

2017 NINJA ZX-10RR

THE CLOSEST THING TO A WORLD SUPERBIKE CHAMPION MACHINE

The 2017 Ninja ZX-10RR has clearly demonstrated its circuit potential through winning results in the Superbike World Championship (SBK). Kawasaki dominated both the 2015 championship and 2016 season with Jonathan Rea's consecutive World Superbike Championships and again winning the 2016 WSB Manufacturers Championship for Kawasaki. Feedback from the Kawasaki Racing Team and constant development research, the 2017 Ninja ZX-10RR (ABS KRT Winter Test Edition) is the closest available Kawasaki model to a highly advanced factory Kawasaki superbike.



Worldwide, only 1,000 units of the Ninja ZX-10RR are being produced for 2017. Designed to win races on the national level in standard trim, the Ninja ZX-10RR excludes any equipment unnecessary to quick lap times. The machine is also suited for street use.

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Engine		Suspension	
Type	Liquid-cooled, 4-stroke In-Line Four	Front	43 mm inverted Balance Free Front Fork with external compression chamber, compression and rebound damping and spring preload adjustability, and top-out springs
Displacement	998 cm ³	Rear	Horizontal Back-link with BFRC lite gas-charged shock, piggyback reservoir, compression and rebound damping and spring preload adjustability, and top-out spring
Bore and Stroke	76.0 x 55.0 mm	Brakes	
Compression ratio	13.0:1	Front:	Dual semi-floating 330 mm diameter discs
Valve system	DOHC, 16 valves	Caliper	Dual radial-mount, opposed 4-piston
Fuel system	Fuel injection: 47 mm x 4 (Mikuni) with dual injection	Rear:	Single 220 mm diameter disc
Ignition	Digital	Caliper	Single-bore pin-slide, aluminium piston
Starting	Electric	Dimensions	
Lubrication	Forced lubrication, wet sump with oil cooler	Overall length	2,090 mm
Drivetrain:		Overall width	740 mm
Transmission	6-speed, return	Overall height	1,145 mm
Final drive	Sealed Chain	Wheelbase	1,440 mm
Primary reduction ratio	1.681 (79/47)	Ground clearance	145 mm
1st	2.600 (39/15)	Seat height	835 mm
2nd	2.214 (31/14)	Curb mass	205 kg Includes full fuel tank
3rd	1.944 (35/18)	Fuel capacity	17 L
4th	1.722 (31/18)	Performance	
5th	1.550 (31/20)	Maximum power	147.1 kW {200.0 PS} / 13,000 rpm
6th	1.391 (32/23)		154.4 kW {210.0 PS} / 13,000 rpm (with RAM air)
Final reduction ratio	2.294 (39/17)	Maximum torque	113.5 N.m {11.6 kgf (m)} / 11,500 rpm
Clutch	Wet multi-disc, manual	Colour	
Frame:			
Type	Twin spar, cast aluminium		
Wheel travel:			
Front	120 mm		
Rear	114 mm		
Tyre:			
Front	120/70ZR17M/C (58W)		
Rear	190/55ZR17M/C (75W)		
Caster (rake)	25°		
Trail	107 mm		
Steering angle (left/right)	27° / 27°		



Flat Ebony KRT
Winter Test Edition

The specifications mentioned here apply to and have been achieved by production models under standard operating conditions. We intend only to give a fair description of the vehicle and its performance capabilities but these specifications may not apply to every machine supplied for sale. Kawasaki Heavy Industries, Ltd. reserves the right to alter specifications without prior notice. Equipment illustrated and specifications may vary to meet individual markets.

