



## KAWASAKI MOTORCYCLES ARE A DISTILLATION OF THE MOST ADVANCED TECHNOLOGY THE WORLD HAS TO OFFER.





Representing a unique engineering heritage and a wealth of technological expertise combined with passion, performance and individuality, Kawasaki motorcycles are not just about high performance. They are a crystallisation of advanced technology arising from the collective efforts of the Kawasaki Heavy Industries Group, whose activities span a wide range of business domains including Land, Sea and Air Transportation Systems, Energy & Environmental Engineering and Industrial Equipment.

Kawasaki motorcycles possess both power and grace so are often recognised as being different to other bikes. This results from certain guiding principles adopted at the design stage. Rideology is Kawasaki's rider-centric development philosophy focused on how the riding experience offered by a Kawasaki is crafted, ensuring that our machines are fun to ride and rewarding to control. This approach has been the force behind many of our legendary machines, and in our pursuit of all possibilities it will continue to guide the future creation of Kawasaki motorcycles.



## BUILDING CHAMPIONS

To compete, to race, to win - that is the ambition of every motocross rider, right up to those talented individuals who dominate their chosen racing class to reach the pinnacle of success.

Across MX2 and MXGP the competition is intense, the commitment without question and the self-expectation beyond imagination. For riders like Clément Desalle, Jordi Tixier, Dylan Ferrandis, Petar Petrov, Tommy Searle and Livia Lancelot, what others regard as exceptional becomes the norm and the podium their expected destination. Their machine of choice? KX from Kawasaki. Four-stroke technology at the cutting edge of off-road sport combined with chassis development experience that is a direct result of multiple AMA Championships and numerous wins in MX2, MXGP and WMX.

Second best is not an option, Kawasaki riders do not compete just to make up the numbers. Grab the advantage of the tactical training regime of our best Team Green, Factory supported and Full-Factory KRT riders by starting with the very best equipment available. KX from Kawasaki – making your race for the podium a default destination.



LIVIA LANCELOT WMX DYLAN FERRANDIS MX2



CLÉMENT DESALLE MXGP



## THE BIKE THAT BUILDS CHAMPIONS

KX has won its place as a dominant force on the track. From the mini-bike amateur classes, to the 250cc and 450cc professional classes, the KX's consistent domination of the winners' podium has made it clear that championships are won on a KX. With the best riders and the best bikes, the KX became undeniably championship-proven. Now, after years of success, the relentless dedication to top-level performance adds up to the undeniable proof that KX is the bike to build champions.



1



Light and fast, the KX450F is the quickest way to the top of the 450cc class. With a Light and fast, the KX450F is the quickest way to the top of the A50cc class and a peerless 32 ANA championship peeligree stretching back across four decades and a peerless activity the KX450F championship peeligree stretching back across four decades and a peerless activity the top of th



### WINNING ENGINE

Fuel-injected 449 cm<sup>3</sup> liquid-cooled, fourstroke single delivers hard-hitting power from low through high-rpm. The broad power band and responsive throttle offer a wide-spread of torque delivering the ability to get on the gas and go - even from low revs.



### LAUNCH CONTROL

Factory-style launch control system increases the chance of getting a good start by helping riders maximise traction when starting on a hard pack or slippery surface.



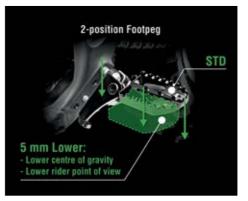
### **FI CALIBRATION KIT**

KX FI Calibration Kit features the handheld FI Calibration Controller, which enables expert riders to adjust engine characteristics to suit their preferences. This simple tool can be used without a PC, simply by plugging into the engine's ECU.



### **FRONT BRAKES**

Oversized ø270 mm front disc delivers strong stopping power and excellent controllability. The factory-style front and rear petal brake discs also contribute to high-quality sporty looks.



### **ADJUSTABLE FOOTPEGS**

to lower their footpeg position by 5 mm. In the bottom position, the centre of gravity is lowered as is the rider's eveline, providing both physical and psychological advantages.



