

Shadow Spirit VT750DC

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2007

SHADOW SPIRIT

VT750DC

PRESS INFORMATION

Introduction

American Custom cruisers remain a popular segment of Europe's diverse motorcycle market, and appeal to many riders with their easy-riding style and performance, reasonable purchase price and low running costs compared to other motorcycle of the same comparable displacement. The highest power figures or and the fastest acceleration are never the main points of interest with this segment, as looks and feel have always been the cruiser's prime attractions. Although Honda does have some impressively powerful examples in its line-up, cruisers are really more about sitting back and enjoying the easy pleasures and sensations of the open road... and looking good while doing it.

Honda's broad range of custom cruisers offers top-notch riding style and comfort combined with easy accessibility for a wide cross-section of riders. In the middle-displacement class, the VT750C or Shadow 750 has been a steady favourite through several generations of styling. Positioned far enough up the displacement ladder to provide a full-bodied reserve of performance, yet distant enough from the litre and over class to offer a relatively economical yet fully satisfying alternative that is also less expensive to insure and maintain, the VT750C appeals to newer riders with its comfortable proportions, easy operation and lower cost.

In 2004, the Shadow 750 was introduced as the latest version of this model, offering an attractive mix of classic and modern design themes, with deeply valanced fenders, fat tyres and chrome-shrouded front fork tubes accentuating its retro cruiser heritage.

With an eye toward further expanding the appeal of the VT750C while bringing it up to date with the enhanced performance and lower emissions available through the latest fuel injection technology, it was felt that the time had come to develop a new variation on the VT's classic cruiser theme. One that incorporates a more lean and mean looking street rod styling and a lower, more extended riding position that helps a rider feel more 'in' the bike than 'on' it. With its combination of new boulevard blasting looks and sportier feel, the new machine was christened 'Shadow Spirit VT750C' as an indicator of the fun and excitement waiting for anyone with the urge to take its throttle in hand and head down the highway.

Development Concept

The new Shadow Spirit VT750C was created out of a desire to build a ‘Cool and Sporty Cruiser’ that could appeal to a wider range of riders with its more aggressive form and exceptional riding ease. A factory custom that both less experienced riders and those returning to motorcycling after a long time away could also fully enjoy. Major advances from previous versions of the VT750C include:

- New PGM-FI fuel injection
- Larger new 21" front tyre mounted on traditional spoked wheel
- Dual shotgun mufflers
- A shorter, upswept rear fender
- A new handlebar position
- A low and comfortable one-piece Gunfighter seat.

One of the development team’s primary design objectives was to give the new Shadow Spirit VT750C the lowest seat height to be found in its class, which could appeal to an even wider range of both new and experienced riders with its supremely easy reach to the ground and easier, more confident control. Something entry and re-entry riders of smaller stature would most appreciate.

Big Cruising V-Twin Power

Power would of course be supplied by essentially the same 750cc liquid-cooled V-twin engine used in the current, Shadow 750, but with one significant update: that being the first use of fuel injection in this configuration of engine. The engine was also fine-tuned to give greater emphasis to its strong feeling of pulsating power and torque from virtually anywhere in its broadly accessible rev range. The simple turn of its throttle would provide access to a wide band of strong acceleration between shifts of its 5-speed gearbox. And to ensure that the new Shadow is smooth, quiet and as easy to maintain as it is to ride, clean shaft final drive was also made a top priority.

More Aggressively Style Form

A heightened sense of style provides the emotional energy that makes every ride a delight, and the Shadow Spirit VT750C’s new triangulated form reaches back from large front wheel to high-mount handlebars, low seat and stubby tail to define it with the spare, purposeful lines of street rod good looks.

All these features and more come together in Honda's latest generation 750cc class V-twin Custom: the all-new Shadow Spirit VT750C. A riding machine made to turn the page on a whole new chapter of cruising enjoyment, with eye-catching style and proven Honda reliability at a remarkably reasonable price, for the best fit and best styling at the best value money can buy.

Styling

The new VT750 Shadow Spirit VT750C presents a slimmer and more aggressively attractive cruiser form ready to prowl the urban street scene and the late hour shadows from which it gets its name. Its slim profile is accentuated by a large 21 front wheel mounting a relatively narrow-body tyre, which provides a large point of focus from which the Shadow Spirit VT750C's lines seem to taper back.

