

Question: WHICH IS THE

CHEVY
FORD
PONTIAC?

Wherever performance enthusiasts gather, there you are sure to find a heated debate. The question: What is the fastest accelerating 1960 stock production car?

There are a number of U.S. cars of the 1960 model year that have excellent accelerating ability. But the issue of superiority, probably for reasons of price and popularity, is generally limited to just five: Ford, Chevrolet, Pontiac, Plymouth and Dart.

HOTTEST 1960 CAR?

PLYMOUTH
OR
DART

Since the start of the current model year, MOTOR LIFE has made special effort, both as part of the standard road testing program and in reports on stock car drag racing, to settle the matter. But readers have not been satisfied. They have demanded more precise performance comparison—between cars ideally equipped for acceleration with stock factory options.

This has been done.

To answer the question posed on the preceding pages—"What is the fastest accelerating 1960 stock production car?"—MOTOR LIFE set up and ran off a special performance trial.

The special test was public. It was made before thousands of spectators on the regular drag strip

just outside Detroit. Electric clocks did the timing.

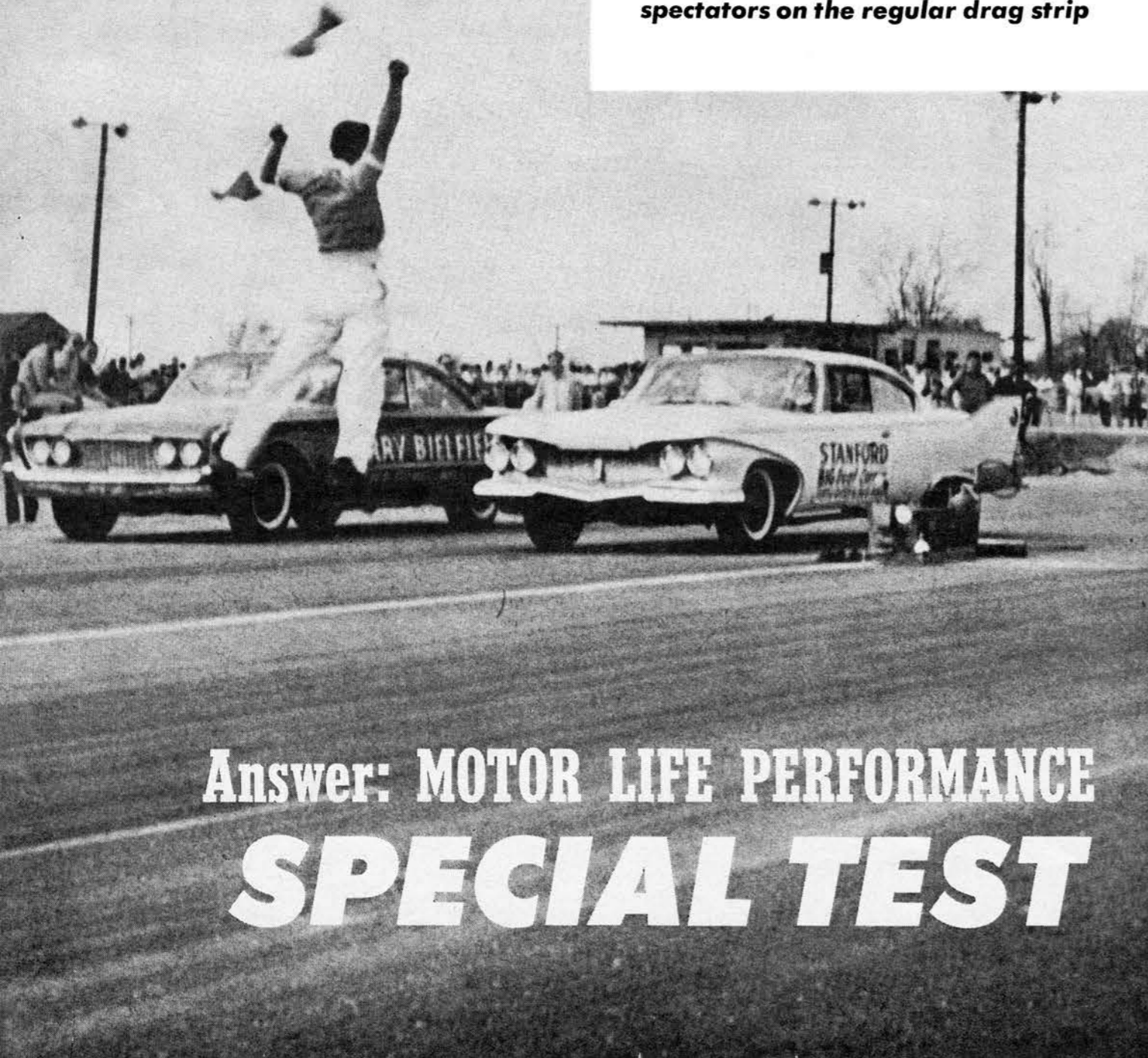
Four of the cars contended for the acceleration honors — Ford, Chevrolet, Pontiac and Plymouth. Because of last minute difficulties the Dart was tested separately but under the same conditions.

