

MOTORSPORT SIB



LINGS

These factory CSL "Batmobiles" from 1975 are still hot, still fast and still racing. When two of them ended up at the same Northern California shop, we couldn't resist a visit.

By William Edgar · Photography by William Edgar, as credited



For 35 years, this intertwined pair of CSLs has survived the rigors of IMSA racing with BMW Motorsport when new and the ensuing demands of historic racing under private owners. Thrilling to watch and hear in action, they've epitomized the allure of the Bavarian marque since they first hit the track, where they've been driven in anger by the very best—Hans-Joachim Stuck, Ronnie Petersen, Peter Gregg, George Follmer, John Morton, Jody Scheckter, Gunnar Nilsson and Sam Posey.

Plenty of replicas have paid tribute to the CSLs and their drivers over the years, but these are the genuine article: serial numbers 2275987 and 2275988, built by BMW Motorsport at Garching in November 1974 for the 1975 North American IMSA championship. With a Paul Rosche-designed 3.5-liter M49/2 inline six and an E9 chassis brilliantly engineered and developed by Martin Braungart and Rainer Bratenstein, the Group 4 CSLs would show BMW's racing might to the world and, in particular, to the important consumer market in North America.

They certainly worked their magic on their drivers. After his initial 1975 test in this pioneering BMW at Kyalami in South Africa, Posey recorded his earliest CSL impression in *Road&Track*: "On the straights the power was sensational," Posey wrote, "and it was easy to imagine that the CSL would be the undisputed leader on such fast IMSA tracks as Daytona, Talladega and Riverside."

Posey would drive CSLs at all three venues that year, taking the overall victory at the 12 Hours of Sebring with his multinational teammates: Brit Brian Redman, Aussie Allan Moffat and German Hans-Joachim Stuck, who echoes Posey's thoughts when I ring him at home in Ellmau, Austria.

"With some good chassis work and a fantastic engine," Hans tells me, "we were the favorites, and so we were better than the others. I was very happy with the car, even if on a normal road it only had two hundred-eighty horsepower. We had five hundred or something, and the race car could manage it because underneath the shell it was really made to the max that you could do in those days."

Our subject cars are the last two of four such cars built by Motorsport for Stuck, Posey and the rest of the factory team led by Jochen Neerpasch; the others were assigned chassis numbers 985 and 986. [There's also a fifth CSL, #984, but this was never designated as a U.S. car and raced here just once before returning to Germany—see *Bimmer* #31 for the complete history of the IMSA CSLs.—Ed.] Today, #987 wears racing number 58 and its original Motorsport livery, while #988 wears the number 45 and brighter, bolder factory graphics atop its white paint.

While neither Posey nor Stuck ever drove #987 in a race—it traveled with its stablemates as a spare or parts car throughout the 1975 season and did not see IMSA track action until it was driven by John Morton in 1978—both Posey and Stuck drove #988 at the 1975 Daytona 24 Hours, and also at that year's races at Sebring and Road Atlanta.

After that, the car went back to Germany to campaign the 1976 ETCC season, most likely with the updated and upright-mounted M49/3 engine developed by Schnitzer that year. In November 1976, it won at Kyalami with Jody Scheckter and Gunnar Nilsson. #987 also went back to Europe for 1976, but nothing is known of its fate until 1977, when it was sold with #988 to BMW privateer Vasek Polak in California.

Just before he died suddenly in 1998, Polak agreed to sell #987 to San Francisco BMW proprietor Henry Schmitt and #988 to fellow BMW dealer Rug Cunningham in San Diego; both sales were completed after Polak's death. After Cunningham died in 2007, his estate sold #988 to Schmitt, briefly giving Schmitt ownership of both CSLs until the end of 2009, when he sold #988 to entrepreneur Andrew Cannon of Melbourne, Australia. While Schmitt owned both, the CSLs were stored and maintained at Bill Watson's Road Rockets shop at Infineon Raceway in Sonoma, California, where we were able to photograph and examine the cars side-by-side.

Steering by popometer

That the CSLs, including #988, won in IMSA in 1975, convincing skeptics that BMW could be a major force in road racing, is fairly common knowledge. That they handled as well as they did, though, comes as more of a revelation. They were big, wide, angular and—except for those enormous wings—looked almost like the BMW coupes you'd see on the street, though they were much more evolved under the skin.

