

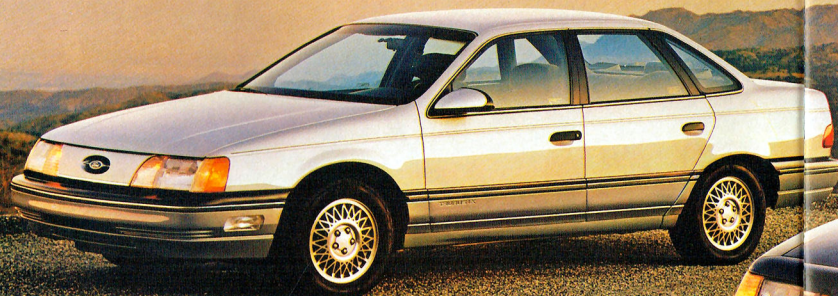
**NO ONE ELSE  
HAS EVER WON  
THIS AWARD  
TWO YEARS  
IN A ROW...**



**MOTOR TREND CAR OF THE YEAR**

Special Car of the Year Advertising Supplement

# THEN AGAIN, NO ONE ELSE BUILDS CARS LIKE THESE.



FORD TAURUS.  
1986 MOTOR TREND CAR OF THE YEAR



FORD THUNDERBIRD TURBO COUPE.  
1987 MOTOR TREND CAR OF THE YEAR

In the 35-year history of the *Motor Trend* Car of the Year award, Ford Division is the only one in the industry to win it two years in a row.

Last year, it was Taurus. Chosen for its innovative new design and engineering. An automobile that *Motor Trend* called "The most significant car introduced by Ford in decades."

And this year, after several outstanding new automobiles were put through a very

demanding testing process, one emerged as the 1987 *Motor Trend* Car of the Year: Ford Thunderbird Turbo Coupe. The only car in the world that combines intercooled turbo-charging, 4-wheel disc Anti-lock brakes and a computerized suspension as standard equipment.

No one else has ever won this award two years in a row. Then again, no one else builds cars like these.

Have you driven a Ford... lately?



# A NEW KIND OF DRIVING EXCITEMENT

FORD THUNDERBIRD TURBO COUPE

In 1986, we named the Taurus Car of the Year, calling it "the most significant car introduced by Ford in decades." This year, it was Ford Division again, with the 1987 Thunderbird Turbo Coupe taking the honors. It's another impressive achievement by the company that *Time* magazine has described as "on a roll."

After a week of objective and subjective testing, the Thunderbird Turbo Coupe beat out a field of Car of the Year nominees that included the Chrysler LeBaron, Dodge Shadow, Plymouth Sundance and Pontiac Bonneville. It's a car that we feel brings a new kind of driving excitement to the personal-luxury market.

## "REFINED AND CULTURED...IT'S HOT."

Our objective evaluations are conducted on the immense acreage of the Los Angeles County Fairgrounds in Pomona. One of our staff members, a vastly experienced former professional racing driver, performs all the tests to eliminate any inconsistencies caused by driving style, and the results are recorded with full computerized instrumentation.

Each nominated car's acceleration is timed in the quarter mile. Its handling is checked on a 600-foot slalom course. We determine how well its brakes can manage going from 60 miles per hour to a complete stop. And its lateral acceleration on a 200-foot-diameter skidpad is revealed. Fuel economy is

also compared, using EPA figures.

The Thunderbird, with its 190-horsepower intercooled turbo engine, won the quarter-mile dash with a time of 16.48 seconds and a speed of 85.1 miles per hour. It also proved that it could stop as well, its four-wheel disc brakes and computerized Anti-lock braking system bringing it to a halt from 60 miles per hour in just 130 feet.

Competition was tighter on the slalom, where the Turbo Coupe was nosed out by a mere two miles per hour. Things were also close on the skidpad, with only hundredths of a G (the force of gravity measured laterally) separating all the entries; the Turbo Coupe's 0.80 compared favorably with the winning car's 0.83. And in the EPA mileage category, the Thunderbird finished fourth, behind the Chrysler cars, which tied with identical numbers.

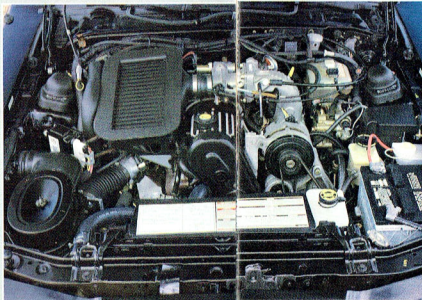
With outright wins in two categories and close placings in the others, the Thunderbird finished well up in the objective testing, which counts for a third when all the Car of the Year categories are tallied.

