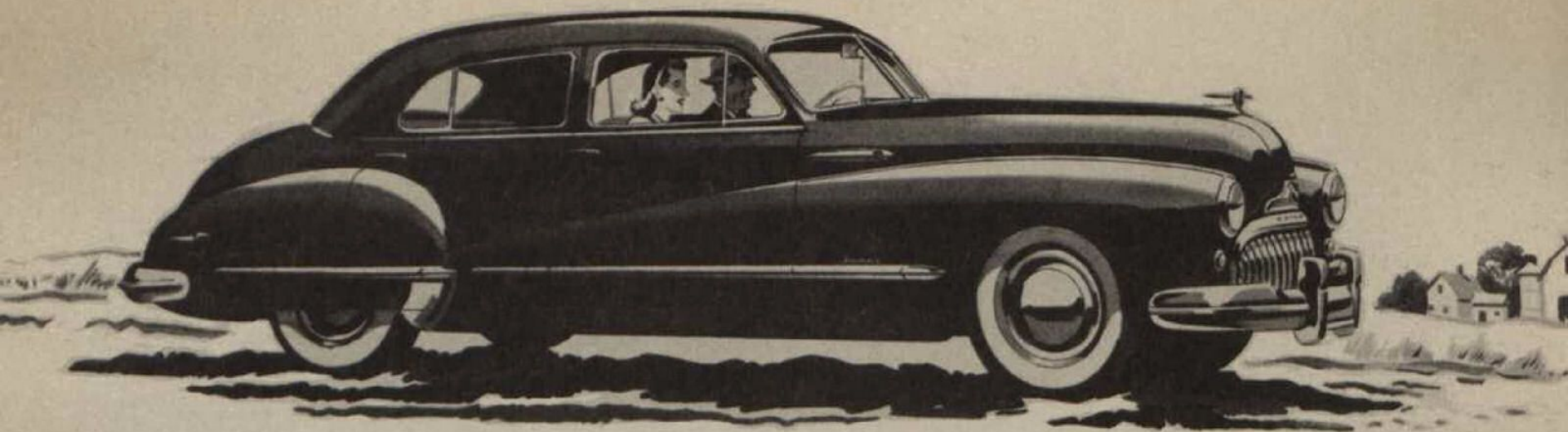
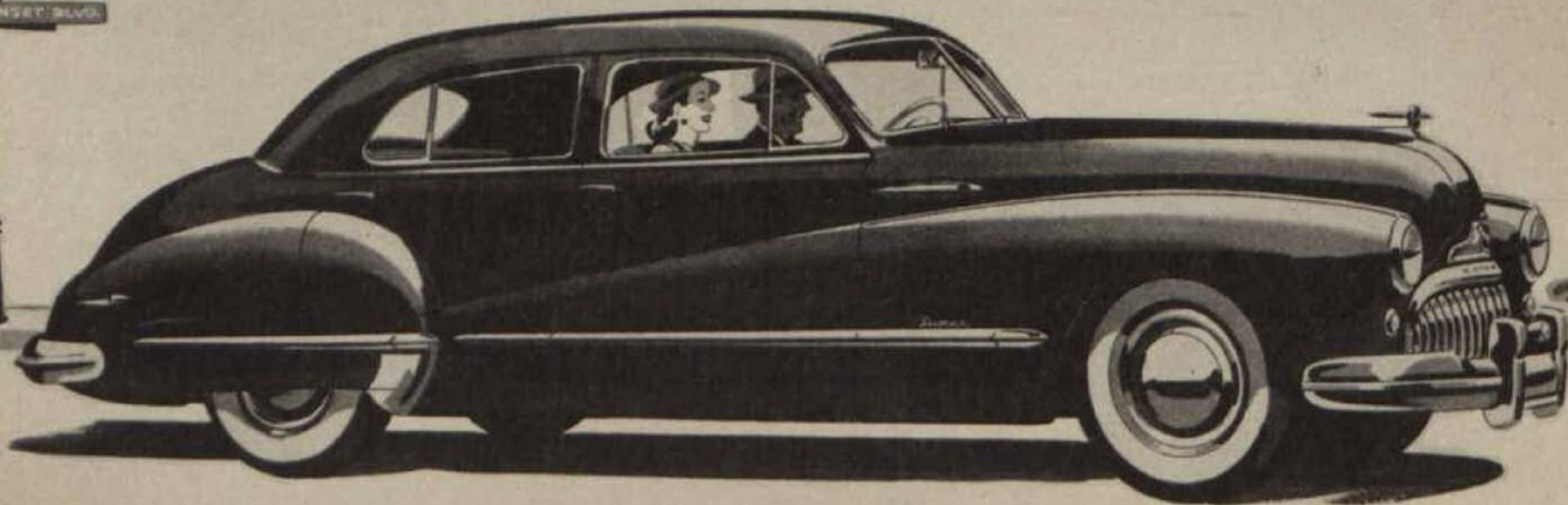


