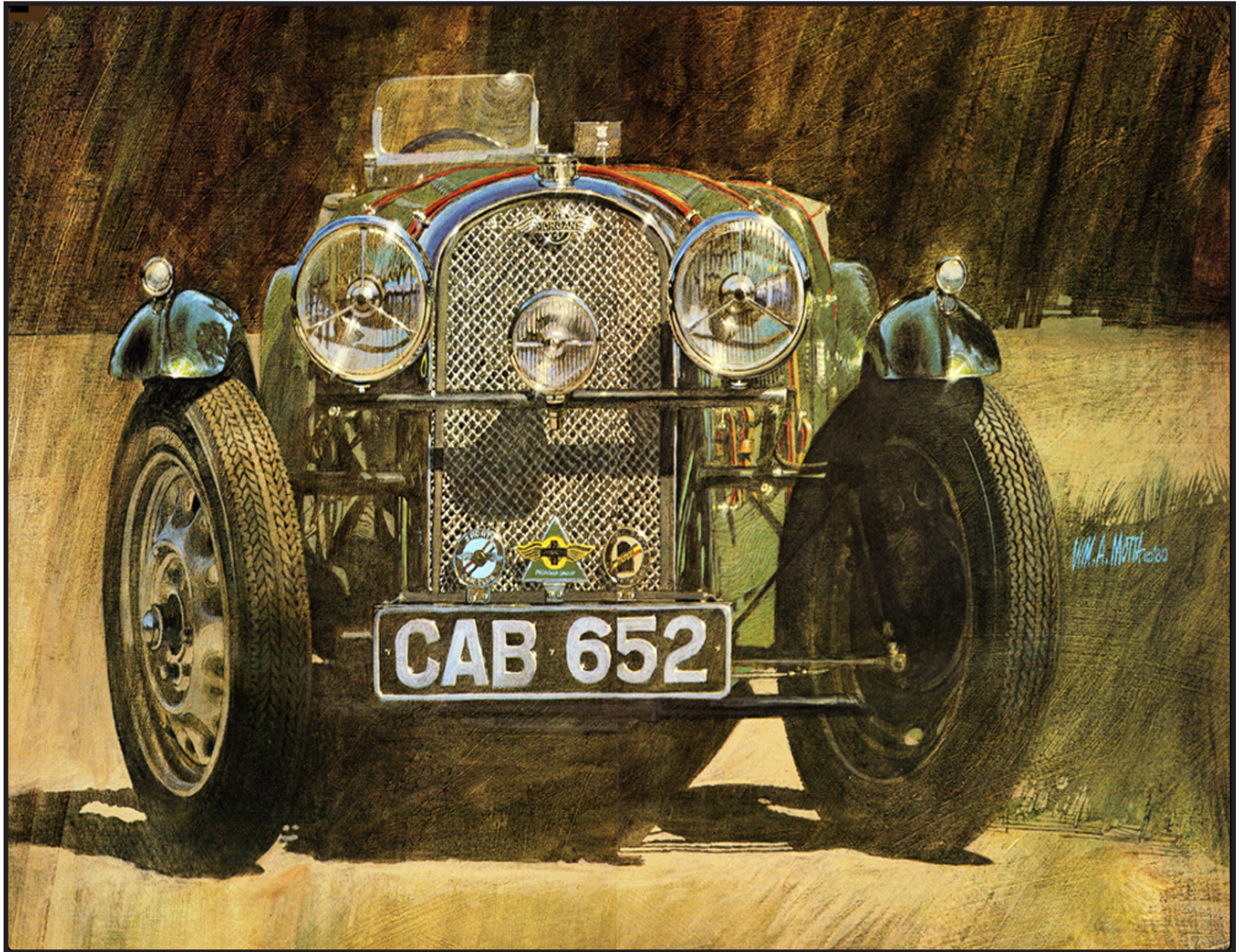


*A dedication to a  
special man and a car!*



**1938  
MORGAN 4/4 TT REPLICA**

*One of the rarest 4-wheelers from Malvern Link*

# 1938 MORGAN 4/4 TT REPLICA

*One of the rarest 4-wheelers from Malvern Link*

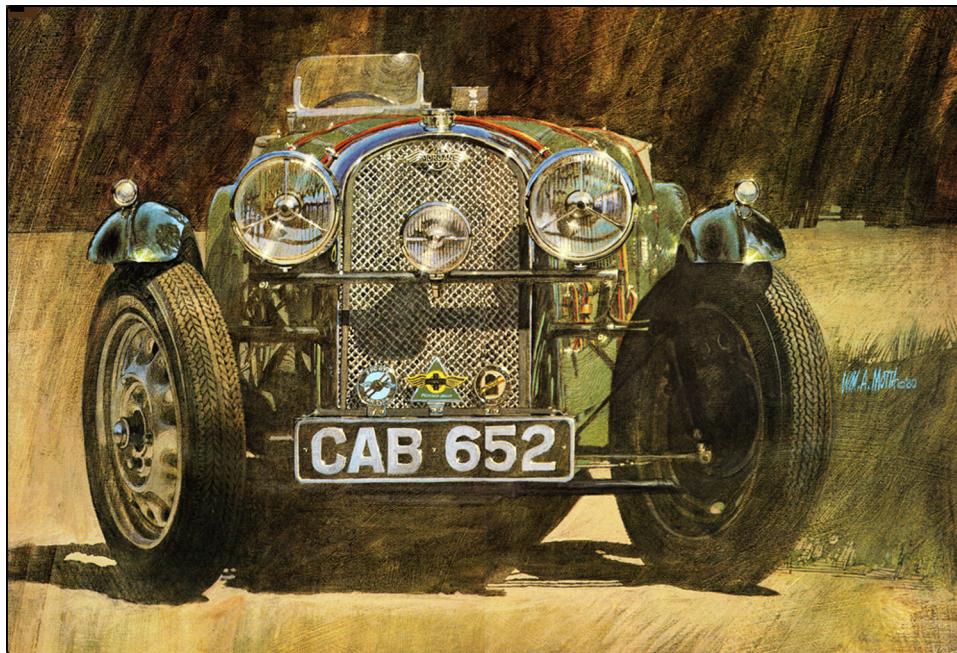
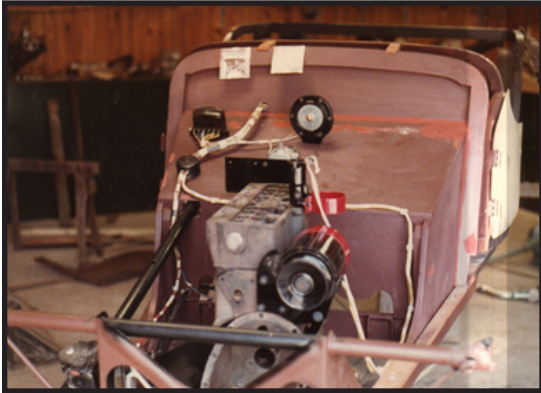
This small booklet is dedicated to a friend and very special customer. Without ever having met this gentleman my future could have turned out very different then it has. But on a fateful day in 1977 both our lives were to change for good. How much my future was to be wrapped up in this cute little Morgan is staggering and so this booklet is dedicated to Jack Artley and CAB652. Thank you so much Jack, you will be greatly missed.

A very grateful friend

*Robert Couch*



*How I became so intimately involved in the life of Jack Artley and a very special Morgan, and then a very special R&T article.*



