# AIR DISC BRAKE

FIELD MANUAL





## AIR DISC BRAKE CALIPER IDENTIFICATION

#### **STEP 1: Vocation**

The tabbed sections are arranged by application. Choose the section that corresponds with the application of your vehicle.







#### **STEP 2: Brake Pads**

Identify the caliper manufacturer by pad length and shape—paying particular attention to the top edge. Match up the retainer bar as well to narrow down your search.



# STEP 3: Axial vs Radial Mount Calipers

Once you know the caliper type, you need to identify the pad carrier mount.

- Axial a mounting surface that is parallel to the rotor
- Radial (also known as vertical) a mounting surface that is perpendicular (90°) to the rotor

Some calipers have a radially mounted air chamber. If your caliper has a radial chamber (sits on top of the caliper) and is not on a transit bus, please refer to PB-1461.



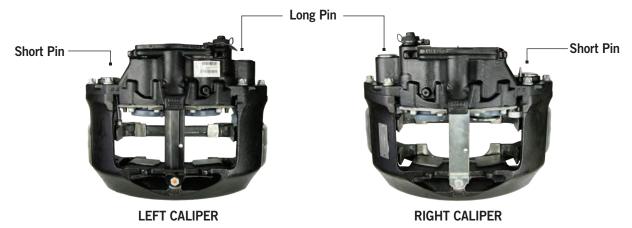


#### **RADIAL MOUNT**



# STEP 4: Left Hand vs. Right Hand Calipers

Calipers have a long and short slide pin, and their location describes if they are left or right. In most cases, a left caliper will be used on the driver's side of the vehicle. There are some exceptions where interference in the wheel well prevents this. Make sure you replace a left with a left and right with a right.



# Rotors This field manual provides the proper Meritor rotor part numbers for each caliper.



This field manual does not cover all possible calipers. If you can't find what you are looking for, refer to MeritorPartsXpress.com or PB-1461.

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# CONCERNED ABOUT LOSING YOUR ADB22X™ WARRANTY?

# When it comes to caliper protection, we've got you covered.

When you choose Meritor® MMD1369AG air disc brake pads, you have peace of mind knowing that not only do you have high-quality, long-lasting pads on your vehicle, but you will also be covered if there is a caliper failure. That's right. If you use Meritor pads and your Bendix® ADB22X™ fails within its warranty period we will replace it with a Meritor® remanufactured caliper. (See SP-2207 for details.)





AND SPECIALTY APPLICATIONS



# TRUCK CALIPERS



TRUCK CALIPER IDENTIFICATION CHART						
Suspension	Bolt Pattern	# of Holes	Bolt Diameter	A–B Distance (in.)	Туре	Page
					Bendix® ADB22X	10
NAFTA® Mount	0.0	6	M20	2 9/16"	WABCO® Maxxus	12
NAI IA WIOUIIL	0	O	IVIZO	2 9/10	Meritor® Twin	8
					Meritor® Single	6
Evelyhtting Podiol		6	M16	2"	Bendix® ADB22X	10
Freightliner <sup>®</sup> Radial	421	4	M20	1 3/4"	WABCO® Maxxus	12
Volvo® Axial	(e C)	6	M20	2 15/16"	Meritor® Twin	8
Volvo® Radial		4	M20	1 9/16"	Meritor® Twin	8

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# **MERITOR® SINGLE PISTON**

#### **Axial Mount Caliper**

RIGHT CALIPER PART #: EX225S204XX000

LEFT CALIPER PART #: EX225S203XX000

MERITOR® AXLE ROTORS					
Meritor Part #	Туре	OD (mm)	Height	Notes	
M44DH83923	Flat	430	45	Front with press on tone ring	
M44DH83924	Flat	430	45	Rear with bolt on tone ring	

HARDWARE KITS				
Description Meritor Part #				
Complete Slide Pin Kit	KIT225303			
Boot Kit	KIT225302			







LINE HAUL BRAKE PAD PART #: KIT2252L2CG2

Includes 6 pad springs



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# MERITOR® EX225L TWIN PISTON

