The American consumer is beginning to understand the need for functional cars that are clean, economical, and make environmental sense.

Introducing

the car that got 37.3 miles per gallon on a coast-to-coast economy run.

Introducing

no ignition system, no carburetor, no standard tune-ups.

Introducing

the engine that requires no emissions control devices.

The Peugeot experience with the Diesel stretches all the way back to 1923. We are the largest manufacturer of Diesel passenger cars in the world, building more Diesel automobiles longer than any other company.

But up to now, in the United States, people who were advocating Diesels took on the quality of doomsday prophets. Here is a car with an engine that, from the very beginning, offered a solution to problems of energy shortages and air pollution. Problems that until just recently were far off in the future. But the future is now. We are reminded of it daily by experiencing shortages that affect us personally.

What we are asking for is an attitude of enlightenment by the American public. We, at Peugeot, are committed to the idea that expressways are not showplaces for speed and cars are not a form of expensive toys.

The time is right for a new set of habits. For looking at the automobile as a preventive measure to deal prudently with the issues of economy, energy and ecology.

Introducing The

With its well-proven design—over 500,000 Peugeot XD 90 engines have been built in the last decade—Peugeot introduces the Diesel to America's medium-priced field. Yes, yes, you say, but just what is a Diesel?

First of all, it's named after Rudolf Diesel who, shortly before the turn of the century, invented a compression-ignition piston engine that needed no spark plugs to ignite the fuel.

Peugeot's Diesel is similar to its gasoline engine in many ways. Both have pistons, cylinders, valves, connecting rods and so forth. Both are water-cooled. Both operate on the four-stroke principle—each piston goes up twice and down twice for each power impulse.

Yet there are significant differences. Diesel engines use fuel injection instead of carburetors. Diesels have no spark plugs and associated electrical equipment such as the distributor, coil, condensor or the increasingly troublesome high-tension wires to the spark plugs. All of these require periodic replacement on a gasoline engine. Maintenance on a Diesel is largely a matter of changing oil and maintaining filters, recommended for every 1,500 miles.

How does the fuel ignite without spark plugs? Extremely high compression is the answer. On the Peugeot, it's 22.2 to one, nearly three times that of the gasoline engine. Compressing air automatically raises its temperature so high that the fuel burns spontaneously. When this happens in a gasoline engine, it's called knocking or pinging or running-on and can damage the pistons or valves. But the robust Diesel is designed to run this way, and does so with impressive economy and reliability.

Another difference. Power from most engines is regulated by controling or throttling the airflow, which in turn determines the fuel flow. But the accelerator on the Peugeot Diesel is not connected to a throttle. There is none. The XD 90 engine runs with maximum air intake at all times, even at idle, in order to achieve top volumetric efficiency. Your right foot controls a speed/load sensor which governs precisely how much fuel the high-pressure Bosch injector pump sends to each cylinder. (Precision is so important that the fuel lines to cylinders #2 and #3 are doubled back on themselves so that they will be exactly the same length as the lines to cylinders #1 and #4.)

The injector pump is analagous to the distributor on a gasoline engine. To time the compression-induced combustion, fuel is injected precisely when combustion is scheduled, namely when

Peugeot Diesel.

1. Peugeot has a patent on the special cooling fan it uses to stabilize engine operating temperatures. A thermal contact breaker controls fan activation, preventing unnecessary fan noise and wasted horsepower when cooling isn't needed.

2. Swirl Chamber: Peugeot is the only Diesel automobile sold in America with the Ricardo Comet V swirl-type pre-chamber. This patented design yields about 5% greater fuel economy than the symmetrical pre-chamber design, with no penalty in exhaust emissions. During the compression stroke, the rising piston squeezes air through a passage which feeds tangentially into the pre-chamber. The hot air swirls around with such turbulence that when fuel is injected, it mixes and burns thoroughly. As the burning gasses expand out through the same passage, contoured depressions in the top of the piston guide them into a double vortex flow within the cylinder. With such strong turbulence and with excess air always present, combustion is always very complete.

the piston is near the top of its compression stroke.

