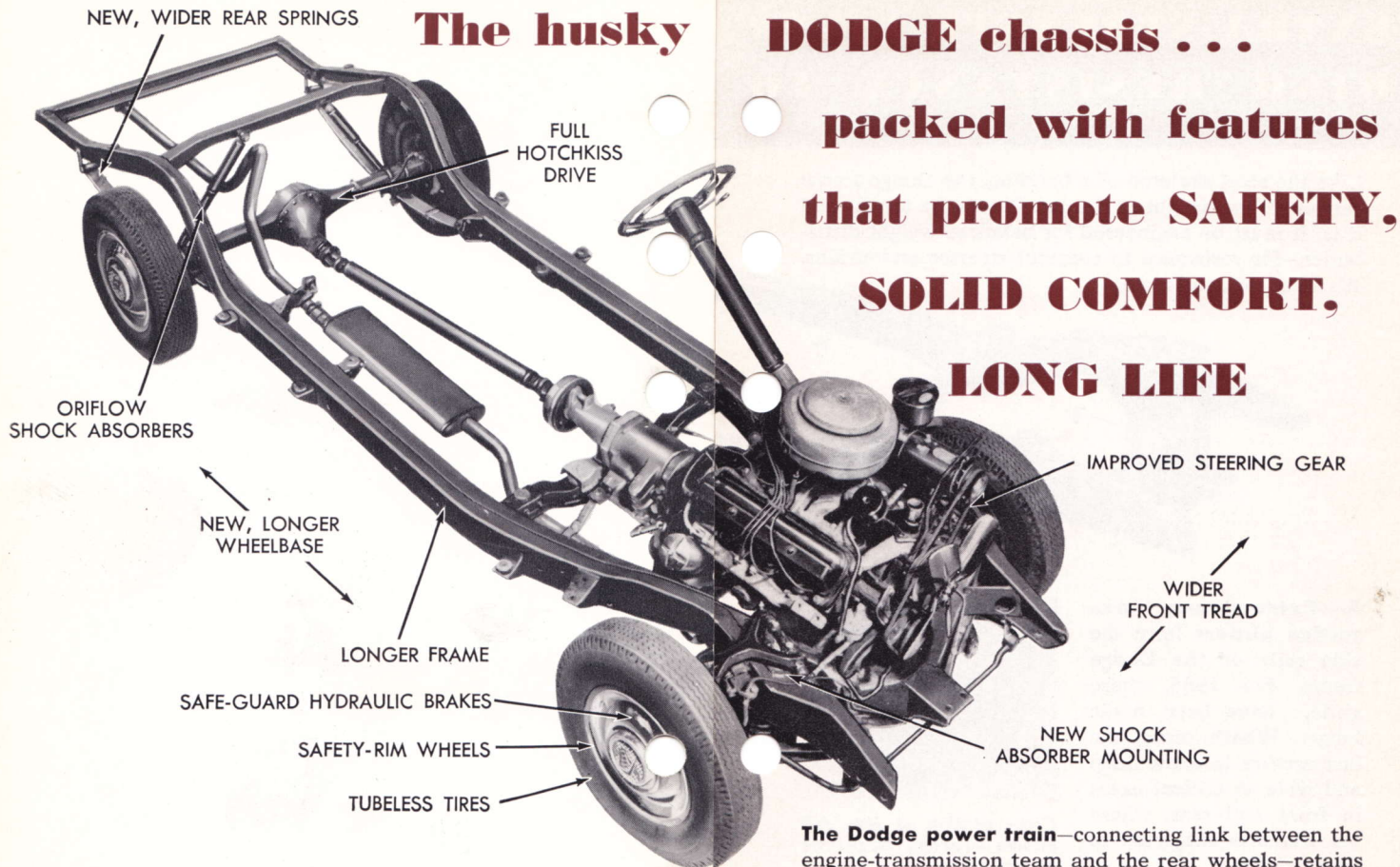


SECTION

E

CHASSIS



The husky

DODGE chassis . . .

