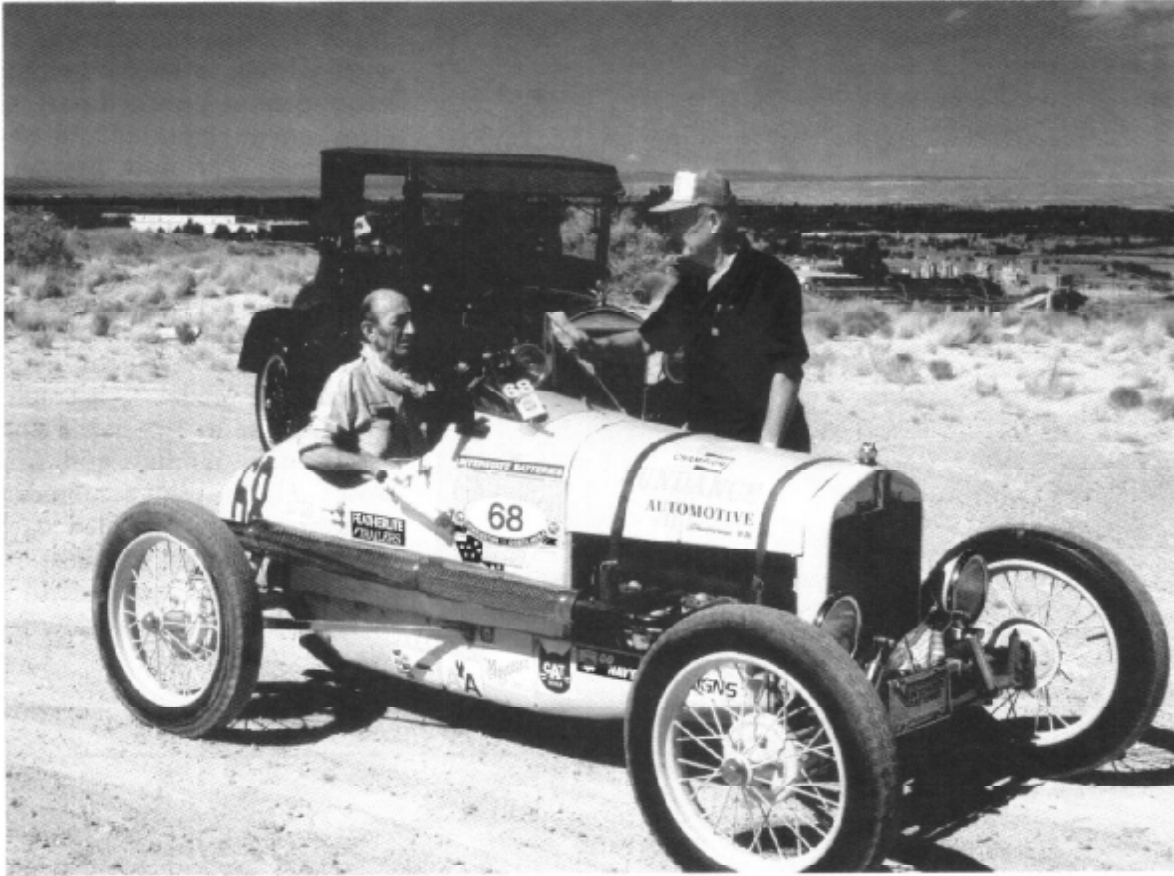


# The Lone Racer and the Great American Race - Rossie Morris Story

by Gerald Hash

*with assistance from Peg Morris, Roy Young, Jerry Coryell and Tom Miles*



*In the desert, outside of Albuquerque, Roy Young helps Rossie Morris prepare for the Great American Race. Tom Miles photograph.*

Why would anyone want to run a Model T in the Great American Race? This grueling race requires speed and endurance—two elements that many question in a Model T Ford.

