# What Bikes

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## KANASAKI ZX-GR FASTI

POWERVALVE BUYING A

### PLUS: KAWASAKI KLX250 DUCATI MOSTRO 600 KAWASAKI VN1500 vs SUZUKI VS1400

hat Bike?

EVERY '95 BIKE IN COLOUR

USED: TRIUMPH TROPHY, HONDA V-FOUR 400s, KAWASAKI ZZ-R600







The Yamaha RD350
Powervalve, now deceased, simply offers the best possible

balance of performance, fun and price. Nothing ever came close when it was available new, and nothing comes close on the used market.

There is no better value sports bike. For well under £2000 you can buy a modem classic that'll top 120mph, handle well enough to cope with most roads, and bring a grin to your face every time you ride it.

What's more, an RD350 is cheap to run, cheap to insure, adequately reliable. comfortable, and wellproportioned enough to carry a passenger. It even has a centre stand.

There are four basic versions available secondhand. The first is the original YPVS of 1983, which came with a little flyscreen fairing.

That was superseded in 1985 by the fully-faired F1, which (confusingly) was also available in naked form as the RD350N. The broadly similar F2 replaced the F1, and this too was available unfaired as the N2. The last model of all is the RD350R, which is the Brazilian-made model.

available only in fully-faired

It's important to understand the differences between these bikes, as RD components can (and do) get mixed and matched. The F1 is easily distinguishable by its all-black tapered exhausts, which look like original pre-power valve 350LC components, and is usually found in red/white livery. The F2 got new forks, pipes with alloy end cans, and is either red/white, blue with yellow stripes, or black. The Brazil Nut model is the only one with twin headlights.

Power-wise, the F1 got a power boost to 56hp: 6hp up on the original YPVS. The F2 got new carbs and was supposed to put out 60hp. The Brazil Nut model has the same engine as the F2, made in Brazil with the original Japanese machine tools. In practical terms, both F1 and F2 are pretty much the same as far as performance goes: The F2 carbs run a bit rich, and the revised ignition cuts the power off sharply at 9000 rpm (redline is at ten but hanging on that long won't help): the word is that the hot set-up for an F2 is to blank off the power jets and fit the ignition stator plate from an F1.



F2 meets Brazi Nut 350R, Spot the difference

## POWER VALUE

Never mind. Even in standard trim any 350 Powervalve always was, and still is, an extraordinarily exciting machine to ride. The first YPVS is little faster than the original LC - 110mph or so. It's just more flexible. The F1 and F2 are noticeably quicker: in standard trim they'll hit a genuine 120mph, and if geared up with one less tooth on the rear drive sprocket, they'll go faster than that. A comfortable cruising speed is about 90mph, with plenty in reserve for overtaking. Fuel consumption is in the low 40s. but those easy on the gas can easily get 45mpg, and the throttle-happy will find it just as easy to get down into the 30s. Any 350 will carry a pillion with ease (a sensible seat is just one its 350's virtues) but it knocks the top off the performance curve and doesn't do much for the fuel consumption, or the handling.

The Brazilian model has a reputation as a bit of a slug. For some reason, it leaves the

factory with enormous restriction washers in the exhaust downpipes. These are fairly easy to remove, but you have to alter the jetting, too the main let gets a tiny size increase from 180 to 185, but the power jet goes up from a tiny 20 to a whopping 55. Fail to get this right and you'll literally blow holes in your pistons. Best thing is to get it done at your dealer -Yamaha supply the parts for nowt. Cynics say the restriction's there in the first place because the worn out secondhand tooling the Brazilians use can't turn out engine parts with tight enough tolerances to produce peak power reliably. Despite this, de-restriction won't affect your warranty if it's been done properly.

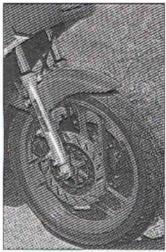
#### WHAT GOES WRONG? WHAT TO CHECK?

Basically, the YPVS bikes are reliable. Yamaha has been building performance two-strokes for decades and hasn't produced a real duffer in all that time. Still, the Powervalve does have its weak spots.

