RS 200

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The 150 mph* Ford RS 200 is a mid-engined two-seater sports car whose state-of-the-art design features many advanced concepts. They include a driver selectable four or two-wheel drive transmission (for competition version), high-technology lightweight materials for the chassis and body panels, and a 50/50 weight distribution for optimum handling.

The RS 200 will spearhead Ford's return to international motor sport, and only 200 are being built to comply with the Federation Internationale de l'Automobile's Group B homologation rules. But the car's turbocharged, 16 valve, fuel injected engine, unique driveline and advanced chassis also provide exceptionally high levels of road performance for a very small number of people who will automatically become members of the exclusive Ford 200 club.

Jackie Stewart, the former Grand Prix star whose three World Championships were won in Ford-powered cars, played a major role in developing the road-going version of the RS 200 and leading rally drivers were involved in the extensive test programme.

Memories of the days when rallies all over the world were dominated by Ford Escorts will be rekindled when the RS 200 starts its competition career towards the end of the 1985 international season.

Developed by Ford Motorsport engineers in conjunction with Tony Southgate, an engineer with extensive Formula One and sports car design experience, Ford's most exciting sports car since the GT40 is powered by a 1.8-litre 4 cylinder twin overhead camshaft, 16 valve engine developed by Ford from the classic Cosworth BDA design.

Its inherent high efficiency is optimised by a Garrett AiResearch TO3/4 turbocharger with a roof-mounted intercooler.

Electronic fuel injection and ignition are controlled by Ford's EEC IV microprocessor — the world's most advanced engine management system — which can handle up to one million commands a second. The 'black box' matches fuel and spark characteristics to every combination of speed and load, from cold starts and tickover at the traffic lights to full-throttle acceleration and maximum power on a rally stage.

The 'standard' version of the BDT engine develops 250 PS at 6000 rpm, allowing the RS 200 to accelerate from zero to 60 mph in less than five seconds**. Higher turbocharger boost and other modifications increase the robust power unit's output to approximately 420 PS for competition purposes.

Conditions on rally stages vary from ice, snow and gravel, where four-wheel drive is essential for maximum traction, to high-friction tarmac on which rear-wheel-drive cars are quicker. All conditions demand a very agile, responsive and sure-footed design capable of fast directional changes. Specified

with eight-spoke Speedline alloy wheels and fitted with 225/50VR16 Pirelli tyres, Ford's RS 200 meets those key requirements with its mid-engine, front-mounted transaxle layout, 50/50 weight distribution and a best-of-both-worlds transmission which enables four-wheel drive, rear-wheel drive, or locked centre differential, to be selected at speed (on competition version).

Each of the transmission's three limited-slip differentials is of the latest Viscous-control type also chosen for the Escort RS Turbo, Sierra XR4×4 and the Scorpio and Granada 4×4 models. Their silicone fluid provides a progressive, wheel-spin sensitive system which eliminates the traditional limited-slip differential's relatively harsh engagement.

When four-wheel drive is selected, 37 per cent of the engine's torque goes to the front wheels and 63 per cent to the back. The split gives the best balance for maximum traction and optimum handling under dynamic conditions.

Although designed with competition in mind, the system's versatility gives road versions of the RS 200 phenomenal all-weather handling and traction. It represents a link between Ford Motorsport and FF Developments, the company whose knowledge of four-wheel drive is based on more than 45 years experience.

The RS 200's body/chassis is essentially a space-age combination of advanced materials and composite construction techniques. Strong, safe and light, the chassis consists of a fully-stressed platform reinforced by deep box sills, bulkheads and a central backbone moulding. The structure uses steel, aluminium honeycomb 'sandwich' and composite carbon/aramid/glass fibre reinforced panels.

Ease of servicing was a major design priority, particularly for competition work, and the whole driveline is readily accessible from underneath the car.

The RS 200's fully-independent, adjustable suspension has double wishbones, twin coil spring telescopic damper units and anti-roll bars at front and rear and includes long wheel travel suitable for rally stage conditions. Other features include cast-aluminium uprights and Formula One standard ventilated disc brakes all round.
The steering rack and column, like the windscreen and doors, are Sierra-based components.

Ford's Ghia Design studio created the styling concept and worked with Ford's design groups in Britain and Germany to perfect the smooth, functional, wedge-shaped body.

Lessons learned during wind tunnel tests in both countries enabled the Ford Design Centre at Dunton, Essex, to increase aerodynamic downforce and to maximise cooling efficiency while avoiding significant drag penalties.

