

The Invisible Cars

350 Chevelle — 351 Torino — 318 Satellite: unexciting, unloved, and more often than not — unwashed. Mobility for the masses — transportation for the silent majority / By Jim Brokaw

Much like the *Purloined Letter* in the Sherlock Holmes classic, the American intermediate sedans are seldom seen, commonplace, indistinguishable one from the other, and yet very much in plain sight. One usually sees a lawn, but not the blades of grass; a crowd, but not the people; the absence of an available parking space, but not the line of invisible cars tethered to the parking meters on Main Street. These are the Detroit draft horses, the darlings of the transportation purists who Naderize styling and elegance. Scorned by the body-shirted, tight-trousered aficionados, they are the beasts of burden which sell by the million year after year.

Having already tested the big family sedans and low priced compacts, and a sprinkling of specialty vehicles in between, one of the few items remaining on our domestic evaluation list is the middle-buck transportation car. By a stroke of good fortune, modified by the vagaries of low public relations budgets, our samplings represent the high, low and middle price classes of the avail-

able configurations of the cars most of you buy. The Plymouth Satellite four-door sedan, a bare bones, Plain Jane version; Ford's Torino four-door hardtop, the high buck, super luxury offering; and finally, the mini-BMW Chevrolet slipped us, a two-door semi-performance model, equipped with, seemingly every option known to man.

The intended comparison was a straight across match-up of unadorned four-door sedans with 2V medium powered engines, radio, heater, power steering, power brakes, good tires, and very little else. What we wound up with provided a much more graphic comparison of what may be desirable, as well as what is downright necessary.

The primary function of these vehicles is to transport four adults in reasonable comfort at a reasonable cost. They are also employed to transport salesmen and their sales items; construction supervisors with their charts, instruments and lunch pails; city, county and state employees, as well as an innumerable variety of lesser corporate employees whose duties require mobil-

Chevelle
GOOD POINTS
Dash panel layout
Outstanding handling
Engine response
Interior quality

BAD POINTS
Flexible fuel line (kinked)
Manual shifter does not directly control trans
Poor rear visibility
Engine surge at 2200 rpm



ABOVE: Chevelle Malibu was the only two-door model tested. Rear seat leg room was insufficient to comfortably transport adults for any length of time. Rear sway bar provided excellent stability. Below: Sport interior in Chevelle had best dash layout of all three vehicles. Bucket seats were very comfortable, but robbed front seat of extra space desired for the intended use of the vehicle.



ity. A few low budgeted municipalities are using these models for police work. In essence, comfort without luxury; economy without spartanism.

Before we even start through the checklist of goods, bads, and nice-to-have-but-too-expensive items, I would like to state unequivocally that two-door models are out. In spite of advertising to the contrary, if you plan to carry an adult or two in the back seat — even a relatively small female adult — there will be gripes and groans about the availability — or lack of it — of rear seat leg room.

SEATING COMFORT and INTERIOR SPACE: Having dispatched the two-door version to the racier set, let us get on to the people-packaging. Picking your seat is a very critical operation, since that's where you spend most of your in-car time. The basic economy bench seat was in the Satellite. It was terrible. Lumbar support was non-existent; post-bump vibration dampening was an abject failure; there was a strange harmonic in the seat-back springs which set to humming on

roughly paved roads; and, to complete the picture, the genuine plastic vinyl seat covering had wrinkles in it.

Chevelle had the pseudo-leather bucket seats with spine straightener seat backs. These were well padded, gave excellent support on long or short trips, and somewhat defeated the purpose of the low-buck intermediate; that of maximum utilization of space. Buckets are out.

