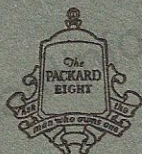


# PACKARD STANDARD EIGHT FACTS

Model 6-26—6-33



Copyright 1928

NUMBER ONE  
Issued July, 1928

PACKARD MOTOR CAR COMPANY  
DETROIT, MICH.

# INDEX

SUBJECT	PAGE
Bodies (General)	3
Club Sedan (5 passenger)	13
Convertible Coupe (2-4 passenger)	14
Coupe Body	13
Coupe Body	12
Phaeton Body (5 passenger)	9
Runabout	8
Sedan	11
Sedan-Limousine Body (7 passenger)	12
Touring Body	7
Trimming and Fittings of Bodies (open)	5
Trimming and Fittings of Bodies (enclosed)	9

## Packard Standard Eight Facts

Body Types Model 6-26—6-33 49

Dimensions:

Complete Cars	55
Enclosed Bodies	56
Open Bodies	58

License Data 58



Mechanical Features

Atomizer	26
Battery	26
Bearings	19
Brakes	33
Camshaft	20
Carburetor	16
Chassis	30
Chassis Lubrication	31
Clutch	35
Connecting Rod	20
Cooling System	26
Crankcase	17
Crankshaft	18
Cylinders	16
Electrical System	23
Exhaust System	30
Fan	23
Frame	32
Front Axle and	33
Front End Drive	22
Front Springs	33
Gasoline System	15
Generator	25

**Packard Motor Car Company**  
Detroit, Mich.

# INDEX

SUBJECT	PAGE
<b>Bodies (General)</b> .....	3
Club Sedan (5 passenger) .....	13
Convertible Coupe (2-4 passenger) .....	14
Coupe Body (2-4 passenger) .....	13
Coupe Body (4 passenger) .....	12
Phaeton Body (5 passenger) .....	9
Runabout Body (2 or 4 passenger) .....	8
Sedan Bodies (5 and 7 passenger) .....	11
Sedan-Limousine Body (7 passenger) .....	12
Touring Body (7 passenger) .....	7
Trimming and Fittings of Bodies (open) .....	5
Trimming and Fittings of Bodies (enclosed) .....	9
<b>Body Types</b> .....	49
<b>Dimensions:</b>	
Complete Cars .....	55
Enclosed Bodies .....	56
Open Bodies .....	58
<b>License Data</b> .....	53
<b>Mechanical Features:</b>	
Ammeter .....	26
Battery .....	25
Bearings .....	19
Brakes .....	38
Camshaft .....	20
Carburetor .....	16
Chassis .....	30
Chassis Lubrication .....	31
Clutch .....	35
Connecting Rod .....	20
Cooling System .....	26
Crankcase .....	17
Crankshaft .....	18
Cylinders .....	16
Electrical System .....	23
Exhaust System .....	30
Fan .....	28
Frame .....	32
Front Axle and Steering .....	33
Front End Drive .....	22
Front Springs .....	33
Gasoline System .....	15
Generator .....	25

Copyright 1928



INDEX—Continued

SUBJECT	PAGE
Ignition System.....	24
Lubrication System.....	28
Motor.....	14
Paint Schemes (Standard).....	40
Pistons.....	20
Rear Axle and Differential.....	37
Rear Springs.....	33
Running Boards and Splashers.....	39
Spare Wheel and Carrier.....	40
Speedometer.....	37
Springs.....	32
Starting Motor.....	25
Starting Switch.....	26
Tires.....	40
Transmission.....	36
Transmission Gear Ratios.....	36
Universal Joints.....	37
Valves.....	21
Valve Gear.....	21
Water Pump.....	27
Weight Distribution on Springs.....	33
Wheels.....	38
Wiring.....	25
<b>Shipping Weights.....</b>	<b>54</b>
<b>Specifications in Brief.....</b>	<b>51</b>
<b>Standard Equipment:</b>	
Chassis Equipment.....	48
Instrument Board Equipment.....	49
Tires and Wheels.....	49

Model 6-26—6-33

Packard Body Types

General

There are ten distinct body types mounted on the Packard Eight chassis of 126½ and 133½ inch wheelbases. On the 6-26 chassis are mounted the five passenger Sedan, two-four passenger Coupe and two-four passenger Convertible Coupe. On the 6-33 chassis are mounted the five passenger Club Sedan, seven passenger Sedan, seven passenger Sedan-Limousine, seven passenger Touring, four passenger Coupe, five passenger Phaeton, and the two-four passenger Runabout.

The body framework is built of thoroughly air dried and kiln dried lumber of the proper species, reinforced by metal braces. The bent woods employed to obtain the correct contours are fabricated on forms and placed in dry kilns having a temperature of 100° to 120° F. and left to dry for twenty-four hours to insure their holding shape. All joints are fitted closely, screwed and glued in a thoroughly workmanlike manner.

Careful selection for proper grain is made of hard wood used in all important members, such as sills, cross sills, cross bars, standing pillars, door pillars and cowl bars. After first assembly of the body panels to the wooden frame all the surfaces are either wire brushed or sanded to prevent any surface imperfection and irregularity of line in the finished product. The body panels before being finally as-

sembled to the body framework are given a coat of primer on those surfaces which will be concealed. The joints of all panels are filed smoothly with great care. Exact symmetry of lines is adhered to in the first as well as the last operation.

The following woods are used in the body construction of the Packard Eight models: ash, birch, rock elm, maple, oak, basswood and spruce.

A new instrument board has been designed. It has a walnut rubbed finish with a nickel bead at the lower edge and the instruments, with the exception of the ignition switch and cigar lighter, are grouped in a pleasing arrangement in the center. The instruments are indirectly lighted by two three-candlepower bulbs which are controlled by a separate switch. The clock is located at the right end of the panel and the speedometer at the left end, easily read from the driving position.

A gasoline gauge is furnished and is placed in the center part of the panel. The oil gauge and motor thermometer are located near the top of the panel equidistant from the center, with the ammeter in the lower center. To the right of the group is the cigar lighter, standard on all Packard open and enclosed cars. Convenient on the left side of the group is the ignition switch of the plunger type built into the end of the ignition coil. The spark advance and carburetor choke controls are located at the bottom of the instrument group, symmetrically, each side of the ammeter.

The cowl ventilator is provided with a lever adjustment operated from the driver's seat. It is quickly and easily

adjusted to three different positions. A spring makes it rattle-proof. An entirely new design of drain pan which fits close up around the ventilator cover makes this ventilator absolutely leak-proof. This drain pan will also effectually prevent dust from accumulating on the instruments attached to the back of the instrument board.

An automatic windshield cleaner and non-glare rear vision mirror are standard equipment on all cars.

A tool compartment under the driver's seat is provided in all models except the Phaeton and Roadster, where it is located in the back of the front seat. There is also a pocket under the cowl on the right for small hand tools, gloves, rags, etc.

All exterior hardware is heavily plated with chromium, the new non-corrosive metal finish.

## Open Bodies

### Trimming and Fittings

All materials used in trimming the bodies are of the very best quality. Neatness of finish and good workmanship are most noticeable. The trimming design is of the plaited type with plaits approximately 4" wide on seven passenger Touring, and 6" on Phaetons and Roadsters. Luxury type cushion springs are used in all seat and seat back cushions. The upholstery material is best quality, first cut hand crushed, Colonial grain leather, in colors to harmonize with paint scheme of the body. Templets shaped to the proper seat contour are used by Packard trim-

mers to maintain most comfortable riding positions.

The entire tonneau floor and heel panels are covered with horse hair carpet, well fitted around the heel kick-up. The front compartment is carpeted with a very durable linoleum with the incline board cast in one piece of raised pattern aluminum. There is a suitable two-step accelerator foot rest cast integrally. The windshield is of the swinging sash type and slopes backward, thus harmonizing with the body lines and eliminating objectionable light reflection.

The stanchions are substantial, chromium plated steel forgings, and the front of the top is fastened securely to them by means of special top to windshield clamps, operated by thumb nuts. This makes a solid, rattle-proof connection between the top and windshield. A weather-proof flap attached to the top is buttoned to the windshield by Lift the Dot fasteners. The windshield glass, set in felt, is designed to swing forward and is rattle and rainproof.

The top, of best quality material, is fitted with a plate glass window 8" x 20" on Touring, 6" x 20" on Phaeton and Runabout in the rear top curtain. The construction is slat iron, chromium plated with walnut finish wood bows. The bows are placed where there is the least danger of striking the head. Each top is rigidly inspected to insure conformity with the harmonious body lines.

The tailor-made fit of the side curtains affords absolute protection from wind and rain. An opening covered with a flap is provided in the left front curtain to permit of signaling from the driver's seat

without unfastening or damaging the curtain. When not in use the curtains are stowed in the left hand door pockets where they are quickly accessible.

Door curtain operating rods, made of solid bar stock to increase stiffness, are supplied for all open body doors. All doors are fitted with outside and inside handles of standard Packard type. The locks are designed to unlock from the inside by either an up or down motion and the handles are so shaped that they will not catch the clothing. The door latch has the double locking feature.

The doors on all models are made flush so there will be no overlapping mouldings to break up the body lines. They swing forward for the front compartment on concealed hinges. The tonneau doors swing to the rear. An additional body moulding has been added to enclose a two-inch monogram panel which may be specified in any color desired.

## Open Body Types

### Touring Body (7 passenger)

The Touring body for seven passengers is mounted on the 6-33 chassis. The top is made of Burbank material and designed to conform perfectly with the long, graceful lines of the body. A top boot is standard equipment.

The new radiator with its vertical shutters and attractive filler cap blends with the bonnet into a rounded cowl exceptionally well proportioned to the after-part of the body. A stationary robe rail is fitted to the back of the front seat. A nickel

plated foot rail is easily adjusted to two different positions.

The metal moulding is neatly attached to the tops of the doors and body sides and continues around the face of the cowl in a graceful curve. It has a black rubbed finish and adds the finishing touch to a well proportioned and expertly constructed body. There are two forward folding auxiliary seats upholstered in Colonial grain leather.

#### **Runabout Body (2 or 4 passenger)**

The Runabout bodies are mounted on the 6-33 chassis. The front seat is of generous proportions for two passengers, with provision for two additional passengers on the disappearing rumble seat. The rear compartment is large and roomy and is fitted with a deck light, carpet, and foot rest.

The rear compartment lid, which carries the folding seat back, may be opened when the top is folded as well as when it is up. Seeping of water into this compartment is prevented by a self-draining feature of Packard design.

The luggage compartment back of the front seat is easily reached from the driver's seat through a door opening on the top of the seat back.

An additional feature of this body is the golf bag compartment, which opens from either side in the body panel just forward of the rear fender. Ample space is provided for two complete golf bags. It is illuminated by a light controlled by an automatic switch. Cylinder locks are fitted on golf bag and front luggage compartments.

A rear deck mat and lugs are provided to protect the deck finish when the top is lowered.

#### **Phaeton Body (5 passenger)**

The Phaeton bodies are mounted on the 6-33 chassis. The top, being unlined, is readily collapsible and standard equipment includes a top boot. The top support is of a slat iron type construction with walnut finish wood bows, the slat irons being chromium plated.

Three compartments are built into the back of the front seat section, two to be used for gloves or other small articles and the other to contain luggage or tools.

#### **Enclosed Bodies**

##### **Trimming and Fittings**

With the exception of the 6-33 Sedan-Limousine, in which the front compartment is upholstered in Colonial grain leather, the enclosed bodies are all upholstered in all wool broadcloth. A plaiting design is followed on the seat and seat backs. Deep Luxury type springs covered with a generous thickness of curled horse hair with lasting resiliency, and the long fibre cotton wadding as used by tailors, contribute to the very fine riding quality.

Comfortable, new design, arm rests, with a sponge rubber core, are provided at each side of the rear seat. Templets are used by Packard trimmers to maintain the best contour which gives the most restful riding position. Worsted tapestry lace and leather beading are used for trimming.

The doors, roof, sides and the front seat back are trimmed with upholstery cloth

to match the seat and seat back. The head lining extends in one section, neatly covering the entire ceiling. Window curtains with rollers are furnished on the rear and side rear windows.

The windlace around the doors is covered with worsted material or leather to match the trimming. There is a weatherstrip fitted to the bottom of each door sill to prevent water leaks and air drafts.

Door and window mouldings on the 6-26 and the 6-33 are made of black walnut with Packard Eight Walnut Finish.

All doors have outside handles; those of the 6-26 are lacquer finished metal with rounded corners, while the 6-33 handles are made of black rubber with square corners. They are opened from the inside by convenient easy operating lever handles.

Inside locks are provided on all except the right front door, which is provided with an outside cylinder lock. The inside locks are operated by pushing the lever handle forward about  $\frac{1}{2}$  inch to the locked position. The locks will not be damaged by slamming if the catch has been set when the door is ajar. On the Sedan-Limousine outside locks are provided on both right hand doors.

Adjusting screw on face of lock to take up wear on plunger and eliminate rattles.

On the enclosed body types the windshield is of one piece construction, attached at the top by a piano type hinge. Weatherstrips are provided to prevent leakage of water between the sash and the stanchions. In addition, the hinge itself is provided with a weatherstrip, thus preventing any leakage around it.

The entire windshield is easily adjustable from the driver's seat from closed to fully open position.

The front pillars and stanchions are specially designed not only to have great strength but also to give maximum vision.

An automatic windshield cleaner and rear vision mirror are standard equipment on all models.

All door windows lower flush with the door belt. The two side windows at the ends of the rear seat lower sufficiently for ventilation. All windows are operated by rotary type window regulators. The glass in the rear window is stationary, except on both two or four passenger Coupe and Convertible Coupe. On the two-four passenger Coupe the rear glass lowers with a regulator and on the Convertible Coupe the rear curtain glass is detachable to provide convenience for speaking with the passengers in the rumble seat. It is stormproof, being set in a channel rubber and securely held in place with a metal moulding finished in walnut. The interior hardware fittings are of an exclusive Packard design.

## Enclosed Body Types

### Sedan Bodies (5 and 7 passenger)

The Sedan body for five passengers is mounted on the 6-26 chassis and the seven passenger is mounted on the 6-33 chassis. These bodies combine perfectly the elements of smartness and utility. Wide plate glass windows and narrow uprights insure maximum vision in all directions.

A robe rail of the stationary type is conveniently mounted on the back of the front seat.



On the 6-33 model a carpet covered foot rail folds out of position when not in use. A rail of the tubular type is standard on the 6-26 model.

### **Sedan Limousine Body (7 passenger)**

The Sedan-Limousine body for seven passengers is mounted on the 6-33 chassis.

The front and rear compartments are divided by a full plate glass partition above the seat back, the glass division being raised or lowered by the use of the standard type of window regulator.

The driver's compartment below the belt is upholstered in best quality, first cut, hand crushed, Colonial grain leather.

The telephone for communication between the rear compartment and the driver is of the dictograph type with a portable transmitter attached to a cord or reel, and is neatly stowed away out of sight in the pocket under the right arm rest in the rear compartment. The robe rail is of the flexible type.

In other respects the design and construction are similar to the Sedan bodies.

### **Coupe Body (4 passenger)**

The four passenger Coupe is mounted on the 6-33 chassis. In seating space this model is most commodious. Three passengers can be carried with utmost comfort and when desired a forward folding auxiliary seat increases the capacity to four. The seat for two passengers is slightly behind and to the side of the driver's seat.

The very best grade of all wool broadcloth upholstery material is used throughout.

A compartment with a hinged lid is located directly behind the driver's seat for parcels, portfolios, bags, etc. Ample luggage space is provided in the rear deck, the door of which is fitted with a cylinder lock. A well proportioned, comfortable driver's seat is provided and beside it a fully upholstered folding seat which tips forward out of the way.

Provision is made for carrying a golf bag when desired. Leakage of water into the compartment is prevented by a concealed self-draining water trough. All windows lower flush with the window belt by means of rotary type window regulators.

### **Club Sedan (5 passenger)**

The Club Sedan body is mounted on the 6-33 chassis. This is one of the smartest productions in the entire line. Three passengers are provided for in a rear seat similar to the Sedan. There is a well proportioned, comfortable front seat for two passengers. This is a four-door model.

A neatly designed folding trunk rack is standard equipment and in addition a rear platform trunk can be used if it is desirable.

### **Coupe Body (2-4 passenger)**

The two or four passenger Coupe body is furnished mounted on the 6-26 chassis. This is a permanent top Coupe. The front seat is of generous proportions for two passengers with provision made for two additional passengers on a disappearing rumble seat.

The rear compartment is large and roomy, and is fitted with a light, carpet and foot rest.

Seeping of water into this compartment is prevented by a self-draining feature. A luggage compartment back of the front seat is easily reached from the front through a door opening on the top of the seat back. A golf bag compartment which extends across the back of the front seat, at the floor, has a door on the right side only. All compartment doors are fitted with good cylinder locks for safety.

The rear window lowers by means of regulator located in luggage compartment.

### **Convertible Coupe (2-4 passenger)**

This body is supplied on the 6-26 chassis, and has a fully collapsible top, which folds up very neatly. Below the belt this body is very similar to the regular Coupe.

## **Mechanical Features**

### **Motor**

The motor is strictly of Packard design and is manufactured in the Packard factory. It is of well balanced design, compact, light in weight and exceptionally smooth running. The motor is a unit power plant, eight cylinders in line with clutch and transmission integral.

Every driven unit has its own individual drive, which increases accessibility of the units for repair or adjustment and eliminates flexible joints that wear out and become noisy. The exceptionally clean appearance of the Packard Eight motor is the result of the experience gained

by years of careful engineering. Maximum efficiency in combustion is obtained by a well balanced layout of carburetor intake manifold in conjunction with an improved design of cylinder head and pistons. The heavy counterbalanced crankshaft with its vibration damper and the light weight reciprocating parts contribute largely to the phenomenal smoothness of this motor.

Design refinements (see catalogues for illustrations) incorporated in this new motor are: An oil filter for removing dirt from the crankcase oil; valve compartment vent tube and chain case breather to allow the escape of destructive vapors; a valve spring assembly of Packard design with exceptionally long life; an oiling device for providing adequate lubrication to the cylinder walls when starting the motor; an oil-tight valve chamber cover; a combination oil filler and breather containing baffles which effectively prevent the throwing of oil out through the breather at high speeds; a crankcase oil gauge of the dial indicator type; a fan drive which permits the use of large diameter pulleys and eliminates belt slippage at high speeds; and a new and improved design of vibration damper. All cylinder head nuts are of the acorn type, nickel plated and polished. Aluminum parts are sandblasted smooth. The enameled parts are finished in Crane gray and black enamel.

### **Gasoline System**

The gasoline supply tank is located at the rear of the chassis and has a capacity of 22 gallons of fuel. The vacuum feed system is used to draw the fuel from the supply tank at the rear to the vacuum

tank on the front of the dash. The gasoline is fed from the vacuum tank to the carburetor by gravity. A gasoline gauge is mounted on the instrument board and registers the amount of fuel in the rear supply tank in gallons.

A gasoline filter with a glass sediment chamber is interposed between the vacuum tank and the carburetor to segregate the dirt and water which may be present in the fuel. This is located where it can easily be observed and the accumulation of foreign substances emptied before causing stoppage of the feed line.

### Carburetor

The carburetor is exclusively Packard in design and is located on the right side of the motor. It is of the automatic float feed type with a spring controlled air valve and cylindrical mixing chamber. A suction tube leads from the base of the spray mixing tube past the carburetor into the intake passage above the throttle valve. The function of this tube is to prevent flooding of the motor when it is idled or driven by the car in coasting with the clutch engaged.

### Cylinders

The motor is of the "L" head type, cylinders cast en bloc, with a detachable head. The cylinders are hard gray iron castings, carefully machined and the bores are honed to size. The cylinder bore is  $3\frac{3}{16}$ ". The cylinder blocks are cast in the Packard foundry by the best known method from an iron mixture containing 20 per cent steel. The addition of the steel makes the metal more closely grained and

increases the strength as well as making a more homogeneous material. They are cast eight in block for compactness and lessened weight, the intake manifold being cast as an integral part of the block. This naturally assists in keeping the gas vaporized as it passes into the cylinder through this heated passage.

The external part of the intake manifold is designed to distribute gas in exactly the same volume to each cylinder—the distance traveled by the gas being precisely the same to the center as well as to the end cylinder.

Water passages are large to give perfect circulation, one entire side of the block being cast open for the purpose of cleaning and inspecting water chambers and outside of cylinder barrels. This opening is covered by a steel plate which acts as a manifold to give even distribution of water around cylinder barrels and is easily removed.

Cylinder bores are accurately finished and honed for size and held to close limits for roundness and taper. The bottom edge of the bore is beveled and enables the block to be slipped over the pistons. The top face of the cylinder head block is carefully machined to insure parallel non-leaking joints.

The cylinder head is removable, thus facilitating service work and permitting the combustion chambers to be completely cleaned. The combustion chamber is of the high turbulence type.

### Crankcase

The crankcase is of the barrel-shaped type to give maximum strength with

minimum weight. This ribbed bridge-like structure furnishes ample support for the nine main bearings on the crankshaft. The crankcase is cast in two parts and is made from aluminum alloy. It is rigidly supported in the frame at both the front and rear ends.

The crankshaft and camshaft main bearings are supported by webs cast in the crankcase upper half. The lower half forms the oil reservoir. This can be removed without disturbing the crankshaft bearings, the gear cover or the transmission case. Baffle partitions are cast crosswise in the lower half to retard surging of oil.

There is an inspection opening at the front of the case for inspecting front end chain adjustment. The spark setting can be checked by removing the motor starter motor and lining up the mark on the face of the flywheel with the pointer attached to the crankcase.

### Crankshaft

The crankshaft is manufactured from a steel drop forging and supported in the crankcase by nine main bearings. The shorter distance between supports, the smaller the tendency for vibration. On the 6-26 and 6-33 models the maximum distance between main bearings is  $2\frac{1}{2}$ ". (Contrast this with motors depending on fewer than 9 main bearings.) This, combined with the large diameters of the main and crankpin bearings, gives such torsional stiffness that the vibration periods (common to all gas engines) are practically imperceptible in the speed range of the car.

The crankshaft design is strictly a Packard innovation; the crankpins for the cylinders 3, 4, 5 and 6 lie in one plane at right angles to the common plane of the crankpins for cylinders 1, 2, 7 and 8. This arrangement, together with the new system of counterbalancing and a specially designed vibration damper fitted to the front end of the shaft, makes for perfect balance and smooth motor operation. There are 96 separate and distinct manufacturing operations performed on a Packard crankshaft. Oil duets are drilled from the main bearings to each adjacent connecting rod bearing for the purpose of supplying oil to each connecting rod and piston pin bearing.

The crankshaft thrust is taken on the extra large rear main bearing and a special oil guard is provided at this point to minimize the leakage of oil.

### Bearings

The crankshaft main bearings, nine in number, are of the bronze shell, babbitt lined type. They are  $2\frac{5}{8}$ " in diameter with lengths over all as follows:

Bearing No. 1	.....	$1\frac{5}{8}$ "
Bearing No. 2	.....	$\frac{9}{16}$ "
Bearing No. 3	.....	$1\frac{1}{4}$ "
Bearing No. 4	.....	$\frac{9}{16}$ "
Bearing No. 5	.....	$1\frac{5}{16}$ "
Bearing No. 6	.....	$\frac{6}{16}$ "
Bearing No. 7	.....	$1\frac{1}{4}$ "
Bearing No. 8	.....	$\frac{9}{16}$ "
Bearing No. 9	.....	$2\frac{1}{16}$ "

The total main bearing length on the 6-26 and 6-33 model motors is  $12\frac{7}{16}$ ". The rigid supporting of the crankshaft assists

materially in making the Packard Eight motor free from vibration.

### Connecting Rod

The Packard Eight connecting rod is designed to give maximum strength with minimum weight. It is manufactured from a special I-beam steel drop forging and the rods are selected so that each rod in any motor varies less than one-quarter of one ounce in weight from its mates.

Both the connecting rod and piston pin bearings are diamond-bored to a perfectly true surface absolutely parallel with each other. The connecting rod lower end bearing is  $2\frac{3}{16}$ " in diameter and  $1\frac{7}{32}$ " long. The connecting rod is rifle-bored lengthwise to provide a passage for oil which is forced up to the piston pin bearing under pressure. The crankshaft and connecting rod bearings on Packard cars have a reputation for extremely long life and efficiency and the Packard Eight bearings are designed to maintain this high standard which has been acquired by years of careful design and manufacturing.

### Pistons

The pistons are of aluminum alloy with "Invar" struts to control expansion and are fitted with four rings, the lower being of the oil sealing type. A heavy rib is cast in the bottom of the skirt to give long life and freedom from piston slaps.

### Camshaft

There are 46 separate and distinct manufacturing operations performed on the Packard camshaft. The camshaft is a steel forging with sixteen integrally forged

cams and eight bearings, all of which are hardened and accurately ground. A spiral gear is machined in the center of the shaft for the purpose of driving the oil pump below and the ignition distributor above. The camshaft is lubricated from the crankshaft rear main bearing, which meters the oil in proper quantities through a rifle-bored passage extending the length of the camshaft.

### Valves

The valves are made of special alloy steel which withstands high temperatures without distorting, consequently giving maximum service without regrinding.

They are made of round bar stock with the head upset on the stem, which gives a radial grain to the metal and adds strength. In this construction the valve and valve head are all one piece, which reduces the tendency to warp and depreciate in service or rupture of a weld between the head and stem. The intake valve is  $1\frac{7}{16}$ " in diameter and the exhaust  $1\frac{1}{4}$ ". The larger intake valve allows for the correct charge being drawn into the cylinder at high motor speeds.

### Valve Gear (See Instruction Book for Illustrated Details)

The valve gear consists of a camshaft operating at half engine speed driven from the front end of the crankshaft by a silent chain designed for that purpose. Each cam on the shaft actuates a rocker arm or lever interposed between the cams and the valve push rods. This rocker arm performs the dual function of removing side thrust, which causes excessive wear on valve push rods and

provides opening and closing characteristics for the valves, assuring a well charged cylinder even under very high speed conditions.

All wearing surfaces of the valve gear are specially hardened, ground and accurately finished. Anti-friction rollers are fitted to the rocker arms to contact with the camshaft.

A novel design of valve spring assembly incorporating two separate springs each operating at a very low stress is used on all Packard Eight motors.

### Front End Drive

On all gasoline engines it is necessary to drive auxiliary units on shafts other than the crankshaft. On the Packard Eight this is accomplished by means of a silent chain running over three sprockets. This chain is  $1\frac{1}{2}$ " wide and but  $32$ " long, which is as short as it could possibly be made. This minimizes the tendency to stretch. The smaller sprocket which drives the generator also incorporates an adjustment feature whereby the chain may be adjusted without disturbing any other parts.

This chain pitch line, approximately an equilateral triangle in shape, has been referred to by authorities as being about as near to the ideal chain layout as has yet been designed.

No attempt has been made to reduce the weight of the sprockets, because some flywheel action is desirable. There are holes tapped in the crankshaft sprocket for removal purposes and the splines in the inside of the generator sprocket engage with those on the generator shaft,

permitting easy removal of the generator assembly without disturbing the generator drive.

While considering the drive of the various auxiliary units on the Packard Eight motor, it is important to note that every unit is removable without disturbing another. The distributor at the top of the cylinder block is driven from the camshaft, the oil pump from a downward extension of the distributor drive, the water pump from the fan belt, the generator from the front end chain and, of course, the starter motor drives the flywheel.

To adjust the chain, it is necessary only to loosen the three nuts on the generator flange studs. The lower stud pivots the generator, making it merely necessary to move the top of the generator away from the motor until the chain has been adjusted properly.

### Electrical System

The electrical system is of the single wire or grounded return type. The source of current is the generator which charges the battery. The positive battery terminal is grounded.

The electric lighting system is protected by a 20-ampere, 25-volt fuse, located on the front of the dash to the right of the lubricator tank. The two poles in the fuse block are connected by a heavy resistance, which will allow enough current to pass to dimly light the lamps in case the fuse burns out. This convenient feature prevents the car from being left in total darkness in case of a short circuit burning out the fuse.

Incorporated in the brake operating mechanism is the switch for the stop light which makes contact when the foot brake pedal is depressed.

The horn is fastened to the left side of the crankcase and the connections to it are very accessible.

The lighting system includes two main headlights of the double filament type, two parking lights, tail light combined with stop light and backing light, instrument board lights, dome lights in enclosed cars, tonneau lights in Touring cars and rear compartment lights in Runabouts and four passenger Coupes. All lamps are chromium plated.

The lighting switch is located on the lower end of the steering gear and is operated by a lever at the steering wheel. The main driving lights are provided with a special reflector and lenses that employ a depressible beam design. The reflector has two focal points so situated that each filament of the two filament bulb used reflects from a different focal point.

The headlights are mounted on a pressed steel cross channel fastened to the front fender brackets. The headlight lenses are non-glare. The tail light is supported from a hollow bracket enclosing the wiring, bolted to the frame.

The tail lamp has been lowered three inches to improve appearance.

### **Ignition System**

The Packard North East ignition unit is mounted on the motor cylinder head between number four and number five cylinders and is driven from the cam-

shaft by spiral gears. The coil is attached to the front face of instrument board with the switch and lock projecting through the board. This has been done to make the car more theft-proof.

### **Wiring**

The high tension wiring is carried in a steel projecting tube along the top of the cylinder block. The low tension wires are well insulated and gathered together into one unit or wiring harness.

### **Battery**

A 15-plate extra heavy battery is located in a battery case in the right front fender outside the frame. It is common to the ignition, starting and lighting system and is composed of three cells. The voltage is 6 volts and capacity 140 ampere hours. The battery is readily accessible by removing the cover plate.

### **Generator**

The generator is supported in the right front corner of the crankcase with an adjustable mounting to provide for chain stretch. The protecting fuse is located under the rear cover and the cutout relay on top of the instrument.

### **Starting Motor**

The starting motor is located on the left side of the motor close to the cylinder block and attached to the front face of the flywheel housing by means of a long pilot and one dowel screw, so that the starting motor can easily be removed for inspection or the checking of the motor timing.

The starting motor is engaged with the flywheel by means of a standard Bendix drive and is enclosed and protected from dirt.

### Starting Switch

The starting switch is located at the right of the accelerator pedal on the inclined toeboard.

### Ammeter

The ammeter is mounted on the instrument board and indirectly lighted for night driving.

### Cooling System

The distinctly Packard radiator is of the cellular type. It is made with a detachable steel shell, heavily plated with chromium. The core is supported on the front cross member and is completely connected so that all of its functions are performed without the shell. This is important from a standpoint of manufacturing and service. The heart of the thermostat, which is mounted on the cylinder head, is the "slyphon" which is an accordion-shaped brass drum filled with a special liquid. This drum expands when heated just like pulling out an accordion, and automatically contracts when cooled. A bronze valve is fastened to one end, and is arranged so that when the motor is cold the circulating water goes through the by-pass lead instead of through the radiator, which means that the cooling water in the cylinder jackets is rapidly heated up so as to obtain motor efficiency quickly after starting cold. Just as soon as it is heated up the passage to the radiator opens and the by-pass

closes. This feature insures a quick warming up of the entire motor.

To supplement this the air flow through the radiator is also regulated by a thermostatically controlled shutter mechanism, built into the assembly.

When cold, the flow will be entirely stopped which allows the engine to heat more quickly the restricted water circulation and the air under the bonnet, thereby adding to the carburetor response. During driving, the air flow is regulated to preserve the most efficient operating temperature.

### Water Pump

The feature of the water pump assembly is its simplicity. Here again is evidence of Packard's ingenuity in constant search for the simple over a complicated design and construction. Mounted on the front of the cylinder block, it forces the water by centrifugal force through the cylinder water jackets, cylinder head jackets and thence to the radiator.

This water pump construction permits the use of only one packing, which is very accessible and has only two hose connections, thus reducing the probability of leaks to a minimum. The water pump also incorporates the fan drive and the provision for adjusting the fan belt.

The fan end of the water pump shaft turns in a roller bearing, which is lubricated by a lubricator connector.

The Packard Eight cooling system is a model of simplicity and features extreme accessibility of the really very small number of parts used.



The capacity of the cooling system is five gallons.

### Fan

The fan is of the built-up construction consisting of sheet steel blades riveted to a pressed steel hub. This construction is sturdy, light in weight and provides a maximum draft of air together with ample clearance.

The fan is driven by a belt running in V shaped grooved fan pulleys from the end of the crankshaft and turns at  $1\frac{1}{4}$  times motor speed.

By driving the fan off the crankshaft we are able to use a large diameter driven pulley which is an important factor in eliminating fan belt slippage.

### Lubrication System (See Instruction Book for Diagram)

The lubricating system is of the circulating pressure feed type.

A gear pump submerged in the oil supply in the bottom of the crankcase circulates the oil under pressure through a manifold to the nine main crankshaft bearings through holes drilled in the bearing caps, thence through the crankshaft to the connecting rods and piston pins by means of a rifle-bored hole lengthwise of the connecting rod.

The cylinder walls are lubricated by the surplus oil thrown off from the connecting rod bearings, the main bearings and an oil bleed in the lower connecting rod bearing.

An oil filter attached to the left side of the cylinder block removes from the oil

carbon and dirt that is too small to be caught by the oil pump strainer, thus preventing wear due to abrasive material passing through the bearings.

A crankcase oil gauge has been added to this model. The gauge has a dial indicator actuated by a float at the oil level and is calibrated in ten equal divisions. The oil is drained by means of a plug in the bottom of the crankcase below the gauge.

To prevent the scuffing of the aluminum pistons and insure adequate lubrication when starting, an oil by-pass valve is located at the rear of the crankcase connected to the choke. An oil manifold on the side of the cylinder block is connected to this valve which provides a passage to each cylinder bore. When the choke is pulled out for starting, oil is pumped onto the skirt of each piston and is shut off when the choke is pushed in. This exclusive Packard feature insures complete piston lubrication from the instant the motor is started.

The camshaft and valve gear are lubricated by a lead from the crankshaft rear main bearing which meters the oil in proper quantities through a rifle-bored passage extending the length of the camshaft.

The oil thrown off from the various bearings returns by gravity to the reservoir for recirculation.

A regulator valve is provided as part of the oil pump assembly, limiting the maximum pressure to approximately 50 lbs. and so proportioned as to maintain a minimum pressure of 30 lbs. under normal engine speeds.

The crankcase oil vapors are drawn through small holes in the side of the cylinder bores into the valve compartment. From this chamber they pass across through the center of the block and down a vent tube which projects below the level of the motor pan.

### Exhaust System

Special attention has been given the design of the exhaust system to approach as nearly as possible silent discharge of gases into the atmosphere. Rigid construction and mounting, complete dampening of resonance of metal parts and proper provision for the expansion of gases, both in muffler and at the exit of the atmosphere, require proper treatment to accomplish this purpose.

To obtain rigidity the muffler is securely fastened by means of heavy brackets. The muffler in turn acts as the support for the exhaust pipe ends entering it. The exhaust pipe and tail pipe are fastened in the muffler by means of a split clamping device. The muffler itself is of very rigid construction. The outside and inside shells being welded into the heads form non-leakable joints. The tail pipe acts as an exit for the gases to the atmosphere, the mouth being of such shape that gradual expansion takes place with exceptional quietness.

### Chassis

There are two chassis, one having a wheelbase of 126½ inches and the other 133½ inches. The angle of the steering column is 37° 49' on the seven passenger Touring, seven passenger Sedan and Sedan-Limousine, Club Sedan, two and four passenger

Coupes and Convertible Coupes. On all other models the angle is 36° 22'.

### Chassis Lubrication (See Catalogues for Illustrations)

The oil lubrication system consists of a centrally located oil reservoir and hand pump which is connected to the points requiring lubrication by means of concealed pipe lines. Lubricating the entire chassis is accomplished by withdrawing and releasing a spring operated pump handle, located at the left of the steering column, convenient to the driver. Metering fittings regulate the amount of oil which goes to each point of lubrication.

This system distributes oil from a central reservoir to the following thirty-eight points:

- 5 Spring bolts—front and rear.
- 8 Spring shackle bolts—front and rear.
- 2 Steering cross tube ball joints.
- 1 Steering connecting rod ball joint front.
- 1 Steering lever ball joint.
- 10 Front axle brake shaft bearings.
- 6 Intermediate brake shaft bearings.
- 1 Clutch throw-out bearing.
- 4 Shock absorber links.

Designed with and built into the Packard chassis, this positive lubricating system protects the precision built into Packard cars. With its clean oil is supplied in sufficient measured quantity exactly where it is needed, thus assisting the owner to control depreciation which is frequently the largest of the various motoring costs.

## Frame

The frame has been designed to give ample strength. This has been obtained by using an 8-inch depth of the side member, and by tapering the frame from the front and rear end so that all offsets are eliminated. The frame steel is  $\frac{5}{16}$  inch thick. Rigid forgings at each end of the frame are fitted with cross tubes which are riveted in place. An extra deep and sturdy cross member is now inserted at the rear of the transmission to increase the rigidity of the frame and reduce torsional stress. These, in addition to the regulation cross members, form a very strong and rigid construction.

## Springs (See Catalogue for Details of Increased Safety Provided with the Exclusively Packard Spring Trunion and Bracket Assembly)

The front springs are semi-elliptical, 38 inches long and 2 inches wide and are mounted on the under side of the front axle and shackled at the front end by a compression shackle. The rear springs are semi-elliptical, 56 inches long and  $2\frac{1}{4}$  inches wide and are mounted on compression shackles at the rear end. The front springs are mounted parallel to the center line of the car, and rear springs are parallel to the tapered frame and solidly mounted to the axles, which forms a strong and safe construction.

We have recently perfected an hydraulic shock absorber which permits the use of more flexible springs with the consequent improvement in riding qualities. (See catalogue for details.)

## Weight Distribution on Springs

Each spring of a vehicle loaded to normal capacity will carry the load indicated below:

### Front Springs

All types.....	{ Right 950 Lbs. Left 850 Lbs.
----------------	-----------------------------------

### Rear Springs

Club Sedan.....	1200 Lbs.
Coupe (4).....	1200 Lbs.
Phaeton.....	1100 Lbs.
Runabout.....	1100 Lbs.
Sedan (7).....	1300 Lbs.
Sedan-Limousine.....	1300 Lbs.
Touring.....	1100 Lbs.
Sedan (5).....	1200 Lbs.
Coupe (2-4).....	1100 Lbs.
Coupe—Convertible.....	1100 Lbs.

## Front Axle and Steering (See Instruction Book for Further Details)

The front axle performs two essential functions—acting as a carrying member and providing, in conjunction with the steering gear, means for guiding the car at the will of the driver. As safety is a pre-eminent requisite, the front axle as a support must be amply strong and as a control mechanism must function to the greatest convenience of the driver, that is, there must be easy, dependable steering. Strength is obtained by properly proportioning the members and selecting the most suitable materials.

To obtain easy steering, the steering knuckle pin is mounted top and bottom on ball bearings. The upper bearing has two rows of balls and takes only radial loads. The lower bearing is specially

designed to take, in addition to the radial loads, the downward thrust or load due to the weight on the front axle.

Friction is further reduced by employing ball and socket joints for the front axle cross tube. These joints are self-adjusting without employing the high spring pressures commonly used.

The steering spindles are chrome vanadium steel forgings heat treated to give a tensile strength of 120,000 pounds per square inch.

Unlike conventional designs, the front springs are underslung or clamped to the under surface of the axle I-beam. This construction permits the axle and the main plate of the spring, through which all of the thrust is transmitted, to be assembled in direct contact with each other. With the reverse construction any shifting of spring plates with relation to each other, due to loose spring clips or faulty assembly, causes the front axle to be shifted from its correct position with the resultant tire wear and misalignment of wheels. Again, with the underslung construction, the bending stresses in the front springs, due to braking torque, are greatly reduced.

The steering gear is of the worm and sector type, having three adjustments for accurately assembling the parts with correct relation to each other and to compensate for wear.

Just the right amount of reversibility is provided in the steering gear to obtain the smooth, self-restoring tendency from the front wheels in regaining their straight ahead driving position after making turns.

The steering gear worm and sector are

made of nickel steel and hardened. The end thrust of the steering worm and also the sector shaft is taken on ball thrust bearings and the worm and sector are lapped together to obtain smooth, easy operation.

Road shocks commonly transmitted through the steering mechanism are avoided in the Packard design by the use of an entirely new idea in mounting the rear end of the left front spring. Instead of being solidly anchored to the frame bracket the left front spring is attached at the rear end to a shock absorbing device which effectually eliminates wheel shimmy, steering rattles, wheel tramp and other difficulties that are inherent with low pressure tires and front wheel brakes.

The steering wheel is 18 inches in diameter and made of hard black rubber over a steel spider. Harmonizing with the appearance of the wheel is an artistic compact design for the light and throttle control. Only the nicked handles of the controls are visible above the wheel center plate.

### Clutch

A single plate form of clutch driving through a series of compression springs has been adopted. The friction discs are specially treated moulded asbestos contacting with the driving face of the flywheel and the clutch driving plate. The outstanding features of this design are: Smooth engagement, the dampening out of motor vibration or harshness due to the cushion spring drive, free release when hot or cold and long life through the reduction of wear to a negligible amount.

The clutch assembly is mounted in a separate compartment at the front of the clutch and transmission case. This construction thoroughly protects the clutch from dirt, oil and water. The clutch shaft is mounted on a ball bearing in the motor crankshaft and on a roller bearing in the transmission case. The direct drive and constant mesh gear is forged integrally with it.

### Transmission

The transmission is of the selective sliding gear type, three speeds forward and reverse, with positive interlocking control. Both the main shaft and the countershaft are short and stiff and mounted on anti-friction bearings. The case is designed to minimize resonance. All gears used in changing speeds are carefully chamfered to insure easy meshing when shifting. All gears are very carefully heat-treated and ground to insure maximum strength and wearing qualities of the teeth. Gears with stripped teeth are practically unheard of in Packard cars. This is true because of the alloy steel and the careful manufacturing processes used in their production.

The change speed lever housing is located well forward in the driving compartment projecting through the inclined toeboard and the ball at the upper end is convenient to reach without stooping forward.

### Transmission Gear Ratios

	6-26	6-33
First.....	14.41 to 1	15.66 to 1
Second.....	7.52 to 1	8.16 to 1
Third or high..	4.38 to 1	4.66 to 1
Reverse.....	18.23 to 1	19.55 to 1

### Speedometer

The speedometer drive is placed at the rear of the transmission and driven by a spiral gear from the transmission shaft. This gives a very quiet drive and is perfectly lubricated at all times.

The speedometer is mounted at the left side of the instrument board.

### Universal Joints

Universal joints are of the oil lubricated all metal type, all bearing surfaces being effectively enclosed, requiring lubrication only at intervals of every 2500 miles. The propeller shaft is of the tubular type held within close limits for balance, assuring smooth operation.

### Rear Axle and Differential

The Hypoid gear design has produced silence of running as far superior to the spiral bevel gear as this form of gearing was superior to the old form of straight bevel gearing first used in automobiles. This form of gearing is used on all Eight models. The standard ratio for the 6-26 model is 4.38 to 1; for the 6-33, 4.69 to 1; special ratios of 4.69 for the 6-26 and 5.08 to 1 for the 6-33 are furnished as special equipment.

The rear axle is of the semi-floating type. The housing is made of pressed steel. Driving forces and the torque of the rear axle are transmitted through the rear axle springs.

The pinion shaft is straddle mounted on ball bearings specially designed for taking the loads imposed.

The rear axle shafts are mounted on single row deep groove ball bearings,

locked in place, which definitely locate them in the housing.

### Wheels

The steel disc wheels, designed for low pressure tires, harmonize with the long wheelbase and general smartness of the body lines. All wheels are interchangeable. Tire inflation is facilitated by accessible valves on the outside of the wheels.

Wood and wire wheels are furnished as optional special equipment and are interchangeable on the hubs and carriers.

### Brakes

The present Packard four wheel brakes are the internal expanding, self-energizing type on both front and rear wheels. They are actuated by mechanism that requires from 15 to 30% less angular movement of the shoe to secure a given clearance than does a two shoe brake. Further, more of the pedal movement is available for taking up wear.

The braking system has been improved by the use of a new design flanged brake drum of heavier gauge material and larger diameter to minimize brake squeak, and increase braking efficiency.

It is practically impossible for any dirt or water to be thrown on the brake lining, due to the construction of the brake drum which overlaps the backing plate.

The area of the brake lining in active contact with the shoe is greatly increased by providing anchor points that necessitate the overlapping of the anchor ends of the shoe.

Further, the design is such that the brake lining surface is concentric with the brake drum when the brake is applied. The resultant brake has 93% of the circumference of the drum in active contact. The reverse braking effort has been greatly aided by the insertion of the auxiliary shoe which acts with a powerful effect when the brake drum moves in the reverse direction.

The use of four wheel brakes reduces the minimum stopping distance enormously, increases the life of the tires, adds life to the brakes and eliminates skidding to a surprising degree.

### Running Boards and Splashers

The running boards are tapered to match the frame. This gives a wider running board under the front door and is, therefore, an advantage, as it gives a little extra room at the point where it is needed. They are carpeted with linoleum carpet bordered with buffed aluminum mouldings.

The running board splashers are tapered to match the frame and body lines. Anti-squeak liners are used between the frame splashers and running board. The radiator front splashers are very readily detachable. It is made to enclose the front spring, front bracket, and also forms a very neat joint at the inner edge of the bonnet frame ledge.

The crankcase splashers are made readily removable and form a mud-tight joint between the crankcase and frame.

The front fender brackets are welded to the fenders, thus making a rigidly sup-

ported fender and eliminating the possibility of squeaks at this point.

### Tires

Straight side non-skid 6-ply cord tires are specified for both front and rear wheels—32 x 6.00 for the 6-26 model and 32 x 7.00 for the 6-33 model.

### Spare Wheel and Carrier

A spare wheel carrier is supplied on all 6-26 and 6-33 cars. It is bolted rigidly to the frame rear cross member and cross tube and is of the hub clamping type. No straps or shoes are required.

The spare wheel is clamped between the carrier and the disc shaped cover and locked in place by means of a flush type lock.

### Standard Painting

The following is a complete list of paint schemes that are now optional as specified. Paint schemes A, B, CA, D, EA, F, KB, N and XB are optional on Packard 6-26 enclosed cars and paint schemes A, B, CA, D, EA, F, KB, N, XB and MA are optional on Packard 6-33 enclosed cars.

With the paint schemes for 6-26 Stationary and Convertible Coupes and 6-26—6-33 open cars, leather is supplied to match the paint. This necessitates our knowing, by the fifth of the month preceding the month in which the cars are to be shipped, what colors are desired on the cars covered by your allotment. We will endeavor to meet your requirements.

The cars must be brought through production in the exact combinations given. If distributors require any changes, they should arrange to do this locally.

## Enclosed Cars

### Paint Scheme "A"

Standard black chassis parts . . . . . Black

Body above upper moulding, upper and lower mouldings . . . . . Black

Window reveals, body only between mouldings, cowl and bonnet above moulding, body and bonnet below moulding and wheels . . . . . Westminster Gray

Stripe—standard position and size on body, bonnet and wheels, also louvers edged  $\frac{1}{16}$ " . . . . . Coronado Tan

Upholstery—standard broadcloth. Where leather is used in Stationary and Convertible Coupes . . . . . Colonial Grain No. 739

### Paint Scheme "B"

Standard black chassis parts . . . . . Black

Body above upper moulding, upper and lower mouldings . . . . . Black

Window reveals, body only between mouldings, cowl and bonnet above moulding, body and bonnet below moulding and wheels . . . . . Packard Blue

Stripe—standard position and size on body, bonnet and wheels . . . . . Gold

Upholstery—standard broadcloth. Where leather is used in Stationary and Convertible Coupes . . . . . Colonial Grain No. 714

### Paint Scheme "CA"

Standard black chassis parts . . . . . Black

Body above upper mouldings, upper and lower mouldings . . . . . Black

Window reveals, body only between mouldings, cowl and bonnet above moulding, body and bonnet below moulding and wheels. . . . Valentine's Rubicelle Deep  
 Stripe—standard position and size below upper moulding and on wheels. . . . Valentine's Vermilion  
 Lower mouldings—two  $\frac{3}{32}$  stripes  $\frac{1}{8}$ " apart through center mouldings. . . . Valentine's Vermilion  
 Louvers edged with  $\frac{3}{32}$  stripe . . . . Valentine's Vermilion  
 Upholstery—standard broadcloth. Where leather is used in Stationary and Convertible Coupes . . . . Colonial Grain No. 704

**Paint Scheme "D"**

Standard black chassis parts. . . . Black  
 Body above upper moulding, upper and lower mouldings. . . . Black  
 Body only between mouldings, cowl and bonnet above moulding, body and bonnet below moulding and wheels. . . Sheffield Green  
 Window reveals. . . . Bakst Green  
 Stripe—standard position and size on body, bonnet and wheels . . . . Pistache Green  
 Upholstery—standard broadcloth. Where leather is used in Stationary and Convertible Coupes . . . . Colonial Grain No. 713

**Paint Scheme "EA"**

Standard black chassis parts. . . . Black  
 Roof and windshield sash, body above upper moulding, upper and lower mouldings. Highland Green

Window reveals, body only between mouldings, cowl and bonnet above moulding, body and bonnet below mouldings and wheels. Special Sagebrush Green Light  
 Stripe—standard position and size below upper moulding and two  $\frac{3}{32}$ " stripes  $\frac{1}{8}$ " apart through center of lower moulding. Peewee Green  
 Wheels—standard position and size . . . . Highland Green  
 Upholstery—standard broadcloth. Where leather is used in Stationary and Convertible Coupes . . . . Colonial Grain No. 713

**Paint Scheme "F"**

Standard black chassis parts. . . . Black  
 Body above upper moulding, upper and lower mouldings. . . . Black  
 Window reveals, body only between mouldings, cowl and bonnet above moulding, body and bonnet below moulding and wheels. . . . Algerian Blue  
 Stripe—standard position and size on body, bonnet and wheels, also louvers edged with  $\frac{3}{32}$ " . . . Flake White  
 Upholstery—standard broadcloth. Where leather is used in Stationary and Convertible Coupes . . . . Colonial Grain No. 714

**Paint Scheme "KB"**

Standard black chassis parts. . . . Black  
 Body above upper moulding, including roof, upper and lower mouldings and windshield frame . . . . Copra Drab



Window reveals, body only between mouldings, cowl and bonnet above moulding, body and bonnet below moulding and wheels..... Chiclé Drab

Panel in door handles..... Chiclé Drab

Stripe—standard position and size on body, bonnet and wheels Casino Red

Upholstery—standard broadcloth. Where leather is used in Stationary and Convertible Coupes..... Colonial Grain No. 739

### Paint Scheme "MA"

Standard black chassis parts..... Black

Body above upper moulding including roof, upper and lower mouldings and windshield sash..... Valentine's Gymnite Green

Window reveals, body only between mouldings, cowl and bonnet above moulding, body and bonnet below moulding and wheels..... Valentine's Arizona Brown

Stripe—standard position and size on body, bonnet and wheels..... Black

### Paint Scheme "N"

Standard black chassis parts..... Black

Body above upper moulding including roof, windshield frame, panel in door handles, upper and lower mouldings..... Killarney Gray

Window reveals, body only between mouldings, cowl and bonnet above moulding, body and bonnet below moulding and wheels..... Dundee Gray

Stripe—standard position and size on body, bonnet and wheels, also louvers edged  $\frac{3}{2}$ "..... Flake White

Upholstery—standard broadcloth. Where leather is used in Stationary and Convertible Coupes..... Colonial Grain No. 713

### Paint Scheme "XB"

Entire car..... Black  
Window reveals, lower moulding and wheels..... Bakst Green

Stripe—standard position and size below upper moulding and on wheels, also one  $\frac{1}{8}$ " stripe through center of moulding..... Straw Color

Upholstery—standard broadcloth. Where leather is used in Stationary and Convertible Coupes..... Colonial Grain No. 713

### 6-26 Open Cars

#### Paint Scheme "SB"

Standard black chassis parts..... Black  
Body, bonnet and wheels..... Copenhagen Blue

Moulding..... Black  
Stripe—one  $\frac{1}{8}$ " stripe in center of each moulding..... Old Ivory

Wheels—standard position and size..... Old Ivory  
Monogram panel..... Old Ivory  
Upholstery..... Colonial Grain No. 714

#### Paint Scheme "YA"

Entire car except wheels and mouldings..... Black  
Wheels and monogram panel Casino Red

Mouldings..... Mojave Brown  
Stripe— $\frac{1}{8}$ " in center of moulding... Black  
On wheels, standard position and  
size..... Black  
Upholstery..... Colonial Grain No. 711

#### Paint Scheme "EB"

Standard black chassis parts..... Black  
Body, bonnet and mouldings  
..... Highland Green  
Monogram panel and wheels  
..... Special Sagebrush Green Light  
Stripe—standard position and size  
on wheels..... Highland Green  
Moulding—one  $\frac{1}{8}$ " stripe through  
center of moulding..... Peewee Green  
Upholstery..... Colonial Grain No. 713

#### Paint Scheme "MB"

Standard black chassis parts..... Black  
Body, bonnet and wheels... Chiclé Drab  
Monogram panel and mouldings  
..... Moleskin Deep  
Stripe—standard position and size  
on wheels..... Cream Color Light  
Mouldings—one  $\frac{1}{8}$ " stripe through  
center of mouldings Cream Color Light  
Upholstery..... Colonial Grain No. 739

### 6-33 Open Cars

#### Paint Scheme "SB"

Standard black chassis parts..... Black  
Body, bonnet and wheels  
..... Copenhagen Blue  
Moulding..... Black  
Stripe—one  $\frac{1}{8}$ " stripe in center  
of each moulding..... Old Ivory

Wheels—standard position and  
size..... Old Ivory  
Monogram panel..... Old Ivory  
Upholstery..... Colonial Grain No. 714

#### Paint Scheme "YA"

Entire car except wheels and  
mouldings..... Black  
Wheels and monogram panel Casino Red  
Mouldings..... Mojave Brown  
Stripe— $\frac{1}{8}$ " in center of moulding  
..... Black  
On wheels, standard position and  
size..... Black  
Upholstery..... Colonial Grain No. 711

#### Paint Scheme "EB"

Standard black chassis parts..... Black  
Body, bonnet and mouldings  
..... Highland Green  
Monogram panel and wheel  
..... Special Sagebrush Green Light  
Stripe—standard position and size  
on wheels..... Highland Green  
Moulding—one  $\frac{1}{8}$ " stripe through  
center of moulding..... Peewee Green  
Upholstery..... Colonial Grain No. 713

#### Paint Scheme "MB"

Standard black chassis parts..... Black  
Body, bonnet and wheels... Chiclé Drab  
Monogram panel and mouldings  
..... Moleskin Deep  
Stripe—standard position and size  
on wheels..... Cream Color Light  
Mouldings—one  $\frac{1}{8}$ " stripe through  
center of mouldings. Cream Color Light  
Upholstery..... Colonial Grain No. 739

### Paint Scheme "XA"

Entire car except wheels and  
moulding . . . . . Black  
Wheels and monogram panel Casino Red  
Moulding . . . . . Mojave Brown  
Stripe— $\frac{1}{8}$ " in center of moulding . . . Black  
On wheels, standard position and  
size . . . . . Black  
Upholstery . . . Red Colonial Grain No. 721

### Paint Scheme "YB"

Entire car except wheels and mono-  
gram panel . . . . . Black  
Wheels and monogram panel  
Stripe— $\frac{1}{8}$ " in center of mould-  
ing . . . . . DuPont's Green  
On wheels, standard position and  
size . . . . . Silver Bronze  
Upholstery . . . . . Colonial Grain No. 711

## Standard Equipment

### Chassis Equipment

Electric starter. Bendix screw shift.  
Electric generator and storage battery.  
Electric headlights with two filament  
bulbs, equipped with non-glare lenses.  
Electric tail lamp and license tag  
illuminator combined with rear signal  
and backing light.  
Electric horn.  
Tool roll with complete equipment of  
tools.  
One-ton jack.  
Parking lamps.  
Extra wheel and carrier.  
Wheel carrier lock.  
Wheel changing wrench.

Hydraulic shock absorbers.  
Bumpers—front and rear.  
Cowl ventilator.  
Automatic radiator shutters.

### Instrument Board Equipment

Gasoline gauge.  
Plunger type ignition switch.  
(Lighting switch on steering wheel.)  
Cigar lighter.  
Clock.  
Speedometer.  
Speedometer includes miles per hour, trip  
and total odometers.  
Ammeter.  
Oil pressure gauge.  
Dash motor thermometer.  
Carburetor dash adjustment and spark  
control.  
Instruments lighted indirectly by two  
three-candlepower bulbs.

### Tires and Wheels

Low pressure tires, straight side 32 x 7.00  
inch for model 6-33, 32 x 6.00 for model  
6-26, non-skid front and rear.  
Steel disc wheels standard equipment.

### Body Types

Bodies will be supplied in the following  
types:

#### Open Bodies

7 Passenger Touring.  
5 Passenger Phaeton—mounted on either  
short or long wheelbase.  
4 Passenger Roadster—mounted on  
either short or long wheelbase.

## Enclosed Bodies

- 5 Passenger Sedan.
- 7 Passenger Sedan.
- 7 Passenger Sedan-Limousine.
- 5 Passenger Club Sedan.
- 4 Passenger Coupe.
- 2-4 Passenger Coupe.
- 2-4 Passenger Convertible Coupe.

## Open Bodies

Changes in all open bodies are of a detail character. The top material used on all open models is of a drab shade, presenting an attractive appearance.

Non-glare rear view mirror.

Non-leakable cowl ventilator.

Packard one-man top with enclosing curtains.

Improvement in front compartment—more foot room.

Four door curtain opening attachment.

Adjustable spot light. Robe rail—stationary.

Walnut rubbed finish instrument board with nickel bead at lower edge.

Folding foot rest. Folding auxiliary seat in seven passenger models. Automatic windshield cleaner. Tonneau light.

## Enclosed Bodies

The improvements in interior appointments apply to the vanity and smoking cases which are now furnished in burled walnut. The interior metalware remains unchanged as to design and finish. The window and cowl mouldings are made of

black walnut and finished in Packard Eight walnut.

The changes in the trimming scheme apply to the width of the plaits and the trimming material.

## Enclosed Bodies

Window regulators for all side windows. Dome lights. Robe rail, stationary type. Foot rest, carpet covered. Inside locks on all doors.

Outside cylinder locks on right door of Coupe and right doors of Sedan-Limousines and right front door only of Sedans.

Folding seats in seven passenger Sedan and Sedan-Limousine.

Burled walnut vanity cases.

Burled walnut smoking sets (except in four passenger Coupe and Club Sedan).

Non-glare rear view mirror.

Automatic windshield cleaner.

## Specifications in Brief

### Engine

Eight cylinders cast in one block.

Removable cylinder head.

Nine bearing crankshaft.

Piston displacement 320 cubic inches.

Four-point suspension.

### Cylinders

"L" head type, bore  $3\frac{3}{8}$  inches, stroke 5 inches.

### Horsepower

32.5 S. A. E. rating—block test actually develops over 90 H. P.

## Ignition

Generator, battery and Packard "North East" distributor.

## Gasoline System

Vacuum feed main tank has a capacity of 22 gallons. Gasoline gauge mounted on instrument board.

## Frame

Pressed steel, 8 inches deep. Rigid torsion tubes at front and rear and cross channels, preventing frame weave.

## Springs

Front semi-elliptic, 38 inches long and 2 inches wide. Rear semi-elliptic, 56 inches long and 2¼ inches wide.

## Lubrication

All motor bearings supplied with oil under 30 pounds pressure for normal running. Pressure increases with power requirements. All chassis bearings lubricated by pressure feed oiling system from oil supply reservoir located on dash.

## Clutch

Special design single plate disc clutch.

## Transmission

Three speeds forward, one reverse—selective type.

## Brakes

Service brakes are internal expanding on all four wheels. The emergency operates separately from the service brake on the rear wheels only. 16" drums.

## Starting System

Individual starting motor with automatic engagement to flywheel, which has alloy steel heat-treated teeth.

## Lighting System

Headlights with auxiliary driving lights and parking lights. Instrument board lights. Combination tail, stop and backing light. Current supplied to battery by six-volt generator. Lighting switch control lever is located at top of steering gear.

## Cooling System

Capacity—5 gallons, with automatic thermostat control of both air flow and water temperature. Six bladed steel fan. "V"-shaped fan belts with great driving power.

## Wheelbase

Model 6-26—126 ½".  
Model 6-33—133 ½".

## Turning Radius

Model 6-26—21' 7".  
Model 6-33—23' 6".

## License Data

Number of cylinders	8
Cylinder bore	3 <sup>3</sup> / <sub>16</sub>
Horsepower (N. A. C. C. rating)	32.5
Piston displacement	320 cu. in.
Stroke	5"

## Shipping Weights

6-26	6-33
Lbs.	Lbs.

Phaeton—5 Pass.....	3905
---------------------	------

Touring—7 Pass.....	3950
---------------------	------

Runabout—2-4 Pass.....	3905
------------------------	------

Coupe—4 Pass.....	4225
-------------------	------

4100 Coupe—2-4 Pass...	
------------------------	--

4020 Convertible Coupe—2-4 Pass..	
-----------------------------------	--

Club Sedan—5 Pass.....	4240
------------------------	------

4185 Sedan—5 Pass.....	
------------------------	--

Sedan-Limousine—7 Pass....	4475
----------------------------	------

Sedan—7 Pass.....	4440
-------------------	------

If weight of a car, ready for the road, is desired, approximately 220 pounds should be added to the above weights to cover gasoline, water and spare tire.

Size of tires—all 6-26 models—32x6.00.

Size of tires—all 6-33 models—32x7.00.

Wheelbase—126½" - 133½".

Vehicle number is on Packard patent plate.

Motor number is on left side upper half of crankcase.

## Transmission

Three speeds  
 selective type

Brakes : 8..... Number of cylinders  
 3 1/2..... Cylinder bore

Service Brake (New) On (New) On  
 all the... the... the...  
 the... the... the...  
 rear wheels only... Stroke

## DIMENSIONS AND CAPACITY PACKARD 6-26—6-33 CARS

(All measurements are in inches)

Type Number	Body Models	Length Over All*—Bumper to Bumper	Width Over All*—Widest Point Across Front Bumpers	Height Over All** Unloaded
330	Touring (7)—6-33.....	196 $\frac{9}{16}$	71 $\frac{5}{8}$	74 $\frac{3}{4}$
333	Sedan (5)—6-26.....	189 $\frac{9}{16}$	69 $\frac{3}{8}$	74
334	Sedan (7)—6-33.....	196 $\frac{9}{16}$	71 $\frac{5}{8}$	74 $\frac{1}{2}$
335	Sedan-Limousine (7)—6-33.....	196 $\frac{9}{16}$	71 $\frac{5}{8}$	74 $\frac{1}{2}$
336	Club Sedan (5)—6-33.....	196 $\frac{9}{16}$	71 $\frac{5}{8}$	74 $\frac{1}{2}$
337	Coupe (4)—6-33.....	196 $\frac{9}{16}$	71 $\frac{5}{8}$	72 $\frac{3}{4}$
338	Coupe (2-4)—6-26.....	189 $\frac{9}{16}$	69 $\frac{3}{8}$	71 $\frac{1}{4}$
339	Convertible Coupe (2-4)—6-26.....	189 $\frac{9}{16}$	69 $\frac{3}{8}$	70 $\frac{1}{2}$
351	Phaeton (5)—6-33.....	196 $\frac{9}{16}$	71 $\frac{5}{8}$	71 $\frac{1}{2}$
352	Runabout (4)—6-33.....	196 $\frac{9}{16}$	71 $\frac{5}{8}$	69

\*Top down does not affect the overall.  
 \*\*Top up on open bodies.

## DIMENSIONS OF PACKARD STANDARD EIGHT ENCLOSED BODIES

(All measurements are in inches)

	333 Sedan (5 Pass.)	337 Coupe (4 Pass.)	336 Club Sedan (5 Pass.)	334 Sedan (7 Pass.)	335 Sedan- Limo. (7 Pass.)	338 Coupe (2-4 Pass.)	339 Convert- ible Coupe (2-4 Pass.)
Length over all (at belt) except Coupes . . . . .	113½	114½	114¾	120¼	120¼	107½	107½
Length—dash to front of front seat . . . . .	25¾	25¾	25¾	25¾	25¾	25¾	25¾
Length—back of front seat to front of rear seat . . . . .	27		18	33¾			
Distance from partition to front of folding seat . . . . .		26		8½	8½	†14½	†15½
*Distance from front of rear seat to folding seat . . . . .		4¾		5¾	5¾		
Distance from partition to front of rear seat . . . . .		52¾		33¾	33¾		
Width over all (at belt) panel to panel . . . . .	61¾	60½	61¾	61¾	61¾	60½	60½
Width of floor in tonneau . . . . .	48	42	48	48	48	42	42
Height inside . . . . .	49¾	48	49¾	49¾	49¾	47½	46¾
Front door width . . . . .	28¾	29	28¾	28¾	28¾	29	29
Rear door width . . . . .	28¾		28¾	28¾	28¾		
<b>SEATS:</b>		Driver's					
Front: Depth . . . . .	18½	18¼	18½	18½	18½	18½	18½
Width . . . . .	46	22	46	46	46	46	46
Height (floor to top of cushion) . . . . .	12¼	12¼	12¼	12¼	12¼	12¼	12¼
Height of seat back . . . . .	22¾	22¼	22¾	22¾	22¾	22¾	24¾
Rear: Depth . . . . .	20½	20½	20½	20½	20½		
Width . . . . .	48	39	50	48	48		
Height (floor to top of cushion) . . . . .	14	13	14	14	14		
Height of seat back . . . . .	22½	22¼	22½	22½	22½	Rumble Seat	Rumble Seat

\*Measured 20" from floor. †Measured from luggage compartment.

## DIMENSIONS OF PACKARD STANDARD EIGHT ENCLOSED BODIES

(All measurements are in inches)

	333 Sedan (5 Pass.)	337 Coupe (4 Pass.)	336 Club Sedan (5 Pass.)	334 Sedan (7 Pass.)	335 Sedan- Limo. (7 Pass.)	338 Coupe (2-4 Pass.)	339 Convert- ible Coupe (2-4 Pass.)
Folding: Depth . . . . .		16½		16½	16½	16¾	16¾
Width . . . . .		17½		17½	17½	40	40
Height (floor to top of cushion) . . . . .		12		*15	*15	13	13
Height of seat back . . . . .		14¾		14½	14½	24¼	24¼
†Head Room: Distance from top of seat cushion to headlining of top—front . . . . .	38½	38	38½	38½	38½	37¾	37½
to headlining of top—rear . . . . .	37¾	38	38	37¾	37¾		

\*\*Measured from bottom of floor pan. †Measured from point 5" ahead of seat back cushion.

(All measurements are in inches)

DIMENSIONS OF PACKARD STANDARD EIGHT OPEN BODIES MODEL 8-30-2-33



# DIMENSIONS OF PACKARD STANDARD EIGHT OPEN BODIES MODEL 6-26—6-33

(All measurements are in inches)

	351 Phaeton	330 Touring	352 Runabout
Length over all . . . . .	111 $\frac{1}{8}$	118 $\frac{1}{8}$	112 $\frac{1}{8}$
Length—dash to front of front seat . . . . .	26 $\frac{1}{2}$	26 $\frac{3}{8}$	26 $\frac{1}{2}$
Length—back front seat to front rear seat . . . . .	24 $\frac{1}{2}$	31 $\frac{3}{4}$	18 $\frac{1}{2}$ **
Width over all (at belt—panel to panel) . . . . .	55 $\frac{1}{8}$	55 $\frac{1}{8}$	51 $\frac{3}{4}$
Greatest width floor in tonneau . . . . .	44 $\frac{1}{2}$	44 $\frac{1}{2}$	41 $\frac{3}{4}$
Front door width . . . . .	23 $\frac{7}{8}$	23 $\frac{7}{8}$	23 $\frac{7}{8}$
Rear door width . . . . .	24	24	
<b>SEATS:</b>			
Front: Depth . . . . .	17 $\frac{1}{2}$	17 $\frac{5}{8}$	17 $\frac{1}{2}$
Width . . . . .	43	43	43
Height—floor to top of cushion . . . . .	12	12	12
Height of seat back . . . . .	17 $\frac{3}{4}$	17 $\frac{1}{4}$ †	20 $\frac{1}{2}$
Rear: Depth . . . . .	20 $\frac{5}{8}$	21	16 $\frac{3}{8}$
Width . . . . .	47	47	39
Height—floor to top of cushion . . . . .	13	14	11
Height of seat back . . . . .	21 $\frac{1}{4}$	19 $\frac{3}{4}$	21 $\frac{3}{8}$
Folding: Depth . . . . .		15 $\frac{1}{16}$	
Width . . . . .		14	
*Height—floor to top of cushion . . . . .		15 $\frac{1}{8}$	
Height of seat back . . . . .		18 $\frac{1}{2}$	
†Head Room: Distance from top of seat cushion to underside of top—front seat . . . . .	34 $\frac{1}{2}$	37	35 $\frac{1}{4}$
cushion to underside of top—rear seat . . . . .	37	38 $\frac{1}{4}$	

\*Measured from bottom of floor pan. †Measured 5' ahead of seat back. \*\*From golf bag compartment.

58