PACKARD STANDARD EIGHT FACTS

Model 726—733

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INDEX

Model 726—733

Packard Body Types

General

There are eleven distinct body types mounted on the Packard Eight chassis of 127 and 134 inch wheelbases. On the 726 chassis is mounted only the five passenger Sedan. On the 733 chassis are mounted the five passenger Club Sedan, seven passenger Sedan, seven passenger Sedan-Limousine, seven passenger Touring, two-four passenger Coupe, the five passenger Coupe, the Convertible two-four passenger Coupe, four passenger Sport Phaeton, four passenger Phaeton, and the two-four passenger Roadster.

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, maple, oak, and laminated fir.

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, cigar lighter, and reading lamp, are grouped in a pleasing arrangement in the center. At the extreme right of the instrument board, forward of the right front door, a neat ash receptacle has been placed. 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.

The steering column is adjustable through a range of 5 degrees.

Package compartments at each end of the instrument panel have been incorporated in the new design instrument board.

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 right side of the group is the

ignition switch of the tumbler 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 rear vision mirror are standard equipment on all cars.

A tool compartment under the front seat is provided in all models except the five passenger Coupe, where it is located under the rear seat.

All exterior hardware is heavily plated with chromium, a 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. 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 trimmers to maintain most comfortable riding positions.

The driver's seat on all models except the Sedan-Limousine has been made adjustable.

The entire tonneau floor and heel panels are covered with horse hair carpet, well fitted around the heel kick-up. The front compartment floor is also covered with horsehair carpet. 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. All open cars have been equipped with forward folding windshields with non-shatterable glass.

Non-shatterable glass set in felt is used in the windshield.

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 handles of standard Packard type. Inside handles are of the non-projecting design and are so shaped they will not catch the clothing. The door latch has the double locking feature.

Door and body pillars have metal facing and etched door scuff plates are used.

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.

Open Body Types

Touring Body (7 passenger)

The Touring body for seven passengers is mounted on the 733 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 flexible cord 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 occasional seats of the folding type upholstered in Colonial grain leather.

Roadster Body (2-4 passenger)

The Roadster bodies are mounted on the 733 chassis. The front seat is adjustable and of generous proportions for two passengers, with provisions 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 (4 passenger)

A Phaeton body is mounted on the 733 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. Built-in arm rests are provided at both sides and a hinged rest is provided in the center of the rear seat.

A large compartment is built into the back of the front seat section to be used for gloves or other articles and to contain luggage or tools.

Sport Phaeton Body (4 passenger)

A Sport Phaeton body is mounted on the 733 chassis. It incorporates a hinged tonneau cowl including a rear single piece folding windshield of non-shatterable glass. At each side of the back of the front seat a light is placed to illuminate the step into the tonneau. A large compartment is also provided in the back of the front seat for tools and packages. A two position foot rail carpet covered, which can be folded when not in use, is standard.

Enclosed Bodies

Trimming and Fittings

With the exception of the 733 Sedan-Limousine, in which the front compart-

ment 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.

Driver's seat of all models has been made adjustable with the exception of the Sedan-Limousine.

Comfortable, new design, arm rests, with a sponge rubber core, are provided at each side of the rear seat. The arm rests on all enclosed bodies except the Club Sedan incorporate neatly concealed vanity case combinations and cigarette lighter with ash tray. The Club Sedan contains smoking and vanity sets of the recessed type. 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 733 model are made of black walnut with Packard Eight Walnut Finish. Metal mouldings are used in the 726 Sedan.

All doors have outside handles; those of the 726 are chromium plated with rounded corners. The 733 handles are chromium plated, also distinctive and original in design. They are opened from the inside by convenient easy operating lever handles.

Non-shatterable glass is used throughout except on the rounded partition of the Sedan-Limousine.

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 ½ 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 as are individual sun visors in the driver's compartment.

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 the 2-4 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 726 chassis and the seven passenger is mounted on the 733 chassis. These bodies combine perfectly the elements of smartness and utility. Wide non-shatterable 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 and incorporates assist handles.

A carpet covered foot rail folds out of position when not in use. Two occasional folding seats have been provided in the seven passenger model.

Sedan-Limousine Body (7 passenger)

The Sedan-Limousine body for seven passengers is mounted on the 733 chassis.

The front and rear compartments are divided by a full 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 (5 passenger)

The five passenger Coupe is mounted on the 733 chassis. In seating space this model is most commodious. Three passengers can be carried with utmost comfort on the rear seat. The front seats are each adjustable and individual in design and the companion seat may also be tipped forward.