Torino, with the brougham interior, had a full bench seat which could hold two adults and a child for distance traveling, or three adults on a short trip. The cushioning and support was excellent with the exception of the seat back rake angle, which was more suited to a Can-Am car than a sedan. The angle can be adjusted to taste, however, with a little help from your local Ford mechanic. The upholstery was magnificent green brocade tricotee — just a little bit up-town for the image we're trying to set. The ideal setup would be the next higher option bench seat above the super cheapy. This is not intended to imply that Chrysler makes bad seats

nor that Ford makes only good seats. Or, maybe it is just Plymouth who makes bad seats? Right now you're saying that everybody's standard seat is bad. The point is that the bottom-of-the-line, standard seat made by anyone is inspired by minimal cost of manufacture and little else. The top of the line fancy brougham interior is very expensive. So shoot for something in between.

Interior space was quite adequate in both four-doors, and not quite enough in the rear for the two-door. All models have from 2 to 3 more inches of back seat living space in the four-door version. Chevy and Plymouth have longer wheelbases on the four-door machines, but Ford managed to ace the passengers out of some space while retaining the same wheelbase on the two-doors.

The Satellite did have one annoying characteristic not shared by the other two: the "B" pillar, or center post, is flared below the belt line. This necessitates angling the side window track forward. When you crank the side window down a few inches to change the smog inside the car, a chilling blast of muscle-stiffening air blows directly across the back of your neck. Apparently, when Chrysler puts in flow-through ventilation, they intend for you to use it. You will *not* be old fashioned and wind down the window.

DASH PANEL LAYOUT: Chevelle took top honors in this category with their sport dash, which has a full bag of instruments, well laid out and backed up by idiot lights. It costs a bit more money, but the included tachometer, water temp, oil pressure and ammeter gauges are well worth it. Neither the Satellite dash nor the fancy Torino dash was bad; they just didn't have enough monitor gauges. I have this weird fetish for wanting to know what my engine is doing instead of what it just ceased doing. All three had good control knob accessibility. For you smokers, the addition of the courtesy light group includes a bulb for the ash

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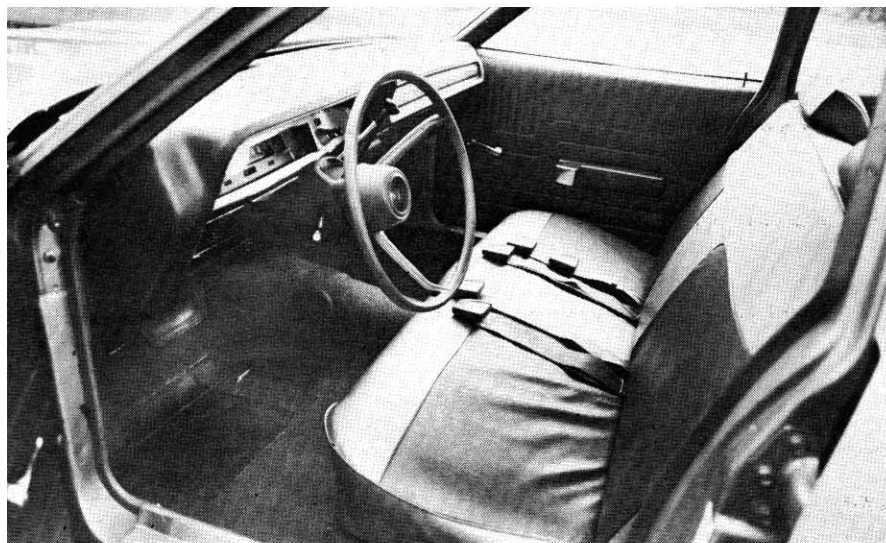
Above: Plymouth Satellite represents new Chrysler concept of designing four-door sedans with consideration for people packaging first, styling second. Result is a tastefully executed compromise with flared fender wells and upswept rear beltline to break the monotony of unadorned sheet metal. Horizontal taillights are placed, well protected, within bumper loops.

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tray, saving a lot of fumbling and near misses during night smoking operations. Chevelle also had the best steering wheel, their small diameter, vinyl covered sport model. This is strictly a matter of taste, however, and the ultimate choice is in the hands of the driver.

