

THREE-WHEELED

Which is the best for three-wheeled play?

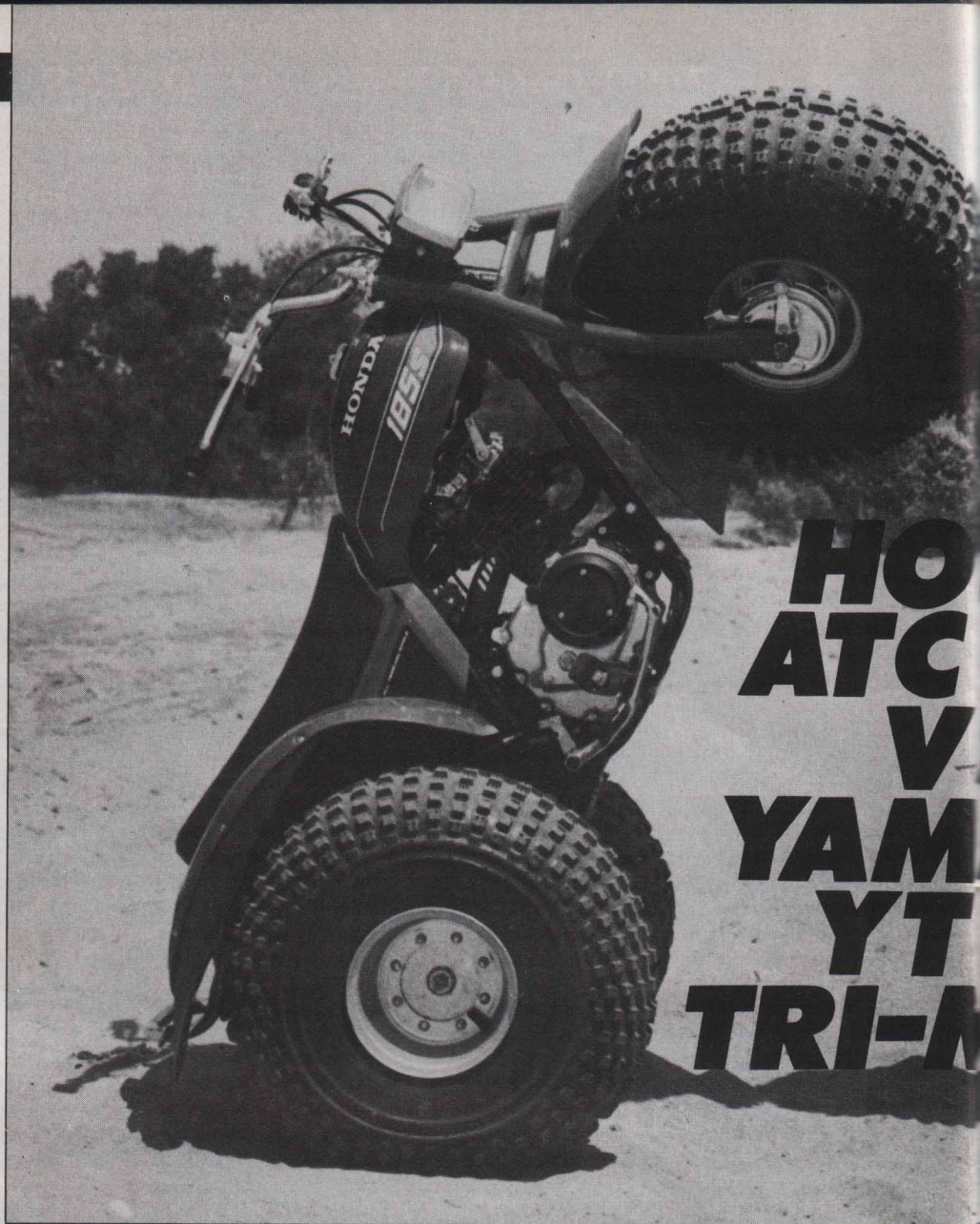
By the Staff of *Dirt Bike*

The Honda ATC250 is a great-selling three-wheeler, but people are still buying the middle-class trikes hand over fist. The simple reason for this is that the 250 is mostly a racing machine—the 185s and 175s can be built to race, but they're tuned more toward people who are interested in having a good time outside the race tracks.

