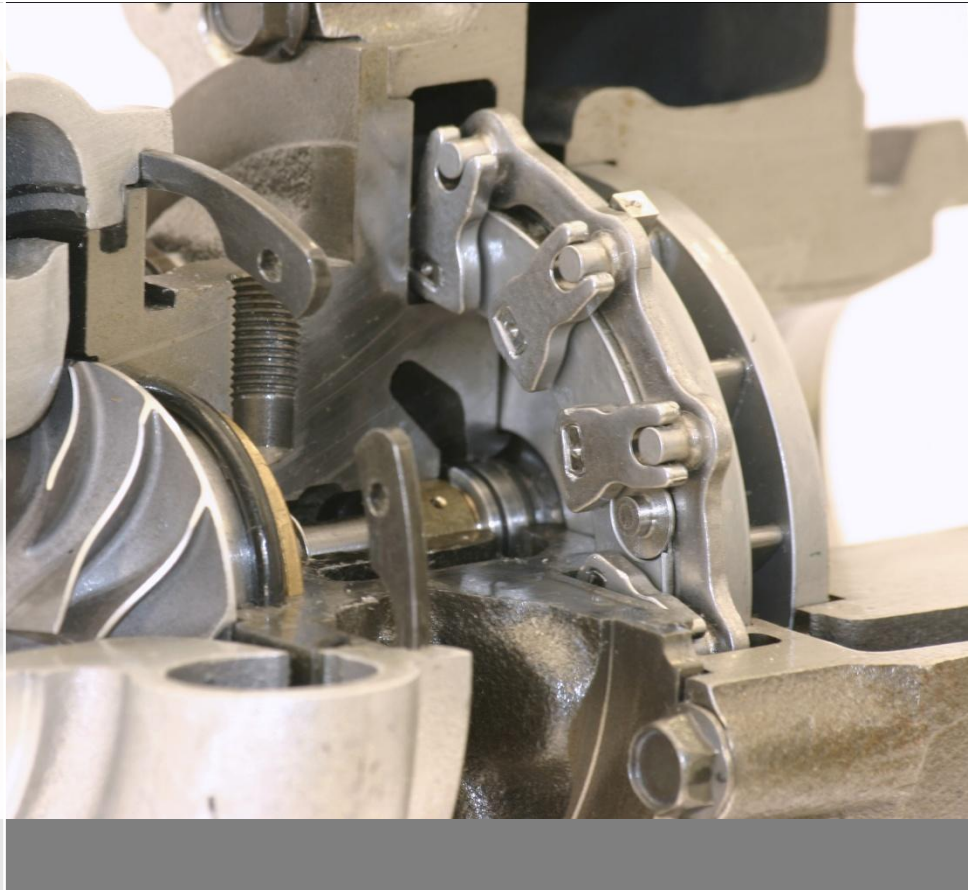




Reliable Performance

Mitsubishi Turbocharger

Independent After market



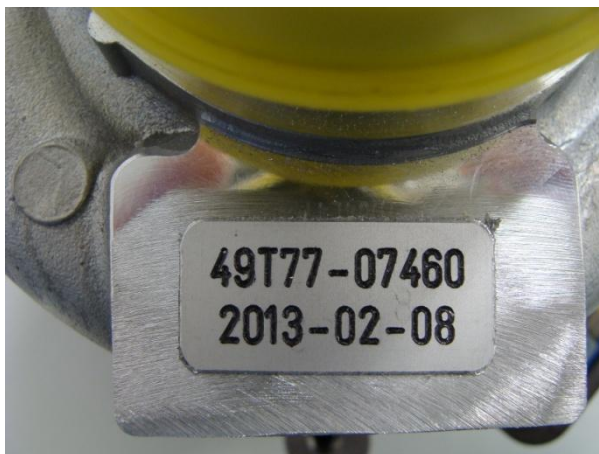
Quality bulletin LT3

49T77-07460

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In our continuous search for improvement of our products and after sales, we would like to help you with the battle against counterfeit sales. That's why we want to keep you informed of the dangers that fitting a counterfeit can produce when a garage fits it on a customer's car. That's why we have tested a counterfeit LT3 turbo against one of our own OE quality product. We have inspected it thoroughly, tested it and now want to share all our findings with you. We have found the following differences; on the left you can find the original MHI part:



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All rotors that are produced by MHI are balanced fully automatic and is grinded in one motion by a CNC robot. The rotor of the counterfeit is balanced by hand and as seen on the picture it has not been done correctly in one grind. These multiple grinds are not only bad looking but balancing is a product of trial and error instead of knowledge and technology.



The VG levers have not been welded correctly, we have found multiple holes and imperfections throughout more than one lever.



