

**This new version replaces all previous versions. Please replace SI-190829**

### Lack of lubrication damage caused by clogged suction basket, softened toothed belts start laterally

#### Introduction:

We find that many turbocharger failures on these vehicles are caused by a lubrication defect in the bearing of the rotor shaft. The lack of lubrication leads to a massive bearing damage with knocked out bearing. Ideally, the damage would be with a discarded nut on the rotor shaft and concomitant intake-side foreign body damage.

#### Note:

The reason for this damage is the use of unauthorized engine oils or a steady fuel input into the engine oil.

The timing belts soften and lose their stability. These start inclined to run and roam with considerable force at the flanged wheels of the toothed wheels. As a result, the timing belts wear on the flanks and teeth. The abrasion is then found in the oil circuit. Initially, fine fibers accumulate in the strainer of the oil suction basket of the oil pump and clog it increasingly. As a result, the recoverable amount of oil is reduced and the oil pressure drops. Before the oil pressure monitoring by the oil pressure switch becomes active, the turbocharger succumbs to the lubrication defect described. The failure of the turbocharger then prevented a major engine failure.

#### Instructions:

Check immediately after removing the defective turbocharger the status of the connection hole for the oil supply line of the turbocharger on the engine block. Directly behind the threaded connection, there is a metal screen in the horizontal direction in the oil passage of the engine block.

It is recommended to rinse the strainer with as little spray pressure as possible. If the strainer shows over the entire surface as a shiny metal strainer, then there should be no obstructive impurities. But if stubborn blockages remain as a visible residue, then the utmost caution is required.

Rotor shaft nut is missing !



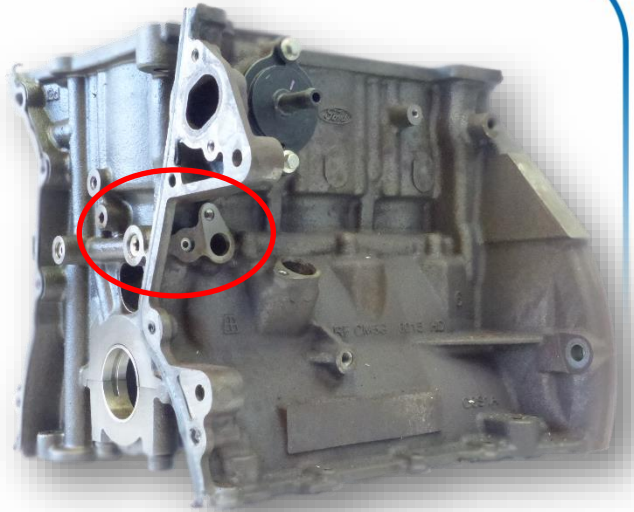
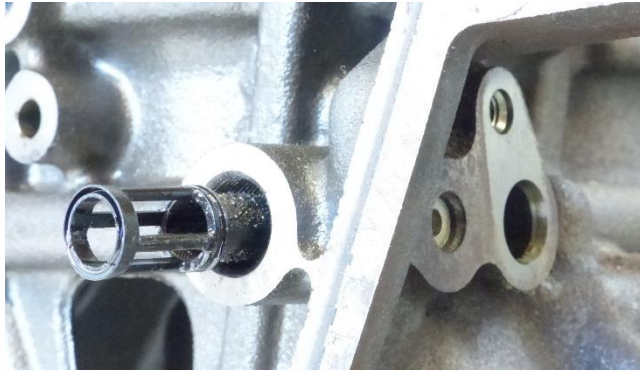
Our investigation of this strainer have brought to light the following effects.



**Please note: OE-references are only for means of comparison. The content of this Service Information is non-binding and is only for informational purposes. The manufacturer specifications have to be adhered to.**

# SI-191014

## Service-Information Turbocharger

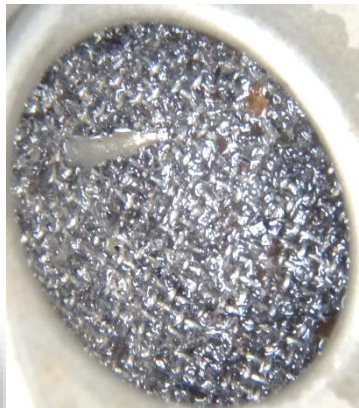


Even if the strainer in the oil supply should be free from contamination, the following defects are not excluded.

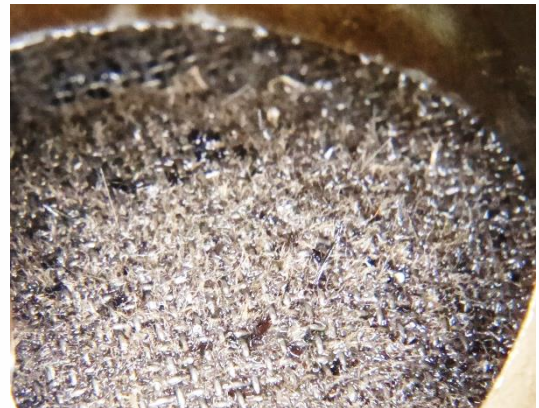
Before installing a new turbocharger, check the oil sump of the oil pump for contamination. Further, both timing belts should be checked for wear on the flanks and teethes. In case of damage, renew the oil pump, the two toothed belts and the strainer in the oil passage to the turbocharger according to the manufacturer's instructions. An oil flushing is recommended.



Oil pump



suction basket from below



Inside of the suction basket

Of course, with the turbocharger you also have to renew the oil inlet and oil return lines.

**Vehicle Manufacturer:** Ford

**Vehicle:** Fiesta VI + VII, Focus III, Tourneo Conect, Transit Courier, B-Max, C-Max 1.0 EcoBoost

**Validity:** This service information is valid for renewing the turbocharger with

**BTS reference:** T916553

**BTS-Service-Set-Nr:** T981626, T981634, T981637

**BTS reference:** T916554

**BTS-Service-Set-Nr:** T981620, T981635, T981638

Please note: OE-references are only for means of comparison. The content of this Service Information is non-binding and is only for informational purposes. The manufacturer specifications have to be adhered to.