

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:			
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 Bolt, Cylinder Head, Short	25527831 25523844 or 88884770		
Bolt, Cylinder Head, Short Bolt, Flywheel	25533811 or 88891770 24505092		
Bolt, Main Cap	24503056		
Bolt, Main Cap 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 Gasket, Oil Suction Tube	OHT3G-093-2 24501259		
Gasket, Oil Suction Tube Gasket, Rear Cover Housing	24507388		
Gasket, Rocker Cover	25532619		
Gasket. Water Outlet	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 NCK TP 6		
Plug, Ignition Spark Plunger, Oil Relief	NGK TR-6 25530949		
PUSHROD, SPECIAL LENGTH, PKG. OF 12	OHT3F-007-1		
. 3335, 31 E01/1E EE110111, 1110. 01 12	011101 001 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