

LifeCheck Technical Note

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Description: Build Sheets and Build Sheet Templates

Overview

Build sheets allow you to create Microsoft Excel based files which detail the components placed on the selected chassis but separated out into specific areas of the car. For example, one build sheet could detail which parts are located within the Front Suspension whereas a second build sheet would detail the braking system components.

LifeCheck implements build sheets using a Microsoft Excel template file which defines the layout and presentation of the build sheet and substitutes data about the chassis build into this template. In order for this 'substitution' to work, LifeCheck must be able to identify exactly where details about each component should be written and this is done using field substitution codes.

Build Sheet Location

The folder in which the build sheet template files are held is defined within the Administration>Global Folders window. In this window you may define both the folder containing the build sheet templates and also a folder into which generated build sheets will be written.

These may be the same folder as LifeCheck will name the output build sheet based on the name of the template but will remove the template suffix. Care should be taken however to ensure that existing build sheets are not over-written. Build Sheet Template files must have names ending in 'template.xls' to be recognized by LifeCheck.

Build Sheet Templates

The process of creating build sheets hinges on the creation of build sheet templates. These are Microsoft Excel based files which define the appearance and content of the build sheet as well as specifying where data from a chassis build should be inserted into the template. The image below shows an example of a build sheet aimed at the gear ratios and associated components on the chassis.

In the above example we can see cells with text values beginning with '***'. This is used as an identifier by LifeCheck to locate cells into which a value will be substituted as the build sheet is generated. There are a number of different substitutions supported:-

***TITLE	Replace with the text specified as the Title
***CIRCUIT	Replace with the name of the selected Circuit
***SESSION	Replace with the name of the selected Session
***CHASSIS	Replace with the Chassis Name specified

***DRIVER Replace with the text specified as Driver
***DATE Replace with the Date specified
***NOTES Replace with the Notes specified

There are also component substitution fields which are defined as :-

***<part number> { |<comment> } | <field>

where <part number> is the part number as held within LifeCheck. Where a Part Class has been specified in the Chassis Build, the part number should be specified as 'PC>part class name' as the specific part number is not known. Field may be one of the following values :-

PN	Part Number
DESC	Description
LC	Life Code
LL	Life Left (Race)
DR	Distance Run
WDR	Weighted Distance Run
MSS	Distance since last service / check
MTS	Distance to next service / check
TL1	Time Left 1
TL2	Time Left 2
TR1	Time Run 1
TR2	Time Run 2
CAL	Last calibration value recorded
LN	Last Note added to the component
NOTE	Free Note added for the component
XD	Expiration Date of the component
STS	Status of the Component

The 'Comment' field is optional but is used to help uniquely identify a specific component within the build sheet where there are potentially multiple instances of the same component but it is important to differentiate between each instance.

In the example above a part class has been used to specify that 7 gear ratios are required but it is important that the correct gear is used for each ratio. The comment field is used here to marry up the correct component from the Chassis Build (which also supports the comment field) and the build sheet.

In the above example the comments are defined as '1st Gear' through '7th Gear'. The comment field can also be useful where a part class has not been defined in the Chassis Build. An example of this is the left and right hand disc rotor where the rotors themselves are not handed but we need to know which rotor is to be used on the left hand side and which on the right hand side. In this case we could specify the substitution code as

TTL-AP-001|LHS|LC' and 'TTL-AP-001|RHS|LC'

Selecting a Check

Where the MSS / MTS fields are used, it is also possible to extend the substitution to define the check for which the 'Mileage since service' and 'Mileage to Service' values are to be displayed. This is done by adding the check name as a third field to the value for example

***TTL-AP-001|MTS|Crack Test

This would substitute the value for the mileage to the next crack test required by the component selected.

Chassis Templates and Build Sheets

There is a close relationship between a Chassis Template within LifeCheck and Build Sheet templates from which build sheets are generated. There is the obvious relationship as previously explained with part numbers and part classes but there is a less obvious relationship when it comes to Comments.

Comments are used within the Chassis Template to allow individual instances of a component to be uniquely identified and hence able to be matched with an entry in a build sheet template.

Comments can be added to both part classes and instances of an individual part. To set a comment for a part, right click the part and select **Set Comment** from the menu displayed. Note that where a comment has been specified, an entry in the build sheet template must match not only on part number/class but also on the comment. If no comment is found in the template there will be no match.

Creating Build Sheets

Build sheets are created on the Build Chassis window by right-clicking within the window and selecting Create Build Sheets from the menu displayed. The following window will be displayed

Select Build Sheets

Title :

Circuit : Session :

Date : Driver :

Notes :

Available Build Sheet Templates

- ☐ gearratio_template.xlsx
- ☐ jota1_template.xlsx
- ☐ jota2_template.xlsx
- ☐ test_template.xlsx

Select Chassis to Include

Primary :

Secondary :

Tertiary :

OK Cancel

In this form we can define a number of items which are available for substitution into the generated build sheet as well as select 1 or more build sheets to be generated. Once the required details have been entered, click **OK** to generate the build sheet(s) requested. On completion LifeCheck will allow the build sheet to be opened using the default application if a single template was selected. If multiple build sheets were generated, LifeCheck will display the name of the folder into which the files were saved.

Disclaimer:

Please note that while every effort has been made to ensure the accuracy of this document, Trenchant Technology, Ltd may not be held responsible for any errors or omissions or any data loss which may occur through the use of this document. It is highly recommended that a backup of the LifeCheck database is made prior to making any changes such as importing parts.