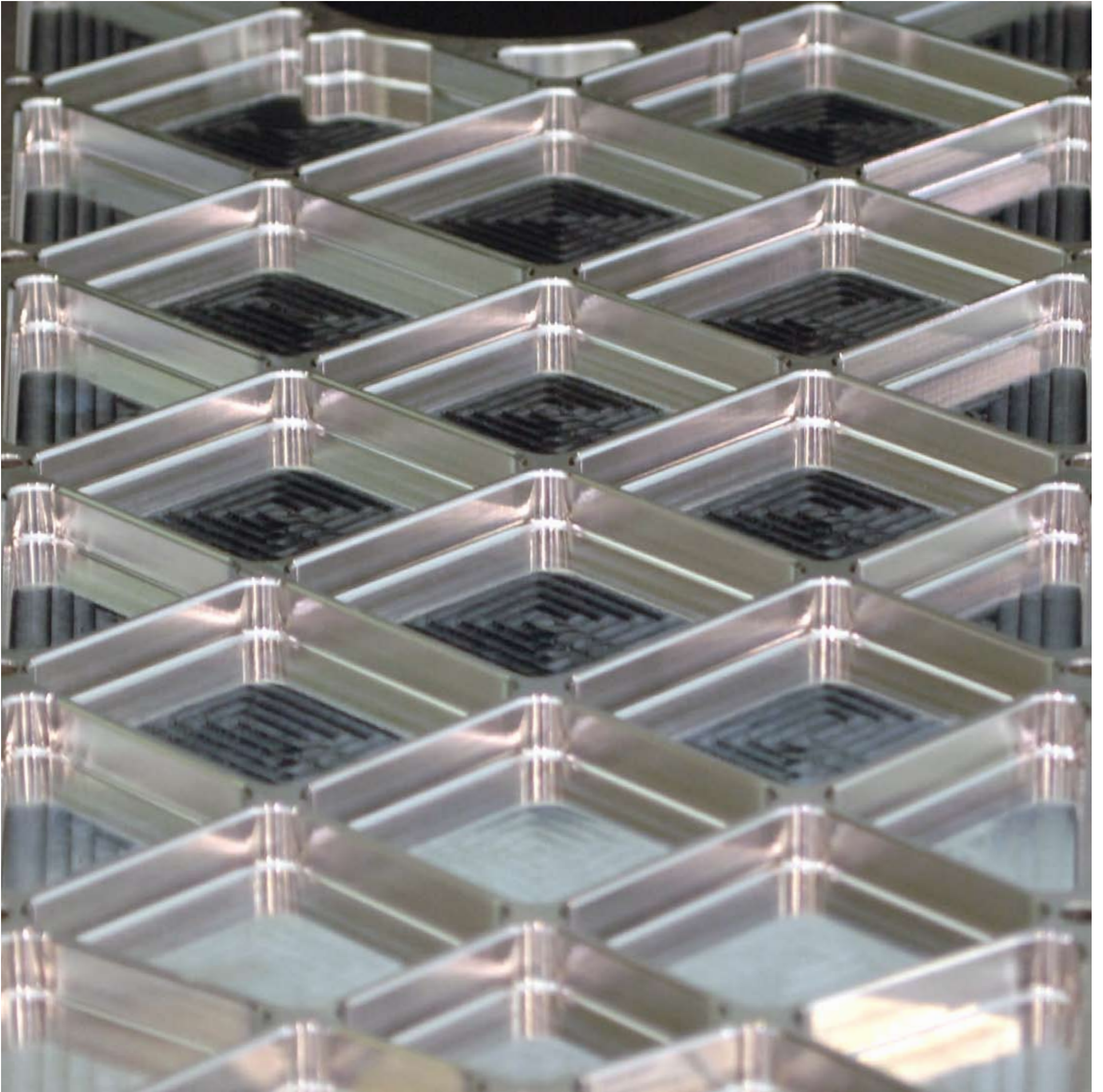




KIRKHAM
motorsports



THE ART OF ENGINEERING

presented to Larry Ellison

By David Kirkham

All photos by David Kirkham except as noted

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TABLE OF CONTENTS

introduction	6
billet chassis design team	10
suspension design	16
billet chassis	24
main frame rails	32
vertical chassis build	38
tunnel	54
rear wheel well	60
footboxes	68
undercarriage	84
machining	90
half shafts	102
suspension	116
steering rack	140
engine and transmission	150
exhaust	164
components	174
testing	188
aluminum body	194
interior	266
photo finish	276
specifications.	292
the book	294
acknowledgments	300



