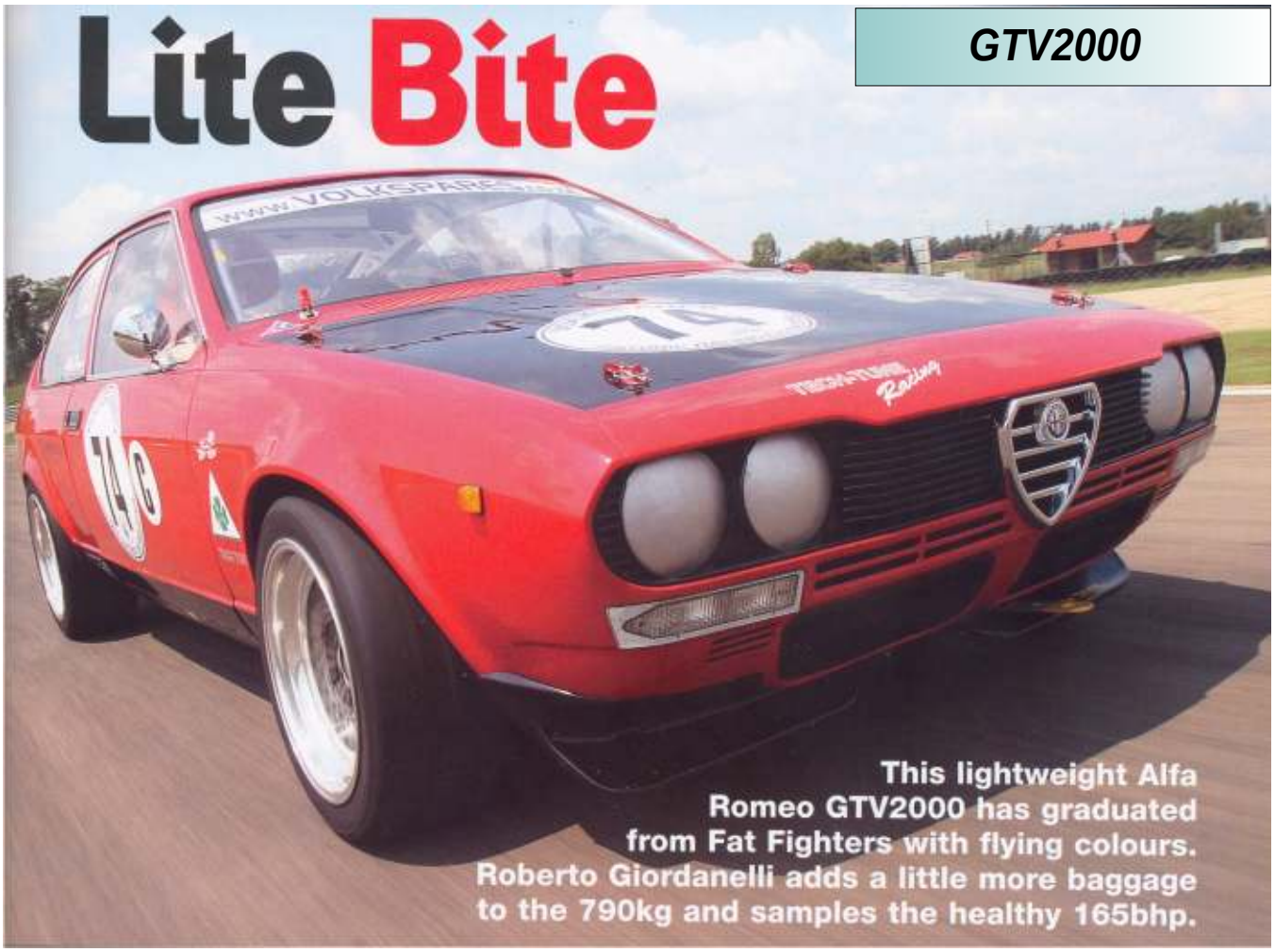
Lite Bite

GTV2000

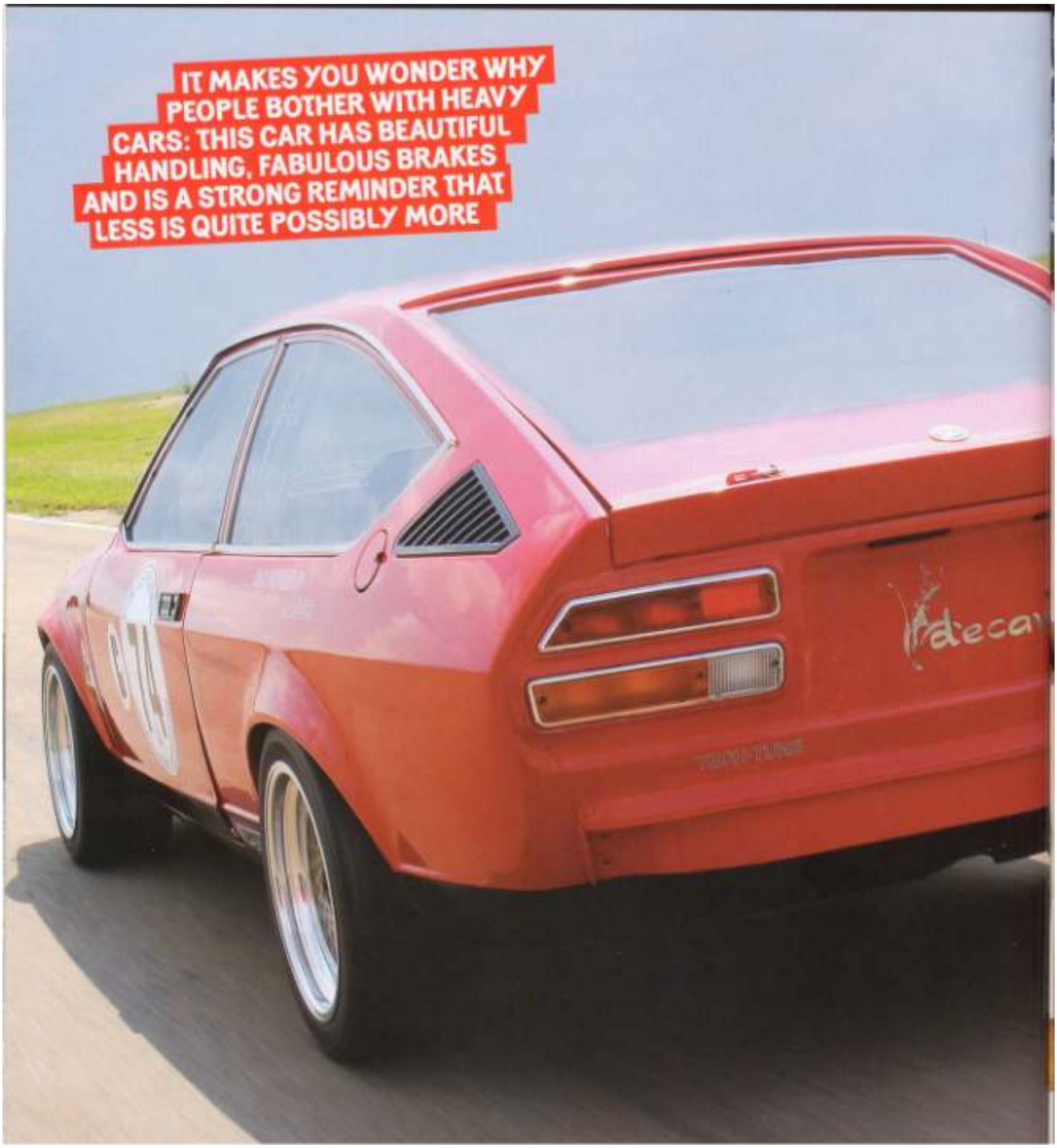


This lightweight Alfa Romeo GTV2000 has graduated from Fat Fighters with flying colours. Roberto Giordanelli adds a little more baggage to the 790kg and samples the healthy 165bhp.

Trc went to South Africa to find a gem, not down a diamond mine but at a care circuit and what a little jewel this Alfa was. As a fan of lightweights it was bound to appeal to me, after I built a similar car in 1993. Well sort of. The owner of this fabulous lightweight Alfa Romeo GTV2000 is José Lopes, a Portuguese who lives in South Africa. Who's a clever chap and built this lightweight Alfetta himself. South Africa still has those multi-skilled all-rounders who can build and race their own car.

