Brute Force 750 4x4i Brute Force 750 4x4i Camo Brute Force 750 4x4i Silver Edition 2006 Model Information

# KVF750A6F / B6F / C6F



## **MODEL CONCEPT**

This flagship Sport/Utility ATV is powered by the industry's largest displacement liquid-cooled V-Twin. The KVF750 4x4i offers high peak torque and power, as well as quick acceleration.

The KVF750 4x4i features double-wishbone independent suspension front and rear. The result is a combination of luxurious ride quality and enhanced ground following ability in the low and medium speed ranges, as well as ample sport riding performance.

Standard features include the easy-to-operate, smooth-shifting, CVT automatic transmission with "Selectable" 2WD/4WD, variable front differential control, a sturdy double-cradle chassis, twin-piston front disc brakes, and a fully enclosed, wet, multi-plate rear brake.

Designed to be the King of All ATV's, no other machine in the Sport/Utility category offers such impressive performance.

Three body finishes are offered for 2006: Aztec Red and Hunter Green in scratch resistant TPO plastic, Hardwoods<sup>®</sup> Green HD<sup>™</sup> Camouflage, and new Galaxy Silver finish.



#### The Brute Force 750 4x4i's key sales features can be summarized as follows:

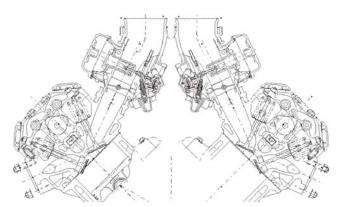
- Industry's Most Powerful Performance With a massive displacement of 749 cm<sup>3</sup>, large 34 mm down-draft carburetors, straight intake tracts, plated aluminum cylinders, and SOHC 4-valve heads, the Brute Force 750 4x4i has more power and torque than anything in its category.
- Comfortable Suspension Performance & Luxurious Ride Quality Kawasaki's first ATV with independent rear suspension. Very comfortable upright riding position and seat design tailored for all-day riding.
- Styling Design Suitable for Kawasaki's Flagship ATV Rugged looks, full instrumentation, convenient glove boxes, a 4-bulb headlight, high quality fit and finish, and scratch resistant plastic make the Brute Force 750 4x4i as good looking as it is high performing.
- Award-winning Features Electrically "selectable" 2WD/4WD, KAPS, variable front differential control and a sealed internal wet brake are just some of the proven systems that make the Brute Force 750 4x4i a pleasure to operate.
- **Improvements for 2006** Improvements to the air intake and rear brake systems improve rideability and braking feel.





# ENGINE

- The ATV industries most powerful, liquid-cooled, 749 cm<sup>3</sup>, SOHC, 4-valve V-twin engine churns out a substantial 50.9 PS @ 6,500 rpm.
- Torque output 60.7 N m @ 5,000 rpm lets the KVF750A accelerate with ease.
- Offsetting the cylinders by 90° results in perfect primary balance, for low vibration levels and comfortable riding. It's so smooth there's no need for a separate extra engine balancer, saving power and weight.
- Oversquare bore and stroke measure 85 x 66 mm.
- All-aluminum cylinders feature electrofusion-coated bores for light weight, long wear and excellent heat dispersion. The electrofusion bores save 1.5 pounds of engine weight.
- Large bore CVKR-34 mm down-draft carburetors are oriented for best flow into the straight intake tract for high intake efficiency and gutsy power across the rpm range.



- The four valve heads use large, 30 mm intake and 26 mm exhaust valves.
- Efficient, SOHC (Single OverHead Cam) design operates forked rocker arms with screw type lash adjusters for ease of maintenance.
- Vacuum-operated petcock automatically shuts off fuel flow when the engine is not running.
- Oval, oiled foam air filter provides a large filtering surface for excellent breathing between routine cleanings.
- Clever body styling has created a simple air box cover designed to allow access to the air filter by removing only one cover.

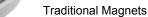




- Air routed to the air filter (and to the CVT) enters a cavity located in front of the air box via a rear-facing intake passage under the handlebars. This helps prevent the ingress of water, mud, dust, etc.
- A new 3-piece shroud box further reduces the possibility of water and mud entering the air box and CVT cavity in harsh conditions. Insulators are attached to the lefthand shroud panel to reflect exhaust pipe heat and ensure cooler air flow into the air box for a denser intake charge to increase power at low speeds or under hot climate conditions.
- Drains in the air box (one on the clean side and one on the dirty side of the filter) help remove water that accumulates in the airbox in harsh conditions.
- Powerful rare-earth magnets used in the AC generator are highly efficient and lighter weight than traditional magnets. Lighter flywheel effect aids in the quick revving engine character.



KVF750 Rare-Earth Magnets





- AC generator output at slower speeds is enhanced with the rare-earth magnets making more power available to run accessories when driving at slower speeds. Peak AC generator output is 340W.
- High-mount radiator is less likely to be filled with mud and is accessible for cleaning.
- Large, thermostatically controlled fan keeps cooling air moving through the radiator even at slow vehicle speeds.
- A circuit breaker ensures the cooling fan's motor does not overheat in the event the fan does become clogged with debris. The under-seat breaker switch can be reset without changing parts.



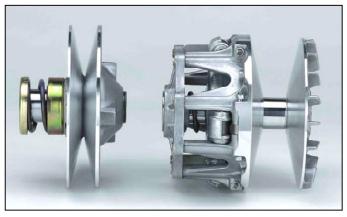


# TRANSMISSION

• Convenient mono-shifter enables quick shifting between Reverse, Neutral, High, and Low range thanks to the unique single sliding detent mechanism inside the transmission case.



- The engine can be started in any gear if one of the brakes is applied.
- The KAPS (Kawasaki Automatic Powerdrive System) is a high-durability automatic CVT combined with a straight shifting High/Low/Reverse transmission designed to handle the massive power output of the Brute Force 750 engine.
- KAPS takes advantage of the Brute Force 750's strong low end torque by engaging just off idle (approximately 1500 rpm) which contributes to the relaxed low speed riding and very smooth belt engagement.



- The drive converter uses a four-finger spider that distributes loads better than a traditional three-finger spider. With the reduced loads per finger, CVT response is smoother and wear is reduced.
- Hard chrome plating on the drive converter shaft improves surface texture to reduce bushing wear and to further improve CVT action.
- Cooling fan cast into the drive sheave draws air from a cavity located below the handlebars via a rear-facing intake passage. This helps prevent the ingress of water, mud, dust, etc.
- A new 3-piece shroud box further reduces the possibility of water and mud entering the air box and CVT cavity in harsh conditions.
- The driven converters' movable sheave slides on sealed, greased bushings for smoothest operation and longest wear. Four steel guide pins also operate within the sealed grease.



- The two power pulses of the Brute Force 750's V-twin engine reduce stress on the CVT components compared to the one large power pulse of a big-bore single cylinder engine extending belt and CVT service life.
- CVT sheaves are manufactured of high-pressure cast, high silicon aluminum (same as pistons) for best durability.
- Kawasaki Engine Brake Control uses speed and direction sensors along with an electric servo for smooth operation. This system detects the ATV's speed, direction, and deceleration electrically. When the conditions are satisfied, the electric servo moves out to hold the CVT drive pulley closed thereby connecting the driving pulley with the driven pulley through the belt and then generating braking force from the engine.
- The Kawasaki Engine Brake Control is an automatic engaging system. There's no need to apply throttle for the system to engage. Coasting forward in gear, the Kawasaki Engine Brake Control automatically engages to provide engine braking force. Additionally, whenever the key is turned off, a learner program in the engine brake controller measures and then self adjusts for belt wear to ensure consistent engine braking operation.
- Kawasaki Engine Brake Control safety features ensure that the engine braking force only works when the ATV is moving forward and vehicle speed is more than 3 km/h.

# **FINAL DRIVE**

- Efficient "through engine" propeller shaft is lubricated using the same oil shared with the engine and transmission. The all-in-one case saves weight and controls the exacting tolerances between components.
- "Through engine" design allows for very short, light, rigid drive shafts for the front and rear final drives. Straight alignment of the drive shaft to the front final drive case delivers power through sealed splines with no U-joints required.
- Front and rear final drives use sturdy CV joints to feed power to the wheels.
- Front outboard CV joints have an operating range of 50°.
- Front CV joints can be independently disassembled, greatly easing outboard CV boot replacements.
- The compact, frame mounted rear final drive housing carries Kawasaki's renowned, internal, wet brake system. The brake operates in the final drive's oil bath completely sealing it from wear causing mud, dust, water, etc.





