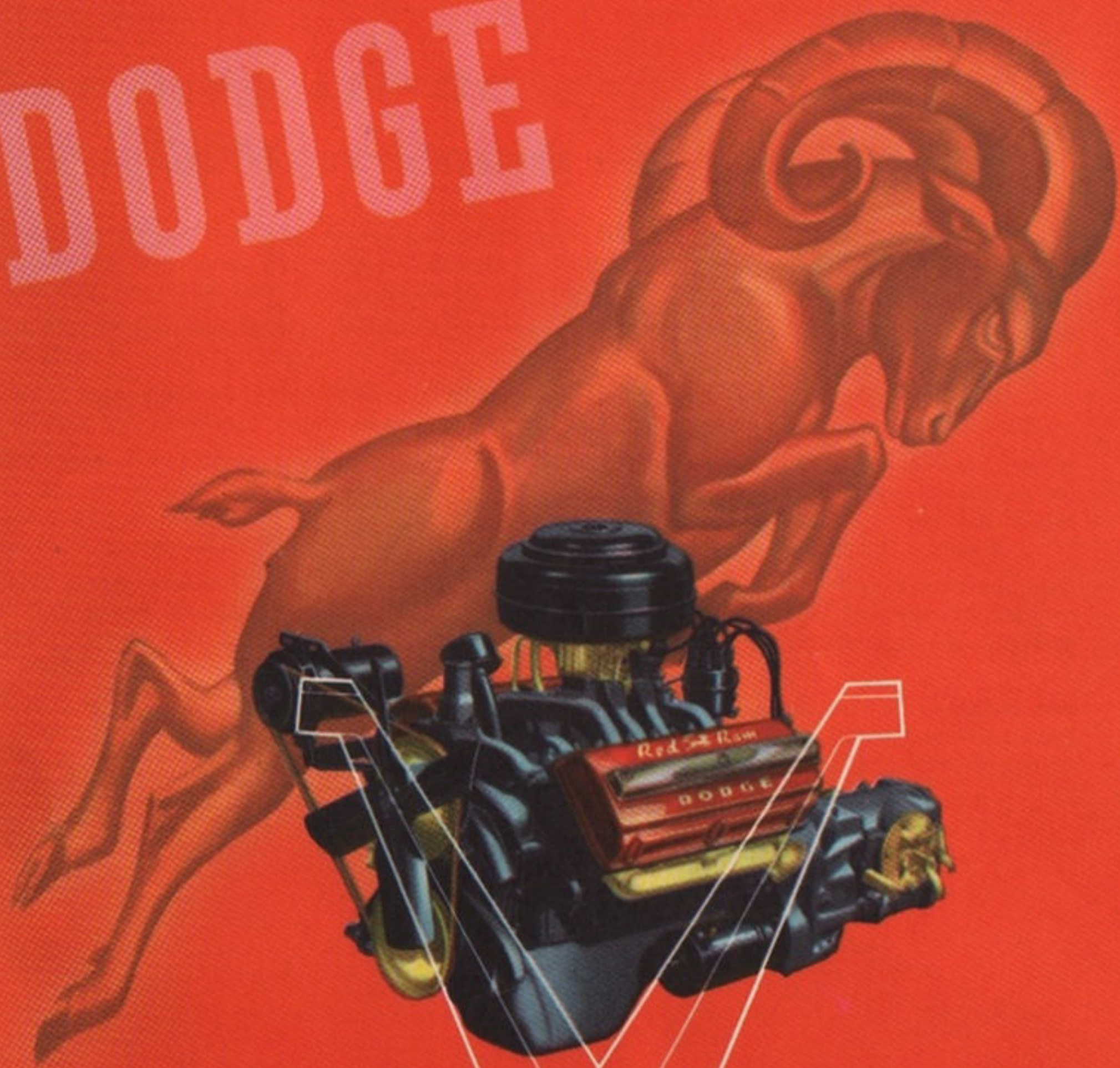


THE SENSATIONAL NEW

DODGE

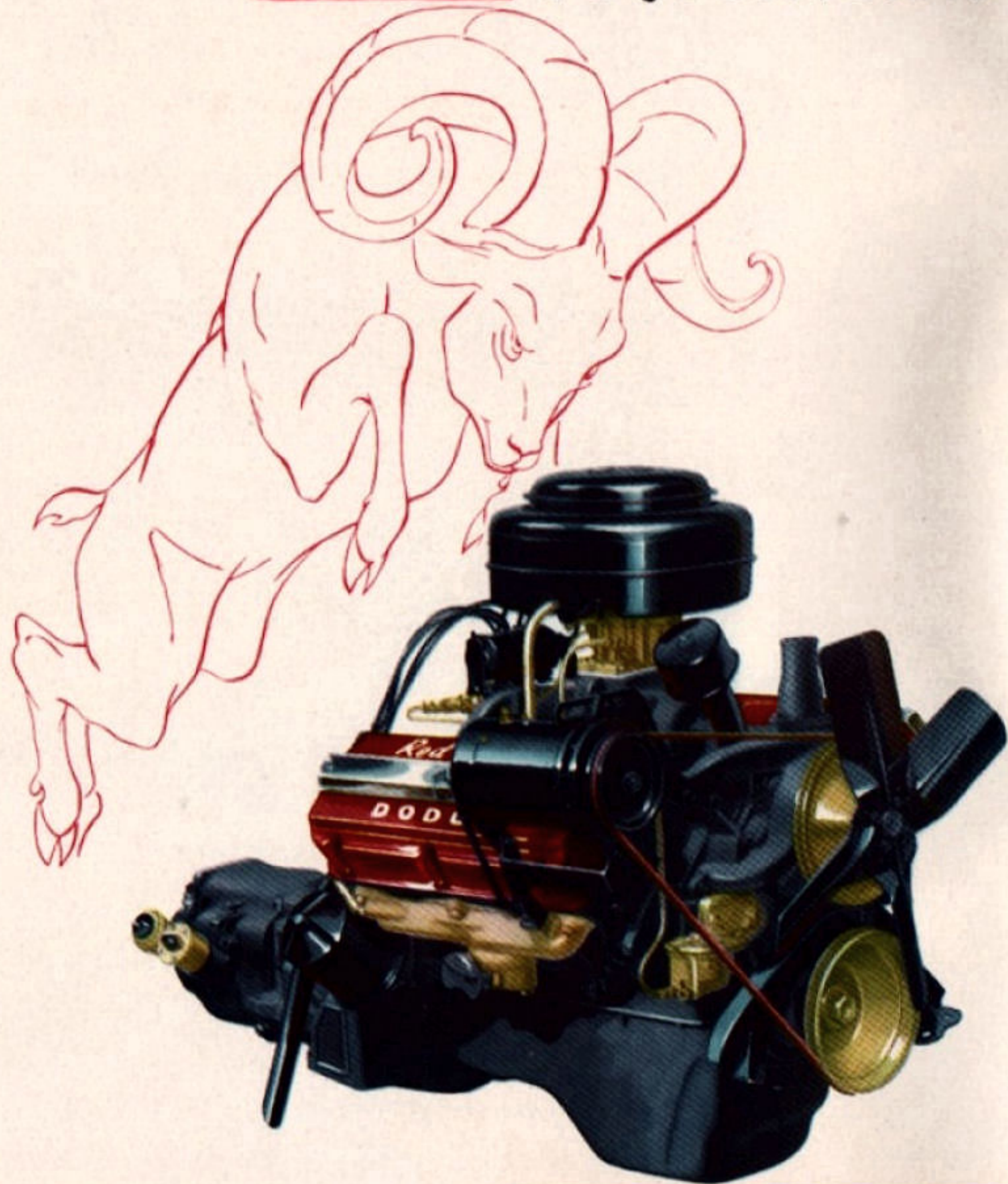


RED RAM

EIGHT

...AND TIME-TESTED "GET-AWAY" SIX ENGINES

The Most EFFICIENT Automobile



Engine Design in America!

