

WARD'S AUTO WORLD

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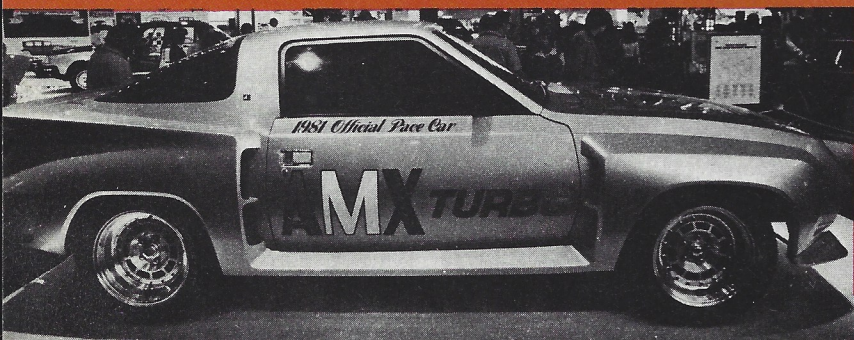
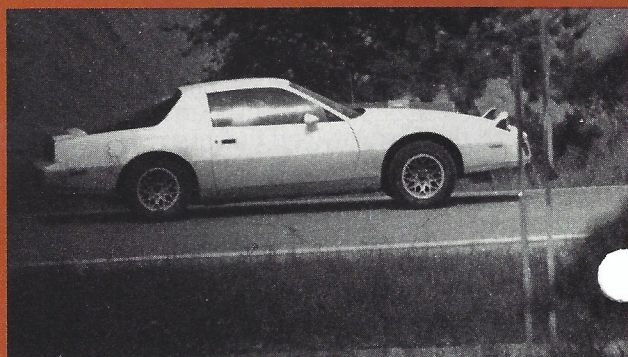
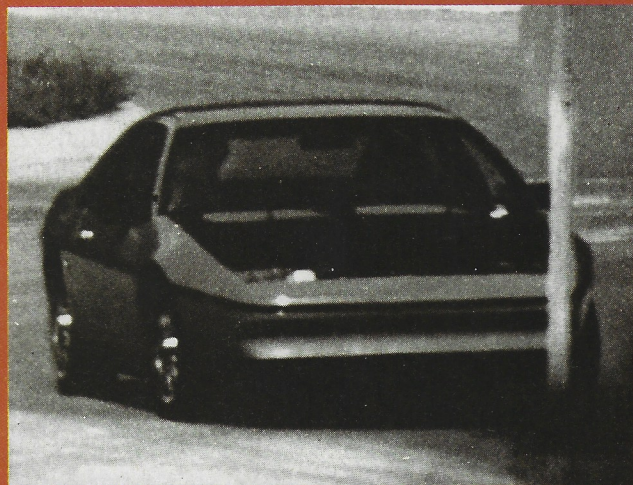
**Emphasis on
ENGINEERING**

Quality: Getting It All Together

Hollywood's legendary Keystone Kops were the antithesis of all that's orderly. For one thing, their Tin-Lizzie kept falling apart. In the starkly real world of automotive competition, however, that elusive parameter of orderliness called quality becomes the keystone of U.S. engineering in the '80s.



Youth will be served: Clockwise from left, Ford's sporty Lynx LN7 — and companion Escort EXP — arrive in dealerships in April in an appeal to young buyers. Pontiac's plastic-body, midengine P-car is slated for '83, while its revamped Firebird — featuring hidden headlamps — arrives next fall. AMC's AMX Turbo is not scheduled for production, but it will get plenty of exposure at 1981 racing events.



Engineering

by Gary L. Witzenburg



A generation ago young people created their own "youth cars." Depending on skill, energy, budget, time and taste, they took a second-hand sedan, hopped up the engine, removed the chrome, chopped and channeled the body, added a boisterous muffler, moon-disc wheel covers and blue-jeweled taillamp lenses — and headed for the drive-in.

