## What :-xt?

New \& used, running, riding \& more - every month

# KNus. surax . 

POWFRTMLI

## BUYINGA

L.GEND


##  <br> VALUE

R20350
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.

$T$There is no better value sports bike. For well under £2000 you can buy a modem ctassic that'll top 120 mph , handie 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. comfortabie, 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 faining.

That was superseded in 1985 by the fully-faired F1, which (confusingly) was also available in naked form as the RD350N.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 form.

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 350L.C 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 headights.

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 60 hp . The Brazil Nut model has the same engine as the F , 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 ter but hanging on that long won't help): the word is that the hot set-up for an F2 is to blank oft the power jets and fit the ignition stator plate from an F1, >



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 - 110 mph or so. It's just more flexible. The F1 and F2 are noticeably quicker: in standard trim they'll hit a genuine 120 mph , 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 90 mph , with plenty in reserve for overtaking. Fuel consumption is in the low 40 s , but those easy on the gas can easily get 45 mpg , 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 jet 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 twostrokes 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 selze. 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 saying 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 lawnmower 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 14,4001). Stan Stephens or Bob Farnharn 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


－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 funes 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 6000 rpm ，at which point it should lift off． There＇s often a flat spot between 5500 and 6000 rpm ， so don＇t worry about that． Ideally you need someone who knows RD350s to evaluate the bike，but one that doesn＇t hit 90 mph 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．

## MAINTEMANCE

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．（2）

Neil Murray

## PiICES

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 you， 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 quid 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 l＇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．

GEIUINE VAMAHA SPARES（E2）

| Handeor | ［4783 |
| :---: | :---: |
| Atratiee | t3900 |
|  | 153808 |
|  | 23586 |
| Indecitor | \％estof |
| Brino | 883 |
| Cinctivat | Soge |
| Chatrout | 810，95 |
| Mror | 23092 |
| Matpuar | tseat |
| Enfoctratam | 86027 |
| Amintund | 235390 |
| Remetate | 4430\％ |
| Stren | S9368 |
| Emate | c376＋4 |

PATJERM PARTS（from MFP）

| Exhaids suter | 280500 |
| :---: | :---: |
| Whtorfatili | 12800 |
| Chatind spordiati ition | ＋3se．00 |
|  | C1R00 |
|  | 12200 |
| Fowteetripa | 8685 |
| Phatrsatiotug suit | 490．00 |
| Gasketuer（ail） | \＄26000 |
| Altur | 8460 |
| lidicioranseobir | 采学 |
| trakeve | 2ciz |
| Cutativer | 岳泿 |
|  | 2306to |

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．

## USERUL NUMBERS

| M，${ }^{\text {c }}$ |  |
| :---: | :---: |
| MPS |  |
| Sransiephens |  |
| Bob Fapliam |  |
| Semturatis |  |