With no throttle valve and no limit on incoming air, Peugeot's Diesel runs thriftily lean at all times. This contributes to the Diesel's impressively low emissions of carbon monoxide and unburned hydrocarbons. This is especially so at idle because the Diesel's ample air supply insures complete combustion just when a gasoline engine is running its richest.

Also contributing to the low HC emissions is the fact that fuel is injected only after the air is compressed and heated and in a state of great turbulence. Little or no fuel reaches the relatively cool metal surfaces where burning would be impeded. And because the combustion begins in an initially rich mixture near the injector nozzle and proceeds very rapidly due to the great turbulence, very little NOx is formed despite the overall lean mixture. All of which leads to yet another low-maintenance plus: there are no exhaust emission control devices to be concerned with, none at all.

The fuel for a Diesel engine, similar to household heating oil but containing lubricating elements to protect the close tolerances of the injector pump, comes from the heavier end of crude oil than gasoline. It is far less volatile and therefore much safer. It is also denser than gasoline and contains about 15 to 20% more energy per gallon. This—in combination with the inherently high thermal and volumetric efficiencies derived from a 22.2-to-one compression ratio and an induction system unobstructed by a throttle valve—enables the driver of a Diesel car to achieve impressively high fuel mileage. Trips involving a typical mixture of city, suburban and freeway driving could average up to 30 miles per gallon.

Four-Wheel Independent Suspension: With the sole exception of the Corvette, you can't buy a single car from Detroit with this superior suspension system. Yet every Formula One and Indianapolis car in the world uses it. It costs more, of course, which is why it's still so rare in the United States.

But don't miss the experience of test driving the 504 sedan fast over a rough road. Well engineered fully independent suspension is the secret of the Peugeot's exceptional road holding, stability and ride comfort.

Four-Wheel Disc Brakes: Until this year, the Corvette again was the only American car with disc brakes on the rear wheels as well as the front. Now there's another, the Chrysler Im-

1.

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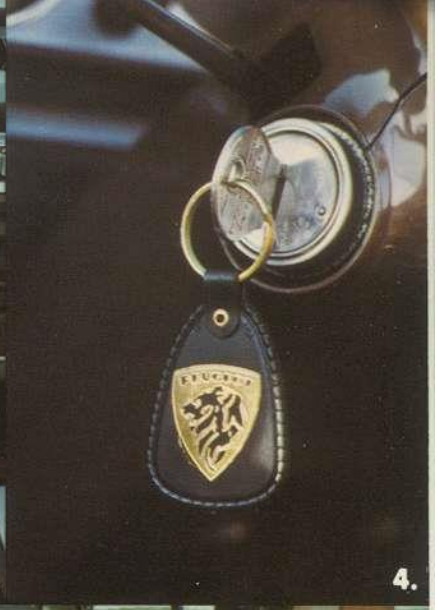

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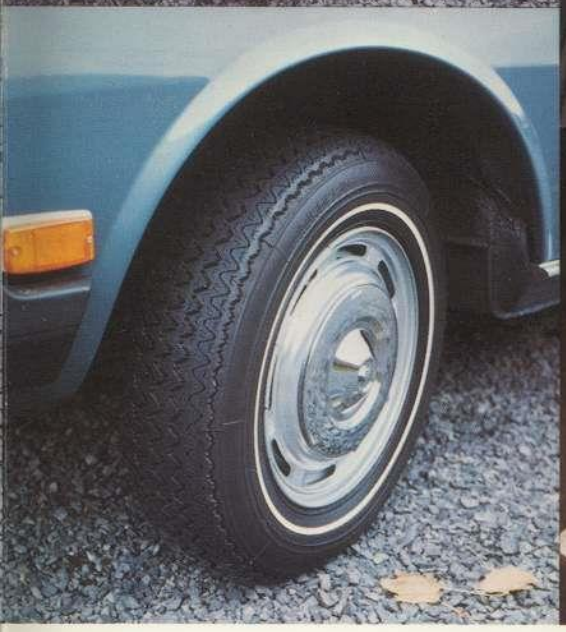

5.

