

ROAD TESTING A DE SOTO V-8 ENGINED PLYMOUTH

HOP UP

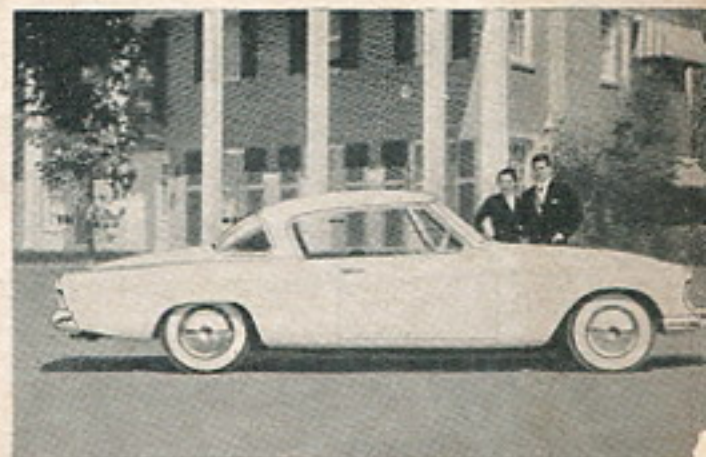
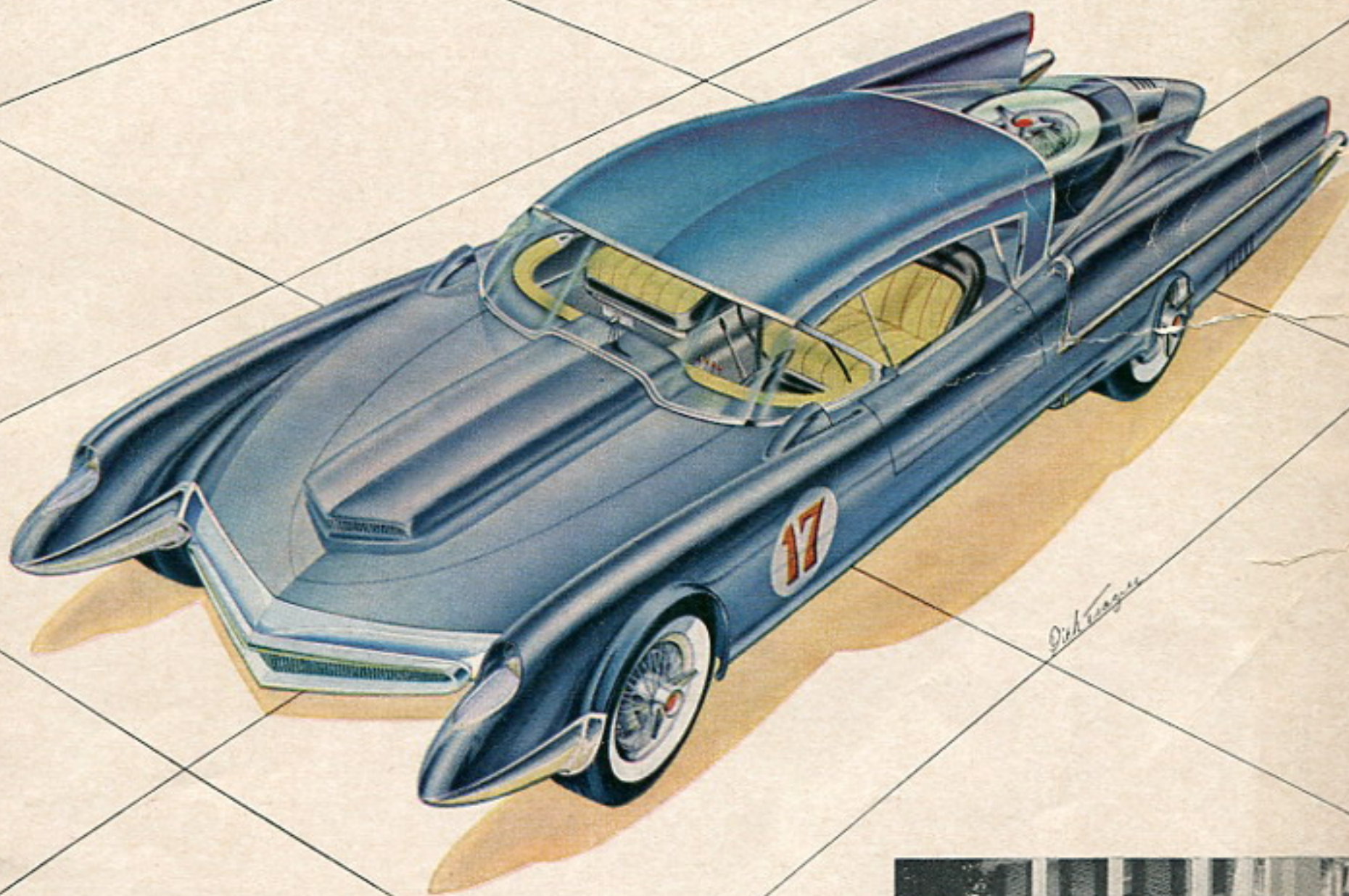
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- CARS OF THE FUTURE?
- HOPPING UP THE FORD 6
- AUTO CHASSIS DISCUSSED
- CUSTOM CARS
- BONNEVILLE PREVIEWS