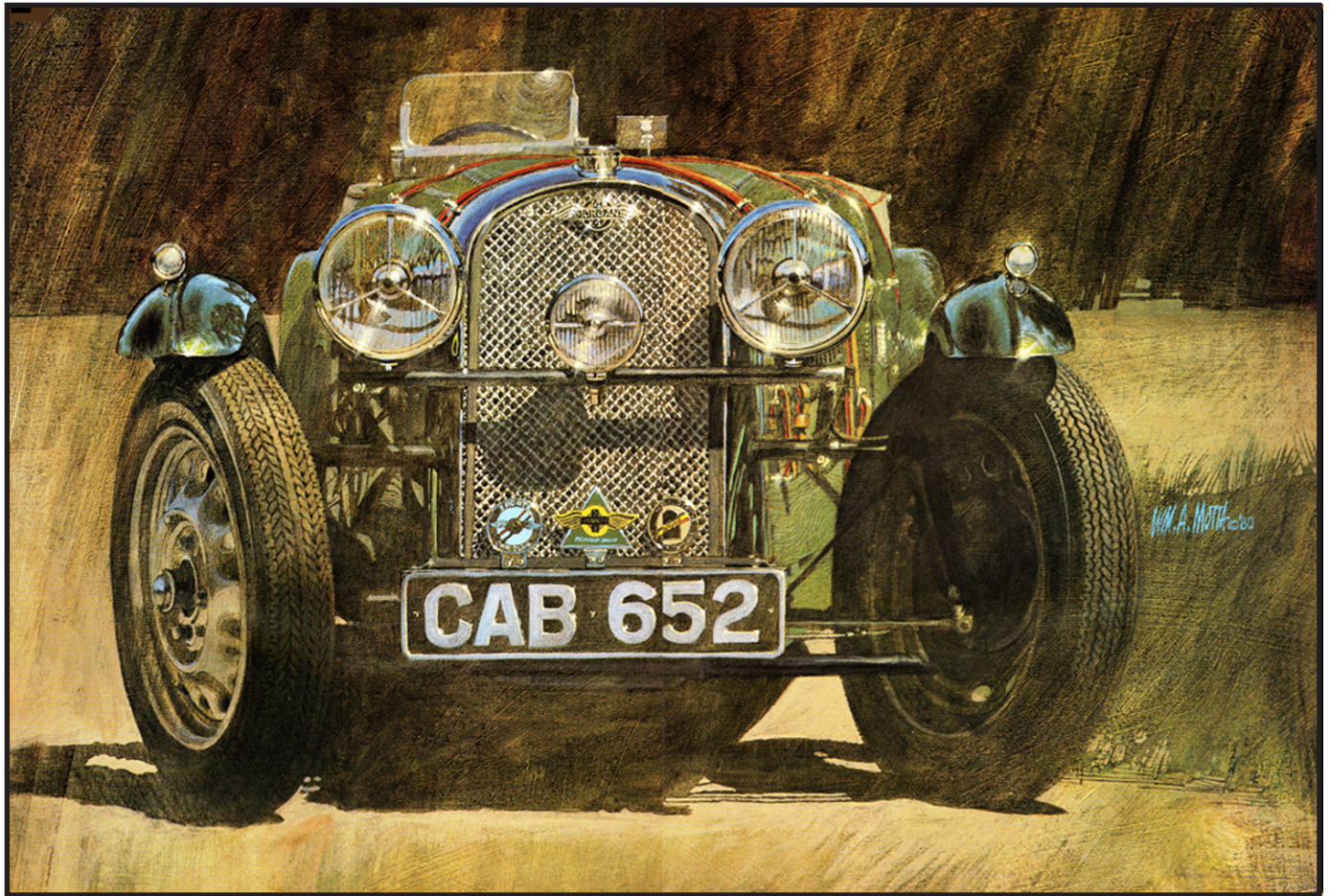
The year was summer 1977. I was doing some detail work on a Jag SS90 for a collector in New Jersey that a partner and I had been working for. One day a gentleman from New York City by the name of Jack Artley came in and was very impressed with the detailing work that I was doing. He asked me if I would be interested in restoring some vintage race cars that he was going to buy. I jumped on the offer before he finished his question. I was in need of a vacation and having lived in England the past 4 years back to England I went with suggestions from Jack to look for a vintage race car while there. At this point in my automotive career I had never done any real serious mechanical work on anything, nor had I ever “restored” a car. How little did I know how quickly I was to learn how to restore a car. In my first week in London, in one of the motor car magazines, there was this rare

Morgan factory race car for sale behind a pub. It was known as a Morgan “TT” car with plate number CAB652. I called Jack, gave him the information on the car, and into the libraries of New York City he went to research the car. He called me back the next day with question after question and each question was answered positively, proving that the car was indeed as advertised, a very rare Morgan factory race car. The car was purchased with the intent to restore it to its former glory. Payment was made, shipping arranged, and the car was on its way. I then returned to my folks home and Jack and I awaited the arrival of the car from England. I prepared the little garage at my dad’s house for a place to restore it. I then began to ponder what a restoration was and how in the world this young man from a small New England town was going to accomplish such a task. So into some of the best restoration shops in the East I went, with eyes, ears, and notebook wide open! The car arrived, I picked it up at the New Jersey docks and drove it to the shop. I especially remember the spirited ride along the Sawmill River Parkway, and the cold fall breeze in my face. How little did I know that my future was wrapped up in this little car. The racing history of this car is long and glorious and well documented. All the while I was restoring the car Jack was researching the full history of the car and he was having a ball, what a history it was! In the future, knowing the full history of this car would make all the difference for my career.

