# "Cast in Bronze"

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Published in Porsche Panorama

July 2013

(First issue of new size format)

Circulation: approximantely 100,000













DEF	PARTMENTS
6	EDITOR'S NOTE
12	LETTERS
16	PRESIDENT'S NOTE

JUNIOR DRIVER

STREET TALK

ART & CANVAS

EUROPEAN WINDOWS

FROM THE REGIONS

PCA NATIONAL CALENDAR

PCA CLUB RACING SCHEDULE

COMING EVENTS

TECH Q&A

THE MART

ZWART

ADVERTISER'S INDEX

1949 356/2 Gmünd coupe Photo by Jeff Zwart

ANY QUESTIONS?

18

22

34

36

92

100

104

106

108

112

138

140

144

COVER



68

(78

(86)

MAGAZINE OF THE PORSCHE CLUB OF AMERICA

## In the Beginning 356 Gmünd Coupe

A day spent driving around Southern California in Porsche's very first production car reminds us why it truly is a masterpiece.

## End of an Era Andial's Last Days

Dieter Inzenhofer, the last active member of a legendary American Porsche racing shop, decides to close the shop's doors for good.

## Red Herring 924 Carrera GTS Clubsport

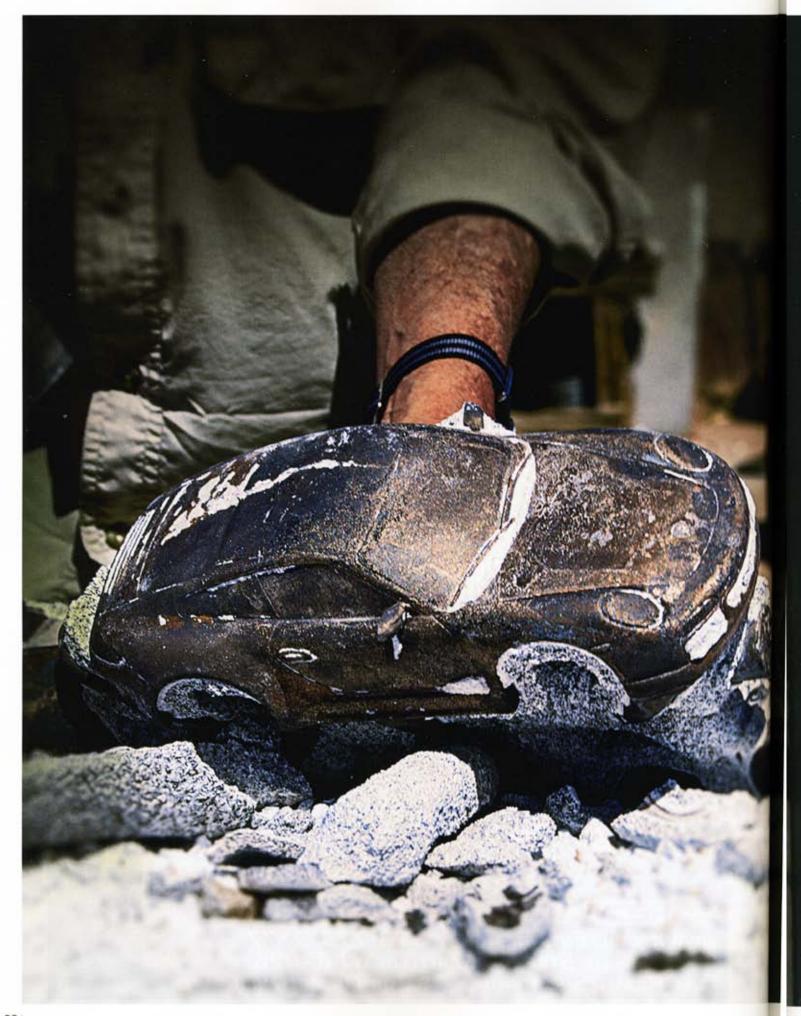
An aggressive argument for a front-engined future that wasn't to be, this rare 924 remains one of the coolest Porsches of the 1980s.