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

Ample luggage space is provided in the rear deck, the door of which is fitted with a cylinder lock.

Door 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 733 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 trunk platform is incorporated at the rear in the design of this body.

Coupe Body (2-4 passenger)

The two-four passenger Coupe body is furnished mounted on the 733 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. The front compartment is also carpeted.

Seeping of water into the rear 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, of non-shatterable glass, lowers by means of regulator located in luggage compartment.

Convertible Coupe (2-4 passenger)

This body is supplied on the 733 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 dual 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 two separate fan belts eliminates belt slippage at all 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 sand-blasted 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 25 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 expanding type and automatically provides the correct proportions of air and gasoline throughout the entire range of the motor speeds. All conditions are compensated for by a single adjustment.

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 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. To improve bearing fits under all operating conditions Packard bearing caps are made of cast iron. 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 726 and 733 models the maximum distance between main bearings is 2½". (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 which relieves certain bearing loads, 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 ducts 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 No. 7 main bearing. A special oil guard is provided at the rear bearing to minimize the leakage of oil.

Bearings

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

Bearing No. 1 . . . . . $2''$
Bearing No. 2 . . . . . $\frac{61}{64}''$
Bearing No. 3 . . . . . $1\frac{17}{64}''$
Bearing No. 4 . . . . . $\frac{61}{64}''$
Bearing No. 5 . . . . . $1\frac{45}{64}''$
Bearing No. 6 . . . . . $\frac{61}{64}''$
Bearing No. 7 . . . . . $1\frac{3}{8}''$
Bearing No. 8 . . . . . $\frac{61}{64}''$
Bearing No. 9 . . . . . $2\frac{21}{64}''$

The total main bearing length on the 726 and 733 model motors is $12\frac{19}{64}''$. 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 $1\frac{3}{32}''$ 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 1½″ 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 belts, 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.

A new voltage regulator maintains the proper relation between charge and discharge of battery regardless of driving conditions.

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, two instrument board lights, one for reading,

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 have been altered to improve appearance and 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 altered 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 camshaft 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 air flow through the radiator is 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 belts.

The fan end of the water pump shaft turns in a ball 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 two belts running in V shaped grooved fan pulleys from the end of the crankshaft and turns at 1¼ 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 minute to be trapped 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 127 ½ inches and the other 134 ½ inches. The angle of the steering column has been made adjustable through a range of 5 degrees.

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 forty-three points:

5 Spring bolts—front and rear.

8 Spring shackle bolts—front and rear.

2 Steering cross tube ball joints.

1 Steering sector shaft.

1 Steering connecting rod ball joint front.

1 Steering lever ball joint.

10 Front axle brake shaft bearings.

4 Intermediate brake shaft bearings.

2 Brake rear connecting rod levers.

1 Clutch throw-out bearing.

8 Shock absorber links.

Designed with and built into the Packard chassis, this positive lubricating system protects the precision built into Packard cars. With it 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 $\frac{5}{32}$ 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 Trunnion 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 2¼ 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. All springs are fitted with metallic covers which effectively prevent loss of lubricant or entrance.

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 as follows:

Special Light Front Springs

All Bodies	Left	950 Lbs.
	Right	1050 Lbs.

Special Light Rear Springs

Sedan (5)	1200 Lbs.
Coupe (2-4)	1100 Lbs.
Conv. Coupe (2-4)	1100 Lbs.
Touring (7)	1000 Lbs.
Sedan (7)	1300 Lbs.
Limousine (7)	1300 Lbs.
Club Sedan (5)	1200 Lbs.
Coupe (5)	1100 Lbs.
Phaeton (4)	1000 Lbs.
Roadster (2-4)	1000 Lbs.
Sport Phaeton (4)	1000 Lbs.

Front Springs

All Bodies	Left	850 Lbs.
	Right	950 Lbs.

Rear Springs

Sedan (5)	1200 Lbs.
Coupe (2-4)	1100 Lbs.
Conv. Coupe (2-4)	1100 Lbs.
Touring (7)	1000 Lbs.
Sedan (7)	1300 Lbs.
Limousine (7)	1300 Lbs.
Club Sedan (5)	1200 Lbs.
Coupe (5)	1100 Lbs.
Phaeton (4)	1000 Lbs.
Roadster (2-4)	1000 Lbs.
Sport Phaeton (4)	1000 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 a single row 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. The section through rim is $1\frac{1}{16}$ in. in diameter. Harmonizing with the appearance of the wheel is an artistic compact design for the light and throttle control. Only the ivory catalin 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 spe-

cially 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, four 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

	726—733
First	15.00 to 1
Second	8.83 to 1
Third	5.73 to 1
Fourth	4.38 to 1
Reverse	12.4 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 726—733 models is 4.38 to 1; special ratios of 4.69 and 5.08 to 1 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 tapered roller 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 made of steel, covered with a cork carpet and bordered with chromium plated moulding.