The restoration was finished in the spring of 1980. Because of the rarity of the Morgan, the car was invited to compete in the first Chinetti invitational concours at Lime Rock Race Track. At the time, there were lots of vintage race cars being professionally restored and vintage race cars were becoming a market unto their own. There was no real place at the time for these beautifully restored cars to be seen as a group and to compete, so it was decided by the Chinetti business to start a venue for these cars to be displayed and shown annually at Lime Rock race track. Chinetti’s was the Ferrari dealer in the Northeast. CAB652, as she is known, got to go for the first time in years before her peers and show her stuff before the most beautifully restored million dollar Ferrari’s, Porsche’s and others. Since it was the first restoration of mine I held out little hope for any placing in the competition. CAB652 sparkled like a jewel, and she became the center of attention. The million dollar Ferrari’s looked worried and so did some of the owners! Rene Dryfus, the very famous Grand Prix driver of past years was the head judge. The winner of the concours came down to two cars, CAB652 and a very famous factory Porsche race car. Mr. Dryfus spoke to the owner of the Porsche and asked him if he knew the racing history of the car, and as the story goes, the owner just laughed and said that the car was nothing more than an investment. Mr. Dryfus then came before Jack and me and asked us about our little Morgan and we both rattled off the full history of the car. Impressed, he turned slowly and gazed at our little beauty with a smile on his face that I can still see today! He slowly raised his hand and pointed at the Morgan and said “the Morgan gets it” I almost passed out! So many people fell in love with this little car, being so cute and beautiful, so different, so small as to be almost huggable. I was simply blown away that my very first restoration defeated million dollar cars with million dollar restorations. Because of the car’s success at the concours, and because R&T was having a special Morgan issue celebrating an anniversary of the Morgan Motor Co. they decided to include an article about CAB 652 in the August 1980 issue. It was featured in their premier “Salon” section. William Motta a famous writer for Road and Track and professional painter did a gorgeous watercolor from the front of the car, which the owner has to this day. A photo of this painting was featured in the Road and Track article which follows. I seriously began to wonder where this was all going for me. One major concours win and a feature in Road and Track. I could not have written a better script, it was after all my first restoration. We then decided to take the car to the National Morgan Meet in Luray Virginia. We towed the car to Virginia, prepped it, and showed it. Again everyone was in awe of the car, having never seen one of these rare factory TT race cars and never having seen a Morgan restored to the level of quality that CAB652 was restored to. A new standard was being set. The car won every trophy that was available to win. It clearly seemed as though a career in Morgan restorations lay before me. It turned out that this young man from New England ended up being the right guy, in the right place, at the right time! Thanks Jack for that fateful day we met!



**The opening photo from the R&T article of  
the painting by William Motta.**



**Luray Virginia national Morgan meet 1980**



# The article from Road&Track



## 1938 MORGAN 4/4 TT REPLICA

*One of the rarest 4-wheelers from Malvern Link*

BY TONY HOGG

PHOTOS & PAINTING BY WM. A. MOTTA

EVER SINCE WORLD War II, Morgans have had a special place in the hearts of American enthusiasts and, as 1980 is the 70th anniversary of the marque, it is fitting that we should feature a Morgan as our Salon car for this month. While looking for a suitable example, we came across the 1938 Morgan 4/4 TT Replica owned by John Artley of New York City and quickly realized that its history and accurate restoration qualified it as a Salon car.