New Dodge 140-HP RED RAM V-EIGHT
Packs More Punch per Cubic Inch!

Dodge brings you the most efficient engine designed for *any* American passenger car! Yes, the sensational new Dodge Red Ram V-Eight packs more power punch per cubic inch of displacement than any other automobile engine in volume production—bar none!

Compact in size and light in weight, it delivers a full 140 horsepower—and on regular grade gasoline!

This means new and higher standards of engine performance. You get power to spare—with a magnificent reserve of acceleration that lets you drive with greater confidence, greater safety.

The secret of this amazing power output lies in the Red Ram V-Eight engine's advance design. It's the *only* engine in the medium-price field that gives you the triple power advantages of hemispherical combustion chamber . . . "square" short-stroke design . . . high-lift lateral valves. More fuel energy goes into *power*, less fuel energy is wasted in heat and friction!

These power design features have been known to engineers for years. They have been used in high-output aircraft engines . . . in high-performance racing cars . . . in expensive foreign cars . . . and recently, in a few higher-priced models of passenger cars built by Chrysler Corporation.

Now, Dodge brings you all the benefits of these advance design features—and in an automobile costing but very little more than the lowest priced cars! The sensational new Dodge Red Ram V-Eight gives advantages of power, pick-up and big-car performance never before available in a car of this price!

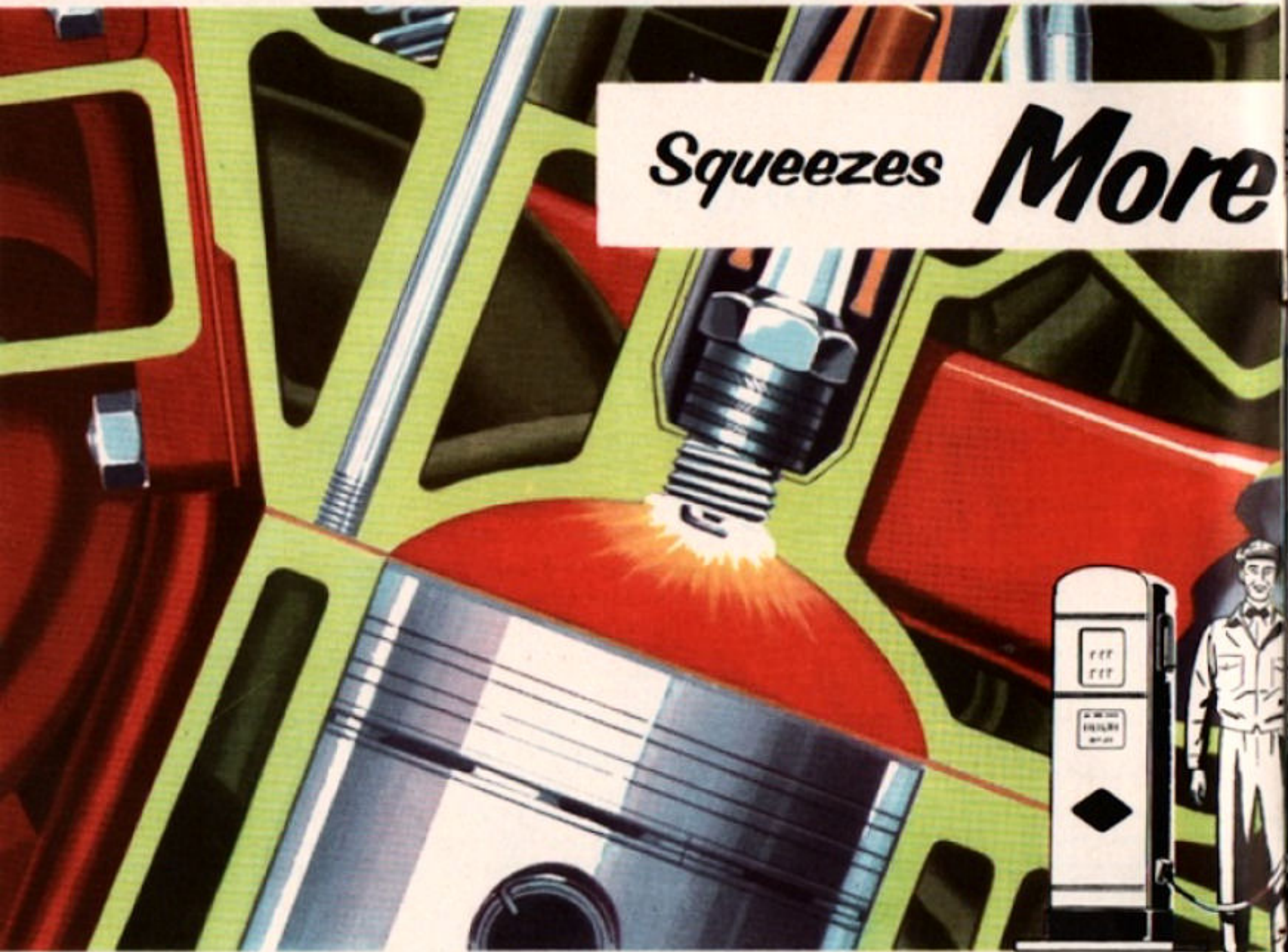


'53 Dodge

How the Dodge "FIRE-FLASH" Hemi

spherical Combustion Chamber

Squeezes **More Power from Fuel!**



Here's the "heart" of the Red Ram engine—the "Fire-Flash" hemispherical combustion chamber. It converts fuel into usable power with greater efficiency than any other combustion chamber design!

The principal reason for this is found in the compactness of the combustion chamber itself. Based on a simple geometrical fact—that a sphere is the smallest possible surface containing a given volume—the Dodge "Fire-Flash" hemispherical combustion chamber provides *less* combustion surface. It turns out more power because less energy is lost through heat waste!

It provides the ideal arrangement for the combustion process, too. The spark plug is located in the center of the combustion chamber. Flame travel from this centrally-located spark plug takes less time, and is evenly distributed throughout the chamber. This means *controlled combustion*, with more uniform pressure on the piston head. Result is smooth, even power thrust.

In fact, this "Fire-Flash" hemispherical combustion chamber is *so efficient* that it *does not* require premium fuel! The Red Ram engine delivers its amazing performance on regular grade gasoline, even with a high compression ratio of 7.1 to 1.

