CONTENTS

FEATURES

<u>20 Like the Hammers</u> Chris Bibb and a BMW M5 swill the world's natural resources in a doomed quest for sherry

<u>24 Just A Small Affair</u> Not only did we hire this pair, we sponsored their event

<u>30 Four Score</u> Torque is split on the new Carrera 4—opinions are not

<u>36 Zealotry!</u> IMSA champ Steve Millen bashes Dave Colman's head in, and Scott Dahlquist gets it on film

<u>44 Racing Improves the Fees</u> Jon Ingram considers the real and mythical roots of factory-backed racing

<u>50 TZ1, Competition 0</u> Joanne's test car is radical, gnarly, totally tubolare

58 The Bridges of Shizuoka County Fourthrate novella meets first-rate convertible

<u>64 Return of the Silver Arrows</u> Forty years on, Chris Nixon recounts the Invasion of Untertürkheim

<u>74 The Handling Gap</u>, <u>Part One</u> John Dinkel suggests some things to ponder while you're flying off the road backward

DEPARTMENTS

- 6 The Word Lucky 21
- 8 From the Editor Burnt Piston, Heal Thyself
- 10 Emmo On Chapman
- 16 Correspondence Pingree Cushions
- 18 25 & Under Chevrolet Beretta Z26
- 72 Featured Issue The Month of August 1987
- 79 Quick Look Saab 9000 CDE V6
- 80 Affordable Sports 1966-1994 Alfa Romeo Spider



Page 58



Page 64



Page 50

COVER

Laughing at the dangerz, Zcott Dahlquizt doez a zunrise crane zhot at the Ztreetz of Willow Zpringz



Volume 10, Issue 12, December 1994

Page 74

SPORTS CLASSIC

TZI, Com

Joanne Marshall drives and photographs a Giulia Tubolare Zagato, the brilliant little Alfa that could.

t all came about by accident—by an accident in the 1956 Mille Miglia, to be precise. Enthusiastic privateers, the Leto di Priolo brothers totaled their brand-new, Bertone-bodied Alfa Romeo Giulietta Sprint Veloce on the home leg between Radicofani and Siena, when the policeman red-flagging a dangerous, mud-covered bend had disappeared to answer the call of nature.

The damage to the Sprint Veloce was so serious it would have cost just as much to repair it as to build a new car. The second avenue was taken, and it led to Carrozzeria Zagato's door in Milan. Kitted out in smart new aluminum panels, the Sprint Veloce Zagato (or SVZ) had distinct, if rather squat, Bertone overtones, but pure Zagato hallmarks showed through in its rounded panels and tapered tail.

More importantly, it had a lower frontal section and was even lighter (by around 44 pounds) than Bertone's Spartan competition special had been. This was Zagato's *raison d'être*, of course, and the results spoke for themselves; better aerodynamics meant the SVZ was nearly six mph faster in top speed, capable of hitting close to 118 mph on the Mille Miglia's long straights.

1 10----

Ruling Class

Much to Alfa's dismay, the subsequent series of SVZs ruled the 1300cc-class roost over the firm's own production cars for four seasons, and they snapped uncomfortably at the heels of some far bigger-engined rivals as well, Maserati and Ferrari paramount among them.

Miffed by this upstart's success, Alfa and

petition 0

Bertone tried again in 1957 with the gorgeous Sprint Speciale prototype, but by the time it reached production in 1959 that car had sprouted heavier steel bodywork and greater creature comforts, Alfa Romeo having succumbed to the obvious importance of street sales over smallbore racing primacy in the GT ranks.

And so, after 14 SVZs had been built for well-heeled privateers, Alfa Romeo simply gave Zagato the green light (and the bare chassis) to build a definitive and official version of the car instead, to be called Giulietta SZ. Ironically, the coachbuilder was allowed to work on the Giulietta SS's shorter (88.6 versus 93.7-inch) chassis and more powerful (100 versus 90 bhp DIN) running gear, so top speed reached an impressive 124 mph. The incredibly rotund SZ (quickly nicknamed the Easter Egg by factory hands) was then launched at the 1960 Geneva Show.

