



This document is scheduled to be published in the Federal Register on 02/11/2013 and available online at <http://federalregister.gov/a/2013-02987>, and on FDsys.gov

DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

49 CFR Part 571

Docket No. NHTSA-2013-0011

RIN 2127-AL11

Federal Motor Vehicle Safety Standards; Air Brake Systems

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

ACTION: Final rule; response to petition for reconsideration.

SUMMARY: On July 27, 2009, NHTSA published a final rule that amended the Federal motor vehicle safety standard for air brake systems by requiring substantial improvements in stopping distance performance on new truck tractors. This final rule responds to petitions for reconsideration of a July 27, 2011 final rule that slightly relaxed the stopping distance requirement for typical loaded tractors tested from an initial speed of 20 mph. NHTSA is granting the request to remove the stopping distance requirements for speeds of 20 mph and 25 mph and denying the request to relax the stopping distance requirements for speeds between 30 mph and 55 mph.

DATES: This final rule is effective [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].

Petitions for reconsideration must be received not later than [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: Petitions for reconsideration should refer to the docket number and must be submitted to: Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue, S.E., Washington, DC, 20590.

FOR FURTHER INFORMATION CONTACT: For technical issues, you may contact George Soodoo, Office of Crash Avoidance Standards, by telephone at (202) 366-4931, and by fax at (202) 366-7002.

For legal issues, you may contact David Jasinski, Office of the Chief Counsel, by telephone at (202) 366-2992, and by fax at (202) 366-3820.

You may send mail to both of these officials at the National Highway Traffic Safety Administration, 1200 New Jersey Avenue, S.E., Washington, DC 20590.

SUPPLEMENTARY INFORMATION:

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I. Background of the Stopping Distance Requirement

On July 27, 2009, NHTSA published a final rule in the **Federal Register** amending Federal Motor Vehicle Safety Standard (FMVSS) No. 121, Air Brake Systems, to require improved stopping distance performance for heavy truck tractors.¹ This rule reduced the maximum allowable stopping distance, from 60 mph, from 355 feet to 250 feet for the vast majority of loaded heavy truck tractors. For a small minority of loaded very heavy tractors, the

¹ 74 FR 37122; Docket No. NHTSA-2009-0083-0001.

maximum allowable stopping distance was reduced from 355 feet to 310 feet. Having come to the conclusion that modifications needed for “typical three-axle tractors” to meet the improved requirements were relatively straightforward, NHTSA provided two years lead time for those vehicles to comply with the new requirements. These typical three-axle tractors comprise approximately 82 percent of the total fleet of heavy tractors. The agency concluded that other tractors, which are produced in far fewer numbers and may need additional work to ensure stability and control while braking, would need more lead time to meet the requirements. Due to extra time needed to design, test, and validate these vehicles, which included two-axle tractors and severe service tractors, the agency allowed four years lead time for these tractors to meet the improved stopping distance requirements.

Requirements in FMVSS No. 121 provide that if the speed attainable by a vehicle in two miles is less than 60 mph, the speed at which the vehicle shall meet the specified stopping distances is four to eight mph less than the speed attainable in two miles. In the July 2009 final rule, the agency used an equation to derive the required stopping distances for vehicles with initial speeds of less than 60 mph.²

$$S_t = (1/2 V_o t_r) + ((1/2) V_o^2 / a_f) - ((1/24) a_f t_r^2)$$

Where:

S_t = Total stopping distance in feet

V_o = Initial Speed in ft/sec

t_r = Air pressure rise time in seconds

a_f = Steady-state deceleration in ft/sec²

² The complete derivation for this equation was included in the docket. See Docket No. NHTSA-2005-21462-0039, at 18-22.

For the final rule, the agency selected an air pressure rise time of 0.45 seconds, which is equal to the brake actuation timing requirement in FMVSS No. 121. The steady-state deceleration was based on a theoretical deceleration curve in which vehicle deceleration would increase linearly during the rise time portion of the stopping event, followed by constant steady-state deceleration, followed by an instantaneous decrease in acceleration back to zero at the completion of the stop. Table II in FMVSS No. 121 sets forth the stopping distance requirements for speeds from 60 mph down to 20 mph (in increments of 5 mph) for both typical and severe service tractors in the loaded conditions and all tractors in the unloaded condition derived using that formula.

