

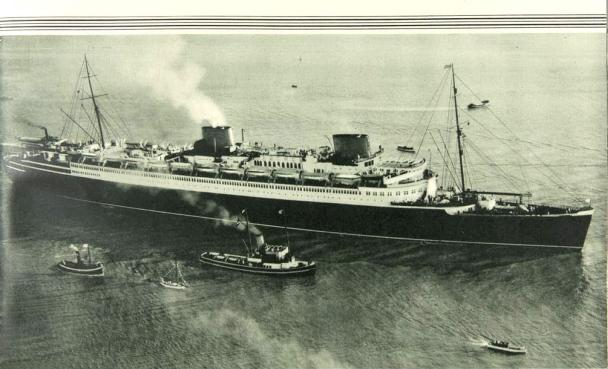


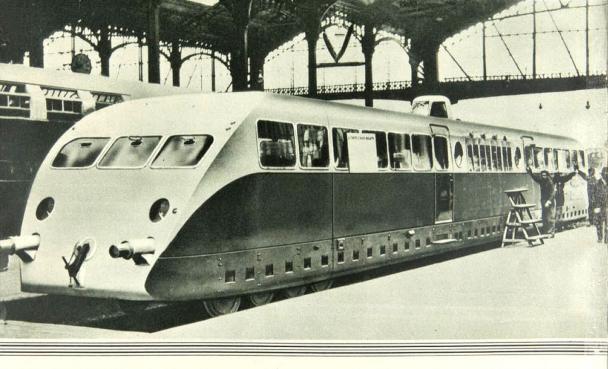
# IN THE AIR!

One of the first problems that the pioneers of flying had to solve was... wind-resistance. Gradually the study of aero-dynamic design became a science. Builders learned how to "airflow" every inch of a plane's surface. You can now fly from coast to coast in less than a day.

# ON THE SEA!

Steam replaced sail... and oil has largely supplanted coal. Now marine engineers have begun to apply aero-dynamic principles. The most modern ships have blunt, rounded bows and short sloping stacks. As a result, trans-Atlantic records are being broken and broken again.





# ON LAND

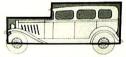
Trains have looked just about the same for as long as we can remember. But big changes are taking place. They have "airflow" trains in Europe capable of more than 100 m. p. h. Several American companies are rushing all-metal "airflow" trains to completion. The study of aero-dynamics has begun the Revolution on Rails.

# IT'S TIME FOR AERO-DYNAMIC CAR

WHY DO conventional automobiles of today look the way they do? That may seem a strange question to ask. We have grown so accustomed to the appearance of our motor cars that we can hardly imagine them being different. We forget that, like everything else, they had to have a beginning.



But a moment's thought will tell us that they are the direct descendants of the horse-and-buggy that they supplanted. Those early designers of the horseless carriage were chiefly interested in getting rid of the horse. They made as few other changes as were necessary.



The really surprising thing is that the resemblance has persisted after all these years . . . despite all the mechanical improvements that have been adopted. There seemed to be no good reason for any radical changes.

Five years ago, De Soto engineers began to suspect otherwise. They observed the, tremendous strides being made in other forms of travel, particularly in the air.

"What would happen." they asked, "if the laws of aero-dynamics were applied to motor cars?" To find out, they built large wind-tunnels similar to those employed by aircraft designers and by the U.S. Government. Into them they put scale models of cars... their relative resistance to wind measured by delicate instruments.



A car moves through air as a boat moves through water. The only difference is that we can't see the air. But it is there all the time... exerting a pressure of 14.7 lbs. per square inch when the car is stationary and increasing as the square of the speed!

Exactly what happens, when a car of conventional design meets the on-rushing air? The wind smashes against the radiator . . . whirls and eddies over the top and around the sides . . . then forms a powerful vacuum in the rear that sucks

the car backward. Every projection from the body, lamps, fenders, etc., acts as a trap to the wind, lessening the speed of the car and increasing running costs.



DeSoto engineers learned that a conventional car, running at 60 miles an hour, uses up to 50% of its power to overcome windresistance. They learned an even more astonishing fact. A model of an ordinary sedan was placed in the tunnel and its resistance carefully measured. Then the model was taken out, the body removed from the chassis and reversed, like this:—



Its resistance was again measured and found to be considerably less. In other words, conventional cars were actually running backwards! This deduction was later checked by building a full-sized car with reversed body... and it was found to be true. It was a startling thought. For

it meant that the popular belief..."The longer the hood the more the speed" was the reverse of the truth.

