

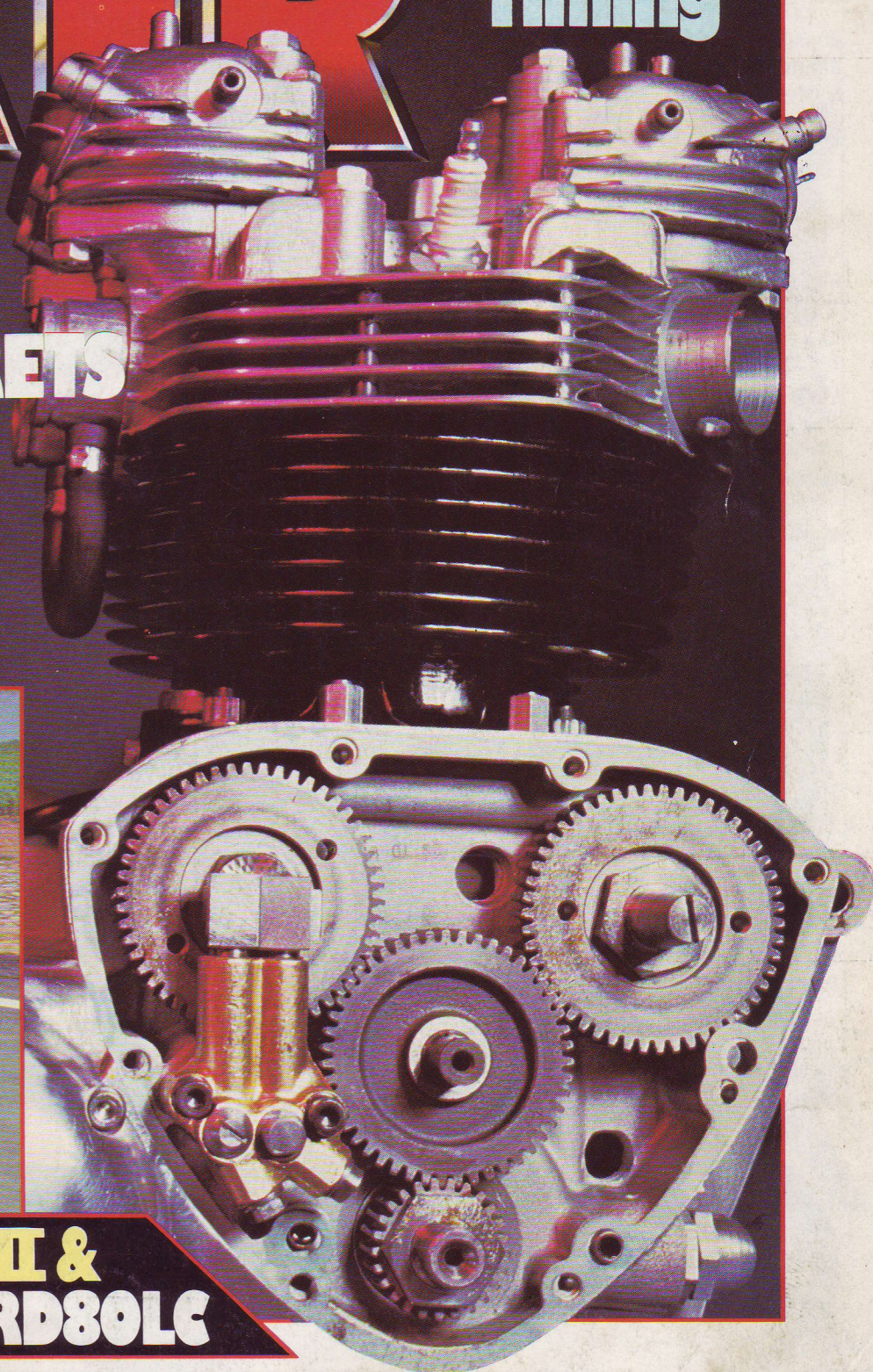
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THE BIKER