In a final rule published in the **Federal Register** on November 13, 2009, the agency addressed petitions for reconsideration regarding the stopping distance requirements for reduced speeds, the omission of four-axle tractors under 59,600 pounds gross vehicle weight rating (GVWR) from the listed requirements and the date on which the improved stopping distance requirements should apply to those tractors, the manner in which NHTSA characterized the typical three-axle tractor, and the fuel tank fill level testing specification.³ The November 2009 final rule made the following amendments: (1) The agency accepted the recommendation of the petitioners and required compliance with the improved stopping distance requirements for tractors with four or more axles and a GVWR of 59,600 pounds or less by August 1, 2013, thereby giving four years of lead time; (2) the agency revised the definition of a “typical three-axle tractor” in the regulatory text to include three-axle tractors having a steer axle gross axle weight rating (GAWR) of 14,600 pounds or less and a combined drive axle GAWR of 45,000

³ 74 FR 58562; Docket No. NHTSA-2009-0175-0001.

pounds or less; (3) the agency removed the fuel tank loading specification from the test procedure; (4) the agency made two typographical corrections.⁴

In a final rule published in the **Federal Register** on July 27, 2011, the agency responded to petitions for reconsideration with respect to the new stopping distance requirements from reduced initial speeds.⁵ The agency increased the stopping distances set forth in Table II of FMVSS No. 121 for typical tractors in the loaded condition (column (3)) and for unloaded tractors (column (6)) from an initial speed of 20 mph. For typical tractors in the loaded condition, the agency increased the stopping distance from an initial speed of 20 mph from 30 feet to 32 feet.

The agency made this change after conducting additional tractor testing.⁶ In the test program, one of the agency's three-axle tractors that had been used in previous brake research was loaded to a modified gross vehicle weight so that it was able to stop from 60 mph as close as possible to the 250-foot stopping distance requirements. Additional tests were then conducted at each initial speed specified in Table II of FMVSS No. 121 in both the loaded and unloaded condition.

The 60 mph stop showed a slightly different deceleration profile compared to the idealized deceleration profile that was predicted by the stopping distance equation. For example, the equation assumed that the deceleration rate would remain steady for the majority of the stop. However, testing found varying deceleration rates during the stop with slightly higher deceleration rates as the vehicle's speed approached zero. By averaging the stopping distances from six stops from each speed in each loading condition, the agency was able to compare the

⁴ The agency made further correcting amendments to correct an omission in the November 2009 final rule. See 75 FR 15620 (Mar. 30, 2010); Docket No. 2009-0175-0004.

⁵ 76 FR 44829; Docket No. 2009-0175-0006.

⁶ *Experimental Measurement of the Stopping Performance of a Tractor-Semitrailer from Multiple Speeds*, Report No. DOT HS 811 488 (June 2011); Docket No. 2009-0175-0005.

test results to Table II. The test tractor performed slightly better than the Table II stopping distance requirements at each test speed between 30 mph and 55 mph. At 25 mph, the test tractor closely matched the Table II stopping distance (44.2 feet in testing compared to 45 feet in Table II). However, at 20 mph, the test tractor performed worse than the Table II stopping distance (31.2 feet in testing compared to 30 feet in Table II).

The agency concluded that the tractor testing demonstrated that there were slight inaccuracies in the equation due to the theoretical deceleration profile's not matching the test tractor. We found that braking tests with initial speeds below 35 mph are of such short duration that there is insufficient time to attain and maintain the level of steady-state deceleration performance that is seen from higher initial braking speeds. However, the agency determined that additional research would not likely lead to improvements in the robustness of the equation, nor would it be likely to suggest a need for any significant changes to the Table II stopping distance requirements.

II. Petition for Reconsideration

NHTSA received one petition for reconsideration of the July 2011 final rule from the Truck & Engine Manufacturers Association (EMA).⁷ The petition for reconsideration addressed two issues. First, EMA requested that the agency amend the reduced-speed stopping distances for loaded tractors that fall outside of the definition of a typical three-axle tractor. Second, EMA requested that the agency amend FMVSS No. 121 to remove the stopping distance requirements for initial speeds of 20 and 25 mph.

