A WASHOUT TO TORONTO, CANADA

A 1930 STUDEBAKER PRESIDENT BROUGHT THE GREAT RACE

By Whitney E. Kerr, Navigator

When my friend Larry Cain of Dallas, Texas, saw the Studebaker President FE through Dallas in June 1995, his interest in the sport was renewed. During the '50s Larry owned an MG and was active in sports car rallies. Larry remembered that my father and I had driven a 1930 Studebaker President Coupe Sedan in the 1985 Great Race and asked me if I would navigate while he drove in the 1996 Great Race. After several discussions we asked my father to look for a car we could drive.

My father had sold a 1940 Packard several months before, and his first thought was to look for a 1940 Packard with synchromesh transmission and hydraulic brakes. The Packard owner with Buick Century 1940 had good acceleration and good brakes, with synchromesh transmissions. He found several of each make and year

Similar ceremonies were held in each of 13 cities between Tacoma and Toronto. An announcer provided details on the car, driver, navigator and scores for the day's run. This photo was taken in Peoria, IL, where local organizers had scheduled a car show to coincide with the arrival of the contestants of the GAR.

that had been restored with good paint and upholstery, but a driving test left questions about mechanical condition. Then upon reading the rules for scoring, we learned we would be handicapped with a newer car, so we started looking for an older car.

By then it was the middle of November, and we remembered Kenneth Johnson of Burlington, Iowa, who owned a 1930 Studebaker President Brougham. Kenneth had the car restored in 1974, and the paint and upholstery were beautiful. We did not drive the car because the battery was down. We decided not to look any further and arranged to get the car over Thanksgiving weekend. Kenneth agreed it would be better to drive the car the 300 miles to Kansas City than to trailer it. During the past 22 years, the car was only driven in parades and to car meets close to Burlington. I did not question the mechanical condition because of Kenneth's reputation and Johnson's statement that we would drive the car to Kansas City.

We discussed with this car is being told to show how an owner and a purchaser can be surprised about the dependability of a 65 year old car that is beautiful but has not been driven much. I hope this story will be a guide for others so they will not be stranded on the highway with dirt in the gas tank. Most certainly I know Ken Johnson was as surprised as we were that we had gas line troubles.

Friday after Thanksgiving, my father and I drove to Burlington, Iowa, in my father's Ford pickup to get the car. The gas tank was about half full, and Ken suggested we fill up and not let the gas get low in the tank. My father drove the Studebaker, and I was following in the pickup. The car ran smoothly, but seemed to lack power. Several days later we found the choke butterfly on the choke valve did not open fully, causing a rich mixture, gasoline use and loss of power. The gas gauge did not work; so when we left Burlington we thought we could get to Monmouth, approximately 15 cents less per gallon than in Iowa. Just north of Keokuk, Iowa, the car ran out of gas. When I asked my father what happened, he admitted he was trying to get to Missouri. I reminded him he was driving 60 miles an hour on Ken's roads.

I towed him to the nearest gas station where he foolishly opened the gas hose nozzle wide open and stirred up dirt in the bottom of the gas tank. We stopped about two miles down the road. It was about noon and, to make a long story short, the rest of the day until dark we went in two mile jumps until we towed the car to Paris. Missouri, where we left it for the night.

Saturday morning we put the car on a grassy area where we could get under it to clean the electric fuel pump and blow out the gas line with compressed air. We thought we had our problem solved, but were only able to go about a mile when we stopped again, because

the gas line plugged up again. At this point we decided to tow the car to Arrow Rock, Missouri, where my dad's farm. We reached there at dark and put the car in the barn.

Monday we fixed up a can of gasoline with copper tubing to the carburetor to drive the car onto a trailer, and took it to my dad's farm in Kansas, to my father's house. The lesson from this experience is to not let the gas get low in a tank and clean the fuel pump. It can happen to a very good old car.

Our first order of restoration was to remove the gas tank, carburetor, fuel pump, filter and gas lines. The gas tank was put in a caustic tank for cleaning and we discovered the tank had many pin holes in the bottom. The top of the tank was cut out and the inside of the tank glass bead blasted. There was at least a quart of rust in the tank when we started to dig. After a new tank was installed, it was coated inside with alcohol resistant sealer. A new filter and electric fuel pump were installed close to the tank with new gas line to the carburetor. The carburetor was cleaned and overhauled with new float valve and seat. A new mechanical fuel pump was installed in series with the electric fuel pump so the electric pump would only be used in case of vapor lock. The King Seeley gas gauge was repaired with new tubing and fluid and is now quite reliable.

With a clean source of gasoline we took the car for a test drive. The car ran fairly well but didn't have the power I had expected, and the engine seemed noisy. After further driving tests, and compression and vacuum tests, my father decided to do a complete mechanical inspection and overhaul. Most cylinders had 90 pounds compression but one had 80 pounds and two had only 75 pounds.

