



DISC BRAKES AUSTRALIA



# Friction Buyers Guide

Passenger and Light Commercial Vehicles

DISC BRAKE PADS AND BRAKE SHOES



The braking system in today's modern vehicles consists of many different parts that work together to bring a vehicle to a controlled stop. These parts can include a master cylinder, brake fluid, hoses, calipers, brake pads, rotors, drums, and brake shoes.

A vehicle may be fitted with either a brake rotor/pad system across all four wheels, or may come with disc rotors at the front (where the majority of the braking is done) and drum/shoe brakes at the rear.

### DISC BRAKE ROTORS / PADS

Today's modern vehicles generally come with brake rotors/pads assemblies. Brake rotors are large, rotating, circular cast iron plates fitted into the wheel hub. When engaging the brake pedal, calipers that sit around the rotors are moved inward and force the brake pads against the rotors.

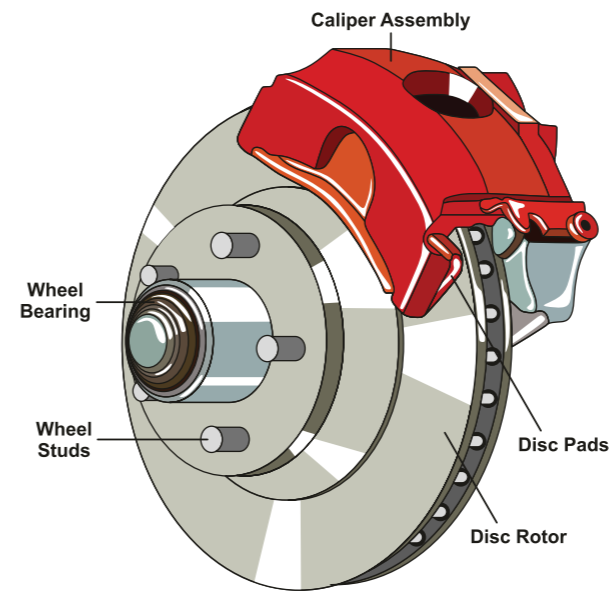
### BRAKE DRUMS

On some vehicles brake drums are an alternative system (generally older design and predominantly on the rear). The 'drum' sits at the wheel hub and rotates along with the wheel. When engaging the brake pedal, curved brake shoes are forced against the inside of the drum to slow down the vehicle.

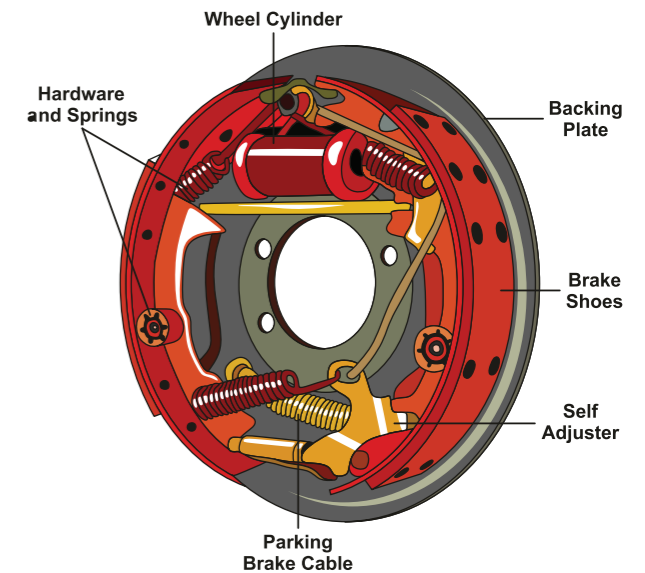
### HYDRAULIC PRESSURE

Regardless of the type of system, both are actuated through hydraulic pressure. When pressing the brake pedal, hydraulic pressure is built up in the master cylinder that sits within the vehicle's engine bay. This hydraulic pressure is transferred through a series of pipes and hoses to the front and rear brake calipers, which then engage the brake pads or shoes and 'squeeze' on the rotor or within the drum, hence slowing down the vehicle.

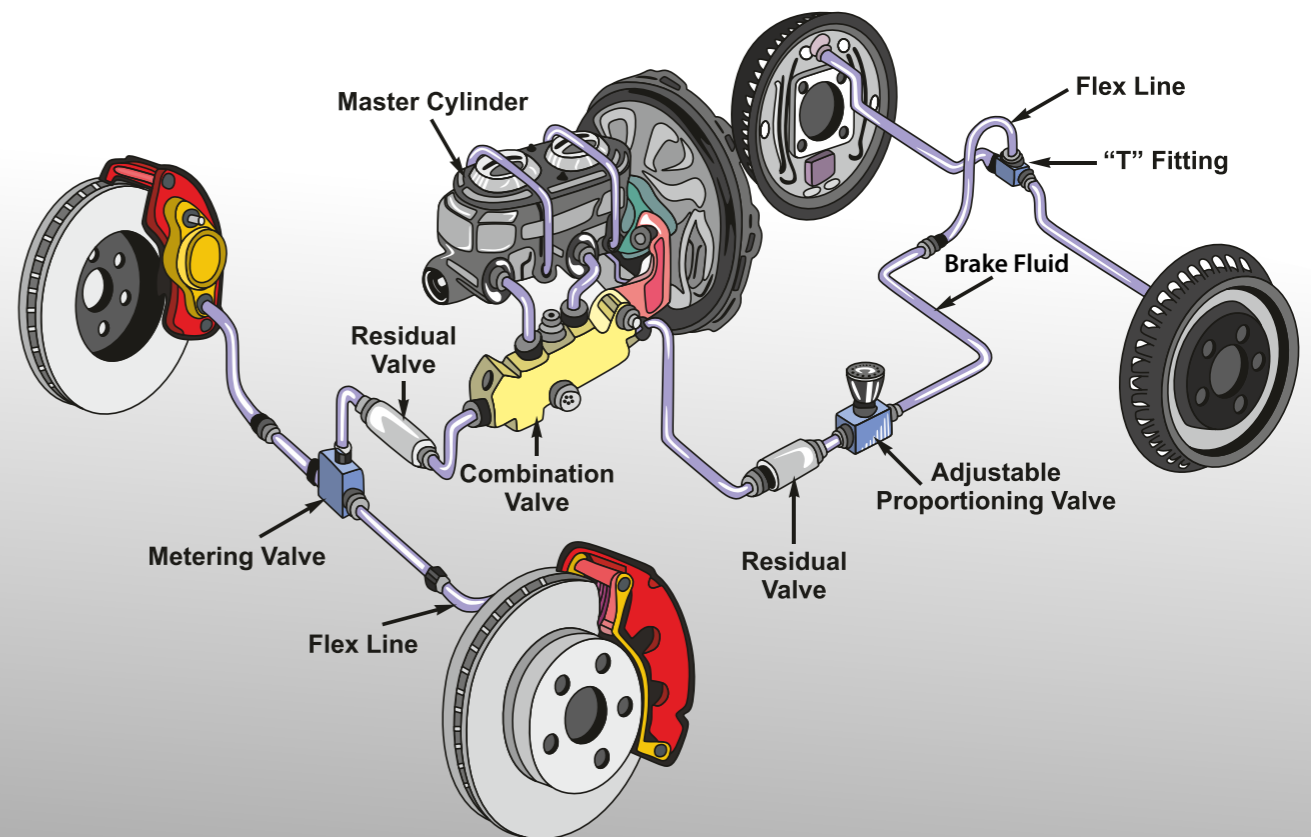
## AUTOMOTIVE BRAKING SYSTEM



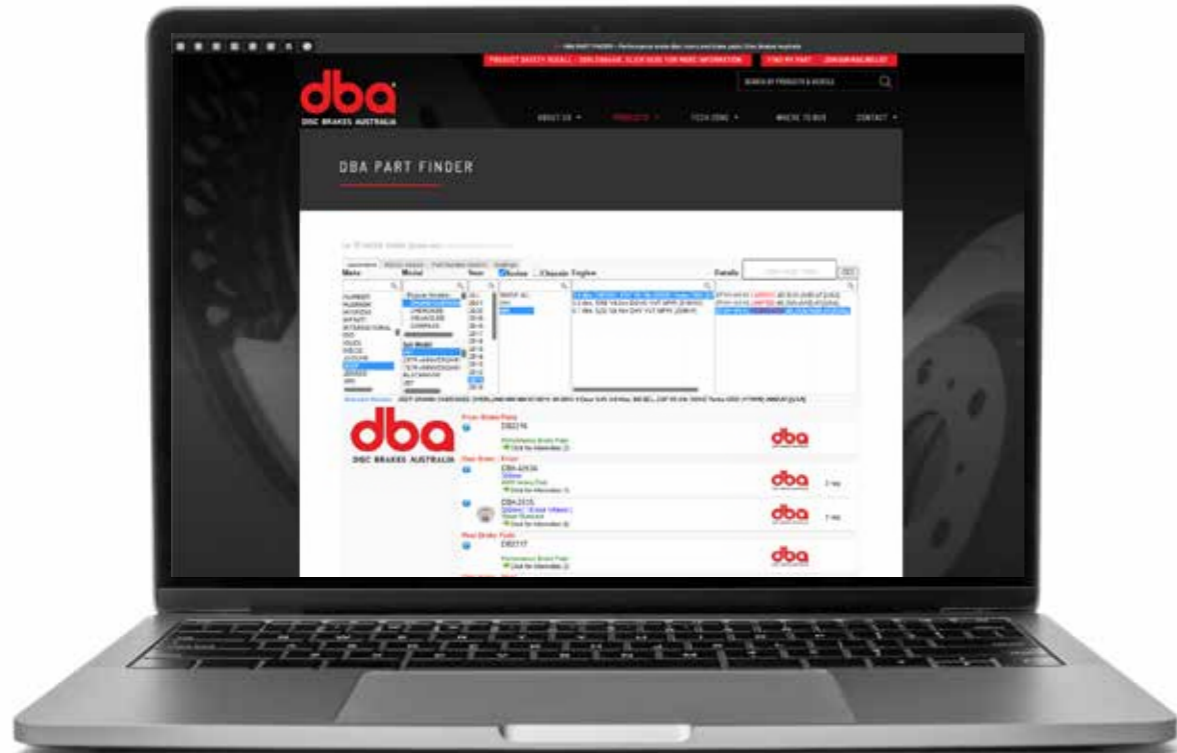
DISC BRAKE



DRUM BRAKE



Brake System Guide	02	Brake Calipers	18
Part Finder	04	Brake Shoes	19
Disc Brakes Australia	06	Brake Fluids	20
Brake Pads	07	Buyers Guide – Brake Pads	21
Disc Rotors & Drums	13	Buyers Guide – Brake Shoes	28
Tech Zone	14	Q&A	34
Direct Replacement Guide	16	Warranty Statement	39



## FIND THE RIGHT PARTS DESIGNED FOR YOUR VEHICLE ONLINE

- Visit our website [dba.com.au](http://dba.com.au)
- Click on FIND MY PART in the red box in the top right corner, or go directly to <https://dba.com.au/products/catalogue/online-catalogue/>
- You will be presented with several search options, represented by the different taps
  - Automotive – Enter vehicle details such as make, model, year, series, chassis, engine, etc.
  - VIN number search – Enter the vehicle VIN number.
  - REGO search (for Australia only) – Enter the vehicle registration number. Enter your state when prompted.
  - Part Number Search – To view the range of vehicles that a particular DBA part number is applicable to, enter DBA part number here.
- You will be presented with a list of applicable DBA products and their part numbers to choose from.
- ‘Click for Alternatives’ underneath a part number indicates alternative parts are available. Click on the green arrow to expand view.

**The DBA friction range of pads & shoes covers >95% of the Australian passenger vehicle / LCV population!**



### CONTACT DETAILS

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- Torun, Poland – DBA Europe (OzParts)
- Eight DBA Distribution Centres across Australia / New Zealand / USA
- Key Distribution Hubs in America, Europe and Asia



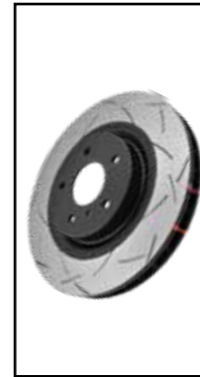
**DBA MANUFACTURING FACILITY IN SILVERWATER (SYDNEY)**



**BRAKE PADS**



**BRAKE SHOES**



**DISC ROTORS**



**BRAKE DRUMS**



**BRAKE CALIPERS**



**BRAKE FLUIDS**

## CUTTING EDGE BRAKE PAD TECHNOLOGY

### HISTORY

DBA has grown from its humble beginnings over 40 years ago to being Australia's number one disc rotor manufacturer and complete 'brake solution' supplier. With our unparalleled technical expertise, we not only engineer and manufacture the most comprehensive program of disc rotors and drums, but a complete range of brake pads and shoes, calipers, brake fluids, sensors and other ancillary items.

In recognition of its uncompromising approach to quality and performance, Disc Brakes Australia was recently voted #1 preferred and recommended brand, #1 for product range, and #1 for technical expertise in brake rotors by Australian workshops.

The company has long been a champion of safety in the Australian Automotive industry, and our dedication to quality has been recognised with over 16 manufacturing awards from the Australian Automotive Aftermarket Association (AAAA). DBA is also a founding member of the Australian Auto Innovation Centre (AIC).

### COVERAGE AND DISTRIBUTION

DBA's range covers over 97% of the Australian car parc, with direct replacement disc rotors and pads applications catering for street vehicles, performance upgrades, towing, 4x4 / SUV, military / armoured vehicles, track and motorsport applications.

While we are proud of our Australian roots and our local achievements, DBA over time has truly grown into a global player, servicing the world through eight distribution centres across Australia, New Zealand and the USA, distributors on all continents, and exporting to over 30 countries.

DBA engages with its retail, trade and end-customers through numerous channels. Both face-to-face and over the phone, through our dedicated expert team of Sales and Customer Service Representatives, and virtually via our website and our Facebook, LinkedIn and Instagram pages. These offer a world of information about our range of brake products, new product releases, and technical insights, and are also a great way to engage with us.