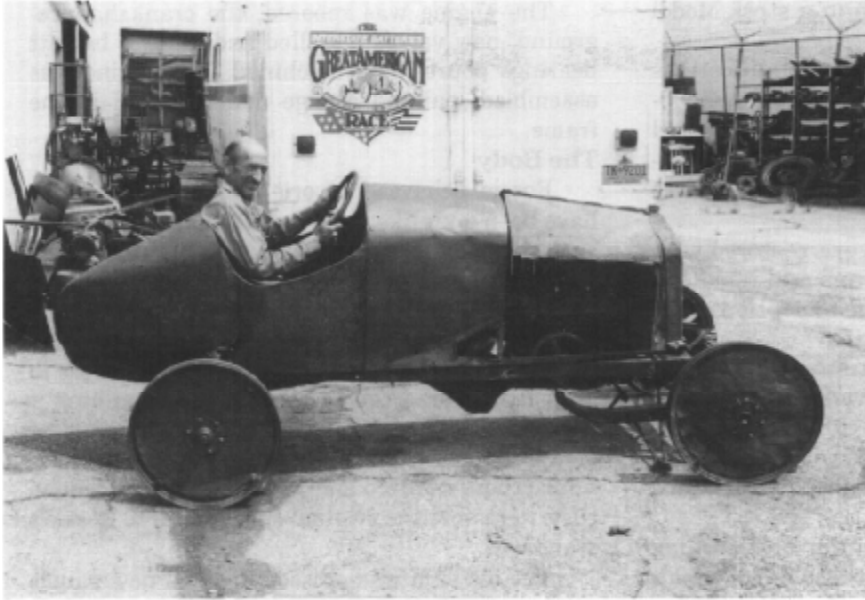
Rossie L. Morris, at the young age of eight, developed an avid interest in cars. A visit to Cormit Speedway in Albuquerque, New Mexico in 1946 changed his life forever; he was hooked on automobile racing.

As soon as Rossie was old enough to drive, he was behind the wheel of a race car. This led to all forms of racing on local dirt tracks in the area.

Rossie also had a strong interest in antique cars—especially Model T Fords. And when he wasn't working on race cars, he was working on the antique cars.

Of course it helped when Rossie founded his machine shop, Sundance Automotive in Albuquerque, some twenty-plus years ago. He was not only making a living doing the work he enjoyed, but he was also able to build engines for his race cars and race engines for some of his friends. In addition, his business facility and facility provided him an area to restore his growing collection of antique cars. In fact, two rooms of his building are strictly reserved for Model T and Model A Fords. There he pours babbitt, machines rods, and tinkers exclusively with these early Fords.

A love of automobile racing and Model Ts, the expertise and equipment to work on both, and a high energy level are the prime ingredients for this story.



*In the beginning. . . rusty tin and a dream.*

### An Original Rusty Relic

In 1988, Rossie purchased a 'Twenties vintage racer from Dr. Leslie Hutchins of Albuquerque. Dr. Hutchins inherited it from his father, W. C. Hutchins of Broadview, New Mexico. The car had last been raced in eastern New Mexico in 1928 in local "stripped-down" events. When it blew an engine that year and the owner could not afford repairs, the elder Hutchins, then 16, traded his burro for the racer. He repaired it and then ran it up and down the country roads in the ranch country for several years before retiring it to a barn.

Rossie purchased the racer because of his enjoyment of racing and Model Ts, but had no definite plans for the little racer.

### Introduction to the Great American Race

When the Great American Race (GAR) came through Albuquerque en route from Disneyland to Disney World in 1988, the little racer's future was starting to become clear.

Rossie enjoyed seeing the cars from the GAR and thought the event would be a very enjoyable experience - albeit challenging. While he had no immediate thoughts of participating, the seed was planted.

That winter, Rossie was approached by Roger Herd and his brother who were preparing a 1933 Chevrolet Coupe for the 1989 Great American Race. They needed Rossie's mechanical expertise and asked him to be on their race crew.

For the next two years Rossie and his wife, Peg, assisted the Herd brothers with their Great American Race efforts. On the way home from the 1990 race, Rossie and Peg decided to enter their T racer in the 1991 GAR.

### Problem!

One minor problem - the little racer was a single-seater; there was no room for a navigator. No one had ever attempted this timed event without the assistance of a navigator who was needed to read the directions and maps and keep careful watch on times and speeds.

Rossie found nothing in the official Great Race rules pertaining to cars minus the navigator and called the Great Race offices in Dallas to verify that there were no specific rules requiring a separate navigator.

First he spoke with someone who told him "no problem, but he was trans-

ferred to another person who said "maybe. The call transferred again and the next person said he "must have a navigator.

Rossie would not take "no" for an answer. He called the Great Race offices again and asked to speak with Tom McRae, executive director. "You can, but you can't," he was told.

