



APRILIA SHIVER 900

THE MOST RECENT EVOLUTION OF THE SPORT NAKED FROM NOALE IS POWERED BY A REFINED 900 CC TWIN-CYLINDER THAT GUARANTEES TORQUE VALUES AT THE TOP OF THE CATEGORY

PERFORMANCE COMBINED WITH AN ABSOLUTELY TOP SHELF FRAME FOR A RIDEABILITY THAT RAISES THE BAR TO NEW HEIGHTS IN THE NAKED SPORT BIKE SEGMENT

AN INTUITIVE, POWERFUL, EASY TO HANDLE BIKE AND NOW EVEN MORE TECHNOLOGICAL THANKS TO THE NEW INTEGRATED NAVIGATION SYSTEM IN THE INSTRUMENT CLUSTER

ALSO AVAILABLE IN THE LIMITED 35 KW POWER VERSION FOR RIDERS WITH AN A2 DRIVER'S LICENSE

As always, Aprilia makes **refined mechanics and an excellent chassis structure the winning values on one of its bikes**. Aprilia Shiver 900 represents the most recent evolution of the original project of a motorcycle that, from its first appearance on the scene in 2007, marked a turning point as the first factory bike fitted with Ride-by-wire technology to manage engine throttle valve electronics. An Aprilia technological first derived directly from the racing world: In fact, Aprilia Cube was the first MotoGP bike to use this technology in 2002 and since then all of the other manufacturers have followed suit.

The beating heart of the Aprilia Shiver, the **900 V-twin engine**, is capable of increasing not only the power, but more importantly, the maximum torque delivered at any rpm at top levels for its category. Power and character that translate into great riding satisfaction without sacrificing the ease and comfort that have always been characteristics of the Aprilia Shiver. A bike that has made fledgling and expert riders alike fall in love, thanks to its chassis architecture that, in the best Aprilia tradition, draws on the know-how of a manufacturer that has won 54 world titles in its brief history and that currently has bikes in premier competitions like MotoGP and Superbike.

The easy to ride, powerful and technologically advanced Aprilia Shiver 900 is equipped with an **advanced traction control system** that increases safety while taking riding pleasure to maximum levels. From city riding to more flowing routes, from mountain passes to touring itineraries, even long range, Shiver 900 invites you to fasten your helmet and set off in search of the best sensations on two wheels.

The design: a non-conventional sport naked

A non-conformist sport naked, Aprilia Shiver 900 emphasises a distinctive design: from the lateral air intake ducts that embrace the front end to the characteristic compact rear end with the exhaust pipes positioned under the saddle, the superstructure - fuel tank side covers, side panels, tail, front mudguard - form an original and non-conformist look.

The twin cylinder from Noale also stands out for its aggressive features that highlight its distinctly sporty character: the frame, the shock absorber spring and the cylinder head covers are painted

red. Adrenaline-charged details that blend with the three available colour schemes - **Hi Tech Silver** and the new **Challenging Red** and **Innovation Dark** -, creating an original contrast.

Another characterizing element of Aprilia Shiver is the exhaust: the position under the saddle contributes to an extremely clean side view of the bike, with the terminal part of the silencer short and aimed upward. A **brand new exhaust bottom made up of concentric rings** ends in a concave disc: a further bold stylistic element that makes the Shiver immediately recognizable even from the rear, as well as being a practical way to send the exhaust fumes downward, thereby avoiding interference with the passenger and ensuring greater comfort.

Engine: we write torque, you read fun

The engine, grown to 900 cc from the 750 cc of the first version, is characterised above all by its generous **mid-range torque**, all to the advantage of quick acceleration and exiting turns. The **90 Nm of torque at 6,500 rpm** guarantee pure fun in the saddle: this goal was a priority for the Aprilia engineers in designing the twin cylinder with more than 95 HP, also available in the version with power limited to 35 kW, that can be ridden with an A2 class driver's license. Aprilia Shiver 900 is therefore an easy bike to ride even for new bikers, accompanying them in their personal evolution of experience in the saddle.

The powerplant, with a 90 degree angle between the two cylinders, four-valve timing per cylinder, dual overhead cam and liquid cooling, underwent various changes, including a significant operation aimed at **reducing friction on the pistons** characterised by a special anti-friction feature on the mantle, whereas the pins contribute to lightening the alternated parts in motion.

On the other hand, an **efficient semi-dry carter internal lubrication circuit** helps to reduce losses of power due to shaking and to keep consumption and temperature of the lubricant to a limit, thereby eliminating the need for an oil radiator. High levels of efficiency have also been reached in terms of combustion, thanks to the implementation of injectors that allow better spraying of the air/fuel mixture, with benefits to consumption and emissions. The Aprilia Shiver 900 engine is also fitted with an **automatic decompressor** which makes it easier to start in low temperature conditions.

