



Auto Mechanic

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Job Description:

Electricians install, test, and maintain electrical systems.

Wages:

Average median yearly pay is about \$38,000 a year in Utah.

Schedule: May work evenings and weekends, but generally they have regular office hours.

Education & Experience:

- ◆ Completed High School
- ◆ Long-term on-the-job training

High

School Courses:

- ◆ Auto Collision Technology
- ◆ Auto Repair Technology
- ◆ Diesel Mechanics and Repair
- ◆ Introduction to Mechanics



Gross Monthly Income:

\$3,100

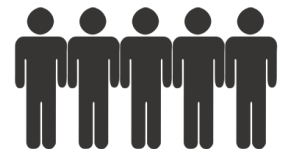
Advancement: Beginners who learn on the job usually start as trainees or mechanics' helpers. Within a few months, they perform many routine service tasks and make simple repairs. It usually takes two to five years of on-the-job training to become a journey-level mechanic. However, graduates of college training programs are often able to advance to the journey level after only a few months on the job. With an additional year of training, journey-level mechanics can specialize in a difficult area, such as transmission repair. However, they can specialize in areas that do not require all-around knowledge of auto repair in less time. Experienced mechanics with leadership ability sometimes advance to shop supervisor or service manager.

Work Conditions:

- ◆ Responsible for the work done by other workers.
- ◆ Medium level of social contact. They work mostly with tools and cars.
- ◆ Often exposed to hazardous situations, conditions, and equipment
- ◆ Often work in cramped work spaces underneath vehicles that require getting into awkward positions.
- ◆ Must be exact in their work. Work as part of a team.
- ◆ Meet strict deadlines. Repeat the same tasks often throughout the day.

Travel: None

Job Outlook:



Very Large

Hours a Week:

40

Leisure Time:

Medium

Knowledge:

- ◆ Mechanical
- ◆ Customer & Personal Service
- ◆ Computers & Electronics
- ◆ Engineering & Technology
- ◆ Education & Training
- ◆ Mathematics

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Overview

Cars, just like people, need check-ups. Some people even describe the car's oil as functioning like a person's blood. Without proper maintenance and fixes, cars will not do what we want them to do. Just like human bodies - if we do not keep ourselves healthy, it will become harder for us to do what we need to do. In the case of cars, the brakes will squeak, the engine will stutter, and the whole thing might pull to one side of the road. Worse yet, it might not even start.

Auto mechanics perform routine service on cars and light trucks to keep them running well. They are also called service technicians. They inspect and lubricate engines and parts. They tune engines to use less fuel. They often follow a checklist to be sure they examine potential trouble spots. Belts, hoses, plugs, brakes, and fuel systems are items mechanics watch closely. In addition, mechanics may install or repair accessories, such as heaters and windshield wipers.

When cars are not working properly, auto mechanics talk to owners about the symptoms of the problem. Then they examine cars, trying to eliminate simple things that could cause the problem. Sometimes auto mechanics test drive cars to observe their performance. They also use a variety of testing equipment, such as hand-held diagnostic computers and compression gauges. Once they find a problem, mechanics make adjustments or repairs. They often review work orders and create a plan of action, with some help from supervisors. Sometimes they replace or rebuild damaged parts. For large repairs, mechanics estimate the cost and get the customer's approval before doing any work.

Because of recent changes in technology, auto mechanics work on many new types of cars. They may work on the brakes, batteries, or engines in hybrid electric vehicles. Auto mechanics might adjust engine sensors on flexible fuel vehicles. They do safety checks on the fuel systems for cars using natural gas.

They also make changes to older cars. Auto mechanics may install systems that improve fuel efficiency. They may convert cars that use regular gasoline to use bio-diesel, ethanol, methane, or other fuels. Also, they might replace older parts with more efficient electric systems.

Auto mechanics use a variety of tools in their work. They use power tools such as pneumatic wrenches to remove bolts quickly. They use machine tools such as lathes and grinding machines to rebuild brakes. They use welding and flame-cutting equipment to remove and repair exhaust systems. They also use jacks and hoists to lift cars and engines. In addition, mechanics use common hand tools, such as screwdrivers and pliers, to work on small parts. Some mechanics use electronic equipment. For example, they may use infrared engine analyzers and computerized diagnostic devices. These devices diagnose problems and make precise adjustments. Car technology changes quickly, so mechanics must learn how to use new tools and methods to work on new types of cars.

Auto mechanics who work in large shops may specialize in one or more areas. For example, automatic transmission technicians work on gear trains, hydraulic pumps, and other parts of a transmission. Bio-diesel technicians may remove old fuel tanks to install new fuel systems. Tune-up technicians adjust timing and valves, and adjust or replace spark plugs and fuel systems. Front-end mechanics align and balance wheels and repair steering and suspension systems. Brake repairers adjust brakes and replace brake linings and pads. They also service regenerative braking systems in hybrid vehicles. In small shops, mechanics must know about all areas of car repair.

Pathway:
***Skilled &
Technical Sciences***