Tom went on to explain that while there is no rule saying you can't run the race without a navigator, it is all but impossible to drive the car, read the instructions, and make the correct turns and maneuvers.

"That means I can do it, if I want! Right?" Rossie asked.

"Well, yes," was the reluctant answer.

"My entry will be in the mail," Rossie responded.

### The Race Car

After a photo session to acquire "before" pictures so that the Great Race rules committee would accept the little "rust bucket" racer as an original of the Twenties, the car was completely dismantled and restoration began.

### The Chassis

The frame had been shortened by 16 inches and lowered by five inches from its original stock Model T configuration.

The five-inch drop had been accomplished by fabricating a "dogleg" in the frame rails in the rear just in front of the rear axle. In the front, an inverted L-shaped spring mounting plate in front of the front cross member had been installed. This "suicide plate," as they were known in the old days, allowed the front spring to be mounted two inches

forward and five inches higher than a stock Model T.

The durability of these early modifications looked questionable given the rigors of a 4,000-mile, 50-MPH "endurance run across the United States. Therefore, the frame was torn apart, reinforced, re-welded, reassembled, and repainted to "like new condition.

The front axle and springs were restored with all new bushings, pins, and bearings and remained completely stock Model T with the exception of the mounting points and orange paint.

The rear axle was a different story. The Great Race committee encouraged upgrading the brakes to hydraulic for safety reasons. Rossie, thinking about the mountains he would be crossing and 50+ MPH speeds he would be driving, agreed with GAR's suggestion.

A set of Chevrolet brake drums and backing plates were modified to fit with the Chevrolet drums inside the Model T drums. The modification looks completely stock if you don't see the hydraulic brake lines discreetly routed under the axle.

A master cylinder was mounted inside the frame rails and would be operated by the hand brake lever which, due to the narrow body of the racer, ended up outside the car.

A 3-to-1 ring and pinion gear set and all new stock bearings were installed and the rear end was assembled, painted orange, and mounted to the frame.

#### The Engine

Like most Model T enthusiasts, Rossie is a purist and likes to keep his cars as original as possible. However, there were a few areas where his competitive spirit overruled his desire for originality and he decided to upgrade the ignition, electrical system, and carburation as allowed by the Great Race committee.

Ed Hull, a machinist friend of Rossie's in Albuquerque, fabricated a distributor housing which bolted in place of the timer and allowed the use of a Chevrolet Vega distributor. This talented fellow also built an adapter plate which enabled a 12-volt alternator to be bolted in place of the generator, driven by the timing gear. Fiber timing gears aren't a good choice here! More about that later.

A Model A carburetor was adapted to the stock 1926 Model T intake manifold.

Other than these few Great Race recommended changes, the engine was Model T all the way. It used the original splash-type oiling system, babbitt bearings, and a stock Model T transmission.

The engine was rebored, the crankshaft re-ground, new valves installed and all new babbitt bearings poured and machined. The engine was assembled, painted orange and installed in the frame.

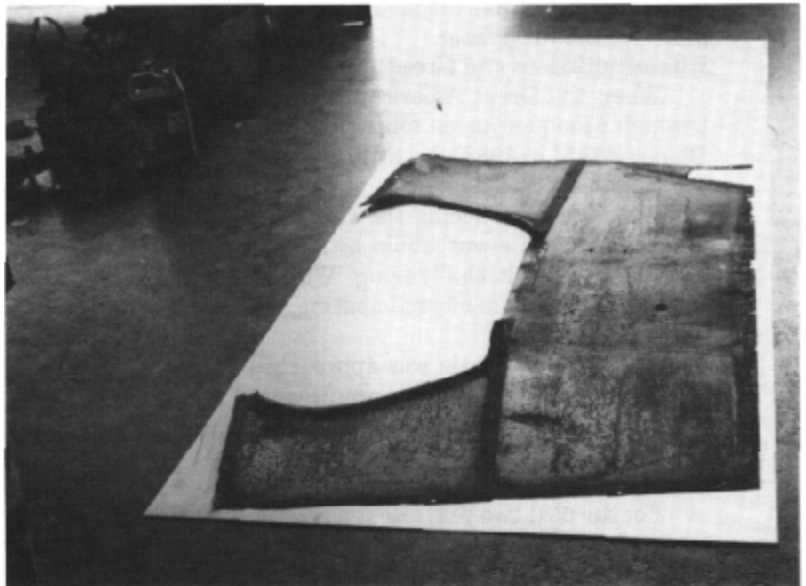
#### The Body

Rossie believes the original racer body may have been a kit like those available from suppliers such as Speedway Body Works, or it may have been a well designed body built from scratch by a talented racing enthusiast.

