



Way of Life!

# V-Strom 650XT ABS<sup>II</sup> V-Strom 650 ABS<sup>II</sup>

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Champion Yellow No.2 (YU1) Pearl Glacier White (YWW) Glass Sparkle Black (YVB) Champion Yellow No.2 (YU1) Pearl Glacier White (YWW) Glass Sparkle Black (YVB)

### SPECIFICATIONS

V-Strom 650XT ABS / V-Strom 650 ABS

Overall length	2,275mm (89.6 in)
Overall width	910mm (35.8 in) / 835mm (32.9 in)
Overall height	1,405mm (53.3 in)
Wheelbase	1,560mm (61.4 in)
Ground clearance	170mm (6.7 in)
Seat height	830mm (32.7 in)
Curb mass	216kg (476 lbs) / 213kg (470 lbs)
Engine type	4-stroke, liquid-cooled, DOHC, 90° V-twin
Bore x stroke	81.0mm x 62.6mm (3.2 in x 2.5 in)

Engine displacement	645cm <sup>3</sup> (40.2 cu in)
Compression ratio	11.2 : 1
Fuel system	Fuel injection
Starter system	Electric
Lubrication system	Wet sump
Transmission	6-speed constant mesh
Primary reduction ratio	2.088 (71/34)
Final reduction ratio	3.133 (47/15)

Suspension	Front	Telescopic, coil spring, oil damped
	Rear	Link type, coil spring, oil damped
Rake / trail	26° / 110mm (4.3 in)	
Brakes	Front	Disc, twin
	rear	Disc
Tyres	Front	110/80R19M/C 59V, tubeless
	Rear	150/70R17M/C 69V, tubeless
Ignition system	Electronic ignition	
Fuel tank capacity	20.0L (5.3 / 4.4US / Imp gal)	
Oil capacity (overhaul)	3.0L (3.2 / 2.6US / Imp qt)	

Specifications, appearances, color (including body color), equipment, materials and other aspects of the SUZUKI products shown in this catalog are subject to change by Suzuki at any time without notice and they may vary depending on local conditions or requirements. Some models are not available in some territories. Each model may be discontinued without notice. Please inquire at your local dealer for details of any such changes.

- Always wear a helmet, eye protection and protective clothing. ■ Enjoy riding safely.
- Read your Owner's Manual carefully. ■ Never ride under the influence of alcohol or other drugs.

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\*Image shown with optional accessories.



Suzuki's "Way of Life!" is the heart of our brand - every Suzuki vehicle, motorcycle and outboard motor is built to create excitement so customers can enjoy everyday life.



Way of Life!

V-Strom 650XT  
ABS  
V-Strom 650  
ABS

# Adventure, in All Directions

- ✓ Every day commuting,
- ✓ Rough and wet conditions,
- ✓ B-Road Twisties,
- ✓ Long highway stretches,
- ✓ Two-up comfort,

The ultimate tackle to Do-It-All.  
The tool that never lets you down.  
Think of a task, a challenge, an adventure.  
The answer to every thought.  
V-Strom 650.

V-Strom 650XT ABS  
\*Image shown with optional accessories.

V-Strom 650XT ABS  
\*Image shown with optional accessories.

# Back up Support

Rain or shine, the adoption of the Traction Control is there to support you. When riding out from those slippery campgrounds, or riding through stone-paved city streets. Advanced technologies are there to give you that extra feel of confidence, to back up your urge to go those few miles further.



