2018 HONDA NC750X

Press release date: 6th November 2017
Model updates: *Honda's ultimate commuting motorcycle wears a tough, adventure look and features a torque-laden parallel twin engine, long travel suspension, internal storage compartment, LED lighting and LCD instruments with personalised colour options. Two Level Honda Selectable Torque Control (HSTC) is also now fitted as standard. A 35kW version is available for A2 licence holders.*

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1. Introduction

Since its introduction in 2012* the NC750X has enjoyed consistent popularity throughout Europe, making it a permanent fixture in the ranks of Europe's top ten best selling motorcycles.

Reasons for its success are several: its ground-breaking, torque-laden twin-cylinder engine, which sips fuel while punching the bike forward in the low-to-mid rpm ranges, the relaxed, roomy riding position, wide handlebars and comfortable seat and riding position, the compliant, long-travel suspension and distinctive adventure styling all play their part.

The storage compartment (where the fuel tank would normally be) is capable of holding a full-face helmet and Honda's unique DCT (Dual Clutch Transmission) that over a third of customers choose are further features that set the NC750X apart.

As a total package, the NC750X's qualities combine to create a motorcycle which functions superbly. For all types of riding – commuting, touring and simply riding for pleasure – it is a motorcycle with compelling all-round appeal.

*As the NC700X.

2. Model Overview

The NC750X has an adventure-oriented edge, with comfort for rider and pillion. A large windscreen gives great wind protection and there's plenty of room in the storage compartment positioned where the fuel tank is normally situated, which also has a utility rail built onto its lid. The LED headlight and taillight add class and the instruments – with variable colour display – can be personalised and present a premium image to the rider.

The rear shock absorber features a spring preload adjustment system while Showa Dual Bending Valves (SDBV) front forks are fitted up front.

The NC750X's 745cc twin cylinder engine puts out strong low-to-mid range torque, delivering strong acceleration from very low rpm. It returns 28.6km/l (WMTC mode)

and now features 2 Level Honda Selectable Torque Control (HSTC), which can also be turned off.

The NC750X's DCT features a natural 'feathered' clutch feel around an on/off throttle. In addition to the most fuel efficient automatic ***D*** Mode, for sportier riding there are 3 levels of ***S*** mode.

Also available for 2018 is a 35kW version allowing A2 licence holders to enjoy the NC750X. This new version can easily be converted to a full power version at the appropriate time at a Honda dealer.
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3. Key Features

3.1 Styling & Equipment

- ***Adventure styling provides comfort for rider and pillion***
- ***22L storage area will take a full-face helmet***
- ***Negative LCD instrument display can be personalised***
- ***LED headlight and taillight***
- ***Wave key with Honda Ignition Security System (HISS)***

A lot of the experience of riding a motorcycle comes down to feeling, and guiding the NC750X's design is the phrase *'Sensual Performance.'* From the front the machine has a bold, adventurous identity with an LED headlight and running lights forming a unique impression.

The tall screen guides airflow around the rider's upper body and a central duct equalises pressure. Slits on the upper left and right side reduce wind noise. The side cowls and side covers create muscular lines; the svelte seat unit and clear-smoke LED taillight are underlined in a minimal manner by the exhaust muffler, further emphasising the mass-forward stance.

The storage area has a 22L volume and the lid exterior features rugged external rails – useful for mounting a tank bag. The lid's interior has four hooks to allow rubber straps to assist in organising luggage and make best use of all of the space.

Attractive instruments use a negative LCD display. Information includes odometer, trip meter, gear position, fuel efficiency and consumption gauges, (optional) heated grip temperature plus 3-stage ***S*** mode for the DCT model.

The colour of the rev-counter bar display can also be changed by the rider; a total of 9 options are available. It is also possible to have colours change according to gear selected, rpm range or (for the DCT version) riding mode.

ECO and ***SHIFT*** mode are further options when riding with the display set to a single colour or (on the DCT machine) the mode-dependent setting. ***ECO*** mode turns the display to light blue if riding with good fuel efficiency, and green if riding even more economically. ***SHIFT*** mode sees the colour change to orange if engine rpm exceeds a level pre-set by the rider.

A ‘wave’ key features the Honda Ignition Security System (HISS). If the ID chip embedded in the key and the ID in the Engine Control Unit (ECU) do not match, the engine will not start.