Tests like these not only showed what was wrong with the "horse-and-buggy" tradition, but clearly showed how a car should be shaped so as to pass through the air with a minimum of disturbance and "drag." This was highly important ... but the most startling discovery was yet to come.

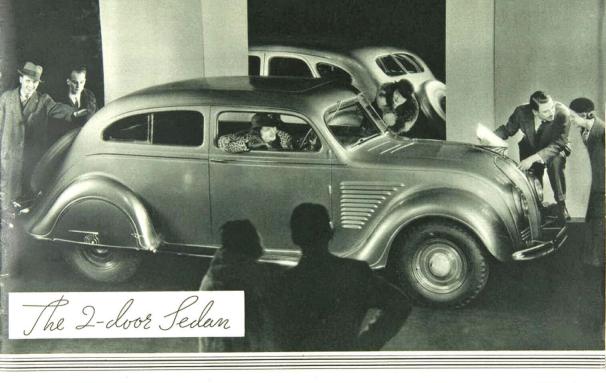
To build such a car, De Soto engineers



found that it was necessary to change the entire weight distribution. They did this ... moved the engine forward ... the passengers forward. The result of this . . . and subsequent changes . . . was almost beyond belief. True, the car was faster. But that was hardly noticed. It was the RIDE that amazed everyone. It was obviously the most comfortable ride ever experienced on four wheels... a FLOATING RIDE clearly destined to change the entire trend of car design. And thus the AIRFLOW De Soto was born ... a modern aero-dynamic car for modern life ... a car built as it should be built for comfort, safety and performance . . . a veritable "Car of the Future."

# HERE IT IS !\_ THE A/RFLOW DE SOTO ...





FIRST MODERN CAR FOR MODERN LIFE!

### FOUR BREATH-TAKING AIRFLOW MODELS





# AND THE PRICE IS A MIRACLE, TOO!

## SAY GOOD-BYE TO ALL THIS: instead...

#### STRAPHANGING DAYS ARE OVER

The AIRFLOW De Soto is like an airplane...good to look at ... but the real thrill comes when you ride in it!

So long as automobiles follow the old "horse-and-buggy" tradition, riding comfort will always be restricted. Improved springs and shock-absorbers simply modify basic faults . . . they cannot overcome them.



The diagram above shows the scating arrangement in the conventional car ... with the rear seat passenger riding squarely over the back axle.

What happens when a car like this goes over a bump? The front wheels go up. This depresses the back springs and the rear passengers go doen. Just as they begin to bounce up, the rear wheels hit the same bump, pitching the passengers upward with double force.

No wonder you cannot relax. No wonder that your nerves are jangled and your muscles tired out after a long ride.

This bumping and bouncing has been done away with, thanks to the new AIR-FLOW De Soto and its "Floating Ride,"





#### YOU CAN RELAX FOR THE FIRST TIME

In the AIRFLOW De Soto... no matter whether you are sitting in the front seat or the back... you can relax completely and utterly. The entire passenger compartment has been moved forward and you ride comfortably "amidships"... like this:



In this position, you experience no bumping, bouncing or vibration of any kind. The bumps just seem to flow under the car without reaching you. It is impossible to realize how great a relief this is until you actually try it.

For the first time in your life, you can lean your head on the back cushion just as you would in a big armchair at home. You can sleep . . . without being jarred awake every few minutes. You can read your newspaper . . without having to strain your eyes. You can write a letter more easily and legibly than in a Pullman car! You will notice that there are no "hand-straps" in this car. No one would ever use them!

Here is a new thrill for every passenger. Riding becomes a real pleasure and distance becomes quite unimportant.

### ...READ A NEWSPAPER AT 80 M.P.H.!

### THREE IS NO CROWD IN THIS FRONT SEAT

#### IT'S JUST AS WIDE AS THE BACK

The front seat of a conventional car is intended for two passengers... but how often three are crowded into it! No one is really comfortable and gear shifting is difficult for the driver. What a surprise when you step into the AIRFLOW De Soto for the first time!

Although the car itself takes up no more room on the highway, its front seat is at least eight inches wider than before. It holds three people just as well as the ordinary front seat holds two. In fact it is just exactly as wide as the back seat. Think what a convenience this is!

The passengers are not the only ones to be thrilled in the AIRFLOW De Soto. It's a new experience for the driver, too. The entire steering mechanism has been redesigned. Instead of being well back of the front axle it is actually in front of it. This permits a more horizontal position of the steering column so that steering is done by more fore-arm and less shoulder movement.

There is a comfortable arm rest that does not interfere with quick action. A new type windshield permits wide-angle visibility. Add the fact that there is no humping or secondary vibration and it is easy to see why you can drive 500 miles in this car as easily as you now drive 200.