In the meantime, Alfa's small-displacement twincam had reached its power development peak—somewhere in the racetuned neighborhood of 130 bhp @ 7500 rpm—and the SZs were losing their competitive edge in the 1300cc class to the ultra-lightweight Lotus Elites.

The only way forward was to up the car's top speed, so at the end of 1960, Elio Zagato had a long, ungainly, but functional aluminum tail riveted to an SZ in the hopes of improving its aerodynamics. Assisting in the stopwatch duties on the car's test runs was a young designer named Ercole Spada—the same man who would quickly rise to chief of design for Zagato in the 1960s and again in the 1990s.



➤ Like a GTO left in the dryer



➤ Don't leave Rome without it

Empirical road testing included lapping the circuit at Monza the wrong way—not as oddball as it sounds, for the track's long straight is on a slight incline—and bashing up and down the Milan-Bergamo autostrada. "At the time," recalls Spada with a rueful grin today, "that stretch of autostrada was trafficked by slow-moving baby Fiats and had just three lanes, the middle one reserved for head-on collisions. But we managed to reach a maximum 227 kilometers per hour (141 mph)."

Still, the bulky rear overhang with its concurrently high polar moment of inertia had detrimental effects on the car's cornering agility. Eventually, Zagato came to a compromise. "Following the Kamm principle," Spada continues, "we took a hacksaw to the aluminum protuberance and lopped most of it off, losing only a couple of kph in the process."

The car debuted—driven by Elio Zagato himself—at Monza in June of '61 and immediately took pole position, easily outrunning the round-tailed cars in the process. Thirty of the new style were built, differing in detail substantially from the earlier version; the Kamm-tail model was longer, narrower and lower, although weight went up 33 pounds to 1727 overall. The hoodline was made lower and the nose became slimmer, as did the line of the fenders. In a moment of inspiration, the hood's trailing edge was finished off in a kink over the windshield wipers to reduce turbulence and drag—standard practice today, but *terra incognita* to Zagato's minions at the time.

On the Tube

After a busy, pluri-victorious racing career, the SZ's development ceased in 1963; back in 1959, Alfa's chief engineer Orazio Satta and development manager Giuseppe Busso had already set to work with a clean drawing board toward making an ambitious, purpose-built GT racer to replace it.

The definitive chassis of this effort was delivered to Zagato for bodying in January of 1961, and the real novelty lay in that chassis. Rather than carry on with the Alfa/Zagato practice of adapting existing production monocoques for racing, this new car had a low, wide, tubular spaceframe chassis that weighed just 136 pounds. High structural rigidity was ensured by reinforcing the rear suspension mounting points with a transverse pressed-steel insert, while at the front a large-diameter elliptical tube provided bracing at cowl height for the front suspension and engine mounting points.

Unlike the live-axle SZ, the Giulia Tubolare Zagato, or TZ as it quickly became known, featured independent suspension and disc brakes all around. The front did at least retain the Giulietta's double-wishbone setup, though it received new arms with separate springs and telescopic shocks—these latter inclined to keep the wheelarches as low as possible—and an antiroll bar. The engineering that went into the rear suspension was rather more novel. The disc brakes were mounted inboard next to the limited-slip differential to reduce unsprung weight—a process continued through the GTV6s of the 1980s—and the driveshaft acted as the suspension's upper link. The lower link was formed by a wishbone located via longitudinal and radius arms with an antiroll bar attached.

The TZ's running gear consisted of essentially the same pieces set to debut in the Alfa Romeo Giulia saloon for 1962, including a bigger 1570cc version of Alfa's classic all-aluminum twincam Four. The TZ's powerplant did differ significantly in detail from the sedan's, though—weightsaving measures called for magnesium-alloy castings for the clutch housing and gearlever turret, for example, and the engine was so seriously canted over to allow for a plunging hoodline that a new sump, bellhousing and intake manifold had to be made for the application.