Stuck was instrumental in the car's pre-1975 development—especially its tire technology—putting in countless laps on European circuits such as the Nürburgring and Monza. He describes his approach to handling a CSL at ten-tenths: "We didn't have DSC or traction control, so it was pretty much driving you did with your popometer. That's the thing that you sit on, you know."

He laughs, rushing on, "Your popometer was your connection between the road and the car, and this showed you what the car is doing. Is it understeering, oversteering? I like the car to oversteer and to drive it with the throttle, you know, because my kind of driving technique was to go into the corner with a little bit already an unstable car, then use

the power for stabilizing the car and have it constantly in a little drift around the corner with some oversteer at the end.

"The CSL had the front engine with good grip and the rear was pretty loose anyway, even when we had a wing on the car, which wasn't adjustable but was helpful to sort of support my driving style, you know, and I could control it very well with the power."

The exuberant Stuck and the CSL made a huge impression on race fans and casual watchers alike in their first season of racing in the U.S. and Canada. Says Posey of his co-driver's skill, "Hans wore that car almost as a piece of clothing."

CSL #988, the one Stuck and Posey often drove in period, was a sure bet to win 1975's Daytona 24 Hours until the crank broke. A month later, it was used as Neerpasch's "hare" for Hans and Sam to goad the Porsches into crashing out at Sebring, setting an unbeatable pace until it suffered engine failure, which it also did in its third and last IMSA appearance at Road Atlanta.

In January 1976, #988 was modified by BMW Motorsport to 470-hp Group 5 spec, which is how it appears today in the number 45 livery used by current owner Andrew Cannon. He'd never even sat in #988 before 2010's Rolex Monterey Historic Motorsports Reunion at Mazda Laguna Seca Raceway, but he'd seen Stuck drive CSLs back in the day, when he was just a kid.

"You can get up to a certain percentage of a great driver like Hans-Joachim Stuck pretty quickly," Cannon says, "but it's that last bit that only someone like he has. I'm never going to get to that point. I just enjoy driving it."

Living in Australia and only racing #988 when able to book contiguous vintage race weekends Stateside, Cannon's not really driving it enough for his own liking. Meanwhile, his CSL resides at Vintage Racing Motors in Redmond, Washington, where it's maintained by historic car specialist Byron Sanborn. It was Sanborn who suggested #988 when Cannon began inquiring after a CSL, looking for a closed car to pair with his Maserati 250 S.

"I tested it up here in Seattle," Sanborn says of #988, "and it was fabulous! It's got a ton of back tire on it, so you've got to convince yourself that you really can get on the gas early."

Sanborn assures me it's easy to drive, incredibly stable at high speeds and has no bad habits—as its new owner quickly discovered.

"He got in the thing," Sanborn says, "and it didn't even take him a full session to get really comfortable with the car."

Cannon insists #988 would make anyone look good.

"When it came up for sale," he says, "I tried not to fall in love with it, but I did."



CSL #987 wasn't raced by the BMW factory team during the 1975 IMSA season but was a spare car until 1976, when it raced in the ETCC. In 1977, the car was sold to Vasek Polak, who campaigned it in IMSA in 1978 and from whose estate current owner Henry Schmitt bought it in 1998. Schmitt put its M49/3 engine in storage and had Bill Watson attach its ancillaries to an S38 head while making a few more improvements to fuel delivery and other systems; otherwise, #987 runs as it did with BMW Motorsport. Group 4 bodywork still looks dramatic.



DETAIL PHOTOS BY JACQUE JOURET



CSL #988 didn't win in IMSA in 1975 but finished second at Le Mans and won at Kyalami in 1976. Like #987, it was sold by BMW Motorsport to Vasek Polak in 1977, winning for John Morton in IMSA. After a long stint in vintage racing with Rug Cunningham, it was sold to Henry Schmill, who passed it on to Andrew Cannon in 2009. Its M49/3 has been updated by Bill Schlossnagel to address vibration problems, allowing Cannon to make full use of the engine's 470 hp and the ample grip from its enormous rear tires. Group 5 bodywork provides plenty of downforce.

