

## عنوان مقاله:

Simulation and Testing for Tearing Occurrence in Selected Automotive Timing Belts made from Different Materials via FEM

## محل انتشار:

ششمین کنفرانس بین المللی آزمون های غیرمخرب ایران (سال: 1399)

تعداد صفحات اصل مقاله: 8

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## خلاصه مقاله:

The timing belt connects the crankshaft to the camshaft in internal combustion engines in order to synchronize them. A four-stroke engine requires the valves to open and close once for every two revolutions of the crankshaft, a task performed by the timing belt. This belt has teeth using which it rotates the camshaft(s) synchronously with the crankshaft. In some engine designs, the timing belt can also be used to move other engine parts such as the water pump and the oil pump. The timing belt is connected to the crankshaft and the camshaft via a number of pulleys. The endeavor of the present paper is to examine the effects of the number of tensile parameters and rubber material used (CR, EPDM, and HNBR) on the amount of tearing of the timing belts of the Pride engine and the XU7 engine

## کلمات کلیدی:

Timing belt, belt tearing, fracture mechanics, CR rubber, EPDM rubber, HNBR rubber

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1168705>

