compare the 1949 buick roadmaster, series 71, with the hudson commodore-6 and commodore-8

in the interest of an unbiased comparison between the 1949 buick roadmaster with the newer, more advanced hudson styling, it must be taken into consideration that the hudson cars are all new and all units are in harmony. conversely, buick inherited a 1948 body-style, which oldsmobile pioneered last year, and mounted this body on a chassis which is substantially the same as the buick 1941 design. only minor chassis improvements have been incorporated into the 1949 models advertised by buick.

compare, then, these buick models which were built up from a prewar chassis combined with a body styling which was originally designed for a chassis of another specification, height and weight, with the newer, more advanced hudson models which were totally engineered, redesigned and built "complete" as a brand new automobile of advanced design. the hudson models, then, are in complete harmony throughout, and this "totally new" hudson car has many advantages in interior roominess, in beauty, lower center of gravity, safety, economy of operation, superior performance, streamlining and comfort which are unobtainable in the buick roadmaster model.

from the standpoint of size, roominess, appointments, performance and other important features, the only buick model that can be logically compared with the hudson commodore custom model is the buick roadmaster. a glance at the specifications and a look at the cars will readily prove that there is absolutely no comparison between the buick special and super models and the hudson commodore custom.

hudson offers more usable room inside

compare these measurements which dramatically prove that all hudson models offer more carrying space and greater passenger comfort in extra room than is available in the buick roadmaster.
HUDSON OFFERS WIDER SEATS—MORE HIP AND SHOULDERRoom

All Hudson models are wider, have wider seats, offer greater hip room and much more shoulder room in both front and rear seats than does the Buick Roadmaster. Here are a few of the reasons why interior dimensions may not be included in the Buick Salesman's handbook:

Compare the room inside the cars. Hudson has more room and more usable room inside, over all these dimensions.

<table>
<thead>
<tr>
<th>Measurement Taken</th>
<th>Buick Roadmaster</th>
<th>All Hudson Models</th>
<th>Additional Hudson Interior Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A) Instrument panel to rear window...........</td>
<td>96&quot;</td>
<td>101 1/2&quot;</td>
<td>4 1/2&quot; More Room</td>
</tr>
<tr>
<td>(B) Dash to front seat back (Minimum).........</td>
<td>39 1/2&quot;</td>
<td>40 1/2&quot;</td>
<td>1/2&quot; More Room</td>
</tr>
<tr>
<td>(C) Head room in front seat....................</td>
<td>36 1/2&quot;</td>
<td>37 1/4&quot;</td>
<td>3/8&quot; More Hat Room</td>
</tr>
<tr>
<td>(D) Steering wheel clearance to top of seat cushion............</td>
<td>5&quot;</td>
<td>6 1/4&quot;</td>
<td>1 1/4&quot; More Comfort</td>
</tr>
<tr>
<td>(E) Head room in the rear seat.................</td>
<td>35 3/4&quot;</td>
<td>37 3/4&quot;</td>
<td>2&quot; More Head Room</td>
</tr>
</tbody>
</table>

Compare "head room" in the chart above. The Hudson models have 3/4" more head room in front and 2" more head room than the Buick Roadmaster in the rear seat. The extra Hudson head room in both front and back seat means that many Hudson passengers can wear their hats in comfort while riding and many Buick passengers will be unable to. This lack of head room in the Buick Roadmaster is one of the compromises which Buick engineers had to make when they adapted the Oldsmobile body to the Buick chassis and this extra room is WHAT HUDSON BUYERS RECEIVE THAT BUICK ASKS THE ROADMASTER OWNER TO DO WITHOUT.

For many years Buick has included all interior dimensions in a handbook used by Buick Salesmen. This was not done in 1949 and General Motors spokesmen have indicated that Buick is reluctant to release interior measurements at this time. Further reason for deleting interior dimensions from advertising and sales material may be seen in the following:

The advantages of Hudson design in placing the rear seats ahead of the rear wheels are seen when the width of the rear seats is compared. The rear seat of both the Hudson Commodore-Series models is 12 inches wider than the rear seat in the Roadmaster. This extra room in all Hudson models is taken up by rear-wheel housings in the Buick Roadmaster model.