Workshop
Tuning a DT175
plus
**Ignition
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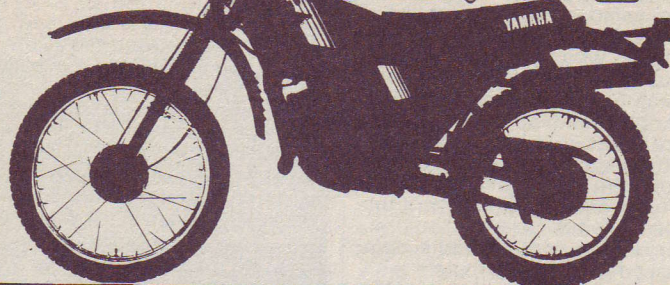
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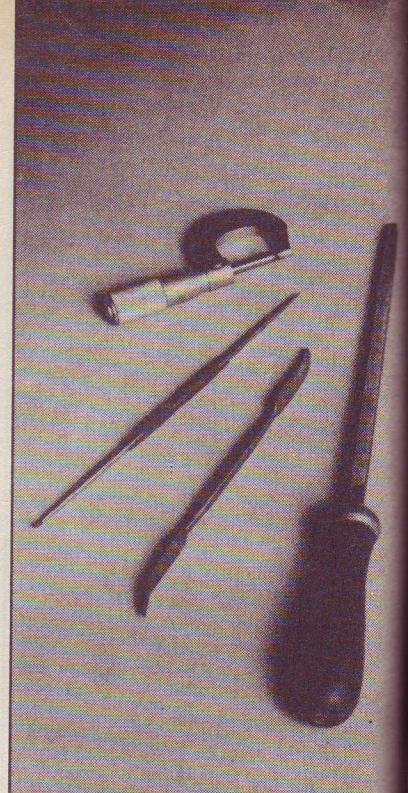
On Test **Le Mans III &
Yamaha RD80LC**

PROJECT



DT ENDURO

The DT engine even in standard form is an excellent unit giving plenty of low-down and mid-range power. With a few mods it can become a very effective enduro powerplant



Basic hand tools are all that is required to transform your DT into a flyer — note small files for ports

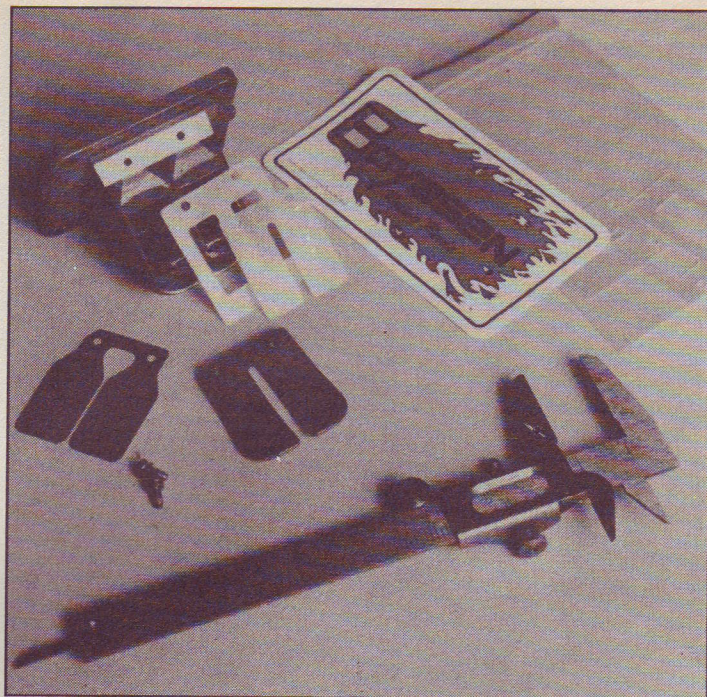
The second instalment tells of our attempts — successful — to get more poke out of the already plucky DT175 motor.

FIRST of all, to all you guys expecting a second instalment of the saga last month — my apologies but due to crashing said DT second time out and coming off second best, I had to defer further news for a month. Good start eh?

Anyway, let's get back on the trail (!) and carry on where we left off last time.

In standard spec. the DT175 motor is a very impressive piece of work indeed for a trailbike unit. It pulls well from low revs, has plenty of mid-range and revs pretty cleanly at the top end. Like virtually all 'stokers, however, it responds well to a little tuning.

