

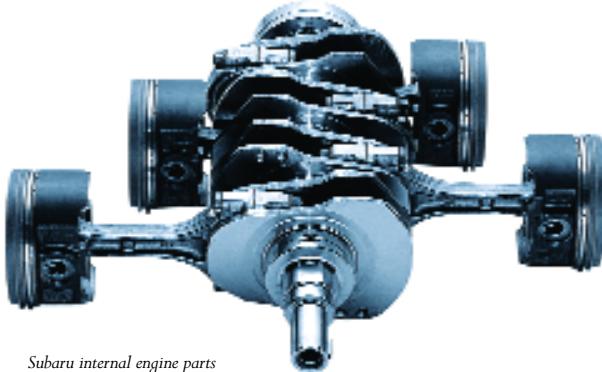
insider info

Engine Noise When Cold

Subaru models from the 2000 model year and later, equipped with 2.2 and 2.5 liter engines, are more fuel efficient, more powerful and have a flatter, more usable torque curve than in previous years. To achieve these objectives, it was necessary to make several internal engine improvements and modifications.

These modifications include:

- Mechanical valve lash adjusters (reduced friction)
- Lightweight pistons (reduced inertia)
- Short skirt, Molybdenum coated pistons (reduced friction)
- Increased compression ratio (improved power output)
- Improved cylinder head design (improved cooling)
- Improved induction system (improved breathing)



Subaru internal engine parts

As a result of these enhancements, some engines may exhibit some engine noise during the warm-up period after a cold start-up. This noise is a consequence of the engine improvements and is not, in any way, an indication of any engine problem. A light engine knock, after cold start, that gradually dissipates as the engine warms up and is virtually undetectable (from inside the vehicle) once the engine has reached operating temperature, is a normal characteristic of these engines. Repair attempts to reduce this type noise are generally unsuccessful.

If you are diagnosing an engine for noises other than those that have been described above, be sure to take the time to check all possible causes prior to condemning the internal components of the engine. Before replacing parts in an attempt to eliminate engine noise, the engine should be inspected externally and internally for another source of noise. A look at the engine oil is a good place to start. Another area to look at would be the timing belt tensioner and the belt and sprockets. Noises coming from under the belt covers and from external components can sound like a deep internal knock.