The unit fitted on the Aprilia Shiver 900 is controlled by the **Marelli 7SM ECU**: a substantial evolution that, on one hand, has allowed a refined traction control system to be introduced and that, on the other hand, has led to a significant simplification of the electrical system; in fact, the engine control and management systems, functions that were previously carried out by two separate electronic control units, are now integrated in a single hardware components, the same one fitted on the V4 models from Noale.

All of the clutch components have been redesigned in correspondence to the switch to the 900 cc engine capacity: The load on the clutch lever has decreased by 15%, whereas the primary drive reduction ratio has been changed to optimize exploitation of the available power.

Refined electronics to reiterate its supremacy

The Shiver 900 receives the full benefits of Aprilia's extensive experience in electronic control systems and riding support for which the Aprilia RSV4 - the supersport bike that has won seven World SBK titles (three rider and four manufacturer) in its racing version and that is consistently at the top of its category in the street version - is an unrivalled example.

Out of this experience and from this Aprilia technological first, the Shiver 900 features an **advanced traction control system** that can be set to three different levels or disabled, designed

to guarantee maximum safety, but also pure brilliant riding enjoyment thanks to the dual control that acts on both ignition and on the motorized throttle valves, making its intervention smooth and easy to manage. The Aprilia Traction Control system is combined with a **Continental two-channel ABS** system with developed calibration in order not to take anything away from the sporty ride. The ABS feature can also be disabled.

The **full Ride-by-wire electronic throttle system**, which made its début on a factory bike precisely on the first version of the Shiver, is now entirely integrated in the throttle grip, all to the benefit of light weight. This system also allows even more accurate management of the fuel/air mixture and the injection throttle valve opening based on numerous parameters including engine speed, gearbox position, air flow, throttle grip opening (in quantity and speed) and temperature, with great benefits in terms of smooth riding without opening/closing jerks, containment of harmful emissions and fuel consumption.

The sophisticated electronic management also provides the possibility of changing the engine mapping, radically changing the character of how the power it is capable of developing is unloaded onto the ground. The **Sport** setting provides an immediate and aggressive throttle response; the **Touring** logic provides a smoother response, ideal for touring and daily use, whereas the **Rain** map reduces available power to about 70 HP and is therefore ideal in the event of difficult weather conditions or on slippery road surfaces. Mapping can also be changed at any time, even on the fly, by simply pressing the engine start button.

The control instrumentation is made up of an ultra modern **TFT technology display** that ensures perfect legibility of the information provided. The large, 4.3" screen (the same one used on the Aprilia RSV4 and Aprilia Tuono 1100 V4) allows all the on board information to be clear and highly legible at all times, thanks in part to its capacity of adapting the background and font colours based on the conditions detected by the light sensor. The information displayed includes: rev counter, speedometer, selected gear indicator, coolant temperature, air temperature, selected engine map and clock. Using the practice MODE joystick on the new left hand electrical block, you can navigate through the menu and scroll/adjust the following parameters: odometer, traction control level, ABS ON (only when not in movement), MENU (only when not in movement), Trip A, Trip A time, Trip A maximum speed, Trip A average speed, Trip A average consumption, Trip B, Trip B time, Trip B maximum speed, Trip B average speed, Trip B average consumption, instantaneous consumption, Km ridden in reserve.

Aprilia Shiver 900 is also fitted from the factory with the Aprilia Multimedia Platform (AMP), which ensure connectivity with your smartphone to allow all call information to be displayed directly on the display, as well as intercom information and any music tracks that may be playing. By connecting to the smartphone using the dedicated App, the display also becomes a **navigation tool, displaying the instructions for the selected route through pictograms**.

Last but not least, the App lets you share travel information, from the info on the sportiest riding style, to the info on touring, with indication on consumption, routes and speeds, grip conditions and Aprilia service centre locations.

A chassis architecture worthy of the Aprilia tradition

The performance provided by the powerplant is perfectly matched to an ultra-fine chassis architecture, easy to ride and intuitive, but at the same time incredibly high performance that, in the best Aprilia tradition, is simply unrivalled in the category. In fact, the mixed steel trellis/aluminium plates frame provides standard-setting stiffness, defines an extremely compact bike and ensures that it is capable of catering to fledgling riders with no problem, as well as enhancing the riding

skills of more expert and discerning bikers. This makes flowing routes a favourite playground for the Shiver 900.

The structure of Shiver 900 draws from all the proverbial Aprilia chassis architecture know-how, as well as their experience on tracks all over the world. The trellis upper part in steel tubing is connected to wide spread aluminium lateral plates using special, high-resistance bolts. The combination formed by these elements forms an extremely stiff and lightweight frame, an rational and excellent solution for reining in all the horses of the Aprilia V90.

The contained longitudinal development of the engine has led to obtaining an agile bike, a feature that also benefits from the choice to position the shock absorber laterally. Thanks to this solution, space was created for the exhaust manifolds that have a shape and volume calibrated to perfection in order to get the best performance from the engine. This has allowed for an optimum exhaust manifold layout, without having a significant impact on the length of the bike and without thermally stressing a fundamental riding element like the shock absorber.