RIDE and HANDLING: Torino had the best ride until one encountered a large bump. The bump itself was taken in good fashion, but the front end tended to oscillate two or three times too often after level ground was reached. Chevelle's sport suspension, with 7-inch wheels and F60-15 Polyglas tires, predictably afforded the best handling of all three. Here again, the object is not to compare apples and prunes, since the standard passenger suspensions offered by the three manufacturers are quite similar in performance, as are their heavier duty options. In the case of all three, the next firmer suspension above normal will give the best compromise between ride and handling, and the plain truth is that it should be standard. If the government has its way after 1973, it will be. The trailer towing package is generally the most economical way to achieve this, usually for under \$25. Satellite gave a comfortable, but noisy, ride with satisfactory handling. The suspension tended to take a rather exaggerated set going into a highway turn, but the roll moment was most stable once the suspension was set. Chevelle sacrificed a portion of ride comfort on some of the rougher roads in deference to superior handling. It is really driver's choice in this area; however, the handling options should at least be experienced in the dealer's demo.

BRAKING: At 60 mph, Chevelle came in with the best stopping distance. There was a slight tendency to turn out at the end of the full-lock stop, but not enough to leave your assigned lane. Torino came in second with no adverse



Above: Satellite's bottom of the line, economy seat was uncomfortable and poorly assembled. Next higher option would be a wiser purchase in terms of comfort and durability.

Satellite

GOOD POINTS

Excellent engine response
Transmission operation
Visibility
Rear seat leg room

BAD POINTS

Brakes
Front seat
Front side window function
Outside mirror
Power steering

reactions. Satellite was a decided third, but this was expected inasmuch as the Satellite had manual brakes and the other two had power disc/drum brakes — all of which pointedly reaffirms that it just isn't worth the money you may save, to stick with manual brakes on anything but a sub-compact. Pedal pressure on the Satellite's non-power brakes was excessive; application resulted in uneven locking of the wheels; and, until the brakes heated up, the runout was a bit squirrely. Any intermediate sedan needs power disc/drums for maximum safety. Insurance companies should give a discount for them. Having tested Ford's manual brakes on previous models, we'd place them in the same performance category as those on the Satellite; one may assume that Chevrolet would do no better.

POWER and RESPONSE: On paper the 2V versions of the 350 (Chevy), 351 (Ford) and 318 (Plymouth) don't sound very perky, and you'll never see one of them pulling a NASCAR stocker around the high banks at Daytona; however, the astute engineers in the

Torino

GOOD POINTS

Engine response
Power steering
Interior quality
Paint

BAD POINTS

Door latches improperly adjusted
Seat back rake angle
Ride control on bumps

Below: Torino's well-balanced styling lends itself quite handsomely to the four-door configuration. Bumper is a bit skimpy, chrome strip is set too low for avoiding parking dings.



Below: Torino interior was most elegant of the lot, but a bit too expensive for the intended market. Pile carpeting is a worthwhile consideration as it is definitely more durable than standard floor covering. Solid seat back should accommodate over the shoulder restraint harnesses if they ever become fashionable with the safety set. Bench seat was most comfortable.



hidden laboratories of the big three have slide-ruled a surprising bit of performance into these mundane little clean-air engines. By selecting the proper rear end gear ratio, installing the correct cam, and jacking the timing around to bring out the right numbers on the dyno digital indicators, the point of maximum torque has been put right down where you'll do most of your driving. On the acceleration tests, all three machines consistently chirped the tires coming off the line, while Torino actually did some smokey wheel spinning. All three were responsive in traffic and presented no problem in attaining freeway on-ramp speeds. They do get a bit tired at the top end, but there is still plenty of energy to do any prudent passing which may be required. Of the three engines, the Ford 351 showed just a bit more spirit, but not enough to induce anyone to cross long term loyalty lines. If you're a Chevy nut, the 350 will satisfy; if Chrysler is your bag,

the 318 will give no cause to hide your head. Fuel economy was not up where I expected it to be, ranging from 13.45 to 14.47 mpg, but the machines were run exclusively on low lead regular fuel. It is a conceded fact that mileage is one of the sacrifices we must make in the battle for clean air.

