

I have owned several Riley cars during the last twenty years, and have at last achieved my ambition to own a post-war 1½ litre model. The car in question was first registered in 1950, and really does provide "Magnificent Motoring". I have noticed, however, that a leakage of oil is evident from the agen grade filler can

of oil is evident from the rear axle filler cap breather hole. If there is any modification I could carry out to overcome this trouble, would you please let me know?

IF a leakage occurs from the breather hole, this in all probability is due to the development of high internal pressure within the rear axle casing. Various experiments have been made by extending the breather on the filler plug, but it is considered desirable to allow the related breather at the top of its casing.

axle to breathe at the top of its casing.

To overcome the trouble a $\frac{1}{32}$ in. diameter hole should be drilled in the top of the banjo casing on the off side, $8\frac{1}{2}$ in. from the centre line of the axle.

The use of grease on the drill will prevent swarf from falling into the axle casing. Finally, the vent in the filler plug must be filled in with solder.

Brake Squeak

My Morris Eight car has developed a loud squeak that can be heard every time I apply the brakes. Can you tell me how to remedy this noise without impairing the efficiency of the brakes, which is good?

I is true to say that brake squeak on any make of car can rarely be eliminated entirely under all conditions of service. However, this trouble may be kept within reasonable bounds by ensuring that there is no dust or grit embedded in the brake T is true to say that brake squeak on inings. Carefully cleaning the linings and plowing out any dust from the brake-drums with an air-pressure line should bring

about some improvement. Non-standard brake linings, or worn inings causing the securing rivets to come n contact with the brake-drums, could ilso cause brake squeak, as would excessively worn and thin brake-drums.

Should an examination show all the should an examination show all the ibove-mentioned points to be in order hen an improvement might be achieved by drilling the brake-shoe web and saw-cutting through to the drilled hole. The lot so made would permit slight flexibility of the shoe when pressure is applied, and he job should only be carried out by a Morris Distributor or Dealer, who has the recessary details explaining in full this operation, including the exact position for he slot and hole.

Screen Adjustment

I have recently purchased a Morris Ten Series II model, and although it has covered i considerable mileage it is still in good ondition. However, I am experiencing rouble with a water leakage at the top of he windscreen, and I would like your advice

Please write to the Technical Editor if you have any particular mechanical problem concerning your car, quoting chassis and engine numbers. A reply will be sent by post and your query, with the answer, will be published here if found sufficiently interesting.

on any adjustments that could be made to overcome this.

WATER leakage past the windscreen is invariably caused by maladjustment of the windscreen flange rubber against the screen panel, allowing the water to penetrate at one or more places. Adjustment is made by slackening the hexagon-headed lock bolt on each bracket, and turning the round-headed adjusting screws turning the round-headed adjusting screws until a uniform pressure between the flange rubber and panel is obtained. Should the flange rubber be adjusted too tightly against the panel, it will curl at the top corners and allow water to penetrate. On the other hand, if the adjustment is too slack water will enter at the centre of the windscreen.

In extreme cases, where the main adjust-ment has become too slack, it may be necessary to refit the windscreen quadrants. This is done by undoing the four chromium-plated screws from each quadrant, and suitably dowelling the holes in the scuttle pillars with hard wood. The quadrants can then be repositioned on the scuttle pillars to ensure sufficient pressure between the flange rubber and the screen panel.

On completion, the lock bolts on the top brackets should be tightened securely.

Fitting a Heater

I have recently acquired an M.G. $1\frac{1}{4}$ litre Saloon and am desirous of fitting a heater unit. Will you please advise on the heater to fit and the method of installation.

THE recommended heater for the M.G. $1\frac{1}{1}$ litre Saloon is the standard $1\frac{1}{2}$ kw. recirculating type manufactured by Smiths Motor Accessories Ltd., Cricklewood Works, London, N.W.2. Satisfactory posi-tioning of the heater unit can be obtained by bolting it in a horizontal position to the bottom of the battery box, arranging the location so that the radiator water pipes location so that the radiator water pipes extend in an upward direction immediately adjacent to the passenger side of the battery box rear wall. Rubber elbows supplied in the new standard kit are then attached to the radiator pipes and the water hoses are then passed through the bulkhead on either side of the battery box into the engine compartment.

As no provision is made on the engine water connections for a car heater, the recommended method is to drill the lefthand side of the water outlet neck, supporting the thermostat, and braze into this a Ing the thermostar, and braze into this a copper pipe for connecting to the water control valve supplied with the heater unit. This necessitates brazing to the end of the pipe a $\frac{3}{2}$ in B.S.P. female union. The water return point to the engine is obtained in a similar manner by drilling and brazing in a $\frac{1}{2}$ in. copper pipe into the lower metal water pipe between the radiator and the water pump housing.

Misfiring

Despite recent decarbonisation, my Morris Despite recent decarbonisation, my Morris Minor engine occasionally misfires at speed. My garage tells me the engine compression pressures are satisfactory and the car-buretter was tuned correctly at the time of the engine decarbonisation. I have checked the tappets and find their clearance to be as recommended. Please can you tell me what may be responsible for this trouble?

A^S it would appear that the engine valves are operating correctly, consideration should be given to the ignition equipment. An engine will misfire at speed if the sparking plug gaps are too wide. It will be understood that when the throttle is open wide the maximum amount of gas is being drawn into the cylinders. This will be compressed to such an extent, when the piston reaches the top of the compression stroke, that a pressure far in excess of (continued on page 49)

