

Tools News Techniques

Equipment | How To | Training | People | **Gear Test** | Web & Media | Events

Strut It

Rescue 42's TeleCrib Stabilization System proves wider is better

By Travis Kidd

Rescue 42's TeleCrib Stabilization System

Pros

- + Affordable;
- + Easy to put into operation;
- + Strut Jack provides an excellent way to lift with the struts; and
- + Composite material is strong, light, nonconductive and won't corrode.

Cons

- Ratchet straps are too long for certain applications.

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One of the more challenging scenarios on the extrication scene is a vehicle that isn't resting on its wheels. Vehicles can land on their side, roof or even on top of another vehicle, resulting in reduced surface contact with the ground and rendering them unstable. Such situations require stabilization that goes beyond basic cribbing techniques. The stabilization device of choice: a strut, which provides a wide base on which to displace the weight of the vehicle, thus fully immobilizing the vehicle. The TeleCrib Stabilization System from Rescue 42 is a strut system capable of doing just that.

Sufficient for many tasks, including vehicle stabilization, light structural collapse, confined space and lifting/stabilizing various objects, the TeleCrib Stabilization System is fairly lightweight and able to support an impressive amount of weight. At first glance I wondered how strong these struts could really be; they are made of a composite material, rather than metal. However, after performing some tests, I found the struts to be incredibly strong. Each strut is given weight capacity ratings with one pin placed in the strut for lighter loads and with two for supporting heavier loads. At their lowest height, these struts have an 18,000-lb. weight rating with two pins; the weight

rating diminishes as the length of the strut increases.

Because they will mainly be used for vehicle stabilization on the extrication scene, I tested the struts in a situation with a vehicle on its side and in an under-ride situation.

The first scenario: a four-door sedan resting on its passenger side. After assembling the struts, another firefighter and I approached the vehicle and applied them on either side. The struts were easy to assemble and operate. On the end of every strut, we placed the combi head, or the head of the strut, which features a unique design, allowing it to come into contact with several areas on the vehicle. After applying all four struts, we tested the stability of the vehicle by trying to rock it back and forth. The vehicle didn't budge an inch and was fully immobilized.

While stabilizing the vehicle, we did notice a couple of unique characteristics of the TeleCrib system. The base plate is angled upward at either end and designed with a large area where the strut attaches to the base. While tightening one of the straps on the underside of the vehicle, we noticed that the flat portion of the base plate began to lift up off the ground. Our first thought: Since the flat portion lost contact with the ground, the strut would be less stable. But after a closer look, we discovered the angled portion of the base plate was still in contact with the ground, and the strut was completely stable.

The only negative characteristic we encountered involved a short strut placed on the roof side of the



The struts from Rescue 42's TeleCrib Stabilization System are easy to put into operation. Inset: The angled portion of the base plate can take the weight.



PHOTOS STEVE KIDD



The Strut Jack is an excellent addition for lifting with the struts.

vehicle. Because the base was close to the vehicle, we were unable to use the ratchet strap to secure the strut because it was too long. An easy solution is to use a long strut instead; however, having shorter ratchet straps just for those situations would be ideal.

The second scenario we used to test the TeleCrib was an underride situation. We placed one vehicle on top of another, with its trunk resting on top of the engine compartment. We then applied two struts to the wheel wells of the rear axle on either side of the vehicle and secured the struts by running one ratchet strap under the vehicle and bonding the struts together. Once the vehicle was secure, we wanted to see if we could lift it off of the vehicle underneath it. To do this we applied the Strut Jack, which comes with the system, to one of the struts. The Strut Jack is a jack that becomes integrated into the strut by attaching directly to it. With the Jack attached, the strut can be lifted and reset by moving the pins as the strut is raised. As we lifted the vehicle, the entire strut system self-adjusted and provided stabilization throughout the operation.

After lifting the vehicle several inches, we were really impressed by the efficiency of the lifting operation and how much the system was capable of lifting. At its extended length, each strut was between five and six feet long, which meant they were capable of holding 8,000 lbs. with a 2:1 safety factor. With a strut on either side of the vehicle, this system was capable of holding a total of 16,000 lbs.; the vehicle weighed 3,000 lbs. at most. In this particular scenario the struts were capable of supporting more than five times the amount of weight that was placed upon them. At the end of this evolution, the vehicle was resting securely on both struts, several inches above the vehicle underneath it.

The TeleCrib Stabilization System is a versatile rescue tool; Rescue 42 offers several system packages to fit your needs. An excellent DVD is included with instructions for using the struts in basic scenarios. Although I only tested the system for its use in vehicle extrication, it is able to do much more and is only limited by your ability to configure the struts to the situation. These struts are certainly well thought out and they provide a safe and easy means of vehicle stabilization in those situations when cribbing just won't do.

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