The
wonderful
ride that's
wrapped in
velvet

BUICK'S VIBRA-SHIELDED RIDE
—SMOOTHEST STORY
OF THE YEAR!



On back road or boulevard—Buick's ride
is the envy of the industry



PUT A NEW BUICK through its paces and you experience a ride incomparably smooth and buoyant—a ride so unique in sheer comfort and quiet that it has won the envious respect of even competitive car builders.

There are many reasons for this, and they all sum up to one word—*engineering*.

For under its fashion-plate style lines, the beautiful new Buick is *ride-engineered* more completely than any other car built.

Here, Buick engineers have gone beyond the obvious and customary steps in cushioning the car. They have built-in velvety

softness and smoothness through a number of major engineering features found in no other automobile.

On the following pages are explained the reasons for Buick's superb riding qualities—for its jar-free going over ruts and ridges—for its level flatness over roller-coaster roads—for its matchless buoyancy over country lane and concrete highway.

And you will be introduced to the crowning achievement that puts even more velvet in this velvety ride—that makes Buick smoother, quieter and more fatigue-free than this envied car has ever been before.

Source of Buick's silky smoothness

Into Buick's building goes meticulous care for your comfort—with no less than eight important steps Buick engineers take to make your ride smoother, more buoyant, more velvety-soft on all roads.

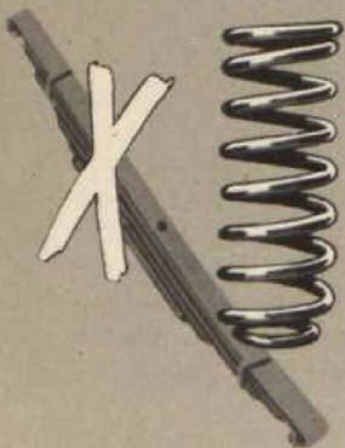
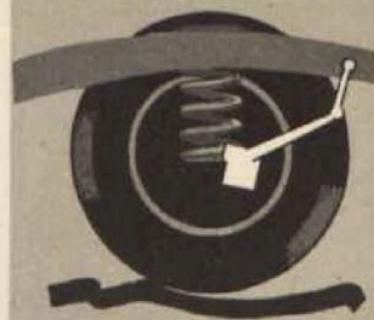


NEW, LARGER, LOW-PRESSURE TIRES ON EXTRA-WIDE RIMS

From the ground up, Buick's ride starts with softness—with larger, lower-pressure tires mounted on Safety-Ride rims. These rims—a half to one-and-a-half inches *wider* than other rims—permit more air volume in the tire at even *lower* pressure. So you ride softly pillowed against road tremors.

SHOCK ABSORBERS—SPECIALLY CALIBRATED

Buick's shock absorbers are engineered to react instantly when a wheel hits a bump. They stop tremors and snub jars with quick precision—and are so calibrated, they maintain a balance that makes front-seat and rear-seat rides equally soft, flat and easy.

