2020 SIDE x SIDE





Kawasaki



The all-new Teryx[®] KRX[™] 1000 is the ultimate Kawasaki sport side by side, offering unmatched capability in challenging and technical off-road terrain, high performance, and Kawasaki-engineered durability from the ground up to provide the ultimate off-road experience.





KEY FEATURES

- COMPACT LITER-CLASS PARALLEL TWIN ENGINE DELIVERS BOTH HIGH POWER AND ROBUST LOW-END TORQUE
- CVT WITH CENTRIFUGAL CLUTCH PROVIDES SMOOTH ACCELERATION AND AIDS PRECISE THROTTLE CONTROL
- LONG WHEELBASE AND LONG-TRAVEL SUSPENSION FEATURING FOX 2.5 PODIUM LSC SHOCKS COMBINE FOR EXCELLENT PERFORMANCE AND RIDE COMFORT
- ON-THE-FLY ELECTRICALLY SELECTABLE 4WD AND FRONT DIFFERENTIAL LOCK
- LARGE REAR CARGO AREA FOR SPARE TIRE OR OTHER LARGE ITEMS
- ROOMY INTERIOR WITH ADJUSTABLE HIGH-BACKED BUCKET SEATS
- SPEED-SENSITIVE ELECTRIC POWER STEERING

SPECIFICATIONS

KRX1000ALF

Engine Type	Liquid-Cooled, 4-Stroke Parallel Twin, DOHC, 4-Valves per Cylinder
Displacement	999 cc
Bore & Stroke	92.0 x 75.1 mm
Maximum Torque	76.7 lb-ft @ 7,000 rpm
Compression Ratio	11:5:1
Fuel System	DFI [®] with Two 50mm ETV Throttle Bodies
Transmission/Drive System	CVT w/Centrifugal Clutch, Dual Range H/L/N/R, 2WD/4WD, Shaft Drive
Front Tire Type/Size	Maxxis Carnivore 31 x 10.00R15 8PR, Bead-lock Wheels
Rear Tire Type/Size	Maxxis Carnivore 31 x 10.00R15 8PR, Bead-lock Wheels
Wheelbase	98.8 in.
Front Brake Type	258mm Hydraulic Discs, 32mm Twin-piston Calipers
Rear Brake Type	258mm Hydraulic Discs, 38mm Single-piston Calipers
Front Suspension Type	Double wishbone, FOX 2.5 PODIUM LSC shocks with piggyback reservoir,
	fully adjustable preload, and 24-position adjustable compression damping
Rear Suspension Type	4-link trailing-arm, FOX 2.5 PODIUM LSC shocks with piggyback reservoir,
	fully adjustable preload, and 24-position adjustable compression damping
	w/Preload Adjustment, 24-Way Compression Damping Adjustment
Front Wheel Travel	18.6 in.
Rear Wheel Travel	21.1 in.
Ground Clearance	14.4 in.
Fuel Tank Capacity	10.6 gal.
Track Front/Rear	59.3 in. / 59.4 in.
Length x Width x Height	130.1 x 68.1 x 75.0 in.
Bed Length x Width x Heigh	14.6 x 33.1 x 9.1
Bed Load Capacity	351 lb.
Curb Weight ⁺	1,896.3 / 1,898.5 (CA Model) lb.
Limited Warranty	6 months
Kawasaki Protection Plus™	12, 24 or 36 months
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Specifications subject to change without notice.

 $^{(KP)}$ = See Kaw-Pedia section for more details.

 \star = Changes from previous model year.

t = Includes all necessary materials and fluids to operate correctly, full tank of fuel (more than 90% of capacity) and tool kit (if supplied).



ENGINE^[1]

With both high power and torque, the well-balanced performance of the new engine accommodates a wide range of uses from high-rpm trail running to navigating lowspeed technical sections.

