The Girl that was a Car, *the TVR Tina*

by Jeff S. Savage *Photos by John Binford*

When we last left TVR..., well in the first issue of this magazine, "Spring 1992, Vol. 1, No. 1" the TVR Trident was covered. That car was a coachbuilt prototype for TVR. TVR had commissioned Trevor Fiore to design a new car for the company, and the Italian coachbuilder Fissore to build the car. The sad tale of the Trident concerned a beautiful car that never really would reach serious production. The Trident became the center of a storm between the Lilleys (Arthur and Martin) who had bought TVR, and William J. Last, a TVR dealer who purchased the moulds for the Trident.

Last had been TVR's biggest dealer in England. He personally financed a new Trident, a convertible based on an Austin-Healey frame. He had naturally felt that when TVR went into liquidation in August of 1965 the rights to the Trident were up for sale, and having financed a chunk of the cars, and with Fissore owed quite a bit of money for the prototypes, he bought the moulds and the rights to the car. The Lilleys felt otherwise. Having bought TVR in November of 1965 they had counted on the Trident to be their principal model. Last picked up the third prototype in Italy from Fissore and bought the design rights from Fiore. Both sides soon became involved with the argument as to who owned the Trident, and the Lilleys considered legal action. They must have rethought their position legally however, and decided to drop what might be a losing lawsuit.

To make a long story short, the Trident eventually emerged as a separate make in its own right, and never with the requisite frame of the TVR, for which it was designed. Last was dropped from the TVR dealership list, hurting TVR more than Last. To this day TVR enthusiasts must wonder what would have been had the two sides swallowed their egos, and built the Trident as a TVR. Regardless, the spell of the Trident would be incredibly strong on TVR. Twice the company would eventually get back to the basic design of the Trident. In the late 1970's TVR would put into production what was in essence a Trident for the 1980's, the TVR Tasmin. However, in the 1960's TVR actually considered another Trident like car. Borrowing a page from Last, it would be designed in both coupé and convertible forms, it would feature a bizarre (for TVR) layout, a metal body (also bizarre for TVR), it would have changed the entire nature of the small British specialist manufacturer, and it would carry the name of a girl. The TVR Tina remains one of the most strange chapters in the TVR history book.

The Tina did not just occur overnight, yet the speed at which the basic design took shape is daunting. The Lilleys bought TVR in November of 1965. This due to the fact that shortly before the collapse of the company in August of 1965, Arthur Lilley bought £1,000 of stock in the small company from a friend who needed the money for his impending marriage. He was unwilling to just lose the money. Martin Lilley (the son) was a TVR dealer and took over the reigns of power. Arthur Lilley however, was to provide much of the financing and maturity to the company. In one year (from November 1965 to November 1966) the Tina would go from a vague idea to a show car at the Turin Motor Show. Martin Lilley and Trevor Fiore discussed the idea of a new TVR shortly after the Lilley takeover of TVR.

The first idea was to take the Austin-Morris 1800 sedan platform, turn its front-drive, transverse powertrain around and produce a rear-engined, rear-drive TVR sports coupé. However Fiore, backed by the factory floor-manager David Hives, was convinced that if TVR was going to go down this route, a small rear-engined car would be a better bet. The 1800 was powerful enough to put TVR in direct competition with several popular choices, such as the MG B, yet it would not provide anything of an ad-

TVR Tina prototype, number 1, Joe Hart owner. Author photo.

vantage. The design idea was soon narrowed down to the Hillman Imp as the obvious starting place.