### QUALITY, PERFORMANCE & SAFETY

DBA's uncompromised focus is on Quality, Performance and Safety. When manufacturing and distributing safety critical components, DBA believes there can be no shortcuts or substitutions for quality. Our direct replacement disc rotors and pads feature a myriad of technical innovations and patents and set the bar in quality, tolerances, and premium metals that delivers top quality. Drivers worldwide demand DBA products for consistent, reliable and superior performance. DBA ensures this by engineering and manufacturing products that are far superior to generic parts and aftermarket counterfeits.

DBA holds its performance and motorsport roots closely as it continues to supply the world with leading braking solutions, for both street and performance vehicles. DBA maintains ISO9001:2015 accreditation through TÜV Rheinland®.

**STREET  
SERIES**

**STREET  
PERFORMANCE**

**XTREME  
PERFORMANCE**

**RACE  
PERFORMANCE**

After four decades at the forefront of disc brake rotor manufacturing, DBA has successively been developing and manufacturing its very own range of high-quality brake pads to the market. The result of an exhaustive research and development program, DBA brake pads have been put through their paces on the street, off-road, and the racetrack as well as DBA's extensive testing equipment.

Not only do DBA brake pads offer industry-leading performance, but they are also designed to match perfectly with DBA's long-established and trusted range of disc brake rotors.

With a range of brake pad options available to suit all driving needs, from daily drivers to four-wheel drives and days out on the track, DBA is able to offer a pad and rotor combination to suit your needs.

# INTRODUCING STREET SERIES BRAKE PADS



### Features:

- ⊗ OE-style post-cured process for optimal braking performance over the pad life
- ⊗ Ceramic\* formulation and copper-free (NSFI certified) for low dust emission & clean wheels
- ⊗ High-friction stripe for easy bedding-in
- ⊗ Application-specific NVH shims, slots and chamfers for less vibration and noise

### Ideal for

- OE replacement & everyday use
- Passenger cars & SUVs
- Light commercial Vehicles

\* Check box label for applicability



## STREET PERFORMANCE

### Features

- ⊗ Consistent high temperature performance
- ⊗ Scorched for optimal braking performance
- ⊗ Semi-metallic formulation and copper-free (NSFI certified) for low dust emission
- ⊗ Application-specific NVH shims, slots and chamfers for less vibration and noise

### Ideal for:

- OE upgrade
- Performance cars, SUVs & 4WDs
- Use with DBA Performance Disc Rotors



## XTREME PERFORMANCE

### Features

- ⊗ High performance across the full temperature spectrum
- ⊗ Scorched for optimal braking performance
- ⊗ Carbon-fibre, low copper formulation (NSFI certified)
- ⊗ Application-specific NVH shims and slots for less vibration and noise

### Ideal for:

- Performance street cars & track use
- High GVM towing, heavy off-road use
- Use with DBA Performance Disc Rotors



## RACE PERFORMANCE

### Features

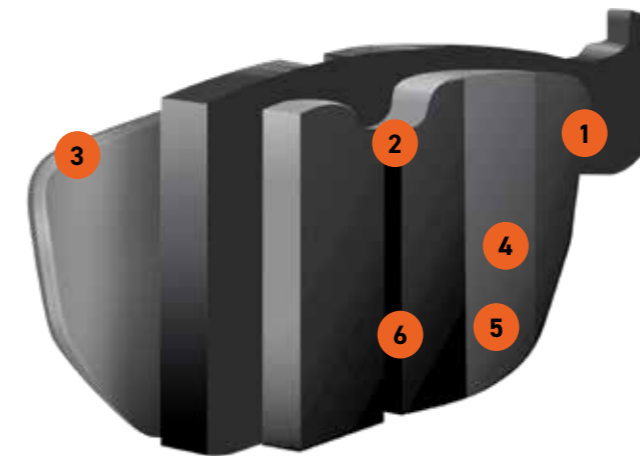
- ⊗ Optimal braking consistency up to extreme temperatures
- ⊗ Carbon-metallic formulation

### Ideal for:

- Super sprints & circuit racing
- Extreme temperature applications
- Only use with high performance rotors, such as DBA 5000 Series
- Not suitable for road use

# BRAKE PADS

## TECHNICAL FEATURES

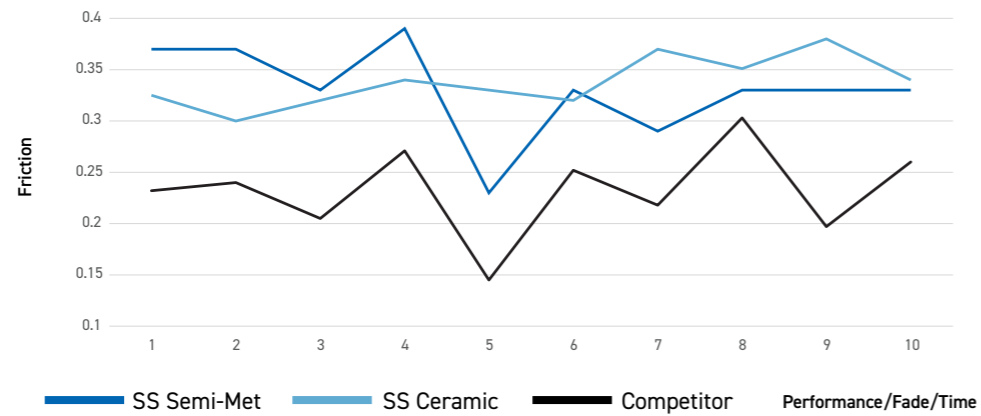


- 1 CHAMFER**  
Reduce noise, vibration and harshness
- 2 SLOT**  
Facilitation of temperature stability / removal of dust and debris
- 3 PREMIUM QUALITY SHIM**  
Application Specific Multi Layered elastomeric coated shim for noise reduction
- 4 Post-curing / Scorching Process (TSP)**  
Raises cold friction effectiveness & reduces bedding-in time
- 5 FRICTION MATERIAL**  
Application specific friction materials with varying friction coefficient, fade, noise and performance features
- 6 BEDDING-IN STRIPE**  
The Titanium infused stripe increases the initial friction co-efficient to improve initial stopping power performance and assist in the bedding-in process by better preparing the mating surfaces between rotor and brake pad

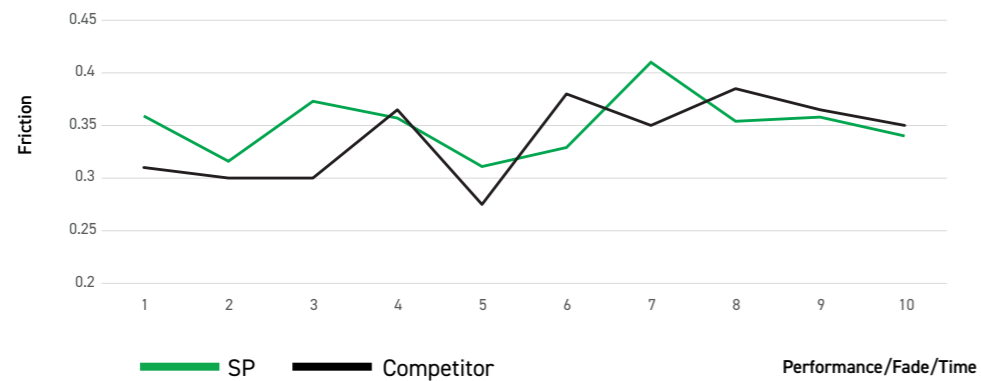
	STREET SERIES	STREET PERFORMANCE	XTREME PERFORMANCE
<b>Friction Material Formulation</b>	Ceramic / Semi-Met (limited sku's)	Semi-Met	Semi-Met Carbon Fibre
<b>Copper Content</b>	Copper free	Copper free	Low copper
<b>Application</b>	OE style replacement	Street Performance	High Performance / Heavy Duty Upgrade/ Commercial
<b>Chamfer</b>	Yes	Yes	No
<b>Slots</b>	Yes	Yes	Yes
<b>Shim</b>	Yes	Yes	Yes
<b>TSP</b>	Post-cured	Scorched	Scorched
<b>Bedding-in stripe</b>	Yes	No	No
<b>R90 certified</b>	-	Check parts listing in this book for applicability	

# BRAKE PADS - PERFORMANCE GRAPHS

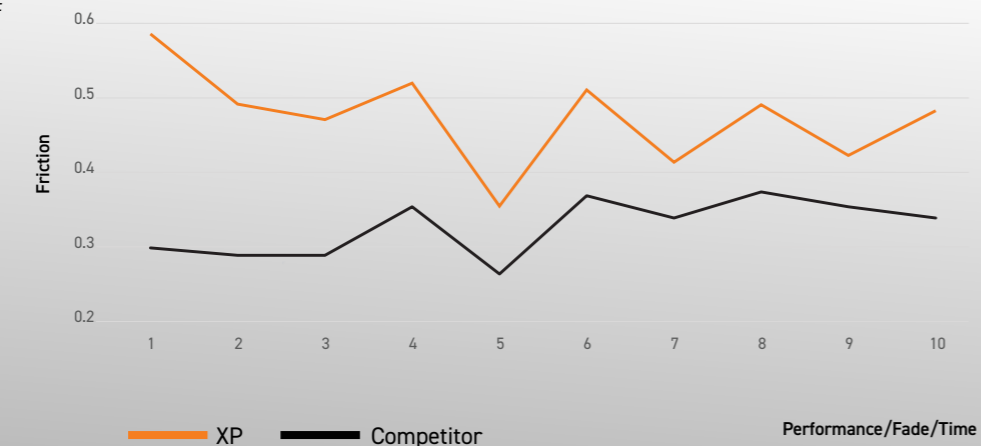
**STREET**  
SERIES



**STREET**  
PERFORMANCE



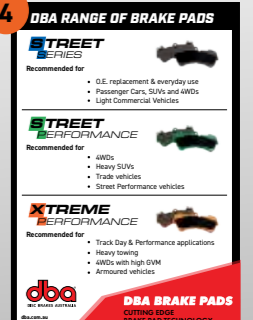
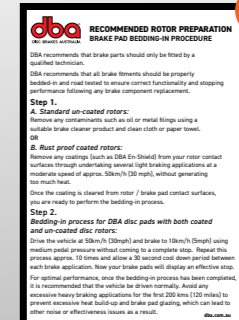
**XTREME**  
PERFORMANCE



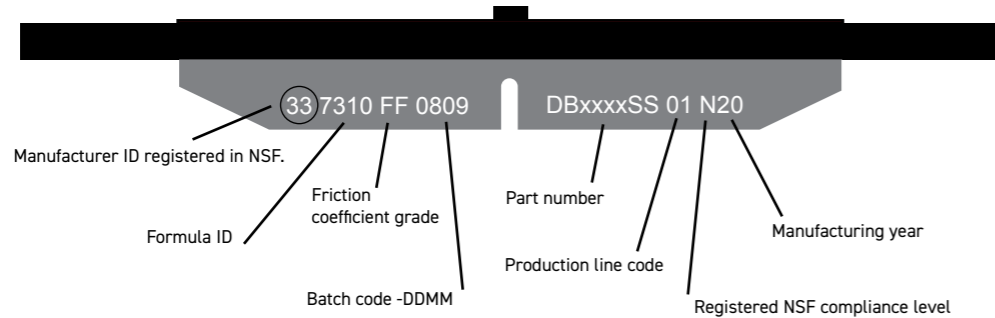
# BRAKE PADS - WHAT'S IN THE BOX?

- 1 BRAKE PADS (AXLE SET)
- 2 HIGH TEMPERATURE BRAKE PAD LUBRICANT
- 3 SERVICING STICKER (DOOR FRAME)
- 4 BEDDING - IN INSTRUCTIONS
- 5 BRAKE PAD SENSOR\*
- 6 HARDWARE\*

\*WHERE APPLICABLE



# BRAKE PADS - LABELLING



**dba STREET SERIES**  
DISC BRAKES AUSTRALIA

**DB1914SS** Front

D436  
2209-20

Toyota 1988-2005

Ceramic formulation

dba.com.au

**dba STREET SERIES**  
DISC BRAKES AUSTRALIA

**DB1915SS** Front

D1425  
2712-17

Ford  
Nissan  
Toyota

Semi-Met formulation

dba.com.au

**dba XTREME PERFORMANCE**  
DISC BRAKES AUSTRALIA

**DB1199XP**

(E11)90R-02A01584/49904  
ECE R90 Approved

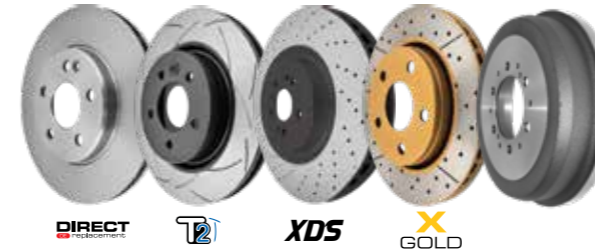
1104-20  
TOYOTA

www.dba.com.au

# DISC ROTORS & DRUMS

DBA offers a wide range of high-quality, safety-oriented brake rotor / drum replacement options for over 98% of vehicles on Australian roads. All products are for direct replacement, meaning no modification to your vehicle is required.

## STREETSERIES



Street Series direct replacement rotors are for drivers seeking OE level braking performance or better. Manufacturing above OEM standards is our minimum requirement. Street Series rotors are available with several added benefits including En-Shield (E), cross drilled and slotted (XDS), and T2 bi-directional slot (S). DBA recommends the Street Series for daily drivers, light commercial and SUV applications.

- Street Series rotors feature:
- Kangaroo Paw ventilation
  - Direct replacement suitability
  - Moisture proof corrosion protection packaging

## 4000SERIES



4000 Series direct replacement single-piece disc brake rotors are designed for drivers seeking improved braking performance.

The 4000 series is DBA's most popular choice for performance upgrades, featuring DBA's patented Kangaroo Paw ventilation system, high carbon cast-iron, Thermal Stability Profiling (TSP), Thermo-Graphic paint markings and T3 slot.\*

DBA recommends the 4000 Series for high stress applications including performance vehicles, SUV and 4x4, towing applications, light commercial vehicles (utes & vans), armoured vehicles and light track day duties.

