

JAGUAR UNLOCKS THE ULTIMATE CAT.





# Jaguar V-12

## THE 12-CYLINDER ANIMAL: JAGUAR V-12.



From its beginning several decades ago, Jaguar has always been Jaguar.

By that we mean that Jaguar has set its own benchmarks of what a car should be and has never deviated from its course. By following a course of personal conviction and conscience, its automobiles have achieved a high standard of individualism and spirit that in itself has become a standard for others.

Start with 1936, for that was the year of the S.S. Jaguar 100, a two-seater powered by the company's first effort at designing its own engine. Its success can be measured by the fact that it had the best individual performance overall in the famous International Alpine Trial competition of that year. Part of the reason was its road and cornering stability, an attribute that stemmed from its low center of gravity and wide tracking (features loudly proclaimed by today's car makers).

Then came the Jaguar that practically overnight rendered obsolete all that came before it in terms of sports car design and performance. The year: 1948. The car: the XK 120 which combined luxury comfort with magnificent performance. It was also the first quantity-produced car to be fitted with a twin-overhead camshaft engine. At the same time, its striking aerodynamic design was hailed for its purity of line. In the words of one observer, instead of following any school of design of the time, Jaguar's XK 120 created one.

Three years later, in 1951, Jaguar developed the lightweight XK-engined C-type that won the Le Mans 24-hour race the first time out. This was but the initial thrust of a spectacular invasion of Le Mans. The triumph was repeated again in 1953. Then the D-type, making its appearance in 1954, won the competition in 1955, 1956, and 1957. An enviable record, for those uncompromising auto-makers from Coventry.

In 1961 to match their pace-setting engineering with trend-setting design, Jaguar introduced the XKE. It set a styling standard which is still unequalled.

Now Jaguar has the long awaited V-12 that will do the same for engine standards. The excitement stems not just from a numbers perspective (although there is no disputing that 12 cylinders are impressive), but from the effortlessness and uncanny smoothness with which its power is produced.

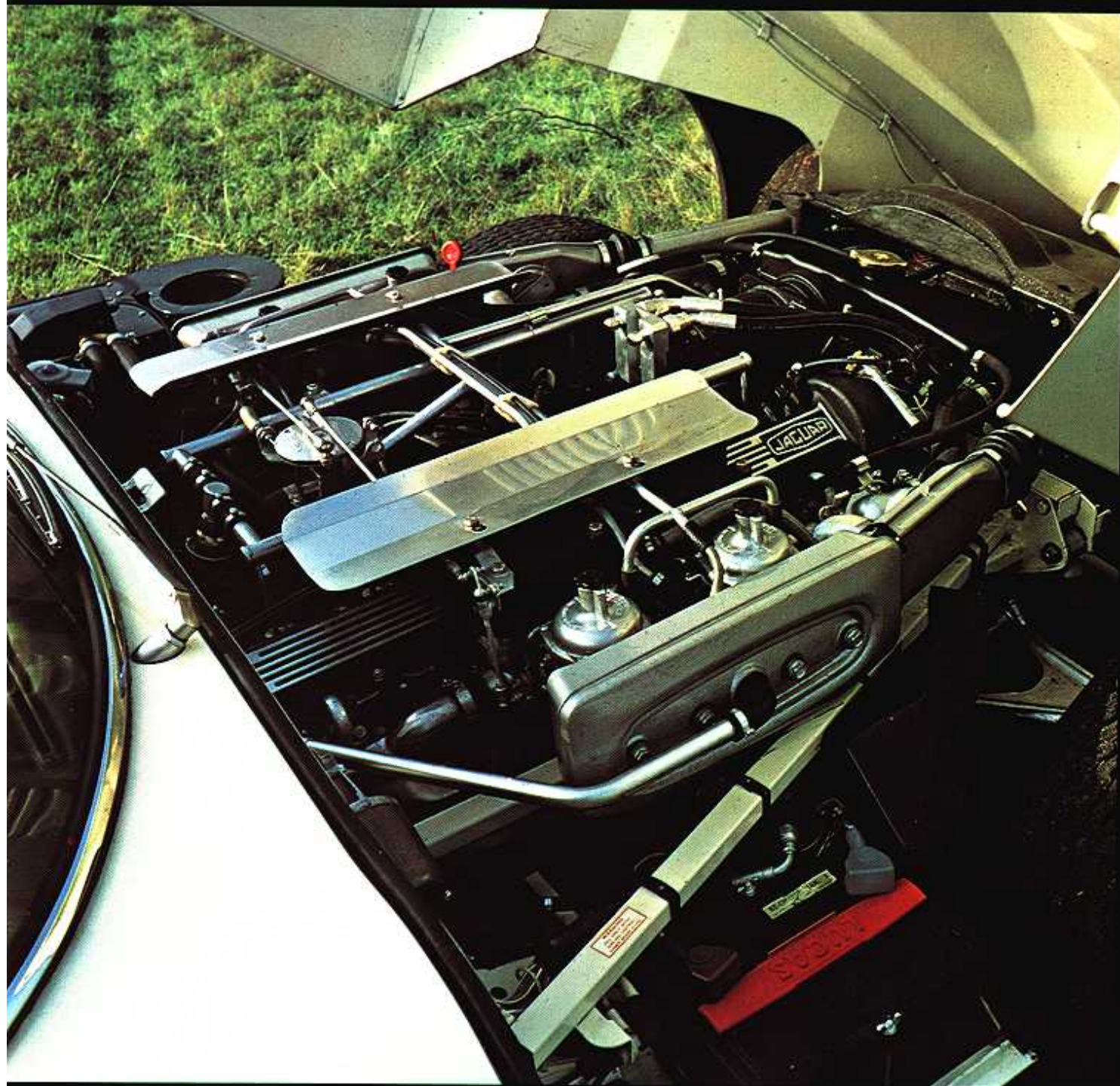
The reason for this lies in the V-12's configuration. It is inherently balanced. Simply put, this means that there is a symmetry of forces within the engine's block.