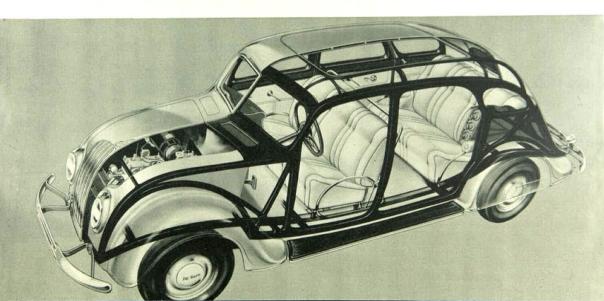


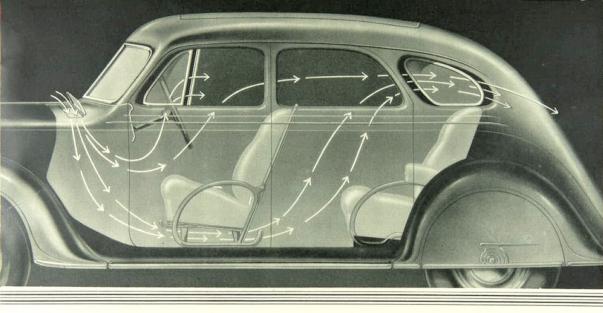
IMAGINE SIX BIG CHAIRS IN ONE CAR!

### A CAR BUILT LIKE A MODERN BRIDGE

There is nothing safer than a modern girder-trussed bridge. But wouldn't you be surprised to see one that was trussed only half way across! Yet that is how conventional cars have always been built. The frame ends stick out in front of the body like the handles of a wheelbarrow. In the AIRFLOW De Soto, for the first time, frame

and body are one girder-trussed, safety-steel unit extending not merely to the dash but from end to end of the car, making it 40 times more rigid than a conventional frame and body. You ride surrounded by beams of great structural strength. The entire car moves as a whole, instead of the frame vibrating against the body.





## AT LAST\_ VENTILATION TOP AND BOTTOM!

Ventilation has always been a problem in a car of conventional shape. The design of the AIRFLOW De Soto solves this as it solves so many other problems. You can open the front window and feel no draft whatsoever. The back window is of swivel design, thus, by a slight adjustment . . . a mere turn of the wrist . . . the car can be comfortably ventilated at all times.

In this car, the passenger compartment is properly ventilated at the bottom as well as the top. The front scat is raised from the floor. With the cowl ventilators open, a current of air passes under this scat. There is complete natural circulation along the floor. For winter use, a heater in front heats the entire car instead of roasting the front passengers while the rear passengers freeze.

## HERE'S BEAUTY WITH A NEW THRILL IN IT





BECAUSE IT'S IN TEMPO WITH THE TIMES



• (Left) Of course the AIR-FLOW De Soto is equipped with Hydraulic Brakes. Today no car is considered safe without them. The brakes have been greatly improved and increased in size to insure absolute safety at the higher speeds made possible by the AIRFLOW design.



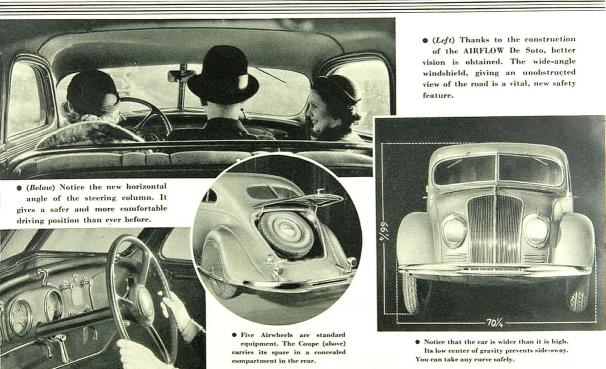
 (Abore) Notice the convenient location of the independent hand brake.
It is under the dash, where the driver can reach it instantaneously no matter how many people are in the front seat.

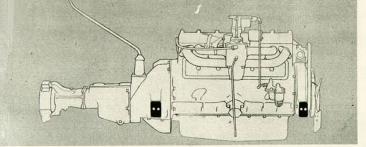
Statistics show that a surprising number of accidents occur when people are getting in and out of cars. De Soto's wide

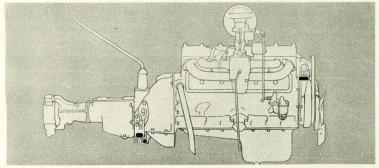
 Statistics show that a surprising number of accidents occur when people are getting in and out of cars. De Soto's wide doors and flush running boards virtually eliminate possibility of such accidents.