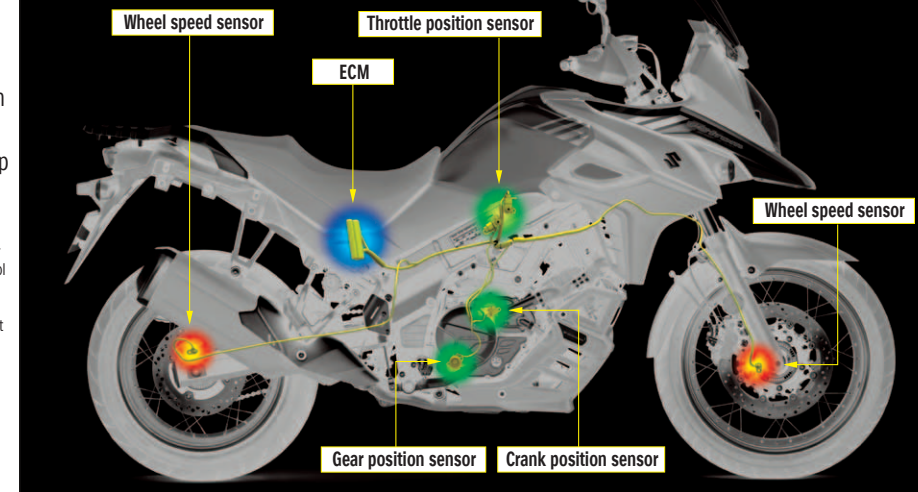
## Advanced Traction Control System

Inheriting the favored traction control system from the V-Strom 1000, the new V-Strom 650 ABS/XT ABS now also is equipped with this advanced technology. This system continuously monitors the front and rear wheel speeds, throttle position, crank position, and gear position with various sensors, and controls the engine output by managing the ignition timing and air delivery. The traction control system can be switched to either of two modes, or off. The modes differ in terms of sensitivity. Mode one allows modest rear wheel spin for more advanced, exhilarating riding, while mode two activates traction control at the slightest loss of rear-wheel grip to give you greater confidence on slippery surfaces or in the rain. The choice of modes can be quickly and easily made by selecting the traction control mode from the left switch cluster and confirming it with a glance at the instruments. In difficult riding situations such as cold or ragged road surfaces, fully loaded with luggage, or with a pillion rider, this advanced system already established on the V-Strom 1000 shall back up the ride.

Note: Traction control system is not a substitute for rider's throttle control under the various conditions, and traction control cannot prevent loss of traction due to excessive speed when entering turns, or while braking, and it does not control front wheel traction.

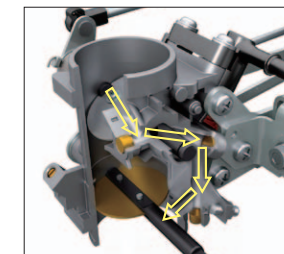


### Traction Control System



### Traction control mode description

Mode	TC mode indicator	Sensitivity level	Good for
OFF		-	-
1		Low	Sport riding, good road conditions
2		High	Wet or cold conditions



## Low RPM Assist

By adopting the new Low RPM assist system, the concern of an unexpected engine stall has been relieved. This system will automatically raise the idle speed when engaging the clutch or when riding at low rpms, assisting frequent clutch work in congested town rides and preventing sudden and unexpected engine stall when running in the low rpm range.

## Rich Information to Support Multiple Tasks

By sharing the easy to see and easy to operate/understand instrument cluster, along with the cowling image with its bigger brother, the new 650 now has rich information with a quality design. The new instrument cluster incorporates a large analogue tachometer and digital readouts for the gear position and speedometer. The digital section below displays the odometer, twin-trip meter, clock, fuel level, coolant temperature, ambient temperature, battery voltage, range on remaining fuel, average and instantaneous fuel consumptions, and traction-control modes. The remaining fuel range continues to display after the fuel gauge shows empty, offering the rider with accurate and comforting information. Plus, instantly recognizable LEDs provide freeze\*, high-beam, neutral, malfunction indicator lamp (MIL), ABS, traction-control mode, and water-temperature indicators. All of this information is accessible from the left handlebar switch, where it is now also possible to reset the trip meter.

\*The freeze indicator starts blinking when the ambient temperature falls below 3°C. It continues to blink for 30 seconds then remains lit until the ambient temperature rises above 5°C.



All lights and indicators are illuminated in the photo for illustrative purposes.