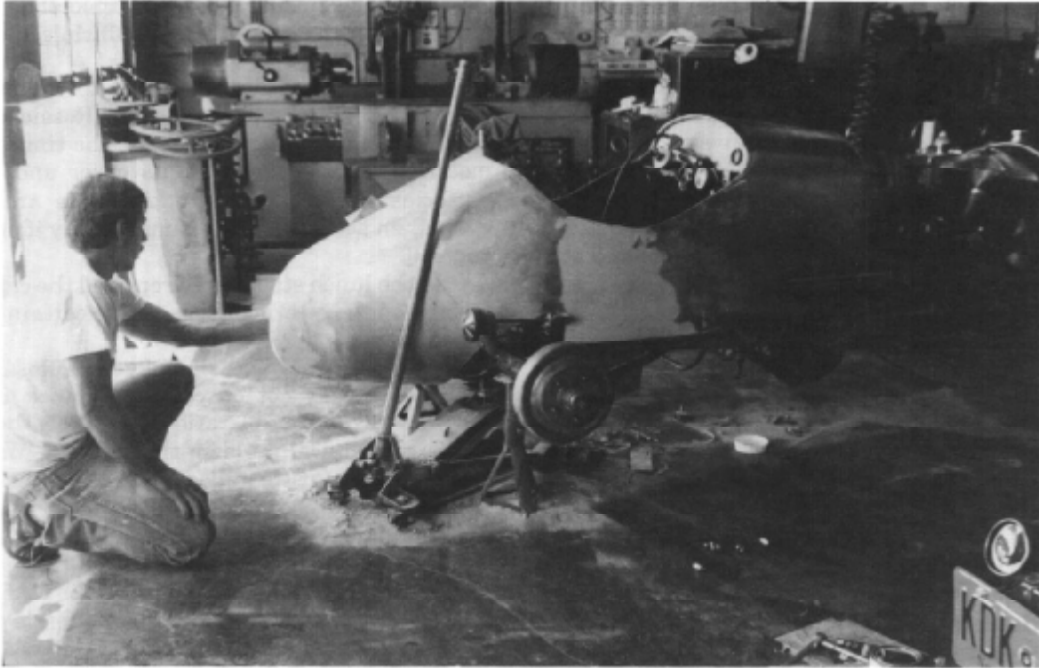
The body was built by forming sheet metal over a skeleton metal frame using compound curves to form the tapered tail section. In the beginning it was assumed that the original metal skin would be usable, but after further investigation it was determined there were too many wrinkles (and too much rust) to restore the original sheet metal to Rossie's standards.

The old skin was pressed flat and new panels were cut from new metal; the reskinning task began. The cowl and sides were covered quite uneventfully, but the tail section was another story. There were compound curves everywhere you looked and the metal had to be heated, stretched, and tack welded-heated, stretched, and tack welded - forever, it seemed. In the end though, the body was in "show room condition just as it had been in 1926.