Result: There are no "out of balance" factors from either a primary or a secondary source. Hence, smoothness of performance, not power for power's sake, is the reason-for-being behind the V-12.



**The Jaguar V-12 engine.** The objective of Jaguar, in its engineering of the V-12 engine, was smoothness of engine performance. Not brute power □ Because of its inherent balance, the engine idles in near silence with virtually no vibration. It powers the Jaguar to 60 m.p.h. in 6.8 seconds with such sinuous grace that one hardly experiences a sensation of motion. And even at full 6500 rpm there is an eerie absence of engine noise □ Of significance is its power to displacement ratio. Jaguar's V-12 displaces only 326 cubic inches and yet develops 314 horsepower □ Of additional significance is its power-to-engine weight ratio. The total engine weight: an unexpected 680 pounds. Reason: the Jaguar V-12 engine is almost all aluminum □ The V-12's flat head design (with a single camshaft per bank as a natural corollary) was chosen only after tests with various designs plus previous experience gained with Coventry Climax racing engines. The V-12's flat head design produces excellent torque throughout the lower and middle speed ranges. This is especially useful in today's city-to-thruway kind of driving □ The bore/stroke measurements are also rather unusual—a 3½-inch bore and a 2¾-inch stroke. This means the cylinder is unusually wide and the piston stroke unusually short. The advantage: it provides lower piston speed for longer engine life □ Another revolutionary development: a transistorized ignition system. This system, race-proven in Formula 1 cars, employs a new electronic distributor that eliminates all contact points. With no contact points to wear or foul, a major cause of engine tune-ups is eliminated. (Incidentally, an out-of-tune engine is a major cause of engine pollution.) □ Every single V-12 engine—not just an occasional one—is thoroughly and exhaustively tested. Besides individual testing of components, each engine with its clutch and gearbox is bench-tested as a unit—not once but several times. (Final engine approval, of course, is reserved until 2 different road tests by 2 different crews.) □ This then is Jaguar's latest contribution to automotive history: the new V-12. In our opinion, it is the finest production engine in any automobile, regardless of size, regardless of price.







### **The Jaguar 2 + 2.**

The 2 + 2, like all Jaguars, takes 8 full weeks to build. It is, of course, a sports car. An enclosed sports car with a host of amenities for touring in the grand style.

### **The suspension system.**

All four wheels are fully independently suspended. A bump on one does not lift another. This isn't mere creature comfort—although it is comfortable—it is creature safety. Moreover, new front-end "anti-dive" geometry, plus torsion bars, has been introduced into the suspension system to make the 2 + 2 sure-footed. And for even surer footing, the track has been appreciably widened.

### **The steering.**

When you turn the wheel, you turn the wheels. No more. No less. The steering is power-assisted rack-and-pinion with 3.5 turns lock-to-lock. And the steering column is adjustable. For extra maneuverability, the turning circle has been reduced from 41 to 36 feet.