Detroit took notice. In 1964, Ford Motor Co.'s Ford Div., under General Manager Lee A. Iacocca (now Chrysler Corp. chairman), and General Motors Corp.'s Pontiac Div., under General Manager Elliott M. Estes (who recently retired as GM president) and Chief Engineer John Z. De Lorean (who now runs his own auto company), created factory youth cars. Dubbed Mustang (a high-

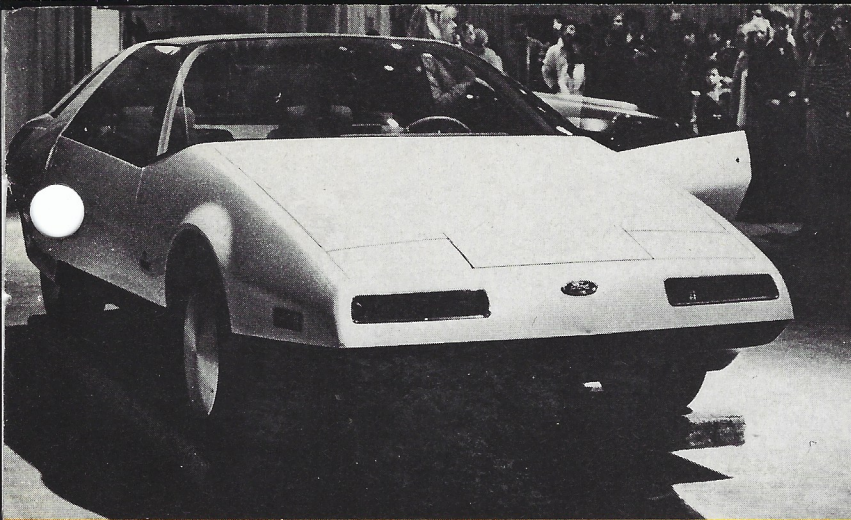
spirited horse) and GTO (a high-performance Ferrari), this dynamic duo established the formula for hordes of emulators that proliferated like guppies until safety regulations, emission controls and soaring insurance rates sapped the muscle from muscle cars a decade ago.

Since then it has been downhill for performance-oriented young motorists. There have been noble holdouts — notably Pontiac Trans Am and revivals such as Chevrolet Camaro Z-28, resurrected four years ago. Otherwise, youth cars since the mid-1970s have been stripped and spoiled shadows of their former

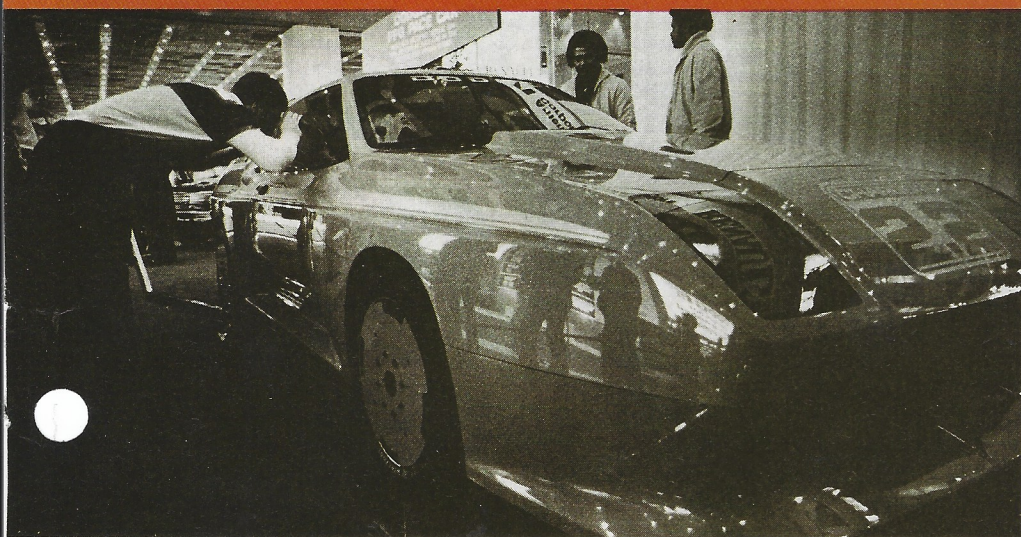
muscle-flexing selves.

Meantime, import makes have been luring young buyers their way with efficient, affordable, attractive, reasonably fun-to-drive small cars. Although Detroit is starting to fight back, the hobgoblins of stringent fuel economy, emissions and safety laws challenge the industry's ability to develop products that catch youthful eyes. More important is the impact of costs, including down payments, on the youth market.