- Lightweight cast pistons minimize reciprocating weight and contribute to high-rpm performance. Low-friction molybdenum coating on the skirts helps reduce mechanical loss.
- Innovative balancer weight layout contributes to the compact engine design.
- Compact oil pan helps reduce engine size. Baffle plates in the pan ensure that the pump is fed with oil even at extreme driving angles.
- Long-reach spark plugs have large contact area with the cooling jacket to help prevent engine knock.
- Downdraft intake design^[2] contributes to crisp throttle response and helps reduce overall engine height.
- Drawing from development input of Kawasaki's multitime World Superbike Championship-winning team, the intake port exits are machined in two stages – first along with the valve seats and then again at an inclined angle – to create a smoother, straighter path for intake air as it enters the combustion chamber. Polished intake ports further contribute to high engine performance.^[3]
- Long, race-style intake funnels^[4] help boost low-end torque. The shape and length of the funnels are different to help provide a smooth torque feeling.
- Large 20-liter intake chamber^[5] helps ensure the airflow is undisturbed into each of the intake funnels for a flat torque character.
- Dual snorkel air intakes one for the engine and another for the CVT – are located high on each side behind the doors. Recessed entrances helps any dust flow past, instead of into, the intakes. Pre-filters at the intake entrances help block dust, and a Donaldson air filter downstream in the engine intake provides superb performance.











ENGINE CONTINUED

- Electronic throttle valve (ETV) system^[6] enables the ECU to control the volume of both the fuel (via fuel injectors) and the air (via throttle valves) delivered to the engine. Ideal fuel injection and throttle valve position results in smooth, natural engine response and the ideal engine output.
- Dual 50 mm throttle bodies help flow a large volume of air for quick, crisp response.
- Fine-atomizing injectors^[7] with a droplet size of 75 microns contribute to efficient combustion and engine response.
- The exhaust ports have D-shaped cross sections^[8] to efficiently expel spent gases and boost performance. They are also polished to provide higher performance.
- Hydroformed header pipes are also D-shaped to match the exhaust ports, then transition to circular shaped. Pipe diameter increases from 42.7mm to 45mm before joining the 65mm collector pipe and entering the muffler, a design that contributes to both power feeling and engine response.







Power Mode

• A choice of Full Power or Low Power modes allows drivers to set power delivery to suit preference and conditions. The milder throttle response offered by Low Power mode contributes to superb low-speed control when tackling technical terrain.

CVT with Centrifugal Clutch^[9]

The CVT and centrifugal clutch play a key role in transferring the KRX 1000's high engine power for superior acceleration control at slow and very slow speeds. The centrifugal clutch eliminates the shock of the CVT belt engaging for more precise throttle control when navigating rock gardens or other technical terrain.

- Centrifugal clutch is located between the crankshaft and CVT drive pulley so it eliminates the shock of the CVT belt engaging for smooth departures from a stop and more precise throttle control when navigating technical rocky terrain. Reduced stress to the high-grade CVT belt also increases belt life.
- CVT and transmission ratios were selected to offer optimum ride feel while ensuring stable engine braking characteristics. The engine braking offers reassuring support when rolling down steep inclines.



• To ensure great durability and long life the KRX 1000 uses a large-volume CVT, centrifugal clutch and high-quality belt to match the increased power and high-rpm operation of the parallel twin engine.

ENGINE CONTINUED

• Three-speed transmission^[10] with Forward High, Forward Low, and Reverse, provides versatility on open trails, tight technical sections and everything in between.



On-the-Fly Electrically Selectable 4WD and Front Differential Lock

- Allows drivers to quickly and easily switch between drive modes to suit changing terrain and applications while driving.
 - 2WD light steering for maximum sport performance
 - 4WD enhanced traction while keeping steering light
 - 4WD + Differential Lock maximum traction
- When the switch is pressed, the system engages instantly and smoothly so the driver has full control of when 4WD or the front differential lock is activated.
- Locking the front differential causes the front wheels to act as a single axle, preventing wheels from free spinning in low traction situations or when a wheel is suspended in the air, ensuring maximum traction when driving over technical terrain.



CHASSIS

Highly-Rigid Frame With Integrated ROPS

Designed using Kawasaki's advanced dynamic rigidity analysis, the KRX 1000's frame incorporates the Rollover Protection Structure (ROPS) as a stressed member. The energy-absorbing ROPS design helps disperse stress, contributing to optimal rigidity and high durability.