Introducing

3. Nothing ruins the feel of a good suspension system faster than vague steering. Peugeot has solved that problem by adapting the precise rack and pinion used in racing cars and by perfecting the rest of the parts to the point where they work easily without needing power steering.

4. Turn-Key Starting: Peugeot is the first Diesel automobile in the U.S. that has eliminated levers and pushbuttons for heating the pre-chamber with glow plugs and fuel shut-off controls for stopping the engine. It's our new "turn-key" system being introduced for 1974. Simply turn the key clockwise to the "on" position. This triggers the pre-heat activity of the glow plugs. When they are warm enough, turn the key further to activate the hefty starter and with a light touch on the accelerator pedal, your Diesel engine is running. To stop, just turn the key counter-clockwise. The biggest difference from your present car is that you can't call it the ignition key if there's no ignition system, can you?

5. The seats in a 504 are the focal point of the car's subtle luxury. They do all the things a car seat should do and they do them well. They treat your body with firm respect. They breathe. They're easy to clean. And they're fully reclining. In fact, they adjust every which way.

perial. Like fully independent suspension, disc brakes cost more, but perhaps the tide is finally turning. Meanwhile, you owe it to yourself to enjoy the major benefits of driving a sedan with four-wheel discs. Peugeot's system also includes power assist, automatic brake pressure balancing and a unique brake wear warning light.

Unitized Body: Another hidden secret of Peugeot's legendary durability. Unitized construction combines the entire body and frame into one interlocking structure welded together for maximum strength.

Interior: Take your time getting to know the subtle luxury that's inside a Peugeot. After all, you may be spending an average of nearly 300 hours in it every year. When you get used to the superior roominess, comfort and visibility, look for the little things like side window defrosting, extra storage space under the dashboard and between the seats, child-proof rear door locks, full carpeting, transistorized electric clock and courtesy lights that go on when you open any door. Because engineers designed this car, there's just no room for wasted space.

Safety: Peugeot believes that the best kind of safety is the kind that helps you stay out of trouble. That's why the company spends extra money for components such as advanced suspension systems, disc brakes, rack and pinion steering, front and rear anti-sway bars and steel-belted radial tires.

Station Wagon: The significance of Peugeot's station wagon isn't only its impressive 66 cubic feet of cargo space. While most station wagons are little more than sedans with a box on the back, the Peugeot wagon has been engineered specially to do its job. The rear suspension is entirely different from the sedan so that carrying capacity is increased without sacrificing ride and comfort. The wheelbase is six inches longer than the sedan. Axle ratios are different to enable it to move heavier loads. What's the same is Peugeot's quality.

Options: Traditionally, one of the distasteful rituals of buying a new car has been the great option list dilemma. Everything you want, and many of the things you need, are extra dollars. Peugeot doesn't play that game. Peugeot equips its cars right in the first place, even including such pleasant extras as a steel sliding sunroof on the sedan.

Now that you've read about the highlights of the Peugeot 504 Diesel, take the next step. Drive it. Now, honestly, isn't this a car that makes good sense?

The Next Car.

