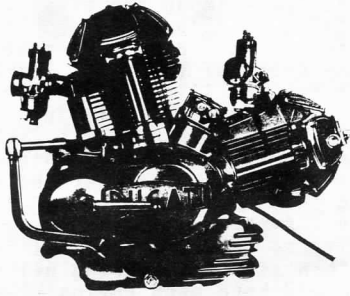


TECHNICAL



DUCATI 750 TWIN SIMPLE SERVICE

BY Motorcycle Mechanics, Sept. 75 issue.

Assuming that anyone experienced enough to own the big Duke is also experienced enough to know how to adjust the rear chain or change the spark plugs we will concentrate on the more important and difficult servicing tasks. But even something which appears to be simple, like the changing the oil, can cause trouble on the Ducati. The sump filler plug is hidden at the front of the engine, and it can be difficult getting oil in. The simple answer is to use a breather plug from one of the single cylinder engines which screws straight in. Fit a piece of large bore plastic hosing to it and pour the oil down the pipe. The result is no waste oil over the outside of the engine.

Many riders have had trouble with smoking from the front cylinder exhaust pipe after an oil change. The reason for this is overfilling. The sump holds exactly one gallon, any more and the oil pumps its way past the front piston. The only way to guarantee that all the old oil is drained out is to lay the bike on its side while the drain plug is out.

The use of multi-weight oil is not recommended. Most experts suggest the use of straight grade mineral oil rather than a multi-grade.

On the 750 engine there is only one oil filter, a long cylindrical device which screws into the sump and every time the oil is changed the filter should be taken out and washed clean.

Talking with Mick Walker, the British Ducati importer, you soon realize just how completely involved with the V-twins he is. Point to almost any part of the bike and he has a modification or trick which makes for better riding. For instance there have been a few cases of the air cleaner rubbing closing up and choking the engine. The simple, but effective answer, is to fit a lazy spring like a coil of wire inside the rubber hose to make sure that the rubber cannot pinch up.

Ducati have used a number of different hydraulic disc front brakes and each type has its own peculiarities. Mick always uses a thin layer of PVC tape round the screw cap of the front brake master cylinder to make sure that it doesn't come undone. With the later master cylinder fit a Brembo rubber gaiter inside the master cylinder since this allows the cylinder cap to sit lower and prevents moisture getting in to the hydraulic fluid.

A useful tip on all models is to lock wire the exhaust pipe flanges to the head. On all the twins the flanges are drilled in four places. All that is needed is a small hole in one of the head fins and a short length of tough wire. If the exhaust pipe starts to rattle round in the head, the threads can wear very quickly with expensive results.

Carburation on the V-Twins is worth a book on its own. Each bike is built and tuned separately, and almost any size jets could be fitted as standard. The sizes for main jet quoted in the specification

box at the end of this article are for guidance only. The significant thing is that normally the front cylinder runs with a richer jet than the rear cylinder. The best advice is to leave the jetting alone unless you are sure that there is something wrong. In many cases what looks like a carburation problem is ignition timing out of the wrong spark plugs fitted.

The Dell'Orto concessionaires are translating the translating the Italian tuning leaflets at the present time, but it will take almost till the end of the year before the translation is finished and the leaflets printed. (DIOC has no knowledge of these leaflets even existing other than the ones put out by Cosmopolitan motors in Hatboro Pennsylvania.)

From observation one of the hardest carburetor problems to solve with the big twin is synchronizing the carbs so that both slides open at the same time. The mechanics in Mick Walker's workshop check each carb individually with finger resting on the slide, but private owners may find it difficult to get the engine running correctly this way. One suggestion is to get a friend to help you with this task. Get him to open the twistgrip while you rest one finger on each slide. If the twistgrip is opened slowly enough you should be able to feel if one slide is moving before the other. If in doubt it wouldn't be a bad idea to get a second opinion.

Mick Walker believes in setting the tickover as slow as possible without the engine cutting out. His own bike ticks over more like a stationary engine than a high performance road burner. Carburation is set in the normal manner by checking the pilot jet adjustment and then slowly moving both slide stop screws.

While covering carburetors it is worth mentioning that it is possible to get an inlet manifold leak by over tightening the manifold securing nuts. Pull the nuts down too hard and the rubber type gasket distorts and lets air in.

With the Ducati it is easy to overtighten nuts and bolts because the manufacturers do not quote torque settings. Mick Walker gave us an instance of an owner who pulled the threads out of a crankcase simply because he kept on tightening the head nuts. The Ducati doesn't use a head gasket so very little pressure is needed on the nuts to keep the head down. Far more important than pressure is to pull the head evenly so there is no chance of distortion. The same thing applies to almost every other nut and bolt on the engine. It is very easy to over-tighten Allen screws which hold the covers on, but all that is needed is hand pressure on an ordinary Allen key.

The V-Twins have used a number of different hydraulic brake systems, but regardless of which type of brake is fitted the correct hydraulic fluid to use is Lockheed series 329. (Try and find this stuff at your local Ducati dealer.....if he's still there. Try and find it anywhere for that matter....ed.)

Because it is almost impossible to tell what make of hydraulic system is fitted from just a frame number, Mick Walker advises customers to actually quote the maker's name stamped on the part they want. The same thing applies to the silencers of the exhaust pipes, and the front forks and the electrical switch gear. Only by doing this can you be sure to get the right spares for your bike.

Although not really within the areas of servicing there are a couple of special points about the clutch where owners go wrong. The clutch springs are not adjustable, the adjusters must always be screwed fully home. The clutch hub is made from cast iron and as long as it isn't abused will last for years.

Apply leverage to it and there is a chance of breaking one of the gear teeth off. If this should happen the only solution is a new clutch hub with the drive gear since the two are a matched pair.

Ignition timing is as critical with the Ducati as it is with any modern high performance bike, and it is just as hard to set. The problem is the manu-