HUDSON ADVANTAGES IN BEAUTY, STYLE, BETTER RIDE...
LOWER CENTER OF GRAVITY and EASIER HANDLING

We have already seen by comparison and accurate measurement that Buick offers much less room inside for both passengers and driver (Fig. 1), including much less head room in both the front and rear seats (Fig. 2). Now compare the over-all height of the Buick Roadmaster with that of the Hudson models.

<table>
<thead>
<tr>
<th>Measurement Taken</th>
<th>Buick Roadmaster</th>
<th>All Hudson Models</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over-all height—Unloaded (Car with gas, oil and water)........</td>
<td>65 1/4&quot;</td>
<td>61 1/4&quot;</td>
</tr>
<tr>
<td>Over-all height—Loaded (Same as above with 5 passengers)........</td>
<td>63 9/16&quot;</td>
<td>60 3/4&quot;</td>
</tr>
</tbody>
</table>

The much lower over-all height of the Hudson models means that Hudson design has combined a beautiful, low, streamlined silhouette with a new, lower center of gravity, which in turn permits greater safety, improved roadabiliy and ride.
BODY AND FRAME

Compare the method in which Buick puts the Roadmaster floor up on top of the frame, failing to use the all-important space between the frame members, with the newer ultra-modern Hudson method which gives the Hudson buyer extra value by using the important "step-down" zone between the frame members. Buick still uses a separate frame and body and bolts the body to 10 "outrigger brackets" on the frame which Buick has used for nearly 10 years. Hudson uses heavier box-girder steel foundation side and cross-members and the body-and-frame are all in one single unit. Built like a bridge or a battleship, the Hudson models are all equipped with Monobilt body-and-frame* construction.

HUDSON IS EASIER TO PARK AND HANDLE

Buick bumpers on long "frame-extensions" Hudson bumpers integral with body-and-frame

Compare the Buick wheelbase, shortened from 1948 to adapt to a compromise with the 1948 Oldsmobile body, with the Hudson wheelbase:

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Buick Roadmaster</th>
<th>All Hudson Models</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheelbase</td>
<td>126&quot;</td>
<td>124&quot;</td>
</tr>
<tr>
<td>Overall Length</td>
<td>214½&quot;</td>
<td>207½&quot;</td>
</tr>
</tbody>
</table>

Despite the fact that Hudson has more room inside the car, where room really counts, Buick has endeavored to give the Buick customer "extra value" by hanging the bumpers on long "frame extensions." This means the Roadmaster is harder to park and harder to handle than the Hudson models. Hudson bumpers are an integral part of the Monobilt body-and-frame.*

STEERING

Compare the turning-circle diameter of the Buick Roadmaster, 44.8 feet with Hudson's shorter, much more convenient turning-circle diameter of only 41 feet. This means greater ease of parking and turning in a restricted area and offers a considerable advantage in Hudson cars which the Buick buyer is asked to do without.

LESS NOISE IN HUDSON CARS

The quieter car is the safer car. Excessive fatigue is induced by high noise levels. The detrimental effect of noise on human fatigue has long been recognized.

1. Valve-in-head type engines are noisier, have more parts to wear out and push-rod noise is always present. Buick uses a valve-in-head engine. Hudson uses quieter "L"-head type engines.

2. Hotchkiss drive, in addition to being more efficient, also transmits less tire noise to the interior of the car than does the Torque-tube type. Buick uses Torque-tube drive; Hudson has the quieter Hotchkiss drive.

3. Bodies bolted up on top of the frame develop unpleasant vibration from the rubbing action set up, and "squeaks" are almost impossible to eliminate. Buick bolts the Roadmaster body to the frame. Hudson uses an integral Monobilt body-and-frame* construction and the body and the frame are all one single unit.

HUDSON HAS A LOWER CENTER OF GRAVITY

Hudson has a lower center of gravity than Buick and is lower in over-all height than the Buick models. Moreover, because Hudson uses Hotchkiss drive, the driving force of the rear axle is cushioned as it is transmitted through the rear springs and results in greater flexibility, less "shock-torque" delivered to the passengers and it makes the ride easier.

