



## DEPARTMENT OF TRANSPORTATION

### National Highway Traffic Safety Administration

[Docket No. NHTSA-2018-0104, Notice 2]

#### Spartan Motors USA, Inc., Denial of Petition for Decision of Inconsequential

#### Noncompliance

**AGENCY:** National Highway Traffic Safety Administration (NHTSA), Department of Transportation (DOT).

**ACTION:** Denial of petition.

**SUMMARY:** Spartan Motors USA, Inc. (Spartan), has determined that certain model year (MY) 2017-2019 Spartan Emergency Response Gladiator and Metro Star chassis cabs do not fully comply with Federal Motor Vehicle Safety Standard (FMVSS) No. 121, *Air Brake Systems*. Spartan filed a noncompliance report dated October 12, 2018, and amended the report on December 26, 2018. Spartan petitioned NHTSA on November 12, 2018, and amended the petition on July 31, 2019, for a decision that the subject noncompliance is inconsequential as it relates to motor vehicle safety. This document announces and explains the denial of Spartan's petition.

**FOR FURTHER INFORMATION CONTACT:** Ahmad Barnes, Office of Vehicle Safety Compliance, the National Highway Traffic Safety Administration (NHTSA), telephone (202) 366-7236, facsimile (202) 366-3081.

#### SUPPLEMENTARY INFORMATION:

**I. Overview:** Spartan has determined that certain MY 2017-2019 Spartan Emergency Response Gladiator and Metro Star chassis cabs do not fully comply with paragraph S5.3.3.1(a) of FMVSS No. 121, *Air Brake Systems* (49 CFR 571.121). Spartan filed a noncompliance report dated October 12, 2018, and amended the report on December 26, 2018, pursuant to 49 CFR part 573, *Defect and Noncompliance Responsibility and Reports*. Spartan petitioned NHTSA on

November 12, 2018, and amended the petition on July 31, 2019, for an exemption from the notification and remedy requirements of 49 U.S.C. chapter 301 on the basis that this noncompliance is inconsequential as it relates to motor vehicle safety, pursuant to 49 U.S.C. 30118(d) and 30120(h) and 49 CFR part 556, *Exemption for Inconsequential Defect or Noncompliance*.

Notice of receipt of Spartan's petition was published with a 30-day public comment period, on December 10, 2019, in the **Federal Register** (84 FR 67509). No comments were received. To view the petition and all supporting documents log onto the Federal Docket Management System (FDMS) website at <https://www.regulations.gov/>. Then follow the online search instructions to locate docket number "NHTSA-2018-0104."

**II. Chassis Cabs Involved:** Approximately 15 MY 2017–2019 Spartan Emergency Response Gladiator and Metro Star chassis cabs manufactured between November 16, 2016, and October 30, 2018, are potentially involved.

**III. Noncompliance:** Spartan described the noncompliance as the service brake application timing exceeding the 0.45 timing requirement as specified in paragraph S5.3.3.1(a) of FMVSS No. 121.

**IV. Rule Requirements:** Paragraph S5.3.3 of FMVSS No. 121 includes the requirements relevant to this petition. Each service brake system must meet the requirements of paragraph S5.3.3.1(a). With an initial service reservoir system air pressure of 100 psi, the air pressure in each brake chamber must, when measured from the first movement of the service brake control, reach 60 psi in not more than 0.45 seconds in the case of trucks and buses.

**V. Summary of Spartan's Petition:** The following views and arguments presented in this section, "V. Summary of Spartan's petition," are the views and arguments provided by Spartan and do not reflect the views of the Agency. Spartan describes the subject noncompliance and contends that the noncompliance is inconsequential as it relates to motor vehicle safety.

Spartan states that paragraph S5.3.3.1 of FMVSS No. 121 provides that 60 psi is required, in this case, for the front brake chambers and Spartan notes that it requires the pressure in the brake chamber to be achieved in no more than 0.45 seconds. According to Spartan, this part of the requirement “is not interpreted to mean brakes are to be applied at 60 psi but rather a certain pressure at the brake chamber will be achieved.”

