Road & Track, November 1980

Triumphing on Track or Special Stage

Tulluis' TR8 does it on the circuit, Buffum's does it in the dirt, but both do it well indeed.

Different horse for different courses, they say. So it's not surprising that the two subjects of this comparison test, the rally and racing versions of Triumph's TR8, display some fascinating contrasts. They're both impressive, though, and resplendent in that esoteric art of transforming a production sports car into one specially built for competition.

Ironically, both cars were competing well before the stock TR8 ever made its appearance in U.S. showrooms; this, because of production delays on the part of British Leyland. Thus, by the time of our June 1980 road test of the stock TR8, John Buffum had already made a name for his TR8 coupe in the SCCA's Pro Rally series, and Bob Tullius' Group 44 TR8 coupe had already been transformed from a front-runner in SCCA Trans-Am racing to an IMSA GTO car. In fact, at one point we found ourselves in the curious situation of having to wait for the production car once arrangements were made for testing the competition versions. No matter, really, because the stocker itself is no slouch: We recorded a 0-60 mph time of 8.4 seconds, quarter-mile figures of 16.3 sec at 85.5 mph, a slalom speed of 60.5 mph and skidpad value value of 0.754g. But as you might guess, the considerable tweaking done to Tullius' GTO and Buffum's rally version makes these admittedly impressive figures look pretty tame. First, let's examine some of the tweaks, then see what they accomplish and, finally, hear what the two drivers have to say about the production TR8.

Buffum's car began life as a shell with "two men spending three weeks" rebuilding it for the rigors of rally special stages. All the spot welds of the TR8's chassis were reinforced, the rollcage went in with its A-pillar portion recessed away from the driver's line of sight, a sturdy skid plate was attached underneath and mounting points of the MacPherson struts were reinforced by extensions of the rollcage angled forward. John notes that the stock Triumph chassis has good rigidity, but the pounding of rally work brings a new meaning to it all. For instance, loads transmitted from the strut towers into the firewall and transmission tunnel areas can lead to cracks in the latter.

Although the front suspension of Buffum's TR8 looks fairly stock, there are a multitude of changes reflecting the car's rally milieu. Specially valved Bilstein shocks replace the stock units; the Bilsteins have rates of 280/120 for jounce/rebound, respectively. John notes that rallying puts greater stress on these components than does racing: The suspension of a rally car is constantly working, whereas, by contrast, a racing car undergoes essentially smooth transitions. In general, John says, conventional racing shocks overheat and aerate under rally conditions. The springs, stiffer than stock, are of smaller diameter to clear the larger B.F. Goodrich T/A P195/70R-13 tires fitted at the front. Rear tires are even larger P205/70R-13s, with all four mounted on Panasport alloy wheels. The springs have a dual rate: On compresses, the rate increases to 240. Lower lateral arms are stock, as are most of the bushings (several are replaced by those of harder rubber). The bottom spring collar is threaded, thus allowing adjustable ride height. However, John observes that the entire 6.0-in. range is rarely exploited: First, extremes of adjustment reduce shock travel excessively; second, the sort of fine-tuning that makes sense in circuit racing has no real payoff on rally roads.

The front anti-roll bar is a standard one and, as on the stock car, it doubles as a trailing locator on each side. However, Buffum has it tapered to a 1/8–in. smaller diameter between its two chassis mounts. This reduces front roll stiffness just a bit, to lessen the TR8's inherent understeer. John says that he couldn't lighten the springs without causing the body to crash down too often, so this anti-roll bar modification is a more acceptable way to soften the front end. "You turn into a corner," he says, "and

you can feel a slight flex of the chassis. The thinner section of that bar translates into better adhesion at the front."

The rear suspension is modified for increased travel and better location of its live axle; the latter, a JRT limited-slip unit. The shock absorbers are longer than stock, with 180/110 jounce/rebound. John ha experimented with two spring rates, 210 and 185 lb/in., both softer than stock. He feels the stiffer of the two is better on asphalt, but because most rallies stress off-road stages, the 185s get a lot of use too. To counter the springs' relative softness, the rear bump stops have moved upward 0.8 in. Improved location of the axle is achieved in two ways. In stock form, each side has a lower trailing arm and an upper arm angled outward to serve both longitudinal and lateral duty. On Buffum's car (and Tullius's as well), the upper arms are relocated to a fore/aft position so they function solely as conventional trailing arms. Lateral location of the rally car's rear axle depends on a Panhard rod that links the right side of the live axle to a point on the left of the rollcage structure. Rod-ends replace the original rubber bushings on the lower trailing arms. For the upper arms, there are rod-ends at one extreme and stiff rubber bushings at the other; the latter, to provide some suspension compliance. As it's set up, Buffum's car understeers less than the stock version, but it's further from neutral than Tullius' road racer. Also, its long suspension travel offers a ride that's much softer than the vision-blurring road feel of Tullius' car. And, as an interesting contrast, John observes that predictable agility and robustness – not ultimate cornering power – are the long suits of a rally car.