This boxy little car was the Rootes Group's (Hillman, Humber, Singer, and Sunbeam) answer to the Austin-Morris Mini. It featured an 875cc (53.4 cubic inch) 4-cylinder engine mounted at the rear, and driving the rear wheels. The engine was in fact inclined 45°. It should be noted that the engine (and to a lesser degree, the Imp itself) owed quite a bit to the talents of Michael Parkes, a former development engineer for Ferrari, and race-car driver among other notable achievements. The engine itself, an outgrowth of the renown Coventry Climax, was not a bad little piece of engineering. It was an overhead-camshaft unit, of light-alloy, with dry liners and 2 valves per cylinder. By the standards of the early 1960's it was rather advanced. It could easily be modified for racing (due to its design heritage), and would go on to win numerous rallying and racing titles in various small car races situated in Europe, particularly in Britain. Even the standard Hillman unit usually came with a 10:1 compression ratio and 37 bhp., the Imp Sport, Sunbeam and racing versions often featured much more power on the order of 55 bhp. The little unit could be revved up to its 5,600 rpm redline with little trouble, and of course the competition versions often were modified to rev beyond this. Compared to this unit, the BMC A-series (rugged and reliable to be sure), was rather agricultural by comparison.

If the engine had any flaws, they were just two. It was only a 3-main bearing unit, where a 5-main bearing would have been both smoother and more reliable in the long run; though Imp engines are actually pretty durable. The other was the fact this nice little unit was actually pretty much at limit size-wise. This meant that bigger bore versions that could have meant much to both the Sunbeam and Singer nameplates within the Rootes empire, and other buyers of the engine on the outside, could not be produced. Stretching the engine would be done with only extreme difficulty and debatable results, hence its never being done for the production Hillmans.

Still, it was a good unit on which to base a small sports car. Several British specialty makers of the day chose this very unit for their sports cars, the most memorable now probably being the Ginetta G-15, although that company's model did not arrive until after the TVR Tina was shown. Having chosen the engine/drivetrain layout, two Hillman Imp Sports (reportedly Sunbeam Imp Sports variants) were purchased and their chassis shipped to Italy for Fissore to body. According to Martin Lilley himself he declared the chassis "camping gear" at the boarder to the customs officials; the chassis were covered under tarpaulins. It would create a bit of a problem when it came time to ship them out of the country however!

The time period was early 1966 and during the summer of that year, Martin Lilley spent much time with Eraldo Fissore himself in Italy. For two months during the summer Martin was in Italy almost the entire time, rather than at the factory! The body that Fissore built was drawn by Trevor Fiore. Fiore had of course designed the TVR Trident, and the Elva-BMW GT160 project between the two TVR projects. This second TVR project took on a decidedly Trident look right from the start. Not surprising as Martin was obviously intent on producing his own version of the Trident design regardless of what Last was planning with the original design. The decision to build two cars was agreed upon, but emphasis was given to the first of the two, a convertible, to be ready for the Turin Show later that year. Fissore completed a handsome little convertible with simple lines and a very simple front-end, a "droop-snoot" as the British dub such designs. The British GM division, Vaux-