Before any Plymouth fans get irate over the apparent mismatch of the 318 against the two larger opponents, remember the 318 is the only engine that competes in this category. The 340 is a high performance engine and, at this writing, the low emission 360 is not available in the Satellite model. Besides, it held its own on performance and came in with 14.47 mpg, the best mileage of the three. The reason for selecting these engines over the 5-liter models was to permit an assessment of power options as well as air conditioning if it happened to be installed, as it was on the Torino. The 5-liter engines can't really cut the mustard with a full

power bag and air conditioner on board.

QUALITY OF MATERIALS: Naturally, the brougham interior of the Torino put down the other two in every respect except cost. The rough grain vinyl in the Chevelle was just acceptable, and appeared to be a bit more durable. Paint, fit and finish awards were equally divided between the Chevelle and Torino. Since this is not a function of cost, Satellite should have been right in there swinging, but it wasn't. Chrysler realizes they suffer an acute quality control problem and have put former Dodge Division General Manager Byron Nichols in charge of a special program to translate customer complaints into remedies. Ford's exterior finish was the best, but the rear doors failed to close properly without a resounding slam. You can lay this off to improper door latch adjustment, but you get irritated at having to stop and reclose the door. So, a penalty point on Ford. The remainder of the various latches and fixtures on all three func-

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tioned as were originally intended.

The eternal question looms heavily in the final pages of any multi-car comparison: which is the "best" car? In view of the diverse configurations of the machines in question, I'm going to mealy-mouth it and not pick a best car. The primary reason for evading the issue is the vast difference in quality between the bottom end super cheap version of these intermediates and the next higher model. The quality of assembly and materials on the Satellite was so far below other Plymouth products we've tested that it would be grossly unfair to the potential consumer to "pick a winner."

The conclusion you may draw from all of this is: don't buy the car until you have personally witnessed the difference between the interior finish and appointments on the low-buck offering as compared to the next higher quality model. It may save you a lot of disappointment in the long run.

Regardless of the model selected, minimum additional equipment should include automatic transmission, power steering, power disc/drum brakes, tinted windshield, dual outside mirrors, and trailer towing package or sport suspension, whichever is offered as the next firmer suspension above standard. The trailer towing package is usually one of the best bargains offered, as it includes a large radiator and HD alternator.

Comfort options should include a radio; and if you do not go for air con-

ditioning, consider power windows as an alternate means of driver-controlled ventilation. Flow-through works fine, but some like a bit more air movement.

The best combination of all would be to put the Ford power steering and interior into a Chevelle body with SS suspension and use the Plymouth 318 and torqueflite trans to move it. You will not find these options available at your local dealership.

Four-door intermediate sedans may leave you cold, but turn-on is not their bag. They are specifically designed as a means of getting the occupants from one point to the next in reasonable comfort. This they do very nicely. So leap into your Plain Jane four-door, crank up that 2V engine, glide carefully out into the traffic and disappear from sight.