Check These Thrilling Advantages

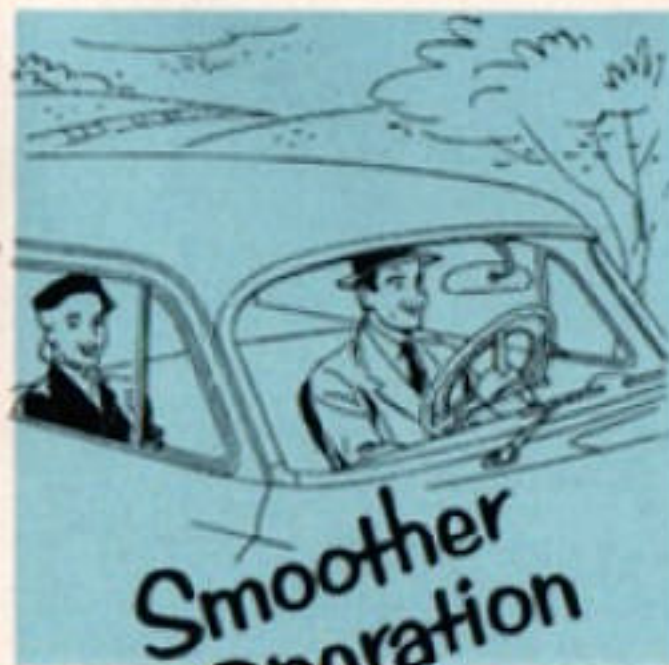
of The New Dodge

Red Ram Engine



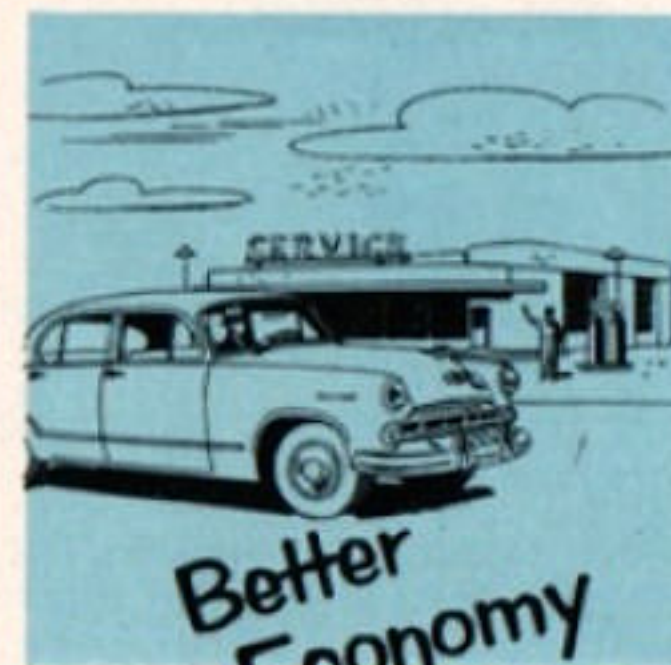
Live Action Performance

With one of the highest power-to-weight ratios of any car in America, you'll realize a thrilling new kind of *live-action* performance! There's breathtaking acceleration — instant response — and ample reserve power for greater driving safety.



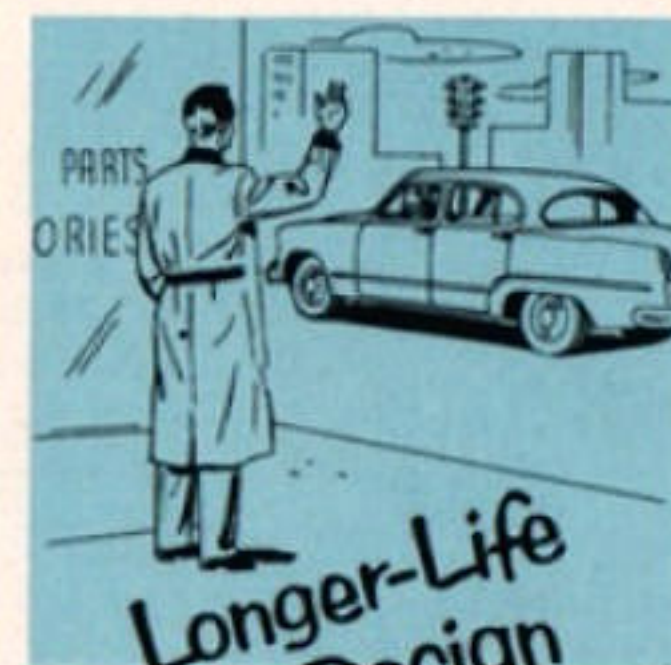
Smoother Operation

You'll be delighted with the smoothness and quiet operation of this Dodge Red Ram engine. On cross-country highway or in city traffic, engine noise and vibration have been reduced almost to the vanishing point. Driving is more relaxing and enjoyable.



Better Economy

"Short punch" stroke gives amazing oil economy. Revolutionary "Fire-Flash" hemispherical combustion chamber squeezes more power from every drop of regular-grade fuel. You save on better gasoline mileage and on lower gasoline cost!

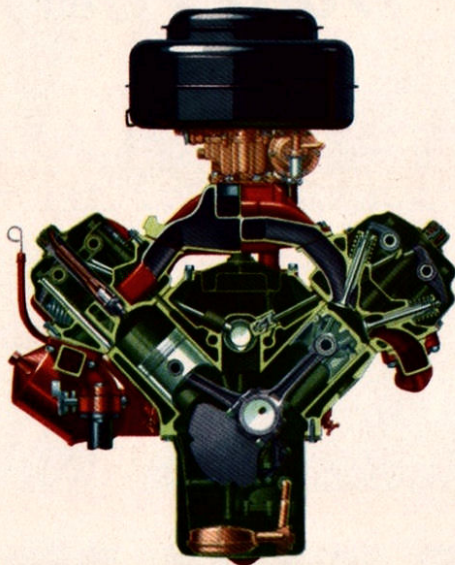


Longer-Life Design

"Square" engine design (large bore, short stroke) gives longer engine life. There's less wear on the cylinder walls, less strain on bearings. Pistons travel shorter distances at slower speeds. The Dodge Red Ram engine maintains its high efficiency longer.

New Dodge **Red Ram V-EIGHT**

Is Most Efficient Because . . .



In the creation and development of an automobile engine, engineers evaluate their final design by means of three basic efficiencies. These are:

1. **Thermal efficiency (burning).**
2. **Volumetric efficiency (breathing).**
3. **Mechanical efficiency (working).**

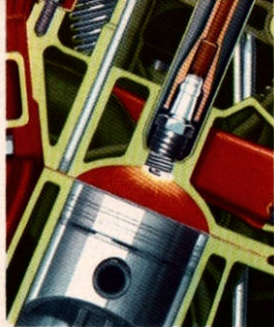
These three important efficiencies are the yardstick of design excellence. And the best engine is one which stands highest in these basic performance characteristics.

Such is the new Dodge Red Ram V-Eight. A compact, overhead valve V-type engine of short stroke and large bore, it represents the most efficient automobile engine design ever developed. It is *unmatched* by any passenger car engine in America for combined thermal, volumetric or mechanical efficiency!

