



A Program of ASTM International

## Test Monitoring Center

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Sequence IVA Information Letter 13-4  
Sequence Number 23  
October 29, 2013

***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 IVA Mailing List

SUBJECT: 1) Alternate Engine Oil Cooler Mounting Stud  
2) Reporting Average Cam Wear less than Zero

- 1) At the October 15, 2013 Sequence IV Surveillance panel meeting, the panel agreed to include a mounting stud to be used with the alternate oil cooler, approved during a previous meeting. Table A2.1 has been revised to include the oil cooler mounting stud available from OH Technologies.
- 2) Also during the October 15, 2013 meeting, the panel agreed to use zero when negative end of test average cam wear results are encountered. Section 12.1.5 has been revised to require negative final wear values be reported as zero.

The attached changes to Test Method D 6891 are effective October 15, 2013.

William A. Buscher III  
Chairman  
Sequence IVA Surveillance Panel

Frank. M. Farber  
Director  
ASTM Test Monitoring Center

Attachment

c: [ftp://ftp.astmtmc.cmu.edu/docs/gas/sequenceiv/procedure\\_and\\_ils/il13-4.pdf](ftp://ftp.astmtmc.cmu.edu/docs/gas/sequenceiv/procedure_and_ils/il13-4.pdf)

Distribution: Email

## Revises Test Method D 6891-13a, as amended by Information Letters 13-2 and 13-3

12.1.5 Average (equal weighting) the lobe wear values for the twelve lobes of the camshaft to determine the single test result (average cam wear, ACW) (reported to a 0.01  $\mu\text{m}$  of a micrometre). Adjust for laboratory severity as shown in the ASTM Lubricant Test Monitoring System document which can be found at [www.astmtmc.cmu.edu](http://www.astmtmc.cmu.edu). Record this severity-adjusted value as Average Cam Wear Final (ACWFNL) on the appropriate test report form. ACWFNL is the primary result from this test method. When negative values are encountered for Average Cam Wear Final, record zero as the Final Average Cam Wear result.

### A2. PARTS LIST

A2.1 This annex illustrates the parts needed for the Sequence IVA test (Table A2.1).

TABLE A2.1 Parts List

Section	Description	Part Number	Contents	Supplier
6.1	Bare Engine Assembly	A0102-76P01	Engine Block / Head / Valvetrain Assembly <sup>A</sup>	Nissan North America, Inc.
6.4.1.3	Test Kit	13000-40F85	Camshaft Assembly (1) Rocker Shaft (2) Rocker Arms (12) Oil Filter Assembly (3) Spark Plug (4)	Nissan North America, Inc.
6.4.1.4	Head Assembly <sup>B</sup>	A1040-40F80	with Valves and Springs without Camshaft, Rocker Arms	Nissan North America, Inc.
6.2.7	Oil Cooler	21305-03E00	Engine Oil Cooler	Nissan North America, Inc. or
	Oil Cooler	OHTKA24-006-1	Engine Oil Cooler	OH Technologies, Inc.
	Adapter	OHTKA24-005-1	Adapter for OH oil cooler	OH Technologies, Inc.
	Mounting Stud	OHTKA24-007-1	Mounting Stud for OH Oil Cooler	OH Technologies, Inc.
6.4.1.4	Engine Valve Regrind Kit	A1042-10C2E	Head Gasket and Seals	Nissan North America, Inc.
6.4.1.2	Test Stand Kit No. 1	A0001-76P25		Nissan North America, Inc.
6.4.1.2	Test Stand Kit No. 2	A1001-40F25		Nissan North America, Inc.
6.4.1.2	Test Stand Kit No. 3	B4010-40F26		Nissan North America, Inc.
6.4.1.2	Test Stand Kit No. 4	14004-F4003		Nissan North America, Inc.
6.3.9	Jacketed Rocker Cover	TEI-NIVAWCR-020	Aluminum Jacketed Rocker Cover	Test Engineering, Inc.
6.2.9	Modified Wiring Harness	OHTKA24-002-1	Modified Harness for ECM	OH Technologies, Inc.
6.3.4.2	Air Filter Assembly	16500-86G50KT	Air Filter Housing and Element	Nissan North America, Inc.
6.5.1	Cam Angle Encoder	NIVACWM010		Test Engineering, Inc.
	Cylinder Head Calibration Apparatus			OH Technologies, Inc.
7.4.2	Silicone Gasket Maker	999MP-A7007	RTV sealant	Nissan dealer
7.2	Test Fuel	KA24E	KA24E (dyed green)	Dow Chemical
7.3.1	Break-In Oil	TMC 926-2	TMC926-2	ASTM Test Monitoring Center

<sup>A</sup> Can be used for forty-eight tests; cylinder head included with assembly can be used for twenty-four tests.

<sup>B</sup> Can be used for twenty-four tests.