Sequence VIII Engine Test
(ASTM D6709)

Specifications
• API SJ/SL/SM/SN
• ILSAC GF-5

Objective
• Evaluate the performance of a lubricant in preventing copper/lead/tin bearing corrosion and measure viscous shear stability under high-temperature operating conditions using unleaded gasoline.

Field Service Simulated
• High-temperature, corrosive service
• Copper/lead/tin bearings
• Field service correlation not established

Test Fixture
• .7 L carbureted, single-cylinder, spark ignition, CLR lubricant test engine operated with an external lubricant heater circuit.

Test Parameters
• The test duration is 40 hours.
• The engine runs continuously at 3150 rpm for 40 hours using unleaded gasoline. Lubricant temperature is raised to 143°C using an external lubricant heater.
• Lubricant samples are taken and additions are measured at 10, 20 and 30 hours.

Test Parts Evaluation
• The connecting rod bearing weight loss is measured.

Used Lubricant Analysis
• Viscosity @ 40°C & 100°C (ASTM D445)
• Stripped Viscosity (ASTM D445)

Pass/Fail Criteria
• 26 mg weight loss maximum; stripped viscosity must stay in grade.
We welcome your inquiries.
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