Higher Thermal Efficiency

—Burns Fuel Better

A gasoline engine gets its power from heat-energy in the burning of fuel. The engine's ability to convert this heat-energy into useful work is thermal efficiency. The "Fire-Flash" hemispherical combustion chamber provides the ideal shape for maximum thermal efficiency. There is less surface area through which heat-energy can be lost. Also, the centrally-located spark plug gives controlled, even burning for highest-efficiency combustion.



Higher Volumetric Efficiency

—Breathes Better

The Red Ram engine's "breathing" ability—or ease with which it inhales the fuel mixture and exhales the exhaust gases—is outstanding. Valves are arranged laterally (cross-wise) in the cylinder head. This permits larger valves. They assure free, unrestricted flow of gases through the combustion chamber. Also, valves have an exceptionally high "lift"—further contributing to better breathing.

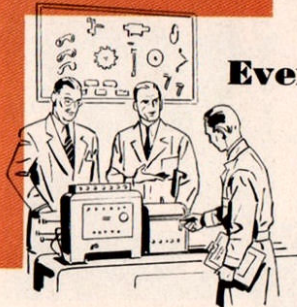


Higher Mechanical Efficiency

—Works Better

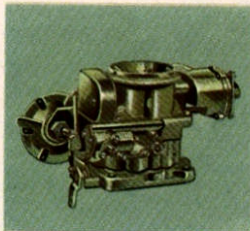
Friction in an engine is the number one enemy of mechanical or working efficiency. In the Dodge Red Ram engine, engineers have achieved a "square" design that cuts friction to a minimum. Bore is large, stroke is exceptionally short. This means less distance for pistons to travel—and thus, sliding friction in the cylinders is reduced. In every engineering detail, the Dodge Red Ram engine makes the most of the exceptional mechanical efficiency inherent in the short-stroke, large-bore V-type design.





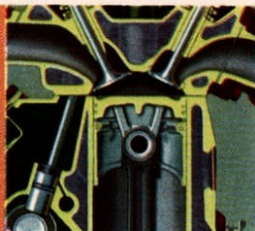
Every Engineering Detail Assures Live-Action Performance, Lasting Economy

Contributing to the basic design excellence of the Red Ram V-Eight engine are a number of additional engineering features and improvements. Some of these are illustrated and described below. Others that give the Red Ram engine its outstanding performance, durability and economy include: a rigid five-bearing crankshaft that is both statically and dynamically balanced for smoother engine operation . . . a full-pressure lubrication system with rotary oil pump and floating oil intake that assures thorough lubrication of all vital engine parts . . . a high capacity, oil-bath air cleaner that prevents dust and dirt from entering the carburetor for longer engine life . . . an integral-mounted automatic choke with a special heat-retaining feature for reliable engine operation under all weather conditions . . . and an automatic manifold heat control and an automatic by-pass thermostat that provide quick engine warm-up.



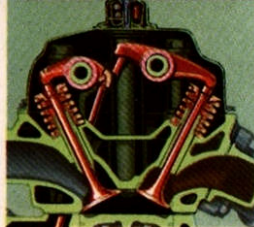
Dual-throated Carburetor

Here's precise fuel metering under *all* driving conditions! Dual-throated down-draft carburetor also assures equal fuel distribution to every cylinder. A special, thin aluminum throttle body, which transmits heat more rapidly, gives protection against stalling caused by throttle icing.



Controlled-Temperature Cooling System

Cylinder-length water jackets and large passages in the cylinder head help maintain proper engine temperature for most efficient operation. High-capacity water pump, by-pass thermostat and cellular-type radiator further contribute to efficient cooling.



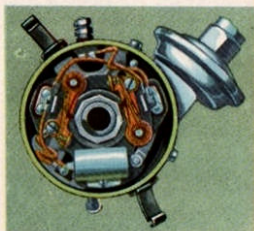
Lateral Valve System

Laterally-placed valves feature twin concentric valve springs. They give better high-speed performance and encourage rotation of the valve for longer valve life. Hydraulic "tappets" or lifters are self adjusting for smoother, quieter operation and longer valve life.



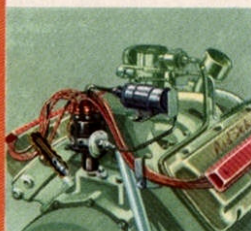
Slipper-type Piston

Lightweight aluminum piston with cut-away "slipper" skirt reduces load on bearings, gives smoother engine operation. Special cast-in steel ring controls piston expansion, permits closer piston fit for quieter operation. Tin-plating of pistons reduces friction.



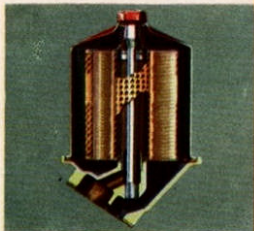
Double-Breaker Distributor

For more reliable engine operation and better performance—especially at higher speeds—the Red Ram engine has a double-breaker distributor. This double-breaker design provides a longer "build-up" time for the spark. It assures a stronger, hotter spark for smoother operation and more power output.



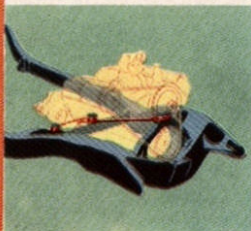
Weatherproof Ignition System

Quick starting and reliable engine operation in wet weather is further assured by the weatherproof ignition system. Spark plugs are set deep in the cylinder heads and protected by plastic jackets and metal tubes. And both the coil and distributor are specially designed to keep out moisture and water splash.



Fixed-Shunt Oil Filter

New fixed-shunt type oil filter is remarkably effective in keeping oil clean. Tiny, abrasive particles are quickly filtered out of the oil. Engine wear is reduced—and engine life is prolonged. Unique shunt arrangement protects engine by permitting oil to be pumped directly to engine, should filter ever become clogged.