/MT



TORINO 4 Door

Engine	90° OHV V-8
Bore & stroke — ins.	4.00 x 3.50
Displacement — cu. in.	351
HP @ RPM	240 @ 4600
Torque: lbs.-ft. @ RPM	350 @ 2600
Compression Ratio/Fuel	9.0:1 Reg
Carburetion	2V
Transmission	3 spd. auto select-shift
Final Drive Ratio	3.00:1
Steering type	Power Recirculating Ball
Steering Ratio	20.64:1
Turning Diameter (Curb-to-curb-ft.)	42.33
Wheel Turns (lock-to-lock)	3.5
Tire size	F78-14 belted
Brakes	Power disc/drum
Front Suspension	Coil/link stabilizer
Rear Suspension	Leaf springs
Body/Frame	unitized frame
Wheelbase — ins.	117.0" (2 dr. 117")
Overall length — ins.	206.2" (17.2 ft.)
Width — ins.	76.5" (6.37 ft.)
Height — ins.	53.6" (4.46 ft.)
Front Track — ins.	60.5
Rear Track — ins.	60.0
Curb Weight — lbs.	3745
Fuel Capacity — gals.	20
Oil Capacity — qts.	4 (1)
Luggage Capacity	16.2 cu. ft.

PERFORMANCE

Acceleration	
0-30 mph	3.0
0-45 mph	5.1
0-60 mph	9.6
0-75 mph	14.0
Standing Start ¼-mile	
Mph	82.87
Elapsed time	16.798
Passing speeds	
40-60 mph	5.1
50-70 mph	5.7
Speeds in gears*	
1st . . . mph @ rpm	47 @ 4600
2nd . . . mph @ rpm	82 @ 4600
3rd . . . mph @ rpm	100 @ 4000
Mph per 1000 rpm (in top gear)	25.0
Stopping distances	
From 30 mph	22'6"
From 60 mph	121'2"

SATELLITE 4 Door

Engine	90° OHV V-8
Bore & stroke — ins.	3.91 x 3.31
Displacement — cu. in.	318
HP @ RPM	230 @ 4400
Torque: lbs.-ft. @ RPM	320 @ 2000
Compression Ratio/Fuel	8.8:1 Reg
Carburetion	2V
Transmission	3 spd. auto torqueflite
Final Drive Ratio	3.23:1
Steering type	Power Recirculating Ball
Steering Ratio	18.7:1
Turning Diameter (Curb-to-curb-ft.)	40.6
Wheel Turns (lock-to-lock)	3.5
Tire size	F78-14 belted
Brakes	Drum/drum
Front Suspension	Torsion bar
Rear Suspension	Leaf springs
Body/Frame	Unit body
Wheelbase — ins.	117.0" (2 dr. 115")
Overall length — ins.	204.6" (17.0 ft.)
Width — ins.	78.6" (6.55 ft.)
Height — ins.	53.7" (4.47 ft.)
Front Track — ins.	59.7
Rear Track — ins.	62.0
Curb Weight — lbs.	3410
Fuel Capacity — gals.	21
Oil Capacity — qts.	4 (1)
Luggage Capacity	14.2 cu. ft.

PERFORMANCE

Acceleration	
0-30 mph	3.1
0-45 mph	5.7
0-60 mph	9.9
0-75 mph	15.3
Standing Start ¼-mile	
Mph	79.57
Elapsed time	17.04
Passing speeds	
40-60 mph	5.6
50-70 mph	6.1
Speeds in gears*	
1st . . . mph @ rpm	45 @ 4400
2nd . . . mph @ rpm	74 @ 4400
3rd . . . mph @ rpm	92 @ 4000
Mph per 1000 rpm (in top gear)	23.0
Stopping distances	
From 30 mph	28'
From 60 mph	138'10"

CHEVELLE 2 Door

Engine	90° OHV V-8
Bore & stroke — ins.	4.00 x 3.48
Displacement — cu. in.	350
HP @ RPM	245 @ 4800
Torque: lbs.-ft. @ RPM	350 @ 2800
Compression Ratio/Fuel	8.5:1 Reg
Carburetion	2V
Transmission	3 spd. auto Turbo hydro
Final Drive Ratio	3.31:1
Steering type	Power Recirculating Ball
Steering Ratio	18.5-12.4:1
Turning Diameter (Curb-to-curb-ft.)	42.0
Wheel Turns (lock-to-lock)	2.9
Tire size	F60-15 Polyglas
Brakes	Power disc/drum
Front Suspension	Coil/link stabilizer
Rear Suspension	Coil/control arms
Body/Frame	Welded perimeter
Wheelbase — ins.	112.0" (4 dr. 116")
Overall length — ins.	197.5" (16.4 ft.)
Width — ins.	75.4" (6.28 ft.)
Height — ins.	52.7" (4.40 ft.)
Front Track — ins.	60.0
Rear Track — ins.	59.9
Curb Weight — lbs.	3670
Fuel Capacity — gals.	19
Oil Capacity — qts.	4 (1)
Luggage Capacity	12.8 cu. ft.

