# Suspension WIP

Last updated: 23/01/2017

2 programs used to iteratively optimis

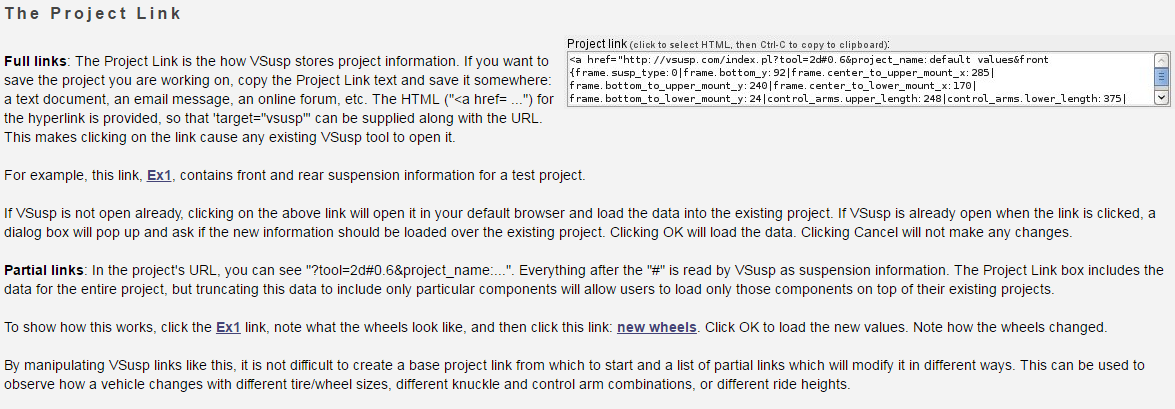
e solution.

<http://www.vsusp.com/> (for geometry)

<http://suspensioncalculator.com/download.html> (for forces, moments and component selection)

## VSUP

Saving and Loading



Saved Link

[url=http://vsusp.com/?tool=2d#0.8%26project\_name%3ASalford%20mk.1%26trim%7Bbody\_roll\_angle%3A0%7Cfront.left\_bump%3A0%7Crear.left\_bump%3A0%7Cfront.right\_bump%3A0%7Crear.right\_bump%3A0%7D%26front%7Bframe.susp\_type%3A0%7Cframe.bottom\_y%3A7619%7Cframe.center\_to\_upper\_mount\_x%3A24079%7Cframe.bottom\_to\_upper\_mount\_y%3A20269%7Cframe.center\_to\_lower\_mount\_x%3A24079%7Cframe.bottom\_to\_lower\_mount\_y%3A0%7Ccontrol\_arms.upper\_length%3A24130%7Ccontrol\_arms.lower\_length%3A25400%7Cknuckles.hub\_to\_upper\_x%3A15000%7Cknuckles.hub\_to\_lower\_x%3A13000%7Cknuckles.hub\_to\_lower\_y%3A13000%7Cknuckles.hub\_to\_upper\_y%3A13000%7Cknuckles.hub\_to\_strut\_axis%3A14000%7Cknuckles.strut\_incl%3A8000%7Csteering.active%3A0%7Csteering.hub\_to\_outer\_tie\_rod\_x%3A7620%7Csteering.hub\_to\_outer\_tie\_rod\_y%3A7620%7Cwheels.offset%3A4000%7Cwheels.diameter%3A1300%7Cwheels.diameter\_expl%3A35000%7Ctires.size\_convention%3A0%7Ctires.section\_width%3A20500%7Ctires.aspect\_ratio%3A4000%7Ctires.diameter\_expl%3A50000%7Ctires.width\_expl%3A7620%7Ctires.compression%3A635%7D%26rear%7Bframe.susp\_type%3A0%7Cframe.bottom\_y%3A9200%7Cframe.center\_to\_upper\_mount\_x%3A28500%7Cframe.bottom\_to\_upper\_mount\_y%3A24000%7Cframe.center\_to\_lower\_mount\_x%3A17000%7Cframe.bottom\_to\_lower\_mount\_y%3A2400%7Ccontrol\_arms.upper\_length%3A24800%7Ccontrol\_arms.lower\_length%3A37500%7Cknuckles.hub\_to\_upper\_x%3A15000%7Cknuckles.hub\_to\_lower\_x%3A13000%7Cknuckles.hub\_to\_lower\_y%3A13000%7Cknuckles.hub\_to\_upper\_y%3A13000%7Cknuckles.hub\_to\_strut\_axis%3A14000%7Cknuckles.strut\_incl%3A8000%7Csteering.active%3A0%7Csteering.hub\_to\_outer\_tie\_rod\_x%3A7620%7Csteering.hub\_to\_outer\_tie\_rod\_y%3A7620%7Cwheels.offset%3A4000%7Cwheels.diameter%3A1500%7Cwheels.diameter\_expl%3A35000%7Ctires.size\_convention%3A0%7Ctires.section\_width%3A19500%7Ctires.aspect\_ratio%3A4500%7Ctires.diameter\_expl%3A50000%7Ctires.width\_expl%3A7620%7Ctires.compression%3A0%7D%26pref%7Bdiag1.px\_per\_mm%3A200%7Cdiag1.front\_or\_rear%3Afront%7Ctab.active%3A0%7Cunits%3A0%7Cshow.f%3A1%7Cshow.ca%3A1%7Cshow.k%3A1%7Cshow.st%3A1%7Cshow.stl%3A1%7Cshow.w%3A1%7Cshow.t%3A1%7Cshow.rc%3A1%7Cshow.rcl%3A1%7Cshow.ic%3A1%7Cshow.icl%3A1%7Cshow.fvsa%3A0%7Cshow.tl%3A0%7Cshow.kpil%3A0%7Credraw\_during\_drag%3A1%7Cchart.x\_axis\_center%3A0%7Cchart.x\_axis\_window%3A10%7Cchart.x\_axis\_num\_steps%3A21%7Cchart.x\_axis\_field%3Atrim.body\_roll\_angle%7Cchart.y\_axis\_fields%3A%5BFR%5D.general.roll\_center.y%7D]Salford mk.1[/url]

Current Frame Settings with 3 inch ground clearance.

