VIARDS AUTO WORLD Gains in Drivelpain

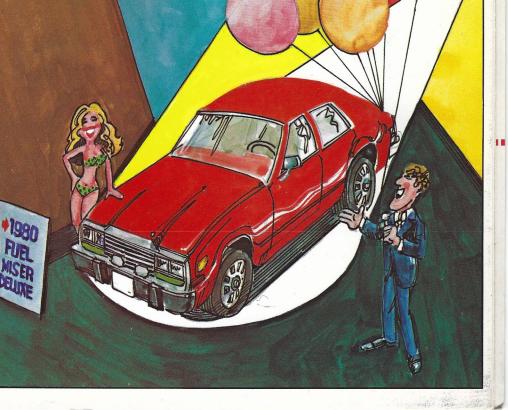
OCTOBER 1979

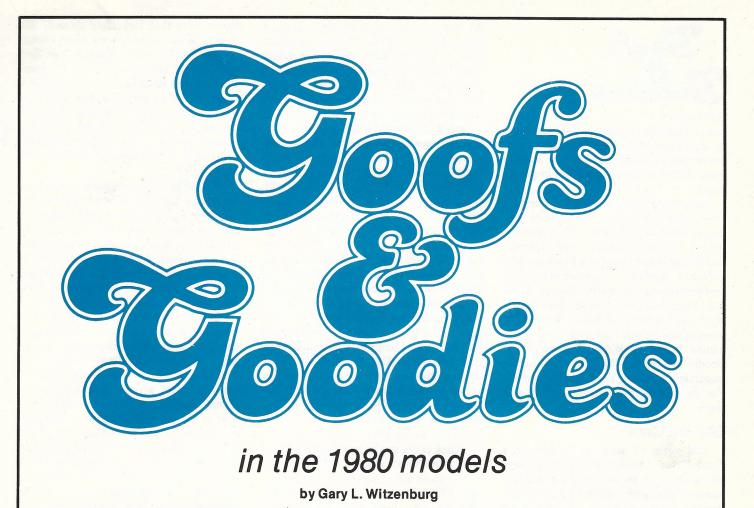
\$2.00

Spotlight on Fuel Economy

Detroit shines in battling the shadowy perplexities at the pump:

- Rating the '80 Models
 - ■Marketing the '80 Models
 - Goofs & Goodies in the '80 Models



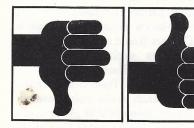


vershadowing all engineering advances in 1980-model domestic cars is one Giant Goodie: vastly improved fuel economy by each of the automakers. In coming up with miles-per-gallon advances in big cars and small, Detroit leaves little doubt that it is playing the mileage game in earnest.

Product downsizing-coupled with a sharp rise in small engines, major drivetrain improvements, broader application of high-pressure radial tires that reduce rolling resistance, advances in aerodynamics and increasing use of electronics for more precise engine control-adds up to a fast start as the industry plunges into the "Fuel-Efficient '80s."

Sprinkled among Detroit's bountiful basket of technological Goodies in the '80 models are the usual Goofs. But, as has become the custom since U.S. automakers were forced to begin revamping all of their lines a half-dozen years ago, solid advances outweigh shortcomings in the new models. There's also the usual smattering of "Tremendous Trifles," but perhaps they should be tolerated in an era that places more emphasis on close tolerances and less on pizzazz.

Mileage gains in the 1980 models were made despite stricter emission



standards and changes in the way the Environmental Protection Agency (EPA) calculates fuel-economy ratings.

Allowable hydrocarbon (HC) emissions for 1980 are cut from 1.5 grams per mile (gpm) to .41; carbon monoxide (CO) goes from 15 to 7 gpm; and in California, nitrogen oxides (NOx) drop from 1.5 to an extremely tough 1 gpm. In '81 federal CO and NOx emission standards dip to 3.4 and 1 gpm, respectively.

But corporate average fuel economy (CAFE) regulations dominate the scene. CAFE is 20 mpg (8.5 km/l) in '80 but then double-jumps to 22, 24 and 26 mpg (9.4, 10.2 and 11.1 km/l) for '81, '82 and '83. "If it'll gain .1 mpg (.04 km/l) it's worth doing," is the battle cry. Each of the U.S. automakers should comfortably surpass 20 mpg in '80. Shaving a few pounds can mean dropping from one EPA fuel-economy inertia weight class to another, and

those classes are tightened for '80 to 125lb. (56-kg) increments instead of the previous 500 lbs. (225 kg).

