

THESE JOBS YOURSELF ON YOUR 12 MIDGET"

HERE are two aspects of the jobs that the owner should attend to himselfone is in the nature of actually doing work on the car, and the other is checking up whether the parts are functioning correctly.

Such items as shock absorbers may entail, first of all, checking whether they are operating correctly; secondly, it may be a matter of adjustment; and thirdly, it may be a case where the shock absorber, or some such similar part, has to be taken to pieces, cleaned, or parts replaced before it will work satisfactorily.

Shock Absorbers: There are two methods of checking over the shock absorbers—one is to jack up the front of the frame so that the axle is suspended. This is a

more lengthy job than the second method and necessitates the use of two jacks or boxes. In any case, it is necessary first of all to slack off the shock absorbers' adjusting nuts so that the absorbers are completely thrown out of action. It must be borne in mind that the shock absorbers should be equally tightened — that is to say, on the near-side and off-side. The adjusting nuts should be turned

by hand as tightly as possible; then gradually tightened up with a spanner an equal number of turns, until the axle is just retained from falling when pushed upwards.

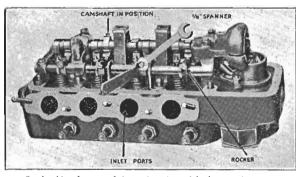
Where the adjustment is effected without jacking up the frame, the same initial procedure should be followed, until it is only just possible when lifting up the front of the car-say by the wing—that the tension of the shock absorber prevents the frame from settling back. It will be noticed on examining the face of the shock absorber that there are four sections, marked 2, 4, 6 and 8, and the degree of tension is indicated by a pointer. necessary after tightening the shock absorber to take the car

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out on the road and, if it feels too light, to tighten evenly each shock absorber a section at a time: it is no use giving it a complete turn and trying it, as that would probably be too much.

Valve Tappet Adjustment: There are usually two ways of doing a job, viz. the right and the wrong way, and this is exemplified in the adjustment of the valve tappets on the J2 model. To study the accompanying illustration for a moment and visualise the components: first of all there is the camshaft and the cams: then there are parts called the rockers and the



Study this photograph in conjunction with these maintenance

valves themselves, which are forced down when the cam comes in contact with the rocker. It is necessary to have a proper clearance, and in the case of the J2 engine the inlet and exhaust are different :--

Clearance for the inlet valves is six thousandths of an inch. Clearance for the exhaust is eight thousandths of an inch. And it cannot be emphasised too strongly that this clearance should be checked between the cam and the

rocker, and not be ween the rocker and the valve stem.

The actual adjustment of the tappets is effected by rotating the bronze nut after the \frac{1}{8} in. locking screw has been slacked off; the spanner, shown in the illustration, attached to the bronze nut should always be pulled downwards, to reduce the clearance between the rocker and the cam, and while the locking screw should be tightened, care should be exercised to see that it is not tightened too much.

There are certain points connected with the valve gear which are beyond the average owner's capacity, as, for example, after continuous valve grinding, the valves will become pocketed and if the seats have to be cut, the valve stems may have to be shortened. This is really a job for a Service department and special tools employed.

Engine Timing: When the aluminium valve cover is removed, it is possible to notice on the upper bevelled wheels that drive the camshaft, meshing marks. These do not necessarily

have any relation to the top dead centre of the position of the piston: they really only relate to the meshing of the camshaft with the vertical drive. To check the top dead centre, remove the cover of the high-tension distributor and see that the rotor is pointing to the No. I sparking plug lead. Top dead centre position will be found when the fork on the dynamo is parallel with

Whenever the cylinder head is removed, make sure that the cylinder head gasket is put on the correct way; it is possible to put it on the wrong way, which will result in overheating and probably a burnt gasket, because the holes in the gasket and the cylinder

head do not coincide.

the crankshaft.

Sparking Plugs: For ordinary road use, which does not include trials and racing, Lodge HD-14 sparking plugs are recommended. These are the 14 mm. plug, and the gap setting should be 18/1000th of an inch. The sparking plug should be tested from time to time under compression, and a spare set should always be kept available in the plug carrier.

To be continued