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- New, external brake lever return spring replaces the internal brake lever return spring to provide better and more consistent brake feel at the lever.
- Compact final gear case design contributes to incredible ground clearance allowing the KVF750 to go where others fear to tread.
- Dual Cardan joints to the rear drive absorb torque fluctuations and reduce vibration through the rear drive shaft.
- Electrically "selectable" 2WD/4WD system allows fast, easy switching between two and four wheel drive to suit changing terrain and applications.



• Rider controlled, variable front differential makes it much easier to get the ATV through difficult or slippery situations.

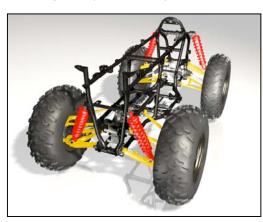


- With the hand lever released, the system functions as a light limited slip differential providing excellent steering feel.
- Pulling the lever increases the torque on the limited slip plates until the differential effectively locks. This fast acting, wide range of fine-tuning ability is a technological feature unseen in other industries, let alone on competitors' ATV's.
- Lever operation puts the rider in control. The rider decides how strong the system functions. Also, there's no delay as in some electrically switched systems; the system engages and disengages immediately as the rider pulls or releases the lever.
- Reverse limiter (3600 rpm) automatically engages when reverse is selected to prevent excessive speeds or acceleration in reverse. An override pushbutton on the left handlebar control assembly allows the rider to easily increase to full power if needed.



# CHASSIS

- High-tensile steel, double-cradle frame is very rugged.
- Compared to the riding position of the KVF700, which lends itself well to jumps and sliding the machine while standing up, the Brute Force 750 is suited to more of an upright, seated position.
- Seat has thick foam padding and a wide, comfortable shape.
- Double wishbone suspension used front and rear ensures high ride comfort and ground following ability, especially in the low and medium speed ranges.





- The Brute Force 750 features an independent rear suspension. The suspension offers the best IRS sport riding potential keeping the "sport" in Sport/Utility.
- Upper and lower front A-arms and lower rear A-arms use a combination of needle bearings and spherical joints for high stability, smooth suspension action and superb ride comfort.
- Reinforced rear knuckles are more resistant to harsh riding conditions.



- Tuned sway bar controls roll yet allows smooth independent movement of the rear wheels.
- 5-position adjustable spring preload, front and rear, allows tuning for varying loads.



• The 4-bulb headlight cuts an impressive swath through dark nights.



- Large 20.5 L fuel tank is located beneath the rear fender and operates via a vaccuumoperated fuel pump. This location contributes to a low centre of gravity.
- Instrument package mounts the instruments more vertically to suit the upright-seated riding position. Multi-purpose, digital instrumentation includes speedometer, odometer, tripmeter, fuel gauge, engine temperature indicator, clock, and hour meter. Indicator lamps for neutral, reverse gear, 2WD/4WD, belt indicator, and oil warning are also fitted.



- Fenders and body parts are made of thermo-plastic olefin (TPO) material featuring a scratch resistant finish for long-wearing good looks. Fit and finish is excellent.
- Storage compartments in the left and right front fenders are handy for storing a variety of small items. Rubber nets keep items secure yet accessible.



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- High-quality aluminum wheels mount with automotive-style tapered lug nuts.
- Dual-piston front brake calipers deliver powerful, progressive braking.
- A "vehicle down" sensor automatically shuts off the fuel supply if the machine's attitude becomes extreme. If the vehicle tips over or leans more than 65 degrees, the sensor operates, cutting the ignition spark. The system automatically resets once the ATV is upright again.
- Electrical equipment is conveniently located under the seat for easy access.



- Convenient 12 V accessory outlets are provided at the front (10 Amp switched, cigarette type) and rear (5 Amp unswitched, bullet type).
- Convenient carriers hold 40 kg up front and 80 kg in the rear, and are ideal for work, camping and many other tasks.
- Space to fit a winch is available inside the front guard. The sturdy frame can handle a 3,000lb class winch with the optional mounting bracket (p/n: KVF008).
- Standard equipment trailer hitch bracket is fitted with a standard \_" bolt hole for a traditional trailer ball.





# COLOURS

• KVF750A6F: Hunter Green (in scratch resistant TPO plastic) Aztec Red (in scratch resistant TPO plastic)





• KVF750B6F: Hardwoods<sup>®</sup> Green HD™ Camouflage



• KVF750C6F: Galaxy Silver





# **SPECIFICATIONS**

# KVF750A6F / B6F / C6F

#### ENGINE

Туре	. 4-stroke 90° V-twin
Type Displacement	. 749 cm <sup>3</sup>
Bore and Stroke	. 85 x 66 mm
Compression ratio	. 8.8:1
Valve system	. SOHC, 4 valves
Carburetor	. Dual Keihin CVKR-34
Ignition	. Digital DC-CDI
Starting	. Electric with recoil back-up
Cooling	. Liquid

#### DRIVETRAIN

Transmission	Dual range CVT with reverse
Primary drive	Belt converter
Final drive	
Primary reduction ratio	3.122 ~ 0.635 (belt converter)
Overall drive ratio: Forward (Hig	Jh) 42.32 ~ 8.61
Forward (Lov	<i>N</i> ) 66.02 ~ 13.43
Reverse	55.01 ~ 11.19

#### FRAME

Туре		Double cradle, high-tensile tubular steel
Suspension:	front	Double wishbone, stepped spring preload adjustment
	rear	Double wishbone, stepped spring preload adjustment
Wheel travel:	front	171 mm
	rear	200 mm
Tires:	front	AT 25 x 8-12
	rear	AT 25 x 10-12
Tread (front/rear): .		915 mm / 875 mm

#### BRAKES

Front	Dual hydraulic with twin-piston calipers with 200 mm drilled discs
Rear	. Enclosed wet multi-plate
Parking	. Enclosed wet multi-plate

#### **ELECTRICAL EQUIPMENT**

Battery	. 12 V, 12 Ah, Maintenance Free
Charging output	. 24.2 A, 14 V @ 6,000 rpm)
Headlights (high/low)	. 12 V, 40/40 W x 2
Headlight Marker lights	
Tail/brake light	. 12 V, 5/21 W

#### DIMENSIONS

Overall length	2192 mm
Overall width	1177 mm
Overall height	1249 mm
Wheelbase	1283 mm
Seat height	935 mm
Dry weight	274 kg
Fuel capacity	20.5 litres
Warranty	6 months
Good Times Protection Plan	24 or 36 months (begins after standard warranty expires)

The specifications mentioned here apply to and have been achieved by production models under standard operating conditions. We intend only to give a fair description of the vehicle and its performance capabilities but these specifications may not apply to every machine supplied for sale. Kawasaki reserves the right to alter specifications without prior notice. Equipment illustrated and



specifications may vary to meet individual markets. (6232)



# KVF700A6F / D6F



# **MODEL CONCEPT**

The KVF700 4x4 features selectable four-wheel drive with variable locking differential control, the Kawasaki Automatic Power-Drive System (KAPS), dual front disc brakes and the Kawasaki-exclusive sealed rear brake system. The V-twin four-stroke engine features 4-valve heads and dual downdraft CV carbs.

The KVF700 4x4 features MacPherson strut front suspension and Uni-Trak rear suspension for stable, sporty handling after the work is done. Adjustable floorboard "pegs" and gas charged rear shock enhance the sport while the big, steel racks and standard trailer hitch with 1200 pound capacity bring on the utility to this exceptional sport/utility ATV.

Hard charging or slow hauling, the KVF700 4x4 is poised to deliver anything you ask of it. The KVF700 4x4 is available in Aztec Red and Hunter Green and for the first time, in Lime Green (with polished rims) as part of the Team Green Special Edition.