#### **Axial Mount Caliper**

Found on Meritor® Axles

RIGHT CALIPER PART #: EX225L262XX000

Remanufactured: EX225L262R

LEFT CALIPER PART #: EX225L261XX000

Remanufactured: EX225L261R

#### **Axial Mount Caliper**

**Volvo® Trucks with Volvo® Group Steer Axles** 

RIGHT CALIPER PART #: EX225L266XX000

LEFT CALIPER PART #: EX225L265XX000

#### **Radial Mount Caliper**

**Volvo® Trucks with Volvo® Group Drive Axles** 

RIGHT CALIPER PART #: EX225L270XX000

LEFT CALIPER PART #: EX225L269XX000



MERITOR® AXLE ROTORS				
Meritor Part #	# of Mounting Holes	OD (mm)	Notes	Application
M44DH83923	10	430	Front, press on tone ring	Axial mount
M44DH83924	10	430	Rear, bolt on tone ring	Axial mount

HARDWARE KITS				
Description Meritor Part #				
Complete Slide Pin Kit*	KIT225277			
Boot Kit	KIT225282			

<sup>\*</sup>Slide Pin Kit works on all EX+L calipers except EX225L201-211 and EX225L245-246

#### Air Disc Brake Pads with hardware



#### LINE HAUL BRAKE PAD PART #: KIT2252L2CG

Genuine pad kit used in all Meritor® EX22L calipers in line haul applications



#### SEVERE SERVICE BRAKE PAD PART #: KIT2252L2DD

Severe Service pad kit for Meritor® EX225L calipers

#### LINE HAUL BRAKE PAD PART #: KIT2252LCM7400

Genuine pad kit used in Volvo®/Mack® calipers in line haul applications



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## BENDIX® ADB22X

#### **Axial Mount Caliper**

Found on Paccar® Navistar® Freightliner®

**RIGHT CALIPER PART #: MK081142X** 

OE REF: K081142, K097850SC, K147430X, K109961X

LEFT CALIPER PART #: MK081143X

OE REF: K081143, K097851SC, K147431X, K109962X



SEE PAGE 37 FOR DETAILS

**Radial Mount Caliper** 

Found on Freightliner® with Detroit Axle

#### RIGHT CALIPER PART #: MK081256X

OE REF: K081256, K097846SC, K109957X, K147136X

#### LEFT CALIPER PART #: MK081257X

OE REF: K081257, K097847SC, K109958X, K147135X



SEE PAGE 37 FOR DETAILS

MERITOR® AXLE ROTORS						
Meritor Part #	# of Mounting Holes	OD (mm)	Depth	Application		
M44DH802569	Splined	430	45	Axial Mount		
M44D802082	10	430	150	Axial Mount		
M44D802081	10	430	138	Axial Mount		
M44DH20682	10	430	160	Radial Mount		



MCKSK 6.2

MCKSK.4.2

Complete Slide Pin Kit

Boot Kit

Air Disc Brake Pads with Hardware



LINE HAUL BRAKE PAD PART #: MMD1369AG

Replaces OE: K070796, K129276, K182235, S-29152-2



SEVERE SERVICE BRAKE PAD PART #: MMD1369DD

Replaces OE: K109113



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## WABCO® MAXXUS

#### **Radial Mount Caliper**

Found on Freightliner® with Detroit Axles

RIGHT CALIPER PART #: 640 322 066 ONX

OE REF: 640 322 051 0

**LEFT CALIPER PART #: 640 322 065 0NX** 

OE REF: 640 322 050 0



SEE PAGE 37 FOR DETAILS

MERITOR® AXLE ROTORS				
Meritor Part #	# of Mounting Holes	OD (mm)	Depth	Application
M44DH20682	10	430	160	Radial Mount

HARDWARE KITS			
Description	Meritor Part #		
Complete Slide Pin Kit	640 322 938 2		
Boot Kit	640 322 932 2		







LINE HAUL BRAKE PAD PART #: MMD2061AG

Replaces OE: 640 322 934 2



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# REPLACEMENT AIR DISC BRAKE PARTS?

YOU HAVE A CHOICE.

