

MERITOR® REDUCED STOPPING DISTANCE FRICTION MATERIALS



MERITOR



IDEAS DRIVING RESULTS

RE-ENGINEERED FRICTION MATERIALS FOR BETTER BRAKING PERFORMANCE.



FMVSS 121 REDUCED STOPPING DISTANCE REQUIREMENTS

Timing (for new vehicles)	Number of Tractor Axles	Tractor GVWR (lbs.)	Loaded 60 MPH Stopping Distance (ft.)	
			Current	New
Aug 1, 2011	Three	0 to 59,600	355	250
Aug 1, 2013	Three	59,600 to 70,000		250
	Three	> 70,000		310
	Two	All		250
	≥ Four	0 to 85,000		250
	≥ Four	> 85,000		310

Reduced Stopping Distance Friction Materials Offer Improved Lining Life

Meritor ideas bring unique solutions to the industry. Like our Reduced Stopping Distance (RSD) friction material. In addition to meeting the FMVSS 121 reduced stopping distance requirements for new vehicles, Meritor friction materials have been re-engineered to offer improved lining life compared to older-generation Meritor materials. That's a better idea that delivers the braking results fleets and end users want.

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



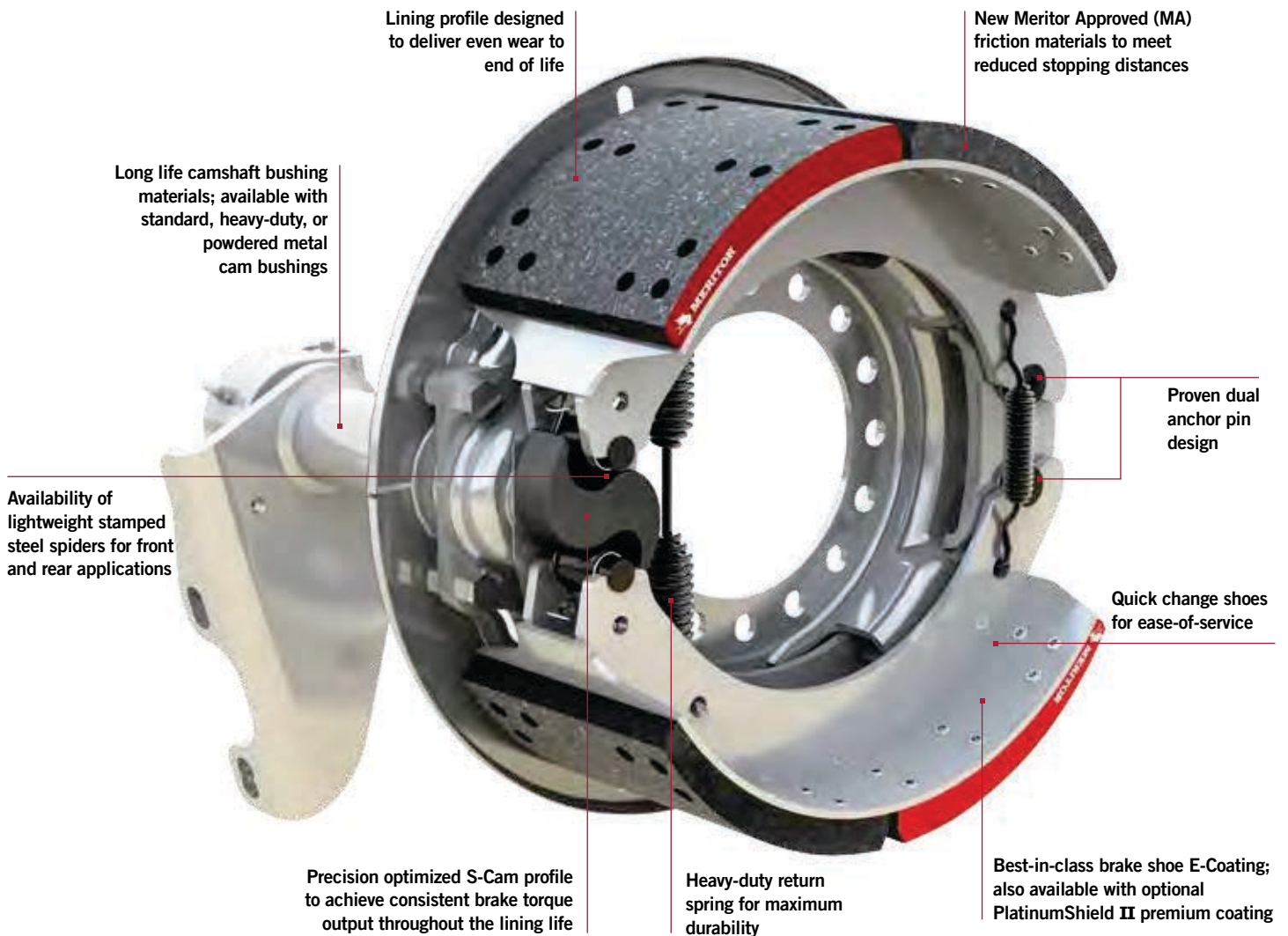
For answers to commonly-asked questions on reduced stopping distance requirements, see publication SP-11137.



