

## 2008 Model Information

MODEL CODE: **KLE650A8F**

MODEL NAME: **Versys**



### **VERSYS: ACTIVE CONTROL FOR INDIVIDUAL EMPOWERMENT**

At Kawasaki, we know that no stretch of road has ever been ridden the same way twice. Choice of line, angle of corner approach and exit, nuance of brake and throttle, weight transfer, rhythm and timing – just some of the personal signatures of each and every ride.

For enthusiasts, and particularly for Kawasaki riders, at the very heart of motorcycling lies the singular enjoyment of the ride – not merely negotiating riding conditions, but revelling in them. Like a surfer on a wave, we make each ride our own.

With the Versys we set out to create a motorcycle that would empower riders to explore fully their individual riding style and find true inspiration on all types of road, in or out of town. Riders who have experienced a wide range of riding conditions and already know plenty about how they like to ride will be very excited by what the Versys has to offer – an added dimension of ride controllability.

We wanted the Versys rider to be able more than ever to take charge of their riding experience. So the suspension settings and riding position of the Versys are specifically designed to respond to weight transfer decisions by the rider, particularly adjustments to forward-rear balance while in motion. Rider-machine synchronicity has always been a prime Kawasaki design consideration, and to enhance rider feeling on the Versys we paid special attention to optimising feedback; in fact, the Versys could well be the most communicative bike you will ever ride.

Completing the package is an engine tuned to respond to your command at any rpm, especially down low, so you're never left short when you want power on the ground.

With the distinctive handling characteristics of the Versys, riders will find that they really can call the shots, nailing their chosen line with ease or altering their track with equal aplomb, even mid-corner.

And with a set up devised to complement riders' personal technique and natural instincts, striking a great riding rhythm – be it perfectly stringing together a series of tight bends or moving effortlessly through traffic quickly emerges as a definitive characteristic of the Versys ride.

Dynamic ride control to enhance your riding experience – that's the any street promise of the new Versys.

Designed for the discerning enthusiast, the Versys' riding position, engine characteristics, chassis balance and suspension settings were all selected to maximise rider exhilaration on the street. With its superb control and feedback, in the Versys, Kawasaki engineers are satisfied that they have achieved a model that offers a high level of rider confidence in numerous street riding situations and accommodates a variety of riding styles.

## Long-travel suspension

The combination of long-travel suspension with stiff spring settings is one of the keys to the active control offered by the Versys. In addition to being easily able to cope with a variety of road conditions and offering confidence-inspiring feedback to the rider, the Versys allows riders to consciously control the bike's forward-rear weight balance – adding a new dimension of controllability for riders to explore.

## Slim, upright riding position

A slim, upright riding position with wide handlebars offers both a naturally relaxed posture and great control-ability, and allows riders to experiment with a number of riding styles.

Whether riding in the hills or navigating city traffic, the clear, unobstructed view afforded by the tall seat height and upright position make it easy to see and avoid potential problems on the road ahead.

## Compact Parallel-Twin engine tuned for low-mid range torque

A compact Parallel Twin engine tuned for low-mid range torque delivers a satisfying surge of acceleration from starts and out of corners. The controlled response of the carefully tuned engine offers riders the confidence to get on the gas at any rpm.

## Sleek, flickable chassis

From long sweepers to tight twisties, the Versys' combination of quick steering and dynamic stability lets riders handle corners with ease. The high level of feedback offered by the chassis and suspension settings clearly communicates the bike's limits to the rider. Although the Versys' performance was optimised for 80-120 km/h range, its dynamic stability ensures that it is equally happy at higher speeds.

## Wind protection

Wind and weather protection from the adjustable windscreen is excellent, making jaunts on the highway stress-free.

## Tandem comfort

A well-cushioned pillion seat and naturally located grab bars ensure good comfort levels for a passenger. The slim chassis and under-engine muffler also contribute to the passenger's relaxed, heat-free riding position.



## LONG-TRAVEL SUSPENSION & 17" WHEELS

Not all streets in the real world are made of circuit-smooth pavement. Road imperfections (bumps, potholes) are far from rare, and some streets are not even paved (such as cobblestone, etc). While the Versys was not designed for off-road use, its long-travel front fork and rear shock were specially selected to cope with any street conditions it may come across, and, along with its 17" wheels, enable aggressive sport riding. Further, the long travel suspension provides an added dimension of controllability: the ability to consciously control the bike's front-rear weight transfer gives riders an additional riding element to explore.

