



# R1. It's changed the supersport world. Forever.

It's the lightest, shortest and most powerful machine ever seen in its category. And overnight the awesome Yamaha YZF-R1 has achieved legendary status with riders looking for the ultimate experience.

R1's short-wheelbase Deltabox II aluminium frame and ultra-long swinging arm are constructed to the highest-ever specification using GP-developed technology, bringing 600 agility to the 1000 cc class.

And for total domination this uncompromising ground-breaking machine is powered by our most advanced and compact 20-valve EXUP engine—and slowed by remarkably efficient one-piece 4-piston dual front calipers.

YZF-R1. Only from Yamaha.



# Shortest. Lightest.

# Quickest.



**One-piece cylinder/Crankcase**  
Utilising the most advanced casting techniques, the one-piece cylinder and upper crankcase make for immense engine rigidity together with reduced weight—while chrome-composite plated bores ensure higher durability and improved heat dispersion.



**3-axis transmission/Crankshaft layout**  
Large-capacity outer-pull clutch handles the R1's awesome power, and ultra-short engine dimensions are achieved by the use of an innovative 3-axis transmission featuring a vertically stacked mainshaft and driveshaft.



**Piston/Connecting rods/Pins/Crank assembly**  
Racing specification engine internals include drop-forged low-friction pistons with lightweight pins, carburised con-rods and small-diameter crankshaft which work together to deliver remarkable throttle response and bullet-proof high-rpm durability.



**Sophisticated narrow-angle 5-valve head**  
Featuring extremely narrow valve angles, Yamaha's highly efficient 5-valve head and compact combustion chamber design give superior combustion for stronger power right through the rpm range.



**EXUP**  
Monitoring four engine variables, the latest-generation 'intelligent' EXUP system delivers a massive power boost between 5,000 rpm and 7,500 rpm by constantly adjusting the exhaust pipe's internal aperture.



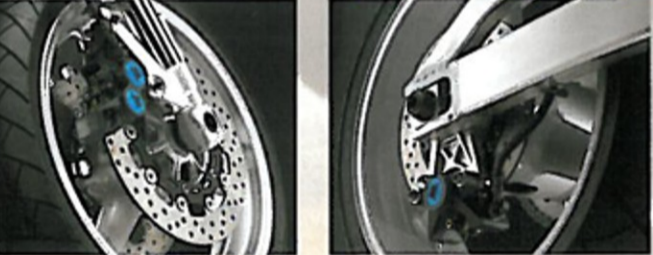
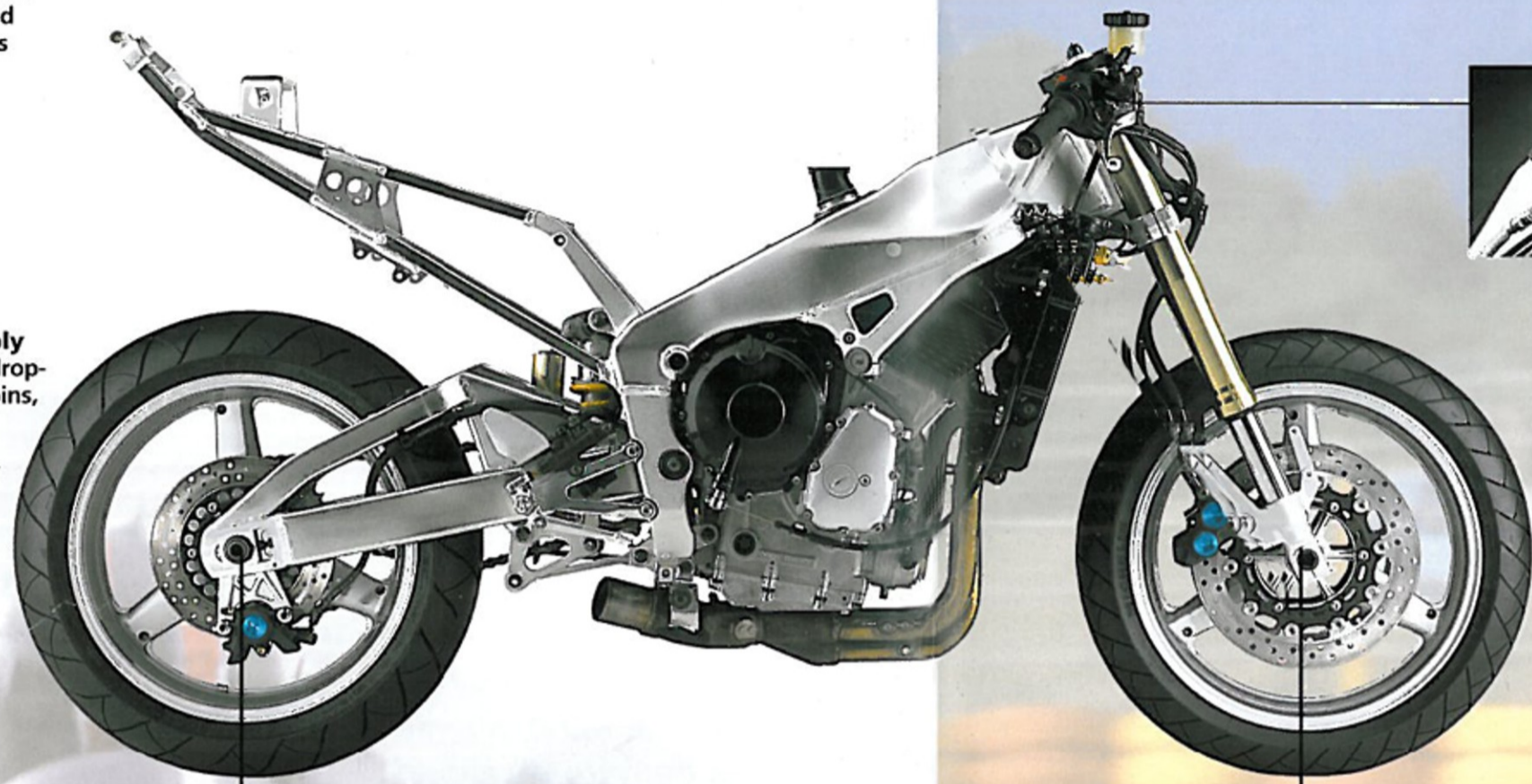
**Carburetors/Air cleaner**  
Sucking cool, fresh air through a large-capacity dual-intake airbox, the big-bore BDSR 40 mm TPS-equipped carburetors feed a precisely metered explosive mixture via 12 inlet valves for optimal performance at all speeds.



