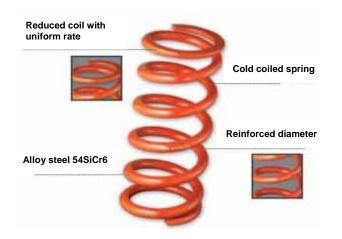




Since 1984 *transmeta* has been the number one brand of automotive suspension springs manufacturing in Peru. The success of our products is sustained in the application of german technology in the design and process of manufacturing, in addition to the use of the best steel for automotive suspension springs: Chromium Silicon (54SiCr6). Each *transmeta* spring is designed in patent german software and the manufacturing by the exclusive "cold coiling process", according to the DIN 2095 norm, used by the best international manufacturers.

The quality of the *transmeta* springs has been recognized in demanding tests carried out over our Peruvian territory such as "Caminos del Inca," "Rally Sudamericano," "Las seis horas peruanas," TATT, among other national and international tournaments.



Types of transmeta springs

- 1. Standard springs or OEM.
- 2. Sporting springs for the use in rally, circuit and off road.
- 3. Reinforced springs for extra load, armored vehicles, liquefied natural gas (LNG) and liquefied petroleum gas (LPG).
- 4. Special springs for tuning.

Spring specifications

Raw Material:	Alloy steel 54SiCr6 - AISI/SAE 9254		
Geometry and Dimension:	Wire diameter from 10.00mm to 20.00mm		
	Cylindrical form, conical, biconical, with constant and progressive rate, closed or opened ends, ground or non ground ends.		
Manufacturing:	Design assisted by patent german software.		
	Process setting.		
	Tempering process in controlled atmosphere furnaces.		
Finishing:	Electrostatic and anticorrosive paint.		

Quality Control of the suspension springs

The *transmeta* springs are tested by one assuring its optimist performance. Machines like calibrators, dynamometers, scales, microscope durometers, banks of hydraulic load are used in the process of quality control that includes stages like the entrance of raw material, loads during the process of rolling and the finished product.

Reasons to choose transmeta springs

- 1. One year (12 months) of guarantee.
- 2. Experience and recognition at a national level since 1984 in the manufacturing of springs for cars, railways, mining equipment and industries, in general.
- 3. Technical support and redesigning of springs when the original doesn't satisfy its expectations.
- 4. Quick answers to any demands or expectations of our clients.

Replacement of the suspension springs on your car

transmeta recommends:

- The replacement of all the springs in a single occasion. Failure to do so, you should make the change in pairs, whether front or rear.
- The replacement of shock absorbers during the change of springs. The manufacturers of shock absorbers recommend changing springs every two changes of those.
- Depending on the use of the vehicle it is suggested to make the replacement:

Type of use	Annual average travel	Average replacement suggested
Taxis	150 000km	Every 6 months
Personal	25 000km	Every 3 years

Mayor reasons for the replacement of springs suspension

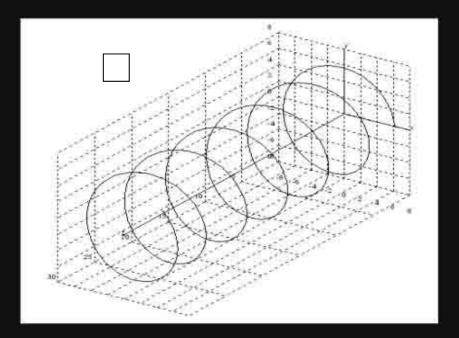
The timely replacement of the spring ensures good performance of the suspension and brake system which relies on greater comfort and safety for you and your family.

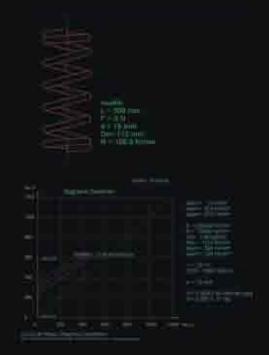
- 1. The constant use of the springs alters the centre of gravity of the vehicle producing the vehicle to require more space for braking thus increasing the chances of an accident.
- 2. Premature and irregular wearness of tyres.
- 3. Keeps the good performance of the suspension offering comfort of a new vehicle, thereby avoiding vehicle suffering from loosening, and noises produced by exposure of the vehicle structure to potholes in our city.
- 4. Avoids premature wear of shock absorbers, bearings, terminals, arms control, caps and rubber suspension.
- 5. For your security the replacement must be carried out immediately if your vehicle if the spring of your car has cracks caused by rust, broken or coils coffers clash between coils (especially at the ends).
- 6. When the vehicle has forward, back or side inclinations.
- 7. When amending the weight of the vehicle by placing LPG tank, LPG tank, shielding or because the vehicle did not satisfy. Usually vehicles with sedan version require a rear suspension reinforced when it is usual to transport two or three people in the rear part.

What you should never do

- Never alter the original resort by cutting with a blowlamp or any other way.
- The steel which the resort is fabricated by contains apart from others mineral of carbon which is lost irretrievably to the excessively warm spring, producing cracking spring during use, exposing it to accidents. If you cut a spring without raising the temperature it alters the constant load which was designed with the spring and could produce excessive "hardening" of its suspension exposing your vehicle to premature fatigue in the other component of the suspension.
- Do not use the rubber cushions when your spring is expired or fatigued. The use of these devices does not restore benefits of the suspension, it only gives a false appearance of improvement and greater economic loss to you by continuing the problem in the suspension.











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