Kawasaki Technology - Click on the Icon to view more information



Simply the Fastest on the Track

- Refined In-Line Four delivers 147.1 kW (200 PS)
- Max power maintained while meeting Euro 4 regulations
- Strong acceleration on corner exits
- Electronic Throttle Valves: Precise control of intake airflow
- Titanium exhaust system
- Specially Designed Marchesini Forged Wheels
- High Performance Tyres
- Special "RR" Features



Refined Track-focused 998 cm³ liquid-cooled, In-line Four

Offering the same blend of high power and manageability, smooth power deliver facilitates getting back on the gas, while updates deliver a stronger low-mid range for quicker acceleration out of corners on the track. Significant feedback from Kawasaki's factory superbike ensures the engine's immense power was maintained while meeting Euro 4 regulations.



Bosch IMU (Inertial Measurement Unit)

The Ninja ZX-10RR compact IMU operates in 6 DOF (degrees of freedom): 5 measured + 1 calculated. Combined with Kawasaki's proprietary dynamic modelling program, input from the IMU enables even more precise chassis orientation awareness, the key to bringing Kawasaki's electronics to the next level.

The use of Bosch's compact IMU allows an additional layer of precision to be added to the already high-level S-KTRC, KLCM and KIBS. A new cornering management function uses KIBS and S-KTRIC to assist riders in tracing their intended line through the corner (ABS models only).



Instrumentation

The centrepiece of the Ninja ZX-10RR's instrument panel is the highly visibly LED-backlit bar-graph tachometer - a mass-production first when introduced on the 2011 model. Additional functions on the multi-function meter include: gear position indicator, odometer, dual trip meters, average fuel consumption, instant fuel consumption, Power Mode (3 modes), S-KTRC (5 modes + OFF), low fuel indicator, Economical Riding Indicator, water/intake air temperature and a host of indicator lamps.

Aluminium twin-spar frame

Geometry care of a steering head moved closer to the rider, and a longer swingarm put more weight on the front for increased corner entry stability and confidence on the circuit.

Swingarm with optimised rigidity

Designed using Kawasaki's advanced dynamic rigidity analysis and a from-the-outside-in approach, swingarm with optimised rigidity contributes to nimbler handling



Aerodynamic bodywork

Large upper cowl cuts through the air more efficiently, and offers the rider greater wind protection, making it easier to shift position for corner entry when riding on the track



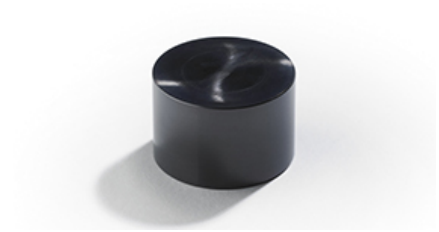
WSB Ready Cylinder Head

A number of changes offering enhanced performance and increased reliability came from feedback from Kawasaki's racing efforts in the Superbike World Championship facilitate converting the Ninja ZX-10RR into a race machine. Modified cylinder head provides the clearance to accommodate race-kit high-lift cams.



High Rigidity Crankcases

Reinforced, high-rigidity crankcase offers increase reliability and performance for a race-tuned engine. The connecting passageways between the cylinders are narrower and wall thickness increased in that area.



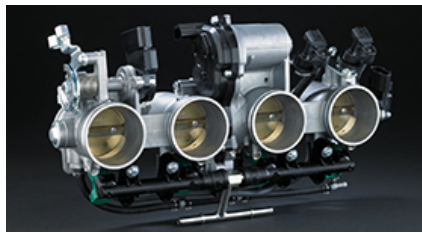
DLC Coated Tappets

Tappets based on feedback from Kawasaki's WSB racing efforts feature a DLC (Diamond-Like Carbon) coating, which facilitates mid/long-distance engine break-in, and offers reduced mechanical loss and increased performance for a race-tuned engine (i.e. tuned for high performance).



Light, Strong Pistons

Short pistons with high performance crowns are designed to handle the loads of the powerful engine. The light piston's contribute to excellent engine response. Further, the pistons are made from a special material with superb heat resistance that also offers excellent durability and toughness. Finally, a dry film lubricant coating on the piston skirts reduces friction at low rpm and helps with the piston bedding-in process.