**Sophisticated 5-valve head with side-drive DOHC cams/Magnesium valve cover**  
Side-drive DOHC system keeps engine width to a minimum and allows the use of equally spaced cylinders and straight inlet tracts for improved performance. And for reduced weight there's a magnesium valve cover.



**Oil cooler/Oil filter/Built-in water pump**  
Another space-saving design is the built-in water pump which helps make this motor the most compact in its class. And for consistently high performance an easily accessible oil filter and oil cooler unit is fitted.



**Deltabox II frame**  
Race-developed Deltabox II aluminium chassis delivers unmatched stability and agility thanks to its exceptionally short 1,395 mm wheelbase and ultra-long GP-type swinging arm with a forward-mounted pivot.

**Steering head pipe/Bearings**  
Supported by extra-large diameter low-friction sealed bearings, the lightweight aluminium steering shaft responds instantly to rider input.

**Shift linkage**  
New for '99 is a redesigned gearchange linkage and longer shaft designed to ensure even smoother shifting. Passing through the aluminium frame, this efficient system epitomises our fine attention to detail.

**Swinging arm/Linkage**  
Extra-long 582 mm truss-type swinging arm has been developed from our GP bikes, and together with the lightweight Monocross linkage and Bilstein shock delivers excellent traction and agile handling.

**Rear shock**  
R1's fully adjustable 40 mm Bilstein piggyback shock is designed to resist heat-induced fade for consistently high levels of comfort and class-leading roadholding.

**Front forks**  
Running massive 41 mm tubes and a sturdy forged aluminium lower clamp, the fully adjustable forks offer an extra-long 135 mm rebound stroke—a race-developed feature which offers superior control, especially during acceleration.

**Front brakes/Calipers**  
Highly advanced front braking system employs dual 298 mm floating discs slowed by ultra-compact and remarkably light one-piece 4-piston calipers which generate enormous stopping power and offer superb feedback.

