

# **KAWASAKI 454 LTD**

**BUY IT  
FOR  
ECONOMY,  
LOVE IT  
FOR THE  
ENGINE**

**E**CONOBIKE. EVEN THE NAME has a nasty ring to it, as though it were the two-wheeled equivalent of those tinny, wheezing-for-power commuter cars.

With its new 454 LTD, though, Kawasaki is trying to upgrade the econobike's lot in life. And thanks to its cruiser-bike styling and what may be the best mid-displacement inline-Twin ever, the LTD could be one of the sales success stories of 1985.

Certainly, econobikes—entry-level motorcycles, if you prefer—have gotten the short end of the marketing stick for the past few years. At a time when manufacturers were drastically

upgrading sportbikes, tourers and upscale cruisers, econobikes had to soldier on with unassuming engines and so-so styling. The end result of this corporate neglect was a collective yawn from the buying public, and a lot of unsold econobikes.

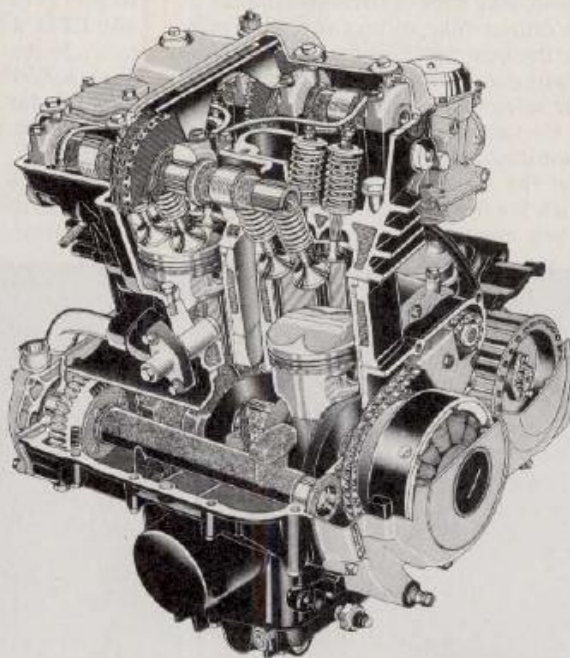
Kawasaki was as guilty as anyone. Its pre-1985 entry in the class was the 440 LTD, a Chevy Chevette of a motorcycle that evolved from the plain-Jane KZ400 of a decade earlier, and about as far from the cutting edge of motorcycle technology as it's possible to get.

Not so with the 454 LTD. First off, it was designed from the outset to be a cruiser-style machine. And while >





*The LTD engine shows its Ninja heritage: The pistons, valve train and carburetors are taken directly from the 908cc sportbike, although the LTD's dual overhead cams are driven by a centrally located chain rather than an outboard chain as on the Ninja. The engine's counterbalancer shaft is visible in front of the crankshaft.*



