



Description of New Features and Bug Fixes at Version 4.03g

			Description
1	Bug Fix	Sprung Mass	Total sprung mass now saved in data file. Previous versions lost this value.
2	New	Virtual Skcms	Added static damper ratio calculation to Virtual Skcms procedure.
3	Bug Fix	Track Rod	Problem bumping full vehicle model didn't move 2 nd track rod point. Now corrected.
4	Bug Fix	Bump Stop	Error filling stiffness matrix for bump stop properties. Mixed left/right. Now Fixed.
5	New	Phase Angle	Option added to allow external forces to have a phase angle. Only applies to forced-damped analysis.
6	New	Castored TCP	Added the castored TCP point to SDF outputs. Calculations for anti-dive and anti-squat changed to fully use this point rather than a mix of TCP and castored TCP. May see small change in the results because of this.
7	Change	Virtual SKCMS	Changed the calculation of longitudinal bush stiffness to use the castored TCP point rather than the TCP co-ordinates.
8	New	Adams SKCMS	New import routine for Raven to import 'SKCMS' data from req files.
9	Bug Fix	Add from End	The add from end option could produce a change in compliance results when adding a rear to a front model. This was due to the rack stiffness value being changed by a number stored in the rear suspension model. The data file structure has been modified to prevent this from happening.
10	Bug Fix	Write AVI	AVI file writing routine failed for modal and forced damped options. This has now been resolved.
11	New	Graphs	Option added to graph menus to be able to plot when showing both left and right sides them either separately, the sum of the two or the difference of the two.
12	Change	Force Sets	The maximum number of usr definable force sets has been increased to 20 from the previous limit of 15.
13	New	Force Listings	A new force results listing option has been added that allows users to define their own force results displays.
14	Change	Solver Speed	A number of changes have been to the compliant solver to improve solution speeds.
15	Change	New File	On new file any bump stop data or drive shaft loss data is now zeroed. Previously existing data would be transferred between the old file and the new.
16	New	Non-linear Rack	A non-linear rack bush has been included that allows force deflection of the rack bush to be specified.
17	New	Ground Plane	Previous versions have always forced the front and rear suspensions to have the save ground plane value, the rear being modified in a specified way to make common. An option has now been added that allows the ends to have different z-coords.
18	New	Reports	A new 'Reports' function has been added that allows users to collate individual results into a single RTF file. These report files are script files that can themselves contain batch files.
19	Bug Fix	Length Transducer	Previously it was not possible to add a length transducer to the rear suspension. This has now been fixed.
20	Bug Fix	Combined Mode	Previously it was not possible to run the combined mode on a rear suspension only model. This has know been resolved.