Because the Tri-Moto we tested is an '83 model, this shootout is a little lopsided. The 1983 Yamaha was actually released in mid-1982, and when we asked for a Tri-Moto to test, this was all that was available. To be fair, next year's ATC185 will be an improved version of the one you see here, with the most significant change being the addition of a set of forks on the front end.

HANDLING AND SUCH

Handling? On a three-wheeler? Many people, including some of the staff of *Dirt Bike*, have a hard time believing that there are differences in handling quality between one three-wheeler and the next, but it's true. The most obvious example of this is found in the Tri-Moto and the ATC. Honda mounts the 185 engine right in the middle of the chassis, where the weight is balanced between the front and the rear wheels, and it has a Japanese patent on that location. Yamaha has to work around this patent, and on the YT does so by mounting the engine in a position far to the rear of the chassis.



Favorite activity of ATC185 riders: doing slides. Phil Beckman demonstrates the hang-off cornering style.

Right off, this produces the most obvious difference in the machines: The Yamaha has a very light front end. Because of this, the yellow bike (can we call it a bike? why not . . .) likes to wheely, a trait very endearing to many a pit racer. On the negative side, a light front end doesn't like to stick to the ground, which means that the YT has a severe front-end washout problem in the turns. If you sit in the middle of the seat and pitch it into a slippery turn, it will usually scrub the front wheel and head straight to the outside of the turn.

Yamaha riders compensate for this by moving their weight far forward on the machine, and applying heavy throttle to keep the rear wheel spinning. There's nothing in the way, between the seat and the handlebars, to keep the rider from sliding up—which is a plus in our opinion—but in the long run, it takes a lot more work to control the Yamaha in the turns.

The Honda is a different story. They've been working on the ATC geometry for

HORSEPOWER

No doubt about it, the new Yamaha will roost on the ATC. The '83 YT has been given a horsepower increase, and that, along with the quick-revving ability of the two-stroke engine, makes it a very snappy little bike. Our only complaint about the Yamaha was the tall gearing. It seems to be geared for high-speed running, and would be much easier to ride with one tooth less on the countershaft. The YT won every drag race against the ATC, just so long as the rider remembered to keep his weight forward. If he didn't the second gear shift was a looper every time!