### ENGINE

- The liquid-cooled, 697 cc, SOHC, 4-valve-per-cylinder, V-twin engine churns out a massive 46.6 PS @ 6,500 rpm. Torque is stump pulling at 6.13 kgf-m @ 5,000.
- Oversquare bore and stroke of 82.0 mm x 66.0 mm contributes to the high torque output and the flat, user-friendly torque curve.
- Offsetting the cylinders by 90° results in perfect primary balance, for low vibration levels and comfortable riding.
- Large, 30 mm intake and 26 mm exhaust valves are set at a narrow 19° (intake) and 21° (exhaust) for a compact, high-efficiency combustion chamber.
- Dual, CVKR-D32 downdraft carburetors deliver smooth throttle response and efficient fuel consumption.
- The KACR (Kawasaki Automatic Compression Release) makes starting with the electric or pull starter quick and easy.
- The air box is located between the cylinders and uses a snorkel air intake to minimize the entry of water, dirt and foreign objects.
- Oval-type air cleaner element reduces dust build-up and reduces maintenance frequency.
- Damperless crankcase-mounted propeller shaft: the KVF700's smooth V-twin power pulses do not require a driveline damper. This means one less source of noise during sudden throttle opening changes. It also saves weight.

## TRANSMISSION

- Third-generation KAPS (Kawasaki Automatic Power-Drive System) CVT automatic belt drive system features quick response and great reliability.
- The Kawasaki Engine Brake Control system provides additional slowing power when descending hills by using the braking effect of the engine's compression. Kawasaki Engine Brake Control is controlled automatically by a computer under the seat.
- A Belt Failure Detection System protects the rider if the double cog KAPS drive belt is excessively worn or frayed. Under such conditions, the drive belt trips a switch mounted atop the CVT cover that limits engine speed, prevents the machine from being shifted into 4WD and signals the operator with a light on the instrument panel.
- Air intake passage located under the handlebars routes cooling air to the CVT unit.
- Electrically "selectable" 2WD/4WD system allows easy changing between drive systems to suit changing terrain and applications.
- Mono-shifter mechanism makes for quick shifting between Hi-Low and Reverse and makes for a lightweight transmission assembly.
- Variable front differential control makes it much easier to get the ATV moving when it gets stuck. Lever operation allows rider to adjust the amount of torque to suit conditions.
- Override pushbutton switch allows the rider to increase power when riding in reverse gear.



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# **CHASSIS**

• Highly rigid, aluminum swingarm features Kawasaki's exclusive wet, multi-plate rear brake, the best rear brake ever on an ATV. The internal wet brake is completely sealed from mud and dust, etc. while its compact design allows ample ground clearance.



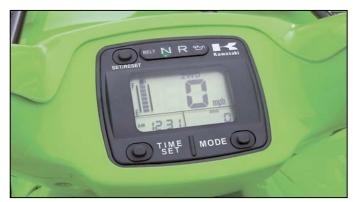
- Uni-Trak rear suspension features a reservoir-equipped shock for stable damping characteristics. Step-less adjustable for preload, it comes with a dual-rate spring and delivers 184 mm of wheel travel for excellent ground tracking qualities and ride quality.
- MacPherson strut front suspension gives a long wheel travel of 170 mm and enhances the wheels' ground-following ability for a smooth yet sporty ride.
- Dual-piston front brake calipers deliver powerful, progressive braking.
- Tough, 12" aluminum rims are sized 6-inch wide for the front and 7.5-inch wide at the rear.
- The large, 17 litre fuel tank is located beneath the rear fender and includes an in-tank fuel pump contributing to a low centre of gravity.
- Safety system allows the engine to be started in any gear if one of the brakes is applied.
- Large, steel racks hold 40 kg up front and 80 kg in the rear, and are ideal for work, camping and many other tasks.



• Bright, multi-reflector headlights throw plenty of light for late nights on the job.



• Multi-purpose, digital instrumentation includes speedometer, odometer, tripmeter, clock, fuel gauge and hour meter. Indicator lamps for neutral, reverse gear, 2WD/4WD, belt indicator, and oil warning are also fitted. Long, well padded seat provides lots of room to move around on technical trails.



• Long, well padded seat provides lots of room to move around on technical trails.

# COLOURS

 KVF700A6F: Aztec Red, Hunter Green





 KVF700D6F: Lime Green, Team Green Special Edition







## SPECIFICATIONS KVF700A6F / D6F

#### ENGINE

Туре	4-stroke 90° V-twin
Displacement	
Bore and Stroke	82 x 66 mm
Compression ratio	9.9
Valve system	SOHC, 4 valves
Carburetor	Dual Keihin CVKR-D32
Ignition	Digital DC-CDI
Starting	Electric with recoil back-up
Cooling	Liquid
Charging output	25 A, 14 V @ 6,000 rpm)

#### DRIVETRAIN

Transmission		. Dual range CVT with reverse
Primary drive		. Belt converter
Final drive		. Shaft, Electric 2WD / 4WD, rider controlled locking front differential
Primary reduction ra	atio	. 3.122 ~ 0.635 (belt converter)
Overall drive ratio:	Forward (High)	. 42.32 ~ 8.61
	Forward (Low)	. 66.02 ~ 13.43
	Reverse	. 55.01 ~ 11.19

#### FRAME

Туре		Double cradle, tubular steel
Suspension:	front	MacPherson strut
	rear	Uni-Trak swingarm & single shock with piggy-back reservoir
Wheel travel:	front	170 mm
	rear	184 mm
Tires:	front	AT 25 x 8-12
	rear	AT 25 x 10-12
Tread (front/rear)		906 mm / 910 mm

#### BRAKES

Front brakes	Dual hydraulic drilled discs with 2-piston calipers
Rear brake	Enclosed wet multi-plate
Parking brake	•

#### ELECTRICAL EQUIPMENT

Battery	. 12 V, 12 Ah Maintenance Free
Headlights (high/low)	. 12 V. 45/45 W x 2
Tail/brake light	

#### DIMENSIONS

Overall length	. 2,190 mm
Overall width	. 1,180 mm
Overall height	. 1,175 mm
Wheelbase	. 1,290 mm
Seat height	. 870 mm
Dry weight	
Fuel capacity	. 17 litres
Warranty	. 6 months
Good Times Protection Plan	. 24 or 36 months (begins after the standard warranty expires)

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# KVF650D6F / E6F



# **MODEL CONCEPT**

Combine the brilliant engine and drive-train performance of the KVF650 with the stable chassis performance of the KVF700 wrapped in a styling package inspired by the Brute Force 750 and what do you get? The Brute Force 650 4x4 - a sport/utility ATV offering the performance of a large-displacement 4WD for the price of a mid-displacement machine.

The Brute Force 650 4x4's styling perfectly suits its identity as a dual-role ATV. Soft lines from curvaceous fenders combine with a user-friendly operating panel to make the Brute Force 650 4x4 easy to operate for the wide range of users for whom it was designed.

In the Brute Force 650 4x4, customers get proven performance and features found on Kawasaki's premium V-twin KVF ATVs wrapped in an attractive new styling package, all at the price of many competitors mid-class (450-500cc) models.



### ENGINE

- Proven liquid-cooled, 633 cc, SOHC, 4-valve, V-twin engine from the award-winning KVF650 churns out a massive 42PS @ 6,500 rpm.
- Oversquare bore and stroke of 80.0 x 63.0 mm contributes to a high torque output of over 38 ft-lb @ 4,000 rpm and a flat, user-friendly torque curve.
- Offsetting the cylinders by 90° results in perfect primary balance, for low vibration levels and comfortable riding.
- Dual, CVKR-D32 downdraft carburetors deliver smooth throttle response and efficient fuel consumption.
- The KACR (Kawasaki Automatic Compression Release) makes starting with the electric or pull starter quick and easy.
- The air box is located between the cylinders and uses a snorkel air intake to minimize the entry of water, dirt and foreign objects.
- Oval-type air cleaner element reduces dust build-up and reduces maintenance frequency.
- Damperless crankcase-mounted propeller shaft: the 650's smooth V-twin power pulses do not require a driveline damper. This means one less source of noise during sudden throttle opening changes. It also saves weight.