We knew from our experience in the 1985 Race that a car must be in top mechanical condition to be competitive and dependable. The car acceleration through the gears and good brakes are a must. The engine and transmission were removed and taken to the same machine shop that had rebuilt two other President engines for us. About a week later, the machine shop called and wanted us to see what they would recommend for rebuilding. The cylinders were less than one thousandth out of roundness and only required honing. The pistons were all okay and only needed new rings. All the valve guides needed to be replaced along with all the valves and new valve springs. The water manifold had been removed and all scale had been removed from the block and cylinder heads. Hardened valve seats were to be installed in the exhaust ports. The crankshaft was to be ground and the bearings installed. The rear main bearing was to be rebuilt with new plates. The connecting rods were to be rebabbitted with oversized connecting rod bearings, and all weighed for accurate balance. Pistons were to be all corrected for the same weight. New bearings were cast for main bearings and camshaft bearings and each was line bored. The camshaft was reground to provide higher valve lift. The top of the block was ground along with the cylinder head to be flat within one thousandth of an inch. The oil pump was machined and fitted with a new gear and shaft. The flywheel was resurfaced for the clutch plate. The clutch was rebuilt with new plates and a new clutch throw out bearing. The transmission was rebuilt as best as we could with new bronze bushings and new ball bearings. The transmission is not as quiet as we would like because we were unable to find a better cluster gear.

While all this was being done at the engine rebuilding shop, my father was cleaning and repacking universal joints and making new seals for ball covers. While adjusting the brakes, he discovered that the brakes had good lining but only one shoe, of the three, in each wheel was touching the drum. The front brake drums were slightly out of round, but we thought they would be acceptable. Brake drums and brake shoes were cleaned and repacked. All grease seals in the wheels were okay.

Whitney M. Kerr, 87 years old, father and navigator Whitney E. Kerr, deserves most of the credit for the success of the venture. He performed most of the mechanical work on the car and did more than his share of driving east to Tacoma. A most remarkable man.

My father overhauled the distributor with new cap, points and condensers and two new ignition coils with new spark plugs and plug wires. The starter and generator were taken to a generator shop for rebuilding. The generator was changed from a three brush using the cutout to a two brush for use with a voltage regulator. The fan shaft was reworked and new fan bearings installed with a new six bladed fan. The radiator was taken to a very good radiator shop that we have patronized for years to be cleaned and rodded out. The fill connection in the top tank of the radiator was modified for the cooling system to run at four pounds pressure with a radiator overflow jar.

A friend of my father, whom we consider to be a good machinist, inspected the water pump and advised he would not touch it since the shaft was well polished and the bushing and packing seemed to be in good order. This decision turned out to be a mistake because we had water pump problems enroute to Tacoma, Wash-

Our first problem was overheating caused by coolant leaking out of the water pump shaft. The packing around the water pump shaft would not contain the coolant. At every stop, we would add water to the expansion tank and tighten the packing nut on the water pump shaft. At one stop, we had to scoop snow from a ditch, since there were no service stations or inhabitants anywhere nearby.

The next problem was oil leaking out of the top of the oil filter. The oil pressure on the refined engine was very high, over 80 lbs. No matter how tight we turned the filter cartridge, or how often we changed the gasket, we could not contain the oil pressure. It would oil mist all over the interior of the engine compartment, and oil rain down the lowers on the sides of the hood. We had the inconvenience of adding a quart of oil every fifty miles, not to mention the mess that it had made.

We stopped in Iowa and tried to reduce the oil pressure by adjusting the oil pressure regulator on the right front side of the block. Apparently the wedge regulator was stuck in the block, and we couldn't get it loose. All the time we spent stopping to cure water and oil losses was cutting into our average speed and slowing the distance covered. The first day out we only covered 300 miles. That meant we had to cover the remaining 1,500 miles in three days, averaging at least 500 miles per day in a 6 cylinder car, with drivers ages ranging from 60 to 87 years of age.

After struggling with the oil filter leak, my 87 year old father, who was the only competent mechanic on board, decided we had to stop and bypass the oil filter. We pulled into a roadside truck stop somewhere east of Rapid City, South Dakota, and re-routed the copper oil lines, fabricating and bending new copper lines. That effort took my father almost an hour and a half. Part of the time was lost because the engine and oil were so hot we couldn't touch it.