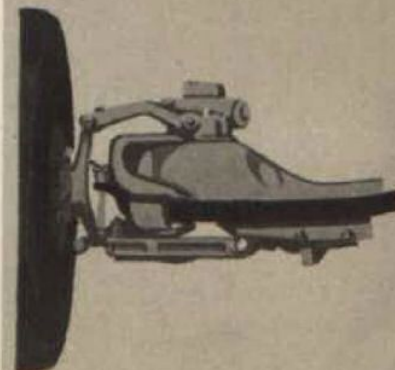


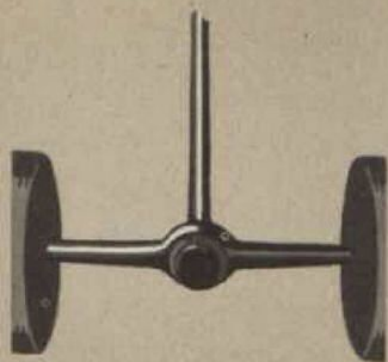
QUADRIFLEX COIL SPRINGING

Like those in your innerspring mattress, Buick's springs—*all four of them*—are gentle *coils* of tempered steel. They give each wheel its own cushion of the softest type known—soak up road roughness almost magically—account largely for Buick's uniquely buoyant, matchlessly level ride.

FRONT STABILIZER—SIZED FOR SOLIDITY

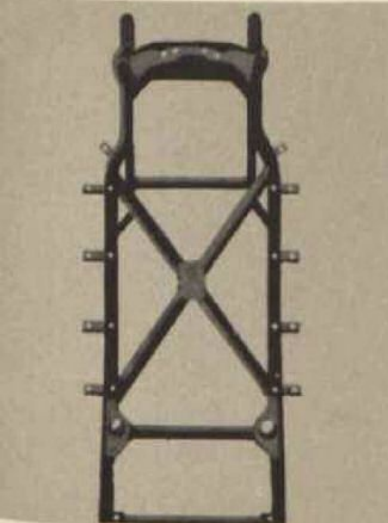
To hold the front end firm and true under *all* conditions, Buick engineers use a specially-sized stabilizer. So there's no disturbance of the front-end geometry which gives proper caster and camber to the wheels—allows them to bank on curves, recoil under road shock.





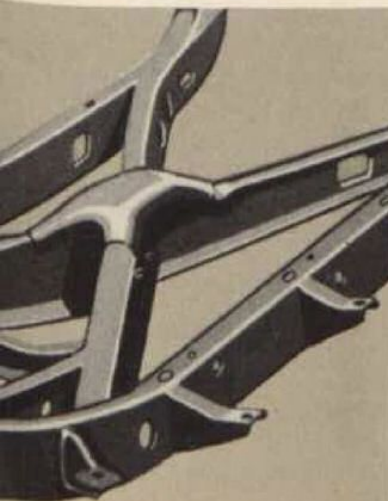
TORQUE TUBE THAT TAKES ALL DRIVE THRUST

Here in Buick you find a completely sealed, rigid, full-length torque-tube bolted to the rear end in perfect T-square alignment. This absorbs *all* the driving thrust so often put on rear springs. Buick springs are free to do nothing but cushion the car.



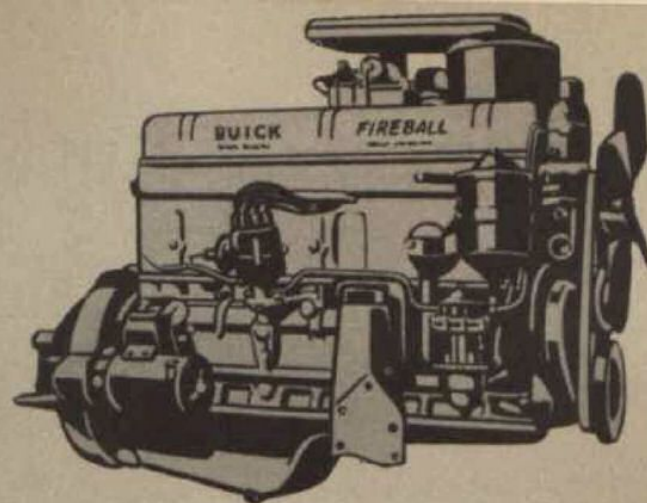
HUSKY, X-BRACED FRAME

Skimping on nothing, Buick engineers use a wide, X-type cross member frame for maximum rigidity and balance. This stalwart frame literally acts as a bulwark against road shock and jar. Deep side rails running straight and practically parallel from dash to rear assure maximum strength and resistance to torsion.



BODY MOUNTINGS IN SILENT ZONES

From exhaustive tests, Buick engineers determined the most vibration-free points—the *silent zones*—for the placing of all body bolts. Using two rows of bolts instead of one, the frame and body are joined firmly—with each mounting adjusted to the exact requirements at each point. Metal-to-metal contacts are eliminated—vibration and road noise are deadened beyond human perception.



