Honda R&D Technical Review April 2007

Table of Contents:

Introduction of new technologies
- Style and Design for New CR-V
- Styling and Design of New ASIMO
- Development of 1.8L Flexible Fuel Vehicle System for 2007 Model Year CIVIC for Brazil
- Development of New BF90 Outboard Motor
- Development of Super Handling-All Wheel Drive System for SUV
- Development of POP-UP HOOD SYSTEM
- Development of Active Damper System using Magnetorheological Dampers for 2007 Model Year Acura MDX
- Sensor Calibration Technique and Check Method for Active Damper System
- Road Conditions and Engine Mount Displacement of Sao Paulo and Boston

Technical papers
- Research on Extended Expansion General-Purpose Engine (Part 2) - Heat Release and Brake Performance
- Study of Ignition Timing Control of Gasoline HCCI Engine
- Thermal Management of Air-cooled Motorcycle Engines Using Forced Oil-cooling System
- Development of Lean NOx Catalyst with High Thermal Durability
- Hydraulic Control Technologies with Robust Stability and Performance for CVT Start Clutch
- Development of Non-normalized Nitrocarburized High Strength Crankshaft
- Development of Piston Surface Treatment for Internal Combustion Engine
- Research on Optimization of Viscoelastic Properties of Tire Tread Rubber to Reduce Rolling Resistance and Decrease Braking Distance
- Development of Microscopic Damage Model for Impact Failure Simulation of Polymeric Components
- Development of Orthotropic Damage Model for Crush Simulation of Extruded Aluminum Member
- Study of Method to Reduce Low-frequency Noise by Controlling Panel Vibration Phase
- Study of Door Closing Sound Mechanism Using Operational Modal Analysis and Acoustic Holography
- Establishment of Method for Optimizing Multi Specifications for Sound-proof Packages
- Motorcycle Dynamic Simulation Model Incorporating Actual Rider Behavior Data
- Measurement of Piston Skirt Oil-film Pressure when Piston Slap Noise Occurs
- Piston Slap-noise Prediction Using 3-dimensional Piston Secondary Motion Simulation
- Study of Modal Analysis from Order Tracking Data
- Development of Simulation Technology for Dynamic Behavior of Assembled Crankshaft Systems in Single-cylinder Engines