DETROIT'S DREAM CARS REVEALED BY DICK TEAGUE

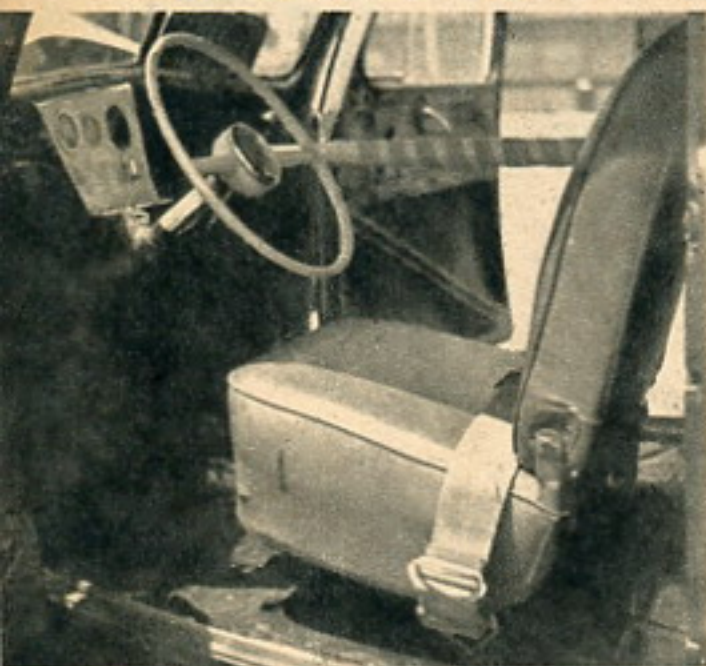
• 1953 STUDEBAKER STARLINER COUPE



Don Corwin (L) and Sharon Baker with the "big barge" at Saugus, Calif., drag strip. Fancy paint job is red and white.



Sedan and '34 coupe get off to a good start at the Saugus strip. Sedan won.



Above. Interior of sedan shows panel delivery seat, safety belt, aluminum instrument panel with two instruments.



BUILT TO GO NOT TO SHOW

Three Enthusiasts Got Together to Rejuvenate This Record Holding '40 Ford Tudor Sedan For Drag Racing and Lakes

by Sharon Baker

SPRING, and a young (?) man's fancy turns—but to racing in this instance instead of the usual things involved. What we're getting at, in a round about way, is the re-awakening of the 1940 tudor Ford seen on these pages.

Its history (racing) starts in 1949, as far as the engine is concerned, and from that time on, except for two years of retirement in a neighborhood garage, its performance speaks well for the car.