**packed with features
that promote SAFETY,
SOLID COMFORT,
LONG LIFE**

Famous Dodge dependability is emphasized again and again in the Dodge chassis for 1955. The frame has been strengthened to make it even more rigid—more resistant to twisting. Springing and suspension, as well as shock absorber mountings, have been improved to give a smoother ride. A redesigned suspended pedal system makes famous Dodge Safe-Guard hydraulic brakes even easier to operate. (The new suspended clutch pedal is covered on page D-32.) And a relocated brake master cylinder is more accessible for servicing.

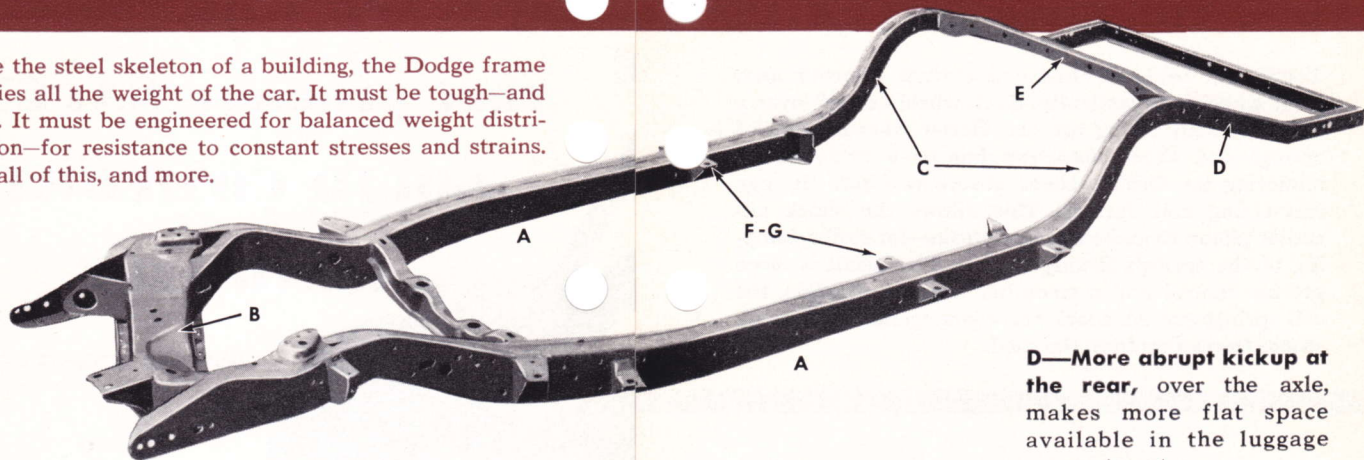
The Dodge power train—connecting link between the engine-transmission team and the rear wheels—retains all the outstanding features of last year. From the tubular propeller shaft to the hypoid rear axle, it's engineered to let you sell smooth, quiet, dependable performance.

The entire Dodge chassis is a superbly designed, perfectly integrated unit that provides the right foundation for the engine, transmission, and the beautiful new Dodge body. It makes a major contribution to safety, convenience, comfort and pleasure to help you sell the finest Dodge ever built.

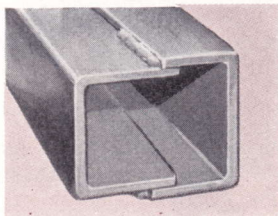
EXTRA STRENGTH GIVES HIGH RESISTANCE TO

THE 1955 DODGE FRAME TWISTING AND IMPACT...

Like the steel skeleton of a building, the Dodge frame carries all the weight of the car. It must be tough—and it is. It must be engineered for balanced weight distribution—for resistance to constant stresses and strains. It's all of this, and more.



A—Extra-strong box-section girders form the side rails of the Dodge frame. For 1955, these girders have been made longer. What's more, the box section is extra deep and wide at critical areas in front and rear, where the frame is subjected to greater stress.



Cross section of side rail shows sturdy, box-type construction

B—Front crossmember is more rigid, with no large cutouts or surface irregularities. Heavy-gauge steel and additional reinforcements provide a solid base for the front suspension.

C—An abrupt upsweep in the forward part of the frame kickup provides more space for the rear seat cushions. Full-depth cushions can be used. This also allows use of a wider rear door bottom section for easier entry and exit.

D—More abrupt kickup at the rear, over the axle, makes more flat space available in the luggage compartment.

