



Installing your new engine after an engine failure

If you have had an engine failure such as a spun bearing or any other failure your ENTIRE oiling system has been contaminated with metal shavings. Metal debris from engine failures will RUIN your new engine! Most items can be cleaned out such as the oil pan etc... but you CANNOT clean out your oil cooler enough to be re-used. No amount of cleaning will get all of the debris out. Please perform the following steps when installing your new engine:

- 1. *Replace the engine oil cooler:*** This is the most important step of all. Oil coolers CANNOT be flushed out completely. You can never get all of the debris out of the internal fins of the oil cooler. The OEM EVO oil coolers are very expensive; AMS offers an aftermarket/upgrade oil cooler for a very reasonable cost.
- 2. *Clean out the cylinder head:*** Bring the cylinder head to a reputable machine shop, explain your engine failure and have them inspect and clean the cylinder head.
- 3. *Clean everything in the oil system:*** Thoroughly clean all engine oil system parts that you don't replace (oil pan, dipstick tube, oil filter housing, oil pickup tube, etc...)
- 4. *Flush out the turbo:*** Once the engine is installed disconnect your crank sensor to disable the engine from starting. Remove the oil return line from the turbo and fill the crank case with fresh oil. Crank the engine allowing oil to drain from the turbo until clean oil comes out (roughly 2 qts.). Be careful not to run the engine out of oil while doing this. Connect oil return line to turbo when done.
- 5. *Priming your new engine before start up:*** Your new engine must be primed with oil before start up. Fill your engine with fresh oil to full level on the dipstick. With the crank sensor still disconnected crank the engine until the oil light on your dashboard turns off, this means you now have oil pressure and are ready to start your new engine. Connect the crank sensor and start the engine. Carefully monitor oil pressure. If oil pressure is low or the oil light comes on immediately shut off the engine.