

# OLDS 442

Probably unlike any Olds you've ever handled; firm ride and super control are enhanced with 400 cubic inch V8 and silky-smooth 4-speed

photos by Eric Rickman

At one time, roughly about a decade and a half ago, the name "Oldsmobile" struck awe into the hearts of most would-be stock car drag artists and captured the imagination of the young motoring American as one of the fastest accelerating stockers ever produced. And even as organized quarter-mile racing got its first foothold, Oldsmobile dominated the stock drag classes and a few others as well. It wasn't hard to figure out why. The Olds of the early 'fifties had a large (for the time) 303 cubic inch mill stuffed into a reasonably light body. The icing on the cake was that everything in the drive train and, most significant, the engine itself was big and beefy, well able to withstand the onslaught of continual abuse. Each autumn, at the time of new car announcements and before the phenomenon of ½- and ¼-year models almost as if by magic the Oldsmobile Engineering crew pulled a yet more rapid Rocket out of the hat. 1955 looked like another sure bet but the lighter, high-winding little Chevy left them at the gate and, except for a last gasp with the J-2 in '57, Olds faded into the relative obscurity of the medium-price range.

Being old enough to recall the bygone glory days of Olds, and armed with a knowledge that the Rockets had emerged from the immediate uncertain post-war era as the torch bearer of experimentation and innovation, we anticipated with hopeful expectation a long road test session with the Division's hottest new number: the 442. On this particular evaluation we really lucked out, as the saying goes, because GM had in-



vited us to a series of demonstrations at their Mesa, Arizona, Proving Grounds, so we decided to utilize the trip to wring out the new Olds as well. A bit more savor was added to the plot when it was revealed that we would be given an opportunity to run the car on GM's test track. In light of all this, it seemed that we would enjoy all the time necessary to learn if the 442 lived up to its press release of being designed to embody "outstanding dimensions of performance, responsiveness, handling and road sense."

When we picked up the car the weekend before leaving on the Arizona trip, barely 120 miles were registered on the odometer, so, for all intents and purposes, it was a new machine. This particular model was the F-85 club coupe equipped with every high-performance option available, as well as an eye-catching coat of cream lacquer that was set off admirably by a tasteful amount of chromework. Fastened to the bow, stern, port and starboard sides of the coupe were the 442 emblems that, in order, this year indicate 400 horsepower, 4-barrel carburetor and dual exhaust. If you didn't know already, last season the numerical designation represented 4-barrel carburetor, 4-on-the-floor and dual exhaust, but the old order has changed to something a little hairier. Although we're getting a bit ahead of the narration, it would do well for those who tempt fate at the lights to remember this insignia to avoid future competitive embarrassment. Even the grille on this job has been redone slightly for the high-performance look; we think it is smart looking.

The spec sheet we received with the car enumerated the salient aspects of the 442 as well as a complete breakdown of differences between it and the stock Cutlass model. The engine is not a beefed-up version of last season's 330 cubic inch unit; but rather an under-bored variation of the all-new Stage II, 425-inch Rocket, a report of which appeared in the November 1964 issue of HRM. With a 4-inch bore and 3.975-inch stroke, this is barely an over-square design that belts out lots of torque for which Oldsmobiles have been famous for years; in this case, about 440 lbs./ft., at 3200 rpm. Maximum brake horsepower has been pegged at 345 with moderate 10.2:1 compression ratio and the 4CG Rochester four-holer that enthusiasts will readily recognize as the carburetor used on popular Olds models of the past, though it has received considerable updating. An identical pot is employed in the smaller Cutlass engines, but for the 442 the primary throttle bore has been opened up an eighth-inch to 1 1/16-inch, and the secondary jets reamed .003-inch. In addition, a less restrictive ball-type fuel inlet valve has replaced the normal needle. All the carburetor modifications wouldn't be particularly significant if the fuel couldn't get to its destination

(Continued on following page)



BY ERIC DAHLQUIST/tech editor

*TOP LEFT*—African Safari, here we come! Well, not quite, exactly, but the Olds 442 really displayed stamina in situations like this, always being completely predictable, no matter what.