## ABS-Equipped Brake System

Equipped with 310mm diameter twin discs with twin two piston calipers on the front and a 260mm diameter single disk with a single piston caliper on the rear, the V-Strom 650 ABS and 650XT ABS provides controllable and dependable stopping performance. Also the compact and light-weight ABS, to avoid wheel lock caused by excess hard braking, has been upgraded to the next generation with advanced settings for a further natural feel and secure activation.

Note: ABS is not designed to shorten the braking distance. ABS cannot prevent wheel skidding caused by braking while cornering. Please drive carefully and do not overly rely on ABS.



Starter switch



## Suzuki Easy Start System

Conventional starter switches needed to be pressed by the rider until the engine starts, but the new model has adopted the Suzuki Easy Start System enabling the engine to start with one push of the button. A computerized ECM checks the status and disengages the starter motor immediately after start, making the engine start easier for the rider.

# A Few More Horses Under Your Belt

Merge out to the fast lane, Wonder into small allies. Forget the engine and concentrate on your adventure, Or rev it hard and enjoy the ride. Always the required output, in the required behavior. A few more horses, right there were you need them.



## Sophisticated V-Twin Performance

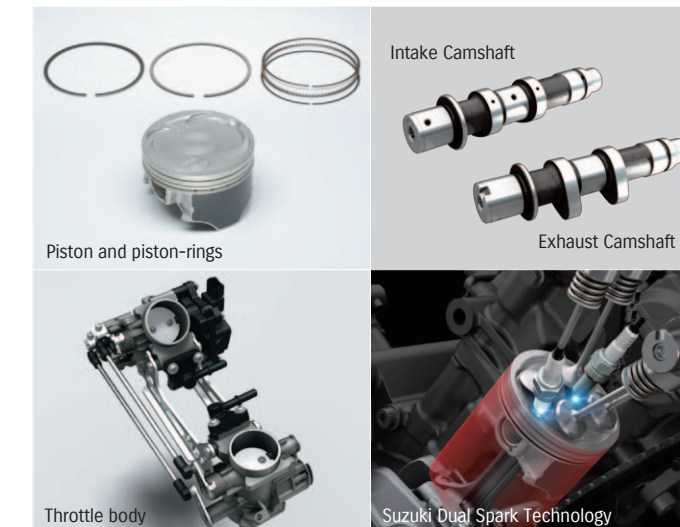
The 645cm<sup>3</sup> DOHC V-twin is a masterpiece of Suzuki engineering which has an evolving history. For the new 650, this unit has been tuned for ample low to mid-range torque for practical use while maintaining an exhilarating top-end. The new unit now meeting Euro4 emission standards has undergone a rebuild, installing new technology such as the resin-coated pistons, and revising over 60 components of the engine to achieve a higher output in a broad area of the rev-range while keeping the unique V-twin character with low fuel consumption. With low fuel consumption combined with the large 20L fuel tank, the riding rage between fill-ups are at the top in this class, relieving the rider from the stress of frequent refueling. The further evolved new engine has succeeded in emphasizing the attractions of the V-Strom 650 character, making it another masterpiece by Suzuki.



645cm<sup>3</sup> DOHC, 90-degree V-twin engine

## Resin Coated Pistons

One of the upgraded features in the 645cm<sup>3</sup> unit are the resin-coated pistons which is a coating technology to decrease friction in the cylinder, resulting in improved fuel economy and corresponding to latest emission control. Special L-shaped piston rings are also installed for enhanced sealing performance and blow-by gas reduction, all resulting in meeting up-to-date regulations while improving the output and the ease of use.



Piston and piston-rings

Intake Camshaft

Exhaust Camshaft

Throttle body

Suzuki Dual Spark Technology

## Suzuki Dual Throttle Valve (SDTV) Fuel-Injection System

Featuring the performance-proven Suzuki Dual Throttle Valve (SDTV) injection system, each cylinder has two butterfly valves for enhanced power output and efficiency. One butterfly valve is directly linked to the riders throttle control while the other butterfly valve is controlled by the ECM and operates according to information from the throttle position sensor, engine speed sensor and gear position sensor for optimum intake flow, realizing an efficient and smooth power delivery with ample torque at low revs. Idle speed control is also a feature, supporting a steady idle speed and fewer emission. The injectors have been upgraded to a 10-hole type with a long nozzle for further efficiency.