## THESE FEATURES PROTECT YOU EVERY MILE

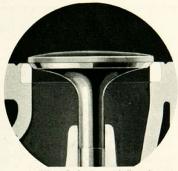
# TODAY\_MORE THAN EVER IT'S "SAFETY FIRST"



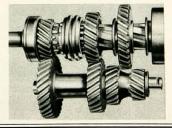




- The top diagram shows how a conventional engine is mounted. There is more weight above than below with the result that the engine is top heavy and the vibration is transmitted to frame and body. De Soto's engine has
- Floating Power engine mountings that permit it to rock slightly in its natural axis. Because it is permitted to oscillate and is not locked rigidly, no vibrations can possibly reach you.

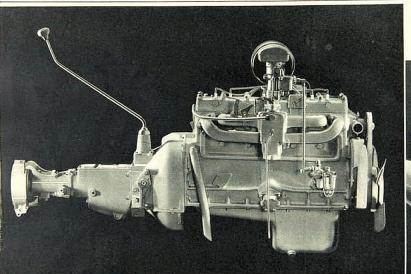


- (Above) De Soto's special alloy valve seat inserts reduce valve grinding to a minimum.
- (Below) The Easy-shift, constant-mesh transmission is completely silent in all speeds.



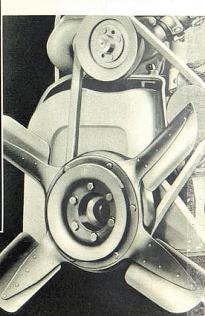
### IT'S THE NEW LEADER IN PERFORMANCE!

### IT'S NOT ONLY THE NEW STYLE LEADER\_



The X-type fan (below) is mounted on the crankshaft and no longer driven by the belt. Relieved of this load, the belt will probably last the life of the car.

• The AIRFLOW De Soto is powered by a 100 Horsepower, high compression aluminum cylinder head engine. It represents the last word in perfected motor design. Bore and stroke 3½' x 4½'... piston displacement 241.5 cubic inches... by far the most powerful engine ever used in a De Soto car. In conjunction with the aerodynamic design of the car itself, it means that De Soto is the speediest, most powerful, most flexible car in its class.



## S P E C I F I C A T I O N S

- ENGINE—De Soto 6-cylinder, L-head, with Patented Floating Power engine mountings. Bore, 33½"; stroke, 4½". Piston displacement, 241.5 cu. in. Taxable horsepower ratio 27.34. Developed horsepower 100 horsepower at 3400 r.p.m. with aluminum high-compression cylinder head (6.2 to 1 compression ratio).
- CRANKSHAFT ASSEMBLY—Crankshaft drop-forged from special highcarbon steel, balanced at rest and in motion. Seven counterweights, Impulse neutralizer. Four steel-backed main bearings. Aluminum alloy T-slot pistons, matched in weight with connecting rods. Four rings on each piston.
- CAMSHAFT—Driven by silent chain from crankshaft. Four camshaft bearings.
- ENGINE LUBRICATION—Force feed from gear-type oil pump, through rifledrilled cylinder block passages to front end drive chain, to main, connecting rod and camshaft hearings. Pressure spray to pistons, piston pins, valve stems, valve cams and valve tappets. Oil purifier and crankease ventilator. Capacity 6 quarts.

- CHASSIS LUBRICATION Pressure grease system.
- ENGINE COOLING—Water-cooling by centrifugal pump. 19½-in. 4-blade fan. Double action thermostatic water control. Complete circulation around all cylinders and valve seats. Cellular type radiator.
- FUEL SYSTEM—Plain-tube down-draft carburetor, Air cleaner, double unit type combined with intake silencer. Accelerating pump. Pump feed from 16-gallon supply tank.
- ELECTRICAL SYSTEM—Six-volt battery ignition. Fully automatic spark advance. Voltage limit relay. Battery capacity, 15 plates, 117 ampere hours at 5 amperes discharge.
- CLUTCH—10-in. dry, single plate, with shock-absorbing center. Molded asbestoslinings. Ball-bearing release. Pitot bearing, Oilite bronze bushing. Automatically releases and engages with closing and opening of foot throttle. Locks in or out with free wheeling control from dash. Automatic clutch optional.
- TRANSMISSION—Constant-mesh, easyshift type. Three speeds forward and one reverse. All helical gears. Silent in all speeds, including reverse. Ball and roller bearings.