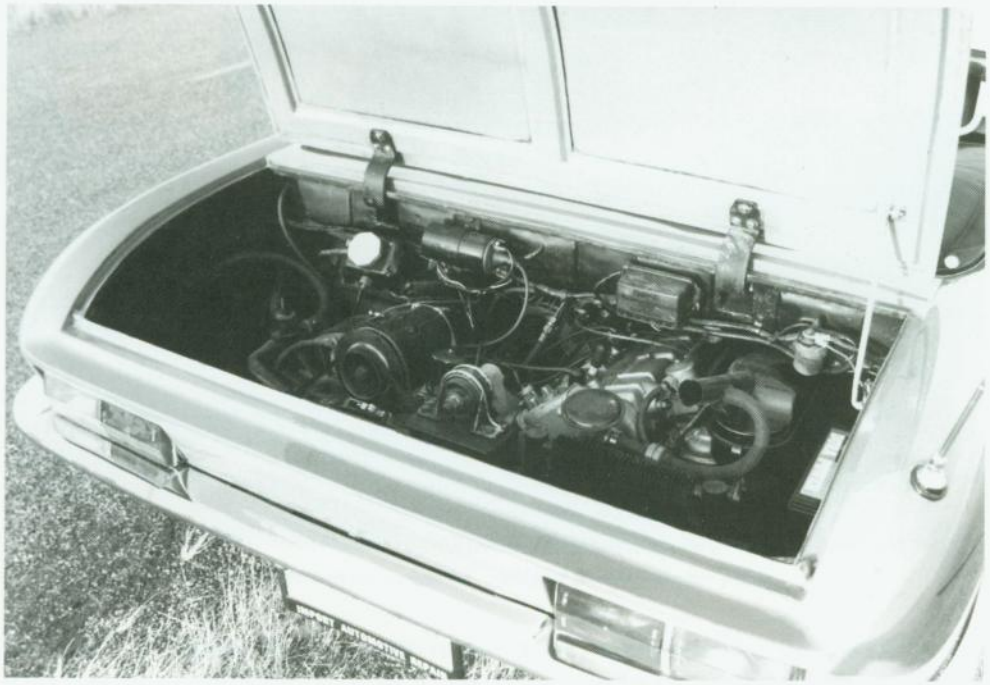
hall, too is known for some "droop-snoot" cars in the 1970's. The "droop-snoot" meant the lack of a grille up front, on a sloping front end. The front-end of the hood sloped gently down to the bumper, with two square headlamps located on the sides behind perspex fairings that kept the nose-line intact. In the center of the nose, where the grille would be on a conventional car, was the tiny Tina badge.

This last item has a bit of humor connected with it. Fissore, Lilley, and company bought a Ford (U.K.) Cortina badge and cut the "Cor" part off to form "Tina". So, the TVR Tina, the strangest car in TVR's history, was born. Under the Lilleys, particularly bachelor Martin, the female of the species would receive rather inordinate attention in both names and advertising. In fact under the latter category, Martin would resort to using topless (and sometimes fully nude) models at car shows to bring attention to the TVR name. This he hit upon at the 1968 London Motor Show where he noted the opposition were utilizing bikini clad females to entice male customers. At the TVR stand, a car that appealed almost exclusively to young males, was a nice, slim model in a rather odd skirt made of human hair! By the time the 1970 London Motor Show arrived at Earls Court, Martin had a surprise in store, a topless model! From that moment a TVR tradition was born, and Martin would often use it to its fullest on 'Press day' of the annual event where the Press would spend much of their time at the TVR stand to the detriment of the competition!

As for the name of the car, the name was chosen after that of Gerry Marshall's oldest daughter, Tina. Gerry Marshall had come into the TVR sphere as a racer of the marque. Having been bitten by the "TVR bug", Marshall was known for his racing enthusiasm for the car, like Martin Lilley himself and Tommy Entwistle. This all taking place in 1965, prior to Martin and Arthur Lilley's purchase of the company. By the time the "Tina" project rolled around, Marshall was firmly established as TVR's most flamboyant racer and fan, not a mean accomplishment considering the others in the running. The name Tina was chosen for his daughter, and perhaps a bit of luck, which TVR could certainly use at the time.

Top up, top down. Fun either way.

1966 brought some racing victories and some orders, but the company ran into the red. Although both Martin and Arthur Lilley expected this, they were still concerned over it. Meanwhile, the front-end of the Tina had come under criticism from almost all corners, and it was decided after the Turin show in November, to redesign the front-end of the car and the coupé version that was coming along. During 1967 the company sales actually began to taper off and Martin Lilley began to make some tough choices. He had built up a good reputa-



The power behind the throne, the little Imp engine.

tion with potential buyers, and especially the Press, but had failed to get the cars actually sold in great numbers. Sales in the U.S.A. were actually healthier thanks to the incredible efforts of Gerry Sagerman, who would remain the distributor for the company here until the end of the 1970's. As for the Tinas, Martin knew they had to be ready for the October London Motor show.