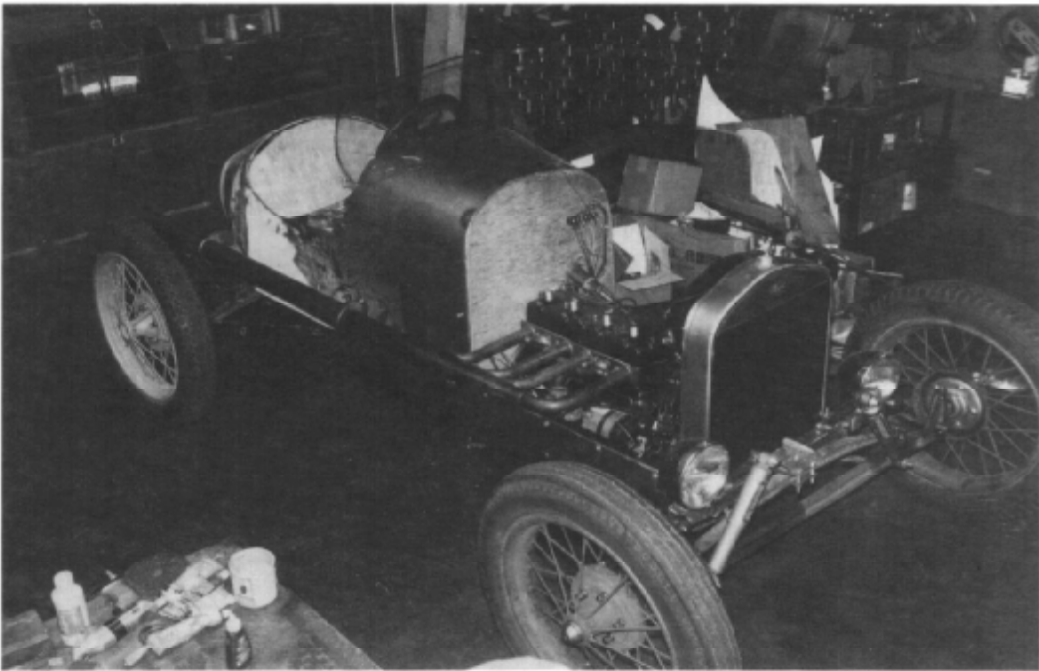
A pressurized fuel tank was mounted in the tail of the racer. Fuel was forced from the tank to the carburetor by a hand pump that was mounted on the outside of the car, just left of the steering wheel.



*The old sheet metal was removed from the racer, pounded flat and used as a pattern for the new skin*



*The little racer starts to take shape after years of neglect*



#### **Other Features**

An electric cooling fan was installed behind a stock Model T radiator to help alleviate the cooling problems encountered in driving at the race speeds. However, Rossie knew from his V8 Ford racing and

previous Great Race support crew experience that the 12-volt electric cooling fan would be insufficient for the little racer in 120 degree desert driving. So, using one of Rossie's old racing secrets, a copper tube with small holes was mounted above and in

front of the radiator core, just behind the radiator shell. The tube was connected to a water tank mounted between the dashboard and firewall. This tank was pressurized by a hand-operated pump mounted on the right side of the car. When Rossie turned a valve in the cockpit, water would be sprayed on the front of the radiator and evaporation would cool the little racer.

A stock Model T steering column, upholstery, floorboards, and an oak dashboard completed the little racer and everything except the seat and steering wheel was painted orange.

Now all Rossie had to do was manipulate the normal Model T controls with his feet and hands, pump fuel with his left hand, water with his right hand, navigate with his brain, somehow turn the pages of his daily instruction packet, and be at each of the Great Race checkpoints within a second of his assigned time for 4,000+ miles at 50 MPH. "Nothing to it! Let's go work on some timing," Rossie declared.

#### Testing and Practice

It was October 1990 and the racer was complete and ready for testing.

For the next six weeks, the weekends were spent running along the back roads, across Interstate highways, and up and down mountain roads with elevations up to 10,500 feet.

We frequently visited Amarillo, Texas and Clovis, Tucumcari, Sante Fe, Grants, and Truth or Consequences in New Mexico.

With Rossie in the racer and the author in a support vehicle pulling a trouble trailer, we covered over 3,500 miles by February. Numerous little mechanical problems were debugged on these outings and Rossie practiced his "timed driving." On one trip the fiber timing gear stripped, which proved that you don't drive a 12-volt alternator with a fiber gear.

In early April the GAR had scheduled a two-day 500-mile practice rally in the Dallas area to familiarize drivers with GAR procedures. The little racer passed GAR's rigid technical standards and we were ready for the car's first real test.

The first day's practice run was uneventful;

Rossie finished with a fairly respectable time—much to the amazement of GAR officials and other participants.

On the second day, en route to the starting point, a brief Texas shower soaked Rossie and the racer. On the first leg of the run, the timing clock mounted on the dash lost its cover and spilled batteries on the floorboard. As these are timed events, an accurate clock is mandatory if one is to succeed.

At the lunch stop Rossie repaired the clock and started on the afternoon legs with a certain degree of confidence.

The confidence was short-lived as Rossie soon realized he was not on course. A quick U-turn, followed by rapid acceleration, was likely the cause of the mechanical problem that ensued. With the engine silent, Rossie pulled the racer to the side of the road, removed the seat pad, grabbed some tools and found he had distributor problems.