Spartan says that it “conducted three tests on a sample chassis cab of similar brake system configuration to those subject to the identified noncompliance.” Spartan found that, on average, the air pressure at the chamber of the sample chassis cab reached 60 psi 0.04 to 0.05 seconds after the required time of 0.45 seconds. Spartan further notes that even when the timing requirement is not being met “the brakes are still being applied irrespective of achieving the 60-psi pressure at the front brake chambers.” Spartan claims that exceeding the required time by the 0.044 to 0.05 seconds observed in its testing “would not impede the capability of the vehicle being able to stop.” It stated that the impact of being 0.044 to 0.05 seconds above the requirement of 0.45 seconds would have very little impact (approximately 4 feet at 60 mph) to stopping distance of the vehicle.

Spartan then refers to the Driver’s License Manual as stating that “stopping distance is impacted by driver perception distance and reaction distance,” as well as other factors including speed and gross weight of the vehicle. Spartan argues that those factors “would appear to have a more significant impact on overall stopping distance, than 0.05 seconds of timing, for the air pressure to reach 60 psi at the front brake chambers.”

Finally, Spartan explains that at 60 mph, the subject vehicles are required by FMVSS No. 121 to achieve a complete stop in 310 feet. A vehicle meeting this requirement would take approximately 3.52 seconds to stop from a speed of 60 mph. Spartan contends that the subject vehicles are capable of stopping within 310 feet at 60 mph, and, therefore, “would still be able to stop within the required stopping distance.”

Presumably because any time delay or degradation in performance resulting from not meeting the timing requirement is small in relation to the time involved in a full stop from 60 mph, Spartan concludes by again contending that the subject noncompliance is inconsequential as it relates to motor vehicle safety and that its petition to be exempted from providing notification of the noncompliance, as required by 49 U.S.C. 30118, and a remedy for the noncompliance, as required by 49 U.S.C. 30120, should be granted.

## **VI. NHTSA's Analysis:**

In determining inconsequentiality of a noncompliance, NHTSA focuses on the safety risk to individuals who experience the type of event against which a recall would otherwise protect.<sup>1</sup> In general, NHTSA does not consider the absence of complaints or injuries when determining if a noncompliance is inconsequential to safety. The absence of complaints does not mean vehicle occupants have not experienced a safety issue, nor does it mean that there will not be safety issues in the future.<sup>2</sup> Further, because each inconsequential noncompliance petition must be evaluated on its own facts and determinations are highly fact-dependent, NHTSA does not consider prior determinations as binding precedent. Petitioners are reminded that they have the burden of persuading NHTSA that the noncompliance is inconsequential to safety.

Arguments that only a small number of vehicles or items of motor vehicle equipment are affected have also not justified granting an inconsequentiality petition.<sup>3</sup> Similarly, NHTSA has

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<sup>1</sup> See *Gen. Motors, LLC; Grant of Petition for Decision of Inconsequential Noncompliance*, 78 FR 35355 (June 12, 2013) (finding noncompliance had no effect on occupant safety because it had no effect on the proper operation of the occupant classification system and the correct deployment of an air bag); *Osram Sylvania Prods. Inc.; Grant of Petition for Decision of Inconsequential Noncompliance*, 78 FR 46000 (July 30, 2013) (finding occupant using noncompliant light source would not be exposed to significantly greater risk than occupant using similar compliant light source).

<sup>2</sup> See *Morgan 3 Wheeler Limited; Denial of Petition for Decision of Inconsequential Noncompliance*, 81 FR 21663, 21666 (Apr. 12, 2016); see also *United States v. Gen. Motors Corp.*, 565 F.2d 754, 759 (D.C. Cir. 1977) (finding defect poses an unreasonable risk when it “results in hazards as potentially dangerous as sudden engine fire, and where there is no dispute that at least some such hazards, in this case fires, can definitely be expected to occur in the future”).

