



Expansion of the Portfolio of Lemförder Chassis and Steering Parts

- Chassis and steering parts are safety-relevant
- The workshop should put the focus on regular inspections
- ZF Aftermarket offers portfolio in OE quality

Chassis and steering parts are safety-relevant parts. It is therefore necessary to comprehensively check these parts during every inspection. The different chassis types do not make the work of the workshops any easier. In recent weeks alone, the Lemförder chassis and steering parts product portfolio has been expanded to include an additional 60 transverse control arms for the current premium models Range Rover, Land Rover Discovery, Jaguar XF, XJ, F and S type. By the end of 2018, the product portfolio will be enlarged to encompass a further 120 original Lemförder parts, such as for Tesla Model X, the BMW 35-Up platform, Citroën Jumper and Alfa Romeo Giulia. In addition to the Lemförder products themselves, training and technical information on chassis and steering parts are in high demand from ZF Aftermarket.

An independent suspension such as a multilink rear suspension consists of many individual components. Each chassis part, such as guiding control arm, supporting control arm or stabilizer link, has a precise function within this chassis. However, repair of these complex designs and accurate wheel alignment have become that much more demanding. A good understanding of how modern wheel suspensions work and thus the interaction of the individual components is therefore necessary to diagnose and remedy potential damage.

Regular chassis check indispensable

First, it makes sense to subject these components to a visual inspection on a regular basis. Whenever a suspension strut and shock absorber is replaced, the associated suspension-strut mounts or shock-absorber mounts, as well as the compression stop or ancillary springs included in the mounting kit, should be replaced as well. Chassis parts are always



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wearing parts – regardless of the overall complexity of the chassis. After the visual inspection, a test drive should definitely take place.

Unusual vehicle handling and noises often indicate other defective chassis components, such as transverse control arms or stabilizer links. Ball joints, for example, are wearing faster because of increasing vehicle weight. The forces that act on joints and tie rods when potholes are hit and curbs are struck also leave their mark. This has adverse effects on axle geometry and results in uneven vehicle handling. In addition, defective components cause increased wear on other chassis components as well as tires, leading to an overall deterioration in driving safety and ride comfort.

Checking rubber bellows, boots and clamping rings

Mechanics should also inspect whether the rubber bellows at the chassis joints are worn, damaged or leaking. If dirt particles get into the joint, they destroy the inner spherical plastic shell and damage both the ball and the joint housing. As a result, the joint clearance will no longer correspond to the requirements. This is also the case if pitting corrosion is already recognizable to some extent on the spring clamping rings of the rubber bellows. When it comes to the steering system, particular focus should be placed on the tie rod: In addition to the rubber bellows, the steering boot should also be inspected for damage.

Special tools such as press-out tools are definitely required for disassembly of the joints. With some vehicles, adjustment tools are also used for assembly to ensure installation without twisting. Many other chassis types, such as a McPherson axle or the VAG multilink rear suspension, require the use of special hex keys, supporting joint breakers or press kits.

The effects of defective chassis and steering parts on the handling of the vehicle and thus on the safety of the vehicle occupants are enormous. The workshop should invest time in informing customers in this area. With Lemförder chassis and steering components, the workshop is then perfectly equipped for all jobs. ZF Aftermarket offers



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workshops not only a broad product portfolio in OE quality but also services which match this level of quality. With practical training, technical information and workshop concepts, workshops can acquire a detailed understanding of products and systems and thus establish the best basis for targeted diagnostics and professional repair.

New Lemförder brand campaign

For more than 70 years, the Lemförder brand has been setting the highest standards in terms of steering and chassis. It originated in Lemförde near Bremen, and the components are still developed and produced in Germany today. A new advertising campaign for passenger cars and commercial vehicles not only focuses on the pioneering spirit of the founder but also on the innovative strength and striving for perfection of the Lemförder team. They are the basis for a worldwide convincing OE quality and the associated precision in the development and production of Lemförder chassis and steering parts. More information on the brand campaign website:

www.lemfoerderprecision.de

Captions:

- 1) ZF Aftermarket recommends a thorough chassis check to avoid damage.
- 2) Checking the wear on the joints is part of the chassis check.
- 3) Mechanics should check whether the rubber bellows are worn, damaged, or leaking.

Photos: ZF

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ZF Friedrichshafen AG

ZF is a global leader in driveline and chassis technology as well as active and passive safety technology. The company has a global workforce of 146,000 with approximately 230 locations in some 40 countries. In 2017, ZF achieved sales of €36.4 billion. ZF is one of the largest automotive suppliers worldwide.

ZF allows vehicles to see, think and act. The company invests more than six percent of its sales in research and development annually – in particular for the development of efficient and electric drivelines and also in striving for a world without accidents. With its broad portfolio, ZF is advancing mobility and services in the automobile, truck and industrial technology sectors.

With integrated solutions and the entire ZF product portfolio, the ZF Aftermarket Division of ZF Friedrichshafen AG guarantees the performance and efficiency of vehicles throughout their life cycle. Its combination of established product brands, digital innovations, customized products and services, and a worldwide service network has made ZF a sought-after partner and number two in the global automotive aftermarket.

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