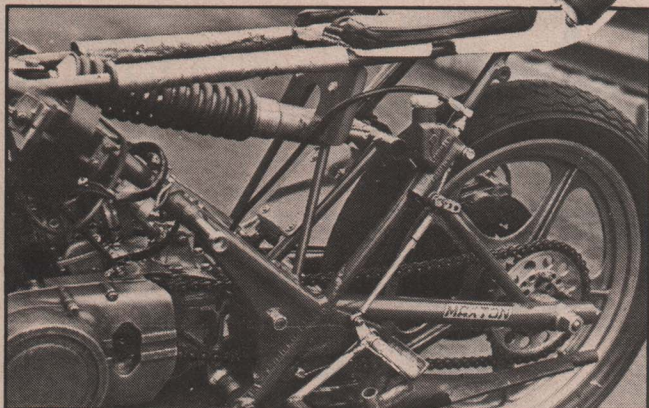


# CHARLIE'S T.T.

**W**HAT better debut can a new, untried and revolutionary racing motorcycle have than to win in the gruelling Junior TT first time out, followed by victory in the North West 200 and second place in the Manx GP? Ron Williams, the renowned frame and suspension wizard who has made the Maxton name synonymous with fabulous handling throughout the racing world, built just such a motorcycle, and Dugdale Motors of Alvanley in Cheshire, who own the machine, loaned it to us for Percy Tait to test, in exactly the same trim as when Charlie Williams won last year's Junior on it.

Ron Williams had converted a few of his standard Maxton frames to take a cantilever swinging arm and central suspension unit, but this machine was the first purpose-built monoshock chassis, and as such is better, neater and lighter. Unhappy with the damper units he had used on the earlier models, Ron made his own for this bike, and it has fully adjustable damping and spring-



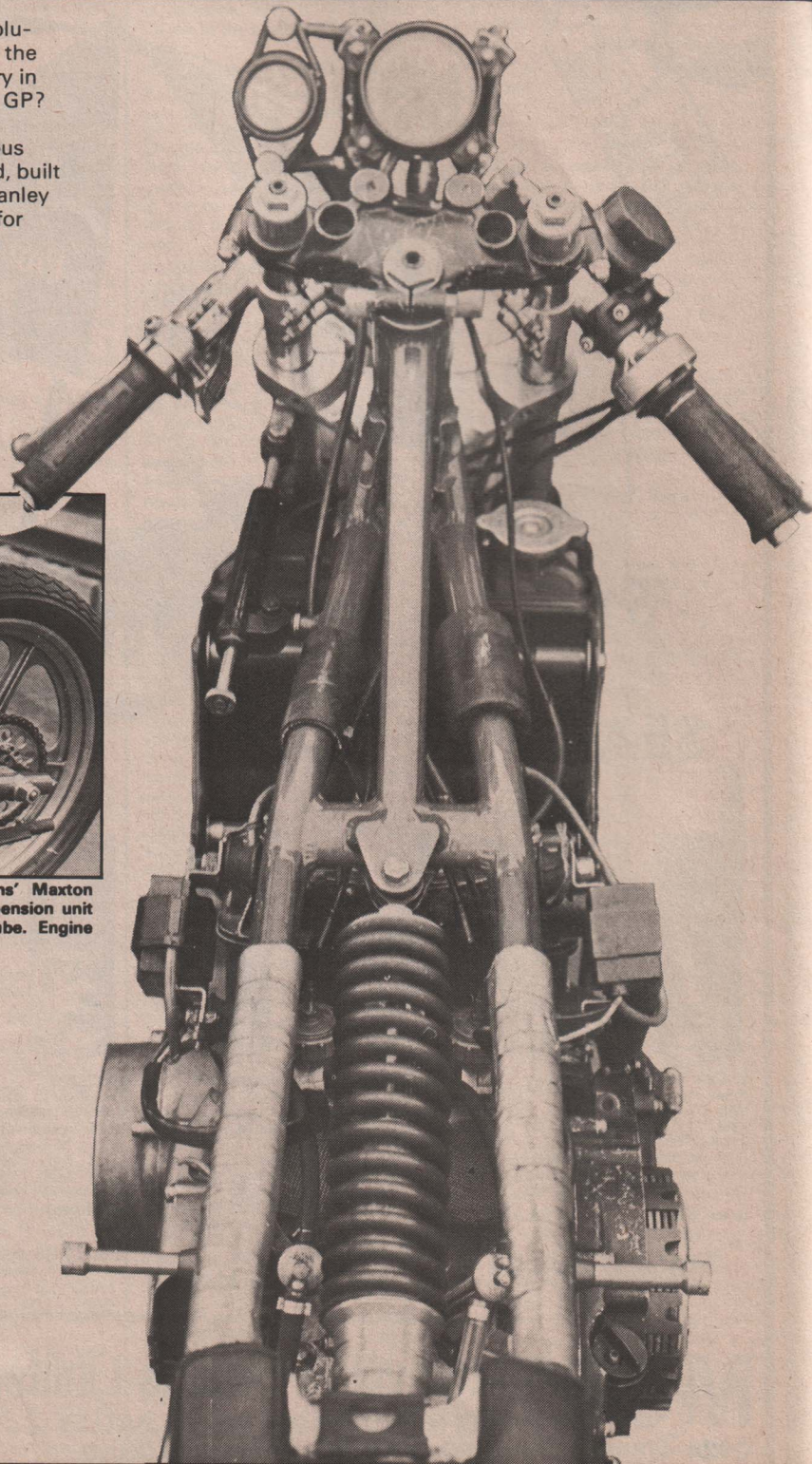
The very high standard of workmanship on Ron Williams' Maxton cantilever frame is clearly shown here. The monoshock suspension unit (right) is braced rigidly against the headstock by a top tube. Engine is rubber mounted.

