

Report to MLIT on the Measurement of Fuel Economy and Emissions in Final Inspections

HIROSHIMA, Japan – Mazda Motor Corporation has submitted a report to Japan's Ministry of Land, Infrastructure, Transport and Tourism (MLIT) on the results of an investigation into its sample testing of fuel economy and emissions during final vehicle inspections. The investigation was conducted in response to a request from MLIT (No. 674) issued to automakers on July 9 after the discovery of fraudulent testing practices at other companies.

Key findings of the report

The investigation covered JC08 and WLTC testing modes and confirmed the following.

- (1) No improper alteration or falsification of test data in either mode.
- (2) Test data containing speed trace errors* was handled inappropriately in 72 cases out of 1,472 vehicles tested under the JC08 mode. All test data has been re-examined and the results show there was no effect on specification fuel economy and emission figures. No such cases were found in WLTC mode testing.

There are two causes for (2) above. First, the system was not set up to automatically invalidate results when a speed trace error occurred. Second, test procedures left the determination of speed trace errors up to each individual inspector.

Measures to prevent reoccurrence

We have decided to take the following steps.

- Update the system to automatically treat test results as invalid in the event of a speed trace error.
- Have multiple employees check inspection data, including speed trace errors

We would like to offer our sincere apologies for the concern this matter has caused to our customers and to all our stakeholders. We are treating the matter very seriously and will make every effort to prevent similar occurrences in the future.

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* A situation in which vehicle speed deviates more than the permitted amount from the speed trace pattern prescribed by the test mode

Outline of investigation into Mazda's sample testing of fuel economy and emissions during final vehicle inspections

Plant investigated: Hiroshima Plant (Minami-ku, Hiroshima)

Note: sample testing of fuel economy and emissions for all domestically produced models takes place at Hiroshima Plant

Period covered: For data used in test reports, the investigation covered the full three years and nine months (November 2014 – July 2018) that the company is required by law to keep records. For data for which there is no obligation to keep records, the period covered was decided by available data saved in testing systems, etc.

[1] JC08 fuel economy and emissions data: From Jan 2018

[2] JC08 speed trace data: From Oct 2016

[3] WLTC fuel economy and emissions data: From Jan 2018

[4] WLTC speed trace data: From Jan 2018

Method of investigation:

1. Data saved in exhaust testing equipment ([2] above) was checked against data in test reports to confirm whether or not any vehicles had made speed trace errors or whether any data had been improperly altered.
2. Data not saved in exhaust testing equipment but which was printed out from such equipment or was similarly judged to be in an unalterable form was checked against test report data to confirm whether or not there had been any instances of data alteration ([1], [3] and [4] above).
3. A hearing was conducted with inspectors regarding the existence of altered data.

Items investigated and results

Items investigated	Result	No. of vehicles investigated	No. of vehicles affected	Percentage of total
Improper alteration of reported fuel economy and emissions data	Not found	466 units JC08: 39 units [1] WLTC: 427 units [3]	0 units	0.0%
Improper alteration of temperature/ humidity data in the emissions testing room	Not found	466 units JC08: 39 units WLTC: 427 units	0 units	0.0%
Data judged valid despite deviations from stipulated test conditions				
Speed trace deviation	Found	1,875 units JC08: 1,472 units [2] WLTC: 403 units [4]	72 units JC08: 72 units WLTC: 0 units	3.8% JC08: 4.9% WLTC: 0.0%
Temperature/ humidity deviation	Not found	466 units JC08: 39 units WLTC: 427 units	0 units	0.0%
Failure to calibrate emissions gas analyzer	Not found	5,310 units JC08: 5,285 units WLTC: 25 units	0 units	0.0%