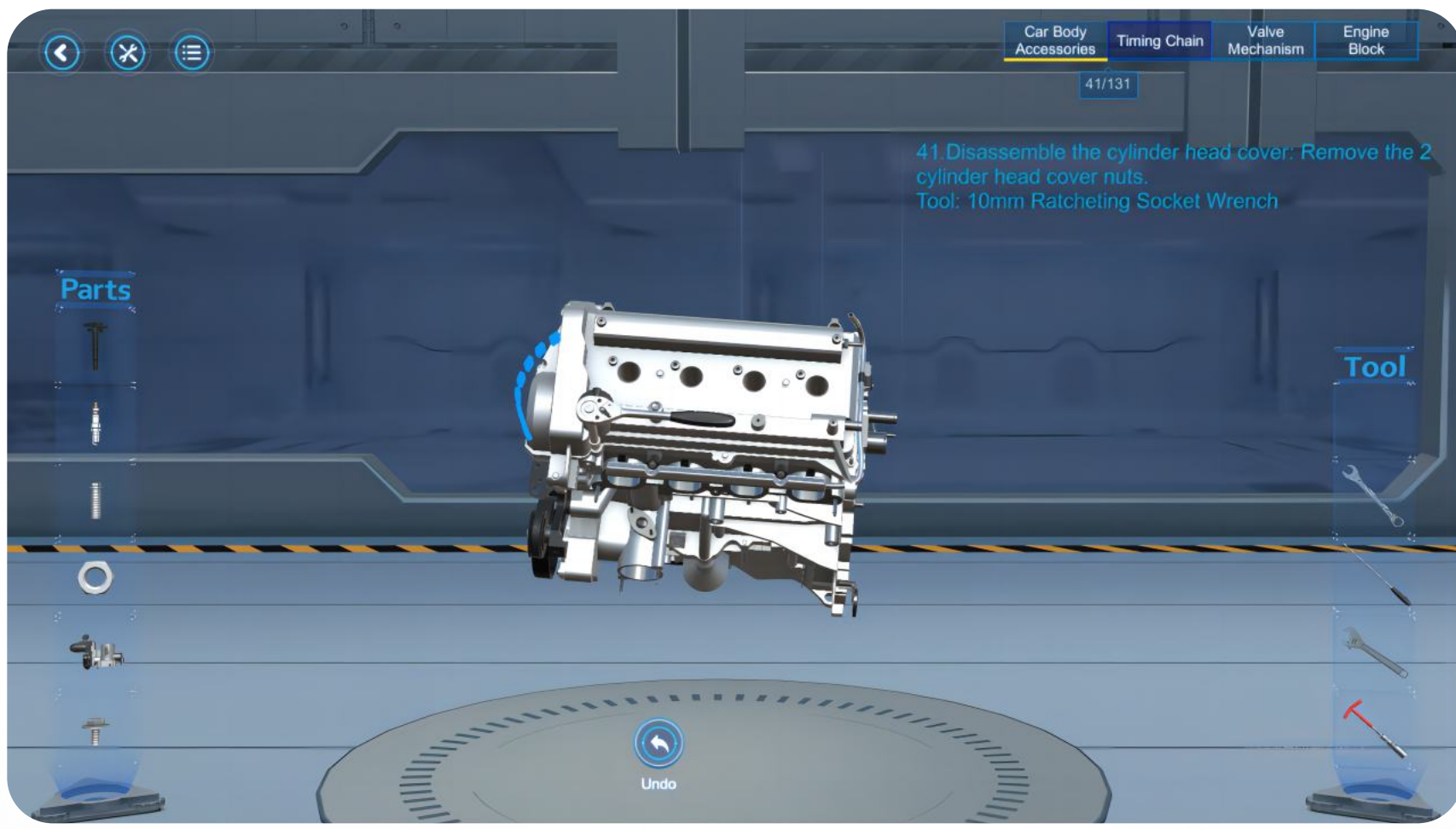


Powertrain Disassembly and Reassembly VR Practice

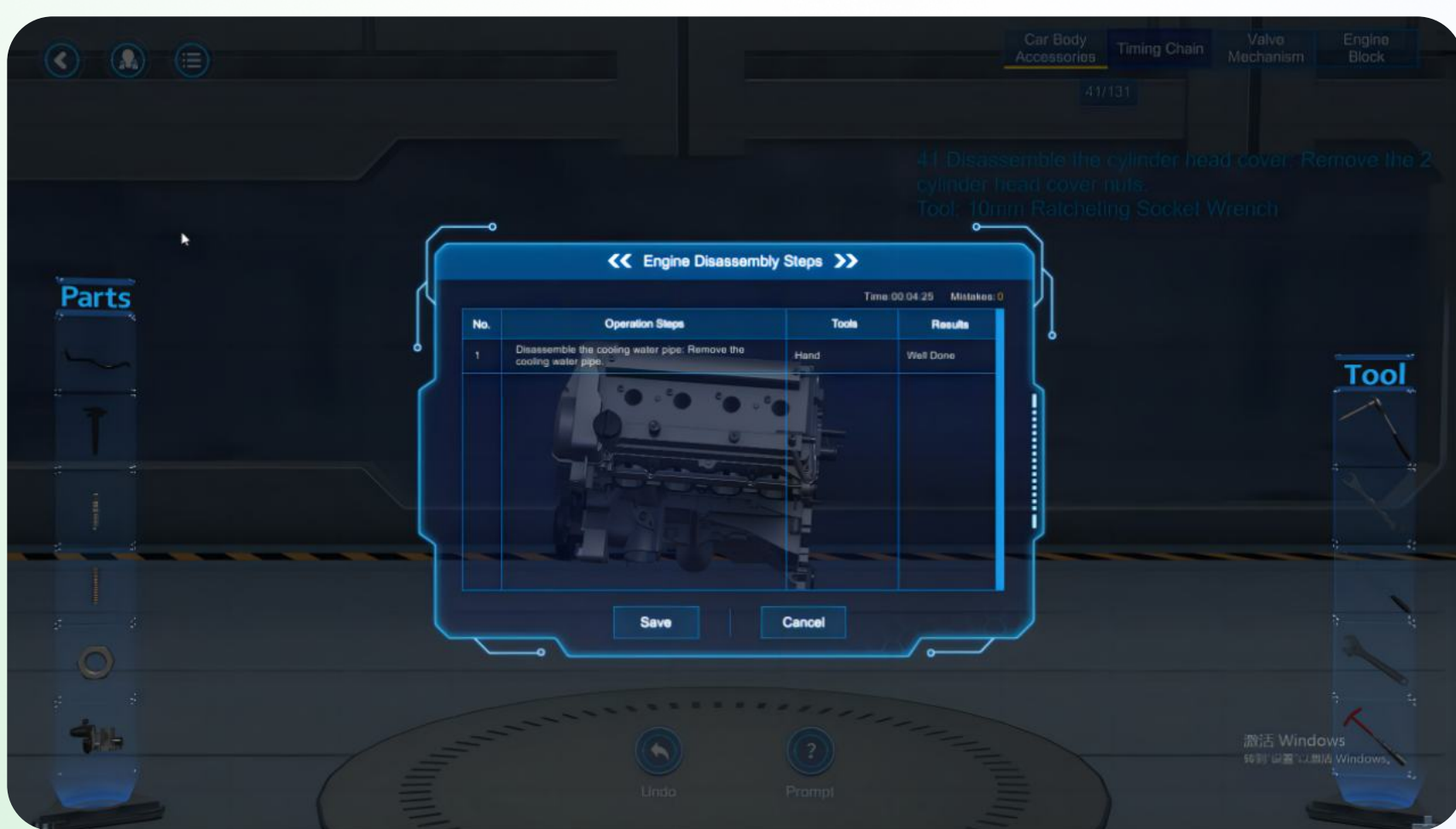
The software is specifically designed to support automotive education at both undergraduate and vocational stages, catering to programs focused on Automotive Service Engineering, Automotive Inspection, and Maintenance. Through the utilization of extensive real-world maintenance data and thorough research conducted at educational institutions, the software offers precise **1:1 modeling** of automotive components. This level of accuracy provides students with an immersive training environment, enabling them to rapidly grasp the concepts related to car powertrain systems. By leveraging the software's realistic modeling and immersive features, students can effectively develop their skills and knowledge in automotive technology, preparing them for successful careers in the field of automotive service and maintenance. Additionally, the software consists of two parts: **Engines** and **powertrain automatic transmission**.