By far the most important powertrain achievement of the year reaps a "Golden Goodie" Award for Ford Motor Co.: a fuel-saving 4-speed automatic-overdrive transmission, which has partial mechanical torque transmission in the 1:1 ratio third gear and complete lockup in the .67:1 overdrive fourth. Ford also wins WAW's "Bolt Out of the Blue" trophy for its "smart" engines featuring sophisticated third-generation electronic engine control (EEC-III) combined with electronic fuel injection on certain models. These are standard or optional on Ford's all-new Lincoln Continental, Mark VI, Thunderbird and Cougar XR-7 lines, all of which are downsized and more fuelefficient for 1980.

General Motors Corp., for its part, has done a masterful job of refining its fullsize B- and C-body cars, now in their fourth year. Besides sporting a fresh look, their mileage is up by 1 to 2 mpg (.43 to .85 km/l) thanks to efficiency improvements across the board. There's also a brand-new, controversial Cadillac Seville on the excellent Eldorado/Riviera/Tor-

continued next page



continued

onado front-drive chassis, plus extended diesel-engine availability, lockup torque converters on some models, new engines from all five divisions and other improvements.

Despite its financial troubles, Chrysler Corp. hasn't stinted on its product programs. This year it brings on a smaller, lighter Chrysler Cordoba and LeBaron, and Dodge Mirada (replaces Magnum) and Diplomat specialty intermediates. And fast-recovering American Motors Corp. introduces what could be the year's most significant new model line: a series of 4-wheel-drive (4-wd) compact cars aptly named Eagle. A WAW "Golden Eagle Goodie" Award goes to AMC for filling an important product need before anyone else in Detroit even recognized it was there.

GM Big Cars

GM walks off with our "Improving a Good Thing" Award by squeezing more efficiency from its already excellent full-size and luxury cars. Exterior and interior designs are spruced up, with the most obvious change coming in 2-door coupe rooflines. Front overhangs are increased and rear overhangs are decreased, hoods are lower, decks are slightly higher, fenders are more rounded at the corners and rear roof shapes are more squared off, all of which improve aerodynamics and produce a longer, lower appearance.

More important, however, are underskin improvements. Torque-converter clutches are going into more models as availability permits; more efficient standard and optional engines replace older, larger units; each GM division now offers Olds' 5.7-liter (350-cid) V-8 diesel in at least one full-size model; new, low-rolling-resistance metric radial tires are standard throughout the big-car lineup, along with suspension and structural improvements to preserve ride quality; and serviceability and convenience improvements, such as sill jacking, larger fuel tanks and slightly enlarged trunks, abound. They're Goodies all

Chevy and Buick have new V-6 engines of 3.8 and 4.1 liters (231 and 252 cid), respectively. Pontiac, Oldsmobile and Cadillac boast new V-8s of 4.3, 5 and 6 liters (265, 305 and 368 cid), all basically derived by changing displacement of existing designs and all destined for wide usage in the '80 full-size models. Weight reductions average 100 to 200 lbs. (45 to

90 kg) per car, aerodynamic drag is reduced 8% to 14%, and rolling resistance is down 12% or more, model for model. The result is fuel-economy improvements averaging a mile per gallon in EPA ratings and probably more in real-life usage—despite tougher emission standards.

More important than mpg to many big-car buyers, however, is mpt-milesper-tankful. Pontiac has increased its Bbody fuel-tank capacity to a hefty 25 gals. (95 liters) and to 27 gals. (103 liters) with the optional diesel engine. Buick boasts an impressive theoretical highway range of 600 to 625 miles (960 to 1,000 km) from its 4.1- and 3.8-liter (252- and 231-cid) V-6equipped LeSabres, which also have 25gal. (95-liter) tanks. Diesel models will cruise even further between tankfuls, and Oldsmobile plans to nearly double its V-8 diesel output to 300,000 units in 1980. Also on the engine front, GM will expand its California Computer-Controlled Catalytic Converter (C-4) emission system to 49-state full-size cars as it gears up for across-the-board use in 1981. Cadillac Div. already has closed-loop, digital electronic fuel injection as standard on its new 6liter (368-cid) gasoline V-8.