Electronic Throttle Body

Kawasaki's fully electronic throttle actuation system enables the ECU to control the volume of both the fuel (via fuel injectors) and the air (via throttle valves) delivered to the engine. Ideal fuel injection and throttle valve position results in smooth, natural engine response and the ideal engine output. The system also makes a significant contribution to reduced emissions. The simple system enables more precise control of S-KTRC, and allows implementation of new electronic systems like KLCM and Kawasaki Engine Brake Control. Throttle valve diameter is 47 mm.



Light Crankshaft

Crankshaft has a low moment of inertia. This is one of the most significant changes brought about by feedback from Kawasaki's WSB factory team. Benefits the bike's overall performance: acceleration, deceleration and cornering are all improved. Engine response is improved as the engine is able to spin up more quickly. Reducing the moment of inertia offers handling benefits as well.



Close Ratio Transmission/Back-torque Limiter

The Ninja ZX-10RR's gear ratios were idealised for circuit riding. Short ratios for second through to sixth gears (especially the closer first, second and third gears) offer strong low-mid range acceleration for quicker corner exits. The closer ratios also contribute to more stable downshifting. Easily adjustable back-torque limiting clutch facilitates smooth downshifts. This highly acclaimed feature is one of the main contributors to the rear's stable composure under hard braking.



RR Engine Covers

The Ninja ZX-10RR features black engine covers to enhance the "RR's" race-ready appearance.



Exhaust System

Exhaust header pipes, formed from heat-resistant titanium alloy, have almost the same length and diameter as their race-use counterparts. (This feature makes it easier for riders to increase exhaust performance (for track applications) without having to replace the entire exhaust system.) Connector pipe joins headers 3 and 4, contributing to smooth engine response. Header collectors (4-2 sections) are hydroformed, resulting in a simple, lightweight construction.



Horizontal Back-link rear suspension

Revised set-up on the high-performance Showa BFRC lite rear shock to suit the new Pirelli tyres and single-seat specifications.



Multi Function Mode Selector

The choice of Power Mode (3 modes), S-KTRC (5 modes + OFF, KQS, KLCM, KEBC functions) are controlled using a multi-function button located at the left handle.



Optimised Suspension Settings

Revised to match the Ninja ZX-10RR's single-seat specification and new wheels and tyres, new front and rear suspension settings ensure smooth weight transfer during deceleration and acceleration on the circuit. Pitching is kept at a manageable level, resulting in composed behaviour. Complementing the new Pirelli tyres, the suspension settings contribute to the bike's quicker lap times. (Because these changes were accomplished by simply revising initial pre-set positions ? a testament to the high performance offered by the Showa Balance Free Front Fork and BFRC lite rear shock ? the same changes can be made on standard Ninja ZX-10R models.)



Aluminium Swingarm

Taking a from-the-tyres-inward approach, Kawasaki's dynamic modelling program (a comprehensive application the magic formula tyre model) was employed to determine the stresses that would be placed on the swingarm when the tyres are used to their full potential on the circuit. Then advanced dynamic rigidity analysis was used to precisely determine the necessary wall thickness and size to deliver the ideal lateral and torsional rigidity. The swingarm's optimised torsional rigidity contributes to the bike's nimbler handling.

A long swingarm contributes to the weight on the front. The benefits can be felt during braking, turn-in and when flicking the bike from one side to the other.



Enhanced Chassis Orientation Awareness

The strength of Kawasaki's cutting-edge electronics has always been the highly sophisticated programming that, using minimal hardware, gives the ECU an accurate real-time picture of what the chassis is doing. Kawasaki's proprietary dynamic modelling program makes skilful use of the magic formula tyre model as it examines changes in multiple parameters, enabling it to take into account changing road and tyre conditions. The use of Bosch's compact IMU allows an additional layer of precision to be added to the already high-level S-KTRC, KLCM and KIBS (ABS models only).