E—Rear shock absorber crossmember is huskier. To provide a firm anchor for the rear shock absorbers, the crossmember is attached to the frame with additional welds. It makes the Dodge frame exceptionally resistant to twisting forces in the rear area.

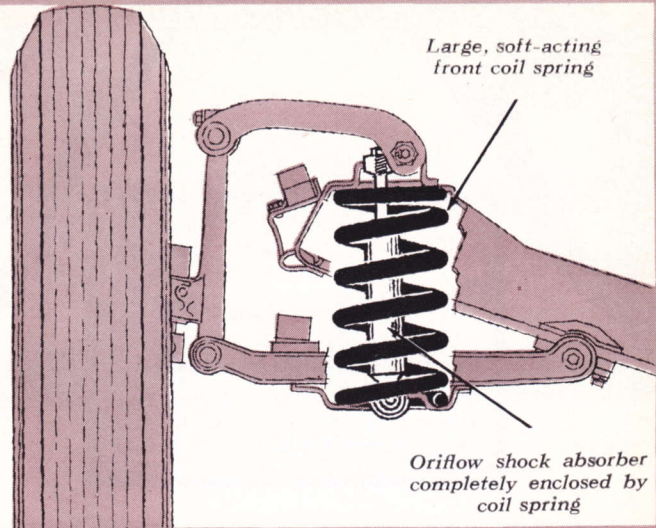
F—Extra body mount brackets give more support. Brackets that support the Dodge body are less subject to flexing because they are short and unusually rigid. Two additional brackets have been added on the inboard sides of the frame rails to provide better body attachment.

G—Two additional rubber body mountings have been added this year to make a total of fourteen. There is no metal-to-metal contact at the attaching points. Road shocks and engine vibrations are absorbed before they reach the car's body.

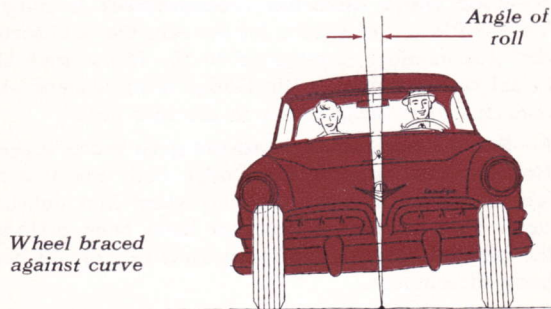
Rubber limit bumpers, front and rear, prevent any metal-to-metal contact between the frame and suspension in case super-sized bumps should cause complete compression of the springs.

DODGE FRONT SUSPENSION LEVELS BUMPS, LETS DODGE HUG THE ROAD ON CURVES

Tough but resilient steel coil springs suspend each front wheel independently. Each wheel can lift over a bump without tilting the car. Better co-ordination of springs and shock absorbers has been achieved by mounting the Oriflow shock absorbers *inside* the big, easy-acting coil springs. This allows the shock absorber piston to make a longer stroke—for softer damping of the spring's flexing motion. The result is more precise control and a smoother ride. In addition, the coil springs protect shock absorbers against damage by stones thrown up from the road.

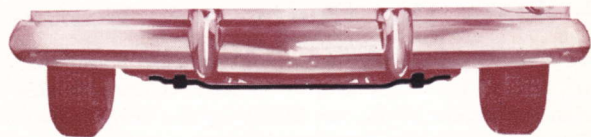


Dodge high roll center resists tilt on curves



Centrifugal force causes any car to lean outward on sharp curves. In producing a more stable roll center, Dodge nonparallel suspension arm design provides a countering force on the low side of the tilt that automatically pushes the bottom of the front wheel outward, bracing it against the curve. This bracing action sharply reduces the amount of tilt (or body roll) to considerably less than that of the average car.