The NC750X is available in 5 colour options:

Matt Pearl Glare White
Candy Chromosphere Red
Matt Gunpowder Black Metallic
Glint Wave Blue Metallic

The range of genuine Honda Accessories include a specifically-designed new rear rack and knuckle guards to add integrated function and tough adventure style; 35L and 45L top boxes; 29L panniers; inner bags; centre stand; fog lights and fairing bars; 5-stage heated grips; U-lock and AC charging socket.

3.2 Engine

- ***40.3kW peak power/68Nm torque***
- ***35kW A2 licence version available***
- ***2 Level Honda Selectable Torque Control (HSTC) now standard***
- ***HSTC can also be turned OFF***
- ***Rpm cut raised by 900rpm to 7,500rpm***
- ***400km range possible from the 14.1L fuel tank***

The design of the NC750X’s liquid-cooled, SOHC 8-valve parallel twin-cylinder engine ensures punchy performance in the low-to-mid range. Its relatively long-stroke architecture and specially shaped combustion chambers combine with the high-inertial mass crankshaft to produce large amounts of effortless torque from very low rpm. Its forward-leaning position brings the centre of gravity down for optimum stability. Peak power is 40.3kW @ 6,250rpm with maximum torque of 68Nm @ 4,750rpm. For 2018, the rpm limit has been raised to 7,500rpm to allow natural use of the engine performance into a higher rpm range.

For A2 licence holders a 35kW version is now available, which can be easily converted to the full power version by a Honda dealer at the appropriate time. Equally, it will be possible to restrict the full power version to 35kW by a Honda dealer replacing the standard throttle body and remapping the ECU. In most riding situations the restriction of peak power is not noticeable and the 0-100m acceleration time is identical to the full power version.

Another addition to the NC750X for 2018 (both manual and DCT option) is Honda Selectable Torque Control (HSTC). It features 2 levels; Level 1 allows some rear wheel spin – on gravel or dirt for instance – while Level 2 provides confidence-inspiring traction on slippery roads. Level 2 is the default from ‘ignition on’, and a push of the button on the left handlebar changes the setting to Level 1. Pushing and holding the button turns HSTC off.

Twin balancers counteract vibration from higher rpm inertia, refining the engine yet still allowing the distinct ‘throb’ delivered by its 270° firing order. Bore and stroke is set at 80 x 77mm. By keeping the number of parts to a minimum, the engine is kept light, efficient and reliable and where possible components are made to do more than

one job; the camshaft drives the water pump, while one of the balancer shafts drives the oil pump.

A lightweight pentagon-shaped muffler uses two chambers joined by a hole-punched link pipe, which works with a final resonator chamber to create a deeply distinctive sound and exhaust pulse. The built-in catalyser has a two-layer structure for cleaner emissions.

The NC750X's engine is EURO4 compliant with CO_2 emissions of 81g/km; fuel consumption of 28.6km/l (WMTC mode) provides a 400km plus range from the 14.1-litre underseat fuel tank.

3.3 Dual Clutch Transmission

- ***Adaptive Clutch Capability Control gives natural feel***
- ***3 levels of sporty S mode***

Honda's DCT technology is now in its eighth year of production and gaining popularity year on year on all of the machines that feature it as an option. DCT uses two clutches: one for start-up and 1st, 3rd and 5th gears: the other for 2nd, 4th and 6th, with the mainshaft for each clutch located inside the other for compact packaging. Each clutch is independently controlled by its own electro-hydraulic circuit.

The DCT system features two automatic plus the ***MT*** mode for manual gear changes. The standard automatic ***D*** mode is for general or highway riding and maximum fuel economy. ***S*** mode – which shifts up and down at higher rpm than ***D*** mode for a sportier ride – gives three levels of sports performance.

Some riders prefer to ride higher gears, some lower and the three modes make it possible to tailor gearbox response to riding style. The selected level is stored, and acts as the default ***S*** Mode for subsequent rides. It is also displayed on the dash.

The DCT used by the NC750X features "Adaptive Clutch Capability Control" that manages the amount of clutch torque transmitted. This adds a natural 'feathered' clutch feel when opening or shutting off the throttle for a smoother ride. Further refinements include fast operation of the ***N-D*** switch on turning on the ignition and a control system in ***AT*** mode for gauging the angle of ascent or descent and adapting shift pattern accordingly.