## "BRAINS TO MATCH ITS BRAWN."

In the all-important subjective test, for which each staff member drives every car over a designated route and then rates it in categories ranging from Styling and Design to Dollar Value, the Thunderbird Turbo Coupe pulled out to an insurmountable lead. We found it hard to argue with a car that claimed first place in seven of the nine major scoring categories and was also chosen as the personal favorite by eight of the nine judges.

While the staff was impressed by the Turbo Coupe's road behavior (one writer said it had performance "heretofore found only in cars costing twice as much"), they were equally taken with its impressive interior appointments and uniformly high level of build. They also rated its bucket seats highest in overall comfort.

Another staffer called the Turbo Coupe an electronic dream machine because of its computer-controlled suspension. Anti-lock brakes and intercooled turbo engine.



PHOTOGRAPHY BY RANDY LORENTZEN

# THUNDERBIRD TURBO COUPE TECHNOLOGY

ADVANCED ENGINEERING FOR WORLD-CLASS  
PERFORMANCE

The Thunderbird Turbo Coupe was named *Motor Trend's* 1987 Car of the Year for many reasons. But what really set this Thunderbird apart from the competition was its abundance of practical high-tech hardware and logical design.

## INTERCOOLED TURBOCHARGING

The Thunderbird's turbocharger is a compressor powered by exhaust gases. It packs air and fuel into a dense charge, which it forces into the combustion chamber. When ignited by the spark plug, this dense charge yields more power than is possible to achieve with conventional induction. An intercooler is a device that lowers the temperature of the air/fuel charge, making it denser yet for even more power.

The Thunderbird Turbo Coupe's functional hood scoops duct fresh air to its intercooler, which is essentially a small radiator that's tucked unobtrusively alongside the engine between the turbocharger and intake ports. The intercooler decreases the temperature of the air/fuel mixture, which boosts maximum power by 15 percent, raising the output of the manual-transmission, 2.3-liter, four-cylinder engine to 190 horsepower. Also contributing to the ponies are its electronic fuel injection and overhead cam.

## ANTI-LOCK BRAKING SYSTEM

Under hard braking or in slippery conditions, locking the wheels is common.

When that happens, there's no tire adhesion, and steering control is lost. The Thunderbird Turbo Coupe's Anti-lock braking helps prevent this from happening.

Sensors at each wheel detect lockup and send the information to a computer, which activates solenoid valves, causing the hydraulic fluid pressure to fluctuate rapidly—in effect, pumping the brakes. This maintains wheel rotation and tire adhesion, allowing the driver to retain steering control. Anti-lock is applied to each front wheel independently, to the rear wheels as a pair or to any combination of the three as the need arises.

## AUTOMATIC RIDE CONTROL

The 1987 Thunderbird Turbo Coupe is the first domestic car to offer an Automatic Ride Control suspension system. It's a sophisticated arrangement of sensors, computer controls and actuators that adjust shock-absorber strut damping automatically to optimize ride and handling

characteristics over a variety of road conditions.

When you drive down a straight road, the Turbo Coupe's suspension sets itself for a smooth, supple ride. But the moment the system senses a sharp turn, the suspension is automatically adjusted to a firmer level, helping to keep the car flatter and more stable. In the "firm" mode, Automatic Ride Control also reduces nose dive under hard braking and helps alleviate squatting during sudden acceleration. Though the system works automatically, there's a selector switch on the dash that lets the driver choose between automatic and firm settings.

When you consider these features along with some of the Turbo Thunderbird's other technical high points (like rack-and-pinion power steering, a 190-horsepower engine, four-wheel disc brakes, a Traction-Lok axle and 16-inch Goodyear P225/60VR16 unidirectional "Gatorback" tires), you can begin to appreciate why it became Car of the Year.



# HOW THEY PAVED THE WAY

PEOPLE ARE THE KEY

**F**ord's recent statement of guiding principles says, "Our people are the source of our strength. They provide our corporate intelligence and determine our reputation and vitality

... Employee involvement is our way of life: We are a team. We must treat each other with trust and respect."

What this means is that everyone at Ford is in-

volved like never before in the process of bringing a car to market. Whether that person is an executive or assembly worker, his or her opinions and suggestions are actively sought. The

idea is to draw from the accumulated experience and intelligence of all the people at Ford. Nobody's input is ignored. At one Ford facility, for example, a team of workers was given an

active role in designing the layout, machine tools and training programs for a new transaxle assembly line. In the past, workers were seldom consulted about such matters, much less given

decision-making roles.