COURTESY OF JACQUES JOURNET



Classic BMWs on a classic circuit

"The hardest thing to get used to," says Cannon, who bought the CSL before he'd even driven it, "is how sticky it is with those slick tires, and how good the brakes are."

Really? We'd think it would be the noise!

"The six-cylinder, twenty-four valve makes a hell of a racket," he says of the M49/3 under the hood, "but it's very exciting to drive."

Drive he did at Monterey last August. Qualifying 14th of 32 starters in the 1973-'82 IMSA group, Cannon finished eighth in the race, relegating a bevy of Porsche 935s, 911s, RSRs, Corvettes and Chevy Dekon Monzas to his mirrors.

"I could have kept going all day!" claims Cannon. "Some cars you race, you say, 'I'm glad that's over!' But when the checkered flag came out, I was just getting into the swing of it. The CSL drives terribly around the pit area, granted, but as soon as you get going and get into the revs, it comes alive. My impression is how advanced it was in braking and handling for its period. Last week, I did a hundred laps in my Ferrari 599, and when you think about that car with all its technology, you have to think how good the BMW was."

Cannon's wasn't the only CSL at Monterey last August: CSL #987 finished two spots ahead of it in sixth, driven by Henry Schmitt. The 52-year-old Schmitt—same age as Cannon—has been driving #987 on track regularly since taking ownership in 1998, but he's been around BMWs his whole life. His father started Schmitt BMW (now BMW San Francisco) in 1964, when Henry was seven, and it was only natural that he'd develop an interest in racing. In time, he met Czech émigré Vasek Polak, slight in stature but mighty as driver, mechanic, dealer and collector. Visiting Polak and his epic Porsche and BMW stable in Southern California, Schmitt admits he was "blown away." Among Polak's cars were our two subject CSLs, #987 and #988.

Says Schmitt, "We had this agreement that I would buy one of Vasek's CSLs and Rug Cunningham was going to have the other, and there also was a vast amount of Motorsport parts and spares. Then Vasek died, but there were enough people who knew we had a purchase agreement, so I was able to buy my car [#987] cleanly."

Trouble was, Polak's spare parts weren't as clearly defined as his cars, and they remained something to figure out after the sale of the CSLs. As Schmitt remarks of the intended dispersal, "Rug would see what he needed and I would get what I needed, and we would split it up or something."

Time passed without a resolution, and it

later came out that *all* the spares had gone to Cunningham, who knew the CSLs would need them. "Those engines," Cunningham told me in 2006, "were always pretty much a grenade."

"When Rug passed away in 2007," says Schmitt, "Gina [Cunningham, Rug's widow] called me and said, 'I know you have always wanted these parts, and you can have them. That's the good news. The bad news is, you have to buy the other car to get the parts.'"

Schmitt balked at first, then, "I did the math, bit the bullet and stepped up, and right then things started happening in our economy," he says. "It wasn't the best timing."

To offset the expense, Schmitt was able to sell a number of parts he didn't need or that he now had in triplicate.

"Then," he says, "I had this other car [#988], which was really interesting, but I couldn't race two at once and didn't want both of them."

Schmitt enlisted BMW restoration/racing specialist Bill Watson to make the repairs and mods, including improvement to the car's roll cage, needed to upgrade #988 to vintage competition standards. Eventually, along came Cannon in search of a CSL.

Knowing Watson from his standout BMW 1600 GT [*Bimmer* #92], I find him again in his Road Rockets shop at Northern California's Infineon Raceway.

Doing what couldn't be done

When we open the hood of #987, we see in its engine bay a distinctly more modern powerplant than the old M49.

As Watson recounts, "When Henry Schmitt approached me about making #987 track-worthy, he said, 'I'd like to use the six out of an M5 or M6. Can we do that?' I said, 'Probably so,' and that led down a long path. After asking for the blessing of Larry Koch at BMW North America on behalf of [vintage racing stewards] Steve Earle and Chris Vandergriff, we were given the OK to use the cylinder head and cam carrier from an engine used in the original M5s and M6s [*the S38 used in U.S. models—Ed.*] because they were the 'grandsons' of the original BMW four-valve six-cylinder engine. In fact, the bore centers, the head bolt bosses and the water passages on the M49 very closely mimic, or are identical to, the later production blocks.