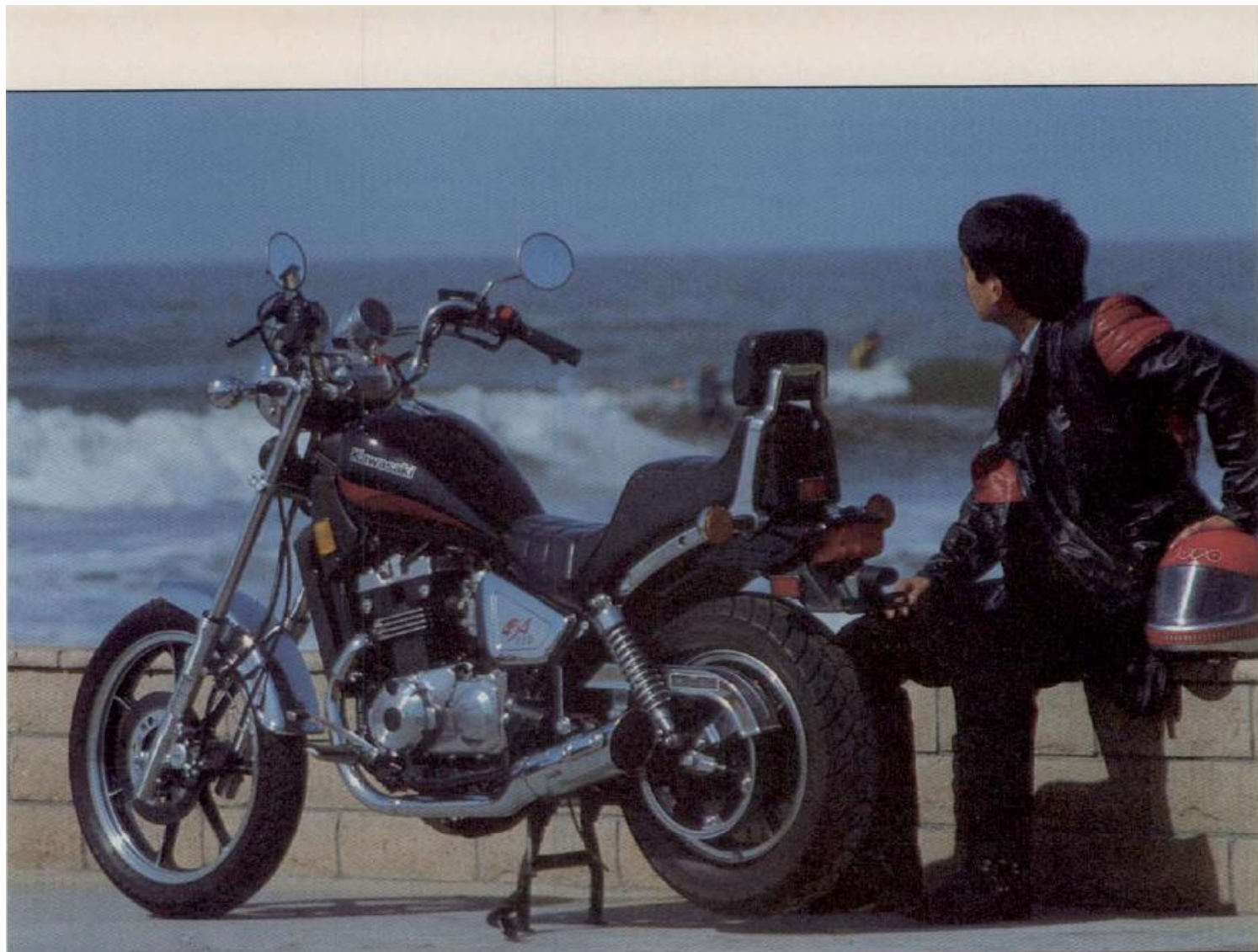
purists may snicker and call it a "chopperette," there's no denying that this is the style of motorcycle that Americans are clamoring for. From its fat rear tire to its cascading seat to its stretched-out front fork, the LTD is pure cruiser. And even if it doesn't break any new styling ground, it does manage to give off an inviting, almost jaunty, feel.

There are other aspects of the 454 that buyers will appreciate—the suspension, for instance. While its twin rear shocks and skinny fork tubes aren't exactly technical knockouts, the Kawasaki delivers a plush, compliant ride around town and on the highway. Ridden with vigor on a bumpy backroad, the LTD will misbehave slightly, thanks to overworked shocks and a front end that flexes slightly. Still, given the fact that most LTDs will be used as short-distance commuters, the suspension is impressive, especially if you remember the shopping-cart-like rides delivered by some past econobikes.

Also impressive are the bike's ergonomics. As with the Vulcan 700, Kawasaki has managed to combine all the earmarks of cruiser-style seating—a low, undulating saddle, pullback bars and way-forward footpegs—into a package that works well. The riding position is ideal for crosstown commutes or short highway trips; and, unlike some other cruisers, the 454 doesn't overly tax its rider's arm, neck and back muscles on longer runs at freeway speeds. For extended tours, a soft duffel bag to lean against and a windscreen to cut down the wind blast would help, but all in all, there's not much to complain about.