With a little extra noodling—adding two twin-choke Weber 45 DCOEs, an uprated camshaft and a compression ratio of 9.7:1—the standard TZ-spec Four packed 112 bhp @ 6500 rpm and 98 lbs.-ft. of torque @ 3500 rpm. That was respectable power indeed when allied to a low 1452pound curb weight: Further race-tuned to 160-170 bhp and spinning easily to 7500 rpm, this 1.6-liter engine guaranteed dreadnought-level performance from Zagato's light cruiser.

Zagato's bodywork for the initial two prototypes was a long time in coming, at least for Alfa's urgent need to combat the ever-present threats from Lotus and Porsche. The Milanese coachbuilder was going through one of its most florid eras and demand for the existing SZ was high, drawing personnel not only from the TZ project but from other lucrative prototype work for Aston Martin, Lancia and Bristol as well.

Oddly enough, the first prototype, delivered in October of 1961, was a roadster. It proved aerodynamically inefficient during testing at Monza, reaching only 129 mph. Due to teething problems in the handling department as well—the rear suspension was working on its bump-stops, making the car an understeering pig at racing speeds—Alfa's high-tech new hotrod failed to lap Monza any faster than the SZ it was supposed to replace.

The next TZ to leave Zagato's Via Giorgini works was a closed coupe with a slightly longer tail similar to the one already in use on the SZ, and the improvement was immediate. Top speed rose to 133 mph and lap times at Monza dropped from just over two minutes to Sanesi's record of 1:51.2. The definitive version would be quickly arrived at, its hoodline being lowered still farther to produce a degree of downforce and the tail getting its characteristic tulip shape to reduce drag.

The concept may have dated to 1959 and the first road testing to 1961, but the Alfa Romeo Guilia TZ1 truly reached its development apogee in 1964—the same year it won its displacement class in GT racing at all the major international events, including the Sebring 12 Hours, the Targa Florio, the Nürburgring 1000 Kilometers and the 24 Hours of Le Mans.

The car was eventually succeeded in 1965 by the even more exasperated TZ2, Spada and Zagato's *pièce de résistance*. Without doubt, the TZ2 was one of most delectable sports cars of '60s, second only



► Butt-end of champions

Theater of the Obscure: A Readers' Guide to Romeos and Giulias

➤ To the uninitiated, Alfa Romeo seems to have named an annoying array of cars either Giulia or Giulietta Somethingorother, with a couple of letters thrown in at the end for good measure. In the case of the TZ1's progenitors, a little clarification is definitely called for.

➤ The Giulietta Sprint: Introduced in 1954, the Bertone-styled Giulietta Sprint (and later Sprint Veloce) coupes were the firm's front-line productionbased racing car through the end of the decade.

➤ The SVZ: Constructed as privateerfinanced customer cars, more than a dozen so-called SVZs—essentially rebodied Sprints—were constructed by Zagato. The cars ran to great success in international competition. Actual coachwork varied, but Zagato's eggshaped theme held sway throughout.

➤ The SZ: Tired of being trounced by SVZs, Alfa commissioned Zagato to create refined versions of the car with the factory's blessing. This became the SZ series, of which more than 215 were produced. The round- and short-tail models comprise the two main subsets.

> The SS: Bertone's own more stylish (but bulkier and less competitive) successor to the Sprint Veloce. Too



heavy for meaningful competition, it became a stylish grand tourer.