## As Good as it Gets A Very Custom 993

One of five dealer-built 1998 "Carrera S Cabriolets" becomes even more unusual when a PCA member turns it into a "Speedster S."

## Cast in Bronze The 997 as Sculpture

Riley Kelley's passion for fast Porsches is now immortalized in sculpture-thanks to a fast course in the art of bronze sculpture.



## A PASSION FOR FAST PORSCHES IMMORTALIZED IN SCULPTURE. STORY AND PHOTOS BY SEAN GRIDLAND

That was the thought that passed through Riley Kelley's mind as he drove his 2011 Carrera GTS down a New Mexico highway. Most of us are too busy to do anything but let our rhetorical exclamations drift into the ether. Occasionally, though, they become starting points for a new adventure, the first step on a journey through neighborhoods and alleys we couldn't have imagined. As the miles passed, Riley, a certified public accountant, made a decision: He would learn how to create the bronze sculpture he envisioned.

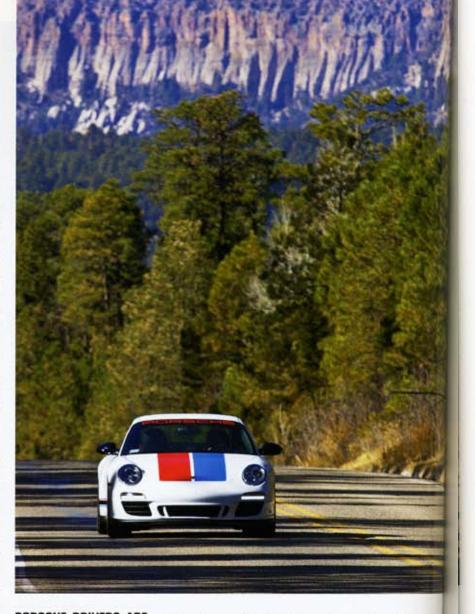
## "THIS CAR IS PERFECT; IT SHOULD BE CAST IN BRONZE."

## HE PORSCHE THAT inspired

Riley Kelley is no "ordinary" Carrera GTS. His 408-hp, 997 coupe is the third of just five "B59s" sold by Brumos Porsche as a very limited edition. That doesn't stop Riley from driving it as intended. He and his red, white, and blue 997 can often be seen spiriting up the road to the Santa Fe Ski Area in the early morning hours of summer. "14 miles up, 14 down, 72 turns," says Riley with a grin. He doesn't offer to divulge how long the run takes him, but you get the sense it isn't long.

Riley's fast 997 is joined in his garage by another GTS: a 2010 Cayenne GTS. Riley puts the 405-horse sport ute to good use, sending up plumes of dust in the desert, trudging through winter snow, and running the occasional foul-weather autocross with PCA's Roadrunner Region. These days, his Sand White Cayenne has a new mission: carrying art supplies and making runs from his Santa Fe-based studio to meet with various artisans throughout the Southwest.





### PORSCHE DRIVERS ARE nothing if

not dreamers. Riley certainly is thanks in no small part to his father, Mike Kelley. The Mississippi cotton farmer knew he had to do something to keep his son from going down the wrong path, and felt that unconventional adventures would keep the boy occupied until he could find his calling. When Riley was 11 years old, his father left him in the middle of a field in an old pickup and told him, "Come home when you've learned how to drive it."

A few years later, Riley found himself attending the Accademia di Belle Arti in Florence, Italy and the Lycée Michelet in Paris. Not long after, he was waiting impatiently for his 16th birthday so he could take his pilot's test—a good idea since he'd already been flying for almost two years... Despite his early penchant for the arts, Riley chose to pursue an accounting degree at the College of Santa Fe. He was earning As in his first semester when he was called into Brother Ferdinand's office for a serious talk. The counselor's words were unexpected: "Riley, I'm very concerned. You just don't fit the mold to be a CPA. I'm worried you'll be unhappy. I think you should be in marketing, or an artist or something."

Riley would not be deterred, however, and earned his certification as a public accountant. After graduation, he worked for several large firms in Jackson, Mississippi before relocating to Santa Fe. Along the way, he married wife Joan, raised three daughters, and created a lifestyle successful enough to allow him several kinds of fast cars and motorcycles before he settled on Porsche as his favorite marque.

Besides his pair of white GTSs, Riley has a Guards Red 1988 911 Carrera that he loves to scoot around Santa Fe in. The first of three Cayennes was purchased when he needed an SUV to carry groceries and grandchildren. The B59 came about after he got to know Hurley Haywood at the Porsche Sport Driving School. The legendary endurance racer called Riley in early 2011, offering him a "smokin' good deal" on the still-secret run of commemorative Carrera GTSs. Kelley said he thought about it for less than a Mississippi minute and picked the car up at the special presentation in September of that year.

Not long after, his lifelong passion for art and his time in Italy and France as a young man came rushing back in a sudden urge to do something special. Having always dabbled in drawing, sketching, clay sculpture, and other media, Riley had dreamed about creating a piece in bronze but had yet to find the right inspiration. In the B59, he found it.

Riley set about turning his urge into tangible reality. He played around with shaping and modeling, wanting to get the shape just right. Eventually he did.

### IF OWNING A PORSCHE is a journey,

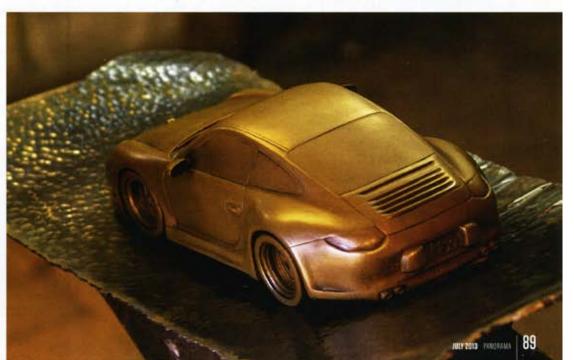
delving into the process of creating a bronze sculpture in the art community of northern New Mexico is more like an odyssey. The state's motto, "The land of enchantment," is more than a quaint saying. The area has been rated the second-largest art market in the U.S., and merely living among the many Native, Hispanic, and European cultures is an adventure for anyone, let alone someone with an urge to create.

To find the team of artisans and craftspeople he'd need to help him turn his idea into a finished bronze statue, Riley would visit little towns and villages with names like Chimayo or Tesuque. Eventually, he got hooked up with bronze artist Marco Oviedo. A product of old-world Italian and Spanish descent and a long tradition of bronze workers, Oviedo helped him make the leap from the modeling phase to the mold-making process. With his help, Riley produced his very first wax model, which looks temptingly like a chocolate 997.

From there it was on to Santa Fe Bronze Foundry, near the village of La Cienega. The foundry works with artists from all over the western U.S., and helped Kelley with the decidedly complex process of getting his project from the wax model to the beautifully finished piece (see sidebar next page).

The journey wasn't over yet, though. Riley wanted a sloping base reminiscent of Laguna Seca's Corkscrew. That meant heading north for regular visits to the blacksmith shop of lifelong local Patrick Porter. An honest-to-goodness cowboy, Porter is the son of color photography pioneer Eliot Porter, and grew up sitting on the laps of Ansel Adams, Georgia O'Keeffe, and D.H. Lawrence. Watching Porter hand-hammer the steel mount, Riley was treated to jokes and stories that burned as red as Porter's furnace's embers.

