



## Description of New Features and Bug Fixes at Version 4.02h

			<b>Description</b>
1	Bug Fix	SDF File	Previous differences seen in SDF file between moving ground and moving body display methods has been resolved.
2	Change	Solver	Solver changed to deal with simple tie bar type link that has a spring/damper or secondary link attached to it. Default type 19 changed to have spring attached to lower link rather than the upright.
3	New	Suspension Template	New default embedded suspension template added at index No. 20. This has a double wishbone style suspension but with twin outer ball joints at top and bottom.
4	New	User-Body Graphics	Support has been added for the inclusion of user defined body vectors and facets. A spread sheet editor and import of STL files has been included to enable user manipulation of the data within the application.
5	New	User Definable templates	The ability for a user to define their own templates has been added. Additional default user templates can be load automatically on start-up to either replace or add to the embedded ones. Further options are available to edit, save and load further templates.
6	New	Roll Bars	The capability to model roll bars has been added via extra general template point types. An example is included as type 23 in the supplied default user templates file, '_User_Templates.Dat'.
7	Change	Articulation Definition	The previous apparent data duplication definition of suspension movement, through 'limit of travel', 'increment' and 'no of steps' has been removed. The number of increments has been removed, now being calculated directly from the travel and increment sizes.
8	New	Raven Module	With this release support for the first PC version of the Raven full vehicle handling module has been introduced. This is a separately licensed product that shares the same interface as the Shark product. Contact support for further details.