➤ After the production-based SZ, Alfa's tube-framed TZs took over the firm's competition duties, and that brings us up to date with the story. Now the only question is, couldn't Alfa think up some more names? —Keith Martin and George Stradlater



Personal trainers to the stars

in its aggressive animalesque grace to the Ferrari GTO. But if the TZ1's career was rather brief overall—its major wins spanning a period between Monza in 1963 and Sebring in 1965—then the TZ2's was nothing but a brilliant 1965 flash. Both models would quickly be replaced in Alfa's grand vision by the Giulia GTA touring car and Carlo Chiti's 1960s masterpiece, the Alfa Tipo 33 sports-racers.

Driving Reign

The car I'm testing is a particularly representative model of the TZ's breed. Chassis #750018 is an earlier car built at the beginning of 1964, perhaps most unusual simply in its not being red. The color is accounted for by 750018's being originally destined for France and privateer Jean Rolland, though it did end up painted in more traditional Alfa livery prior to its recently completed restoration. Along the current and conservative lines of restoration thought, this TZ has been subject to almost



➤ Vents are a factoryblessed hatchet job

holistic intervention, the restoration artisans only touching the original metalwork where strictly necessary. It's the same approach long used in the art world—after all, if you set about restoring a Rembrandt you don't replace the canvas.

Most emblematic of this approach is the large clamshell hood. On the driver's side is a fist-sized panel gap caused by years of owners, mechanics and admirers repeatedly lifting the 1-piece hood from that side. It's been straightened as far as possible, but the thin-gauge aluminum has understandably been stretched. This hood has simply been left in place, warts and all, rather than replaced. This quest for originality and respect for the car's well-earned patina are things that SCI has been trying to champion for years, so we heartily applaud the current owner's decisions.

Indeed, you should actually beware of any dead-straight TZ1. Like many other handbuilt racers of that era, few if any had perfect curves even when they left the factory. If they look absolutely straight now, you're almost certainly looking at a replica part—or maybe even a replica car.

Given its originality and years of use, then, this TZ1 is perfect in every respect, witnessing years of painstaking research by its proud Swiss owner. Every part is original, right down to the aluminum kick strips—one of those little trim items that were usually the first bits to get pitched overboard in the hunt for light weight.

Revealed Truth

On the road, the TZ1 is one of those performance revelations that the '60s sometimes throw back at you, making one wonder just where all the fuss about progress comes from. Okay, the decibels are outstanding for their presence, the ride is lively and the legitimate period rubber squirms around on its tread blocks even at modest cornering speeds. But this Alfa also presages everything you'd ever want from a modern sports car-nimbleness, faithful road manners, punchy acceleration, tight, telepathic steering and wheelbarrow-loads of character. As a driving experience, the TZ1's total lack of excess flab impresses even the most jaded modern driver.

The blue racer looks low and purposeful but seems even more so when you try to get in. It's amazing how compact this car is, with its bodywork shrink-wrapped around precisely engineered spaces for the suspension, powertrain and driver. Climbing into Zagato's early form of wraparound seat requires the tortoise-like ability to retract your head into the space most of us keep reserved for neck and ribs.

Once in, the TZ1 simply envelops you. With a helmet in place headroom would be quite a squeeze, and I can't help wondering whether drivers in the 1965 Nürburgring 1000 Kilometers developed their own Gurney bumps in the roof just through repeated jumps off the Flugplatz.

There's really nothing to learn from inside the cockpit—it's all bare essentials,



with a nice, upright steering wheel and the traditional Giulia gearshift sitting comfortably a palm's span from the attractive wooden rim. The all-important rev counter is placed right-bang in front of your eyes, while the less noteworthy speedo is perched off above the shifter. Three minor gauges (plus a fourth for fuel) monitor the other essentials—water and oil temperature plus oil pressure. All-around visibility is excellent, although the low roofline over the windshield takes a little getting used to, rather like peering out of half-closed eyelids on a hairy Morning After.