Meritor® air disc brake pads are engineered to provide an enhanced solution with the performance required when replacing original equipment products. Meritor ADB friction meets strict Meritor quality standards for stopping distance, low maintenance, downtime costs and lasting value.









# TRAILER CALIPERS



Bolt
Patte

TRAILER CALIPER IDENTIFICATION CHART					
Suspension	Bolt Pattern	Bolt Diameter	A–B Distance (in.)	Туре	Page
				Bendix® ADB22X	20
Hendrickson® / Meritor®	0 0	M20	3 1/4"	WABCO® Pan 22	22
	8			Meritor® Twin	18
Meritor® Truck Mount	000	M20	2 9/16"	Meritor <sup>®</sup> Single	16
Hendrickson <sup>®</sup> MAXX22		M18	1 3/4"	WABCO® MAXX 22T	24
SAF-Holland <sup>®</sup>		M18	2"	Bendix® SK7	26
Ridewell Reyco <sup>®</sup> / AXN / IMT		M16	4 1/8"	WABCO® Pan 22	22
IMT		M14	2"	WABCO® Pan 17	28

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# **MERITOR® SINGLE PISTON**

#### **Axial Mount Caliper**

RIGHT CALIPER PART #: EX225S204XX000

LEFT CALIPER PART #: EX225S203XX000

MERITOR® AXLE ROTORS						
Meritor Part #	Туре	OD (mm)	Height	Notes		
M44D802082	U-shape	430	150			
M44DHS34172006	U-shape	430	150	Includes tone ring		
M44DH18609	Flat	430	45			

HARDWARE KITS				
Description Meritor Part #				
Complete Slide Pin Kit*	KIT225303			
Boot Kit	KIT225302			







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# MERITOR® EX225L TWIN PISTON

#### **Axial Mount Caliper**

Found on Meritor® Trailer Axles

RIGHT CALIPER PART #: EX225L272XX000

Remanufactured: EX225L258R

LEFT CALIPER PART #: EX225L271XX000

Remanufactured: EX225L257R

MERITOR® AXLE ROTORS					
Meritor Part # # of Mounting Holes OD (mm) Depth Notes					
M44DH802082	10	430	150	No tone ring	
M44DHS34172006	10	430	150	Includes bolt on tone ring	

HARDWARE KITS				
Description Meritor Part #				
Complete Slide Pin Kit*	KIT225277			
Boot Kit	KIT225282			

<sup>\*</sup>Slide Pin Kit works on all EX+L calipers except EX225L201-211 and EX225L245-246



#### Air Disc Brake Pads with Hardware



#### LINE HAUL BRAKE PAD PART #: KIT2252L2CG

Genuine Pad kit used in all Meritor® EX22L calipers in line haul applications



#### SEVERE SERVICE BRAKE PAD PART #: KIT2252L2DD

Severe Service pad kit for Meritor® EX225L calipers



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## BENDIX® ADB22X

#### **Axial Mount Caliper**

Found on Hendrickson, Intraxx, Meritor, etc.

**RIGHT CALIPER PART #: M802984X** 

OE REF: 802984, K113887X, K149714

**LEFT CALIPER PART #: M802985X** 

OE REF: 802985, K113888, K149715



SEE PAGE 37 FOR DETAILS

MERITOR® AXLE ROTORS					
Meritor Part #	Notes				
M44DH802569	Splined	430			
M44D802082	10	430	150	No tone ring	
M44DHS34172006	10	430	150	Comes w/ tone ring	
M44DH18609	10	430	45		

HARDWARE KITS				
Description Meritor Part #				
Complete Slide Pin Kit	MCKSK.6.2			
Boot Kit	MCKSK.4.2			