I on the other hand, built my example back in 1993, it was a 105 series GTA recreation, weighting 790kg and powered by a 180bph 2.0 Twin-Spark motor. The Car on test here is the next generation Alfetta, weighing 780kg and powered by a similar 2.0 Twin-Spark motor, producing an estimate 165bph. For the non-Alfisti, the Alfetta has the engine up front, but the gearbox is mounted at the rear in a transaxle layout and the benefit comes from a 50/50 weight distribution as opposed to the 60/40 front heavy setup of the old 105 Series Bertone Coupés. The light rear ends of the old Bertone Gts and GTAs is not a big porblem unless you fit a torquey motor, I heard of one guy who put a 500bph turbo motor in one! Enough of the 105

Series though, let's get back to this 116 Series. José 165bph/780kg car works out as a power-to-weight ratio of 211bph/tonne. What does this mean? As medium-sized new cars now weight roughly 1500kg, it means that you would need over 300bph to match José Alfetta. Even then you would be rubbish in the corners and even more so under braking. So it was a good job that I was at Swartkops Race Circuit in South Africa during a race car test day with plenty of traffic. Before driving the little gem José talks me though the car. He started with a bare shell and he means bare: no paint,no dirt, nothing. The underside of this 1974 car is as clean as the top. The bonnet, boot and doors are in fibreglass and all the windows are in polycarbonate with an amperlite windscreen. Inside there's a fibreglass copy of the orginal dash into which are mounted the original instruments but with a mixture of read-outs replacing the speedo. The roll-cage is a good compromise for low weight and chassis stiffness and is joined nicely to the shell. /inside the minimalist car has a tiny MOMO steering wheel, an OMP race seat, Sabelt harnesses, a hand held fire extinguisher, a lightweight race battery and an alloy fuel tank. Externally, the



nose fines are fiberglass copies of the originals and no headlights are fitted. José also built the 2.0 litre Twin-spark eight-valve motor himself. Fuelled by two twin-choke Dellorto 45DHLA carbs on open trumpets, the whole right-hand side of the engine bay ahs been made into an airbox. This was cleverly achieved by fabricating a fibreglass and aluminium panel to seal if off from the rest of the

bay via a grille mesh at the very front which allows cold air to enter. Although José would not reveal the type of pistons fitted, he did admit to his own camshaft design. I did say he is a clever guy. The cr spends most of its life at nearly 6000ft above sea level, either here at Swartkops or at Kyalami GP Circuit, and at this altitude it restricts horse power, so a 14.3:1 compression ration is used to try and compress the thin air. All Mechanical components have been lightened where possible. The motor has never been on the rollers but I remember running my old Twin-Spark race motor with Dellorto 48DHLAs to 8000rpm to see 180bph on a good day. An eight-valve engine rarely exceeds 100bph per litre. There is an alloy water radiator but no oil cooler, ignition is Bosch but in the quest for low weight, no alternator is fitted. This limits the battery to 45 minutes of use before requiring a recharge. Quite an inconvenience, but then an alternator does weigh 2kg.. No handbrake system fitted - another 2kg off the weight. It soon mounts up. There is a neat engine stabiliser bar under the bonnet which will help with reducing movement between the motor and transaxle. Unlike the Porche, Maserati and Ferrari, Alfa never used a torque tube, so any

extra mountings are a good idea. The exhaust system is a big 4-2-1 lightweight tubular system. You can tell you are in a lightweight car as you move off in the first gear, its just that easy. The gear change is slick; much better than I remember with the old Alfettas and the motor pulls well. But at 4000rpm, on full throttle there is a flat spot. This is quite common on big-carb two-litre fours. The mixture goes rich. It's an emulsion tube thing. It means finding a very clever rolling tuner and even then you might still have to live with it. José says the motor will take 8000rpm but he uses 7500rpm. The important thing is to use just enough revs so that you don't drop into the 4000rpm rich-spot after up-change. i use 6800rpm; enough to avoid 4000rpm power dip but not enough to blow-up the motor. The Alfetta carves through the crowded test session, its light weight coming into its own. Other cars brake at the 200m board but I'm braking after the 100m board. They slow to walking speed for the hairpin. I don't. You can try this out at the supermarket. Run down the isle with an empty trolley into the hairpin that takes you from coffee to biscuits. Then try it with a full trolley. The Alfetta light weight also helps if you go to quickly. Any slide will quickly slow the car

back into the grip zone. This gives the driver confidence, which in-turn makes the car quicker. It also means that you can duck and dive. This ability to change your mind in unpredictable traffic is another strong point of a lightweight car. It makes you wonder why people bother with heavy cars? This car has beautiful handling, fabulous brakes and is a strong reminder that less is quite possibly more.

Recommendations:

First I must thank José for trusting me. As a novice I would fit a lightweight alternator and charging circuit and make up make for the extra weight else where. A rolling road session would be money well spent to get rid of that 4000rmp flat spot, too. But sadly I have bad news. At the next outing a Porsche come into contact with the Alfetta's tail, sending it into a scenery at barrier-breaking speed. The car was destroyed and José was hospitalised. He is making a steady recovery and we wish him sell.

Article from:
Track and Race Cars
September 2006