Buick is doing a solid job of creating a new, youthful image for itself. "The name of the game for the 1980s is efficiency,' says Chief Engineer Robert J. Schultz, "but we also need some excitementproducts with flair and personality." Buick comes up with some Good Stuff in the luxury department. Examples include an electronic-touch climate control and 6speaker Concert Sound system, which, unfortunately, are exclusive to Buick's fanciest model, the Electra Park Avenue. In the running for a Tremendous Trifles Trophy, however, is an electroluminescent "Park Avenue" insignia that glows in the dark on the instrument panel. One of the few possible Goofs in GM's new big cars is adaptation of a tape-drive window mechanism that saves weight and space in GM's X-cars but has produced durability problems.

Seville

Introduced in 1976, Seville was the first "international-size" Cadillac and had a controversial squared-off roofline. Former GM Vice President-Design William L. Mitchell admitted to some Rolls-Royce influence in the car's appearance, but he bristled when accused of copying Mercedes. "When you steal," he said, "you rob a bank, not a grocery store." Seville's sheer design grew in popularity, and the car became an unqualified success. By now almost every sedan in GM's showrooms and many others bear traces of Seville's squared-off look.

So where does that leave Seville

buyers now that lookalikes abound? The answer is an all-new, even more controversial Seville with a sloping rear deck and "bustle" trunk reminiscent of classic Bentleys and Rolls-Royces. At first glance nearly everyone grimaces. But keep looking and you realize that the '80 Seville—especially in 2-tone "Elegante" form—comes together in the most arrogantly, snobbishly stylish new-car design on the road today.

If stylishness isn't enough to make the '80 Seville Cadillac's hottest property, its excellent Eldorado-shared machinery underneath should spice the deal. It's the first U.S. car with a diesel engine standard—the Olds-built 5.7-liter (350-cid) V-8. As a result it scores 6 mpg (2.6 km/l) higher than last year's gasoline-powered standard version in EPA ratings.

Seville sits on the industry's most advanced front-wheel-drive (f-wd) chassis, complete with fully independent suspension, electronic leveling, 4-wheel disc brakes and all-weather radial tires on cast-aluminum wheels. Inside, electronic climate control and cruise control are also part of the package. Exterior dimensions are similar to the '79 version, but weight is cut by 300 lbs. (135 kg), and passenger and usable cargo space is significantly increased. GM's new 6-liter (368-cid) digital electronic fuel-injection gasoline V-8 is optional except in California where all Cadillacs retain the 5.7-liter (350-cid) closed-loop fuel-control V-8.

Continental and Mark VI

"The 1980 Lincoln and Mark VI have the best fuel economy of any gasolinefueled luxury cars, foreign or domestic," boasts Thomas J. Feaheny, Ford vice president-car engineering, "and that includes the smaller luxury cars like Seville and Mercedes." The fuel-efficiency gain of these new, smaller, but still big Lincolns averages a remarkable 38% over 1979's end-of-an-era gunboats. Part of the gain relates to shaving 750 to 800 lbs. (338 to 369 kg), and part is attributable to EEC-III engine controls in all models and electronic fuel injection on the smaller base 5-liter (305-cid) engine. But most of the improvement comes from the 4-speed automatic overdrive transmission (AOD) standard in both new models. Preliminary EPA figures indicate city fuel economy is up 4 mpg (1.7 km/l); combined metro/ highway is 5 mpg (2.1 km/l) higher; on the highway, fuel is stretched 8 mpg (3.4 km/l) to 25 mpg (10.6 km/l)—with no loss in 0-to-60 performance.

This "better idea couldn't have come to fruition at a more opportune time," says Transmission and Axle Chief Engineer Paul D. Fadow. AOD has a new-design torque converter that reduces engine load at idle and slippage in first and second gears; a split-torque path in third gear that transmits 60% of the engine torque mechanically; and 100% mechanical transmission in the overdrive fourth gear. Mr. Fadow says even the 5.8-liter (351-cid) Lincoln prototypes with the AOD averaged about 21 mpg (8.9 km/l) on one engineering sign-off trip, while a '79 Cadillac brought along for comparison managed only 15 to 16 mpg (6.4 to 6.8 km/l) over the same route. But 0-to-60 acceleration is roughly a second better with the AOD compared with the same vehicle having a conventional 3-speed automatic, he says. WAW's "Energy Conservation" Award to Ford for this