MERITOR Q PLUS™ BRAKE

Engineered To Assist Vehicle Manufacturers Meet FMVSS 121 Stopping Distance Requirements

The Meritor Q Plus cam brake system remains the industry standard by which others are measured. Combined with Meritor Approved (MA) friction materials, fleets and end users can equip their vehicles with unsurpassed stopping power for outstanding performance and more time on the road.



RSD WARNING

Meritor RSD brakes are designed to meet the FMVSS 121 August 2011 and August 2013 stopping distance requirements for new vehicles. RSD brake assemblies must be serviced with RSD brake shoe and lining assemblies to maintain braking capability. Use of non-RSD friction material could negatively impact the safe operation of the vehicle.

MERITOR APPROVED (MA) FRICTION MATERIALS FOR REDUCED STOPPING DISTANCE REGULATION

MA1201	Steer Axle
GG 12,500 lb. & 13,200 lb. GAWR / 132 AL	
Approved for RSD steer axle brakes on Daimler, Navistar and PACCAR vehicles using 15" x 5" (FMSI 4703) and 16.5" x 5" (FMSI 4720) Q Plus brakes. Also available for limited use on older model Meritor and all-makes brake applications. MA1201 is rated for both 12,500 lb. and 13,200 lb. Meritor steer axles using T24 brake chambers and 5.5" slack adjusters.	
MA1501	Steer Axle
GG 14,600 lb. GAWR / 132 AL	
Approved for aftermarket use on 14,600 lb. steer axles using 16.5" x 6" (FMSI 4715) Q Plus brakes. Can be used as an alternate material to replace MA1502. MA1501 is rated for 14,600 lb. Meritor steer axles using T24 brake chambers and 5.5" slack adjusters.	
MA1502	Steer Axle
GF 14,600 lb. GAWR / 132 AL	
Approved for RSD steer axle brakes on Daimler, Navistar and PACCAR vehicles using 16.5" x 5" (FMSI 4720) Q Plus brakes. MA1502 is rated for 14,600 lb. Meritor steer axles using T24 brake chambers and 5.5" slack adjusters.	
MA1503	Steer Axle
GG 14,600 lb. GAWR / 132 AL	
Approved for RSD steer axle brakes on Navistar and PACCAR vehicles using 16.5" x 5" (FMSI 4720) and 16.5" x 6" (FMSI 4715) Q Plus brakes. MA1503 is rated for 9,975 lb. - 14,600 lb. Meritor steer axles using T24 brake chambers and 5.5" slack adjusters.	
MA2001	Drive Axle
FF 20,000 lb. GAWR / 165 AL	
Approved for RSD drive axle brakes on Daimler, Navistar and PACCAR vehicles using 16.5" x 7" (FMSI 4707) and 16.5" x 8-5/8" (FMSI 4711) Q Plus brakes. Also available for limited use on older model Meritor and all-makes brake applications. MA2001 is rated for 20,000 lb. Meritor drive axles using T30 brake chambers and 5.5" slack adjusters.	
MA2301	Drive Axle
GG 23,000 lb. GAWR / 165 AL	
Approved for aftermarket use on 23,000 lb. drive axles using 16.5" x 8-5/8" (FMSI 4711) Q Plus brakes. MA2301 is rated for 23,000 lb. Meritor drive axles using T30 brake chambers and 5.5" slack adjusters.	
MA2302	Drive Axle
GF 23,000 lb. GAWR / 165 AL	
Approved for RSD drive axle brakes on Daimler, Navistar and PACCAR vehicles using 16.5" x 8-5/8" (FMSI 4711) Q Plus brakes. MA2302 is rated for 23,000 lb. Meritor drive axles using T30 brake chambers and 5.5" slack adjusters.	
MA2303	Drive Axle
GG 23,000 lb. GAWR / 165 AL	
Approved for RSD drive axle brakes on Navistar vehicles using 16.5" x 7" (FMSI 4707) and 16-1/2" x 8-5/8" (FMSI 4711) Q Plus brakes. MA2303 is rated for 23,000 lb. Meritor drive axles using T30 brake chambers and 5.5" slack adjusters.	