MOST IMPORTANT: THE ENGINE —MICROPOISE BALANCED

So precisely balanced is Buick's famed Fireball engine that—ounce for ounce—it's smoother than the watch on your wrist. For this valve-in-head straight-eight power plant goes through an operation not duplicated in any other automobile factory — micropoise balancing *after* assembly.

First, of course, every part is checked and re-checked for weight and dimensions *before* assembly. Pistons are sorted in matched and balanced sets. Flywheel, crankshaft and clutch are balanced as a *unit*, not merely as separate parts. And cylinders are automatically bored with superprecision, then double honed.

Now, the finished engines are micropoise balanced. Each is run on a specially designed machine. A sensitive pointer catches every hint of vibration and shows not only *if* this engine is out of balance, but *where*. Then corrections in flywheel weight promptly bring it within a small fraction of an inch-ounce of perfection.

These steps, capped by Buick's exclusive micropoise balancing *after* assembly, are what make the mighty Fireball engine "the smoothest thing that runs".



Now, to the superbly velvety ride-qualities inherent in Buick from these eight great features, Buick engineers have added a crowning achievement—Vibra-Shielding!



Vibration is the villain

To understand the importance of Buick's Vibra-Shielding to car comfort and smoothness, you should first meet the villain: Vibration.

Anything that moves—from a spinning top to a mammoth turbine generating power—is subject to some vibration.

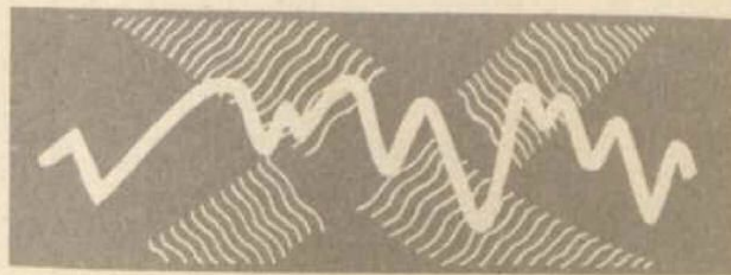
In a car, vibrations are damped at their individual sources—at the engine, the drive shaft, the wheels, the springs, and so on.

You have seen the strict and complete engineering care Buick takes at all these points; so complete, in fact, that vibrations are kept beyond the threshold of human perception.

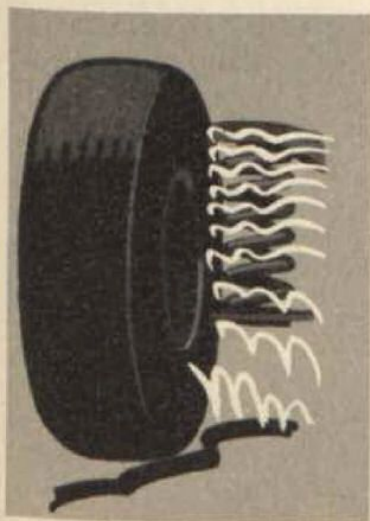
Yet even in this utterly smooth car, a bugaboo remained that has always

plagued the automobile industry.

That's vibration build-up—the synchronizing or teaming up of tiny, imperceptible tremors into bigger ones you might actually feel, that could eventually tire you.

