

Wiper Blade Maintenance and Diagnosis

Diagnosing Wiper Blade Issues

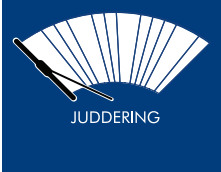
Wiper blades may not be something that we rely upon every day (especially through the summer months) but when we do need them, we need them to perform. Your wipers are all that stand between the assault on your windscreen and your driving vision, making them a critical safety component. However, the performance of your blades hangs in a delicate balance. The soft, supple rubber that sweeps away water so effortlessly is not so great at battling other environmental factors. Faced with an onslaught of road tar, tree sap, cleaning chemicals, insects, oils from exhaust gasses and damaging UV rays, wiper blades can quickly deteriorate and that simple, easy-going component becomes the bane of your driving experience. Streaking, chattering, smearing and noise are all common and whilst replacing the old blades can often cure all of these complaints, it is not always the answer. Garages and motor factors frequently report new blade customers returning and reporting the same issues. Often in these cases, the root causes of the symptoms have been missed. Here we look at some of the most common wiper blade complaints and identify possible causes and recommended solutions and additional checks to ensure that higher levels of customer satisfaction are achieved.

1. Streaking



Perhaps the most common complaint is narrow streaks left on the windscreen or bands of water that remain after each stroke. This could simply be caused by dirt, dust or debris between the blade and the windscreen. However, if a thorough clean of the windscreen and the blades fails to resolve the issue, then the blades are likely to be at fault. Over time ultraviolet light and ozone dry out the soft rubber of the blade causing it to become brittle and crack. Water on the screen passes through the cracks causing the narrow streaks. In this case the blade must be replaced.

2. Juddering



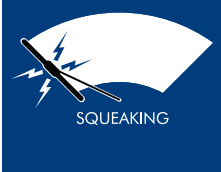
There is little more annoying than a wiper blade that skips or judders across the windscreen causing noise and banding as it goes. More often than not this is due to the angle at which the blade sits on the screen. A smooth motion requires the blade to sit perpendicular to the screen otherwise the blade will face resistance as it is pushed across causing skipping or juddering. There are two possible causes here. Firstly, extreme temperatures and extended periods of non-use can cause the rubber blade to curve changing the contact angle and causing the judder. In this case the blade will need to be replaced. The second (and commonly overlooked) cause is the angle of the wiper arm. Even a box-fresh blade can judder if the arm presents it to the windscreen at an incorrect angle. Automatic car washes are a common culprit for knocking arms out of line and the smallest of changes can have a big effect. To check the wiper arm's profile angle, remove the blade at rest and lay the arm carefully on the screen. Take a line from roof to bonnet, where the arm touches the screen it should be flat on that line, if not then very carefully twist it back into profile.

3. Missed Areas



If the wiper leaves large or small areas of the screen unwiped it is likely that the rubber is damaged. Splits in the rubber, separating it from the wiper are a common issue. General ageing usually causes this and again ultraviolet rays from the sun are a contributing factor. A split wiper blade will need to be replaced.

4. Squeaking



Squeaking blades can be incredibly distracting, especially as wet conditions demand higher concentration levels. There are a number of possible causes of squeaking and again, not all are directly due to the wiper blade itself. Old blades may start to squeak as the rubber hardens; in this case replacement will be required. However, if the rubber is fine or the blades are new, start by ensuring that the windscreen is thoroughly clean. Stubborn contaminants that may not be obviously visible can come between the wiper and the glass causing noise. If the squeaking persists check the wiper assemblies and in particular the spring tension. If they are too loose air will get trapped between the blade and screen causing a squeak, too tight and the blades are more likely to drag and chatter across the screen.

5. Smearing



Smearing is caused when water is left on the windscreen even after the wiper blades pass over it. This can seriously hamper vision in wet conditions. Smearing in one direction is common in cold conditions and can be a sign that the blade is deteriorating. Smearing in both directions usually indicates a dirty blade or screen. Again, thoroughly clean the windscreen and gently clean the blade. If the problem reoccurs later try using a higher quality screen wash.

Wiper Blade Maintenance

Wiper blades should be checked every 6 months, or roughly every 7,500 miles (12,000 km,) and cleaned or replaced as appropriate – replacements should be carried out at least once a year. The ideal time to do this is at the end of winter, after the ice and cold temperatures have taken their toll and then again at the end of summer to ensure that the rubber has not been damaged or worn by ultraviolet rays and high temperatures. Depending on environmental conditions, the lifespan of wiper blades can vary dramatically, therefore such regular checks are vital.

Advice for Drivers

Clean wiper blades regularly to remove dirt and foreign matter – this can be done most effectively using a lint-free cloth or paper towel soaked with a mild detergent or windscreen washer fluid. Thoroughly clean the windscreen before using new wiper blades and at regular intervals to remove abrasive particles and stubborn contaminants. Never use the wiper blades to clear a frozen windscreen. Ice is abrasive and can damage the soft rubber of the blade. Defrost or use an ice scraper to clear the screen before setting off. Keep washer fluid topped up. There is little more harmful to a wiper blade than travelling across a dry, dirty windscreen. In hot conditions try to avoid parking in direct sunlight where possible. UV rays can make the rubber brittle and heat could deform the blade.