- ★ The long stroke of the inverted front fork and off-set laydown rear shock (F: 150 mm, R: 52 mm) allow experienced riders to actively control the bike's front-rear weight balance. Purposely increasing braking force to compress the front suspension before a corner reduces the caster, resulting in quicker steering. Alternatively, the rider can opt to brake less aggressively, maintaining the bike's attitude for smooth, stable turn in. The Versys puts this choice in the hands of the rider, so even the same corner can be enjoyed a number of different ways.
- ★ Both the front fork and rear shock combine long travel with stiff springs. Standard off-road style long-travel suspension allows a bike to fly over bumps and ruts with ease, but this type of suspension was deemed to be too mushy for the kind of riding we wanted to offer. Likewise with sport bike suspension, road holding is superb, but performance is best on (relatively) smooth roads. Combining both long travel and stiff springs yields the benefits of both off-road-style and sportbike suspension, offering excellent road holding in a wide range of street riding conditions and superb feedback, enabling aggressive sport riding.
- ★ In addition to being tapered, the outer tubes of the 41 mm inverted front fork are relatively short (even at full compression, a large portion of the inner tubes remain visible) to provide the ideal stiffness balance to complement chassis settings.
- ★ In order to accommodate the longer stroke of the rear suspension, an aluminium gull type swingarm was chosen. The use of aluminium helps reduce unsprung weight.
- ★ In addition to being lighter, using a simple non-link type rear shock offers more direct feedback from the rear wheel, contributing to greater rider "feel." The excellent feedback clearly communicates the bike's limits, increasing rider confidence.
- ★ The ability of the rear suspension to soak up bumps and ruts was the key to being able to ride over cobblestone streets and handle road imperfections like rocks and potholes, etc. Consequently, a great deal of development time was also devoted to the tuning of the Showa rear shock unit. The high-grade unit makes use of a free piston and 2-stage damping valves to ensure smooth action at the initial part of the compression stroke and firmer damping near full compression, giving a more planted feel.



This careful attention to the tuning of the rear suspension ensures the Versys can be ridden aggressively and with confidence through city streets, be they paved, brick or cobblestone.

- ★ Both the front and rear suspension have adjustable rebound damping and preload. Along with a fork height adjustable by 8 mm, they offer riders a range of adjustability to experiment with if they want.
- ★ 17" wheels front and rear contribute to the bike's quick steering. A 110 mm front tyre was considered, but in the end a 120 mm tyre was deemed to offer a better balance of quick steering and front wheel traction. Tyre sizes are as follows:  
Front: 120/60ZR17M/C 58W  
Rear: 160/60ZR17M/C 69W



## SLIM, UPRIGHT RIDING POSITION

When engineers considered the kind of riding they wanted to offer, and the speed range most often used in everyday riding (80-120 km/h), a naturally relaxed posture and high controllability care of a slim, upright position with wide handlebars was deemed ideal. Because it would have a great impact on rider control and enjoyment, a substantial amount of development time and effort was devoted to fine-tuning the riding position.

The combination of a compact Parallel Twin engine and a narrow, lightweight trellis frame enabled by an offset laydown suspension is the key to the Versys' slim riding position.



A short-style tank positions the rider closer to the front wheel for increased controllability and offers a greater choice of forward-rearward sitting positions.

- ★ The seat's slim design and the knee grip characteristics of the tank afford good freedom of movement, allowing the riders to change sitting position should they so choose. Thicker urethane increases comfort and contributes to a seat height that places the rider in a position of fun controllability. The stepped shape of the two-piece seat also provides support for the rider when accelerating
- ★ Complementing the wide handlebar, the footpegs are positioned low and slightly forward of the seat. Wide rubber covered footpegs help reduce unwanted vibration and offer increased freedom of mobility.
- ★ Together, all these points result in a very natural, relaxed position designed to offer the rider a high level of machine control. The upright riding position accommodates a variety of riding styles (lean-in, no-lean, lean-out), broadening the spectrum of riding enjoyment and also offers a high level of comfort, a great benefit for touring. This combination of comfort and control is one of the things that makes the Versys so much fun to ride.
- ★ When combined with the long-stroke suspension, the upright riding position and higher seat height offer a commanding view of the road ahead – especially advantageous when navigating city traffic or winding roads in the hills.



## COMPACT PARALLEL-TWIN ENGINE TUNED FOR LOW-MID RANGE TORQUE

When tuning the 649 cc Parallel Twin engine, our engineers' first priority was to find a throttle response that balanced a powerful feeling and a quick-revving character. To optimise performance for everyday riding (most of which takes place in and around the 80-120 km/h range), care was taken to maximise low-mid range torque. When opening the throttle, riders will notice that the engineers succeeded in creating an extremely smooth and powerful engine character that offers both a high level of control when making minute throttle adjustments and a gratifying rush of acceleration in the lower rpm ranges.

- ★ Intake and exhaust cams with short operating angles move the torque curve toward the lower end of the rpm range.
- ★ To achieve smooth power and torque curves, the exhaust system makes use of a balance tube.
- ★ Fuel injection settings for the Versys were selected primarily to deliver a strong powerful feeling when the throttle is opened.



