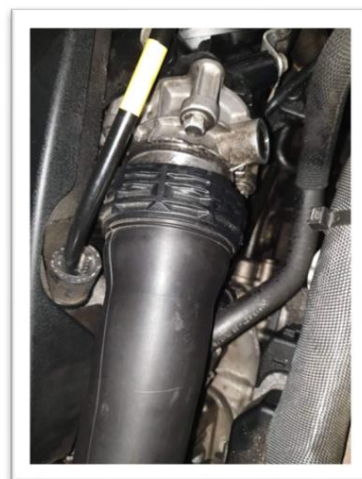
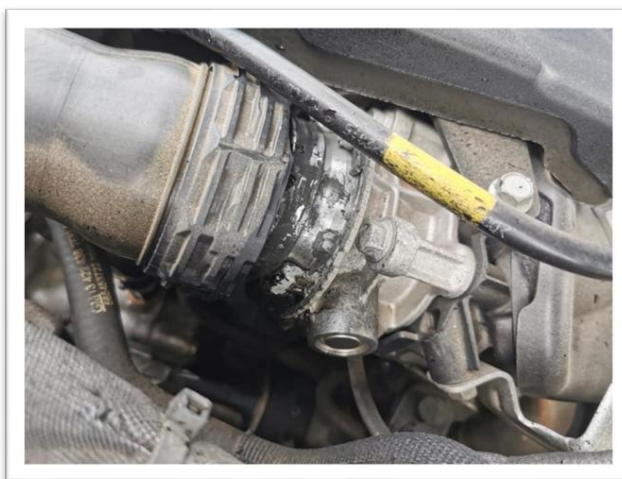
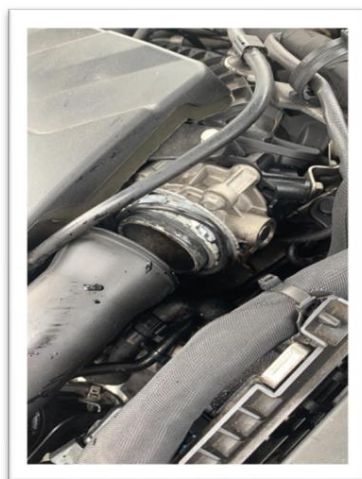


# Installation instructions Opel repair kit Charge pipe for B/D20DTH/R

Like many modern turbocharged engines, the engine generation of the B/D20DTH/R series suffers from a connection between the charge air pipe and the throttle valve that is not permanently designed for the high boost pressure. This is made of plastic and cannot withstand the loads permanently. The result is torn connection pieces of the charge air pipe on the throttle valve.

The engines are installed in the Insignia A, Insignia B, Zafira C and Cascada.



The damage patterns shown above are commonplace with these engines, the replacement part installed by Opel for around €250.00 is not significantly more robust than the part installed in the factory. We therefore recommend a cheaper repair that can also be carried out by technical laypeople, which is explained in more detail below.

## A notice:

All work must be carried out at your own risk. The author of the instructions and the company TurboZentrum GmbH dissociate themselves from any responsibility for damage as a result of the conversion.

## needed Utils:

- Repair kit from Turbozentrum GmbH Commercial ¼"
- ratchet box / ratchet box Screwdriver Vacuum cleaner Brake cleaner (or similar)
- 
- 
- 
- 
- cloth or rag

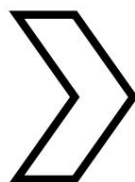
## Installation instructions Opel repair kit Charge pipe for B/D20DTH/R

Installation:

The first step is to remove the charge air pipe on the throttle valve, this is done by turning the connection piece on the throttle valve and then pulling on the charge pressure pipe. If the boost pressure pipe is already defective

the remains of the connector must be removed from the throttle body connector become.

Then please stick a cloth or rag deep into the charge air pipe (behind the point where the cut is made) to prevent sawdust from falling in. Under no circumstances must these get into the engine.

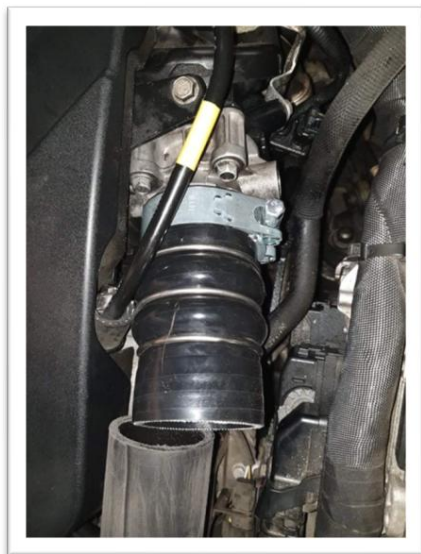


Then saw off the charge air pipe at the point marked in red in the picture (behind the connection). This can be done with the help of a regular plastic saw or, in an emergency, a hacksaw for metal. **IMPORTANT:** Please only saw off so far that a piece of the enlargement remains and the new charge air hose can just be pulled over the widening. This ensures permanent strength during operation, since the hose clamp will later prevent the hose from slipping due to the widening, see green marking in the right picture.

Then the charge air pipe with a vacuum cleaner from all sawdust free and remove the cloth again.

# Installation instructions Opel repair kit Charge pipe for B/D20DTH/R

Assembly of the repair kit:



First the supplied wide clamp on the  
Put on the silicone hose and place it on the previously (from  
impurities cleaned and oil residue)

Push on the throttle body and clamp like  
tighten in the picture.

Finally the second wide clamp on the other end of the  
Put on the silicone hose and the charge air pipe in the  
Push in the silicone hose.

Also tighten the second clamp.

end result:

