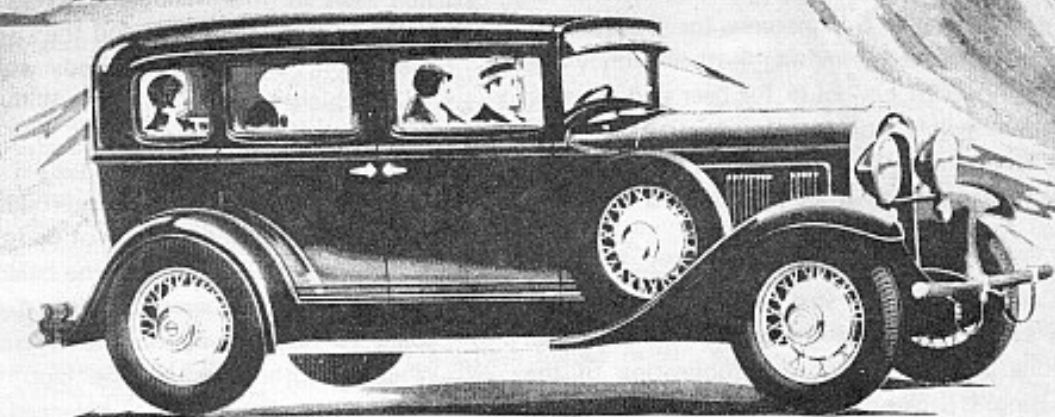


The WILLYS-OVERLAND  
**STARTER**



*A torrent of POWER and SPEED!*

THE  
WILLYS SIX

*December*

JANUARY, FEBRUARY, MARCH 1929

1929

*Announcing the*

# New Willys Six—

*An entirely new expression of modern motor design, construction and performance*

**I**T IS our attempt, in this article, to present for you certain facts and figures; information and data which will give you a vivid word picture of Willys-Overland's most recent creation—the new Willys Six.

You will, of course, appreciate that words are wholly inadequate in describing a motor car such as the new Willys Six. A careful inspection, and a thorough and convincing demonstration of the car itself will better convey to you what Willys-Overland engineers have accomplished.

The Willys Six is emphatically a new automobile. It introduces to the low-priced six cylinder group unprecedented standards of speed, power and performance. It is an entirely new expression of modern motor car design and construction. It has been designed to meet modern requirements in every respect.

It has been in the stage of development for many, many months. It has been subjected to positively cruel tests. Its behavior has been critically observed and its road deportment, under conditions which no sane owner would ever drive, has been laudable.

## **Speed Capabilities**

Present day motoring in itself is highly competitive. Speed, power and responsiveness, capable of taking the lead at the flash of the "go" is a major requirement. A car's willingness to get away and to go places in congested traffic, or to deliver to its owner, mile after mile of sus-

*This announcement story will give you an idea of what you may expect from the new Willys Six. It contains details of gruelling tests to which this car was subjected during its development.*

tained high speed is the thing that counts, and the quality looked for by every purchaser.

The new Willys Six will fulfill, to a thrilling degree, this increasing demand. It has been designed to perform. When acceleration is desired the car will respond quickly. It will leap ahead like a spirited thing. It will step away from anything in its price class with ease and grace, confidence and unfailing satisfaction.

Confirming this, note what the following tests have revealed. The Willys Six will travel from 5 to 25 miles per hour, in high gear, in just 8 seconds. It will flash from 5 to 50 miles per hour in 21 seconds, in high gear.

Second gear tests have shown equally remarkable activity. This new car may be driven 45 miles per hour in second gear with unusual

smoothness and silence. On the high-ways and straightaways it will zoom along hour after hour at a mile a minute. And if you care to travel faster the Willys Six is eager to do 72 miles per hour.

This will give you some idea of what to expect in the way of performance from the new Willys Six. However, you cannot possibly get the full appreciation of what this car will do and the way it will do it, until you slip in behind the wheel, and put it through your pet tests; demanding that it answer for itself anything you may care to ask. Then, and then only, will you know to the fullest degree what Willys-Overland engineers have brought about in this truly remarkable automobile.

## **A Torrent of Power**

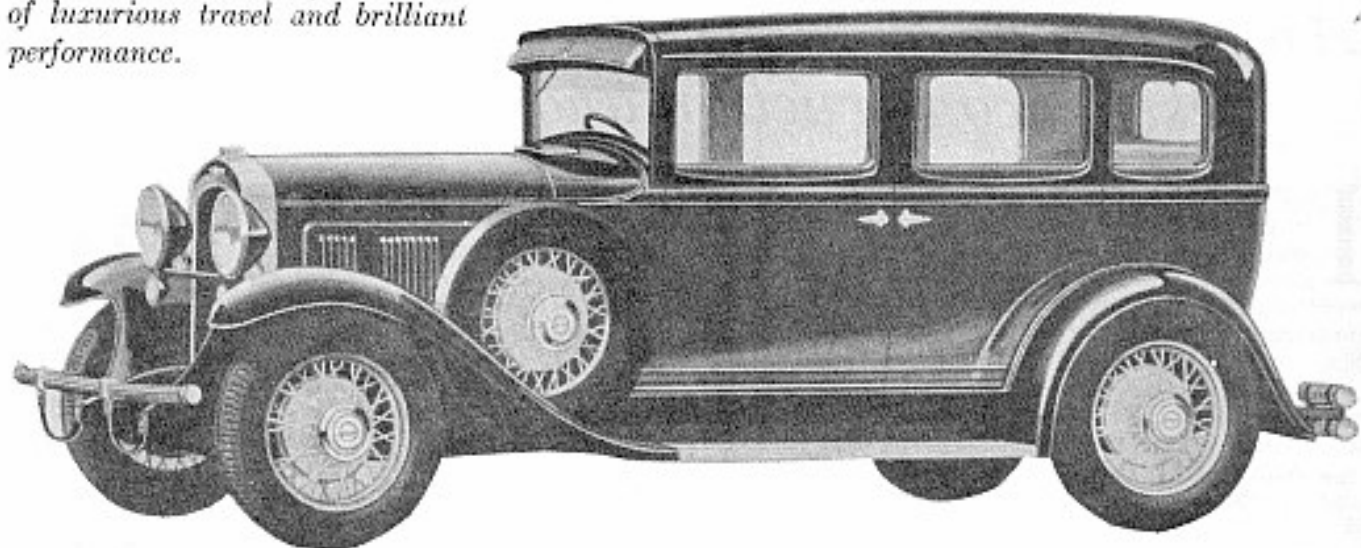
Speed is not the only factor which has been given serious consideration in the planning and designing of the new Willys Six. Its engine, the most modern and advanced idea in automotive power plants, will carry you through places you formerly thought unfair to ask a motor car to take you. It has a bore of  $3\frac{1}{4}$  inches, while its stroke is  $3\frac{7}{8}$  inches. It has 195 cubic inches of displacement and will develop 65 horsepower at 3400 r.p.m.

During the time that the Willys Six was having to answer to the stubborn tests conceived by its designing engineers, it has pushed behind it many of the principal mountains and steep grades in the country. The Willys Six is not a product of a (*Continued on page 15*)

# A Torrent of Power and Speed

# The Willys Six De Luxe Sedan

*Never before has a car in its price class afforded such a high degree of luxurious travel and brilliant performance.*



## The New Willys Six

*(Continued from page 3)*

man-made proving ground. It has been required to prove its case on the country's natural highways where owners might choose to put it through its paces.

While serving its apprenticeship under the calloused supervision of its designers, the Willys Six climbed every mountain in high gear, and many of these are noted testing grounds and are avoided by the average driver. The Willys Six power is obtained with a compression ratio of 19 percent or 5.25 to 1. This is the highest compression and highest efficiency obtainable from any engine in its price class.

### Quality in Frame and Body

When you inspect the Willys Six pay particular attention to the high quality of the frame and body details. The frame or foundation has six supporting cross members. The principle of riveting the cross members to both the upper and lower flanges of the side rails has been followed out in this new car. The channel section of the frame is of

$\frac{3}{4}$  inch stock with  $1\frac{3}{4}$  inch flange and the side rails are  $5\frac{1}{4}$  inches deep. The design of the Willys Six frame results in an unusual degree of strength and durability.

The over-all length of the Willys Six is  $152\frac{1}{2}$  inches. The springs are long and flexible and are of Chrome-Vanadium steel, the best spring material known to engineers. The spring shackles are Tryon, which are self-adjusting and self-lubricating. This resists wear and eliminates frequent attention.

The new Willys Six is a remarkably easy car to handle. Its steering gear is the semi-irreversible type, worm and gear, with ratio 11 to 1. The large surface, four-wheel, internal expanding brakes enable you to drive at high speed with a feeling of confidence and security. Tests show surprising deceleration results. At a speed of 20 miles per hour, and with an exceedingly light pressure applied to the pedal, the car may be brought to a stop within 19 feet. The car may be brought to a stop so violently, however, as to surge the occupants forward.

Adding to the inherent riding comfort of the Willys Six are Monroe

Hydraulic Shock Eliminators, both front and rear.

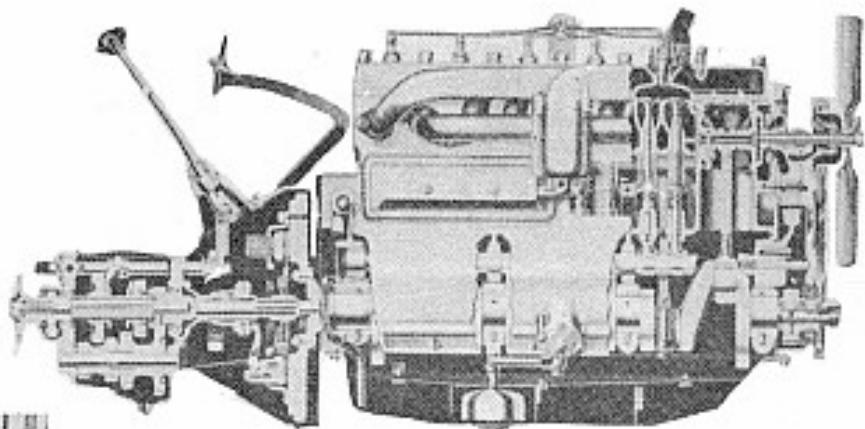
You will be especially pleased with the Willys Six body lines and interior refinements in the various model styles. The bodies are wide, providing ample leg room, plenty of head clearance and liberal elbow space. The rear compartments of the five-passenger models will accommodate three large persons with comfort and ease. The seat backs are high and come well up on the passenger's shoulders. They are constructed so as to conform with the natural curves of the body.

The cushions are well padded and richly upholstered. They are deep and restful. The springs are responsive. In the De Luxe Sedan arm rests, assist straps, rear and quarter curtains, robe rail, and other fittings have been included for the owner's convenience and comfort.

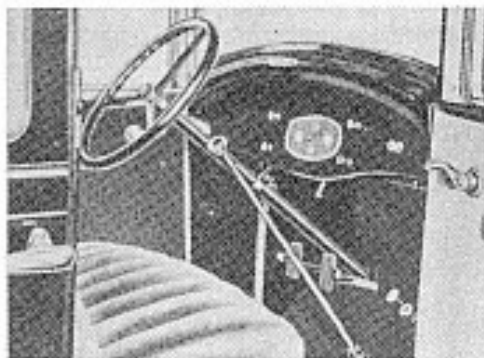
The driver's compartment is also spacious. Serious thought has been given to the arrangement of all controls. They are virtually at the driver's finger tips. The adjustable steering wheel enables the car to be fit to the owner's individual driving requirements.

*Here are some of the Willys Six mechanical features on which to build your sales arguments.*

**USE THEM!**

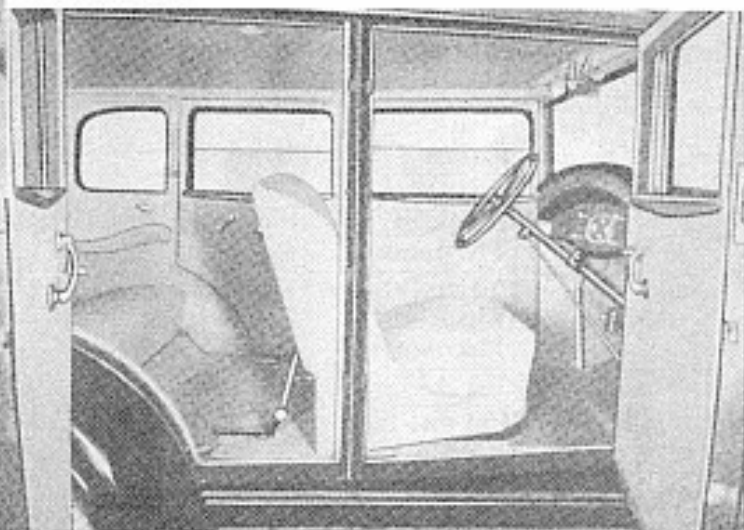


The new Willys Six engine incorporates the most advanced ideas of modern engineering. It has 65 horsepower and is the highest compression engine in its price class. It delivers flashing activity with smooth ease and grace. Its remarkable acceleration will carry you from 5 to 25 miles per hour in 8 seconds and from 5 to 50 miles per hour in 21 seconds. On the straightaways it will do 72 miles per hour.

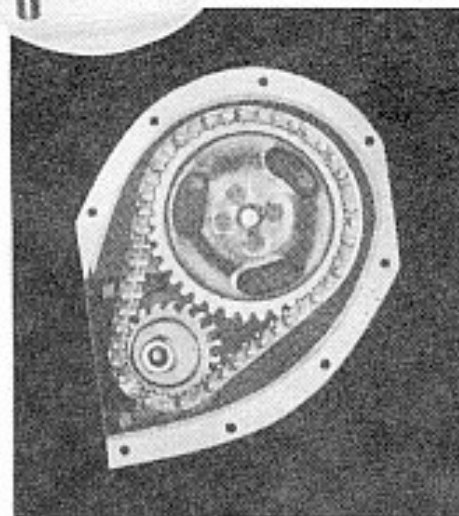


The front compartment of the new Willys Six with its convenient placement of all controls. The seat is wide and deep, allowing you to assume the most comfortable driving position. There is ample leg room. The interiors are richly appointed.

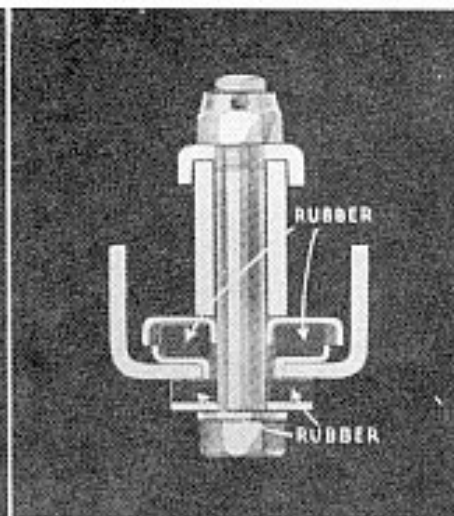
The new Willys Six carries, as standard equipment, Monroe Hydraulic Shock Eliminators, front and rear. These, together with the long, responsive springs, and the inherent riding qualities of the car, enhance its comfort.



The Willys Six De Luxe Sedan is luxurious in every detail. Its wide doors, opening well back on the seats, afford easy access. In the rear compartment are curved arm rests, adding to your comfort. It is equipped with assist straps, rear and quarter curtains, foot rests, robe rail, dome light and many other refinements.

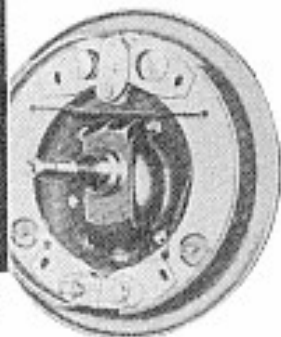


The silent timing chain, for quiet, smooth operation, drives the camshaft and auxiliary shaft of the new Willys Six. It adds to the already quiet performance of the engine.



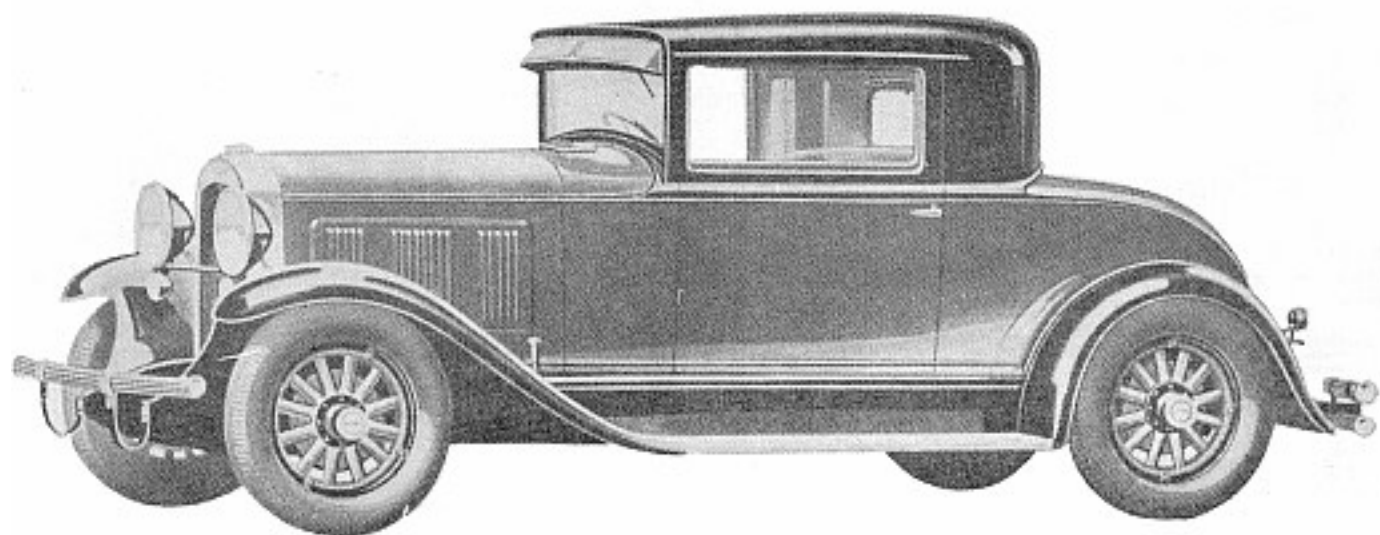
The Willys Six engine is mounted in rubber. The rubber cushions above and below the engine leg reduce vibrations.

Internal expanding brakes of the Willys Six give perfect operation. They are fully enclosed, thus they are protected from water, road dirt, mud and grit. Only a slight foot pressure is required to bring the car to a firm stop.



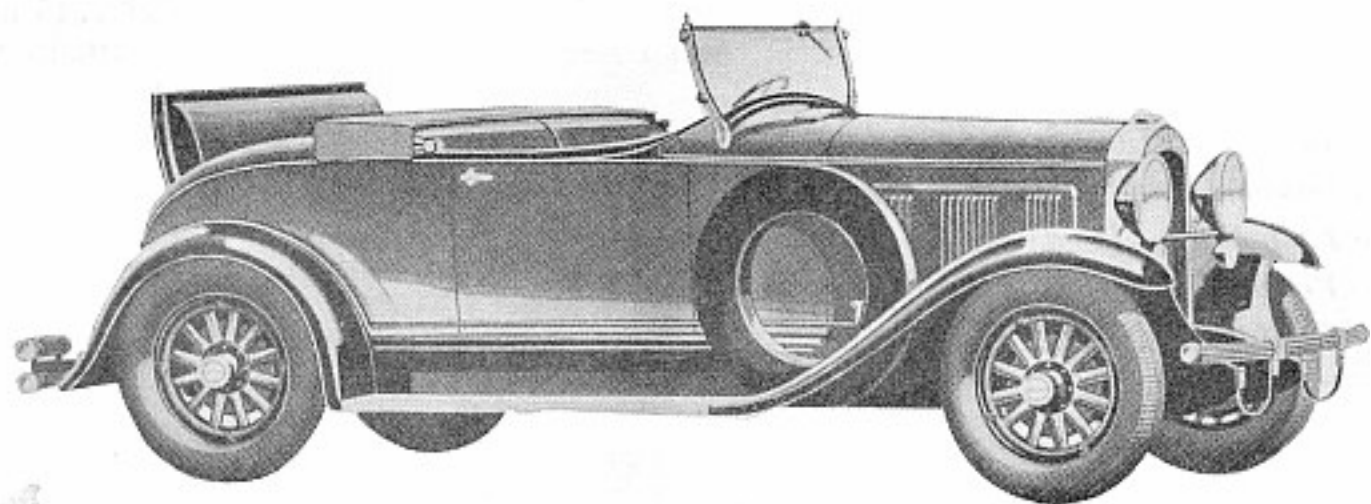
# The Willys Six Coupe

*An ideal personal car with privacy and comfort for two or room and convenience for four*

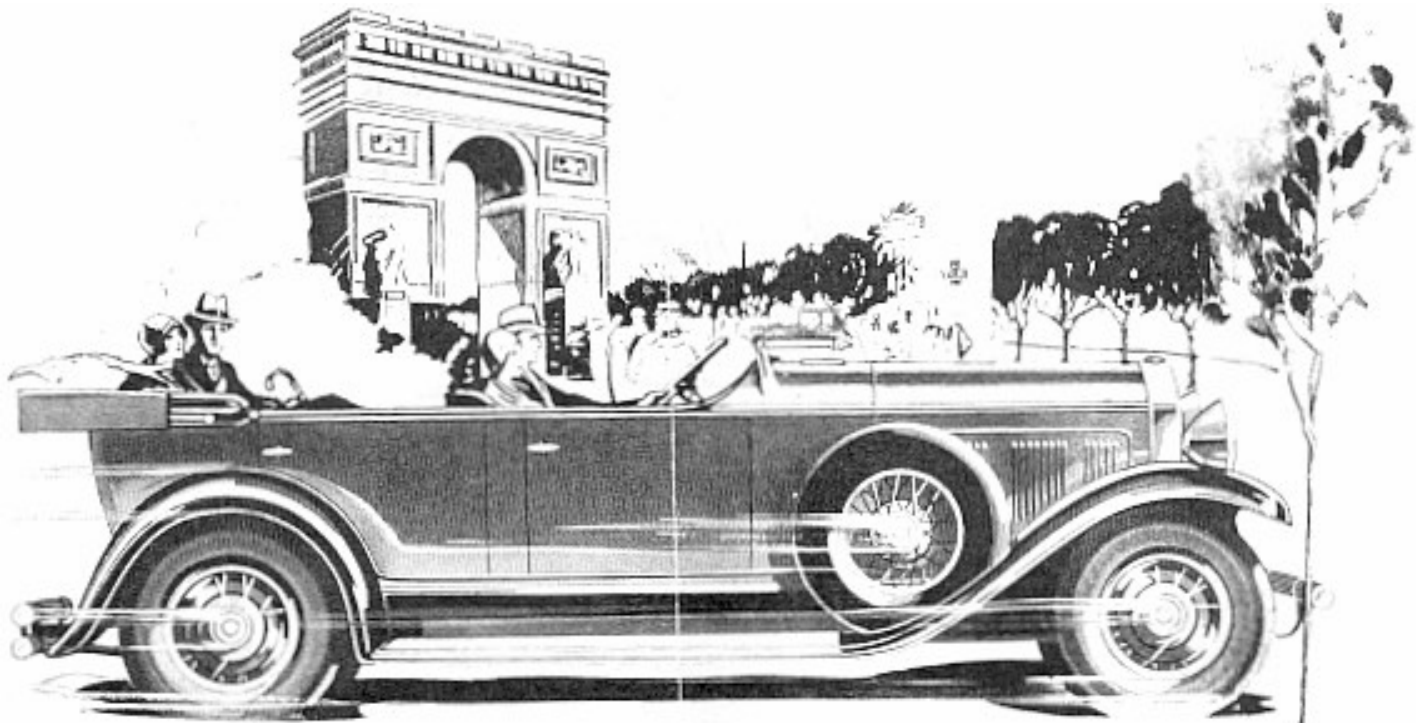


# The Willys Six Roadster

*Fleet, sweeping lines characterizing its power and speed capabilities*



Monroe Hydraulic Shock Eliminators



**..A torrent of  
POWER and  
SPEED!**

In engineering, the Willys Six sweeps beyond all precedent and establishes new high standards for all low-priced cars. It is called the speediest and most powerful car offered in its price class, and its all-around performance can be adequately appreciated only through personal experience.

The big motor of the Willys Six is rubber insulated against vibration and develops 65 horsepower, with speed of 72 miles an hour easily and comfortably sustained...45 miles an hour in second gear for dashing pick-up...hill-climbing ability that will prove a revelation to even the most experienced motorist.

*72 miles an hour—45 miles an hour in second gear . . . .  
Full Force-Feed Lubrication  
Ventilated Crankcase . . . .  
Rubber Insulated Power Plant*

An entirely new car, the Willys Six meets the popular demand of the motoring public for a low-priced Six with a speed and power development previously found only in cars above the \$1000 class.