In some ways Lilley was planning more on the two cars' psychological appeal to the public as indicative of a company on the move rather than actually putting them into production. The two arrived for the show at Earls Court in October 1967 along with a bare running chassis, a TVR Tuscan V-8, and the first TVR Vixen (an S1) for company. It would be the latter car, the least modified in both concept and actuality from the TVR Granturas, that would actually end up being by far the most significant to TVR's future.

The Tinas now featured a blunt front-end, with the coupé having a single pair of rectangular headlamps, and the convertible having two smaller pair of circular units. The coupé looked very similar to the Trident at first glance, except being a bit longer. This due to the fact that the cars were intended as 2+2's, not 2-seaters. Both were metal bodied of course and created an immediate stir, TVR this time would do it based upon *car* models! The convertible was an attractive car with room for four and a sharp looking profile. A bit of the "wedge" found in the TR7 and so many cars today is apparent in the side profile.

Both cars were built out of steel of course, by Fissore to Fiore's design. They were totally alien to the other TVRs on the stand and in existence. The Tinas had not only a steel body when the TVRs throughout history had only had fiberglass bodies, they also had those diminutive Hillman Imp 4-cylinder engines at the rear, to boot! Of course production Tinas, like the Trident project before them, were to have fiberglass bodies mounted/bonded to steel frames. It seems the Lilleys were hoping to actually manufacture the Tina in large numbers, far larger in fact than TVR has achieved even today. When they bought TVR in November of 1965 they had originally planned to use the Trident as the basis of a TVR come-back, eventually putting it into serious production on the order of several hundred units a year. When the Trident fell through their hands, they apparently still believed that a "modern" TVR was what was needed and proceeded with the Tina project.

The showing of the two Tinas at the London Motor Show in October of 1967 resulted in numerous inquiries to TVR about availability of the cars. They were to be sold for only £998, including all taxes! This from a company that currently sold cars from £998 to £1,400 on average for the 4-cylinder models (kit form to assembled) and well over £2,300 for a road ready V-6 or V-8 model (Tuscan). The idea that TVR could actually get the Tina into production for under £1,000 (about $3,000 then), was totally dependent on volume production, something that TVR had no experience with. Naturally (in Britain) the idea of a good looking coupé or convertible with a top speed of 100 m.p.h. and fuel economy in the 40 m.p.g. range for about £1,000 was incredibly enticing. It is no wonder that some potential customers were offering to leave checks for the prototypes alone; although they had cost more than £15,000 by this time.

Since TVR could not possibly get the cars into production with its facilities, Martin Lilley felt that the obvious thing to do was to come to an agreement

with another manufacturer and have the cars built under a licensing agreement. The three main companies approached apparently were Rootes, Jensen, and Aston-Martin. The idea was not totally alien to TVR as Grantura Plastics (separate from Grantura Engineering - previous owner/builder of the TVR, which had failed) was still building the fiberglass bodies for the TVR chassis. This arrangement was not very financially efficient for TVR and was one of the main reasons why the company showed an approximate £14,000 loss in 1967. The three companies approached were interesting in themselves.

Rootes; builders of Hillman, Humber, Singer, and Sunbeam cars, was the builder of the Hillman Imp that the Tina was based around and certainly had the capability of putting such a car into production. Rootes was supposedly quite interested in the cars at the time. However, Chrysler was at this time increasing its stake in Rootes and about to take-over the company. This is often cited as the primary reason that negotiations were dragging and apparently would never "go anywhere". More likely, Rootes wanted the cars for themselves and probably had some serious questions about building a sports car for less money than its Sunbeam Alpine, especially a more attractive one! There was also the problem of the Imp drivetrain and Tina body. The Tinas were built out of steel and some alloy, the proposed production models were to be fabricated out of fiberglass and bonded to a steel Imp subframe. This was not a practical proposition, in fact some of Rootes engineers were apparently questioning this strategy. The answer, which Martin Lilley had already contemplated, was to build the car out of metal.

