



## Richard Farmer Biography

Richard Farmer/Engine Development/BUB Enterprises  
Born 05/10/55 in San Francisco  
Graduated Placer High Auburn Ca  
Graduated UTI Phoenix Az  
Apprentice to journeyman in automotive machine shop 1975-1983  
First motorcycle 98cc Excelsior Welbike(UK) when I was five  
First race car 1971(1957 chev)  
Married Carol in 1978  
2 sons Jeff,Ray

My dad was a machinist and had worked in a foundry as a pattern maker. He had several Harleys as well as airplanes which sparked my interest in all things mechanical at an early age. Like most wives and mothers of gearheads, mom had to put up with our constant flow of projects thru the garage. After graduating from UTI, I went to work as an automotive machinist. I soon learned working on racing engines was what I wanted to do. Between 1975-1983 I gathered tools, equipment, and experience. In early 1983 Carol and I bought a building, moved in our equipment and started RPM Racing Engines. As the business grew, we added employees and established RPM as one of the premier sprint car engine building shops.

I started working on Denis Mannings 3LV4 engine in 1994.It is a design by Joe Harralson and is a complete design of its own, owing nothing to any previous engine .The first time I saw the engine was in John Jans shop, Datum Machine. Joe and Denis had spent many months building patterns and casting parts so John could machine them. After arriving at RPM, the engine was subject to all the standard engine maching,head porting, flowing,balancing and blueprinting.

After assembly and installation on the dyno,a large learning curve started with the engine management system. Many thanks to George Clark and Jim Munn of JGM/Motec for their help .In 1996 we finally had a running engine on the dyno.Naturally aspirated, it made 420hp with a very flat torque curve.

In 2003 after many championships and races, RPM was sold to the employes;Steve Fehrman and Don Hughes.They carry on the tradition of championship racing engine building, and are constantly expanding the business.

From 2003 to 2006 I went to work for a friend at Collier Technologies in Reno,Nv .My time there was spent in R&D.We worked on H2/CNG (HCNG) fuel for industrial and surface transportation engines. My last project at Collier Tech took place at Penn State University and consisted of

converting a public transportation bus to one of Collier Technologies Daewoo platform HCNG fueled engines under a Dept of Energy contract.

Early in 2006 Denis Manning and I struck up a deal where I could come to work at BUB Enterprises, work on the streamliner project as well as some other special projects BUB has. What a great year it has been working with our talented crew and rider Chris Carr.

Thanks

Denis Manning	for letting me play with your streamliner
Joe Harralson	for designing the coolest engine ever
John Jans	for making all the parts I needed (I never supply drawings)
Jeff Boyle	for making the electrons flow
Howard Carte`	for knocking me down when I get on my high horse
Eric Manning	for fixing my computer when it locks up
Delvene Manning	for running a perfect event
Pete Davis	for a perfect race course (straightaway juice)