### **The amenities.**

The reclining bucket seats are upholstered in top-quality leather of matching color and grain. They fold forward to facilitate entrance and exit to the back seat.

The back seat, in turn, pivots forward to add extra room to the already generous luggage space. A wide-swinging rear door, with an interior release, provides quick and easy access to the luggage compartment.

A most important amenity: a new flow-through ventilation system with an air extractor louver situated on the car's rear panel.

The Jaguar 2 + 2. The ultimate cat. With a permanent roof.









### **The Jaguar Convertible.**

Several changes have been made in the Convertible enhancing its design. The bumper-brakelight assembly, for example, has been restyled so the lights are now an integral part of the wrap-around bumper. And underneath the bumper is an impressive array of tail-pipes.



The Convertible now measures 15 feet 4 inches in overall length. This adds several extra inches of leg room and trunk room. In addition, doors have been widened to provide for easy entrance and exit.



The newly designed all-weather top can be quickly and easily raised or lowered. It's so snug-fitting you're comfortable even in the most severe weather conditions.

The Jaguar Convertible. The ultimate cat. With a folding top.







**The ultimate cat: outside.** The ultimate cat has had exterior changes. The fenders are slightly flared. This animal not only claws the road, it also looks like it does. And there's a new unity in the design of the headlamps, parking lights, and turn signals, accentuated by the sweep of the wrap-around bumper. As indicated by the 2 + 2 (below), this animal — even at rest — seems ready to spring.



The grille gleams through an oval of chrome. And at its center, the distinguished symbol of Jaguar. Beneath the grille, the new air scoop for more efficient engine ventilation. (Incidentally, eight coats of paint are applied to the body — the last one after the car has been road-tested.)







This is the ultimate cat. Lithe. Sleek. Swift. Adapted to any motoring environment. With independent 4-wheel suspension to give this animal the footing it needs, regardless of the surface it's running on. With power-assisted rack-and-pinion steering. And a new power-assisted braking system with 10-inch discs in back and new 11-inch ventilated discs in front. When you want this cat to stop in its tracks, it stops.





**The ultimate cat: inside.**

The front bucket seats recline individually and fold forward to facilitate passage to and from the back seat in the 2 + 2 model. Additionally, the back of the rear seat pivots forward to provide the abundant luggage space illustrated on the opposite page. Standard on all models: a retractable, inertia-reel seat-belt system.







**Some of the car's equipment.**

Included in the price of every Jaguar is a center console-mounted synchromesh 4-speed stick shift. The instrument panel, including the electric tachometer, is designed for accessibility—visually and manually. As a safety feature, all metal parts, such as instrument surrounds and heater controls, are finished with a non-reflective surface. The diameter of the adjustable steering wheel has been reduced to 15 inches. The steering wheel itself has satin-finished aluminum alloy spokes and a rim covered in hand-stitched leather.





# JAGUAR V-12 SPECIFICATIONS

## ENGINE

12-cylinder water-cooled aluminum 60-degree "V" with overhead camshafts (1 per bank).  
3-plane, 7-bearing crankshaft.  
Exhaust and evaporative emission control.  
Compression ratio: 9:1  
Bore: 3.543 in.  
Stroke: 2.756 in.  
Stroke/bore ratio: 0.779:1  
Displacement: 5343 c.c. (326.06 cu. in.)  
Horsepower: 314 b.h.p. gross at 6,200 r.p.m.  
Torque: 349 lb./ft. gross at 3,800 r.p.m.  
Ignition: Opus Mark II Electronic System consisting of electronic distributor with timing rotor, amplifier unit, ballast resistance unit, and special high performance coil.  
Carburetion: Four Zenith-Stromberg 175 CD2SE carburetors.  
Fuel Pump: 1.5 p.s.i. S.U. electric.  
Fuel Tank Capacity: 20.25 U.S. gallons.  
Sump Capacity: 11.5 quarts.

## TRANSMISSION — Manual:

Four-speed all synchromesh.  
Clutch: Diaphragm spring-type Borg & Beck 10.5 in. with hydraulic actuation.  
Limited slip differential.  
Rear Axle Ratio: 3.54:1.  
Overall Gear Ratios: First 10.38:1, Second 6.75:1, Third 4.92:1, Fourth 3.54:1, Reverse 11.95:1.

## TRANSMISSION — Automatic (Optional):

Borg Warner three-speed fully automatic with torque converter.  
Limited slip differential.  
Rear Axle Ratio: 3.31:1.  
Overall Gear Ratios:  
1 6.82 — 13.24  
2 4.8 — 9.6  
Drive: 6.62:1 with torque conversion.