*TOP RIGHT*—Frozen at f16 by the camera's shutter, the 442 felt as steady at an indicated 90 mph on the banked Mesa, Arizona track as standing at rest in the hot desert wastelands.

*LEFT CENTER*—For the person endeared to open-aired touring, the 442 is available in a convertible form. What better way to spend a warm summer day than cruising rural byways.

*LEFT*—Spewing a rooster tail of gravel and dust, our man in the "outback," HRM Tech Editor Eric Dahlquist, powers Olds in Pikes Peak profile through a tight hairpin with predictable precision. Extra beef in the sway bars, springs and shocks showed their mettle in rugged settings.





## OLDS 442

*LEFT — Reflecting the tightly sealed underbody, our test car flogged through the water-trough in fine fashion at 30 plus mph. Only a few droplets barely squeezed in through the dimmer switch area on the floorboard.*

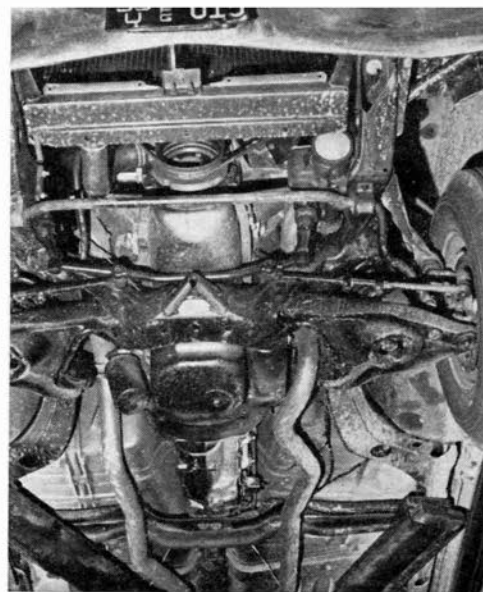
*BELOW RIGHT — Off the line at San Fernando strip, the 442 charged out of the chute to a 16-second e.t. and 91 mph top speed.*

*BELOW—Ours is but to reason why and at least part of car's handling agility can be attributed to stiffer shocks, sway bars and spring (left) in front. Parallel construction at rear (right) includes identical pieces plus more hefty trailing arms and accompanying bushings than stock. 442 frame is beefed, too.*

in proper quantity, so a greater capacity, high-dome fuel pump has been fitted, in conjunction with a  $\frac{3}{8}$ -inch outside diameter gas line instead of the usual 5/16-incher.

Roger Huntington has already given HOT ROD's readers a thorough rundown on the 425 last year and this smaller model doesn't deviate from it, except, of course, for 25 fewer cubes. Items such as forged steel crankshaft and connecting rods, light, stamped steel rocker arms with tubular pushrods, plus those 2-inch intake and 1.625-inch exhaust valves all contribute to vigorous and long-lasting health.

As back-up systems for the engine, there are some well-thought-out package parts that are usually overlooked in combos like this, despite the fact they are sorely needed in most cases. One item that few people pay much attention to is the radiator, and here Olds engineers have substituted a heavy-duty job that was designed for lots of abuse. The second area, no less important and just as frequently forgotten, is the electrical system. Here a generous 70-ampere-hour battery has been provided and, coupled with the alternator, it should provide the owner with above-average longevity in almost any desired use. Modern engineering has all but eliminated the annoying engine-produced vibrations but, at



the same time, the softness of the mounts normally leaves a little to be desired where constant acceleration and shifting place extra strains that can cause them to become unglued periodically. In this Rocket, they have substituted a sturdier set incorporating stops to control engine roll and, though we can't say how much the vibration frequency was elevated, if at all, engine movement was noticeably subdued. Finally, since logic tells us that the driveline is bound to suffer commensurately with severe usage, the standard driveshaft has been replaced with a new one, the design of which is such that it reduces high-speed vibrations to a minimum.

The remainder of the options reads like a road tester's dream of a decade ago come true. Fifty per cent higher wheel rate front and rear coil springs; firmer shocks to control high- and low-frequency ranges; fat front and rear stabilizer bars, about one inch thick, to retard roll and sway; reinforced rear lower control arms with appropriate, higher rate bushings; Red Line Royal "tiger paws" premium nylon tires on 6-inch rims, an inch wider than stock, for sustained high speed operation; they're all here, and more.