## **KX450F**

- 1. ALUMINIUM PERIMETER FRAME IS NARROW ACROSS THE MAIN BEAMS, LIGHT, AND WITH RIGIDITY CALCULATED TO CONTRIBUTE TO GREATER FRONT-END FEEL.
- 2. FACTORY-RACER-STYLE SFF-AIR TAC FRONT FORK HAS ITS DAMPING ASSEMBLY IN THE LEFT FORK TUBE AND A PNEUMATIC SPRING, COMPRISED OF THREE PRESSURISED AIR CHAMBERS, IN THE RIGHT. LIGHT WEIGHT, LOW FRICTION, EASY ADJUSTABILITY, A WIDE ADJUSTMENT RANGE AND PRECISE SETTINGS ARE SOME OF THE ADVANTAGES.
- 3. FUEL-INJECTED 449 CM<sup>3</sup> ENGINE OFFERS HARD-HITTING POWER ACROSS THE **REV-RANGE WHILE ENSURING STABLE** FUEL-METERING IN ALL CONDITIONS. RACE-INSPIRED TUNING AND PARTS LIKE THE HIGH-PERFORMANCE BRIDGED-BOX BOTTOM PISTON ENSURE TOP-LEVEL PERFORMANCE FROM THE CRATE.
- 4. AGRESSIVE BODYWORK ADDS TO THE BIKE'S COMPACT LINES AND IS COMPLEMENTED BY FACTORY-STYLE DESIGN. KAWASAKI'S FIRST IN-MOULD GRAPHICS AS USED ON THE SHROUDS RESULT IN AN ULTRA-SMOOTH SURFACE FOR IMPROVED DURABILITY.
- 5. A CHOICE OF FOUR SETTINGS ALLOWS RIDERS TO TAILOR THEIR RIDING POSITION WITHIN A RANGE OF 35 MM. FACTORY STYLE RENTHAL HANDLEBAR AND PAD COME AS STANDARD.
- 6. UNI-TRAK REAR SUSPENSION LINKAGE MOUNTS BELOW THE SWINGARM FOR MORE PRECISE SUSPENSION TUNING. DUAL COMPRESSION ADJUSTABILITY OFFERS A WIDE RANGE OF SETTINGS. SELF-LUBRICATING ALUMITE COATING ON THE DAMPER BODY IMPROVES WEAR RESISTANCE AND SHOCK ACTION
- 7. UPPER AND LOWER TRIPLE CLAMPS ARE REDESIGNED BASED ON FEEDBACK FROM KAWASAKI'S FACTORY RACE TEAMS TO OFFER IMPROVED STABILITY ON CORNER ENTRY, ENABLING QUICKER TURN-IN.

Adjustable footpeg mountings enable riders



### SFF-AIR TAC SUSPENSION

The works-replica fork is lightweight and highly rigid, contributing to superior riding stability. With settings chosen for high-level to expert riders, the new fork offers excellent shock absorption performance at high speeds, making it easier for racers to ride even faster.

Rush to the front of the pack on the KX 250F, the first choice for MX2 winners informing every aspect of its design.





### WINNING ENGINE

The fitment of the world's first dual injectors on a production motocrosser is a key to the KX250F's highly acclaimed fuel-injected performance.



LAUNCH CONTROL

Factory-style launch control system improves your chances of a perfect start by helping to maximise traction when starting on a hard pack or slippery surface.



### **FI CALIBRATION KIT**

KX FI Calibration Kit features the handheld FI Calibration Controller, which enables expert riders to adjust engine characteristics to suit their preference. This simple tool can be used without a PC, simply by plugging into the engine's ECU.



### FRONT BRAKE

ø270 mm BRAKING brand front disc delivers strong stopping power with excellent controllability. The factory-style front and rear petal brake discs also contribute to aggressive sporty looks.

7.

6.

3.

# 4-position Handlebar

### **4-POSITION HANDLEBAR**

A choice of four positions allows riders to tailor their riding position within a range of 35 mm. Factory-style Renthal handlebar and pad come as standard.

