



## Test Monitoring Center

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Sequence X Information Letter 21-1  
Sequence Number 5  
September 17, 2021

TO: Sequence X Surveillance Panel

SUBJECT: Updates to Test Method D 8279

As a result of recent conference calls and an electronic ballot, the Sequence X Surveillance Panel agreed to the following changes to Test Method D8279:

1. The panel agreed to not require several engine components be limited to six total runs. Section 6.2.2.1 has been updated to no longer require crankshaft bearings and connecting rod bearings, turbocharger and fuel injectors to be limited to a maximum of six tests.
2. The panel agreed to clarifications to honing procedure detailed in section 8.13.1, which include corrections to surface finish measurement values and specifying a profilometer for measurement.
3. The panel also agreed to include directions in section 8.19.3.3 to ensure the connecting rods are properly installed and to correct an error in the orientation of the notches.
4. Finally, the panel agreed to add a sentence to Section 8.23.2.10 to further define how to orient the blowby gas temperature thermocouple.

The revised text has been highlighted in red and blue and is included in the attached. These changes are effective September 9, 2021.

*M. D. Deegan*

Michael Deegan  
FCSD, Service Product Development, SEO  
Ford Motor Company

*Frank M. Farber*

Frank M. Farber  
Director  
ASTM Test Monitoring Center

Attachment

c: [http://www.astmtmc.cmu.edu/ftp/docs/gas/sequencex/procedure\\_and\\_ils/il21-1\\_x.pdf](http://www.astmtmc.cmu.edu/ftp/docs/gas/sequencex/procedure_and_ils/il21-1_x.pdf)

Distribution: Email

## Revises D8279-21

**6.2.2.1** Crankshaft ~~and bearings~~, connecting rods ~~and bearings~~, pistons, camshafts, ~~timing chain covers~~, cylinder blocks, and cylinder-head assemblies, ~~turbocharger, and fuel injectors~~ can ~~also~~ be used for a maximum of six tests provided they remain serviceable. However, keep these parts together as a set for all six tests.

**8.13.1 General**—Carry out deglazing after ultrasonic cleaning **for both new and used engines** under the following conditions to achieve **an per cylinder average** surface roughness ( $Ra$ ) of **9 0.178  $\mu\text{m}$  to 13 0.330  $\mu\text{m}$  (7  $\mu\text{in}$  to 13  $\mu\text{in}$ ) and  $30^\circ \pm 5^\circ$  crosshatch** using a Mitutoyo SJ-410 profilometer.

**8.19.3.3** Install the pistons **with the arrows facing forward** and connecting rods with the notches facing the **front rear**.

**8.23.2.10** Blowby Gas—Install a **temperature** sensor at the gas outlet of the blowby heat exchanger. **Orient the thermocouple such that water condensate does not affect the temperature measurement of the gas.**