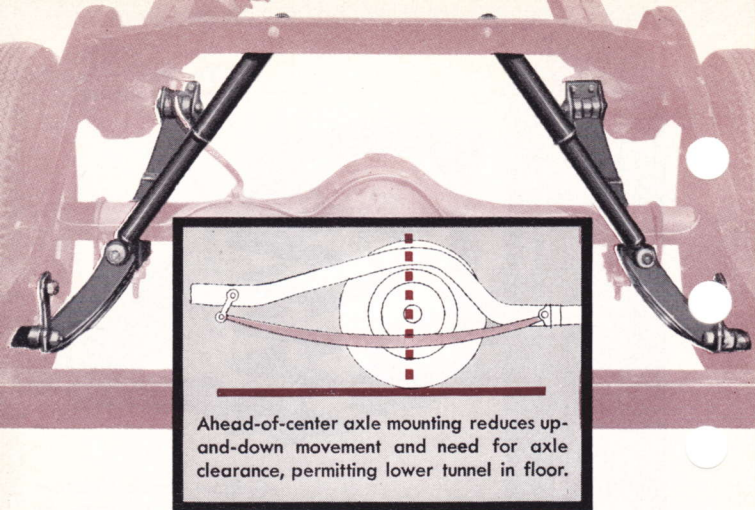
Dodge sway eliminator adds stability



A sturdy steel torsion bar extends across the front of the Dodge and connects to each side of the front wheel suspension system. It further reduces body tilt or roll by resisting these forces in proportion to the degree of tilt. The combination of the high roll center front wheel suspension and the sway eliminator gives Dodge ground-hugging stability far superior to that of most cars.

Wider front tread gives broader footing

Your 1955 Dodge has a front tread of 58.91 inches, an increase of 2.97 inches. These extra inches give Dodge a broader base or footing on the road surface and provide additional control of any tendency to tilt.



Ahead-of-center axle mounting reduces up-and-down movement and need for axle clearance, permitting lower tunnel in floor.

DODGE REAR SUSPENSION MINIMIZES REAR-END SWAY —floats the Dodge over bumps

New rear springs with wider leaves (2.50") are "toed-in" toward the front to give extra resistance to side-wise movement of the car. Mounting the Oriflow shock absorbers with the lower ends angled outward (sea-leg fashion) adds still more resistance to sidesway. Rear shock absorbers also have a longer stroke this year for softer damping of the springs' flexing motion. Wax-impregnated liners between spring leaves provide lifetime lubrication.

Long, easy-acting Dodge rear springs are rubber-insulated from the frame for extra quietness. These rubber bushings at spring mountings are larger this year, and eliminate the need for lubrication.

Springing is synchronized, with Dodge rear springs having a slightly faster recovery from a bump than the front springs. When you hit a bump, your Dodge levels off quickly, without "seesawing," because the rear springs catch up with front spring action.

Oriflow shock absorbers give full-range ride control over bumps

In controlling spring action to minimize bouncing when bumps are encountered, Oriflow shock absorbers are unmatched in the automotive industry.

Their unique design gives perfectly proportioned control over the *full range* of spring compression and rebound; for small, moderate or large bumps. They are particularly outstanding, however, in the upper range of control—where a combination of car speed and size of bumps produces shocks that really put shock absorbers to the test.

As a matter of fact, tests show that Oriflow shock absorbers can absorb shocks 2½ times stronger than the most severe shocks controlled by ordinary shock absorbers.

HERE'S WHY:

In Oriflow shock absorbers, control over spring action depends primarily on the flow of fluid through calibrated orifices or holes in the shock absorber piston. The faster the piston tries to push fluid through these orifices, the greater the resistance, and *the greater the control of spring and wheel movement.*

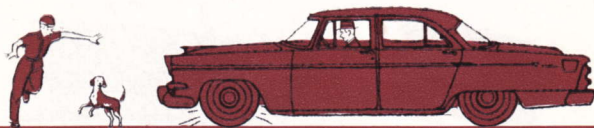
In ordinary valve-type shock absorbers, control over spring action depends primarily on the flow of fluid through spring-loaded valves. The faster the piston tries to push fluid through these valves, the wider the valves open. Finally, the valve opening becomes so large that the pressure in the shock absorbers is virtually "spilled," and *the control over spring and wheel movement becomes negligible.*

DODGE SAFE-GUARD HYDRAULIC BRAKES

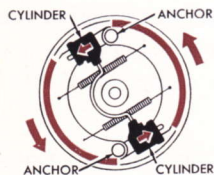
stop you smoothly, safely

Dodge Safe-Guard hydraulic brakes give maximum stopping power and safety with minimum physical effort. You can depend on getting just the degree of braking you ask for . . . to give smooth, controlled, straight-line stops.

as quickly as you wish

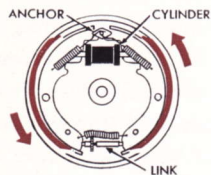


Extra braking in front where it's needed



Dodge Safe-Guard hydraulic brake

Any car has a tendency to shift its weight forward when stopping. This adds more traction at the front wheels. Dodge takes advantage of this added traction by giving the front wheel brakes more stopping power. Two hydraulic cylinders and two shoe anchors are used in each front brake instead of the usual single cylinder and single anchor used on all competitive cars.