# TRANSMISSION

- Third-generation KAPS (Kawasaki Automatic Power-Drive System) CVT automatic belt drive system features quick response and great reliability.
- The Kawasaki Engine Brake Control system provides additional slowing power when descending hills by using the braking effect of the engine's compression. Kawasaki Engine Brake Control is controlled automatically by a computer under the seat.
- Belt Failure Detection System protects the rider if the double cog KAPS drive belt is excessively worn or frayed. Under such conditions, the drive belt trips a switch mounted atop the CVT cover that limits engine speed, prevents the machine from being shifted into 4WD and signals the operator with a light on the instrument panel.
- Air intake passage located under the handlebars routes cooling air to the CVT unit.
- Mono-shifter mechanism makes for quick shifting between Hi-Low and Reverse and makes for a lightweight transmission assembly.





- Electrically "selectable" 2WD/4WD system allows easy changing between drive systems to suit changing terrain and applications.
- Variable front differential control makes it much easier to get the ATV moving when it gets stuck. Lever operation allows rider to adjust the amount of torque to suit conditions.



• Override pushbutton switch allows the rider to increase power when riding in reverse gear.

# CHASSIS

- With a dry weight of 274 kg, the Brute Force 650 is lighter than North American competitors mid-size models.
- Bodywork is based on the tough, stylish image of the Brute Force 750 however the 650 conveys a certain user-friendliness.
- High fender design emphasizes the large wheel travel and appeals to this model's excellent off-road capabilities. The fenders angle downwards to give an aggressive, sporty look.



- Fenders and body parts are made of TPO material and feature a more scratch-resistant finish for long-wearing good looks. Fit and finish is excellent.
- Riding position is like that of the KVF700.



• Uni-Trak rear suspension features a reservoir-equipped shock for stable damping characteristics. Step-less adjustable for preload, it comes with a dual-rate spring and delivers 184 mm of wheel travel for excellent ground tracking qualities and ride quality.



- Highly rigid, aluminum swingarm features Kawasaki's exclusive wet, multi-plate rear brake, the best rear brake ever on an ATV.
- MacPherson strut front suspension gives a long wheel travel of 170 mm and enhances the wheels' ground-following ability for a smooth yet sporty ride.



- Dual-piston front brake calipers with drilled discs deliver powerful, progressive braking.
- Tough, 12" aluminum rims are sized 6-inch wide for the front and 7.5-inch wide at the rear.



• The internal wet brake is completely sealed from mud and dust, etc. while its compact design allows ample ground clearance.



- The large, 17 litre fuel tank is located beneath the rear fender and includes an in-tank fuel pump contributing to a low centre of gravity.
- Safety system allows the engine to be started in any gear if one of the brakes is applied.
- Large, steel racks hold 40 kg up front and 80 kg in the rear, and are ideal for work, camping and many other tasks. Standard trailer hitch with 567 kg capacity.
- Multi-purpose, digital instrumentation includes speedometer, odometer, tripmeter, clock, fuel gauge and hour meter. Indicator lamps for neutral, reverse gear, 2WD/4WD, belt indicator, and oil warning are also fitted.



- Long, well padded seat provides lots of room to move around on technical trails.
- Bright, multi-reflector headlights throw plenty of light for late nights on the job.

# COLOURS

- KVF650D6F: Aztec Red (in scratch resistant TPO plastic) Hunter Green (in scratch resistant TPO plastic)
- KVF650E6F: Hardwoods<sup>®</sup> Green HD™ Camouflage



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# SPECIFICATIONS KVF650D6F / E6F; Brute Force 650 4x4

### ENGINE

Туре	. 4-stroke 90° V-twin
Displacement	. 633 cm <sup>3</sup>
Bore and Stroke	
Compression ratio	. 9.9
Valve system	. SOHC, 4 valves per cylinder
Carburetor	. Dual Keihin CVKR-D32 with anti-icing heaters
Ignition	. Digital DC-CDI
Starting	. Electric with recoil back-up
Cooling	. Liquid
Charging output	. 25 A, 14 V @ 6,000 rpm

#### DRIVETRAIN

Transmission		. Dual range CVT with reverse
Primary drive		. Belt converter
Final drive		. Shaft, Electric 2WD / 4WD, rider controlled locking front differential
Primary reduction ra	atio	. 3.122 ~ 0.635 (belt converter)
Overall drive ratio:	Forward (High)	. 42.32 ~ 8.61
	Forward (Low)	. 66.02 ~ 13.43
	Reverse	. 55.01 ~ 11.19

#### FRAME

Туре		Double cradle, tubular steel
Suspension:	front	MacPherson strut
	rear	Uni-Trak swingarm & single shock with piggy-back reservoir
Wheel travel:	front	170 mm
	rear	184 mm
Tires:	front	AT 25 x 8-12
	rear	AT 25 x 10-12
Tread (front/rear)		909 mm / 910 mm

#### BRAKES

Front brakes	. Dual hydraulic drilled discs with 2-piston calipers
Rear brake	. Enclosed wet multi-plate
Parking brake	. Enclosed wet multi-plate

#### **ELECTRICAL EQUIPMENT**

Battery 12 V	, 12 Ah Maintenance Free
Headlights (high/low) 12 V	, 45/45 W x 2
Tail/brake light 12 V	

#### DIMENSIONS

Overall length	. 2,185 mm
Overall width	
Overall height	. 1,166 mm
Wheelbase	. 1,294 mm
Seat height	. 864 mm
Dry weight	. 273 kg
Fuel capacity	. 17 litres
Warranty	. 6 months
Good Times Protection Plan	. 24 or 36 months (begins after the standard warranty expires)

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# **KVF650F6F / KVF650G6F**



## **MODEL CONCEPT**

Last year's release of Kawasaki's new Sport/Utility ATV flagship, the Brute Force 750 4x4i, is followed by another exciting IRS model in 2006. The Brute Force 650 4x4i combines the luxurious ride quality offered by the front and rear independent suspension of the Brute Force 750 4x4i with a new 650cc engine. A scaled down version of the 750 4x4i's engine, the new powerplant has the same power characteristics as the 750, offering powerful performance in both low- to mid-rpm *and* high-rpm ranges. While overall styling is based on that of the 750 4x4i, the 650 4x4i's new front guard design gives it a more rugged appearance.

The Brute Force 650 4x4i completes Kawasaki's line-up of large-displacement Sport/Utility ATVs and offers customers looking for the comfort that comes with IRS in an economical alternative to the larger 750.

Two body finishes are offered for 2006: Aztec Red and Hunter Green in scratch resistant TPO plastic and Hardwoods<sup>®</sup> Green HD<sup>™</sup> Camouflage.

#### The Brute Force 650 4x4i's key sales features can be summarized as follows:

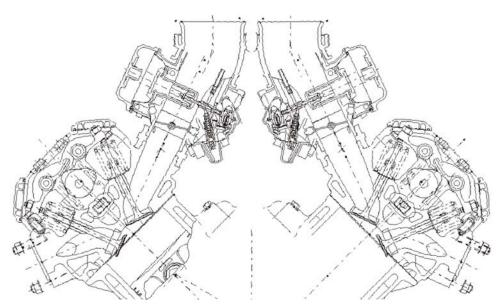
- **Powerful Performance** With a displacement of 633 cm<sup>3</sup>, large 34 mm down-draft carburetors, straight intake tracts, plated aluminum cylinders, and SOHC 4-valve heads, the Brute Force 650 4x4i has more power and torque than anything in the mid-size category.
- **Comfortable Suspension Performance & Luxurious Ride Quality** Benefitting from revised independent suspension front and rear, the Brute Force 650 4x4i is very comfortable with its upright riding position and a new softer seat design for all-day riding.
- Styling Design Suitable for Kawasaki's Flagship ATV Rugged looks, full instrumentation, convenient glove boxes, a 4-bulb headlight, high quality fit and finish, and scratch resistant plastic make the Brute Force 650 4x4i as good looking as it is high performing.
- Award-winning Features Electrically "selectable" 2WD/4WD, KAPS, variable front differential control and a sealed internal wet brake are just some of the proven systems that make the Brute Force 650 4x4i a pleasure to operate.



# ENGINE

The ATV industries first V-twin receives its first substantial revisions in 2006 for the use in the Brute Force 650 4x4i. The new, liquid-cooled, 633 cm<sup>3</sup>, SOHC, 4-valve V-twin engine is more powerful than many competitors largest machines, churning out a substantial 46 PS @ 7,500 rpm.

