



## SPECIFICATIONS

EX650A8F

Engine Type	4-Stroke, Liquid-Cooled, DOHC, 4 Valve Cylinder Head, Parallel Twin
Displacement	649 cc
Bore & Stroke	83.0 x 60.0 mm
Maximum Torque	48.5 lb-ft @ 7,000 rpm
Compression Ratio	11.3:1
Carburetor	DFI with Keihin 38mm Throttle Bodies (2)
Transmission	6-Speed with Positive Neutral Finder
Final Drive	O-Ring Chain
Rake/Trail	25°/4.2 in.
Front Wheel Travel	4.7 in.
Rear Wheel Travel	4.9 in.
Front Tire Size	120/70-17
Rear Tire Size	160/60-17
Wheelbase	55.5 in.
Front Suspension	41mm Hydraulic Telescopic Fork
Rear Suspension	Offset Laydown Single Shock
Front Brake Type	Dual 300mm Petal Disc with 2-Piston Caliper
Rear Brake Type	Single 220mm Petal Disc
Fuel Tank Capacity	4.1 gal.
Seat Height	31.1 in.
Dry Weight	393 lb.
Colors (3)	Sunbeam Red Lime Green Metallic Diablo Black
Warranty	12 months
Good Times™ Protection Plan	12, 24, 36 or 48 months

(Specifications subject to change without notice.)  
Ask about the Riders of Kawasaki (ROK) Club and the Good Times™ Credit Plan.

(KP) = See Kaw-Pedia section for more details.

\* = Changes from previous model year.

The Ninja® 650R is designed to be fun for a wide range of riders. The parallel twin cylinder engine pumps out plenty of smooth, responsive power while its compact size allows the entire machine to be made smaller and narrower for light, nimble handling. While the Ninja 650R looks like no other Kawasaki Ninja motorcycle due to its distinctive bullet-tipped muffler mounted below the engine, stylish trellis frame and laid-down single rear shock that gracefully flows into the frame lines, it shares triple petal brake discs and 6-spoke wheels with its race-bred Ninja ZX™-6R and ZX™-10R siblings.

### Key Features:

- ◆ Aggressive Ninja Styling
- ◆ Compact Size and Weight
- ◆ Low Seat Height
- ◆ Powerful Twin-Cylinder Engine

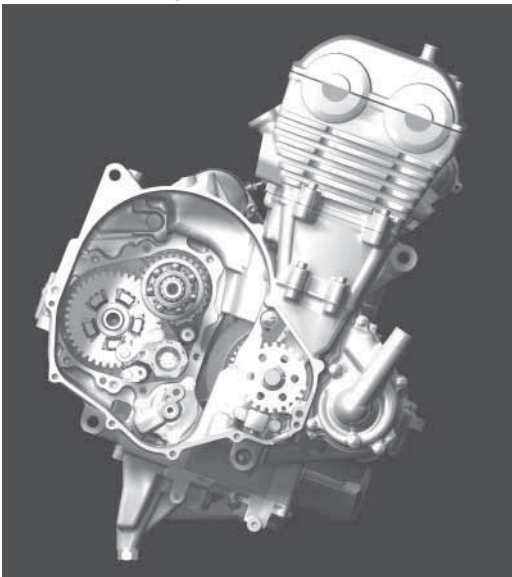
### ◆ 649cc Twin-Cylinder, DOHC Engine

- Parallel twin engine is the most compact in its category. The engine is considerably smaller than that of the Ninja 500 and helps reduce the

dimensions of the entire motorcycle to keep it small and nimble.



- Tuned to deliver smooth, responsive power in the low- to mid- rpm range with exceptional roll-on response for negotiating city traffic.
- Triangular crank and transmission shaft layout makes the engine very short from front to back, a semi-dry sump<sup>(KP)</sup> oil system reduces overall engine height, while the narrow pitch of the chrome composite<sup>(KP)</sup> plated aluminum cylinders helps reduce engine width.



