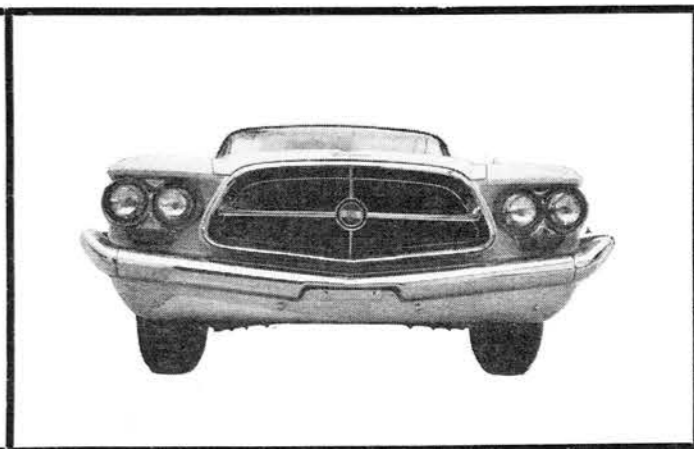
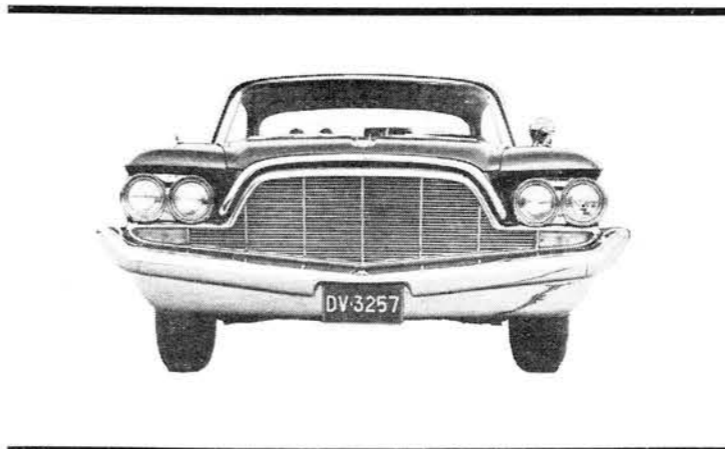


*There is a choice but
it's limited to
degrees of sheer power*



By JOHN CHRISTY

IN PREVIOUS stories in MOTOR LIFE's option series we've concerned ourselves with choices through small, medium and large engines and cars. With this one we come to the choice of big, bigger and biggest. Let us face one fact right now, if anyone feels the *need* of a bigger car than is offered by the senior Chrysler line we can only suggest psychotherapy. These cars represent a sort of epitome in sheer American muscular bulk. In terms of decoration they range from plush to outright luxury. In terms of engine size and output the range is from 295 hp at the lower end of the De Soto scale to 400 horses at the top end of the Chrysler scale, all from the same basic block through variations of bore, stroke, cams and carburetion.

At first glance one might be led to believe that there were only three engine combinations as far as straight displacement is concerned, these being 361, 383 and 413 cubic inches respectively. A closer glance, however, reveals that there are in reality four different combinations due to the different stroke lengths between De Soto and Chrysler. The De Soto uses a stroke length of 3.38 inches in both the 361 and 383 engines while Chrysler uses a stroke length of 3.75 inches throughout which means that there are four different bore sizes. De Soto has the biggest bore size at a hulking 4.25 inches to make its 383 cubic inches while Chrysler has the smallest at 4.03 inches to make up its version of the 383 cubic inch engine.

One might at first figure that there was a quick way to extra horses for the De Soto merely by swapping cranks and rods. There is another interesting idea that comes to mind, too. All the engines except the 300-F engine have a 10-to-1 compression ratio across the board. Since the smaller De Soto engine has the same ratio of combustion chamber volume to cylinder volume as the largest in the line it follows that the chamber volume of the 361-inch engine is less than that of the 383. Used on the 383 block it could boost the compression ratio a full point. The major difference would be the smaller intake valve used in the 361 engine but judicious use of a 70-degree piloted reamer and eight of the large valves would take care of that particular problem. The one remaining would be to see if there is any structural differences between the two heads that would shoot the project down. Since to our knowledge this piece of power swapping has not yet been done we don't make the foregoing remarks as a guarantee but merely as a thought for the day that might bear looking into, at least for those who cannot be content to leave things as the factory made them. Chrysler products have that effect on some people; there's so much on tap that maybe something more can be had by stirring things around.

