Fiat 124 Spider

Twin cam powered, but simple to service, Fiat's 124 Spider is a viable proposition for DIY maintenance. Kim Henson reports.

Engine

The Aurelio Lampredi designed twin overhead camshaft, in-line four cylinder engines are said to be unburstable. With regular engine oil and filter changes (every 6000 miles), and no hard revving when cold, they can clock up 200,000 miles or more without trouble.

There are design differences in the later engines, but all are fairly simple to maintain. On some the distributor is at the front-left of the cylinder block, on others it is at the rear, on the exhaust cambox. Some (US) cars have twin sets of contact breaker points.

The engine bay offers easy access to the ancillaries from above. The only complication is in the valve clearances, controlled by selective shims. Removal/refitting of these needs a special tool (cost £37.05 from Middle Barton Garage); this is simple to use. Check clearances regularly – if they are lost, major cam wear and expense follows! An undertray needs removing to access the bottom of the engine. This should be easy, but the fasteners can seize/break.

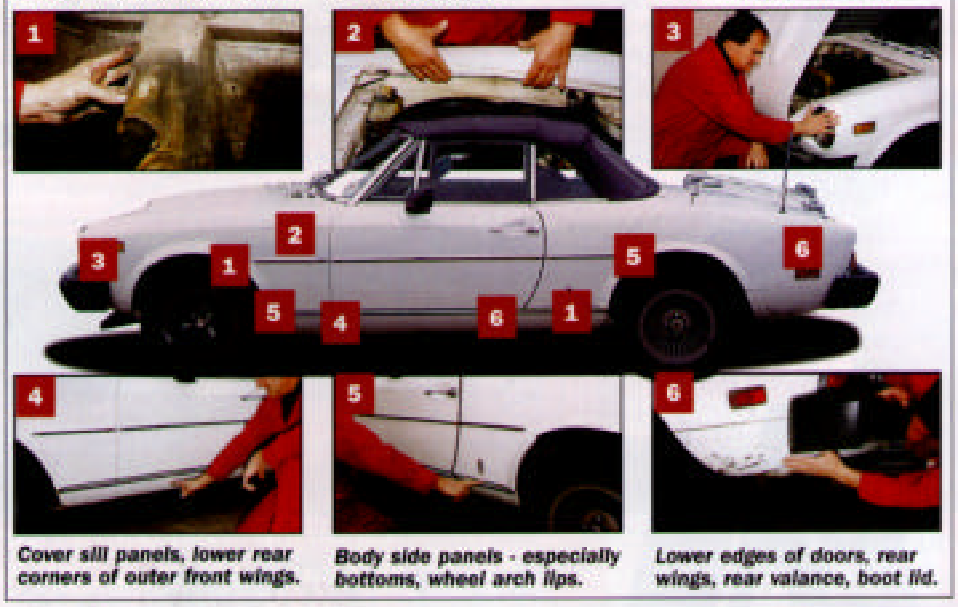
The cylinder head and cam boxes/covers are made from aluminium; use of a torque wrench is vital. If threads are stripped, thread inserts will need to be installed.

When topping up the engine oil place a rag around the filler aperture to absorb any oil spilt. If oil is allowed to fill the spark plug wells, it will be difficult to remove it. Engine oil leaks (common) must be stopped – especially any which can contaminate the cam belt. Common leak points are the front crankshaft seal, auxiliary shaft seal, cam covers, cam box gaskets and camshaft front oil seals.

When changing the cam belt, it is vital that the auxiliary shaft (which drives the oil pump and, on non fuel-injection models, the plunger/arm for the mechanical fuel pump), is correctly timed, as well as the valve gear, or the cam lobe for the fuel pump arm will hit no 2 cylinder's connecting rod, causing mechanical 'lock-up' and possibly forcing the shaft through the side of the cylinder block...

When ordering spares, you must quote chassis number (on the bulkhead-mounted identification plate) and engine number – above the oil filter mounting on 1969-78 models, and to the right of it on 1979-85 versions.

CORROSION CHECK POINTS



Front suspension mounts, chassis members, floor pans.

Inner wing tops, inner/outer front wing joints.

Around headlamps, lower front valance, bonnet lip.

Cover sill panels, lower rear corners of outer front wings.

Body side panels - especially bottoms, wheel arch lips.

Lower edges of doors, rear wings, rear valance, boot lid.

Fiat 124 Spider TIMELINE

1966 124 Saloon introduced.

1968 Pininfarina-styled Sport Spider, with shortened floor pan and saloon-derived running gear, but with larger, twin overhead camshaft engine (1438cc).

1970 Close mesh radiator grille, subtle bulges to bonnet and longer stroke 1808cc engine (Fiat 125 type).

1973 1592cc engine (Fiat 132 type).

1974 1756cc motor. New bumpers to meet US safety regulations, after Sept' Spiders made for USA only.

1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 19