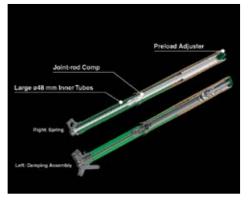
## **KX250F**

- 1. ALUMINIUM PERIMETER FRAME IS LIGHTER, STIFFER AND SLIMMER. THE FRAME IS ALSO NARROWER ACROSS THE MAIN BEAMS AND FEATURES REVISED RIGIDITY CONTRIBUTING TO GREATER FRONT-END FEEL.
- 2. THE TYPE 2 SEPARATE FUNCTION FRONT FORK (SFF) HAS ITS DAMPING ASSEMBLY IN THE LEFT FORK TUBE AND A SPRING IN THE RIGHT. Ø48 MM FORK TUBES AND WORKS-STYLE INTERNAL CONSTRUCTION CONTRIBUTE TO ASSURED FRONT-END FEEL, INCREASED DAMPING PERFORMANCE AND RIDE COMFORT, GREATER BOTTOMING RESISTANCE AND INCREASED STABILITY WHILE ON THE BRAKES OR WHEN LANDING JUMPS.
- 3. FUEL-INJECTED 249 CM<sup>3</sup> ENGINE IS TUNED FOR HIGH PERFORMANCE. ITS HIGH-REVVING CHARACTER IS COMPLEMENTED BY SUPERB **RESPONSE. THE HIGH-PERFORMANCE** BRIDGED-BOX BOTTOM PISTON WITH DOWNDRAFT-STYLE INTAKE ROUTING AND REDUCED MECHANICAL LOSS FURTHER ELEVATE ENGINE OUTPUT.
- 4. AGGRESSIVE NEW BODYWORK GIVES A MORE COMPACT APPEARANCE AND IS ENHANCED BY FACTORY-STYLE DESIGN. KAWASAKI'S FIRST IN-MOULD SHROUD GRAPHICS GIVE AN ULTRA-SMOOTH SURFACE FOR IMPROVED DURABILITY.
- 5. ALL-NEW MINIMALIST BODYWORK INCLUDES EVEN SLIMMER RADIATOR SHROUDS THANKS TO REORIENTED RADIATORS, A FLATTER SEAT AND TANK AND SMOOTH, SEAMLESS DESIGN MAKING IT EASIER FOR RIDERS TO MOVE AROUND.

6. ADJUSTABLE FOOTPEG BRACKETS ENABLE RIDERS TO LOWER THEIR FOOTPEG POSITION BY 5 MM. IN THE BOTTOM POSITION, THE CENTRE OF GRAVITY IS LOWERED AS IS THE RIDER'S EYELINE, PROVIDING BOTH PHYSICAL AND PSYCHOLOGICAL ADVANTAGES.

- 7. LINKAGE OF THE UNI-TRAK REAR SUSPENSION MOUNTS BELOW THE SWINGARM FOR MORE PRECISE SUSPENSION TUNING. DUAL COMPRESSION ADJUSTABILITY OFFERS A WIDE RANGE OF TUNING OPTIONS. SELF-LUBRICATING ALUMITE COATING ON THE TANK CYLINDER IMPROVES WEAR RESISTANCE AND SHOCK ACTION.
- 8. USING THE FI COUPLERS PROVIDED, RIDERS CAN QUICKLY AND EASILY ACCESS A CHOICE OF THREE MAPS (STANDARD, HARD, SOFT) INSTALLED IN THE ECU.





### SFF TYPE 2

A lighter inner fork-tube design fine-tunes front-end rigidity. Along with revised shim stack layout, revised oil level and a firmer spring rate, the pitching effect when braking over bumps is reduced, and cornering stability is increased while sharp turn-in is maintained.







### **POWERFUL 2-STROKE**

A low-friction piston, new KIPS valve and numerous other updates give the KX85's liquid-cooled, two-stroke racing engine increased power and torque across the rev range.



36 MM INVERTED FORK

The fork offers improved damping and bottoming resistance, enabling higherpaced riding and contributing to increased ride comfort.



**FACTORY STYLING** 

All-new bodywork and racy graphics ensure the new bikes will look good in the winners' circle. Black alumite rims, black fork guards and green alumite finish on the suspension rance of the KX85.



### FRONT BRAKE

Large diameter 220 mm petal disc brake gripped by a dual-piston caliper contribute to strong braking performance. Just like the larger KX models.

5.

2.