First things to check are the power-valves themselves. They're exposed at the front of the barrels and all the road crap hits them head-on. Consequently, the seals wear out. In bad cases the bushes wear as well. Check the front of the barrels as you rev the engine hard at a standstill. Any blowing or smoke means a stripdown is needed, and with gaskets and re-bushing that can easily cost £150.

If the bikes aren't used hard. or are run on cheap oil, the power-valves coke up and seize. When you turn on the ignition switch, you'll hear a "whee-whee" as the valves rotate through their cycle. This is to clear any carbon build-up. If they stutter through the cycle, or if you can hear them chattering, then they're seizing up and will have to be stripped down and cleaned. That will cost you about £35 in gaskets and seals alone. Don't believe a seller saving that it's just a duff battery - assume the worst. Ask what oil he uses in the engine. It should be quality stuff, not cheap chainsaw and awnmower sludge.

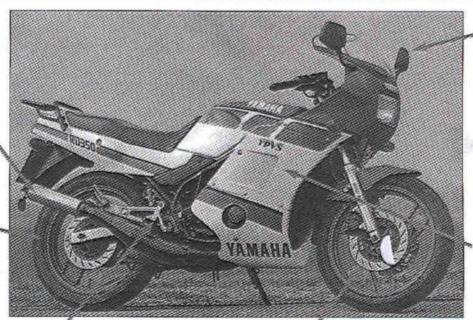
Powervalve engines are very quiet in operation, and any rattles or rumbles mean there's a problem. Some noises are down to clutch rattle — pull in the clutch lever and if



The 350's front end looks a bit weedy these days, but it's still up to the job

it quietens down there's no need to worry — but anything else means that something fundamental, usually the crankshaft, is on the way out. This is simply to be expected: not many RD350 cranks last past 25,000 miles (mine only lasted 14,400!). Stan Stephens or Bob Farnham will strip and rebuild the engine and give the crank a new set of bearings for a couple of hundred quid or so, so it's not the end of the world — just a useful bargaining

- Exhausts are the first thing to get changed, usually make sure any re-jetting work was carried out properly or wave bye-bye to your pistons
- Few will have the standard tyres these days, thank heavens. Pirelli Demons (if you can find them) or equivalents are about the best tyres for the skinny rims—go for the stickiest you can afford



 Rear shock sags and loses damping. Bounce on the back end — if it boings up straight away, the shock's surely shagged (try saying that with a mouth full of crisps)  Brakes aren't the best in the world, but regular maintenance and braided hoses make all the difference

- engine and frame numbers loads of 350s have been raced, stolen or mucked about with (sometimes all three)
- Listen for engine rattles some are no problem but others spell big money (see text). Otherwise it's solid, reliable, tuneable... oh, and bloody good fun



· Good clocks, wobbly fairing and mirrors, and a comfy riding position. They don't make 'em like that any more

point. It can, of course, be done for less if you do the work yourself.

Treat tuned engines with suspicion. There are many amateur bodgers out there, and if you want a tuned 350. it's best to go for one which has been fettled by a recognised tuner, like the aforementioned Stephens or Farnham. A stage one tune is a mild one and just peps the thing up a bit. Stage two makes quite a difference, and stage three tunes aren't really suitable for the road and reliability takes a sharp plummet.

Finally, if you're anticipating doing any rebuild work yourself, never buy pattern parts, with the exception of Potenza and other top quality pistons and rings. Certainly never buy pattern gasket kits. The genuine ones are the only ones which seem to last.

Rear suspension linkages wear out quite fast, as do the cush drive rubbers. These are easy to detect - just waggle the back end about - and reasonably easy to fix. Again, treat faults here as bargaining chips, although they might cast a question mark over maintenance generally. Other consumables like wheel bearings, head races, chains and sprockets all tend to lead a hard life. On the first YPVS, the rear suspension unit is adjusted by a toothed belt. This always breaks, but by now few Mark One

Powervalves will be wearing their original rear shocks.

The forks are a bit soft, and people who put in stiffer springs and maybe thicker oil obviously know what they're doing, It's a plus point. Fork braces make absolutely no difference at all, so don't pay extra for one.

