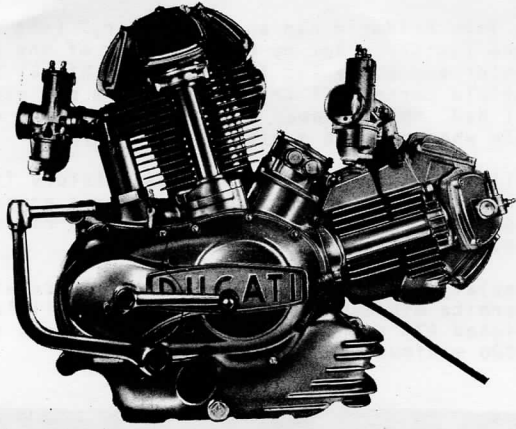


TECHNICAL



TECHNICAL BITS AND PIECES
by
William Richardson

O.K., you're beggin' for tech articles. Well, I don't know if this is what you want, but you'd better print it! I spent hours writing it.

I notice a definite renewed interest in Duck singles and around here some of us are changing a few things to help the handling or functions. The following is a list of things that I have personally tried or use now. These changes are straight forward and can be accomplished by the novice mechanic, in a short amount of time.

If you search for a good $\frac{1}{4}$ fairing for Duck singles, there is one that is outstanding in performance, ease of mounting, and reasonable in price. This is the $\frac{1}{4}$ fairing sold by Camber Company. This fairing fits like it was made for the singles, and is rounded into a bullet shape for excellent penetration through the air. The Camber comes with 2 mounts, of which one bolts to each side of the headlight, after which the fairing is secured to the mounts by 2 more bolts. Removal of the fairing for maintenance is simply removing 2 bolts, leaving the mounts in place on the headlight and ready for reinstallation. Oh-Yeah, I used an additional L-shaped bracket to secure the bottom of the fairing shell to the lower fork triple lamp. This insures stability of the shell at all speeds and rough roads. This bracket can be easily made from a muffler bracket, with holes drilled in each end and bent to shape by hand. Cost of the fairing should be around \$100.00, and it comes in fiberglass with a polished white finish, easily painted to match your bike. For a replacement windscreen, a BMW R90S windscreen fits exactly. Looks really trick and works better than any other I've tried (several).

Some people search (like myself) for a conversion rearset kit. I've found none! However, this works well. For myself (six feet tall) the rear footrest (for passenger) is an excellent point to move the riders feet back to and this seems to suit 90% of the people who have tried it.

I used the original passenger fold-up pegs, and a stock brake pedal from a marrow crankcase Ducati bike (mid 60's). There should be a lot of these old brake pedals around. A more recent model Duck brake pedal should be mounted with the threaded shank of the folding peg going thru the mounting pivot hole in the brake pedal. Then, using a torch, cut the toe end off the pedal. Next shorten the remaining pedal arm to fit the riders foot. After rewelding the toe piece you have a neat-looking shortened brake pedal. Next, have a competent welder fix a cable stop onto the frame tube just above the brake pedal pivot

(foot peg). I made my cable stop out of a $1\frac{1}{2}$ inch square piece of $\frac{1}{4}$ inch thick plate steel, then drilled a hole for the cable and hacksawed a slot to slide the cable thru to the hole. The inside diameter of the pivot hole in the pedal is a bit larger than the foot peg shank, so you can have a bronze or brass bushing machined to fit inside the pivot hole, and leave yourself only operating clearance around the peg shank. A bushing large enough to slide up over the front end of the brake cable, and about $1\frac{1}{2}$ " long, provides an effective pedal stop. This

bushing is slipped on the cable between the attachment point of the cable to pedal. The length of this bushing determines how far up the pedal returns when the brake is released. The cable itself must be shortened to fit, and a new nipple resoldered into the cable end. Now for the shifter side! I couldn't locate the original rearset linkages from any source. If you can get 'em, use 'em! If you can't, you can get by just fine by grinding off the short end from an old heel-toe Duck shifter, and installing it pointed towards the rear of the bike. A rubber toe-piece will soften the up-shift pressure against the top of the foot, an old Honda kick-starter rubber cut in half works fine, just twist it onto the toe-piece of the shifter. Needless to say, this reverses the shift pattern, now it's down for low! Didn't cause me any problems. The shifter fits my size $10\frac{1}{2}$ foot just fine, but shifters can be lengthened or shortened to suit individuals (remember, the longer the shifter, the longer the throw, excessive foot movement).

The stock kick-starter lever can be used, but it must be remounted to return more towards the front of the engine. The locating groove in the kick-start shaft for the pinch bolt must be cut out a bit longer towards the rear. A hand grinder does it quickly. This lets the pinch bolt go thru the kick-starter while the kick-starter is returned toward the front of the engine. The kick-starter will spin the engine only once before your foot reaches the rear-set peg, but if the bike's in tune (basically stock engine) it will start OK. Mine does.

By the way, all you people who let the air control (choke) cable rust or break, and not be repaired, well you're a glutton for punishment! The Duck will start much easier if you use the enricher control the way it was intended for starting.

Now with rearsets working good, you need low handlebars. The best I've found are BMW R90S handlebars. I used these, and eventually went to real clip-ons. Either works well. Good clip-ons are available from Domracer, Inc. of Cincinnati, Ohio for about \$15.00. These fit the Ducati for legs with shims or modification. *Note: You cannot use Ducati clutch-compression release bracket with clip-ons. Use Duck clutch lever bracket.

For a lowered seating position compatible with the rearset-clipons, I find that a 24" solo fiberglass racing seat from Dixie Int. of Columbus Ohio is perfect. Cost about \$30.00. Comes in white but is easily painted, and has a well padded snap-on seat cover. Simple but trick! This seat is exactly the width of the Duck frame under the seat and the rear of the fiberglass tail section comes almost back to the tail lite. My racing seat rested firmly and evenly on the frame tubes, and I only needed one bolt to hold it firmly in place. The trick here is to drill the hole under the snap-on seat cover through the seat bottom and fender. Then bolt the fiberglass base on the bike, and snap the padding and seat cover over the bolt. Hidden but easy to remove.

Well, enough for now. I'll write more later. By the way, the above modifications were performed on my '73 450 MK 111, but they will work on about any Duck single of 175cc or more, from '59 to present time. I've enjoyed my single twice as much after modifying, handling is much better, and even top speed will be reached quicker and held easier. Rt. 3 Box 150 Lebanon, VA 24266