4

## ADJUSTABLE HANDLEBARS

## KX85-1 KX85-11

- 1. STURDY PERIMETER FRAME IS DESIGNED TO HARNESS THE ENGINE'S POWER AND OFFERS STRENGTH AND TORSIONAL RIGIDITY, ALLOWING YOUNG RIDERS TO PUSH HARD ON THE TRACK.
- 2. UNI-TRAK REAR SUSPENSION IS ADJUSTABLE FOR COMPRESSION AND REBOUND DAMPING AND PRELOAD. THE COMPRESSION MECHANISM FOR THE REAR SHOCK ALLOWS DAMPING FORCE TO BE GENERATED AT SLOWER STROKE SPEEDS, CONTRIBUTING TO A MORE STABLE RIDE FEEL. THE MECHANISM IS 24-WAY ADJUSTABLE FOR COMPRESSION DAMPING AND 21-WAY ADJUSTABLE FOR **REBOUND DAMPING.**
- 3. ALL-NEW MINIMALIST BODYWORK, FLATTER TANK AND SLIMMER, FLATTER SEAT WERE DESIGNED TO MAKE IT EASIER FOR RACERS TO GO FAST FOR LONGER.
- 4. BRUSHED ALUMINIUM FINISH ON THE SWINGARM CONTRIBUTES TO A HIGH-QUALITY IMAGE.
- 5. FORK AND REAR SHOCK ADJUSTERS HAVE A GREEN ALUMITE FINISH LIKE KAWASAKI FACTORY RACERS.
- 6. AVAILABLE IN TWO SIZES TO SUIT RIDER GROWTH, BOTH SMALL AND BIG WHEEL **KX85 MACHINES FEATURE EXACTLY THE SAME** PERFORMANCE AND STYLING.

	KX85-I (small wheel)	KX85-II (big wheel)	
Front wheel	17″	19″	
Rear wheel	14″	16″	
LxWxH	1,830 x 765 x 1,100	1,920 x 765 x 1,150 mm	
Seat height	830 mm	870 mm	
Curb mass	75 kg	77 kg	



KX85 riders grow taller and change size quickly. By rotating the clamps, or adding the supplied aluminium spacing shims, the handlebars can move up and down by 10 mm in three possible heights plus stay in standard position or move back and forwards by 10 mm.



KX85-II shown





- 1. A HIGH-PERFORMING, LIQUID COOLED 64 CM<sup>3</sup> ENGINE DELIVERS STRONG LOW- AND MID-RANGE PERFORMANCE WITH A WIDE, MANAGEABLE POWERBAND.
- 2. THICK BACKBONE TUBING AND REINFORCED DOWNTUBE GIVE THE FRAME DURABILITY AND STABILITY. THE REMOVABLE LEFT SIDE REAR FRAME PIECE EASES AIRBOX AND SHOCK SERVICING.
- 3. SINGLE FRONT AND REAR BRAKE DISCS WITH SINGLE PISTON CALIPERS DEMONSTRATE THE POWER OF EFFECTIVE BRAKING.
- 4. STURDY 33 MM TELESCOPIC FRONT FORK DELIVERS FLEX-RESISTANCE AND PRECISE STEERING AND THE ADDITION OF FOUR-WAY REBOUND DAMPING ADJUSTMENT ALLOWS FIRMER SUSPENSION SETTINGS TO BE DIALLED IN AS EXPERIENCE AND PACE INCREASE.
- 5. BOTTOM-LINK UNI-TRAK REAR SUSPENSION WITH 4-WAY REBOUND DAMPING ADJUSTABILITY DELIVERS SUPERIOR HANDLING PERFORMANCE.



1. AIR-COOLED 112 CM<sup>3</sup> SOHC ENGINE PUMPS OUT PLENTY OF RESPONSIVE LOW-RPM TORQUE. 2. STURDY BACKBONE FRAME AND BRACED SWINGARM CONTRIBUTE TO EXCELLENT HANDLING CHARACTERISTICS. 3. 4-SPEED TRANSMISSION WITH AN AUTOMATIC CLUTCH ALLOWS NEWER RIDERS TO CONCENTRATE ON RIDING AND NOT ON CLUTCH CONTROL. 4. ADJUSTABLE THROTTLE ALLOWS PERFORMANCE TO BE LIMITED AND HELP NEW RIDERS GAIN EXPERIENCE AT SLOWER SPEEDS. 5. THE ELECTRIC STARTER IN COMBINATION WITH KAWASAKI'S AUTOMATIC COMPRESSION RELEASE ENABLES HASSLE-FREE STARTING.





1. THE 449 CM<sup>3</sup> LIQUID COOLED, 4-STROKE, SINGLE CYLINDER ENGINE IS TUNED FOR MAXIMUM LOW- AND MID-RANGE PERFORMANCE.