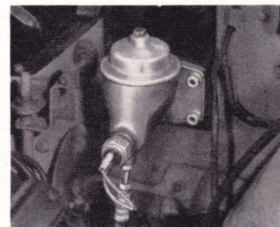
Competitive servo-type brake

With two cylinders and two anchors, each of the two brake shoes is forced independently against the drum for even, positive braking action.

Competitive servo-type brakes, with only one cylinder, tend to be erratic and unpredictable. The single cylinder forces the shoes away from each other against the drum at the top. Both shoes are free to turn slightly with the drum until the rear shoe meets the single anchor. The front shoe then forces the rear shoe hard against the drum, leading to uneven lining wear and unbalanced, inefficient braking.

Dodge brake master cylinder now easier to service

For 1955, the Dodge brake master cylinder has been moved to the engine side of the dash panel. Here it is easily reached whenever it is necessary to add brake fluid or perform service.

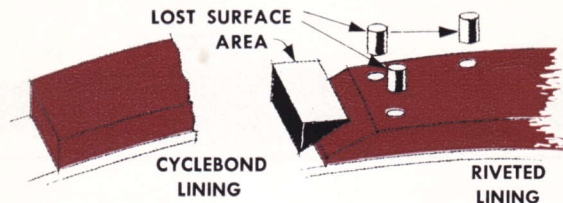


New suspended brake pedal has more natural feel

The new, easy-acting, hanging-type Dodge brake pedal eliminates need for a hole in the toeboard which could admit dust and drafts. Arc of travel of this new pedal gives a more natural feel and the linkage is designed to provide a constant mechanical advantage for the full travel of the pedal. Pedal linkage is nylon-bushed for long pivot life. No lubrication is required. On cars equipped with PowerFlite, the new brake pedal is eight inches wide. Left- or right-foot operation is equally convenient. This should prove a big help, especially when inching into tight spots.



DODGE CYCLEBOND BRAKE LINING GIVES UP TO 50% LONGER LIFE



You get brake lining wear practically down to the brake shoes with Dodge Cyclebond brake linings. That's because they're permanently fused to the shoes—need *no rivets*. What's more, you get about 15% extra lining contact area because you save the space used by rivet holes and tapered ends in ordinary brake lining. Cyclebond lining not only lasts longer, it prevents scoring and scratching of drums. This is a common fault of ordinary lining that has rivet holes which collect dirt and grit.

Dodge independent parking brake gives the protection of a second braking system

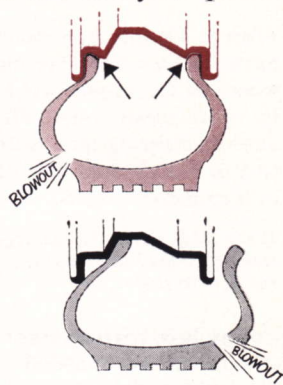
This important safety feature is *exclusive* with Dodge in its class. It's entirely separate from the service brakes and operates on a drum mounted on the propeller shaft. It provides a reserve braking system you can call upon in an emergency.

In all competitive cars, the parking brake is simply a mechanical hand lever hooked up to the regular service brakes. As these brakes wear, the parking brake loses holding power and must be continually adjusted if it is to be useful and safe.



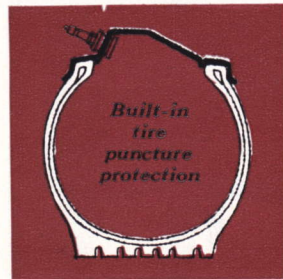
DODGE SAFETY-RIM WHEELS hold blown-out tires securely in place

You can bring a Dodge to a safe, controlled stop if you should ever blow a tire on Dodge Safety-Rim wheels. Protective retaining humps on the rim keep the beads of the tire on the wheel—prevent the tire from being thrown off the rim. With conventional wheels, a blowout usually means a whipping tire that could cause loss of control by the driver.