Even the frame got into the act on this car, being of more rugged design than the ordinary perimeter jobs found under the stock Cutlasses and F-85's. This addition is identical to the extra strength units law enforcement agencies demand under their specials to increase handling stability under adverse conditions.

Also in the police package vein are the 442's brakes that provide 156.3 inches of swept area. This figure is divided between front and rear so that the former, where the greatest amount of strain is, due to weight transfer in stopping, has a bit more material to cope with the extra exertion. The fact that Olds stuck to the Bendix duoservos in the face of the current trend to disc brakes indicates their faith in the capability of the bigger binders.

And, while we wax on enthusiastically, in light of these things, the transmission selections are not to be found wanting, either. Standard on the 442 is the same three-on-the-column box normally found behind the big 425-inch engine. Ratios for this column shifter are: 1st, 2.59; 2nd, 1.60; 3rd, 1.00. Besides this, a three-on-the-floor all-synchro trans, replete with Hurst shifter, will come on with a little different spread of ratios: 1st, 2.42; 2nd, 1.61; 3rd, 1.00. Still another stick is the new-last-season Muncie close-ratio four-speed that is offered with or without between-the-buckets console, depending on body model. This is the box that was in the car we tested and the ratios are as follows: 1st, 2.56; 2nd, 1.91; 3rd, 1.48; 4th, 1.00. Clutch action for all the manuals is an extra-duty 11-inch assembly that should dis-

play excellent wear qualities even with abuse.

For those who desire to just stab and steer, a two-speed automatic torque converter transmission may be bought also. Olds Engineering stayed with the two-speed instead of three because they felt the variable stator arrangement offered equal performance to their three-speed. To keep things working in good shape, plates have been added to the forward and reverse clutches, while the shift point into drive was raised to 5000 rpm. With the automatic, the standard rear end ratio is 3.23:1, so this combo is apt to get down the road in very short order.

As soon as we cleared the Olds garage and had an opportunity to run through the gears, even in subdued fashion, it was immediately apparent that the car was long-winded. Our particular machine was outfitted with the 3.55:1 ratio in the centersection and, even in city traffic, this choice appeared well suited to its task. Since the automatic job comes with a higher 3.23 ratio, we immediately set to wondering if the higher geared rear end would combine with the stick setup. Or, how to go fast without really trying.

The weekend trial revealed no malfunctions so, with HOT ROD Magazine photog Eric Rickman aboard, we headed out the pike for the freeway, the California border, miles of Arizona desert, and ultimately the GM Proving Grounds in Mesa. It didn't take long to realize that even with the engine only partially loosened up the 442 was a "runner" with a capital R. Charging along at a posted sixty-five, a light nudge on the go pedal would bring the speedo needle over eighty in short order. When we tanked up the first time at Indio, California, a quick division of gallons into miles disclosed that the car was

*(Continued on following page)*





covering about twelve miles on each gallon of gasoline. Even though this figure is nothing to write home about, the odometer showed a total mileage of still under 250 so we anticipated better averages later as break-in progressed, and it was learned we weren't to be disappointed.

At Indio we turned off on Routes 60-70 that streak out across the desert to Blythe, California, crossing into Arizona and beyond. In this neck of the woods, and we use the term loosely, for this is true desert country, the best method of getting territory put behind is to bear down on the accelerator and this is just what we did. The highways in this part of the land are little affected by weather as far as smoothness goes but at eighty even the smallest knoll may cause trouble for the unwary driver so we were on our toes. High-speed touring was the order of the day and we mean a day at a time. The engine was running like a well-oiled sewing machine and, although no tach was provided, despite the fact that on such a machine it's a welcome adjunct, one could feel that it was loafing.

Passing was at no time a problem and all that was required to get around even the most persistent drivers was to get the secondaries open in that big Rochester, at which time it delivered a sensation akin to the kick-down in an automatic or overdrive. Acceleration at lower speeds could not be classed as pokey by any means, but in some conditions in mid-range it felt as if the fuel supply was running a trifle lean. And, later on, upon removal of the carburetor top, we did discover that the floats were set too low so this probably accounted for it.