This presented a whole new set of problems however. The 55 bhp. Imp Sport engine was fine for a coupé and convertible which weighed around 1,500 pounds or less, but in a car which might end up weighing closer to 1,800 pounds, the engine became a more debatable choice. The amount of money needed to tool up for metal production bodies would also be dramatically higher than for simple fiberglass moulds. Further, metal stampings would have to be handled by trained workers with experience. They would not present themselves very suitable for adjustment or repairs on the assembly line.

Still, Martin was gung-ho as long as he could find a company who would be ready to put up some of the development money for the body production. Having hit something of an impasse at Rootes, he talked to Jensen. This made much sense as Jensen was primarily a body builder rather than a car manufac-

turer in its own right. Only a few hundred of the fabulous Jensen Interceptor/FF models were being produced a year in the late 1960's. By comparison the company was turning out thousands of Volvo P1800 bodies (although having lost that contract by now, in late 1964), Austin-Healey 3000's, and Sunbeam Tigers. The latter being of particular interest to TVR and Rootes, the two major players in the Tina saga at this point.

Jensen however, seemed dubious as to the possibility of the Tina to sell in numbers high enough to be as profitable as needed. In fact Jensen obviously felt that Americans would not go for the car in large numbers (probably true), and that the U.S. would have to be the Tina's major market if it was to be successful as a volume item. This meant that the car might return to the format of a semi-mass-production model. That in turn made the whole idea rather silly; better to build the car in small numbers at Hoo Hill (TVR's factory at the time) then in somewhat better numbers at West Bromwich (Jensen's factory).

What reaction the Lilley proposal received at Newport Pagnell (Aston-Martin & Lagonda) is completely unknown to this author, but obviously there must have been a feeling that Aston-Martin was not willing to chance its potential failure on an untried product. To be fair to Aston Martin and the David Brown Group, Aston had its own financial problems at the time and could hardly be expected to ante up the kind of money needed to get the cute little Tina into serious production. This brought Martin full circle back to Rootes. If Rootes would be willing to provide some of the funding in addition to the drivetrain, chances are that Jensen would have gladly put the car into production on a contract basis.

This however was not to be. Rootes had too many troubles at the time and would soon be in the hands of Chrysler who would certainly not be running the business with the idea of funding someone else's competing car, even if it did use a goodly number of Rootes mechanicals. This left Martin with a very serious decision on his hands. The Tina had consumed at least £15,000 of his and especially his father's money by now, and Arthur Lilley was now ill somewhat, further complicating things. His father (Arthur) had decided to sell his business to provide funding for TVR; a courageous decision on the part of Lilley senior. Martin made what may have been the pivotal decision in TVR's history, he decided to abandon the Tina and bid *adieu* to the girl and return his sole attention the old gal, the TVR Grantura derived Tuscan and Vixen series.

It was a tough decision for Martin. For the better part of a year he and his father had based their strategy on a new TVR model to be built in large enough numbers to bring back their original investment. Not that they had allowed the older TVR design to collect dust. Shortly after take-over in late 1965, they had redesigned the Grantura MK III as the 1800S, giving some very good detail improvements. The 1800S and Vixen received even better changes in 1967. The trim and finish was upgraded considerably and for the first time TVRs began to look as good inside as they drove. The longer wheelbase was adopted during these years so that ingress/egress could be acceptable; this latter issue is no moot point as the author, being an owner of the older Grantura MK III, can attest to!

For 1968 Martin introduced the Vixen S1 complete with a Ford (U.K.) Crossflow 1,599cc 4-cylinder with 88 bhp. at its disposal. With the Ford engine in place of the MG B unit, the car was a bit lighter and almost as powerful. The Vixen was the car that would turn TVR's fortunes around. 164 Vixens were built and sold in 1968, followed by 209 in 1969, and well over 200 in 1970. This gradual increase in production, along with the smaller but steady V-6/V-8 pro-


IMPORT AUTOMOTIVE REPAIR

Simple and elegant interior. Well trimmed for a sports car of the era.

duction, gave TVR the financial base needed for survival. Martin would turn the company around by nothing more than the hard, but important, task of just improving the product already on the market. TVR has never looked back, and the Lilleys would probably not really regret the decision to drop the pretty Tina; though they would bring back the 'Trident style' from time to time in the shape of the SM (Zante), and the Tasmin.

