

**WE SHOWCASE A LOT OF SUPERTRUCKS IN OUR PAGES. YOU KNOW THE ONES: ABLE TO LEAP MULTIPLE WHOOPS IN A SINGLE BOUND, MORE POWERFUL THAN THE SPACE SHUTTLE ON STEROIDS...**

The dirty little secret behind most of those supertrucks is that they're rarely, if ever, driven on the street. Why? Competition-style rollcages make ingress and egress an exercise in body contortion, not to mention the way they amplify noise into the cab. Add competition-style five-point harnesses to the picture and you can see why supertrucks aren't practical or fun for everyday use.

## And Now for Something Streetable...

If your envisioned supertruck needs a dash of Clark Kent in the mixture, we'd suggest following the Ranger formula on these pages. Tim Giles of Whittier, California, needed just such a mixture in his '96 Ford Ranger.

Tim originally started working on a '92 Ranger, but slammed into a proverbial brick wall mid-way through his build. Burned out and frustrated, but not wanting to give up completely, he decided a different truck and a different approach were in order. He scanned the classified ads for an unmolested stock truck and happened upon a clean '96 Supercab Ranger with the 4.0 pushrod-style V-6. The truck

hadn't been modified or abused. It was a perfect blank canvas.

To paint that blank canvas, Tim turned to Tom McKenzie of S.I. Motorsports. Tom has built several supertrucks, but developed a formula for building dual-purpose Rangers along the way. What is the formula? It's a bolt-on bed cage with an integrated spare tire carrier, a bolt-on engine cage, long-travel front I-beams, and long-travel rear leaf springs. To keep this truck streetable, a full rollcage wasn't part of the equation. Comparing Tom's work to art on a canvas isn't a stretch. Tom's a perfectionist and does things either a hundred percent or not at all.

We love looking at and riding in supertrucks, but we still know there's a definite place for Clark Kent. That place may be in your driveway. **OR**



# The Ranger Formula

BY KEVIN BLUMER  
PHOTOGRAPHY: KEVIN BLUMER



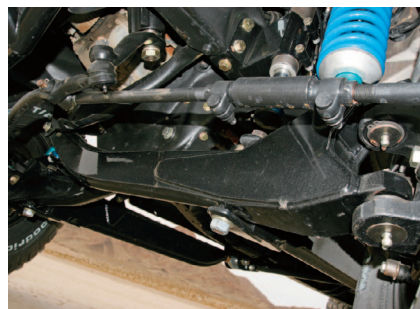
▲ S.I. Motorsports built Tim's engine cage from 1.5-inch, 0.120-wall 4130 chromoly tubing and 1/8-inch-thick chromoly plate. TIG welding was used exclusively on this build. The engine cage bolts to the frame using grade-8 hardware. Fourteen-inch-stroke King coilovers help provide 20 inches of front wheel travel.



▲ Stock 2WD Ranger spindle snouts have a habit of pulling out of the steering knuckles that they're attached to. The team at S.I. didn't merely fix this problem, they smashed it. In place of the stock spindle, they pressed a custom 4WD-style spindle into place, and then welded it to the knuckle. As if pressing and welding weren't enough, the bolt you see on the back side of the knuckle goes through and adds a third layer of spindle retention.



▲ Tom re-welded the factory seams on the I-beam crossmember. He also added reinforcing washers to the beam pivot points. A small pocket was added to the bottom of the crossmember (arrow) to facilitate additional droop travel. There are 20 inches of front suspension travel on tap.



▲ Like the engine cage, the S.I. I-beam front end combines chromoly tubing and plate, melded using a TIG machine. These 4-inch wider-per-side I-beams pivot from the original brackets, so they're the un-equal length factory configuration. The steering adjusters were lengthened using 1.25-inch solid stock which was externally sleeved with 1.5-inch chromoly tubing.

