Comparing the 1949 Packard Eight and Super Eight with the Hudson Super-Six and the Hudson Super-Eight

High roof, high center of gravity and floor on top of frame eliminate the possibility of a low silhouette, which is the mark of the modern motor car.

Compared with the Hudson Super-Six and the Hudson Super-Eight, the Packard Eight and the Packard Super Eight are much smaller cars than the difference in price indicates. Size is an accepted gauge of motor-car value. The wheelbase of both Hudson cars is 4 inches longer than the 120-inch wheelbase of either Packard Eight or the Packard Super; the overall length of the Hudson cars is 3 inches greater. Not only are the Hudsons longer but they are wider to afford more seating room.

The interiors of the Packard Eight and the Packard Super have the same dimensions. The Hudson-built cars have more interior room and more usable room than either of these two Packard models. The front-seat hip room in these Packard models is 61½ inches wide. The 64-inch wide front-seat hip room in the Hudson models is 4% wider than the Packard front seat measured door-to-door. Hudson recesses the front door panels to permit an elbow-room dimension of 66 inches, 10% more elbow room than the Packard.

Confidential: This bulletin will provide Hudson salesmen with exclusive information regarding Hudson advantages over competitive makes. It is not intended to be shown to prospects. This information has been secured from the most reliable sources but cannot be guaranteed. January 25, 1949.
models provide. Shoulder room in the Packard front seat is 58 inches. Compare this figure with the much wider Hudson front-seat shoulder room of 62 inches—more than 6% additional shoulder room in the Hudson cars.

**HUDSON OFFERS MORE ROOM**

Comparison of the usable space in the rear seat of the Packard cars with the Hudson models shows an even more dramatic plus value for the Hudson models. The Packard rear seat cushion is only 50¼ inches wide between the arm rests, this dimension, then, is the hip room available. The Hudson rear seat cushion is 63 inches wide and provides more than 12 inches additional hip room. This means extra comfort and less crowding of passengers in the Hudson models. The door-to-door width of the Packard back seat is 61½ inches, but 11 inches of this space is unused because of the arm rests. The shoulder room and elbow room available in the Packard rear seat is also less than the Hudson models.

**AND MORE LEG AND HEAD ROOM**

An unbiased comparison of other interior dimensions indicates that greater regard for passenger and driver comfort has been built into the Hudson cars. For example, there is 1 inch more leg room in the Hudson front seat; Hudson allows 67¾ inches vertical clearance between steering wheel and front seat cushion—Packard allows only 5¼ inches. Headroom in the Hudson front seat is 37¼ inches; Packard has only 36½ inches—the difference is sufficient to prevent tall men from wearing their hats while driving the Packard models.

The rear seat of the Hudson models also provides more headroom than the Packard models. Headroom in the Hudson rear seat is 37½ inches; Packard has only 36¾ inches. Both measurements are taken vertically from the center of the cushion. The Packard rear turret drops sharply at this point and Packard headroom is further reduced.

The Hudson cars, in addition to having a longer wheelbase, have a greater overall length, and are also wider and roomier inside.

**LOWER CENTER OF GRAVITY**

The overall height of the Packard cars is greater from road to the top of the car than the Hudson models. The Hudson cars are 60½ inches low, have a hug-the-road way of going and a lower center of gravity than the Packard models, which are 64¼ inches high from road to top of car. Paradoxically, the Packards have less head room inside and are shorter; with their higher center of gravity the Packard models are more inclined to "roll" and heel over on turns taken at high speed, although Packard has attempted to overcome this trait with a roll-control bar.

Additional headroom, greater width and better streamlining is obtained in the Hudson models with the "step-down" feature, an exclusive Hudson engineering triumph. Hudson has put this vital space inside the car by recessing the floor down within the frame—use of this space is the key to the many advantages in the Hudson models which neither the Packard Eight nor the Packard Super Eight offer. Packard does not have the "step-down" feature.

The floor of the Packard models is built on top of the frame and the vital space between frame members is under the floor of the Packard cars instead of inside the car as it is in the Hudson models. This accounts for the Packard having a greater overall height than the Hudson cars.

**COMPARE THE PACKARD EIGHT AND SUPER-EIGHT RIDING AND HANDLING . . . AS WELL AS THE OTHER FEATURES, WITH THE HUDSON MODELS**

An impartial comparison of almost any of the features of the two Packard models, the Packard Eight and the Packard Super Eight, with the Hudson Super-Series models, reveals that while many mechanical features in the more costly Packards are identical with those provided by Hudson, the Hudson models offer many superiorities and advancements in ride and handling, in comfort, construction, safety and many other points.

