

## LATEST NEWS ON THE FARRAR "SPECIAL"

Latest news is as follows:— Latest state of tune is inlet timing 160°, exhaust 180°, transfer 130°, with a secondary compression ratio of 13.5 to 1 (geometric) and a 1½ inlet (Wal Phillips Injector) twin contact breakers, throttle controlled Silk oil pump feed into inlet port as well as normal feed to mains. Expansion chamber with silencer stage (quieter than standard) the motor will heave around 400lb. of 1950 Scott and 11 stone to well over the ton, in fact I've done over 110 m.p.h. on the clock TWO-UP (true speed around 104, speedo checked by friendly fuzz!). This is on a 19T gearbox sprocket equivalent to 4.62 top. Solo on a long road I've had a true 109; 110 m.p.h. equivalent to about 6,400 r.p.m. In the gears (c/r box) it pulls 7,500 r.p.m. (with 8,000 r.p.m. being used sometimes) which works out at 64/65 in first (8,000) and around 100 in second (8,000), most satisfying with one more gear to go!

The motor is of course very modified with Silk cranks, silver plated racing big-end cages (as opposed to the roadster big-end cage George is doing), crankcase stuffers, Silk squish head (a bit modified) with solid copper gasket (standard ones due to high compression). The barrel features massive boost ports with only one inlet port per cylinder—this consisting of a very large 45mm wide by 21mm high port. This entails removing the middle inlet port bar from each cylinder before opening up the remaining port, the four inlet ports per cylinder are blanked off and the "dead space" left in the crankcase filled in. The rest of the inlet passage is opened right up to achieve a constant cross sectional area from injector to inlet port. The transfer port feeds in the crankcase are opened right up to match the cutaways in the barrel and pistons (the cutaway in the barrel extends to the cork ring and the pistons match this. The pistons incidentally are 30-thou. wide, top ring made from steel. The bottom of the normal transfer passage is filled in. Apart from other bits and pieces, that's about it.

The oil pump works superbly and must with throttle control be the best present lubrication system for the Scott. I get 300 miles to the pint, normal two-stroke oil (Filtrate) with the pump set rich to allow for the state of tune of the engine, but with a more normal rate of delivery over 400 miles to the pint was obtained with virtually no smoke even in traffic hold ups.

George's twin contact breakers eliminate 'orrid distributor and lack of advance/retard make no difference.

The big-end cages are essentially for my motor as standard big-ends last around 200 miles before the con-rods get the heat treatment so badly that they go blue, one inch up from the big-end, and that's with the pump set really rich. The cages now have done 4,000 miles at up to 8,000 r.p.m.—no trouble with no real wear.

Regarding fuel consumption it just depends on how your right hand is feeling as with most two-strokes. If you drive it fast as any normal Scott would go, say cruising at 65-70 m.p.h. with bursts up to 85 then you get around 50 m.p.g. If you drive it a bit quicker, say cruising at around 80 m.p.h. with the odd burst to 90 and keeping the revs in the gear to about 6,000 r.p.m. then you get around 45-50 m.p.g. If you use all the performance in the gears plus cruising at 90 with bursts of over the ton, it drops to about 30-35 m.p.g., but then you tend to cover the ground rather rapidly. Acceleration? Well the beast does 60 in around 6½ seconds, it's not any quicker because of 1st being high and the poor clutch with 12 springs is liable to complain, so I'm afraid it's not a Kawasaki eater yet, though in one of George's new frames and with a four-speed box, matters would I'm sure be different. Even so the beast will give lesser machines a shock. My

friendly fuzz had a quick blast on it and reckons it's a deal quicker than the 6½ Triumphs they use.

I feel that my motor is probably a trifle overtuned for the normal owner but George's normal roadster tuned engine goes well and is a good deal more flexible than mine which has been through various stages of tune—this however takes much time and effort. I've spent around 150 hours of work just modifying the crankcase, block and pistons (without assembly time being taken into account) to get it in the present state. So long as you've got the right bits (don't tune a motor with standard cranks—it's a total and expensive waste of time). Standard cranks are quite bad enough in the standard motor let alone in a tuned one, and those standard big-ends and oil pump—ugh!

J. B. Farrar.

((Sorry we can't oblige with an illustration, but since the above was written, an argument with a Cortina has put the Special off the road for the time being).

## MASHAM (YORKS) STEAM ENGINE RALLY

16th JULY, 1972

### CLASS 11—SCOTT MOTOR-CYCLES

- 11-1 1926 Scott Two Speeder. Reg. No. FL 5428. 500 c.c. Owned by R. M. Pearce, Romanby, Yorkshire.
- 11-2 1928 Scott Super Squirrel. Reg. No. OT 9778. 498 c.c. Owned by M. U. Rispin, Leeds, Yorkshire.
- 11-3 1929 Scott Two Speed Sports. Reg. No. DC 9418. 498 c.c.. Owned by G Chandler, Knaresborough, Yorkshire.
- 11-4 1929 Scott T.T. Replica. Reg. No. DB 4229. 498 c.c. Owned by G. W. Partridge, Harrogate, Yorkshire
- 11-5 1929 Sports Squirrel. 500 c.c. Owned by K. Reavley, Blyth, Northumberland.
- 11-6 1930 Scott Sprint Special. Reg. No. UB 4004. 498 c.c. Owned by J. H. Barker, Hutton Rugby.
- 11-7 1930 Scott Autocycle Reg. No. DWW 877. 98 c.c. Owned by G. Firth, Collingham, Yorkshire.
- 11-8 1930 Scott Tourer. Reg. No. BKY 375. 600 c.c. Owned by J. Holmes, York.
- 11-9 1930 Scott Squirrel. Reg. No. SK 1716. 298 c.c. Owned by G. W. Rispin, Harrogate, Yorkshire.
- 11-10 1932 Scott Replica T.T. Reg. No. BBB 129. Owned by T. Metcalf, Harrogate, Yorkshire.
- 11-11 1937 Scott Flying Squirrel. 600 c.c. Owned by S. G. Hodgson, Darlington, Co. Durham.
- 11-12 1947 Scott Flying Squirrel. 600 c.c. Owned by J. R. Boothroyd, Huddersfield, Yorkshire.
- 11-13 1948 Scott Flying Squirrel 600 c.c. Owned by P. Bentley, Stockton-on-Tees, Teeside.
- 11-14 1948 Scott Flying Squirrel. 600 c.c. E. A. Midgley, Heighington, Co. Durham.
- 11-15 1949 Scott Flying Squirrel. 600 c.c. Owned by I. Reavley, Blyth, Northumberland.
- 11-16 1956 Scott Flying Squirrel. 600 c.c. Owned by A. W. Graham, Darlington, Co. Durham.
- 11-17 1972 Scott Silk (The newest Scott in the world) 650 c.c. Owned by J. Bayliss, Broughbridge, Yorkshire.