



SOMEWHERE BETWEEN SUBTLE AND BATMOBILE, BMW'S GOT A COUPE FOR YOU

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BMW had been building six-cylinder CS coupes since 1968, but they received a major upgrade for 1971, with the addition of rear disc brakes from the sedan, an improved four-speed transmission and a pair of 3.0-liter engines, one Zenith carbureted, and one with Bosch D-Jetronic fuel injection. The U.S. not only didn't get fuel injection, we got a version with compression lowered to 8.3:1 from 9.0:1. Smog equipment and retarded ignition timing sucked away some more power in 1973, and the 1974-'75 versions were saddled with a protruding five-mile-per-hour aluminum bumper—1973 versions had a slightly extended, intermediate version that increased overall length by about three inches.

Throughout, all versions of the E9 series three-liter cars are sophisticated and highly

competent. Power ranges from 170hp for the U.S. carbureted version, up to a claimed 206 for a fuel-injected CSL. Officially, the U.S. received only the carbureted CS, between 1970 and 1974, via importer Max Hoffmann. Gray market fuel-injected cars are so common, however, that even many owners don't realize they weren't officially imported. While the horsepower is attractive, quality of these cars is all over the map. Anecdotally, federalized cars from the 1980s and 1990s seem to be the worst, so in addition to all your routine inspection, it's a good idea to take a close look at the fuel and emissions systems. Today, strong European currencies make buying and importing cars expensive, but any that do come over are old enough to be exempt from emissions and safety regulations. Conversely, the flow of cars from America

to Europe has picked up, although not to the point that they're impossible to find.

Standard in CSs was BMW's excellent, smooth-shifting four-speed; an optional and widely maligned Borg Warner BW65 three-speed automatic was also available on carbureted cars. It's not generally considered a good match to the high-revving, oversquare engine, and while later versions were better than in the first few years, it's common to find cars de-optioned back to four-speed specifications, and five-speed conversions are available as well. All-independent suspension is via MacPherson struts and lower A-arms in front; and a semi-trailing arm arrangement bar in back. Some enthusiasts consider this one of the best setups ever offered in any BMW, although stock rear springing might be a little soft, as BMW definitely biased the suspension toward

1971-1975 BMW 3.0CS



City package, or Stadtpaket, CSLs had a mix of lightweight racing cues like spoilers and lightweight fenders, along with interior comforts.



All U.S.-spec CSs came with this twin-Zenith setup. They're a popular target for upgrading, as they can be finicky in cold weather.



Stadtpaket cars usually lack the rooftop deflector of a factory CSL. All CSLs and all fuel-injected CSIs in the U.S. are federalized gray-market

long-distance GT comfort. Stiffer springs, Bilstein shocks, plus-sized wheels, lowering kits and urethane bushings are available for those interested in tampering with the factory settings.

The M30 straight-six engine family came in many versions, from 2.5 out to 3.5 liters, but the 2.8- and 3.0-liter (2,985cc) versions are the most beloved, and helped establish the continuing reputation of BMW sixes. *Road & Track* called the 3.0 "without a doubt, the most sophisticated inline-six in the world." If there's any criticism of it at all, it's that in a stock CS it can be hard to hear, and they do have a beautiful engine

note. Parts for the entire drivetrain are easily available, and due to rust issues, parts cars are also a good option.

Getting a non-running CS on the road and keeping it there is a mixed bag. The drivetrain is robust, straightforward to work on, has no major issues, has an excellent supply of parts of every grade, and is interchangeable with the three-liter, six-cylinder sedans. While they stock a full line of mechanical parts, Bavarian Autosport's most requested CS items are almost all routine maintenance items such as oil filters, ignition wires, air filters and so forth. They also sell a large number of badges and roundels

for those completing their cars...as well as thermostats and other cooling system parts, as it's the 3.0's one major mechanical weakness. They also do a brisk trade in manuals, indicating a high level of owner involvement and many ongoing restorations.

Unfortunately, the body isn't robust and does have issues—there's a limited supply of replacement parts—and is unique to the CS.