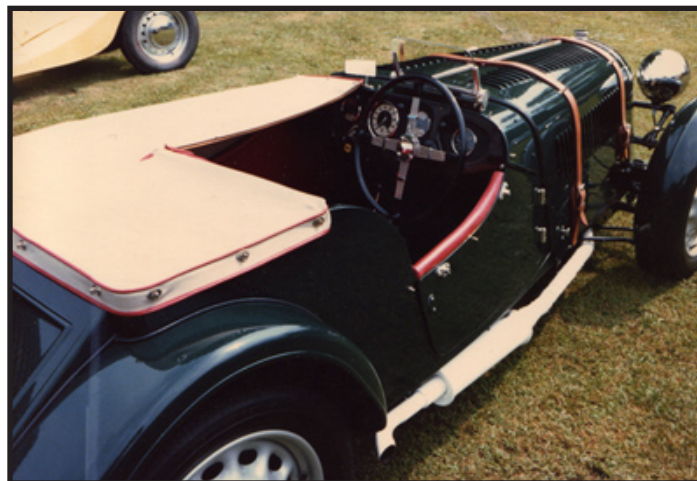
In the best tradition of buying weird and wonderful motorcars, John Artley bought his sight unseen. Three years ago Artley was looking for a car worthy of restoration and he had told his friend Robert Couch, who was in England on business, to keep an eye open for him. Couch called long distance one day to say that he had come across a 1938 Morgan 4/4 TT Replica. Not having the least idea what it was, Artley rushed to Gordon's Bookstore on East 55th St and picked up a copy of a book called *More Morgan* by Gregory Houston Bowden. On page 132, he found a picture of a TT Replica being driven by someone named Dixon Smith. The caption described the car as being one of the two rarest kinds of 4-wheeler Morgans, the other being the Le Mans Replica, so Artley was immediately interested. He could just make out the

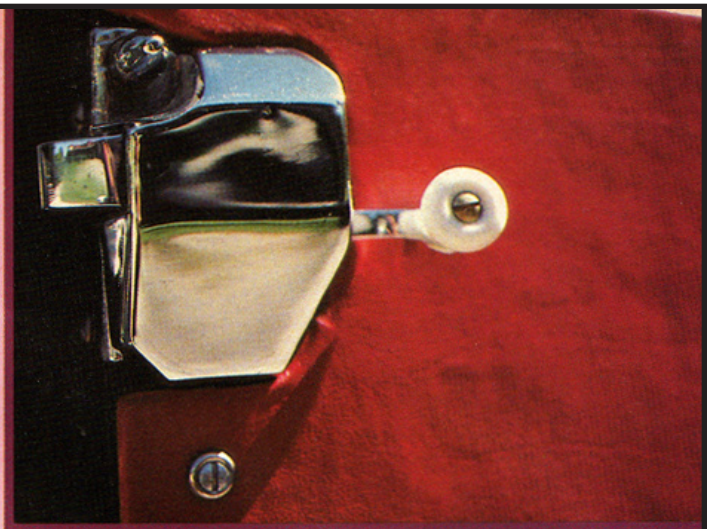
number on the front license plate as CAB 652 and, knowing that in England the license plate number stays the same for the life of the car, he called Couch back to see if the car really was CAB 652. Couch confirmed that it was, so Artley asked him to make an assessment of what would be needed to restore the car, money changed hands and three months later the car arrived in the U.S.

As it is today, Artley's 1938 TT Replica is typical of the long tradition of Morgan cars; remarkably similar in construction and with a strong family likeness to the latest model, which we have tested for this issue. Novelty has never been considered a virtue at Pickersleigh Road, Malvern Link, Worcestershire, where the Morgan factory is located, and neither apparently is it a necessity, because Morgan just goes on and on with some 400 cars a year coming out of a plant that at best could be described as quaint but profitable.

How the Morgan traditions got started is interesting. Before the turn of the century, the bicycle was the common means of transportation in England, with a superb network of railways for longer journeys. In the early 1900s, the motorcycle started to appear and it primarily appealed to young men with mechanical minds, but as a form of sport rather than transportation. Many

106 ROAD & TRACK





motorcycle clubs were formed and the major activity was Sunday runs, in which the members could help each other with flat tires, burned exhaust valves and the other hazards of motorcycling at the time. The automobile, of course, appeared during the same period, but it was strictly for the rich and subjected to severe taxation. The average man's disposable income was very limited and so the motorcycle became the ideal outlet for a mechanical mind and a sporting instinct.

However, marriage tended to put a stop to a man's motorcycling activities, although there was always the possibility of attaching a sidecar to the motorcycle, or, alternatively, buying one of the 3-wheel cars that were coming on the market, of which the early Morgans were typical. Three-wheelers somehow managed to escape the taxation levied on automobiles and were, therefore, not much more expensive to run than motorcycles. In concept, they were much more closely related to the motorcycle than to the automobile, because they were conceived by motorcyclists for motorcyclists and employed mainly motorcycle components. This close association with motorcycles went right through almost to the end of the 3-wheeler's life and even the Super Sports Morgans of the Thirties were driven by using motorcycle

controls on the steering wheel, including throttle, choke and ignition advance levers. The engines were motorcycle V-Twins of up to 1100 cc and a number of different makes were used by Morgan including Matchless, JAP, Anzani and Blackburne.

