

HONDA

Press Information

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21YM HONDA CB125R



Model updates: Honda's premium Neo Sports Café 125 gets a power and torque boost from an all-new DOHC 4V engine, improving performance across the board. It also receives a major suspension upgrade – high-quality 41mm Showa's 'Separate Function' Big Piston (SFF-BP) USD forks, the first 125cc motorcycle in the world to do so.

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Contents:

1 Introduction

2 Model overview

3 Key features

4 Technical specifications

1. **Introduction**

When embarking on a two-wheeled career, there are certain fundamentals that every rider looks for from their first motorcycle: an easy-to-ride chassis, with engaging real-world engine performance, and super-agile handling. Wrap those fundamentals, however, in distinctive, classy styling and add a host of premium specifications, and the result can be an extra special machine with which to begin a two-wheeled career.

It was for new riders looking for this kind of package that Honda introduced the all-new CB125R in 2017. The smallest member of Honda's minimalist, bare-boned 'Neo Sports Café' family, the CB125R was launched alongside the CB300R and the flagship CB1000R, and represented a bold new, premium addition to the ranks of Honda's entry level machines.

Now, for 2021, the CB125R gets a brand-new engine and major front suspension upgrade, keeping it at the head of a competitive field, and at the top of many young riders' wish list.

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2. **Model Overview**

While the attention-grabbing styling of the CB125R is unchanged, its new DOHC four valve engine delivers 1.2kW more power and 1.2Nm more torque – with improved response throughout the rev-range.

And, in a world's first for a 125cc motorcycle, 41mm Showa Separate Function Big Piston (SFF-BP)* USD forks - the same unit fitted to the 21YM CBR650R and CB650R, with spring rate and damping changes - are now standard equipment.

The 21YM CB125R will be available in the following colour options:

Pearl Smoky Gray ****NEW for 2021****

Mat Gunpowder Black Metallic

Candy Chromosphere Red

Mat Jeans Blue Metallic

*Full name: Showa Separate Function front Fork Big Piston (SFF-BP)

3. **Key Features**

3.1 Engine

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- ***New DOHC, 4V liquid-cooled engine***
- ***An extra 1.2kW peak power, with 1.2Nm more peak torque***
- ***Full EURO5 compliance***

Originally derived from the CBR125R the SOHC, 2 valve engine of the 2018 CB125R was an effective powerplant, tuned for response in real-world situations.

For 2021 the CB125R gets its very own, new 125cc, DOHC 4V design and with it comes a power and torque boost – 11.0kW @ 10,000rpm and 11.6Nm @ 8,000rpm (from 9.8kW @ 10,000rpm and 10Nm @8,000rpm). Thanks to the extra power, top speed goes from 101km/h to 105km/h, with 0-200m covered in 11.3s. The gearbox remains six-speed.

Bore and stroke is set at 57.3 x 48.4mm, with compression ratio of 11.3:1 as opposed to the previous engine's 58 x 47.2mm and 11:1. PGM-FI fuel injection is fed through a revised inlet duct, air cleaner connector tube and resonator. As before, the exhaust is underslung and exits through a dual-chamber muffler.

The CB125R engine is fully EURO5 compliant.

3.2 Chassis

- **Now with 41mm Showa's Separate Function Big Piston (SFF-BP) USD forks**
- **Radial-mount 4-piston caliper and hubless 296mm floating front disc**
- **ABS works through Inertial Measurement Unit (IMU)**

Underpinning the CB125R's minimalism is its tubular and pressed steel construction lattice-style frame, which is unchanged for the 21YM update. 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 frame to deliver agile handling with stability and feedback; rake and trail are set at 24.2°/90.2mm.

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, 129.8kg wet weight and compact 1345mm wheelbase. Fat bar-style handlebars turn through 40° and the 2.3m turning circle guarantees easy passage in jammed city traffic. Seat height is 816mm.

41mm Showa Separate Function Big Piston (SFF-BP) USD forks are a major upgrade; this is the first time they've made an appearance on any 125cc motorcycle. A pressure separation damper in one fork tube and spring mechanism in the other deliver high damper performance and lighter weight. Together with the use of a larger sized piston the result is increased feel, bump absorption and control. The rear monoshock is spring preload adjustable.

The rest of the running gear remains unchanged; a 296mm hubless floating front 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.

3.3 Styling & equipment

- **Industrial minimal styling makes bold visual impact**
- **Full LED lighting and LCD instrumentation**
- **10.1L fuel tank gives 470km range**

The CB125R's styling is unique to the machine and also remains unchanged. It follows the unmistakable 'Neo Sports Café' design language of the CB1000R – minimalist retro styling with a very modern twist – and injects a harder-edged attitude to Honda's entry level range. The cutaway tail unit is minimalist in the extreme and holds the rear mudguard mount, which moves from nylon to steel manufacture. Both rider and pillion footpeg hangers are aluminium.

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 45.5km/l (WMTC mode), the CB125R can cover over 455km from full.

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4. Technical Specifications

ENGINE	
Type	Liquid-cooled 4-stroke 4-valve DOHC single cylinder
Engine Displacement (cm ³)	124.9cc
No. of Valves per Cylinder	4
Bore and Stroke (mm)	57.3mm x 48.4mm
Compression Ratio	11.3:1
Max. Power Output	11.0kW @ 10,000rpm
Max. Torque	11.6Nm @ 8,000rpm

Oil Capacity	1.5L
FUEL SYSTEM	
Carburation	PGM-FI electronic fuel injection
Fuel Tank Capacity	10.1L
Fuel Consumption	45.5km/L (WMTC Mode)
ELECTRICAL SYSTEM	
Starter	Electric
Battery Capacity	YTZ6V 12V 5Ah MF
ACG Output	180W/5000rpm
DRIVETRAIN	
Clutch Type	Wet, multiplate with coil springs
Transmission Type	6-speed
Final Drive	O-ring sealed chain
FRAME	
Type	Inner Pivot Diamond Frame
CHASSIS	
Dimensions (LxWxH)	2015mm x 820mm x 1055mm
Wheelbase	1345mm
Caster Angle	24.2°
Trail	90.2mm
Seat Height	816mm
Ground Clearance	140mm
Kerb Weight	130kg
Turning radius	2.3m
SUSPENSION	
Type Front	41mm (SFF-BP) USD forks

Type Rear	Single-damper with preload adjustment
WHEELS	
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
BRAKES	
ABS System Type	Front & rear independent ABS with IMU
Type front	296mm hubless floating disc. Radial-mount Nissin 4-piston caliper
Type rear	220mm single disc a single-piston caliper
INSTRUMENTS & ELECTRICS	
Instruments	LCD Display
Headlight	LED
Taillight	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.