With its low, gunfighter-style seat offering a deep recline that makes the rider feel a central part of the motorcycle, rather than just a passenger on it, the Shadow Spirit VT750C's riding position is further defined by its short semi-drag-style handlebars, which are positioned for a comfortable forward reach and a cool cruiser feel. The combination of large front wheel, higher handlebars and low-slung seat form the apexes of a triangle that creates a sportier, more aggressive looking image compared to most of the factory customs on the road. A perfect combination of style and comfort for long days—and nights—of cruising enjoyment.

Eye-Catching Fuel Tank Design

Playing a central role in the new Shadow Spirit VT750C's design from the rider's point of view is its long, beautifully formed fuel tank. An attractive chrome-plated speedometer assembly that incorporates all gauges and indicator lights into its compact design sits prominently atop the tank, its large central dial providing an instantly recognisable readout of cruising speed while still managing to remain discreetly out of the direct line of sight when focusing on the road ahead. The teardrop shape of the Spirit's large chrome-plated aircleaner cover complements the curves of the fuel tank while hiding away all the mechanical and hydraulic parts of its advanced fuel injection system.

Colouring Concept

The new VT750C Shadow Spirit VT750C will debut in two traditional American Custom colours, black and candy red, which express much of the straightforward appeal one looks for in a custom cruiser. These simple hues also provide an attractive base to show off the eye-catching glint of chrome and metal.

Colours

- **Graphite Black**
- **Candy Glory Red**

Engine

The new VT750C Shadow Spirit VT750C is powered by an old stalwart in the Honda stable of engines, a responsive and hard accelerating liquid-cooled 52° V-twin with some new technological touches that bring it right up to date. Essentially the same unit that has provided strong, dependable power to all Honda's 750cc V-twin cruisers over the years, its SOHC three-valve cylinder heads mount dual spark plugs for assured combustion efficiency and an instant thrust of power. The long-stroke single-pin crankshaft engine configuration combines with extra crankshaft and ACG mass to provide a solid, staggered feel of power pulses and a lower rpm torque peak that enhances the feeling of V-twin power. Large-diameter main shaft and journals provide greater structural strength and ensured reliability.

This engine also contributes to the new Shadow Spirit VT750C's longer and lower proportions, with shorter heads allowing the frame's central backbone to be lowered along with its seat and fuel tank. Its one-piece aluminium cylinders feature cast-in fins despite it being liquid cooled to provide a traditional air-cooled look that also contributes to the attractive uncluttered simplicity of its design.

New PGM-FI Electronic Fuel Injection System

In the interests of achieving smoother, stronger performance, more dependable starting, improved fuel economy and cleaner emissions to meet current EURO-3 exhaust emissions regulations, the new VT750C Shadow Spirit VT750C has been equipped with Honda's latest PGM-FI fuel injection system. The system's compact single 42mm throttle body is equipped with an idle air control valve (IACV), which minutely controls the volume of incoming air to maintain ultra-smooth idling operation. It then feeds the air intake to the cylinders through dual forked downdraft manifolds each equipped with a single fuel injector mounted high for a straight shot down the intake ports. Response is smooth and predictable, and performance comes alive with a satisfying surge of throbbing acceleration from deep in the engine's powerband, reacting with instant authority to each twist of the throttle. Accurate monitoring of fuel flow also assures low fuel consumption for longer rides between fill-ups.

Of course, high revs and peak power figures are simply not what cruising is about, so the engine's enhanced low-to-midrange performance and close-ratio transmission combines with a quiet and smooth shaft drive to deliver a deeply satisfying surge of acceleration from anywhere in its wide powerband.

Quiet, Maintenance-Free Shaft Final Drive

The new Shadow Spirit VT750C also features the smooth and silent operation of enclosed shaft final drive rather than the chain final drive found on most cruisers in its class. Shaft drive also offers cleaner operation with minimal maintenance—and its related grime and hassle—to detract from the pleasure of owning and riding this superb new custom cruiser. The Shadow Spirit VT750C's shaft drive system also contributes to a more impressive sensation of the engine's power pulses, while providing a more direct delivery of power to the tyre for a more impressive-feeling surge of acceleration.