The ultimate goal of the team method is to build better cars, and there's evidence that that goal is being realized. Ford's highly acclaimed Taurus, for in-

stance, incorporates more than 500 employee suggestions that help make it "best in class." This design philosophy was shared by the team that designed the Turbo Coupe. It's that kind

of active participation that's responsible for automobiles that are good enough to be named Car of the Year two years in a row.

PHOTO: GUY MORRISON  
PHOTOGRAPHY



# FORD'S PERFORMANCE TEAM

AGILE COMPANIONS TO THE CAR OF THE YEAR

The Thunderbird Turbo Coupe is indicative of the kind of thinking that's driving Ford these days: continual improvement, refinement of sound ideas and a serious effort to stay in front of the learning curve. You see this in the evolution of some other Ford cars as well, cars with aero-design, electronic engine controls, high-output engines, sports interiors—many of the same kinds of advanced features that made the Thunderbird Car of the Year.

## ESCORT GT

Powered by a responsive 1.9-liter high-output engine with multiport electronic fuel injection, the GT is the top performer of the Escort line, the best-selling cars in the world.

It's obviously aimed at people who see driving as

fun—people who get a kick out of easing into a supportive bucket seat and getting a firm grip on a leather-wrapped steering wheel. It's also great for those who enjoy putting a car through its paces, what with its smooth-shifting five-speed manual transaxle, specially valved shocks and struts and 15-inch performance radial tires mounted on eight-spoke aluminum wheels.

## ESCORT EXP SPORT COUPE

This is a two-seater that mixes luxury with perfor-



mance in a package that's got plenty of appeal for the spirited and youthful among us. The EXP Sport Coupe's exterior design is a real standout, with Midnight Grey lower paint treatment, blackout window trim, "bubble-back" rear hatch and 15-inch performance radials mounted on eight-spoke cast-aluminum wheels.

And the people at Ford hooked up the power of its multiport, fuel-injected 1.9-liter HO engine with the road-holding capability of performance suspension, making the Sport Coupe one of those enticing cars you just want to point down the nearest country road.

## TEMPO SPORT GL

With a functional aerodynamically designed shape that aids directional stability and cornering agility, the Tempo Sport GL is clearly a product of the same design philosophy responsible for the Thunderbird.

Add to that the 2.3-liter HSO electronically fuel-injected engine under the hood, and you know the Tempo Sport GL has what it takes to give you a healthy boost down the road. Ford made sure the handling was equal to the job by fitting the car with

performance tuned suspension and gas-pressurized shock struts. And to make the going pleasant, it's got reclining performance bucket seats, a sports instrument cluster and a full-function AM/FM stereo with cassette and Dolby® noise reduction.

## MUSTANG GT

The high-output 225-horsepower 5.0-liter EFI V8 makes the Mustang GT the most powerful Ford auto-

mobile. And that's just as it should be if tradition means anything. This Mustang lives up to its name. It has a firm, road-holding suspension; Borg-Warner five-speed manual transmission with overdrive fifth; Traction-Lok rear axle; aerodynamically tuned, ground-effects styling; plus standard features like bucket seats with power adjustable lumbar support, a tilt steering wheel and a 7000rpm tachometer.

In addition to the Mustang GT coupe, with its decklid spoiler, integrated fender extensions with air scoops and a longer-profile hood, there's also a convertible GT with a power retractable top.



# THE NEW LOOK AT FORD

A TREND-SETTING THEME

The Thunderbird Turbo Coupe is a comprehensive restatement of Ford's innovative styling theme. Some years ago, Ford broke away from the rest of the domestic auto industry and took a hard look at what car design should be all about. The result was a major break with the past; Ford decided to redesign its cars and, in the process, redesign itself.

The first of the new cars was the 1983 Thunderbird. Ford gambled that its efficient "aerostyle" design would make sense to the public. The company soon struck pay dirt—first with the Thunderbird, then with

the Tempo and, most dramatically, with the highly successful Taurus.

At the same time, Ford made major institutional changes. It drew up guiding principles that stressed quality, customer satisfaction, employee involvement and integrity. These were applied with diligence, and the work paid off. In a recent issue of *Time* magazine, a noted auto analyst was quoted: "Ford is the shining star of the automobile industry now."

