

SPOTLIGHT ON... SWIFT CARAVAN SAFETY



The Swift Group's tourers have been an integral part of the Tow Car Awards testing programme throughout its 10-year history. Here, we look at the technology advances that make Swift, Sterling and Sprite caravans safer than ever to tow

The Swift Group has now been producing touring caravans for more than 50 years, and has been the official supplier of tourers to the Tow Car Awards since its inception in 2007.

Today, The Swift Group manufactures touring caravans under three different brand names from its base in Cottingham, near Hull: Swift, Sterling and Sprite. Swift Group offers models that are light enough to be safely towed by cars as small as a Ford Focus or Vauxhall Astra, yet the current range of 59 tourers for the UK market goes right up to large caravans such as the latest, top-of-the-range twin-axle Swift Elegance and Sterling Continental. Featuring state-of-the-art, entirely timberless SMART HT construction, these luxurious tourers will need a large 4x4 car to tow them.

The Tow Car Awards programme is the most rigorous test of tow cars in the industry today. Each year, up to 60 vehicles are put through a punishing test of their capabilities over the course of a week at a private test track in the Midlands.

And with a testing programme as tough as that, it's not just the cars themselves that need to be robust, but the tourers, too. All of the Swift test caravans are ballasted and carefully weighted to 85% of each tow car's kerbweight, which is a sensible recommended maximum for a safe and stable outfit match.

The testing programme involves the most demanding manoeuvres: a high-speed lane-change test reveals how each car will perform if forced to swerve in an emergency, and the driver's subjective impressions are compared with hard data from the Al-Ko ATC Trailer Control System fitted to each hitch. ▶



Interior layouts are designed by a dedicated team to ensure the correct distribution of weight, and make for a safe and steady performance on tow



Acceleration and braking during these tests is measured using satellite-tracking equipment. There's also a low-speed slalom to assess brake-pedal feel and steering response, and a constant-radius bend to test each car's grip and handling balance.

Each tow car and caravan outfit performs a hill-start on a 1-in-6 incline, and high-speed stability is assessed at motorway speeds and beyond if capability allows.

Of course, all the caravans have to go through the same demanding tests. Fortunately, these are tough tourers! Today, all Swift Group tourers are built on galvanised Al-Ko chassis fitted with a Euro-axle and overrun device, and all but the new entry-level Freedom models are offered with Al-Ko's hitch-head stabiliser as standard. Swift's upper tourer ranges are also factory-fitted with Al-Ko ATC, which is an electronic, emergency control system designed to deter the caravan from snaking on the road; it is offered as an optional extra on all lower ranges, too.

All Swift Group tourers run on branded tyres with a higher load rating, building a margin into the tyre specification, plus the addition of a spare in case of an emergency. Each is designed with an aerodynamic profile, too, from the stylish frontal aspect to the moulded rear panel, to improve airflow over the van and to maximise fuel consumption on tow. The layouts are all designed with balance in mind, to help ensure a sensible noseweight and a more stable performance when towing. All models from the Swift Challenger and Sterling Eccles up are also fitted with shock absorbers to provide a smoother towing experience.

To get an accurate understanding of how each car tows, all trailer-stability aids are removed from the caravans for the duration of the Tow Car Awards testing programme. Yet, even with these devices disabled, the tests are a clear indicator that Swift Group caravans are designed with towing safety very much in mind, and built tough enough to emerge unscathed and ready to go touring, year after year!

All Swift Group tourer bodyshells are designed with an aerodynamic profile, from the attractive moulded front panel to the shaped rear panel



The latest pioneering SMART HT construction system from Swift Group features an entirely timberless bodyshell and is highly resilient to moisture



The latest luxury tourers from Swift Group, the Swift Conqueror, Sterling Elite and the flagship Swift Elegance and Sterling Continental ranges, feature SMART HT construction and have been engineered to significantly reduce drag while on tow



ALL ON AL-KO



All Swift Group touring caravans are based on Al-Ko chassis, which is the market leader for touring caravans.

The chassis accepts a wide range of Al-Ko accessories and safety products, such as ATC, which is an electronic, emergency trailer control system, and AKS hitch-head stabilisers.

ATC is sited behind the tourer axle and uses electronic sensors to apply the brakes when it detects instability, which can occur in high winds or when overtaken by a large vehicle, such as a coach. This can prevent snaking.



Al-Ko chassis use rubber suspension axles, shock absorbers and a proven overrun braking system, which offers unrivalled stability and roadholding on tow. The overrun device controls the caravan's braking system: when you dab the tow car's brakes, the towing vehicle produces a drawbar force on the coupling, pushing in the overrun lever and operating the van's brakes.



The AKS3004 stabiliser is designed to overcome the worst pitching and lateral movements on tow. Friction pads inside the head of the stabiliser dampen these movements and help to keep the caravan under control in all towing conditions.