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 splasher is 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 supported fender and eliminating the possibility of squeaks at this point.

Tires

Straight side non-skid 6-ply cord tires 20 x 6.00 base are specified for both front and rear wheels.

Spare Wheel and Carrier

A spare wheel carrier is supplied on all 726 and 733 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 and Upholstery

The following is a complete list of paint schemes for either open or closed 726—733 cars that are not optional as specified. Paint schemes A, B, C, D, F, K and X. Paint scheme Y is supplied for open cars only.

Standard upholstery for 726 and 733 enclosed cars will be Laidlaw 1303 on seats and seat backs and back of front seat, and Laidlaw 13030 on balance of car. Where leather is used in Sedan-Limousine, Colonial Grain No. 546 will be standard.

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

Enclosed and Open Cars

Paint Scheme "A"

Standard black chassis parts.....Black

Body and bonnet mouldings and window casings, also body base moulding.....Black

Window reveals, cowl and bonnet above moulding, also body above moulding, body and bonnet below moulding and wheels including wire and wood wheels when specified..Nassak Diamond Deep Gray

Stripe—body and bonnet standard position and size.....Old Ivory

Wheels — standard position and size.....Black

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

Paint Scheme "B"

Standard black chassis parts....Black

Body and bonnet mouldings and window casings, also body base moulding.....Black

Window reveals, cowl and bonnet above moulding, also body above moulding, body and bonnet below moulding and wheels including wood wheels when specified .....Packard Blue

When wire wheels are specified standard color.....Black Enameled

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

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

Paint Scheme "C"

Standard black chassis parts. . . . . Black

Body and bonnet mouldings and window casings, also body base moulding. . . . . Black

Window reveals, cowl and bonnet above moulding, also body above moulding, body and bonnet below moulding and wheels including wood wheels when specified . . . . . Rubicelle Deep

When wire wheels are specified standard color. . . . . Vermilion

Stripe—body, bonnet and wheels standard position and size. . . Vermilion

Upholstery—standard broadcloth. Where leather is used in Stationary and Convertible Coupes and open cars. . . . . Colonial Grain No. 704

Paint Scheme "D"

Standard black chassis parts. . . . . Black

Body and bonnet mouldings and window casings, also body base moulding. . . . . Black

Window reveals, cowl and bonnet above moulding, also body above moulding, body and bonnet below moulding and wheels including wood wheels when specified . . . . . Shirvan Green

When wire wheels are specified standard color. . . . . Stanley Green

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

Upholstery—standard broadcloth. Where leather is used in Stationary and Convertible Coupes and open cars. . . . . Colonial Grain No. 704

Paint Scheme "F"

Standard black chassis parts. . . . . Black

Body and bonnet mouldings, also body base moulding. . . . . Black

Window reveals and casings, cowl and bonnet above moulding, also body above moulding, body and bonnet below moulding and wheels including wire and wood wheels when specified. . . . . Pewter Pot

Stripe—body, bonnet and wheels standard position and size. . . . Argent

Upholstery—standard broadcloth. Where leather is used in Stationary and Convertible Coupes and open cars. . . . . Colonial Grain No. 710

Paint Scheme "K"

Standard black chassis parts. . . . . Black

Body and bonnet mouldings and window casings, also body, base moulding and body above moulding on enclosed cars only . . . . . Copra Drab

Window reveals, cowl and bonnet above moulding, body above moulding on open cars only, body and bonnet below moulding and wheels including wire and wood wheels when specified . . . . . Chicle Drab

Stripe—body, bonnet and wheels standard position and size. Straw Color

Upholstery—standard broadcloth. Where leather is used in Stationary and Convertible Coupes and open cars. . . . . Colonial Grain No. 726

Paint Scheme "X"

Standard black chassis parts. . . . . Black

Body and bonnet mouldings and window casings, also body base moulding . . . . . Black

Window reveals, cowl and bonnet above moulding, body above moulding, body and bonnet below moulding and wheels, including wire and wood wheels when specified . . . . . Black

Stripe—body, bonnet and wheels standard position and size . . Old Ivory

Upholstery—standard broadcloth. Where leather is used in Stationary and Convertible Coupes and open cars . . . . . Colonial Grain No. 704

Paint Scheme "Y"

(For Open Cars Only)

Standard black chassis parts. . . . . Black

Entire body and bonnet and wheels including wire and wood wheels when specified. . . . . Straw Color

Body and bonnet moulding and body base moulding. . . . . Black

Stripe—body and bonnet standard position and size. . . . . Straw Color

Wheels, standard position and size. Black

Upholstery . . . . Colonial Grain Leather No. 704

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

Instrument Board Equipment

Gasoline gauge.
Tumbler 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.

Reading lamp and package compartment at each end of board.

Tires and Wheels

Low pressure tires, straight side 20 x 6.00 inch are standard front and rear.
Steel disc wheels standard equipment.

Body Types

Bodies will be supplied in the following types:

Open Bodies (long wheelbase only)

7 Passenger Touring.
4 Passenger Phaeton.
4 Passenger Sport Phaeton.
4 Passenger Roadster.

Enclosed Bodies

5 Passenger Sedan. (Short wheelbase only)
7 Passenger Sedan. (Long wheelbase only)
7 Passenger Sedan-Limousine. (Long wheelbase only)
5 Passenger Club Sedan. (Long wheelbase only)
5 Passenger Coupe. (Long wheelbase only)
2-4 Passenger Coupe. (Long wheelbase only)
2-4 Passenger Convertible Coupe. (Long wheelbase only)

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.
Adjustable driver's seat.

Carpet in front compartment.
Improvement in front compartment—more foot room.
Non-shatterable glass in windshield.
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 concealed in the 726 Sedan. The interior metalware is new 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.
Adjustable driver's seat.
Individual inside adjustable sun visors.
Outside cylinder locks on right door of Coupe and right doors of Sedan-Limousines and right front door only of Sedans.
Folding occasional seats in seven passenger Sedan and Sedan-Limousine.
Carpet in front compartment.
Vanity and smoking sets.

Rear view mirror.
Automatic windshield cleaner.
Non-shatterable glass throughout.
Ash receptacle in front compartment of all closed cars.

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 $3\frac{3}{16}$ 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 25 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

Four 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 726—127½".
Model 733—134½".

Turning Radius

Model 726—22′ 3″.
Model 733—23′ 9″.

License Data

Number of cylinders	8
Cylinder bore	$3\frac{3}{16}$
Horsepower (N. A. C. C. rating)	32.5
Piston displacement	320 cu. in.
Stroke	5″

Shipping Weights

726 Lbs.	733 Lbs.
Sport Phaeton—4 Pass.	4130
Phaeton—4 Pass.	3935
Touring—7 Pass.	4055
Roadster—2-4 Pass.	3945
Coupe—5 Pass.	4255
Coupe—2-4 Pass.	4180
Convertible Coupe—2-4 Pass.	4100
Club Sedan—5 Pass.	4325

4265 Sedan—5 Pass.....

Sedan-Limousine—7 Pass.....4555

Sedan—7 Pass.....4500

3245 Chassis.....3290

If weight of a car, ready for the road, is desired, approximately 245 pounds should be added to the above weights to cover gasoline, water and spare tire.

Size of tires—all 726 models—20x6.00.

Size of tires—all 733 models—20x6.00.

Wheelbase—127½"-134½".

Vehicle number is on Packard patent plate.

Motor number is on left side upper half of crankcase.

DIMENSIONS AND CAPACITY PACKARD 726—733 CARS

(All measurements are in inches)

Type Number	Body Models	Length Over All*—Bumper to Bumper	Width Over All*—Widest Point Across Front Fenders	Height Over All** Unloaded
400	Touring (7)—733	195 13/16	71 7/8	71
403	Sedan (5)—726	188 7/8	71 7/8	71 1/4
404	Sedan (7)—733	195 13/16	71 7/8	71 1/4
405	Sedan-Limousine (7)—733	195 13/16	71 7/8	71 3/4
406	Club Sedan (5)—733	195 13/16	71 7/8	71 1/4
407	Coupe (5)—733	195 13/16	71 7/8	70 3/4
408	Coupe (2-4)—733	195 13/16	71 7/8	70 1/4
409	Convertible Coupe (2-4)—733	195 13/16	71 7/8	69 1/2
401	Phaeton (4)—733	195 13/16	71 7/8	68 3/4
431	Sport Phaeton (4)—733	195 13/16	71 7/8	68 3/4
402	Roadster (2-4)—733	195 13/16	71 7/8	67

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

DIMENSIONS OF PACKARD STANDARD EIGHT ENCLOSED BODIES

(All measurements are in inches)