With the beginning of the 1949 lakes season, the Russetta Timing Association opened up its classes to sedans in addition to the streamliners, coupes and roadsters. At it stood then, two classes were set up for sedans based on engine size and body modifications.

Class A was from 0 to 300 cubic inches with stock body and fenders, which had to be mounted in the normal manner on top of the frame rails, al-

though lightening of the chassis and body was permitted.

Class B allowed contestants to go all out. Engines of over 300 cubic inches, chopped tops, channeled bodys, streamlining ahead of the firewall, rear engines etc. Almost anything went.

Our problem was to have a competition car and a family transportation machine, all in the same vehicle. So plans were made, savings counted, and a helping hand guiding in the right direction we started on the car.

The helping hand came from the direction of Edelbrock's shop, in the form of Bob Meeks. After considering the size of the car, the limitations imposed by the rules, and trying to guess what the competition would offer, Bob suggested that I bore the block to 3 $\frac{5}{16}$, an increase of $\frac{1}{8}$ inch over stock.

To this we would add the new 8CM Merc crank, with a $\frac{1}{4}$ inch longer stroke than previous models, which would give us the needed torque to push that big hunk of iron fast enough to get the job done.

Left. Shot of nineteen of the trophies won by Baker during the two years he ran the car at El Mirage with Russetta.

One week later, after a few anxious days of work and many hours of sweat, the new engine was installed and ready to run (I hoped). To say I was a bit shocked at the difference between a stock, tired 1939 Ford V-8 engine as compared to a 276 cubic inch "full house" would be putting it mildly.

At the first lakes meet, two weeks later, our efforts were well rewarded when the car racked up first place in its class at 109.65 mph.

The sedan had, at this time, a 3.78 to 1 rear end ratio, a stock 11A ignition, and 6.50 x 16 street tires, and burned straight alcohol fuel.

Gradually through the season we changed to 3.54 gears in the rear end, added a converted Zephyr type ignition, and mounted 7.00 x 16 Speedway Firestone tires on the rear.

The end of the season showed the car had the fastest run, one way, for its class at 119.64 mph and the fastest two way average at 118.34 mph.

All this time, the car was being driven on the streets, between meets, to work, in and around Los Angeles and several trips to the northern part of the

state had racked up a total of 26000 miles on the engine.

This proves, to me, that if the engine is properly built and care is used when the assembly is done, that a *good* modified engine can be used over a long period of time.

Before the 1950 season opened, the engine was pulled from the car and a complete inspection given all of the poor tortured innards. The decision was made to bore a little larger, open up the ports a little, and install larger intake valves. The bore was now 3 $\frac{5}{16}$ plus .040".

It was indicated that competition would be considerably rougher this season so a spare engine was bought to run in the sedan when not in competition so the "Hot" engine could be more highly tuned. Aside from the new pistons and rings, big valves, and new main bearings, the original parts were all used again.

To this very day the engine has never had a major mishap other than the loss of two exhaust valve seats which worked loose. The original inserts installed in 1949 are still in this engine.

Believe me, static and electronic balance of an automobile engine is a must. Stock or otherwise, it pays!

The first meet of the 1950 season really proved the modifications added to the engine. The first run made through the traps was 126.58 mph with 3.54 gears and 7.00 x 16 tires.

As the season progressed, and a near hazardous engine fire shook us up a bit, we realized that the work involved in sweat and strain to change an engine every 4th week (stock to hot for each month's lakes meet, and back to stock again) and all the necessary accessories, plus the chance of being out of transportation called for something else in competition or call it quits.

A "dog" was found, and purchased for a mere pittance. ("Dog" in this case refers to a "moldy" looking '40 Ford tudor sedan.) The car looked atrocious but was found to have a very square and straight chassis.

Three days later, after the removal of three hundred pounds of headliner, dash, radio, heater, window regulators, side glass, seats, and inside trim the hose and shovel treatment was given the inside of the car to finish it off. The car weight was now down to somewhere near a satisfactory figure.

The rear end was taken apart and the differential action locked by arc welding the four spider gears to the spider cross. 50-50 Houdialle shocks mounted all around, and a 1950 1/2 ton pickup transmission replaced the original 1940 model which was thrashed beyond use for our needs.