"The ancillaries, the mechanical injection system, the exhaust headers were transferred and fit onto the later cylinder head, so Henry's chassis number 987 runs with the same fuel delivery and exhaust systems that the car ran with back in the day."

Although they changed the CSL's engine, Schmitt and Watson didn't discard the original. "Henry's M49/3-18 sits carefully stored away, and that piece of motorsport history is

intact and undamaged and will be a part of that car forever."

The other CSL, Cannon's #988, is running the standard M49, this one by El Cajon, California engine builder Bill Schlossnagel. Reserved and self-sufficient, Schlossnagel worked on the car when Rug Cunningham owned and vintage raced it. He tells me the engine was rebuilt over the course of more than four years after the number five piston shattered during a vintage race at Coronado, taking a portion of the block with it.

"I began around 2005 acquiring parts and pieces," says Schlossnagel. "We started with a fresh European L-series block, and I had Crower in San Diego make a new crankshaft and connecting rods. From the spare parts Rug had bought from Vasek, we had a brand-new cylinder head and the standard CSL valves. Then, on the dyno, it broke a tappet that in turn broke one of the last magnesium tappet carriers, so I had a company in L.A. make some billet aluminum ones that took a year to do. We put everything together, sorted it out, and once that was done the engine went in the car and it's been there ever since."

As have other drivers, both Posey and Stuck mentioned so-called "sine wave" vibrations created by M49 crankshafts at specific rpm, but Schlossnagel says this harmonic disturbance doesn't exist in #988's rebuilt engine. The new crank made by Crower Cams & Equipment Company replaced BMW's "weird" harmonic damper on the crank snout with a re-engineered damper of its own. Says Schlossnagel, "I have no scientific way to back it up, but we may have taken care of that problem."

Watson adds, "Both this engine [Cannon's] and the other engine [Schmitt's] have crankshaft dampers that are of a later design than the original. At higher rpm, harmonics can cause a lot of grief inside the lower end of the engine. This engine [#988's] had been constructed with an alternate damper to try and resolve, or ameliorate, some of those conditions working on the crankshaft, the main bearings and the rods and rod bearings that are attached to it."

Fuel starvation was another concern endemic to M49s back in the day, and Watson has had to repair the car's original fuel accumulator.

"The idea now is there's always an abundance of fuel available for the injection pump to draw on, regardless of how low the tank is or with regard to g-forces," he explains.

Coming in hot, hot, hot

Watson's work helped Schmitt turn in a stellar performance at 2007's Monterey Historic Races, at which #987 turned out to

be the only BMW in the IMSA GT race when BMW NA sat out the event. #987 finished eighth, beating most of the twin-turbo Porsche 935s and several Chevy Monzas.

"We were jubilant!" Watson enthuses. "So this fellow in a BMW logo shirt comes over and sort of growls, 'Nice job, but the car shouldn't be that fast.' I said we don't know what we can't do, so you just see what you can produce. He said, 'My name's Larry Koch. I'm with BMW.'"

"Koch said, 'It's faster than our car.' I said we probably worked on it longer, that's all. He said, 'That's a really good job—how high do you turn it?' Nine thousand, I told him.



Sam Posey runs CSL #988 through its paces in 1975. Though it didn't win any IMSA races that year, this CSL impressed onlookers with its speed and handling, and it cemented BMW's reputation in North America. As a vintage racer, it continues to do so 35 years later.

He said, 'You can't do that.' I said we spent a fair amount of time and worked on the dyno trying to figure things out. He said, 'Must be a racing crank.' No, I said, actually it's an '88 M5 crankshaft.

"Koch was simultaneously nodding his head and shaking his head, in a state of disbelief that the car had run that well. It was fun, and as a result of that, he's been good enough to take my phone calls."

Two years later, Schmitt's #987 was racing at Laguna Seca against its sister car, #988, now in the hands of Andrew Cannon.

"Henry certainly had the wood on me there," says Cannon. "By the end of the weekend, the gap had narrowed a bit, but I think there is a fair bit of work to do to go neck and neck with him. I can't wait to drive the CSL again and have another go."

Schmitt is glad for the competition, and he also loves his interplay with the Porsches on track. Though their turbos allow some 935s to stretch their lead on a straight, there's invariably the next corner.