On the other hand, the suspension of Tullius' GTO racer has simultaneously more and less to contend with. Granted, its road surfaces are considerably smoother than Buffum's, but the nature of circuit racing demands more fine-tuning of suspension components. Whereas Buffum can afford to set-and-forget, Tullius and the Group 44 crew spend a fair amount of practice time setting up the car's suspension for each particular course.

The chassis of Bob's car undergoes an initial treatment similar to Buffum's, but here the idea is to obtain the stablest platform possible to exploit subtle adjustments of the suspension. There's little TR8 ahead of the firewall, for instance. The rollcage itself extends forward in NASCAR fashion to provide mounting points for the front suspension. Slots in the structure allow strut-tower camber changes, and shims permit slight alterations in caster. Also, the front track is reduced by 3.0 in.; this, to cut overall width despite the hefty 23.0 x 10.5-15 Goodyear Blue Streak rubber fitted to the front at the time of our testing. Rear tires were 25.0 x 11.0-15s; and, like the fronts, mounted on Jongbloed alloy wheels. (Since that time, Bob has gone up one size to 16-in. diameter rolling stock.)

The GTO car's front suspension is more highly modified than that of Buffum's car. Unlike the stock and rally versions, for example, there are separate specially fabricated trailing links together with modified stock lateral arms locating the GTO car's MacPherson struts. The latter are fitted with Koni wet shocks, the sort that have valved tubes rather than cartridges. Also, the front anti-roll bar is specially fabricated from tubular stock. Like Buffum's car, the IMSA TR8 has special springs and adjustable ride height via spring location.

Also like Buffum's, the IMSA car's rear suspension has its upper arms relocated to serve solely as longitudinal trailing arms. But here, lateral location is handled by a Watt lonkage rather than a Panhard rod. Also, there is an adjustable rear anti-roll bar on Tullius' car, whereas Buffum's has no rear bar whatsoever. Several of the rubber bushings are replaced by rod-ends, but, like the rally car, the racer retains some suspension compliance by keeping its stock bushings at the forward ends of the lower arms.

Both cars use the TR8 rack-and-pinion steering, but each in somewhat modified form. On the Tullius car, the rack is cut down slightly to accommodate other changes in the front suspension. Also, it's mounted a bit lower on the chassis to clear the oil pan which rides a little lower because of engine

modifications. Bob's racing Jaguar XJ-S had power-assisted steering: "It was one of the best speed secrets we had," Bob notes. "Frankly, I think a race driver can be a whole lot neater if he has power steering. We'd have mounted it on the TR8 but for clearance constraints."

Buffum, on the other hand, prefers unassisted steering, "provided you don't have to be a superman to turn the wheel." His rally car, like Tullius' racer, is fitted with a close-ratio pinion giving 2.5 turns lock-to-lock versus the stock 3.5. John notes that Leyland has three pinions available, 7-, 8- and 9-tooth; the 7-tooth is stock, and his car has the 9-tooth gear.

The two cars' brakes are also similar in hardware, but considerably different in execution. Both use Lockheed discs, front and rear. Tullius' are vented at all four corners, with 12.0-in. diameter at the front and 11.0 at the rear. Buffum's are 10.3-in. front and rear but only the fronts are vented. Both setups offer a means of balancing fore/aft braking forces, but with completely different strategies of doing so. Tullius' brakes, for example, have no provision for cockpit adjustability. Bob feels that the hardware allowing this leads to a relatively spongy pedal, and he prefers a conventional balance bar. Proportioning is normally set at something like 70/30, front/rear, and it can be fine-tuned during practice.