\*dependent on variant

- DBA's 4000 Series rotors feature:
- XG-150 High Carbon Alloyed Iron
  - TSP (Thermal Stability Profiling)
  - Thermo-graphic paint markings (THGP)
  - Direct replacement suitability
  - Moisture proof corrosion protection packaging

## 5000SERIES



5000 Series rotors are a composite 2 piece direct replacement brake rotor, combining high carbon cast-iron rings with aerospace grade aluminium hats (T6061-T6).

The 5000 Series shares all the performance technology featured in the 4000 Series, with the added benefits of weight reduction and improved heat management via the aluminium hats.

The use of aluminium hats also allows for uniform radial disc expansion and lower heat transfer from disc to hub.

DBA's 2 piece 5000 Series allows users to re-use their 5000 Series aluminium hats with replacement DBA flat disc rotors (rings) available.

DBA recommends the 5000 Series disc rotors for high performance street vehicles, track days, club racing and rally sport applications.

- DBA's 5000 Series rotors feature:
- Aluminium hats (T6061-T6)
  - National Aerospace Standard (NAS) bolts and crimp nuts
  - Replacement disc rotors available
  - XG-150 High Carbon Alloyed Iron
  - TSP (Thermal Stability Profiling)
  - Thermo-graphic Paint markings (THGP)
  - Direct replacement suitability
  - Moisture proof corrosion protection packaging

## BEDDING-IN PROCEDURE

### COATED VS. UN-COATED ROTORS

Many brands of rotors are coated with a paint-like coating to protect the rotor surface from rust and corrosion. This is important to know as it requires a different bedding in procedure.

DBA recommends that brake parts should only be fitted by a qualified technician. All brake fitments should be properly bedded-in and road tested to ensure correct functionality and stopping performance following any brake component replacement.

**Step 1.**

**A. Standard un-coated rotors:**

Remove any contaminants such as oil or metal filings using a suitable brake cleaner product and clean cloth or paper towel.

OR

**B. Rust proof coated rotors:**

Remove any coatings (such as DBA En-Shield) from your rotor contact surfaces through undertaking several light braking applications at a moderate speed of approx. 50km/h (30 mph), without generating too much heat.

Once the coating is cleared from rotor / brake pad contact surfaces, you are ready to perform the bedding-in process.

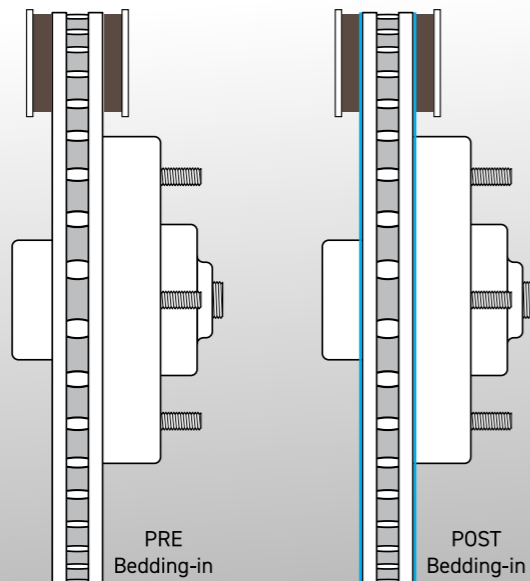
**Step 2.**

Bedding-in process for DBA disc pads with both coated and un-coated disc rotors:

Drive the vehicle at 50km/h (30mph) and brake to 10km/h (5mph) using medium pedal pressure without coming to a complete stop. Repeat this process approx. 10 times and allow a 30 second cool down period between each brake application. Now your brake pads will display an effective stop.

For optimal performance, once the bedding-in process has been completed, it is recommended that the vehicle be driven normally.

Avoid any excessive heavy braking applications for the first 200 kms (120 miles) to prevent excessive heat build-up and brake pad glazing, which can lead to other noise or effectiveness issues as a result.



## DISC THICKNESS VARIATION [DTV] AND UNEVEN BRAKE PAD WEAR



Uneven brake pad wear is often symptomatic of DTV issues. DTV is a variation in the thickness of the disc rotor's braking surfaces as it rotates on the axle. Pedal pulsation and steering wheel vibration are typically associated with DTV.

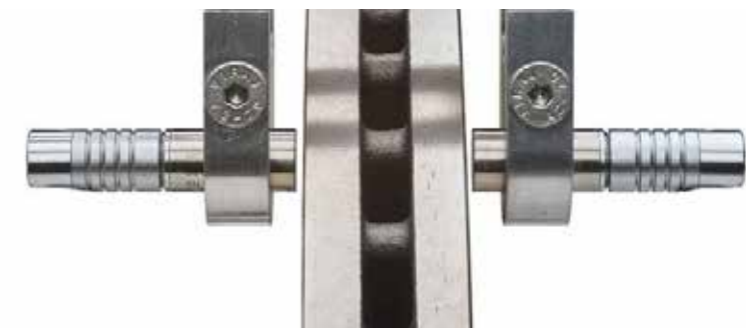
The hydraulic pressure behind the brake caliper pistons force the brake pad to maintain consistent load on the rotor surface. When the thickness of the disc rotor varies by as little as 20 microns, the pads oscillate back and forth, causing a pulsation in the hydraulic circuit back to the brake pedal. This brake pad oscillation also causes a variation in brake torque as the brake pads grab and release over the higher portion of the rotor surface. This is typically noticed in the steering wheel (vibration) as the brake torque from the left and right sides of the axle is different and out of sequence.

DTV in essence occurs due to uneven wear of the rotors during service. This can occur due to high levels of rotor run-out at fitment, and poorly serviced calipers can accelerate the onset of DTV.

A few of the more common causes are;

- Wheel nut torque. Variation in torque values cause distortion of the disc rotor and hub.
- Typically associated with pneumatic rattle gun misuse.
- Worn or damaged wheel bearing assemblies.
- Not cleaning the hub mounting faces.
- Scoring or corrosion on the mounting face.
- Bent or damaged wheel studs.
- Irregular thickness of disc rotor anti-corrosion coating on the mounting face.
- Poor quality rotors with out of tolerance specifications.






























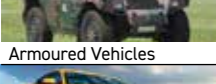







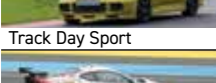










Once DTV is correctly identified, disc rotors may be repaired by means of re-machining only, if adequate material is remaining on the disc rotor surfaces. Naturally, the mechanical or fitting issues must be addressed to eliminate re-occurrences. Calipers should be overhauled and slide pins checked to ensure they slide freely and piston seals are in good condition.



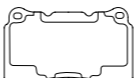
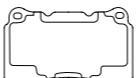




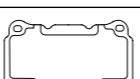
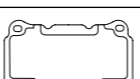
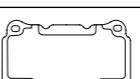
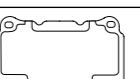
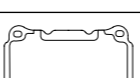
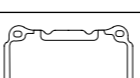
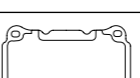
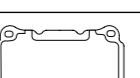
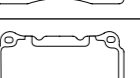
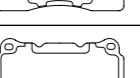
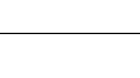
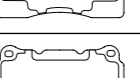
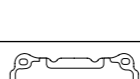
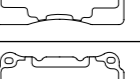
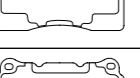
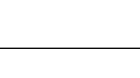




# DIRECT REPLACEMENT GUIDE

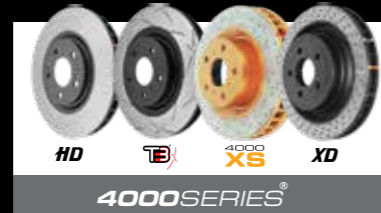
# MATCHING BRAKE ROTORS & PADS

BRAKE ROTORS & BRAKE PADS DIRECT REPLACEMENT GUIDE	STREETSERIES®			4000SERIES®			5000SERIES®		
	Plain	Slotted	Cross-drilled / Slotted	Plain	Slotted	Cross-drilled / Slotted	Plain	Slotted	Cross-drilled / Slotted
	DIRECT	T2	OEX XDS GOLD	HD	TB	4000 XS XD	HD	TB	XD
<b>VEHICLE TYPE</b>									
 Daily Street Driver									
 Family 4WD & SUV									
 Street Utes & Vans									
 OffRoad & Towing >750kg									
 OffRoad & Towing <750kg									
 GVM upgrade 4WD									
 Armoured Vehicles									
 Performance									
 Track Day Sport									
 Club Racing									
 Rally Sport									

The key factors that determine which brake pad is best for your car is based on the type of vehicle and what you intend on using it for. First match your driving application on the left, then follow the chart across to see the recommended DBA disc rotors and brake pads that have been selected to meet your requirements.

	STREET SERIES	STREET PERFORMANCE	XTREME PERFORMANCE	RACE PERFORMANCE
				
				
				
				
				
				
				
				
				
				

## BRAKE DISC ROTORS



## BRAKE PADS



# BRAKE CALIPERS

## FEATURES

- ⊗ Direct Replacement - single unit
- ⊗ Piston & housing assembly
- ⊗ Brackets included
- ⊗ Brake pads are not included to allow 'selection by application' usage



DBA STREET SERIES direct replacement brake calipers are backed by DBA's over 40 years of braking expertise and know-how.

The calipers are manufactured to original equipment and ISO quality standards, using state of the art high-technology casting, CNC machine and laser manufacturing, and assembly equipment.

STREET SERIES brake calipers are designed to provide the most efficient method of repair solution, without the fuss of time consuming rebuilding or the complexity of remanufactured product core exchange, with ensured 100% performance out of the box.

STREET SERIES brake calipers save time, money and provide restored vital braking system performance levels.

With a wide product range tailored to suit popular applications, it supports the trade mechanic or DIY customer.

Ideal for:

- OE replacement & everyday use
- Passenger Cars & SUV
- Light Commercial Vehicles

Recommended for use with DBA Brake Rotors, Brake Pads and Brake Fluid.



# BRAKE SHOES

OVER  
600 SKUs

## FEATURES

- ⊗ Complete Brake axle set
- ⊗ Pins & handbrake levels included where available



All friction material is a minimum of ff rated with a stable and consistent coefficient of friction across a wide temperature range.

Corrosion inhibitor to shoe core prevents rust

## BENEFITS

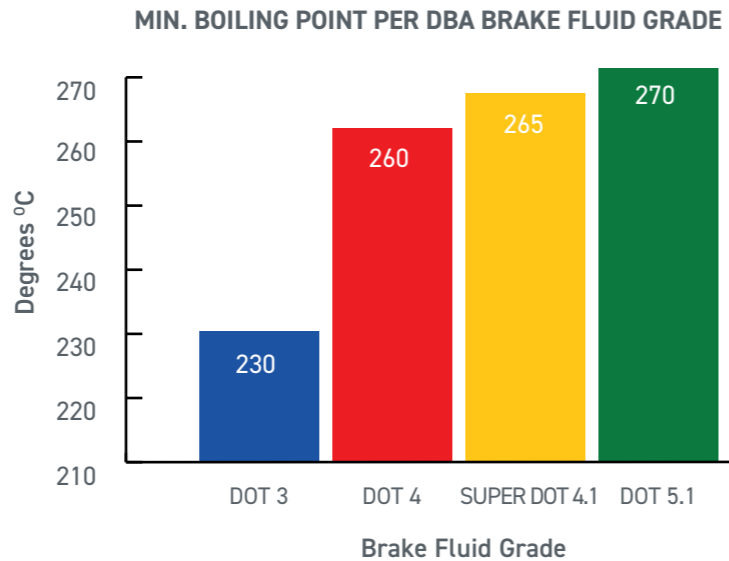
- LOW DUST
- LOW NOISE
- SHORTER BEDDING-IN TIMES
- BETTER BRAKING PERFORMANCE



Packed in the popular 500ml sizes, DBA's range comprises of **DOT 3**, **DOT 4**, **SUPER DOT 4.1** and **DOT 5.1** brake fluids, which are polyglycol fluids suitable for popular vehicle applications.

## FEATURES

DBA Brake Fluid has high temperature resistance, low moisture absorption and anti corrosion properties in every grade of fluid. Brake fluids that inhibit metal corrosion from absorbed moisture can reduce the costs in maintaining hydraulic brake systems.



## TYPES OF BRAKE FLUID



### DOT 3

PART NO. DBADOT3-500

Brake fluid Dot 3 is a premium quality, non silicone, non-mineral/petroleum based, fully synthetic brake fluid designed for use in a wide range of brake and clutch applications.



### DOT 4

PART NO. DBADOT4-500

Brake fluid Dot 4 is a high performance polyglycol synthetic brake fluid suitable for both passenger and commercial vehicles including ABS systems.



### SUPER DOT 4.1

PART NO. DBADOT4S-500

Brake fluid Dot 4.1 is a high performance grade brake fluid with superior quality for universal use in modern brake systems and is ideal for vehicles with ABS systems.



### DOT 5.1

PART NO. DBADOT5.1-500

Brake fluid Dot 5.1 is a premium quality, full synthetic, non silicone brake fluid designed for use in a wide range of brake and clutch applications.