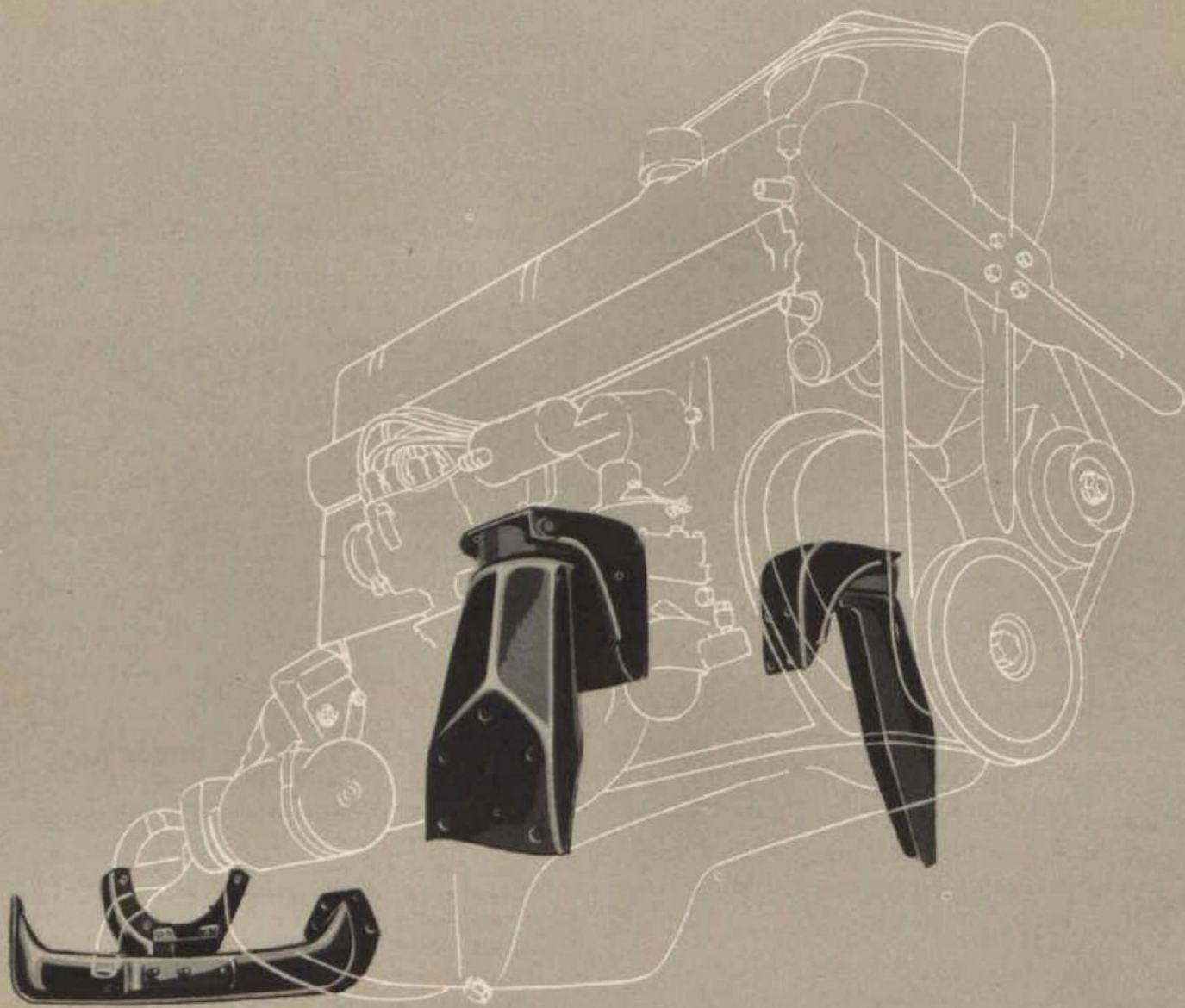


It comes when any tremors elsewhere in the car make the engine shake on its mountings. The mountings, of course, cannot be rigid. They must be flexible, to insulate “engine sensation” from the car’s occupants.



Buick's Vibra-Shielding, for the first time, insulates “engine sensation” and at the same time prevents vibration build-up!

Putting vibration to sleep



HOW BUICK's Vibra-Shielding puts an end to vibration build-up is really amazingly simple. *The engine is mounted in a new way.*

Finding that new way was *not* simple.

That's because every automobile engine must be permitted a slight freedom in movement. As the engineers put it:

Every engine tries to "wag its tail, bob its head and shake on its axis" to meet varying operating conditions.



Engine mountings must permit some of this freedom of motion, yet hold the engine securely and prevent this motion from being noticed by the car's passengers.

So Buick engineers set out to find a new mounting that would do the required job and at the same time keep vibrations from building up.

They developed special scientific vibrator tests. They conducted them, painstakingly and exhaustively, over a period of several years. And they finally got it—*Hi-Poised mounting*.

They found that the engine's varying frequencies were controlled most effectively by putting the

main mountings at two points high up on the engine, and towards its center—a radical departure. This Hi-Poised mounting gives the engine a *suspension* rather than the usual *support* arrangement.