Rossie trudged to a nearby farmhouse only to discover he had no phone numbers for GAR headquarters or his support crew's motel. Rossie phoned Peg in Albuquerque, who called GAR headquarters, and had them locate me, which took until 4:00 PM. By 10:00 PM we had the racer back in Dallas and by 2:30 AM had it fixed. After a few winks of sleep, at 5:15 AM we discovered the battery was dead—the crew had forgotten to turn off the ignition switch. A quick tow and the racer was running, but not to its potential. At the lunch stop Rossie bought a cherry pie and coke and tinkered with the distributor. In doing so he backed over his cherry



*Restored... and ready to run!*

pie and there went lunch. It all ended at 3:30 PM when the distributor drive gears gave way. Although disappointed, back home new gears were made and tested, and everything was readied for the "real thing."

#### The Race

The grueling two-week, 4,000+ mile GAR is a test of racer, driver and support crew. The driver draws a number each evening to determine the starting line-up for the next morning. The support crew departs 30 minutes ahead of their car. Cars depart at one-minute intervals. Each driver receives a packet of instructions (about 30 sheets) just 30 minutes before his starting time.

Each stage begins with a tire warm-up leg followed by a speedometer calibration run of at least 15 miles. Then comes a pit stop. Somewhere en route will be a checkpoint to see if the racers are in proper position. Then, when least expected, over a hill or around a curve, will be the timing van with a microwave link to a satellite and computers to record the time. After a lunch stop, the same procedure is used for the afternoon legs. To be competitive, the drivers must pass the timing checkpoints within a few seconds of their computer-calculated times.

The racers begin crossing the finish line about 6 PM and are required to be on display until 9 PM. This leaves little time for clean up, maintenance and preparation for the next day, especially when it is done at a hotel or shopping center parking lot, away from home base. Hopefully it doesn't rain. Have you ever had to change oil, transmission bands, carburetors, etc. in a parking lot? Fortunately, many local Model T clubs came out and lent a hand.

The 1991 Great American Race began at the Waterfront area of Norfolk, Virginia on June 22nd and ended at Elliot Bay in Seattle on July 4th. Rossie had a coast-to-coast (4,280 miles) trip ahead of him which he had to traverse with split second timing in an open Model Tracer, come rain or shine.

While the support crew is normally required to leave at least 30 minutes before their racer and are usually routed on different roads, on the first day we were allowed to stay and wave the racers off at the starting line. This was a happy day. The racer



*The smile on Rossie's face indicates all is well with the "Lone Racer"*

was running great, the Navy band was playing, and each car was officially waved off at the starting line. Just as Rossie came through the starting gate, a few drops of rain began to fall. Being from Albuquerque, we assumed this was just a local, short-lived rain shower like those at home.

As the crew started driving west toward Raleigh, North Carolina--the first night's stop, it rained harder and harder and the crew became very quiet while thinking of Rossie in his open racer. In Raleigh we went to the finish line to wait for Rossie to come through the gate. With over four inches of rain, stories of knee-deep water and mud at several places on the race route began passing through the crowd as some cars came in.

Our hopes dimmed because we knew there was no way that the low-slung racer could make it through water that deep without drowning out. We waited and waited and finally as we all secretly expected, the little racer and Rossie came in on the trouble truck-along with several others who had drowned out.

Rossie explained that he had just made it through one of the many streams of water when the racer sputtered to a stop. He had jumped out and dried the distributor, not knowing that a screw had also vibrated loose inside the distributor. When he tried to start the racer, the screw jammed the distributor and broke the drive gear. Spirits were low. We had just used our one DNF (Did Not Finish) that championship class competitors are allowed and we had eleven more race days to go. Another DNF and we would be eliminated from the race.



Nevertheless, we were determined and the racer was towed to the hotel parking garage where a new distributor was installed. The old distributor had caused an electrical short as well, which damaged the wiring. However, by 1:30 AM #68 was repaired and ready for the next day's race.

The next morning the crew again left 30 minutes before Rossie's start time and drove to Ashville, North Carolina to await the racer's arrival. After our first day's experience, our confidence was shaken and no one was sure whether Rossie would drive through the clay's finish gate or come in on the trouble truck again.

