

Why I Like My Side-Valve Morris Minor

THE editor of MOTOR SPORT has asked me, much to my surprise, for I had never considered my Morris Minor as more than a reliable hack, to tell something about what it is that makes them go, and so, although the subject has been covered from the sporting angle by an abler pen than mine, what now follows is a brief account of the main work done to a side-valve Morris Minor to make it into an entirely reliable and not uninteresting little motor-car.

The car is a 1933 side-valve and was purchased very cheaply two years ago from a friend who was going to Africa to help with the distillation of Ugandian electricity. With it came a small vanload of assorted spare-parts.

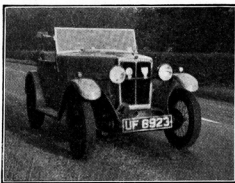
Having owned other and more worthy motors, I regarded my purchase with some condensation and, shortly after the car became my property, having to make a journey to Yorkshire and being unwilling to afford the doubtful luxury of travel by British Railways, decided to "risk it" in the Minor.

Returning safely and not unexpectidly a week later with nothing worse to report than a waterless and almost incandescent engine in the middle of nowhere (which melted the solder someone had technically used to fill up a crack in the cylinder-head), I decided the little car was worthy of attention.

First of all, then, the steering and road-holding were, to say the least, a little peculiar, and investigation of the front axle revealed the existence of two wedges under the front springs. These were removed, replaced with the thick edges to the rear and the steering, now a little heavier and with plenty of castor-action, was vastly improved, as was the road-holding. This department was further improved by throwing the Armstrong shock-absorbing ironmongery away and fitting a set of single Hartfords. The ride was now fairly "hard" but the car had a much better "feel" with absence of the previous "bucketing" over rough places and steering became really good with the ability to place the car accurately on corners, while at "speed" on the straight the car held to a dead straight line.

I had now become quite attached to my funny little grey car and decided to splash some money about on doing up the engine. Inspection of the cylinder-head suggested that no harm would come from raising the compression ratio, so two millimeters were ruthlessly removed while the Engine Expert was heard to mutter darkly something about "clots trying to make silk purses out of sow ears." About 3½ lb. were also removed from the inside of the flywheel flange to his further dismay, by now quite convinced I was mad.

The crankshaft is sturdy, the camshaft almost too robust and the cam-profiles (as is the case with all s.v. Minors) in excellent condition. The rear camshaft bearing is a roller-race whose inner race is the end of the shaft itself. This does not wear well and the end of the camshaft



by John Wrigley

Believing that there is something of interest in any car, providing the right things are done to it, we asked John Wrigley what he saw in the side-valve Morris Minor that prompted him to start a Register for them. Here is his reply.—ED.

was skimmed, the race being fitted with oversize rollers.

Whilst the engine was otherwise being overhauled normally, I managed to buy a four-speed gearbox and made the few simple modifications, including ¼ in. off the propeller-shaft to accommodate the greater length. The gear-lever was shortened by 7 in. and from the usual willow affair became quite stiff and much more pleasant to use. The gearbox has constant-mesh engagement on third and top gears and gives a "snap" change from first to second as normal drill, whilst from second to third you shift the lever just as quickly as your hand can move. From third to top is practically instantaneous and, whilst the ratios (approximately 19.3, 12.4 and 6.9 overall, on the indirects) are not ideal for touring they at least give decidedly brisk get-away in traffic and third will provide 45 m.p.h. (indicated) at near peak revs. It is a delightful gearbox to use and clutchless gear-changes are the usual thing when one is not in a hurry. I often think to myself how funny the little car must look scuttling away when the "lights" turn green and frequently leaving the less enterprising tin-ware well behind!

The clutch, by the way, is delightfully simple and repays attention to thrust-race and toggles (clearance about ⅜ in.) whilst I am sure I was wise to fit new and slightly heavier clutch springs. An extravagance was the acquisition of some old-type "open" hubs on which were built 17 in. rims, the wheel then being fitted with 4.50-section tyres, slightly lowering the already low back-axle ratio and accounting in part, I expect, for the really brisk acceleration for such an old little car.

Great care is always taken of the

ignition department and a sports coil is used with all wires and terminals clean, good and tight. The dynamo and starter have been completely reliable, although I admit to having made away with the two-rate charging resistance-box which seemed to have a "hoo-doo" on it. Charging is now regulated, if necessary, by moving the third brush, an extremely simple operation as the brush gear is held simply under tension. American motor-cycle head lamps are used, mounted on a cross-bar fixed at either end on to the erstwhile headlamp brackets on the mudguards, nearside headlamp permanently dipped, off-side controlled by a switch on an aluminium prong which clamps round the steering column and also carries the horn-button.

A visit to the helpful storekeeper at the S.U. place in Acton proved beneficial when I suspected a jet orifice of being less circular than its original design. My suspicions were confirmed and for a small sum petrol consumption was restored to its proper figure, which is 33-36 m.p.g. in town and 40-42 m.p.g. on a straight run, cruising at an indicated 48-55 m.p.h.

The S.U. Petrolift has been discarded and petrol is now brought forward by means of a small Autovac, the writer being firmly convinced that this is the ideal method for an ordinary motor-car. Purchased for two-and-sixpence from a scrap-yard, it has worked faultlessly for 20,000 miles with occasional attention to the petrol inlet filter.

A spring-spoke steering wheel (price 7s. 6d. from the same source of supply) made a pleasant change from the old one and some man-size instruments have been acquired.

The oil pressure relief-valve has been arranged to blow off at 130 lb./sq. in. when cold and oil-pressure at 30 m.p.h. when the engine is really hot is 88-45 lb./sq. in. Some good second-hand oil pump gears were also acquired and, of course, it pays to have the driven gear a good fit with its spindle.

Brakes, for a long time rather a headache, are now quite adequate—brake-cam-spindles reconditioned and endowed with new bushes, brake shoe toes given new steel inserts and all play eliminated from the brake linkage, including skimming and re-bushing the brake cross shaft. Front brake operation is now by Bowdener cables and really works. Very meticulous adjustment is essential and this is best achieved by feeling the temperature of the respective drums after braking.

Engine oil is changed every 1,500 miles. During 25,000 miles motoring this little car has never spent a night under a roof and has never failed to start easily on the coldest morning. It is indeed quite a pleasant and an entirely reliable means of going hither and yon. I almost regret that by the time this article appears in print the little car will be getting a rest prior to some body repairs. But by then I shall be motoring in a much more delightful vehicle—a 1923 8-h.p. Talbot two-seater!