New puncture-protected tubeless tires in- crease blowout protection, give better traction

Now, Dodge brings motorists the added safety, convenience, and economy of a tire that uses *no inner tube*.



With an air-tight seal around the rim, and puncture protection built into the casing, this tire will run for many miles without going flat even with a nail through the casing. Actual tests show flats are five times more frequent with ordinary tires than with tubeless tires.

Better control on slippery pavement

New, flatter tread permits greater tire contact area on the pavement for up to 15 per cent better traction and control on wet or icy surfaces. In addition, it improves riding comfort.

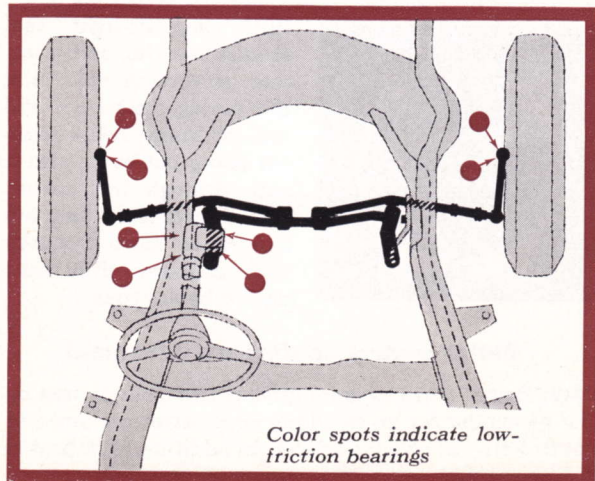
DODGE MANUAL STEERING IS EASY AND RESPONSIVE

With a Dodge, you don't have to turn the steering wheel as far as you would in most other cars. The over-all steering ratio is 26 to 1 in V-8 models, 23 to 1 in 6-cylinder models.

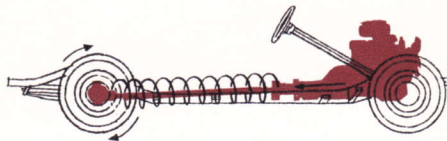
Only 4½ turns of Dodge steering wheel take you from full left to full right



Dodge low-friction steering gear linkage lessens the amount of effort needed to turn the wheels. Dodge uses the highly efficient worm-and-roller type of gear, with roller bearings. There's a ball thrust bearing at each steering knuckle, and a roller bearing at the top of each kingpin, where most cars use an ordinary bushing. A new 3-tooth roller steering gear makes control more precise and adds to ease of handling.



ENGINE POWER DELIVERED TO REAR WHEELS THROUGH QUIET, HIGHLY EFFICIENT DODGE DRIVE TRAIN

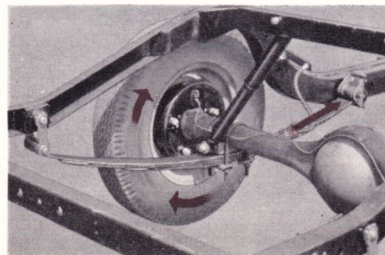


The Dodge tubular propeller shaft is relatively light in weight. It provides exceptional strength for transmitting high torque. Precise balancing of the shaft prevents annoying vibrations at all speeds.

Universal joints, located at both ends of the propeller shaft, are the superior ball-and-trunnion type. Working parts are completely enclosed and protected from water, slush, and grit. Large bearing areas promote long life. Trunnion balls are equipped with roller bearings to hold down friction.

Smooth-meshing hypoid gears, with unusually large contact areas for long life, transfer power "around the corner" from the propeller shaft to the rear axle. They are exceptionally strong because there are more teeth in mesh at one time to distribute heavy loads. Dodge rear axle shafts have high-load-capacity, tapered-roller bearings to reduce friction.

Dodge Hotchkiss drive lets the rear springs absorb sudden shocks of starting and stopping. As you can see



in the photograph, the forward thrust of the wheels is transmitted to the frame through the springs. This cushioning effect adds to riding comfort.