The Heavy Duty Brake Manufacturers Council (HDBMC) submitted a document that it styled as comments regarding the July 2011 final rule. In its comments, HDBMC requested that the agency do four things: (1) reconsider adopting HDBMC's recommendations regarding

⁷ Docket No. NHTSA-2009-0175-0008.

stopping distances at lower speeds;⁸ (2) eliminate the 20 mph stopping distance requirements from Table II; (3) initiate additional research to study the effect of different design solutions on stopping distance from 25 and 30 mph and revise Table II based on that research; and (4) consider the impact of the agency's 20 mph stopping distance requirements on in-service braking performance set by the Federal Motor Carrier Safety Administration (FMCSA). Because HDBMC's submission was styled as a comment, we will consider it to the extent it is applicable to EMA's petition for reconsideration.

III. Response to Petition

A. Stopping Distance Requirements at Speeds between 30 and 55 MPH

EMA's first request in its petition for reconsideration is for NHTSA to reduce the stopping distance requirements in Table II of FMVSS No. 121 for initial speeds between 30 mph and 55 mph. EMA acknowledged NHTSA has conducted testing at lower speeds, but EMA contended that NHTSA's testing of a single tractor falls short of what is needed to confirm that the reduced-speed stopping distance requirements are appropriate for all types of tractors regulated by FMVSS No. 121. Further, EMA asserted that the tractor tested by the agency was not representative of a typical three-axle tractor because it was equipped with 24.5 inch diameter wheels, instead of the more common 22.5 inch diameter wheels, which provided the tractor with additional tire-to-road surface friction. EMA also stated that the agency's testing was insufficient to justify the reduced-speed stopping distance requirements because the test tractor was equipped with disc brakes on the steer axle, which generated braking power more quickly than if drum brakes had been used. It also stated that, for the fully loaded testing, the vehicle had been loaded to a lighter weight than the tractor was rated for, which improved its braking performance by allowing brake torque to be generated in less time and with less brake fade

⁸ See Docket Nos. NHTSA-2005-21462-0020; NHTSA-2009-0083-0004.

during the stops. EMA also asserted that the tractor's brakes were conditioned much more thoroughly than is done using the FMVSS No. 121 brake burnishing procedure, which enhanced the vehicle's braking performance. Even assuming that the vehicle tested by the agency was representative of a typical three-axle tractor, EMA asserted that the testing cannot be used to validate the stopping distance requirements for two-axle tractors or severe service tractors.

EMA included with its petition the results of TruckSim computer simulations used to determine the braking performance at reduced initial speeds for two types of tractors (normal duty and severe duty) that EMA stated had the precise braking improvements needed to meet the new 60 mph stopping distance requirements for each type of tractor (250 feet and 310 feet, respectively). EMA's TruckSim results are shown in Table 1.

TABLE 1 – EMA TruckSim Stopping Distance Results

Initial Braking Speed (mph)	EMA TruckSim Results, Typical Tractor (stopping distance in feet)	EMA TruckSim Results, Severe Service Tractor (stopping distance in feet)
30	74	86
35	96	111
40	122	143
45	150	177
50	180	212
55	214	260

EMA also included an appendix showing stopping distance performance from reduced speeds of seven tractors that are considered typical three-axle tractors. EMA observed that, although the compliance margins for stops from 60 mph ranged from 10.5 to 12.3 percent, the compliance margins for stops from 30 mph varied much more greatly, from -3.2 to 16.3 percent. A summary of EMA's three-axle testing appears in Table 2.

TABLE 2 – EMA Typical Three-Axle Tractor Test Results

Speed (mph)	FMVSS No. 121 Stopping Distance	Stopping Distance Performance (feet)						
		Vehicle A	Vehicle B	Vehicle C	Vehicle D	Vehicle E	Vehicle F	Vehicle G

	Requirement (feet)							
30	65	54.4	67.1	56.3		61.4	56.9	59.3
35	89							
40	114	93.0		92.3	96.2	98.2	99.0	97.7
45	144							
50	176	143.6		151.0		152.4		156.5
55	212							
60	250	219.2	220.1	219.8	220.2	223.6		223.7

EMA requested in its petition that the agency adopt the stopping distances for initial test speeds between 30 mph and 55 mph set forth in Table I in place of the existing stopping distance requirements specified in Table II of FMVSS No. 121. Alternatively, EMA requested that the agency should change the stopping distance requirements from reduced initial speeds back to those that were in place prior to the July 2009 final rule.