- Torque output 51.4 N m @ 5,500 rpm lets the KVF650F accelerate with ease.
- All new, high flow cylinder heads are based on the mighty the Brute Force 750 4x4i but feature a combustion chamber matched to the 650's 9.9:1 compression ratio.
- New, KVF750 style, all-aluminum cylinders feature electrofusion-coated bores for light weight, long wear and excellent heat dispersion. The electrofusion bores save 1.5 pounds of engine weight compared to the iron liner cylinders of the other KVF650 models.
- Other than jetting changes, the **large bore**, **dual CVKR-34 mm**, **down-draft carburetors** are lifted straight from the KVF750. Oriented for best flow into the straight intake tract, they deliver high intake efficiency and gutsy power across the rpm range.



- Primer feature ensures easy starts no matter how cold the weather.
- The four valve heads use large, 30 mm intake and 26 mm exhaust valves.
- Efficient, SOHC (Single OverHead Cam) design operates forked rocker arms with screw type lash adjusters for ease of maintenance.
- Vacuum-operated petcock automatically shuts off fuel flow when the engine is not running.
- Offsetting the cylinders by 90° results in perfect primary balance, for low vibration levels and comfortable riding. It's so smooth there's no need for a separate extra engine balancer, saving power and weight.
- Oversquare bore and stroke measure 80 x 63 mm (85 x 66 mm for the 750). Pistons and con rods are common with the other KVF650 models.
- New aluminum exhaust pipe and muffler covers are lighter than previous steel components.

- Oval, oiled foam air filter provides a large filtering surface for excellent breathing between routine cleanings.
- Clever body styling has created a simple air box cover designed to allow access to the air filter by removing only one cover.
- Air routed to the air filter (and to the CVT) enters a cavity located in front of the air box via a rear-facing intake passage under the handlebars. This helps prevent the ingress of water, mud, dust, etc.
- A 3-piece shroud box further reduces the possibility of water and mud entering the air box and CVT cavity in harsh conditions. Insulators are attached to the left-hand shroud panel to reflect exhaust pipe heat and ensure cooler air flow into the air box for a denser intake charge to increase power at low speeds or under hot climate conditions.
- Drains in the air box (one on the clean side and one on the dirty side of the filter) help remove water that accumulates in the airbox in harsh conditions.
- New, lightweight crankshaft reduces engine inertia for faster throttle response.
- Powerful rare-earth magnets used in the AC generator are highly efficient and lighter weight than traditional magnets. Lighter flywheel effect aids in the quick revving engine character.



KVF650 Rare-Earth Magnets

**Traditional Magnets** 

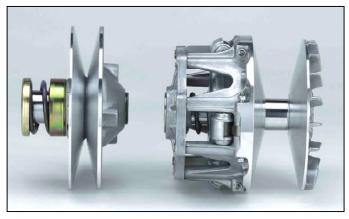
- AC generator output at slower speeds is enhanced with the rare-earth magnets making more power available to run accessories when driving at slower speeds. Peak AC generator output is 340W.
- **New cooling fan motor** keeps cooling air moving through the radiator even at slow vehicle speeds.
- A circuit breaker ensures the cooling fan's motor does not overheat in the event the fan does become clogged with debris. The under-seat breaker switch can be reset without changing parts.

## TRANSMISSION

• Convenient mono-shifter enables quick shifting between Reverse, Neutral, High, and Low range thanks to the unique single sliding detent mechanism inside the transmission case.



- The engine can be started in any gear if one of the brakes is applied.
- New transmission gears feature lightening holes. Ratios are the same as the KVF750A.
- The KAPS (Kawasaki Automatic Powerdrive System) is a high-durability automatic CVT combined with a straight shifting High/Low/Reverse transmission designed to handle the strong power output of the Brute Force 650 engine.
- KAPS takes advantage of the Brute Force 650's strong low end torque by engaging just off idle (approximately 1500 rpm) which contributes to the relaxed low speed riding and very smooth belt engagement.



- The drive converter uses a four-finger spider that distributes loads better than a traditional three-finger spider. With the reduced loads per finger, CVT response is smoother and wear is reduced.
- Hard chrome plating on the drive converter shaft improves surface texture to reduce bushing wear and to further improve CVT action.
- Cooling fan cast into the drive sheave draws air from a cavity located below the handlebars via a rear-facing intake passage. This helps prevent the ingress of water, mud, dust, etc.
- A 3-piece shroud box further reduces the possibility of water and mud entering the air box and CVT cavity in harsh conditions.
- The driven converters' movable sheave slides on sealed, greased bushings for smoothest operation and longest wear. Four steel guide pins also operate within the sealed grease.

- The two power pulses of the Brute Force 650's V-twin engine reduce stress on the CVT components compared to the one large power pulse of a big-bore single cylinder engine extending belt and CVT service life.
- CVT sheaves are manufactured of high-pressure cast, high silicon aluminum (same as pistons) for best durability.
- Kawasaki Engine Brake Control uses speed and direction sensors along with an electric servo for smooth operation. This system detects the ATV's speed, direction, and deceleration electrically. When the conditions are satisfied, the electric servo moves out to hold the CVT drive pulley closed thereby connecting the driving pulley with the driven pulley through the belt and then generating braking force from the engine.
- The Kawasaki Engine Brake Control is an automatic engaging system. There's no need to apply throttle for the system to engage. Coasting forward in gear, the Kawasaki Engine Brake Control automatically engages to provide engine braking force. Additionally, whenever the key is turned off, a learner program in the engine brake controller measures and then self adjusts for belt wear to ensure consistent engine braking operation.
- Kawasaki Engine Brake Control safety features ensure that the engine braking force only works when the ATV is moving forward and vehicle speed is more than 3 km/h.

# **FINAL DRIVE**

wear causing mud, dust, water, etc.

- Efficient "through engine" propeller shaft is lubricated using the same oil shared with the engine and transmission. The all-in-one case saves weight and controls the exacting tolerances between components.
- "Through engine" design allows for very short, light, rigid drive shafts for the front and rear final drives. Straight alignment of the drive shaft to the front final drive case delivers power through sealed splines with no U-joints required.
- **New drivetrain revisions** include: a thinner, lighter propeller shaft, yoke components have been trimmed down, select parts have been unitized, and grease nipples have been removed from the drive shaft spiders.
- Compact final gear case design contributes to incredible ground clearance allowing the KVF650 to go where others fear to tread.



• External brake lever return spring replaces the internal brake lever return spring to provide better and more consistent brake feel at the lever.

- Dual Cardan joints to the rear drive absorb torque fluctuations and reduce vibration through the rear drive shaft.
- Front and rear final drives use sturdy CV joints to feed power to the wheels.
- Front outboard CV joints have an operating range of 50°.
- Front CV joints can be independently disassembled, greatly easing outboard CV boot replacements.
- Electrically "selectable" 2WD/4WD system allows fast, easy switching between two and four wheel drive to suit changing terrain and applications.



 Rider controlled, variable front differential makes it much easier to get the ATV through difficult or slippery situations.



- With the hand lever released, the system functions as a light limited slip differential providing excellent steering feel.
- Pulling the lever increases the torque on the limited slip plates until the differential effectively locks. This fast acting, wide range of fine-tuning ability is a technological feature unseen in other industries, let alone on competitors' ATV's.
- Lever operation puts the rider in control. The rider decides how strong the system functions. Also, there's no delay as in some electrically switched systems; the system engages and disengages immediately as the rider pulls or releases the lever.
- Reverse limiter (3600 rpm) automatically engages when reverse is selected to prevent excessive speeds or acceleration in reverse. An override pushbutton on the left handlebar control assembly allows the rider to easily increase to full power if needed.

## **CHASSIS**

- High-tensile steel, double-cradle frame is very rugged.
- Compared to the riding position of the KVF700, which lends itself well to jumps and sliding the machine while standing up, the Brute Force 650 is suited to more of an upright, seated position.
- Seat has thick foam padding and a wide, comfortable shape. New, softer urethane foam improves rider comfort.
- The Brute Force 650 features independant front and rear suspension. The suspension offers the best IRS sport riding potential keeping the "sport" in Sport/Utility.