3.4 Chassis

- ***Rugged steel diamond frame***
- ***Long travel 41mm Showa Dual Bending Valve front fork***
- ***Pro-Link rear suspension with preload adjustable shock absorber***
- ***320mm front disc and two-piston caliper/240mm single-piston rear***

The NC750X's rugged steel diamond frame delivers the high levels of rigidity required for agile, responsive handling in a variety of conditions. It's also ideal where space is at a premium, since it takes up very little volume but offers superb riding dynamics.

Rake is set at 27° with trail of 110mm, wheelbase of 1,535mm and front/rear weight distribution of 48/52. Kerb weight is 220kg (230kg DCT). Seat height is 830mm

The riding position is upright and neutral, with a higher viewpoint for enhanced hazard perception.

Another advantage of this adventure-style riding position is great low-speed control – combined with the low centre of gravity and generous steering lock, the result is exceptional low-speed handling and balance.

41mm telescopic forks feature 153.5mm travel and use Showa Dual Bending Valves, with ratios optimised for both compression and rebound damping. This allows the generation of damping force in precise proportion to piston speed – from the low speed range – improving ride quality and comfort. Increased compression damping provides more progressive firmer suspension response and helps reduce dive under heavy braking. Grey Alumite caps add a finishing touch.

The rear monoshock features a spring preload adjuster system and has 150mm travel. It operates through Pro-Link that offers an optimised balance of a soft initial stroke, for dealing with low-speed bumps, together with excellent control.

Up front the 320mm wavy disc and two-piston brake caliper deliver plenty of easy-to-modulate stopping power, complemented by the rear 240mm wavy disc and single-piston caliper. Lightweight two-channel ABS provides powerful and confident braking even on slippery or wet road surfaces.

Cast aluminium front and rear wheels – sizes 17 x 3.50-inch and 17 x 4.50-inch – wear 120/70 ZR17 and 160/60 ZR17 tyres. Forged aluminium L-shaped rim valves make checking and adjusting air pressure easier.

4. Technical Specifications

ENGINE	
Type	Liquid-cooled 4-stroke 8-valve, SOHC parallel 2-cylinder. EURO4 compliant.
Displacement	745cc
Bore & Stroke	77mm x 80mm
Compression Ratio	10.7 : 1
Max. Power Output	40.3kW @ 6,250rpm (95/1/EC)
Max. Torque	68Nm @ 4,750rpm (95/1/EC)
Oil Capacity	MT : 3.7L DCT : 4.1L
FUEL SYSTEM	
Carburation	PGM-FI electronic fuel injection

Fuel Tank Capacity	14.1 litres
Fuel Consumption	MT: 28.6km/l (WMTC mode) DCT: 28.6km/l (WMTC mode-Tested in D-Mode)
ELECTRICAL SYSTEM	
Starter	Electric
Battery Capacity	12V/11.2AH
ACG Output	MT : 420W/5000rpm DCT : 450W/5000rpm
DRIVETRAIN	
Clutch Type	MT : Wet multiplate clutch DCT: Wet multiplate hydraulic 2-clutch
Transmission Type	MT: 6-speed Manual Transmission DCT: 6-speed Dual Clutch Transmission
Final Drive	Chain
FRAME	
Type	Diamond; steel pipe
CHASSIS	
Dimensions (L´W´H)	2230mm x 845mm x 1350mm
Wheelbase	1535mm
Caster Angle	27°
Trail	110mm
Seat Height	830mm
Ground Clearance	165mm (minimum)
Kerb Weight	MT: 220kg DCT: 230kg
SUSPENSION	
Type Front	41mm telescopic fork, 153.5mm stroke
Type Rear	Monoshock damper, Pro-Link swingarm, 150mm travel

WHEELS	
Type Front	Multi-spoke cast aluminium
Type Rear	Multi-spoke cast aluminium
Rim Size Front	17M/C x MT3.50
Rim Size Rear	17M/C x MT4.50
Tyres Front	120/70-ZR17M/C (58W)
Tyres Rear	160/60-ZR17M/C (69W)
BRAKES	
ABS System Type	2-channel ABS
Type Front	320mm single wavy hydraulic disc with 2-piston caliper and sintered metal pads
Type Rear	240mm single wavy hydraulic disc with single-piston caliper and resin mold pads
INSTRUMENTS & ELECTRICS	
Instruments	Digital speedometer, digital bar-type tachometer, clock, bar-type fuel meter, two trip meters, gear position indicator, 'instant' and 'average' fuel consumption and coolant temperaturewarning light.
Security System	HISS
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.