And the engineers came up with a new kind of engine-mount cushion—a thick pad of synthetic rubber that could be *exactly* compounded to smother vibrations trying to pass through it.

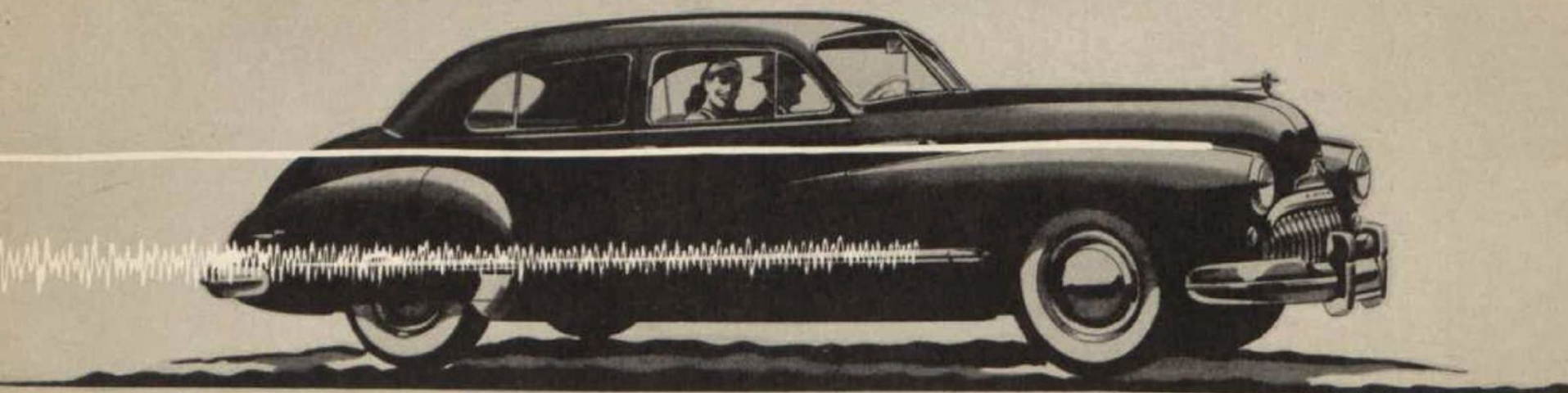
As a result of this new kind of mounting, the silky-smooth mighty Fireball engine now has even more smoothness. It can move as an engine should—"wag its tail, bob its head and shake on its axis." And its more effectively controlled movements cannot get in tune with vibrations coming from outside sources. Vibration is put to sleep!



Whether transmitted through the frame towards the engine, or vice versa, vibration is smoothly straightened out and damped by the new mounting pads. Different vibrations cannot synchronize, cannot build up into bigger ones.