Dual Shotgun Exhaust System Produces Low Emissions

Glistening in thick polished chrome, the new Shadow Spirit VT750C's eye-catching dual staggered shotgun exhaust pipes reach back alongside the engine and rear chassis to provide a powerful visual accent on the bike's mean street rod looks, combining the attractive lines and sound of hard-charging boulevard cruising performance.

Each of these two pipe is equipped with its own oxygen sensor feeding back information to the fuel injections system's ECU, and a 300-cell catalyser element. Both of components play integral roles in the Shadow Spirit VT750C's new HECS3 low emissions system and its full compliance with strict new EURO-3 emissions regulations while still maintaining strong performance and a distinctive sound. A radiator bypass thermostat helps the engine heat up quickly to ensure optimal catalyser temperatures for the most efficient neutralisation of harmful exhaust gasses.

Chassis

Representing a new generation of Honda's popular line of 'Long and Low' American Custom cruisers, the new Shadow Spirit VT750C offers riders the lowest seat height available in a large-displacement cruiser, and at 652mm, its new one-piece gunfighter seat is certainly the lowest in the 750cc class. Combining with its semi-drag-type handlebars and its easy reach to the ground, the Spirit providing a laid-back cruising experience without peer.

At the heart of this design is a lightweight and rigid double-cradle steel frame constructed around a large-diameter round-section single tube backbone and pressed steel pivot plates that combine to lower the overall height of the chassis, and by extension the fuel tank and seat. The design also features a cast sub-frame for the seat rails supporting the Spirit's sleek new bobbed rear fender.

A Visceral Feeling of Power

One of the most integral parts of the cruising experience is the feel of the V-twin engine's power pulses as it rolls up to speed. The new Shadow Spirit VT750C's frame transmits just enough primary vibration to feel the full exciting rumble of acceleration, but it never grows to become a backside-numbing irritation. To keep secondary vibration from numbing other extremities, the Shadow Spirit VT750C also features solid damper weights installed in its rubber-mounted handlebars and solid-mounted steps with rubber inserts that inhibit the transmission of annoying buzzes of vibration to the hands and feet.

Suspension, Wheels and Brakes

The new Shadow Spirit VT750C handles as good as it looks. Its extended 41mm telescopic front fork is coupled to an eye-catching large-diameter 21" wheel for responsive handling and a relaxed ride, and its 115mm of compliant axle travel comfortably soaks up the bumps to ensure confident control in virtually all riding situations.

The Shadow Spirit VT750C's rigid rear swingarm integrates its drive shaft into the left-side arm for a clean look, as well as clean and quiet operation. The absence of a drive chain also eliminates the need for a chain guard, thus offering a simpler and more attractive overall look. Rear suspension duties are handled by an attractive pair of chrome-plated conventional dampers, which are tilted forward for more progressive

damping that maintains both a comfortable ride and precise control. Both rear dampers offer five steps of spring preload adjustment to ensure the best setup for weight and riding conditions.

Like the Shadow 750, the new Shadow Spirit VT750C rides on a fat 160/80–15 rear tyre that presents a wide footprint for both impressive looks and confident control. Up front, its large 21" chrome-plated rim mounts a slim 90/90–21 tyre for light and sure handling to match its impressive look, and is stopped by a large-diameter 296mm drilled disc mated to a responsive dual-piston calliper for strong and confident braking control. At the rear, a conventional 180mm leading/trailing drum brake works to slow things down in a hurry.

Equipment

Honda Ignition Security System (HISS)

The new Shadow Spirit VT750C will also be equipped with Honda's highly effective HISS (Honda Ignition Security System) for effective prevention against rideaway theft. The Shadow Spirit VT750C's ignition switch is programmed to accept only the two keys that are originally supplied with each machine. Since the engine is totally disabled at the very heart of its digital ignition system, no other key can turn the switch or start the engine, and neither can the bike be hot-wired and ridden away. A blinking red indicator LED on the Shadow's tank-mounted instrument panel warns off potential thieves with an attention getting display.

Optional Equipment

The new Shadow Spirit VT750C will also be equipped with an extensive selection of optional accessories, which have been specially designed by Honda Access Corporation for the finest in fit and finish. Among other offerings, these accessories include.

