

CARB REBUILD

The choke mechanism in the side of the carb has a rubber O-ring. If that's dried out, the carb will run rich as if it's always on choke. In terms of rebuilding a carburettor, Richard recommends buying a book and reading up on the subject first. If you strip one down to clean it, use the

other as a reference to put it back together. A simple check is to remove the baseplate and check the float levels. After high mileages, or if gritty fuel has been used, the spindles can wear, as can the butterfly shaft. Burlen Fuels can supply most parts to refurb SU carbs: www.burlen.co.uk



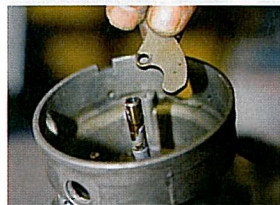
THE BILL

John provided an itemised cost of parts and labour. Although some tasks require specialist knowledge and tools, many of the jobs here can be completed in a garage at home, thus saving money. Figures shown include VAT.

Rebore block	£218.55
Pistons and rings	£246.75
Cams and lifters	£156.75
Timing chain assembly	£32.90
Gaskets and seals	£101.05
Balance	£156.75
Bearings	£75.20
Oil pump gears	£32.90
Lighten flywheel	£41.13
Carburettor rebuild kits	£79.90
New guides and cut seats	£310.20
Valves	£47
Rocker shafts	£25.85
Oil and filter	£28.20
Plugs	£28.20
Core plugs	£111.75
Labour to build and dyno	£881.25
Total	£2474.33

Mini-Tech

LUMENTION OPTRONIC IGNITION



1 Strip the distributor and clean all the parts. They're usually either worn out or seized up. Put in the bob weights. Sparingly put in some aluminium lube because it gets flung around and clogs up the mechanism. Bob weights sit in the base. For this type, they're all the same but might vary in other distributors.



8 The 'magic eye' locates nice and simply on one peg and is held in place by one screw.



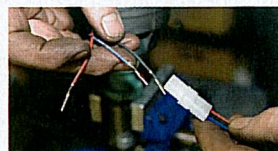
9 Make sure the cutter isn't touching the top or bottom of the eye.



2 The advance/retard mechanism slots in – there's a retaining screw in the top. Later models had a plastic clip but the screw locates it more positively. Ensure the mechanism can rotate freely.



5 The dwell adjustment screw (applicable if running the points) is different to other types of distributor. For an electronic unit, put it into a neutral position and leave it. If not fitted, the timing will move.



10 Note the colours and position of the plug because it only fits one way. Fit the wires so colours match. Make sure you use the recommended coil. Use a normal points coil with an impedance of no less than three ohms or a points coil with a ballast resistor fitted. Don't use an electronic ignition coil because it'll damage the ignition. John's advice is to "read the instructions."



3 Attach the two springs. There's a definite knack to fitting them – John uses a small screwdriver to push them on to their locating pins.



6 The trigger kit is applicable for several different distributors (the SD1 uses a different type) so ensure you select the correct version for your distributor.



4 Refit the baseplate – it'll only fit one way. The earth strap between the top of the baseplate and the body is vital because the baseplate swivels. Optronics needs this earth tag fitted.



7 The baseplate that replaces the points has a peg on it that locates the vacuum advance mechanism. It pushes on and retains via a screw. The vacuum advance unit locates with two screws. Push wires through rubber grommet. Make sure the grommet is tightly fitted to keep water and dirt out of the distributor.

RUNNING-IN SAFELY

JED test ran the engine on their dyno. If it's not going straight into in the car, they suggest you set the timing and leave it. If you've dropped the engine straight into the car, start it up and run it for five minutes, checking for leaks and rattles. Drive the car for about 20 miles keeping the revs in the mid-range; don't rev it

excessively but don't baby it either. Ideally, drive up a steep hill in the highest gear you can. Treating it gently means it'll glaze up and burn oil for life. Do frequent checks to make sure it's all okay. For the first 500-1000 miles, don't rev it high and change gear a little earlier. Avoid short journeys and do make the engine work hard.