For the reasons discussed below, we do not believe changes to the reduced speed stopping distance requirements are necessary, nor do we believe that unique or complicated braking systems (that is, modifications beyond those contemplated in the July 2009 final rule) are needed to comply with the requirements that went into effect for typical three-axle tractors on August 1, 2011 and will go into effect for 4x2 and severe-service tractors on August 1, 2013. We note that, although EMA's petition expressly requested that NHTSA change the stopping distance requirements at reduced speeds for severe-service tractors, EMA's petition contained substantial discussion regarding the stopping distance requirements for typical tractors. Thus, the agency has considered all of the reduced speed stopping distance requirements in the loaded condition.

By way of background, the agency notes that, in setting the requirements for tractor stopping distances at reduced initial test speeds, the agency did not intend that unique or complicated brake systems would be needed solely to meet the new requirements at reduced

initial test speeds. The agency assumed that most tractors would require some type of foundation brake system improvement in order to meet the new 60 mph stopping distance requirements of 250 feet for typical tractors and 310 feet for severe-service tractors. As discussed in the July 2009 final rule, the agency's best estimate was that, at a minimum, all typical three-axle tractors would need to have larger S-cam drum foundation brakes installed on the steer and drive axles and all two-axle tractors and severe-service tractors would need to be equipped with disc brakes on the steer and drive axles in order to meet the new 60 mph stopping distance requirements with an adequate margin for compliance.⁹ EMA's current petition for reconsideration suggests that, without changing the stopping distance requirements for reduced initial speeds, vehicle manufacturers will need to develop unique or complicated braking systems to comply with these requirements.

In its petition for reconsideration, EMA raised several issues regarding the validity of the agency's testing of stopping distance from reduced initial speeds. The outcome of this testing led NHTSA to make minor adjustments in the July 2011 final rule to the Table II stopping distance requirements final rule from an initial speed of 20 mph.

The agency selected the vehicle that was tested based on its prior 60 mph stopping distance of 249 feet, which is nearly equal to the upgraded 60 mph stopping distance requirement. However, when the tractor was prepared for additional testing, its 60 mph stopping distance was found to have increased to approximately 295 feet. Therefore, a substantial amount of ballast reduction was necessary to improve the tractor's performance to reach a zero margin of compliance relative to the 60 mph stopping distance requirement. Contrary to EMA's assertion that this tractor had braking performance that was better than normal tractors, we believe this tractor had poor braking performance that required the agency to remove ballast weight.

⁹ See 74 FR 37152-53.

EMA identified four factors in the agency's test program that it believed had a disproportionately positive effect on stopping performance from reduced initial speeds:

- It was equipped with 24.5 inch diameter wheels rather than the more common 22.5 inch wheels.
- The disc brakes on the steer axle generated more braking power than drum brakes would have and caused more load transfer to the steer axle resulting in less tendency for wheel lockup.
- The reduction in test weight resulted in a lightly loaded condition and the brakes had excess power to stop the vehicle with less fade than brakes designed for a tractor with a lower GVWR.
- The additional stops conducted during the test program provided exceptional brake burnish that would not be accomplished in an FMVSS No. 121 compliance test.

The agency does not believe that any of these factors had a substantial effect on the outcome of the braking tests. Many of EMA's concerns are countered by the alteration of the ballast weight to provide a zero margin of compliance with the 250-foot stopping distance requirement from 60 mph. For example, we agree that changing the wheel diameter or type of steer axle brakes could result in better or worse braking performance than was achieved during the agency's testing. Similarly, HDBMC asserted that, by removing ballast weight and reducing the load on the tires, the tire-to-road coefficient increases, which would enable shorter stopping distances. However, had the wheel diameter, steer axle brake type, or tires been changed, the agency would have adjusted the ballast weight up or down as needed so that the tractor would have a zero margin of compliance with the 250-foot stopping distance requirement from an initial speed of 60 mph. The tractor deceleration rate is generally based on the quotient of the

total braking force divided by the total vehicle weight. Thus, deceleration rate can be adjusted by increasing or decreasing the braking force or the weight.¹⁰ That is, changing the weight normalized the braking performance so the agency could make direct comparisons of stopping distances at different speeds.

