The Oldest Sidevalve MORRIS MINOR?

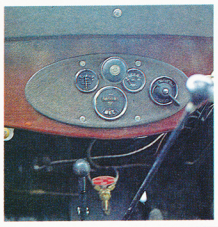
Restoration Special Selection:

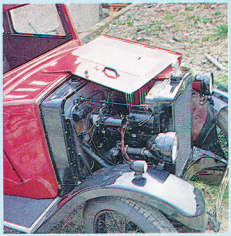
Dave Dockerill discovers an early side valve Morris Minor and sets about a thorough restoration

OU 7875 arrived with us in the fortnight before Christmas around four years ago, I already owned one pre-war car, a 1936 Morris 8 saloon, purchased in the days when such cars could be picked up for £50 and driven home. My father had commenced his motoring career in a 1929 overhead-cam version of the Morris Minor, well remembered for its high strung mechanics and very untidy fabric body. I had seen one or two overhead-cam examples at rallies and was very much taken with the angular body lines and sporty sounding engine, although it was reputed to be somewhat fragile.

When I heard of a 1931 Minor saloon for sale in Bristol I was off hot foot to look at the car, 1931 being the change over year it could have been either side valve or overhead cam. OU 7875 on our first meeting turned out to be not a very attractive proposition, to start with the car was a side valve, but worse still it was very dismantled, the dismantling having been carried out in a rather haphazard manner. I had been involved with enough restorations to know that the dismantled car is the worst possible buy, you can never be certain that some vital component has not been lost and rebuilding such a car is often one huge jig-saw. The gentleman who owned the car was a little pushed for space, most of OU 7875 being squeezed into a lock up along with a complete and very tidy 1934 example of the Minor, hence he found it necessary to store the bodywork of the 1931 car inside his Transit van!

It was when I first saw the body section I started to warm towards OU 7875, pure "cammy" Minor, deep sills, small doors, narrow screen, sliding windows, and the petrol tank in the scuttle. It was at this point I also noticed a black windscreen surround, and it began to add up. Early in 1931 Morris embarked upon a project to produce a small saloon for £100, he achieved this by fitting his new side valve engine into the existing overhead cam chassis, a gearbox of only three ratios was installed, the bodywork for the first production cars being identical to that of the





overhead cam cars. In an attempt to keep costs down the brightwork was deleted from the windscreen surround and the radiator both items being finished in black stove enamel. All to no avail for the saloon version even "sans" bumpers never got down to the magic £100, although the two seater touring version did, and Ford a few years later carefully worded their advertising "The first £100 saloon".

A quick excursion back to the lock up produced the black radiator and a three speed gearbox, some more digging produced a chassis No. of 252 and an engine No. 635, very early since the normal Morris practice was to commence the chassis numbers at 101. Perusal of the registration documents showed the date of registration to be 28th Feb. 1931, the very month of the introduction of the new side valve version.

This was the point at which I decided to buy the car, it had the body lines I had admired so much but without the fragile engine, and it seemed highly probable that this pile of bits could be rebuilt into possibly the earliest surviving example of the side-valve Minor.

The following Sunday found me piloting a 3 ton Ford flat bed lorry down the M4 with the Minor spread out from cab to tailboard.

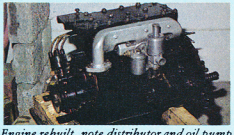
The Minor had been very much an impulse purchase and I now found myself in the same predicament as the gentleman in Bristol who had sold me the car. I had only a single lock up garage which contained a complete and running Morris 8, fortunately I owned a large plot of ground to the rear of our bungalow and for some years had threatened to build a large garage and workshop upon it, and the arrival of the Minor provided the impetus to get the job done.

A further two years elapsed before the new building was complete. Difficulty was encountered in convincing the local authorities that the structure was to be used for, in their parlance, "recreational purposes only" and not for the intensive farming of chickens or raising of pigs.

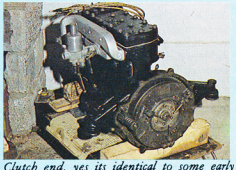
In the interim period most of the sub-assemblies were reconditioned, working in the lock-up garage, carefully wrapped, labelled and stored away in the loft of our bungalow, eventually enough Morris Minor ended up in the loft to make me wonder if the insurance covered half a ton of pre-war motor car crashing through into the lounge.