In the end, Riley was able to bring his dream to life as a bronze sculpture of his B59. On its own, the



It's safe to say

member Riley

Kelley (below)

is pretty into

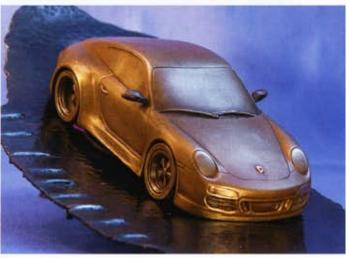
**Brumos and its** 

New Mexico PCA

sculpture is almost ten inches long, about five inches wide, and just short of four inches high. Its sloped, hammered steel base adds another seven inches in height.

Having gone through all that trouble to make one bronze B59. Riley had a mold capable of making more. As a result, his pet project has turned into something more than a one-off creation for his own pleasure: He has committed to making a signed, numbered run of 59 copies in commemoration of the legendary Brumos racing number. Several have already found themselves in the hands of automotive art aficionados, so Riley is off on yet another adventure in his Sand White Cayenne GTS. After all, he's got deliveries to make.

Sloping base for the bronze 997 recalls Laguna Seca's famed Corkscrew, replete with alligator stripes to the inside.



## The Process

**CREATING A BRONZE** sculpture is remarkably complicated, requiring skills in metallurgy and ceramics, high-temperature heat, and special materials so that human hands can safely handle very hot materials. Unlike other forms of art, creation of a bronze statue often requires a whole team of people and a foundry to render the conceiving artist's vision.

The first step requires conceiving of the shape and making a "maquette," or model, of the item to be cast in bronze. Next comes production of the mold, from which you will produce the wax used in the "lost wax" process. These days, the mold is made of latex, which is painted in layers over the maquette and then allowed to dry. Eventually, the latex mold is stabilized in a plaster casing that protects it and helps to maintain its structural and shape integrity.

Wax is poured into the latex mold to create the shape that will be cast in bronze. The wax must be just the right temperature and just the right consistency if it is to reach all the minute grooves, nooks, and crannies of the mold. When the wax cools and is freed from the latex mold, it must be cleaned, trimmed, and prepared for "spruing." Sprues are the wax tubes attached to the wax that channel molten bronze into the mold and allow air to escape during the casting process.

Once the model is sprued, it is dipped into a silicate solution several times to create the "investment" casing. The molten bronze is poured into the investment casing to create a rough bronze casting. This is where the "lost wax" portion of the process comes in.

The investment casing is then placed in a kiln, where it is heated to approximately 1,800° F. The heating process does two things. First, it cures and solidifies the investment casing, hardening it and bringing its temperature up so it won't explode when molten bronze is poured in. Second, it melts and burns away all of the original wax model and its sprue vents, leaving only the cavity into which the bronze



flows. Bronze ingots are heated to approximately 2300° F and then poured into the investment. Once the bronze has been poured and the foundry technician is satisfied that it has reached all cavities, it's allowed to cool and solidify.

To reveal the solid bronze casting, the plaster-like investment shell is carefully broken away with a hammer and other tools, revealing a piece that still has all the sprue-vents attached, just like the wax model did. Now comes the work of "chasing," or cutting away all the excess bronze left by the sprue vents, then grinding and polishing those areas so they are smooth and leave no trace of the sprues. Sandblasting to create a uniform finish follows.

Many bronze sculptures are cast in several pieces, which then must be welded together to create the form originally conceived by the artist. When the artist is satisfied that the piece has the desired shape and finish, a patina is applied to give color to the bronze. The patina process is itself a fine art. Patinas can be monochrome, shaded, or polychrome. A good patina artist will apply the patina in order to add highlights and shading depth to a piece so it emanates the beauty envisioned by the designing artist. -Sean Cridland



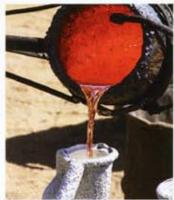
A drying latex mold surrounded by photos of its inspiration.



The wax is cleaned and trimmed.



Three invested waxes in various states of layering. The white one is ready for the kiln.



Molten bronze is poured into the investment casing.



The bronze is "chased" or cleaned of its sprues and vents.



The patina is applied by hand with brush and flame.