Regarding the brake burnish, we note that the vehicle's braking performance was consistent throughout the test program. Furthermore, after testing at reduced speeds, the agency conducted additional stops from 60 mph to ensure the vehicle's stopping distance performance had not changed. As indicated in the agency's test report, nothing about the vehicle's stopping distance performance changed during testing.¹¹

Regarding the issue of whether the agency's test tractor is representative of a 4x2 tractor or a severe-service tractor, which was raised by both EMA and HDBMC, we believe that all types of tractors share the same overall characteristics in terms of brake system reaction time and steady-state deceleration. The largest severe-service tractors are expected to have lower steady-state deceleration based on prior agency testing at 60 mph. Thus, they are provided with longer allowable stopping distances than lighter tractors. However, we would not expect that the brake systems would perform substantially differently. EMA did not provide any detailed test data showing that these other types of tractors brake differently from reduced initial speeds than the typical three-axle tractor that the agency tested. The test data provided by EMA to the agency in 2006 for 4x2 and severe-service tractors addressed only the initial test speed of 60 mph.¹²

The agency has reviewed the stopping distance data that EMA listed in Appendix A of its petition for typical three-axle tractors. Test results were not provided for each of the seven

¹⁰ An upper deceleration limit could be reached if the brakes can generate sufficient torque to lock up all of the vehicle's wheels. However, this limit was not reached in the agency's tests.

¹¹ See Docket No. NHTSA-2009-0175-0005, at 13, 17.

¹² See Docket No. NHTSA-2005-21462-0034.

tractors at each initial test speed. Six of the tractors were tested from 60 mph, four were tested from 50 mph, six were tested from 40 mph, and six were tested from 30 mph.

The 60 mph braking performance for the six vehicles that were tested showed stopping distances between 219 and 224 feet, corresponding to margins of compliance with the upgraded stopping distance requirement of 10 to 12 percent. From an initial test speed of 50 mph the four vehicles that were tested had stopping distances between 143 and 157 feet, corresponding to an 11 to 18 percent margin of compliance with the 176-foot stopping distance requirement from 50 mph. From an initial test speed of 40 mph, the four tractors that were tested had stopping distances between 92 and 99 feet, corresponding to a 13 to 19 percent margin of compliance with the 114-foot stopping distance requirement.

From an initial test speed of 30 mph, the current FMVSS No. 121 stopping distance requirement is 65 feet. Three of the tractors tested by EMA met this requirement with at least a 10 percent margin of compliance. One tractor met this requirement with a 9 percent margin of compliance. One tractor met this requirement with a 6 percent margin of compliance. One tractor (Vehicle B) had a stopping distance of 67 feet, which was 3 percent longer than the FMVSS No. 121 requirement. Vehicle B test data was only provided at initial test speeds of 30 mph and 60 mph.

The agency could not conduct a technical evaluation of EMA's stopping distance results. EMA did not provide details regarding how many stops were conducted at each speed. This is important because the FMVSS No. 121 stopping distance requirement states that a vehicle must stop within the distance specified in Table II at least once out of six stops. If six stops were conducted, EMA's data does not show how much variability occurred in each tractor's six-stop series. Moreover, EMA did not provide information about the specific tractors tested such as

GVWR, GAWRs, wheelbase, type and size of brake components, antilock brake system configurations, and brake application timing, which would provide more information regarding braking performance. Without this information, the agency cannot determine what measures might be needed in order for Vehicle B's braking performance to be improved to meet the 65-foot stopping distance requirement from 30 mph. The difference in performance from Vehicle B could be explained by differences in brake systems among the seven tractors tested. However, EMA did not provide sufficient details for the agency to determine if any of the brake system differences would be considered to be unique or complicated beyond the brake system improvements contemplated by the agency in its July 2009 final rule.

Similarly, the TruckSim results provided by EMA do not contain sufficient detail to justify a change to the stopping distance requirements. Aside from stating that the simulated tractors were equipped with brake system improvements needed to meet the 60 mph stopping distance requirements, EMA did not provide any information of the characteristics of the simulated tractors, including the number of axles, GVWR, GAWR, foundation brake type and size, brake actuator size, brake application timing, brake system deceleration rise time, or stopping distance deceleration profiles for the agency to review. Without sufficient details underlying the simulation, the agency cannot accept the simulation results as sufficient justification to revise the stopping distance requirements.