• Double wishbone, independant suspension used front and rear ensures high ride comfort and ground following ability, especially in the low and medium speed ranges.



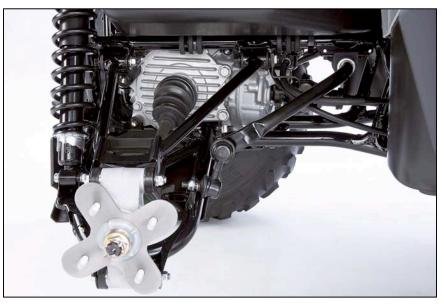


• Revised caster angle for the front A-arms (upper and lower) results in lighter steering.

Model	Caster	Trail
Brute Force 750 4x4i	5.5°	28 mm
Brute Force 650 4x4i	2.0°	10 mm



- New front and rear spring rates with revised initial preload settings improve rider comfort.
- Upper and lower front A-arms and lower rear A-arms use a combination of needle bearings and spherical joints for high stability, smooth suspension action and superb ride comfort.



- Tuned sway bar controls roll yet allows smooth independent movement of the rear wheels.
- 5-position adjustable spring preload, front and rear, allows tuning for varying loads.

- The 4-bulb headlight cuts an impressive swath through dark nights.
- **New front guard and front guard cover** give this 650 a rugged look distinct from that of its 750 big brother.



• Instrument package mounts the instruments more vertically to suit the upright-seated riding position. Multi-purpose, digital instrumentation includes speedometer, odometer, tripmeter, fuel gauge, engine temperature indicator, clock, and hour meter.



• Indicator lamps for neutral, reverse gear, 2WD/4WD, belt indicator, and oil warning are also fitted.

- Fenders and body parts are made of thermo-plastic olefin (TPO) material featuring a scratch resistant finish for long-wearing good looks. Fit and finish is excellent.
- Storage compartments in the left and right front fenders are handy for storing a variety of small items. Rubber nets keep items secure yet accessible.



- High-quality aluminum wheels mount with automotive-style tapered lug nuts.
- Dual-piston front brake calipers deliver powerful, progressive braking.
- A "vehicle down" sensor automatically shuts off the fuel supply if the machine's attitude becomes extreme. If the vehicle tips over or leans more than 65 degrees, the sensor operates, cutting the ignition spark. The system automatically resets once the ATV is upright again.
- Electrical equipment is conveniently located under the seat for easy access.
- Convenient 12 V accessory outlets are provided at the front (10 Amp switched, cigarette type) and rear (5 Amp unswitched, bullet type).
- Large 20.5 L fuel tank is located beneath the rear fender and operates via a vaccuumoperated fuel pump. This location contributes to a low centre of gravity.
- Convenient carriers hold 40 kg up front and 80 kg in the rear, and are ideal for work, camping and many other tasks.
- Space to fit a winch is available inside the front guard. The sturdy frame can handle a 3,000lb class winch with the optional mounting bracket.
- Standard equipment trailer hitch bracket is fitted with a standard \_" bolt hole for a traditional trailer ball.

### Colours

• Aztec Red (in scratch resistant TPO plastic)



• Hunter Green (in scratch resistant TPO plastic)



• Hardwoods<sup>®</sup> Green HD™ Camouflage



# KVF650F6FBrute Force 650 4x4iKVF650G6FBrute Force 650 4x4i Camo

## ENGINE

Туре	4-stroke 90° V-twin
Displacement	633 cm <sup>3</sup>
Bore and Stroke	80 x 63 mm
Compression ratio	9.9:1
Valve system	SOHC, 4 valves
Carburetor	Dual Keihin CVKR-34
Ignition	Digital DC-CDI
Starting	Electric with recoil back-up
Cooling	Liquid

#### DRIVETRAIN

Transmission		.Dual range CVT with reverse
Primary drive		.Belt converter
Final drive		.Shaft, Electric 2WD / 4WD, rider controlled locking front differential
Primary reduction ra	atio	.3.122 ~ 0.635 (belt converter)
Overall drive ratio:	Forward (High)	.42.32 ~ 8.61
	Forward (Low)	.66.02 ~ 13.43
	Reverse	.55.01 ~ 11.19

### FRAME

Туре		Double cradle, high-tensile tubular steel
Suspension:	front	Double wishbone, stepped spring preload adjustment
	rear	Double wishbone, stepped spring preload adjustment
Wheel travel:	front	171 mm
	rear	200 mm
Tires:	front	AT 25 x 8-12
	rear	AT 25 x 10-12
Tread (front/rear):		920 mm / 894 mm

## BRAKES

Front	Dual hydraulic with twin-piston calipers with 200 mm drilled discs
Rear	
Parking	•

#### ELECTRICAL EQUIPMENT

Battery	12 V, 12 Ah, Maintenance Free
Charging output	24.2 A, 14 V @ 6,000 rpm)
Headlights (high/low)	12 V, 40/40 W x 2
Headlight Marker lights	3/3 W x 2
Tail/brake light	

### DIMENSIONS

Overall length	2195 mm
Overall width	1177 mm
Overall height	1230 mm
Wheelbase	1279 mm
Seat height	908 mm
Dry weight	274 kg
Fuel capacity	20.5 litres
Kawasaki Limited Warranty	.6 months
Good Times Protection Plan	24 or 36 months (Kawasaki GTPP begins after standard warranty expires)

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# KSF400A6F



## **MODEL CONCEPT**

This exciting sports model is powered by a torquey, yet high-revving, 400 cc, DOHC, Single pumping out impressive power across the rev range. Advanced features of this highly compact engine include a forward-slanted cylinder for a low centre of gravity, a plated cylinder bore, dry-sump lubrication and direct valve operation. The 5-speed transmission has a gear for almost every occasion, and even a reverse gear for getting out of trouble. Electric starting, CD ignition, an automatic cam chain tensioner and other low maintenance features ensure easy operation.

This high-performing engine is mounted in a lightweight steel frame running double-wishbone front suspension sprung on piggyback-reservoir shocks and linkage-equipped rear suspension. Dual front discs and a single rear disc deliver impressive stopping performance. Dual headlights integrated with the front fenders combine with the sleek bodywork to give the KXF400 the aggressive lines of a true sports ATV.



- Liquid-cooled, DOHC 4-valve, 398 cm<sup>3</sup>, 4-stroke Single delivers plenty of torque, especially in the low-to-mid range, and offers highly accessible power throughout a broad powerband.
- The forward-leaning engine reduces overall engine height, and together with the use of a dry-sump lubrication system, allows the engine to be placed lower in the frame for a lower centre of gravity.
- TPS-equipped 37mm carburetor for improved engine performance especially at higher RPM.
- CD ignition delivers precise ignition timing, boosting efficiency while reducing emissions.
- Durable, lightweight aluminum-alloy cylinder is plated with a nickel-phosphorus silicon carbide coating for increased heat transfer, and a tighter piston-to-cylinder clearance than steel-liner cylinders. Less mechanical losses contribute to a strong, consistent power output.
- The DOHC design, with separate intake and exhaust camshafts directly pushing the intake and exhaust valves, is distinguished by precise valve operation and less mechanical losses.
- Shim-under-bucket tappet valvetrain, often seen in high-performance motorcycles, extends periods between maintenance.
- The aluminum valve retainers weigh only 5 g much lighter than steel retainers.
- Automatic decompression system helps to start the engine easily. With a simple push of the electric starter button, the decompression system automatically opens one exhaust valve and relieves cylinder compression, allowing easy starting.
- Forged aluminum piston with short skirts and cutaway sides reduces weight. Use of forged aluminum allows a compact design while maintaining durability and heat resistance.
- Gear-driven counter-balancer shaft reduces vibration for increased rider comfort.
- The KFX400 features a manual clutch and a five-speed transmission equipped with a convenient reverse gear.
- Vacuum-operated fuel valve automatically turns the fuel flow on and off, eliminating the need to shut the fuel off manually.
- Dry-sump lubrication system helps make the engine more compact, and allows the engine to be placed lower in the frame. As a result, the centre of gravity is about 10 mm lower than it would be with a wet-sump lubrication system.
- The large air cleaner contributes to the engine's smooth, sharp throttle response. For ease of maintenance, the air cleaner is positioned under the seat.