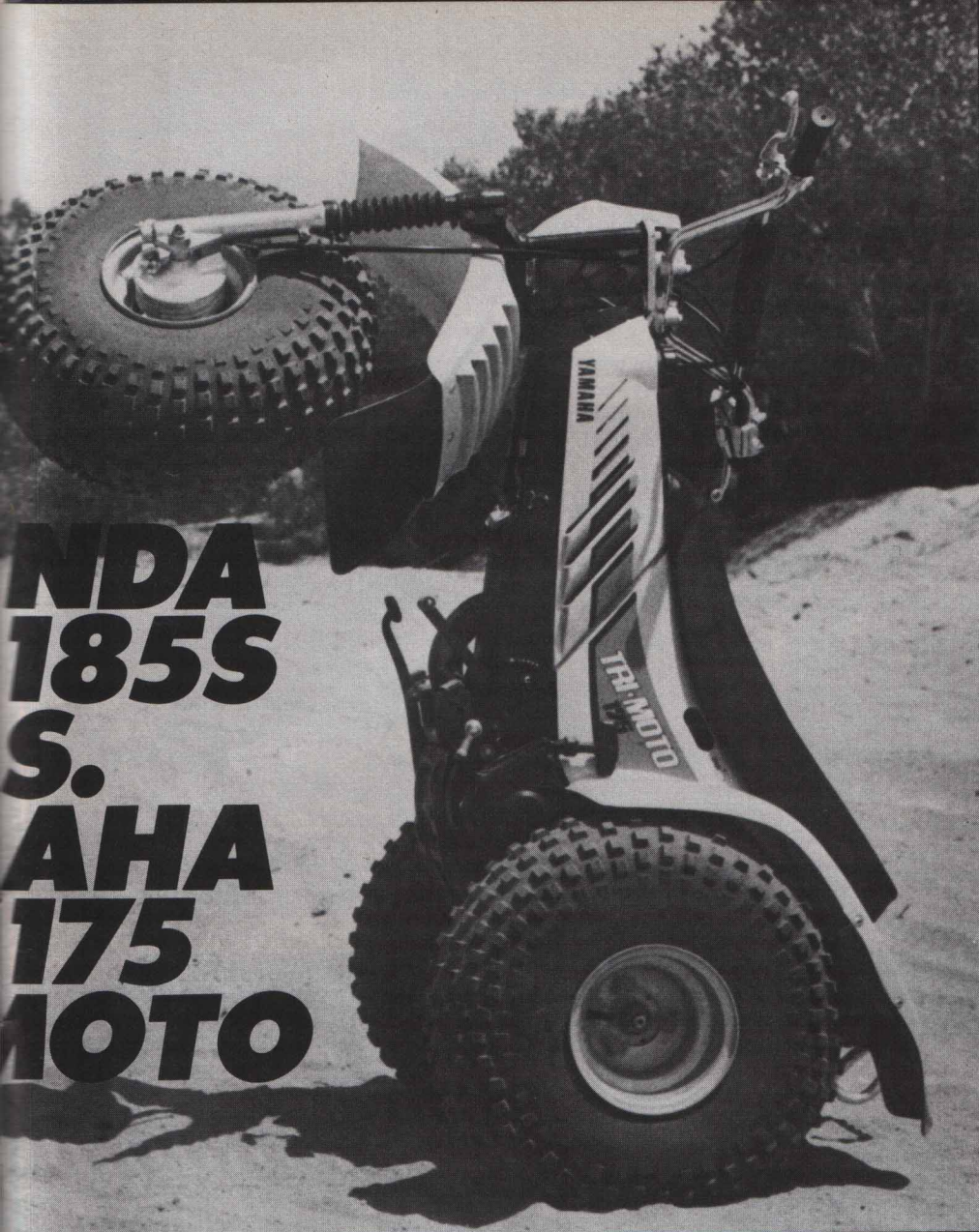
The Honda's forte is torque power, and plenty of it. While the YT walked away on level ground, the ATC made up for it in the hills. With all the torque available to the Honda rider, he doesn't need to shift as often and can just sit back and give it more thumb on uphills. Gearing is slightly lower than the Yamaha, but all five gears are evenly spaced to take advantage of the wide powerband.

COMFORT AND CONTROLS

The winner of the comfort category is the Honda, hands down. The ATC's seating position is very natural—good, wide pegs to stand on, and the bars seem to be the perfect bend for every rider. The seat is designed to be soft, to better absorb the bumps transmitted by the lack of suspension, and even the tires are a radial design to soak up some of the small stuff. Both the shifter and rear brake pedal are wide and easy to find.

The Yamaha, on the other hand, is not quite up to par. The body of the YT is very narrow in front of the rider, which seems like a good idea at first, but many of our test riders complained that it was too narrow. It wasn't unusual to have a

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more than ten years, and it shows in the way the bike handles. The Honda sticks to the ground. It is not nearly as easy to wheely as the YT, but the front end bites hard in the turns. Switching back and forth between the two, our testers were occasionally surprised by a near highside on the Honda in the same turns the YT wanted to plow through. Pure and simple, the ATC is easier to control, and much more predictable than the Yamaha.

The Yamaha does have one big advantage over the ATC, though, in the form of a front suspension. We're not talking long travel here—the YT forks deliver only four inches—but any amount of travel is better than none. Those four inches do a lot toward soaking up the bumps, and you can feel the difference. Small stutter bumps, rocks and holes cause the front end of the Honda to hop off the ground while the YT gives a smoother ride through the rough. Big whoops and bumps are to be avoided on either bike, as they'll both turn into heavy pogo sticks with very little warning.



