

DISC BRAKE PADS – FITMENT GUIDE

Disc Brake Pads and their related system components are safety critical components. Do not undertake fitment if you are unable to do so in a competent trade like manner.

Caution - Brake pads and braking system components must only be replaced by persons possessing the necessary expertise!

This is a general fitment guide and any vehicle specific workshop procedures must be followed as per the manufacturers workshop manuals. This guide does not include any vehicle specific information or additional procedures.

SAFETY & WARNINGS

Caution - Correctly support vehicle weight with axle stands before placing any part of your body under the vehicle.

Brake fluid handled in an inappropriate way may cause serious personal injury or damage particularly to painted surfaces. Wear safety glasses and if brake fluid gets in your eyes flush immediately with water and seek medical attention.

Do not use compressed air to clean brake components. Do not breathe in fine dust from brake components as this can be a health hazard. If working in poorly ventilated areas, use a respirator.

Step 1: Raise Vehicle

Chock appropriate wheel axle set. Raise/Jack vehicle and install axle safety stands. Remove wheel and work on one axle at a time (this is important as you can use the other side for reference if you have problems with reassembly). As an extra safety measure place removed wheel under the appropriate front or rear chassis centre between the axle stands or under engine cross bar.

Step 2: System inspection and Disc Brake Pad removal

Review the brake assembly and its components. Take note of the brake calliper type as there are different procedures for “fixed” brake callipers versus “sliding” brake callipers. Examine Brake Disc Rotor for scoring and/or tapered wear. Measure the rotor thickness. If below minimum then replace.

Fixed Calliper

Review pad retaining hardware. Remove retaining bolts or pins and associated spring clips. Attach brake bleeding bottle or vacuum bleeder to bleed screw. Check master reservoir level is not low. Release calliper bleed screw. Use a clamp or expansion tool to push pads back, or back off disc brake pads 2-3mm, then remove from calliper and continue piston retraction with appropriate tool. Inspect calliper piston, piston dust boots and general calliper condition. Damage to any components and or any fluid leaks would require calliper rebuild or replacement.

Sliding Calliper

Review calliper body retaining hardware. Loosen bleed screw and softly retighten (as it is difficult to undo the bleed screw later with calliper body loose). Remove calliper body retaining bolts or slide pins. Remove calliper body (In some cases you can remove just one retaining bolt and pivot calliper to expose Disc Brake Pads). Remove Disc Brake Pads. Attach brake bleeding bottle or vacuum bleeder to bleed screw. Check master reservoir level is not low. Release calliper bleed screw. Use a clamp or expansion tool to push pistons back to home position. Inspect calliper piston, piston dust boots and general calliper condition. Damage to any components and or any fluid leaks would require calliper rebuild or replacement. Inspect

calliper carrier, slides and dust boots. If required, clean and lubricate calliper slides with special grease. Damaged or rusty slides/guides will require replacement.

Step 3: Disc Brake Pad Replacement

Compare new brake pads with the ones removed to ensure they are correct for the application. New brake pads must move freely in their guides and abatements. Contact surfaces of the backing plate/ calliper guides and backing plate/calliper pistons should be appropriately lubricated with special grease. Follow any specific instructions from the vehicle manufacturer. Ensure all shims, springs, pins and pad hardware are in serviceable condition and installed correctly. Any asymmetric hardware must be installed in the correct order and any arrow indicators must point in the direction of rotation. Install fasteners and tighten to the appropriate torque. Replace any single use fasteners with new items of the same type. Check that component operation and clearances are within manufacturers specification and free of binding. If not review and remedy. Ensure brake fluid levels are topped up appropriately.

Caution – Incorrect tightening torque of fasteners may induce braking failure

Step 4: Test Brake Function

WARNING

DO NOT DRIVE ON UNTESTED BRAKES. BRAKES MUST BE TESTED AFTER INSTALLATION OR MAINTENANCE.

Actuate brake pedal repeatedly to re-position brake pads and set pad/calliper piston clearances. Make sure pedal is firm. Hold firm pressure on pedal for several minutes, it should remain in position without sinking. If the pedal sinks toward floor, check system for fluid leaks. DO NOT drive

vehicle if pedal does not stay firm or can be pushed to the floor with normal pressure.

At low speed perform trial brake applications with caution as initial brake effectiveness may be compromised.

Observe any manufacture specific bedding instructions. Do not use excessive pedal pressures or continuous brake applications in an effort to "speed up" bedding in.

Always test vehicle in a safe place where there is no danger to (or from) other people or vehicles. Always wear seat belts and make use of all safety equipment. Always observe traffic regulations when performing brake tests or bedding in procedures.

Carry out functional tests on a rolling road to ascertain that the system meets any specific legal requirements.

General Warnings:

IT IS THE RESPONSIBILITY OF THE PERSON INSTALLING ANY BRAKE COMPONENT OR KIT TO DETERMINE THE SUITABILITY OF THE COMPONENT OR KIT FOR THAT PARTICULAR APPLICATION. IF YOU ARE NOT SURE HOW TO SAFELY USE THIS BRAKE COMPONENT OR KIT, YOU SHOULD NOT INSTALL OR USE IT. DO NOT ASSUME ANYTHING. IMPROPERLY INSTALLED OR MAINTAINED BRAKES ARE DANGEROUS. IF YOU ARE NOT SURE, GET HELP OR RETURN THE PRODUCT. YOU MAY OBTAIN ADDITIONAL INFORMATION AND TECHNICAL SUPPORT BY CALLING ZNOELLI AT (+64) 9 263-0350, OR VISIT OUR WEB SITE AT WWW.ZNOELLI.CO.NZ. USE OF ZNOELLI TECHNICAL SUPPORT DOES NOT GUARANTEE PROPER INSTALLATION. YOU, OR THE PERSON WHO DOES THE INSTALLATION MUST KNOW HOW TO PROPERLY USE THIS PRODUCT. IT IS NOT POSSIBLE OVER THE PHONE TO UNDERSTAND OR FORESEE ALL THE ISSUES THAT MIGHT ARISE IN YOUR INSTALLATION.

RACING EQUIPMENT AND BRAKES MUST BE MAINTAINED AND SHOULD BE CHECKED REGULARLY FOR FATIGUE, DAMAGE, AND WEAR.

DO NOT OPERATE ANY VEHICLE ON UNTESTED BRAKES!

ALWAYS UTILIZE SAFETY RESTRAINT SYSTEMS AND ALL OTHER AVAILABLE SAFETY EQUIPMENT WHILE OPERATING THE VEHICLE.

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