However, we're wandering far afield. What we are after is

what the factory *will* give its customers who aren't content to walk into the Chrysler or De Soto store and tell the man to "wrap up that one."

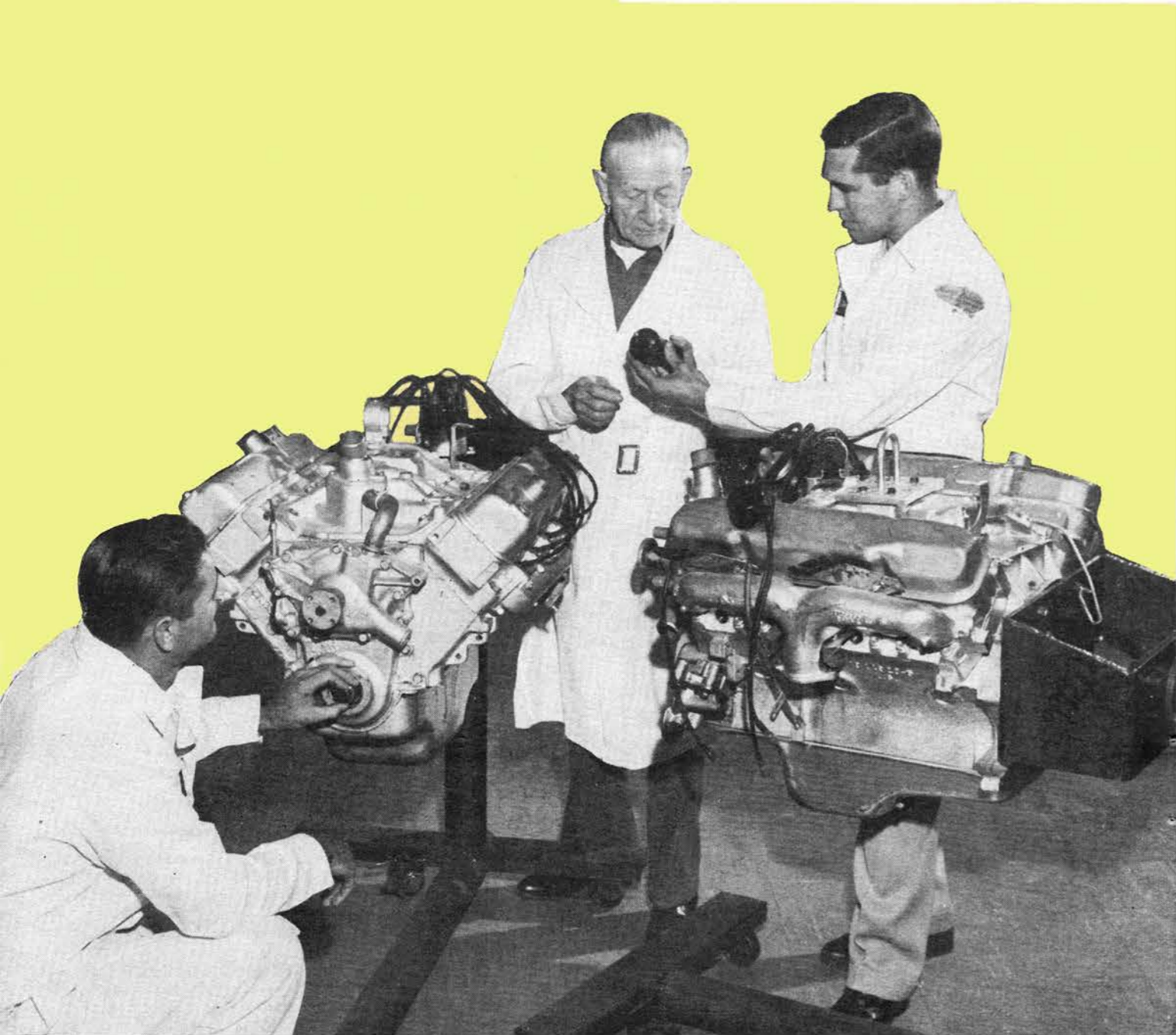
If the De Soto is the desire there are two basic engine choices, the 361 and the short-stroke 383 engines. In the case of the former there are no power options; it comes in basic form only. Available only with the single two-barrel carburetion it develops 295 hp at 4600 rpm and 390 lb.-ft. of torque at 2400 rpm, quite a wide spread. In the strictest sense of the word it is not an economy engine since due to the 10-to-1 compression ratio it must use a diet of premium fuel though admittedly it will use less of the stuff than the larger engines.

