

a S.I. mple APPROACH



T.I.B. MEETS S.B.C.

BY KEVIN BLUMER
PHOTOGRAPHY: KEVIN BLUMER

If you're a Ford fan, you know that the twin I-beam front suspension is one of the most durable designs ever fitted to the front of a desert truck. If you're a Chevy fan, you know that Chevy small-block motors are powerful, easily modified, and as common as Starbucks Coffee locations. Why not combine the two?

Crack kills, and Jeff Larson's '73 Chevy shortbed had cracks aplenty when he first brought it to S.I. (Suspension Innovation) Motorsports' Tom McKenzie. The front suspension was cracked, as was the frame it attached to. Rather than patch up what would surely break again, Tom got the go-ahead from Jeff to revamp the front of the truck with a Blue Oval design. The framereils were plated with 4130 chrome-moly, and

the stock suspension crossmember was rivetted and replaced with a custom-configuration crossmember, also rendered in aircraft-grade chrome-moly. The front of the frame was revitalized and stronger than ever.

With the foundation in place, Tom created a one-off twin I-beam front suspension for Jeff's Chevy. Differences in frame dimensions and chassis contours meant using an off-the-shelf S.I. Motorsports F-150 system wouldn't work. What's on these pages was built specifically for this truck. Tom used kingpin beam ends for durability unmatched by ball joints. Ford 1-ton spindles pivot at the ends of the beams, capped off by Sandy Cone hubs.

"Jeff wanted to save money where he could," Tom revealed. "We could have used 2-inch bolt-on snouts instead of stock 1-ton parts, but this was an area where we were able to take a more economical approach and still have a front end that was strong enough."

At this point, Jeff's Chevy was well-equipped up front but still lacked a durable rear suspension system. The truck headed back

into the desert with the S.I. front end and a time-bomb rear end. The heart of the time bomb was a stock Chevy 12-bolt rear axle and stock-length leaf springs. Jeff's luck played out for a whole year before the time bomb went off and the 12-bolt housing failed. He could have merely replaced the 12-bolt rear end with a custom-braced Ford 9-inch, but Jeff knew that the truck would be better off with a rear suspension that was up to par with the front.

As soon as the schedule opened up at S.I. Motorsports, Jeff's '73 was back under the knife. Tom deleted the broken 12-bolt, leaf springs, and existing rear 'cage work. The truck's tail section now a blank slate, Tom custom-designed and built a four-link suspension. The framereils were kicked upward to facilitate more bumptravel. The 12-bolt was replaced with a Currie-built Ford 9-inch. The rear 'cage was redone to complement the new rear suspension and to match the strength of the tubing that Tom had already plopped in the engine bay and in the cab.

The S.I. treatment didn't stop with suspension and 'cage work. Tom's meticulous nature is evident throughout the truck. The 'cage is not just painted, it's powdercoated. The backsides of the fiberglass fenders, bed-sides, and hood are coated with Line-X for lasting good looks. The firewall is also coated

with Line-X, noise reduction and reduced in-cab temperatures are the payoff.

A premium chassis is more fun when infused with an equally premium motor. As stated earlier, Chevy small-block engines are as common as Starbucks locations. They're also available in several sizes and flavors. Jeff decided to use a 400 small-block for his powerplant. The 400 is more commonly used in drag-racing applications, and as the author personally found out (see sidebar "The Left Seat"), this motor is built and tuned to launch the chassis at warp speed. Backing the 400 is another 400 — a built Turbo-Hydramatic 400 transmission. The TH400 has long served as a benchmark for a durable, economical transmission. Jeff's Turbo 400 is built with a manual valve body and is controlled via an Art Car gated shifter.

Our photo session captured the truck's first foray back into the dirt with the newly placed four-link and the accompanying rear 'cage work. We ventured forth on a triple-digit day in Lucerne Valley, hoping that the joy of fresh upgrades would drown out the misery of the heat. Mission accomplished. Gatorade, sunscreen, and a smooth, fast truck made for a completely cool experience. The S.I. mple Approach proves that good things happen when twin I-beams meet a small-block Chevy. ■



a S.I.mple APPROACH



• In front of the kingpin equal-length I-beams is an S.I. swingset steering system. This system is designed to precisely follow the suspension movement for zero bumpsteer throughout the front end's travel. The one-off Chevy kit cycles at 22 inches total: 12 inches of bumptravel and 10 inches of droop travel. Tommy Lee built the steering box, custom pump, and ram assist.