Good thing it's *not* a Morning After, however, as firing up the engine confirms the cabin's excellent abilities as a mechanical resonance chamber. Running a genuine 160 bhp, the high-compression (11.4:1) Four snorts moodily to itself at idle, although the firing is remarkably smooth for such a cooking unit. Squeezed tight up against the firewall, there's no doubt it's sharing passenger space with you. The metallic chorus is completed by the whining differential, especially when cruising casually in top gear.

This TZ1's engine was originally built by Virgilio Conrero, one of the SZ and TZ tuning maestros that catered to privateers unsatisfied by the official Autodelta setup. In more recent years, 750018's concerto has been conducted by the magical hands of Angelo Chiapparrini, a Milan-based tuner who prepares and races (to spectacular effect) his own Alfas, including two delectable TZ1s.

The venerable Alfa twincam in this form is truly magnificent-on a constant throttle it's crisp and duly progressive despite the two big-throated, twin-choke Weber 45DCOEs and seething cam. Having said that, the real action only starts to boil up between 5000 and a merry 8000 rpm, evidence of this small mill's high state of tune and the light weight of the car it's intended to propel. As is usual in such a gargling setup, mash the throttle anywhere below that rev range and the fuel/air mix sticks in the Webers' throats like overconcentrated mouthwash in the maw of a hopeful deb. Rather than offering up a sophisticated sizzle, this aggressive 4-banger thunders and rasps its disapproval at low revs, only to blare stridently after 4500 is cleared.

My Name's Sybil

Once the engine is on cam, the entire personality changes. When left to churn about sluggishly, the TZ1 feels a mite reluctant and bullish. As road speed rises and the engine spins faster, though, it becomes alive and fluent, rewarding human precision with mechanical precision, the velvety throttle response encouraging you to drive tidily and build up speed around corners.

Constant power through bends reveals stunningly accurate feedback provided by the worm-and-roller steering, and the car's handling feels poised and cat-like in its bal-

➤ The van delivers



➤ Calling Dr. Kamm



➤ How to play hide-and-seek with your gauges

ance. The tubular chassis eradicates the earlier SZ's dainty, ballerina-light cornering style, despite its 2-inch shorter wheelbase and only marginally wider (0.3-inch) front track. The TZ1 also stands two inches lower than the SZ, and its lower center of gravity gives the car greater precision and stability.

The TZ1 shows strong grip on its narrow

the Milan-based manufacturer with two World Sports Car Championship titles and a return to Formula One exactly 30 years after Alfa took the first World Championship in 1950. Recently history had turned full circle, with his own Motori Moderni factory employed in building and servicing the monstrous 420-bhp V6 engines used by the Alfa 155 V6 TIs in the German Touring Car Championship.

➤ Chiti started Alfa's heroic Autodelta racing arm in 1963 with a commission to assemble 100 TZ1s. Speaking to me shortly before his death in July of '94, the great engineer described the operation thus: "At the beginning, ours was a small organization—just a handful of workers, no more than seven or eight. Alfa sent us Zagato's bodies and the running gear, and we tested and assembled the cars.

➤ "The TZ1s were initially raceprepped by Alfa with engines tuned by Conrero, and were entrusted to the Milan based team of Scuderia Sant' Ambreous. Subsequently, Autodelta took over some of the development for racing in Group 3 GT. Then, after Sebring in 1965, we transferred lock, stock and barrel to the outskirts of Milan—to be closer to Alfa Romeo—and took over preparation and team management of Alfa's racing program. 155-15 tires, and its modest understeer gives way to a pleasingly neutral cornering stance before the tail breaks gently away. Snapping the throttle shut in mid-bend reveals an understandable shortcoming with such unyielding period tires; the nose tucks in, encouraging the usually well pegged-down rear to lift and step briefly out of line.

Of course, the TZ is definitely more skittish once grunt overcomes grip. Funnily enough, that makes this old car feel more chuckable and communicative than a faster GT of the modern vein. In the real world, then, the TZ1 would seem the superior handling car—it can be reasonably hard work winding on the steering in tighter bends, but its flat ride and strong grip through highspeed sweepers make it tremendously rewarding at rapid cross-country speeds.