Unless, that is, you happen to be over six feet tall. The LTD is a smallish, short-coupled motorcycle, and tall people just don't fit the bike well. Their knees end up even with front of the fuel tank, their arms have to bend at awkward angles to reach the handlebar, and the seat just doesn't feel right. Don't expect a blanket endorsement from the NBA Players Association, in other words.

Fortunately for Kawasaki, few potential buyers have the physical characteristics of Kareem Abdul-Jabbar. But the 454's ergonomics are more a reflection of the bike's entry-level mission—which is to be unintimidating and user-friendly to many small/young new riders—than they are a condemnation of its compactness. And the LTD has the makings of an ideal first bike in other aspects, as well. Many new buyers are fearful of the amount of maintenance a motorcycle might need, but Kawa-



saki has seen to it that the LTD is as maintenance-*un*intensive as possible. The ignition is electronic and the cam chain is automatically tensioned; and while the LTD isn't equipped with hydraulic valve adjusters, its threaded adjusters are easier to work on than a shim-and-bucket arrangement and only need checking at 6000-mile intervals.

Another maintenance plus is the belt final drive. Lighter than shafts, quieter and less messy than chains, belt drives are nothing new to motorcycles. In fact, some of the very first motorcycles were belt-driven. It wasn't until the fairly recent application of the toothed rubber belt, though, that this form of power transmission was viable for modern motorcycles. Belt drive is particularly well-suited to a beginner bike like the 454 LTD because after an initial 500-mile adjustment, the belt can usually be ignored for up to 30,000 miles. And the belt never needs lubrication—one more thing an LTD owner doesn't have to worry about.



***Because it is quite comfortable, the seat can be forgiven for its overdone fake stitching and 22 simulated buttons. The sharp rise gives the rider some back support, and even the relatively thin passenger portion is livable.***

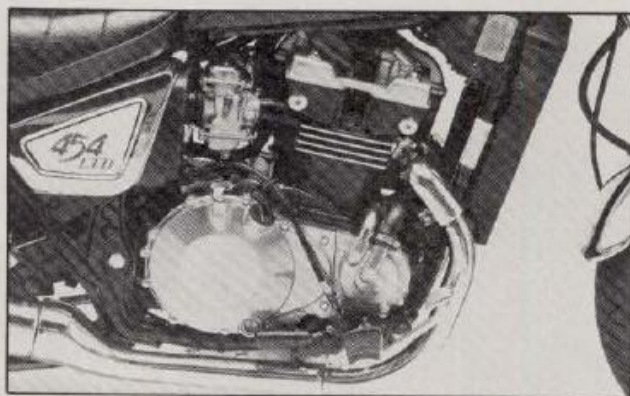
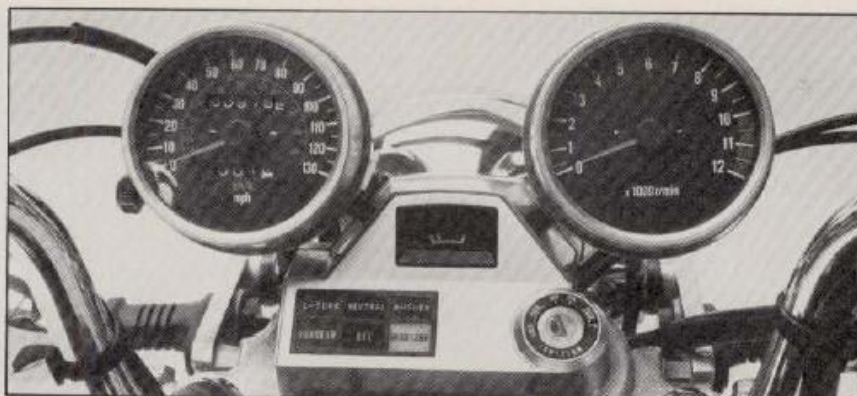
There are other features that make the Kawasaki easy to live with. Although the front disc brake is not overly strong, it is easy to modulate, a plus for a bike that will see a lot of time in the hands of inexperienced riders. The front brake's effectiveness is offset somewhat by the mushy rear

drum brake, however.