- The sturdy frame construction was designed using advanced dynamic rigidity analysis to ensure minimum weight with maximum strength. The detailed analysis used during frame development results in an optimized frame design that uses minimal gussets.
- Thicker walls reinforce the frame at the engine and suspension mounts, and other points of high, concentrated stress.
- Angled shape of the underbody complements the generous 14.4-inch ground clearance to help reduce the chance of striking objects.
- The undercarriage is covered by highly-durable skid plates,^[11] with key components protected by steel pieces.
- ROPS pillars feature an arched construction that helps disperse stress.
- ROPS B-pillars follow the same line as the rear shocks which allows the pillars to effectively counter the forces exerted by the shocks on the frame.
- The innovative design places each of the ROPS pillars on a separate plane, contributing to increased structural strength.
- The wheels are positioned as far apart as possible to contribute to the overall stance. A long wheelbase combined with long-travel suspension contribute to performance and ride comfort, while the wide stance helps to maintain a line when cornering.



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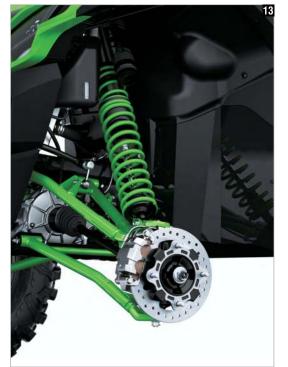
- The wheels are at the four corners of the vehicle^[12] and extend beyond the bodywork, creating approach and departure angles of 90 degrees so that the tires are the first thing to encounter trail obstacles.
- Low, centrally-mounted fuel tank minimizes the effect of fuel weight on the chassis.



Long-Travel Suspension

The long suspension arms and massive FOX 2.5 PODIUM LSC shock units easily soak up obstacles encountered on the trail, and the suspension's ability to keep the wheels in contact with the ground keeps the KRX 1000 moving forward. Long wheel travel combined with independent suspension action also translates to superior articulation that enhances its ability to tackle tricky technical terrain.

- Double wishbone front suspension has 19 inches of travel.^[13]
- Four-link trailing-arm rear suspension has 21 inches of travel.^[14] The four-link trailing arm system minimizes change to the toe-in over the suspension stroke which aids straight-line performance and contributes to high-speed cornering stability.
- The long-travel suspension enhances the KRX 1000's ability to soak up bumps with minimal disturbance to the cabin for increased ride comfort.







- High-performance, single-chamber gas-charged FOX 2.5 PODIUM LSC (Low Speed Compression) shocks offer excellent fade-resistant damping performance, even in hard conditions. Adjustable preload and 24-way compression damping enable precise setting adjustments.
- Dual-rate coil-over springs the lower spring rate allows the suspension to soak up minor bumps while keeping the wheel in contact with the ground while the higher-rate spring provides roll resistance during cornering.
- Piggyback reservoirs on the shocks provide extra oil volume to help the shocks run cooler for more stable damping performance under hard conditions.
- The rear shocks have stainless steel sleeves that increase wear resistance for the damper bodies.
- Steel suspension knuckles contribute to durability.

Large-Diameter Disc Brakes^[15]

- Four 258mm disc brakes provide superb braking force. 5.8mm thick stainless steel rotors are highly rigid to contribute to excellent brake feel.
- Twin-piston calipers with 32mm pistons grip the front discs, while single-piston calipers with 38 mm pistons clamp the rear discs.
- As the brake pedal is pushed, the front brakes engage first followed by the rear brakes for a very natural, linear brake feel that facilitates precise brake force control.
- Conveniently-located parking brake activates the rear brakes to keep the vehicle in place when parked.

Big Tires On Bead-Lock Wheels^[16]

- The 31-inch MAXXIS Carnivore tires ride over small obstacles with greater ease than their smaller-diameter counterparts, allowing to the KRX 1000 to better maintain its forward momentum.
- Aggressive off-road tire pattern provides enhanced grip for climbing over rocks while 8-ply construction offers excellent puncture resistance.
- The 15- inch aluminum wheels feature bead-lock rims designed to hold the tire beads in place during extreme use. Large bead-lock bolts have reinforced inserts for extra holding power.

Electric Power Steering

- The electric power steering system (EPS) reduces steering effort, especially at low speeds. Input from a vehicle speed sensor and torque sensor determine the amount of steering assistance required from the system's electric motor, so at slow speeds or when stopped assistance is greatest, then reduced as vehicle speed increases for superior handling.
- The EPS system also enhances ride comfort and control by acting as a damping system. When steering input is neutral, the inertia of the electric motor acts as a stabilizer. It also significantly reduces bump steer and kickback to the steering wheel often caused when encountering rocks or ruts.
- Separate maps for 2WD and 4WD help to maintain a more consistent steering feel, regardless of the mode selected.