RSD FRICTION MIX BY OEM APPLICATION

OEM Application	Friction Mix	Brake Size	FMSI No.	New Shoe	New Shoe Kit	Reman Shoe	Reman Shoe Kit	Minor Kit
RSD Front Brake Shoes								
NAVISTAR	MA1201	15" x 5"	4703	SMA12014703QP	KSMA12014703QP	XSMA12014703QP	XK12014703QP	KIT8824HD
DTNA, NAVISTAR, PACCAR	MA1201	16.5" x 5"	4720	SMA12014720QP	KSMA12014720QP	XSMA12014720QP	XK12014720QP	KIT8081
DTNA, NAVISTAR, PACCAR	MA1201	16.5" x 6"	4715	SMA12014715QP	KSMA12014715QP	XSMA12014715QP	XK12014715QP	KIT8081
VOLVO/MACK	MA1501	16.5" x 5"	4720	SMA15014720QP	KSMA15014720QP	XSMA15014720QP	XK15014720QP	KIT8081
VOLVO/MACK	MA1501	16.5" x 6"	4715	SMA15014715QP	KSMA15014715QP	XSMA15014715QP	XK15014715QP	KIT8081
DTNA, NAVISTAR, PACCAR	MA1502	16.5" x 5"	4720	SMA15024720QP	KSMA15024720QP	XSMA15024720QP	XK15024720QP	KIT8081
DTNA, NAVISTAR, PACCAR	MA1502	16.5" x 6"	4715	SMA15024715QP	KSMA15024715QP	XSMA15024715QP	XK15024715QP	KIT8081
NAVISTAR, PACCAR	MA1503	16.5" x 5"	4720	SMA15034720QP	KSMA15034720QP	XSMA15034720QP	XK15034720QP	KIT8081
NAVISTAR, PACCAR	MA1503	16.5" x 6"	4715	SMA15034715QP	KSMA15034715QP	XSMA15034715QP	XK15034715QP	KIT8081
VOLVO/MACK	SOR1203*	16.5" x 5"	4720	SR12034720QP	KSR12034720QP			KIT8081
VOLVO/MACK	VMCOM**	16.5" x 5"	4720	SVMCOM4720QP	KSVMCOM4720QP			KIT8081
* SOR = Spec Only Release for Volvo/Mack								
** SOR1203 CAM / SOR2003 ANCHOR Combination for Volvo/Mack								

