

HENNEY-PACKARD
SERVICE
CAR

HENNEY MOTOR COMPANY, INC.
FREEPORT, ILLINOIS

"World's Largest Manufacturer of Funeral Cars and Ambulances"

SPECIFICATIONS

PACKARD CUSTOM EIGHT CHASSIS

CHASSIS: Packard Custom 156" wheelbase Commercial Chassis.

ENGINE: L-head type, 8 cylinders in line. Bore $3\frac{1}{2}$ " stroke $4\frac{5}{8}$ "; piston displacement 356 cubic inches. A. M. A. rating, 39.2 Horsepower; maximum braking horsepower is 160 at 3600 R.P.M. Neutro-poised engine mountings. Compression ratio 7.00 to 1. Cast iron cylinder head.

Crankcase: Cast integral with cylinder block for rigidity and strength.

Main Bearings: Nine (9), bearing area 86.8 square inches.

Crankshaft: 104 lbs., fully counterweighted with eight bolted-on counterweights. Rubber friction disc weatherproof vibration damper operates effectively at all speeds. Complete assembly is dynamically and statically balanced.

Connecting Rods: Individually drop forged from carbon steel, rifle drilled from end to end to furnish pressure lubrication to piston pin bearings; pin bearings are bronze bushed. Crankpin bearings are a steel shell with copper-nickel matrix impregnated with a special babbitt material.

Pistons: Aluminum Alloy Thermo-strut pistons designed with wide steel struts embedded in the skirt. Pistons are heat treated to remove internal strains and to harden the metal. Pistons are tin plated to shorten break-in period and prevent wall scoring. Piston pins are floating type with steel retainer ring at each end to locate in proper position. Piston rings—two compression rings and one oil control ring—all rings are located above piston pin.

Valves: Inlet valves made of chrome nickel, exhaust valves made of Austenitic steel which has exceptionally high heat resisting properties. Seat angle: Inlet valves 30 degrees, exhaust valves 45 degrees. Hydraulic valve tappets. All clearance between valve stem and tappet is eliminated and they operate at zero under all conditions. Valves are permanently quiet because they are always in accurate adjustment.

Lubrication System: Full pressure feed; gear type oil pump with water controlled oil temperature regulator and series type full flow oil filter. Oil under pressure forced to all main connecting rod and camshaft bearings, valve rocker levers and through rifle-drilled passages in the connecting rods to the piston pin bushings. Oil thrown from a bleed hole in the lower connecting rod bearing drenches the cylinder walls, pistons, distributor drive gears and valve tappets. An efficient oil filter is standard equipment. Crankcase oil capacity, 7 quarts. Pressure gauge on instrument panel and quantity dip-stick on crankcase.

COOLING SYSTEM: Forced draft crankcase ventilation with copper mesh cleaner which prevents dust and dirt from entering crankcase. Radiator core, tubular type, with thermostatically controlled recirculating feature. Capacity 5 gallons. $18\frac{1}{2}$ " 5-bladed fan. Forced circulation by centrifugal pump driven by fan belt. Radiator system sealed with pressure radiator cap raising boiling point approximately 13 degrees. Automatic heat control on intake manifold directs the heat from all eight cylinders around the intake hot spot, causing rapid warm-up of the fuel mixture.

CARBURETOR: Duplex down-draft carburetor with automatic choke. Air cleaner and silencer—oil bath type. Gasoline filter incorporated in mechanically operated fuel pump.

GASOLINE TANK: Mounted in rear. Capacity 20 gallons. Electric gas gauge on instrument panel.

MUFFLER: Low back pressure type. Exhaust pipe, muffler and tail pipe are floated on rubber mountings to prevent transmission of vibration.

GENERATOR: Autolite GGJ-4804A 40 ampere-hour capacity cutting in at 625 r.p.m.

BATTERY: 21 plate. 150 ampere-hour capacity at 20 min. rate.

STARTER: Autolite starting motor. Operated by accelerator when ignition switch is turned on. Pressure on accelerator pedal closes a switch in the carburetor that supplies current to operate the starter motor, engaging the Bendix mechanism with the flywheel.

FRAME: Frame especially engineered to provide great rigidity. Tapered I-Beam X member construction is used with new corner braces used on both sides at top and bottom of the intermediate rear cross member. The section of the frame which carries the engine is of box section construction. Chassis flange width is 2" at critical point, side rail thickness $\frac{3}{16}$ ". 5 Cross Members.

REAR AXLES: Heavier rear axle assembly of greater capacity. Semi-floating type with hypoid gears. Axle shaft material is chrome molybdenum steel. Driving pinion is mounted in two large tapered roller bearings. Differential and ring gear are also mounted on tapered roller bearings. A special roller bearing is built in behind the ring gear exactly opposite to the driving pinion. This bearing holds the ring gear in perfect alignment under great driving power. Outer ends of rear axle shafts are carried on large tapered roller bearings requiring lubrication only every 30,000 miles.