Fortune smiled upon us with most of the major units, the gearbox upon removal of the lid showed a good set of internals, and likewise the rear axle wasn't concealing any of yesteryear's mechanical disasters. The axle was modified to improve the oil sealing arrangements, initially the only barrier to oil migrating along the half shafts into the rear brakes was a pair of flat leather washers. Apparently the works realized the short-comings of the system early on and fitted the famous left and right hand helix cork tubes which became a feature of the Morris 8,

The man and the Minor — distributors down there some place!



Engine rebuilt, note distributor and oil pump mounted on the timing case.

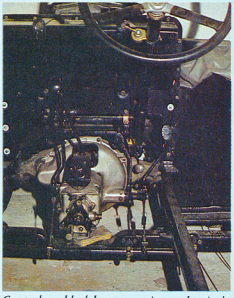


Clutch end, yes its identical to some early MGs and yes, the engine stands are available from supermarkets.

Body in primer, poorly fitting doors were cured to a large extent by fitting new hinge pins and balls, once again MG parts were used.

Rear aspect with newly painted body fitted to the chassis — finish is oil based brush applied.

Honestly, it is brush painted! Masking is to prevent staining of finished parts when wet flatting early coats.



Controls — black button on the gearbox is the self starter, clutch extreme left pedal, brake extreme right pedal, throttle is the small one in the middle, narrow feet essential. Small column mounted lever is the ignition control. The purpose of the "lash up" (note the wooden block under the rear of the gearbox) was to establish the brake cable runs.

recommending that all Minors should be so modified. Experience with the Morris 8 indicated that the corks tended to be somewhat less than perfect, so the axle was reworked by welding a steel ring onto the housing which originally carried the leather washers; a modern rubber spring chevron type oil seal was then pressed into the ring, the half shaft passing through the centre of the seal.

A major problem was the engine, as it had been partly dismantled prior to my ownership of the car and was known to have four cracked pistons and run big end bearings. The Minor side valve is of different design to the engine used in the Morris 8 having only two main bearings the rear one being a roller, an external oil pump, and dry clutch of Morris design; in fact the lower half of the engine was derived directly from the early overhead cam unit. Consequently the engine is more difficult to strip and does appear to be prone to more problems than the later side valve units.

I dismantled two engines; in one of them the rear main had spun on the crankshaft destroying the bearing interference, on the other the flywheel refused to separate from the crankshaft taper. To make matters worse, extreme care has to be exercised when extracting the flywheel as the crank has a thread which protrudes through the flywheel.

I hired a Sykes Pickavant hub extractor of herculean dimensions, protecting that vital thread with a box spanner; the upshot of this exercise was one crumpled box spanner. Two nights and several box spanners later the flywheel yielded to gentle warming and a not so gentle impact on that Sykes extractor with a bricklayer's hammer.

All the component parts from the two engines were cleaned, inspected and labelled with the engine number of the unit they came from, the intention being to use the best components in one engine, an exercise which was totally futile. Both engines featured an identical pattern of wear!

Tappets from both engines required refacing and hardening, valves, springs and all bearings proved to be beyond re-use, the worst problem being that both camshafts featured a bad wear pattern on one of the journals. The camshaft runs in one roller and one ball race, the roller having no inner track, running directly on the camshaft thus producing a neat groove in the journal. The eventual "fix" was to machine away the wear pattern, hard chrome the journal and re-machine to size, a difficult job since the repaired journal needs to be absolutely parallel with the unrepaired one and concentric to the axis of the cams. Eventually the engine was rebuilt with new pistons, new valves and springs, and all new bearings throughout. Engine reassembly was complicated slightly by the use of ball and roller races in the engine–several races had to have their temperatures raised by "stewing" in hot oil to ease the interference slightly.

Body refitted-head and sidelights in this picture are not original, the car should not have side lights at all, but use a Lucas 7" lamp unit with a small internal polot light. The same type of lamp that was used by Austin on the 1930 "7". A pair of these lamps have proved to be very elusive. I have now managed to collect enough bits from various sources to enable a pair to be assembled.

A distinct advantage that arose from the long wait for the new workshop to be complete was that by the time the building was finished all that remained of the Minor to recondition was the chassis itself and the body section. All of the research into the final rebuilding and all of the scouring of auto-jumbles for king pins and so on having been completed.