The two Tinas would sit at the factory for some time until eventually being sold off. The convertible was apparently sold to an enthusiast prior to a 1973 advertisement for the car that appeared in the prestigious British magazine *Classic Car* (*Classic Cars* today) that year. The current owner bought the car around late 1976 and has kept it original, it currently has only about 21,000 miles on it! The coupé was at the factory until at least the early 1980's, but has since been sold off and its current whereabouts are unknown. They remain an enticing proposition even after the passage of 25 years!

The Tina at speed is an interesting car. The little 4-cylinder engine works quite well actually. Although the driver is aware that the engine is revving quite a bit in order to maintain the speed called upon it, the engine is fairly smooth and will rev to its redline with little fuss or complaint. You can hear the engine back there turning away but it never becomes an irritant the way a Volkswagen Beetle, or Porsche can be. This is truly amazing for such a small engine and shows the engineering know-how of Michael Parkes and the Rootes development team. Despite the heavy weight of the steel body, which the Tina was not intended to have in production, the car accelerates willingly to 60 m.p.h. The stick shift can be a bit sticky at times; this is typical of the Imp from what sources more familiar with that car report. The stick shift itself is short and you have the

undeniable feeling of when the knob has been engaged in the gear. It is almost as if the gearbox reaches out and grabs the little shifter at the end of the short travel from gear to gear. It is slightly vague between the gears however.

The steering, as expected with the bulk of its weight at the rear, is light and anyone who can not handle this car is really not fit to drive. Power steering, needless to say, would never have been necessary. The brakes were not quite sorted out the day the author drove the car and are not necessarily typical of the car. Nevertheless, they provide adequate stopping power and when operating correctly would probably be more than sufficient. The steering wheel is well suited to this driver's hands, and the bulk of the instrumentation is well laid out and legible. Some of it does get a bit obscured by the steering wheel however.

The interior of the car is well laid out and trimmed to a high standard, way above what TVR could probably have afforded if the car had been put into production. It is a good quality vinyl that resembles leather on the seats. The trim around the instrument panel, center console, and door panels is nicely done, if not luxurious. Of course with the top down there is plenty of room. Leg room up front is acceptable, leg room in the rear is at something of a premium, especially if the driver is tall. The rear seats are well trimmed but really intended for children rather than adults. That however, is nothing negative in a sports car. After all, if carrying adults in the rear is the owner's ambition, he or she can purchase a sedan.

The trunk space is of course at the front, and actually decent for such a car. It would probably be considerably better if the car was front engined however. On the other hand, TVRs have never been known for their copious luggage capabilities anyway. The metal body is reasonably stiff, showing that Fiore and Fissore did their homework. In fact considering that this is a prototype

that was put together in less than a year for a car show, then reworked for another the next year, it is actually quite solid feeling. Better than the Trident prototype looked at in Issue 1-1, though in fairness the Trident prototype was constructed out of aluminum, not steel like the Tina.

Overall the Tina is a nice little sports car that handles well, steers very well, brakes well, rides very well (much better than just about any other model TVR), gets great gas mileage, and has perky, if a bit boxy, styling. It would have been a great buy in the 1960's. It is still a whole lot of fun and the owners must enjoy the car immeasurably. Still it probably would not have saved TVR. British history is filled with small specialist concerns who did well with a model then became ambitious and brought out radically improved models, or completely new and ambitious models, only to slide inexorably into the red. If Martin had decided to put the car into production, it might have sank TVR.

