

**Description of New Features and Bug Fixes at Version 4.03k**

			Description
1	Bug Fix	Export to Excel	Previously the 'Export to Excel' option in tolerance analysis the data was wrapped onto three lines rather than a single line, (as is achieved with 'Open in Excel'. This has now been fixed.
2	Change	Define by Step	The settings for defining displacement by the number of steps rather than by displacement increment are now saved to the INI file. Previously the application would always revert to define by displacement increment.
3	Bug Fix	Batch Prompt	A problem with the command window was identified that requires a 3d part graphics library fix. As an interim solution a trap has been added to the application to avoid the problem. In the mean time this may produce the occasional missing character from the prompts.
4	Change	Virtual SKCMS	The virtual SKCMS test has been modified such that the derivation of the lateral camber compliance is switched to use the 'parallel' test rather than the 'opposed' test. Also at this time added a -1 correction on the spline.
5	Change	Bush Results	The default number of decimal points used to display bush results has been increased from 2 to 4. To provide greater required accuracy on the displayed values.
6	Bug Fix	Screen Writing	Removed a number of spurious screen writes that had been added at the previous version as part of debugging.
7	New	Shortcut Ctrl+G	The Ctrl+G short cut command has been added to support graph auto scaling. It is the equivalent of the pull down menu 'Graph / Autoscale (All)'
8	New	Bush Editing	Support for the 'Page Up' and 'Page Down' buttons has been added to the bush property editing dialogue box. This provides a convenience method for moving between points without the need to pick from the selection box.
9	New	Apply Button	An 'apply' button and associated functionality has been added to the Spring and Damper property editing display.
10	New	Results Menu	The enabling of the 'Results' menu has been re-instigated. This means that the pull down menu is disabled until data has been loaded. Was previously set as permanently on due to problems seen with some machines. There is an options switch for this under Setup / General Defaults if it is required to disable this feature.
11	Bug Fix	Virtual SKCMS	Different results could be generated depending if the virtual SKCMS run was started in equal bump or opposite wheel bump. This is now always set to equal bump to ensure consistent results.
12	Bug Fix	Scroll Bars	Previously it was possible for scroll bars to be missing on some multi-line test displays when using user defined windows. This has now been resolved.



13	Bug Fix	Adding Rear Suspension	Previously when adding a rear suspension model to an open front some of the rear models data was lost. This has now been fixed.
14	Bug Fix	Editing Full Vehicle	With a full vehicle model it was not always possible to select 'rear' from data edit dialogue boxes such as 'bush properties' and 'external forces', this has now been resolved.
15	New	User SDF	The user SDF editing / functionality now supports the use of external global forces applied to a part. They are identified by the part label and the required global axis or resultant force tag. Thus [UprightFX] would retrieve the sum of external forces applied to the upright in the global X direction. Note that the label is case sensitive. External forces include spring, bump stop and drive shaft loads if appropriate to the selected part.
16	Bug Fix	INI File Read	Previously when using a variable magnitude external force, it caused a problem reading the INI file back in. This has now been resolved.
17	Bug Fix	Roll Centre	The calculation traps for roll centres have been revised to ensure robust calculation when using full vehicle models, and in particular full axle independent front models.