

## Bodyshell

The latest generation of Aston Martin has been built to a high standard throughout and if properly looked after should be clean and tidy even if they are high mileage. Some earlier cars did have a reputation for patchy paint quality and can be more prone to stone chips. This means the overall paintwork does need careful inspection for inconsistencies, orange peel effects excess marking and wear. The overall quality seems to have improved each year, and from mid-2008 onwards new paint techniques and inspection checks further improved consistency for the already high-quality hand finish.

Because the entire Aston Martin range features a specialist bonded and riveted construction using mixed components, like aluminium, steel, RTM and carbon fibre; it is extremely important to check the car for any accident repairs or repaint work that may have been carried out. Major accident repair work requires very specialist skills and the right equipment to cut in new alloy sections then bond them in the correct way to avoid damaging existing infrastructure. For example if new chassis sections are bonded and riveted into the existing structure, the process must ensure that existing components (wiring loom, trim etc) aren't damaged by overheating during

the new sections curing process. This is why official repairers have developed special new glues that bond at lower temperatures. Because aluminium loses much of its strength if it is manipulated too much, official repairers also usually completely replace any damaged extrusion, using specialist tools to remove the old section before re-bonding the new part in its place. Conventional welding can't be used, as it would weaken existing bonded sections. High-value, prestige cars like Astons are rarely written off in financial terms meaning the car can be seriously wrecked in an accident, but still repaired and sold at a profit. Low budget repairs will often not repair the car's bodyshell to the same standard as it left the factory, particularly if the main tub and major extrusions have been damaged. It is for this reason we strongly recommend avoiding any damage-repaired car that has not been fully approved by Aston Martin.

Even simple cosmetic paint repairs need careful inspection and official approval as they could invalidate the warranty. While repairing RTF sections is fairly straight forward, it is also worth considering that aluminium and carbon fibre panels (see VH structure for details of which panels affect which model) are particularly susceptible to water ingress if not



*Since 2008 paint robots + new production and checking procedures improved all aspects of the cars including paint finish, earlier cars do need more careful inspection.*