

'torsionally flexible' Unimog frame. By providing some of the needed articulation through the frame, as well as the coil springs, the suspension is capable of supporting heavy loads without the 'roly-poly' type antics of very long travel suspensions. Of course, if a frame is designed to twist, it is not good for high speed traveling when you only want the suspension to do the moving, which is usually not a problem for the 50 mph (80 kph) Unimogs,



but it does pose a problem for anything attached to the frame, such as body and engine. To overcome this, everything in a Unimog and in particular the Diesel versions, is attached to the frame with '3-point mounts'. The frame can twist all it wants and all body and mechanicals remain flat and in line. Have you not heard all that creaking when your vehicle is really twisted? Your frame isn't supposed to twist but it does, and the rubber body mounts are groaning in protest.

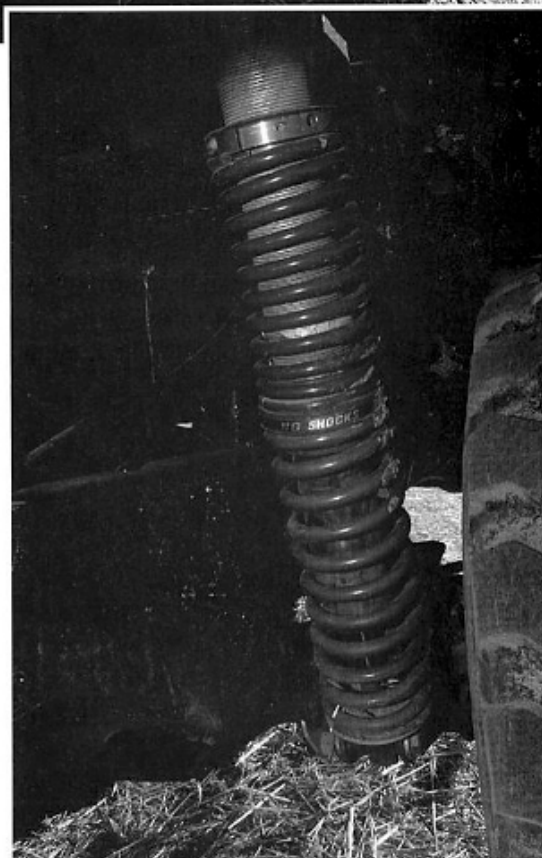
So, if you retained all three of these important Unimog ingredients in a rock buggy you would have something like John van Horn's.

John Van Horn from Munroe, Washington brought his 1955 Swiss 404 Unimog-based rock buggy. John bought the 404 in 1999 from a Southern Oregon dealer at: <http://www.unimogwherehaus.com/index.html>

John chose the 404 as a base for a rock crawler because it is relatively cheap he feels it is the best Unimog off-road. The truck was originally a troop carrier for the French army. The wheel base is 105 inches, 11 inches shorter than normal. John took everything off the frame then put only what he wanted back on. The open cab with the safari-

type fold down or tip out at the bottom is great for wheeling on the hot rocks.

It uses the 'standard' Unimog 20 speed transmission. The crawl ratio is 347:1 with 19 others to choose from if that is a bit too low. The Michelin XZL 335/80R20 tires (41-inch diameter) are held on with Trailready bead locks. John replaced the rear coils with King coil-over-shocks and the fronts with softer Bronco II springs. The 404 'arm-strong' manual steering was replaced by the power steering unit from a Diesel 406 but the installation of this required a 1-inch cab lift. The fuel tank and battery box were also lifted out of harm's way from trail nasties. The electrics were converted to 12-volt and a 12,000 lb Megawinch was installed at both ends of the vehicle. The rear of the open cab was lopped off and a section added to create a four-passenger cab with two additional seats facing the rear in the bed. A full roll cage was made so now the whole Munroe family can rock crawl together. A pull-out ladder step



helps the young'uns clamber into the back. This 'candy Mog green' buggy really rocks in John's skilled hands and demonstrates to the cannibals what a 'full meal deal' is really like.