If you liked the old Lincolns, you'll love the new ones. They look almost the same except the Continentals lose their hidden headlamps and the 4-door gets a slim rear-quarter opera window. They handle better, thanks to a new coil-spring suspension with standard sway bar in front and a 4-bar link design in back. Even so, the old wallowing feeling has been retained to make traditional Lincoln owners feel at home. There's a slick digital instrument panel with computerized message center (optional in Continental, standard in Mark VI) that checks operating conditions, gives trip information and does almost everything else except make the payments. One Goodie in this new design: an electronic bar-chart fuel gauge, an industry first.

Despite their smaller sizes—the 2-door Mark shrinks to a 114.3-in. (290.3-cm) wheelbase and 216 ins. (548.6 cm) overall, while the Continentals and new 4-door Mark contract to 117.3 ins. (297.9 cm) wheelbase and 219.2 ins. (556.7 cm) overall—these cars are still plenty big and have more interior space in most dimensions than the '79 versions. Halogen headlamps, power vent windows and electronic stereo search radios are part of the standard package, and the instrument panel features a "look of cut crystal and wood" to show just how far decorative plastics technology has moved.

WAW's not too sure about the need for a 4-door Mark VI—a first—which is really a 4-door Continental with Mark styling, and we can't say much for the big, round, gimmicky "auxiliary lamps" optionally available on the Mark's headlamp covers. But then we said the same thing about the front-fender louvers three years ago. One interesting new option, an electronic keyless entry system, falls just short of greatness: You can turn on the interior lights, unlock the driver's door, passenger doors and trunk by entering a 5-digit code into a pushbutton panel on the door. But







it's quicker to use the key-and you must get the key out anyway to start the car once inside. Its major use seems to be saving the day when you lock the keys inside—if you can remember the code.

Thunderbird and Cougar XR-7

The second half of Ford's one-two punch for 1980 is a nice, if overdecorated, new pair of downsized personal coupes to carry on the Thunderbird/Cougar XR-7 tradition. Sitting on stretched versions of the excellent, European-style Fairmont/ Zephyr platform that features strut-type front and 4-bar link rear suspensions, variable-ratio power rack-and-pinion steering and coil springs all around, these new entries offer at least as much room and comfort as their oversized predecessors, along with vastly improved handling and fuel economy. A new 4.2-liter (255cid) V-8 is standard and the 5-liter (302cid) with AOD is optional. EPA mileage gains over last year's optional powertrains range from 4 to 6 mpg (1.7 to 2.5

Front-seat legroom, a usual Ford failure, is more than adequate for 6-ft. (1.8-m) occupants, and rear knee clearance and legroom are up 2.8 ins. and almost 4 ins. (7.1 and 10.2 cm) respectively, compared with the '79s. Weight is slashed some 700 to 800 lbs. (315 to 360 kg), and overall length is chopped by about 17 ins. (43.2 cm), making these efficient new versions nearly the same in exterior size as the original 1967-model Cougar ponycar. There's also a deep-well trunk that increases usable volume by 2.1 cu. ft. (59.5 liters) compared with previous models. And some 400 hours of wind-tunnel refinement has created 14% more aerodynamic body shape. Drag coefficient for the T-Bird is .44 vs. .51 in the '79 model.

On the Goofy side, WAW can't help but wonder why Ford can't or won't come up with some decent but inexpensive bucket seats of its own having a backrest angle adjustment comparable to that found in practically all imported cars and a few more-enlightened domestic models.

And why is cruise control unavailable in Ford products except with the little plastic "luxury" steering wheel, which definitely does not suit everyone's taste? The "European-style" stalk controls that Ford is putting in all its new models are fashionable these days, but why aren't

they in fingertip reach for easy operation with both hands on the wheel, like those of most imports? Finally, as their products get smaller, why do Ford's designers feel obligated to tastelessly overdecorate them like Hero sandwiches with outsized chrome moldings and taillamps, fat, overpadded, visibility-impairing roof treatments and every other old-fashioned styling bagatelle they can think of? Our "Wretched Excess" Award for 1980 goes hands down to Ford's premium-version T-Bird and Cougar, which seem to be overdone treatments of basically clean body shapes.