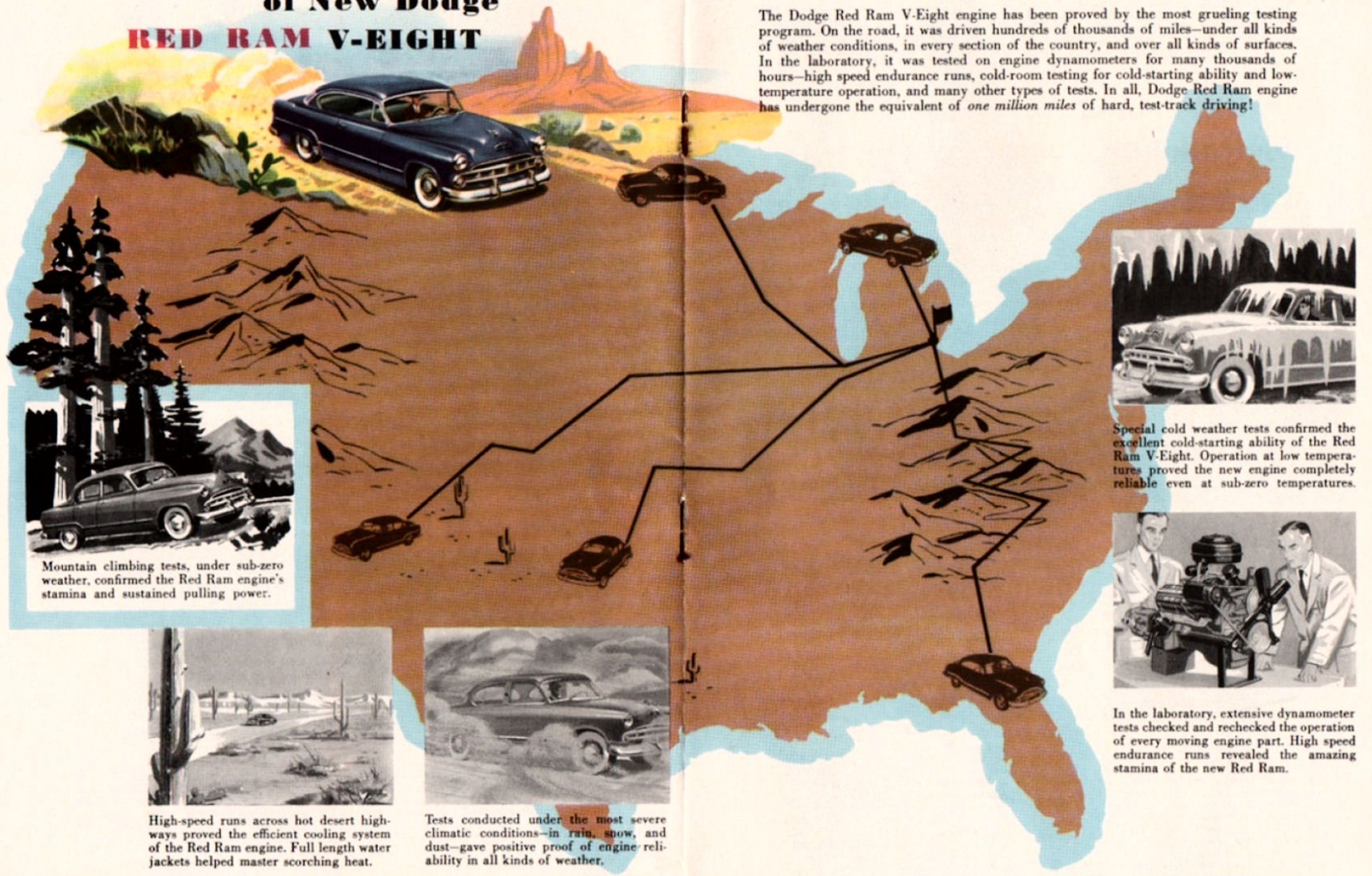
Floating Power

In the Floating Power type of engine mounting, the engine is balanced on three rubber-insulation supports—one up high at the front and two low at the rear to give through-the-middle support for the engine weight. This scientific mounting effectively cushions both power impulses and engine vibration.

Toughest, Most Grueling Testing Program Proves Power and Stamina of New Dodge

RED RAM V-EIGHT

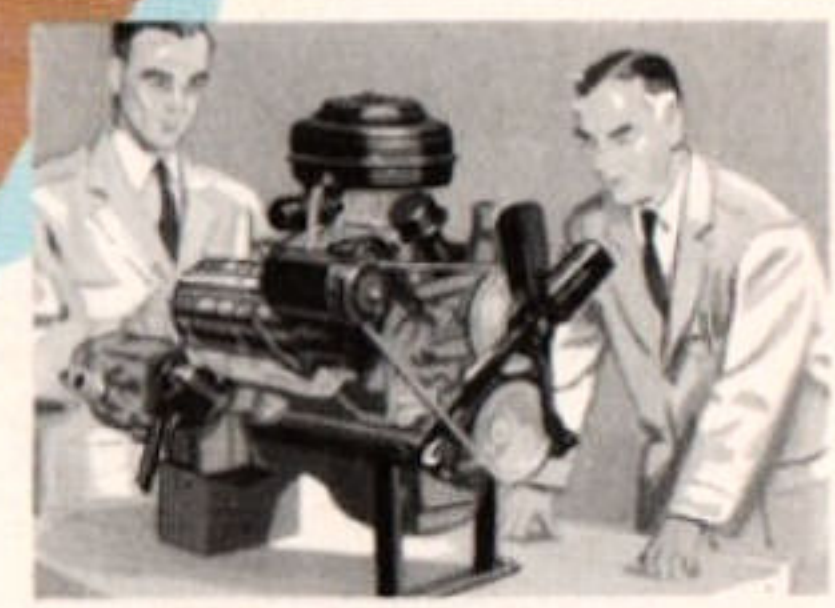
The Dodge Red Ram V-Eight engine has been proved by the most grueling testing program. On the road, it was driven hundreds of thousands of miles—under all kinds of weather conditions, in every section of the country, and over all kinds of surfaces. In the laboratory, it was tested on engine dynamometers for many thousands of hours—high speed endurance runs, cold-room testing for cold-starting ability and low-temperature operation, and many other types of tests. In all, Dodge Red Ram engine has undergone the equivalent of *one million miles* of hard, test-track driving!



Mountain climbing tests, under sub-zero weather, confirmed the Red Ram engine's stamina and sustained pulling power.



Special cold weather tests confirmed the excellent cold-starting ability of the Red Ram V-Eight. Operation at low temperatures proved the new engine completely reliable even at sub-zero temperatures.



In the laboratory, extensive dynamometer tests checked and rechecked the operation of every moving engine part. High speed endurance runs revealed the amazing stamina of the new Red Ram.



High-speed runs across hot desert highways proved the efficient cooling system of the Red Ram engine. Full length water jackets helped master scorching heat.



Tests conducted under the most severe climatic conditions—in rain, snow, and dust—gave positive proof of engine reliability in all kinds of weather.

Dodge "Get-Away"

SIX-CYLINDER ENGINE

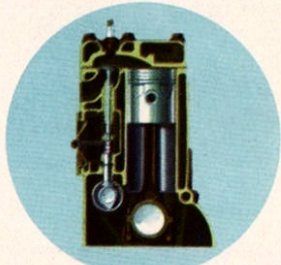
World-Famed for Time-Proved Dependability and Low Upkeep

Here's one big reason for the long famous dependability of the Dodge car! It's the Dodge "Get-Away" six-cylinder engine—a smooth, trouble-free performer that has been time-tested and proved by *billions* of passenger miles, in the hands of *millions* of Dodge owners!

This year, Dodge owners will have more reason than ever to be enthusiastic about the "Get-Away" Six. With a high compression ratio of 7 to 1, and delivering 103 horsepower, it gives fast acceleration—smooth, quiet operation, and exceptionally good fuel economy.

Among the outstanding features of the improved "Get-Away" Six are: Speed-Proofed cylinder walls for safer, quicker engine break in . . . a by-pass type oil filter that does a more efficient job of filtering abrasive material from the engine oil for longer engine life . . . an automatic manifold heat control and automatic by-pass thermostat for quick engine warm-up . . . large volume oil-bath air cleaner, high-capacity fuel pump, and automatic electric choke.

All of these advanced engineering features combine to make the Dodge "Get-Away" Six-cylinder engine outstanding in its field for responsive performance, smooth, economical operation, and service-free dependability.