# CHASSIS

- The KFX400's vertically stacked large dual 30/30W halogen bulbs multi-reflector headlights use reflectors to distribute light, minimizing light-transmission loss.
- Both lights are ON at low-beam and at high-beam settings, to offer greater visibility.
- The KFX comes standard with 5 W multi-reflector taillight and 21 W brake light. Any braking operation, either by foot pedal or hand lever, turns the brake light ON.
- The electric starting system allows in-gear starting if the clutch is pulled in.



• Dash includes indicator lamps for neutral, reverse and coolant temperature.



- Durable and lightweight high tensile steel frame balances high rigidity and engineered-in flex for optimum handling performance.
- Independent double-wishbone front suspension has a long, 215 mm wheel travel. The wishbone sections are made of steel.





- Piggyback-reservoir front shocks have fully-adjustable compression damping, rebound damping and preload to provide increased tuning options.
- Aluminum front bumper and rear grab handle look great while saving weight
- The front brake system combines 170 mm discs with compact, Nissin 32 mm single-piston pin-slide calipers.
- Lightweight aluminum wheels, front and rear, reduce unsprung weight.
- 220 mm rear disc is gripped by a Nissin 34 mm single-piston pin-slide caliper.
- Rear suspension uses a lightweight aluminum box-section swingarm and tapered rear axle to allow the rear shocks and wheels to react precisely for increased rear wheel tractability.
- Showa piggyback-reservoir rear shock mounted on a linkage system offers high performance and is multi-adjustable to meet a wide range of rider demands. Spring preload is fully adjustable; rebound damping and compression damping are 22-way adjustable.
- Bottom-link system, which applies progressively stiffer damping force and spring rates to the rear shocks, contributes to traction and enables a long rear wheel travel of 230 mm.

# COLOURS

- Lime Green
- Blazing Orange



## KSF400A6F

ENGINE	
Туре	4-stroke Single
Type Displacement	398 cm <sup>3</sup>
Bore and Stroke	
Compression ratio	11.2:1
Valve system	DOHC, 4 valves
Carburetor	Mikuni BSR37mm with throttle position sensor
Ignition	DC-CDI
Starting	Electric
Cooling	Liquid
Charging output	4 A, 14 V @ 4,000 rpm

#### DRIVETRAIN

Transmission	. 5-speed, return, plus reverse
Primary drive	. Gear
Final drive	. Chain
Primary reduction ratio	. 2.960 (74/25)
Final reduction ratio	. 2.857 (40/14)
Overall drive ratio	. 7.154 @ top gear
Clutch	. Wet, multi-disc

#### FRAME

Туре		Double cradle, tubular steel with detachable sub-frame
Suspension:		. Independent wishbones and piggyback shocks with fully adjustable compression damping, rebound damping and preload adjustment
	rear	Link-type with fully adjustable preload, 22-way compression
		damping and 22-way rebound damping
Wheel travel:	front	215 mm
	rear	225 mm
Tires:	front	AT 22 x 7R10
	rear	AT 20 x 10R9
Tread (front/rear):		935 mm / 910 mm
, ,		

#### BRAKES

Front	Dual hydraulic with single-piston calipers with 170 mm drilled discs
Rear	Hydraulic single-piston caliper with 220 mm drilled disc
Parking	Mechanical disc

#### **ELECTRICAL EQUIPMENT**

Battery	12 V, 8 Ah
Headlights (high/low)	12 V, 30/30 W x 2
Tail/brake light	12 V, 5/21 W

### DIMENSIONS

Overall length	. 1,830 mm
Overall width	
Overall height	. 1,160 mm
Wheelbase	. 1,245 mm
Seat height	. 810 mm
Dry weight	. 169 kg
Fuel capacity	. 10.0 litres
Warranty	. 6 months
Good Times Protection Plan	. 24 or 36 months (begins after the standard warranty expires)

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# KSF50B6F

## **MODEL CONCEPT**

For kids who prefer four wheels to two, Kawasaki happily offers the new KFX50, the ATV that puts them in the driver's seat. Specially designed for youngsters six years and older, the KFX50 is powered by a dependable two-stroke engine with an automatic clutch, adjustable throttle limiter and a variety of child-friendly features. Sturdy front and rear suspension systems soak up the bumps, and reliable drum brakes slow things down in a hurry.

The KFX50 – the best friend a kid ever had.

- Dependable 49 cm<sup>3</sup>, 2-stroke Single is reliable and durable.
- The single-speed transmission with automatic clutch puts the power to the ground in an efficient, manageable fashion.
- 2.6 litre fuel tank means plenty of running time.
- Automatic oil injection system eliminates the need for pre-mixing while assuring proper lubrication.
- Simple, easy-to-use screw-type throttle limiter allows speed and power to be kept within reasonable limits.
- An ignition switch with a removable key lets parents decide when the action begins and ends.
- Engine stop switch and cutoff tether a quick tug on the tether shuts down the engine instantly whenever necessary.

# CHASSIS

- Independent swing axle front suspension and swingarm rear suspension deliver a controlled, well-composed ride.
- Durable drum brakes at both the front (80 mm) and rear (110 mm) let young adventurers stop in a hurry.
- One-piece-welded wheels with tubeless tires enhance reliability and help to keep maintenance simple.
- Full-size floorboards help the young user maintain a comfortable riding position at all times.
- For easy maintenance, the seat can be removed and refitted using a one-touch lever.

# COLOURS

Lime Green

## KSF50B6F

## ENGINE

Туре	. 2-stroke Single, Air cooled
Displacement	
Bore and Stroke	
Compression ratio	. 5.6 :1
Carburetor	. Mikuni VM12SC x 1
Induction	. Piston Valve
Ignition	. Magneto CDI
Starting	. Recoil Starter
Lubrication	. Oil Injection

#### DRIVETRAIN

Transmission	1-speed, automatic
Primary drive	Gear
Final drive	Chain

#### FRAME

	Double cradle, tubular steel
front	Independent swing axle, coil spring, oil damped
rear	Swingarm, coil spring, oil damped
front	52 mm
Rear	51 mm
front	AT 16 x 8 -7
Rear	AT 16 x 8 -7
	575 mm / 575 mm
nt)	35° / 35°
	front rear front Rear front Rear

#### BRAKES

Front	Dual Mechanical drum
Rear	Mechanical drum

#### DIMENSIONS

Overall length	. 1,260 mm
Overall width	. 760 mm
Overall height	. 745 mm
Wheelbase	. 825 mm
Ground clearance:	
At centre of chassis	. 120 mm
At differential	. 106 mm
Seat height	. 535 mm
Dry weight	. 71 kg
Fuel capacity	. 2.6 litres
Warranty	. 6 months
Good Times Protection Plan	. 24 or 36 months (begins after the standard warranty expires)

#### PERFORMANCE

Minimum turning radius ...... 2.0 m

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# KSF80A6F

## **MODEL CONCEPT**

Not quite ready for a full-size ATV? No worries. The new KFX80 is a lightweight ATV designed for youngsters aged twelve and over. Powered by a peppy 80 cc two-stroke engine and fitted with an automatic transmission and electric starting, it has plenty of power for off-road fun.

The sturdy chassis features supple front and rear suspension systems, soft balloon tires and a deeply padded seat for high comfort. Three brakes are fitted, and handlebar lever operation gives young riders added confidence when slowing down.

Fun to ride and fun to own, the new KFX80 makes off-road riding a family affair.

- Powerful 2-stroke 82 cm3 forced air-cooled Single with crankcase reed valve.
- Continuously variable transmission (CVT) provides smooth acceleration.
- Automatic oil injection system eliminates the need for pre-mixing while assuring proper lubrication.
- Easy-to-use electric starter only works when the brake is applied. An optional manual backup recoil starter kit is available.
- Screw-type speed limiter allows speed and power to be kept within reasonable limits.
- Separate engine stop switch provided for emergency use.
- Fuel petcock with reserve position.