High-performance Brembo Brake System

A pair of massive ?330 mm Brembo semi-floating discs with a thickness of t5.0 mm deliver superb braking force. The stainless steel rotors offer high rigidity and contribute to excellent brake feel. To further improve the Ninja ZX-10RR's corner entry performance on the circuit, a high-spec Brembo front brake system was implemented. The Brembo system ? very similar to the system used on the Ninja H2R ? includes the best components available for a mass-production model. Special tuning at the Brembo factory ensures that all play has been removed from the system, so that when the brakes are called for, they respond immediately.



High Quality Rear Brake

At the rear a Brembo 220 mm diameter disc is slowed by a single-piston caliper. The disc's round shape complements the round shape of the front Brembo discs. Steel-braided line is used for the rear brake as well, contributing to greater feel.



KLCM (Kawasaki Launch Control Mode)

Designed to assist racers by optimising acceleration from a stop, KLCM electronically controls engine output to prevent wheelspin and minimise wheelies when launching. Riders can choose from three modes, each offering a progressively greater level of intrusion. Each



KTRC (Sport-Kawasaki Traction Control)

Hybrid predictive/feedback-type evolution of the highly sophisticated traction control system helps riders push harder by maximising acceleration. 5 modes enable expert riders to get even more serious enjoyment on the circuit. With the addition of the IMU, S-KTRC changes

mode allows the rider to launch from a stop with the throttle held wide open.

from a purely predictive system to one that also incorporates feedback. The new hybrid predictive/feedback system offers even more precise management to help an even greater range of riders experience riding at the limit. The 5 DOF input from the IMU (plus the 6th calculated by the ECU) complements the numerous parameters monitored by S-KTRC system.



Kawasaki Engine Brake Control

The Kawasaki Engine Brake Control system allows riders to select the amount of engine braking they prefer. When the system is activated (by selecting 'L' (Light) in the 'KEBC' settings), the engine braking effect is reduced, providing less interference when riding on the circuit. When activated, the 'KEBC' indicator light on the instrument cluster will be illuminated.



KQS (Kawasaki Quick Shifter)

Updated KQS system allows both clutchless upshifts and downshifts, contributing to race-ready performance. (On the standard model, clutchless downshifts are only possible with the race kit ECU.) Designed for effective sport riding, KQS can also be used on the street at rpm above 2,500 rpm.



Öhlins Electronic Steering Damper

Settings are matched to Ninja ZX-10RR handling characteristics. Öhlins' special twin-tube design ensures stable damping performance even under circuit-riding conditions, and enables superb kickback absorption. The damper's high precision construction and use of an integrated clamp help minimise friction as the damper piston slides back and forth. Initial motion is very smooth as a result. Steering damper body is finished with a highly scratch-resistant alumite¹ coating.



Aluminium Twin Spar Frame

The front wheel is close to the rider helping to place weight on the front. The race bred front-end feeling contributes to increased stability and confidence on corner entry and when flicking the bike from one side to the other.

Reversible offset collar (race kit parts) allows the steering stem position to be adjusted +/-4 mm forward/backward from the standard position. This adjustability allows riders to set up the bike to suit track or riding style.

Reversible offset collar (race kit part) allows the swingarm pivot position to be adjusted +/-2 mm up/down from the standard position. This adjustability allows riders to set up the bike to suit track or riding style.



High Performance Tyres

The Ninja ZX-10RR is fitted with Pirelli Diablo Supercorsa SP tyres. The high-performance tyres greatly contribute to quicker lap times.



Aerodynamic Bodywork

Large upper cowl ensure the aerodynamic performance of the machine-rider package, offers a low cdA (coefficient of drag). The wind protection enables riders to change positions easily as they set up for corner entry when riding on the track.



