Obs	effective_date	info_letter_number	event
1	20000610	00-2	Revised Ring Sticking definitions implemented
2	20000725	00-2	Oil Consumption as a test validity criteria dropped
3	20000815		First occurrence of BC4 Oil Filters in LTMS data
4	20000828		First occurrence of LC camshafts in LTMS data
5	20000829		First occurence of BC5 Oil Filters in LTMS data
6	20000908	00-1	Draft 3 of the Sequence IIIF Test Procedure released
7	20000927	00-2	MRV & CCS Testing of used oil samples added
8	20000927	00-2	Valve train assembly using build up oil implemented
9	20001003		Industry exceeded PVIS EWMA Severity Warning.
10	20001004	00-2	New QI U&L Values implemented
11	20001008		First occurrence of BC5 Pistons in LTMS data
12	20001008	00-2	First occurence of Valve train assembly using build up oil in LTMS
13	20001018		Industry control chart on PVIS returned within EWMA Severity Limit. Alarm caused by failing test result on one test stand.
14	20001206	00-3	Oil Consumption as a test interpretability criteria added
15	20010102		Industry exceeded WPD EWMA Severity Warning.
16	20010109		First occurrence of BC6 Pistons in LTMS data
17	20010109		First occurrence of BC3 Valve Springs in LTMS data
18	20010130		Industry control chart on WPD returned within EWMA Severity Limit. No test results failed and no cause for alarm condition identified.
19	20010310		First occurrence of BC7 Pistons in LTMS data
20	20010401		Reference Oil 1008 test targets updated
21	20010425		First occurrence of MB camshafts in LTMS data
22	20010425		First occurrence of BC8 Pistons in LTMS data
23	20010425		First occurrence of BC6 Oil Filters in LTMS data
24	20010523	01-1	Condenser Flow QI requirements dropped
25	20010523	01-1	New oil addition at EOT dropped
26	20010523	01-1	Condenser part number corrected
27	20010523	01-1	Revised dipstick calibration curve implemented
28	20010523	01-1	Revised MRV & CCS test procedures
29	20010523	01-1	Upper limit of 8000cSt for viscosity measurements established
30	20010523	01-1	Reexamination of Engine Speed and Condenser Coolant Out Temperature QI U&L values performed; no changes made
31	20010815		Reference oil 433-1 introduced. Standard deviation from oil 433 used for PV60 target.
32	20010828		First occurence of BC7 Oil Filters in LTMS data
33	20010905		Reference Oil 1008 test targets updated

Obs	effective_date	info_letter_number	event
34	20010908	01-2	Screened Average Cam-plus-lifter Wear (SACLW) replaces Average Cam-plus-lifter Wear (ACLW) as pass/fail parameter
35	20010908	01-2	Valve train assembly using test oil reintroduced into IIIF test
36	20010912		First occurrence of engine builds using test oil for valvetrain lubrication in LTMS
37	20010912		First occurrence of BC9 Pistons in LTMS data
38	20011010		First occurrence of BC4 Valve Springs in LTMS data
39	20011128	01-3	Sequence IIIF-HD Test Procedure Published
40	20011129		First occurence of BC10 Pistons in LTMS data
41	20011201		Reference oil 1006 test targets updated based upon Surveillance Panel action on $11/15/01$
42	20020109		Reference oil 1006-2 introduced.
43	20020110		First occurrence of MK camshafts in LTMS data
44	20020110		Industry exceeded WPD EWMA Severity Warning.
45	20020218		Industry control chart on WPD returned within EWMA Severity Limit. Alarm caused by differing lab severity levels. No tests failed and labs showed good precision in general.
46	20020301		Reference Oil 433-1 test targets updated
47	20020301	02-1	Revised Sequence IIIF Test Procedure Published
48	20020315	02-2	Sequence IIIFHD Test Procedure added to Revised Sequence IIIF Test Procedure. Editorial changes to IIIF Test Procedure also made and do
49	20020319		First occurrence of BC11 Pistons in LTMS data
50	20020423	02-3	Oil Filter and Oil Cooler Replacement Guidelines issued
51	20020514		Reference oil 1008-1 introduced. Test targets from oil 1008-1 used for initial five reference oil tests based on actions taken at 5/16/02 Surveillance Panel meeting.
52	20020601	02-4	External Oil Bypass Valve System & Modified Oil Filter Adapter
53	20020629		Industry control chart for WPD exceeded the EWMA Precision Warning.
54	20020707		First occurrence of BC12 Pistons in LTMS data
55	20020707		Industry WPD control chart back within EWMA Precision Limit. Alarm caused by single failing test result.
56	20020730		First occurrence of NF camshafts in LTMS data
57	20021101		Reference oil 1006-2 test targets updated.
58	20021206		First occurrence of BC5 Valve Springs in LTMS data
59	20030202		Industry control chart for APV exceeded the EWMA Precision Warning.
60	20030210		Industry control chart for WPD exceeded the EWMA Precision Warning.
61	20030224		Reference Oil 433-1 test targets updated
62	20030322		Industry control chart on WPD returned within EWMA Precision Limit. Alarm caused by differing lab severity levels. No tests failed and labs showed good precision in general.
63	20030421		Reference Oil 1008-1 test targets updated
64	20030430		First occurence of NJ camshafts in LTMS data