• Tom tied the tranny crossmember into the radius arm pivot brackets, then connected it to the suspension/engine crossmember. This structural bracing is hidden by a custom aluminum skidplate, which keeps the 400 small-block and the TH400 from getting smacked by errant rocks.

• Tom referred Jeff to Alpha Performance when it came time to build a custom dash and center console. Johnny Kaiser and the Alpha crew crafted a simple, elegant dash/console combo that looks just right and has room for gauges, switches, and the shifter.



• Like the front suspension, the rear four-link is custom-designed around the Chevy chassis. The lower links are based on the Plask Motorsports Ranger kit (S.I. is an authorized builder of the Plask kit) but are modified for the Chevy application. This lower link design is simple, strong, and effective. It's also more economical to build than "canoe-style" lower links in which the shocks fasten into a sunken "pocket" in the trailing arm. Jeff wanted to save money where possible, so a more basic trailing arm design perfectly satisfied the need.



• To buy additional bumptravel, Tom kicked the rear frame rails 6 inches upward. The frame has been boxed and gusseted in critical areas. The rear suspension cycles through 28 inches of travel — 14 inches up and 14 inches down. King shocks are used at every corner.



THE LEFT SEAT

I've occupied the codriver's seat more times than I can count on both hands and both feet. It's been fun, but I've always envied the one seated to my left. I'd rather participate than spectate, and I'd rather sit behind the wheel than sit behind the GPS. For these reasons, I'm building my own truck, so I can get all the left-seat time I can handle.

I never ask to drive. I know what kind of time and money goes into trucks like this one, and I'm not about to be the one to turn someone's finely crafted pride and joy into a metallic pretzel. In light of all this, I was floored when Jeff offered to give me a turn behind the wheel.

We'd finished the photo shoot and were cruising along the desert floor, taking the scenic route back to the trailers and tow rigs. When I heard the offer, I joggled my head side-to-side, discovering that yes, I was fully awake, and it really was going to happen. I wanted to make sure Jeff knew what words had just left his mouth. "Are you sure?" I queried. "Yeah, no problem," came the reply. At that point, I shut up lest he change his mind.

We coasted to a stop. Jeff got out, and I handed him my camera. I should have asked him to take a photo of me in the driver's seat, but I didn't want to give him a chance to rescind the offer before I strapped in and hit the skinny pedal. Safety harness in place, I ratcheted the shifter through the gates into First gear. I cranked the wheel and eased into the throttle. The hot-rod motor and spooled rear end drifted the truck's tail section around, ATV-style, until the grille pointed the direction I had in mind. I stepped on it. The motor snapped the chassis to attention, and the three of us (driver, motor, and suspension) headed toward the whoop section. Jeff and I came through minutes prior. I found Second and finally Third gear. A pass through the whoops deepened my appreciation for smart design and expertly executed fabrication. The truck handled the mayhem beneath sans drama, bucking, or steering in funny directions. Were they deep whoops or rolled-up newspapers? It was hard to tell. I concentrated on the terrain stone-faced, but inside I wore a silly grin and was doing an embarrassing football-fan victory dance.

The Chevy's suspension, handling, and power made me want to push the truck harder and faster to see what it could do, but the little voice in my head kept reminding me, "Not your truck." I've mentioned the scorching weather; I glanced at the gauges. The water temperature was fine, but the oil temperature had climbed into the red zone. It was time to back off the throttle and cruise the truck back to its owner. I handed over the truck, and Jeff handed over the camera. I can only hope that when I'm finished building my own truck (Project TrailRanger, a '92 Ford Ranger) that it's half as good as this I-beam-equipped, hot-rod-powered Bow Tie. Jeff Larson is one lucky individual.

Sitting in the codriver's seat is certainly fun, but the left seat is infinitely better. I can't say "thank you" enough!

Source

SUSPENSION INNOVATION
MOTORSPORTS
(562) 903-4605