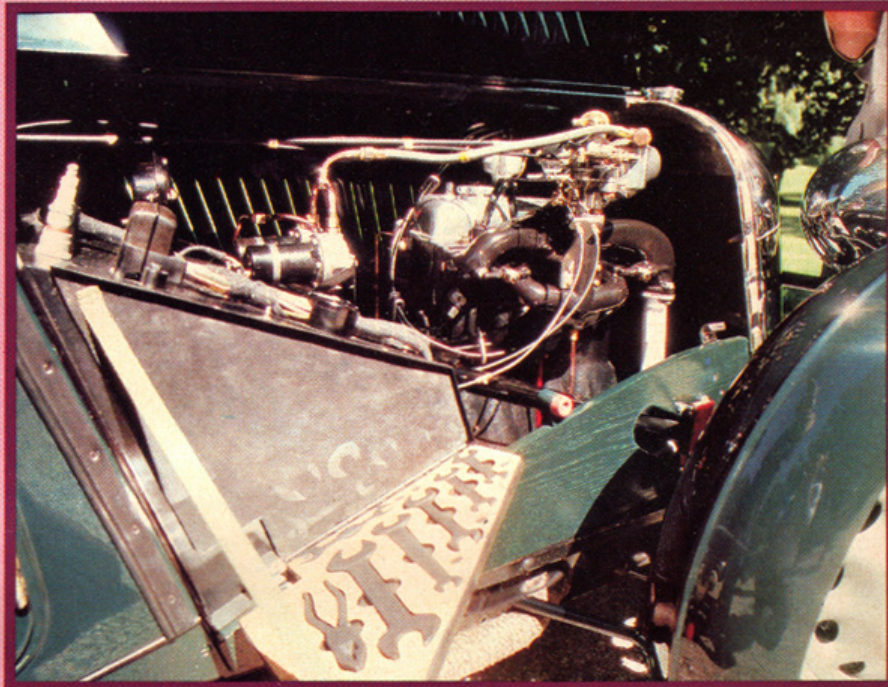
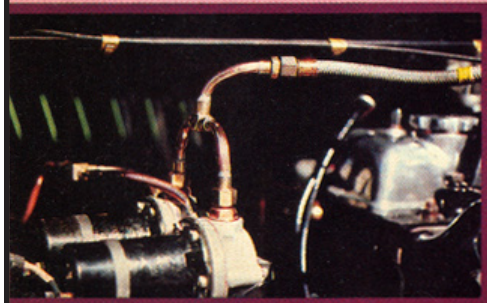
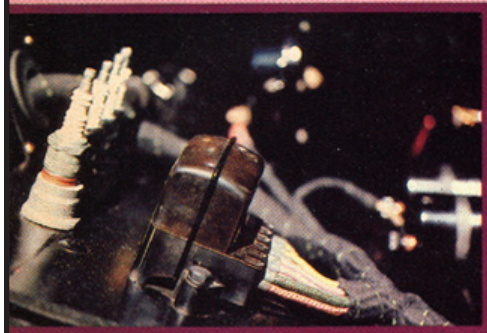
The idea behind the 3-wheelers was to offer sporting driving at minimal cost in a vehicle that could be maintained by the owner, and so it had to be as simple as possible. Morgan was immensely successful at meeting these requirements, surviving the intense competition of the cyclecar era of the Twenties and then the Depression of the Thirties. Not only did the company survive, but it remained in the family so the founder, H.F.S. (Harry) Morgan (1881-1959), was able to pass it on to his son, Peter, who runs it today.



It was in 1936 that the first 4-wheel Morgan 4/4s were available; indeed, the first production 4/4 was entered by H.F.S. himself in the London-Exeter Trial on December 27, 1935. The designation 4/4 has nothing to do with the number of seats, but refers to the number of wheels and the number of cylinders. Morgan 4/4s were offered in either 2- or 4-seater form. At the time, the company was producing a 3-wheeler model using a 4-cylinder 933-cc flathead Ford Eight engine, which was much more civilized than the V-Twin models. It didn't take very much work to redesign this car incorporating two wheels at the rear and

carefully balanced crankshafts and flywheels and various configurations of manifolding and carburetion were available. The first 4/4s were supplied with Meadows transmissions and the later cars came with Moss gearboxes. Artley's car has a Moss, which may or may not be original, but even if it isn't it is perfectly legitimate and anyway the Moss was the better of the two. The transmission is driven through a short shaft from the single-plate clutch.

