



Image shows the training model Toyota Hybrid technology
Order-number SM00 9390

Important attributes:

- Original components of a Toyota Prius Hybrid
- The complete powertrain (electric and combustion engine) can be observed in motion.
- Control, explanation and indication of the various operation modes is realized through a specific computer software on screen including speech output



Image shows the sectional view of the powertrain

Description:

The training model is equipped with original components of a Toyota Prius hybrid technology powertrain (gasoline/electric drive). The whole unit is mounted on a mobile, stable and power-coated tubular steel frame.

The model is cut so that the components and their working principle are visible. 4 cylinder Combustion engine, generator, CVT gearbox, electric drive engine, inverter and high voltage battery are partly cut.

The training model is driven by two 230 V electric motors which allows to observe the whole powertrain in motion. The control of the unit is achieved by means of a special computer software, interface and PC (contained in the scope of delivery).

The operation modes start, normal operation, maximum load, braking, electric drive mode and stop can be observed in motion. The explanation and indication takes place on a screen including speech output.

On the following page you can find further information and screenshots of the computer software.



Image shows the sectional view of the 4 cylinder combustion engine

Order-number:

SM00 9390

Technical Data:

Dim.: approx. 1500x 800 x 1780 mm

Weight: approx. 200 kg

Required accessory:

Power supply:
230V / 50 Hz / 1 phase

Technical alterations are subject to change without notice!

© BBH Technische Anlagen GmbH, Hemer

Prius hybrid technology simulation:

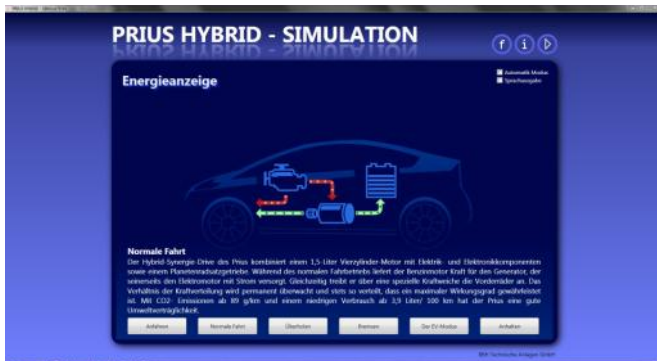
The control of the unit is achieved by means of the simulation software Prius hybrid technology, interface and PC (contain in the scope of delivery).

In the first program section the various operation modes start, normal operation, maximum load, braking, electric drive mode and stop will be controlled successively either manually with buttons at the bottom of the screen or in a „automatic mode“. Additionally an animation indicates the energy flow. The text information can be read out by the optional speech output.

In a further program section the so-called power split device of the Prius can be explained. It concerns the power distribution of a combustion and electric engine by means of a planetary gear unit.

Additionally a video about the hybrid technology of a Toyota Prius is included for demonstration in a lesson.

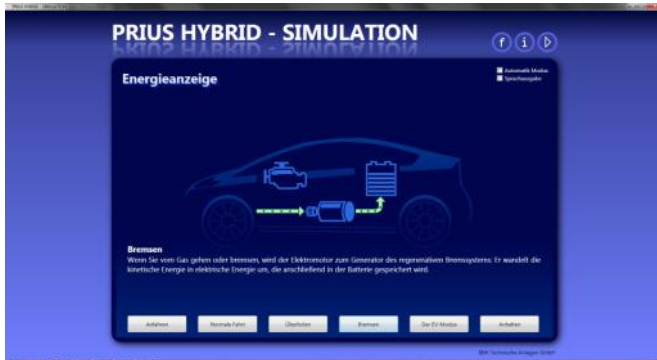
In the following some screenshots of the program Prius hybrid technology simulation:



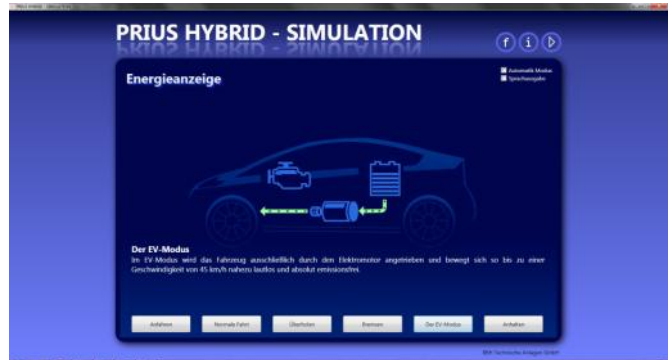
Screenshot shows the animation normal operation with control of the training model



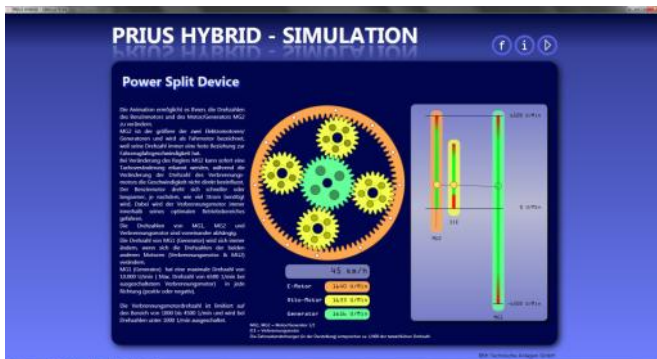
Screenshot shows the animation overtaking with control of the training model



Screenshot shows the animation braking with control of the training model



Screenshot shows the animation electric drive mode with control of the training model



Screenshot shows the explanation of the power split device



Screenshot shows the video about hybrid technology