



Carl's Anniversary Bad Dog takes shape. Below left, a stock Big Dog Pit Bull as it came off the production line.



RUNNING WITH THE BAD DOG

PART 1

Sit, Stay, Run

Story by Vincent Stemp • Photos compliments of Carl's Speed Shop

You've almost definitely heard of Carl Morrow, but if not, take a seat. Carl has been hitting the Bonneville Salt Flats and leaving records in his salty wake since the 1960's, the good old years when Jimmy Hendrix was still swinging an axe and hopped-up Sportsters were the last thing you wanted rewing next to you at the lights. Back in those days, Carl was busy in his garage, tinkering with little projects like a nitromethane fuel injection system he milled himself for his 90 cubic inch Sportster drag bike. Serious stuff!





Carl has seen more performance trends come and go than a Harley-Davidson museum, and has been building horsepower at his self-named Carl's Speed Shop, located first in California but now in Daytona Beach, for more than four decades. Carl's long his-

tory in the industry has taken him down many roads, and for his shop's 43rd anniversary, he decided to whip up something neat to commemorate the occasion: a bike he's calling the Bad Dog.

First, a little modern history. Remem-

ber Big Dog Motorcycles? Regardless of what anyone has to say about production custom choppers, it's a matter of fact that Big Dog managed to put more than 25,000 of their motorcycles on the road before they ceased production in 2011.

SO WHAT IF YOU'RE NOT AN EXPERT?

Maybe you're thinking that it's easy for pros like Carl and his crew to build a bike like this. They have all the right equipment and years of experience, so it's a slam dunk for them, right? Well Carl says, "You could build a bike like this with a well stocked tool box, drill press, bench vise and grinder. If you have a friend that can weld and another who can paint that would be great."



How does he know? "I home-built a top fuel dragster in my garage in 1968 and ran it at Lions Drag Strip. I know what it takes and you can do it without a lot of tools," he said. One further bit of advice: "If you can get the bike up off the floor onto a lift it makes a big difference."

Along with that can-do attitude Carl was also blessed with a first class teacher. "Tom Sifton was my mentor. I'd ask him a question and he'd say, 'I don't know much about it but...,' and you'd better be listening because he sure knew a lot about everything."

If you're not familiar with Tom Sifton, California bay area racer, engine builder and parts designer of great repute, Google him and learn yourself something. For Carl's part, Tom Sifton was one of many great racers and tuners he had the good fortune to know.

"I put an engine in Leo Payne's bike in 1969 at Bonneville. I pulled it out of my bike and put it in Leo's because he broke a rod," said Carl. And how'd Leo do on the Salt with that engine? He ran 186 without the fairing—and set a record at 202.379 *with* the fairing. "I have the picture on my Facebook page," added Carl, showing Leo with George Smith and Doc Dytch. Want to know more? Google those guys, too. — *M. Stemp*



As a Big Dog dealer, Carl's Speed Shop has been—and remains—a great resource for Big Dog owners in need of both basic maintenance and performance upgrades. After the end of Big Dog production, Carl's became the go-to place for many owners to have their bikes serviced in preparation for Daytona Bike Week and Biketoberfest. As one of the biggest Big Dog dealers around, Carl knows both the good points and the bad points of these bikes and he's realistic about both. "Big Dog was building quality machines and they had excellent engines. You only hear about the problems," he points out.

So as a nod to the part that Big Dog has played in the recent history of Carl's Speed Shop, Carl decided to loosely base his 43rd anniversary build on a Big Dog Pitbull frame. "They brought in engineers from the aviation industry to design their chassis, and everything lines up nicely," says Carl. The Bad Dog picks up where Big Dog left off, taking the solid foundation of a Big Dog Pitbull model and building it into what Carl calls a "fully engineered custom."

The build began under Carl's watchful

eye, with Brian Boan, Doug Morrow and Jason Rollier all chipping in at various steps along the way. From the beginning, it was Carl's intention to build a bike that worked with the strengths of the original Big Dog bikes, and also addressed the known issues. A common failure on Big Dog motorcycles is their EHC, or Electrical Harness Controller, an electronic device that operates similar to the ECU in a modern car. The EHC's are fragile and prone to failure, so Carl was sure to eliminate that particular part from the start by using a more traditional wiring setup.

Wanting to maintain the beefy look of 1.5" handlebars but also wanting the flexibility of choosing from a wide range of aftermarket hand controls, Carl chose a set of 1.5" bars from Drag Specialties that have narrower 1" ends to accept most aftermarket controls. Other functional tweaks were made, such as eliminating the side mount license plate bracket and moving it onto the rear fender. "Riders always bump their legs on those darn side mount plates. Besides, if everybody has them, how cool can they still be?" Carl asks.

Further tweaks to the Bad Dog include rotating the rear fender to the rear by 10 inches and welding back in the lost length at the other end of the fender. The additional fender area really cleans up the rear view, as well as offering a great place to french in the new taillight/plate bracket with integrated turn signals. The rear fender struts were also massaged to hide the fender hardware, and stainless steel braided hoses and cables are carefully routed throughout the bike for a cohesive look without any scuffing of the paint or bodywork. Rider information is relayed by a Dakota Digital Speedo that also functions as a tach and has a host of other features, while the 23" front and 20" rear wheels come courtesy of BDM Performance Parts, a remnant of Big Dog Motorcycles that sells parts for Big Dogs. In



the stopping department, Brembo floating rotors are squeezed by Performance Machine calipers.

The real treat, as might be expected, is in the engine room. "We like fast motorcycles," Carl laughs. "If you go out front of the shop, it says "Speed Shop" on the door, and it's not just talk."

The 117" S&S motor that all Big Dogs

were blessed with is in place here, garnished with some of the magic that Carl has learned to put into high performance V-Twins over the years. The Bad Dog's heads were ported and flowed in house, the engine received one of Carl's proprietary CM580 cam grinds, and breathing is handled by another Carl's Speed Shop part, a Typhoon billet carb. It feeds the

power through a Baker belt primary drive into a Baker 6 speed box ready to handle the power. It all adds up to an engine that delivers strong horsepower and torque throughout the rev range. When I asked Carl if he had to sacrifice torque for top end power, he just chuckled. "We know how to build a bike," he smiled.

Judging from the progress in these pictures, it sure looks like it. After final fitting and assembly, the bike will be dismantled for a coat of Brandywine paint with Cream Pearl accents. Join us next time for part 2, where we'll see the bike in its finished state and get riding impressions from the crew at Carl's. **IW**



The Bad Dog build crew: Brian Boan, Jason Rollier, Carl Morrow and Doug Morrow



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Carl's Speed Shop • Daytona Beach, FL
386-258-3000 • www.carlsspeedshop.com