

Test Monitoring Center

Carnegie Mellon University 6555 Penn Avenue, Pittsburgh, PA 15206, USA http://astmtmc.cmu.edu 412-365-1000

Sequence IIIG Information Letter 09-2 Sequence No. 21 May 28, 2009

ASTM consensus has not been obtained on this information letter. An appropriate ASTM ballot will be issued in order to achieve such consensus.

TO: Sequence III Mailing List

SUBJECT: 1. Additional Fuel Analysis

- 2. Reporting of Test Results
- 3. Replacement of Oil Pan Gasket
- 1. At the November 11, 2008 Sequence III Surveillance Panel Meeting, the panel agreed to require a repeat analysis of fuel in storage when any of the parameters are found to be out of specification. Section 7.3.1 of Test Method D 7320 has been modified to require this additional analysis.
- 2. At the same meeting, the panel agreed to report data from all tests run to completion, regardless of validity. Section 10.4.4 has been revised to include this requirement.
- 3. Finally, at the November 11, 2008 meeting, the panel agreed to allow the use of a replacement oil pan gasket. This part number has been added to Annex A2.1

The attached changes to Test Method D 7320 are effective November 11, 2008.

Bruce Matthews

Engine Oil Test Development and Support

GM Powertrain Materials Engineering

John L. Zalar Administrator

ASTM Test Monitoring Center

Attachments

c: ftp://ftp.astmtmc.cmu.edu/docs/gas/sequenceiii/procedure_and_ils/IIIG/IL09-2.pdf

Distribution: Electronic Mail

- 7.1.3 Analyze quarterly the contents of each storage tank that contains fuel used for qualified Sequence IIIG tests to ensure the fuel has not deteriorated or been contaminated in storage. Analyze the fuel for Distillation, Gravity, RVP Sulfur and Gums. Send the results from these analyses to the TMC for inclusion in the Sequence III Test Fuel data base. Conduct a repeat analysis on an additional sample when the fuel analysis is found to be out of specification for any of the above parameters.
- 10.4.4 Report the results on final standard report forms supplied by the TMC, which can be obtained from the TMC web site: ftp://ftp.astmtmc.cmu.edu/datadict/ or by contacting the TMC (see 10.4.4.1). Report the results of all reference oil tests run to completion, regardless of the validity.