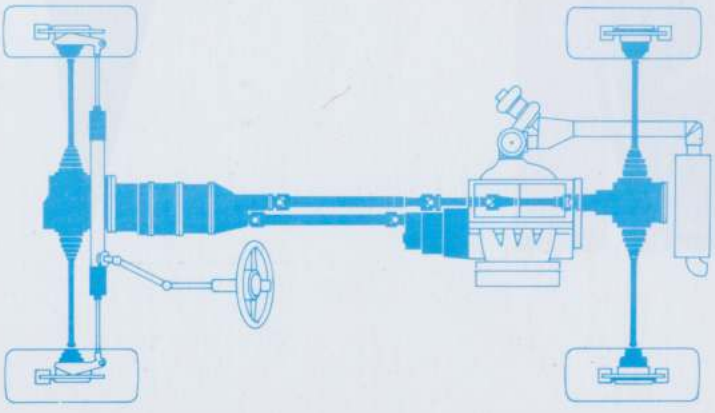
Provisions for mounting full, rally-size spare wheels at either end of the car enable weight distribution to be trimmed for individual events. On the road version, the front spare's position can be fitted with a detachable luggage compartment (Dealer option).

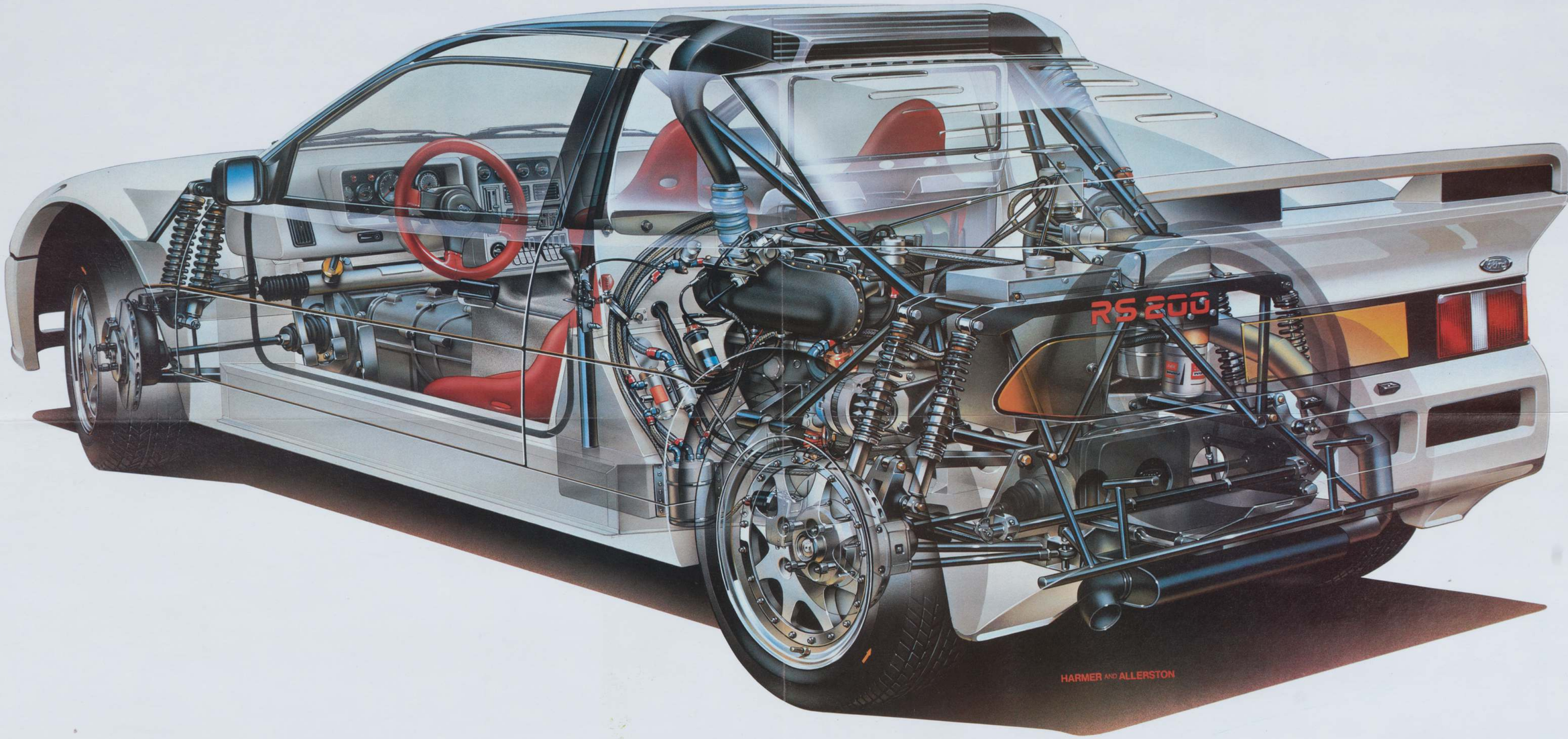
Attractive and practical, the cockpit layout follows Ford's general concept of grouping instruments and equipment into function related panels. Essential instruments and controls in front of the driver are complemented by auxilliary gauges and supplementary switches in the centre of the two-seater.