On the surface it seems hopeless. As autos get more fuel-frugal, cleaner and safer, won't they inevitably become less exciting? As they conform to government and mass-market demands, won't cars grow more alike in looks and performance, less individualistic and less fun to drive? Are automobiles destined to become boring, unappealing appliances, devoid of personality and



Ford's forward design thinking goes into this concept car (above), now making the rounds of U.S. auto shows. Dodge "Charger 22" (below), a one-of-a-kind copy off the Omni O24 chassis, also becomes an auto-show favorite and will be used as a pace car on the racing circuit.



for Youth

character and, yes, sex?

Absolutely not, say engineers and product planners at U.S. and foreign auto companies, who promise that plenty of interesting, exciting hardware is about to blossom. Automakers are sure they have a handle on what youthful buyers of the 1980s want, and are hard at work engineering cars for them.

Youth cars of the 1960s, with macho names such as Boss, Mach I, Magnum and Hemi-Cuda, were easy to spot with their bold stripes, spoilers, louvers, aggressive wheels and tires, and wild colors. Equally easy to define was the youth market, the 16-to-25-year-olds who wanted little more than hair-shirt styling and pavement-ripping power.

But when the muscles atrophied, the market went underground. For a while it regressed to do-it-yourself hot-rods, and a fair share of this element

lives on today. But as those youngsters matured, changed life-styles and reentered the new-car marketplace, their tastes diversified tremendously. Some married and had families; some married and didn't have families; quite a few stayed single or became single again. Whether gray-suit professionals or blue-collar craftsmen, most of them are pursuing active participatory-sports and leisure activities. Many maintain their intense interest in automobiles, but even those who don't continue to prefer personal-type cars. And most still think of themselves as young.

Consequently, there's no simple answer to the question, "What is the youth market?" But here are some thoughts:

"The youth group we used to talk about was under 30," says L. Donald Gschwind, Chrysler Corp. vice presi-

dent-product planning. "I think we have to expand that by five or even 10 years today. It's much different from 10 or 15 years ago."

Notes John G. Middlebrook, Pontiac Div. manager-product planning: "We look at age segments of 15-to-24 and 25-to-34, but generally it means anyone who thinks young."

American Motors Corp.'s Steven E. Gifford, director-Jeep product planning, says, "The youth market today is fuzzy — more a state of mind than age. It's a very mobile zone; it walks all over the place."

F. Robert Joseph, director-product planning, Volkswagen of America Inc., believes "it's the guy or gal who drives the car for fun."

Yet another question arises: What does the market want in today's cars?

"It differs somewhat by geographical area, but one thing that's very consistent is product value," says Mr. Gschwind.

"Fuel efficiency, high quality and reliability," suggests Mr. Joseph.

"Young people like a car that makes a statement about themselves," adds Mr. Middlebrook.

Says Mr. Gifford: "As younger people begin to acquire their second vehicles, they're likely to choose alternative-life-style vehicles."

Ford market research, which led to the youth-oriented Ford EXP and Mercury LN7 sport coupes due for April introduction, reveals seven key points about today's car buyers:

- Almost a third are single, nearly twice those of 20 years ago.
- More than half of America's households contain only one or two people, about half the families have no children at home and 40% have only one or two children.
- Women account for more than half the population and 40% of new-car purchases, and are principal drivers of an even greater percentage of cars.
- Of persons under 25, seven of 10 who buy cars are single, two are married with no children and only one heads a family.
- More than half the potential car buyers in this decade will think small, and most (singles, minihouseholds, women, young people) will prefer sporty little fun-to-drive cars.
- Of person-trips, 84% are made in automobiles, the average length of trips is less than 9 miles (14.4 km) and normally only one or two people are in the car.
- The recent boom in sports such as skiing, tennis, racquetball, boating, bik-

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Return of the ragtop? Chrysler developed this "Reliant K Roadster" as styling exercise for auto-show excitement, but — cash permitting — it could enter production in '82.

Engineering for Youth

continued

ing, running, swimming, hiking and surfing, say Ford researchers, "seems to coincide with a perceptible rise in Americans' interest in sporty cars."

This indicates Ford may be on target with EXP and LN7, which bridge the gap between sport car and economy sedan, as Mustang did 17 years earlier. The trend also bodes well for GM's redesigned Camaro and Firebird, due this fall; Pontiac's midengine 2-seat sport/commuter P-car coming in '83; Chrysler's planned K-based sportsters; and AMC's soon-to-be-imported Renault Fuego.