- FREE WHEELING—Selective cam and roller type. Located rear of transmission. Operates in all forward speeds. Automatically locks out in reverse.
- FINAL DRIVE—Hotehkiss type. 234′ tubular propeller shaft statically and dynamically balanced. Two ball and trunnion universal joints with special roller bearings.
- REAR AXLE—Semi-floating type enclosed in steel-stamped banjo housing. Spiral hevel gears of chromium nickel alloy steel. Eight roller bearings. Double tapered roller bearing at each rear wheel. Drive ratio 4.11 to 1. Road clearance, 8½°.
- STEERING Semi-irreversible. Worm and roller type. Steering wheel, 3 spokes; 17' diameter. Steering wheel adjustable.
- SPRINGS Semi-elliptic. Squeak-proof Oilite inserts between leaves. Silent-U non-sway shackles. Rubber bushings at front ends of rear springs. Spring covers, standard.
- BRAKES—Hydraulic, 4 wheel, internalexpanding self-equalizing and weatherproof. 11' x 2' centrifuse drums. Separate hand brake, 6' cast iron drum, on propeller shaft.
- SHOCK ABSORBERS—Hydraulic, front and rear.

- WHEELS—Five demountable steel-spoke or disc wheels. Drop center rims, 16' x 4.50'.
- TIRES-6.50-16, 4-ply, non-skid Airwheel type.
- BODIES—All-steel unit body and frame. Insulated against sound. Bodies wired for radio.
- INSTRUMENT PANEL Indirectly lighted. Includes speedometer, ammeter, fuel gauge, oil pressure gauge, engine temperature indicator, large glove box, windshield control cranks, cowl ventilator controls. Special ash trays in instrument panel. Special medallion in instrument panel removable for replacement by radio control.
- VENTILATION—Special draftless ventilation system. Pivoted "butterfly" wings and rising glass panels in front windows. Rising glass panels in rear door windows. "Butterfly" wings in rear quarter windows. "Butterfly" wings and windshields of safety glass. Two cowl ventilators. Front seat raised from floor permitting thorough ventilation front and rear.
- De Soto Motor Corporation reserves the right to change prices and make improvements in their cars without incurring obligations on cars sold previously.

### IT'S FUN TO OWN A CAR THAT HAS EVERYTHING

Scientific Airflow Design

Distinctive New Beauty

Floating Ride

All-Steel Unit Body and Frame

Entirely New System of Ventilation

Airwheel Tires (6.50 x 16)

Adjustable Rear Quarter Windows (except Town Sedan)

Wider Doors for easier entrance and exit

Three Passenger Front Seat

Roomier Insulated Steel Bodies

Long, Oilite Squeak-Proof Springs with Covers

Cradled Comfortable Lounge Seats

Duplate Safety Non-Glare Glass in Windshields and Rear Quarter Windows

Luxurious Frieze Upholstery

Bandit-Proof Door Locks

**Dual Cowl Ventilators** 

Disc or Steel Spoke Artillery Wheels

Glove and Parcel Compartment in Dash

Ceiling of Washable Material

Modern Distinctive Hardware

Rear Fender Shields (optional at slight extra cost)

New Type Floor Covering

Steering Shock Eliminator

Lower Center of Gravity

Additional Head Room

Beautiful Instrument Panel

Bonderized Rustproof Sheet Metal

Wired for Philco Transitone Radio

Fully Adjustable Steering Column

Improved Visibility with Wider Individually Controlled Windshields

Flex-Beam Safety Headlamps

Large Enclosed Luggage Compartment

**Dual Windshield Wipers** 

Twin Safety Stoplights

New Type Front Seat Adjustment

100 h. p. Engine with Aluminum Cylinder Head

Patented Floating Power Engine Mounting

Improved Automatic Clutch (optional at slight extra cost)

Selective Type Free Wheeling

Larger Hydraulic Brakes with Centrifuse Drums

Conveniently Located Independent Hand Brake

Automatically Controlled Hydraulic Shock Absorbers

Easy-Shift All-Silent Transmission

Thermostatically Controlled Cooling System

Silent "U" Threaded Shackles

Heat-Resisting Chrome Alloy Steel Valve Seat Inserts

Positive Fuel Pump

Crankcase Ventilating System

Oil Filter

Counterweighted Crankshaft

Torsional Impulse Neutralizer

Dependable Heavy Duty Ignition

Full Pressure Engine Lubrication

Automatic Choke

Aluminum Alloy Pistons with T-slot

Four Piston Rings

Air Cleaner

Carburetor Intake Silencer

Down Draft Carburetor

Fan operated directly off crankshaft

Manifold Heat Control

Silent Timing Chain

IT'S FUN TO BE SMART... AND THRIFTY, TOO!