	403 Sedan (5 Pass.)	407 Coupe (5 Pass.)	406 Club Sedan (5 Pass.)	404 Sedan (7 Pass.)	405 Sedan-Limo. (7 Pass.)	408 Coupe (2-4 Pass.)	409 Convertible Coupe (2-4 Pass.)
Length over all (at belt) except Coupes	112 7/8	113 3/4	104 3/4	119 7/8	119 7/8	113 3/4	113 3/4
Length—dash to front of front seat	23 11/16	23 11/16	23 11/16	23 11/16	23 11/16	23 11/16	23 13/16
Length—back of front seat to front of rear seat	25 1/2		17 1/4	31 1/4			
Distance from partition to front of folding seat				10 5/8	7 3/8	19 3/4	19 3/4
*Distance from front of rear seat to folding seat		5 3/4		4	4		
Distance from partition to front of rear seat					33 1/2		
Width over all (at belt) panel to panel	62	60 1/2	62	62	62	59 7/8	59 7/8
Width of floor in tonneau	47	45 3/4	47	49	49	46	46
Height inside	48	47 5/8	48	48	48	47	47 5/8
Front door width	31 7/8	31 7/8	31 7/8	31 7/8	31 7/8	31 7/8	31 7/8
Rear door width	31 7/8		31 7/8	31 7/8	31 7/8		
		Driver's also Companion Seat					
SEATS:							
Front: Depth	17 3/4	17 3/4	17 3/4	17 3/4	17 3/4	17 3/4	17 3/4
Width	44 1/4	19 1/4	44 1/4	44 1/4	44 9/16	44 1/4	44 1/4
Height (floor to top of cushion)	13 3/8	13 3/8	13 3/8	13 7/8	13 3/8	13 3/8	13 3/8
Height of seat back	20 1/8	19 5/8	20 1/8	20 1/8	19 11/16	20 1/8	20 1/8
Rear: Depth	20	19 7/8	20	20	20		
Width	49	52	49 1/4	49	49		
Height (floor to top of cushion)	14	14	14	14	14	Rumble Seat	Rumble Seat
Height of seat back	20 7/8	20 3/4	20 7/8	20 7/8	20 7/8		

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

DIMENSIONS OF PACKARD STANDARD EIGHT ENCLOSED BODIES

(All measurements are in inches)

	403 Sedan (5 Pass.)	407 Coupe (5 Pass.)	406 Club Sedan (5 Pass.)	404 Sedan (7 Pass.)	405 Sedan-Limo. (7 Pass.)	408 Coupe (2-4 Pass.)	409 Convertible Coupe (2-4 Pass.)
Folding: Depth				16½	16½	16½	16½
Width				17½	17½	42¾	42¾
Height (floor to top of cushion)				**15	**15	12¾	12¾
Height of seat back				14½	14½	21 11/16	21 11/16
†Head Room: Distance from top of seat cushion							
to headlining of top—front	35	35	35	35	35	35	35¾
to headlining of top—rear	35¾	35¾	35¾	35¾	35¾		

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

DIMENSIONS OF PACKARD STANDARD EIGHT OPEN BODIES MODEL 733

(All measurements are in inches)

	431 Sport Phaeton	401 Phaeton	400 Touring	402 Roadster
Length over all	113 5/8	113 5/8	118 1/2	113 3/4
Length—dash to front of front seat	23 11/16	23 11/16	23 11/16	23 11/16
Length—back front seat to front rear seat	21 5/8	21 5/8	30 1/2	19 3/4
Width over all (at belt—panel to panel)	59	59	59 1/8	56 3/4
Greatest width floor in tonneau	47 3/4	47 3/4	48 1/8	46
Front door width	27 7/8	27 7/8	27 7/8	27 7/8
Rear door width	28 1/4	28 1/4	28 1/4	
SEATS:				
Front: Depth	17 3/4	17 3/4	17 3/4	17 3/4
Width	43	43	43	43
Height—floor to top of cushion	13 3/8	13 3/8	13 3/8	12 3/8
Height of seat back	18 3/8	18 3/8	18 3/8	19 3/8
Rear: Depth	20 5/8	20 5/8	20	16 1/2
Width	49 1/4	49 1/4	48	42 3/4
Height—floor to top of cushion	13 7/8	13 7/8	14	12 3/4
Height of seat back	20 1/4	20 1/4	17 3/4	21 11/16
Folding: Depth			16 1/2	
Width			17 1/2	
*Height—floor to top of cushion			15	
Height of seat back			14 1/2	
†Head Room: Distance from top of seat cushion to underside of top—front seat	32 1/4	32 1/4	34	33 1/4
cushion to underside of top—rear seat	33 7/8	33 7/8	35 13/16	

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