Talks with automakers turn up consistent themes on the subject of what young and young-thinking people expect and demand in their cars. Fun-to-drive is mentioned most often, and encompasses handling, performance, comfort and convenience.

"Performance as we once knew it is not as major an issue, and may even be minor," says Chrysler's Mr. Gschwind. "Youth today is interested in different kinds of performance — liveliness, agile handling, responsive steering." AMC's Mr. Gifford refers to "overall performance." Young buyers, he contends, want a vehicle that is "fun to operate" and "more than just an appliance."

As car styling becomes more sophisticated, so do buyer tastes. "The baby-boom people are mature now, and our themes will reflect their changing preferences," explains Pontiac's Mr. Middlebrook.

"Function is more important than it used to be," says Chevrolet Div. Director-Engineering Paul J. King. "A successful new car has to have more than beauty and shape going for it."

"The baroque look is out," echoes Mr. Gschwind. "Today's market wants nice, clean interiors and simple, tasteful exteriors."

But young people will continue to want good-looking, personalized transportation. "There will be a trend toward sporty-type cars in the future," affirms Mazda Motors of America (Central) Inc. Manager-Marketing Duane H. Bowen, "because people will still see their vehicles as extensions of their perceived personalities." Adds Mr. Gschwind: "They want to enjoy the automobile, be proud of it and have others notice it."

Besides that, young people, more than ever before, demand practical qualities such as value, economy and reliability. "Cost is very important," says Mr. Gschwind. "Not just dollars, but dollars for the value of the product; and total economy, which includes fuel economy, maintenance and reliability."

Richard G. Hoffman, Nissan Motor Corp. U.S.A.'s director-domestic engineering, adds other factors to the quality and cost equations: resale value and what he terms "performance quality," or graceful aging. "You can have good showroom quality," he says, "but after a few thousand miles, are the fits still good? The paint? The seals? The entire performance and smoothness? People keep cars longer today and expect them to look and function well for a long time."

Mr. Hoffman, like many of his domestic-maker competitors, rates func-

tion high on the list. "Today's cars are more expensive," he says, "so they should serve more needs. This means adequate rear-seat room, space for groceries, all-weather capability and more, but not at the cost of attractive and individualistic appearance."

AMC's Mr. Gifford says function includes things such as folding rear seats for added cargo capacity, and he plugs Jeep's new Scrambler CJ-based pickup as an example of extreme function and versatility tailored specifically to the youth market: "It's a hardtop, a softtop or a no-top, can be driven with or without doors and also carries cargo."

Next in importance are features such as first-rate stereo sound systems and good-looking wheels or wheel covers. "Young people have really dictated that automakers upgrade entertainment systems," states Mr. Gifford.

"One feature that stands head and shoulders above all others inside the car is high-quality sound systems," echoes Mazda's Mr. Bowen. "They're demanding better and better, and there'll be a lot of changes in that direction."

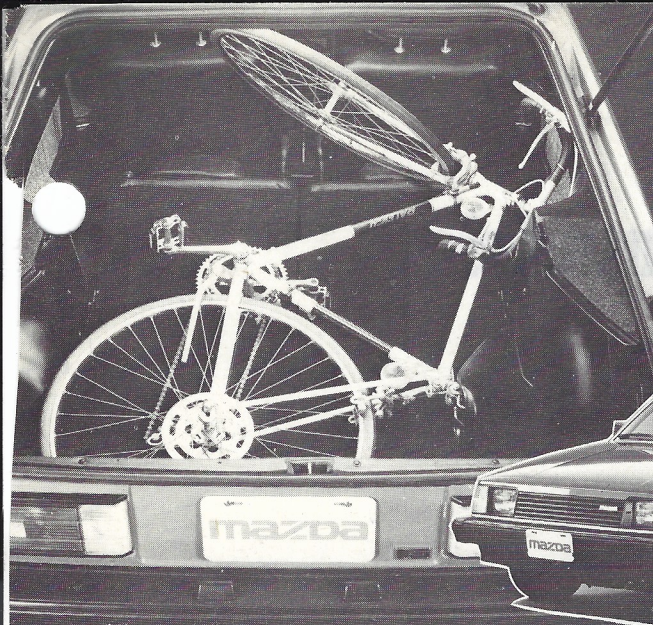
Mr. Gifford says aluminum and styled-steel wheels are key products on AMC cars and Jeeps. "We sell a ton of optional wheels," he enthuses, "mostly to younger buyers. We tailor our wheel programs to fit the age brackets — Concord's is different from Jeep's, for example, because if you don't get them just right, they don't move."