To the relief of the crew, Rossie came through the gate smiling and revving his engine. This was the turning point for the team. The little racer proved very reliable and required only routine maintenance and minor repairs each evening.

The stock Model T components, which made up about 99% of the racer, caused very few problems throughout the entire 4,280-mile race; the only exception was the original-type cotton band linings in the transmission. It became standard procedure each evening to change the brake and low bands as Rossie's hard driving and terrain and heat proved to be too much for the original type bands. The few other problems encountered were with race legal accessories we had added to make the car more "reliable."

The 1991 race had a scheduled day off in Colorado Springs and since we had little experience with wear and tear on a Model T under race conditions, we took the opportunity to inspect the bottom end of the engine. We removed the body belly pan and the engine pan while some of our Albuquerque Tin Lizzie club members, who had met us there, started changing the bands again. Happily, the engine was in excellent shape considering the grueling ordeal it had just survived.

Steve Coniff, a fellow enthusiast from Colorado Springs, came by while the guys were changing bands. He suggested we try the Kevlar bands he produces. He thought they would hold up better under the rigors of racing. He was right! We never had to replace them again.

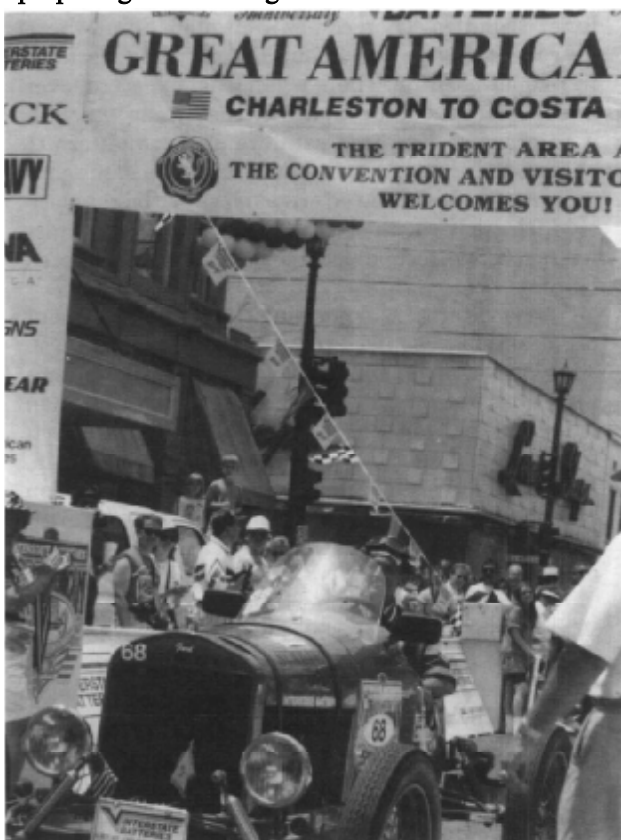
With our band problems solved, the Toyota alternator that we had modified to fit in place of the Model T generator started causing trouble. It just couldn't take the heat given off by the engine, and the diodes kept burning out. The first day after leaving Colorado Springs, on the way to Glenwood Springs, the alternator quit. Rossie was able to complete the day's event by running on the battery and by doing push starts at pit stops to save precious "juice." We found a garage in Glenwood Springs that could repair the alternator; they worked a couple of hours after normal quitting time

and wouldn't take a cent for parts or labor. Later, the alternator quit again on the leg going into Boise and we had to find another repair shop.

The rest of the way to Seattle was fairly uneventful for the crew, but Rossie was becoming exhausted. However, he didn't give up and kept producing excellent times. Rossie finished 20th out of 100, which was excellent—specially remarkable considering that he was the only person that had ever completed the race in a one-man car, both driving and navigating.

We did it again in 1992. This time Rossie and #68 finished every day and we didn't even inspect the bottom end of the engine along the way. We had our normal accessory problems again but nothing catastrophic. On the leg going into Phoenix the transmission got so hot that Rossie melted the soles of his shoes. He finished the 1992 race in Costa Mesa, California after travelling over 4,000 miles with excellent times and no incomplete days.

The "Great American Race" is an experience that we'll never forget. We recommend it to anyone with lots of heart. However, it is very grueling and at the end you swear you'll never do it again. After a couple of weeks, however, you're ready to start preparing the car again.



Rossie and his little Model T racer cross the Start Line in Charleston, South Carolina