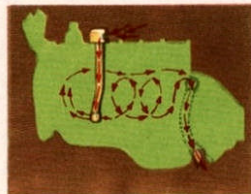
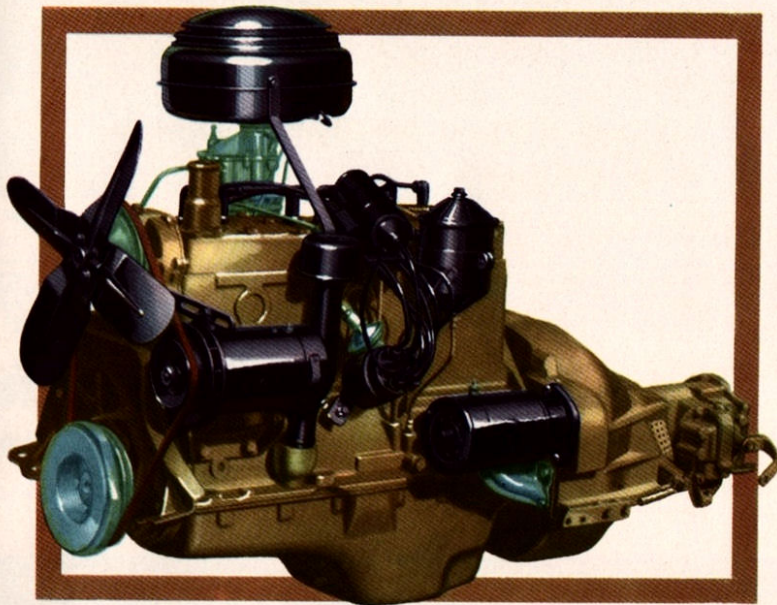
Sturdy L-Head Design

Extremely simple L-Head design has valves and valve mechanism located in the engine block—forming an inverted "L" with the cylinder head. Valves are operated directly from camshaft by means of short, self-locking lifters or tappets. This sturdy, simple design has few working parts. It combines smooth, quiet operation with exceptionally long life.



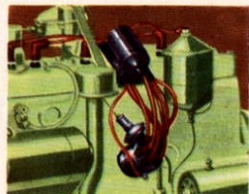
Floating Power

The Dodge "Get-Away" Six is suspended in balance on three rubber-insulated engine mounts—one high at the front, and two low at the rear to give through-the-middle support for the engine's weight. This scientific, Floating Power method of engine mounting effectively cushions both power thrusts and engine vibration to give smoother, quieter riding.



Filtered Crankcase Ventilation

Longer engine life and better engine operation through improved lubrication efficiency are achieved by this filtered crankcase ventilation system. Fresh air is drawn in through a filter in the oil filler cap, circulated through the crankcase where it picks up corrosive gases and harmful acid fumes, and then is expelled through an outlet tube.



Weatherproof Ignition System

Every vital part of the ignition system is protected against entry of water and moisture to assure quick starting and reliable engine operation in all kinds of weather. Spark plugs and ignition wires are kept dry by neoprene rubber coverings. Terminal caps are waterproofed with plastic. The distributor has special splashproof construction.



4-in-1 Carburetion

Improved carburetor of the Dodge "Get-Away" Six actually provides 4 carburetion systems in 1! Each is ready to supply the precise amount of fuel needed at all engine speeds and loads. Assures peak fuel economy.



Dual Automatic Spark

Regulates ignition spark automatically for exact "timing" by both mechanical and vacuum controls. Assures right timing of ignition to match both engine speed and performance requirements for maximum fuel economy.



Resistor Spark Plugs

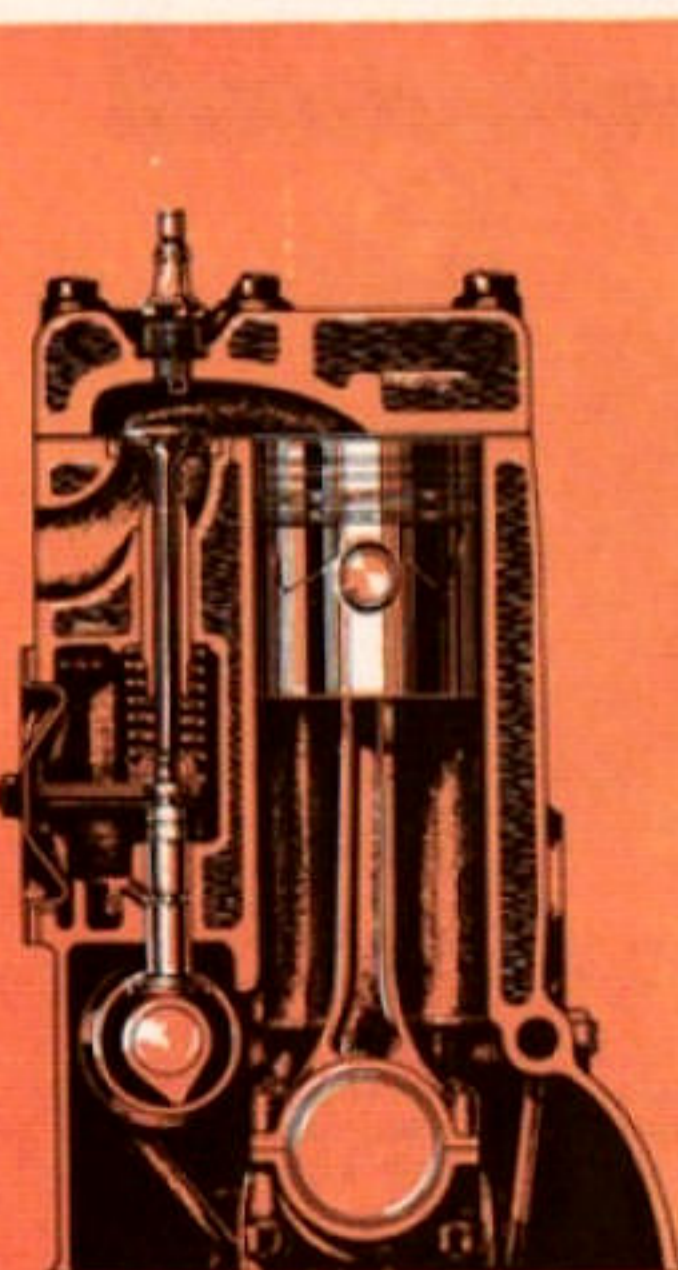
Longer-life "resistor" spark plugs have an extra-wide gap for smoother engine idling, longer spark plug life. Special "resistor" in spark plug barrel helps "build-up" the current to provide a hotter, more efficient spark.



Dodge "Get-Away" Six

Provides Extra-Value Features

for Longer Life and Better Performance!



Oilite Fuel Filter

Protects fuel system supply at its source! Porous, metallic filtering material screens out dirt and water from fuel lines. Increases engine reliability. Reduces possibility of frozen fuel lines. Requires no servicing.

Efficient Cooling

Cylinder-length water jackets in the "Get-Away" Six conduct heat away rapidly for efficient engine cooling. Water distribution tube in the block assures equal distribution of coolant to all cylinders.