- ★ Performance and feel were optimised for the mid-range (3,000-6,000 rpm). However, in the low-rpm range (below 3,000 rpm), power delivery is very smooth, and even above 6,000 power and torque curves continue on without dropping off suddenly.
- ★ These settings result in a performance that favours speeds most used in everyday riding: the range in and around 80-120 km/h. Corner pick-up is excellent: the powerful mid-range delivers a satisfying surge of acceleration and the flat, step-free torque curve and smooth engine response let riders open the throttle with confidence – at any rpm.
- ★ Triangular layout of the crankshaft and transmission shafts makes the engine very short front-to-back.
- ★ Semi-dry sump design reduces engine height.
- ★ Auto-fast idle system simplifies starting and ensures the catalyser reaches optimum temperature quickly.
- ★ 180° crankshaft drives a balancer shaft for silky smooth engine operation.
- ★ With the large radiator and under-engine muffler, the Versys offers superior comfort from a heat dissipation perspective.



## SLEEK, FLICKABLE CHASSIS

The key to the Versys' sleek chassis is its compact Parallel Twin engine, which allows the use of a slim, lightweight frame. Together with the forward located seat position and the under-engine muffler, this engine-frame combination delivers a highly centralised mass distribution, which contributes to the highly agile package.

- ★ The base frame construction and stiffness balance were set to offer a high level of feedback to the rider.
- ★ The highly compact engine and under-engine muffler contribute to mass centralisation. The front cowl (including instrument panel and headlight unit) is mounted directly to the frame, minimising its effect on handling.
- ★ The bike's tall seat height and long-stroke suspension result in a higher CG. The resultant increase in agility makes the Versys even more fun to control.

- ★ Chassis dimensions provide a balance of flickability and high-speed stability. (Although the Versys' performance is optimised for the 80-120 km/h speed range, it is quite happy to oblige riders who wish to travel at higher speeds.) With a wheelbase of 1,415 mm, the Versys can still be considered a "short wheelbase" model, and accordingly it delivers a high level of agility.



## WIND PROTECTION

An adjustable windscreen helps reduce wind noise and helmet buffeting, creating a serene space behind which to enjoy high-speed riding. The adjustable windscreen has three different settings (each 20 mm apart), allowing riders to tailor its height to suit their preferences. (Adjustment is via a 4 mm hexagonal wrench.)

- ★ A tall screen will also be available as an option.

## TOURING POTENTIAL

For riders who prefer longer excursions, a comfortable seat, relaxed riding position, large volume fuel tank, protection from the adjustable windscreen and enhanced touring potential make the Versys a very capable touring partner. A number of optional accessories further increase the Versys' touring potential.

- ★ Along with the comfortable seat, the relaxed position enables riders to spend long hours in the saddle.
- ★ A 19-litre fuel tank combined with excellent fuel economy offers an ample touring range.
- ★ In addition to the optional top-case, specially designed large-volume GIVI panniers are available as options. Each pannier can hold a full-face helmet and is rated for 5 kg (like the top case).
- ★ Passenger footpeg stays and the reinforced sub-frame were designed to accommodate the optional panniers and top case. The sub-frame's additional strength contributes to increased stability when carrying luggage or a passenger.
- ★ Thanks to the under-engine muffler, the bike's profile can stay relatively slim even with the panniers attached.
- ★ Pillion footpeg stays and grab bars can double as tie-down points for securing luggage.



# SPECIFICATIONS

## ENGINE

Type	4-stroke Parallel Twin
Displacement	649 cc
Bore and Stroke	83.0 x 60.0mm
Compression ratio	10.6:1
Valve system	DOHC, 8 valves
Carburettor	Keihin 38mm x 2 Fuel Injection
Ignition	Digital
Starting	Electric
Cooling	Liquid
Lubrication	Forced lubrication, semi-dry sump

## DRIVETRAIN

Transmission	6-speed
Final drive	Sealed chain
Clutch	Wet, multi-disc

## FRAME

Type	Diamond high tensile steel	
Suspension:	front rear	41 mm inverted telescopic Fork Offset laydown single shock
Wheel travel:	front rear	150 mm 145 mm
Tyre:	front rear	120/70 ZR17 160/60 ZR17
Caster (rake)		25°
Trail		108 mm

## BRAKES

Front	Dual 300mm petal discs
Front caliper	Dual piston
Rear	Single 220mm petal disc
Rear caliper	Single-piston caliper

## DIMENSIONS

Overall length	2,125 mm
Overall width	840 mm
Overall height	1,315 mm
Wheelbase	1,415 mm
Seat height	840 mm
Dry weight	181 kg
Fuel capacity	19 litres

## PERFORMANCE

Maximum power	64 PS/ 8,000 rpm
Maximum torque	61 N·m / 6,500 rpm