- Muffler with 3-way catalyzer and bullet-tip opening is mounted below the engine to help lower the center of gravity and aid weight centralization.
- 180-degree crankshaft plus balancer shaft for extremely smooth engine operation.
- Oil jets in the connecting rod big ends spray oil on the undersides of the pistons to aid cooling.

## Liquid Cooling<sup>(KP)</sup>

- Maintains consistent engine temperatures for long engine life and sustained power during hard use.
- Allows closer engine tolerances for more horsepower.
- Coolant is routed through the engine cases to reduce external hoses.

## Digital Fuel Injection

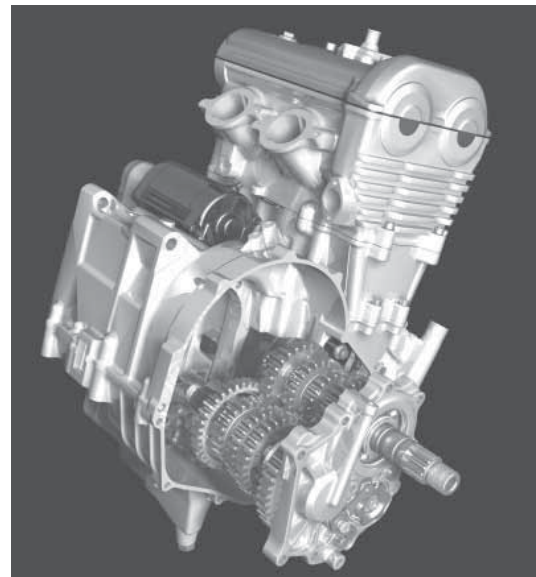
- 38mm Keihin throttle bodies feature sub-throttle valves<sup>(KP)</sup> for optimum performance and rideability. The sub throttles, located behind the main throttle valves, are controlled by the ECU so that the EFI system has more precise throttle response, similar to a constant-velocity carburetor.
- Precise fuel injection plus exhaust catalyzer significantly reduce emissions.
- Automatic fast idle system makes starting and warm-up easy.

## Digital Ignition<sup>(KP)</sup>

- Digital timing advance enhances power.
- Spark plug mounted “stick” ignition coils are compact and help reduce weight.

## 6-Speed Transmission

- Cassette-style transmission puts the transmission shafts and shift drum into a compact layout that is easily removed as a single unit from the cases for easier maintenance.



### Trellis Frame

- High tensile steel trellis frame is small and light.
- Designed using 3-dimensional computer analysis to achieve the optimum stiffness balance for better handling.
- Narrow at the knees and feet for rider comfort and control.



### Single-shock Rear Suspension

- Braced swingarm and offset, lay down single rear shock complement the frame design to create an integrated line flowing from the steering head to the rear hub.
- Short, compact frame and engine design allows the swingarm to be longer, which helps improve overall handling.

### Triple Petal Design Brake Discs

- Petal design offers improved cooling and warp resistance.
- Same design found on the Ninja ZX-6R and ZX-10R supersports machines.



### 6-Spoke Wheels

- Also found on the ZX-6R and ZX-10R, the 6-spoke design requires much less material between spokes so that the rim thickness is thinner and overall wheel weight is reduced.

### ◆ Confidence-Inspiring Cockpit

- Low, narrow seat combined with the slim overall design allows riders to firmly plant both feet on the ground when stopped.
- Carefully designed ergonomics result in a natural, comfortable riding position.
- Textured seat cover helps keep the rider planted.

### Bodywork

- Stylish full fairing with aerodynamic windscreen cuts through the wind and helps protect the rider from the elements.
- Integrated front turn signals with clear lenses enhance the appearance.

### Authentic Kawasaki Accessories

- See the current applicable Kawasaki accessory catalog or [www.kawasaki.com](http://www.kawasaki.com) for all of the latest Authentic Kawasaki Accessories available for this model.