Ratio: 4.54 to 1. With Overdrive 4.7 to 1.
Tread: Rear 65", front 59 $\frac{1}{4}$ ".

FRONT SUSPENSION: Packard independent suspension is of the parallelogram type employing a single coil spring designed for greater loads. Large rubber bumpers between springs and frame limit vertical wheel travel in both directions. Front shock absorbers are double-acting, end to end discharge type. Vertical wheel support which carries front wheel spindle is rugged steel forging and to it are yoked the upper and lower support levers. The steering knuckle spindle has a needle bearing at the top, a bushing of special alloy at the bottom, and a ball thrust bearing between.

WHEELS: Demountable pressed steel, disc type, with slots at rim for mounting individual tire chains. Rim size 5.50x16.

TIRES: 7.50x16 six ply, heavy-duty, low pressure type. 5 wheels standard equipment.

SPARE TIRE AND WHEEL: Located in compartment under floor at left rear side door.

REAR SPRINGS: Semi-elliptical, slung under axle. Length of spring $54\frac{3}{8}$ "x2" wide. Both ends of rear spring mounted in live rubber.

FRONT SPRINGS: Helical coil type made of Silico manganese.

SHOCK ABSORBERS: Delco Hydraulic Two-Way, end to end discharge type, front. Rear shock absorbers are Monroe Direct Acting, airplane type. In addition a fifth shock absorber and lateral stabilizer together form an important feature in the rear suspension.

ROLL CONTROL BAR: Made of spring steel mounted at front of chassis, fastened near wheels and is formed so it passes through rubber cored brackets on the frame.

LATERAL STABILIZER: Fifth shock absorber and lateral stabilizer together form an important feature in the rear suspension. They are used to suppress lateral vibration of the frame in relation to the rear axle, and are attached to the rear spring bracket on one side of the chassis, and to the frame cross member on the opposite side. The complete device suppresses horizontal road shocks and vibration in the same manner as the four regular shock absorbers control vertical car movements.

TRANSMISSION: Unimesh Selective-Silent Synchronized. Large helical gears are used for all forward speeds and after being carburized the gears are lapped to precision limits in special machines. Gears are matched in sets for assembly and each set is tested for quietness. All forward speeds of transmission are in constant mesh all the time. Nine ball and roller bearings assure long life of Unimesh transmission. Gear ratios 4.54 to 1 at high speed, 6.94 to 1 at second speed; 11.03 to 1 at first speed; 14.35 to 1 at reverse speed. Oil capacity 2 pints.

CLUTCH: Single dry plate. Facing material—woven asbestos—size 7"x11"x.125".

PROPELLER SHAFT: Tubular type, balanced both at rest and in motion. Universal joints at each end connect the extension shaft with the rear axle driving pinion. Intermediate self-aligning propeller shaft bearing mounted in rubber.

BRAKES: Servo-Hydraulic, internal expanding, self-energizing on all four wheels. Brake drums front and rear 12" Centrifuge x $2\frac{1}{2}$ ". Total effective braking area service brakes 260 square inches. Hydraulic fluid tubing installed on frame in manner that protects it from flying stones.

STEERING GEAR: Steering mechanism is designed to balance perfectly. Steering gear is of the worm and triple tooth design. The roller is mounted on a double row of needle bearings extending the complete width of the roller and the worm operates on two tapered roller bearings. Attached to the Pitman arm is a bar of tubular steel running crosswise to the frame and fastened at the opposite end to an idler arm, comparable in length and location to the Pitman arm. Two other arms, one on each side, are attached to the steering knuckles at the wheels and to the tubular connecting rod. Ball joints are used at both ends of these cross bars. Thus each wheel can follow road irregularities independently of the other and without transmitting road shocks to the steering wheel. Steering gear ratio is 26.2 to 1.

CHASSIS LUBRICATION: Chassis is fitted with high pressure fittings for lubrication of all parts not otherwise lubricated. Chassis lubrication is only necessary at 2000 mile intervals.

BUMPERS: Bumpers both front and rear are of sturdy wide, "wrap-around" type, chromium plated finish. Bumper guards installed front and rear.

FENDERS: Stamped from heavy sheet steel. Lower front skirts are provided with extensions of the radiator grille die castings giving a wider, more substantial appearance. Headlights are inserted wide apart in the front of the fenders.

LIGHTING: Sealed beam headlights assure excellent night vision. Spaced wide for complete coverage of the road. Red signal light on instrument panel indicates the upper beam is in use.

TURN INDICATORS: Turn indicators are located in the parking and rear lights. These are operated by a lever located on the left side of the steering column. Lever returns to neutral position when turn is completed.