"I come in really hot," Schmitt almost sings in praise of his racing Bimmer, "and at the last second possible just stand on my brakes and the car does not lock up. It really holds well—great traction, great brakes—and then I'm able to accelerate. I can be on the gas earlier and power through that turn

and I'm right back on the Porsche by the exit. We're playing a cat and mouse game around the whole track."

Just looking at these CSLs outside Watson's shop, I feel not only the enthusiasm of Schmitt and Cannon but also the cars' illustrious history welling up around me, like dreams come to life.

Reflects Watson, "For people who remember these cars, it stirs them very deeply."

He touches a front fender of #988, the one with "Vasek Polak" atop its windshield, saying, "This is my favorite car. It is the best car, short of the [Frank] Stella turbo [Art Car] that they ever built. This is the Group 5 car, with the

wider fenders in back and more track in the rear. This is the fastest car, the highest Group 5 finisher of any CSL at Le Mans. Second was the best that they did, and this is the car that did it, and the car that won Kyalami."

Fast and fun, then and now

That's not all when it comes to #988's accolades. Still in its original Group 4 spec, it went back to Europe during the second half of '75 to contest the Nürnberg-Norising race with Ronnie Petersen and Stuck, then won the Nürburgring's ETCC round from pole and scored a class win with fourth overall at Zandvoort. In 1976, painted black and modified to Group 5 spec, it finished second in GT and tenth overall at Le Mans with Posey, Harald Grohs and Hughes de Fierlant. Later, #988 scored more top ten finishes at Mugello, Vallelunga, Silverstone and Dijon. Victory from pole at Kyalami in South Africa, though a non-points race, pushed this CSL's record to the peak.

After its tenure with the BMW factory team, Schmitt's #987, along with #988, returned to the U.S. to join the Vasek Polak stable. At Laguna Seca in 1978, these two Polak-entered CSLs roared away in practice with John Morton driving #987 and Milt Minter in #988, which still wore the black Motorsport livery of its European triumphs.

Unfortunately, #988's motor let go before the main event, leaving only #987 to contest the 100-mile IMSA race. Morton won the GTO class and finished ninth overall, driving the car that in 20 years' time would be Henry Schmitt's pride and joy.

Of that Sunday in April '78, Morton recalls, "When I started, my car felt under-shocked and seemed to have a lot of suspension travel. But it was awfully fast. I just about lapped the GTO second place, Howard Meister in a Carrera RSR, and did a lap record with the CSL that stood for several years."

Nearly 30 years later, Morton drove a CSL again, subbing for its then-owner Rug Cunningham in #988 and starting last on the Monterey Historic grid. "I loved how it ran—powerful, fast—and it really stuck," Morton says of the car with Schlossnagel's rebuilt engine. "We caught up to second place. It was really fun to drive!"

Today, that same CSL continues to please Cannon, who adds, "Hans Stuck reached the pinnacle in driving these cars, and I'm nowhere near it. But I'm trying hard and am looking forward to racing it at the Le Mans Classic in 2012. This car would be perfect to do it." He's virtually guaranteed an entry: Within the BMW vintage racing universe, few examples retain greater cachet than Cannon's CSL.

Henry Schmitt, too, plans to keep racing his CSL and has now brought one of its successors into the fold: the same lightweight 320i Turbo, #003, that a 20-year-old Schmitt watched David Hobbs race to victory from pole at Sears Point on July 23, 1978.

"It's always stuck with me," Schmitt says.

If its restoration keeps pace, he'll have the 320 ready to join his CSL for 2011's Sonoma Historic Motorsports Festival, which takes place this spring on that same Northern California road race circuit (now Infineon).

Back in '75 and '76, Hobbs, Posey, Stuck, Redman, Petersen, Follmer, Scheckter and a few others had the good fortune to drive a CSL and lend it the talent the car deserved. Posey will forever remember his CSL Daytona Finale podium in '75, saying, "It helped to re-establish my sense of myself as a good driver."

All mentioned here have provided indispensable help in telling the story of these two CSLs. When I last spoke with Bavarian-born Stuck, reaching him in Austria as he prepared to go to the Nürburgring, Hans wrapped up our chat by asking if there was anything thing else I needed. I thought back to the joyful attitude toward racing that had first endeared Stuck to North American fans and said, "A Bavarian yodel?"

And yodel he did.

"Yodel-Ay-EEE-Oooo!"