



TECHNICAL BULLETIN No.4

THE SPRING SPECIALISTS

SIDE LOAD SPRINGS Correct Fitment

The front coil springs on some vehicles (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 demonstrates correct and incorrect fitment of a side load spring:

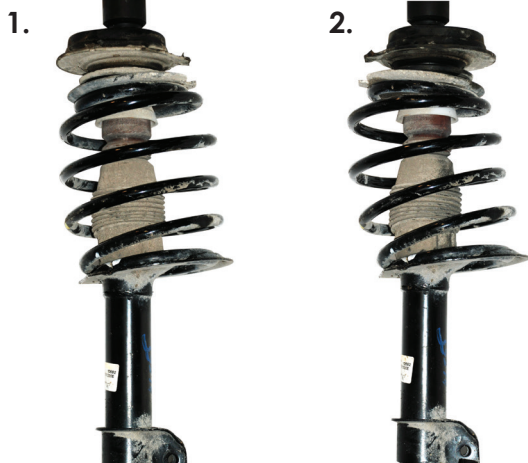
On both pictures the spring has been compressed to a length of 170mm, rebound is 270mm.

The first image shows a correctly fitted spring, with the top spring plate in the correct position. The spring straightens once force is applied.



Side-load coil spring

TEST PICTURES



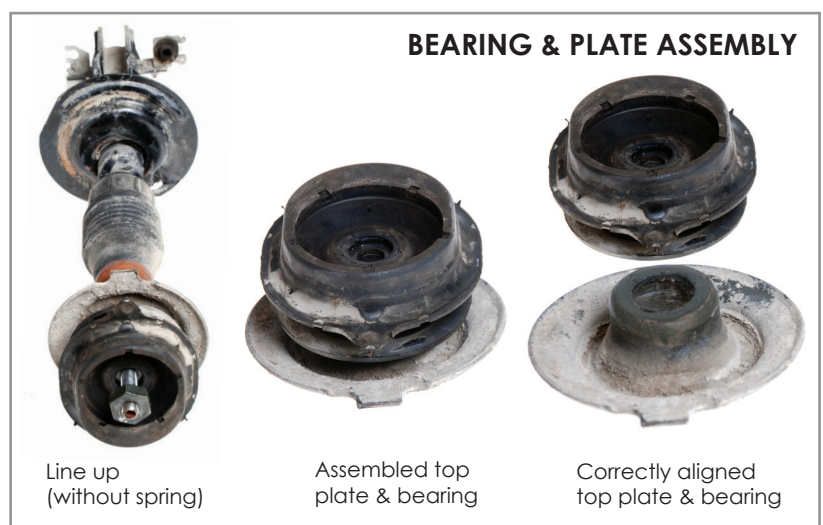
Correctly fitted top plate Incorrectly fitted top plate

The second image shows the top plate twisted out of position by 180 degrees. The spring has not straightened, and may touch the inner wing, creating noise.

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.



Line up (without spring)

Assembled top plate & bearing

Correctly aligned top plate & bearing

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