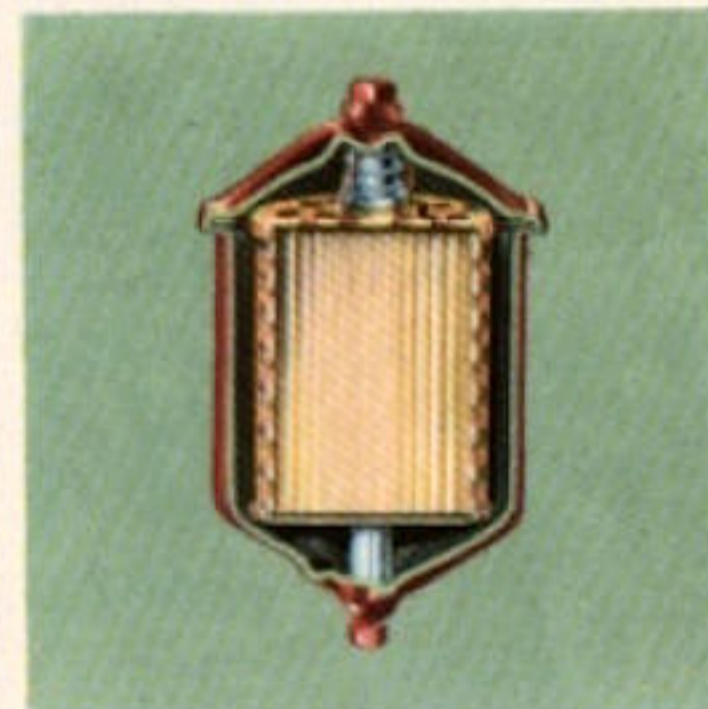
Automatic Electric Choke

Whenever you turn the ignition key, the automatic electric choke goes into action instantly—providing the exact amount of fuel richness needed for quick starting. It avoids "over-choking", too, by enriching the mixture only as long as necessary—preventing needless waste of gasoline and avoiding rough engine operation in starting.



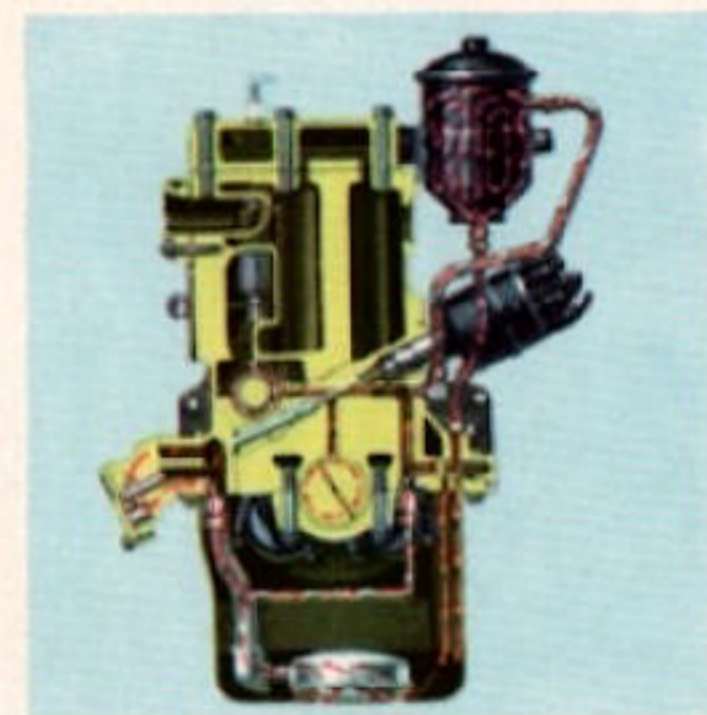
Exhaust Valve Inserts

Extra-hard, tough, alloy steel inserts are provided for the exhaust valve seats. Exhaust valves themselves are made of hard, silicon-chromium steel. Together, they give long-life protection against the corrosive action of hot gas. This contributes to better engine performance, and postpones valve grinding for many thousands of miles.



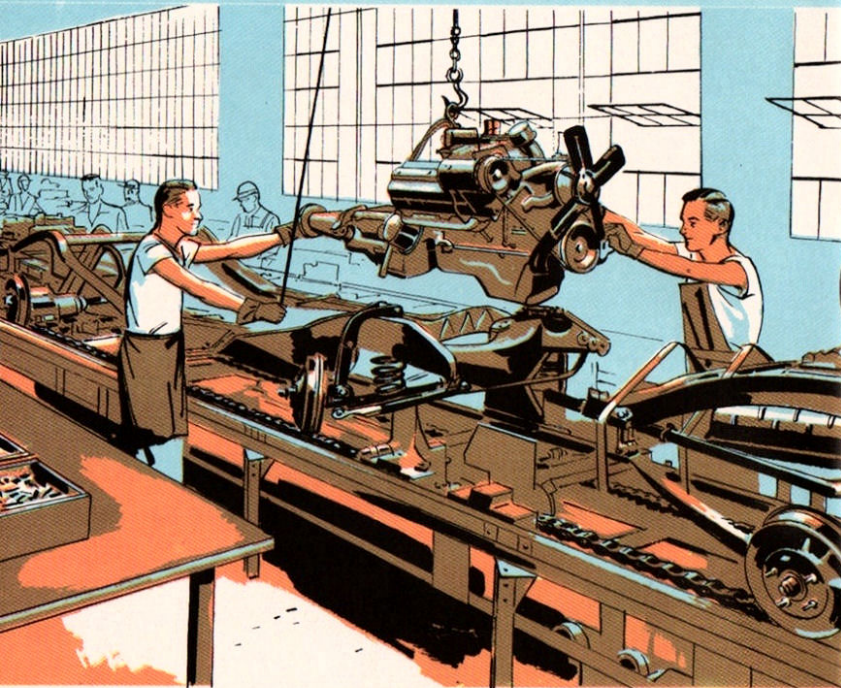
By-Pass Oil Filter

By-pass oil filter is highly efficient—keeps oil remarkably clean. It removes tiny abrasive particles, such as dust and grit, from the oil that circulates to vital engine parts. Thus, it prolongs engine life. By-pass arrangement protects engine by permitting oil to be pumped directly to engine, should the filter ever become clogged.



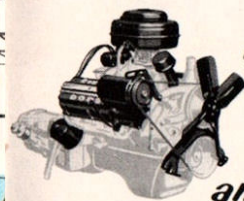
Pressure Lubrication

Positive-pressure system forces oil under pressure to vital operating points of the engine. Crankshaft bearings, camshaft bearings, connecting rod bearings, timing chain, cylinder walls—all are safeguarded constantly with an ample supply of oil under all operating conditions. Promotes longer engine life and trouble-free performance.



Precision-Built in the

Dodge Tradition—



**New Red Ram
V-EIGHT**

and "GET-AWAY" SIX

Quality is a tradition at Dodge. And nowhere is this more in evidence than in the production of the engine itself. From beginning to end—from the casting of the cylinder block to the final performance testing of the completed engine—the highest possible standards of quality are maintained.

Fully-automatic type transfer machines perform several operations at once to assure high dimensional accuracy of parts. For example, a gigantic transfer machine automatically bores all eight cylinders of the Red Ram engine in one passage of the block through machine.

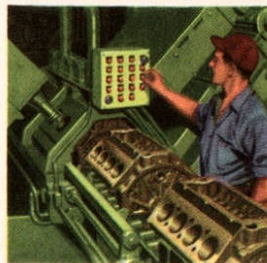
Dimensional accuracy is checked and rechecked to very close tolerance by means of highly-accurate precision gauging equipment.

