

# REDUCED STOPPING DISTANCE (RSD) REQUIREMENTS



## FREQUENTLY ASKED QUESTIONS

### How Does RSD Impact the Aftermarket?

The new reduced stopping distance requirements provide an opportunity to install not just new friction, but materials that deliver the braking results your customers want. Meritor has re-engineered its friction materials to meet the new reduced stopping distance requirements and beyond in some instances. Below are answers to commonly asked questions about the new regulations and the decision to standardize friction.

### About the Stopping Requirements

#### Q. What are the new FMVSS 121 stopping distance requirements and when did they take effect?

A. The new FMVSS 121 stopping distance requirements are illustrated in this chart:

Compliance Date	Vehicle Configuration	Tractor GVWR (lbs.)	Loaded 60 MPH Stopping Distance (ft.)	
			Previous	New
Phase 1 Aug 1, 2011	Three axles	0 to 59,600	355	250
	Two axles	All		250
Phase 2 Aug 1, 2013	Three axles	59,600 to 70,000		250
		Above 70,000		310
	Four or more axles	0 to 85,000		250
		85,000 and above		310

#### Q. Do all new Meritor RSD friction materials meet the new stopping distance requirements?

A. Yes. All new Meritor RSD brakes will meet the new requirements with an additional 10% margin.

#### Q. What is the impact on my existing vehicles? Do I need to change my existing vehicles to the new Meritor RSD friction materials?

A. The law only affects new production vehicles. There is no requirement to retrofit older vehicles.

### Important Facts About the Stopping Distance Regulation Change and Meritor RSD Friction

- The regulations affect new tractors only; existing vehicles are not affected
- Meritor RSD friction is available for fleets that want to standardize on friction materials
- Meritor RSD friction materials are available on new or reman shoes with PlatinumShield™ II coating



**Q. How is compatibility between tractors with the new Meritor RSD friction materials and trailers with older brakes and friction materials affected?**

A. Tractor-trailer brake compatibility was a design requirement for new Meritor RSD friction materials. Our solutions have been developed to maintain tractor-trailer compatibility with existing trailer fleets. The tractor will incur approximately 5% more of the braking workload, while the trailer will experience a proportionate reduction in workload.

**Q. Regarding the new Meritor RSD Q Plus brakes, what has changed other than the friction material?**

A. Since front brakes now absorb more brake torque, the front brake spiders have been made heavier and the mounting bolts are a larger diameter. Front brakes now use Type 24 brake chambers, increasing the AL factor to 132.

**Q. Are larger brake sizes required to meet the new Meritor RSD requirements?**

A. Not in all cases. Meritor has worked with all of the major vehicle OEMs to design the brake package to meet the new stopping distance requirements. Brakes may be slightly different from OEM to OEM. A 15" front brake package is still available, however most new front brakes are 16.5" diameter. See the Meritor application charts for specific sizes per OEM.

**Q. Are there advantages to using larger brake sizes for the Meritor RSD requirements?**

A. Larger brakes will provide some advantages, including increased lining volume to drive longer service intervals, lower operating temperatures, reduced fade and improved performance.

**Q. Will my service practices have to change?**

A. No, service practices do not change. Service technicians and mechanics will not have to be re-trained and parts inventory practices will transition to the brakes. However, new parts will need to be stocked including new brake shoe FMSIs, hardware kits corresponding to the new brake sizes and air disc brake components.

**Q. Can a fleet retrofit all of their drum brakes to the new Meritor RSD friction materials?**

A. Rear brakes can be retrofitted from existing materials to new Meritor RSD with no problem. Meritor RSD friction materials may increase torque in older front brake designs and affect the integrity of older front spiders with 5/8" bolts. However, the effect of Meritor RSD on older front brakes has not been determined.

**Q. Will the use of Meritor RSD friction materials on vehicles with older brakes improve the stopping distance of those vehicles or increase the wear life?**

A. Retrofitting vehicles, with older brake designs, to the new Meritor RSD friction materials will have no impact on those vehicles stopping distances. Stopping distance and wear will be comparable to existing friction materials on those vehicles.

**Q. Will the new Meritor RSD materials be available for "all-makes" brakes, other than Meritor's?**

A. Meritor Aftermarket will offer the new Meritor RSD materials in a limited offering of only the most popular "all-makes" brakes. However, no testing has been conducted to show the potential impact on brake performance when retrofitting "all-makes" brakes to Meritor RSD friction materials has any impact on brake performance.

**Q. How will Meritor Aftermarket supply the new Meritor RSD friction materials?**

A. The new Meritor RSD friction materials will only be available on new or reman lined brake shoes and in new or reman lined brake shoe kits and disc pad sets.

**Q. Will Meritor RSD friction materials be available with PlatinumShield™ II brake shoes?**

A. Yes. All Meritor RSD friction materials will only be available on new and reman brake shoes coated with Meritor's award-winning, rust-jacking preventive coating, PlatinumShield™ II.

**Q. Will Meritor make Meritor RSD friction materials available in bulk block sets for reliners?**

A. No. Meritor RSD friction material will only be available on new or reman lined brake shoes. Meritor Aftermarket will not offer RSD friction materials in bulk block sets.