TABLE A2.1 Parts to be Replaced Every Test

| Part Description | Part Number |
|---|----------------------|
| Arm, Rocker with Pivot Bearing | OHT3F-058-1 |
| BEARING, KIT, ENGINE | OHT3F-042-2 |
| KIT INCLUDES: | 011101 042 2 |
| BEARING, CONNECTING ROD, KIT, UPPER AND LOWER, OH-106 ASSY | 3F042-01 |
| MAIN BEARING KIT, OH101 ASSY, INCLUDES: | 3F042-02 |
| Bearing, Balance Shaft Front (part of 24502388) | SKF6205-2ZNRJEM |
| BEARING, MAIN, LOWER, #1 AND 3 | OH-102 |
| BEARING, MAIN, LOWER, #4 | OH-103 |
| BEARING, MAIN, LOWER, FLANGE, #2 | OH-104 |
| BEARING, MAIN, UPPER, FLANGE, #2 | OH-105 |
| BEARING, CAM BUSHING, POSITIONS 1 & 4 | 3F028-09 |
| BEARING, CAM BUSHING, POSITIONS 2 & 3 | 3F028-10 |
| Bolt, Camshaft Sp rocket | 24501366 |
| Bolt, Cylinder Head, Long | 25527831 |
| Bolt, Cylinder Head, Short | 25533811 or 88891770 |
| Bolt, Flywheel | 24505092 |
| Bolt, Main Cap | 24503056 |
| Bolt, Main Cap, Side | 24505576 |
| Bolt, Rear Cover Housing | 24503970 |
| Bolt, Rocker Arm, Special Test | 3F-058-02 |
| Bolt/Screw, Thrust Plate retainer | 25519242 |
| Camshaft, Special Test, including Manganese-phosphate coating | OHT3F-008-8 |
| Cap, Valve Spring Retainer | 24502257 |
| Chain, Timing | 24504668 |
| Clip, Retainer, Piston Pin | OHT3F-012-1 |
| COOLER, OIL, NICKEL PLATED, BYPASS CLOSED | OHT3F-030-2 |
| Damper, Timing Chain (includes bolt, retaining ring) | 24503893 |
| FILTER, PRO TEC | OHT3F-057-3 |
| Gasket kit, Intake Manifold lower | 89017399 or 89017816 |
| Gasket, Cylinder Head, left | 24503802 |
| Gasket, Cylinder Head, right | 24503801 |
| Gasket, Front Cover | 12587003 |
| Gasket, Oil Filter Adapter | 25534742 |
| Gasket, Oil Pan | OHT3G-093-1 |
| Gasket, Oil Pan | OHT3G-093-2 |
| Gasket, Oil Suction Tube | 24501259 |
| Gasket, Rear Cover Housing Gasket, Rocker Cover | 24507388 |
| Gasket, Notker Cover | 25532619 24502433 |
| Gasket, Water Pump | 24501565 |
| Head, Cylinder | 24502260 |
| Key, Camshaft Sprocket | 24500618 |
| Key, Valve Stem Keeper | 1016634 |
| Lifter, Test ACI w/Flat (25338738A) | OHT3F-029-3 |
| PIN, PISTON WRIST, PKG. OF 6 | OHT3F-014-1 |
| PISTON, TEST, RUNS 1 & 2, GRADE 12 | OHT3F-053-1 |
| PISTON, TEST, RUNS 3 & 4, GRADE 34 | OHT3F-054-1 |
| PISTON, TEST, RUNS 5 & 6, GRADE 56 | OHT3F-055-1 |
| PLATE, CAMSHAFT THRUST, .1520 in. THICKNESS | OHT3F-011-2 |
| Plug, Engine Block Core Hole | 24500867 |
| Plug, Cylinder Head Core Hole | 3835577 |
| Plug, Cylinder Head Cup | 24502262 |
| Plug, Engine Block, Oil Gallery | 3835577 |
| Plug, Ignition Spark | NGK TR-6 |
| Plunger, Oil Relief | 25530949 |
| PUSHROD, SPECIAL LENGTH, PKG. OF 12 | OHT3F-007-1 |
| , | |

| Part Description | Part Number |
|--|----------------|
| RETAINER CLIP, PISTON PIN PKG. OF 12 | OHT3F-012-1 |
| 1 EA. RING, PISTON, RUN 1, ENGINE SET | OHT3F-050-RUN1 |
| 1 EA. RING, PISTON, RUN 2, ENGINE SET | OHT3F-050-RUN2 |
| 1 EA. RING, PISTON, RUN 3, ENGINE SET | OHT3F-051-RUN3 |
| 1 EA. RING, PISTON, RUN 4, ENGINE SET | OHT3F-051-RUN4 |
| 1 EA. RING, PISTON, RUN 5, ENGINE SET | OHT3F-052-RUN5 |
| 1 EA. RING, PISTON, RUN 6, ENGINE SET | OHT3F 052 RUN6 |
| ROCKER ARM ASSEMBLY (Includes: 3F058-02) | OHT3F-058-1 |
| Rod, Connecting (powdered metal) | 12593374 |
| Seal, Crankshaft Front Oil (24504098) | OHT3G-092-1 |
| Seal, Crankshaft Rear Oil (25534760) | OHT3G-091-1 |
| SEAL, EXHAUST VALVE STEM | OHT3F-061-1 |
| SEAL, INTAKE VALVE STEM | OHT3F-060-1 |
| Spring, Oil Relief Valve | 1262505 |
| SPRING, VALVE Special Test (COLOR CODE YELLOW) | OHT3F-059-5 |
| Sprocket, Camshaft | 24505306 |
| Valve, Exhaust (STD) | 12579949 |
| Valve, Intake (STD) | 12569550 |