

Sequence VG Information Letter 04-2 Sequence No. 19

May 26, 2004

## 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 VG Mailing List
- SUBJECT: 1. Change in Quality Index U and L Values for EXHBP and MAP
  - 2. Piston Staining Removal Permitted

At the May 11, 2004 meeting of the Sequence VG Surveillance Panel, the panel agreed to the following changes to Test Method D6593.

- 1. The panel agreed to increase the upper and lower Quality Index ranges for exhaust backpressure from 0.08 to 0.17 and manifold absolute pressure from 0.08 to 0.40. Table A2.2 has been revised accordingly.
- 2. The panel agreed to allow cleaning of pistons with a Scotch Brite 7445 pad to remove discoloration from piston skirts. Section 7.8.4.4 has been modified to add a step to inspect the piston skirt plating and clean using a Scotch Brite 7445 pad where necessary. New footnotes 13 and 14 have also been added and existing footnotes 13 through 19 have been renumbered as 15 through 21.

These changes are effective May 13, 2004.

Peter Misangyi Product Engineering Ford Motor Company

L. Jalar

John L. Zalar Administrator ASTM Test Monitoring Center

Attachment

c: <u>ftp://ftp.astmtmc.cmu.edu/docs/gas/sequencev/procedure\_and\_ils/vgil04-2-19.pdf</u>

Distribution: Email

## 7.8.4.4 Piston Installation:

(1) Examine the skirt surfaces for discoloration. Remove any discoloration by rubbing the piston with a Scotch Brite 7445<sup>10,13</sup> pad. Reject any pistons from which staining cannot be removed.

(2) Install the piston on the connecting rod using Sunnen Model CRH-50 connecting rod heater <sup>10,14</sup>.

| Parameter | Stages  | L      | U      | Over Range | Under Range |
|-----------|---------|--------|--------|------------|-------------|
| Coolflow  | 1       | 47.47  | 48.53  | 87.0       | 0           |
| Cooloutt  | 1       | 56.71  | 57.29  | 113.0      | 0           |
|           | 2       | 84.71  | 85.29  | 113.0      | 0           |
|           | 3       | 44.71  | 45.29  | 113.0      | 0           |
| Exhbprs   | 1       | 103.83 | 104.17 | 115.0      | 0           |
|           | 2       | 106.83 | 107.17 | 115.0      | 0           |
| Humidity  | 1, 2, 3 | 10.85  | 11.95  | 64.0       | 0           |
| Intairpr  | 1, 2, 3 | 0.04   | 0.06   | 1.05       | 0           |
| Intairt   | 1, 2, 3 | 29.80  | 30.20  | 49.0       | 0           |
| Oilint    | 1       | 67.79  | 68.21  | 120.0      | 0           |
|           | 2       | 99.79  | 100.21 | 120.0      | 0           |
|           | 3       | 44.79  | 45.21  | 120.0      | 0           |
| Speed     | 1       | 1198.1 | 1201.9 | 3156.0     | 0           |
|           | 2       | 2898.1 | 2901.9 | 3156.0     | 0           |
|           | 3       | 698.1  | 701.9  | 3156.0     | 0           |
| Мар       | 1       | 68.60  | 69.40  | 76.0       | 0           |
|           | 2       | 65.60  | 66.40  | 76.0       | 0           |
| Cooloutp  | 1, 2, 3 | 69.35  | 70.65  | 159.0      | 0           |
| Raccint   | 1, 3    | 28.63  | 29.37  | 120.0      | 0           |
|           | 2       | 84.63  | 85.37  | 120.0      | 0           |
| Raccfl    | 1, 2, 3 | 14.85  | 15.15  | 29.0       | 0           |

## Table A2.2 L & U CONSTANTS and OVER and UNDER RANGE VALUES

<sup>13</sup> The sole source of supply of Scotch Brite 7445 known to the committee at this time is 3M Abrasive Systems Division, 3M Center, Building 223-6N-01, St. Paul, MN. 55144-1000 USA.

<sup>14</sup> The sole source of supply of Connecting Rod Heater and Pin Installation tool known to the Committee at this time is Sunnen Inc., 7910 Manchester, St Louis, MO 63143.

Existing footnotes 13 - 19 renumbered as 15 - 21.