



TECHNICAL BULLETIN

No.2

THE SPRING SPECIALISTS

FIAT PUNTO FRONT COIL SPRINGS (chassis types 188/288 1999-)

The front coil springs on the above vehicle (both OE and Kilen) are of a side load design, also known as “banana” shaped.

These springs are designed to work in conjunction with the vehicle’s angled top plate, which when positioned correctly will apply force in a manner which causes the spring to straighten.

However if the top plate is positioned incorrectly the spring will bend, which can result in it touching the inner wing and creating noise.

The following test was conducted using a 2003 Fiat Punto strut:

On both pictures the spring has been compressed to a length of 170mm, rebound is 270mm. In this test the spring was fitted with the top spring plate in the correct position and then with the plate twisted out of position by 180 degrees.



Fiat Punto front coil spring

TEST PICTURES



Correctly fitted top plate

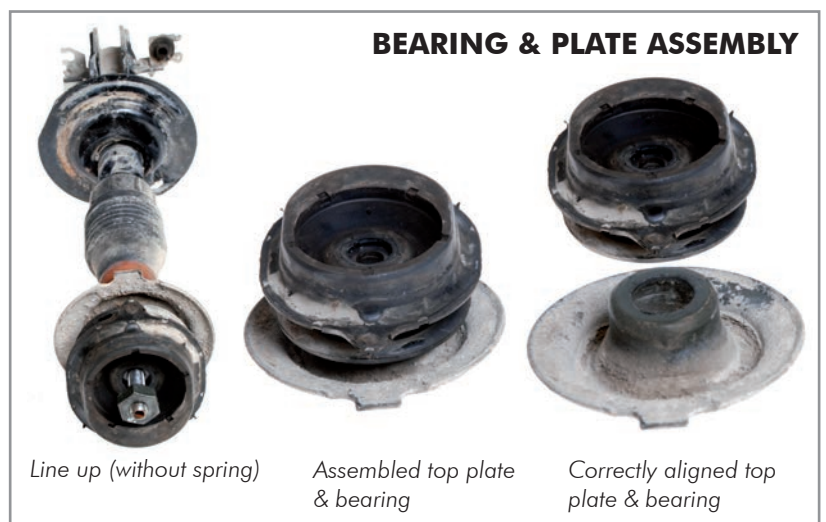
Incorrectly fitted top plate

If fitted correctly, as detailed above, the spring will straighten once force is applied to it.

Note: Although the test information detailed above relates to the Fiat Punto, the same principles apply to Fiat Stilo “banana” shaped springs - See technical bulletin No. 1

It should also be noted that the top plate and bearing are separate parts which can easily be taken apart and put together (if accidentally dropped they will normally split into two pieces), and that it is possible to rotate the top bearing into any position and still fit it to the top plate.

It is therefore important to check that the plate and bearing are lined up correctly. To do this the rubber tag on the top bearing should line up with the slot in the top plate, which in turn should line up with the bottom end fitting of the assembled strut.



BEARING & PLATE ASSEMBLY

Line up (without spring)

Assembled top plate & bearing

Correctly aligned top plate & bearing