## CHASSIS

- Dry weight is a mere 100 kg.
- T-shaped seat for effective support in curves.
- Single A-arm front suspension with twin shock absorbers and single shock rear suspension tackle rough terrain. Wheel travel is 51 mm for the front, 58 mm for the rear.
- Two 80 mm front brakes and one 130 mm rear brake all applied by the handlebar- mounted brake lever to simplify operation.
- Rear brake is completely enclosed. Power units are also water-resistant.
- Large AT 19 x 7-8 tires help provide strong traction.
- Minimum number of controls allows riders to concentrate on riding.
- Sealed battery.

# COLOURS

Lime Green

### KSF80B6F

## ENGINE

Туре	2-stroke Single, Forced air cooled
Displacement	
Bore and Stroke	
Compression ratio	7.4 :1
Carburetor	Mikuni VM16SH x 1
Induction	Crankcase Reed Valve
Ignition	Magneto CDI
Starting	Electric (Manual backup recoil starter)
Lubrication	Oil Injection

#### DRIVETRAIN

Transmission	CVT automatic
Primary drive	Belt converter
Final drive	Chain

#### FRAME

Туре		. Double cradle, tubular steel
Suspension:	Front	. Single A-arm with twin shock absorbers
	Rear	Single shock
Wheel travel:	Front	51 mm
	Rear	57 mm
Tire:	Front	AT 19 x 7 -8
	Rear	AT 19 x 7 -8
Tread (front/rear)		575 mm / 630 mm
Steering angle (left/righ	t)	35° (inside) / 27.5° (outside)
Tread (front/rear)	Rear	AT 19 x 7 -8 575 mm / 630 mm

#### BRAKES

Front	Dual Mechanical drum
Rear	Mechanical drum

#### DIMENSIONS

Overall length	. 1,420 mm
Overall width	. 805 mm
Overall height	. 870 mm
Wheelbase	. 940 mm
Ground clearance:	
At centre of chassis	. 155 mm
At differential	. 110 mm
Seat height	. 645 mm
Dry weight	. 100 kg
Fuel capacity	. 6.0 litres
Warranty	
Good Times Protection Plan	. 24 or 36 months (begins after the standard warranty expires)

#### PERFORMANCE

Minimum turning radius ......2.3 m

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# KVF360A6F / C6F



# **MODEL CONCEPT**

The KVF360 4x4 features selectable four-wheel drive with variable locking differential control, the Kawasaki Automatic Power-Drive System (KAPS), dual front disc brakes and the Kawasakiexclusive sealed rear brake system. The air/oil cooled, single overhead cam, four-stroke engine features DC-CD Ignition, large oil cooler with thermostatically controlled fan and CV type carburetor with anti-icing heater.

MacPherson strut front suspension and Uni-Trak rear suspension provide stable yet sporty handling. Big, steel racks, 25" tires, and standard trailer hitch with 1200 pound capacity ensure the utility capabilities of this exceptional sport/utility ATV.



- The engine is a light, simple, air/oil cooled, 362cc single-cylinder unit with overhead cam valve train. The cylinder head is slanted forward to lower the center of gravity.
- CVK-34 carburetor delivers smooth throttle response and efficient fuel consumption.
- Carburetor mounted automatic electric heater to ensure smooth running in cool weather.
- A large oil cooler with thermostatically controlled fan keeps the engine temperature under control.



- The Kawasaki Engine Brake Control system provides additional slowing power when descending hills from the braking effect of the engine's compression. Kawasaki Engine Brake Control is applied automatically under certain conditions when the throttle is released.
- The engine can be started in any gear if any brake is applied.
- The air box is located under the seat for easy access for air cleaner maintenance. A snorkel air intake near the handlebars minimizes the entry of water, dirt and foreign objects.

# TRANSMISSION

• Mono-shifter mechanism makes for quick shifting between High, Low, and Reverse. Unique transmission design makes for a lightweight transmission assembly.



- Third-generation KAPS (Kawasaki Automatic Power-Drive System) CVT automatic belt drive system features quick response and great reliability.
- Belt Failure Detection System lets the operator know if the double cog KAPS drive belt is excessively worn or frayed. Under such conditions, the drive belt trips a switch mounted atop the CVT cover that limits engine speed, prevents the machine from being shifted into 4WD and signals the operator with a light on the instrument panel.
- Air intake passage located under the handlebars routes cooling air to the CVT unit.



• Electrically "selectable" 2WD/4WD system allows the rider to choose between 2WD or 4WD. A switch on the right side of the handlebar lets the rider easily change between drive systems to suit the terrain and applications.



- Riders can control the amount of slip in the KVF360's limited-slip front differential. Using a small lever on the left side of the handlebar, KVF360 riders can vary the amount of differential slip to help control power delivered to the front wheels so that the wheel with traction will always receive some torque.
- The variable front differential control helps to pull the rider through when extra traction is needed while allowing better directional control.



• Override pushbutton switch allows the rider to increase power when riding in reverse gear.



## CHASSIS

• Highly rigid and very lightweight aluminum swingarm features a built-in, oil-bathed, multiplate rear brake. The sealed, internal wet brake used at the rear is completely isolated from mud, dust and debris, while its compact design allows more ground clearance.



- Dual hydraulic disc front brakes deliver powerful, progressive braking.
- MacPherson strut front suspension provides nearly seven inches of wheel travel and enhances the wheels' ground-following ability for a smooth ride.
- Uni-trak rear suspension features a large shock for stable damping characteristics. Fiveposition adjustable for preload, it comes with a dual-rate spring and delivers more than seven inches of wheel travel.
- Rubber mounted floorboards feature adjustable footpegs and provide great grip.
- Bright, multi-reflector headlights throw plenty of light for late nights on the job.
- Standard equipment brake light lets the group know when to slow.
- Instrumentation includes electric (no cable) analog speedometer, odometer, tripmeter, and hour meter and indicator lamps for neutral, reverse gear, 2WD/4WD, belt warning and oil warning.
- Convenient 12V accessory outlets are provided near the steering head and rear fender areas; each rated for ten amps.
- The front guard is designed to accommodate a winch, protected nicely behind the bumper.

## COLOURS

- KVF360A6F: Aztec Red, Hunter Green
- KVF360C6F: Hardwoods<sup>®</sup> Green HD<sup>™</sup> Camouflage





## SPECIFICATIONS KVF360A6F / C6F

### ENGINE

Туре	. 4-stroke Single
Displacement	. 362 cm <sup>3</sup>
Bore and Stroke	
Compression ratio	. 8.3
Valve system	. SOHC, 2 valves
Carburettor	. Keihin CVK 34
Ignition	. DC-CDI
Starting	. Electric with recoil back-up
Cooling	. Air, large oil cooler with thermostatically controlled fan
Lubrication	. Forced lubrication, wet sump
Charging output	. 24 A, 14 V @ 4000 rpm

#### DRIVETRAIN

Transmission		. Dual range CVT with reverse
Primary drive		. Belt converter
Final drive		. Shaft, Electric 2WD/4WD, rider controlled locking front differential
Primary reduction ra	atio	. 3.122 ~ 0.635 (belt converter)
Overall drive ratio:	Forward (High)	. 48.474 ~ 9.859
	Forward (Low)	. 75.619 ~ 15.380
	Reverse	. 63.016 ~ 12.817

#### FRAME

Туре		Double cradle, tubular steel
Suspension:	front	MacPherson strut
·	rear	Uni-Trak Swingarm, single shock with stepped preload adjuster
Wheel travel:	front	170 mm
	rear	180 mm
Tires:	front	AT 25 x 8-12
	rear	AT 25 x 10-12
Tread (front/rear)		890 mm / 895 mm

#### BRAKES

Front brakes	. Dual hydraulic drilled discs with single piston calipers
Rear brake	. Enclosed wet multi-plate
Parking brake	. Enclosed wet multi-plate

#### ELECTRICAL EQUIPMENT

Battery	12 V, 14 Ah
Headlights (high/low)	12 V, 30/30 W x 2
Tail/brake light	12 V, 5/18 W

#### DIMENSIONS

Overall length	2,065 mm
Overall width	1,205 mm
Overall height	1,175 mm
Wheelbase	1,250 mm
Seat height	910 mm
Dry weight	274 kg
Fuel capacity	13.5 litres
Warranty	
Good Times Protection Plan	24 or 36 months (begins after the standard warranty expires)

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