Artley's car has had three different factory engines. The first was the 1122-cc Climax used when the car was built and this was



a conventional driveshaft, and this was the prototype for the 4/4 series. However, for the production models it was decided to use the Coventry Climax 1122-cc engine, which had overhead intake and side exhaust valves. When tested by *The Light Car*, the maximum speed was slightly over 70 mph. In 2-seater form the car was offered at \$1200 at the rate of exchange of the period, which meant that, in the Morgan tradition, it was aimed at the middle class income group and the car was in competition with the lower end of the MG range. Its success is proven by the fact that a total of 883 4/4s were built before World War II stopped production in 1939. As usual, the cars were simply constructed using readily available components so they could be maintained easily by the owner.

Although John Artley's car was actually built in 1937, in its original form it was a normal 4/4 and wasn't converted to TT Replica specifications until 1938. Apart from TT Replicas, there were also some Le Mans Replicas and, as far as anyone can tell, there were about six of each built by the factory. A major feature of the Replica cars is that they had Coventry Climax engines of 1098 cc to bring the car within the 1100-cc competition class. Incidentally, this engine was quite different from the 1100-cc Climax racing engine of the Fifties, which was a single-overhead-camshaft unit of very lightweight construction designed to power portable fire pumps, and which was adapted by Colin Chapman and John Cooper, among others, for use as a racing engine.

The 1098-cc unit used by Morgan was not a lined-down 1122-cc engine, but it was underbored at the factory when it was built. However, other engines were lined down and various 1098-cc engines found their way into Morgan 4/4s. The true 1098-cc competition engines, as supplied by the Climax factory, had

followed by a 1098-cc when the car was converted to TT Replica specs, and then late in the Forties this engine was blown up by Jim Goodall and replaced with a 1267-cc Standard Special engine, which is in the car today. Due to lack of availability of Climax engines, the Standard engine had by then become original equipment in the cars and it had a special overhead valve conversion, developed for Morgan, with a single downdraft SU carburetor. However, Artley has an original 1098 Climax in a box, and his next project is to install it.

Apart from the engine, the main difference between a normal 4/4 and the TT and Le Mans Replica cars is that in the latter, speed was the primary objective and it was not compromised by driver comfort. The most apparent differences are the cycle-type front fenders, the external exhaust system with its straight-through muffler and the aero screen for the driver. Actually, the car had a full-width screen when it was acquired by Artley and he has retained it so that it can be reinstalled at a later date if necessary. In addition, the Replicas came with 17-in. wheels instead of 16 in., to give taller gearing throughout, and the method of mounting the spare wheel and the general configuration in the back are different. The actual Le Mans race cars were equipped with 26-gal. tanks instead of the 9-gal. standard tanks. As with a number of similar sports cars of the day, which tended to be pretty stark and free of creature comforts, it was not too difficult to convert a standard Morgan into a racing car.

Although a TT Replica, Artley's car is pretty much normal Morgan practice of the era, and it is also nearly all original. The car has a wheelbase of 92.0 in. and an overall length of 140.0 in. The width is 54.0 in. and the curb weight is about 1400 lb. The chassis frame is Z-section steel pressings, underslung, with

inverted U-section crossmembers. The rear suspension uses semi-elliptic springs with Andre friction shock absorbers and the front suspension, which dates back literally to the birth of the Morgan although somewhat modified over the years, is independent using sliding stub axle assemblies on vertical pillars, upper enclosed and lower exposed coil springs and Newton telescopic shock absorbers. The final drive is by an open Hardy Spicer propeller shaft with needle-bearing universals to a conventional back axle with spiral bevel gears in a pressed steel banjo case. The brakes are 8.0-in. Girling drums front and rear.

When John Artley took possession of his car, it was in better condition than he had expected, although it had evidently never been restored since it was built. Along the way various people had apparently made attempts at keeping it painted and replacing tires, and there was evidence of new upholstery dating from 1960. There was some body rust and the hood was very wavy and in extremely poor condition. In addition, at some time in its history the car had been converted to a touring configuration with a full-width windshield, side curtains and a top, as well as directional signals, which were the first things to go because the intention was to restore the car to its original 4/4 TT Replica condition.