Each of the five cars, however,

was equipped with factory equipment carefully selected to give the maximum performance in a quarter-mile of acceleration.

For the full story on the unusual performance trial — probably the first of its kind ever held anywhere

—turn to the next page.



Answer: MOTOR LIFE PERFORMANCE
SPECIAL TEST



TRIALS FINDS THE FASTEST IN
AT THE **DRAGS**

by Don Stewart

A FEW WEEKS ago we determined what we considered to be a practical solution to this business of selecting an all-out performer from the ranks of the popular domestics. First, we'd secure five hardtops, one each Pontiac, Ford, Chevrolet, Plymouth and Dodge Dart—all 1960's—all equipped with manual transmissions and also fitted with the maximum performance options available from their respective factories.

Then we'd run them all on the same quarter-mile drag strip—on the same day—with the same fuel, the same tire pressures and under the same weather conditions. Then we could, we hoped, arrive at some sort of agreement as to what make, above the others, was the fastest performer. And thus, the *MOTOR LIFE* Performance Trial came to be. The complications, the competitors and the conclusions follow.

After we had secured the five cars (with a couple of necessary substitutes) we contacted Gil Kohn, owner of the Detroit Dragways, scene of the 1959 and 1960 NHRA National Hot Rod Championships. Gil agreed to allow us the use of his beautiful one-year-old plant and super-accurate Chrondek electric timing

equipment. We picked a date, made our very necessary homage to the sun gods and cleared up a few last minute details.

The following is a car-by-car account detailing the vehicle and its performance during the trial. It should be pointed out here that the times arrived at and the conclusions drawn herein are based on this particular group of cars, the optimum of tuning and preparation of each individual unit and the variables that will always exist whenever and wherever cars are tested.

We don't wish to infer that the performance of any vehicle tested here is the maximum (or minimum) performance that such vehicle (or similarly equipped vehicle) could be expected to deliver under other circumstances. This is not an "absolute" test of the five cars selected, naturally, since any positive conclusion would require far more time and detailed testing than this particular project would allow.

It is however, a reasonably accurate, definitely unbiased report of what five relatively similar cars can be expected to deliver in the way of drag strip performance for the quarter-mile under most normal circumstances. ●



PONTIAC Elapsed Time—14.55 seconds 94.53 mph

1st PLACE

The "tuffest" car in *MOTOR LIFE*'s Performance Trial for 1960 was a big, screaming brave from Pontiac with an elapsed time of 14.55 seconds for the quarter-mile and a speed of 94.53 mph through the traps. In short, this Catalina moved out from its four other popular competitors and left them all on the line. It was a strong car—much stronger than its next best, the Ford, and almost a full second faster than the only other GM make present.

Equipped with the 425-A Tempest, complete with dealer-installed cam and solid lifters, a heavy-duty manual three-speed transmission and a 4.55 rear end the Pontiac was, without a doubt, the champion of the day. Basically, the unit can be duplicated in any Pontiac dealership for a sum approaching \$3200 (plus state and local taxes, delivery, etc.).

The "Chief" arrived at the Detroit Dragways on the Sunday of our test with a 3.89 axle. Two trips through the timing traps was enough evidence that it needed a bigger (numerical) rear end. An enthusiastic Pontiac owner-rooter happened by and

offered the 4.55 cogs from his own storming 1959 Catalina. Two hours and a fast gear change later, the big, white car was back and the first run through the Chrondeks at 14.81 seconds and 92.11 mph convinced all and sundry that the car was the one to beat. As it turned out, it was!

The engine is the basic 389-cubic-inch 1960 Pontiac block. It comes from the factory with hydraulic lifters, a tuned exhaust manifold and system, 10.75-to-1 compression, developing 348 hp at 5200 rpm and 430 lbs.-ft. of torque at 3200 rpm. It also is equipped with four-bolt main bearing caps and a high-lift cam. This is the Tempest 425-A unit as delivered. When you order such a unit for conversion to solid lifters, the dealer receives the cam and lifter package (Pontiac part number 989639) for installation. The latter conversion costs about \$225 complete.