#### Air Disc Brake Pads with Hardware



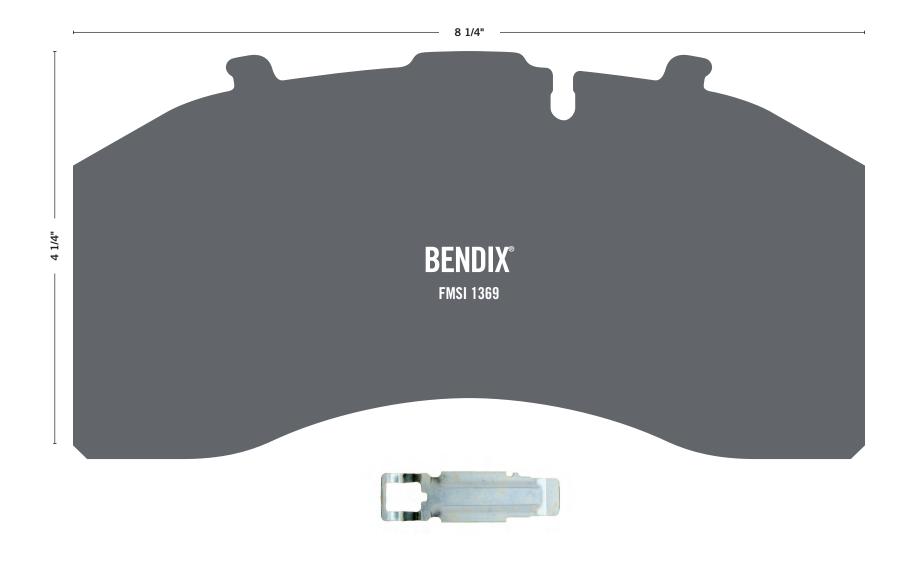
LINE HAUL BRAKE PAD PART #: MMD1369AG

Replaces OE: K070796, K129276, K182235, S-29152-2



SEVERE SERVICE BRAKE PAD PART #: MMD1369DD

Replaces OE: K109113



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## WABCO° PAN 22

#### **Axial Mount Caliper**

Found on Hendrickson® Intraxx® Meritor® Axles

**RIGHT CALIPER PART #: 640 225 081 0NX** 

OE REF: 640 225 037 0, 640 225 145 0

**LEFT CALIPER PART #: 640 225 080 0NX** 

OE REF: 640 225 036 0, 640 225 144 0



SEE PAGE 37 FOR DETAILS

#### **Axial Mount Caliper**

Found on Ridewell® Reyco Granning®, AXN® IMT®

RIGHT CALIPER PART #: 40 225 016NX

OE REF: 40 225 012, 40 225 016, 640 225 147 0

LEFT CALIPER PART #: 40 225 015NX

OE REF: 40 225 011, 40 225 015, 640 225 146 0



MERITOR® AXLE ROTORS							
Meritor Part # # of Mounting Holes OD (mm) Depth Notes							
M44DH802569	Splined	430					
M44D802082	10	430	150	No tone ring			
M44DHS34172006	10	430	150	Comes with tone ring			
M44DH18609	10	430	45				

HARDWARE KITS				
Description Meritor Part #				
Complete Slide Pin Kit	640 225 921 2			
Boot Kit	640 175 920 2			

#### Air Disc Brake Pads with Hardware



#### LINE HAUL BRAKE PAD PART #: MMD1777AG

Replaces OE: 12 999 796, 640 225 922 2, 640 225 938 2



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**HENDRICKSON MAXX22T™** 

#### **Axial Mount Caliper**

RIGHT CALIPER PART #: 640 222 008 0NX

OE REF: 640 222 006 0

**LEFT CALIPER PART #: 640 222 007 0NX** 

OE REF: 640 222 005 0

MERITOR® AXLE ROTORS				
Meritor Part #	# of Mounting Holes	OD (mm)	Depth	Notes
M44DHS34471	10	415	150	Standard Hub

HARDWARE KITS				
Description Meritor Part #				
Complete Slide Pin Kit	640 222 928 2			
Boot Kit	640 175 920 2			







#### LINE HAUL BRAKE PAD PART #: MMD1777M22TAG

Replaces OE: 640 222 938 2



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# SAF-HOLLAND® SK7

#### **Axial Mount Caliper**

C88 / P89 Integral Disc

**RIGHT CALIPER PART #: MK110226X**OE REF: 3080 00 5901, 3080 00 5921, K110226

**LEFT CALIPER PART #: MK110227X**OE REF: 3080 00 6001, 3080 00 6021, K110227

HARDWARE KITS				
Description Meritor Part #				
Complete Slide Pin Kit	MCKSK.6.2			
Boot Kit	MCKSK.4.2			