## Dual Spark Technology

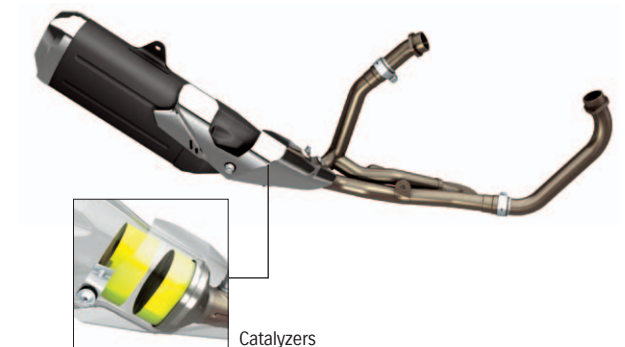
Suzuki's Dual Spark Technology, unique in this class, utilizes two spark plugs per cylinder for precision ignition. Combined with the newly adopted high-ignition nickel spark plugs, it contributes to increased combustion efficiency, smoother power delivery, lower fuel consumption and lower emissions.

## Camshafts for a Distinctive Power Feel

For the unique character of the V-Strom 650, the engine needs to be strong not only at the top end but at the frequently used low to mid-range. To meet these demands, the new engine has an original intake camshaft with equally lengthened intake ports, while for the exhaust camshaft, has newly adopted the item from the new SV650 road model which are higher lifting compared to the previous V-Strom 650. These new features and a total set-up has resulted in a boost in torque and power in the mid to high rev-range, providing the rider with an exciting ride when with a sporty mind, and a stress-free character for daily rides or on a long haul, simply enhancing the attractions of the new model.

## EURO4 Lighter and Lower Exhaust System

Newly designed down-type exhaust system is lighter and closer to the center of gravity, contributing to nimble handling while being able to accommodate the slim and smart optional luggage system. The catalyzers have been positioned in a tandem configuration achieving the required level of emission control for Euro4 emission standards, while successfully gaining exhaust efficiency to boost the output.



Catalyzers

# BIG Heritage, BIG Adventures.



Inheriting the Beak from the original DR-BIG, the V-Strom soars high, out of the city, over the mountains, and over all borders. The heritage from DR BIG, is now ready to support your adventures, either BIG or daily.

\*Image shown with optional accessories.



DR-BIG being the first Adventure model to have a “Beak”, the V-Strom brand has inherited that distinctive look. The 650 now has adopted the same image as the 1000, and with the new design featuring a more direct line from the tip of the beak to the top of the tank, that challenging spirit of its ancestor is further exhilarated.

## The V-Strom Family

With the new design concept “Solid and Smart”, the new model now has an updated look, in kin to its 1037cm<sup>3</sup> brother bringing the V-Strom family together. Suzuki’s original “Beak” style has been further emphasized by making it a straight line from the tip to the top of the tank, expressing the DNA from the DR-BIG and the desert racer DR-Z. The heritage and history of Suzuki’s adventure models are further expressed, giving the owners pride of ownership. Champion yellow is a new color for the V-Strom series, relating to the off-road racing scene of Suzuki and providing owners with an active and challenging adventure feel.



## Head Light and Tail Lamp

Contributing in giving the V-Strom 650 a totally new image is the head light and tail lamp, a common feature with the V-Strom 1000. The high and low beam of the light weight headlight is in a compact vertical configuration and realize brightness equivalent to the previous twin head lights, while when on high beam, both low and high bulbs illuminate providing a broader lit up area. The newly featured LED tail lamp, also in kin with its bigger brother, has a high visibility and contributes to weight savings.

## Adventure with the Heritage

By installing the new design cowling with the vertical configuration headlights, sharing the image with the V-Strom 1000, the cowling is noticeably slimmer giving the rider a wider view and therefore a lighter impression when mounted on the seat. The “Beak” giving the image of the DR-BIG heritage, is sharp and slanted forwards motivating the adventure feel while acting as a functional component reducing the uplift by 9%.

