



EXTREME ENGINEERING



f there's one thing Alfa Romeo's new MiTo is definitely *not*, it's ordinary. However, if you think your MiTo is too ordinary, this extraordinary reinterpretation could be the answer. Italian tyre manufacturer Marangoni has applied electrodes to just about every part of the MiTo, creating a car that's part fashion victim, part tuned monster. Meet the Marangoni MiTo M430.

You may remember last year's Marangoni TRC Fiat 500, which was created in conjunction with TRC Italia (Tuning and Racing Components). Well, Marangoni's MiTo has been to the same TRC laboratory at Campi Bisenzio, Florence, and emerged looking and driving very differently from Alfa's jewel-like supermini.

My first sight of the M430 was at the Pistonheads show at Birmingham's NEC, where frankly, its effect was pretty much the same as a smack between the eyes. Red and white warpaint, Lambo scissor doors, slammed suspension, red tyres and diamante crystals on the gear lever. Not to everyone's taste, admittedly, but certainly striking. To its credit, the M430 has a pukka tuning package as well.

In fact, the M430, which Marangoni describes as the very first example of a tuned MiTo, debuted back at the Essen Motor Show a mere 11 weeks after Italian customers first got to see the MiTo in Alfa showrooms. That's proof of just how quickly Marangoni moved to create such a radical car.

Radical it certainly is. Take a look at the car head-on and you can perhaps see why it was given the 'M430' moniker: Ferrari's F430 is the clear inspiration for those two wide front grilles. Their purpose is to direct cool air to the brakes; the purpose of the vents to the sides of the front bumper, and those chunky side skirts, can only be purely aesthetic

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The all-new rear bumper, made in carbon fibre by MB, features a diffuser that directs the airflow out from under the car. Carbon fibre is also used on the surrounds for the front and rear lights and the spoiler that sits atop the rear window. Supplementing Alfa Romeo's white paint, there's also a highly unusual tyre tread pattern effect on the bonnet, tying in with the









red roof (a shade which apparently comes from Daewoo's palette). The whole effect lives up to the car's billing as a show car first and foremost.

The most radical body mod of all has to be the scissor doors, which in the tuning world are commonly known as 'Lambo' doors. However, they owe more to the Californian tuning scene than anything from Sant'Agata. The mechanism, which has been modified from a kit supplied by LSD of the USA, is quite clever: the doors open up in the conventional fashion to about the half-way point, then pivot upwards. Yes, it's daft, but it works, and let's face it, it does make a big impact the first time you see it.

That's a comment that applies even more intensely to what those scissor doors reveal. The MiTo's seats, roof lining, carpets and pillars have what Marangoni calls 'openwork fabric' in the brightest shade of red imaginable. A company called Luna Supercar then added Italian tricolore flags on the seats (in case you missed the fact that this is an Italian car). Taking the proverbial biscuit, however, are the gear knob, pedals, footrest and handbrake lever. The Italian add-on parts supplier Isotta has adorned all of the above with Swarovski stone inserts. It reckons the diamonique effect is 'regal' – a claim that can only be taken seriously if the sense is 'King of Hip Hop'.

The M430 is not just startling to look at, it's even more startling to drive. That's the result of some fairly serious modifications under the skin. The engine started out as Alfa's 1.4-litre TB, which as standard has a not-to-be-sniffed at 155bhp. Tuning company Mariani then fitted a Garrett bearing-mounted turbocharger, a new down-pipe (with a metal catalyst), a new air filtering system with a carbon air box and a stainless steel rear exhaust with four tailpipes. The result is a peak power output of 213bhp, but with the MiTo's Dynamic setting switched on, the output is estimated at more like 233bhp, some 78bhp more than standard. That works out at more than 170bhp per litre, and all from 1.4 litres – a phenomenal achievement.

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That power is delivered in a sledgehammer fashion.