Cordoba and Mirada

By contrast, Chrysler's new, smaller personal-luxury Cordoba and Dodge Mirada very effectively demonstrate that cars in this class don't have to look like "pizzas with the works" to radiate class and sex appeal. Both are clean, contemporary, aerodynamic-looking shapes that should wear well into the '80s. The sportyversion Mirada CMX easily cops WAW's "Best New Design in Class" Award. Ironically, the new Chrysler midsize cars bear some of Ford's styling cues as well they might: They're the first new Chrysler products to bear the stamp of Harold K. Sperlich, former Ford product planning whiz who's now Chrysler's executive v.p.-engineering and product development.

Cordoba/Mirada are on upgraded versions of the basic LeBaron/Diplomat 112.7-in. (286.2-cm) wheelbase chassis, so there's little new underneath. But they are considerably more appealing all around than the old Cordoba/Magnum they replace. Weight is down 400 to 450 lbs. (180 to 203 kg) and overall length is reduced over 6 ins. (15.2 cm), yet there's more usable space inside. Handling is greatly improved, especially with the optional Open Road handling package, and the barge-like feeling that typifies oldstyle cars of this type is long gone.

Interior Goodies include standard engine-temperature and alternator gauges and a multifunction "smart switch" on the steering column. The windshield-wiper carriers are an innovative black plastic design that provides even pressure for less streaking; the glovebox is a one-piece unit combining box and door for easy assembly and removal; and the instrument panel is a modular design for improved serviceability with snap-on top trim pads for quick behind-the-panel access.

Mirada and the 300-version Cordoba, which will arrive midyear, feature a new weight-saving and highly efficient soft "bun-type" front energy-absorbing system

that goes one up on the usual soft-fascia and hydraulic enersorber design. Automatic transmission with Chrysler's fuelsaving lockup torque converter is standard with both base 3.7-liter (225-cid) 6cyl. and optional V-8 engines.

In the "Knickknack Department" is a "newly detailed replica-minted-coin hood ornament" for Cordoba. But the only noticeable Goofs at first look are the woefully small glovebox (serviceability and ease of assembly are fine, but how about usability for the customer?) and placement of the power door-lock control on top of the armrest where it's a bit too handy for coat-hanger-wielding thieves.

LeBaron and Diplomat

Chrysler's midsize luxury sedans and wagons are mildly facelifted, with Le-Baron getting a handsome waterfall grille but Dodge Diplomat inheriting a busy checkerboard design.

Coupe models, however, are Sanforized 4 ins. (10.2 cm) to fit the 2-door Aspen/Volare platform, and these come out looking better in the process. The topline "S-type" Diplomat coupe comes with a pleasing vinyl top and opera-window treatment, plus specific grille and wheels and a handling-package suspension that does wonders for the tired old Chrysler compact chassis. LeBaron "LS" features all that and more: A classy, 1930s-style wire-mesh grille that garners our "Best New Face of 1980" Trophy and, conversely, a corny set of chromed decklid strips that carry a good design theme one step too far.

AMC Eagle

In addition to its pioneering factory Ziebart treatment that results in a fiveyear rust-perforation warranty, AMC substitutes the zippy and efficient Pontiacbuilt 2.5-liter (151-cid) 4-cyl. engine for the Volkswagen-based 2-liter (122-cid) as base equipment in Spirit and Concord. Standard 4-speed manual transmission now comes in all AMC passenger cars, and there's a lockup torque converter with the 6-cyl./automatic combination and an electronic microprocessor-controlled fuelfeedback system on all 6-cyl. and California 4-cyl. cars. But the really big news at AMC is the new Eagle 4-wd automobile

We covered the Eagle in detail last month (see WAW-Sept. '79, p.82), so suffice to say that standard Goodies include a new-design full-time 4-wd transfer case; independent front suspension; carlike comfort and road manners; 4.2-liter (258-cid) 6-cyl. engine; automatic transmission; power steering and brakes; and radial tires on 15-in. (38-cm) wheels.

Eagle's full range of options includes both leather-seat luxury Limited and sexy, blackout-trim Sport packages. Other than omission of a Sport package for the 4-door model, the only major Goofs are lack of a fuel-saving 4-cyl. manual transmission, lockup torque converter automatic and part-time 4-wd availability. But they're working on all of those things.