The gearbox gives immense satisfaction as well. It's basically the same as that found in the last-generation Alfa Spider, and that means slightly long throws between cogs. Lightning-quick changes are out of the question, but almost telepathic wrist movements accomplish everything necessary. The plus side of this transmission includes a sensation of oily precision and the positive feel that's imparted when you get the cogs to

➤ "On average, 15-16 TZs raced every week and Autodelta had to keep them on the track, either giving full technical assistance or supplying parts. Clearly, our advantage over other... suppliers was that being responsible for development work, we could offer the latest improvements."

> Chiti's all-consuming passion for his creations meant he was always present at race meetings to monitor the various teams' progress. During endurance races he would sleep little and stoke his reputation as a big eater: It's said that at one long-distance event he nervously munched his way through 18 chickens. ➤ "What were the TZ1's most memorable races? But that's 30 years ago or more!, Chiti responded to my question, his eyes widening in mock horror. "Well, there was the 24 Hours of Le Mans when the car came home on three cylinders but still managed third place all the same. My real regret was that neither the TZ1 or TZ2 lasted long enough. With our arrival at Settimo Milanese we became Alfa's racing alter ego, and new projects were already under development to contest two other categories—Touring Cars with the Giulia GTA and the World Sports Car series with the Alfa 33. The TZ's success was short-lived compared to what the later cars would go on to do."-Joanne Marshall



Carlo Chiti and Alfa Romeo

 This larger-than-life engineer started his career with Alfa Romeo in 1952, where he worked for five years on experimental racing projects until being tempted away by Ferrari. Four short seasons later he was part of the famous Ferrari walkout of '61, going to the illfated ATS group before moving into fulltime directorship of Alfa's quasi-works Autodelta team in 1964.
Ing. Carlo Chiti brought glory back to

SPECIFICATIONS

1964 ALFA ROMEO TZ1 (factory delivered)

General

Vehicle type: front-engine, rear-wheel-drive coupe Structure: tubular steel frame with alloy body panels Market as tested: competition

Engine

Type: longitudinally-mounted inline-4, aluminum block and head Displacement (cc): 1570 Compression ratio: 9.7:1 Horsepower (bhp): 112 @ 6500 rpm Torque (lbs. ft.): 98 @ 3500 rpm Intake system: 2x2bbl. carburetors (Weber DCOE) Valvetrain: two overhead cams, two valves per cylinder

Transmission

Type: 5-speed manual

Ratios 1st: 3.26 2nd: 1.99 3rd: 1.36 4th: 1.00 5th: 0.85 Final drive: 3.25

Dimensions

Curb weight (lbs.): 1450 Wheelbase (in.): 86.6 Track, f/r (in.): 51.2/51.2

Suspension, brakes, steering

Suspension, front: double wishbones with coil springs and antiroll bar Suspension, rear: transverse arms with coil springs Tires: 155-15 Brakes, f/r: disc/disc (Girling)

entwine perfectly at the end of each throw.

When it comes right down to it, it was a pity the TZ1's star burned so briefly while its TZ2 successor lived even shorter still. The Tubolare Zagatos had everything going for them—looks, power and performance—but they simply arrived at a time when the other cars in their class had developed mid-engine configurations and Alfa's racing intentions had moved on to touring cars and pure sports prototypes.

Still, the TZs did prove how serious Alfa was about getting back to its racing roots, and the involvement of Carlo Chiti alone (see the accompanying sidebar) make them irresistible pieces of history. Following Chiti's lead, Alfa Romeo would even go back into F1 eventually, hoping and bring the heat and sizzle of a racing image back to its clients' minds. In the meantime, it was the Giulia Tubolare Zagatos that kept the fires of this worthy heritage stoked.



➤ Homemade trumpet

➤ Yes, it's <u>that</u> Giulia twincam Four

