

New!
Heavy-Duty Turbocharger
for your On-Highway
550 H.P. 3406E
or C15 Engine



“For The Durability You Expect”

Nothing is better than getting into your vehicle and knowing, just knowing, that you aren't going to have any trouble with it today, tomorrow, or the day after that. Well, today is that day.

“Durability” is just a click away.

What are you waiting for?

Contact your nearest
participating Garrett®
Turbocharger Distributor

For more information or to find the
nearest independent
distributor go to:
www.BetterTurbo.com

Note: If it isn't part number T704604-11 or
F704604-11 then it isn't the
“New Heavy-Duty Turbo”

Better
TURBOS
FOR
High-Horsepower
Caterpillar Engines*

www.BetterTurbo.com



New Heavy-Duty Turbo: For Caterpillar 550hp 3406E and C15 On-Highway Engines

The Garrett® Brand Turbo GT4702 used on Caterpillar engines contains two frequent modes of failure:

- One Compressor Related
- One Turbine Related

The GT4702 uses a boreless compressor wheel for cycle fatigue durability. However, the older compressor cover design causes premature blade failure, that in turn, causes catastrophic turbo failure and negatively impacts component salvage.

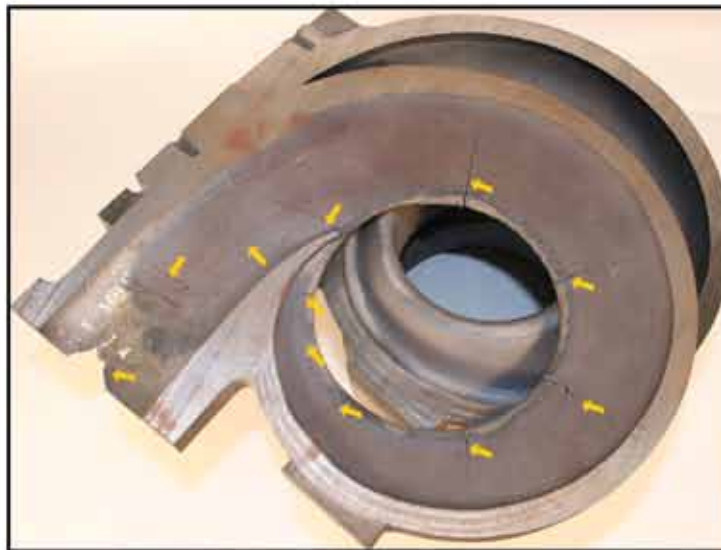
The first example shows three symmetrically spaced inducer support ribs for inducer bleed. These produce blade harmonics that cause premature wheel failure and compressor housing damage.

Due to the common failure mode the three web inducers cause, it is not recommended that this compressor cover be reused.



Introducing the New Compressor Cover with GT4702 updates!

The new assembly contains four asymmetrically spaced inducer support ribs to eliminate the compressor blade and wheel frequency problems.



Both original Caterpillar part numbers* 0R7310 and 0R7923 have turbine housing heat-related failure issues.

High exhaust temperatures can cause the turbine housing divider wall to begin to crack and run the possibility of escaping visual inspection on an external assembly examination.

To the left, a turbine housing divider wall has been cut to reveal a series of cracks, indicated by arrows, that can cause turbo failure due to foreign object damage of turbine housing fragments entering the turbine wheel inducer.

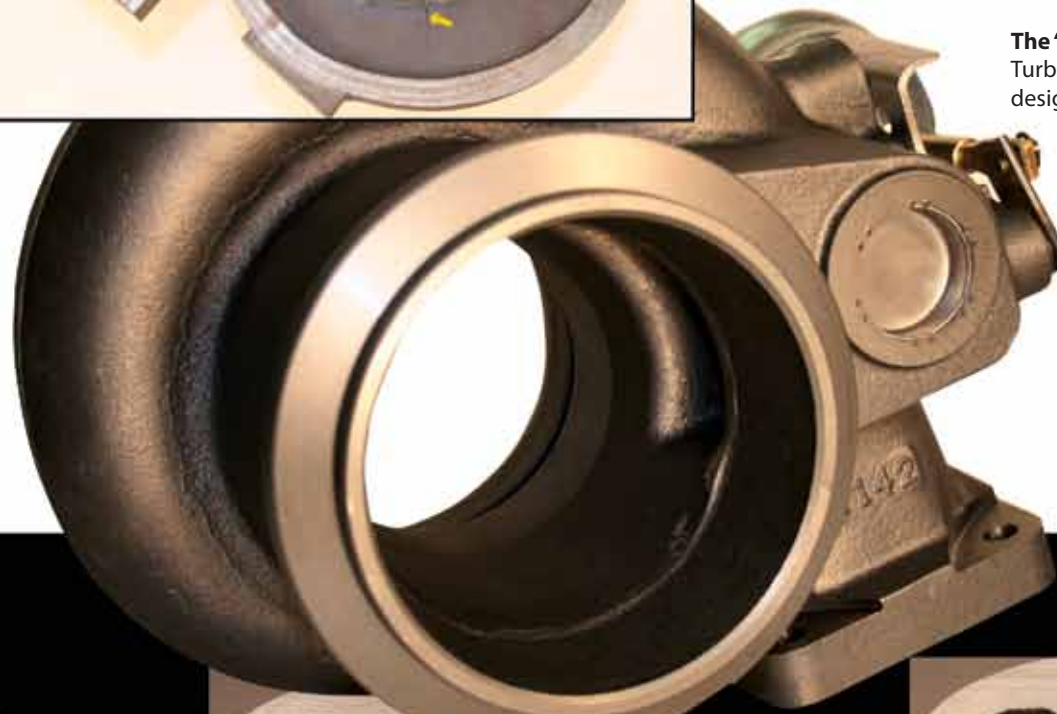
The "New" Heavy-Duty**

Turbine housing has been designed for strength. In

addition to advanced material selection, **a critical element**,

the divider wall has also been designed to be thicker without change to the turbine A/R ratio by keeping the cross-sectional area of the gas passage the same as the original design.

To find more information on these amazing new features, go online to www.BetterTurbo.com.



*Caterpillar Part Numbers used for Reference Only

**Not a product of Caterpillar Inc.



At left, divider wall thickness of old Caterpillar type casting, indicated by arrows.

At right, the new, Heavy-Duty casting.



This cut-a-way section illustrates the Caterpillar turbine housing cross-section, the turbine casting and divider wall. Note how divider thickness is significantly less than turbine casting thickness.

This cut-a-way section illustrates that the "new" Heavy-Duty turbine housing is cut in the exact same casting coordinates as the Caterpillar housing to show the new, stronger divider wall thickness.