

CTE JOURNEYS | HANDBOOKS

Auto and Equipment Mechanics



CAREER AND TECHNICAL EDUCATION

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SECTION 1



Is This the Field for You?

Do you like working with your hands? Are you good at repairs? Maybe being around machines all day sounds exciting. Using tools and getting dirty is not an issue. It's fun to solve problems. Being careful around moving parts comes naturally. If this sounds like you, consider a career in auto and equipment mechanics.

Chapter 1 ›

Inside the Industry

The world depends on **vehicles**. Planes, trains, and cars take people and goods where they need to go. Construction vehicles build bridges and skyscrapers. These machines aren't perfect. Something can go wrong with a machine. People who work in auto and equipment mechanics keep these machines running.





If a part breaks, they will fix it. Sometimes new parts need to be installed. Engines must be tuned up. Tires need to be changed. Windows can break. People in this field solve all of these problems. There are also tasks to do before anything goes wrong. Workers check for problems and keep parts clean.





The work can be dirty and loud. Machines are noisy. It can be dangerous to work with big vehicles. If you like quiet work, there are also desk jobs in this field. Repair shops have offices and front desks. Warehouses need to be managed. Parts must be ordered and stored.

Working with vehicles is a good option for problem solvers. It is also an accessible career path. There are not many requirements to start in this field. Most jobs don't require a degree. If you can learn new skills and work with machines, you can be successful. There is room to grow.





Did You Know?

There are about 30,000 parts in a car.



Americans spend around \$200 billion on car repairs each year.

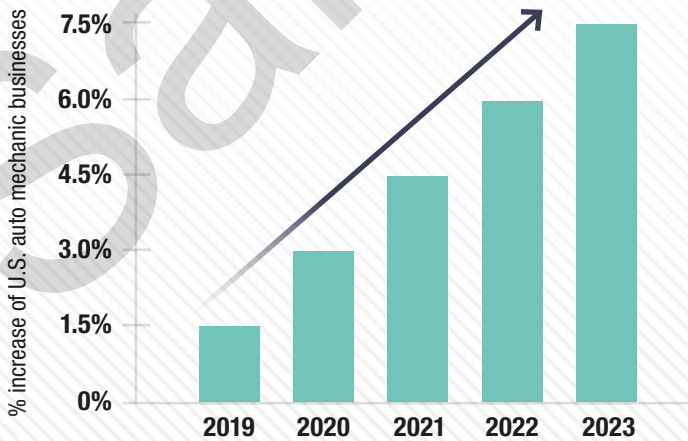
\$200,000,000,000

The National Institute for Automotive Service Excellence runs the largest certificate program for auto mechanics in the country.



214,439
currently certified

There are more than 280,000 auto mechanic businesses in the United States.

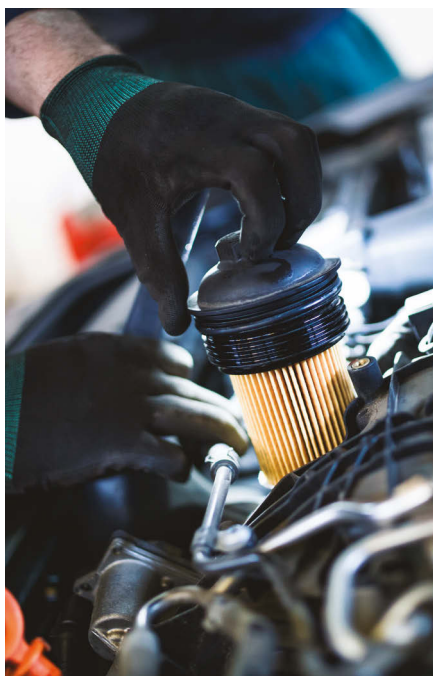


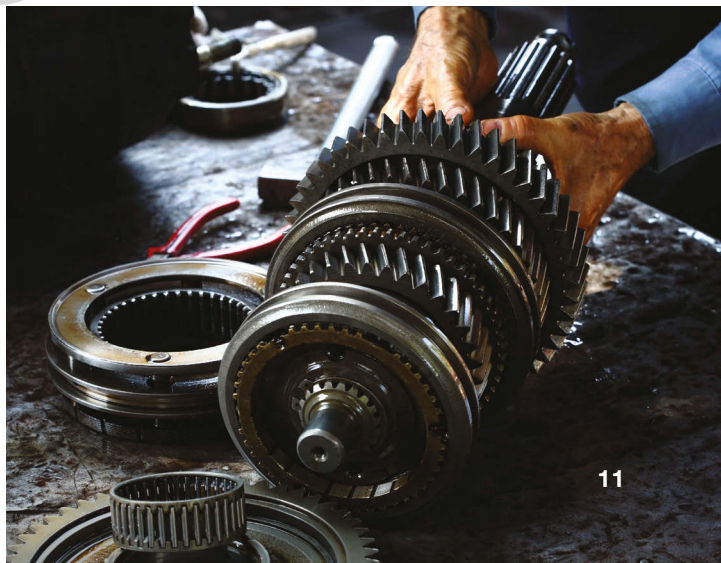


Auto and equipment mechanics work in many environments. Some may be in small shops. Others work in warehouses or outdoors. Each job is a little different. Here is a close-up look at three scenes.