By contrast, Buffum has to contend with everything from smooth asphalt to loose dirt, and his brakes have dual master cylinders, one for each end, and a balance bar that's adjustable en route. There's also a hydraulically actuated handbrake, for really acute corners. John notes that circuit racing puts its emphasis on straight-line braking and ultimate cornering power of the tires, whereas in rallying a car spends a good deal of its time sideways, and it's particularly important to retain steering control under all conditions. He sets the brake proportioning in the range of 40/60, front/rear, and uses brakes, steering wheel and throttle to control the car's attitude before, during, and after a corner. And if you've ever seen John or any other top rally driver in action, you can appreciate the vast contrast between racing and rally techniques in this regard. Racing tends toward subtle changes of attitude, with incredibly high cornering and braking forces. Rallying, it seems, is a random collection of directions: front wheels steering one way, the car pointing another, yet the road heading off in some third direction.

Listening to John, you sense the delicacy with which a rally car is seemingly tossed about: "You play the brake pedal differently," he says, "depending on what attitude you want the car to take. Jump right on them, or apply the brakes gradually. Sometimes you turn the bias quite a bit to the rear, then when you get on them it'll bring the rear out to where you control it with the throttle."

Contrasts abound in the engine compartments too, again dictated by demands of circuit racing versus rallying, but here by regulations as well. Group 44 originally set up the TR8 for SCCA Trans-Am racing, in which competitive demands required that the Triumph-Rover-nee-Buick V-8 be stroked to a displacement of 3989cc. As you might guess, there's a 4.0-liter limit, or as Bob notes, "You never want to run a car at the low end of a displacement class, and we spent a good six months of engine development before that car ever raced. But then things got complicated: We negotiated with SCCA, and agreed that if the car turned out to be too competitive, we'd carry some added weight. But SCCA seemed to feel that being 0.5 sec faster in one qualifying session meant 'too competitive.' And then what if we added the weight and ran 0.5 sec faster the next weekend? Would we be forced to add still more weight?"

Bob is understandably bitter that the car's apparent competitive advantage in the Trans-Am series caused SCCA to impose a 400-lb penalty on it. He observes, "Racing is a business, an entertainment business, if you will, for the organizers. So there always remains the question of one team being in a position of total dominance. But with this TR8 in the Trans-Am series, it wasn't so much a matter of dominance as it was quality of the competition. Our car entered competition at 90 percent of its

development capability; the cars we were running against were only doing 60 percent of theirs. All you've got to do is look at the specifications and potential numbers of the competition, and look at ours.

"If you were going to choose a race car to run," he posed, "which would you rather have: 454 cu in., 2900 lb and easy availability of parts right off of the shelf, or pick some odd-ball car with 244 cu in. and 2550 lb that no one had ever run before?" At any rate, thr Group 44 TR8 is running IMSA's GTO class now, with wins at Sebring, Daytona, 2nds at Lime Rock and Laguna Seca and fastest qualifying lap at the last.

The stock block and heads of the TR8 remain, but little else. Brian Fuerstenau did the engine development, with one of its novel features being a 1.5-in. aluminum girdle sandwiched between the bottom of the block and the oil pan. Bob says they had heard reports of cracks in main bearing webs of the engine under racing conditions, and the girdle distributes the loads better. The engine's stroking comes from a special crankshaft, and custom pistons give a compression ratio of 12.5:1. In sprint trim, the engine produces 360 bhp at 8000 rpm and 310 lb-ft of torque at 5500. For endurance events, the engine is slightly detuned via lower compression to around 330 bhp.

The engine is fuel injected, using an electronic unit that's "originally Lucas, with heavy doses of Kinsler and Fuerstenau," as Bob puts it. The fuel injection feeds an intake manifold designed by Leyland Special Tuning for the European rally cars. Power goes through a 2-plate Borg and Beck clutch to a stock TR8 5-speed transmission housing, but with the top cog removed. Both Tullius and Buffum omit this 5th gear because they consider it a weak link in what is otherwise a robust gearbox. Although the housing is stock, the gears within are Leyland close-ratio, with 1st through 4th of 2.33, 1.61, 1.30 and 1.00:1, respectively. At the other end of the driveshaft, Tullius' car has a NASCAR-like Frankland Baby Grand rear end with an aluminum center section containing a limited-slip differential. The housing's volume and aluminum's heat-transfer characteristics do such a good job of dissipating heat that no auxiliary differential oil cooler is required. There are, though, remote oil coolers for the gearbox and engine, both off Leyland shelves. The engine coolant radiator is a Corvette aluminum unit.

