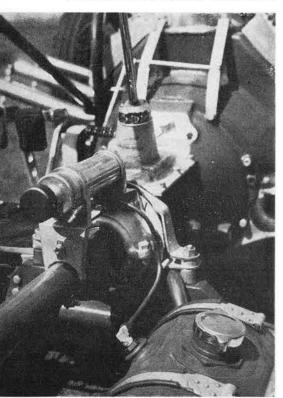


BluePrint Dragster

Hand pressure pump mounted within easy reach of driver and fuel pressure is maintained at 5 psi. The magneto "kill" button is mounted directly below pump



22

Text and Photos by Dean Batchelor

EVER wonder why anyone would go to the trouble of building a car that can't be driven on the streets? Many people, viewing a lakes meet or drag race for the first time, have asked this.

They can see the advantage in owning an Indianapolis type car—it pays off. (?) But they just can't see the use of spending time and money for a car that has no chance of financial return and can't even be driven on the street.

But Joe Goss doesn't feel this way. Joe is like many of us who have had to give up our own pursuit of happiness to serve our country in time of need. He recently returned from the front lines in Korea, where he was twice wounded. and joined forces with Neil Emory and Clayton Jensen, of the Valley Custom Shop, designing and manufacturing lowering kits for late model cars.

Joe is like many of us in another respect, too. He shares our avid enthusiasm for the hop-up sport.

However, whereas Joe formerly raced on the mud flats at El Mirage as a member of the Glendale Stokers, he has now turned his interest to drag racing. But drag racing to him is not the end; it is merely a means to an end.

Joe and a buddy, Jerry Richards, are

drawing plans for a competition sports car. They intend to make their machine the ultimate, at least as far as their knowledge and finances will permit.

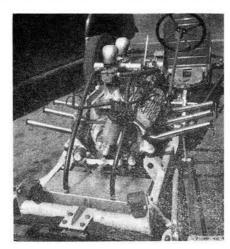
Some of the ideas they intend to incorporate into the sports car needed trying out and they didn't want to use the sports job for a guinea pig if there was another way out. There was.

Joe whipped this unusual dragster together in his spare time and, despite his lack of previous experience in this line, built a swing-axle rear end for the car.

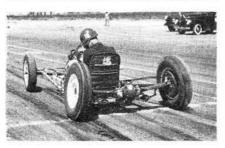
Why put a swing-axle on a drag job, you say? Why not use a stock Ford transverse leaf spring at the rear? After all, some of the hottest drag jobs in existence are built this way.

That's true. But these drag jobs aren't going to be the hottest in existence forever. Joe feels, as does this writer, that traction is one of the prime requisites for getting a car under way in a hurry, whether on a drag strip or coming out of a hairpin turn in a road race. To achieve maximum traction, you have to keep the wheels on the ground. And one of the best methods of insuring this is to increase the sprung/unsprung weight ratio. In other words, some sort of independent rear suspension must be provided.

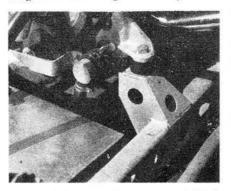
Joe doesn't necessarily feel that swing (Continued on page 62)



Closer view of front end reveals front spring mounting detail. Scintilla Vertex magneto, tach drive from front of crankshaft, water tank and return hoses, chrome plated individual exhaust stacks

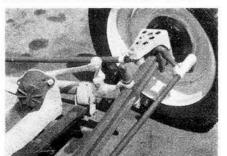


Above: Joe Goss leaves starting line in dragster. Note swing axle in operation

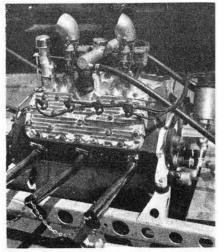


Detail of front engine mount which is fabricated from .125" th ck stee! plate and welded to frame. Rubber between engine and frame is the type which is used to plug ends of tubing while it is processed through plating tanks. Joe has also used these for exhaust p'ugs

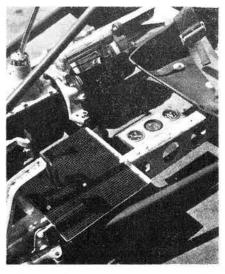
Detail shot of left front wheel shows home-made steering arm, no front binders, 5.00x16 ribbed tires, spring mounted to split, frame mounted wishbones.