Buick's Vibra-Shielded Ride

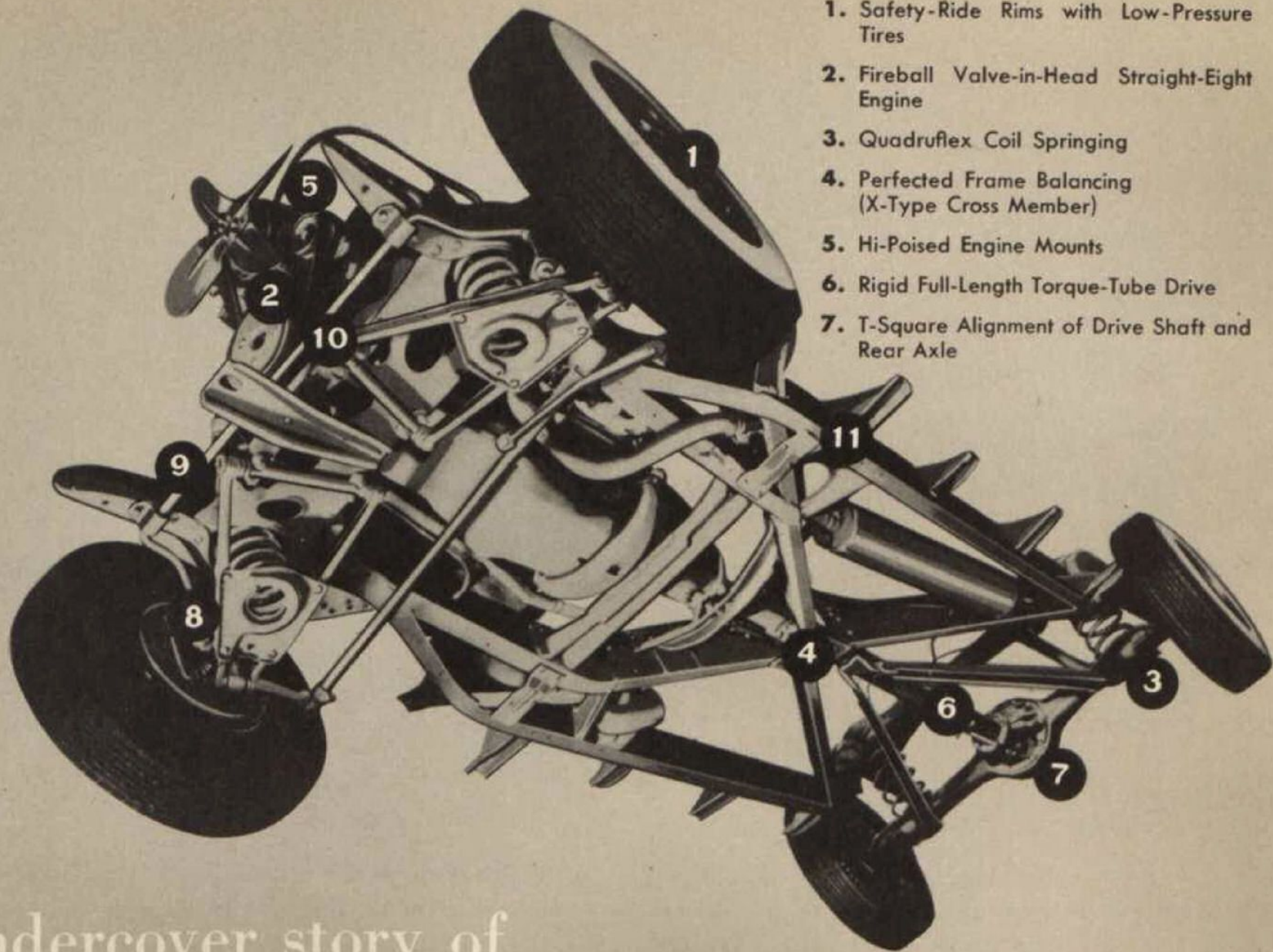


BUICK'S INTRODUCTION of Hi-Poised engine mountings is as important a step forward in the control of car vibration as was the introduction of shock absorbers in their leveling effect on rough roads.

It results in what we call the Vibra-Shielded Ride. It adds to the smoothest ride in the world a new velvety smoothness. It lends to Buick's quiet going a new living-room quiet. It brings to Buick's buoyant comfort a new easy-chair comfort.

For here is truly an engineering achievement. Now, engine sensation is almost imperceptible. Now, road noise is reduced to an unbelievable degree. Now, motoring fatigue is a thing of the past.

When you drive a new Buick you'll know what we mean. For only by experiencing the living-room quiet and ease of this fatigue-free motoring can you really know the utter comfort of Buick's Vibra-Shielded Ride—the wonderful ride that's wrapped in velvet!



1. Safety-Ride Rims with Low-Pressure Tires
2. Fireball Valve-in-Head Straight-Eight Engine
3. Quadruflex Coil Springing
4. Perfected Frame Balancing (X-Type Cross Member)
5. Hi-Poised Engine Mounts
6. Rigid Full-Length Torque-Tube Drive
7. T-Square Alignment of Drive Shaft and Rear Axle

Undercover story of
Buick's wonderful ride

8. Rapid-Reacting Shock Absorbers
9. Buick-Engineered Stabilizers
10. Front-End Geometry
11. Silent Zone Body Mountings

Buick's

THE ONE AND ONLY WITH

*Vibra-Shielded
Ride*

WHEN BETTER AUTOMOBILES ARE BUILT, BUICK WILL BUILD THEM

BUICK DIVISION OF GENERAL MOTORS