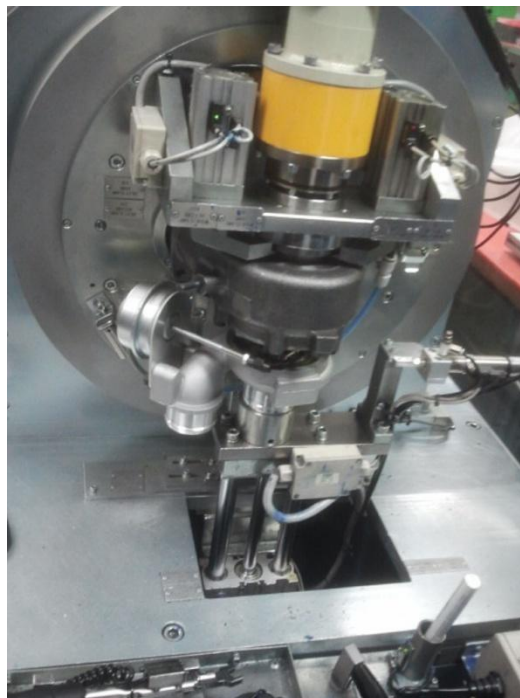
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When tested we found that the actuator lever/pin is not in the correct center of the counterfeit. As seen in the pictures you can clearly see the difference of a perfectly centered actuator against a poorly fitted one. This will result in poor actuator movement and could eventually come to a failure.



On the counterfeit LT3 turbo, the actuator has not been configured to the correct starting point. It will also not completely open or close with the corresponding pressures. In the worst case this will result in a far too high pressure with all kinds of problems and engine failures as result. The wear and damages that will occur will always be of high costs and labor.

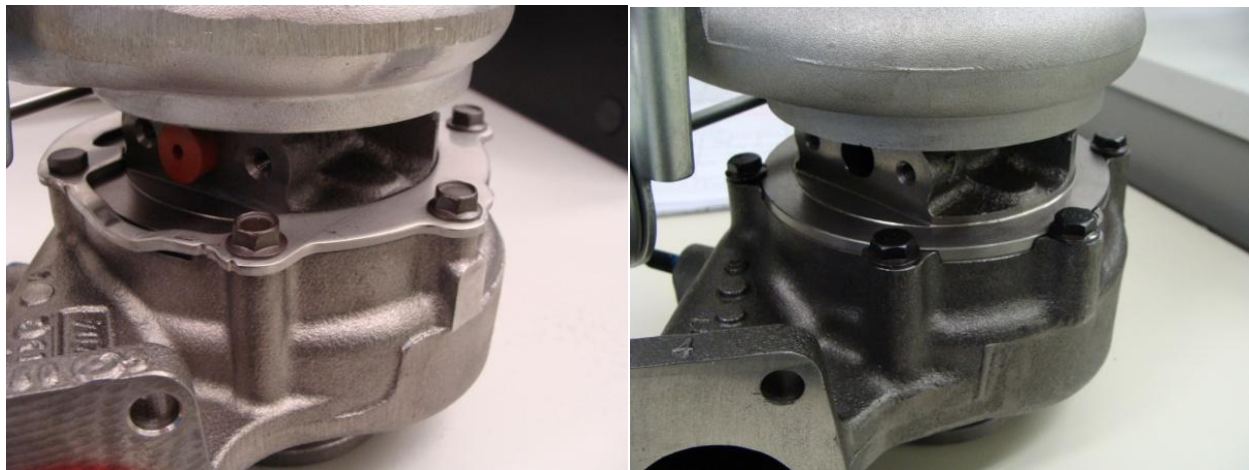


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As you can clearly see on the pictures, is that the counterfeit turbo has a back plate of poor design and is mounted not correct. The bolts only hold the back plate from a fraction of its capacity. This is the old and first design of MHI that was discontinued early in the product life cycle. Keep this in mind when you receive one of these old MHI turbo`s for remanufacturing.

We also noticed that the bolts where mounted very poorly with minimal torque. MHI engineers where able to loosen the bolts by hand. MHI bolts are fitted with a torque of 8N/M. We think this lack of torque is to reduce pressure on the the low quality seal ring. Because the low quality seal ring is not capable of handling the full loads it should. The solution was found in low or hardly fastened bolts, these will balance the force that the seal ring can't. In time this will result all kind of failures or loss of power.



As pointed out, there are a lot of differences between an OE quality MHI turbo and a counterfeit. Counterfeiters don't have the technology, know how or resources to develop and produce a technical product as the turbocharger. When someone buy`s the cheap counterfeit it will almost imminently result in damage or engine failure. The cheap solution will result in very costly problems material wise and in customer relations.

Please share this knowledge with your own customers. Working together and sharing this kind of information will help us all to reduce counterfeit sales and increase our market share.

Yours sincerely,

The Independent Aftermarket Turbo team