With the engine cooled down, the radiator full and the oil leak stopped by the oil filter, we started out again with renewed optimism. A short time later while Larry was driving about 60 MPH, he shouted, "I think we have a flat tire." We had to stop and repair our third chronic problem. He pulled onto the shoulder, and we climbed out to see the right rear tire nearly flat. That was

Flags flying, bands playing and it's off to the races! ASC member Gail Jansen of Seattle was just one of the many ASC members who came out to help send off the racers and snapped this photo in Tacoma.

the first of three flat tires on the way to Tacoma. The reader will please note rule #1 for the Great Race.

Rule #1: Don't believe your tire company when they tell you, "These old tubes last forever."

Replace them! While we had excellent tread on our new tires, our problems seemed to be with old rubber valve stems leaks. As noticeably, we thought we didn't need to replace those tubes. Fortunately, we had brought extra tires with us.

The second day out we pulled into Rapid City, South Dakota, to repair the right. When Larry and I got out of the car we noticed a long stream of foaming antifreeze coolant trailing behind us into the hotel parking lot. I told Larry not to say anything about it to my father. We were all dead tired, and I thought to myself, if that NOS head gasket has failed again, I'm not going to tell my father until morning. At least we can get a good night's rest before facing the disaster.

Nervously, the next morning we added coolant and were delighted to find the head gasket had not failed. We added oil and had the flat tire repaired at a truck stop. Changing tires on a 1930 Studebaker President is a problem, but dismounting a tire and tube from a 19" snap ring wire wheel is beyond the capability of most service stations.

Lesson #2 - You need to find a truck tire specialist.

After installing the new tube and with the renewed confidence in my spares, we continued our journey.

We drove long and hard at 60 MPH, had two more flat tires (*because of tubes*), continual coolant loss through the water pump and soon discovered a rare and different chronic problem. The front oil seal on the crankshaft was leaking oil, and in large quantities. When the engine was rebuilt in Kansas City, the crankshaft seal had been replaced, but it was done with an adapted new felt seal. Being behind schedule, we decided to try to end just keep adding oil.

In the morning I called long distance to the Universal Tire Company in Lancaster, Pennsylvania, and ordered two new 6.50 x 19 tires, tubes, and flaps and had them air freighted to the hotel in Tacoma to await our arrival.

About 9:30 AM Friday morning, the three of us drove the old Studebaker from the Great Race Vehicle Inspection. We were gone 11 minutes! We had traveled 1,800 miles in less than four days driving. The car seemed to be running well, but overheating would occur on the various leaks.

We quickly passed inspection, loaded in the new tires and tubes, and headed off for a Goodyear Truck Tire store to install new tubes in all tires and spares. On the way, my father seemed worried and told Larry and me that he really thought we should tear down the front of the engine and replace the front end crankshaft oil seal. That afternoon we stopped at an automobile parts store, and at that point our luck began to change for the better.

A very curious and friendly retired school teacher named John Hayward came up to admire the old Studebaker. When John heard about our problem, he invited us to go to his house the next day (Saturday afternoon), and offered his garage, shop tools, and assistance. On Saturday morning at 9:00 A.M., the practice rally was scheduled. Larry, my father, and I went on the course. At the end of the practice rally we received permission to leave the luncheon gathering early and drove directly to John Hayward's house. Within an hour, with John's help we had the hood off, headlights off, radiator off and front of the engine opened up. John worked with us to stop the oil hemorrhage by replacing the crankshaft oil seal. About four hours later the car was back together. John wouldn't take a dime for his help and the use of his garage and tools!

Early the next morning (Sunday, the start of the race), my father had planned to fly back to Kansas City. Since the start of the race was Father's Day, I bought the Saturday evening before would be an appropriate time to celebrate Father's Day. Larry, my father, and I were in a very nice restaurant in Tacoma and had a very good dinner and a fun time. I kept thinking how blessed I was to have an active 87 year old, master mechanic, and pal with whom to share this experience.

By the time we got back to the hotel after dinner, it was 10:00 P.M., on the eve of the race. We were still tired from the cumulative effect of the long drive out, the excitement of the practice rally, and the urgency of repair operation of John's house. To our great disappointment, when we looked under the car, the oil leak had resumed.

We debated what to do, fearing that the oil leak might well cause us to drop out during the upcoming

The Car

The car used by Whitney in the GAR was a 1930 President FE Brougham. The Brougham was only available on the long 135" wheelbase and was unique with its padded top and landau arms. This stately vehicle used Studebaker's 336.7 c.i. straight eight engine, which originally produced 115 h.p. at 3200 RPM. Base price was $2,245, which made it second only to the state limousine at $2,595 in price among all FE models. ❖

Sporting their identical Studebaker Wheel tee shirts and hats, navigator (and author of our feature story) Whitney E. Kerr, on left, and driver, Larry Cain, could pose for brothers. This photo was taken in Tacoma on June 16, just prior to the start of the contest.

accurate speedometer is desirable, so we purchased a Jones Speedometer that is graduated in one mile increments and only goes to 60 MPH. This speedometer operates like a ball type governor with balls which, as the throw out bearing, rely centrifugal force. It has a heavy cable to eliminate any waving of the speedometer hand. The Jones Speedometer was mounted on the steering column for easy reading by the driver. Seat belts were also installed to meet race requirements.