Tilt Steering Column^[17]

- The steering wheel has a stepless range of approximately 47 degrees, allowing drivers to set its position to suit their preference, as well as lift it out of the way to facilitate entering and exiting the vehicle.
- The steering wheel has a solid core for a more rigid feel that's ideal for sporty driving.



Comfortable Cabin

- The long wheelbase provides plenty of space for a roomy cabin, and the rear-mounted engine helps keep heat and noise away from the occupants to greatly contribute to ride comfort.
- High-backed bucket seats and three-point seatbelts support driver and passenger during hard driving, while providing comfortable seating during more leisurely drives. Ample legroom and lever-adjustable seats allow the occupants to fine-tune their positions for control and comfort.^[17]
- The ergonomic shape of the seats^[18] was designed to cradle the occupant, providing both support and comfort. The angle of the backrest is optimized for ride comfort, while its seat bolsters offer support from the shoulders to the sides, the wide contact patch makes it easy to relax and sink comfortably into the seat, and it helps provide confidence during hard driving. The long, wide bottom cushion offers great leg support, further contributing to comfort, while hip support contributes to reassurance and reduced fatigue when sitting during long drives.
- The seats use different urethane cushioning for the bottom and back. Bottom urethane is firm to offer proper support and long-term comfort and the backrest urethane is softer.
- Slip-resistant seat covers have superb elasticity for increased comfort and support, regardless of weather conditions.
- Both seats are lever-adjustable over a six-inch forwardrearward range in half-inch increments.
- Wide, adjustable T-handle grip contributes to passenger comfort and assurance.
- Standard doors have wide openings so it's easy to enter or exit the vehicle, can be opened from either side, and they are higher at the abounder for accurate accurates and comfort

are higher at the shoulder for occupant assurance and comfort. Armrests built into the doors add to the comfort.

• A gate-style shift lever^[19] contributes to a positive shift feel, and all controls are positioned within easy reach of the driver.





- Convenient storage spaces are built into the dashboard
 - Water-resistant storage container above the center console
 - Easy-access pocket in the center console
 - Passenger-side glovebox
- Five cup holders four in the center console and one in the passenger door provide handy drink storage to help occupants stay hydrated on the trail.
- DC socket is integrated into the dashboard to provide up to 120 watts of power for accessories or personal devices.

Digital Instrumentation^[20]

- Positioned above the steering wheel, large all-digital instrumentation offers at-a-glance information to the driver.
- The display's white backlighting has three selectable brightness levels.
- Multi-function display includes:
 - Bar-style tachometer with two display options
 - Digital speedometer
 - Bar-style fuel gauge
 - Gear indicator
 - Power Mode
 - Driving Mode
 - Economical Driving Indicator (informs driver when throttle setting is optimizing fuel consumption)
 - Clock
 - Odometer
 - Dual trip meters
 - Hour meter
 - Water temperature
 - Digital battery gauge
 - Bar-style CVT temperature gauge
 - Warning lamps
 - o Seatbelt
 - o Oil pressure
 - o Engine check
 - o Water temperature
 - o EPS
 - o CVT belt (warns of conditions that may shorten life of the CVT belt)
 - Indicator lamps
 - o Neutral
 - o Reverse
 - o Parking brake



Large Cargo Space^[21]

- Rear cargo area is large enough to accommodate a 32-inch spare tire.
- Recessed bottom and four built-in cargo hooks help secure a cooler or other cargo.



Sleek, Aggressive Styling

The long wheelbase combined with high fenders designed to highlight the massive shock units and long wheel travel prominently display the KRX 1000's off-road intentions. Its tough, aggressive front end – an image emphasised by its wide stance – is complemented by sleek bodywork that flows from the front to the rear of the vehicle.