Ergonomics

Riding position enables both circuit and street



Purposeful, Racy Styling

The Ninja ZX-10RR's purposeful styling is



Headlights

Compact line-beam headlamp units match the

riding, contributing to controllability and rider confidence. With the handlebars close to the rider, the riding position is compact, offering riders greater flexibility to choose their position while riding.



Tank Pad

High-quality sculpted rubber tank pad protector, provided standard, protects the finish of the paint on the fuel tank. Fuel tank offers an excellent ergonomic fit with the rider's forearm and inner thigh when cornering.

distinct, but easily recognisable. The upper cowl and large screen, and voluminous rear section give the compact, mass-forward package a silhouette closer in appearance to Kawasaki's factory superbike machine. High-quality fit and finish and superb attention to detail ensure the bike looks equally impressive up close.



High Efficiency Ram Air Intake System

Ram Air intake is positioned close to front of the bike (where air pressure is highest), contributing to airbox filling efficiency. Large 10 L airbox allows a greater volume of intake air to be supplied to the engine. Maximum Power with Ram Air is 154.4 kW (210PS) /13,000 rpm.

upper cowl design and contribute to bike's imposing image. LED-type (3-bulb) position lamp located at the top of the Ram Air duct is highly visible and contributes to the aggressive styling package. Cowl-mounted mirrors feature integrated LED-type (2-bulb) turn signals. The turn signals are connected via couplers, facilitating mirror removal for trackday use.



Windscreen

Windscreen is fully supported by the upper cowl. The wide screen offers excellent wind protection in the shoulder area, and with the additional support reduces vibration at higher speeds. Intakes at the side of the windscreen allow wind to pass through, helping to prevent negative pressure build-up in the cockpit to reduce helmet buffeting.



Special "RR" Touch

Specially "RR" wheels feature a 7-spoke multi-directional forged aluminium wheels jointly developed with Marchesini contribute to lighter handling especially when changing direction. They offer a balance of high rigidity and a significantly reduced moment of inertia (thanks to a design that centralises mass at the hubs). Their machined finish contributes to their high-quality appearance. (These Marchesini wheels can also be fit on standard Ninja ZX-10R models. Parts necessary for compatibility, such as front brake discs and speed sensor ring, will be available via a kit.)



Special "RR" Touch

Ignition key adorned with a "RR" logo adds another special touch.



Special "RR" Touch

Each unit is individually numbered and features a stamped serial number plate on the upper triple clamp. "RR" logo stamped/engraved into the pulser cover helps distinguish the Ninja ZX-10RR from the standard model. Ignition key adorned with a "RR" logo adds another special touch.



Special "RR" Touch

With being race-ready a priority, the Ninja ZX-10RR is designated a single-seat model. Single-seat cover is fitted standard, contributing to the bike's racy image. The KRT Winter Test snowflake logo on the cover matches the one on the windscreen.



KRT Winter Test Logo

The KRT Winter Test snowflake logo is on the front windscreen with Kawasaki Racing Team Logo on the front fender and on the top of the fuel tank.



Titanium Muffler

Lack of passenger footpeg stays and a lightweight silencer stay contribute to a weight savings of approximately 1 kg versus the standard model. Forming the silencer from titanium alloy helps reduce weight and contributes to mass centralisation.



KIBS, Kawasaki Intelligent anti-lock Brake System

KIBS, Kawasaki's supersport-grade high-precision brake management system, uses high-precision control to regulate brake pressure during sport riding. KIBS is a multi-sensing system, using the input from numerous sources. In addition to front and rear wheel speed sensors (standard for any ABS system), KIBS also monitors front caliper hydraulic pressure and various information from the engine ECU (throttle position, engine speed, clutch actuation and gear position).



Genuine Accessories

Accessories available for the new Ninja ZX-10RR include: Knee pads, Sliders, Axle sliders and Rear stand lugs.



24 Month Warranty

A 24 Month Unlimited Kilometre Warranty is standard on the 2017 Ninja ZX-10RR (ABS KRT Winter Test Edition).