DBA Part No.	Vehicle Application & Axle	SS	SP	XP
DB2	[ Alfa / BMW / Ferrari / Mercedes / Opel / SAAB & Volvo 1972-04 R ]	•		
DB84	[ Volkswagen Transporter 1967 - 1992 F ]	•		
DB143	[ Mercedes Benz 1972 - 1989 F ]	•		
DB170	[ Toyota Celica / Mitsubishi Pajero 1986 - 1989 F ]	•		
DB222	[ Alfa / Audi / Fiat / Chery J11 2007 - 2011 R ]	•		
DB241	[ Ford & Mazda 1980-1989 F ]	•		
DB243	[ Mercedes Benz 1972 - 1991 F ]	•		
DB288	[ Eunos Toyota Hilux- Landcruiser 83-90 F ]	•	•	•
DB292	[ Daihatsu / Mazda / Ford Courier 1978 - 1985 F ]	•		
DB296	[ BMW 3/5/6/7/1 R ]	•		
DB300	[ Honda 1979-2014 F ]	•		
DB308	[ Holden & Toyota 1982-2002 F ]	•		
DB318	[ Toyota 1977-1996 F ]	•		
DB319	[ Mitsubishi 1986-1997 F ]	•		
DB321	[ Nissan Urvan / Maverick / Patrol F ]	•		
DB325	[ Nissan 1982-2004 R ]	•		
DB327	[ Isuzu Trooper / Holden Rodeo & Jackaroo 1981 - 1992 F ]	•		
DB340	[ Nissan 1978-1992 F ]	•		
DB372	[ Mazda 1984-2003 R ]	•		
DB382	[ Nissan 1982-1998 F ]	•		
DB388	[ Ford & Mazda 1984-2000 F ]	•		
DB390	[ Honda 1984-2014 F ]	•		
DB394	[ Toyota Dyna / Coaster 1982 - 1992 F ]	•		
DB403	[ Holden & Suzuki 1981-2000 F ]	•		
DB406	[ Ford & Mazda 1985-1994 F ]	•		
DB409	[ Ford & Mazda 1985-1997 F ]	•		
DB413	[ Toyota Supra / Cross Wind / Corona / Cressida 1983 - 1993 R ]	•		
DB416	[ Mazda RX7 1986-1999 F ]	•		
DB417	[ Ford & Mazda 1989-2014 R ]	•		
DB418	[ Subaru 1987-1995 F ]	•		
DB422	[ Holden / Lexus & Toyota 1983-2002- R ]	•		
DB425	[ Mercedes Benz Kombi / Coupe / E-Class 1983 - 1998 F ]	•		
DB426	[ Subaru 1984-1994 F ]	•		
DB433	[ Mercedes 1985-2000 R ]	•		
DB438	[ Isuzu / Nissan & Subaru 1986-2014 F ]	•		
DB442	[ Ford / Kia & Mazda 1985-2014 F ]	•		
DB521	[ Jaguar / Ferrari / Daimler / Jensen R ]	•		
DB525	[ Sunbeam / Holden H series / Triumph / Ford F ]	•		
DB538	[ Holden / Ford / Lancia / Triumph / Volvo F ]	•		
DB549	[ Volvo 140/240/260 1966 - 1993 F ]	•		
DB585	[ Aston Martin / Jaguar / Daimler 1968 - 1993 F ]	•		
DB625	[ Ford / Holden / Hyundai / Rolls & Triumph 1968-1987 F ]	•		
DB843	[ Landrover & Range Rover 1967-2014 F/R ]	•		
DB885	[ Rover / Land Rover 1969 - 1994 F ]	•		
DB1026	[ Chrysler Galant / Mazda R100 / Holden Gemini 1975 - 1985 F ]	•		
DB1029	[ Chrysler & Holden 1976-1980 F ]	•		
DB1045	[ Ford Falcon / Fairmont / Fairlane / LTD 1970-93 F ]	•	•	
DB1078	[ Ford 1981-88 R ]	•		
DB1085	[ Chrysler / Holden / Mitsubishi 1978-97 F ]	•	•	
DB1086	[ Ford / Holden 1980-03 R ]	•	•	
DB1103	[ Holden / Mitsubishi / Nissan & Toyota 1984-95 F ]	•		
DB1106	[ Nissan Pintara & Skyline 1986-91 R ]	•		
DB1108	[ Ford 1988-03 F ]	•	•	
DB1109	[ Ford 1988-99 R ]	•		
DB1113	[ Mitsubishi 1986-07 F ]	•		

DBA Part No.	Vehicle Application & Axle	SS	SP	XP
DB1115	[ Eunos / Ford & Mazda 1987-97 R ]	•		
DB1116	[ Holden & Isuzu 1980-02 F ]	•		
DB1117	[ Holden / Nissan & Suzuki 1987-2014 F ]	•		
DB1118	[ Nissan Pulsar 1987-91 R ]	•		
DB1123	[ Honda 1985-2014 F ]	•		
DB1125	[ Daihatsu Applause & Charade 1987-99 F ]	•		
DB1130	[ BMW / Landrover & Rangerover 1982-06 F/R ]	•		
DB1131	[ BMW 1988-2009 F ]	•		
DB1132	[ BMW 1988-2003 R ]	•		
DB1133	[ Honda 1985-94 F ]	•		
DB1134	[ Suzuki Vitara & X-90 1987-98 F ]	•		
DB1141	[ Toyota 1988-98 F ]	•		
DB1142	[ Honda 1985-2012 R ]	•		
DB1144	[ Nissan 1986-2001 R ]	•		
DB1146	[ Ford & Nissan 1987-98 R ]	•		
DB1147	[ Holden & Toyota 1984-2001 R ]	•		
DB1148	[ Nissan GU Y61 97-14 R ]	•	R90	
DB1149	[ Toyota 1988-2005 F ]	•	•	R90
DB1155	[ Holden & Suzuki 1989-2000 F ]	•		
DB1158	[ Eunos / Ford / Kia & Mazda 1989-2014 F ]	•		
DB1159	[ Daihatsu / Eunos / Ford & Mazda 1985-2000 R ]	•		
DB1161	[ Holden & Isuzu 1987-93 R ]	•		
DB1163	[ Honda & Isuzu 1986-2014 R ]	•		
DB1165	[ Ford & Nissan 1986-2006 F ]	•		
DB1166	[ Ford / Hyundai / Kia & Nissan 1986-2007 R ]	•		
DB1167	[ Hyundai / Kia & Ssangyong 1991-2014 F ]	•		
DB1168	[ Mitsubishi EXpre & L300 1988-2001 F ]	•		
DB1170	[ Nissan & Subaru 1989-2004 F ]	•	R90	R90
DB1175	[ Nissan 1986-2000 R ]	•		
DB1176	[ Landrover & Range Rover 1988-2014 F ]	•		
DB1177	[ Eunos / Ford & Mazda 1989-2014 R ]	•		
DB1178	[ Mazda MX-5 1989-1998 F ]	•		
DB1180	[ Daihatsu / Eunos / Ford / Mazda & Suzuki 89-2014 R ]	•		
DB1185	[ Isuzu & Subaru 1990-2002 F ]	•		
DB1186	[ Isuzu & Subaru 1990-98 R ]	•	•	
DB1187	[ Nissan 1989-99 F ]	•		
DB1191	[ Honda Accord & CRV 1990-2003 F ]	•		
DB1192	[ Audi / Citroen / Honda / Peugeot / Renault / Seat & VW 1980-2012 R ]	•		
DB1199	[ Toyota 4 Runner & Landcruiser 1990-98 F ]	•	R90	R90
DB1200	[ Lexus / Mitsubishi & Toyota 1990-2014 R ]	•	R90	R90
DB1203	[ Honda & Mitsubishi 1996-2004 F ]	•		
DB1204	[ Daewoo & Mitsubishi 1991-2004 R ]	•		
DB1205	[ Great Wall & Toyota 1989-2013 F ]	•		
DB1206	[ Honda 1990-2006 F ]	•		
DB1208	[ Toyota 1990-2000 F ]	•		
DB1209	[ Holden / Lexus & Toyota 1991-2004 F ]	•		
DB1211	[ Nissan 1990-96 R ]	•		
DB1212	[ Daihatsu Rocky / Feroza 1988 - 1999 F ]	•		
DB1213	[ Toyota 1990-2000 R ]	•		
DB1215	[ Toyota 1990-2000 F ]	•		
DB1216	[ Mazda & Nissan 1991-99 F ]	•		
DB1219	[ Isuzu & Subaru 1990-96 F ]	•		
DB1220	[ Nissan & Subaru 1989-2007 R ]	•	•	R90
DB1222	[ Eunos & Mazda 1990-2014 R ]	•		
DB1223	[ Mitsubishi 1991-2014 F ]	•	•	•
DB1224	[ BMW 1989-2014 F ]	•		







# BUYERS GUIDE - BRAKE SHOES

DBA Part No.	DBA Street Series Brake Shoe - Application / Size
DBAS1001	[Triumph 228.6mm]
DBAS1002	[BLMC / Trailer 228.6mm]
DBAS1008	[Hillman 228.6mm]
DBAS1010	[Trailer / International 304.8mm]
DBAS1014	[Ford Galaxie & F250 304.8mm]
DBAS1018	[Ford Galaxie & F250 / F350 304.8mm]
DBAS1022	[Ford / Leyland / Triumph 203.1mm]
DBAS1025	[Toyota Hi-Ace / Hi-Lux 230mm]
DBAS1028	[Toyota Crown / Hi-Ace / Hi-Lux 230mm]
DBAS1031	[Bedford / Ford / Leyland 254mm]
DBAS1042	[Nissan 1000 & 1200 203.2mm]
DBAS1043	[Nissan 1000 / 1200 / 120Y 203.2mm]
DBAS1044	[Toyota Corona 228.6mm]
DBAS1062	[Toyota Corona & Crown 228.6mm]
DBAS1063	[Chevrolet Impala 279.4mm]
DBAS1064	[Chevrolet Impala 279.4mm]
DBAS1066	[Toyota Corolla 200mm]
DBAS1072	[Toyota Corona 228.6mm]
DBAS1074	[Nissan Cedric & Gloria 254mm]
DBAS1075	[Nissan 620 254mm]
DBAS1081	[Dodge 307.9mm]
DBAS1082	[Mazda 1000 / 1300 / 323 200mm]
DBAS1083	[Toyota Landcruiser & Stout 290mm]
DBAS1085	[Mazda 254mm]
DBAS1092	[Land Rover 110 / Series 2A & 3 279.4mm]
DBAS1132	[Holden 1965-68 & Torana 70-74 228.6mm]
DBAS1161	[Ford Customline 279.4mm]
DBAS1163	[Ford Falcon 1960-66 228.6mm]
DBAS1164	[Austin / Ford / Leyland 228.6mm]
DBAS1169	[Ford / Triumph 228.6mm]
DBAS1171	[Holden 228.6mm]
DBAS1172	[Holden 1963-68 228.6mm]
DBAS1173	[Holden 228.6mm]
DBAS1174	[Holden / Gemini / Torana 1962-79 228.6mm]
DBAS1175	[Holden 228.6mm]
DBAS1176	[Holden 228.6mm]
DBAS1179	[Toyota Corolla 200mm]
DBAS1182	[Toyota Corona 228.6mm]
DBAS1189	[Daihatsu / Toyota Corolla 200mm]
DBAS1190	[Toyota Corolla 200mm]
DBAS1210	[VW Karmann 1967-70 248mm]
DBAS1226	[Austin / Morris Sprite 1958-63 177.8mm]
DBAS1227	[Austin / Morris Sprite 1958-66 177.8mm]
DBAS1234	[Austin / Morris Lancer 1958-62 228.6mm]
DBAS1260	[Holden Torana / Vauxhall Viva 203.2mm]
DBAS1263	[Chrysler Valiant 1961-63 228.6mm]
DBAS1264	[Chrysler / Trailer 228.6mm]
DBAS1265	[Ford Falcon 1970-72 / Rambler 254mm]
DBAS1270	[Ford Falcon 1964-73 254mm]
DBAS1271	[Ford / Trailer 254mm]
DBAS1298	[Hillman / Trailer 228.6mm]
DBAS1300	[Volkswagen Beetle 230mm]
DBAS1301	[VW Beetle 1960-70 230mm]

DBA Part No.	DBA Street Series Brake Shoe - Application / Size
DBAS1323	[Ford Bronco / F100 / F150 280.1mm]
DBAS1331	[Triumph Herald / Spitfire 1962-74 177.8mm]
DBAS1332	[Austin / Morris / Leyland Mini 177.8mm]
DBAS1333	[Leyland / Morris Mini & Moke 177.8mm]
DBAS1334	[VW 1600 / Beetle 1960-76 230mm]
DBAS1335	[VW Beetle 1960-70 230mm]
DBAS1336	[Holden 1968-76 254mm]
DBAS1337	[Holden 1968-80 254mm]
DBAS1338	[Holden 1968-71 254mm]
DBAS1339	[Nissan 1968-92 228.6mm]
DBAS1340	[Nissan Caball / Patrol 1960-85 292mm]
DBAS1341	[Nissan Caball / Patrol 1960-80 292mm]
DBAS1342	[Mazda 1600 / 616 / 808 / Capella / RX 200mm]
DBAS1344	[Ford Cortina / Nissan 200B 228.6mm]
DBAS1347	[Nissan 250mm]
DBAS1348	[Mazda 626 / 929 / RX4 / RX7 228.6mm]
DBAS1349	[Ford F100 280.1mm]
DBAS1350	[Nissan 240Z / 260Z 228.6mm]
DBAS1351	[Mitsubishi Colt / Galant / Lancer 203.2mm]
DBAS1352	[Honda Civic 180mm]
DBAS1354-1	[BMW 318i 228.6mm]
DBAS1355	[Renault 12 180mm]
DBAS1356	[Chrysler Centura / Toyota Corolla / Corona 228.6mm]
DBAS1358	[Toyota 1974-99 228.6mm]
DBAS1360	[Ford Capri 228.6mm]
DBAS1361	[Nissan 240C / 260C / 280C 240mm]
DBAS1362	[VW 1500 / 1600 / Beetle / Golf 230mm]
DBAS1363	[Volkswagen Passat 200mm]
DBAS1364	[Ford Cortina 1976-82 228.6mm]
DBAS1365	[Chevrolet / Holden / Isuzu 254mm]
DBAS1366	[Chevrolet / Holden / Isuzu 254mm]
DBAS1367	[Suzuki LJ50/ST80 1975-81 210mm]
DBAS1368	[Subaru 1978-94 180mm]
DBAS1369	[Volkswagen Passat 180mm]
DBAS1371	[Toyota Hi-Ace / Hi-Lux 1976-88 254mm]
DBAS1375	[Toyota Hi-Lux 254mm]
DBAS1376	[Toyota Corona / Supra 228.6mm]
DBAS1377	[VW Kombi T2 1974-80 252mm]
DBAS1379	[Nissan 120Y 203.2mm]
DBAS1380	[Chrysler Valiant / Charger 1971-81 254mm]
DBAS1381	[Ford Escort 203.2mm]
DBAS1382	[Mitsubishi Lancer / Sigma 228.6mm]
DBAS1383	[Ford Escort 1968-85 228.6mm]
DBAS1384	[Mitsubishi Sigma / Nissan Bluebird 228.6mm]
DBAS1384-1	[Mitsubishi / Trailer 228.6mm]
DBAS1384-2	[Mitsubishi 228.6mm]
DBAS1384-3	[Mitsubishi 228.6mm]
DBAS1385	[Holden 1978-90 230mm]
DBAS1386	[Nissan 180B / 200B / 20Z / 260Z 228.6mm]
DBAS1387	[Nissan Pulsar/Stanza/Sunny 203.2mm]
DBAS1388	[Toyota Hi-Ace / Hi-Lux 254mm]
DBAS1389	[Asia / Ford / Mazda 1977-97 260mm]
DBAS1390	[Nissan Urvan 260mm]

