



RUNFLAT INTERNATIONAL – MAINTENANCE & INSPECTION GUIDELINES

RUNFLAT SYSTEMS MAY 2015

Safety is important

The RunFlat system is a stressed component of the vehicle that in service may be subjected to extreme forces.

It is absolutely necessary to check the RunFlat systems periodically (at least every year or when the tyre is changed, whichever comes first) and to pay particular attention to their mounting, removal and maintenance in order to ensure safe operations and to prevent any possible risk.

All service operations must be performed only by qualified personnel, appropriately trained: they have to use correct procedures, proper equipment and tools, and safety precautions.

General safety and maintenance recommendations

Never use RunFlat components which cannot be well identified.

The identification decals are applied to the RunFlat systems next to the fixings will help to ensure the correct replacement with another component.

The use of the correct replacement part becomes particularly important, since the RunFlat system of a given rim size may not be interchangeable with the one belonging to another rim size or type.

When the correct replacement component is installed, careful attention must be paid to the size of rim and the size of tyre. Even small differences may in fact be critical.

RunFlat Systems should be either inspected every year or when changing the tyre (worn within the legal limits), whichever comes first. RunFlat-tyre-rim assembly that has been operated in runflat mode or in under-inflated condition (80% or less of the recommended pressure) should be removed, disassembled and inspected.

RunFlat Composition

The RunFlat is an element within the wheel and tyre, which carries the vehicle weight (load capacity) following a loss of air pressure, enabling the vehicle to continue for a specified distance.

A "RunFlat system" is comprised of 2 or 3 RunFlat segments, 2 or 3 wedges, 2 or 3 clamping plates, 2 or 3 Fixing blocks, 2 or 3 socket cap screws, 4 or 6 head bolts (Loctite to be applied to screws and bolts prior to fitment) and 4 or 6 double locking washers.

Grease must be used with the RunFlat, and applied in the grooves evenly across the surface in contact with the wheel rim (for Dynamic RunFlats) or evenly on the inner tyre tread (for Static RunFlats).



RunFlat Segments



Wedges



Clamping Plates



M16 Fixing Blocks



Cap Screws



Head Bolts



Double Locking Washers

Removal of tyre and RunFlat dismounting

The personnel responsible for the RunFlat mounting / dismounting operations must be qualified and have carried out appropriate training.

The tyre must be fully deflated prior to removal, to ensure this, remove the valve core. If the tyre is not fully deflated, unseen damages to the wheel and tyre could cause the explosion of the assembly.

To carry out these operations, use suitable tools and follow the dismounting procedure prescribed by the Removal Instructions.

Inspection and Detection of a Damaged RunFlat system

When removed, the RunFlat segments should be subject to a visual inspection, checking for physical cracks of the polymer. If one or more cracks have appeared, all segments should be replaced. If the RunFlat has been used in runflat conditions the system needs to be checked for wear on the inside and outside surface (no more than 5mm wear is deemed acceptable) and deformation around the “pockets” (where the fixings are located). If the material has melted, even in part, the RunFlat should be replaced as it was subjected to high heat which modified its physical properties.



Cracks in RunFlat segment



Wear on outside surface



Deformation around the fixings

If the RunFlat has been subjected to a blast or a ballistic attack, it is also recommended that the complete system should be changed.

If in any doubt, the system may be sent back to RunFlat International for inspection and examination.

If the system is deemed to be reusable, all fixings (bolts, washers and clamping plates) should be changed with new ones supplied by RunFlat International. The system should be fitted in accordance with RunFlat International instructions. Once the system is fitted again around the wheel at the recommended torque, the RunFlat should be unable to slip around the rim (test to be carried out by hand before the tyre beads are in place). The bead seat and ring seat areas of the wheel should be especially free of contaminants such as rubber deposit to ensure air-sealing.

When re-inflating the tyre, it is advised that the complete wheel is placed in a safety cage.

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