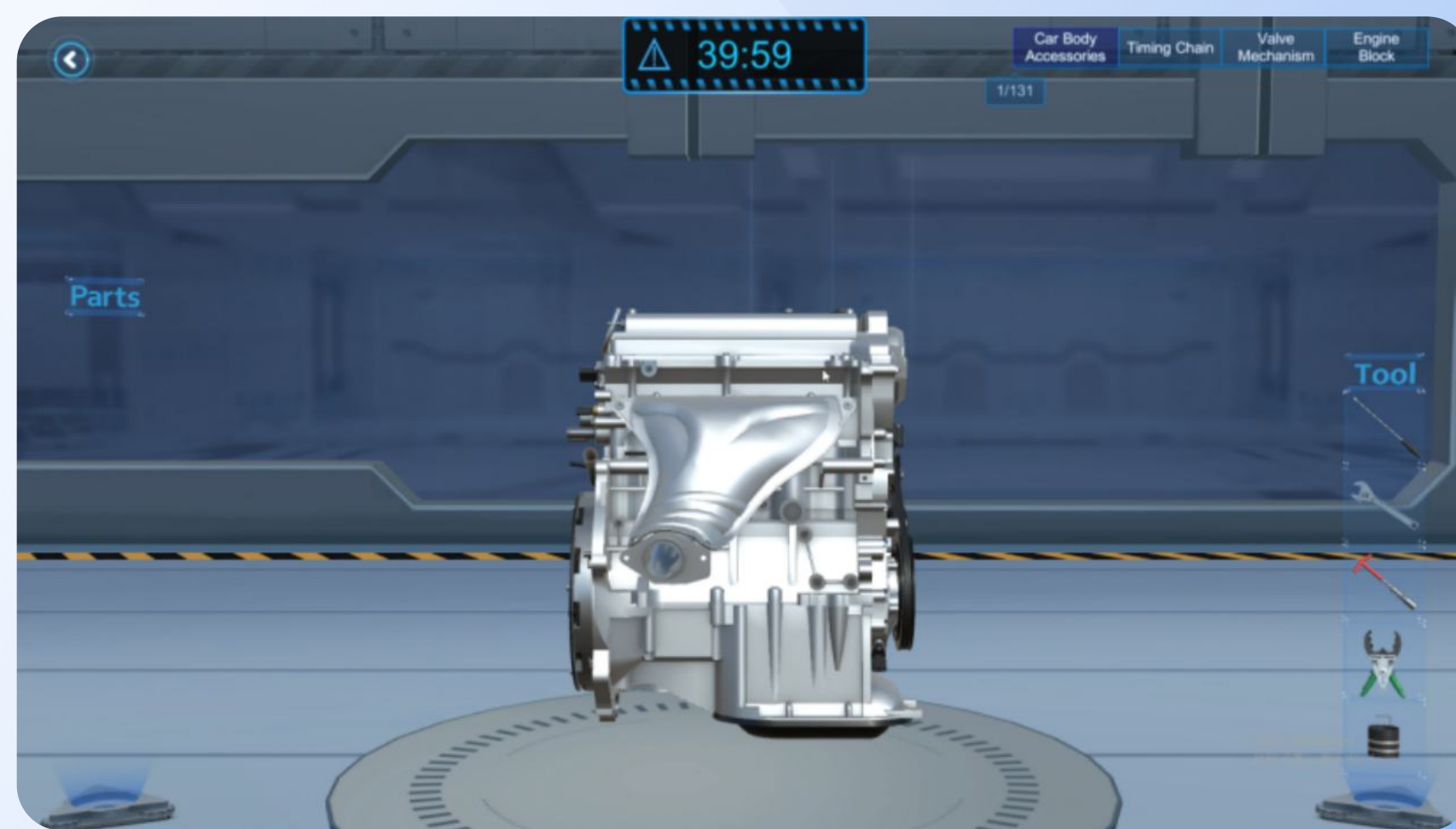
The software precisely simulates the process of disassembling and installing an engine, offering a realistic portrayal of each step involved, including the intricate action of tightening bolts. As students interact with the virtual environment, they can experience the tactile sensation of turning bolts and fastening components, replicating the physical engagement they would encounter in a real-world scenario.



Certainly, the software provides a flexible learning experience that is tailored to individual progress. Students have the option to choose between different modes based on their specific learning needs. The beginner mode is designed for those who are new to the subject or require additional guidance. On the other hand, the regular mode is suitable for students who have a solid understanding of the subject matter and prefer a more independent and challenging learning experience.



Every step of the operation will be meticulously recorded within the software, ensuring a comprehensive log of the user's actions.



Users have the ability to evaluate their proficiency in assembly or disassembly operations through the assessment mode available in the software.

Highlights

- **Versatile and Adaptable:** The software is highly **versatile and adaptable**, capable of functioning seamlessly across various platforms. It can be used on interactive whiteboards, large screens, PCs, curved screens with motion capture, CAVE systems, desktop interactive devices, and mobile devices. This flexibility ensures that users can access and utilize the software on their preferred devices, enhancing accessibility and convenience.
- **Synchronized Learning Experience:** The software offers a **synchronized learning experience** by presenting complex principles alongside practical tasks. When users engage in tasks such as disassembling or installing crucial components or systems, the software provides prompts that highlight the underlying principles. This approach allows learners to **simultaneously grasp essential theoretical knowledge while actively participating in hands-on tasks**, promoting a comprehensive understanding of the subject matter.
- **Adherence to Industry Standards:** The software is designed following **manufacturer-standard operation manuals**, ensuring that the disassembly and assembly processes align with industry standards. This adherence to established protocols **maximizes** the practicality of the training and leverages the advantages of virtual simulation. Users can gain valuable experience by working within a simulated environment that mirrors real-world procedures.
- **Specialized Tools and Prompts:** The software incorporates specialized tools to **enhance the learning process**. During disassembly and assembly tasks, the software provides special prompts for less commonly used tools. Students can access detailed guides on how to effectively use these tools. This feature equips learners with the necessary knowledge and skills to work with specialized tools, promoting a comprehensive and practical learning experience.

Functionalities

Disassembly

Reassembly

Disassembly Assessment

Reassembly Assessment