SOFTWARE FOR GUIDED CHASSIS ADJUSTMENT

Verena Schwaiger
Bertrandt Ingenieurbüro GmbH
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**Technical task:**
The chassis of the GT3 racing cars are iteratively adjusted by mechanics. Although there are software tools that calculate adjustment values, these do not represent the entire process and not all parameters. Moreover, due to their complexity, they can only be operated by engineers.

**Initial situation:**
Chassis adjustment can take a long time and be imprecise. In some cases, the adjustment of the chassis is only possible with the support of engineers.

**Solution:**
The mechanic is guided through the adjustment process by software with user-friendly input masks. After an input measurement, the newly developed calculation can calculate the adjustment values in advance and outputs them in a format that can be used by mechanics. Once the adjustment values have been implemented, the chassis is set. In addition, the software automatically generates a measurement protocol.

The tool contains 3 functions - Adjust Dampers, Adjust Splitter and Setup/Setdown.
1. adjust damper: adjustment of spring plate and pushrod of the shock absorbers
2. adjust splitter: align splitter to underbody
3. setup/setdown: combination of Adjust Dampers, Adjust Splitter & further information

The measurement is carried out with the vehicle on wheels. It must always be measured at the measuring points. In addition, the tool automatically generates a corresponding protocol with the measured values, which can then be saved and/or printed.

**Advantages:**
- The adjustment process can be carried out much faster.
- Even inexperienced mechanics can now adjust chassis.
- Fewer personnel are required for chassis adjustment (no engineering support).
- The integrated protocol generation ensures that all information is logged.