BETTER REAR SPRINGING IN HUDSONS

Hudson's long, leaf-type, metal-covered rear springs, mounted in splayed position.

The Hudson system of rear springing is more costly and more efficient than the Buick "bucoil" coil-spring rear suspension used by Buick.

Coil springs are unable to resist driving thrust and have no effect in stabilizing the ride or holding the car on an even keel. Coil springs as used by Buick smooth out up-and-down motion only. The rear springs
Hudson built cars are of the semi-elliptic leaf type which smooth out up-and-down motion PLUS reducing side-sway and rolling on curves at all speeds. Hudson has also added a rear lateral stabilizer which works in conjunction with the splay-mounted rear springs to further reduce this rolling action. Hudson airplane-type shock absorbers complete the rear suspension combination that gives the level, gliding ride unobtainable in the Buick Roadmaster.

**HOTCHKISS DRIVE . . . A HUDSON FEATURE**

Hudson uses Hotchkiss Drive. Buick doesn’t offer this feature. Passenger comfort is increased with Hudson Hotchkiss Drive since flexibility and less unsprung weight (weight not supported by the springs) is achieved than in the Torque-tube Drive used by the Buick Roadmaster.

**IMPROVED SOUND INSULATION**

In the Hudson-built models, a silicon-asphalt-base, sound-deadening material, is applied at the factory to the entire under-body panel, from the front seat to the extreme rear body. Also, all panels are sound-deadened with an acoustical blanket of felt and other sound-deadening material. Hudson uses more sound-deadening material to increase passenger comfort than any other automotive manufacturer.

**HUDSON ADVANTAGES IN EFFICIENCY . . . GREATER PERFORMANCE AND ECONOMY**

In making an unbiased comparison of the Buick Roadmaster engine with both the Hudson Super-Six and Super-Eight engines, it should be noted that the design trend in automotive engines between 1925 and 1934 was toward greater piston displacement. However, between 1934 and 1949, almost the entire automotive industry has reversed the trend by decreasing the total piston displacement in the interest of more power, better performance and greater economy. Buick is one of the few manufacturers to cling to the large “gasoline-eating” bores. Compare the 320.2 cubic inches of Buick piston displacement with the smaller, more economical Hudson piston displacements of 262 cubic inches in the 6-cylinder engine and 254 cubic inches for the Hudson 8-cylinder engine.

The Buick Roadmaster engine is advertised at 150 horsepower. General Motors spokesmen agree that nearly 12 horsepower is absorbed by the Dynaflow automatic transmission, making the Dynaflow Roadmaster, Series 71 engine actually deliver less power than the Hudson models. However, in the interest of an impartial report we are dealing herein with the 150 horsepower figure.

**MORE POWER DEVELOPED PER CUBIC INCH IN HUDSON ENGINES**

Despite the fact that the Buick Roadmaster engine is 58.2 cubic inches larger than the Hudson Super-Six engine and 66.2 cubic inches larger than the Super-Eight engine, the Buick engine doesn’t develop as much power per cubic inch. This means that the Buick Roadmaster engine is less efficient and costs more to operate since the efficiency of an automobile engine is gauged by the amount of power it is capable of producing per cubic inch of piston displacement.

This is easily determined by dividing the peak horsepower produced by the engine’s cubic inches of piston displacement. Both of these figures may be obtained from the manufacturers’ catalogs. The figures show that the Hudson 6-cylinder engine, which is an ultramodern “High Compression” engine built to adapt to compression ratios up to 9.3:1 at any time in the future when 100 octane gasoline is available, develops .477 horsepower per cubic inch with an optional aluminum head using today’s 82 octane rated fuel. The Buick engine, which has been engineered to its peak performance at a staggering sacrifice in gasoline economy, develops only .468 horsepower per cubic inch. This means that each cubic inch of displacement in the Hudson Commodore-Six engine produces nearly 2% more horsepower with an accompanying saving in fuel. The standard Hudson-Eight engine shows an even better advantage over the Buick Roadmaster 8-cylinder engine inasmuch as each cubic inch of piston displacement in this Hudson engine develops .504 horsepower per cubic inch as compared to Buick’s much lower efficiency of .468—an advantage of more than 7% greater efficiency in favor of the Hudson Commodore-Eight engine.

