

NEUNTECH – Bilstein Conversion Collars for '87 onwards 944 and 968 Suspension

Neuntech conversion collars allow the upgrading of the stock sealed Sachs struts to accept Bilstein B6 inserts.

These threaded collars have been created specifically for the conversion of 944 Sachs suspension and have a number of design characteristics to make this conversion as easy as possible. If you encounter any problems or require advice, please contact us by email and we will be pleased to offer additional advice and assistance. We typically respond to all emails within 12 hrs.

There are 2 Bilstein strut inserts that can be used:

Bilstein code 34-000403 and 34-001042. The compression valving on both these options are identical but the rebound on 34-001042 is slightly slower and will suit applications where uprated springs are being used.

The use of the factory stock springs will maintain the standard factory ride height and the B6 inserts will deliver a slightly firmer but very predictable handling performance.

Please contact me for recommendations of uprated springs which differ across 8V and 16V platforms.



Step 1:

WARNING: BEFORE dismantling the strut assembly it is **ESSENTIAL** to remove tension from the springs by compressing the spring with spring compressors. Failure to properly compress and retain the spring can lead to serious injury.

If in doubt take to a local garage or suspension shop to dismantle the unit.



Once the spring is compressed and the top hat is loose then the strut can be dismantled. Gently prise off the plastic cover to expose 22mm strut shaft nut.



Step 2

Remove strut shaft nut.

To prevent the shaft spinning by camping it with locking pliers and undo the shaft nut with a ratchet and 22mm socket. Note: The old strut and shaft is going to be discarded so it is of no concern that the locking pliers will marr the shaft.

Alternatively the nut can in most instances be removed using a rattle gun without holding the shaft.



Now the whole strut assembly comes apart. Note the perished and split bump stop. The new Bilstein units have internal bump stops so the bump stop may be discarded.



Step 3

Hold the shaft steady in a clamping bench and get ready to cut. Putting a container below is a smart idea because we are about to get messy! The Neuntech insert comes with an alignment guide to assist in cutting the strut body to the correct length. Align the cutting guide decal with the underside of the cap.



A sharp new blade in your hacksaw makes this easy work. Turn the strut body as required to cut carefully along the guide line. The insert collar is designed to accommodate +/-2mm of error but the aim is to keep to the black line.

Here comes the mess!



Step 4

Once you have cut round the strut you can pull out the internals. They are going in the bin!



Tidy up the edge of your cut with a file, put a slight bevel on the outer edge and sand back the paint approximately 10mm from the cut in preparation for welding of the collar.



Step 5

Insert threaded collar into strut body and tap into place with a rubber mallet.



The collar is designed to stop when it reaches precisely the correct position. This may result in a small gap which is fine.



Step 6

Now it is time to test fit the Bilstein insert.

The bottom of the insert has a concave recess which locates with a 'dimple' at the bottom of the strut casing. If you centre the insert into the casing it will locate easily.



If all has gone to plan the body of the insert should protrude 3mm above the top of the collar. There is a tolerance of +/-2mm so a measurement in the range of 1-5mm is acceptable but 2-3mm is ideal 😊



Step 6

On confirmation that the height of the insert is within tolerance remove insert and arrange for threaded collar to be welded and ground flush to the strut. TIG or MIG welding of the collar to the strut body should be around \$30-\$40 per strut and it should come back looking like this.



Step 7

Sand down with 180 and 320 wet and dry and it is time to paint. We have found 2 or 3 coats of Duplicolor engine enamel holds up well and can be applied over the original paint and bare metal without the need of undercoat/primer.



Step 8

Reinsert the Bilstein insert, apply grease to the Bilstein gland nut (supplied with the insert), slide over the shaft and and tighten up to factory specs. 130 +/- 10 Nm. (95 +/- 7 ft-lb)

If you do not have a clamp that enables you to hold the strut firmly enough to torque it up a trick is to refit the strut to the car without the spring in place and torque whilst the strut is bolted up to the spindle. Then remove and refit the spring.

The gland nut can be tightened with a strap wrench, a channel wrench or the Bilstein tool E4-MS08/7

NOTE: Unlike the original Sachs inserts, there is no requirement to use oil in the strut casing when using a Bilstein insert. The design of the Bilstein units allows heat to be dissipated through the shaft rather than the lower portion of the insert.



Job done and you have a beautifully engineered hi performance sports strut for about half the price of an OEM replacement unit.