- An imposing chassis and visually massive components like the wheels and suspension help convey solid performance.
- The hood was made as low as possible to enhance the driver's view of the trail,^[22] while the sporty intake contributes to radiator cooling and acts as a heat sink when the vehicle is stopped.
- Large front grill provides cooling air to the radiator while adding to the aggressive front end appearance.^[23]
- LED headlights^[24] include high and low beams, as well as line-type LED position lamps. Their wide position reinforces the aggressive image of the KRX 1000's wide stance.
- Large wheel-gap created by the high fenders was created to prominently display the long-travel suspension components, reminding viewers of the KRX 1000's superb off-road capabilities.
- Colored bead-lock rings draw attention to the large, aggressive tires.
- Angled design of the underbody emphasizes the high ground clearance.
- Front fenders and the front of the doors were designed to be slimmer to offer the driver a clear view of the front tire an advantage when navigating tricky rock gardens.
- Intakes in the rear fenders direct fresh air into the engine room.
- In addition to further emphasizing the ample rear wheel travel, the tall rear ride height gives the KRX 1000 an aggressive, forward-leaning stance.
- LED taillights contribute to the stylish rear end.







- In addition to further emphasizing the ample rear wheel travel, the tall rear ride height gives the KRX 1000 an aggressive, forward-leaning stance.^[25]
- LED taillights contribute to the stylish rear end.^[26]









KAWASAKI GENUINE ACCESSORIES

See the current applicable Kawasaki accessory catalog, click on links below or visit www.kawasaki.com for all of the latest Kawasaki Genuine Accessories available for this model.







Protection Package



Limited accessory warranty terms-same length as vehicle. *When purchased at same time of vehicle.

PROTECTION

DESCRIPTION

P/N 99969-3813

Sport Front Bumper		
Headlight Guard		
Sport Rear Bumper		
Tail Light Guard Set		
HMW Front A-Arm Guard Set [1/4" (6.35mm)]		
HMW Trailing Arm Guard Set [1/4" (6.35mm)]		
HMW Skid Plate Set [3/8" (9.5mm)]		
Nerf Bar Set		
Rock Slider Set [1/4" (6.35mm)]		



Detailed Images of Protection Package Items



Front Bumper



Tail Light Guard



Head Light Guard



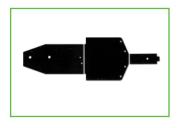
HMW Front A-Arm Guards 1/4" (6.35mm)



Rear Bumper



HMW Trailing Arm Guards 1/4" (6.35mm)



HMW Skid Plates 3/8" (9.5mm)



Tree Kickers



Rock Sliders 1/4" (6.35mm)

Package availability is available through K-Dealer or call your Parts & Accessories Representative at (800) 423-5729.





Cab Package



Limited accessory warranty terms—same length as vehicle. *When purchased at same time of vehicle.

CAB	P/N 99969-3814
DESCRIPTION	
KQR Full Windshield - Glass	
KQR Sport Roof	
KQR Rear Panel - Polycarbonate	
Windshield Wiper / Washer Kit	
Soft Upper Door Set	
Heater Kit	
Dash Net with Anti-Slip Tray	



Detailed Images of Cab Package Items



KQR Full Windshield - Glass



Windshield Wiper / Washer Kit



KQR Plastic Roof (Injection Molded)



Soft Upper Doors



KQR Rear Panel -Polycarbonate



Heater Kit



Dash Net with Anti-Slip Tray

Package availability is available through K-Dealer or call your Parts & Accessories Representative at (800) 423-5729.





Lighting Package



Limited accessory warranty terms—same length as vehicle. *When purchased at same time of vehicle.

LIGHTING

DESCRIPTION

Alternator Kit

8" LED K-Glow Light Bars (QTY 3)

8" LED K-Glow Light Bar Sport Front Bumper Installation Kit

38" LED K-Glow Light Bar

38" LED K-Glow Light Bar Installation Kit

Rear 8" LED K-Glow Lightbar Installation Kit

P/N 99969-3815



Detailed Images of Lighting Package Items



Alternator



Mid Length LED Light Bar (8') (includes QTY 3)



Full Length LED Light Bar (38" for Roof)



38" LED Light Bar Installation Kit



Rear 8" LED K-Glow Lightbar Installation Kit



HMW Trailing Arm Guards 1/4" (6.35mm)

Package availability is available through K-Dealer or call your Parts & Accessories Representative at (800) 423-5729.





Recreation Package



Limited accessory warranty terms-same length as vehicle. *When purchased at same time of vehicle.