Obs	effective_date	info_letter_number	event
65	20030430		Industry APV control chart back within EWMA Precision Limit. Alarm caused by large differences in laboratory severity, with opposite SA's. No problems identified and all stands calibrated.
66	20030504		Industry control chart for PIVS exceeded the EWMA Precision Warning.
67	20030530	03-1	New Oil Filter
68	20030624		Industry exceeded APV EWMA Severity Warning.
69	20030629		Industry control chart for PIVS back within the EWMA Precision Warning. Alarm caused by four failing results on two stands, at different labs. One stand successfully calibrated, the other removed.
70	20030630	03-1	New Front Cover and Oil Filter Housing
71	20030630	03-1	Sequence IIIG Dipstick
72	20030630	03-1	Calibrated Flask for Initial Oil Charge
73	20030701		Reference oil 1006-2 test targets updated.
74	20030810		Industry control chart on APV returned within EWMA Severity Limit. Alarm caused by failing test result on one test stand.
75	20030902		Industry exceeded PVIS EWMA Severity Warning.
76	20030920		First occurrence of PE camshafts in LTMS data
77	20031029	03-3	Revised Fuel Pressure Specification
78	20031029	03-3	Automatic Parts Washing Machine Maintenance Requirement
79	20031029	03-3	Main Bearing Bore Mandrel Procedure made optional
80	20031029	03-3	Piston Ring Cleaning Requirements
81	20031029	03-3	Additional Allowable RTV Sealing Compounds
82	20031029	03-3	Main Bearing Cap Bolt Replacement Specification
83	20031029	03-3	Revised Camshaft Measurement Procedure
84	20031029	03-3	Revised Camshaft Lubrication & Installation Procedure
85	20031029	03-3	Revised Oil Consumption Reporting Procedure
86	20031029	03-3	Fluid Conditioning Module Equipment Specifications
87	20031029	03-3	Revised Camshaft Measurement Equipment Specifications
88	20031029	03-3	Rating Workshop Attendance Requirement
89	20031127		First occurence of BC13 Pistons in LTMS data
90	20031215		New Honing Procedure approved and added to Assembly Manual
91	20031226		First occurrence of PK camshafts in LTMS data
92	20031231	03-1	New Solvent Specifications
93	20040120		Industry PVIS control chart back within EWMA Severity Limit. Alarm caused by failing tests on two test stands. One caused previous EWMA Precision Alarm. Both successfully calibrated.
94	20040122		Reference oil 1006-2 test targets updated.

Obs	effective_date	info_letter_number	event
95	20040224		Reference Oil 433-1 test targets updated
96	20040413	04-1	Revised Intake Manifold Gasket
97	20040413	04-1	Additional Allowable Sealing Materials
98	20040426		First occurrence of BC14 Pistons in LTMS data
99	20040512	04-2	Undercrown Rating Area Definition Clarification
100	20040512	04-2	Flow Meter Specifications
101	20040512	04-2	MRV Reporting
102	20040512	04-2	Amount of Test Oil Used in Camshaft Lubrication
103	20040621		Reference Oil 1008-1 test targets updated
104	20040829		First occurrence of Powdered Metal Connecting Rods in LTMS data
105	20040829		First occurrence of PM rods
106	20041104	04-3	Powdered metal rod torque specs
107	20041104	04-3	New front and rear main seals
108	20041104	04-3	New oil pan gaskets
109	20041104	04-3	New exhaust valves
110	20041104	04-3	Editorial changes to precision statements
111	20041112		First occurrence of RH camshafts in LTMS data
112	20041112		First occurrence of BC6 Valve Springs in LTMS data
113	20050103		First occurrence of BC15 Pistons in LTMS data
114	20050107	05-1	Updated precision statements
115	20050107	05-1	Provisions for alter calibration periods for oil test programs
116	20050107	05-1	Engine build worksheets
117	20050107	05-1	Clarifications to solvent specifications
118	20050314		First occurrence of BC16 Pistons in LTMS data
119	20050314		Industry exceeded PVIS EWMA Severity Warning. Investigation into the alarm is ongoing.
120	20050810	05-2	Corrected errors in Table A7.1
121	20051129	05-3	Revised requirements for raters to attend rating workshop
122	20051129	05-3	Allowed use of Torque Wrench ETW-180
123	20060404	06-1	Added fuel monitoring requirements
124	20060404	06-1	Revised aromatic specifications for fuel
125	20060816	06-2	Added procedural enhancements developed at the Unified Engine Build
126	20060816	06-2	Revised Table A4 to clarify Test Methods to be used for analysis
127	20060816	06-2	Revised references for alipthatic naphtha to degreasing solvent
128	20061003	06-3	Change to PMNS rods, updated part numbers

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129	20061120	06-4	Change in rater calibration requirements
130	20070319	07-1	Added IIIFVIS test procedure
131	20070521	07-2	Changed designation of IIIFVIS to IIIFVS
132	20070521	07-2	Updated Table A4 to reflect metric Units
133	20071213	07-3	Added substitue Rocker Cover Bushing to Test Method
134	20071213	07-3	Change name of Rater Calibration workshop
135	20071213	07-3	Added provisions to allow test stand to be calibrated as IIIF and IIIG
136	20090901	09-1	Dropped requirement to send hard copy test report to TMC
137	20091001		BC7 valve springs found out of square, material to be returned to vendor
138	20091118	09-2	Editorial Change, corrected Annex reference in 10.8.10.1
139	20091118	09-2	Revised QI limits for condenser coolant temperature
140	20091118	09-2	Allow use of teflon tape and 1/16" thermocouples
141	20100521	10-1	Added additional criteria for replacement of oil filter
142	20100521	10-1	Allowed use of real time measurement systems for verification of AFR sensor
143	20100624	10-2	Enhancements for pre and post cam measurements
144	20100719	10-3	NOx measurements no longer required
145	20100803	10-4	Revised calibration periods for multiple stand labs