HJR Equipment weight ratings for the Autobrace2 Vehicle Stabilization System

It has come to our attention that many of you are being asked about our weight ratings on the Autobrace2 struts. Moreover many of our competitors are claiming that our struts are not as strong as theirs due to our published weight ratings on our struts.

At HJR Equipment we take this matter very seriously and want to give you the peace of mind you deserve when using and promoting our products. First and foremost, the Autobrace2 vehicle stabilization system ***IS*** a strong, well made vehicle stabilization system. We take pride in the design, manufacturing, and the way our product is able to be used in the field.

At HJR Equipment we are not going to fall into the trap of the other companies in the industry boasting outrageous weight ratings for their equipment. While we are not saying that these weight ratings are inaccurate, we believe they are misleading to the firefighters and rescue workers they are supposed to serve.

We have tested the Autobrace2 system in a wide variety of situations. We tested the struts at varying lengths and at varying angles. Our working load rating is based on the *worst* situations you can place the struts in while many of our competitors working loads are based on the BEST situations their struts will encounter. Our struts are rated at **full extension**, not some arbitrary height that promotes the best working load for that strut. Our struts can hold up much more than our rated working load, sometimes in the area of six to eight times the rated working loads. At HJR Equipment we do not want to show you big numbers and try to impress you with tens of thousands of pounds of working load. We certainly could do this with our equipment, however, we want the firefighters and emergency workers focused on what this strut could do in the worst of situations, not the best of situations.

"The Autobrace2 Vehicle Stabilization System has a working load that is based on the worst possible scenarios, not the best possible scenarios."

At HJR Equipment, we gave the Autobrace2 vehicle stabilization kit a 2,000 lb. working load rating with a 3:1 MOS (Margin of Safety.) We feel this is more than adequate for the intended use of our products. We based this figure on the following data that shows what types of working loads we may find in certain vehicle stabilization situations.

Vehicle Type	Weight in Lbs.
Passenger Car - Compact	2500
Passenger Car – Mid Size	3500
Passenger Car – Full Size	3900
Mini Van	3900
Sport Utility Vehicle	5200
Pickup Truck – Small	3800
Pickup Truck – Full Size	6000

Strut Angle	Vehicle Weight	Based on 3 strut configuration		
		Strut 1 side A	Strut 1 side B	Strut 2 Side B
50	2500	1600	850	850
50	3500	2300	1200	1200
50	4500	2900	1500	1500
50	5500	3500	1800	1800
50	6500	4200	2200	2200
60	2500	1450	800	800
60	3500	2100	1100	1100
60	4500	2600	1300	1300
60	5500	3100	1600	1600
60	6500	3700	1875	1875

Factual Information vs. Functional Information

While many of our competitors want to impress you with ***Factual information***, at HJR Equipment we want to give you the ***Functional Information*** you need to work with our equipment on a daily basis.

We have no reason to doubt any of the printed facts of any of our competitors. We are questioning the value of the ***Factual information*** they are providing to the fire service.

Working Load of a Column vs. Working load of a Vehicle Stabilization System.

The working load of a strut **system** should be based on the lowest common denominator of the system. In most cases, the lowest common denominator is the anchor top and the strap used to secure the strut system. The strap that most companies use for their ratchet strap has a working load of 3,300 lbs. The ratchet strap used by most manufacturers is a common, off the shelf, brand of ratchet straps. These ratchet straps have a working load of around 3,300 lbs.

"How can a strut manufacturer rate their strut system at 16,000 lbs. when the ratchet strap they use is rated at 3,300 lbs."

The answer to that question is most of the strut manufacturers give you the rating of a strut at a vertical height with no anchor top or ratchet strap used.

While this information provided by these companies may be true……. How functional is this information. How important is it for you to know the rating of a strut in a vertical load with no anchor top or ratchet strap being used.

Again, what is the factual information and what is the functional information

Most of the companies give you a weight rating of their anchor tops which is far less than the weight of their struts. One company rates their anchor top at 4,000 lbs. one inch (at least) below the tip.

How many times do you think you will use the anchor top with a bite less than 1 inch?

This will certainly happen when you utilize the space between the fender and the trunk or hood.

At HJR Equipment, we do not try to pull any “fast ones” on anybody. Our strut ***SYSTEM*** is rated as just that ***“A SYSTEM”*** with all of the components of the system taken into consideration.

We are not giving you a value for the strut and another value for all of the components that make up the *strut system*. At HJR Equipment, we feel this is misleading information to you the dealers and also to the fire departments that are using the strut systems.

You can be assured the Autobrace2 Vehicle Stabilization system will more than meet the demands of each and every vehicle stabilization scenario you may encounter in the above chart data. Please do not hesitate to call any of the staff at HJR Equipment should you have and further concerns regarding working loads of vehicle stabilization struts.