As standard the 361 comes fitted with a three-speed manual

HOW TO SELECT CHRYSLER AND DE SOTO OPTIONS

transmission and a 3.54-to-1 rear end. It is unlikely that anyone would want to pull a higher rear end ratio than this with a manual box but undoubtedly if you insisted you could get the man to install a 3.31-to-1 rear end normally fitted with the optional two-speed Powerflite transmission. A better choice would be to get the dealer to order the car with the 3.73-to-1 gears that are optional for Chryslers. This would give better acceleration throughout the gear range and allow better passing performance on the highway with little if any loss in top speed. It would also be a good ratio for mostly-urban use and for hill country use as well. An interesting point here is that, unless you want to lay out upwards of \$7,000 this is the only way you can get a manual transmission in the entire De Soto-Chrysler group.

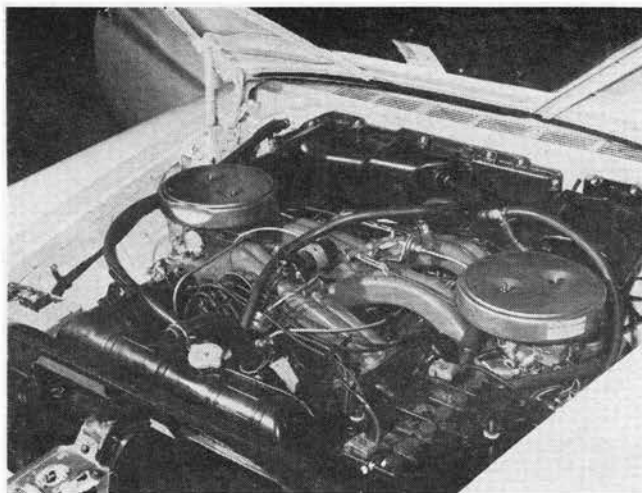
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CHRYSLER & DESOTO OPTIONS

By the gospel according to the AMA spec sheet all other versions of the group list the manual box succinctly as "Not Available." As mentioned there is one other way you can shift for yourself, for a price, as we shall see in a moment.

Regularly listed options with the 361 are the two-speed Powerflite automatic box coupled with the 3.31 rear axle and the three-speed automatic Torqueflite with a 2.93 axle as standard and the 3.31 as option. For those with gentle cruising in open country in mind the standard Torqueflite layout is undoubtedly best, Chrysler Corporation engineers having shown an uncanny ability to mate the proper rear-end, transmission and engine combinations well. However, those who want to stay ahead in city traffic will undoubtedly prefer the 3.31 option. Such are the properties of Torqueflite that the differences in acceleration



RAM INDUCTION is the big power plus that has added horses and torque to the 1960 Chrysler picture. Such innovations have kept both Chrysler and DeSoto well in the not-so-dead power race.

between ratios in the low 3.00's and high 3.00's or low 4.00's are almost nil when used with that particular box. The higher numerical ratios merely seem to produce excessive wheelspin when well and truly booted with this form of automatic, so it would be a waste of time to coax the man to give you anything but one of the two listed options.

The next option up the scale is the short-stroke 383 engine which gives the customer more latitude. The standard version comes with a single two-throat carburetor and develops 305 hp at 4600 rpm and twists up 410 lb.-ft. of torque at 2400 revs. This same engine with no other changes than a four-barrel carburetor and a dual exhaust system is listed as the "Hi Performance Pak" and in this guise, due to better scavenging and the increased venturi area, turns up 20 more horses with a commensurate increase in torque.