Comparison also "points up" that bodies have been lowered in the Hudson models, and that overall visibility is greater than in Packard models. The Hudson-built cars are the smarter in line, have better color, more luxurious upholstery and have been more scientifically designed for passenger riding comfort than the Packard Eight or Super Eight.

**LOWER CENTER OF GRAVITY**

Because the "step-down" feature in the Hudson cars permits the center of weight to be much closer to the ground than in the Packard Eight or Super Eight construction, this lower center of gravity helps
keep the Hudson Super-Series models on a more even keel and lessens the tendency to roll or sway.

GREATER SAFETY

COMPARE the Packard construction with the Hudson exclusive all steel Monobilt BODY-AND-FRAME*, which includes a box-section foundation frame of sturdy steel girders with all structural members of body-and-frame welded together into a single unit PLUS outside girders which give bumper protection at rear and at both sides, even outside the rear wheels.

BETTER CONSTRUCTION

THE most fundamental differences between Packard and Hudson are in the basic types of construction. Packard still uses the old X member in the frame despite the fact that most automotive manufacturers are rapidly eliminating this feature to reduce weight and to permit lowering of the body. The bodies of both the Packard Eight and Super Eight are attached to a drop-center frame and are mounted up on top of the frame.

Compare these factors:—more unpleasant vibration and noise results within the body itself from bolting the Packard body up on top of the frame than in the Hudson integral, Monobilt body-and-frame.*

IMPROVED SOUND INSULATION

EXCESSIVE fatigue is induced by high noise levels. These noises, usually masked by the noises in lower ranges, increase the driver's reaction time. The detrimental effect of noise on human fatigue has been recognized for some time. The quieter car is the safer car. In Hudson cars, a silicon-asphalt-base, sound-deadening material, is applied at the factory to the under-body panel, to both sides of wheel housings and to the floor of the luggage compartment. Also, all panels are sound-deadened with an acoustical blanket of felt and other sound-deadening material.

STEERING

DESpite the fact that the Packard Eight and Packard Super Eight are much shorter cars in overall length and have shorter wheelbases than the Hudson Super-Series cars, the Hudson-built models have a shorter and a more convenient turning radius. Packard cars require nearly two extra feet more than that required by the longer Hudson cars to turn either of the Packard models around in the street. Compare the turning radius of 22 feet for the Packard models with the

Center-Point steering turning radius of 20.4 feet for the Hudson models. Packard does not offer Center-Point steering, which is the most costly type of steering being produced in the automotive industry today.

STARTING

IN the Hudson-built cars, a more convenient finger-touch starter button is located on the instrument panel to the left of the steering wheel. To start all Packard models, the driver must depress the accelerator pedal which opens the throttle and closes a switch to the starter. Disadvantages of an accelerator-pedal starting system are that if starting is not instantaneous the engine is flooded, and when the engine does start the throttle is wide open, placing damaging strain on a cold engine.

DOOR HANDLES

HUDSON uses the new type outside door handles with thumb-operated latch release. Packard does not offer this feature. The Hudson handles are non-rotating. The Packard handles are the refrigerator type and must be pulled toward the person opening the door.

BATTERIES

ALL Hudson models use 17-plate, 120-ampere-hour rated batteries. The Packard Eight and Super Eight are equipped with much smaller 15-plate, 100-ampere-hour batteries. The extra plate area in the Hudson batteries provides a much higher current flow for cranking the engine in extremely cold weather.

GENERATOR

COMPARE the Packard generator output of 35 amperes at six volts with the high-output Hudson fan-forced ventilation-type third-brush generator which reaches a maximum charging rate of 37 amperes at eight volts—5% greater than the Packard generator. This means extra protection against running down the battery and ample current for all electrical equipment.

*Trade-mark and patents pending.
REAR-WHEEL SHIELDS

Hudson’s Engines Offer Greater Efficiency... and Greater Economy of Operation

The economy value of an automobile engine is directly proportionate to the efficiency of the engine itself... the power derived from each cubic inch of piston displacement. Because this fact is so obvious, it is seldom mentioned, and therefore the depth of its significance rarely receives serious consideration. For instance, all other factors being equal, the volume of gasoline drawn into a car's cylinders increases as the size of the displacement of the engine is increased. For this and other reasons, the trend in the design of automobile engines since 1934 has been steadily toward smaller and smaller total displacement. This trend has continued even more sharply toward smaller displacement since 1942.