- A pillion backrest and carrier that enhances both pillion passenger comfort and convenience with a sturdy mount to lean on or load up.
- A large-coverage fork-mounted windscreen, which provides ample protection against the wind while featuring the attractive accent of chrome-plated stays.
- A handsome set of 18-litre black leather saddlebags with metal buckles, studs and chrome-plated mounting stays.
- A beautiful black leather tank belt which provides a stylish accent and features a small built-in pocket for extra riding convenience.
- A large-capacity 17-litre leather top case which locks onto the rear carrier for secure transport. Its black leather finish is highlighted by polished buckles for an appropriately 'western' look.
- Chrome swingarm pivot covers which provide an attractive accent by covering the swingarm pivot area with shiny discs that have been meticulously buffed and polished for a smooth, long-lasting finish.
- A compact and handy leather handlebar pouch, which provides a convenient place to store tools or other small belongings.
- A chrome-plated radiator guard set which helps protect the radiator from damaging impacts while also dressing up the bike. As always, Honda fit and finish are flawless.
- A durable, water-resistant cycle cover designed to protect bodywork against weather and the sun's UV rays. Manufactured from breathable fabric which allows the vehicle to dry while covered, it features lower ties to keep the cover from flapping in the wind and damaging paint. Two holes built into the lower front edge facilitate the attachment of a U-lock.

Specifications Shadow Spirit VT750DC ED-type

Engine

Type	Liquid-cooled 4-stroke 6-valve SOHC 52° V-twin
Displacement	745cm ³
Bore x Stroke	79 x 76mm
Compression Ratio	9.6 : 1
Max. Power Output	33.5kW / 5,500min ⁻¹ (95/1/EC)
Max. Torque	65.1Nm / 3,500min ⁻¹ (95/1/EC)
Idling Speed	1,200min ⁻¹
Oil Capacity	3.2 litres

Fuel System

Carburation	PGM-FI electronic fuel injection with automatic choke
Throttle Bore	34mm
Airecleaner	Viscous, cartridge-type mesh net filter
Fuel Tank Capacity	14.6 litres (including 3.6-litre reserve)

Electrical System

Ignition System	Fully transistorised electronic
Ignition Timing	8° BTDC (idle) ~ 50° BTDC (5,500min ⁻¹)
Sparkplug Type	DPR7EA-9 (NGK); X22EPR-U9 (ND)
Starter	Electric
Battery Capacity	12V / 12AH
ACG Output	399W
Headlights	12V, 55W x 1 (low) / 60W x 1 (high)

Drivetrain

Clutch	Wet, multiplate with coil springs
Clutch Operation	Mechanical; cable-actuated
Transmission	5-speed
Primary Reduction	1.763 (67/38)
Gear Ratio	1 2.400 (36/15)
	2 1.550 (31/20)
	3 1.174 (27/23)
	4 0.960 (24/25)
	5 0.852 (23/27)
Final Reduction	3.091 (34/11)
Final Drive	Enclosed shaft

Frame

Type	Double-cradle; steel tube
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Chassis

Dimensions	(LxWxH)	2,424 x 837 x 1,107mm
Wheelbase		1,653mm
Caster Angle		34° 30'
Trail		158mm
Turning Radius		3.4m
Seat Height		652mm
Ground Clearance		132mm
Dry Weight		230.5kg
Kerb Weight		248.3kg (F: 114.3kg; R: 134kg)
Max. Carrying Capacity		180kg
Loaded Weight		438.5kg (F: 155.5kg; R: 283kg)

Suspension

Type	Front	41mm telescopic fork, 115mm axle travel
	Rear	Dual conventional dampers with 5-step adjustable spring preload, 90mm axle travel

Wheels

Type	Front	Chromed steel rim/wire spoke
	Rear	Chromed steel rim/wire spoke
Rim Size	Front	21M/C x MT2.15
	Rear	15M/C x MT3.50
Tyre Size	Front	90/90 21M/C (54S)
	Rear	160/80 15M/C (74S)
Tyre Pressure	Front	200kPa
	Rear	200kPa

Brakes

Type	Front	296 x 6mm hydraulic disc with dual-piston calliper and sintered metal pads
	Rear	180mm leading/trailing drum

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