

Technical Guide.

Why is there a need for different types of lubricant for the brake system?

For a braking system to be operating at optimum efficiency it is important to have free movement of components. Unfortunately, due to exposure to environmental conditions, being subjected to acidic cleaners and high-pressure washers, the brake area can suffer from corrosion that will inhibit free movement of components. This can cause damage to the brakes by over-heating through prolonged contact but more alarmingly might cause the vehicle to react unstably when braking leading to accidents. Please refer to our article on corrosion and how it affects the braking system for a more detailed explanation.

In a brake system there are several contact points that will need to be treated as part of the repair process to ensure free movement. There is an old school habit within the industry that reveres copper grease as the universal lubricant for the workshop. However, copper grease within the brake environment can result in galvanic corrosion which is further worsened by the contamination of acidic wheel cleaners due to the owners' desire of keeping their alloys or rims sparkling clean. It is inaccurate that there is only 1 type of lubricant will suitable for all contact points.

Apec Braking is delighted to provide a slider lubricant that is compatible with rubber and moisture resistant to prevent corrosion. It is best practice that both the sliders are removed and examined to ensure their condition at every brake pad and disc replacement. Seized sliders are becoming more of an issue due to the increase use of pressure washers, that have enough pressure to remove the rubber boots and introduce moisture in the slider cavity. If the sliders are in poor condition it is recommended that they are replaced. However, if the sliders are in good condition (not pitted or bent) they must be cleaned thoroughly of any corrosion and re-lubricated with Apec Caliper Slider Grease to ensure free movement as well as protection from corrosion.



There is a common short cut of removing one slider bolt and swinging the caliper away to fit the replacement pad. This method

does not allow for detailed examination of the sliders or provide the room for the carriers to be cleaned thoroughly of any corrosion therefore is discouraged.

Contact points that are exposed such as the abutment points on the carriers, will require a lubricant that will not cause galvanic corrosion to the surrounding metallic components. It is essential that the lubricant used will be of the correct consistency to prevent its removal through driving or cleaning. For these contact points, the specially formulated metal free Apec Brake Grease with a high melting point will be the perfect lubricant to prevent galvanic corrosion. Apec Brake Grease is manufactured from super refined mineral oils, that makes it water-insoluble, to provide resistance from washing off under most adverse conditions. However, this would make it incompatible to be used on the slider pins as it would cause the surrounding rubber boots to deform which will allow contaminants into the slider cavity and prevent free movement.



If you ever have any questions, please feel free to contact our technical helpline on 01174 288100. Apec Braking is proud to provide you with technical information to support the quality of its products and to uphold its "Full Spec. Full Stop." promise to customers.

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