

## Roller Follower Wear Test (ASTM D5966)

### Specifications

- API CJ-4, CK-4, FA-4

### Objective

- Determine the ability of an engine lubricant to control wear that can develop under low to moderate engine speeds and heavy engine torques.

### Field Service Simulated

- Roller follower shaft wear in the hydraulic valve lifter assembly of the test engine has been correlated with vehicles used in stop-and-go delivery service prior to 1993.

### Test Fixture

- General Motors 6.5 L indirect-injected diesel engine rated at 119 kW at 3400 rpm.

### Test Parameters

- The test engine is operated with new roller followers for 50 hours without changing the lubricant.
- Oil gallery and coolant-out temperatures are controlled to 120°C.

### Test Parts Evaluation

- At end of test, the roller follower axles are removed and their wear is measured using a linear profilometer.
- Oil samples are taken at 25 and 50 hours.

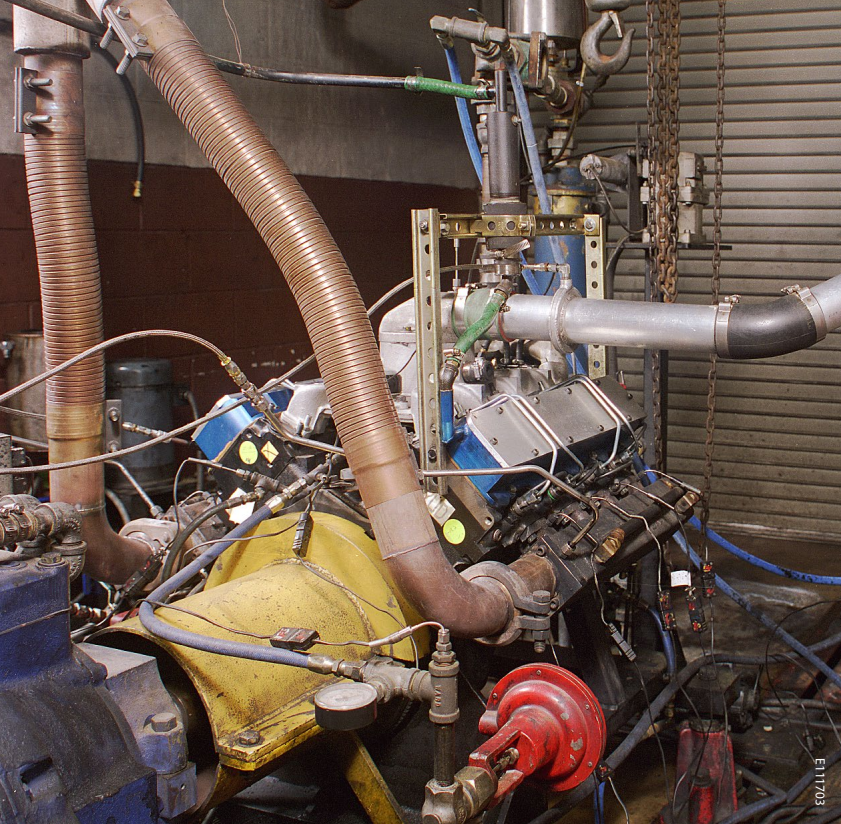
### Used Lubricant Analysis

- Viscosity @ 100°C (ASTM D445)
- Wear metals (ASTM D5185)

### Pass/Fail Criteria

Average Pin Wear	MTAC Limit
Mils	0.30 / 0.33 / 0.36 maximum
µm	7.6 / 8.4 / 9.1 maximum





We welcome your inquiries.  
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