PERFORMANCE

Acceleration	
0-30 mph	3.4
0-45 mph	5.9
0-60 mph	9.7
0-75 mph	15.6
Standing Start ¼-mile	
Mph	80.42
Elapsed time	17.10
Passing speeds	
40-60 mph	5.2
50-70 mph	6.5
Speeds in gears*	
1st . . . mph @ rpm	59 @ 4800
2nd . . . mph @ rpm	91 @ 4500
3rd . . . mph @ rpm	94 @ 3100
Mph per 1000 rpm (in top gear)	30.32
Stopping distances	
From 30 mph	28'
From 60 mph	115'3"

*Speeds in gears are at shift points (limited by the length of track) and do not represent maximum speeds.

TORINO BROUGHAM 4-DOOR HARDTOP 8-CYLINDER

Base price	\$3,248.00
Wheel covers	NC
Foam-padded seats	NC
Color-keyed nylon carpeting	NC
Flow-thru ventilation	NC
Dual headlights	NC
Belted tires	NC
351 cid 2v 8-cylinder engine	45.00
Vinyl roof	95.00
NOX emission control system	NC
Select-shift Cruise-O-Matic	217.00
F78 x 14 belted WSW tires (five)	30.00
Visibility group	38.00
Power steering	110.00
Power front disc brakes	70.00
Air conditioner — Selectaire	407.00
AM/FM stereo radio	214.00
Tinted glass — complete	43.00
Power side windows	122.00
Deluxe wheel covers	52.00
Total	\$4,691.00

CHEVELLE MALIBU SPORTS COUPE Base V8*

245-hp 350 2v	26.35
SS Equipment Group: Power disc/drum brakes; L.H. mirror — remote; Sport suspension; 15 x 7 wheels; F60 x 15 W.L.; Function symbols — knobs	357.05
Appearance guard group	31.60
TurboHydramatic	216.50
Trailer rear end ratio — 3.31	12.65
Power steering	115.90
Deluxe safety belts	15.30
Tinted glass	43.20
Special instruments	84.30
Aux. lighting	21.10
Heavy-duty radiator	21.10
AM radio	66.40
Rear speaker	15.80
Sport steering wheel	15.80
Bucket seats	136.95
Total	\$4,160.00
*4-Door V8 base price	\$2,773.00

PLYMOUTH SATELLITE 8-CYLINDER 4-DOOR SEDAN

Base price	\$2,829.00
318 cid engine 8-cylinder	NC
Bench seat — vinyl	NC
TorqueFlite Transmission	216.40
Tinted windshield	29.80
NOX exhaust emission control	12.95
AM radio — solid state	66.40
Power steering	116.75
Deluxe wheel covers	27.35
Tires — F78 x 14 WSW	31.95
Total	\$3,330.60

HOW TO BUY

TORINO ECONOMY VERSION

Even if we're interested in saving the most bucks we can, we'd still choose a V8 over a six. Why? Because this car holds six people, and, if you include luggage, that's going to be straining a six. So our minimum choice would be the 302, followed by the two-barrel 351; the first mated to the manual 3-speed and the latter to Ford's fine 3-speed Cruise-O-Matic.

MODERATE VERSION

Let's face it — if the whole car's economical, you can afford to splurge a little money on extras; so, order the 351-2v with automatic, power steering and an AM radio. If you care about handling at all, order F70 x 14 tires instead of the standard E78s. For extra stopping protection, order front disc brakes.