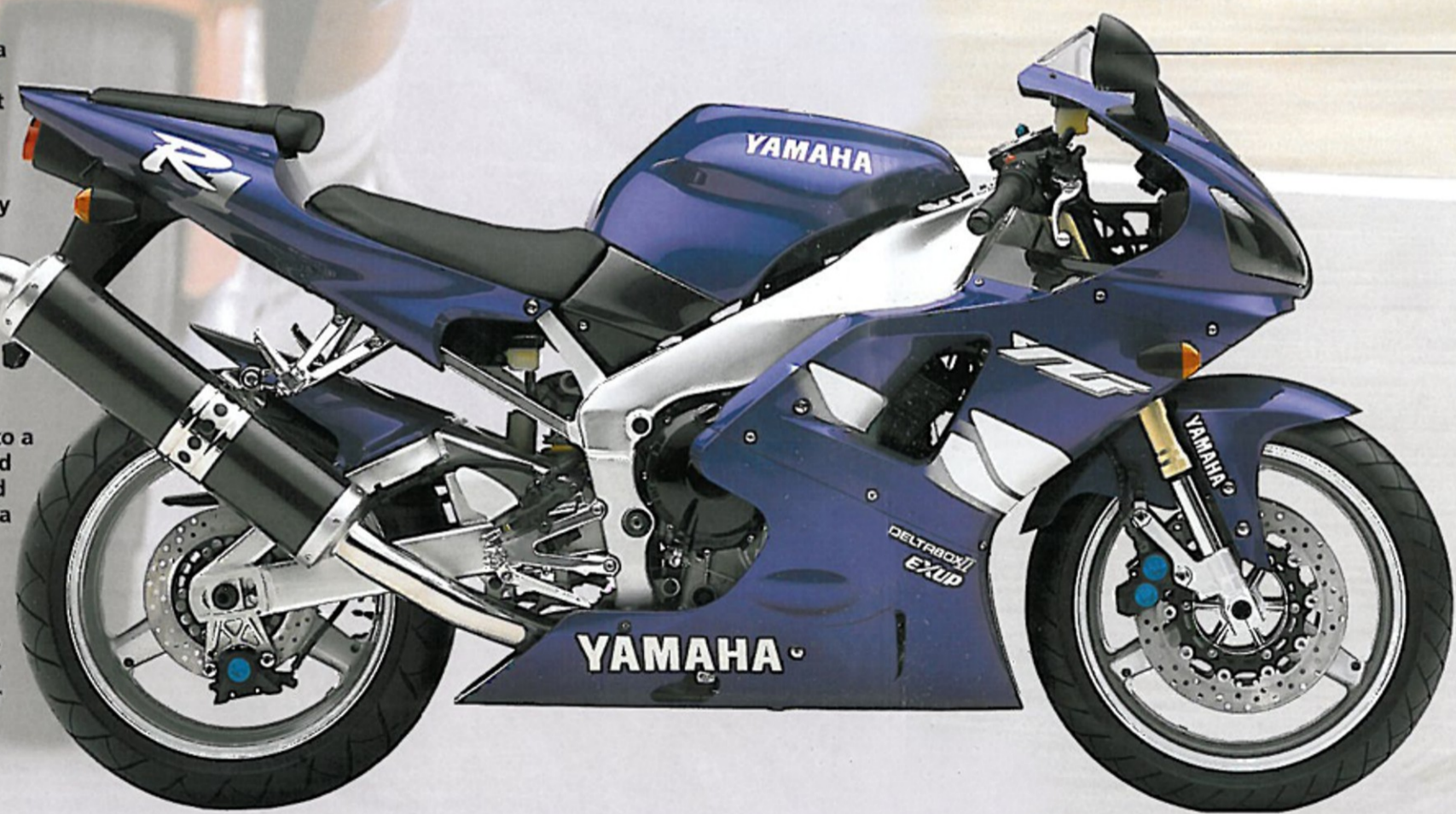
**Rear brake/Caliper**  
245 mm rear disc is operated by a one-piece opposed 2-piston caliper mounted below the swingarm to keep centre of gravity low.

**Wheels/Tyres**  
Lightweight 17 inch 3-spoke alloy wheels run a super-wide 190/50-ZR17 rear radial with 120/70-ZR17 rubber at the front for high levels of traction and radical lean angles.

# 998cc

# 1395 mm

# 177kg



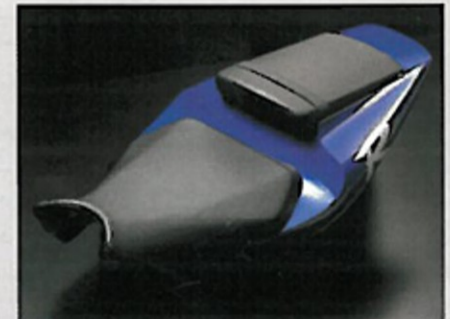
**Fairing/Front fenders/Mirrors**  
GP-inspired slant-nose low-screen fairing keeps the R1's frontal area small to give super-slippery aerodynamics and stunning looks. Compact mirrors offer good visibility, and like the lightweight front fender are designed to offer minimal drag.

**Instruments**  
Lightweight instrumentation is the most advanced in the class, and features a digital speedometer, racing-type tachometer, fuel gauge, indicator lights and multi-function digital display which includes three odometers and a clock.

**Handlebars/Levers**  
Lightweight aluminium handlebars with end weights help absorb road shocks and vibration for reduced rider fatigue. And for easy operation the R1 is fitted with specially shaped handlebar levers and a span-adjustable front brake.