## FORD'S AERODYNAMIC DESIGN

It was obvious from the

looks of the 1983 Thunderbird that Ford had come upon a new approach to design. The Thunderbird's shape was significantly different from other cars; it was more organic, rounder. The demarcations between glass and metal were smooth, and the car's lines flowed without abrupt styling accents or visual gimmicks. The 1987 Turbo Coupe, though it has a virtually new body—with advances like flush side glass and aerodynamic headlights—is the culmination of an evolution that began with that first aerostyle Thunderbird.

The Ford Escort and Mustang automobiles have

also benefited from the designers' and engineers' efforts to create more efficient automobile shapes. But perhaps the most striking results of the progress Ford's designers have made can be seen in the Tempo and, in particular, the Taurus, the 1986 *Motor Trend* Car of the Year.

## PUTTING THE AIR TO WORK

The basic principle behind Ford's aerodynamic designs is elementary: Controlling the way air negotiates the surface of an automobile through fine-tuning of individual body areas helps the car's performance and handling.

It stands to reason that a



smoother shape offers less resistance to airflow. But achieving that in the design—while taking into account passenger headroom, adequate trunk space and all the other requirements an automobile must meet—is a painstaking task. And those are just the obvious design criteria. Less apparent effects must also be considered.

Among the most important is downforce. As a matter of general aerody-

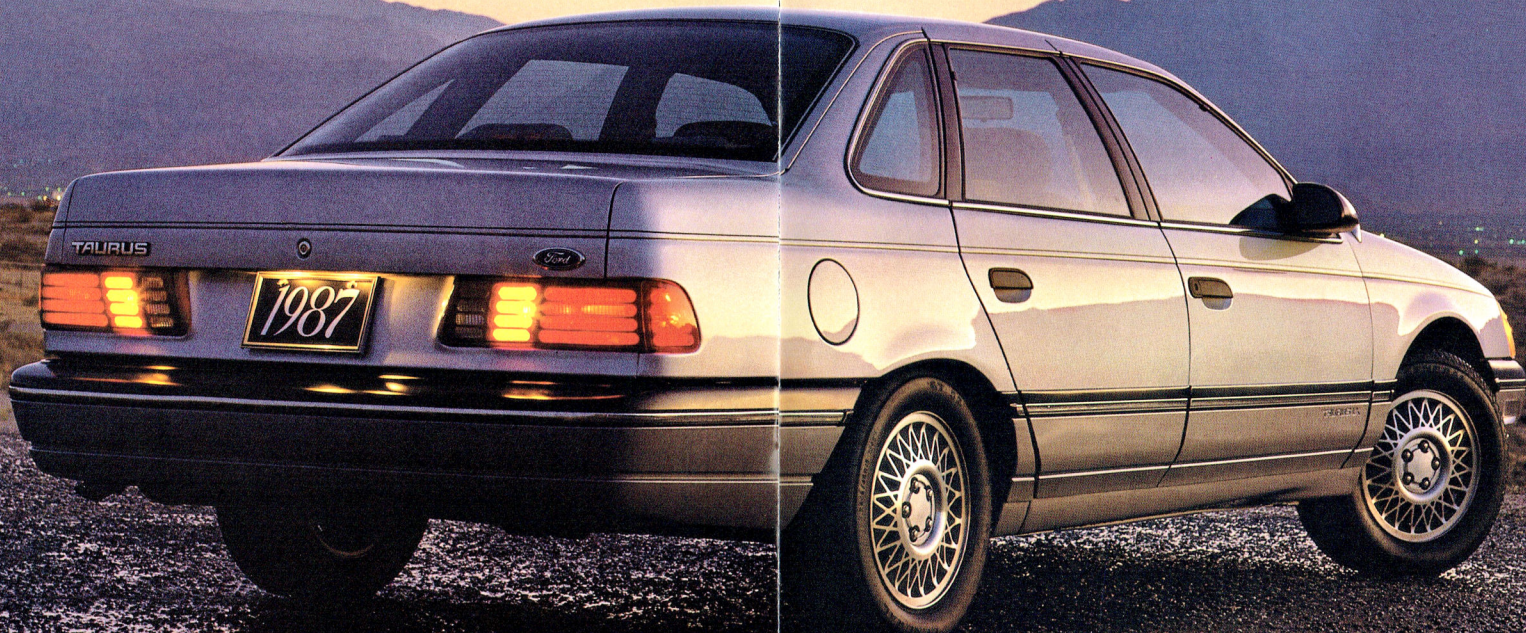
namic principle, the better the front and rear anti-lift characteristics of an automobile, the better its wheels and tires will hold the road. The tapering shape of the Thunderbird Turbo Coupe and the slight kick-up at the rear of the decklid are designed to redirecting it over the hood and trunk surfaces to decrease front and rear lift.

