



AUSTRALIA'S LEADERS IN  
**AIRBAGS & AIR SUSPENSION**  
Designers & Manufacturers



### THE INCORRECT RUMOUR

"IF YOU FIT AIRBAG SUSPENSION TO YOUR VEHICLE IT WILL BEND THE CHASSIS"

### INDEPENDENT ENGINEERING ANALYSIS RESULT

"FITMENT AND USE OF AIRBAG MAN AIR HELPER SUSPENSION **WILL NOT** ADVERSELY AFFECT THE VEHICLE CHASSIS"



CERTAIN VEHICLE TYPES WITH AND WITHOUT AIRBAGS HAVE EXPERIENCED CHASSIS DAMAGE. EXCESSIVE LOAD AND/OR AN UNUSUAL OPERATIONAL CIRCUMSTANCE IS USUALLY THE CAUSE.

### INDEPENDENT ENGINEERING ANALYSIS

- All tests with & without Airbag Man airbags fitted
- Evaluated the effect on the chassis
- Varying load conditions - light to heavy
- Standard or upgraded suspensions
- Extensive physical and FEA analysis
- Included heavy bottoming out

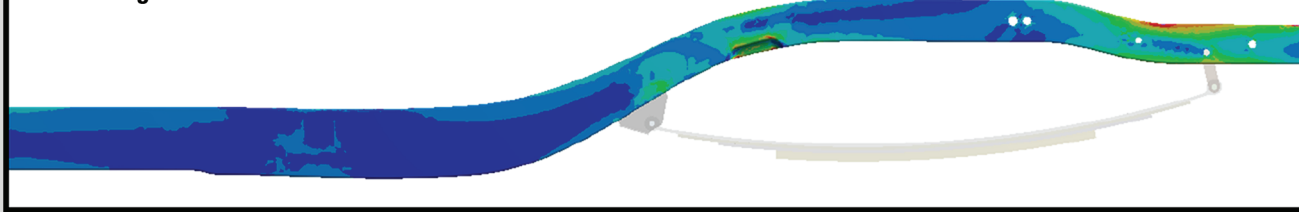
Syngineering Pty Ltd report concluded:

"... AIRBAGS HAVE LITTLE TO NO EFFECT ON THE DISTRIBUTION OF STRESS WITHIN THE CHASSIS RAILS"...

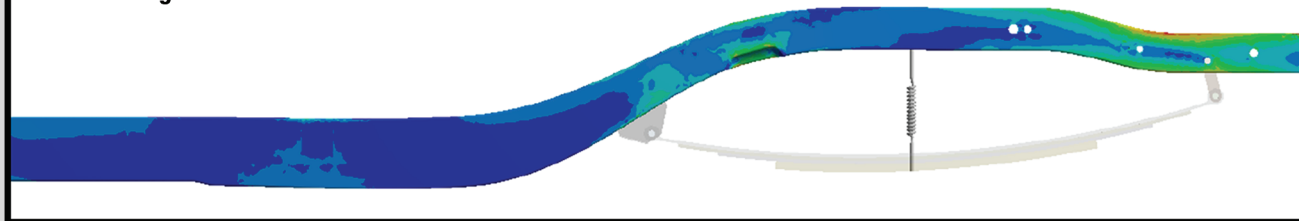
"THE RESULTS INDICATE THAT IN EVERY LOAD CASE INVESTIGATED THE ADDITION OF AN AIRBAG BETWEEN THE CHASSIS RAIL AND LEAF SPRING DOES NOT INCREASE THE MAXIMUM STRESS THROUGH ANY SECTION OF THE CHASSIS RAIL"

Image from one of the many load cases used, property of Syngineering; note more red = more stress.

No Airbag – Chassis Rail Stress 210.47 MPa max.



With Airbag – Chassis Rail Stress 209.8 MPa max.



**Airbag Man** specifically designs kits to suit each vehicle application and the load is usually applied where the OE expects a bump load to occur if bottomed out. This bump load is expected to be a lot higher than normal loads applied. When a vehicle is used as intended by the manufacturer, **Airbag Man** air suspension can be fitted and operated in confidence that there is no concern for increased stress of the chassis rail.

**THERE ARE MANY BENEFITS TO BE GAINED FROM USING AIRBAG MAN AIR SUSPENSION PRODUCTS - PROVEN OVER TWENTY YEARS WITH MANY THOUSANDS OF SATISFIED CUSTOMERS.**

If you have any further questions please contact our highly qualified Engineering Team

**INFORMATION & PRICING FREE CALL 1800 247 224 [airbagman.com.au](http://airbagman.com.au)  [facebook.com/airbagman](https://facebook.com/airbagman)**