



Vehicular Engine Design (Powertrain)

By Hoag, Kevin

Springer, 2006. Book Condition: New. Brand New, Unread Copy in Perfect Condition. A+ Customer Service! Summary: 1: The internal-combustion engine: an introduction 1.1 Heat engines and internal combustion engines 1.2 The reciprocating piston engine 1.3 Engine operating cycles 1.4 Supercharging and turbocharging 1.5 Production engine examples 1.6 Basic measures 1.7 Recommendations for further reading 2: Engine maps, customers, and markets 2.1 Engine mapping 2.2 Automobile, motorcycle, and light-truck applications 2.3 Heavy-truck applications 2.4 Off-highway applications 2.5 Recommendations for further reading 3: Engine validation and durability 3.1 Developing a durable engine 3.2 Fatigue analysis 3.3 Friction, lubrication, and wear 3.4 Further wear and failure mechanisms 3.5 Recommendations for further reading 4: Engine development process 5: Determining displacement 5.1 The engine as an air pump 5.2 Estimating displacement 5.3 Engine uprating and critical dimensions 6: Engine configuration and balance 6.1 Determining the number and layout of cylinders 6.2 Vibration fundamentals reviewed 6.3 Rotating forces and dynamic couples 6.4 Reciprocating forces 6.5 Balancing the forces in multicylinder engines 6.6 Gas pressure forces 6.7 Bore-to-stroke ratio optimization 6.8 Recommendation for further reading 7: Cylinder block and head materials and manufacturing 7.1 Block and head materials 7.2 Block and head casting processes 7.3 A look at block and head casting 7.4 Block and head machining processes 7.5 Recommendations for further reading 8: Block layout and design decisions 8.1 Initial block layout 8.2 Crankcase design decisions 8.3 Cylinder design decisions 8.4 Camshaft

Reviews

Extensive manual for pdf fanatics. This can be for all who statte there was not a well worth looking at. I am pleased to tell you that this is basically the very best pdf i have go through inside my individual existence and might be he finest ebook for at any time.

-- **Dorian Roob**

Absolutely essential study ebook. It is among the most remarkable book i have got read through. You will like how the article writer compose this pdf.

-- **Jessie Rau**