or wait it over 80 C.
- ❖ Pay enough attention to existing emptiness in connection place. Connections must be lubricated by grease oil in order to prevent spraining or corrosion
- ❖ End fittings are controlled for tightness before assembling
- ❖ Do not sprain the rod of the gas springs (there can occur sprain gas springs with long strokes). This must be supported by tightening.
- ❖ Gas springs must be applied to a maximum 30% of the weight of their support.