ing. As with all Maxton frames, the quality of workmanship on the gleaming red chassis is first class, and it was the first thing that Percy commented on, even before he rode it.

"The frame looks so neat and right, you feel it's got to handle well," he said.

But before he could get a chance to discover the delights of Maxton Yamaha handling round Oulton Park's shivery December circuit, we had a problem. The oil seal behind the dry-plate clutch was weeping, and during the winter lay-up enough lubricant had contaminated the plates to make them slip badly.

Washing the plates clean with petrol didn't improve things much, so Hector Dugdale zoomed off in his car to fetch a new clutch from his shop. An hour later, with the new plates fitted, we dragged Percy away from the warmth of his Mercedes van sat him on the bike and set him off with





# WINNER

## THE TAIT TEST

Percy Tait reports on his first ever ride on a cantilever Yamaha. Verdict: "A big step in the right direction... for road bikes as well."

instructions not to stop until he got very cold!

As the Maxton screamed past the pits, every lap getting noticeably faster, we began to realise that either Percy's blood freezing point was much lower than he had us believe, or there was another factor creeping in — like he was enjoying himself too much to want to stop.

Eventually he pulled in, dropped the bike into the hands of Alan Dugdale, and scuttled off to the Mercedes where he related his opinions of the bike while reviving himself in the full blast of the heater.

"As far as the suspension goes, the back end controls the bumps beautifully, and I

over the Cronk-y-Voddy straight and from Ramsey hairpin where it is really rough, it would be no effort at all — like riding on a smooth road.

"It now needs something like leading link forks to give the front wheel the same degree of controlled movement, and also to cure the nose down attitude the bike takes under heavy braking, but the improvement over the standard Yamaha frame and suspension set up with this bike gives a big advantage.

"The power comes in at 8,000 rpm and goes up to 11,000 which is about average for this type of engine. When it is in the rev range there is a lot of power — it is quite a

and the clutch was fine once the new plates were fitted.

"The track was so slippery today that I daren't take it into a corner too fast, but the rear suspension allows you to get the power on all the way round the corner because the wheel is always on the ground, this means you are bound to get better lap times.

"In fact my only criticism is of the front forks, which aren't really bad — I mean I didn't have any problems, the bike was still

### SPECIFICATION

**Engine:** Yamaha TZ 350 water cooled, parallel twin, two-stroke, piston ported. Bore and stroke: 64 x 65 mm, 347cc capacity. Compression 7.04:1. Two 34 mm Mikuni carburettors. Lubrication: 16:1 petrol mix.

**Electrical equipment:** Femsa electronic ignition and crankshaft alternator. Ignition timing 2mm BTDC.

**Transmission:** Straight cut primary gear, multi-plate dry clutch, six-speed gear box, chain secondary drive.

**Frame:** Maxton cantilever. Double loop cradle with rubber-mounted engine. Maxton monoshock rear unit, and modified Yamaha front forks. Castor angle 28 degrees, trail 4in.

**Brakes:** Front and rear, single modified Yamaha disc, castellated inside and cut distortion slots outside, and disc thinned to half weight. Lockheed calipers.