Another small plus, but one that shows how intent Kawasaki was at upgrading its entry-level bike, is the inclusion of self-canceling turn signals, a feature usually reserved for more expensive models. A further aid to first-time riders is Kawasaki's positive neutral finder, which will not allow the transmission to be shifted past neutral from first gear when the bike is at rest. This precludes the need for an unpracticed toe to fish between first and second gear while waiting at a stoplight. Even the mirrors have been well-thought-out, as they give a clear view to the rear without the elbow-tucking gymnastics that some bikes require.

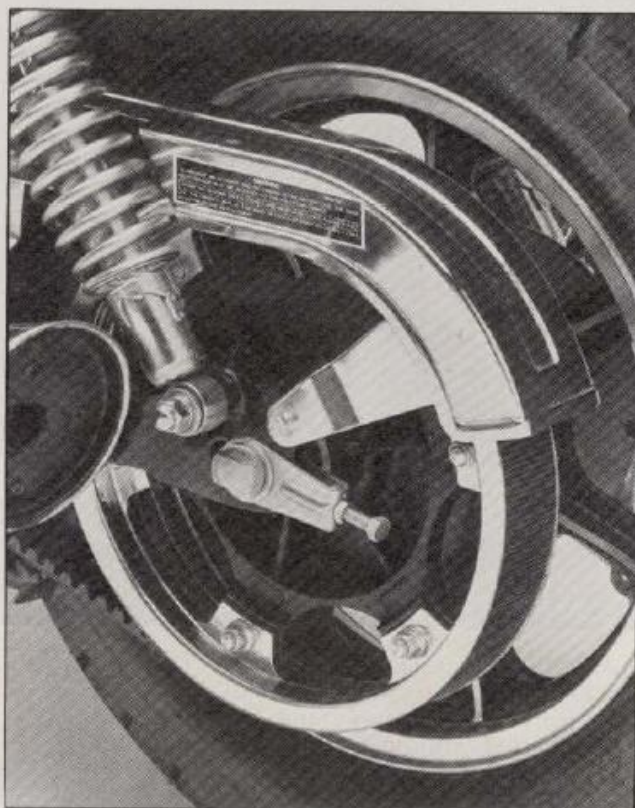
As nice as those features are, though, what lifts the LTD past all the entry-level bikes that have come before, what puts the 454 into a class by itself, is its engine. And you don't need a specifications page full of numbers or a fistful of dragstrip time sheets to know that this is a very special engine. A full-throttle, wheelie-

*In keeping with the rest of the bike, the LTD's instrumentation is simple and easy to read. The speedometer was only slightly optimistic.*



*The Kawasaki's inline-Twin may not have the same aesthetic appeal of, say, a Triumph 500, but if the British had made engines like this one they'd still be in business today.*

*Besides being quiet and lubrication-free, the LTD's belt drive should last three times longer than a chain. When replacement is necessary, however, the swingarm must be removed because the belt is continuous.*



popping run through the gears is all it takes. Not that the the 454 is the all-time acceleration king of the sub-500cc class, although with a 13.97-second quarter-mile clocking, it's close. But what makes the LTD's engine so memorable is the the *kind* of power it makes, an unlikely combination of low-end grunt and high-rpm surge that is accompanied by an almost racer-like snarl escaping from the abbreviated mufflers. Working in concert with a marvelously slick six-speed gearbox, the engine's flexible powerband makes the LTD a bike that can happily be lugged around in fifth or sixth gear, or blasted up to its 10,000-rpm redline in the lower gears, if that's what the rider wants.

Kawasaki arrived at this engine design by throwing away the old 440's

powerplant and borrowing from the new-style inline-Four that propels the company's flagship sportbike, the 900 Ninja. In effect, the designers sawed a Ninja 908cc Four in two; even company literature refers to the 454 as "half a Ninja." Which means that instead of having a technological wimp for a powerplant, the LTD is pushed along by a liquid-cooled, double-overhead-cam, four-valve-per-cylinder motor that is about as advanced as an inline-Twin can get.

Part of that advanced technology is a weighted counterbalancer shaft driven off the primary gear on the crankshaft. Kawasaki claims the counterbalancer virtually eliminates secondary vibration; and while some rumbling can be felt through the footpegs at certain engine speeds, vi-

bration on the LTD never falls into the offensive category.