## Slimmer Tank, still with a 20L Capacity

The redesigned slimmer and smarter tank still holds a capacity of 20L, realizing a long riding range combined with the excellent fuel consumption. Also by eliminating the plastic covers on both sides of the tank from the previous model, the tank has become slimmer and is now able to accommodate magnetically attachable tank bags. The frame covers which were positioned directly underneath the seat on the previous model have been slimmed down as well, allowing the rider to reach straight down to the ground, resulting in better access to the ground and more confidence.



## Equipped for V-Strom 650“XT” ABS

Unique to the V-Strom 650XT ABS are the knuckle covers to support harsh condition riding, and the engine under cowling to give the rider that extra adventure feel, both as standard equipment.

## Functional Comfort

An important feature on the V-Strom 650 is the ultimately comfortable seat, and although with the new design to match the update in cowling design, the reputation will continue. Also an appeal inherited from the previous model is that the tandem area is parallel with the rear carrier providing a large flat space to securely strap large baggage when needed.



V-Strom 650XT  
ABS  
V-Strom 650  
ABS

# The Luxury Ride

The unbeatable comfort of the seat and natural riding position are not the only things that makes the ride such a luxury. The stress free nature of the engine, the super-neutral handling, the acceptability of the whole bike is at a premium balance. As the miles build up, the difference is obvious and the love will grow.



V-Strom 650 ABS



V-Strom 650XT ABS  
\*Image shown with optional accessories.

## Supple Suspension

Flexible and comfortable conventional telescopic forks have a forgiving character, allowing stress free long distance rides to an exciting run on twisty roads. The rear suspension is equipped with rebound adjustment and a remote preload adjuster which can be operated by hand allowing the rider to quickly setup the suspension to match the riding style or in a case of two-up riding or with a full load of luggage without any tools needed.



Rear suspension adjuster



V-Strom 650 ABS

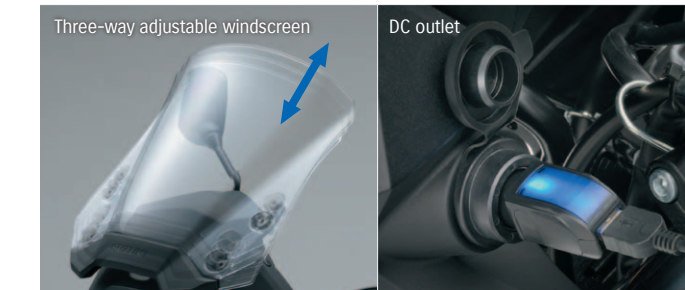
V-Strom 650XT ABS

## New Wheels and Tires

Ten spoked cast aluminum wheels are an eye-catching feature for the new V-Strom 650 ABS. Not only do they give a sporty image in kin to its V-Strom 1000 ABS brother in the Suzuki Adventure model family, tracking back to the DR-BIG and DR-Z, but improves the road holding ability and reduces weight. The V-Strom 650XT ABS features tubeless tire applicable wire spoked wheels which absorb shock from the road better due to the flexible character of spokes, providing the rider with further comfort and exhilarated riding pleasure. The Champion Yellow colored model features unique gold-anodized rims in contrast to the black-anodized items on the other colors. Wheel sizes are 19-inch on the front and 17-inch on the rear, realizing the perfect balance of stable and nimble handling, and newly installed tires are the stability and grip level heightened Bridgestone BATTLAX ADVENTURE A40, specially developed for the V-Strom 650.

## Controlling the Comfort

The windscreen has been extended 9mm upwards to reduce the windblast and buffering to the body, while the shape has been changed to control the wind flow rather than to simply create a wind-free zone. By making the boundary between the protective area and the not-protective area a blur, the rider will be able to move more freely due to less turbulence and feel a natural wind flow. The adjustable preset three positions are also available using four screws.