► Here is a worm's-eye view of the King coilover and the Fox bumpstop. Note the bolt-on bumpstop bracket. Bolt-on construction makes it easy to remove cages and brackets if needed during maintenance, and the bolts also allow a little bit of give between the bracket and the frame. This helps the whole chassis last longer. Check out the custom battery tray: another sample of Tom's meticulous work.



▲ Clean enough to eat off of. It was important to take the photos the first time back in the dirt, as this Ranger was built to be used and may never be this spotless again.



▲ The bed cage is made from 1.75-inch, 0.120-wall chromoly tubing, and provides a home to a pair of 16-inch-stroke King bypass shocks. The interior of the bed was coated with Line-X to deaden sound and preserve longevity.



▲ The underside of the spare tire carrier is no less impressive. S.I. integrated a hitch just in case Tim wants to do some towing.



▲ Reinforced factory spring plates were initially part of the build, but they bent while the U-bolts were being torqued. S.I. obliterated the problem by making new spring plates out of (you guessed it) chromoly plate. Two pieces of 3/8-inch plate were cut out and welded together to form the base. "Bomb-proof" comes to mind.



▲ A bolt-on S.I. front bumper leads the way. The screened vent holes keep large chunks out of the radiator.



▲ Deaver leaf packs are part of the S.I. ranger formula. The spring-over configuration was retained, but the rear shackles were flipped to reduce the springs' negative arch at full bump. The factory spring hangers were retained, but the rivets were drilled out and replaced with grade-8 fasteners.



▲ This is one spare tire carrier you won't want to nerf. The spare is held down by a nut that uses a special internal spline configuration for extra security.

## Specs

**VEHICLE:**  
1996 Ford Ranger Supercab 2WD

**OWNER/HOMETOWN:**  
Tim Giles/Whittier, CA

**ENGINE:**  
Ford 4.0 OHV/pushrod V-6

**INDUCTION:**  
Stock EFI

**TRANSMISSION:**  
Stock 5-speed

**FRONT SUSPENSION:**  
S.I. Motorsports Unequal-length I-beams, 4 inches wider per side, custom spindle that's pressed, welded, and bolted to the steering knuckle, S.I. Motorsports bolt-on engine cage, King coilovers, Fox bump stops, 20 inches of travel

**REAR SUSPENSION:**  
S.I. Motorsports leaf spring system using Deaver spring packs, flipped shackles, S.I. spring plates, S.I. bed cage, King bypass shocks, Drivelines Unlimited driveshaft, 16 inches of travel

**RING AND PINION:**  
4.88 gears with full spool, Currie Ford 9-inch rear-end. Note: While a spool isn't street-friendly, it's extremely reliable and provides ultimate traction in the dirt

**TIRES:**  
35x12.50R15 BFGoodrich Mud-Terrain T/A KM2

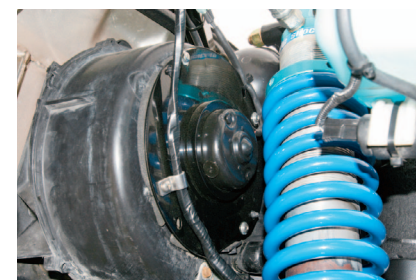
**WHEELS:**  
Pro Comp 15x8

**FIBERGLASS:**  
Glassworks Unlimited fenders and bedsides, Autofab hood

**OTHER DETAILS:**  
Fenderwells deleted, custom S.I. mounts for battery, EVAP canister, air cleaner, and windshield washer bottle



▲ The factory fenderwells were deleted in favor of open air and tubing. There wasn't room for the factory windshield washer bottle, so Tom did some sleuthing and found another bottle that worked perfectly. It's mounted with a custom bracket.



▲ Getting the coilovers to mount at the correct angle was no easy task. The HVAC blower motor was in the way. Rather than push the coilover forward to an angle that wasn't ideal, Tom built an adapter plate for a shorter blower motor. On the driver's side, a new master cylinder with exit ports on the passenger's side was used to keep the brake lines away from the coilover.

# The Ranger Formula