Buffum's car has a stock-displacement engine prepared by Huffaker Engineering. The engine is blueprinted, with 10.5:1 compression-ratio pistons, and a special cam and connecting rods. John estimates its power at 280 bhp at 7000 rpm and torque at 245 lb-ft at 5000. More critical, he says, is its wide torque range with a kick coming as relatively low as 4000 rpm. The TR8 is the most powerful car competing in the SCCA Pro Rally series, although John admits that getting power to the ground (and often this – not pavement – is the correct term) is the most important criterion of rallying. "On the faster stages," he notes, "it would be nice to have 300 bhp. But I'd rather give up 10 or 20 bhp and have a tractable, reliable engine. And besides, the extra power would just make it too easy to light up the tires on dirt."

John has worked to lessen the stock TR8's nose-heavy (57/43) weight distribution in several ways. For instance, he has mounted the engine oil cooler in the trunk, with fan-boosted air entering a NACA duct on the car's left rear flank and exiting around the license plate. And he has recessed the driving lights up front to reduce their moment-arm contribution to front weight. He estimates current weight distribution at 53/47.

As for fuel delivery, John feels that a Holley 4-barrel carburetor fitted to his car's engine is a better choice for rallying than the fuel injection used on Tillius' racer. "There's choking dust to contend with," he observes, "and I'd be worried about the usual bumps, crashes and bangs messing up the electronics."

Behind the engine is a Lockheed single-plate clutch, essentially a heavy-duty version of the stock component. John says he has tried multiple-plate racing clutches, but their in/out nature is too hard on the rest of the drivetrain. The clutch mates with a standard Leyland 5-speed gearbox, but one fitted with a modified set of factory close-ratio gearsm all except 5th. Recalling the non-synchromesh challenge of

shifting the Fiat Brava rally car, we asked John if there was any advantage in fitting a crash box. "No," he said, "principally because it would have to be a non-JRT product, and really everything in the car, save springs and shocks, is JRT. I think it's good for a manufacturer to use its own products whenever possible."

How about the deleted 5th gear: does he ever miss it? "There is a problem," John notes, "in getting the top speed the car is capable of. With the 4.55:1 rear end [the one fitted for our day of testing] we have about 107 mph as the absolute top speed. In a way, it's perfect quarter-mile gearing, but not quite tall enough for fast rally stages. Another more subtle problem, though, was the relatively large gap between the close-ratio's 2.33:1 1st and its 1.61:1 2nd.

"But I got this demon idea of a solution." John says, "It just so happens that the standard gearbox's 2nd gear is a 2.08:1, just what's needed for a close-ratio 1st. So I ordered a standard 2nd gear, and had it machined to fit in the 1st-gear position on the close-ratio shaft. We're running it today, and if it works in competition – wow, what a brain. If it doesn't, I just won't tell anybody."

Judging from Buffum's current point total (he's 1st in SCCA Pro Rally as this is written), he can talk about it all he wants.

And it certainly worked during our day of testing at Riverside International Raceway, with John cranking off seemingly effortless runs of 0-60 mph in 5.3 sec and quarter-miles in 13.9 sec at 103.5 mph. Slalom speed for the rally car was some 3.4 mph faster than the 60.5 mph of the stock TR8. And after fiddling with the brake bias to account for Riverside's surface, John brought the car down from 60 mph in 117 ft and from 80 in 243 ft.

During the sound-measurement runs, our Engineering Editor had an honest-to-God seat for a change – usually in such tests he's wrapped around a rollcage sitting on bare metal. It wasn't what you'd call quiet, however, with readings of 99 dBA at 70 mph and 100 dBA at 90. This is a little louder than the Fiat Abarth rally car we tested this past May (96 and 97 dBA at the same two speeds) and certainly a contrast from the stock car's 76 and 82 dBA, respectively.

The car has a full interior, although door panels are lightened, seats are special wraparound rally types and instrumentation is rally-functional with handy circuit breakers and the necessary navigation equipment. Its exterior has two removable fiberglass panels, the hood and trunk lid, but the rest is stock steel. There are Plexiglas rear and door windows, the latter showing signs of tree-branch encounters, well worn mud flaps at the rear and numerous little indications of stone impingements all around the bodywork.

By contrast, Tullius' car is sleek and immaculate, befitting its particular competitive environment. The bodywork modifications, Bob notes, were dictated by suspension, wheelbase and track. The team worked to keep the car as narrow as possible for reduced air resistance and maximum top speed. They also did extensive testing at Lockheed's Marietta, Georgia wind tunnel ("an entire day at $600/hour," Bob recalls, "but the learning experience at a place like that is incredible.") Several different angles of attack were tried through variations in ride height and rake, and at one point an airflow deflector was fitted to the rear of the roof. Ultimately, the best tradeoff of downforce and drag was obtained with the front air dam and rear spoiler shown in the photos.