**POWER-TO-WEIGHT RATIO**

Statements made by General Motors engineers indicate that efforts are being made by various divisions to reduce the weight of the cars. Notwithstanding this, the 1949 Buick Roadmaster 4-door sedan weighs 4200 pounds as compared with 4160 pounds for the 1948 model and is 575 pounds heavier than the Hudson Commodore-Six and more than 550 pounds overweight as compared with the Hudson Commodore-Eight.
Extra weight in an automobile places an added burden on each functioning unit and affects the performance and economy of the car as a whole. Extra weight is required to start and move each additional pound, and more fuel must be consumed in producing the extra power. To equal the performance of the car with less weight, the heaviest car must have much more power.

However, power-to-weight ratios in the Buick Roadmaster and the Hudson Commodore-Series cars are nearly identical. Each horsepower of the Super-Six engine, with optional aluminum head, moves 29.2 pounds and both the Roadmaster and the Hudson Super-Eight engines move 28.1 pounds. The major difference is that a much greater waste of horsepower, with accompanying expense from which the buyer receives no benefit, is required in the Buick Roadmaster to move the extra and unnecessary car weight which exists in the Buick model.

**OPTIMAL RATIO**

The real value of high compression is demonstrated in what it accomplishes in the aluminum cylinder head also offered as an option with the Hudson Commodore-Eight engine. The 7.1 to 1. ratio of this engine with aluminum head increases the power developed per cubic inch to 320 horsepower — 10% more power per cubic inch than Buick offers in the Roadmaster 8-cylinder engine.

**AUTOMATIC TRANSMISSION**

Hudson offers an optional Drive-Master automatic transmission. Buick calls automatic transmission Dynaflow. The Hudson automatic transmission drives through a standard transmission with no loss of power. Automotive experts say that 12 horsepower is lost in the Buick Dynaflow automatic transmission and it has long been known that as high as 15% average horsepower losses occur when driving is accomplished through hydrodynamic transmissions of the Buick type. Alternate methods of driving and shifting are available in the Hudson automatic transmission. Buick does not offer this advantage. There is no creeping at lights with the Hudson Drive-Master and shifting is done automatically when the driver so desires. The Buick automatic transmission shifts at a pre-set speed and the driver has no control over the timing of the shift as in the Hudson automatic transmission.

**CLUTCHES**

There is no hydraulic cushion in the Buick clutch to insure soft engagement. Instead, only the clutch lining serves to break the impact as the clutch faces contact. Hudson’s clutch friction surfaces are of cork, possessing the highest efficiency of any material used for this purpose. The oil cushion in the Hudson clutch provides for smoother engagement, eliminates chatter and grab, and the oil bath in which all operating parts of the Hudson clutch are continuously bathed prolongs the life of all working parts. Moreover, the oil cushion of the Hudson clutch carries away heat as rapidly as it is generated.

**COOLING SYSTEMS**

Automobile engines operate best in a temperature range from 140° to 180°. An overheated engine has a tendency to “ping” and a continuously hot engine increases engine wear. In the Hudson Commodore-Six engine, the cooling system circulates 18 quarts of water around six cylinders while Buick must cool eight cylinders with only 16 3/4 quarts of water. Whereas the Buick cooling system has 61 2/3% less cooling capacity than the Hudson-Six engine, it must do 25% more cooling. The Hudson Commodore-Eight engine also has a larger cooling capacity than the Roadmaster engine.

**BRAKES**

Hudson engineers are recognized as the pioneers in the elimination of useless weight. Because of Buick’s excess weight more brake area is required than in the Hudson-built cars. Whereas the modern automotive engineering trend is toward smaller wheels and larger tires, Buick requires brake drums 12 inches in diameter as compared to the equally efficient 11-inch diameter brake drums used in Hudson-built cars. Buick brakes do not offer the added protection of the reserve braking system which Hudson has. This exclusive feature protects the occupants of the Hudson-built car in the event anything should happen to the hydraulic system. While there is slight chance of this occurrence, Hudson even provides against this possibility with this extra mechanical braking system, operating from the same brake pedal. Buick has added a “step-on” parking brake . . . but the Triple-Safe braking system is exclusive with Hudson.