LINE HAUL BRAKE PAD PART #: MMD1369SAF



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WABCO® PAN 17

#### **Axial Mount Caliper**

RIGHT CALIPER PART #: 40 175 073NX

OE REF: 40 175 091

LEFT CALIPER PART #: 40 175 072NX

OE REF: 40 175 090

MERITOR® AXLE ROTORS					
Meritor Part #	# of Mounting Holes	OD (mm)	Depth (mm)		
M44D75180	Q	325	1/10		

HARDWARE KITS				
Description Meritor Part #				
Complete Slide Pin Kit	12 999 699VT			
<b>Boot Kit</b> 640 175 920 2				





TRAILER BRAKE PAD PART #: MMD1518AG

Replaces OE: 12 999 806, 640 175 952 2





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## WHATEVER YOUR RIDE, THIS IS YOUR STOP.

A trusted name for heavy-duty braking now offers aftermarket air disc brake rotors for all-makes. Engineered and tested for reliable performance, these rotors offer durability, long friction life and excellent fade resistance. As part of our comprehensive air disc brake portfolio, they make it possible to standardize your air disc brake service needs with confidence.









# BUS & SPECIALTY CALIPERS



TRAILER CALIPER IDENTIFICATION CHART						
Suspension	Bolt Pattern	# of Holes	Bolt Diameter	A–B Distance (in.)	Туре	Page
Meritor <sup>®</sup> Specialty Axles	0.0	6	M20	4 1/8"	Refuse	32
Mentor Specially Axies	0	U	IVIZO	4 1/0	Transit	32
Valor (Maril	600	6	MOO	2 15/16"	Volvo Axial	32
Volvo / Mack®		4	M20	1 9/16"	Volvo Radial	32
New Flyer Xcelsior®		6	M18	4 1/8"	Front / Rear	34
Nova LFS Radial Chamber		6	M16	1 5/8"	Rear / Center (Nova and NF)	34
Nova LFS		4	M20	2 11/16"	Front	34

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# **MERITOR®** EX225H

#### **Axial Mount Caliper**

Found on Meritor® Axles Used in Refuse and Transit Applications

RIGHT CALIPER (Refuse Truck)
PART #: EX225H201XX000

Remanufactured version: EX225H201R

LEFT CALIPER (Refuse Truck)
PART #: EX225H202XX000

Remanufactured version: EX225H202R

RIGHT CALIPER (Transit)
PART #: EX225H301XX000

Remanufactured version: EX225H301R

LEFT CALIPER (Transit)
PART #: EX225H302XX000

Remanufactured version: EX225H302R



#### **Axial Mount Caliper**

Found on Volvo® Refuse Trucks with Volvo® Group Steer Axles

RIGHT CALIPER PART #: EX225H228XX101

Remanufactured version: EX225H218R

LEFT CALIPER PART #: EX225H227XX101

Remanufactured version: EX225H217R

Radial Mount Caliper

Found on Volvo® Refuse Trucks with Volvo® Group Drive Axles

RIGHT CALIPER PART #: EX225H226XX101

Remanufactured version: EX225H216R

LEFT CALIPER PART #: EX225H225XX101

Remanufactured version: EX225H215R

MERITOR® AXLE ROTORS					
Meritor Part #	# of Mounting Holes	OD (mm)	Height (mm)	Notes	Application
23 123642 015	10	434	131	Refuse Truck	Axial Mount
23 123647 002	10	434	143	Transit Bus	Axial Mount

HARDWARE KITS		
Description	Meritor Part #	
Complete Slide Pin Kit	KIT225280	
Boot Kit	KIT225201	