Anyone who hasn't ridden off-road much tends to think that you need plenty of bottom end pull from a dirt bike, with an ability to rev out in

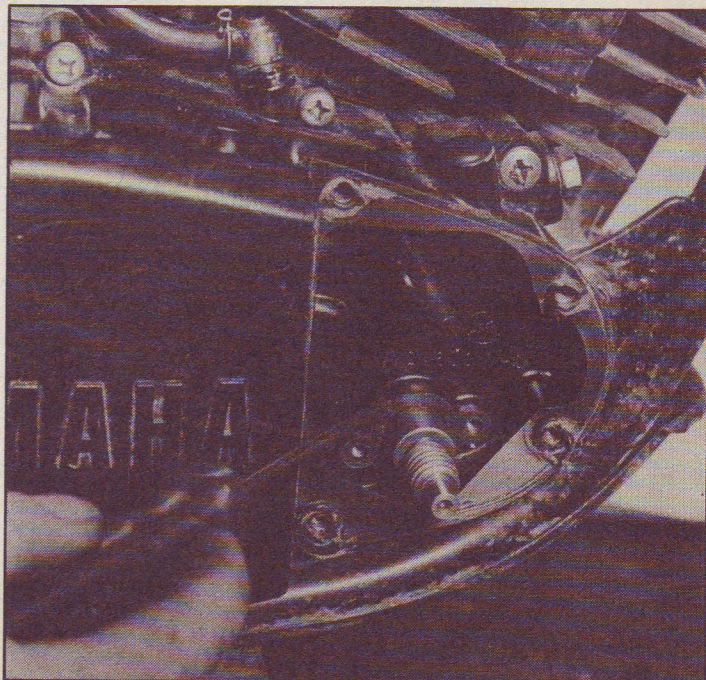


Inlet port needs to be opened out top and bottom to enable reed stops to be opened up for Boyesen reeds


The main problem with the standard porting is that it is too good! The ratio of transfer port height to exhaust port

We were after a simple bar-

A word of warning: when you remove the studs from *Oil pump is removed from drive shaft — secured by two cross-head screws. An oil seal prevents seepage and leaks*



PROJECT



DT ENDURO

the barrel to lap the head take great care. We had to use a stud extractor and even then one of the threads was left looking a bit sorry for itself.

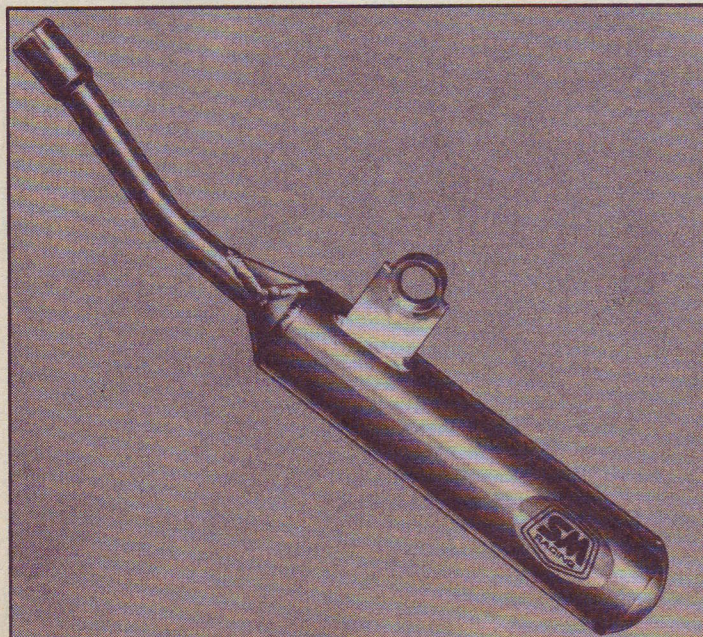
With this work done, we put the engine back together once more and turned our attention to the ignition timing. Because the mods already carried out would require a retarding of the spark we used a dial gauge to back the timing off to 1.8mm BTDC and then finally checked using a strobe. This is vital if a holed piston is to be avoided.

PETROIL

From the outset it was decided to convert the bike to run on a petrol mix instead of relying on the stock oil pump to provide the necessary lubrication.