- 2. LIGHTWEIGHT DIGITAL INSTRUMENTATION INCLUDES A SPEEDOMETER, TWIN TRIPMETER, ODOMETER AND CLOCK.
- 3. THE LIGHTWEIGHT ALL-ALUMINIUM PERIMETER FRAME IS SET UP TO OFFER NIMBLE HANDLING QUALITIES IN ROUGH CONDITIONS.
- 4. SUSPENSION QUALITY HAS NOT BEEN COMPROMISED AND THE FULLY ADJUSTABLE FRONT AND REAR UNITS OFFER SUPERB CONTROL.
- 5. THE ELECTRIC START IS BACKED-UP BY THE FAIL-SAFE OF A KICK-STARTER AND RESTARTING IS ALSO MADE EASIER WITH KAWASAKI'S AUTOMATIC COMPRESSION RELEASE SYSTEM.

### SPECIFICATIONS

MODEL	KX450F	KX250F	KX85 I & II	KX65	KLX110	KLX450R
Colours	Lime green	Lime green	Lime green	Lime green	Lime green	Lime green
Engine type	Liquid-cooled,	Liquid-cooled,	Liquid-cooled,	Liquid-cooled,	Air-cooled,	Liquid-cooled,
	4-stroke Single	4-stroke Single	2-stroke Single with KIPS	2-stroke Single	4-stroke Single	4-stroke Single
Displacement	449 cm <sup>3</sup>	249 cm <sup>3</sup>	84 cm <sup>3</sup>	64 cm <sup>3</sup>	112 cm <sup>3</sup>	449 cm <sup>3</sup>
Bore x stroke	96.0 mm x 62.1 mm	77.0 mm x 53.6 mm	48.5 mm x 45.8 mm	44.5 mm x 41.6 mm	53.0 mm x 50.6 mm	96.0 mm x 62.1 mm
Compression ratio	12.8:1	13.7:1	10.9:1 (low speed);	8.4:1	9.5:1	12.0:1
			9.0:1 (high speed)			
Valve system	DOHC, 4 valves	DOHC, 4 valves	Piston reed valve	Piston reed valve	SOHC, 2 valves	DOHC, 4 valves
Fuel system	Fuel injection: Ø 43 mm x 1	Fuel injection: Ø 43 mm x 1	Carburettor: Keihin PWK 28	Carburettor: Mikuni VM24SS	Carburettor: PB18 (Keihin)	Carburettor: Keihin FCR-MX40
		(Keihin) with dual injection				
Lubrication	Forced lubrication,	Forced lubrication,	Petrol mix	Petrol mix	Forced lubrication,	Forced lubrication,
	semi-dry sump	semi-dry sump			wet sump	semi-dry sump
Transmission	5-speed, return	5-speed, return	6-speed, return	6-speed, return	4-speed, return	5-speed, return
Final drive	Chain	Chain	Chain	Chain	Chain	Sealed chain
Clutch	Wet multi-disc, manual	Wet multi-disc, manual	Wet multi-disc	Wet multi-disc	Centrifugal, wet multi-disc	Wet multi-disc
Frame type	Perimeter, aluminium	Perimeter, aluminium	Perimeter, high-tensile steel	Double-cradle,	Backbone, Steel	Perimeter, aluminium
				high-tensile steel		
Tyre, front	80/100-21 51M	80/100-21 51M	70/100-17 40M /	60/100-14 30M	2.50-14 4PR	80/100-21M/C 51P
			70/100-19 42M (II)			
Tyre, rear	120/80-19 63M	100/90-19 57M	90/100-14 49M /	80/100-12 41M	3.00-12 4PR	120/90-18M/C 65P
			90/100-16 52M (II)			
Suspension, front	49 mm inverted Separate	48 mm inverted telescopic	36 mm inverted telescopic	33 mm telescopic fork with	30 mm telescopic fork	48 mm inverted AOS type
	Function front Fork Air - Triple	Separate Function front Fork	fork with 20-way compression	4-way rebound damping		telescopic fork with 22-way
	Air Chamber (SFF-Air TAC).	(SFF) Type 2. Compression	damping			compression and 18-way
	Compression damping:	damping: 22-way. Rebound				rebound damping
	22-way. Rebound damping:	damping: 20-way. Spring				
	20-way	preload: 40-way				
Suspension, rear	Uni-Trak. Compression	Uni-Trak. Compression	Bottom-Link Uni-Trak with	Bottom-Link Uni-Trak with	Single shock	Uni-Trak with 22-way low-
	damping: 19-way (low-speed),	damping: 19-way (low-speed),	adjustable preload, 24-way	gas-charged shock, adjustable		speed, 2 turns or more high
	4-turns or more (high-speed).	4-turns (high-speed). Rebound	compression and 21-way	preload and stepless rebound		speed compression damping,
	Rebound damping: 22-	damping: 22-way. Spring	rebound damping	damping		22 way rebound damping and
	way. Spring preload: Fully	preload: Fully adjustable				adjustable spring preload
	adjustable					
Brakes, front	Single semi-floating 270 mm	Single semi-floating 270 mm	Single 220 mm disc. Caliper:	Single 180 mm disc. Caliper:	Drum (Ø 90 mm)	Single semi-floating 250 mm
	petal disc. Caliper: Dual-piston	petal disc. Caliper: Dual-piston	Dual-piston	Single-piston		petal disc. Caliper: Dual piston
Brakes, rear	Single 240 mm petal disc.	Single 240 mm petal disc.	Single 184 mm disc. Caliper:	Single 180 mm disc. Caliper:	Drum (Ø 110 mm)	Single 240 mm petal disc.
	Caliper: Single-piston	Caliper: Single-piston	Single-piston	Single-piston		Caliper: Single piston
LxWxH	2,195 x 820 x 1,280 mm	2,170 x 820 x 1,265 mm	1,830 x 765 x 1,100 mm &	1,590 x 760 x 955 mm	1,560 x 650 x 955 mm	2,175 x 820 x 1,250 mm
			1,920 x 765 x 1,150 mm (II)			
Wheelbase	1,495 mm	1,475 mm	1,265 mm / 1,310 mm (II)	1,120 mm	1,075 mm	1,480 mm
Ground clearance	335 mm	320 mm	290 mm / 330 mm (II)	305 mm	215 mm	315 mm
Seat height	950 mm	940 mm	830 mm / 870 mm (II)	760 mm	680 mm	935 mm
Curb mass**	108.8 kg	104.5 kg	75 kg / 77 kg (II)	60 kg	76 kg	126 kg
Fuel capacity	6.3 litres	6.4 litres	5 litres	3.8 litres	3.6 litres	8 litres

