

# Heavy Vehicle Mechanic

**Louise** is a heavy vehicle mechanic. She started her apprenticeship at 15 and repairs and maintains heavy vehicles like trucks, semi-trailers and buses. She also trains and mentors other tradespeople in heavy vehicle and plant mechanics. Find out more:

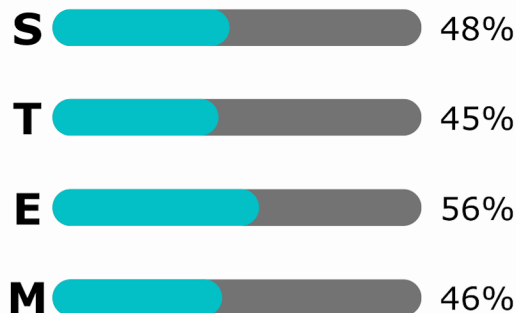
[futureyouaustralia.com.au/pathfinders/louise](https://futureyouaustralia.com.au/pathfinders/louise)



*'The idea of going to university didn't appeal to me at all. I wanted to work with my hands.'*

## STEM Meter

How much Science, Technology, Engineering and Mathematics (STEM) does this job use?



Source: [jobsandskills.gov.au](https://jobsandskills.gov.au)

## 5 reasons why you should do this job

- 1** Help keep food in our homes
- 2** Make our roads safer
- 3** Ensure our heavy vehicles last longer
- 4** Make sure important deliveries arrive
- 5** Contribute to technological advances

### 3 STEM skills required for this job

Arithmetic: Fractions & conversions

Troubleshooting

Problem-solving

### Subjects to develop these skills

Mathematics, Science

Science, Mathematics, Digital Technology

Design and Technologies, Digital Technology



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# An example of a day in the life of a heavy vehicle mechanic

This is what a typical day could look like if you became a heavy vehicle mechanic.

- 6.00am** I get up early so I can take my dogs for a walk, squeeze in a quick ride on my motorbike and prepare a cooler of snacks and lunch before work. I love doing something for me every day before starting work. It helps me start the day with a positive mindset.
- 7.30am** I race out the door with a breakfast sandwich in one hand and a coffee in the other. Nothing better than a warm brekky in my belly before a full day on the tools.
- 8.00am** I start my workday on the workroom floor and make sure I have all the tools and parts I need at my workstation to take on my jobs for the day. I scan my work queue – this is a document our team uses to track the vehicles we're working on, so we know what's coming up and know what parts we need. I notice that later this week I am working on a tractor that will need some new belts and hydraulic pumps. We don't have any in the workshop at the moment, so I place an order to ensure we're prepared.
- 9.00am** Our team uses a whiteboard in the workshop to track the vehicles we're working on. This is really handy because we also include estimates of time, which means my boss can see who has capacity to take on new work orders as they roll in (or, sometimes, sputter in). I update my part of the board because I was in the middle of a job yesterday when I came across an unexpected issue involving some cracked pistons. This means the job will take longer, but it's great that we found them because now they won't cause major issues down the track. My boss is satisfied with the extra time I have allocated, and the client is also happy, because these machines are NOT cheap and it's important to keep them in tiptop shape.
- 9.30am** It's time to deal with the cracked pistons. This is not a small task. Before I start fixing them, I need to work out WHY they cracked. This can be caused by quite a few things, and I need to do some investigation to find the cause. Then I will be able to let the client know so they can hopefully not do it again. Investigating the cause requires me to strip the engine and remove the pistons for closer inspection. I love this part! Finding out the WHY is always so exciting.
- Midday** Lunchtime and I am starving! I smash through my cooler of food and chat to some of my colleagues. We always end up talking shop, which is great because it means we can chat about the issues we are dealing with and sometimes a fresh set of eyes (or ears, in this case) can see a solution that has not yet been considered. I love my crew. We always share ideas and a laugh. It makes work really enjoyable when you know your team has your back.
- 1.00pm** I have to start another job, which means it's time to consult my checklist and do an inspection. My checklist helps me to identify the issue with a machine by stepping me through a list of frequent engine malfunctions. The customer's reported symptoms, the use of diagnostic equipment, including scan tools, and the results of a test-drive all prove helpful in finding the source of the issue. In this case, it's a bus and it turns out to be a rather simple fix. The customer reported that the bus was taking a few goes to turn on, was stalling, and seemed to be a bit lethargic. Turns out the fuel filter was clogged. A pretty simple fix. I start by lifting the bus with the hydraulic lift in the workshop and locating the fuel filter. Once I locate it, I put a container underneath to catch all the fuel when I release it to clean it. Once it's clean, I reinstall the filter and test the vehicle. The bus is good as new again!
- 3.00pm** Back to those cracked pistons. I found the cause: it was an incorrectly sized timing belt. So I will replace the timing belt with the correct-sized timing belt, and then I will repair the piston. A cracked piston is not repaired or changed alone – it requires changing gasket, rubber sealings, valves and engine oil, which takes time and requires a lot of attention to detail. I get stuck in.
- 5.00pm** Knock-off time! Phew. I am shattered, but it was a great day and I managed to get a lot done. I say goodbye to the crew and head home to shower.
- 7.00pm** I drive over to a friend's house for dinner. About six of us get together every week and do Taco Tuesdays and play board games. It's the best way to unwind after a long day.
- 10.00pm** I get home, hop into bed and set my alarm, ready to do it all again tomorrow.