RECREATION

P/N 99969-3816

DESCRIPTION		
KQR Half Windshield - Polycarbonate		
Winch Installation Kit		
Tow Hooks (QTY 2)		
Spare Tire Y-Strap		
Lighted Wide Angle Rear View Mirror		
Rear Cargo/Tire Rack		
KQR Premium Roof, Black		
KQR Tailgate		
Dash Net with Anti-Slip Tray		
WARN VRX45 Winch		



Detailed Images of Recreation Package Items



KQR Half Windshield -Polycarbonate



Spare Tire Y-Strap



KQR Roof, Black, Polycarbonate



Winch Installation Kit



Wide Angle Rear View Mirror



KQR Tailgate



Tow Hook (Qty 2 included)



Cargo Rack



Dash Net with Anti-Slip Tray

NO IMAGE AVAILABLE

WARN® VRX45 Winch

Package availability is available through K-Dealer or call your Parts & Accessories Representative at (800) 423-5729.





MUD

Mud Package



Limited accessory warranty terms—same length as vehicle. *When purchased at same time of vehicle.

P/N 99969-3817

DESCRIPTION
KQR Full Windhsield - Glass
KQR Rear Panel - Polycarbonate
Windshield Wiper / Washer Kit
Winch Installation Kit
Tow Hook (QTY 2)
KQR Tailbox
Wide Fender Flare Kit
KQR Premium Roof, Black
Dash Net with Anti-Slip Tray
WARN VRX45 Winch
Mud Flap Kit



Detailed Images of Mud Package Items



KQR Full Windshield - Glass



Tow Hook (Qty 2 included)



KQR Roof, Black, Polycarbonate



KQR Rear Panel -Polycarbonate



KQR Tailbox



Dash Net with Anti-Slip Tray



Windshield Wiper / Washer Kit

NO IMAGE AVAILABLE

Wide Fender Flare Kit



WARN VRX45 Winch

NO IMAGE AVAILABLE

Mud Flap Kit

Package availability is available through K-Dealer or call your Parts & Accessories Representative at (800) 423-5729.





I Want It All



Limited accessory warranty terms-same length as vehicle. *When purchased at same time of vehicle.

I WANT IT ALL

P/N 99969-3818

DESCRIPTION

DESCRIPTION

HMW Front A-Arm Guard Set [1/4" (6.35mm)]
HMW Trailing Arm Guard Set [1/4" (6.35mm)]
HMW Skid Plate Set [3/8" (9.5mm)]
Nerf Bar Set
Tow Hook (QTY 2)
Spare Tire Y-Strap
Lighted Wide Angle Rear View Mirror
KQR Tailbox
Cargo Rack
Rear 8" LED K-Glow Lightbar Installation Kit
Wide Fender Flare Set
KQR Premium Roof, Black
Rock Slider Set [1/4" (6.35mm)]
Dash Net with Anti-Slip Tray
WARN VRX45 Winch



Detailed Images of I Want It All Package Items



KQR Full Windshield -Glass



Winch Installation Kit



Alternator



38" LED Lightbar Installation Kit



Tow Hook (Qty 2 included)



Rear 8" LED K-Glow Lightbar Installation Kit



KQR Rear Panel Polycarbonate



Front Bumper



Heater Kit



HMW Front A-Arm Guards 1/4" (6.35mm)



Spare Tire Y-Strap

NO IMAGE AVAILABLE

Wide Fender Flare Kit



KQR Roof, Black, Polycarbonate



Windshield Wiper / Washer Kit



Headlight Guard



Mid Length LED Lightbar (8') (includes Qty 3)



HMW Trailing Arm Guards 1/4" (6.35mm)



Wide Angle Rear View Mirror



Rock Sliders 1/4" (6.35mm)

Package availability is available through K-Dealer or call your Parts & Accessories Representative at (800) 423-5729.



Soft Upper Door Set



Rear Bumper



Front 8' LED Lightbar Installation Kit



HMW Skid Plates 3/8" (9.5mm)



KQR Tailbox



Dash Net with Anti-Slip Tray



Audio System



Tail Light Guard



Full Length LED Lightbar (38' for Roof)



Tree Kickers



Cargo Rack



WARN VRX45 Winch



CONTINUOUSLY VARIABLE TRANSMISSION (CVT)

Features:

An automatic transmission system featuring a torque converter that has two variable-diameter pulleys. A large V-belt transmits power from the crankshaft mounted pulley to the pulley on the transmission input shaft. The crankshaft pulley increases in diameter as engine RPM increases applying more load to the engine. The input shaft pulley decreases in diameter as the torque required to turn the drive wheels decreases.