Kirkham 427 KMS/SC—KMP0378

INTRODUCTION

*One can not afford to neglect
opportunity.*

Sun Tzu, The Art of War

The person on the other end of the phone introduced himself as “Larry Ellison” and asked me, “What do you have in stock that I can buy right now?” I told him about a beautiful car we had just finished for Ford that we had displayed at SEMA 2005. He said, “Good. SOLD. We have a deal. How much?” After delivery, he expressed concern that someone could get hurt if they leaned against the hot, exposed side pipes—a burn known as a “snake bite.” He asked if we could run the pipes out the back. I said we should consider making him a new car.

While we kept up a brisk communication about his next car with under-car exhaust, we began to consider other options we could feature within the framework of our cars. He mentioned he loved the technology of modern automobiles and wondered if it would be possible to take the suspension off a new Z06 Corvette and put it under a Kirkham body. We bought a Z06 Corvette but soon discovered we couldn’t shorten the leaf-spring suspension to the width of a Kirkham without too many dangerous compromises. We did, however, gather an incredible amount of good information on suspension geometry and kinematics by putting the Corvette on our lift and analyzing it.

Later, in the spring of 2006, Larry called. He was determined to commission a unique car but didn’t quite know what he wanted. The conversation drifted:

Chopin Polonaises, Mountain Gorilla protection in Rwanda, sailing, the War on Terror, his love of classical guitar. He mentioned a Cobra was the most beautiful car in the world and casually asked me, “David, what do you want to build? What is your dream car?” I was floored. Ideas started racing in my head.

We had just been talking about our billet aluminum calipers we sell for the European FIA racing circuit. They look identical to the original cast aluminum calipers—except we make them from a solid

billet (block) of aluminum. They are extremely stiff and especially resistant to softening (losing stiffness) at the high temperatures encountered under heavy braking in race conditions. With our billet calipers, drivers are able to brake