The New  
**WILLYS SIX**

# COMPARISON

## 98-B vs. Competition

Item	Willys Six	Essex	Pontiac	De Soto	Durant 60
Wheelbase	110"	110½"	110"	Not Given	109"
Frame Over All Length	152½"	Not Given	Not Given	160" Including Bumpers	Not Given
Frame Cross Members	6	5	4	4	5
Spring Shackles	Tryon	Plain	Tryon	Tryon	Tryon
Brakes	Mechanical Front Rear Int. Exp. Int. Exp.	Mechanical Front Rear Int. Exp. Int. Exp.	Mechanical Front Rear Int. Exp. Int. Exp.	Hydraulic Front Rear Int. Exp. Int. Exp.	Mechanical Front Rear Int. Exp. Int. Exp.
Service Brake Area	135½ sq. in.	147 sq. in.	191.2 sq. in.	116.6 sq. in.	147 sq. in.
Hydraulic Shock Eliminators	Yes	Yes	Yes	Yes	No
Universal Joints	Monroe	Monroe	Lovejoy	Lovejoy	Watson
Steering Spindle Thrust Bearings	2	2	2	2	2
Wheel Bearings Front and Rear	Timken Roller Thrust Adjustable Timken Thru-out	Bushing Timken Thru-out	Ball Ball	Ball Timken Front Timken Rear	Timken Roller Thrust Timken Thru-out
Pinion and Differential Bearings	Adjustable Timken Thru-out	Timken	Ball	Timken	Timken
Engine Bore and Stroke	3¼"x3⅞"	2¾"x4½"	3⅝"x3⅞"	3"x4⅜"	2⅞"x4¾"
Cu. in. Piston Displacement	193 cu. in.	160.3 cu. in.	200 cu. in.	174.9 cu. in.	185 cu. in.
S. A. E. Rated H. P.	25.35	18.2	26.3	21.6	19.8
Actual Brake H. P.	65 at 3400	55 at 3600	57 at 3000	55 at 3200	46 at 3200
Compression Ratio	5.56 to 1	Not Given	4.9 to 1	5.0 to 1	5.4 to 1
Number Main Bearings	4	3	3	4	4
Type Main Bearings	Interchangeable	Cast Babbitt	Interchangeable Bronze Back	Interchangeable Bronze Back	Interchangeable Bronze Back
Weight of Crankshaft	59 lbs.	Not Given	Not Given	Not Given	Not Given
Total sq. in. of Bearing Area	49.66	38.25 sq. in.	32.22 sq. in.	45.06 sq. in.	36.29 sq. in.
Engine Lubrication	Full Pressure to Main Conn. Rods, Camshaft and Timing Chain Case	Pump Splash	Pressure to Main Conn. Rods, Camshaft and Timing Chain	Pressure to Main Conn. Rods, Camshaft and Timing Chain—Spray	Pressure to Main Conn. Rods, Camshaft and Timing Chain—Spray
Engine Cooling	Pump Cir. Thermostat Control	Thermo Siphon	Pump Circulation Thermostat Control	Pump Circulation Thermostat Control	Pump Circulation Thermostat Control
Camshaft Drive	Silent Timing Chain	Silent Adjustable Timing Chain	Non-Adjustable Timing Chain	Silent Timing Chain	Silent Adjustable Timing Chain
Intake Valve	Nickel Chromium 1½" Head Dia.	1½" Head Dia.	Nickel steel 1½" Head Dia.	1½" Head Dia.	1½" Head Dia.
Exhaust Valve	Silichrome Steel 1½" Head Dia.	1½" Head Dia.	Silichrome Steel 1½" Head Dia.	1½" Head Dia.	1½" Head Dia.
Piston	Light Weight Cast Iron	Aluminum Alloy	Cast Iron	Aluminum Alloy Nelson-Invar Strut	Aluminum Alloy Nelson-Invar Strut
Connecting Rod Length	8¼"	Not Given	9¼"	Not Given	9"
Size Connecting Rod Bearing	2"x1⅝"	1⅝"x1⅝"	2"x1⅝"	1⅝"x1¼"	2"x1½"
Clutch Type	Single Plate Dry Disc	Single Plate Oil	Single Plate Dry Disc	Single Plate Dry Disc	Single Plate Dry Disc
Size Tire	29"x5.00"	30"x5.00"	29"x5.00"	29"x5.00"	29"x5.00"

Above Specifications as of November 30, 1929, taken from the Manufacturers' Catalog or Trade Papers of late issue.