Like a contemporary sedan, BMW built the lightweight CS from an unspecified—but vast—number of individual, welded steel stampings and lightweight aluminum panels. In places, including the base of the

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Car Buyer's Guide

Specifications

ENGINE

Type	SOHC straight-six
Displacement	2,985cc (182-cu.in.)
Bore x stroke	89 x 80 mm
Compression ratio	8.3:1
Horsepower @ rpm	170 @ 5,800
Torque @ rpm	185-lbs.ft. @ 3,500

TRANSMISSION

Type	Four-speed manual
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STEERING

Type	Worm and roller, power assist
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BRAKES

Type	Disc/disc, power assist
Front/rear	10.7 inches

CHASSIS & BODY

Construction	Steel unit body
Body style	Four-passenger, two-door coupe
Layout	Front engine, rear-wheel drive

SUSPENSION

Front	Independent; MacPherson struts, lower A-arms, coil springs, tube shocks, anti-roll bar
Rear	Independent; semi-trailing arms, coil springs, tube shocks, anti-roll bar
Wheels	Cast alloy
Front/rear	14 x 6 inches
Tires	Michelin XAS
Front/rear	175HR-14

WEIGHTS & MEASURES

Wheelbase	103.3 inches
Overall length	186.5 inches
Overall width	64.9 inches
Overall height	53.9 inches
Shipping weight	3,175 pounds

PERFORMANCE

0-60 mph	10.0 seconds
¼ mile ET	17.2 seconds @ 82.5 mph
Top speed	125 mph

PRICE

Base Price	\$10,720
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Production

Total E9:	30,546
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BODY

The Karmann-built CS is in heady Fiat or British car territory when it comes to corrosion. We can't

cover it all here, but the CS Registry has 15 pages covering rust areas on its Web site. The E9 Coupe Web site even has a beautiful, interactive eight-point rust finder at www.e9coupe.com/buyers_guide, which is required reading. Our art director, Tim Metcalf, went to Texas in search of a rust-free car, and almost succeeded. Highlights include: around the A-pillars, wheel wells and rockers, front and rear shock towers (see fenders), front fenders, floors and trunk. You should either be good with sheetmetal work, or know someone who is, because not only is the CS's body construction complicated, body panels are expensive and many are very hard to find. Most CSL-specific add-ons, however, are available.



INTERIOR

High-quality leather upholstery was optional for the CS, and the expensive extra seems to

have been very popular. The CS's rust problems can even affect the interior, as water entering either from above via the A-pillars, or from below via the floors, can damage the interior. You're better off from an upholstery point of view if it's the floors, because carpet sets are one of the few interior bits available. One of the drawbacks to sourcing a car from a dry region is in the sun damage to the interior, especially both dash tops and faces, which can crack; you'll either live with it, attempt some vinyl repair, or source a used one from a parts car. Interior wood trim will also delaminate and check with age.

While described as an option, most U.S.-spec cars were equipped with power front windows. Slow-moving windows are normal, but window motors can seize up, and only used replacements are available; NHTSA recalled their switches in the 1970s. Rear windows do not retract all the way. Radios were not available from the factory. Many dealerships installed them at the time of purchase,





ENGINE

The E30 engine itself is beautifully and soundly built, but the same can't be said for all of the accessories.

Overheating has always been the biggest problem, and it's common to many six- and four-cylinder BMWs of the Seventies. Insufficient flow through the radiator makes the water pump work hard, and stock units fail regularly. As most driveable cars come from warm climates, someone's probably solved that problem already. If they haven't, simple overheating can become very expensive, as the alloy head is susceptible to warping or cracking, at which point one of several improved versions should be installed, along with a high-flow radiator and upgraded fan.

The stock twin Zenith carburetors require regular cleaning to prevent sticking; we've seen a number of cars converted to an expensive, but elegant and performance-minded Weber setup. CSs and CSLs can develop control box issues; they require regular maintenance. Stock CSs benefit from great parts interchangeability with other BMW sixes; CSLs used many unique mechanical items.



TRANSMISSION

The later ZF three-speed automatic was improved from the Borg Warner

version *Road & Track* called "the worst [they'd] ever encountered in any car, ever," and they've never been popular with enthusiasts. While generally reliable, BMW's four-speed will eat up synchros with enthusiastic use, so listen for extra noise during a test drive. The CS shares transmissions with 2800s, Bavarias, and others; so rebuild kits, used, rebuilt and brand-new four-speed and five-speed upgrades and automatic transmissions are easily available, if expensive.

Clutch noise, chatter and stiff takeup are common, and not necessarily a sign of trouble. But then, they might be, and clutch rebuilds should incorporate a heavier-duty pressure plate. Leaking from the rear differential isn't unknown and doesn't necessarily signal trouble, but should you need to replace it, a variety of rear gear ratios are available to suit your driving style and intended use.



