



The 3-litre V6 Alfa 75 is distinguished by new spoilers, front and rear bumpers and sill extensions

The V6 engine's extra capacity is achieved by increasing bore and stroke. Power is 188bhp (left)

The 2-litre cylinder head features twin spark plugs per combustion chamber and steep valve angle (above)

SOMETHING OLD SOMETHING NEW

Alfa Romeo has revived pre-war practice in its new twin-plug per cylinder head for the 2-litre twin-cam. That engine and the 3-litre V6 both appear in the revised 75s that Graham Jones tried

No car enthusiast likes to see a manufacturer with such a famous heritage as Alfa Romeo struggling, but even those within the Milanese firm's headquarters will admit that is just what has been happening over the last few years.

Now, however, with the Fiat takeover complete, there is the prospect of financial stability and the chance to get on with the business of producing cars. At this point, much is on hold while Fiat's accountants and strategists work out an overall plan for Alfa Romeo, but one of two things do seem certain. One is that the long-awaited Alfa Type Four car-coded 164, will go ahead and that the 75 range will continue for the foreseeable future.

Last week, in Rome, we had a chance to sample two new versions of the 75, the Twin Spark 2.0 and 3.0 V6. Although significant additions to this range of sports saloons, of arguably more importance is the fact that both engines will be fitted to the 164, albeit in a transverse position, driving the front wheels.

The Alfa 75 lineup, consisting of 1.8-litre four cylinder and 2.5-litre V6 models in the UK, has been discussed at length in *Autocar*, and the new versions, which will arrive here in time for August registrations, have not altered visibly, to any great degree.

Certainly there are worthwhile changes to the interior, with an improved seating position, two-way adjustable steering column, revised instrumentation and a new thick-rim steering wheel being the most obvious alterations.

Outside, what might unkindly be termed a body kit, consisting of hoodlid spoiler, sill and wheelarch extensions and new front and rear bumpers, has subtly changed the appearance of the 75, as have Fiat-style front door draft excluders which will be fitted to both 2- and 3-litre UK-specification cars. These changes have helped to reduce the coefficient of drag from 0.37 to 0.35 for both models.

Under the skin, the main modifications have been to the suspension. In an effort to improve ride quality without significantly detracting from the 75's already excellent handling, the front shock absorbers have been softened by five per cent and the rears by a similar amount, but only at the

top end of their response curves.

Otherwise the spring rates and anti-roll bar diameters remain the same as for the present 2-litre and 2.5-litre models. Front and rear tracks have been increased by approximately 2cm and both Italian test vehicles were fitted with limited slip differentials, set at 25 per cent lock-up.

It is under their respective bonnets, however, that the real interest lies. The Twin Spark 2000 is what Alfa Romeo describes as the third generation of its 2-litre, four-cylinder engine, the first being the 'classic' unit with twin side-draught carburettors and the second incorporating Motronic engine management, fuel injection and variable inlet valve timing. As the name suggests, this latest version employs two spark plugs per combustion chamber and twin ignition systems plus Bosch electronic injection and a further development of the variable inlet valve timing system.

The engine block is the same light alloy unit as previously, but the alloy cylinder head is new with a much tighter included angle for the valves (46deg compared with the previous 80deg) and combustion chambers machined to take a pair of spark plugs for each cylinder. The altered valve positioning, more compact combustion chambers and modified inlet manifold are all claimed to improve the volumetric efficiency of the engine while the double ignition-twin spark system is said to improve the spread of the flame front in the combustion chambers.

This leads to better combustion at partial loads and idle with a consequent reduction in exhaust emissions, an improvement in drivability and a halved spark advance angle which in turn leads to gains in mechanical and combustion efficiency.

The double ignition system also allows the use of leaner fuel mixtures with an accompanying improvement in fuel consumption. Additionally, if one ignition circuit fails, the engine will continue to run on the remaining circuit. A fully mapped Bosch electronic engine management system integrates fuel injection, ignition and timing functions for maximum thermodynamic efficiency at a given engine load.