For the increased price you receive what amounts to an Iskenderian camshaft with a Pontiac parts number and the springs, etc., necessary to convert from "wet stick" to dry. You get no

increase in horsepower or torque but, naturally, you dispense with valve float in the crucial 4500-5500 rpm range which allows you to wind out without a noticeable power loss. Interestingly enough, however, we were shifting the Pontiac for this test at about 5,000 instead of going up the line and it performed very well in this relatively low range, an important factor when considering engine life and durability.

The Tri-power manifold and three two-barrels feed fuel to the big plant. This combination seems to be the standard for fast drag strip performance in Pontiacs and it certainly proved to be a potent combination for our trial.

The heavy-duty three-speed with 2.49 low and 1.59 second combined with the strong 4.55 rear end was also a very hot combination. Though I feared it was almost "too much" when suggested earlier, it proved to be the ideal axle for such acceleration work. A Pontiac "Saf-T-Track" rear end was also fitted to this car (Pontiac part number 535088).

Since our test, the car's owner, Bill Packer, Jr. of Detroit's Packer Pontiac agency, has fitted a four-speed box and the

This car's engine is primarily the same unit that was announced as an option in December 1959. It develops 360 hp at 6,000 rpm and 380 lbs.-ft. of torque at 3,400; is fitted with an aluminum manifold and a big four-barrel Holley, a compression ratio of 10.6-to-1 and a high lift cam, 1958 rockers and lifters and Falcon pushrods.

Unfortunately, this engine has raised some doubts in owners' minds as to the durability and/or performance it is capable of delivering. Stock units, purchased by drag racing addicts to be driven on the strips with stock valve springs and ignition have, it's been reported, not lived up to the advertised ratings of peaking speeds, etc. Several reports have come in from disgruntled 360 Ford owners, all with one common fault noted—valve float far below the 6,000 rpm mark.

This is too bad! Per dollar/per horsepower it's hard to find a better engine than the 360 and dollar for dollar, you have to search a long time to buy a better, more versatile car for drag racing than the 1960 Ford so equipped. But, until a few weeks ago, the valves floated and there's no use saying they didn't.



FORD Elapsed Time — 14.81 seconds 94.71 mph

Daytona Beach exhaust headers, as used by the Smokey Unich cars in last February's feature event. These smooth-looking, full-flow individual headers are a factory option now and, though the parts number wasn't available at press time, they can be purchased (about \$100 per set).

And so, that's the inside on the hands-down winner of MOTOR LIFE's First Performance Trial. But what about the runner-up, a big screaming Ford 360?

2nd PLACE

The next strongest competitor in our trial was a Ford Starliner equipped with a 360-hp, 352-cubic-inch engine, a manual three-speed box and a 4.11 rear end. With this set-up, the hairy Dearborn unit flashed through the traps at 94.71 mph with an elapsed time of 14.81 seconds—a very creditable performance against the big Pontiac that carries almost 40 cubic inches more displacement (and a price tag of several hundred dollars over the second-place car).

But, now they don't—thanks to a new distributor and a new set of valve springs and retainers!

The car supplied for this test would run 6800 rpm without floating. *That's right!* If you happen to be an owner with a 360 that quits dead at 5800 (or you're thinking of buying same) listen closely. A new "K" series distributor with dual springs that give good low speed performance and will carry—without floating—over the 6800 rpm mark, is now available. Ask your Ford dealer for part number COAF-12127-K. Or, if you're willing to sacrifice a little low-speed smoothness and don't want to go the route for a completely new distributor, you can now purchase a new vacuum advance spring set-up that will allow the same kind of high-up revving.

Then, throw away those stock valve springs (if your car was manufactured prior to February 1960) and purchase a set of new springs and retainers (parts number COAZ-6513-B and COAZ-6514-B respectively) and run up to 6800 rpm without

MOTOR LIFE PERFORMANCE TRIALS *Continued*

valve float. This should be good news to the Ford fans who aren't quite satisfied with the top end speeds of a floating-valve engine. Also, it will let the buyers who went the 4.86-rear-end route run out a good deal further in each gear.

Possibly, since the car did have the new springs and distributor, a stronger rear end (say, 4.56) could have been used with a lower elapsed time resulting. It would definitely run strong over 6,000 with the 4.11 in first and could have been shifted later in second than it was (5800 rpm).