With the border inspection well behind, the next stop for gas was at Salome and we were pleasantly surprised to learn that the mpg had jumped to 15.5. Another thing we noticed was the interest shown, not only by fellow travelers, but mainly by the service station attendants who never failed to barrage us with questions and thereby attract a few additional bystanders. By this time we were both well aware of the comfort of the adjustable-pitch steering wheel which reduced driving fatigue to a minimum. By pulling back on a stubby lever fastened just below the turn signal indicator arm, the wheel could be tilted down to a near-vertical position or elevated to a flatter truck-like angle. I have always appreciated the inclination of various sports car wheels but have nearly always been forced to

resort to some form of physical contortion for entrance and exit due to the lowness of the wheel.

We arrived in Phoenix the night before the GM demonstration, so we decided to get some idea of the countryside which wound up including a ten-mile jaunt down what may be best described as an undulating desert dirt road that embodied about as many bumps, curves and just plain dust as you are likely to encounter anywhere in the country. GM literature had mentioned in passing that they also utilized many public side roads in their test programs because these little-traveled byways provide a severe trial for all components and, after our ordeal, we knew why. Yet, despite these rough conditions, the Olds showed an abundance of class in all situations. On the hump-backed surfaces the combination of stiff shocking and firmer-than-normal springing really did the job in enabling the driver to retain control. Sweeping around the gravel turns at speed brought to light another of the 442's fortes, excellent handling. It was a simple matter to set up for a turn in fine dirt-track fashion and then power around, keeping the rear end hung out while at the same time safely avoiding an excursion into the boondocks.

At the Proving Grounds the next day, part of the program was devoted to allowing various members of the motoring press to make a few hot laps on the test track and the quarter-mile as well. First attempt on the quarter-mile resulted in a 16.1-second elapsed time, with two observers aboard, and a lot of wheel spin. Second time out, minus one 200-pounder and a little of the burnt rubber, we registered a 15.1-second e.t., dusting a 421-powered member of the GM "hot medium" family in the process. Immediately the wheels began turning in our minds as to just how this "baby" would run, set up along drag competition lines; collectors, cheater slicks, tailored distributor, etc. As for top speed, just the way the test car was equipped, only once did we try to peg the speedometer, but as the needle slid beyond 120 and the engine was still pulling strong, we backed off.

In compliance with the rule at the Proving Ground facility (a member of the engineering staff must accompany all visiting drivers), a genial ruddy-complexioned fellow named Jerry Liles took part on the runs and directed our attention to various interest points during our track time. He also commented in passing about the fact that the 442's

mill was identical to the 425 except for the smaller bore. Later on we learned that the 425-type pistons are identical in weight to their smaller counterparts, so no rebalancing would be necessary for the switch.

Given these facts it is the next logical step to wonder why Olds didn't just use the 425-inch engine to begin with, or at least list it as an option; the reason being, of course, that the GM "front office" drew the cubic inch line at 400 in the A-bodied car, of which the 442 is a member, hence the smaller engine. Another consideration may have been that the 442 had just about the right balance carrying a 400 cube mill,