On a test ride the bike should pull steadily, if unexcitingly, up to 6000rpm, at which point it should lift off. There's often a flat spot between 5500 and 6000rpm. so don't worry about that. Ideally you need someone who knows RD350s to evaluate the bike, but one that doesn't hit 90mph going up through the gears is probably a bit tired.

Finally, the most important check of all: engine and chassis numbers. These should match the logbook, and should also read the same as each other. If they don't match. then it's had another engine. which is OK as long as the change has been recorded on the logbook. You'd be better off looking for one with its original motor, though, just in case. If they don't match the logbook and each other, then the chances are high that it's a ringer. RD350s used to be the most nicked bike in the country, and there are still an awful lot of dodgy ones around, so this is a check that you must make.

#### MAINTENANCE

There are few bikes easier to service than an RD350. The timing is electronic, the carbs rarely go out of balance (and even then have little windows in them so you can set the slides up by eye), and the gearbox oil only needs changing every 6000 miles. The cables connecting the power-valves to the servo motor do stretch over time - every so often you need to pull the cover off the power-valve and adjust the cables so that the alignment marks are in their correct position. The cables also have a habit of seizing in bad weather, so buy a cable oiler and learn how to use it. Apart from looking after the usual consumables, that's it.

**Neil Murray** 

#### PRICES

RD350s were always cheap, which was one of their great assets. Even now, there's no need to pay more than £1500 for one.

The first YPVS models are already becoming collectable. They were milestone bikes, so this is understandable. Mind vou. all Powervalve models are destined for classic status. no question, £800 is starting money for a Mark One YPVS, but £1000 is a better bet. The RD350F1 and F2 can all be bought for about a grand, but you're likely to end up with something that needs another few hundred guid spent on it. For a good fully faired bike, you really need to start thinking at £1400. To give you some idea, I recently sold my 1988 F2. which I'd had from new. That was mint, had 22,000 miles on the clock, and all the consumables were in good order. It had had a recent rebore and a Farnham stage one tune. A dealer price would have been about £1750. Privately, 1988 F2s were going for £1500. I sold it to a friend for £1600, and he was happy to pay slightly "over book" because he knew the bike and knew it was in perfect nick.

Against that, you'll get optimists who've spent £300 on tuning, another £300 on things like RGV250 suspension and wheels, and another £300 on a paint job, and who think that this makes their bikes worth £3000. They aren't. They're worth a little bit more than standard, to a very small number of buyers, and even then only if the work's been done properly. It's best to buy stock

examples.

**USEFUL NUMBERS** M-P 0782 775566 (pattern parts) MPS 0626 835835 (patiern parts) Stan Stephens 6474 854331 (turting) Boo Famham 0732 833842 (huning) Samintans 0232 664422 (just in case)

GENUINE YAMAHA SPARES (FZ)	
Handlebar	£47.93
Air filter	£3.90
Front brake pads (pr)	£38.08
Rear brake pads (pr)	£35.86
Indicator	£28.06
Brake lever	\$8.25
Clutch lever	28.82
Clutch online	£10.95
Mirror	£37.92
Mudginard	\$50.76
Exhaust system	2617.79
Front wheel	£253.80
Petrol tank	1430.29
Screen	£93.68

#### PATTERN PARTS (from M+P)

1376.14

Fairing

Exhaust system	1205.00
Mirror (pair)	£18.00
Chain and sprockets (H/O)	00.863
Front brake pads (pr)	£12.00
Flear brake pads (pt)	112.00
Fork seals (pr)	£6.50
Pistons and rings (pr)	£70.00
Gasket set (full)	£26.00
Air filler	£4.00
Indicator assembly	17.75
Brake-lever	£3.75
Clutch lever	£3.75
Clutch kit (complete)	£30.60
* Complete Micron system	

For an absolutely pristine, very low mileage, late 1992 or even '93 Powervalve you'll pay up to £2200 and there's no need to pay more than this. Some people are asking £2500-plus for very late Brazil Nut models, but they just aren't in much demand: the Japanese models are purer.

Finally, I know of a dealer - John Groombridge of Cross-in-Hand, Sussex (0435) 862466) - who's still got Japanese F2 models in stock (amongst mounds of other obsolete stock spanking TZR250s, anyone?). For £3500 you could get a brand new Powervalve. Worth thinking about.