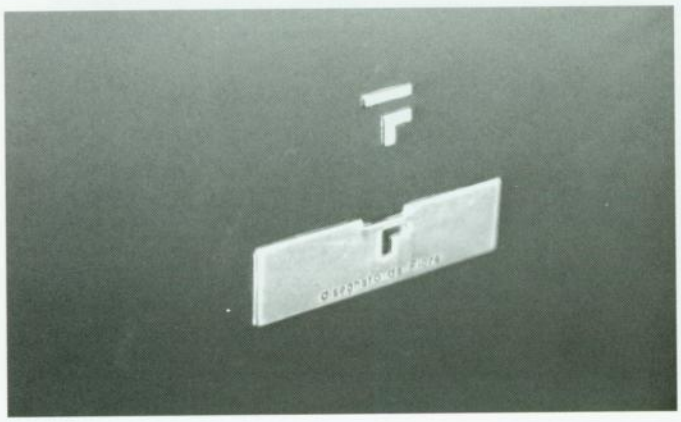
As for the players in the Tina saga, their fortunes became mixed. Eraldo Fissore wound up his business in the mid-1980's, then he re-entered the field working for his old friend Zagato as the chief designer until recently. Trevor Fiore (Trevor Frost) worked on variety of projects until becoming a major designer at Citroën. He is currently active in the field here in California. Jensen and Rootes both went their ways, eventually running into trouble. It is notable that Jensen not only lost the Sunbeam Tiger contract, but the Austin-Healey contract as well, and would spend much of its days in the 1970's trying to build a sports car of its own, the Jensen Healey, which unfortunately did not do well. Rootes of course, became Chrysler U.K., and today builds Peugeots as part of Peugeot-Citroën.

Gerry Marshall raced and promoted TVRs for awhile before going his own way, while the Lilleys (especially Martin) would eventually turn TVR into

The handsome Fissore badge and emblem that appeared on the cars coachbuilt by Fissore. The Trident's is similar but a bit different.

a financially stable company, with help from Gerry Sagerman in the U.S. Lilley would eventually bring out the Tasmin in 1979 that owed more than a little in its looks and attitude to the Trident, and somewhat to the Tina. Having built TVR up, the Lilleys sold TVR in the early 1980's to Peter Wheeler. Under Wheeler TVR would finally move away from the Trident.

The Tasmin was heavily refined, and eventually adopted a somewhat silly numeral system (280i, 350i, etc...) in place of the traditional nomenclature. However by the late 1980's TVR would be back to building the same basic design that they had started with thirty years earlier! The original pattern first laid down by TreVoR Wilkinson himself would form the mainstay of production throughout the years, and eventually lead to the current TVR Griffith et al. As of this date TVR remains one of the few automakers in the world prospering in a time of trouble. This due to a car that is a fiberglass body around a tubular steel semi-space frame, with a heavily modified Rover V-8 for power. Currently the company can not build its annual 800 (or so) units fast enough to meet demand for them coming from Europe (mainly) alone!



Trevor Fiore's own distinctive badge and emblem for cars designed by him. Note the interesting effect of the "F" cut out of the badge block and lifted above it. "Dessignato da Fiore" of course means 'Design of Fiore' or Designed by Fiore

The result of TVR's success these days is that the company plans to put its own engine into production in the near future. This after having been modifying Rover V-8's for some years now to good effect on their cars. This is actually rather amazing for a small specialist firm that began building kit cars in dozens per year for installation with almost any drivetrain the customer wanted. TVR's entering the field of producing their own engine will be the first time since the early 1970's and Lotus that a small car producing firm has managed to become an engine manufacturer on its own; with all due respect to semi-race car firms like Bugatti and McClaren. An amazing accomplishment.

One wonders if the company would have been as successful over the years if they had been smitten by the charm of a certain metal bodied lady with a little 4-cylinder engine in the tail, and actually had put her into production.

Usually we like to credit the owners of the cars in the pages of **AutoPhyle**. *However in this case the owners, a nice couple and collectors of some fine and rare machinery here in California, would prefer to remain anonymous. Their wish will be respected. They have one of the world's truly unique automobiles. Shall I say a real "vixen" of a car?*

Bits and Pieces...