CHEVELLE ECONOMY VERSION

As with the Torino, we would have to choose a V8 as a minimum in a car that conceivably might be called upon to haul a family and its gear on vacation. In this case, the 307 two-barrel would be adequate, mated to the optional three-speed TurboHydramatic.

MODERATE VERSION

Two-barrels are lean on gas but the 350-cu.-in. two-barrel has more torque than the 307; so, if you can come up with a few extra bucks, it's worth it. We'd mate this to an automatic for city driving and order power steering.

SATELLITE ECONOMY VERSION

For the same reason as the other two brands, we'd order the base 318 V8 as a minimum in a family car. You really should order an automatic if you can afford it. Plymouth has a good one, the TorqueFlite. Order power steering too.

MODERATE VERSION

With the Satellite's engine offerings, there's a big jump between the 318 and the next larger engine, the 383. But don't let the big increase in cubic inches scare you, because there's an economical two-barrel version rated at 275 hp. You have to order it with an automatic, and we'd specify power steering and wider tires if you can see the benefits vs. the extra cost. We think these two should be mandatory options with the big American sedans.

1971 TORINO 4-DOOR SEDAN ECONOMY POWER TEAMS

Engine	Transmission Available	Torque	Carburetion	Comp. Ratio Fuel	Rear Axle Ratio
145-hp 250 Six	Manual 3-speed Cruise-O-Matic	232 @ 1600	One-barrel	9.0/R	2.79*, 3.00
210-hp 302 V8	Manual 3-speed Cruise-O-Matic	296 @ 2600	Two-barrel	9.0/R	3.00*, 3.25
240-hp 351 V8	Cruise-O-Matic only	350 @ 2600	Two-barrel	9.0/R	2.75*, 3.25*
285-hp 351 V8	Man. 3- or 4-Spd Cruise-O-Matic	370 @ 3400	Four-barrel	10.7/P	2.75*, 3.00* 3.25, 3.50

1971 CHEVELLE 4-DOOR SEDAN BASE POWER TEAMS

Engine	Transmission Available	Torque	Carburetion	Comp. Ratio Fuel	Rear Axle Ratio
145-hp 250 Six	Manual 3-speed or Powerglide	230 @ 1600	One-barrel	8.5/R	3.8
200-hp 307 V8	Manual 3-speed Powerglide	300 @ 2400	Two-barrel	8.5/R	2.73*, 3.08 3.31*
245-hp 350 V8	Manual 4-speed TurboHydramatic	350 @ 2800	Two-barrel	8.5/R	2.56*, 3.36 3.31*
270-hp 350 V8	Man. 3- or 4-Spd TurboHydramatic	360 @ 3200	Four-barrel	8.5/R	2.73*, 3.86 3.31*

1971 PLYMOUTH SATELLITE 4-DOOR SEDAN ECONOMY POWER TEAMS

Engine	Transmission Available	Torque	Carburetion	Comp. Ratio Fuel	Rear Axle Ratio
145-hp 225 Six	Manual 3-speed or TorqueFlite	215 @ 2400	One-barrel	8.4/R	2.93*, 2.94* 3.23, 3.55
230-hp 318 V8	Manual 3-speed or TorqueFlite	320 @ 2000	Two-barrel	8.8/R	2.71*, 2.94 3.23, 3.55
275-hp 383 V8	TorqueFlite only	375 @ 2800	Two-barrel	8.7/R	2.45*, 2.76* 2.94*, 3.23*
300-hp 383 V8	Man. 3- or 4-Spd TorqueFlite	410 @ 3400	Four-barrel	8.7/R	2.76*, 3.23 3.55

*Available with automatic only

NOTE: Higher-performance engines are available, but are not shown due to economy nature of test

*Available only with TurboHydramatic and special suspension as Trailing Option