## REFINING THE DESIGN

Many aerodynamic design techniques are well known to designers through previous experience. But new applications of these techniques require intensive wind-tunnel testing to refine. In this sense, aerodynamics is as much an art

as a science. Ford's testing begins with 1/4-scale clay models at major universities and aerospace wind tunnels; later on, full-scale mock-ups are used, until finally pre-production prototypes are tested.

Wind-tunnel testing helped Ford designers identify and eliminate high-velocity areas, standing vortex flows and turbulent flow areas on the original Thunderbird design. In addition to giving the car its distinctive look, this work resulted in a shape that helps the car pass through the air with less effort. This helps save fuel and reduces wind noise.



## FORD THUNDERBIRD FOR 1987

The Turbo Coupe was singled out as Car of the Year because its combination of technical features gives it an unprecedented level of performance. In principle, though, it's similar to the other Thunderbirds in the Ford line.

### THUNDERBIRD

The 1987 Thunderbird shares the Turbo Coupe's trend-setting style and much of its technology, sporting the same basic aerodynamic shape right down to its dual halogen headlights.

And it's a world-class road car, with a 3.8-liter electronically fuel-injected V6, Automatic Overdrive transmission, rack-and-pinion steering and a taut suspension.

### THUNDERBIRD SPORT

With a 5.0-liter V8, this Bird has the power to match its sporty looks. Set off by black accents and



styled wheels outside, it has an electronic instrument cluster and individual seats separated by a full console inside for serious driving.

It's tuned for exceptional road holding. The quad-shock arrangement of the rear suspension helps dampen the harsh jounces and keeps the wide tires in close touch with the road.

### THUNDERBIRD LX

This Thunderbird comes with amenities like power windows, power door locks and AM/FM cassette player as standard equipment.

Outside, it's got accent stripes, electric remote-control mirrors and styled road wheels. Inside are split bench seats, a leather-wrapped tilt steering wheel and thick carpeting.

## JACKIE STEWART DRIVES THE THUNDERBIRD TURBO COUPE

*Jackie Stewart, winner of 27 Grand Prix and three World Driving Championships,*



*has applied his driving skill and technical insight to helping Ford develop its cars. His thoughts about the 1987 Thunderbird Turbo Coupe:*

"I've always felt that the best way to drive, whether in a racing car or a road car, is smoothly. The finest racing drivers in the world—Fangio, Moss, Clark and Lauda come to mind—are the least spectacular because they're at one with their machine and can get the most out of it with the least apparent effort.

"The design of the Turbo Coupe is aimed at creating that synergy, if you will. It begins with what I call the

Command Position, and the driver sits in this car very well. Its multiple seat adjustments allow a person to locate himself in the proper relationship to the pedals, controls and steering wheel—upright, elbows slightly bent, relaxed. Also, the Thunderbird's excellent visibility helps create a feeling of confidence, which is absolutely essential to good driving.

"With 190 horsepower, the Turbo Coupe certainly qualifies as tops in the performance department. But, more important, it has the handling capability to complement its power. One of its most impressive features is an electronic

switch that selects a firm ride or a softer ride. A car that holds the road well generally has to be firm in its suspension, but this car offers the best of both worlds.

"I think that, for the first time in the history of the American motor industry, we have a serious competitor for the export market. In years gone by, Europeans, for instance, wouldn't have bought many American cars; the cars weren't suitable for their kind of driving. But if you offer the Thunderbird Turbo Coupe to Milan, Turin, Stuttgart, Paris or London, people who demand a lot from a car will surely buy it."





MOTOR TREND CAR OF THE YEAR

# FORD THUNDERBIRD TURBO COUPE

**F**or an unprecedented second year in succession, a Ford automobile has won this important award. The Taurus earned it in 1986, and this year the Ford Thunderbird Turbo Coupe took the honors.

A simple explanation for this "double" is that Ford makes great cars. But there's more to it than that. Great cars are the result of a commitment to quality that begins with a car's basic design, continues through every step of development and manufacture and doesn't stop at the showroom floor.

Ford claims to have made that commitment. It declares in a document titled "Company Mission and Guiding Principles" that "customers are the focus of everything we do."

The depth of such a commitment can be judged only by the end result. Does the product meet the promise? Well, winning the Car of the Year award is one measure of having delivered the goods.