At low revs, the bigger turbo takes a long time to spool





up, but when it does, it gives you an almighty kick in the back. The power flow remains super-smooth and relentless right up to its peak of 66oorpm, all accompanied by a highly entertaining soundtrack from the quad-pipe exhaust.

This thing is quick. We coaxed it up to around 140mph on the two-mile straight at Bruntingthorpe test track before we ran out of braking distance. As it was still accelerating at the time, the estimated 158mph top speed seems credible. Marangoni reckons it'll do 0-62mph in 6.6 seconds, too, which seems an underestimate if anything.

So how does the MiTo's chassis cope with 230bhp? Pretty well, it must be said. TRC Italia has specified KW threaded suspension strut housings which lower the car by around 40mm. That gives it a very low stance, and a rather stiff ride. There is still a little body roll around bends but the M430 corners with great confidence. Yes, there's torque steer if you hoof the throttle when exiting tight bends but it's good fun. The handling reminds me a bit of the old Fiat Strada Abarth 130TC – a bucking bronco but all the better for it.

Stunning is the best way to describe the brakes. In a car that's relatively light (1150kg), Tarox B33 10-pot front calipers and composite 330mm discs make for astonishing braking performance. Not only are braking distances incredibly short, the feel through the pedal is sharp and easy to modulate.

I've left the wheels and tyres till last. Marangoni is, after all, a tyre manufacturer, so you'd expect something a bit special. The M430 boasts Marangoni Mythos 225/35 R18 tyres - but not ordinary ones. They're a shade of red that Marangoni describes as 'fire red' but in the flesh (or rubber!), they look something like the colour of raspberries. Whatever, there's no denying they look utterly unique. In dry conditions they

also offer tremendous grip, only struggling a little in the wet with so much torque going through the Oxigin Crystal 8×18 wheels.

Undoubtedly the M430 has fulfilled Marangoni's brief to create an eyeball-widening show car. But I think it has another, unintended purpose. Forget the M430's crystal handbrake lever bling. More importantly, it lets us peer into the crystal ball of the future. You see, Alfa Romeo has confirmed that it will be launching a MiTo GTA at the Geneva Motor Show in March, featuring a 1.8-litre direct injection turbo engine with no less than 240bhp. Marangoni's M430 proves that a tuned MiTo works, and that its chassis can cope with the sort of power the GTA will be putting out.

One final thought. I have a suggestion to rename the M430. If Mi stands for Milano and To is Torino, we could add in Marangoni's home city - Roma - and come up with MiToRo. Sounds a bit like 'my bull'. I can't think of anything more fitting.

TECHNICAL SPECIFICATIONS

MARANGONI MITO M430

ENGINE: BORE X STROKE: FUEL SYSTEM: POWER:

TORQUE: TRANSMISSION: BRAKES:

SUSPENSION:

WHEELS: TYRES: KERB WEIGHT: TOP SPEED: 0-62MPH: PRICE: 1368cc 4-cylinder dohc Garrett turbo
72 x 84mm
Direct injection
213bhp @ 5183rpm (estimated 233bhp
in Dynamic mode)
247lb ff @ 4168rpm
Six-speed manual, front-wheel drive
Tarox B33 10-pot front calipers,
composite 330x26mm discs
Independent MacPherson, anti-roll bar
(front); torsion beam axle (rear), KW
strut housings (40mm drop)
Oxigin Crystal black 8x18
225/35 R18 Y red Marangoni Mythos
1150kg
158mph (claimed)
6.64sec (claimed)

MARANGONI'S LIFETIME WARRANTY

Pretty strong marketing idea this: guarantee your tyre for life. Marangoni's lifetime warranty replaces any tyre that has manufacturing defects or suffers accidental damage, provided the tyres are maintained properly with correct pressures. Any tyre with 80% or more of its tread remaining will be replaced free of charge; discounts of 80, 60 and 40% apply to worn tyres when you buy new tyres. Check out Marangoni's new website at http://tyre.marangoni.com for more details.

BELOW: The M430 title was adpoted because the MiTo has a modified bumper from a Ferrari F430