# BUYERS GUIDE - BRAKE SHOES

DBA Part No.	DBA Street Series Brake Shoe - Application / Size
DBAS1391	[Ford / Mazda E Series 228.6mm]
DBAS1392	[Ford / Mazda E Series 180mm]
DBAS1393	[Honda / Rover / Triumph 180mm]
DBAS1394	[Ford Laser / Mazda 323 180mm]
DBAS1395	[Mitsubishi Colt 180mm]
DBAS1396	[Toyota Crown 1974-87 254mm]
DBAS1397	[Honda Accord / Civic 180mm]
DBAS1398	[Hyundai Excell / Mitsubishi Colt 180mm]
DBAS1399	[Holden Astra / Nissan Pulsar 180mm]
DBAS1400	[Nissan Urvan 254mm]
DBAS1401	[Mitsubishi L300 220mm]
DBAS1402	[Holden Rodeo / Shuttle 254mm]
DBAS1403	[Dodge / Mitsubishi L200 1980-87 241.3mm]
DBAS1404	[Nissan Patrol 270mm]
DBAS1405	[Toyota Dyna / Hi-Ace / Hi-Lux 1979-01 254mm]
DBAS1406	[Daihatsu Charade / Handivan 180mm]
DBAS1407	[Daihatsu F20 F55 Scatt / Toyota Blizzard 254mm]
DBAS1408	[Mazda 626 / 929 228.6mm]
DBAS1409	[Ford Telstar / Mazda 626 200mm]
DBAS1410	[Suzuki Carry 180mm]
DBAS1411	[Ford Courier / Mazda B1600 / B1800 260mm]
DBAS1412	[Holden Parking Brake 160mm]
DBAS1413	[Holden Jackaroo / Isuzu 254mm]
DBAS1414	[Toyota Cruiser / Prado 295mm]
DBAS1415	[Toyota Landcruiser 1979-90 295mm]
DBAS1416	[Fiat / Renault 228.6mm]
DBAS1417	[Landrover 2 / 2A & 3 1958-80 254mm]
DBAS1418	[Landrover [2Pcs] Parking Brake 228.6mm]
DBAS1419	[Trailer 228.6mm]
DBAS1425	[MGB / Trailer 254mm]
DBAS1430	[Trailer 203.2mm]
DBAS1436	[Trailer 279.4mm x 52.5mm]
DBAS1441	[Trailer 254mm]
DBAS1441-1	[Trailer 254mm]
DBAS1442	[Trailer 254mm]
DBAS1442-2	[Trailer 254mm]
DBAS1444	[Mitsubishi 241.3mm]
DBAS1447	[Nissan Cabstar 280mm]
DBAS1448	[Toyota Coaster / Dyna 320mm]
DBAS1449	[Toyota Coaster / Dyna 320mm]
DBAS1450	[Toyota Corana / Liteace 228.6mm]
DBAS1451	[Rover 2600 / 3500 228.6mm]
DBAS1452	[Triumph Stag 1970-79 228.6mm]
DBAS1453	[Toyota 295mm]
DBAS1454	[Toyota Dyna / Stout 295mm]
DBAS1459	[Bedford CF 254mm]
DBAS1461	[BMW 316/320/1800/2000 250mm]
DBAS1470	[Jeep CJ5 / 6 1972-78 / Rambler 279.4mm]
DBAS1471	[Jeep CJ7 / CJ8 / Rambler 254mm]
DBAS1473	[Lada Niva 250mm]
DBAS1476	[Mitsubishi Cordia 203.2mm]
DBAS1490	[Toyota Camry / Corolla / Corana 1983-00 200mm]
DBAS1492	[Toyota 1978-05 254mm]

DBA Part No.	DBA Street Series Brake Shoe - Application / Size
DBAS1493	[Toyota Hi-Ace 230mm]
DBAS1494	[Daihatsu / Toyota 290mm]
DBAS1495	[Toyota Dyna / Stout 290mm]
DBAS1496	[Toyota Coaster / Dyna 320mm]
DBAS1497	[Toyota Coaster / Dyna 320mm]
DBAS1512	[Chev Camaro 1967-80 241.3mm]
DBAS1514	[Nissan Homer 250mm]
DBAS1515	[Nissan Cabstar / Caball 320mm]
DBAS1519	[Ford Mustang 1968-73 254mm]
DBAS1520	[Mazda E2000 320mm]
DBAS1521	[Ford Trader / Mazda T Series 1981-00 320mm]
DBAS1522	[Ford Trader / Mazda E2000/E3000 320mm]
DBAS1523	[Ford Trader / Mazda T Series 1981-00 320mm]
DBAS1524	[Ford Trader / Mazda E2000/E3000 320mm]
DBAS1525	[Honda Accord 180mm]
DBAS1528	[Jeep J20 304.8mm]
DBAS1529	[Jeep Cherokee 279.4mm]
DBAS1538	[Suzuki ST90 180mm]
DBAS1539	[Holden / Suzuki 1981-90 220mm]
DBAS1540	[Toyota [2Pcs] Parking Brake 160mm]
DBAS1541	[Toyota [2Pcs] Parking Brake 160mm]
DBAS1542	[Toyota [2Pcs] Parking Brake 160mm]
DBAS1543	[Toyota / Daihatsu [2Pcs] Parking Brake 178mm]
DBAS1544	[Daihatsu Delta 320mm]
DBAS1545	[Ford [2Pcs] Parking Brake 170mm]
DBAS1546	[Ford / Mazda / Nissan [2Pcs] Parking Brake 180mm]
DBAS1547	[Mazda / Nissan [2Pcs] Parking Brake 203.2mm]
DBAS1548	[Nissan [2Pcs] Parking Brake 160mm]
DBAS1549	[Forklift / Isuzu 254mm]
DBAS1550	[Isuzu NPR300 / NPR400 300mm]
DBAS1551	[Isuzu NKR200 / Atlas 228.6mm]
DBAS1552	[Isuzu Elf 279mm]
DBAS1554	[Isuzu NKR150 / NKR200 300mm]
DBAS1555	[Isuzu NKR200 300mm]
DBAS1556	[Isuzu [2Pcs] Parking Brake 178mm]
DBAS1560	[Mitsubishi Canter / Rosa 300mm]
DBAS1561	[Mitsubishi Canter / Rosa 300mm]
DBAS1562	[Mitsubishi Canter / Rose 1980-11 320mm]
DBAS1563	[Mitsubishi [2pcs] Parking Brake 180mm]
DBAS1564	[Suzuki Hatch 180mm]
DBAS1565	[Suzuki Alto / Hatch 180mm]
DBAS1579	[Holden Gemini 228.6mm]
DBAS1582	[Nissan [2Pcs] Parking Brake 203.2mm]
DBAS1584	[Nissan 720 / Cabstar / Urvan 1979-86 254mm]
DBAS1585	[Ford / Mazda / Nissan 1983-99 228.6mm]
DBAS1586	[Mazda Bongo / E1400 180mm]
DBAS1587	[Ford / Mazda / Kia 1981-06 260mm]
DBAS1588	[Ford / Mazda / Nissan 1984-01 220mm]
DBAS1589	[Ford Trader / Mazda 320mm]
DBAS1590	[Ford Trader / Mitsubishi Canter 320mm]
DBAS1591	[Toyota Tercel 200mm]
DBAS1592	[Mitsubishi Cordia / Lancer / Nimbus 203.2mm]
DBAS1593	Now replaced by DBAS1594

## BUYERS GUIDE - BRAKE SHOES

DBA Part No.	DBA Street Series Brake Shoe - Application / Size
DBAS1594	[Mitsubishi 1983-14 254mm]
DBAS1595	[Holden Rodeo 254mm]
DBAS1596	[Nissan Cabstar 300mm]
DBAS1597	[Nissan Cabstar / Patrol 1980-92 270mm]
DBAS1598	[Nissan Bluebird / Pulsar 1987-06 203.2mm]
DBAS1599	[Suzuki LJ80 / 81 & Sierra 1978-81 210mm]
DBAS1600	[Honda Civic 200mm]
DBAS1601	[Holden 180mm]
DBAS1602	[Toyota Corolla 1983-94 200mm]
DBAS1604	[Ford Laser / Mazda 323 200mm]
DBAS1605	[Mazda 323 200mm]
DBAS1606	[Daihatsu Charade / Mira 180mm]
DBAS1607	[Daihatsu Feroza / Rocky 1984-98 254mm]
DBAS1608	[Daihatsu Hijet 180mm]
DBAS1609	[Daihatsu Hijet 180mm]
DBAS1610	[Honda Civic / CRX / Integra 80mm]
DBAS1611	[Honda Civic / Integra 200mm]
DBAS1612	[Nissan Navara / Pathfinder 1985-97 254mm]
DBAS1613	[Honda Accord / Prelude 1982-90 200mm]
DBAS1614	[Honda Accord / Civic / HRV 1986-09 200mm]
DBAS1615	[Honda ACTY 1982-86 180mm]
DBAS1616	[Holden Barina / Suzuki Swift / Jimny 180mm]
DBAS1617	[Suzuki Sierra 1983-99 220mm]
DBAS1618	[Subaru Sherpa 170mm]
DBAS1619	[Honda Civic 200mm]
DBAS1620	[Toyota Corolla II 180mm]
DBAS1621	[Nissan Vanette 180mm]
DBAS1623	[Toyota Dyna 320mm]
DBAS1624	[Holden Scurry / Suzuki Carry 220mm]
DBAS1626	[Toyota Landcruiser 295mm]
DBAS1627	[Holden Drover / Suzuki Sierra 1984-99 220mm]
DBAS1628	[Holden Drover / Suzuki Sierra 1982-99 220mm]
DBAS1629	[Toyota Dyna 1984-06 295mm]
DBAS1630	[Mercedes Parking Brake 160mm]
DBAS1631	[Toyota Coaster / Dyna 320mm]
DBAS1632	[Daihatsu Charade 180mm]
DBAS1633	[Suzuki Alto 180mm]
DBAS1634	[Nissan Pulsar / Sentra 228.6mm]
DBAS1635	[Toyota Coaster / Dyna 320mm]
DBAS1636	[Mitsubishi Cordia / Lancer 203.2mm]
DBAS1637	[Ford Laser / Mazda 323 28.6mm]
DBAS1639	[Toyota Corona 228.6mm]
DBAS1643	[Mazda T2000 / T4000 228.6mm]
DBAS1644	[Subaru 170mm]
DBAS1645	[Toyota Dyna 1984-95 260mm]
DBAS1646	[Toyota Celica / Cressida / Supra 228.6mm]
DBAS1647	[Toyota 4 Runner / Hi-Lux 295mm]
DBAS1648	[Toyota 254mm]
DBAS1649	[Subaru Brumby / Leane 1980-94 180mm]
DBAS1650	[Honda Prelude 180mm]
DBAS1651	[Honda Civic 200mm]
DBAS1652	[Nissan Navara / Pathfinder 254mm]
DBAS1653	[Mitsubishi Express / Starwagen / Triton 1984-06 254mm]

DBA Part No.	DBA Street Series Brake Shoe - Application / Size
DBAS1654	[VW Caravelle / Kombi T3 1982-92 252mm]
DBAS1655	[Landrover [2Pcs] Parking Brake 254mm]
DBAS1656	[Nissan Bluebird / Skyline 228.6mm]
DBAS1657	[Nissan Navara / Pathfinder / Urvan 1986-05 260mm]
DBAS1658	[Daihatsu Charade 1987-00 180mm]
DBAS1659	[Toyota Camry / Vista 1986-94 228.6mm]
DBAS1660	[Toyota Cruiser / Hi-Lux 1984-05 295mm]
DBAS1661	[Lada Samara 200mm]
DBAS1662	[Holden / Isuzu Rodeo / Jackaroo 1981-03 254mm]
DBAS1663	[Isuzu NPR300 / NPR400 320mm]
DBAS1664	[Ford / Mazda 121 170mm]
DBAS1665	[Ford Courier / Mazda B Series 1985-06 260mm]
DBAS1666	[Subaru Fiori / Vivio 180mm]
DBAS1667	[Subaru Leone 180mm]
DBAS1668	[Ford Maverick / Nissan Patrol 1988-99 295mm]
DBAS1669	[Holden Parking Brake 180mm]
DBAS1670	[Daihatsu Handivan / Mira 1986-03 165mm]
DBAS1671	[Ford Laser / Mazda 323 1989-98 200mm]
DBAS1672	[Holden Astra / Nissan Pulsar 180mm]
DBAS1673	[Daihatsu Hijet 180mm]
DBAS1674	[Holden Gemini 180mm]
DBAS1675	[Hyundai Sonata 228.6mm]
DBAS1676	[Suzuki Alto 180mm]
DBAS1677	[Mitsubishi Lancer 180mm]
DBAS1678	[Toyota Hi-Ace 1985-05 270mm]
DBAS1679	[Hyundai Excel 180mm]
DBAS1681	[Mitsubishi Lancer 1986-03 180mm]
DBAS1682	[Daihatsu Charade / Suzuki Swift 1989-07 200mm]
DBAS1683	[Suzuki Vitara 1988-00 220mm]
DBAS1684	[Holden Barina / Suzuki Swift 180mm]
DBAS1685	[Ford Laser / Mazda 323 200mm]
DBAS1686	[Ford 254mm]
DBAS1687	[Ford 228.6mm]
DBAS1688	[Daihatsu Charade / Mira 165mm]
DBAS1689	[Ford Trader / Mazda T Series 320mm]
DBAS1690	[Ford Trader / Mazda T Series 320mm]
DBAS1691	[Suzuki Vitara 220mm]
DBAS1692	[Honda Civic 180mm]
DBAS1693	[Toyota Dyna 320mm]
DBAS1694	[Ford Festiva 200mm]
DBAS1695	[Hyundai Scoupe 180mm]
DBAS1696	[Ford / Mazda 121 180mm]
DBAS1697	[Nissan Pulsar 180mm]
DBAS1698	[Landrover 279.4mm]
DBAS1699	[Mitsubishi Lancer / Mirage 203.2mm]
DBAS1700	[Toyota Coaster 320mm]
DBAS1701	[Hyundai Excel 180mm]
DBAS1702	[Hyundai Lantra / Excel / Elantra 203.2mm]
DBAS1703	[Hyundai Accent / Elantra / Lantra 203.2mm]
DBAS1704	[Holden Nova / Toyota Corolla 200mm]
DBAS1705	[Holden Barina 200mm]
DBAS1706	[Volvo Parking Brake 160mm]
DBAS1707	[VW Golf / Passat / Polo 180mm]