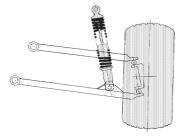
Benefits

The CUT eliminates shifting and automatically keeps the engine in the most efficient range for selected vehicle speed or load terrain, making the vehicle easy to operate.

DOUBLE WISHBONE SUSPENSION

Features:

Double wishbone front suspensions have longer wheel travel with less camber change. As the wheel is pushed up when it rolls over a bump, the lower wishbone pivots up and at the same time the upper wishbone moves up and pushes the hub carrier out. This keeps the front axle parallel to the ground, letting the tire maintain traction for better steering.



Benefits:

Similar to suspensions on sports cars, the double wishbone suspension keeps the tires and chassis in the right place at the right time for good cornering and steering performance.

ELECTRIC POWER STEERING (EPS)

Features:

There are three basic components of the EPS system; a power assist unit on the steering shaft assembly, an ECU and speed sensor. Vehicle speed is calculated by the ECU using signals from the speed sensor. Once the ECU makes its calculations, it controls the amount and direction of current supplied to the power assist unit's reversible motor. The motor runs a worm gear that turns a larger drive gear, which is made of a plastic composite to reduce mechanical shock and operational noise in the actuator.

Within the actuator the input shaft from the steering wheel and output shaft to the steering gear assembly are connected by a torsion bar that allows the shafts to rotate at different rates, depending on the amount of torque applied to the input shaft or rotational force on the output shaft generated by the steering assembly. The input shaft passes through the torque sensor and as the input/output shafts rotate, the torsional twist between the shafts move the sensor's rotor up or down. This changes the magnetic field acting on the right and left turn coils. The ECU senses this change of voltage on the coils and adjusts the amount of current to the motor.

Benefits:

The power assisted steering reduces steering effort to ease driver fatigue, especially when the four-wheel drive mode is engaged. Since the EPS is a variable-assist system it provides increased assistance at low speeds, where it's needed most, while reducing the assistance at higher vehicle speeds. The electric motor's inertia also significantly reduces bump steer and kickback to the steering wheel often caused when encountering rocks and ruts for a more comfortable and controlled ride.

ELECTRICALLY SELECTABLE 2WD/4WD

Features:

A switch on the right side of the handlebar allows the operator to choose between two- and four-wheel drive when the vehicle is stopped.

Benefits:

Electrically "selectable" 2WD/4WD system allows easy changing between drive systems to suit changing terrain and applications.

ELECTRONIC THROTTLE VALVE (ETV)

Features:

Kawasaki's electronic throttle actuation system enables the ECU to control the volume of both the fuel and air delivered to the engine. The throttle grip and throttle valves are not mechanically connected. Instead, twisting the throttle grip actuates cables attached to a pulley on one side of the throttle body, so that throttle pull feels just like a traditional system. The pulley on the throttle body connects to an Accelerator Position Sensor (APS), which sends a signal to the ECU for the rider's requested throttle position. It is the ECU that actually controls the opening of the throttle valves by actuating a DC motor atop the throttle body. Throttle position is confirmed to the ECU by the throttle position sensor (TPS). The simple system makes it easy to incorporate other systems like cruise control.

Benefits:

Kawasaki's ETV provides several advantages over a purely mechanical system. Its ideally matched fuel injection delivery and throttle valve position results in better, more natural engine response. Control of both fuel injection and airflow also enables precise cold-engine idling control, and once underway the precise control contributes to better fuel mileage. For the rider, throttle pull is lighter yet retains the more traditional, mechanical feel, while cruisecontrol equipped models help reduce fatigue on long trips down the highway.

KAWASAKI DIGITAL FUEL INJECTION SYSTEM

Features:

An on-board, digital microprocessor reads various inputs from the engine, like ignition timing, rpm, and throttle position, and from the environment, like air temperature and pressure. It uses the information to decide the precise amount of fuel that the engine needs at that moment, and injects it into the intake tract.

Benefits:

The fuel injection system feeds the engine just the amount of fuel it needs, when it needs it. No extra fuel is wasted, nor is the engine forced to run too lean. The result is excellent fuel economy and, combined with power and torque when the rider demands it. The engine runs smoothly and powerfully from idle to top speed.