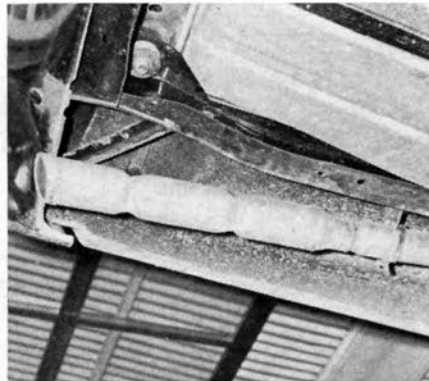
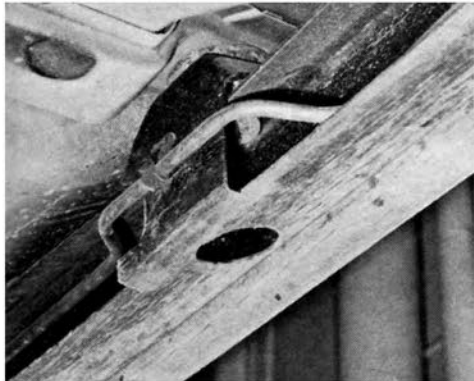
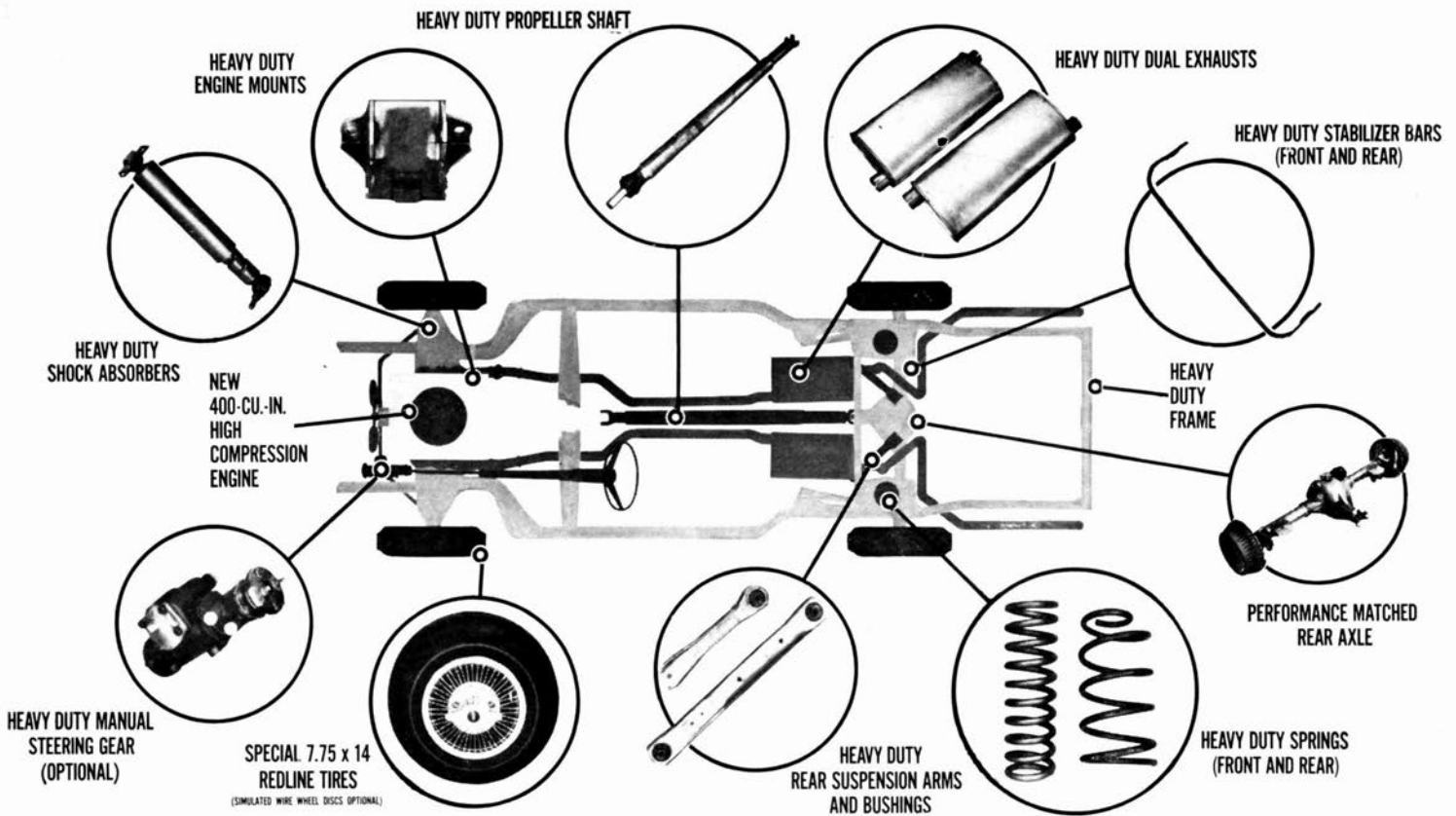
## OLDS 442



so why stretch the car's capabilities. We'd have to concur with this judgement in all but race course conditions, because there is seldom any instance in the course of normal driving where the 442 potential can be used as it is, let alone with 25 additional inches.