In this form, the 1962cc twin-cam



engine produces 148bhp at 5800rpm (which works out at 75.4bhp per litre) and 137lb ft of torque at 4000rpm — respectable figures for a 2-litre engine with two valves per cylinder and better than those likely to be achieved by an equivalent single-plug engine.

The 2059cc V6 is perhaps less innovative than the Twin Spark 2.0, being a bored and stroked version of the original 2.5-litre engine. Specifically, bore size has increased from 88.0mm to 93.0mm and stroke from 63.3mm to 72.6mm.

In this larger displacement form, and on a compression ratio of 9.5 to 1, power output is 188bhp at 5800rpm and torque, 180.5lb ft at 4000rpm (previously 150bhp at 5600rpm and 155lb ft at 4000rpm). The 60deg vee engine remains remarkably compact, cylinder head layout being very ▶

Worthwhile changes to the V6 interior include improved seating, adjustable steering column, new instrumentation and thick-rim wheel (top) V6 has supportive seats in the front and the rear 2-litre model has easily understood dashboard with warning lights grouped in the centre console

similar to that of the 2.5-litre unit with a single, belt-driven overhead camshaft per bank and two valves per cylinder situated in hemispherical combustion chambers.

DRIVING IMPRESSIONS

Although fitted with the less powerful engine, we decided to try the 2.0 Twin Spark car first, primarily to see whether Alfa's rationale for using twin spark plugs rather than four valves per cylinder could be justified on the road. It had been explained that the aim with this latest development of the twin-cam engine was to achieve the best possible performance over the widest rev range allied to excellent response and flexibility.

Certainly our limited driving experience with the car over some particularly uneven roads suggested that useful improvements have been made to this long-running power unit. It has the almost instant start-up from cold of any fuel-injected engine and seemed particularly smooth and tractable, even when pulling from low crankshaft speeds.

Whenever the subject of engine noise is broached to an Alfa Romeo spokesman, it is usually met with a shrug of the shoulders and a broad grin, followed by the explanation that

Alfa owners not only expect, but also want, to hear the engines of their cars working. That tradition has been maintained with the Twin Spark, it being engine noise which comes through clearly in most circumstances with wind noise joining in at higher speeds.

The Twin Spark engine can perhaps best be described as forty but smooth-revving. It undoubtedly produces an even spread of torque, but even so, it is necessary to rev the power unit hard to get its best.

Power units aside for a moment, there have been several useful improvements to the interior of the Alfa 75 range, most notably to the driving position. This has been achieved by lowering the seats 3cm (which also allows a little extra headroom when a sunroof is fitted), increasing their fore-and-aft movement on the runners and providing both reach and take adjustment on the steering column. The test drive experience suggests that the modifications work.

The V6-engined 75 is an altogether racier proposition. The basic power unit, although now getting on a bit in years, seems to have taken on a new lease on life in 3-litre guise and produces one of the most evocative production car engine notes we can



SPECIFICATION

MODEL

ALFA 75 TWIN SPARK 2.0

ENGINE

Longways, front, rear-wheel drive. Head block all alloy/al. alloy. 4 cylinders in line, wet liners, 5 main bearings. Water cooled, electric fan.

Bore 84mm (3.31in), stroke 88.5mm (3.48in), capacity 1962cc (119.2cu in).

Valve gear 2ohc, 2 valves per cylinder, chain camshaft drive.

Compression ratio 10 to 1. Twin digital electronic ignition systems, Bosch ME 7 electronic injection.

Max power 148bhp (IPS-DIN) (110kW ISO) at 5800rpm. Max torque 137lb ft at 4000rpm.

TRANSMISSION

5-speed manual, single dry plate, diaphragm clutch, 8.5 dia.