And the car goes every bit as quickly as it looks. The team has a middle-range 3.90:1 rear end installed during our day of Riverside testing, and Bob roared through the acceleration runs with really impressive numbers: 0-60 mph in only 4.3 sec and quarter-mile figures of 12.7 sec at 115.5 mph. Braking distances from 60 and 80 mph were 107 and 218 ft, respectively. And when we set up our slalom pylons, Bob zipped around them at an amazing 67.7 mph with as little drama as you please.

Editor John Dinkel had the honor of entangling himself amid the TR8's rollcage for the sound measurements, runs that recorded a painful 125 dBA maximum in 1st gear, with 104 and 115 dBA, respectively, at constant speeds of 70 and 90 mph. Thus, Tullius' IMSA TR8 is just a tad less noisy than the loudest car we've measured, the IMSA RX-7 that left us all temporarily deaf with readings of 120 and 125 dBA, respectively at 70 and 90 mph.

After all this ear-splitting activity, Tullius and Buffum relaxed by taking turns with a stock TR8 around Riverside. To put their lap times of around 1 minute 55 seconds in perspective, we can note that Bob had earlier posted a string of 1:29s with his GTO racer. John's rally car, with its 4.55:1 rear end, was evidently unsuited to Riverside's high-speed sections, so he contented himself with a few laps in Tulluis' car instead. Their comments follow:

Buffum on the GTO racer: "Wow. It's got gobs of power compared to my rally car. And, of course, its suspension is a lot stiffer, to the point that it really doesn't roll when you get sideways. Sort of like driving a go kart, although the TR8 traits are still there."

Buffum on the stock TR8: "It handles similarly to all TRs. There's some initial understeer that you can balance by tiping on and off the throttle. Play the throttle and steering wheel together, and it'll go where you want. In general, though, the stock car has more initial understeer than mine, and mine had more than Bob's."

Its power? "It depends on what you just got out of," John says, "Remember, I just drove Bob's car. Get out of an economy sedan, though, and it's a different story."

Tullius on his GTO racer: "More than any other race I've driven, this one has balance and agility that re close to perfect. The Jaguar had a lot more power, and you'd go along at 4000 rpm in 2nd, stand on the throttle, and it would light the rear tires. The TR8 is so nicely balanced, you come along at 3500-4000, punch it, and it simply moves out. Brian Fuerstenau and Lanky Foushee set it up this way, and its cornering, stopping ability and acceleration are all designed to work in concert. For instance, back in 1977 at Watkins Glen, we went around in 2:06.5 or so with the Jaguar. Now assume we would have gained 0.5 sec over the winter – if you don't, you're sitting around doing nothing – so figure a 2:06 flat for the Jaguar in 1978. The TR8 came out of the box that year, and did a 2:04.9. This is what I mean by balance and agility.

Tullius on the stock TR8: "It has a lot of punch at the low end, but understandably it fades pretty quickly above 5000 rpm. As for handling, it's as neat as a pin through the fast corners and switchbacks, but when things get tighter it wants to understeer, and you have to feather the throttle to neutralize it a bit. I like the steering better than my race car's because it's power-assisted. As you know, the Jaguar had power assist, and I'm completely comfortable with it at racing speeds."

What about the softness of the stock car, compared to his racer? "It doesn't bother you, because you compensate for it. Besides, I've never really been an advocate of what's called classic sports car handling. I enjoy driving, but I like being comfortable at the same time. I prefer a car that has a compromise, if you will, of ride and handling."

As we noted at the beginning, different horses for different courses. But each one a fascinating experience, whether on the road, track or special stage.

