Obs	effective_date	info_letter_number	event
1	20030812		First occurrence of BC3 Oil Filters in reference oil data
2	20030819	03-1	Draft Sequence IIIG Test Procedure Issued
3	20030831		First occurrence of BC13 Pistons in reference oil data
4	20030909	03-2	Revised Valve Spring Load Specifications
5	20030923	03-3	Revised Test Numbering Methodology
6	20031014		First occurrence of BC3A Rings in reference oil data
7	20031025		First occurrence of BC2 Ex. Valve Seals in reference oil data
8	20031025		First occurrence of PE Camshafts in reference oil data
9	20031029	03-4	Revised Fuel Pressure Specification
10	20031029	03-4	Automatic Parts Cleaning Machine Maintenance Requirements Added
11	20031029	03-4	Main Bearing Bore Mandrel Made Optional
12	20031029	03-4	Piston Ring Cleaning Requirements
13	20031029	03-4	Additional Allowable RTV Sealing Compound Allowed
14	20031029	03-4	Main Bearing Cap Bolt Replacement Specifications
15	20031029	03-4	Revised Camshaft Measurement Procedure
16	20031029	03-4	Revised Camshaft Lubrication & Installation Procedure
17	20031029	03-4	Revised Oil Consumption Reporting Procedure
18	20031029	03-4	Fluid Conditioning Module Equipment Specifications
19	20031029	03-4	Revised Camshaft Measurement Equipment Specifications
20	20031029	03-4	Rating Workshop Attendance Requirement
21	20031104	03-4	Elimination of CCS & MRV from IIIG test (creation of IIIGA test)
22	20031128		First occurance of new honing technique in reference data
23	20031215		New Honing Technique approved and added to Assembly Manual
24	20040105		First occurrence of BC14 Pistons in reference oil data
25	20040120		Elimination of transform from ACLW results on oil 438 in LTMS; other oils still transformed
26	20040120		New Pooled s for ACLW SA calculation, based upon 434 and 435 only
27	20040201		Targets for 434, 435, and 438 revised, using all data available on 1/20/04, based upon 1/20/04 Surveillance Panel action
28	20040320		First occurrence of BC7 Rocker Arms in reference oil data
29	20040323		Reinstatement of transform on 438 ACLW results, for all data. Control charts recalculated and effective today
30	20040323		First occurrence of BC3 Valve Springs in reference oil data
31	20040324		Industry control chart for ACLW exceeded the EWMA Precision Warning Limit
32	20040331		First occurrence of PK Camshafts in reference oil data
33	20040331		Industry control chart for ACLW exceeded the EWMA Severity Warning Limit

Obs	effective_date	info_letter_number	event
34	20040402	04-1	Revised Intake Manifold Gasket
35	20040402	04-1	Additional Allowable Sealing Materials
36	20040409		Industry control chart for ACLW returned within the EWMA Precision Warning Limit. Alarm caused by failing test result on one test stand.
37	20040512	04-2	Undercrown Rating Area Definition Clarification
38	20040512	04-2	Flow Meter Specifications
39	20040512	04-2	Editorial Corrections to Draft 2D
40	20040512	04-2	MRV Reporting
41	20040512	04-2	Amount of Test Oil Used for Camshaft Lubrication
42	20040524		Industry control chart for ACLW within the EWMA Severity Warning Limit. Alarm caused by two tests on one test stand, one failing on ACLW and the rerun, which passed under the "Special K" criterion.
43	20040601		Targets for 434, 435, and 438 revised, using all data available on 5/26/04, based upon 5/26/04 Surveillance Panel action
44	20040815		First occurrence of Powdered Metal Connecting Rods in reference oil data
45	20040822		First occurrence of BC8 Rocker Arms in reference oil data
46	20040822		First occurrence of BC15 Pistons in reference oil data
47	20040822		First Occurence of BC-4 Rings
48	20040826		Industry control chart for WPD exceeded the EWMA Precision Warning Limit
49	20040901		Reference Oil 438 targets updated.
50	20040915		Industry control chart for WPD returned within the EWMA Precision Warning Limit. Alarm caused by single failing result on oil 438 (3.74Yi).
51	20040915		Industry control chart for WPD exceeded the EWMA Precision Warning Limit
52	20040924		Industry control chart for PVIS exceeded the EWMA Precision Warning Limit
53	20041001		Reference Oil 435 targets updated.
54	20041011		Industry control chart for WPD returned within the EWMA Precision Warning Limit. Alarm caused by single failing result on oil 438 (4.45Yi). Different lab than previous alarm.
55	20041104	04-3	Powdered Metal Connecting Rod Torque Specifications
56	20041104	04-3	New Front and Rear Main Seals
57	20041104	04-3	New Oil Pan Gaskets
58	20041104	04-3	New Exhaust Valves
59	20041104	04-3	Editorial Changes to Precision Statements
60	20041108		Industry control chart for PVIS returned within the EWMA Precision Warning Limit. Alarm caused by two failing reference oil tests, one mild and one very severe, on a single test stand.
61	20041116		First occurrence of BC4 Valve Springs in reference oil data
62	20041116		Industry control chart for PVIS exceeded the EWMA Severity Warning Limit. Invesigation into the cause of this alarm condition is ongoing.