Rear view shows offset seat for ease of shifting and to make sure the driver's feet end up behind the flywheel, instead of alongside it. The Japanese idiograph painted on the rear of the seat is hayaku which simply means "fast." or "quickly"

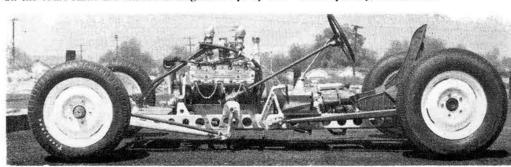


Engine shot shows Navarro heads, dual manifold. Scintilla Vertex magneto. Not visible is the Winfield Su 1A cam which is further modified to fit requirements of small engine size. Engine is early Ford block bored \(\frac{\lambda}{2}\)" oversize which makes the bore 3\(\frac{\lambda}{2}\)". The crank's been des roked to 3". This gives a total of 181 cu. in. Joe built the engine to run in SCIA class A, which allows 183 cu. in.



Miniature floor board is made from thin sheet of chrome moly covered with piece of rubber floor mat. Instrument panel is not made to be viewed while running the course. Instruments cousis of water temp, oil pressure & fuel press, gauges. Radius rod ends are Ford F-8 truck tie rod ends which are plenty rugged for job

Side view of Goss' drag job shows engine placed well back in the frame for good traction on rear wheels but still leaving enough weight on front wheels to allow steering. Wheelbase is 100", tread is 57". Tires are 5.00 x 16 in front, 7.00 x 16 on the rear. Runs are started at engine temp. of 140° but it quickly reaches 180°



HOP UP, November, 1953

BLUE-PRINT DRAGSTER

(Continued from page 22)

axles are the ultimate in suspension, but it was a starting point and the most reasonable from the standpoint of dollars and cents. All parts of this unit were purchased from a Ford parts counter or fabricated by Joe himself.

There are still many problems to be worked out even though the car is built and has been run once. Joe took the car to the Saugus drag strip one Sunday and discovered on the first run that the rear springs were not stiff enough.

Swing-axle setups have a peculiar tendency. They allow the rear end of the car to lower when extreme power is applied in low gear acceleration. Then, as the car gets rolling, it comes to level. On Goss' first run the rear of the dragster went down and stayed there the full length of the course, with the rear wheels sticking out at crazy angles. Foresight being one thing Joe learned from lakes racing, he had brought along extra spring leaves and, with the help of many willing hands, proceeded to install two more leaves on the spot.

Subsequent runs proved the extra leaves to be just about right. Within 25 yards from the start, the wheels had returned to their normal position and were getting a good "bite" without slip.

getting a good "bite" without slip.

Unfortunately, the front end was not aligned properly and the dragster did not handle well even with the rear end troubles seemingly ironed out. This situation will be corrected soon by a trip to Bagge

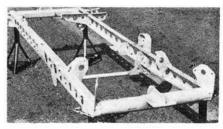
Wheel Alignment Shop in Los Angeles.

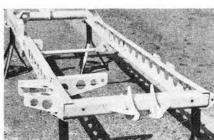
Yet, in spite of the front end wandering all over the course, he turned 90 in the standing quarter-mile while bucking a slight headwind.

If this doesn't seem fast for a dragster, just bear in mind that this engine is a little job with 180 cubic inch displacement, as compared to the 300 plus of most draggin' wagons.

The engine has been clocked at 130 mph at El Mirage, in George Hill's old '29 roadster, and has topped 100 in Don Simpson's drag job.

At any rate, Joe is not unhappy. He will return and do considerably better.



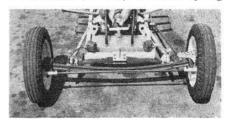


Front and rear views of frame before car is assembled shows how it has been liberally drilled for lightness. Frame has been entirely cadmium plated along with all nuts & bolts on the car. Everything else has been painted red, or chromed



Joe Goss hooks up the dragster's tow bar

Front view shows fabricated four gallon water tank, Houdaille shocks with homemade arms, and front spring made from a shortened (1 inch) model A spring



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