To assure perfect engine smoothness at all operating speeds, the crankshaft of every Dodge engine produced is checked for balance—both statically and dynamically—in several stages of its manufacture. And these balancing checks are made on both the crankshaft itself and on the complete crankshaft and fluid coupling assembly.



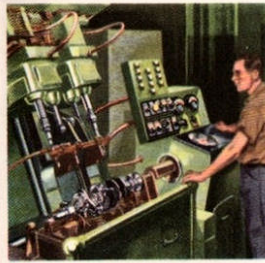
Casting The Cylinder Block

Quality control of cylinder block casting is exercised at all times—in the precision forming of the molds, exact temperature to which the liquid metal is heated, and technique in pouring.



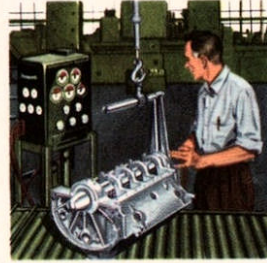
Machining The Block

This automatic transfer machine bores all eight cylinders at one time—and maintains a high degree of precision. Banks of lights on the control panel indicates progress of block to operator.



Crankshaft Balancing

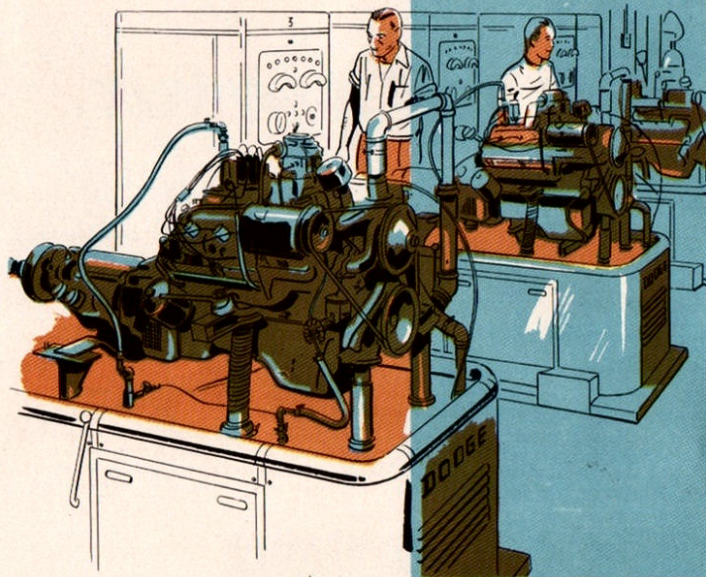
The precision balancing machine drives complete crankshaft assemblies at high speeds. Slightest unbalance is indicated by highly sensitive measuring system. Accurate corrections are made by operator.



Precision Air Gauges

Latest-type precision air gauges provide highly accurate means of checking the crankshaft bearings and cylinder bores. Air gauges indicate measurements as small as one-millionth of an inch.

Every Dodge Engine Must Pass A Rigid Performance Test



An important part of the Dodge manufacturing process for producing engines of better quality and greater dependability is the final performance test.

Every Dodge engine that comes off the production line is given this rigid performance test before being released for shipment.

A battery of 60 electronically-controlled dynamometers performs the operation. The engine is operated at different rates of speed and under varying loads. Every moving part is checked under actual running conditions.

This final performance testing of Dodge engines by the factory is positive proof that every Dodge engine built will deliver peak performance and maximum economy.

SPECIFICATIONS

RED RAM V-EIGHT ENGINE

TYPE:

The Red Ram engine is an overhead valve, 90 degree V-block with 8 cylinders. Bore, 3-7/16 inches; stroke, 3-1/4 inches. Piston displacement, 241.4 cubic inches. Compression-ratio, 7.1 to 1. Maximum brake horsepower, 140 at 4400 r.p.m. Maximum torque, 220 lbs.-ft. at 2000 r.p.m. Counterbalanced forged crankshaft with 5 main bearings. Slipper-type aluminum-alloy pistons with cast-in ring inserts for controlled expansion. Two narrow compression rings, and one slotted-type expander oil ring. Hemispherical combustion chambers with extra-large, laterally-arranged valves. Twin parallel rocker shafts. Single, chain-driven camshaft. Self-adjusting hydraulic valve lifters.

LUBRICATION:

Positive-pressure lubrication to all crankshaft, camshaft, and connecting rod bearings. Floating oil intake. Fixed-shunt type oil filter. Rotary-type oil pump. Filtered crankcase ventilation. Oil capacity, 5 quarts.

COOLING:

Single, high-capacity water pump. Cylinder-length water jackets. Automatic by-pass thermostat. Cellular type radiator. Pressure-vent radiator cap. Coolant capacity, 19 quarts.

FUEL SYSTEM:

Compact, dual-downdraft carburetor with thin aluminum throttle body. Heavy-duty oil-bath air cleaner. Automatic choke, integrally-mounted on carburetor. High-capacity fuel pump. Oilite fuel filter in fuel tank.

ELECTRICAL:

Double-breaker distributor with dual automatic spark control. Weatherproof ignition system. High-capacity, 45-ampere generator with automatic current and voltage control. Resistor spark plugs.

"GET-AWAY" SIX-CYLINDER ENGINE

Type: The "Get-Away" Six engine is an L-head, 6 cylinders. Bore, 3 3/4 inches; stroke, 4 1/2 inches. Piston displacement, 230.2 cubic inches. Compression ratio, 7.0 to 1. Maximum brake horsepower, 103 at 3600 r.p.m. Maximum torque, 190 lbs.-ft. at 1200 r.p.m. Counterbalanced, forged crankshaft with 3 main bearings. Light-weight aluminum-alloy pistons with 4 rings. Vibration dampener. Silent timing chain. Exhaust valve seat inserts.

Lubrication: Positive-pressure lubrication to timing chain and all crankshaft, camshaft, and connecting rod bearings. Floating oil intake. By-pass type oil filter (except on Meadowbrook Specials). Rotary-type oil pump. Crankcase ventilation. Oil capacity, 5 quarts.

Cooling: Single, high-capacity water pump. Cylinder-length water jackets. Water distribution tube. Automatic by-pass thermostat. Cellular-type radiator. Pressure-vent radiator cap. Coolant capacity 14 quarts.

Fuel System: Efficient "4-in-1" carburetion. Heavy-duty oil-bath air cleaner. Automatic electric choke. High-capacity fuel pump. Oilite fuel filter in fuel tank.

Electrical: Dual automatic spark control. Weatherproof ignition system (except on Meadowbrook Specials). High-capacity, 45-ampere generator with automatic current and voltage control. Resistor spark plugs.

Road Test the Dodge Red Ram V-Eight for Thrilling Proof of Performance!



Road test the new Dodge V-Eight yourself, if you want to find out what this sensational Red Ram engine can really do! Put it through its paces—out on the open road—through city traffic—up and down the steepest hills. You'll experience a new thrill in motoring!

See your Dodge dealer and ask him for a demonstration. He'll be pleased to have you "Road Test" a new Dodge V-Eight!