The Tri-Moto is not a comfy slider; the light front end doesn't like to bite and steer through the turns. Keep the throttle pegged for best control.

THREE-WHEELED SHOOTOUT



Jumping the ATC is a little risky with no suspension to cushion the landing.

foot slip off the footpeg of the YT while blasting through a turn: The narrow peg forced the rider to keep his legs clamped close to the body, and when the rider threw his body weight to the outside, the foot slipped off. Not a really critical problem, but a nuisance, at any rate.

The Yamaha bars are tall and forward, which gives the rider a feeling of "reaching" for the bars. The narrow body allowed for good forward weighting, but moving up makes the brake and shifter hard to find. The seat is harder and thinner than the Honda seat—not a disadvantage on a short ride, but it becomes uncomfortable after a few hours.

BITS AND PIECES

Both bikes use semi-automatic clutches, meaning to say that the clutch action is in the shift lever. The Honda is very tight and positive, but the Yamaha suffers from the rear engine location and the necessity of using a long shift lever and pivot to change gears. What this means is that the Yamaha has a longer shift throw and feels sloppier. To be fair, we had no trouble with shifting on either bike, shifter "feel" aside.

Both machines are easy to service. The seat/rear fender combo can be removed from either bike by just pulling a lever. The Yamaha engine looks to be a tight fit under the plastic, but actually it's easy to get at everything.

The Yamaha fuel tank holds 2.2 gallons, while the Honda holds 2.3 gallons. You can expect to fill the Honda less often than the Yamaha, as the four-stroke engine is capable of amazing gas mileage. Lubrication in the Yamaha is by an oil injection system—don't forget to fill the oil tank at least every other time you fill the

gas tank.

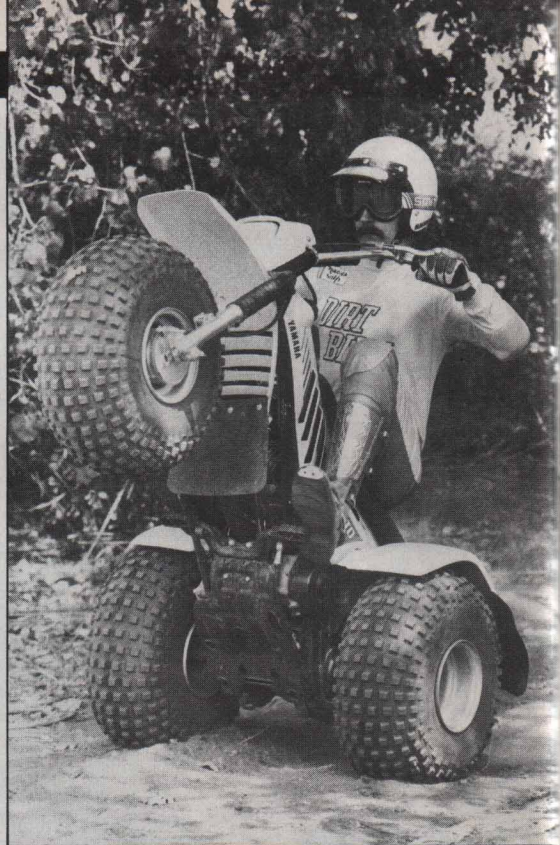
The YT uses a front drum brake and a rear disc, while the ATC uses drums on both ends. We had a chance to spend a considerable amount of time riding in water, and both brakes on both machines faded when wet, although dragging the brakes after a plunge dries them out, no problem.

Speaking of water, both bikes are near-submarines. During one particularly frenzied river shorttrack, we tried repeatedly to drown them out, and never succeeded. Excellent waterproofing here.