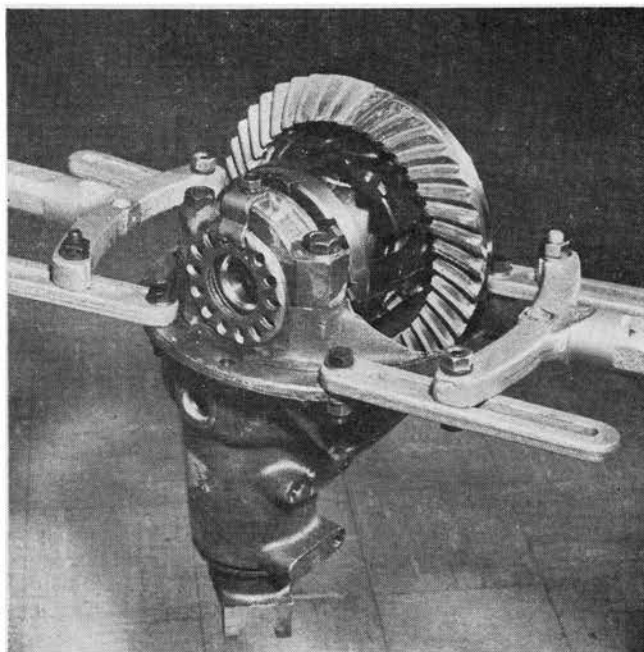
The big blast in the De Soto line, however, is the ram-tuned engine for the Adventurer line. This is the same 383-inch engine as before but uses the ram-tuned induction system and a different cam to increase the peaking speed of both torque and horsepower. To be brief about it this is the same engine used in the D-500 Dodge and the biggest Sonoramic Commando Plymouth. Power is 330 horses at 4800 rpm and torque is a massive 460

SUGGESTED OPTION for the rear end is the limited-slip, Sure-Grip differential. With hotter engines it is hard to make full use of take-off power when only one wheel is doing the pulling.

lb.-ft. at 2800 revs. Torque being just what a two-ton car of this nature needs to get under way, the ram-tuned Adventurer does just that. Suffering a weight disadvantage over the smaller, similarly powered Dart it won't do 90 in the standing quarter or hit 60 in eight or less seconds but it will come reasonably close. The cam used in this is the 268-degree stick used in other cars mentioned whereas the cam used in the other De Soto engines is the comparatively mild 252 unit. Overlap for the hot one is 48 degrees against 30 degrees for the mild one.

Torqueflite is the only transmission offered with any of the 383-inch engines. The two-barrel version uses the 2.93-to-1 axle as standard with the 3.31 as an option while the procedure is just the reverse with the two hotter versions. As pointed out before it would be patently useless to mess around with these ratios, since the 3.31 axle seems to offer the best all-around gearing in terms of acceleration and speed. So little is to be gained by swapping that the procedure would be merely a time-consuming waste. However, one option for the rear end that is definitely not time consuming nor waste is the limited-slip, Sure-Grip differential, especially in the hotter varieties. The ram-tuned engine develops so much torque that it is hard not to burn rubber on anything better than a maiden-aunt type take-off if only one wheel is doing the pulling. Doubling the amount of traction lessens considerably the tire consuming chirp and can save its price in rubber over a two-year period. Too, trying to get one of these factory hot rods under way in snowy or rainy weather can be a tiresome job without some form of double traction unless great restraint is used in applying the right foot.

Now we come to the Chrysler line. The two junior members, the Windsor and the Saratoga both share the long-stroke 383-inch engine and the entire line uses the Torqueflite transmission. There are literally no engine options for either of these cars, the Windsor coming through with a single two-throat carburetor and developing 305 hp at 4600 revs and 410 lb.-ft. of torque at 2600, exactly the same as the De Soto short stroker. The Saratoga comes through with 20 more horses through the use of the four-barrel carburetion that accounted for the same raise in the De Soto. Both engines share the mild 252-degree cam and both use the smaller 1.95-inch intake valves used on the milder De Soto. However, there is no listed power pack for either of these cars. If you want something more than the



DISASSEMBLED Torqueflite graphically tells story of intricacies of current transmission design. It is only transmission offered on standard Chryslers but is fully capable of getting full performance out of the engines.



standard Windsor has to offer you must take the Saratoga. After you own the car there's nothing to stop you from stuffing it full of any of the Chrysler Corporation power pack equipment pieces you want but the factory won't do it for you unless you happen to be the Commissioner of State Police in New Jersey where they use such things. If you want Chrysler to supply you with a Q-ship you'll be better off with a Dart.