Obs	effective_date	info_letter_number	event
63	20041222		Industry control chart for ACLW exceeded the EWMA Precision Warning Limit. Invesigation into the cause of this alarm condition is ongoing.
64	20050107	05-1	Updated precision statement
65	20050107	05-1	Engine build worksheets
66	20050107	05-1	Added provision for calibration period adjustment for oil test programs
67	20050107	05-1	Clarifications to solvent specifications
68	20050207		Industry control chart for WPD exceeded the EWMA Severity Warning Limit. Invesigation into the cause of this alarm condition is ongoing.
69	20050212		First occurrence of RH Camshafts in reference oil data
70	20050818		First Occurence of BC-5 Rings
71	20051129	05-2	Revised requirements for raters to attend workshops
72	20051129	05-2	Allows use of torque wrench ETW-180
73	20060329		First Occurence of BC-6 Rings
74	20060404	06-1	Added fuel monitoring requirements and revised aromatic limits
75	20060818	06-2	Procedural enhancements developed at the unified engine build
76	20060818	06-2	Revised Table A4 to clarify test methods and units
77	20061003	06-3	Change in con rod type (PMNS) and updated part numbers
78	20061008		First occurence of powdered metal non slotted rods (PMNS)
79	20061107	06-4	Change in rater calibration requirements
80	20070319	07-1	Added IIIGVIS procedure to test method
81	20070401		Start of New Cylinder head torquing Procedure
82	20070521	07-2	Revised designation of IIIGVIS Procedure to IIIGVS
83	20070605	07-2	Revised designation of IIIGVIS Procedure to IIIGVS
84	20070605	07-2	Revised allowable difference between top and bottom ring gaps
85	20070605	07-2	Revised Table A4 to reflect metric units
86	20071213	07-3	Added substitute Rocker Cover Bushing
87	20071213	07-3	Revised instrumentation calibration requirements
88	20071213	07-3	Added provisions to calibrate a stand as IIIF and IIIG
89	20071213	07-3	Revised name of rater calibration workshop
90	20080520	08-1	Clarified definition of downtime during oil leveling
91	20080608		First occurence of powdered BC-7 Rings
92	20081106	08-2	Added IIIGB Test procedure (Phos retention)
93	20081124	08-3	Added Snap on Torque wrench to test method
94	20081124	08-3	Revised source for Perfect Seal #4 sealing compound
95	20081124	08-3	Addressed editorial changes

Obs	effective date	info letter number	event
96	20090309	09-1	Addressed editorial changes
97	20090309	09-1	Allow replacement of oil cooler and or filter
98	20090528	09-2	New oil pan gasket, additional fuel analysis, reporting of results run to end of test
99	20090723	09-3	Applied correction of 1.61 to IIIGB results
100	20091012	09-4	Eliminated requirement to mail hard copy final test report to TMC
101	20091012	09-5	Add a tolerance to the bath temperature for cylinder head cleaning.
102	20091012	09-5	Corrected the part number for the cylinder head gaskets.
103	20091012	09-5	Deleted the requirement to clean cylinder heads with a brush.
104	20091012	09-5	Add a requirement to the have the cylinder hone load output and current checked annually by the manufacturer.
105	20091012	09-5	Revise the source of cylinder head bolts.
106	20091118	09-6	Corrected valve spring part number
107	20091118	09-6	Corrected Annex reference in 10.8.10.1
108	20091118	09-6	Allowed use of teflon tape and 1/16" thermocouple
109	20091118	09-6	Revised U & L values used in QI calculation for condenser coolant temperature
110	20100427	10-1	Corrected error in phos retention calculation formula.
111	20100522	10-2	Increased oil consumption limit for interpretibility of non-reference oil tests to 4.89 L
112	20100522	10-2	Allowed use of real time measurement systems to verify AFR sensors
113	20100522	10-2	Additional criteria for oil filter replacement
114	20100624	10-3	Improvements to cam cleaning and measurement procedures
115	20100719	10-4	Changed NOx measurements from mandatory to non mandatory
116	20101119	10-5	Increased time to conduct MRV from 168 h to 504 h
117	20110622	11-1	Revised oil filter change criteria
118	20110701	11-2	Changes to engine build procedures
119	20110701	11-2	Updated Part numbers in Annex A2.1 and A2.2.
120	20110701	11-2	Updated references to rating manuals
121	20110810	11-3	Added heat exchanger to oil cooler cooling system