All RS 200's will be produced in Diamond White and will be available as either right-hand-drive or left-hand-drive and with a choice of road or rally specification. Both versions will use the same engine, but some parts and mechanical components such as shock absorbers, springs and mounting bushes will be changed on the rally version.

Built to win rallies and races — setting new standards for road-going sports cars with its unique mechanical layout — the RS 200 is a very significant landmark in the history of automobile design.

*Ford test figures.
**Estimate based on measurements taken by Ford Motorsport engineers during testing. Driver only condition.





RS200

Ford

Capacity cc	1804
Cylinder	4
Bore	86.0 mm
Stroke	77.6 mm
Compression ratio	8.2:1
Valve gear	Twin-cam, 4 valves per cylinder
Induction	Garrett AiResearch T03/4 air to air intercooled turbocharger, Ford electronic injection with EEC IV controls
Power	250 (PS-DIN) at 6000 rpm (420 PS in competition usage)
Torque	280 (NM-DIN) at 4500 rpm

ENGINE
1804 cc 4 cylinder 16 valve twin-cam turbo Ford BDT engine. Alloy block and head, Garrett T03/4 turbocharger with roof mounted intercooler. Ford electronic fuel injection controlled by EEC IV module.

TRANSMISSION
5 speed front mounted, magnesium casing. Four-wheel-drive or rear-wheel-drive or locked centre differential (for competition version), provide three torque splits. Front, centre and rear Ferguson viscous-controlled limited slip differentials. Final drive ratio of 4.375:1.

SUSPENSION
Double wishbones, twin coil-spring/damper units, anti-roll bars, alternative ride settings — front and rear.

BRAKES
Ventilated discs front and rear (285 mm × 25 mm).

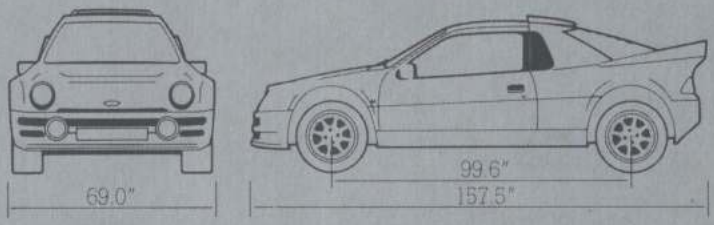
STEERING
Rack and pinion with 2.3 turns lock-to-lock and 9.6 m turning circle between kerbs.

WHEELS AND TYRES
Speedline alloy 16" × 8" wheels with 225/50 VR16 Pirelli radial tyres.

BODY AND CHASSIS
Lightweight composite steel, aluminium honeycomb, carbon/aramid/glass-fibre reinforced resin, bonded, rivetted and bolted. High grade steel tubular roll cage. GRP/aramid/carbon body panels. 74 + 42 litres (16.2 + 9.2 imp. gal.) capacity fuel tanks (single fill).

RALLY SPECIFICATION
Tarmac rally setting shock absorbers and road springs. Competition clutch. Hard mounting bushes for engine, trans-axle and rear axle.

A full range of Motorsport parts are under development for the competition user.



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Ford

Drive one.

2009 'Drive one' Drive Experience

FORD S-MAX

- The Ford S-MAX is born from an entirely new vehicle architecture driven by Ford Motor Company's Global Platform initiative.
- The S-MAX, is designed to be a distinctly different vehicle, combining elements of a sports car and multi-activity vehicle, and using 'kinetic design' cues to stress its sporty personality.
- The athletic side profile of the Ford S-MAX makes this easy to see. The fast roof line arching into the hood, the pronounced wheel arches with trailing-edge vents and the distinctive kick-up to the rear of the window glass area all help to indicate that this is a dynamic vehicle.
- The front end of the Ford S-MAX is characterized by its distinctively angled nose and dynamic headlamps which give it a purposeful appearance. Fog lamps are placed inbound and high on the front bumper, giving the vehicle a sporty look.
- The rear design of the S-MAX was given more of a surround feel, moving away from traditional square look often found in vehicles of this type. The large wrap-round tail lamps follow the bottom edge of the screen and feature clear, louvered upper lenses with red lower lenses.
- In the S-MAX, the driver enjoys a 'cockpit' driving position. This naturally feels more involved and is complemented by a flow-through console and sports seats.