# BPW NEWS BPW BERGISCHE ACHSEN

# Conversion of spring pivot bolt from 30 mm to 24 mm diameter on the Airlight II air suspension system

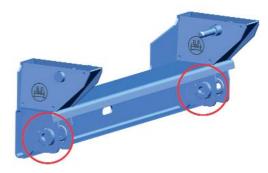
As part of the introduction of new products into series production, the spring pivot bolt connection on all Airlight II air suspensions systems will be changed from M 30 to M 24 from **September 2007** onwards. Introducing an M24 pivot bolt provides greater security due to higher bolt tension being achieved. In addition the surface area of the clamped interfaces is increased. This means the bolted connection has been made even less susceptible to settling. The M 24 spring bolts are Geomet-coated, removing the need for additional lubrication on new component assembly.

This modification affects all air suspension systems with 70 mm wide trailing arms (all Airlight II versions and SL suspension for axles up to 5.5 t axle load). All the versions will be changed over to M 24 at the start of series production from week 36 onwards. Versions with M 30 spring bolts will no longer be produced from that point onwards. This launch is performed in two steps:

# From week 30: Air suspension hanger brackets and channel crossmembers (Airlight II) are available for M 24 spring pivot bolts!

From week 30 onwards, all air suspension hanger brackets and channel crossmembers for the M 24 spring bolt will be available in parallel to the current series production with M 30 bolts. Provision of new air suspension hanger brackets and channel crossmembers from week 30 onwards will make it possible for vehicle manufacturers with external frame production to achieve a smooth transition.

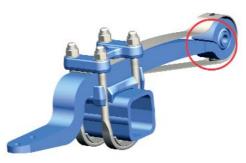




## From week 36: Air suspension modules (Airlight II) will only be obtainable with M 24 spring pivot bolts!

From week 36, all modules with 70 mm wide trailing arms will be supplied with M 24 spring pivot bolts.

Your Sales Department contact will be pleased to provide support in planning the series production changeover. Please make sure that your stocks of old parts are used up by the time of the



series launch - in particular where external frame production is involved.



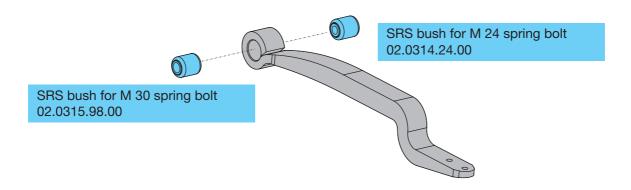
From week 36 onwards, only Airlight II modules for M 24 spring bolts will be supplied!





#### Technical features

The adaptation to M 24 spring bolts is performed by changing the spring pivot bolt assemblies, the bushes in the air suspension hanger brackets and channel cross members and the steel/rubber/steel bushes in the trailing arms. The geometry of the actual trailing arm is not changed. As an assembly, the trailing arms with steel/rubber/steel bushes for M 24 spring bolts are given the index 2 (example: trailing arm 05.082.13.88.0 for M 30 spring bolt => trailing arm 05.082.13.88.2 for M 24 spring bolt). It is possible to adapt from the M 30 spring bolt to the M 24 spring bolt by changing the steel/rubber/steel bush.



The changeover to the M 24 spring bolt means the spanner width for the nut changes from 46 mm (for M 30 spring bolt) to 36 mm (for the M 24 spring bolt).

The tightening torque (with torque wrench!) for Airlight II channel crossmembers and air suspension hanger brackets is reduced from 900 Nm (840 - 990 Nm) for the M 30 spring bolt to **650 Nm (605 - 715 Nm)** for the M 24 spring bolt.

The code numbers of the spring bolt assemblies are changed as follows:

	Spring bolt assembly M 30	Spring bolt assembly M 24
Steel / high-grade steel hanger bracket	05.857.00.18.0	05.857.00.28.0
Channel crossmember / hanger bracket BH 350	05.857.00.19.0	05.857.00.29.0
Aluminium hanger bracket	05.857.00.20.0	05.857.00.30.0



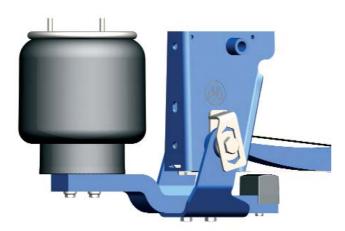
Hanger brackets and channel crossmembers for M 30 spring bolts are not allowed to be combined with M 24 spring bolts!

For all other information about installation and maintenance of Airlight II air suspension, please refer to the air suspension installation instructions and the service and maintenance regulations.



The adaptation of the axle lift geometry to the M24 spring bolt means there are new code numbers for the different axle lifts.

#### One-sided lift



One sided lift hanger bracket, part assembly for M 24 spring bolt: 05.828.31.84.0 One sided lift channel crossmember, part assembly for M 24 spring bolt: 05.828.31.85.0

#### Two-sided lift



Double-sided lift for hanger bracket, part assembly for M 24 spring bolt: 05.828.31.81.0 Double-sided lift for channel crossmember, part assembly for M 24 spring bolt: 05.828.31.82.0 Double-side lift for aluminium hanger bracket, part assembly for M 24 spring bolt: 05.828.31.83.0

The complete conversion list for the air suspension hanger brackets and channel crossmembers can be obtained from your Sales Department contact.

## Warning note for start of series production

At the start of series production, all modules for M 24 spring bolts will be identified with a note on the trailing arm.