Further Kudos, Brickbats

Chevrolet takes home the "Cute Little Rear End" Award for its attractive and aerodynamic new Chevette hind quarters, but also lands the "K-Mart Design" Trophy and "Murky View" Award for its cheap-looking and overly reflective Citation instrument panel, Goofy vertical radio placement and near-useless little ashtray.

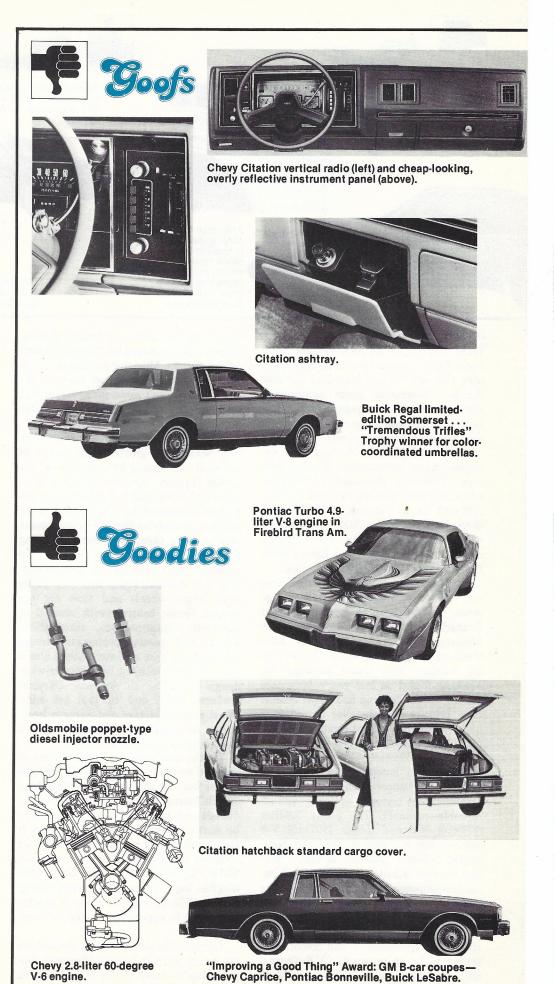
An attractive and aerodynamically functional facelift, innovative new lightweight honeycomb front bumper, lowrestriction exhaust system, impressive 250-lb. (113-kg) weight shaving and other improvements net Chevrolet's Corvette a big engineering Goodie.

A potential Goodie in the form of Buick's 3.8-liter (231-cid) Turbo V-6 in Monte Carlo rates a Goof instead for its rough and unimpressive performance in the prototype we tried. If that car was representative, it needs work.

Rival Pontiac, on the other hand, needs to polish its slipping image. Management says it's shooting to recover third place in domestic sales, but seems to have lost sight of what put Pontiac there in the first place: a youthful, exciting image that set it apart from sister GM divisions in the public eye. The 1960s' GTO built that image, but things began slipping in the early and mid-70s.

The new turbocharged 4.9-liter (301cid) V-8 available in Firebird Formula and Trans Am is certainly exciting, but lack of an available 4-speed transmission is not. Why should buyers be forced into the expensive turbo route to get decent performance in such a car? If Chevrolet can certify a 5.7-liter (350-cid) engine with both manual and automatic transmission, why can't Pontiac? Chief Engineer Steven P. Malone admits it didn't even try. "Tighter (emission and fuel-economy) standards put the manual transmission over the hill," he says.

Olds and Buick score the "Silk Purse from Sow's Ear" Award with their handsome new midsize Cutlass and Century 4door sedans, replacing the unloved "aero" fastbacks. But they're decorated for Goofery for retaining the maddening fixed rear-door windows. Buick, neatly fielding the excitement ball that Pontiac has fumbled, scores a "Best New Design in continued next page







continued from page 93

Class" Award for its slick Skylark X-car Sport Coupe, and continues its quick and sexy Century Turbo Coupe into the new decade. Oldsmobile grabs engineering Goodies with a new poppet-type diesel injector nozzle and an improved-design B-car window-reveal molding and seal.

Ford and Lincoln-Mercury have extended many new-product Goodies into existing models: Fairmont and Zephyr adopt Mustang/Capri's optional 2.3-liter (140-cid) turbo engine, LTD/Marquis share the fuel-saving AOD and EEC III with optional V-8 engines, and Capri by midyear will have optional Recaro seats first offered in the '79 pace-car replica.