Less Gas Goes In

Hudson Super Engines

More Power Comes Out

REAR-wheel shields are standard equipment and a part of the body of both the Hudson Super-Six and Hudson Super-Eight. Packard sells fender-skirts to cover the rear wheels of both the Eight and Super Eight as an accessory at extra cost. The Hudson rear-wheel shields may be removed in five seconds or less by finger-tip pressure on spring-loaded locks. A clamping bolt must be removed with a wheel wrench to take off the Packard fender-skirts.

The Hudson Super-Eight engine shows an even greater favorable advantage in efficiency and economy over the Packard engines. With a displacement of 254 cubic inches, 12% smaller than the Packard Eight engine and 22% smaller than the Packard Super Eight engine, the Hudson engine produces nearly .504 horsepower per cubic inch of piston displacement—11% more power per cubic inch than the Packard Eight, 12% more power per cubic inch than the Packard Super Eight.

Added Horsepower at Less Cost

Broadly speaking, to improve an automobile engine several methods can be followed:

First: To increase the number of cylinders per engine.
Second: To increase the size but retain the number of cylinders per engine.
Third: To increase the number of cylinders per engine and to increase their size as Packard has done. To adopt this method means excessive engine size, weight and added cost.
Fourth: To increase the number of cylinders and decrease them in size as Hudson has done in the Super-Eight engine. Both Hudson engines are smaller and more compact, weigh less for horsepower delivered and cost less for horsepower obtained than the Packard engines.

Compression Ratio

Despite the fact that the Hudson engines are much more efficient than the Packard engines, the Packard engines use a compression ratio of 7.0:1 while the Hudson engines are designed on a compression ratio of 6.5:1. Hudson, however, offers a higher optional compression ratio. Packard does not. Compare the efficiency of the Packard engines with the
Hudson engines equipped with an optional aluminum cylinder head which brings the Hudson compression ratio to 7.0:1. The Hudson Super-Six engine then produces .473 horsepower per cubic inch of piston displacement—nearly 5% more per cubic inch than the Packard Eight and more than 6% more horsepower than the Packard Super Eight engine produces per cubic inch. The Hudson Super-Eight engine, equipped with the optional head, produces nearly .520 horsepower per cubic inch—13% more power per cubic inch than the Packard Eight, 15% more power per cubic inch than the Packard Super-Eight.

**PISTON RINGS**

APiston starts with a jolt about 3,000 times a minute, travels 3 3/4 inches in the Packard Eight, 4 1/4 inches in the Packard Super Eight, 4 3/4 inches in the Hudson Super-Six engine and 4 1/2 inches in the Hudson Super-Eight engine, starts with a jerk, and returns with cannonball velocity and boomerang action. Metal rubs against metal at a speed of approximately 2,000 feet per minute, like a steel sled on a steel track, starting and stopping every four inches, yet averaging almost 25 miles per hour. To prevent irregular cylinder wear under these conditions, Hudson piston rings are pinned. They cannot turn. Packard rings are not pinned. Hudson pistons have two rings for compression and two rings for oil control to insure oil economy. Packard pistons have only three rings.

**CLUTCH**

Cat's-paw action in Hudson clutches is provided by cork friction surfaces

Claims made for the type of clutch which Packard uses are that its plate pressure (the force that holds the plates together so they do not slip and lose power) increases with the speed of the engine. This pressure is very low at low speeds in clutches of this type. Low plate pressures at low engine speeds have a distinct disadvantage in heavy pulling or hill climbing because they have a tendency to let the clutch slip, heating the clutch faces in addition to losing power. The Hudson clutch pressure is more than double the Packard pressure at all times. The Hudson clutch operates in a cushion of oil to break the impact as clutch surfaces come together. The Packard clutch is the dry-disc-plate type. The oil cushion in the Hudson clutch, an exclusive feature, reduces wear, eliminates grab and chattering, lubricates hard-to-oil splines and eliminates friction and wear.

**BRAKES**

_Hudson_ has an exclusive reserve braking system; Packard does not have this feature. Both Hudson and Packard have 4-wheel hydraulic braking systems of the servo-action type. In addition, in the Hudson-built cars there is always a second complete braking system in reserve. If for any reason the hydraulic brakes should fail to operate, a slight additional travel of the same brake pedal automatically brings in the Hudson mechanical braking system. Hudson is the only American-built automobile which combines the best features of two complete braking systems operating from the same pedal. The Hudson cars also have a parking brake. The Packard cars have a hand-grip emergency brake. The Hudson parking brake may be released with finger-tip pressure and is more conveniently located under the left dash.

