### Dirt Bike Rider August 1983



## **FULL TEST**

## CAGIVA DG350



# A Little Bit Of This...

Cagiva's new 350 can trace its roots to Spanish development with more than a little Bultaco influence but the Italian trials iron with the truly international pedigree is different enough to be a winner . . . By Team DBR.

N ew entries into the trials field aren't that common but we've seen one this year, the Cagiva DG350. As a supplier of off road competition machinery Cagiva has been expanding in the past two years. In this country we've seen the growing popularity of their motocross and enduro machines. Continental trials bikes, however, have been diminished with the loss of Spain's Bultaco. Their cycles may be no longer forthcoming but their development expertise is. The Italjet factory were the first to benefit

from ex-Bultaco designers, now it's the turn of Cagiva.

Signor Bulto had more than a small hand in the Cagiva's frame. It's an open loop affair with a single front downtube. The front tube divides just above the exhaust port and cradles the front half of the engine providing two mounting points. The rear of the engine is supported by the frame tubes that hold the swing arm pivot. The swing arm itself is rectangular sectioned.

Suspension is by Betor at both ends; twin shocks at the back with

### **CAGIVA DG350**

progressively wound springs and leading axle forks at the front. The most striking feature of the bike is the design of the tank seat unit. Moulded in glass fibre, the tank is a complex combination of angular flats and curves, giving a low seat and a high sweeping tank. As with the frame the engine has been developed in Spain by Bultaco where the bike is sold as a Merlin. The power plant started life in Cagiva's 350cc trail bike.

With a bore and stroke of 80 x 68, it actually displaces 341.8cc. Ignition is electronic by Motoplat and the carburation is Dellorto. The exhaust is distinctive using a large bore parallel pipe which sweeps round to the left of the barrel.

The flick up choke on the carb is a bit hard to find for starting as it conflicts with the inline fuel filter and on-off tap. The clutch is light and smooth but the gearshift a little notchy.

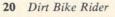
It will come as no surprise that the overall feel of the bike is very much like a Bultaco with slightly slower steering. It could be the larger diameter forks or a heavier engine further forward or even the footrest position. Favourite would be the engine as it's tilted slightly forward and mounts very close to the front downtube. The extra weight on the front end makes for true steering though, particularly when the going is very soft. Conversely, hoiking it around is harder work than it should be.

Power is there a-plenty but not for very long. It's a bit lumpy straight off the bottom and then it'll charge on like a train but



Above: The feel is very Bultaco. Extra weight on the front makes for true steering, especially when the going's soft.

Right: Our special thanks to Colin Boniface for the posing pix as he didn't ask for any cash . . .



#### **CAGIVA DG350**



Above: Engine power is soft which allows for rider mistakes but being just a five speeder with large gaps between second and third you can get stuck between cogs.

Left: The Betor suspension had to be good to help out an over-eager Boniface.!

Test pictures by Jim Forrest.

it doesn't even come close to revving out. It's not a bike you can ride fast. For maximum grip it's the highest gear it will pull and take it slow. If the rear wheel starts to lose grip, roll it off a gnat's and the power will still be there. Try and ride it like a Fantic and you won't get anywhere. The Cagiva will only be at a disadvantage on long climbs with a very tight approach where you need the motor to rev out in the same gear as you started in. Something else that slightly aggravates the situation are the gear ratios. Contrary to popular trend the DG350 is only a five speeder and there's a larger than average gap between second and third. So despite the abundant low end power you can

get stuck between gears.

The Betor suspension package is the same as can be found on other machines; the reason being it's about the best you can get. The rear units are rebuildable and there's enough springs available to suit various riding styles. The forks are soft and well damped. The cycle parts package includes the familiar Grimeca hubs and as to be expected the brakes work well. The only niggle is the rear brake lever which is hard to get at because of the kickstart. If you bend it out for easier access the chances of it hitting a rock or root would be quite high.

The rest of the bike is well protected. The gear lever has a folding tip, the exhaust runs completely inside the frame and the prop stand is cranked well out of the way. The aluminium bash plate is substantial but sacrifices some ground clearance compared to a full frame loop. One Bultaco legacy that may not go down too well, particularly in the southeast, is the front mudguard – won't take much sticky clay to clog it up. The chain run won't have these problems though, a robust guard keeps the clag on the tyre and off the chain.

Where the Cagiva scores is on ridability. The Bultaco dimensions give the bike precise handling while still allowing the rider to make some mistakes. The soft engine power also helps this and even a novice could find grip with it. The design experience is apparent when you start throwing the bike round for nothing gets in the way. The back of the tank is very slim and with the seat as low as possible you can lean a long way off the bike and still have your feet firmly on the rests. Design also runs through to the air filter location. Just lift the seat and there it is. It can be changed in seconds.

The finish of the bike is good and that includes the welding. The use of glass fibre for the tank/ seat unit and headlight mount could be criticised by some but Cagiva already have plans for these items to be made in plastic. This should put the Cagiva among the best finished bikes.

**S** omething that wasn't quite clear to us at the start of the test was that the motor is designed to run in two different states of tune, achieved simply by altering the ignition timing. What we've been describing is the soft option. Advancing the timing gives the motor more snap and a wider rev range making it more of an expert's bike.

Despite the tuning options and that the bike comes standard with a lighting kit, it's still on the expensive side. At £1399, only the SWM is more expensive but the DG350 does offer an alternative to the all Italian Fantic and SWM domination. An Italian engine in a Spanish frame should be a good combination and it is. In the trend conscious trials world, anything new and different will get attention to start with. A lot of club riders could even find themselves doing better on a more forgiving machine like the Cagiva and you can always turn up the wick by changing the timing if things get too easy.



22 Dirt Bike Rider