The competition engine was then installed along with a 1941 Ford radiator

(Continued on page 58)

HERE'S A TIP...



that might save you many headaches. Excessive vibration while your car is moving may be caused by the tires being unevenly worn. Rotate them every 2000 miles and they will wear evenly.



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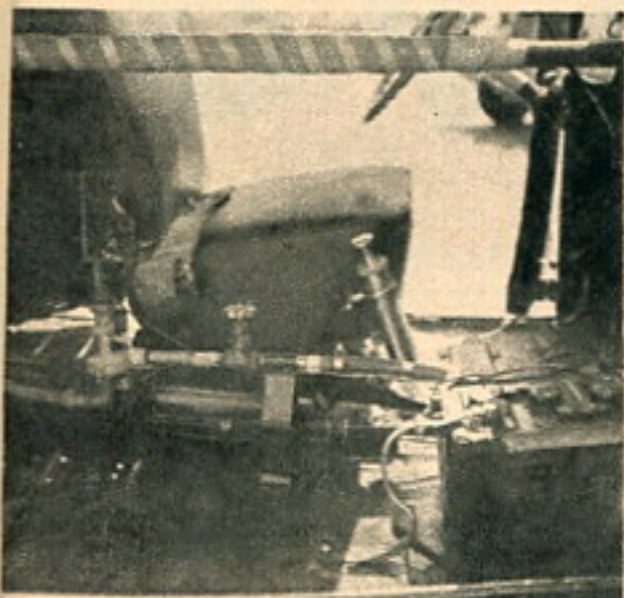
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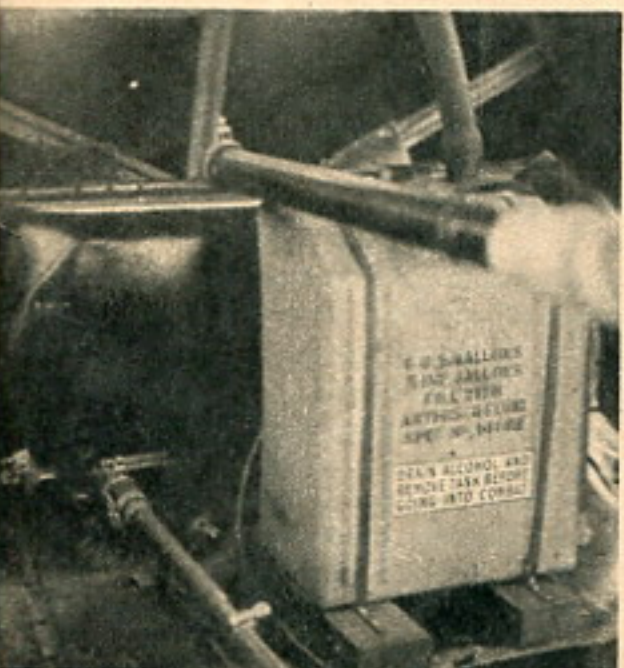
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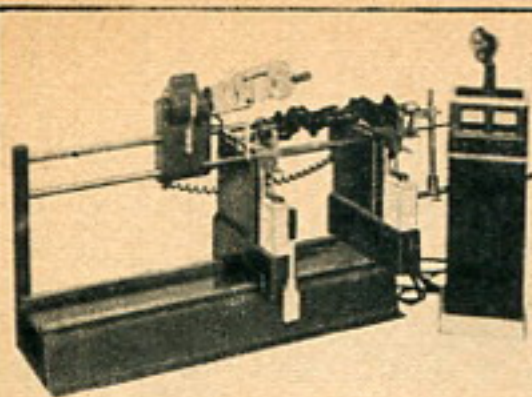
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Above. Next to seat are mounted hand pressure pump, electric motor used to turn water pump and shut off for water.

Below. Looking into rear of sedan you can see the fuel tank (foreground) and old gas tank now used for water supply.