After the chassis had been cleaned and painted a more interesting assembly job began and indeed OU 7875 grew like topsy. One of the most time consuming jobs on the chassis was the rebushing of the road springs. Morris did not see fit to bush the spring eyes from new and some of the shackles featured wear in excess of 1/8" with an equivalent amount of wear present in the spring eyes. I elected to drill and ream the spring eyes myself, a procedure which took several evenings, reducing a ½" electric drill to a smoking ruin despite using tipped drills (several). The subsequent reaming operation left me with hands like a bricklayer.

Most of the clevis pin holes in the braking system were badly elongated and several more evenings had to be spent brazing and re-drilling out the holes. The achilles heel of the car would appear to be the braking system, which is best described as primitive. Someone in the past seemed to have been concerned about the Minor's ability to stop for the front brakes had previously been converted to the familiar Bowden type cable. I decided to retain this conversion, as in original form the front brake cables wound a tortuous route around miniature pulleys on the chassis frame and on top of the king pins. To be anything like frictionless these pulleys would have to be around 6" in diameter.

The standard brake drums have a very thin wall and I feel some of the Minor's stopping problems may be related to "panting" of the drums; during the rebuild the back half of an MG M type was cannibalised for spares, (a reversal of the usual procedure) this chassis providing a fine pair of finned drums. For the moment the Minor has the correct type of drum fitted but I may well use the MG item when I put the car on the road. I cannot see heat disipation being a problem on a car of the Minor's weight but the shrunk-on fins added by MGs should increase the rigidity of the drums.

When work commenced on the body section real evidence of the cost cutting principles appplied in 1931 surfaced. Body timbers are of white pine, the gauge of steel used in the front and rear wings seems thinner than other Morris's of the period and the doors are of very basic construction. Despite this very flimsy construction all structural timbering proved to be sound,

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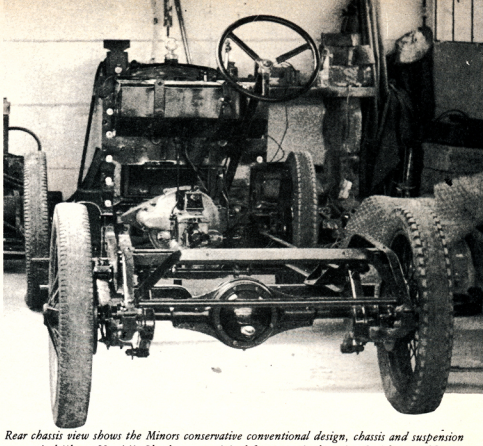
some work being required on the underside the floor which had been devoured by woodworm. To expedite repairs and painting of the underside the whole body section was simply rolled over onto a pile of tyres. To the best of my knowledge pattern body parts for the early Minor have not yet appeared, so a good deal of effort and around 30ft of brazing rod was put into the Minor's front wings, the lower third of each wing needing replacement due to rust damage. Consequently hours of adjustment with a panel beater's hammer were required to ensure the correct "line" and fit to the chassis. This having been achieved, the wings were then removed for painting.

In an attempt to hold down costs a traditional coach finish was applied to the body, the chosen colour being maroon over black wings and lower chassis. A very satisfactory result was obtained but the whole process took several weeks, it being important that each coat should be allowed to harden for days prior to flatting and recoating. I cannot remember the total number of coats used, work was simply continued on each panel until I was satisfied with the result.

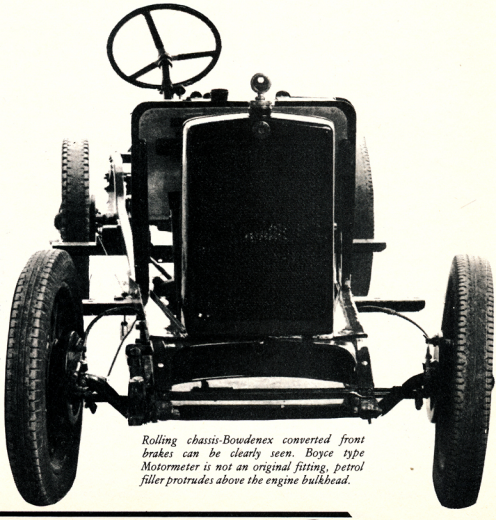
The apparently simple operation of setting the fully painted body back onto the chassis in the event was responsible for a lot of bad language and crawling underneath with a surform. On something like the fourth attempt it settled near enough into the right position, and a few more hours with pinch bars and packing pieces saw the installation complete allowing the work to proceed on the electrical harness and interior trim.

