



Evolution IV



Power unit mounting direction reversed

Evolution IV was powered by the same 4G63 rally engine as previous models in the series, but the engine/transaxle was rotated through 180 degrees. This was accompanied by a stringent reexamination of all engine component parts that resulted in 18 modifications covering weight reduction, materials, and fabrication methods. A new twin-scroll turbocharger gave better response and more stable low-end torque. The secondary air supply system first fitted to Evo III was also modified with the adoption of separate air passages in the exhaust manifold for each cylinder for better response, and the system was made operational in the production model as well. Together with a 15% increase in intercooler capacity, these changes raised Evo IV's maximum output to 280PS and 36.0 kg-m.



Body aerodynamics grow in sophistication

Developed using a totally new platform, Evo IV's styling also adopted a new approach to aerodynamics. Modified to reduce lift to zero while cutting drag, the new styling also made more effective use of the airflow for cooling and generation of downforce. Its most distinguishing feature was the delta-shaped wicker designed to wrap over the entire trunk. The front end was distinguished by the enormous bumper opening and the engine hood outlet designed to extract hot air from the engine compartment when the car was on the move. Evo IV returned a drag coefficient of 0.30 and a lift coefficient of zero.



New-concept AYC traction control and updated footwork

Evo IV came with a new AYC (Active Yaw Control) computer-controlled rear differential. Replacing the conventional LSD, AYC actively regulated torque transfer between the rear wheels to keep vehicle behavior smoother through corners. The suspension system underwent a major remake. The front retained the strut design of previous models in the series but with the front track widened by 5 mm. The control arm pickup points were repositioned to lower the roll center. Adopting a double-wishbone multi-link arrangement, the rear suspension underwent more fundamental changes. All control arms were replaced by forged parts, with the upper arms and cross members using aluminum. That the WCR provided the backdrop for the suspension redesign can be seen in the fact that all suspension mounts were designed for pillow ball linkages.



Second-generation Evolution takes off

With its base model Lancer having undergone a full model change, Evo IV underwent major modifications in terms of its power unit, bodywork, and suspension. These advances saw Evo IV, the first of the second-generation series, accelerate fiercely off the line.