At any rate, it exhibited its new go and pushed the Pontiac very hard in several wheel-to-wheel runs. But, a man once said something about not being able to beat cubic inches and he has yet to be proven completely wrong. Our test of the Ford against the larger car proved that a very potent package does come from Dearborn with an odds-on chance of being a winner over all but the really mighty.

3rd PLACE

The only deviation from our original plan of having completely stock versions of Detroit cars was our selection of the particular Plymouth Fury we utilized for this test. Since Chrysler Corporation has not seen fit to provide a solid lifter version of its 383-cubic-inch engine (for production, that is) the only available Plymouths that would qualify with all factory installed (or offered) equipment was a hydraulic valve version. And, since manual transmission versions of the ram-inducted Plymouths are as scarce as the proverbial hen's teeth, this segment of our test looked like a void.

We had just about decided to give up on the Plymouth portion of the trial when Les Stanford of Stanford Brothers, Inc., of Detroit, a local Plymouth-Valiant dealer stepped in and offered a unique car. He called and said he would make available a Plymouth 1960 Fury, three-speed manual, ram-inducted manifold, solid lifter engine unit if we wanted it.

Well, since Chrysler *should* make a solid lifter version of this engine anyway, and since we didn't want to run the trial without that popular make represented, we accepted Stanford's generous offer. Now, a brief description of his car.

This is the car that Paul O'Shea, a noted sports car pilot, *bon vivant* and Checker Superba salesman saw fit to run on the beach at Daytona last February. He turned a one-way time of over 147 mph with this same car (and a 2.93 rear end). It was built by Ronnie Householder, a former race car type, who is now employed by the Plymouth-DeSoto-Valiant division of Chrysler Corporation. Stanford came by the car after the Daytona runs and it is his specific plan to offer similar units for sale in his dealership. But, therein lies a snag.

The cam for this particular car is the same stick that was ground for the solid lifter version of the 413 Chrysler engine as fitted to the 400-hp 300-F Chrysler (MOTOR LIFE, June 1960). Unfortunately, this cam option was dropped, as were all the Chrysler performance options except the Hy-Per pack kit for the Valiant, shortly after the Daytona trials were over. Plymouth engineering had intended to use this cam (all Chrysler parts numbers intermix) with their version of the dry stick 383-ram-induction powerplant. But, when it was dropped from the Chrysler 300-F production plans, it fell by the wayside at Plymouth, too. Therefore, the Stanford Plymouth is a hybrid with a cam that carries no parts number or—a car that is not eligible for NHRA Super Stock rating.

But, besides all that, it did run (with a 3.31 rear end) against the other cars in our test and, while it finished third to the Pontiac and Ford, was undoubtedly a very strong car. A much stiffer gear could have been used since the unit didn't seem to drop off much until 5400 rpm was reached and it moved through

the traps with the 3.31 axle well down from this mark.

It's a pity that such a cam option isn't offered by Plymouth since the balance of the parts (valves, rockers, etc.) can be bought out of the Chrysler parts book.

4th PLACE

The same problem of hydraulic lifters and the non-availability of a cam for solid lifter conversion faces Dodge Dart owners as it does the Plymouth devotees. Therefore, without benefit of a solid lifter version of this make, we ran the Dart test separately with a hydraulic unit car *and* an automatic three-speed transmission *with* a 4.56 rear end fitted.

The results of such an odd combination were quite revealing. First off we learned that an automatic car with a big rear end and peak rpm speed of 4800 could still get through the standing quarter-mile trap in a very respectable amount of time. The Dart's elapsed time of 15.19 seconds was creditable considering the way it ran out of rpm's.

The engine was a standard 383 Dodge Dart-Plymouth unit with ram induction manifold and two four-barrels fitted. It delivers 330 hp at 4800 rpm and maximum torque of 460 lbs.-ft. at 2800 rpm. By shifting manually (pushing Low, Second and Drive buttons separately) we arrived at an elapsed time of 15.67 seconds and by allowing the unit to shift itself (flooring it in Drive) we reached the lower 15.19 second figure. The calibrations of the second gear shift could be altered to allow a longer run in this range. As it was, only a portion of the power curve was utilized in second before the shift to drive was completed. With such an alternation made, it's quite possible that elapsed times in the high 14-second range could be forthcoming—making the Dodge Dart a real threat in the Super Stock Automatic class this year.

5th PLACE

The fifth and last car to be tested in the trial was a 1960 Impala equipped with a 320-hp, 348-cubic-inch engine with a single Carter four-barrel fitted. The drive train included a four-speed transmission and a 4.11 rear end. And what else can one say!