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DRAG SEDAN

(Continued from page 49)

and the car towed to Bagge and Son wheel alignment shop in Los Angeles. Because the sedan was to be used for competition only, he set 10 degrees caster into the front end. The other sedan had been used for both street and lakes so the caster on it had been set at 8 degrees.

A single, Ford panel delivery, seat was used in our machine because it was readily fitted and comfortable, plus being adjustable fore and aft.

A small instrument panel, made of .125" aluminum sheet, was installed and three gauges mounted. A Sun electric tachometer with an 8000 face, a 100 psi oil pressure gauge, and a water temperature gauge. When the Harman & Collins Magneto was installed later, the tach became unusable because it connects to the condenser of a battery type ignition.

The battery was taken from under the hood and mounted inside the car to allow more room for working on the engine and to move all possible weight to the rear. The battery is only for starting the car and for tail light illumination for after dark towing.

The first time out for the two door was another happy day for us. After one run for tune up and to make certain everything was secure I quit driving in order to help a family understanding.

A few minutes later, Don Corwin put on his winning smile and boots and caused no end of pit chatter by clocking 130.05 mph.

By the end of the 1950 season, with a lot of luck and Corwin's heavy foot we had boosted the one way time to 132.35 and the season's record for two way average to 125.59.

The 1951 season was started off by abolishing the old records and starting over again. The three times the car ran it was first in its class. It was during this year that Corwin was injured in another car and at the same meet we loosened another valve seat in the sedan. With funds depleted and spirits down, the car was put on jacks in June of 1951.

After Don had recuperated from his near fatal accident and received his army discharge, he opened a Macmillan gas station in Los Angeles. About this same time he started to needle me to get the sedan running, with his help.

Parts of the car had been sold during its two year rest but were soon replaced with new parts and again we contacted Bob Meeks at Edelbrock Equipment Co. The valve seat that had been loosened at the last lakes meet the car ran was intalled, the spider webs cleaned out

of the body, a new fuel pressure system installed and we were nearly ready to run again.

This time the competition would be of a different nature than before. We gave up the lakes and had turned toward drag racing.

Because all the local strips are 1/4 mile long, we would have to run different gears in the rear end or different tires. Maybe both. Corwin, Bill Likes, and myself went into a huddle to try and figure the correct ratio for maximum acceleration. After arriving at a decision agreed on by all we proceeded to mount the new gears in the rear end.

To facilitate the cooling, a 15 gallon gas tank from a '40 Ford was mounted inside the car directly over the rear axle. Inlet and outlet lines run from the engine to this tank, by-passing the normal radiator which was removed from the car.

This set up eliminates the weight of the radiator and water from in front of the axle and added more weight where it was needed, plus giving the car a larger water capacity.

To control the water flow, a 6 volt marine pump was installed in the smaller inlet line to the engine, and the initial movement of water is supplied by the thermo syphon effect when the engine heats up.

It was further decided to run the car on gasoline because the classes have been opened in both drag strips and lakes competition.

We are learning more by running the car on gas than we ever did while running on alcohol. With no changes in the engine other than carburetion, our good luck seems to be holding out. To satisfy our ego, we ran fuel (straight alcohol) at the Santa Ana drag strip once this season, and turned the quarter mile at 107.57 proving our guess of the rear ratio to be pretty close.

At Saugus, Calif., 1/4 mile strip we turned 91.45 on gasoline, not aviation gas, but Macmillan pump ethyl, and have taken first place both times we ran at this strip. We run in the 1932 to 1940 class and the sedan weighs close to 3000 lbs. ready to go. Those '32 and '34 coupes we run against sure do look light.

Once more this month we tried lakes competition, even though we swore we'd never show up there again. We're burning gas here too, and this time we came out second best at 124.18 mph.

We're sold on gas now, and our motto has become more understandable—"Three times cheaper—three times as far—just as fast" (we hope).

Time will tell with a little more tuning for 85 to 90 octane fuel and two fine workers like Don Corwin and Bill Likes to help out. Who knows, 1953 might be another successful season for our big barge.

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