With our test track trials concluded we adjourned to the water-trough area to see how well the car was sealed against moisture. First run through the drink at 15 mph produced no signs of leakage and a non-sensational shot for our photo editor. So we went back to have at it again, this time "at speed." Running through the trough in such a confined area creates strange effects as Eric Rickman discovered when a wall of water advanced through his view-finder.

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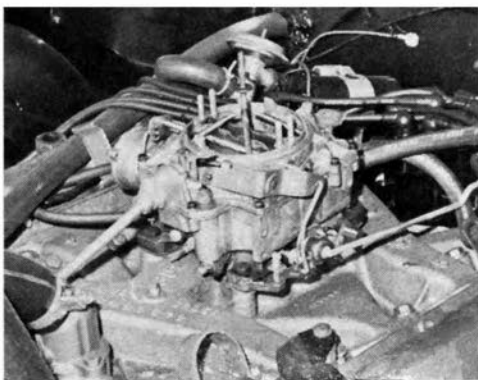


*ABOVE—If you are going to construct a high-performance car, this is the approach: comprehensive.*

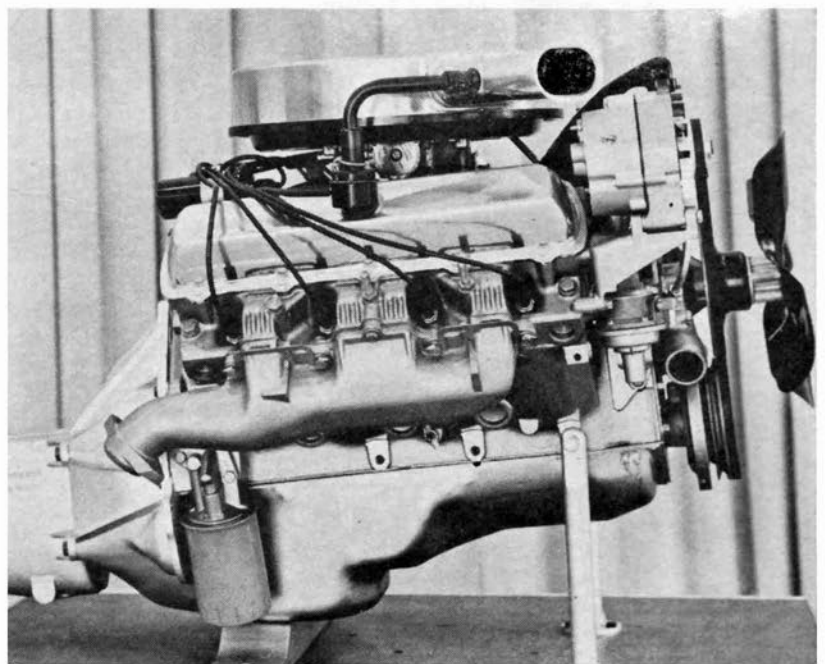
*FAR LEFT — And then there's the Hurst shifter, smooth with or without glove. Tach, console are extras.*

*CENTER—The fuel line diameter has been increased to 3/8-inch to satisfy the increased requirements.*

*LEFT — Constriction in tail pipe is used to subdue generous sound emitted by resonatorless system.*



*ABOVE — Engine compartment is more spacious than camera angle indicates. Servicing for most areas is easily accomplished. Rochester carb, though familiar, is modernized.*



*RIGHT — Neatly attired in tasteful chromium, the 442 version of the 425-inch Olds powerplant is entirely adequate for application. Exhaust manifolds are free flowing.*

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**OLDS 442**  
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A few drops crept into the Olds passenger compartment around the dimmer switch hole on this run but it was nothing that a little dum-dum wouldn't correct in a jiffy; a remedy, we might add, more rapidly accomplished than the time it took Rick to dry off.

With our mission accomplished, we settled back for the demonstrations which were well worth an hour out of anyone's schedule, and then prepared for the trip to L. A. via Yuma. During all this desert travel the 442 never faltered, and at night, when the temperature sags far enough to ice-coat small bodies of water, the Olds heating system functioned with an efficiency able to scorch the tail off a jack-rabbit at forty paces. Although we never ran into any weather above 80, the ventilating quality of the car seemed to be adequate for all but those 120-degree days when nothing satisfies like an air conditioner.