Completing the youth must-list are interior and seating comfort; control function and convenience; special visual, handling and performance packages; interior features such as sunroofs, reclining seats and sporty steering wheels; prestige mechanicals including front-wheel drive, independent rear-suspension, 4-wheel disc brakes, fuel injection and turbocharging; and manual transmissions, especially 5-speeds, to enhance fuel economy and the fun factor.

Obviously, a major problem is affordability. How can young people, particularly "entry-level" types purchasing their first vehicles, pay the asking prices?

"We need to present a product to the market that's both desirable and accessible," notes Chevrolet's Mr. King. "This might be epitomized by sporty versions of our smallest and simplest cars."

Says Jeffrey C. DuComb, a Ford car product-planning chief analyst: "Affordability is a much more powerful factor in the youth market than in the new-car market as a whole." Only 26 himself, Mr. DuComb is chairman of Ford's Car



Top to bottom: Importers appeal to young at heart with variety of choices including Mazda's '81 GLC (trunk and three-quarter views) boasting plenty of cargo space with rear seats folded down. Datsun's 200SX coupe is sporty eye-grabber, while Volvo GLT wagon is billed by the Swedish automaker as "The World's Roomiest Sport Car."



Youth Committee, a 10-member group of representatives, all under 30, from sales, product planning, engineering, design, public relations, market research and Ford Motor Credit Co.

Theorizes Mazda's Mr. Bowen: "I think we're going to see more assistance from parents helping with down payments and perhaps even underwriting some monthly payments. Also, entry-level buyers will purchase less-fuel efficient used cars because the price will be right. But there's no question it'll be very difficult for young people to get into the market."

Asked to summarize his company's programs and philosophies for serving

tomorrow's youth market, VWA's Mr. Joseph replies: "It depends on what you mean by youth. Volkswagen today is a very different car company, selling different products in different markets, compared to 15 years ago. I'm not sure what we're doing is directed to youth *per se*, but we're aiming toward the discriminating buyer who may happen to be young. We have to do things very tastefully to suit the person who's willing to pay \$7,000 for a product."

"It's easier to sell a young man's car to an old man than sell an old man's car to a young one," says Ford's Mr. DuComb, "and the same goes for women. One of the goals of our commit-

tee is to be a youth-market conduit. Having been involved in the committee for the past two years, I feel very confident about the way Ford is moving in that direction." One important move is Ford's broadening commitment to enhancing its product image through motorsports, something domestic automakers have shied away from in recent years.

"If you can get customers while they're young, perhaps they'll stay with you," suggests Pontiac's Mr. Middlebrook. "We're trying to do those things better. I think Pontiac has the best opportunity in GM to do that, because we have young and young-thinking engineers and designers to make products appealing. We have a 10.5% share of sales to people 25 and under; if we can keep those people, it speaks well for the future."

Says AMC's Mr. Gifford: "Jeep lines particularly have been fairly successful with youth-oriented packages. About 25% to 30% of CJ sales have the Renegade package, for example. It's a commitment tailored toward that market — not just stripes and paint, but a system of components coming together to improve handling, performance, seating comfort and appearance. We also try to deliver more value for the dollar, such as full instrumentation in Jeeps and galvanized outer panels for rust protection. You can rest assured our '83 front-drive program will have youth positioning with different body styles and trim packages."

"I think there are improvements to be made," says Nissan's Mr. Hoffman. "Serviceability as part of initial design, for example. At a \$22-an-hour labor rate, you can run up a \$100 shop bill very quickly. Also we could learn to personalize a vehicle more in an age when so many components are shared. You must be careful not to lose each car's individual character. Factory options such as wheels and tires, audio equipment, handling packages and exterior decor should be readily available to allow more personalization; maybe, in the past, imports have done a poorer job than domestics in providing these things."

Perhaps Mr. Hoffman speaks for all when he says: "The youth market may be getting smaller by virtue of birth rate, but it's getting larger by virtue of age. It's amazing how many people 50 and up are buying cars they never would have considered a few years ago. They're discovering the fun of driving smaller cars." □

Gary Witzenburg is a Detroit freelance writer.