Removal of the pump is straightforward: take off the pump casing on the right side of the engine and disconnect the control cable. Undo the two cross-head screws either side of the pump, pull off the oil pipes and the pump will slide off the drive shaft. The shaft is fitted with an oil-seal in the case so there are no worries about air or oil leaks

Serval tailpipe replaces the stock pipe to give a few more horses throughout the rev range



Standard main jet is increased from 160 to 190 in order to cater for use of petrol mix.

with the pump removed. Needless to say, the cable can be removed from the machine. The advantage of running without an oil-pump is that you never have to wor-

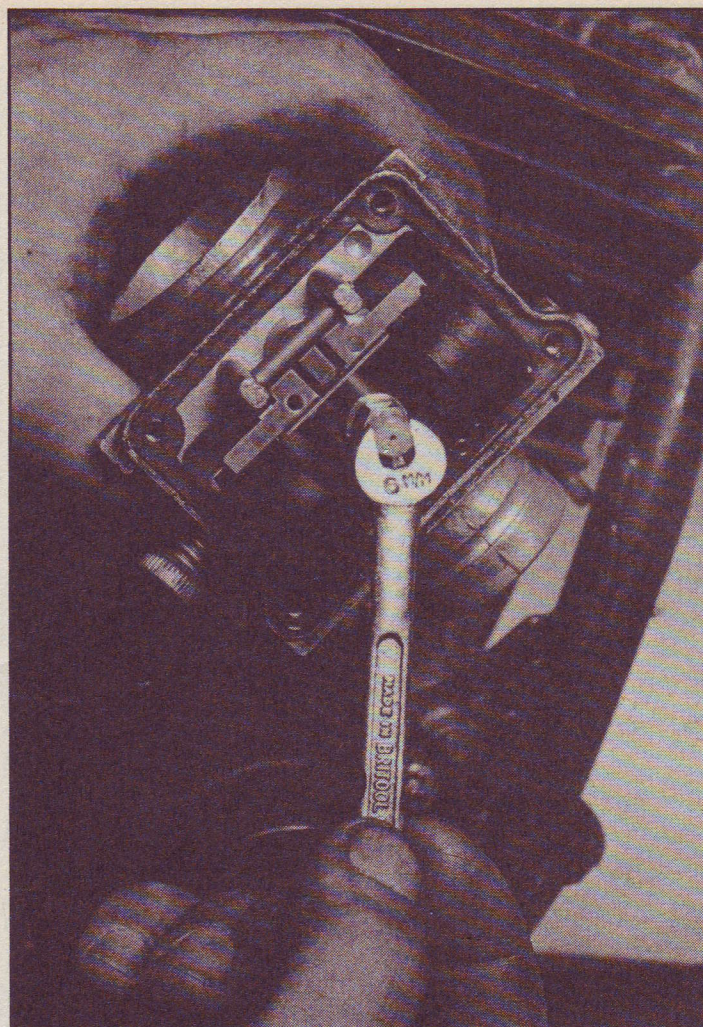
ry about a broken cable and a consequential loss of lube. There is also the small added bonus of saved weight as you no longer need the pump or the oil tank.

Because there is no oil passing through the main jet, it is necessary to go up on the jet size to prevent a weakening of the mixture. We first of all went up from the standard 160 main to a 180 but found that the bike refused to rev out in top so a 190 was tried and a plug check showed it to be perfect. NGK plugs are used.

RESULTS

So what has been the result of these mods? Well, previously the bike would pull about 75mph on the flat whereas now it revs out to a happy 85 or so. Even with motocross rubber on the back there is sufficient punch to hang the tail out under power at will.

A couple of other points worth mentioning are the fact that the stock original clutch burnt out during the first event so it will be a good idea to make sure that yours is ok



from the start. I also fitted a quick action throttle which reduced twist-grip rotation by 50% — it takes a bit of getting used to but is a good idea in the long run. A new cable is needed and for this I modified an Amal carb one to fit the DT carb top.

I first of all had fitted a 4.00 x 18 Cheng Shin tyre on the rear with a 2.75 x 21 at the front. Unfortunately the rear one was too badly damaged to use after the first event suffering severe cuts. I have now fitted a 4.00 x 18 Metzeler motocross tyre which is a very tight fit — you can get it in the swing arm by inserting an extra link in the chain and moving the wheel right to the back of the slot. The difference in grip is astounding.

FUTURE PLANS

I have a few little ideas in mind to try out on the DT (or the DT-IT as it's been nicknamed) the first of which is to fit a 26mm carb from a Yamaha RD250LC road bike which should help the top-end breathing quite a bit. Use the left-hand carb as it is the one fitted with the choke mechanism. Another mod is to fit a complete Fresco exhaust system in place of the standard expansion chamber and tail pipe. This is an unrestricted system which is reckoned to give amazing increases in poke compared to the stock set-up. Let's hope so! Let's hope also that we now see a lot of hot DTs around.



Metzeler motocross tyre is now used at rear end to give better off-road traction