#### Air Disc Brake Pads with Hardware



#### TRANSIT BRAKE PAD PART #: KIT2252H2CG

Pad kit used in all Meritor® EX22H calipers for transit applications

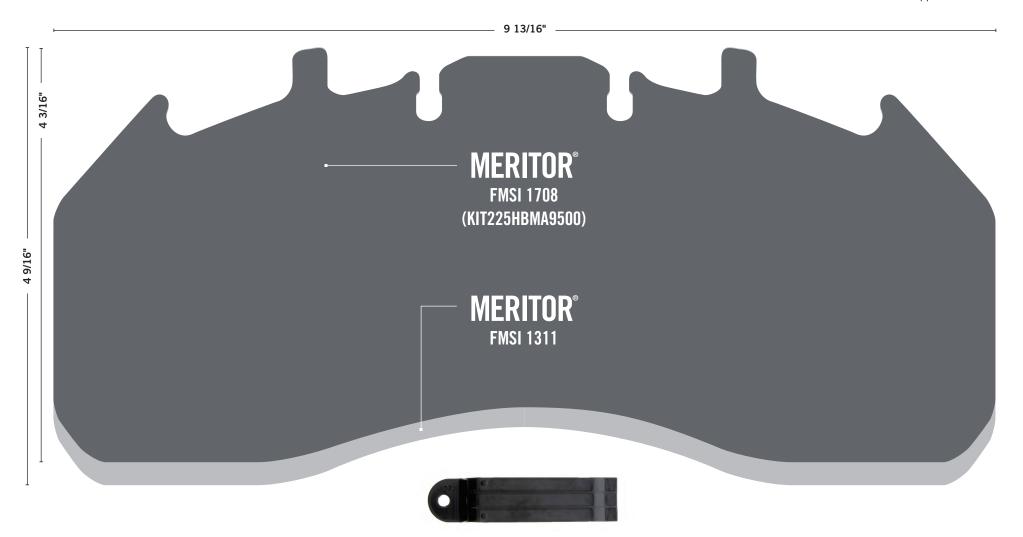


#### SEVERE SERVICE BRAKE PAD PART #: KIT2252H2DD

Pad kit for Meritor® EX225H calipers for refuse/severe service applications

#### PART #: KIT2252HBMA9500

Pad kit used in Volvo®/Mack® calipers for refuse/severe service applications



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### BENDIX<sup>®</sup> SN7/SB7

#### **New Flyer Xcelsior**

RIGHT CALIPER (front left, rear right)
PART #: MK100093X

OE REF: K100093, 6447272, 81.50804.6652

LEFT CALIPER (front right, rear left)
PART #: MK100094X

OE REF: K100094, 6447270, 81.50804.6651

# **UPGRADE NOW!**KIT225290FRT, KIT225290RR

SEE PAGE 37 FOR DETAILS

NEW FLYER XCELSIOR ROTORS				
Meritor Part #	# of Mounting Holes	OD (mm)	Depth	Rotor
MBR5057	12	432	130	Front
MBR5068	10	432	135	Rear

#### **Nova LFS Drive**

**RIGHT CALIPER PART #: MK021989X** 

OE REF: 6447850, 0501 008 593, K064525

LEFT CALIPER PART #: MK021990X

OE REF: 6447849, 0501 008 594, K064526

# UPGRADE NOW! KIT225291CF

SEE PAGE 37 FOR DETAILS

NOVA (ALL), NF XCELSIOR CENTER ROTOR			
Meritor Part #	# of Mounting Holes	OD (mm)	Depth
M44DK021958	10	430	131

HARDWARE KITS		
Description Meritor Part #		
Complete Slide Pin Kit	MCKSK.3.2	
Boot Kit	MCKSK.4.2	