High-pressure "P" metric radial tires and jet-spray windshield washers go across the board except for Pinto/Bobcat Granada/Monarch and Versailles, while Mustang and all L-M products have standard halogen headlamps. There's also an exciting new Cobra package for Mustang, based on last year's Indy pace car, and both Mustang and Capri benefit from interior door handles moved to a higher, more convenient location—a Goof turned into a Goodie.

Neither Mustang/Capri nor Fairmont/Zephyr, however, get any relief from their cramped front-seat room via increased seat travel or optional—and affordable—recliners. The peppy 2.8-liter (171-cid) V-6 and 5-liter (302-cid) V-8 engines are replaced by the old boatanchor 3.3-liter (200-cid) straight "six" and the new 4.2-liter (255-cid) V-8. Manual transmissions aren't available with a V-8 in either car or with the 2.3-liter (140-cid) turbo "four" in the Fairmont/Zephyr.

Speaking of the Ford Turbomotor, it still needs performance and smoothness tuning to be an acceptable V-8 alternative. And Ford gets an "Elmer's Glue" Prize for the stick-on-look hood scoops on the Turbo Fairmont and Zephyr. Finally, there's a fake convertible "Carriage Roof" option for the Mustang notchback coupe that looks so real it brings tears to the eyes. Why doesn't some enterprising U.S. manufacturer revive the *real* convertible top on a small, sporty car like that?

"No car in Chrysler's history has ever achieved a greater sales record or conquest rate among its competitors," enthuses Chrysler Executive Vice President-Sales and Marketing E. F. (Gar) Laux, and a gross of Goodies has been added to the popular front-drive Omni/Horizon econocars to make them even more appealing for 1980. Tinted glass, a clock, a trip odometer and a convenience light package join the standard-equipment list, along with larger wheels and tires for the coupes. Cruise control (with manual or automatic transmission), intermittent wipers and special performance-image packages are new options. There's also a new positive-locking distributor-wire design and, like all domestic Chrysler products, Omni and Horizon get additional rust protection and halogen headlamps. An easy-entry passenger seat is a new addition to premium interiors.

On the Goofy side, however, there's an optional reclining bucket seat for the passenger but not the driver, and the Omni 024 DeTomaso package is overdone on the outside and too timid in performance to be worthy of its famous Italian name. It also comes in only red and yellow, heavily accented by black trim, and it reaps the WAW "Eyestrain" Medallion for a nearillegible logo design. The corresponding Horizon TC3 Turismo, however, is as slick and subtle in appearance as the DeTomaso is garish.

Chrysler-Plymouth dealers pleaded for the return of their full-size Plymouth, but now they're liable to be stuck with it. But Chrysler can brag about a bundle of

real engineering and convenience Goodies this year: a new optional automatic transmission for the Plymouth Champ and Dodge Colt Hatchback f-wd minicars; lockup torque converters on all domesticbuilt models except Omni and Horizon; wide-ratio transmission ratios in conjunction with lower drive-axle gears for a better performance/economy compromise; microprocessor spark control on California engines, high-altitude 318s and all 360 V-8s, with electronic detonation suppressors and dual-pickup distributors in most applications; electronic-feedback carburetors on California engines; increased usage of chimes instead of annoying warning buzzers; and convenient threaded fuel-filler caps and inertia-type frontseat latches in most models.

Not to be outdone, AMC also has some Good New Stuff. Even the oddball Pacer has better fuel economy, thanks largely to its 4-speed manual standard transmission; the performance-image AMX is more affordable in base form with some items becoming optional; 4-cyl., 4-speed Spirits and Concords have a new Lucas-Girling hydraulic-clutch actuating system; the use of efficient viscous cooling fans is extended; and new lightweight batteries across the board feature extra warranty coverage on top of AMC's full Buyer Protection Plan warranty. New premium reclining bucket seats are standard in Spirit DL and Limited models and come with the AMX Custom interior, and new options include automatic load-leveling shocks for Concord, cruise control available for the first time with the 4-cyl. engine in Spirit and Concord and premium sound systems for all models.

The competition was tougher than ever, but with creative thinking like that, the industry should be able to meet future government standards, no matter how difficult. \square