## STEERING:

Rack-and-pinion, power assisted. Adjustable steering column.  
Steering Ratio: 18:1.  
Turns lock to lock: 3.5.  
Turning Circle: 38 feet.

## SUSPENSION:

Front: Independent transverse wishbones with torsion bars, monotube hydraulic shock absorbers, and anti-roll bar. Incorporates "anti-dive" geometry.  
Rear: Wishbones with drive shaft forming upper link, radius arms, monotube hydraulic shock absorbers inside coil springs, and anti-roll bar.

## BRAKES:

Power-assisted 4-wheel disc brakes.  
Front: 11.18 in. diameter ventilated discs.  
Rear: inboard 10.38 in. diameter solid discs.

## ROAD WHEELS:

Ventilated pressed steel, 15 in. diameter fitted with Dunlop E70VR 15 SP sport radial-ply tires.

## PERFORMANCE DATA:

Maximum Speed: 135+ m.p.h.  
Acceleration: 0-60 m.p.h. — 6.8 sec.  
Standing Quarter Mile: 14.8 sec.  
Road Speed at 1,000 r.p.m. in top gear:  
Manual gearbox: 21.4 m.p.h.  
Automatic: 22.9 m.p.h.

## ELECTRICAL:

Negative ground, 12-volt system.  
Battery rating: 60 amps at 20 hours.  
Alternator: 60 amps.

## INSTRUMENTS:

Speedometer with trip odometer.  
Electric tachometer.  
Battery indicator, oil pressure, water temperature, and fuel gauges.  
Clock.  
Manual choke.  
High-pressure electrically operated windshield washer.  
Brake fluid/handbrake, oil pressure, direction indicator, emergency flasher, and choke-control warning lights.  
Door-operated courtesy and map-reading lights.  
All instruments and switches set in no-glare, padded dash.

## BODY:

All-steel monocoque construction with separate engine sub-frame.  
Convertible: 2 passenger. Quick-folding top.  
2+2: 2-4 passenger with fully upholstered rear seat; rear seat pivots forward to increase luggage compartment area to maximum length of 52.5 inches.

## INTERIOR:

Semi-reclining bucket seats leather-faced with ambla panels on non-wearing surfaces.  
Inertia-reel seat belts.  
Cigarette lighter and ashtray.  
Lockable glove box and console.  
Ambla-trimmed interior.  
Fitted carpet with rubber inserts.

## OPTIONAL EQUIPMENT:

Automatic transmission.  
Factory-installed air conditioning.  
Solid-state AM/FM pushbutton radio.  
Whitewall radial-ply tires.  
Chrome wire wheels (requires tubed tires).  
Tinted glass.  
Electrically heated rear window (2+2 only).  
Removable hardtop (Convertible only).

JAGUAR CARS CONFORM TO U.S. FEDERAL MOTOR VEHICLE SAFETY AND AIR POLLUTION STANDARDS APPLICABLE AT THEIR DATE OF MANUFACTURE.  
SPECIFICATIONS AND COLORS SUBJECT TO CHANGE WITHOUT NOTICE.



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LEONIA, NEW JERSEY 07605

## MAIN DIMENSIONS:

Overall length: 184.38 in.  
Overall height: Convertible, 48.13 in. 2+2, 51.13 in.  
Overall width: 66.06 in.  
Wheelbase: 105 in.  
Track at Front: 54.38 in.  
Track at Rear: 53.75 in.  
Ground Clearance (minimum): 5.38 in.  
Weight: 3435 lbs.  
Trunk Capacity: Convertible—4.75 cu. ft.,  
2+2—9.5 cu. ft.—12.5 cu. ft.

## BODY COLORS:



COLOR COORDINATED INTERIOR TRIM AVAILABLE





#### **Optional equipment.**

The list of options on the Jaguar is rather limited. Because all the essentials, and many of the amenities—such as a transistorized clock and lighter—are included in the basic price.

#### **Among the Jaguar's optional equipment:**

Floor-mounted automatic transmission incorporating a new selector arrangement, a greater degree of control, and considerable improvement in overall standards of ratio-change smoothness.

Factory-installed air conditioning system with a more efficient compressor and larger evaporator.

Solid-state AM/FM radio.

Chrome wire wheels.  
Whitewall tires.

Electrically heated demisting rear window (on the 2 + 2).

Tinted glass all around.

Custom-fitted removable hardtop (on the Jaguar Convertible).