BRAKES AND SUSPENSION

The suspension is seldom a problem, unless you count rust

at attachment points, especially shock towers. Expect bushings to have worn out in older cars, and look carefully for cracking at the tops of the springs in high-mileage or abused cars.

All American CSs came with ZF power steering. It should be light and quiet: Squealing might just be a belt, or a more serious bearing problem. There should be very little play.

The all-disc power brakes were designed with Autobahn speeds in mind, and may squeal. Period tests showed a tendency for the rears to lock, which they attributed to insufficient rubber on the road. Enough of that sort of behavior may lead to cracked front discs. A test drive should include a panic stop, however; any pulling may be evidence of seized calipers. CSs tend to use up brake pads quickly, but all parts are available to repair, rebuild, replace or upgrade the brakes, all the way up to a full race-spec system.



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Price Guide

Low	\$10,000/\$25,000
Average	\$15,000/\$50,000
High	\$25,000/\$100,000

Parts Prices

Alternator.....	\$209.95, less core
Brake pads, front, OEM	\$59.95
Clutch plate, OEM	\$129.95
Center rocker panel, OEM	\$662
Differential, 3.25:1, complete	\$1,250
Distributor, high performance	\$469.95
Door seals, each	\$343
Exhaust, complete stainless.....	\$1,469
Fan clutch kit, upgrade, complete ...	\$199.95
Fender, front L/R	\$770
Head gasket.....	\$169
Lower control arm, each	\$94.95
Power steering pump, rebuilt	\$379.95, less core
Radiator, high-flow	\$331
Starter, rebuilt	\$132.95, less core
Thermostat, improved 71-degree.....	\$17.95
Tie rod assembly, each	\$289.95
Timing chain, dual row.....	\$44.95
Trunk seal, repro.....	\$69
Trunk lid, used, steel.....	\$750



Five-mph impact bumpers appeared in 1974. Ugly, yes, but they've saved more than one front end. When hit, they collapse and are hard to repair.



All BMWs of the era came with an elegant, trunklid-mounted toolkit. No car is finished without a complete one; spare tools are available.

The CSL

It's the same story you've heard a thousand times: Manufacturer builds nice car. Manufacturer homologates wacky version for racing. Wacky homologation version languishes as a misunderstood outcast in the market for a generation, then abruptly becomes insanely collectible. Actually, that almost never happens, but in the beginning of the 21st century, the hairy oddball of the BMW family has made the big time.

BMW had a perfectly presentable and respectable coupe, and was in the hunt for an entry in the European Touring Car Championship to replace the 2002. They debuted a competition CSL in 1971, but Ford took the driver's championship with the Capri RS2600. As humiliating as it was for BMW to lose to Ford, Alfa Romeo claimed the manufacturer's title, and 1972 turned out the same. No surprise, then, that BMW decided to take serious measures to get ahead—and at the same time, hamstringing the Ford effort, by hiring away engineers Jochen Neerspach and Martin Bruangart.

The 3.0CSL was already 550 pounds less than a CS, lacking power accessories, carpets, etc. It also used light-gauge steel construction, Plexiglas windows, a synthetic bumper and an alloy hood and trunk. The 1973 version came with the longer-stroke 3,153cc engine, and the Ford engineers' contributions weren't under the hood. Neerspach and Bruangart concentrated on aerodynamics, which had been the key to the Capri's success. They designed a deep air dam, funky air guide fendertop winglets, a rooftop deflector and a giant wing. They weren't for show: The rear wing produced so much downforce at speed that they reverted to a steel trunk to bear the load.

After a fantastic season of racing, BMW emerged with both the driver's championship for Toine Hezemans, and the manufacturer's. BMW and Ford withdrew from the ETCC after the season, but privateers continued to campaign CSLs, and essentially swept the series from 1975 through 1979...at which point, a BMW factory team took up the slack for another four years.

Numbers for CSLs are a little unclear, but they built an initial series of 169 carbureted cars in 1971, and 569 more fuel-injected versions through 1975. BMW rated the CSL at 206hp, up six from the CS. Not surprisingly, few people cared to shell out \$10,000 or so for a car that was essentially unlivable on the street, so around 1,000 more cars came with a Stadtpaket or "city package," which put back in the amenities removed to make the lightweight race car: interior, power steering and windows, carpets, etc.—like Lance Levetan's 1973 feature car. They did come with an air dam, winglets and held onto the alloy trunk and hood of the 1971-'72 CSLs. Customers could also purchase all the bits and pieces to assemble their own from BMW, so check VINs carefully before buying. We haven't heard of any, but a CSL sold for \$130,000 last year, which means fakes and clones will be popping up.