EQUIPMENT: Beautiful new instrument panel adds warmth and richness to interior. The panel background is of Oriental Wood graining with chromium across the face of the entire panel. Speedometer, self starting electric clock, ammeter, electric gas gauge, heat indicator and oil pressure gauge are grouped directly in front of the driver. Indirect lighting for all instruments. The center panel has a chromium grille over the radio speaker when car is radio equipped. Ash tray is installed convenient to driver's seat in central section of panel. The steering wheel is designed to give unobstructed view of the gauges. All control switches and buttons are aligned along the bottom of the instrument panel, are the new push control type, and are individually illuminated. The switches are a definite part of the instrument board and grille styling.

STANDARD BODY SPECIFICATIONS

Model 14995

Henney-Packard Limousine Service Car.

Model 14995

CHASSIS: PACKARD Custom Eight 156" Wheelbase Commercial Chassis.

BODY: Model 14995 Limousine Service Car Body.

FRAME STRUCTURE: The Henney-All-Steel body is constructed especially to withstand the severe stresses and strains to which a service car body is subjected. Body frame pillar members are formed from heavy gauge metal as a separate and distinct section and in turn are fabricated by welding into a complete body frame assembly to which the body panels are applied. This construction eliminates the hazard of relying on body panels with integral posts to form a rigid frame. All parts are fabricated as sub-assemblies which are assembled and welded together in a production framing jig, to form a complete one piece body frame assembly. The use of the Henney production framing jig provides the users of Henney-Packard service cars with close fitting weatherproof construction and as a result, long life interiors.

RUSTPROOFING: The entire framework and inside of all panels are covered with a rustproof primer.

PANELS: The entire body is paneled with the best grade of deep drawing auto body steel. All metal panels are painted on inside surface before being applied to body frame. On inside of body a heavy coat of body deadener is applied to the metal to prevent rumble.

METAL ROOF: One piece, all steel roof deck supported and reinforced by all steel roof frame assembly.

DOORS: Doors are All-Steel built on jigs that hold to rigid limits. Doors are hung on heavy forged steel hinges. Front doors hinged to all steel cowl designed and built to support weight of doors large enough for a Service Car body. Door dimensions as follows: One single 40" door in rear hinged on right side; rear side doors, one on each side 40" wide; and front doors, one on each side 46" wide. Front door windows are fitted with No-draft ventilating system.

GLASS: Fine quality polished Safety Glass in all window openings.

REGULATORS: The driver's compartment doors are equipped with Hydraulic Window Regulators. Control button located on each door with master control button operating both regulating windows located on left front door beside driver's position. Windows may be regulated at the window itself or from driver's position. All regulating glass and the sliding partition glass operate in noiseless channel. Balance of glass is set solid.

DRIVER'S SEAT: New wider seat, high back with finest quality spring and foam rubber construction in cushions and backs, luxuriously upholstered. Hydraulically adjustable for leg room and back position.

EXTERIOR APPEARANCE: The side doors and the rear quarter panels are paneled solid in the approved service car manner. Windows are omitted in the rear side doors and the rear quarters. Motif design on rear side doors and rear quarter panels.

TRIMMING: Rear compartment is upholstered with gray carpet from floor to bottom of partition glass. Fabric leather from top of carpet line to ceiling and on ceiling. Driver's

compartment seat cushion and back, windcords and arm rests upholstered with hand boarded, machine buffed Blue-Gray leather with balance of upholstery matching fabric leather. Other colors of leather and carpet available upon request. Oriental Wood grain garnish mouldings.

FLOOR AND TOE BOARDS: Covered with Rubber mat padded on bottom side.

INTERIOR EQUIPMENT: Plywood floor covered with linoleum bound off with polished moulding at doors. Special hardware screwed permanently to the floor consisting of ten 9 $\frac{3}{4}$ " rubber covered roller assemblies, which eliminates any possibility of casket side slip. Bier pins and skid plates located for maximum protection to floor and wheelhouse panels. Rubber covered patented bier pins with offset shank permitting $\frac{1}{4}$ " adjustment. Chromium plated protection bars in back of partition to protect sliding glass. Flat removable service car rack adjustable to three positions. Rear extension rollers extending out from rear door over rear door sill to facilitate loading. Dimensions: Overall height 74 $\frac{1}{2}$ ", body width outside 81", body width inside at belt 65". Over-all length of body and chassis including bumpers, 252". Height from floor to roof, 49". Back of driver's partition to rear door at floor 114 inches.

DUST STRIPS: All doors completely sealed against dust on all edges.

LIGHTS: 3 Domelights installed in rear compartment.

PULL-TO HANDLES: Remote control pull-to handles on all doors.

WINDSHIELD: "V" type windshield with safety glass.

WINDSHIELD WIPER: Tandem windshield wiper.