DIMENSIONS AND SPECIFICATIONS	504 SEDAN	504 STATION WAGON
MODEL NUMBERS	504 A90 (Standard)	504 D90 (Standard)
BODY STYLE	4-Door Sedan with Manual Sliding Roof	5-Door Station Wagon
DIMENSIONS		
Wheelbase	108″	114″
Overall Length	181″	192″
Overall Width	66″	67″
Overall Height	57″	61″
Curb Weight	3,000 Lbs.	3,230 Lbs.
Sedan Trunk & Station Wagon Carrying Capacities	20 Cu. Ft.	66 Cu. Ft.
CAPACITIES		
Fuel Tank	14.8 Gallons	15.8 Gallons
Engine Crankcase	5½ Quarts	5½ Quarts
Cooling System, Including Heater	10½ Quarts	10½ Quarts
STEERING		
Type	Rack & Pinion	Rack & Pinion
Ratio	22.2 to 1	22.2 to 1
Turning Circle	35′10″	37′5″
Steering Turns, Lock-to-Lock	4½	4½
TIRES		
Type	Michelin Steel Belted Radial	Michelin Steel Belted Radial
Size	175 HR x 14	185 SR x 14
BRAKES		
Hydraulic with compensator cable control on rear wheels		
Front	Disc	Disc
Rear	Disc	Drum

DIMENSIONS AND SPECIFICATIONS	504 SEDAN	504 STATION WAGON
4-CYLINDER ENGINE		
Type (XD-90)	Overhead Valve	Overhead Valve
Bore & Stroke	3.54″ x 3.62″	3.54″ x 3.62″
Piston Displacement	128.9 Cu. In.	128.9 Cu. In.
Compression Ratio	22.2 to 1	22.2 to 1
Rear Axle Ratio	3.9 to 1	4.11 to 1
Main Bearings	5	5
TRANSMISSION		
Type	4-Speed Synchromesh	4-Speed Synchromesh
Rear Axle Ratio	3.9 to 1	4.11 to 1
ELECTRICAL SYSTEM		
Type	12 Volt 90 Ampere/Hour Battery, Three Phase Alternator (750 watt max. output)	12 Volt 90 Ampere/Hour Battery, Three Phase Alternator (750 watt max. output)
SUSPENSION		
Front	Independent	Independent
Rear	Independent	Rigid Rear Axle with 4 Coil Springs and Telescopic Shocks
Anti-sway Bars	Front & Rear	Front & Rear
BODYWORK	All-Steel, Monocoque Construction	All-Steel, Monocoque Construction

INSTRUMENTATION
120-mph speedometer, 99,999 odo, 999.9 trip odo, water temperature, voltmeter, fuel level, clock.
Warning lights: oil pressure, brake wear, parking brake, pre-heat, highbeam, directionals, flashers, temperature, brake pressure. Equipment: automatic fast idling, anti-theft steering lock, two-speed windshield wipers, electric washer pump and tinted glass.

Stephen F. Wilder, professional road test driver and automotive writer, reports on a cross-country economy run sponsored by Peugeot:

"I drove the Peugeot sedan from Los Angeles to Boston, 3,077 miles through 14 states and averaged 37.3 miles per gallon. Most of the time, we drove at speeds ranging from 40 to 60 miles per hour. And we averaged approximately 45 miles per hour. On the entire trip we consumed only 82.5 gallons of Diesel fuel for a total cost of $28.51, less than a penny a mile.

"My guess is a gasoline engine in the same car would have burned about 50% more fuel and the cost for gas would have averaged 5.5 cents more per gallon." (Distance, cost and fuel consumption documented by the General Environments Corporation of Springfield, Virginia, an independent laboratory specializing in automotive testing for industry and government.)

Road & Track, September 1973:

"The savings here result from the lack of an ignition system. With no spark plugs or points to change and no timing to set, about half the normal tuneup costs can be eliminated."

Popular Science, November 1973:

"The injection system is essentially maintenance-free, protected by a series of filters."

Motor Trend, September 1972:

"...intriguing is the fact that low emissions characteristics are inherent in the basic design of the Diesel engine; no external add-ons—such as air pumps or thermal reactors—are necessary."

Road & Track, September 1973:

"...the Peugeot 504 Diesel is a good Diesel car, rich in transportation value and economy of operation. If you're an environmentalist at heart, you might even find it exciting."

Introducing

the sedan that costs about $2,500 less than the other Diesel.

Introducing

the only Diesel station wagon in America.