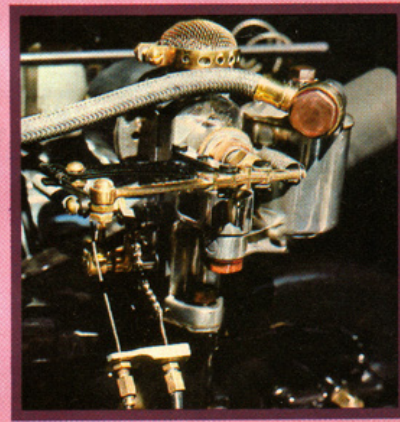
Most of the restoration work has been done by Robert Couch of Millerton, New York, who had located the car in the first place. When restoration began, the engine was completely rebuilt with new pistons, rings, valves, guides and springs, and the crankshaft throws were built up and machined to standard with new bearings fitted. The transmission was also completely rebuilt with new bearings and seals and a new 1st with reverse gear. The rear end was torn down and all bearings and seals replaced and the braking system was gone through completely.

The electrical system proved to be something of a problem, but some Lucas-style cloth-braided wire was found and the lights,

been taped where the hood made contact, but fortunately a new radiator that had been hand-built in England at some time was found. The front wire mesh grille was fabricated by blowing up an original photograph of the factory TT car, measuring the size of the mesh and then acquiring some stainless steel wire screen with the same mesh dimensions. Obviously, there was a great deal of detail work to be done in addition to the major reconstruction, but the comparative simplicity of the original design made the whole restoration project much easier and cheaper than would be the case with a more sophisticated, but not necessarily more effective car.

Documenting a classic car is always difficult, and particularly in the case of cars built by small companies where the record keeping has to be kept to a minimum and one model can be converted into another almost overnight in the shop. Fortunately, the history of John Artley's car was fairly well known when he bought it, and he has been able to bring its history up to date by correspondence.

It was certainly a works car for about 10 years and therefore went through many modifications during that period, over and above the three engines that it has had and apart from its conversion from a production 4/4 to a TT Replica. In its original form it was a trials and rally car and was driven quite extensively by H.F.S. Morgan himself. Among other events, H.F.S. won an award in the 1938 RAC Rally and a bronze medal in the 1938 MCC Edinburgh Trial. Apparently the car was then converted to TT specifications and is thought to have been entered for the TT race at Donington, although it was not listed as finishing. In 1939, the car competed in the Caledonia Rally, but apparently did not win anything. In 1947 it ran in the Daily Express Trophy Meeting, where it placed 2nd to a 1500-cc HRG in the production sports car race.



which were quite unoriginal when the car was bought, were replaced with the correct type and even a proper taillight, which is just a combination stop and park light, was found. The gauges, which included the original Smiths Chronometric tachometer, worked, so they were just checked out and cleaned.

The bodywork presented more of a problem, because when the panels were removed it was found that about 25 percent of the woodwork supporting the panels had disappeared, having rotted away over the years, and most of the rest collapsed into splinters and dust. So, some good seasoned oak and ash and Philippine marine plywood were found and all new wooden parts were built from scratch.

The front and rear fenders were found to be in relatively good condition and only required straightening. However, the hood was in bad shape with the louvers caved in and cracked, so all the cracks were welded and the louvers reformed and a new hinged center piece fitted along the top. The radiator had been completely worn through by the sides of the hood because it had not

It was shortly after this event, and while the car was being prepared for another race, that the engine blew up and the Standard Special was installed. The car then appears to have been sold but it turned up from time to time in club events, and changed hands on several occasions. Later it spent quite a long period stored in a shed behind a pub. Apparently, the pub was the meeting place for local Morgan enthusiasts, who used to go out to the shed to look at it. The owner was always promising to restore it, but never did and finally the car was sold to the person from whom John Artley bought it.

At a time when classic cars of any kind, and many without much of a pedigree at all, are fetching uncommon amounts of money, it's a pleasure to come across someone like John Artley who has the good taste to recognize the significance and historical importance established by Morgan cars over the years. His TT Replica 4/4 is one of the most important cars in the Morgan family and the excellence of his restoration is certainly worth the time and effort he has put into it.



***Mr. Jack Artley  
The proud owner of***



***and a very happy restorer  
celebrate a very special day!***

**1938  
MORGAN 4/4 TT REPLICA**

*One of the rarest 4-wheelers from Malvern Link*