## BUYERS GUIDE - BRAKE SHOES

DBA Part No.	DBA Street Series Brake Shoe - Application / Size
DBAS1708	[Ford Trader / Mazda T Series 320mm]
DBAS1709	[Ford Trader / Mazda T Series 320mm]
DBAS1710	[Daewoo Espero / Lanos / Nubera 200mm]
DBAS1711	[Nissan Vanette 260mm]
DBAS1712	[Volkswagen Transporter T4 270mm]
DBAS1713	[Mitsubishi Pajero / Nimbus 228.6mm]
DBAS1714	[Toyota Hi-Ace / Hi-Lux 270mm]
DBAS1715	[Jeep Cherokee 228.6mm]
DBAS1716	[Jeep Cherokee 254mm]
DBAS1717	[Isuzu [2Pcs] Parking Brake 216mm]
DBAS1718	[Isuzu [2Pcs] Parking Brake 190mm]
DBAS1719	[Mitsubishi [2Pcs] Parking Brake 180mm]
DBAS1720	[Ford / Mazda [2Pcs] Parking Brake 190mm]
DBAS1721	[BMW Parking Brake 160mm]
DBAS1722	[BMW Parking Brake 180mm]
DBAS1723	[Mercedes Parking Brake 164mm]
DBAS1724	[Mercedes Parking Brake 164mm]
DBAS1725	[Nissan Micra 180mm]
DBAS1726	[Nissan Narava / Pathfinder 295mm]
DBAS1727	[Toyota Cabstar 320mm]
DBAS1728	[Renault 19 180mm]
DBAS1729	[Subaru Impreza / Liberty 203.2mm]
DBAS1730	[Subaru Impreza / Legacy / Liberty 228.6mm]
DBAS1731	[Toyota Starlet / Paseo 180mm]
DBAS1732	[Holden Barina / Combo 230mm]
DBAS1733	[Isuzu NPR200 / NPR275 / NPR400 320mm]
DBAS1734	[Mazda Capella/MX6 228.6mm]
DBAS1735	[Suzuki Vitara 254mm]
DBAS1736	[Peugot 205 180mm]
DBAS1737	[Ford Transit 280mm]
DBAS1738	[Ford Transit 254mm]
DBAS1739	[Hyundai Excel 180mm]
DBAS1740	[Holden / Suzuki [2Pcs] Parking Brake 180mm]
DBAS1741	[Seat 200mm]
DBAS1742	[Suzuki Escudo / X90 20mm]
DBAS1743	[Toyota [2Pcs] Parking Brake 200mm]
DBAS1744	[Toyota Parking Brake 210mm]
DBAS1745	[Toyota Parking Brake 230mm]
DBAS1746	[Toyota Coaster / Dyna 320mm]
DBAS1747	[Toyota Rav4 228.6mm]
DBAS1748	[Trailer 228.6mm]
DBAS1751	[Holden / Toyota Parking Brake 170mm]
DBAS1752	[Toyota Parking Brake 167mm]
DBAS1753	[Kia Mentor 200mm]
DBAS1754	[Kia Sportage 250mm]
DBAS1755	[Daihatsu Pizar 200mm]
DBAS1756	[Chrysler Grand Voyager 250mm]
DBAS1757	[Holden Rodeo 295mm]
DBAS1758	[Suzuki Vitara 254mm]
DBAS1759	[Mitsubishi Triton / Express 270mm]
DBAS1760	[Mitsubishi Pajero / Triton 254mm]
DBAS1761	[GM Suburban 283mm]
DBAS1762	[Chevrolet C20 / C30 330mm]

DBA Part No.	DBA Street Series Brake Shoe - Application / Size
DBAS1763	[GMH Suburban / Chevrolet C20 / C30 330.2mm]
DBAS1764	[Honda CRV / Suzuki Grand Vitara 220mm]
DBAS1765	[Daihatsu 228.6mm]
DBAS1766	[Nissan Atlas / Condor 300mm]
DBAS1767	[Nissan Atlas / Condor 320mm]
DBAS1768	[Toyota Hi-Lux / Tarago 254mm]
DBAS1769	[Ford Ranger / Mazda BT50 295mm]
DBAS1770	[Mitsubishi Parking Brake 170mm]
DBAS1771	[Ford / Mazda / Toyota Echo 200mm]
DBAS1772	[Toyota Echo 180mm]
DBAS1773	[Ford Transit 280mm]
DBAS1774	[Ford / Jeep Parking Brake 184mm]
DBAS1775	[Kia Sportage 1999-04 260mm]
DBAS1776	[Ford KA 180mm]
DBAS1777	[Ford / Jeep Parking Brake 184mm]
DBAS1778	[Hyundai / Kia Carnival 254mm]
DBAS1779	[Hyundai Accent 2000-02 180mm]
DBAS1780	[Hyundai Getz 2002-11 180mm]
DBAS1781	[Kia Mentor / Spectra 200mm]
DBAS1782	[Hyundai Santa Fe 254mm]
DBAS1783	[Daewoo Matiz 1999-04 180mm]
DBAS1784	[Mazda E Series 1999-05 270mm]
DBAS1785	[Mazda E Series 1999-05 220mm]
DBAS1786	[Mazda Vanette S21 220mm]
DBAS1787	[Suzuki Grand Vitara / Jimney 220mm]
DBAS1788	[Holden Barina / Combo 2002-05 230mm]
DBAS1789	[Chrysler Neon 200mm]
DBAS1790	[Land Rover Freelander 254mm]
DBAS1791	[Ford Escape / Mazda Tribute 228.6mm]
DBAS1792	[Nissan Pulsar 1999-06 203.2mm]
DBAS1793	[Holden Colorado / Rodeo 295mm]
DBAS1794	[Toyota Parking Brake 190mm]
DBAS1795	[Daihatsu Copen/Sirion 180mm]
DBAS1796	[Mitsubishi Pajero/Navara 228.6mm]
DBAS1797	[Mitsubishi Parking Brake 197mm]
DBAS1798	[Ford KA 1999-03 180mm]
DBAS1799	[Daihatsu Handivan / Sirion 180mm]
DBAS1800	[Nissan Terrano 1995-06 254mm]
DBAS1801	[Land Rover Parking Brake 254mm]
DBAS1802	[Kia Carnival 250mm]
DBAS1803	[Citroen Xsara / Peugeot 205 / 206 180mm]
DBAS1804	[Citroen Xsara / Peugeot 306 180mm]
DBAS1805	[Citroen / Peugeot 405 & 406 / Proton 228.6mm]
DBAS1806	[Peugeot 306 / 405 228.6mm]
DBAS1807	[Peugeot 206 180mm]
DBAS1808	[Peugeot Xsara 228.6mm]
DBAS1809	[Peugot 228.6mm]
DBAS1811	[Renault 19 180mm]
DBAS1812	[Renault Clio 180mm]
DBAS1813	[Renault Megan / Scenic 228.6mm]
DBAS1814	[Renault Megan 203.2mm]
DBAS1815	[Renault 19 203.2mm]
DBAS1816	[Mercedes MB100 / Ssangyone Actron 254mm]



# BUYERS GUIDE - BRAKE SHOES

DBA Part No.	DBA Street Series Brake Shoe - Application / Size
DBAS1817	[Mercedes Parking Brake 160mm]
DBAS1818	[Mercedes Parking Brake 170mm]
DBAS1819	[Mercedes Parking Brake 177.8mm]
DBAS1820	[Holden Cruze 180mm]
DBAS1821	[Mitsubishi Fuso Canter 228.6mm]
DBAS1822	[Ford Courier / Mazda BT50 270mm]
DBAS1823	[Kia Ceres 260mm]
DBAS1824	[Holden Colorado / Rodeo 254mm]
DBAS1825	[Mitsubishi Fuso [2pcs] Parking Brake 203.2mm]
DBAS1826	[Ford Fiesta / Focus 203.2mm]
DBAS1827	[Jeep Parking Brake 193.8mm]
DBAS1828	[Suzuki Wagon R 180mm]
DBAS1829	[Kia Rio 2000-05 200mm]
DBAS1830	[Ford Fiesta / Mazda 2 203.2mm]
DBAS1831	[Nissan UD [2pcs] Parking Brake 203.2mm]
DBAS1832	[Toyota Hi-Lux 295mm]
DBAS1833	[Isuzu [2pcs] Parking Brake 203.2mm]
DBAS1834	[Nissan Parking Brake 171mm]
DBAS1835	[Hino [2pcs] Parking Brake 304mm]
DBAS1836	[Isuzu / Mits [2pcs] Parking Brake 304.8mm]
DBAS1837	[Ford Parking Brake 205mm]
DBAS1838	[Holden Parking Brake 210mm]
DBAS1839	[Toyota Parking Brake 175mm]
DBAS1840	[Renault Kangoo 2004-10 203.2mm]
DBAS1841	[BMW Parking Brake 160mm]
DBAS1842	[Renault Kangoo 228.6mm]
DBAS1845	[Mazda MPV 1999-06 254mm]
DBAS1846	[Subaru Parking Brake 170mm]
DBAS1847	[Toyota Hi-Ace / Regius 254mm]
DBAS1848	[Citroen C2 / C3 203.2mm]
DBAS1849	[Honda Jazz 180mm]
DBAS1850	[Isuzu NPR250 / NPR300 320mm]
DBAS1851	[Landrover Freelander 254mm]
DBAS1852	[Toyota Corolla/Prius/Yaris 200mm]
DBAS1853	[Kia Rio 2000-05 200mm]
DBAS1854	[Daewoo Tacuma 228.6mm]
DBAS1855	[Kia Rio 2005-11 203.2mm]
DBAS1856	[Mazda T4600 320mm]
DBAS1857	[Subaru Parking Brake 170mm]
DBAS1858	[Ford / Kia Carens / Mazda 228.6mm]
DBAS1859	[Citroen / Peugeot 165mm]
DBAS1860	[Mitsubishi Parking Brake 199mm]
DBAS1861	[Suzuki Grand Vitara 254mm]
DBAS1862	[Nissan Tiida 2004-13 203.2mm]
DBAS1863	[Mazda E Series 1999-06 270mm]
DBAS1864	[Mazda E2000 / E2500 220mm]
DBAS1865	[Mitsubishi Canter 320mm]
DBAS1866	[Hyundai / Kia Parking Brake 190mm]
DBAS1867	[Mitsubishi Colt / Lancer 203.2mm]
DBAS1868	[Ford Parking Brake 184mm]
DBAS1869	[Suzuki Grand Vitara/XL7 254mm]
DBAS1870	[Daewoo Kalos T200/Holden Barina 200mm]
DBAS1871	[Suzuki Swift 2004-11 200mm]

DBA Part No.	DBA Street Series Brake Shoe - Application / Size
DBAS1872	[Isuzu NPR400/NQR450 320mm]
DBAS1873	[Iveco 311.1mm]
DBAS1874	[Hyster Forklift 260mm]
DBAS1875	[Hyster Forklift 317.5mm]
DBAS1876	[Hyster, Toyota, Yale Forklift 310mm]
DBAS1877	[Mercedes A140/A160/A170 180mm]
DBAS1878	[Jeep Wrangler 228.6mm]
DBAS1879	[Peugeot 309 180mm]
DBAS1880	[Volkswagen Golf / Polo 200mm]
DBAS1881	[Hyster Forklift 317.5mm]
DBAS1882	[Hyster Forklift 317.5mm]
DBAS1883	[Ford / Mazda Parking Brake 186.4mm]
DBAS1884	[Suzuki APV 2005-on 220mm]
DBAS1885	[Daihatsu Charade 165mm]
DBAS1886	[Mitsubishi Triton 295mm]
DBAS1887	[Mazda Titan 280mm]
DBAS1888	[Nissan Atlas / Cabstar 220mm]
DBAS1889	[Iveco Daily Parking Brake 172mm]
DBAS1890	[Oka [2pcs] Parking Brake 228.6mm]
DBAS1891	[Toyota Forklift 310mm]
DBAS1892	[Ford Courier / Mazda Bravo 295mm]
DBAS1893	[Nissan Navara 295mm]
DBAS1894	[Kia Carnival 254mm]
DBAS1895	[Kia Carnival 1999-07 295mm]
DBAS1896	[Nissan [2pcs] Parking Brake 203.2mm]
DBAS1897	[Nissan Atlas / Cabstar 228.6mm]
DBAS1898	[Isuzu NKR200 240mm]
DBAS1899	[Toyota Parking Brake 190mm]
DBAS1900	[Chrysler Parking Brake 184mm]
DBAS1901	[Isuzu D-Max 295mm]
DBAS1902	[Isuzu FRR500/550/550S 320mm]
DBAS1903	[Mitsubishi Fuso Fighter 320mm]
DBAS1904	[Mitsubishi Fuso Fighter 320mm]
DBAS1905	[Hyundai Parking Brake 190mm]
DBAS1906	[Dexter Trailer 304.8mm]
DBAS1907	[Al-Ko Trailer 304.8mm]
DBAS1913	[Hino Dutro / Toyota Dyna 320mm]
DBAS1914	[Hino Dutro / Toyota Dyna 320mm]
DBAS1915	[Mits / Pueg / Sub / Toy Parking Brake 190mm]
DBAS1916	[Holden Parking Brake 210mm]
DBAS1917	[Honda Parking Brake 198mm]
DBAS1918	[Porsche / Volkswagen Parking Brake 210mm]
DBAS1919	[Golf Cart 160mm]
DBAS1920	[Golf Cart 160mm]
DBAS1920-21	[Golf Cart 160mm]
DBAS1921	[Golf Cart 160mm]
DBAS1922	[Lexus / Toyota Park Brake 241.3mm]
DBAS1923	[Jeep Parking Brake 205mm]
DBAS1924	[Landrover / Range Rover Parking Brake 210mm]
DBAS1925	[Landrover / Range Rover Parking Brake 210mm]
DBAS1927	[Nissan Cube / Micra / Note 180mm]
DBAS1928	[Fiat Ducato / Scudo 254mm]
DBAS1929	[Iveco Parking Brake 170mm]