Recent Ads

1972 BMW 3.0CSI, here is a very rare and very clean BMW 3.0CSI. New speakers and CD player, sunroof, very nice BMW that is very fun to drive. \$22,950.

1973 3.0CS. A 63,000-mile time capsule sitting in storage for the last 17 years. Four spd, ac, manual sr, pw, tool kit, BBS whls, tan leather, Cibie driving lights, Perfect. No sign of rodents, well stored, no rust visible (Yes, I know, there is no such thing as a rust-free coupe but this one comes mighty close). \$15,000.

1973 BMW 3.0CSL RHD. ... this exceptional CSL was the subject of a major restoration during the late 1990s and has covered only nominal mileage since. The restoration was completed using genuine factory panels wherever possible. These included the complete front panel, inner and outer front wings, rear quarter panels, rear wheel arches, floor sections, inner and outer sills, rear panel and complete boot floor. £27,750.

CS Timeline

- 1965: BMW introduces four-cylinder E120 2000CS
- 1968: 2800CS with six-cylinder M30 engine and E9 chassis
- 1969: 2800CS on sale in U.S.A.
- 1971: Carbureted 3.0CS and CSL replace 2800, Europe-only fuel-injected 3.0CSI.
- 1972: RHD 3.0CSL for the English market
- 1974: 2.5CS introduced, official U.S. 3.0CS sales end (leftover cars are sold though 1976)
- 1975: Production of all variants ends, total E9 production: 30,546



Alexander Calder created this scheme, one in a continuing series of BMW Art Cars. The Calder CSL is owned by BMW and appears at shows.



A factory lightweight fuel-injected, 3,153cc 1973 CSL. Fewer than 100 survive in this spec; this example didn't sell for \$80,000 at a 2005 auction.

A-pillars where they join the rockers, a cross section resembles a samurai sword, folded over and over. The rockers themselves are hidden by a cover; underneath are more layers of poorly drained steel, which serve a vital structural function in the unibody car. Replacements are available, though.

Surface rust in either area is usually an indication of much more extensive problems underneath. Depending on your personal aesthetics, you can live with crumbling wheel arches, leading edges and holes in the trunk. But suspension attachment points and structural members are non-negotiable and must be fixed before a car is safe to drive. Paying someone to do it will be extremely expensive and should be a primary consideration when looking for a car.

Period reviewers considered the interior stark, but with wood accents and contrasting fabrics, it has come to look elegant

today. Optional leather seats are common and extremely comfortable if well maintained, although short drivers may find them low. First time drivers will find themselves confused by the switchgear: The steering column stalks have headlamp controls on the left side, and signals and wipers/washers on the right. Standard rear and optional front power windows operate slowly, which can be mistaken for a sign of trouble. Most interior trim and fittings are difficult to find, making another argument for a parts car.

The real joy of a CS is in the driving. Lightly power-assisted steering and disc brakes make life easy, and exceptional visibility in all directions is never bad. If you're not scared away by the rust prognosis, CS ownership is an intensely rewarding experience. The car is more than capable in modern situations, with spectacular looks, terrific performance and a reasonable cost of entry. 🌐

Viewpoint



I can't remember when I first fell in love with this car. One of my oldest best friends reminds me we were in college in the early '70s when one happened by on the streets of

Burlington, Vermont. Let's just say it made an impression on me.

Cut to 2005 when foolishness brought me to act on my idle dream of owning one of these beauties. I searched for the better part of a year, coming close to purchasing a 2800CS out near Syracuse, New York, but decided instead that I wanted the 3.0, with discs all around.

I finally found one in Texas whose condition and price were in my range. The process of purchasing a car sight-unseen is a story in itself, for another place and time, but I worked out a deal, and several weeks later, the car came off the transporter here in Bennington, Vermont.

Balance is what this car is all about. Enough engine to pull and enough revs to cover distance in comfort and style. Brakes are superb. I know a lot of people swap in five-speed transmissions, but for me, the standard four-speed works just fine. If I lived near the Autobahn, well then maybe, but here in Vermont the four-speed is a perfect match for the hills and valleys where I drive my car. Can't wait for spring.

—Tim Metcalf, Art Director,
Hemmings Motor News

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Dues: \$25; Membership: 300

BMW Car Club of America

640 South Main St #201
Greenville, South Carolina 29601
864-250-0022
Dues: \$40; Membership: 20,000