RSD Rear Brake Shoes								
DTNA, NAVISTAR, PACCAR	MA2001	16.5" x 7"	4707	SMA20014707QP	KSMA20014707QP	XSMA20014707QP	XK20014707QP	KIT8000HD
DTNA, NAVISTAR, PACCAR	MA2001	16.5" x 8.62"	4711	SMA20014711QP	KSMA20014711QP	XSMA20014711QP	XK20014711QP	KIT8000HD
DTNA, NAVISTAR, PACCAR	MA2001	16.5" x 8.62"	4711	SMA20014711QP	KSMA20014711QP	XSMA20014711QP	XK20014711QP	KIT8000HD
VOLVO/MACK	SOR2003	16.5" x 7"	4707	SR20034707QP	KSR20034707QP			KIT8000HD
VOLVO/MACK	SOR2003	16.5" x 8.62"	4711	SR20034711QP	KSR20034711QP			KIT8000HD
NAVISTAR, VOLVO/MACK, PACCAR	MA2301	16.5" x 7"	4707	SMA23014707QP	KSMA23014707QP	XSMA23014707QP	XK23014707QP	KIT8000HD
NAVISTAR, VOLVO/MACK, PACCAR	MA2301	16.5" x 8.62"	4711	SMA23014711QP	KSMA23014711QP	XSMA23014711QP	XK23014711QP	KIT8000HD
DTNA, VOLVO/MACK, PACCAR	MA2302	16.5" x 7"	4707	SMA23024707QP	KSMA23024707QP	XSMA23024707QP	XK23024707QP	KIT8000HD
DTNA, VOLVO/MACK, PACCAR	MA2302	16.5" x 8.62"	4711	SMA23024711QP	KSMA23024711QP	XSMA23024711QP	XK23024711QP	KIT8000HD
NAVISTAR	MA2303	16.5" x 7"	4707	SMA23034707QP	KSMA23034707QP	XSMA23034707QP	XK23034707QP	KIT8000HD
NAVISTAR	MA2303	16.5" x 8.62"	4711	SMA23034711QP	KSMA23034711QP	XSMA23034711QP	XK23034711QP	KIT8000HD

OEM Application	Friction Mix	Brake Type	Disc Pad Kit
RSD Front Disc Brake Pads			
NAVISTAR, VOLVO/MACK, PACCAR	MA761	EX225L, H	KIT2252H2CD
PACCAR REFUSE	MA703	EX225H	KIT2252H2BA



RSD FRICTION MATERIAL SELECTION CHART

OEM	GAWR (Front/Rear)	15" x 5" 16.5" x 7"	16.5" x 5" 16.5" x 7"	16.5" x 5" 16.5" x 8.62"	16.5" x 6" 16.5" x 7"	16.5" x 6" 16.5" x 8.62"	EX225 16.5" x 7"	EX225 16.5" x 8.62"
	FMSI	4703 / 4707	4720 / 4707	4720 / 4711	4715 / 4707	4715 / 4711	EX225 / 4707	EX225 / 4711
DTNA	12K/40K			MA1201/MA2001				
	14.6K/46K			MA1502/MA2302				
	10k-12K/17.5K-19K		MA1201/MA2001					
	10k-12K/19,001-21K			MA1201/MA2001				
	10k-12K/21,001-24,999			MA1201/MA2302				
	12,001-13.3K/17.5K-19K		MA1201/MA2001					
	12,001-13.3K/19,001-21K			MA1201/MA2001				
	12,001-13.3K/21,001-26K			MA1201/MA2302				
	13,301-14.6K/19,001-26K			MA1502/MA2001				
	13,301-14.6K/27K-30K		MA1502/MA2302					
	14,601-16K/27K-30K				MA1502/MA2302			
	10K-14.6K/45,001-52K			MA1502/MA2302				
	14,601-16K/34K-40K					MA1502/MA2001		
	14,601-16K/40,001-52K					MA1502/MA2302		
	14,601-16K/54K-65K				MA1502/MA2302			
NAVISTAR	12.35K/34K	MA1201/MA2001						
	12K/40K		MA1201/MA2001					
	12.35K/40K		MA1201/MA2001	MA1201/MA2001				
	10K-12K/20K		MA1201/MA2001					
	12K/21K-23K		MA1503/MA2301					
	12K/26K			MA1503/MA2303				
	12,350/20K		MA1201/MA2001					
	12,350/21K-23K		MA1503/MA2301					
	12,350/26K			MA1503/MA2303				
	13.2K/20K-23K		MA1503/MA2001					
	13.2K/26K			MA1503/MA2001				
	14K/20K-23K		MA1503/MA2001					
	14K/26K			MA1503/MA2303				
	14.3K-14.6K/20K		MA1503/MA2001					
	14.3K-14.6K/26K			MA1503/MA2303				
	12K/40K		MA1201/MA2001					
	12K/46K-52K			MA1503/MA2303				
	12,350/40K		MA1201/MA2001					
	12,350/46K-52K			MA1503/MA2303				
	13.2K/40K		MA1201/MA2001					
	13.2K/46K-52K			MA1503/MA2303				
	14K/40K		MA1502/MA2001					
	14K/46K-52K			MA1503/MA2303				
	14.3K-14.6K/40K		MA1502/MA2001					
	14.3K-14.6K/46K-52K			MA1503/MA2303				
	16K/40K						MA76 /MA2303	
	16K-20K/46K-52K							MA761/MA2303
	20K/58K (Tandem)						MA761/MA2001	
	22K/46K						MA761/MA2303	MA761/MA2303