Three-way adjustable windscreen

DC outlet

## DC Outlet

With the newly adopted instrument cluster, the V-Strom 650 has gained a 12V DC outlet positioned directly below the instruments as standard equipment, supporting the rider for the use of satellite navigation systems and/or the recharging of mobile devices. An update for convenience especially on long distance touring.

## Core of Comfort

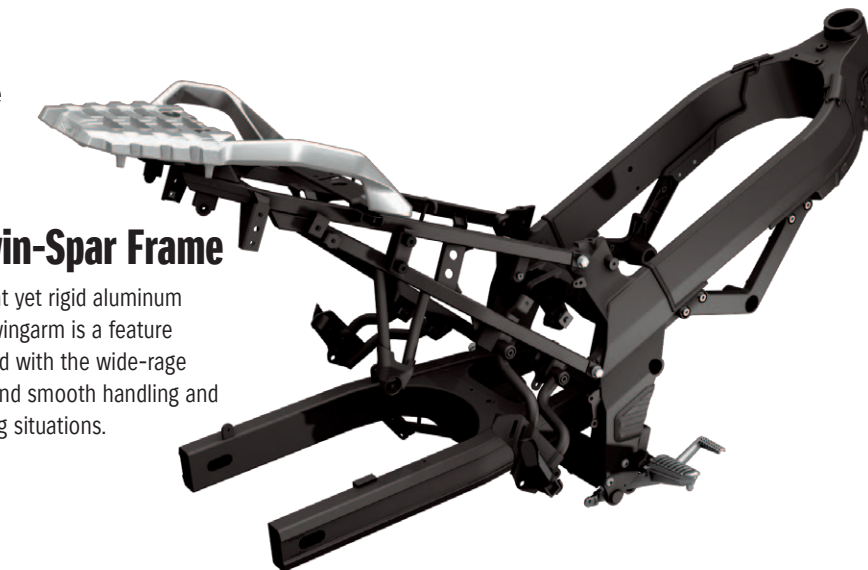
The newly designed seat lives up to the reputation of the V-Strom comfort. While securing a wide flat area to support the rider when riding, the front of the seat is slim enabling the rider to easily reach the ground when stopping. Also the pillion seat has a wide and comfortable space, making sure the pillion rider can also enjoy the ride. When viewed from the side the plentiful padding is visually assuring, inviting the rider on a long adventure.



Comfort seat

## Aluminum Twin-Spar Frame

Combination of the light yet rigid aluminum twin-spar frame and swingarm is a feature unique to this class, and with the wide-range engine, provides light and smooth handling and stability in various riding situations.



# Genuine Accessories to match your purpose

Slimmer and smarter, yet with more capacity, the three-part luggage system will support you and your partner at all levels of adventure. High seat or low seat, handlebar grip heaters or LED fog lamps, the wide range of accessories shall boost your V-Strom to the perfect tool for any task you intend, or not intend to face.



V-Strom 650XT ABS  
\*Image shown with optional accessories.



V-Strom 650XT ABS  
\*Image shown with optional accessories.



