

## 2018 HONDA CB125R

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Model updates: *Honda reveals a stylishly stripped-back new entry level 'sports naked' aimed squarely at style-conscious younger riders. The lightweight CB125R features a responsive liquid-cooled engine, six speed gearbox plus brand new chassis comprised of tubular/pressed steel frame, 41mm USD forks, radial-mount 4-piston front caliper and floating disc plus preload adjustable monoshock. An enhanced specification includes full LED lighting, LCD display and IMU-based ABS.*

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### **1. Introduction**

Take motorcycling down to its bare essentials and often less equals more. Which, for anybody considering his or her first motorcycle is a good thing: the fundamentals of an easy-to-ride machine, with engaging real-world engine performance and super-agile handling are all you need. Wrap those fundamentals in a distinctive new style, and add a host of premium specifications, and the result is a great place from which to begin a two-wheeled career.

Honda understands this formula well, and for 2018 has created the CB125R. Part of a distinctive new family using Honda's new 'Neo Sports Café' styling – which includes the CB1000R and CB300R, both new for 2018 – it distills all of the excitement of two wheels into a compact, lightweight form.

Fun to ride, a joy to own and representing a bold new direction for Honda's entry level machines, it has many of the premium features found on its larger capacity siblings. The CB125R injects a freshly new style on to Europe's city streets with a minimalist, bare-boned attitude.

### **2. Model Overview**

The CB125R may possess big bike looks but it weighs just 125.8kg (wet), making it an extremely easy machine to manage. Its free-revving liquid-cooled single-cylinder engine delivers strong low-to mid-range acceleration and it offers a unique new presence, aimed to engage and inspire young riders.

A brand new frame mixes pressed and tubular steel; it both looks good, and provides a tuned rigidity balance that gives great feedback. The CB125R also features high specification 41mm USD forks, preload adjustable monoshock, radial-mount 4-piston front caliper, IMU-based ABS and full-size Dunlop radial tyres.

Valuable features more usually found on much larger machines such as the tapered aluminium handlebar, LCD instrument display and full LED lighting, exude quality and add to the pride of ownership.

### **3. Key Features**

#### **3.1 Chassis & Styling**

- ***Industrial minimal styling makes bold visual impact***
- ***Lightweight frame mixes tubular and pressed steel***
- ***41mm USD front forks and irregular-cross section steel swingarm***
- ***Radial-mount 4-piston caliper and hubless 296mm floating front disc***
- ***ABS works through IMU (Inertial Measurement Unit)***
- ***Full LED lighting and LCD instrumentation***

The CB125R's styling is unique to the machine, and a deliberate reduction, putting the machine's blacked-out hardware on display. It follows the 'Neo Sports Café' design language of the new CB1000R: minimalist and brutally neat, it brings a new harder-edged attitude to Honda's entry level range. The cutaway tail unit is minimalist in the extreme, and holds the nylon rear mudguard mount; both rider and pillion footpeg hangers are aluminium.

The CB125R's frame – which also helps underpin its minimalist style – is constructed with tubular and pressed steel; the swingarm is manufactured from steel plate, irregularly shaped in cross-section. Both are designed to achieve high longitudinal rigidity and control torsion from wheel deflection *without* excess rigidity or weight.

The chassis' core strength is anchored by the pressed steel swingarm pivot plates and swingarm, allowing the tubular steel lattice frame to deliver agile handling with stability and feedback; rake and trail are set at 24.2°/90.2mm. High specification 41mm USD forks also complement the CB125R's handling, with compliant damping and supple spring rate.

The single rear shock offers 5-step spring preload adjustment. A 51.6% front/48.4% rear weight bias provides a positive feel for front-end grip and easy steering which is also helped by the low, 125.8kg wet weight and compact 1345mm wheelbase.

The aluminium fat bar-style handlebars turn through 40° and the 2.3m turning circle guarantees easy passage in jammed city traffic. Seat height is 816mm.

The front 296mm hubless floating disc is worked by a radial-mount Nissin 4-piston caliper, the rear 220mm disc a single-piston caliper; both are modulated by 2-channel ABS. The high specification system works through an IMU (Inertial Measurement Unit) to give precise front to rear distribution of ABS operation depending on the vehicle behaviour. The 150/60R-17 radial rear tyre is matched to a 110/70R-17 radial front.

A thin (23.5mm) lightweight (230g) full function LCD instrument display provides speed, engine rpm, fuel level and gear position, with warning lights arrayed across the top. Full LED lighting – including indicators – adds a further premium feel and contributes to mass centralisation. The headlight uses a dual bar light signature, upper for low beam and lower for high beam and the taillight is the thinnest ever mounted on a Honda motorcycle.

