ORIGINAL BIRTH ITALY
car components

PULLEYS
CRANKSHAFT

What is it?

The **crankshaft pulley**, also known as the damper, plays a fundamental role in the proper operation of the engine, as it transmits motion to essential components such as the alternator, the air-conditioning compressor, and other auxiliary systems. Over the years, this component has undergone significant design evolution, becoming progressively more complex. In addition to transmitting motion, the crankshaft pulley now also incorporates a system for **damping the vibrations** generated by the crankshaft itself, helping to improve engine reliability and operating comfort.

From a construction standpoint, the pulley appears as a wheel equipped with a series of grooves, into which the triangular-section ribs of the auxiliary drive belt—commonly known as the **Poly-V belt-engage**.
The pulley is mounted directly on one end of the crankshaft and, for this reason, is generally located in the lower part of the engine compartment.

What is its function?

The main function of the **crankshaft pulley** is to transfer mechanical energy, via a belt, from the crankshaft to auxiliary components of fundamental importance, such as the alternator and the air-conditioning compressor.
With the widespread adoption of electric power steering systems, belt-driven hydraulic power steering pumps have become increasingly uncommon. A similar evolution has affected the water pump, which is now commonly driven by the timing belt rather than the auxiliary drive belt. In the past, the crankshaft pulley was a simple wheel made of cast metal or sheet metal. However, the increase in engine power and the growing need to reduce vibrations in order to improve driving comfort and extend the service life of the belt and connected components have led to the development of more complex design solutions.

There are also crankshaft pulleys designed to drive **two flexible belts**, thanks to the presence of **two dedicated grooves**, which may also have different diameters. In spare parts catalogs, the crankshaft pulley is often also referred to as a "**vibration damper**" or simply a "**damper**."

The range

The **Original Birth** range of engine pulleys, consisting of **over 150 active part numbers**, is designed and manufactured to meet the requirements of modern **gasoline and diesel** engines, ensuring high standards of quality and reliability.

Our products guarantee:

- **Effective vibration damping**
- **High mechanical and thermal resistance**
- **Consistent performance over time**
- **Reinforced packaging,** designed for greater safety and product protection
- **Complete supply of bolts,** where applicable
- **Development according to O.E. specifications,** using selected materials and strictly controlled production processes

Attention:

During engine operation, torsional vibrations can cause:

- **abnormal noise**
- **premature wear of the auxiliary drive belt**
- **damage to the alternator, compressor, and other auxiliary components**

A worn or deteriorated damper pulley can seriously compromise the overall reliability of the engine, with the risk of causing significant damage to the connected components.

ACTIVE CODES	APPLICATIONS	VEHICLES
152	5133	1937

TIPS!

Replacement of the damper to prevent more serious damage, when:

- there are excessive vibrations
- there is belt misalignment
- there is a reduction in the lifespan of connected components

Don't forget!
Original Birth offers a complete and reliable range of components for the main vehicle systems, designed to meet the needs of the aftermarket.

- **Components for the cooling system**
- **Steering and suspension components**
- **Engine, suspension, and transmission mounts and bushings**
- **CV joint boots and steering rack boots**
- **Wheel hubs**
- **Pedals**
- **EGR valves**

…and many other products for the automotive aftermarket