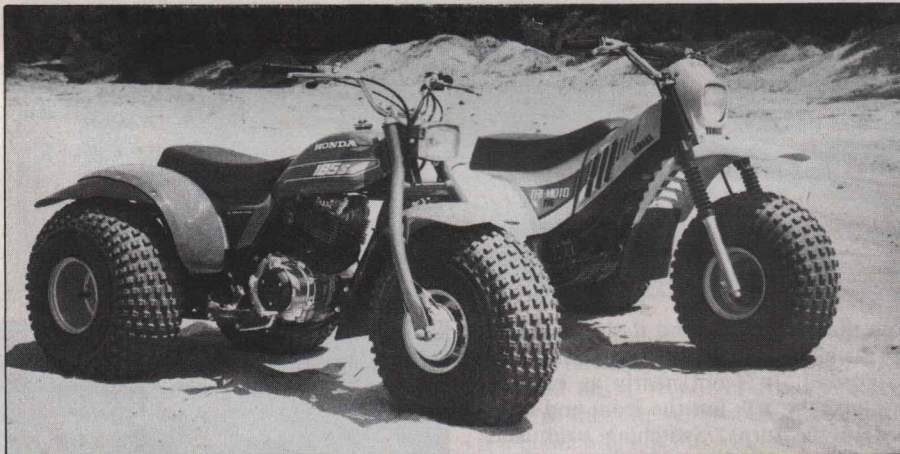
WHO WON

If a small yet racy three-wheeler is what you're looking for, the Yamaha will fill the bill nicely. It has a very snappy engine that is guaranteed to keep the rider from becoming frustrated or bored, and although it has a few handling quirks, it performs well without being dangerous.

For overall riding comfort, ease of control, and general likability, we have to pick the Honda as the overall winner. It does everything the rider asks it to do with a minimal fuss, and although it's not the most powerful in its class, it has plenty of steam to get the job done. It is the quintessential three-wheeler. And after 12 years of development, we would expect nothing less. □



Wheelying the Tri-Moto takes a bit more concentration. With the rearward weight bias, the bike likes to loop over backwards—as Clipper will soon find out.



HONDA ATC185S

ENGINE TYPE	4-stroke, OHC
BORE AND STROKE	63.0mm x 57.8mm
DISPLACEMENT	180cc
CARBURETION	22mm Keihin
IGNITION	CDI
TRANSMISSION	5-speed, auto clutch
FUEL TANK CAPACITY	2.3 gal.
WHEELBASE	1120mm (44.1 in.)
GROUND CLEARANCE	110mm (4.3 in.)
SEAT HEIGHT	665mm (26.2 in.)
WEIGHT (CLAIMED)	276.7 lbs.
SUSPENSION:	
FRONT	None
REAR	None
TIRES:	
FRONT	22 x 11-8 Ohtsu
REAR	22 x 11-8 Ohtsu
INTENDED USE	Off-road
APPROX. RETAIL PRICE	\$1248
COUNTRY OF ORIGIN	Japan
DISTRIBUTOR:	
American Honda Motor Corp. 100 West Alondra Boulevard Gardena, California 90247	

YAMAHA YT175K

ENGINE TYPE	2-stroke, reed valve
BORE AND STROKE	66mm x 50mm
DISPLACEMENT	171cc
CARBURETION	24mm Mikuni
IGNITION	CDI
TRANSMISSION	5-speed, auto clutch
FUEL TANK CAPACITY	2.2 gal.
WHEELBASE	1130mm (44.5 in.)
GROUND CLEARANCE	120mm (4.7 in.)
SEAT HEIGHT	690mm (27.2 in.)
WEIGHT (CLAIMED)	262 lbs.
SUSPENSION:	
FRONT	Telescopic forks, 4.0-in. travel
REAR	None
TIRES:	
FRONT	22 x 11-8 Dunlop
REAR	22 x 11-8 Dunlop
INTENDED USE	Off-road
APPROX. RETAIL PRICE	\$1329
COUNTRY OF ORIGIN	Japan
DISTRIBUTOR:	
Yamaha Motor Corp. U.S.A. 6555 Katella Avenue Cypress, California 90630	