GENUINE PARTS

THE 2017 OFF-ROAD COMPETITION RANGE IS OUR MOST REFINED YET. ENSURE YOU RETAIN FACTORY FRESH PERFORMANCE BY USING ONLY COMPETITION-PROVEN GENUINE KAWASAKI PARTS PRECISION MANUFACTURED FOR YOUR RACING MACHINE.



## KAWASAKI DEALERS

ALL KX AND KLX MACHINES ARE SUPPORTED BY A NETWORK OF KNOWLEDGEABLE AND ENTHUSIASTIC KAWASAKI DEALERS EQUIPPED TO SUPPLY GENUINE PARTS, SERVICING AND EXPERT ADVICE. AS A "PERFORMANCE PARTNER" YOUR KAWASAKI DEALER IS READY TO HELP YOU WIN. Always ride responsibly. Respect the law and the environment. Always ride within the limits of your skills, your experience, and your machine. Wear an approved helmet, eye protection and relevant protective apparel. Increase your ability by taking relevant approved training. Adhere to the instructions and maintenance schedule in your owner's manual. Never drink and ride. Specifications have been achieved by production models under standard operating conditions. Data are intended to describe motorcycles and their performance capabilities fairly but may not apply to every machine. Specifications likely to change without notice. Specifications, products and illustrated equipment may vary by market. The actions depicted here took place under controlled conditions with professional riders. Never attempt any action which is potentially dangerous.

**Copyright © 2016 Kawasaki Motors Europe N.V.** All rights reserved. Subject to the exceptions provided for by law, no part of this publication may be reproduced and/or published in print, by photocopying, on microfilm, electronically or in any other way without the prior written consent of the copyright holder.



The Kawasaki Genuine Products logo is a mark of quality. It can only be found on products manufactured to our exacting standards either by or on behalf of Kawasaki Motors Europe N.V.

### Kawasaki Motors Europe N.V.

Jacobus Spijkerdreef 1-3 2132 PZ Hoofddorp The Netherlands

### www.kawasaki.eu

E99941-3002

For more information, please visit www.kawasaki.eu