COWL: All steel designed and built specially for service car body. Two 5" rainproof fresh air ventilating ducts lead from behind front fenders and radiator grille, along each side of engine to cowl sides. A valve in each duct may be opened or closed to desired degree by control knob. With ventilators open, windows will remain clear in rain even though tightly closed.

SUN VISORS: Two inside sun visors, trimmed to match interior upholstery.

DOOR CHECKS: Door checks on all doors.

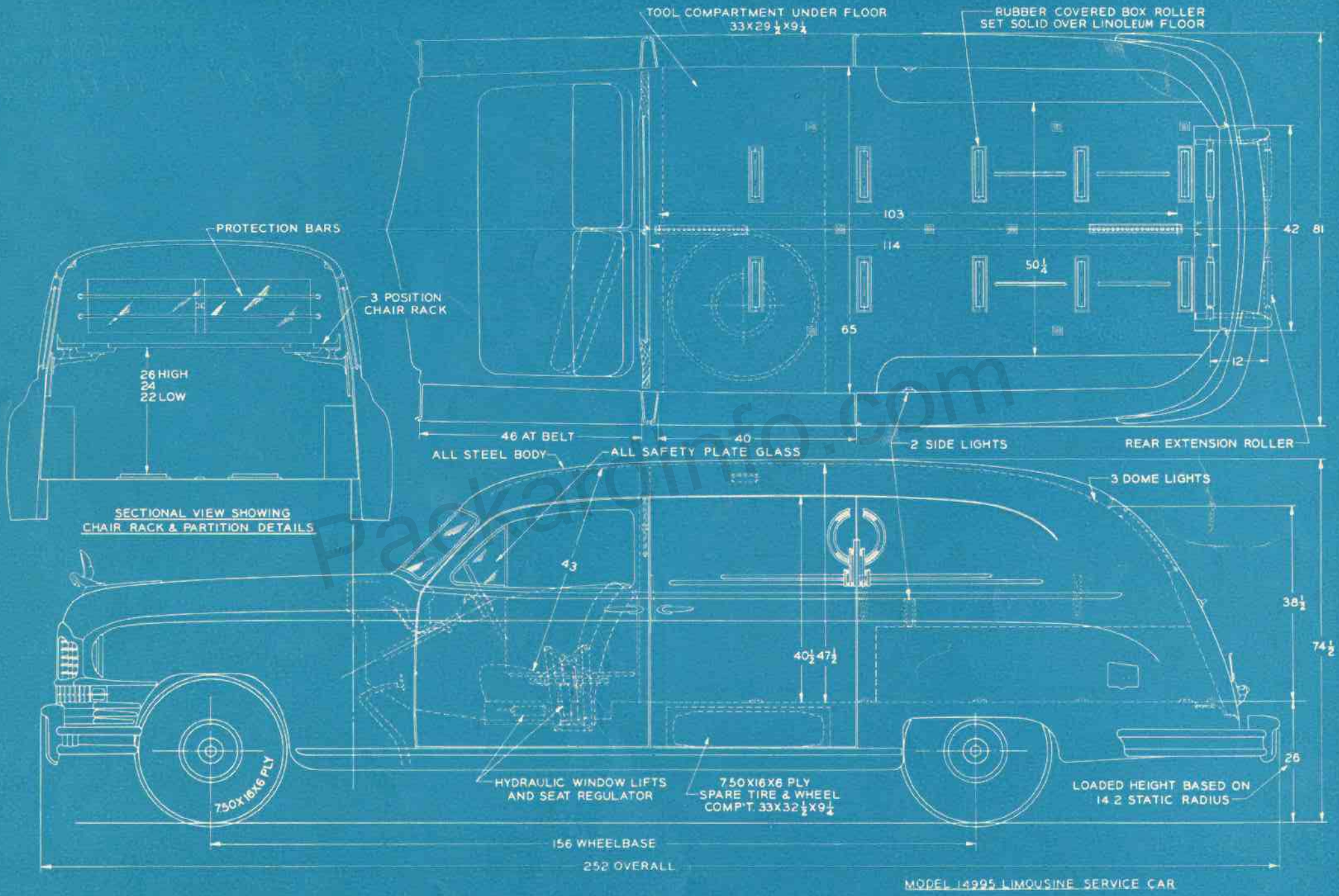
REAR VIEW MIRROR: Tilting No-Glare inside rear view mirror.

NAME PLATES: One pair of name plates furnished regularly with each car if specified. Name plates are mounted on outside of front doors.

DOOR HANDLES: Newly designed, chrome door handles.

PAINTING: Henney special lacquer system. All standard colors available on request and supplied at no extra charge on body and wheels. Light colors which require special undercoats are supplied at an extra charge. The finish on cars painted white, ivory, maroon or cream cannot be guaranteed.

NOTE: No allowances will be made for omission of any regular equipment. All dimensions are approximate. Specifications and prices subject to change without notice.



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