Road & Track, November 1980

Specifications Comparison

Production, Rally & Racing Triumph TR8s

	Production	Rally	Racing
List price	$12,325	$28,000	$85,000
General:			
Weight, lb	2655 (curb)	2390 (curb)	2560 (race)
Weight distribution (with driver), front/rear. %	57/43	53/47	44/56
Track, front/rear, in.	55.5/55.3	55.5/56.8	58.0/61.0
Width	66.2	66.2	67.0
Height	49.5	53.5	48.0
Ground clearance	3.5	7.5	3.0
Usable trunk space, cu ft	9.5	nil	nil
Fuel capacity, U.S. gal.	16.8	15.0	31.8
Engine:			
Bore x stroke, mm	88.9 x 71.1	88.9 x 71.1	89.9 x 78.7
Displacement, cc	3528	3528	3989
Compresion ratio	8.1:1	10.5:1	12.5:1
Bhp @ rpm	137 @ 5000	280 @ 7000	360 @ 8000
Torque @ rpm	165 @ 3200	245 @ 5000	310 @ 5500
Carburetion/fuel injection	Lucas/Bosch L-Jetronic	One Holley (4V)	Lucas/Kinsler/Fuerstenau electronic
Fuel requirement	unleaded, 91-oct	premium, 98-oct	racing, 105-oct
Drivetrain:			
Gear ratios			
5th	0.83	deleted	deleted
4th	1.00	1.00	1.00
3rd	1.40	1.30	1.30
2nd	2.09	1.61	1.61
1st	3.32	2.09	2.33
Final drive ratio	3.08:1	4.55:1	3.90:1
Chassis:			
Brake system	9.8-in. discs front, 9.0 x 1.8 in. drums rear; vacuum assisted	10.3-in. vented discs front, 10.3-in. discs rear; vacuum assisted	12.0-in. vented discs front, 11.0-in. vented discs rear; vacuum assisted
Swept area, sq in	296	394	480
Wheels	cast alloy, 13 x 51/2J	Panasport alloy; 13 x 6 front, 13 x 7 rear	Jongbloed alloy; 15 x 10
Tires	Goodyear G800 + S 185/70HR-13	B.F.Goodrich T/A; 195/70R-13 front, P205/70R-13	Goodyear Blue Streak; 23.0 x 10.5-15 front, 25.0 x 11.0-15 rear
Front suspension	MacPherson struts, lower lateral arms, anti-roll bar, coil springs, tube shocks	MacPherson struts, lower lateral arms, anti-roll bar, dual-rate coil springs, Bilstein tube shocks	MacPherson struts, lower lateral arms, trailing links, coil springs, Koni tube shocks, anti-roll bar
Rear suspension	live axle on lower trailing, arms & upper angled arms, coil springs, tube shocks, anti-roll bar	live axle on upper & lower trailing arms, Panhard rod, coil springs, Bilstein tube shocks	live axle on upper & lower trailing arms, Watt linkage, coil springs, Koni tube shocks, adj. anti-roll bar
Instrumentation:			
Instruments	85-mph speedo; 7000-rpm tach, 99,999 odo, 999.9 trip odo, coolant temp, voltmeter, fuel level, clock	10,000-rpm tach, oil press., oil temp, coolant temp, voltmeter, fuel level, Terra Trip 1, Zetachron Pro II	9000-rpm tach, oil press., oil temp, coolant temp, ammeter, diff temp, gearbox temp, fuel press., brake press.
Warning lights	oil press., brake sys., ignition, low fuel, seatbelts, hazard, high beam, directionals	oil press., alternator, radiator fan, spare fuel pump, high beam, directionals	oil press., alternator, fuel press.
Accomodations:			
Seating capacity, persons	2	2	1
Seat width, in.	2 x 19.5	2 x 19.0	13.0
Head room	36.5	36.5	38.5
Seatback adjustable, deg	45	0	0
Calculated data:			
Lb/bhp (test weight)	20.3	8.9	7.4
Mph/1000 rpm (top gear)	26.1	14.3	18.0
Engine revs/mi (60 mph)	2300	4200	3330
Piston travel, ft/mi	1075	1960	1720
Brake swept area, sq in/ton	213	316	360

Performance Comparison
Production, Rally & Racing Triumph TR8s

	Production	Rally	Racing
Acceleration:			
Time to distance, sec:			
0-1320 ft (1/4 mi)	16.3	13.9	12.7
Speed at end of 1 / 4 mi, mph	85.5	103.5	115.5
Time to speed, sec:			
0-30 mph	2.9	2.2	2.1
0-60 mph	8.4	5.3	4.3
0-80 mph	14.1	8.9	6.5
0-100 mph	24.4	13.1	9.6
Fuel economy:			
Mpg	15.0	6.0 (rally stage)/ 12.0 (road)	3.0 (race)
Handling:			
Lateral acceleration, g	0.754	na	na
Speed thru 700 ft slalom, mph	60.5	63.9	67.7
Brakes:			
Minimum stopping distances, ft			
From 60 mph	179	117	107
From 80 mph	309	243	218
Pedal effort for 0.5g stop, lb	25	48	45
Fade, % increase in pedal effort, 6 stops from 60 mph @ 0.5g	17	nil	nil
Interior Noise:			
Idle in neutral, dBA	65	84	91
Maximum 1st gear	84	99	125
Constant 50 mph	70	96	na
70 mph	76	99	104
90 mph	82	100	115