The fact is that there is very little about the LTD worthy of serious complaint. Kawasaki has done its homework and brought the entry-level bike into parity with the rest of the motorcycle world. Company officials are quietly optimistic about the sales future of the LTD. And with a price tag of \$1999 to go along with its stout-hearted engine and take-it-to-the-bank styling, it's easy to see why. There is one nagging question that remains, however, one that asks if bigger-is-better Americans will forsake the razzle-dazzle of sportier, faster models for this new kind of econobike.

If there is a bike capable of convincing them, it's the 454 LTD. ☐

# KAWASAKI 454LTD

## SPECIFICATIONS

### GENERAL

List price	\$1999
Importer	Kawasaki Motors Corp., U.S.A. P.O. Box 11447 Santa Ana, CA 92705
Customer service phone	(714) 540-1600
Warranty	12 mo./unlimited mi.

### CHASSIS

Weight:	
Tank empty	423 lb.
Tank full	441 lb.
Weight distribution, front/rear, percent:	
Tank empty	43.5/56.5
Tank full	43.5/56.5
Fuel capacity	3.1 gal.
Wheelbase	59.8 in.
Rake/trail	31.5°/5.5 in.
Handlebar width	28.5 in.
Seat height	29.5 in.
Ground clearance	4.8 in.
GVWR	770 lb.
Load capacity (tank full)	329 lb.

### DRIVETRAIN

Engine	liquid-cooled, four-stroke inline-Twin
Bore x stroke	72.5 x 55.0mm
Displacement	454cc
Compression ratio	10.7:1
Claimed power	50 bhp @ 9500 rpm
Claimed torque	30.4 ft.-lb. @ 8000 rpm
Valve train	dohc, threaded adjusters, four valves per cyl.
Valve adjustment interval	6000 mi.
Carburetion (2)	34mm Keihin CV
Air filter	dry foam
Lubrication	wet sump
Oil capacity	4.5 qt.
Starter	electric
Electrical power	238w @ 6000 rpm
Battery	12v, 12ah
Headlight	55/60w, halogen
Primary drive	silent chain
Clutch	multi-plate, wet
Final drive	toothed belt
Sprocket sizes	25/68
Gear ratios, overall:1	
6th	6.84
5th	7.72
4th	9.03
3rd	11.09
2nd	14.28
1st	20.64

### SUSPENSION/BRAKES/TIRES

Front suspension:	
Manufacturer	Showa
Tube diameter	40mm
Wheel travel	6.3 in.
Adjustments	air pressure
Rear suspension:	
Manufacturer	Showa
Type	dual shocks
Wheel travel	4.3 in.
Adjustments	spring preload
Wheels:	
Front	19 x MT 2.15
Rear	15 x MT 3.00
Tires:	
Front	100/90-19 Bridgestone Exedra G523
Rear	140/90-15 Bridgestone Exedra G524
Rear tire revs. per mi.	794
Brakes:	
Front	10.6 in. disc
Rear	7.1 in. drum

## PERFORMANCE

### ACCELERATION

Time to distance:	
¼ mi.	13.79 sec. @ 91.55 mph
Time to speed, sec.	
0-30 mph	1.4
0-40 mph	2.5
0-50 mph	3.5
0-60 mph	4.8
0-70 mph	6.6
0-80 mph	9.1
0-90 mph	12.7
Top gear time to speed, sec.	
40-60 mph	5.1
60-80 mph	6.3

### SPEED IN GEARS

Measured top speed	102 mph
Calculated at 10,000 rpm redline:	
1st gear	37 mph
2nd	53 mph
3rd	69 mph
4th	84 mph
5th	98 mph
6th	110 mph

Engine speed at 60 mph	5430 rpm
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### FUEL CONSUMPTION

High/low/avg.	51/44/48 mpg
Avg. range inc. reserve	149 mi.

### BRAKING DISTANCE

from 30 mph	30 ft.
from 60 mph	118 ft.

### SPEEDOMETER ERROR

30 mph indicated	28 mph
60 mph indicated	56 mph