OEM	GAWR (Front/Rear)	15" x 5" 16.5" x 7"	16.5" x 5" 16.5" x 7"	16.5" x 5" 16.5" x 8.62"	16.5" x 6" 16.5" x 7"	16.5" x 6" 16.5" x 8.62"	EX225 16.5" x 7"	EX225 16.5" x 8.62"
	FMSI	4703 / 4707	4720 / 4707	4720 / 4711	4715 / 4707	4715 / 4711	EX225 / 4707	EX225 / 4711
VOLVO/MACK	12.5K or 13.2K/38K		SOR1203/SOR2003	SOR1203/SOR2003				
	12.5K or 13.2K/40K			SOR1203/SOR2003				
	12.5K or 13.2K/44K			MA1201/MA2301				
	14.6K/44K					MA1501/MA2301		
	10K-14.6K/16,999-20K		Combo*/SOR2003					
	10K-14.6K/21K-23K			Combo*/MA2301				
	12.5K-13.2K/40K		Combo*/SOR2003					
	12.5K-13.2K/44K-46K			Combo*/MA2301				
	12.5K-13.2K/48K-52K			Combo*/MA2302				
	14.6K/40K		MA1501/SOR2003	MA1501/SOR2003				
	14.6K/44K-46K			MA1501/MA2301				
	14.6K/48K-52K			MA1501/MA2302				
	16K-20K/40K						MA761/SOR2003	
	16K-20K/44K-46K							MA761/MA2301
	16K-20K/48K-52K						MA761/MA2302	
	12.5K/40K		Combo*/SOR2003					
	12.5K/44K-46K			Combo*/MA2301				
	12.5K/48K-50K		Combo*/MA2302					
	12.5K/52K		MA1501/MA2302					
	13.2K/40K		Combo*/SOR2003					
	13.2K/44K			Combo*/MA2301				
	13.2K/46K			MA1501/MA2301				
	13.2K/48K-52K		MA1501/MA2302					
	14.6K/40K		MA1501/SOR2003					
	14.6K/44K-46K			MA1501/MA2301				
	14.6K/48K-52K		MA1501/MA2302					
16K-20K/40K						MA761/SOR2003		
16K-20K/44K-46K							MA761/MA2301	
16K-20K/48K-52K						MA761/MA2302		
			* Combo = SOR1203 cam / SOR2003 anchor					
PACCAR	Up to 14.6K/34K		MA1201/MA2001					
	Up to 12K/38K		MA1201/MA2001					
	13.2K or 14.6K/38K			MA1201/MA2001				
	Up to 13.2K/40K			MA1201/MA2001				
	14.6K/40K			MA1502/MA2302				
	12K, 13.2K, or 14.6K/46K			MA1502/MA2302				
	9,975-12K/19K-21K			MA1503/MA2001				
	9,975-12K/21K-23K		MA1503/MA2301					
	12,001-13.2K/19K-23K		MA1503/MA2301					
	13,201-14.6K/19K-23K		MA1503/MA2301					
	10,001-12K/34K-38K		MA1201/MA2001					
	10,001-12K/38,001-40K		MA1502/MA2302	MA1201/MA2001				
	10,001-12K/40,001-44K		MA1502/MA2302					
	10,001-12K/44,001-46K			MA1502/MA2302				
	14,601-16K/34,001-40K					MA1502/MA2001		
	14,601-16K/40K-52K					MA1502/MA2302		
	16,001-18K/34,001-40K							MA761/MA2001
	16,001-18K/40,001-52K						MA761/MA2302	
	18,001-20K/34,001-40K							MA761/MA2001
	18,001-20K/40,001-52K						MA761/MA2302	
20,001-22K/44,001-50K						MA761/MA2302		
20,001-22K/50,001-52K					MA1502/MA2302			



IDEAS DRIVING RESULTS

As a world leader in providing aftermarket solutions for the global commercial vehicle and industrial markets, Meritor is committed to providing our customers with innovative aftermarket ideas that deliver the results you need to get the job done faster, better and more efficiently.



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