Based on the foregoing, the agency concludes that EMA's assertion that unique or complicated brake systems would be needed to meet the stopping distance requirements from reduced initial test speeds is not supported by the information before the agency. Without details regarding the testing of tractor brake testing or the TruckSim simulations, those results do not demonstrate that brake systems changes other than those contemplated by the July 2009 final

rule are necessary to meet the reduced stopping distance requirements. Accordingly, the agency is denying EMA's request to amend Table II of FMVSS No. 121 to increase the required stopping distance from reduced initial test speeds between 30 and 55 mph.

B. Stopping Distance Requirements at Speeds of 20 and 25 MPH

EMA also requested that NHTSA amend FMVSS No. 121 to remove the stopping distance performance requirements at initial speeds of 20 and 25 mph. As set forth in S3, FMVSS No. 121 does not apply to any truck or bus that has a speed attainable in 2 miles of not more than 33 mph. For vehicles that cannot attain a speed of 60 mph in 2 miles, the vehicle is required to stop from a speed in Table II or IIa that is 4 to 8 mph less than the speed attainable in 2 miles.¹³ Therefore, a tractor that can only attain a speed of 34 mph would be tested from an initial speed of 30 mph, and there are no vehicles that would be subjected to testing from an initial speed of 20 or 25 mph.

EMA states that, because the stopping distances from 20 and 25 mph have no bearing on compliance with FMVSS No. 121, maintaining those stopping distances in FMVSS No. 121 wastes time and resources and keeps a potentially confusing contradiction in the standard. HDBMC supported eliminating the 20 mph stopping distances from FMVSS No. 121.

We agree with EMA inasmuch as they state that maintaining the 20 and 25 mph stopping distance is unnecessary because those stopping distances do not apply to any vehicle subject to FMVSS No. 121.¹⁴ Accordingly, we are granting EMA's request to delete the 20 and 25 mph stopping distances for all vehicle types from Tables II and IIa in FMVSS No. 121 for both the

¹³ Tractors that are not what the agency considers "typical three-axle tractors" have additional lead time to comply with the improved stopping distance requirements. Prior to August 1, 2013, those tractors may comply with the stopping distance requirements in Table IIa.

¹⁴ We need not comment on EMA's other bases for removing the 20 and 25 mph stopping distances from FMVSS No. 121.

service brake and the emergency brake. This final rule replaces Tables II and IIa with new tables without stopping distances for 20 and 25 mph that are otherwise substantively unchanged.¹⁵

IV. Administrative Procedure Act Requirements

This final rule eliminates the 20 and 25 mph stopping distances from Table II for all types of vehicles subject to FMVSS No. 121, including buses and single unit trucks that were not addressed in the rulemaking proceeding leading to the July 2009, November 2009, and July 2011 final rules. This final rule does not impose any substantive requirements. It simply removes stopping distances from Tables II and IIa that are not requirements for any vehicle subject to FMVSS No. 121. This final rule will have no substantive effect. Therefore the agency has determined that notice and opportunity for public comment pursuant to 5 USC 553(b) is unnecessary.

A rule ordinarily cannot take effect earlier than 30 days after it is published pursuant to 5 USC 553(d) except when the agency finds, among other things, good cause for an earlier effective date. In addition, 49 USC 30111(d) provides that a Federal motor vehicle safety standard may not become effective before the 180th day after the standard is prescribed or later than one year after it is prescribed except when a different effective date is, for good cause shown, in the public interest. These amendments would not impose new requirements; rather, these amendments simply delete stopping distances at speeds that are not tested by the agency and will have no substantive effect. Therefore, good cause exists for these amendments to be made effective immediately.

¹⁵ We have also taken the opportunity to correct a formatting error in Table IIa. The present version of the table separates the term “PFC” (peak coefficient of friction) from the 0.9 value for PFC. The correct format is included in this final rule.

V. Rulemaking Analyses and Notices

A. Executive Order 12866, Executive Order 13563, and DOT Regulatory Policies and Procedures

The agency has considered the impact of this rulemaking action under Executive Orders 12866 and 13563 and the DOT's regulatory policies and procedures. This action was not reviewed by the Office of Management and Budget under Executive Order 12866. The agency has considered the impact of this action under the Department of Transportation's regulatory policies and procedures (44 FR 11034; February 26, 1979), and has determined that it is not "significant" under them.

This action completes the agency's response to petitions for reconsideration regarding the July 2011 final rule amending FMVSS No. 121. This final rule deletes stopping distances from the tables in FMVSS No. 121 for speeds that are not tested by NHTSA. Today's action will not cause any additional expenses for vehicle manufacturers. This action will not have any safety impacts.