The aluminium alloy swingarm with stiffening truss boasts stiffness values at the top of its category and it is sized to withstand the asymmetrical stress due to the lateral positioning of the shock absorber.

Aprilia Shiver 900 adopts a **Kayaba fork with hydraulics adjustable in extension and spring preload** and with 41 mm stanchions with chill cast feet to support the radial callipers. The 130 mm travel lets you smoothly tackle urban and mountain routes. The two steering yoke plates are made of forged aluminium.

The rear shock absorber, mounted on the side, is pivoted directly to the swingarm, following the cantilever layout and it is adjustable in spring preload and hydraulic rebound. Rear wheel travel is 130 mm.

The sporty three-spoke wheels are taken from the Aprilia Tuono V4 equipment and contribute to keeping weight down. This leads to a drastic reduction of the gyroscopic effect and therefore greater agility for the bike, improved suspension functionality thanks to the reduction of unsprung masses and quicker acceleration. The rims are shod with a 120/70 tyre on the front and 180/55 on the rear.

The braking system, equipped with two-channel ABS, implements radial callipers to highlight the sportiness of the project and 320 mm discs on the front. On the rear, a 240 mm disc is gripped by a single-piston calliper.

Both the front and rear systems have metal braided brake lines derived from the aeronautic sector, which eliminate the annoying buffering effect of conventional lines and guarantee maximum braking precision.

Original Aprilia accessories range: for sport and touring

A wide range of accessories dedicated to **sport and touring** is available for the Shiver 900 as well. The former highlight the sport soul and the unmistakable Aprilia racing character: parts in precious carbon, billet aluminium components, such as brake and clutch fluid reservoir covers, brake and clutch levers and mirrors, as well as the must-have frame guard and fork bumpers. It also has LED turn signals with a highly characteristic design. The tourism accessories contribute to increasing the comfort of the Shiver 900, such as the comfort saddle, the side panniers and the tank bag.

Aprilia Shiver 900 - Technical Specifications

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| Engine type | Aprilia V90 Longitudinal 90° V-twin engine, 4-stroke, liquid cooled, double overhead camshaft with mixed gear/chain timing system, four valves per cylinder |
| Fuel | Unleaded petrol |
| Bore and stroke | 92 x 67.4 mm |
| Total engine capacity | 896.1 cc |
| Compression ratio | 11.5:1 |
| Max Power | 95.2 HP (70 kW) at 8,750 rpm |
| Maximum torque at crankshaft | 90 Nm at 6,500 rpm |
| Fuel system | Integrated engine management system. Injection with 3-map Ride-by-wire throttle valve opening management (Sport, Touring, Rain) |
| Ignition | Digital electronic, integrated with the injection. |
| Starter | Electric |
| Exhaust | 100% stainless steel 2-in-1 exhaust system with three-way catalytic converter and lambda probe |
| Alternator | 450 W at 6,000 rpm |
| Lubrication | Wet sump |
| Transmission | 6 speed, drive ratio: 1st 14/36 (2.57) 2nd 17/32 (1.88) 3rd 20/30 (1.5) 4th 22/28 (1.27) 5th 23/26 (1.13) 6th 24/25 (1.04) |
| Clutch | Multiplate wet clutch, hydraulically operated |
| Primary drive | Straight cut gears, drive ratio: 40/69 (1:1.73) |
| Secondary drive | Chain. Drive ratio: 16/44 (1:2.75) |
| Frame | Modular tubular steel frame fastened to aluminium side plates by high strength bolts. Dismountable rear frame. |
| Front suspension | Upside-down fork, stanchions \varnothing 41. Adjustable hydraulic rebound damping and spring preload. Wheel travel 130 mm. |
| Rear suspension | Aluminium alloy swingarm with stiffening truss. Hydraulic shock absorber with adjustable extension and spring preload. Wheel travel 130 mm. |
| Brakes | Front: Dual \varnothing 320 mm stainless steel floating discs. Radial, four-piston callipers. Metal braided brake hose. Rear: \varnothing 240 mm stainless steel disc. Single piston calliper. Metal braided brake hose. Continental two-channel ABS system. |
| Wheel rims | Aluminium alloy Front: 3.50 X 17" Rear: 6.00 x 17" |
| Tyres | Radial tubeless tyres; |

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|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Front: 120/70 ZR 17 Rear: 180/55 ZR 17 |
| Dimensions | Max. length: 2130 mm Max. width: 810 mm Wheelbase: 1465 mm Max. height: 1110 mm Saddle height: 810 mm Trail: 109 mm Headstock angle: 25.9° |
| Weight | 218 Kg (kerb weight with full fuel tank) |
| Consumption | 5,313 l/100 km (WMTC cycle) |
| CO2 emissions | 123 g/km (WMTC cycle) |
| Fuel tank capacity | 15 litres |