

WARRANTY CONDITIONS & INSTALLATION INSTRUCTIONS

IMPORTANT – Read our installation instructions, before you start installation of the engine! - **IMPORTANT**

By following up the manufacturer data and the installation instructions of **Motor & Getriebe GmbH** you'll ensure yourself the durability of the purchased engine. Doing so you also follow up the guarantee terms.

PRECAUTION

- 1) Before you start with the assembly of the purchased engine, we strongly recommend to perform a diagnosis and localize the malfunction of the original engine. Please inform us accordingly to enable us to advise you for a (potential) special procedure. Engine failure is often caused by attached parts and/or external factors.
- 2) Compare both engines. Any differences will be noticed in an early stage.
- 3) If there're any major differences between your original and the engine we delivered to you, contact us for further proceedings.

ASSEMBLY

- 1) The exchangeable parts need to be professionally checked and cleaned before potential reuse. This is to provide direct pollution into the purchased engine. Consider i.e. the intake manifold, EGR-cooler, intercooler, turbo, etc. If there is any doubt; renew the specific part. The oil cooler you must renew in every case, except it was including with the bought engine!
- 2) Pay extra attention to the injectors, fuel pump and turbo. Test these parts by professionals with a test record. If it's necessary renew the specific parts. The mentioned parts are frequently the cause of an engine malfunction.
- 3) The timing belt/chain and it's components need to be replaced. The purchased engine could be in our warehouse for a couple of years. Due to this it could be the parts are aged and don't function properly.
- 4) Renew the air-, fuel-,oil filter and oil. This all according to the manufacturers specifications.
- 5) Everything needs to be assembled with the tightening torques according to factory data.
- 6) Assemble a rebuild/remanufactured engine **WITHOUT** the injectors/sparkplugs. To control the oil pressure, the engine needs to be turned/started for quite a while. With the injectors disassembled (Attention: Not possible on all models!) there won't be any compression created in the cylinders. In this way the engine can be turned at a higher rpm. Doing so the oil can reach every essential part of the engine without heavy friction on the internal parts.
- 7) Ensure the fuel pump is disabled/disconnected.
- 8) Turn/start long enough until you're sure the oil have reached all the essential parts of the engine. Minimal 1 to 2 minutes. If present, control the oil pressure with the oil light or oil pressure gauge.
- 9) Finish the installation and run the engine idle. Don't put the engine on high rev's.
- 10) Check all systems and inspect specially on any leak. Let the engine idle for a minimum of 1 hour before the car is taken for a test drive. Take it easy with the test drive. Drive in a low to normal rpm. So don't accelerate unnecessary. Also not load the car with a heavy weight.

AFTER CARE

- 1) Change the oil and oil filter after the first 1.000 kilometres.
- 2) Check for the oil level more often, especially in the beginning. There could be a higher oil consumption in the beginning due to the wear in of the new internal parts.
- 3) During the warranty time, change the oil and oil filter latest every 15.000 KM. We know by experience the manufacturers prescribe sometimes too long maintenance periods.
- 4) If there occur any failure or problem. Please contact us for further actions.
- 5) If you do not follow up these instructions; a possible warranty-claim will be invalid.
- 6) We only provide product guarantee, so damage due to not following up of these instructions or assembly failure won't be compensated.
- 7) Please note also our terms & conditions, which are agreed upon together with this document with the purchase of this engine.

GOOD LUCK WITH THE INSTALLATION!