B. Privacy Act

Anyone is able to search the electronic form of all documents received into any of our dockets by the name of the individual submitting the document (or signing the document, if submitted on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act Statement in the Federal Register published on April 11, 2000 (65 FR 19477-78) or you may visit <http://docketsinfo.dot.gov/>.

C. Other Rulemaking Analyses and Notices

In the July 2009 final rule, the agency discussed relevant requirements related to the Regulatory Flexibility Act, the National Environmental Policy Act, Executive Order 13132

(Federalism), the Unfunded Mandates Reform Act, Civil Justice Reform, the National Technology Transfer and Advancement Act, the Paperwork Reduction Act, and Executive Order 13045 (Protection of Children from Environmental Health and Safety Risks). As today's final rule merely deletes stopping distances from the table in FMVSS No. 121 for speeds that are not tested by NHTSA, it will not have any effect on the agency's analyses in those areas.

List of Subjects in 49 CFR Part 571

Imports, Motor vehicle safety, Reporting and recordkeeping requirements, Tires.

In consideration of the foregoing, NHTSA amends 49 CFR Part 571 as follows:

PART 571—FEDERAL MOTOR VEHICLE SAFETY STANDARDS

1. The authority citation for part 571 of Title 49 continues to read as follows:

Authority: 49 U.S.C. 322, 30111, 30115, 30117, and 30166; delegation of authority at 49 CFR 1.95.

2. In § 571.121, revise Table II and Table IIA to read as follows:

§ 571.121 Standard No. 121; Air brake systems.

* * * * *

Table II – Stopping Distance in Feet

Vehicle speed in miles per hour	Service Brake						Emergency Brake	
	PFC 0.9	PFC 0.9	PFC 0.9	PFC 0.9	PFC 0.9	PFC 0.9	PFC 0.9	PFC 0.9
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
30	70	78	65	78	84	61	170	186
35	96	106	89	106	114	84	225	250
40	125	138	114	138	149	108	288	325
45	158	175	144	175	189	136	358	409
50	195	216	176	216	233	166	435	504
55	236	261	212	261	281	199	520	608
60	280	310	250	310	335	235	613	720

Note:

- (1) Loaded and Unloaded Buses.
- (2) Loaded Single-Unit Trucks.
- (3) Loaded Tractors with Two Axles; or with Three Axles and a GVWR of 70,000 lbs. or less; or with Four or More Axles and a GVWR of 85,000 lbs. or less. Tested with an Unbraked Control Trailer.
- (4) Loaded Tractors with Three Axles and a GVWR greater than 70,000 lbs.; or with Four or More Axles and a GVWR greater than 85,000 lbs. Tested with an Unbraked Control Trailer.
- (5) Unloaded Single-Unit Trucks.
- (6) Unloaded Tractors (Bobtail).
- (7) All Vehicles except Tractors, Loaded and Unloaded.
- (8) Unloaded Tractors (Bobtail).

Table IIa – Stopping Distance in Feet: Optional Requirements for: (1) Three-Axle Tractors With a Front Axle That Has a GAWR of 14,600 Pounds or Less, and With Two Rear Drive Axles That Have a Combined GAWR of 45,000 Pounds or Less, Manufactured Before August 1, 2011; and (2) All Other Tractors Manufactured Before August 1, 2013

Vehicle speed in miles per hour	Service Brake				Emergency Brake	
	PFC 0.9	PFC 0.9	PFC 0.9	PFC 0.9	PFC 0.9	PFC 0.9
	(1)	(2)	(3)	(4)	(5)	(6)
30	70	78	84	89	170	186
35	96	106	114	121	225	250
40	125	138	149	158	288	325
45	158	175	189	200	358	409
50	195	216	233	247	435	504
55	236	261	281	299	520	608
60	280	310	335	355	613	720

Note: (1) Loaded and unloaded buses; (2) Loaded single unit trucks; (3) Unloaded truck tractors and single unit trucks; (4) Loaded truck tractors tested with an unbraked control trailer; (5) All vehicles except truck tractors; (6) Unloaded truck tractors.

* * * * *

Issued On: February 4, 2013.

David L. Strickland
Administrator

Billing Code: 4910-59-P