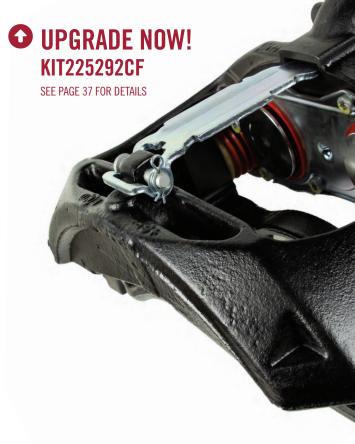
#### **Nova LFS Front**

**RIGHT CALIPER PART #: MK021991X** 

OE REF: K108187, K064529, 0501.008.892, N8900425

**LEFT CALIPER PART #: MK021992X** 

OE REF: K108188, K064530, 0501.008.893, N8893344





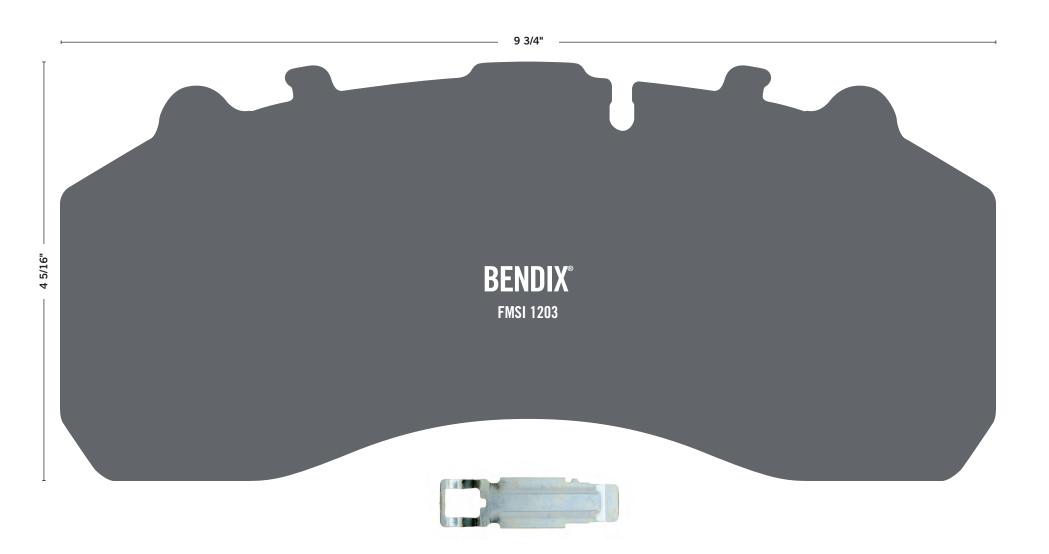


#### TRANSIT BRAKE PAD PART #: MMD1203AG

Replaces OE: N8893343, 0501.215.084, 6447341, 81.50820.6083, K046771K50



SEVERE SERVICE BRAKE PAD PART #: MMD1203DD



MERITOR® AIR DISC BRAKE CALIPER UPGRADE KITS

# THE RIGHT BRAKE TO KEEP YOU ON YOUR JOURNEY.

# SEALED HOUSING DESIGN



PROVIDES PROTECTION FROM WATER AND HELPS PREVENTS CONTAMINATION

# FEATURING BOLT-ON REPLACEMENT



SO YOU ONLY CHANGE THE CALIPERS AND PADS



FOR ON-ROAD APPLICATIONS



# CALIPER UPGRADE KITS

TRUCK			
Part Number	Application	Replaces OEM Part Numbers	
KIT225295	Bendix® Axial Mount	K081142, K081143, K097850SC, K097851SC	
KIT225296	Bendix® Radial Mount	K081256, K081257, K097846SC, K097847SC	
KIT225298	WABCO® Radial Mount	640 322 065 0, 640 322 066 0	

TRAILER			
Part Number	Application	Replaces OEM Part Numbers	
KIT225222	Hendrickson INTRAXX® AAT, AANT	Bendix® K149714, K149715, 802984, 802985 / WABCO® 640 225 080 0, 640 225 081 0	
KIT225299	Hendrickson® Maxx22T	COMING SOON	

TRANSIT AND COACH			
Part Number	Application	Replaces OEM Part Numbers	
KIT225290CF	New Flyer Xcelsior,® MAN Axle	6447269, 6447270, 6447271, 6447272, 6361223, 6361224	
KIT225291CF	Nova® Rear, Nova® and New Flyer® Center, ZF Axle	K064252, K064526, K138983, K138984, 6429512, 6429515, 6447849, 6447850	
KIT225292CF	Nova® Front, ZF Axle	N8900425, N8900426, 0501.008.892, 0501.008.893	
KIT225293	Van Hool®, MAN Axle	K015013, K015014, 80.50804.6617	
KIT225294	MCI® J-Coach	K082530, K082631, K082532, K082533	

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