**OPTIONAL AUTOMATIC TRANSMISSION**

_Hudson_ offers an excellent optional automatic transmission known as Drive-Master. Packard does not have an automatic transmission. The Hudson Drive-Master does all shifting of clutch and forward gears automatically and has a great number of additional advantages, including two alternate ways to drive. Beside being low in cost, the Hudson Drive-Master combines greater motoring safety, more controllability, takes 14 steps out of driving, is trouble-free and the driver can choose any desired gear which is not possible with other types of automatic transmissions. The Drive-Master automatic transmission also eliminates "creep" at stops, permits the driver to shift at any speed, eliminates power losses, provides fast get-away, better gas mileage and quieter operation. There is no accidental shifting with Drive-Master. It is quieter than other automatic transmissions, reduces wear on motor parts, prevents engine stalling, and is useful for teaching beginners to drive.
Hudson Offers a Multitude of Features in the Super-Series Which Packard Asks Eight and Super Eight Owners to Do Without

**STEP-DOWN FEATURE**

In the Packard Eight and Super Eight, the passengers ride on top of the frame. Hudson owners ride cradled down within the base frame. Hudson seats extend the full width of the body. The Hudson front seat is 4% wider than Packard's. The rear seat in the Hudson provides more than 12 additional inches of usable space.

**ROOMIER INTERIORS**

Hudson has 1 inch more leg room in the front compartment. Hudson provides greater vertical clearance between steering wheel and front seat. Hudson also has more front-seat and more rear-seat headroom, as well as greater elbow and shoulder room in both front and rear seats.

**MONOBILT BODY-AND-FRAME**

This unique Hudson construction makes obsolete the Packard method of bolting the body on top of the chassis frame. Hudson construction combines body-and-frame* in a super-safe, single, sturdy, all-welded, all-steel unfor that provides rigidity and stability heretofore unheard of.

**BIGGER CARS**

The wheelbase of both Hudson Super Series cars is 4 inches longer than either the Packard Eight or Super Eight. The overall length of the Hudson cars is 3 inches longer than these Packard models. Both Hudson models are roomier, larger cars than the Packards.

**LOWER CENTER OF GRAVITY**

The Packard Eight and Super Eight are 4 inches in overall height—3 inches higher in the air than the Hudson models—yet the Packard Eight and Super Eight have less head room and a greater tendency to heel over on turns.

**LESS NOISE**

More metal-to-metal rubbing noise occurs when a car body is bolted up on a chassis as it is in the Packard models. This action gradually loosens bolts and causes unpleasant noise and vibration inside the body itself. Compare this feature with the noise-free Hudson Monobilt body-and-frame*construction.

**REAR-WHEEL SHIELDS**

The rear-wheel shields are standard equipment and part of the gracefully streamlined Hudson body on all models. Packard sells rear-wheel fender skirts for the Eight and Super Eight models as an accessory at additional cost.

*Trade-mark and patents pending.

**GREATER ENGINE EFFICIENCY**

Each cubic inch of piston displacement in the Hudson Super-Six engine produces 2% more horsepower than the engine used in the Packard Eight and is 4% more efficient than the Packard Super Eight engine. The Hudson Super-Eight engine is 11% more efficient than the Packard Eight and 12% more efficient than the Packard Super Eight engine.

**OPTIONAL COMPRESSION RATIO**

An optional compression ratio of 7:00:1 is offered for both the Hudson Super Series models. Packard does not offer an optional aluminum head. Equipped with the optional head, the Hudson Six is 5% more efficient than the Packard Eight and 6% more efficient than the Super Eight. The Hudson Eight, so equipped, is 13% and 15% more efficient, respectively.

**BETTER STEERING**

Hudson offers Center-Point steering; Packard does not. The turning radius of the Packard Eight and Super Eight is 22 feet. The Hudson models, although longer in both wheelbase and overall length, have a much more convenient turning radius of only 20.4 feet.

**FLUID CLUTCH**

The Hudson clutch operates in a bath of oil, offers higher plate pressures than the Packard clutch, eliminates grab and chattering, lubricates hard-to-oil splines and eliminates friction and wear. All Packard models are equipped with the old-fashioned, dry-disc-type clutch.

**TRIPLE-SAFE BRAKES**

Hudson has three complete braking systems. Packard has only the conventional two. In the event of failure of the 4-wheel hydraulic braking system, a slight additional travel of the same brake pedal in the Hudson cars automatically brings in the Hudson reserve mechanical braking system. Hudson also provides a parking brake.

**OPTIONAL AUTOMATIC TRANSMISSION**

Hudson offers an optional automatic transmission known as Drive-Master. Packard neither builds nor offers an automatic transmission. The Hudson Drive-Master automatic transmission does all the shifting of clutch and forward gears automatically and combines greater motoring safety, controllability and many other features which are unobtainable in any Packard model.