<sup>3</sup> See *Mercedes-Benz, U.S.A., L.L.C.; Denial of Application for Decision of Inconsequential Noncompliance*, 66 FR 38342 (July 23, 2001) (rejecting argument that noncompliance was inconsequential because of the small number of vehicles affected); *Aston Martin Lagonda Ltd.; Denial of Petition for Decision of Inconsequential Noncompliance*, 81 FR 41370 (June 24, 2016) (noting that situations involving individuals trapped in motor vehicles—while

rejected petitions based on the assertion that only a small percentage of vehicles or items of equipment are likely to exhibit a noncompliance. The percentage of potential occupants that could be adversely affected by a noncompliance does not determine the question of inconsequentiality. Rather, the issue to consider is the consequence to an occupant who is exposed to the consequence of that noncompliance.<sup>4</sup> These considerations are also relevant when considering whether a defect is inconsequential to motor vehicle safety.

The purpose of standard No. 121, as is the case with all FMVSS, is to establish minimum levels of safety performance. The standard ensures safe braking performance under normal and emergency conditions for trucks, buses, and trailers equipped with air brake systems. One means of establishing that braking performance meets normal and emergency conditions is by requiring air pressure to be available at each service brake chamber within a safe time interval after the service brake control is activated. Section 5.3.3.1 of FMVSS 121 defines the amount of pressure (60 psi) for, in this case, the front brake chambers of the affected vehicles to ensure the proper braking performance. Further, it also defines a “not to exceed” time (0.45 seconds) in which that pressure at the brake chamber must be achieved. In agreement to Spartan’s views, this is not interpreted to mean brakes are required to be applied at 60 psi but rather the time in which the air pressure must be achieved at each brake chamber. Brakes must be applied nearly instantaneously after actuation of the treadle valve. Consequently, the relevant metric is the amount of time required for the pressure at each chamber to reach 60 psi after brake activation.

FMVSS No. 121 requires vehicles to achieve a complete stop in 310 feet from 60 mph. According to Spartan, it would take approximately 3.52 seconds for vehicles to decelerate from this rate of speed to a complete stop. While vehicles affected by the subject noncompliance are

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infrequent—are consequential to safety); *Morgan 3 Wheeler Ltd.; Denial of Petition for Decision of Inconsequential Noncompliance*, 81 FR 21663, 21664 (Apr. 12, 2016) (rejecting argument that petition should be granted because the vehicle was produced in very low numbers and likely to be operated on a limited basis).

<sup>4</sup> See *Gen. Motors Corp.; Ruling on Petition for Determination of Inconsequential Noncompliance*, 69 FR 19897, 19900 (Apr. 14, 2004); *Cosco Inc.; Denial of Application for Decision of Inconsequential Noncompliance*, 64 FR 29408, 29409 (June 1, 1999).

capable of stopping within the distance of 310 feet as prescribed by FMVSS No. 121 and the brakes are still being applied irrespective of achieving the 60-psi pressure at the front brake chambers, NHTSA does not concur with Spartan's reasoning that the noncompliance does not impede the capability of all of the manufacturer's vehicles being able to stop within a safe distance.

In determining whether a noncompliance is inconsequential to safety, comparable levels of safety must exist between compliant vehicles and noncompliant vehicles, and in this case, the impact of being 0.044 to 0.05 seconds above the requirement of 0.45 seconds would increase stopping distance by approximately 4 feet. In addition, meeting the minimum required "not to exceed time" of (0.45 seconds) will in most cases, result in a reduction in impact velocity, and hence the severity of a crash. Furthermore, the "not to exceed" time (0.45 seconds) stated in section 5.3.3.1 of FMVSS 121 is intended to assure a minimum level of safety in all circumstances, including emergency or excessive braking events (e.g., driving in congested traffic). In the agency's view, exceeding the 0.45 seconds time interval, particularly given the consequences of impacts between heavy and light vehicles, creates risks with potentially serious safety implications. Moreover, brake responsiveness may also impact vehicle maneuverability in conditions that are less than ideal.

**VII. NHTSA's Decision:** In consideration of the foregoing, NHTSA has determined that Spartan has not met its burden of persuasion that the subject FMVSS No. 121 noncompliance is inconsequential to motor vehicle safety. Accordingly, Spartan's petition is hereby denied, and Spartan is consequently obligated to provide notification of and free remedy for that noncompliance under 49 U.S.C. 30118 and 30120.

(Authority: 49 U.S.C. 30118, 30120; 49 CFR part 556; delegations of authority at 49 CFR 1.95 and 501.8)

**Eileen Sullivan,**

*Associate Administrator for Enforcement.*