On the trip back to home base the mpg picture shone brighter with every tankful and finally climbed to more than sixteen, despite the fact that the driving pace had not slackened. By this juncture we had also learned that the seat angle, which had on first sight appeared to be overly rearward inclined, was in reality just what the doctor ordered for long spells in the saddle, especially in conjunction with the adjustable steering wheel. The accelerator pedal had a comfortable angle too and, since it was on the same plane with the brake, quick stops were easily accomplished by pivoting the right foot on the heel from one to the other. Travel on the individually adjusted bucket seats was more than adequate even for six-footers but, when all the way back, they were knee knockers for those in the back. Besides the steering wheel, the single most attractive fixture in the cockpit was the floor-shift handle placement and operation. The stick was one of the best placed of any in an American car and would shift fast or slow with equal ease. A little more push for the average buyer would probably be the optional console alluded to previously, but our preference ran to the small black rubber boot molded into the floor mat on our car. It somehow seemed more in keeping with the machine's no-nonsense character.

Back in L. A. and surrounding locales we drove the 442 in virtually all city situations and never found it unpredictable. On rain-slick streets the car always exhibited good road-sticking characteristics, except on acceleration from dead starts when a slightly overzealous foot was applied to the accel-



ator and the rear wheels tended to slip a bit in some cases. Outside of the few drops which were forced through during our splash test, not even the heaviest downpour caused any wetness inside. The electric wipers function very efficiently, sweeping clear a wide windshield arc with each stroke. And the front glass itself was tinted down from the roof about four inches to reduce glare considerably.

The local driving phase of our test also included an opportunity to check out the 442 on some 0-60 sprints which averaged out to just about six seconds for a series of tries on different surfaces. As another portion of each car's evaluation we like to run at a regular drag strip and in competition if possible. On the particular Sunday that we went out to San Fernando Raceway the first big meet of the '65 season came off and this, coupled with a trip to the hospital to patch up a deep cut that was inflicted by a razor-sharp fender edge, effectively cut the number of runs to one. For the single blast, we got off at the first wink of the green light but the tires just didn't want to get a decent grip so the e.t. went up in smoke at a disappointing 16.38 seconds. Another 442 identical to ours, except for cheater slicks, ran out at 14.15 seconds, clearing the lights at 98 mph, and we'd guess this is nearer the actual "stock" potential.

Most interesting of all the Olds entries on hand that day (and there were many) was a '64 Cutlass with the smaller 330-inch engine, a dyno-tuned job, 12.5:1 buckets and a big Holley four-throat, which wrung out a quick 12.68-second e.t. at a creditable 109 mph. Sponsored by Guy Martin Oldsmobile, the car had been beaten only a few times in class and amassed thirty trophies in meets all over Southern California. With 70 more cubes and the improvements of the newer design engine, the '65 442 should really haul when set up properly.

Our own times disclosed that the car ran faster with two on board than one and this emphasized the observation that the machine has too much low-end torque to run at its maximum capabilities on the strip without better bite. The average driver probably will not find this situation painfully hard to accept, however, because dragging is only a small portion of the 442's attraction. Fantastic handling with just the right amount of over-steer, high-speed touring potential and generally sound construction minus frill are the features that will sell the car.

Emphatically, the 442 remained one of the most likeable machines we have ever had the pleasure to drive. At the going base price of \$2799.02 f.o.b. Detroit, this Olds is really a buyer's bargain; we wish there were more of them. ■ ■

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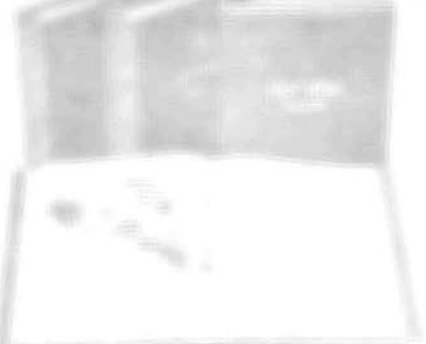
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