

**“FAILURE ANALYSIS OF FLYWHEEL STARTER
RING GEAR AND PINION IN THREE WHEELER
FOUR STROKE SI ENGINE”**

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Abstract

ATUL AUTO LIMITED is leading Three-wheeler manufacturings automobile industry in India. Majority vehicles manufactured in industry are different types of model Gem, Gemini, Smart and Shakti model vehicles and, in which are having SI engine and all SI engine having self-starting facility. This starting device in which flywheel ring gear and starter motor bendix drive pinion gear, this flywheel starter ring gear and bendix pinion got wear and damage problem issue, because the unusual engagement ring gear with pinion gear and the tooth tip deforms at higher rate because of sudden contact with starter ring gear and bendix pinion gear. This report contains the failures analysis to solving this issue.