That is more or less the stage the project has reached, glass has to be installed, a headlining, outer roof covering and a decent set of tyres are needed. Was it all worth it? I'm not sure, never having driven this breed of Morris. Worthy of preservation? Almost definitely, there is something of the stark simplicity of the much-loved Austin 7 about the Minor. Comparison with the contemporary Longbridge product is interesting, wheelbase and track width are almost identical as are the wheel and tyre size; but that is where the similarities end — the Austin was a new design for a small car, the Morris baby was produced by scaling down the design principles of the heavyweights. The obsession with the cost was also short lived; 1932 saw the chrome radiator and bumpers refitted, while rapid and continuing alterations meant that by 1934 the Minor was quite grown, up, with a longer chassis, four gears, opulent trim, smaller, wider wheels, and even a battery master switch as standard.

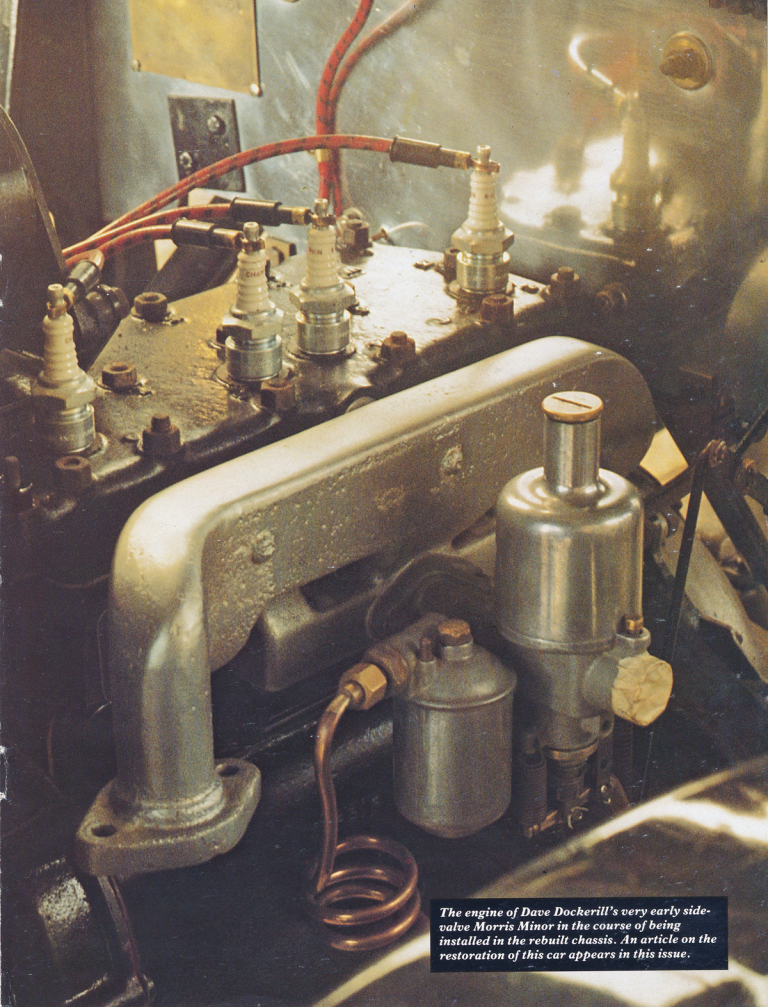
A friend said it all during a conducted tour of the garage when I explained all of the black stoving was an attempt to reduce cost, "Just like my new Ford", he retorted, "Cost a bit more than £100 though." ●



Rear chassis view shows the Minors conservative conventional design, chassis and suspension are typical "large Morris". Shockers are original for 1931 single-acting Smiths "snubbers". Smoking is definitely prohibited in the Minor, the forward tank is actually inside the body above the drivers knees.



Rolling chassis-Bowdenex converted front brakes can be clearly seen. Boyce type Motormeter is not an original fitting, petrol filler protrudes above the engine bulkhead.



The engine of Dave Dockerill's very early side-valve Morris Minor in the course of being installed in the rebuilt chassis. An article on the restoration of this car appears in this issue.