If, however, you're still set on having a Chrysler, the next step up is the New Yorker. Again there's very little choice in engines. The New Yorker comes through with the largest engine in the Chrysler line, the hefty 413-cubic-inch plant in its mildest form. Carburetion is by one big four-throat AFB 2927-S carburetor and the mild cam is used. Output of this engine as received in the New Yorker is 350 horses and 470 lb.-ft. at 4600 and 2800 revs respectively. Using the Torqueflite it is plenty gutty for the average person but it is by no means the ultimate. Here again you can build your own Q-ship but you must do it on your own or be poker buddies with the local Chrysler dealer.

It isn't that the Chrysler Division of the Corporation is against hot rodding, it's just that they have their own ideas of how it should be done. Their views expressed in the ultimate for power packages, the 300-F. Since its inception in 1955, this big boomer has been known as the bankers' hot rod and has since the beginning been the most powerful production car in terms of sheer brute horsepower you can buy anywhere in the world. It is possible that you could get the brothers Orsi to build you up a little something using their 5.7 liter Maserati V-8 engine that will pack more power but it won't be a production unit. As far as buying horses over the counter goes, the Chrysler 300-F is strictly *it*.

Basically the 300 is and always has been a plush, souped-up version of the New Yorker. The differences lie starting from the outside to the inside, in a different, European-type front-end styling treatment and less trim for the body and a distinctive paint job not available on other Chryslers. The interior trim is always in leather and the seats are semi-bucket instead of bench-type. The dash panelling is more functional and given a "sporting" appearance. Usually the 300 series including the 300-F is equipped with all the latest engineering gimmicks that can be hung on it. The result is that one gets a feeling that "Big Brother" is watching and doing some of the driving as well. At night, with all the gadgets turned on including the speed controlling Auto-Pilot about all the driver has to do is gently

guide the big bomb with his finger tips while the throttle automatically adjusts for hills and dips, the lights dim for oncoming cars and the non-glare mirror clicks from dip to bright. One quickly gets the urge to hack every switch but the ignition and herd the thing by hand and eye—one's own hand and eye that is, not Bob Rodger's. He it was and is who has nursed this plush hop-up along since 1954 and one sort of gets the feeling that he has never really let one completely out of his hands, maintaining contact and partial control through all the electronics and hydraulics built into each car.

Hot rod it has been called and hot rod it is. The engine is the basic 413-inch job with a tenth of a point more compression and ram tuning which gives it 375 hp at 5000 revs and a whopping 495 lb.-ft. of torque at 2800 rpm. This kind of pressure pushes the 300-F through a standing quarter in 16 seconds with a speed of 90 at the finish, kicks it from zero to 60 mph in 7.5 seconds, give or take a tenth and will hustle you along the pike at 130 mph with little strain if you and the law can come to terms about such velocities. There's an option for this one, strangely enough. A hotter 284-degree cam with 55 degrees of overlap (the standard one is "only" 268 degrees overlap) gives 400 horses but cuts the torque to 465 lb.-ft. When so equipped (and the fact is that only seven of these have been made so far) the engine is coupled to a four-speed manual all-synchro Pont-a-Mousson gearbox. The standard axle ratio is 3.31 but there are no less than five other options: 2.93, 3.15, 3.23, 3.54 and 3.73 to 1, all, of course, available with limited slip differentials which, as pointed out earlier should be on the "must buy" list.

Other differences aside from the engine are also included in the 300-F. When you have a car with this much muscle you have to have some assurance that the thing will stay on the road, which it does admirably, better than most cars with half its bulk. The front spring rate is 40 percent stiffer at the front and 50 percent stiffer at the rear with shock absorbers to match. In addition there is a meaty anti-roll bar at the front to increase full stiffness further. Even on narrow, winding roads such as those found in New England and the South the handling of the 300-F is, for the heft involved, excellent.

As pointed out earlier, there is no one to stop you if you want to make a 300-F out of a '59 Chrysler or De Soto or even a '60 model but the factory won't do it for you unless you pay the price of a senior model and they won't go the route for less than the cash outlay required for a 300. In a way, though, it's worth it. Mr. Rodgers *does* build a nice hot rod. •