The 10.1L fuel tank is hidden underneath an angular cover and shrouds and houses an aircraft-style filler cap. With fuel economy of 48.4km/l (WMTC mode), the CB125R can cover over 480km from full.

### **3.2 Engine**

- ***Enjoyable single-cylinder SOHC 2-valve engine***
- ***9.8kW peak power/10Nm peak torque***
- ***PGM-FI fuel injection***
- ***6-speed gearbox***

The CB125R's compact 124.7cc SOHC 2-valve liquid-cooled single cylinder engine (derived from the CBR125R) is designed to be responsive in real-world road riding conditions. Peak power of 9.8kW arrives @ 10,000rpm, with peak torque of 10Nm delivered @ 8,000rpm.

Bore and stroke is set at 58 x 47.2mm, with compression ratio of 11:1. PGM-FI fuel injection delivers crisp throttle response across the rev range. The exhaust is underslung and exits through a dual-chamber muffler.

The 6-speed gearbox offers an even spread of gears for strong low to mid-range acceleration; the CB125R will reach 50km/h in 11.4s.

## **4, Technical Specifications**

|  |   |
|--|---|
| <b>ENGINE</b>                          |   |
| Type                                   | Liquid-cooled 4-stroke 2-valve SOHC single cylinder |
| Engine Displacement (cm <sup>3</sup> ) | 125cc   |
| No. of Valves per Cylinder             | 2   |
| Bore and Stroke (mm)                   | 58mm x 47.2mm                                       |
| Compression Ratio                      | 11.0:1  |
| Max. Power Output                      | 9.8kw/10000rpm                                      |
| Max. Torque                            | 10Nm/8000rpm  |
| Oil Capacity                           | 1.3L  |
| <b>FUEL SYSTEM</b>                     |   |
| Carburation                            | PGM-FI electronic fuel injection                    |
| Fuel Tank Capacity                     | 10.1L   |

|                          |                                   |
|--------------------------|-----------------------------------|
| Fuel Consumption         | 48.4km/L (WMTC Mode)              |
| <b>ELECTRICAL SYSTEM</b> |                                   |
| Starter                  | Electric                          |
| Battery Capacity         | YTZ6V 12V 5Ah MF                  |
| ACG Output               | 250W/5000rpm                      |
| <b>DRIVETRAIN</b>        |                                   |
| Clutch Type              | Wet, multiplate with coil springs |
| Transmission Type        | 6-speed                           |
| Final Drive              | O-ring sealed chain               |
| <b>FRAME</b>             |                                   |
| Type                     | Inner Pivot Diamond Frame         |
| <b>CHASSIS</b>           |                                   |
| Dimensions (LxWxH)       | 2015mm x 820mm x 1055mm           |
| Wheelbase                | 1345mm                            |
| Caster Angle             | 24.2°                             |
| Trail                    | 90.2mm                            |
| Seat Height              | 816mm                             |
| Ground Clearance         | 140mm                             |
| Kerb Weight              | 126kg                             |
| Turning radius           | 2.3m                              |
| <b>SUSPENSION</b>        |                                   |
| Type Front               | 41mm telescopic inverted fork     |
| Type Rear                | Single-damper                     |
| <b>WHEELS</b>            |                                   |
| Rim Size Front           | 17M/C x MT3.00                    |
| Rim Size Rear            | 17M/C x MT4.00                    |

|                                    |                                       |
|------------------------------------|---------------------------------------|
| Tyres Front                        | 110/70R17M/C 54H                      |
| Tyres Rear                         | 150/60R17M/C 66H                      |
| <b>BRAKES</b>                      |                                       |
| ABS System Type                    | Front & rear independent ABS with IMU |
| <b>INSTRUMENTS &amp; ELECTRICS</b> |                                       |
| Instruments                        | LCD Display                           |
| Headlight                          | Lo:13W Hi: 8.8W (LED)                 |
| Taillight                          | Stop: 2.5W Tail: 0.4W (LED)           |

All specifications are provisional and subject to change without notice

\*\* Please note that the figures provided are results obtained by Honda under standardised testing conditions prescribed by WMTC. Tests are conducted on a rolling road using a standard version of the vehicle with only one rider and no additional optional equipment. Actual fuel consumption may vary depending on how you ride, how you maintain your vehicle, weather, road conditions, tire pressure, installation of accessories, cargo, rider and passenger weight, and other factors.