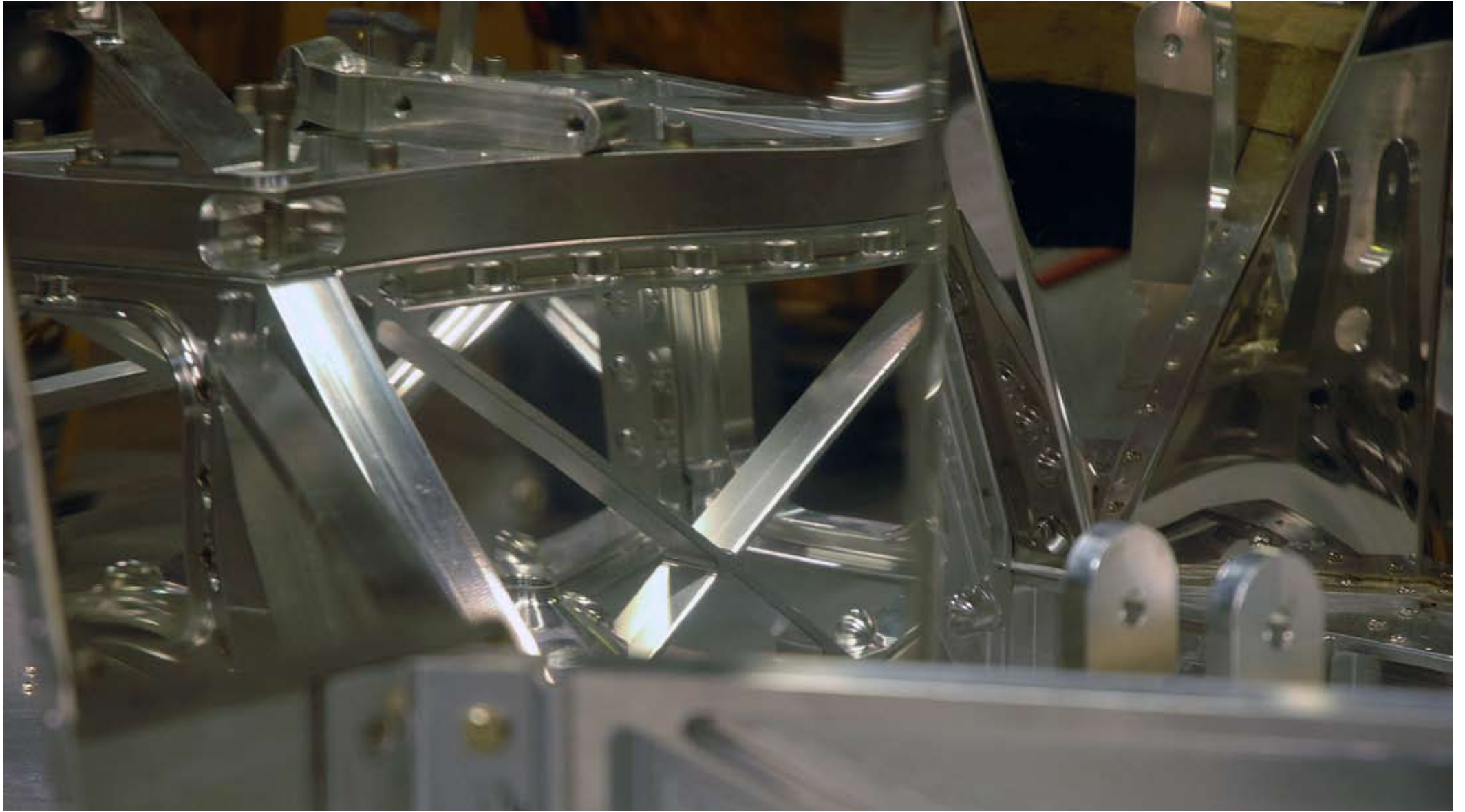
a full 50 feet deeper into a corner than they can with the original cast calipers. I wondered out loud, “If we can make billet calipers, why not a billet chassis?”

Larry immediately jumped on board. He was very excited about the new project. This book documents the challenges, decisions, and solutions we encountered as we created this truly remarkable car. Resolve, imagination, and innovation are required to bring a car like this to life. This car started as a simple phone call and ended driving down the road. During the call, I told Larry I would make him the “best car I possibly could,” a car with “no excuses.”





*Larry takes delivery of the Kirkham 427 KMS/SC—
KMP0378—built for Ford to display at SEMA 2005.*



“David...What is your dream car?” Ideas of the billet chassis began forming in my head.

We were faced with creating an entirely new type of chassis without the benefit of any “giant’s shoulders to stand on.” There were many fundamental engineering problems for making an aluminum billet chassis that had to be solved. The most difficult problem of all—the car had to be every bit as beautiful as any show car yet Larry was going to DRIVE the car not just look at it. His garages house a collection of cars that rival any in the world—Bentley GT, Ferrari Superamerica, McLaren F1, Bugatti Veyron to name a few.

To ratchet the pressure up a few notches, he told me he was going to “park it right next to his Bugatti

Veyron.” We were up against the finest designers and automotive engineers in the world. We had to pull off something new, something innovative, something spectacular. Larry allowed us complete freedom of design to achieve that goal.

Throughout this book, there are pictures of two separate cars—a prototype and the actual car we delivered to Larry. We made a prototype car first to work out any unforeseen problems. You can distinguish the car we delivered to Larry in this book because we built his chassis with stainless steel bolts. The prototype car was assembled with black, steel bolts.