Only two TVR Tinas were ever completed, and the design was never put into production. The first Tina, the convertible, was completed in 1966 and shown at the Turin Motor show of that year. The car the underwent major revisions to the front end, which was changed extensively from the first incarnation. The first several inches of the fenders and hood were altered to give a more upright and blunt end to the car. The convertible's trim and interior was also upgraded considerably at this time.

For the 1967 Earl's Court show (London Motor Show of 1967), the convertible was joined by the coupé. The original Hillman Imp wheels (actually Singer Chamois variants), were replaced by Sunbeam Imp Sport wheels, which had a more aggressive style. These were utilized on the coupé as well. The original tires were Pirelli Centuratos. Both cars now carried the TVR badge up front on their hoods and were far closer to being serious design studies - i.e.: a proposal for production. The convertible received its brilliant red paint job for this show as well, having been painted a much paler tone before, from the looks of the black & white photos. The original color is not known to this publication.

The Earl's Court Show was the last time the cars were seriously shown, as Martin Lilley turned down the proposed production. The cars remained at the factory for years before finally being sold. The current owner notes that the convertible's engine has wire 'O-rings' around all the cylinders and water passages, of about .015 to .020 inches. They cut into the head slightly and are an old way to increase power. Chances are that this was done by TVR themselves, and may mean that the engine actually puts out a bit more than the 55 bhp figure.

Specifications:

1967 TVR Tina

GENERAL:

Length:	152*	inches	Wheels:	12 x 4.5	inches
Wheelbase:	82.0	inches	Tires:	155HR-12	
Width:	62*	inches	Trunk:	N.A.	
Height:	43*	inches	Gas Tank:	7.1 US gallons	
Track (F):	49.7	inches	Clearance:	6.25	inches
Track (R):	48	inches	Turn Diam.:	N.A.	
Weight:	1,500*	pounds	Weight Dist.:	N.A.	

* Measurements taken from the car, approximate therefore

ENGINE: Hillman manufactured, light-alloy, water-cooled, 4-stroke, 4-cylinder slanted at 45° with a 3 main bearing crankshaft. Valves are overhead, 2 per cylinder, and operated via single overhead camshaft. Engine is placed longitudinally at the rear and drives the rear wheels. Bore and stroke of 2.68 x 2.38 inches = 53.4 cubic inches (68 x 60.4mm = 875cc). Compression ratio of 10:1 through 2 Zenith-Stromberg 2-barrel carburetors. Maximum output of 55 bhp@6,100 rpm. Maximum torque of 56 lb-ft@4,300 rpm. Lubricating system of 7.2 US pints of oil. Cooling system of 13.1 US pints of coolant. 12-volt battery.

Chassis: Body of hand-paneled steel wielded to stamped Imp floorplan. Front suspension is independent by U-shaped swinging semi-axles, coil springs, and shock absorbers. Rear suspension is independent by semi-trailing arms, coil springs and shock absorbers.

Steering: Type is rack & pinion, with 2.63 turns lock to lock.

Brakes: 4-wheel hydraulic, 4-wheel drums with a swept area of 151 square inches.

Transmission: 4-speed plus reverse manual with single dry plate clutch. Synchromesh on all forward gears with ratios of 3.417:1 (1st), 1.833:1 (2nd), 1.174:1 (3rd), 0.852:1 (4th), and 2.846:1 (rev.). Final drive is hypoid bevel with a drive ratio of 4.857:1.

PERFORMANCE: (figures are estimates based Imp Sport)

0-60 m.p.h.:	15 sec.s	1/4 mile:	20 sec.s
Top Speed:	100 m.p.h.	Fuel Consumption:	33 m.p.g.

Original Price: $26,000 **Current Value:** $35,000
Projection (2000AD): up 45% **Appreciation** (to date): up 34.6%