Everyone, from the youngest pre-teen drag racing fan to the oldest dry lakes rail bird knows darn good and well that Chevys are stormers on drag strips. This car was set up well—it had optimum tuning by a very devoted bunch of fellows who are well known for developing the big V-8's into strong contenders for a variety of motoring competition.

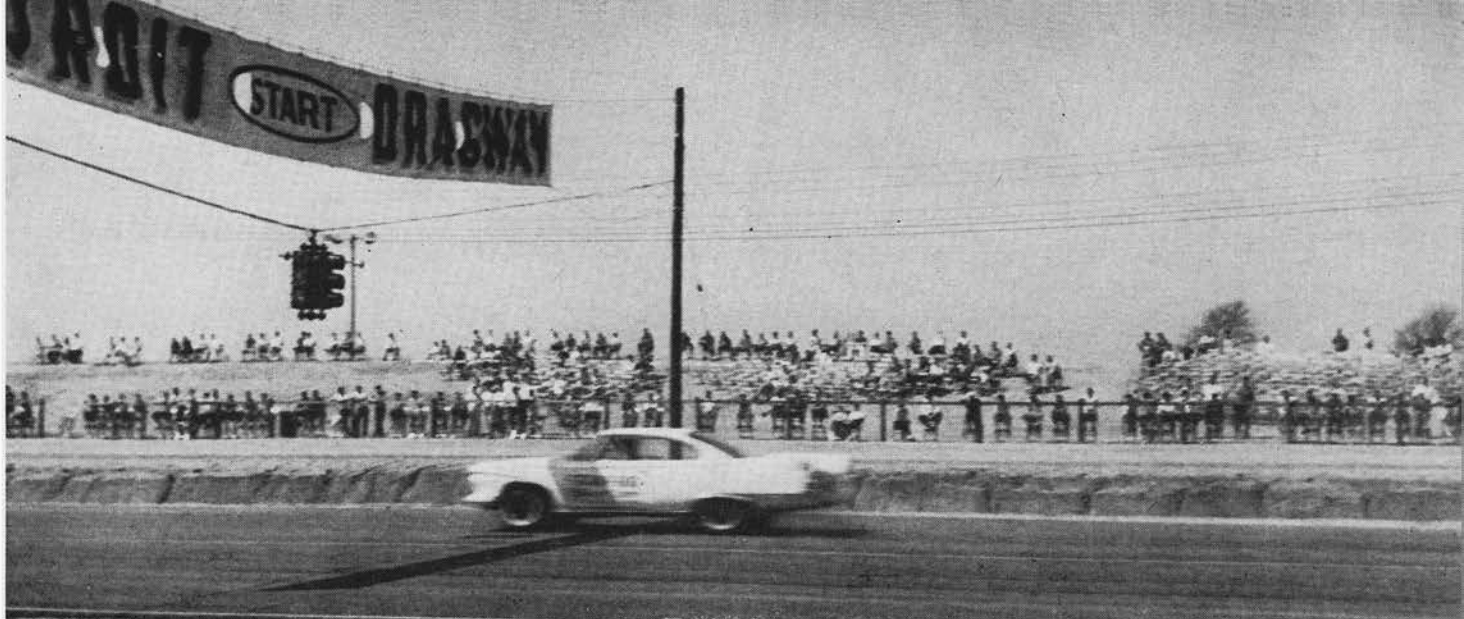
And it wasn't, by any stretch of the imagination, a sick Chevrolet. Why then does a car that should have challenged the front runners finish down at the end of the list? Perhaps this showing of the Chevrolet just goes to prove that nothing in the way of automobile testing can be considered infallible. *One* car's performance cannot constitute an example of what others of the same make will achieve under different circumstances.

This particular unit would run well over 6,000 rpm in first and second gear, drop into third and shift into fourth near the mouth of the trap.

It could have been equipped with a 335-hp engine with three two-barrels (though such a car was available it was decided by the advisors not to run it since they and, I might add, *they* should know, decided the big four-barrel was a better bit for this particular type of acceleration).

It also could have had a 4.55 rear end fitted (though again it was decided, after considerable testing with both sets of cogs, to run the lesser unit).

And so it placed where it did—probably not a typical showing for a make that is consistently high up in drag racing and is generally thought of as a very brisk mover among domestics. ●



PLYMOUTH

Elapsed Time — 15.00 seconds
95.64 mph



DODGE DART

Elapsed Time — 15.19 seconds
86.03 mph



CHEVROLET

Elapsed Time — 15.36 seconds
92.78 mph