# BUYERS GUIDE - BRAKE SHOES

DBA Part No.	DBA Street Series Brake Shoe - Application / Size
DBAS1930	[Citroen / Renault 203.2mm]
DBAS1931	[Toyota Parking Brake 174mm]
DBAS1932	[Holden Parking Brake 170mm]
DBAS1933	[Volkswagen Amarok 295mm]
DBAS1934	[Dodge / Jeep Parking Brake 207mm]
DBAS1935	[Toyota Parking Brake 172mm]
DBAS1936	[Hyundai / Renault Parking Brake 170mm]
DBAS1937	[BMW / VW Parking Brake 185mm]
DBAS1938	[BMW Parking Brake 185mm]
DBAS1939	[Mercedes Parking Brake 186mm]
DBAS1940	[Hyundai Parking Brake 170mm]
DBAS1941	[Isuzu NLR200 / Mazda 2 290.0 mm]
DBAS1942	[Mazda 2 200mm]
DBAS1943	[Honda Parking Brake 170mm]
DBAS1944	[Daewoo Leganza 230mm]
DBAS1945	[Hyundai / Rexton Parking Brake 170mm]
DBAS1946	[Nissan Parking Brake 172mm]
DBAS1947	[Land Rover Parking Brake 186mm]
DBAS1948	[Mitsubishi [2pcs] Parking Brake 203.2mm]
DBAS1949	[Suzuki Grand Vitara 254mm]
DBAS1950	[Mitsubishi / Subaru Parking Brake 210mm]
DBAS1951	[Iveco Parking Brake 190mm]
DBAS1952	[Holden Parking Brake 190mm]
DBAS1953	[Chrysler Parking Brake 180mm]
DBAS1954	[Isuzu FRR500 / 550 / 550S 320mm]
DBAS1955	[Kia Parking Brake 168mm]
DBAS1956	[Hyundai Parking Brake 170mm]
DBAS1957	[Hyundai / Kia Parking Brake 190mm]
DBAS1958	[Nissan Parking Brake 190mm]
DBAS1959	[Nissan Parking Brake 190mm]
DBAS1960	[Kia Parking Brake 190mm]
DBAS1961	[Honda Jazz 180mm]
DBAS1962	[Mercedes / VW Parking Brake 180mm]
DBAS1963	[Smart Car 203.2mm]
DBAS1964	[Renault Clio / Nissan Micra 203.2mm]
DBAS1965	[Ford Fiesta 200mm]
DBAS1966	[Mitsubishi Mirage 180mm]
DBAS1967	[Suzuki Alto 180mm]
DBAS1968	[Nissan Parking Brake 172mm]
DBAS1969	[Daihatsu Sirion 180mm]
DBAS1970	[Chrysler Parking Brake 172mm]
DBAS1971	[Lexus Parking Brake 190mm]
DBAS1972	[Mercedes Parking Brake 180mm]
DBAS1973	[Fiat 500 / Ford KA 180mm]
DBAS1974	[Rogers Axle Trailer 304.8mm]
DBAS1975	[Rogers Axle Trailer 305mm]
DBAS1977	[Nissan / Mazda / Chrysler / Dodge / Jeep 228.6mm]
DBAS1978	[Porsche / VW Parking Brake 210mm]
DBAS1979	[Isuzu FSR113 / 450 / 500 320mm]
DBAS1980	[Volvo Parking Brake 177.8mm]
DBAS1981	[Hummer Parking Brake 210mm]
DBAS1982	[Suzuki Swift 200mm]
DBAS1983	[Subaru Parking Brake 192mm]

DBA Part No.	DBA Street Series Brake Shoe - Application / Size
DBAS1984	[Citroen / Fiat / Peugeot Parking Brake 172mm]
DBAS1985	[Iveco 270mm]
DBAS1986	[Hyundai / Kia Parking Brake 190mm]
DBAS1987	[Hyundai Parking Brake 190mm]
DBAS1988	[Mercedes Parking Brake 174mm]
DBAS1989	[Hyundai Getz 203.2mm]
DBAS1990	[Citroen / Peugeot 203.2mm]
DBAS1991	[Hyundai Parking Brake 210mm]
DBAS1992	[Kia Parking Brake 210mm]
DBAS1993	[Nissan Micra 203.2mm]
DBAS1994	[Nissan Parking Brake 230mm]
DBAS1995	[Forklift 310mm]
DBAS1996	[Kia Parking Brake 167mm]
DBAS1997	[BMW Parking Brake 160mm]
DBAS1998	[SsanYong Parking Brake 170mm]
DBAS1999	[Chevrolet Camaro 241mm]
DBAS2000	[Isuzu FRR500 / 550 / 550S 320mm]
DBAS2001	[Toyota Vitz / Yaris 200mm]
DBAS2002	[Hino Ranger 320mm]
DBAS2003	[Suzuki SX4 220mm]
DBAS2004	[Toyota Vitz / Yaris 200mm]
DBAS2005	[Ford Ranger / Mazda BT50 295mm]
DBAS2006	[Honda Parking Brake 198mm]
DBAS2007	[Holden / Suzuki Parking Brake 200mm]
DBAS2008	[Hyundai / Kia Parking Brake 190mm]
DBAS2009	[Fiat Punto 230mm]
DBAS2010	[Kia Parking Brake 190mm]
DBAS2011	[Renault Captur / Clio / Kangoo 230mm]
DBAS2012	[Nissan Parking Brake 190mm]
DBAS2013	[Fiat Doblo 228.6mm]
DBAS2014	[Toyota Hi-Lux / Revo 254mm]
DBAS2015	[Jeep Parking Brake 205mm]
DBAS2016	[Hyundai / Kia Parking Brake 190mm]
DBAS2017	[Volvo Parking Brake 177.8mm]
DBAS2018	[Honda 200mm]
DBAS2019	[Subaru Parking Brake 170mm]
DBAS2020	[Toyota 254mm]
DBAS2021	[Mercedes Parking Brake 180mm]
DBAS2025	[Holden Colorado / Isuzu D-Max 295mm]
DBAS2027	[Nissan 231mm]
DBAS2028	[Holden 228.6mm]
DBAS2033	[Subaru / Toyota Parking Brake 190mm]
DBAS2038	[Great Wall 295mm]
DBAS2039	[SX Suzuki - 220mm]
DBAS2040	[Kia Parking Brake 190mm]
DBAS2041	[Mercedes Benz Parking Brake 164mm]
DBAS3215	[Minor Park Brake Shoe Kit]
DBAS3216	[Minor Park Brake Shoe Kit]
DBAS3217	[Minor Park Brake Shoe Kit - (single shoe)]
DBAS3218	[Minor Park Brake Shoe Kit - (single shoe)]
DBAS3219	[Minor Park Brake Shoe Kit - (single shoe)]
DBAS3220	[Minor Park Brake Shoe Kit - (single shoe)]

## I. GENERAL

### Q. What causes steering wheel vibration?

A. There are two common causes for steering wheel vibration – friction material deposits and disc thickness variation (DTV).

Some friction material technologies rely on an even layer of friction material transferred from the pads onto the disc surface. This is called a transfer layer. When this layer becomes irregular in thickness, brake shudder will occur due to a grab and release effect from the pads on the disc rotor when braking. This oscillating torque from the brakes will transfer to the steering system resulting in steering wheel vibration.

Disc thickness variation (DTV) is an irregular wear issue with the disc rotor. As the name suggests, the thickness of the friction disc varies, causing the pads to grab and release when braking. Both symptoms result in the same effect but for different reasons.

DTV is typically caused by incorrect fitting of the brakes. The two most common fitting errors are not cleaning the hub, mating faces correctly and irregular wheel nut torque, typically from the incorrect use of pneumatic impact wrenches.

### Q. What causes pedal pulsation?

A. Pedal pulsation is when the brake pedal oscillates up and down while applying the brakes. This is almost always the result of hydraulic line oscillation due to DTV in the disc rotor. The variation in thickness of the disc rotor causes the caliper pistons to extend and retract, transferring brake fluid back and forth in the hydraulic circuit to the brake pedal.

### Q. What causes brake squeal?

A. There are several causes for brake squeal and sometimes solving a squeal issue can be the result of trial and error. The most common causes are:

1. Excessive friction for the application. High performance or race pads used in a light duty application.
2. Brake pad contamination. Dirt, grit, glazing or lubricants.
3. Lack of contact between the pad and rotor.
4. Rotor surface un-even or surface rust build-up.
5. Brake hardware damaged, guide pins, abutment clips, springs etc.
6. Some pads require the use of grease in between the shim and the plate.

### Q. Do I need to clean new disc rotors before installing?

A. Definitely yes. All disc rotors will have some form of anti-corrosion treatment applied before packing. Regardless of whether the disc has a DBA “En-Shield” type painted coating or just anti-corrosive fluid, they should be cleaned. Methanol based brake cleaning products are readily available to clean the disc surfaces. The best method is to apply the cleaning product to a paper towel or a cleaning cloth and wipe the disc friction surfaces and hub mounting face. When no more grease or oil products transfer to the cleaning cloth you are good to go.

While carburettor (carby) cleaner is effective as a cleaning solution, the chemicals used in this product are intended to leave a residue.

The residue from “carby” cleaner often negatively affects the bedding in process therefore this product is NOT recommended.

Warning: Spraying some aggressive cleaners directly onto new, painted surfaces of the disc rotor can damage the paint finish quality. Apply to a cloth or paper towel first and avoid areas outside of the hub mounting face and the disc friction surface.

For a comprehensive rundown on the rotor preparation and bedding-in procedure, please refer to our Technical Bulletin – ‘Bedding-in Procedure’ on the DBA Website.

### Q. Why use slotted rotors?

A. The slots in these rotors assist in the evacuation of brake dust, debris, and outgases, maintaining a clean friction surface and flush contact area between the pad and rotor. This maximises friction performance and eliminates pad glazing, a common cause for brake noise, poor braking performance and overheating.

Slotted rotors are highly recommended in applications where frequent braking or heavy loads are present, such as trade vehicles, 4WDs, performance vehicles and vehicles towing heavy loads.

These applications typically produce more dust and debris than standard street vehicles and greatly benefit from the regular dust evacuation performed by the slots.

### Q. What is brake pedal modulation and why should I use it?

A. Brake pedal modulation is the controlled application and release of the brake pedal when towing heavy loads or descending steep hills. Typically, the brake pedal is applied slightly more heavily than normal for a few seconds and then released to allow the brakes to recover before applying again. This lowers the temperature and stress on the brakes compared to holding the brakes on continuously and potentially inducing brake fade or loss of friction performance.

## II. PADS

### Application Q&As

#### Q. What is the best pad for my vehicle?

A. Refer to the Direct Replacement Guide on pages 16 - 17.

The key factors that determine which brake pad is best for your car is based on the type of vehicle and what you intend on using it for.

- Street Series (SS) brake pads have been developed to provide great stopping performance, low noise and low dust for general or light duty driving applications.
- Street Performance (SP) brake pads have been developed to provide an effective friction response to pedal application and low wear. Low wear means less dust. SP is ideal for normal to spirited street use in most vehicles.
- Xtreme Performance (XP) brake pads are for heavy duty applications, where higher friction levels are required in order to safely brake under extreme conditions.

Heavy loads can either be high axle loads, higher speeds, or a combination of both.

There are many applications where the ideal brake pad recommendation will be to use a mix of Xtreme Performance (XP) on the front and Street Performance (SP) on the rear. This is when the front brakes are doing considerably more work than the rears, typically on trade utes, vans, 4WD's and some performance applications.

Refer to the Direct Replacement Guide on pages 14 - 15.

### Q. Why doesn't DBA have Street Series (SS), Street Performance (SP) and Xtreme Performance (XP) available for all applications?

A. DBA's range of brake pads cover 95% of vehicles in Australia. The most popular applications are stocked across all SS, SP and XP friction compounds.

Exceptions arise where vehicle testing has indicated that for certain applications optimal performance is achieved by using only SP or XP. E.g. high friction noise generation, possibility of lock-up from excessive friction on the rear brakes, or heavy vehicle requirements.

### Q. What is the difference between Street Series (SS), Street Performance (SP) and Xtreme Performance (XP)?

A. The key difference between SS, SP and XP is the friction level and operating temperature(s).

The SS range has been developed for great friction performance, and a high level of comfort features such as low noise and low dust for general light duty street applications.

The SP range has been developed for optimal friction performance and longer life in street applications and light towing.

The XP range has a higher friction level and operating temperature. The addition of carbon fibre elements in the XP range, assists with better thermal stability at higher temperatures, when used in heavy duty applications.

Note: Wear and dust may increase in heavy duty applications.

### Q. Why should I choose DBA Brake Pads over other brands?

A. DBA Brake Pads are developed for extreme Australian conditions.

With over 40 years of experience manufacturing brake rotors and by listening to our customers' feedback, DBA has aimed to develop the best product for the market. We have focused on higher friction class materials, optimal thermal stability, and low dust and wear rates to produce a new generation of braking performance. These compounds were developed from the ground up, listening to our customers' demands.