**WHEEL-SHIELD FEATURE**

Careful consideration of owner-convenience has also been designed into the Hudson rear wheel-shields which are a part of the Hudson body and continue the line of the lower trim moulding to emphasize Hudson’s low streamlined beauty. When changing a rear tire, the Hudson wheel-shield is removed in five seconds or less by finger-tip pressure on a spring-loaded rattle-proof lock. To remove the fender-skirts from the 1949 Buick Roadmaster, the operation must be performed with a tire wrench and by removing a clamping bolt.
What Hudson's Commodore Series Have... That Buick Asks the Roadmaster Buyer to Do Without

- **Step-Down Feature**
  Projecting units have been eliminated in the Hudson-built Commodore-Series models by absorbing them into the general body contour and making possible many advantages unobtainable in the Roadmaster.

- **Exclusive Hudson Monobilt Body-and-Frame**
  Utilization of the vital space between frame members as the "step down" zone, makes possible unique streamlined beauty, coupled with battleship ruggedness and safety.

- **Scientific Roominess**
  Hudson design has been influenced by scientific development rather than a gradual mutation of the species, as in the Buick Roadmaster. The interiors of Hudson cars have more room and more usable room taken from almost any measurement than the Buick Roadmaster.

- **More Economical Weight**
  Despite the fact that General Motors engineers have endeavored to reduce the weight of the Buick Roadmaster for 1949, it weighs more than the 1948 model. Extra weight means an added burden on performance and less economy. Hudson models have a more economical weight.

- **Greater Weight Economy**
  Although the power-to-weight ratios of the Roadmaster and Hudson engines are almost identical, the Roadmaster engine must pull 575 pounds of waste weight more than the Hudson Commodore-Six and 550 waste pounds more than the Hudson Commodore-Eight.

- **Lower Center of Gravity**
  The Hudson Commodore models have a lower center of gravity than the Buick Roadmaster, plus the lowest bug-the-road characteristic of any American stock car.

- **Optional Ratio**
  The 7.12 to 1 ratio of the Hudson optional aluminum cylinder head increases engine performance in both the Six and Eight.

- **Drive-Master Automatic Transmission**
  The Hudson optional Drive-Master automatic transmission offers three different ways to drive, the Roadmaster automatic transmission offers only one. The Buick device is more costly and results in power loss.

- **Fluid Clutch**
  There is no hydraulic cushion in the Roadmaster clutch. The Hudson Commodore-Series offers this advantage which eliminates chatter and grab and makes for longer life of all working parts and softer, smoother clutch action.

- **Larger Cooling Systems**
  Both the Hudson Commodore-Six and the Hudson Commodore-Eight engines have cooling systems of larger capacity than the Roadmaster engine, despite the fact that in the case of the Hudson-Six, there are less cylinders to cool.

- **Three Braking Systems**
  The Hudson models offer proved hydraulic brakes, a separate reserve mechanical braking system operating from the same pedal, plus a parking brake. Buick offers only the hydraulic and the parking brake.

- **Hotchkiss Drive**
  More flexibility and less unsprung weight is made available by the Hudson use of Hotchkiss Drive. Buick substitutes torque-tube drive which transmits more tire noise to the car body.

- **Shorter Turning, Easier Parking**
  Compare the turning circle diameter of the Buick Roadmaster, 44.8 feet, with the much shorter turning circle of the Commodore Series—only 41 feet. This means easier parking and easier turning in restricted areas in Hudsons.

- **Improved Sound Insulation**
  Valve-in-head engines are notably noisier than the Hudson L-head type. Unpleasant vibration results from bolting the body to the frame as compared to Monobilt construction—plus Hudson's improved sound insulation.

- **Semi-elliptical Rear Springs**
  In the Hudson models, the splay-mounted semi-elliptical rear springs absorb the driving force and cushion the ride. The Roadmaster does not have this feature, using, instead, a rigid torque-tube arrangement.

*Trade-mark and patents pending.