Gear	Ratio	mph/1000rpm
Top	0.780	20.89
4th	0.946	17.25
3rd	1.276	13.29
2nd	1.720	9.47
1st	2.875	5.67

Final drive: hypoid bevel, ratio 4.10.

SUSPENSION

Front, independent, double wishbones, longitudinal torsion bars, telescopic dampers, anti-roll bar.

Rear, de Dion, Watts linkage, coil springs, telescopic dampers, anti-roll bar.

STEERING

Rack and pinion. Steering wheel diameter 15in, 3.5 turns lock to lock.

BRAKES

Dual circuits, split front/rear. Front 15in (266mm) dia ventilated discs. Rear 9.8in (250mm) dia discs. Vacuum servo. Handbrake, centre handle acting on rear discs.

WHEELS

Pressed steel (alloy optional), 5.5in rims. Tubeless radial ply tyres (Michelin MXV on test car), size 195/60R14, pressures F26 R26 psi (normal driving).

DIMENSIONS, WEIGHTS

Length 170.5ins (4330mm)

Width 65.3ins (1660mm)

Height 55.1ins (1400mm)

Wheelbase 98.8ins (2510mm)

Track FR 55.0-54.4ins (1399/1382mm)

Weight 2519lb (1140kg).

PERFORMANCE (claimed)

Top speed	Manual
0-62mph	127mph
	8.2secs

FUEL CONSUMPTION

Urban/constant 56mph/constant 75mph 28.4/7.1/33.6mpg.

ALFA 75 V6 3.0

Same as 2.0 except:

ENGINE

6 cylinders, 60 deg V, 4 main bearings.

Bore 103mm (3.66in), stroke 72.5mm

(2.83in), capacity 2569cc (181 cu in).

Valve gear sohc per bank.

Compression ratio 9.5 to 1.

Breakerless electronic ignition, Bosch 1.1 Jenbacher electronic fuel injection.

Max power 188bhp (IPS-DIN)

(140kW ISO) at 5800rpm. Max torque

180lb ft at 4000rpm.

TRANSMISSION

Gear	Ratio	mph/1000rpm
Top	0.780	24.20
4th	0.946	19.96
3rd	1.226	15.39
2nd	1.720	10.97
1st	2.875	6.56

Final drive: ratio 3.54.

STEERING

Hydraulic power assistance.

WHEELS

Al. alloy, 5.5in rims.

PERFORMANCE (claimed)

Top speed	Manual
0-62mph	136mph
	7.3secs

FUEL CONSUMPTION

Urban/constant 56mph/constant 75mph 21.9/8.2/30.7mpg.

think of — you find yourself winding the passenger window down just to listen to the gorgeous howl.

Subjectively, it seems to rev more smoothly than the 2.5-litre version and yet retains the sort of flexibility that will allow it to pull from 10mph in fifth gear right up to the maximum speed without a hiccup in its power delivery. There seems to be usable power available throughout the rev range, mid-range response being particularly impressive. In fact, the free-revving nature of the V6 shows up the gearchange at times for, despite worthwhile improvements to the linkage, shift quality is still rather ponderous.

Apart from the engines, perhaps the most noticeable change to these 75 models is in the ride-handling compromise. The subtle alterations in damper rates aimed at improving ride quality, while taking nothing away from the Alfa 75's roadholding, can be sensed by anyone familiar with the model. Both 2- and 3-litre

To improve ride, front and rear shock absorbers have been softened.

Fiat-style draft excluders are fitted to the front windows. New 75s will arrive in August.

versions feel slightly softer and certainly seem to cope better with badly surfaced roads than their predecessors.

What this means is the 75 is now less tiring to drive but doesn't feel quite so crisply sporting in its responses. It may be the result of the softer ride and the marginally wider front and rear tracks, but the car, particularly in V6 form, seems to roll rather more than its predecessors and hence understeers more strongly when cornered briskly.

Ride and handling, however, is always a compromise and taken overall, the adjustment to the 75's suspension settings seem to be an improvement. ■