DBA Brake Pads work perfectly with DBA's range of disc rotors, addressing limitations of other brake pads in the market that may compromise vehicle performance.

**Q. Why was I recommended Xtreme Performance (XP) over Street Performance (SP), even though there is no track use?**

A. There are many applications that require higher friction and thermal stability other than track use. Such as large 4WDs fully fitted out for adventures (GVM upgrade), towing a boat or caravan, or trade vehicles carrying tools and equipment. Axle weight can add up fast.

Vehicles carrying heavy loads and/or vehicles travelling at high speed (i.e. track use) demand similar performance when it comes to braking.

**Q. Why don't I just buy the Xtreme Performance (XP) Brake Pads?**

A. Sometimes too much friction can have an adverse effect on braking. Too much or too sensitive brake torque (wheel lock-up) may reduce your ability to adjust braking performance in environments such as wet roads or loose surfaces. I.e. more is not always better!

Refer to the Direct Replacement Guide on pages 16 - 17.

**Q. Can DBA Brake Pads be used on any rotor or does it have to be only on DBA rotors?**

A. DBA Brake Pads are suitable for all makes of disc rotors. However, they have been developed and tested for optimal use with DBA rotors. Use with other types of rotors may result in varying performance, wear rates and dust.

**Q. Why are some of your part numbers different to other brands?**

A. DBA Brake Pads are aligned with the DB part numbering system (industry standard in Australia) - where possible.

Where a DB reference does not exist at the time of production, DBA has adopted its own unique number system.

**Q. Should I machine my existing rotors when fitting new pads?**

A. Ideally you should fit new rotors with new pads. However, if pads do need to be changed before the rotor has reached minimum thickness it is recommended to machine the rotor friction surfaces, to ensure a clean flat surface for maximum life and performance of the new brake pad.

## Technical Q&As

**Q. What are DBA Brake Pads made of?**

A. The Street Series (SS) range is made from two separate formulations, depending upon the application of the pad. A ceramic (NAO – non-asbestos organic) material covers 90% of the applications, and a (semi-metallic) material covers approx. 10% of applications. The formulations have been chosen to maximise safety, performance and comfort features for light duty applications. The material type is identified on each box label.

Street Performance (SP) (semi-metallic) and Xtreme Performance (XP) (semi-metallic carbon fibre) contain various metals and complimentary elements (carbon fibre, ceramics, and more) to achieve optimal performance.

DBA's range of Brake Pads does not contain asbestos!

**Q. Are DBA Brake Pads low dust?**

A. Brake dust is the product of wear on both the disc brake rotor and the brake pads.

Compared to leading brands tested, the wear rate is lower when using DBA Brake Pads and therefore the dust may be less.

Note: Xtreme Performance (XP) will have higher dust levels than Street Performance (SP), due to the higher friction levels. Street Series (SS) pads, being primarily ceramic formulation, have an extremely low dusting formulation - even lower than SP brake pads. Furthermore, ceramic friction formulations produce white dust and less visible than dust from metallic and semi-metallic material, which is black.

**Q. Are DBA Brake Pads copper free?**

A. The Street Series (SS) and Street Performance (SP) pads are copper free (N class, <0.5% copper content). The Xtreme Performance (XP) pads are low in copper (B class, <5% copper content). DBA Brake Pads are independently certified by the leading body 'NSF International'.

The focus on copper in currently two states of the USA is due to new legislation being implemented by 2025, requiring brake pads to contain less than 0.5% copper for environmental reasons.

**Q. Do DBA Brake Pads contain asbestos?**

A. No! DBA products are asbestos-free.

**Q. Are the pads R90 certified (European Standard)?**

A. DBA Brake Pads have been developed for the specific and often extreme conditions of the Australian market, and therefore generally perform above and beyond the standard expectation. In fact, part of the Street Performance (SP) and Xtreme Performance (XP) range have been homologated to ECE R90 standards, where their performance characteristics were found to meet the DBA standard. Those parts are designated as such by their part number - refer to part no. specific 'ECE R90 certified' column in the part number listing of this book.

**Q. How long do DBA Brake Pads last?**

A. Pad and rotor life are highly dependent on vehicle application (pad formulation, size of pad, vehicle weight distribution etc.) and usage characteristics (urban driving vs. freeways vs. intense usage).

DBA has conducted testing on various vehicle applications and is continuously undertaking monitoring and testing. Based on these results the product life has shown to be approximately 20% better than the Original Equipment and many aftermarket brands.

**Q. Are DBA Brake Pads soft or hard (pedal feel)?**

A. DBA Brake Pads produce a hard (firm) pedal feel.

They are a high density / low compressibility friction material, which provides improved pedal feel (hard) and high brake torque.

**Q. Do DBA Brake Pads have slots and why?**

A. DBA Brake Pads have a centre groove/slot where applicable. This slot reduces internal stress under high temperatures and helps alleviate the build-up of heat and dust.

**Q. Do DBA Brake Pads have chamfers and why?**

A. Street Series (SS) and Street Performance (SP) pads do have chamfers to reduce vibration and noise at lower temperatures and speed. Based on testing the Xtreme Performance (XP) and Race Performance (RP) pads do not require chamfers when used in the intended application.

**Q. Do DBA Brake Pads have wear indicator lines?**

A. Most DBA Brake Pads have either electronic sensors or mechanical screech sensors to notify the driver when the pads are at end of life. Those that do not have sensors are typically opposed piston calipers where the pads are clearly visible through the wheels.

**Q. When should I replace my DBA Brake Pads?**

A. On most DBA Brake Pads the wear sensors will let you know. When no sensors exist, it is recommended to replace the pads when approx. 4mm of friction material is remaining.

This may not be applicable for motorsport applications where higher temperatures and stresses exist.

**Q. Do the pads have 'titanium strips, bedding-in stripes/coatings'?**

A. Yes, the Street Series (SS) range of pads has a "bedding-in stripe", which provides a temporary benefit of an initially higher friction coefficient that assists in the bedding-in process. While bedding-in stripes may provide a temporary benefit for some general-purpose friction materials, the friction compounds used in Street Performance (SP) and Xtreme Performance (XP) pads do not require any additional intervention to bed-in quickly and effectively.

All SP and XP pads are scorched to minimise any brake fade during the replacement process.

**Q. What is Scorching / Post-curing Thermal Stability Profiling (TSP) on DBA Brake Pads?**

A. DBA has a well-established TSP heat treatment process with its performance disc rotors to prepare the rotor for extreme applications.

Pad scorching is a heat treatment process developed to remove any excess resin material that typically results in brake fade when bedding-in and in reduced performance in new brake pads.

Street Series (SS) pads use a different TSP process known as post curing. This process helps reduce the presence of any impurities or excess resins in the friction material to increase the hardness of the brake pad surface and reduce brake fade.

**Q. If I replace my brake pads, do I need to replace my disc rotors?**

A. It is not necessary to replace disc rotors when changing pads unless the discs are at or near minimum thickness. Exceptions may be when the disc rotor surface is heavily scored, and machining may not be economical when near minimum thickness.

**Q. Should I replace my rubber brake line hoses and when?**

A. Rubber brake hoses should be replaced if damaged or if the rubber material shows signs of degradation (perished).

This is a decision best left to experienced brake technicians/mechanics.

Upgrading to stainless steel (braided) hoses should be considered when modifying vehicles to higher GVMs or for motorsport applications.

**Q. When should I use a stainless-steel brake line hose?**

A. Stainless steel reinforced or braided brake hoses reduce expansion in the flexible hoses between the chassis and caliper. This provides a more responsive and firmer brake pedal.

You should consider braided hoses when upgrading 4WDs to carry heavy loads or in motorsport applications when brake fluid temperatures are higher, as it reduces the expansion experienced in rubber brake line hoses.

**Q. What brake fluid should I use?**

A. Start with the manufacturer's recommendations to select the DBA Brake Fluid best suited for your vehicle. If you have issues with performance due to motorsport activities or heavy towing, then consider a higher temperature fluid. Most vehicles use DOT 4 fluid. DOT 5.1 is the next step up but with shorter use life.

**Q. How often should I flush my brake fluid?**

A. Firstly, as per the manufacturer's recommendations, unless braking performance is reduced due to degraded fluid from extreme driving applications.

Typically, every 24 months.

**Q. Brake booster (rubber) vacuum hose. Should it be replaced? When?**

A. The answer is YES.

The vacuum brake booster rubber hose is installed in 99% of passenger and 4WD vehicles / SUVs. The vacuum booster hose is fitted between the vehicle's inlet manifold and the brake booster. This hose is an oil & fuel vapour resistant Nitrile (NBR) rubber inner tube, with high levels of polyester fibre reinforced for resistance to vacuum collapse, with an outer cover material known for its excellent heat and ozone resistance.

Unfortunately, the hose over a period of time (approx. 8 years and older) does deteriorate internally, due to the heat from the engine exhaust manifold area. The outer hose becomes very hard. However, the inner vacuum tube becomes pliable and will reduce the vacuum/pressure required for vehicle braking.

We highly recommend replacing this. It is an often forgotten and integral part of a vehicles braking system!

Important: The plastic check-valve located in the brake booster should be checked or replaced as well!

**Q. What warranty does DBA offer on its Brake Pads?**

A. DBA provides an industry standard 20,000 km or 12-month warranty against manufacturing or material defects on all DBA Rotors and Pads.

Warranty does not cover motorsport applications as there are many indirect influences on product life and performance out of DBA's control.

Refer to DBA's Global Warranty at [dba.com.au](http://dba.com.au) for terms and conditions.

**Q. Will DBA warrant the Brake Pads if they are used on other brand's disc brake rotors, and if so how?**

A. Yes. Refer to DBA's Global Warranty at [dba.com.au](http://dba.com.au)

Note: DBA Brake Pads have been developed and tested for optimal use with DBA rotors, as performance, wear rates and dust levels may vary when used with another brand's rotors.

Standard Communications Warranty against defects

**IMPORTANT: THIS WARRANTY APPLIES TO ALL GOODS SOLD BY US ON OR AFTER 1 JANUARY 2012 AND IT REPLACES ANY PREVIOUS WARRANTY STATEMENTS IN RELATION TO SUCH GOODS.**

1. This warranty against defects ("Warranty") is given by Disc Brakes Australia Pty Ltd ABN 12 003 543 995 of address Unit 33 / 2 Slough Avenue Silverwater NSW 2128 Australia ("We, Us, Our or DBA").

This Warranty only applies to products purchased in Australia. Please contact your local DBA distributor for products sold outside of Australia. Local distributor details at <http://www.dba.com.au/where-to-buy/>

**WARRANTY**

2.1 We warrant, to the original purchaser ("You") that Our goods will be free from defects in materials and workmanship for 12 months or 20,000 kms (12,000 miles) from the date of purchase whichever occurs earlier ("Warranty Period), provided that subject to

Our obligations under clause 2.3, We will at Our option either repair or replace goods where;

- (a) We are satisfied that the goods are defective; and
- (b) Freight charges both ways are paid for by You and We accept no liability for loss or damage during transit.

2.2 No repair or replacement during the Warranty Period will renew or extend the Warranty specified in this clause;

2.3 Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

2.4 Notwithstanding the preceding clause, Our liability in respect of a breach of a consumer guarantee, condition, warranty or other obligation made under this Warranty is limited, to the extent permissible by law, at our option to:

- (a) in the case of goods We supply;
  - (i) the replacement of the goods or the supply of equivalent goods;
  - (ii) the repair of the goods;
  - (iii) the payment of the cost of repairing the goods or of acquiring equivalent goods;
  - (iv) the payment of the cost of having the goods repaired.

- (b) in the case of services We supply;
  - (i) the supplying of the services again;
  - (ii) the cost of having the services supplied again.

2.5 To the extent permitted by law, all other warranties whether implied or otherwise, not set out in this Warranty are excluded and We are not liable in contract, tort (including, without limitation, negligence or breach of statutory duty) or otherwise to compensate You for:

- (i) any increased costs or expenses;
- (ii) any loss of profit, revenue, business, contracts or anticipated savings;
- (iii) any loss or expense resulting from a claim by a third party; or
- (iv) any special, indirect or consequential loss or damage of any nature whatsoever caused by Our failure in complying with our obligations.

2.6 We warrant that We will perform any Warranty services with reasonable care and skill and agree to investigate any complaint regarding our services made in good faith. To the extent permitted by law, Our liability in relation to such services is limited to matters set out in clause 2.4(b) provided that We are satisfied that the complaint is justified.

2.7 To make a claim pursuant to this Warranty You must, before the end of the Warranty Period, contact the reseller, distributor or workshop from where You purchased the product and follow their warranty claim instructions. In the event that the reseller or repairer is no longer trading, please phone DBA on 1800 730 039 where you will be assisted.

2.8 This Warranty is in addition to and does not limit, exclude or restrict your rights under the Competition and Consumer Act 2010 (Australia) or any other mandatory protection laws that may apply.

3. What this warranty does not cover

- 3.1 This warranty will not apply in relation to:
- (a) goods modified or altered in any way;
  - (b) defects and damage caused by use with non standard tools
  - (c) repairs performed other than by an authorised mechanical or brake expert;
  - (d) defects or damage resulting from misuse, accident, impact or neglect;
  - (e) goods improperly installed or used in a manner contrary to the relevant instruction manual; or
  - (f) goods where the serial number part number on the product has been removed
  - (g) all associated components are within recommended specifications
  - (h) the rotor that has been subjected to conditions beyond those for which it was intended, such as, but not limited to, being used in any form of motor sport.

**Motorsport Warranty Statement**

DBA's warranty will not apply in relation to: use of the product for any form of motorsport or speed trial. Whilst DBA promote its product for use in motor sport applications, DBA cannot warrant the product when used in any form of motor sport because it may be subjected to many variables that are not controllable (such as vehicle modifications, ie. wheels, tyres, suspension).

DBA cannot be held responsible for fitment if not installed by a licensed motor mechanic or licensed brake specialist, wear and tear and lack of maintenance, including situations, where DBA's product is used past the design limits.



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