After the engine was installed in the car a new type screw on oil filter was installed to replace the original oil filter. On our way to Tacoma oil leaks made it necessary to eliminate the oil flow through the filter since the seal could not hold against the 80 pounds of oil pressure.

Four months after we removed the engine and transmission, we had completed the work on the brakes, brakes, wiring and engine overhaul. It took about two weeks to install accessories on the engine and install the radiator. When we had it all assembled, we started the engine and ran it in the garage until the radiator started steaming with several leaks. To our surprise our 590 radiator cleaning was a waste of money. Rather than trying to fix the 65 year old radiator, we had a new radiator made and used the upper and lower tank from the old one. With the new radiator installed, we were ready to take the car for a road test. The first test was only about five miles in our neighborhood.

The winner of the GAR 1996 and the $50,000 grand prize was Jim Hampton and John Sears driving a 1929 Model A Speedster. Their margin of victory over second place Wayne Stanfield, riding solo on a '36 Harley Davidson, was one second.

Of the 83 entrants that left Tacoma on June 16, 70 were still running and in the competition at the conclusion in Toronto on June 30. Most racers do not earn any money, but as Whitney indicates in his fine story, "to finish is to win." ❖

Whitney E. Kerr, 62, is the son of Whitney M. Kerr, 87, and the late Thelma C. Kerr. Whitney M. Kerr is the owner of the 1930 Studebaker President Coupe in the race. Whitney E. Kerr was born in Kansas City, Missouri and has resided there all his life. He is a commercial-industrial Real Estate Broker with Colliers Turley Martin Tucker & Co. and has been in the real estate business for 30 years. Kerr and his wife, Day, have five children and eight grandchildren. A hobby, they have restored a 1945 Greek Revival mansion in Arrow Rock, Missouri, where they spend their weekends. Whitney E. Kerr has a 1921 Sunbeam Model 24 roadster, a 1931 Studebaker President Four Season roadster, a 1959 Studebaker E-12 ½-ton truck, and a 1962 Studebaker Lark Daytona convertible. ❖

packing. I called my father that evening, and he obtained some German made industrial pump packing. The Studebaker pump has not leaked a drop since we put it in it was repacked in Kansas City June 22nd.

As we drove across the country, we saw Studebaker fans and ASC/SDC members at almost every stop. When we arrived in Peoria, Illinois, Larry Stevenson and Dick Quinn were there, and we enjoyed visiting about the race and about our Studebakers. Thank you Larry and Dick! We also met for the first time Lloyd Lyon and his brother John. The Lopez brothers followed the race in their car and were our cheerleaders across the United States from Peoria to Toronto. John and Lloyd joined us at the banquet in Toronto and sat at our table. Their support and encouragement will long be remembered. Thank you Lloyd and John!

By the time we left Kansas City, we had readjusted the brakes on the car, had repacked the water pump shaft, and fixed the oil leak problems. The old car was running well. The mechanical performance of the machine was good until we reached Adrian, Michigan. We stopped for a mid afternoon pit stop and a man came up to me and said, "Mister, something is hanging down under your car." When I investigated, I discovered the left front wheel brake rod was disconnected about four feet behind the front axle. It was dragging on the ground.

A volunteer raced to the corner hardware store and brought back a case hardened bolt. With great difficulty we managed to recover the bolt and secure it with bolts, cotter pins, etc. Having lost valuable time and being on the clock, we raced off to start the next leg of the race. At the first corner, Larry exclaimed, "Oh my God, we don't have any brakes!"

For the next 65 miles, until we reached Southfield, Michigan, we drove with the emergency brake only. Fortunately it held up. We managed remarkably well considering the terrain and the many times we needed to depend on it to stop the 5,180 lb. Studebaker President.

When we got to Southfield, Michigan, that evening "Grandpa" Stanfield adjusted the mechanical brakes on the car, and they have worked very well ever since. Thank you "Grandpa" Stanfield!

When we crossed the finish line in Toronto, Larry and I both had a real feeling of accomplishment. Somewhere with the Grace of God, the help of many people, the restoration work, and the tutoring of my father on the 1,800 mile trip from Kansas City to Tacoma, Larry and I had managed to drive the 65 year old Studebaker President over 6,100 miles. We finished 18th in a field of 55. Not in the money for prizes, but definitely a memorable score. Would we do it again? Sure! Larry has already signed up for 1997. ❖