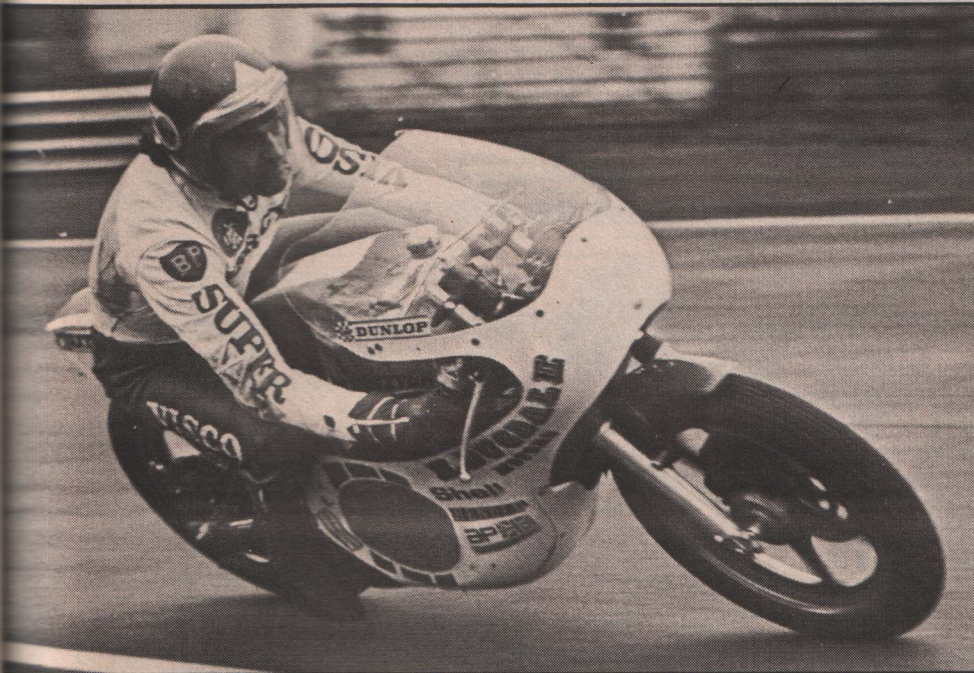
**Tyres:** Dunlop racing 3.00/3.25 x 18 front, 3.25/3.50 x 18 rear.

**Dimensions:** Wheelbase 54in, length 78in. Weight approx 330lb.

**Claimed Performance:** 147 mph timed TT Highlander speed trap.

**Capacities:** 5 galls approx 25 mpg.

**Price:** Maxton cantilever frame kit £330. Machine sold shortly after our test for £1,400. Kits available from Dugdale Motors, Greenbank Garage, Alvanley, Nr Helsby, Via Warrington.



Despite cautious riding because of the slippery track, Percy was delighted with the super-smooth ride.

couldn't hardly feel the irregularities of the track at all. Unfortunately, though, the front end is so hard when you shut off for a corner it makes the bike flick noticeably on slower bends. This was caused by overdamping which is aggravated by the cold conditions thickening up the fork oil," said Percy.

"I think cantilevers are definitely a step in the right direction as far as motorcycle suspension is concerned and that goes for road bikes as well, but it is no good having stiff front suspension and soft rear suspension. If they get this problem sorted out they will have a really super bike. When you make a big improvement to the rear suspension any deficiency in the front end is shown up. But I can understand why it would be good in the Isle of Man. It would ride all the bumps, and

quick bike for a TZ350. The brakes are very good, and the slots cut in the disc to allow for expansion without the disc distorting are a good idea, and will help to cut out fading during a long race. It is a very comfortable bike to ride, and the sort of machine you can jump straight on and get right into a race on. I could have ridden it in a race today without any problem whatsoever. It gives a feeling of security because the steering is much more precise which Ron has built in by altered steering geometry and weight distribution.

"It feels as though the bike is made in one piece as opposed to the ordinary Yamaha which feels all loose when you go into a bend. The gearbox on the Yamaha is very good and this one is no exception,

very controllable, but it meant it wasn't quite 100 per cent, and to make it so it would need softer damping on the forks.

"I suppose the difference between the cantilever suspension and the standard system is about as much of an improvement as when rigid frames were replaced with swinging arm frames. All in all the machine was very impressive. It is the first time I have ridden a cantilever motorcycle, and conventional suspension will seem disappointing after it," he said.