35L top case and side cases



55L top case

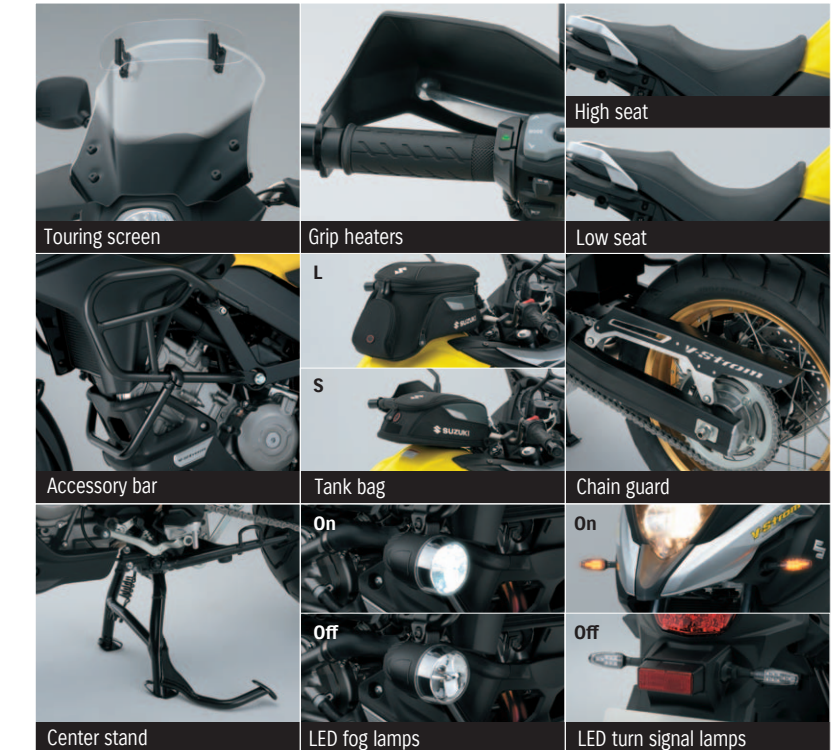
Side case

## Load up and be prepared

With the reputation for its long-distance touring performance sometimes even tandem riding, the optional integrated three-luggage system\*1 is an important option to heighten the attraction of the V-Strom 650. The newly designed rear section of the bodywork can now accommodate the same integrated three-luggage system as the V-Strom 1000, therefore no additional brackets or tools are needed to attach/detach the cases. Also mainly benefiting from the new exhaust system, it was possible for the cases to be fitted close to the center of gravity of the body, resulting in minimum effect in handling providing increased maneuverability. All three cases are lockable with the ignition key. Additional to the 35L top case in existence, a 55L top case\*2 has been introduced to the lineup which is able to hold two full-face helmets\*3 reassuring further luggage capacity for long distance, tandem riding tours.

\*1 The side case and 35L top case each have a maximum loading capacity of 3kg. \*2 Maximum loading capacity is 5kg.  
\*3 Helmets of certain shapes may not fit in the top case.  
Note: The 55L top case is not designed to be used with the side cases. Be sure to use the 55L top case alone. When using the side cases, be sure to use the 35L top case.

SUZUKI MOTOR CORPORATION reserves the right to add any improvement to change the design or to discontinue any Suzuki Genuine Accessories at any time without notice. Some Suzuki Genuine Accessories might not be compatible with local standards or statutory requirements. Please check with your local AUTHORIZED SUZUKI DEALER for details at the time of ordering.



## Wide Range of Accessories

Most appreciative in the cold seasons of riding or in the rain, the grip heaters have undergone a model change. The new type has a thinner grip and is almost identical to the standard grips making it feel natural even when not using them. Also the switch is built in to the left hand grip making the device compact and easier to fit, while the hot wire inside the grip has been positioned all-round the grip rather than only half, providing a more effective heating efficiency. The rich accessory lineup include items such as touring screen, high/low seats, accessory bar, tank bag, chain guard, center stand, LED fog lamps, and LED turn signal lamps which comes in handy when loading the vehicle.

# No Missing Pieces

No matter what your intention is, the V-Strom 650 will measure up. No matter how demanding your adventure is, the V-Strom 650 will respond to your expectations. Sometimes offering excitement, sometimes just quietly doing its job. V-Strom 650, truly, a masterpiece.



## Impression from Stefan Everts:

The V-Strom 650 was very well on the power range when I compare it to the V-Strom 1000.



The lighter version of the V-Strom handled like a RM-Z 250 through the mountains. You can ride it even more sporty and specifically on the unpaved trails.



## About Stefan Everts:

- Stefan Everts is the most successful motocross rider in the world championships with an as-yet unsurpassed total of 10 world titles in all three classes - 125, 250 and 500cc/ MX1.
- In a grand prix career that spanned 15 years (he retired in 2006) he accumulated a total of 101 Grand Prix victories.
- Won his first world title - the 1991 World 125cc Championship - for Suzuki at the age of 18.