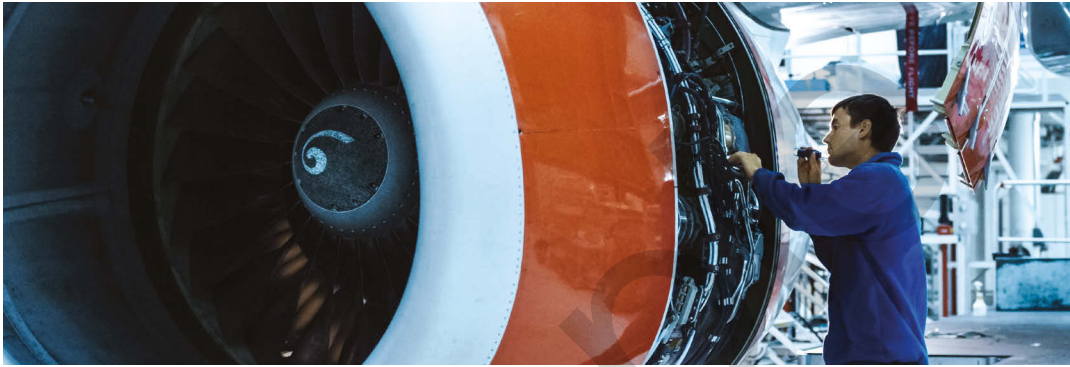
Scene #1: Auto Body Repair Shop

In auto shops, cars are repaired. An **auto machinist** works on the engine. The **auto body technician** fixes the outside. Tires are changed by an **auto mechanic**. A **glass technician** gives the car a new windshield. In the office is a **parts professional**. They make sure workers have the parts they need.





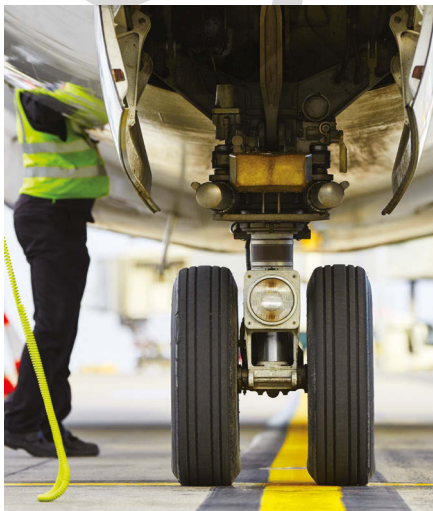


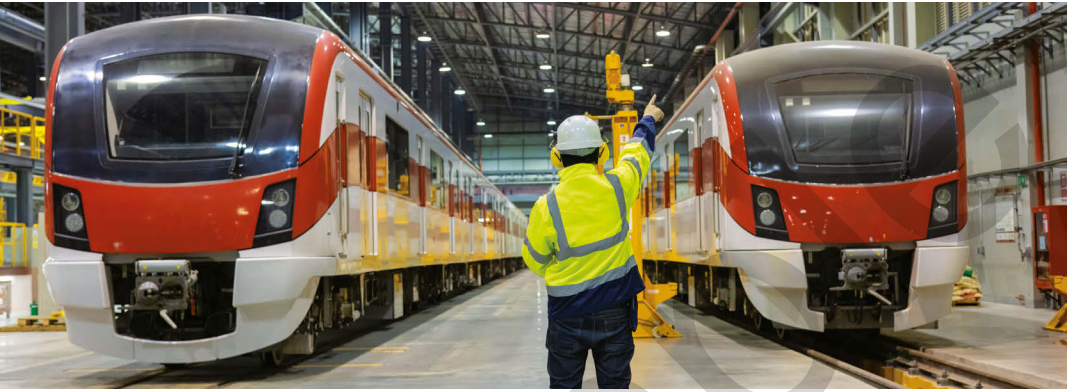


Scene #2: An Airport

Many people work to keep airplanes safe. An **aviation safety inspector** looks for problems. They make sure the plane is safe.

The **aircraft fueler** adds gas. An **aviation maintenance technician** fixes anything that breaks. **Aircraft cleaners and detailers** work on the outside of a plane. The **interior technician** cleans the inside. A **line technician** tows the plane back to the runway.





Scene #3: Train Depot

What happens to trains when they need repairs? They go to a train depot to be fixed. **Rail car maintenance workers** fix train cars there. Some even hang from safety harnesses to screw bolts into the top of train cars. **Track equipment repair operators** work on train tracks. Computer systems help trains run. A **train system technician** works on those systems.

