

Technical Specifications

August 2006



Chassis

The monocoque chassis is true in spirit to the original but features superior strength and stiffness. The chassis is a tig-welded, stainless-steel structure consisting of 67 CNC punched and bent panels, welded together in a jig to ensure dimensional accuracy. It features an integral roll over bar and side impact protection bars. Every CAV GT chassis is manufactured to accept a bolt-in roll cage for racing purposes.

Front Suspension

The front suspension comprises of tig welded A-frame wishbones and adjustable anti-roll bar linkages. Specially designed suspension geometry ensures superb handling on road and track conditions, with the benefit of bump steer adjustment. The lower wishbones are braced. The front uprights are CNC machined from aircraft spec billet aluminium.

Rear Suspension

The rear suspension geometry consists of independent double trailing links with inverted A-frame wishbones, upper transverse links and an adjustable anti-roll bar linkage coupled to cast aluminium uprights.

The suspension design is true to the original without compromising on handling. The CAV GT features a more compact, lightweight handbrake caliper that helps to reduce unsprung mass. The CAV GT has been perfected for racing conditions and the rear suspension features 16 adjustable rose-joints.

Springs / Dampers

The suspension is set up on competition coil over type gas damper shocks with adjustable damping rate and variable spring height.

Brakes

Dual circuit, front rear split with servo assistance, tandem master cylinder and proportioning valve.

Standard: Forged aluminium 4 pot Wilwood calipers with 300 mm diameter rotors front and rear.

Independent lightweight handbrake calipers.

Race: Billet aluminium 6 pot Wilwood calipers with 300 mm diameter rotors at the front and forged aluminium 4 pot calipers at the rear. Independent lightweight handbrake calipers.

Note: Various rotor and brake pad configurations available on request.

Steering

Rack and Pinion. 4 turns from lock to lock overall ratio 14:1.

Wheels

Two original style, alloy pin drive rims with centre knock off hubs are available - BRM or Halibrand. They are available in the following sizes:

Rims	Type	Front/Rear	Size	Recommended Tire
15"	BRM	Front	7.5"	215 / 60
		Rear	9.5"	295 / 50
15"	Halibrand	Front	8.0"	215 / 60
		Rear	10"	295 / 50
17"	Halibrand	Front	8.5"	225 / 45
		Rear	10.5"	305 / 40

Note: Tyre sizes dependant on country

Fuel Tanks

There are two 9.5 Gallon FIA approved rubber, foam filled fuel cells mounted in the sills. Original style, large funnel filler caps with breather, total capacity 19 US gallons. Individual electric pumps and filters with dash change over switch.

Cooling

High efficiency, four-core front mounted aluminium radiator with twin auxiliary, thermostatically-controlled electric fans with manual override.

Body

The body of the CAV GT is made from vinyl ester resin which is stronger and more stable than polyester resins. Each body is individually set up on its own chassis. The bodies are hand shaped in a painstaking pre-spraying process.

The body is available in standard form or with the wide rear fender flares. Other body options include single or twin nostril, Gurney bubble and Mk II periscopes (snorkels). Front and rear windscreens are OE E spec shatterproof and Armour plate glass respectively. Side window and headlight covers are made from aircraft quality polycarbonate.

Style	Two door GT	Wheelbase	95"
Length	164.5"	Dry Weight	2,350 lbs
Width	70"		Incl. engine & gearbox
Height	40"	Ground Clearance	5"



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Electrical

The electrical circuits are fused and relayed, with a rear-mounted battery. The vehicle features a battery master isolator switch and push button starter. The CAV GT features Cibie headlamps, and all the other lights conform to the original designs.

Ignition

Electronic breakerless ignitions fitted as standard.

Interior

The CAV GT is designed for maximum comfort. The interior, including seats, padded dashboard, steering wheel, centre consol, roof lining and door linings are all covered in leather.

The ergonomically sound leather-clad adjustable seats feature original style brass grommets. Sound damping is provided by insulating foam and top grade carpeting. Additional comforts include air conditioning, increased head and legroom to accommodate anyone up to 6'4" and a fully adjustable racing style pedal box. Original style Smiths gauges complete with chrome bezel and Lucas switch gear recreate the experience of the 1960s design.

Exhaust

The CAV GT exhaust models the original design. It is a stainless steel 'Bundle of Snakes' eight branch header system with two collectors, muffler and stainless steel heat shield.

Engine Options

The CAV GT is designed to accept a Ford engine V8 small block 289/302 or 351 cid with induction Holley 4 barrel, 4 x 48IDF Webers or fuel injection. Recommended power unit is a 347 stroker with approximately 400bhp SAE.

Clutch

A street racing unit would use a "Standard Woven Clutchplate" as this gives a smooth engagement. For higher torque applications, as in racing, a copper clutch is used. They range in configuration from 4 button to 6 button plates. The 4 button would tend towards a smoother action while the 6 button would have a higher torque capacity with a much sharper action. Whatever the configuration they are supplied with cushioned centres. Diaphragm type pressure plates are used with upgraded heavy-duty diaphragms.

Driveshafts

Race specification solid driveshafts. High horsepower driveshaft set-up available as an option.

Transaxle Options

There are two transaxle options: The RBT (ZF) original style transaxle or the CAV GT Audi 6 Speed. The RBT transaxle is recommended for track cars or cars with engine powers exceeding 450 hp.

RBT 5 Speed		Speed in gears at 6500rpm	
Ratios	1st	2.58	52 mph
	2nd	1.61	83 mph
	3rd	1.14	118 mph
	4th	0.95	140 mph
	5th	0.80	166 mph
	Final Drive	3.70	

CAV GT Audi 6 Speed		Speed in gears at 6500rpm	
Ratios	1st	3.50	40 mph
	2nd	1.888	70 mph
	3rd	1.230	105 mph
	4th	0.933	145 mph
	5th	.0729	172 mph
	6th	0.600	-
	Final Drive	3.875	

Performance

Performance figures are approximate and depend on transaxle ratios and engine power.

0 - 30mph	2.2 Seconds	0 - 60 mph	4.5 Seconds
0 - 40mph	3.2 Seconds	0 - 100 mph	9.5 Seconds
0 - 50mph	4.0 Seconds		

Approximate with 400hp and RBT transmission option using 7000rpm

Colours

Standard colours are as follows: Le Mans Blue, Sunburst Yellow, F1 Red, Gaurdsman Blue, Silver Poly, Diamond Black, Titanium Silver and Wimbeldon White. Custom colours available on special request.

Striping options: Twin 6" x 1" gap, twin 4.5" x 1", single 12", pin striping available as well as side stripes.

Other design options: Race number Gumballs on doors, nostril and rear clip.

Options

A race version of the CAV GT is available. Finished to the specification of the customer but would include roll cage, upgraded brakes and race spec. 4 or 5 point racing harnesses.



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