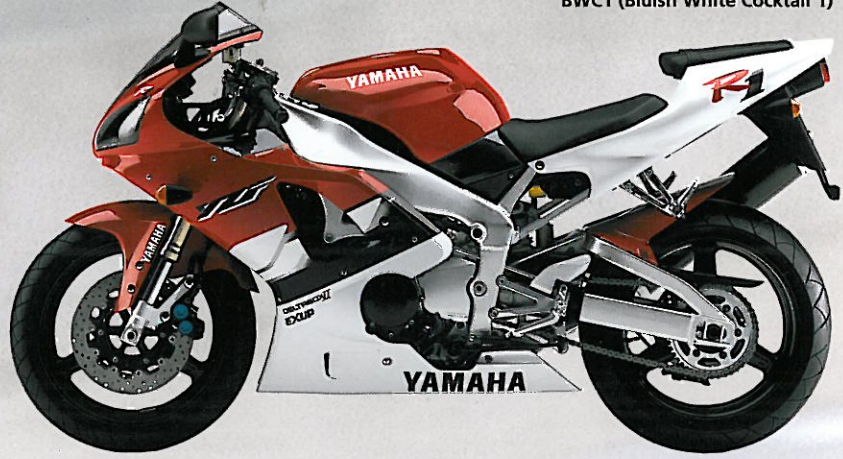
**Seat/Rear cowl**  
Designed to give high levels of rider support during acceleration—as well as allowing quick and easy weight shifting—the compact seat and GP-type rear cowl underline the R1's uncompromising racing heritage.

**Fuel tank**  
Beautifully crafted flangeless fuel tank offers an impressive 18 litre capacity—including 4 litres reserve—and is designed to allow the rider to mould their body to the machine for low-drag, low-fatigue sports riding.

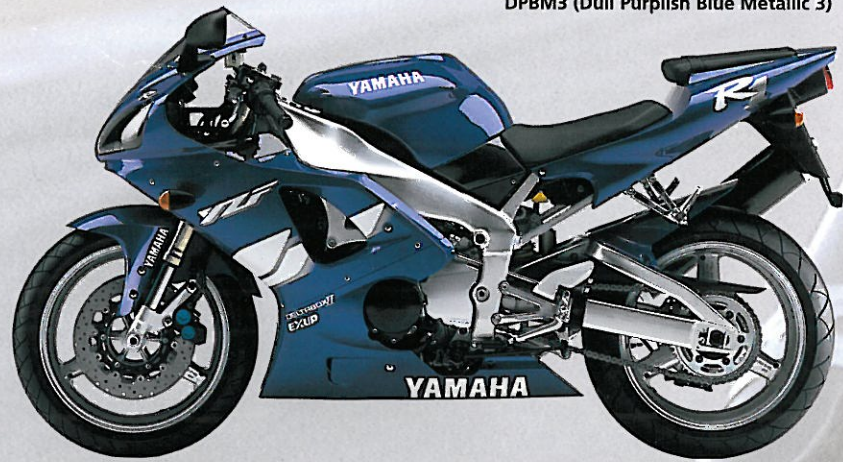




BWC1 (Bluish White Cocktail 1)



DPBM3 (Dull Purplish Blue Metallic 3)



**YZF-R1**

**TECHNICAL SPECIFICATIONS**

ENGINE		CHASSIS	
Cylinder arrangement	Liquid cooled, forward inclined parallel 4 cylinder, DOHC 20 valve	Total length	2,035 mm
Displacement	998 cc	Total width	695 mm
Bore and stroke	74 x 58 mm	Total height	1,095 mm
Compression ratio	11.8 : 1	Seat height	815 mm
Maximum power	110.3 kW / 10000 rpm	Wheelbase	1,395 mm
Maximum torque	108.3 Nm / 8500 rpm	Dry weight	177 kg
Starter System	Electric	Min. ground clearance	140 mm
Lubrication	Wet sump	Trail	92 mm
Carburation	MIKUNI BDSR40/4	Fuel tank capacity	18 L
Primary reduction ratio	63 / 43 (1,581)	Front suspension	Telescopic fork
Secondary reduction ratio	43 / 16 (2,688)	Rear suspension	Swinging arm
Clutch type	Wet, multiple disc	Front wheel travel	135 mm
Transmission type	Constant mesh 6 speed	Rear wheel travel	130 mm
Gear ratio 1st	39 / 15 (2,600)	Front brake	Double disc Ø 298 mm
Gear ratio 2nd	35 / 19 (1,842)	Rear brake	Single disc Ø 245 mm
Gear ratio 3rd	30 / 20 (1,500)	Front tyre size	120/70 ZR17 58W
Gear ratio 4th	28 / 21 (1,333)	Rear tyre size	190/50 ZR17 73W
Gear ratio 5th	30 / 25 (1,200)		
Gear ratio 6th	29 / 26 (1,115)		
Final transmission	Chain		

Always wear a helmet, eye protection and protective clothing. Yamaha encourage you to ride safely and respect fellow riders and the environment. The specification and appearance of Yamaha products can vary from time to time without notice, and as shown here are illustrative only and are not a contractual description of products. For further details please consult your Yamaha dealer.

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