



Magazine 6A – Mechanics

This document provides a transcript for the audio in Magazine 6A – Mechanics. It includes a text copy for interviews, presenter videos and activity audio.

Slide Image



Transcript

Servicing the Community Issue 1

Mechanics Interviews with mechanics within the community

+ How to order parts

Meet Justin & Jonathan



Welcome to Issue 1 of Servicing the Community Introduction to Mechanics

00:36 Minutes: Welcome to Prevet

Welcome to Prevet

Hi! In this set of interviews you'll meet Cody, Justin and Jonathan.

They talk about how they train to become mechanics and what they like about their jobs.

Cody works on the big trucks at the Ranger Mine. Justin and Jonathan are light vehicle mechanics at Galiwin'ku. Their job helps keep people and things moving by fixing and maintaining all kinds of vehicle.

Let's meet the guys.







Interviews with Mechanics Ranger Mine, Jabiru Coby Wright-Cronin

01:34 Minutes: Cody Wright-Cronin – First Year Diesel Fitter Apprentice

My name is Cody. I am an apprentice diesel fitter at Ranger Mine. I have been here roughly two years, I only got my apprenticeship this year. Before I got myself an apprenticeship, I was a trainee rigger over at the Mills side working with the cranes and scaffolding, and stuff like that. Before I came here I was in construction.

The main part is just maintenance, I am really in first year so I am doing a lot of servicing of any type of machinery from the graders to the trucks and I have done some change outs, engine change outs and rebuilds.

I chose this career because I know this is a job I can do anywhere in the world and it's a job that I can do either out in the mines or I could be in town, doing the same type of work. I like doing work on graders and dozers and the loaders, that's something that you use everywhere, every day with normal road works. I'd like to get as much experience as I can, so I can do more work. I like to get as much experience as I can, so I can do more work in those types of areas. It's good if you start to know what you would like to do at a younger age, then by the time you reach an age where you should really start finding a career you have a good idea of what you want to do.

Interviews with Mechanics Galiwin'ku Jonathan Gulurrwuyz Garawirrtja

03:08 Minutes: Jonathan Gulurrwuyz Garawirrtja - Mechanic

My name is Jonathan Gulurrwuyz and I works here, in the workshop. I do some mechanical work. I finished my apprenticeship last four years back but I am working here for nearly 5 years. Mainly we do like just repair all the mainly the engine or gearbox and every month we do like field runs. Like every month we do like delivering field every homelands

Mainly my job is just servicing cars, that's my main job.

But number one rule is just the safe, that's the number one rules, for safe – mainly on the workshop and other workplace area. Just because we work like heavy machines more like big tyres or like lifting something heavy and just keep the workshop like clean area you know. That's the





main safety and all that – mainly in the workshops, especially in the workshops.

Every time like when I do my job especially mainly just a private job back at home I do my jobs and my kids or my kids friends they always come watch me doing on the vehicle. Every time you know they ask me questions, for you know like how to fix and how that operate – all that engine and all the wirings.

Yeah I have got my level III certificate but some of the mechanics they do like mainly the heavy duties like mainly on the trucks or like big machines. That's a different story for like other certificate more like <???> or for like tyres. If you want to do like tyres in 5 years, or maybe 3 years or 2 years you have to get a different certificate

I think just a sometimes mainly on like remote community sometimes you know just two hards just the two hards for you know mainly the kids. But I always support you know my kids, my friends children, and my kids friends or even like other kids or like you know – every time I go past me and Justin they always you know they always say I want to become a mechanic.

Interviews with Mechanics Galiwin'ku Jonathan Gulurrwuyz Garawirrtja

03:08 Minutes: Justin Garawimtja - Mechanic

Hey my name is Justin Garawimtja and I am from Galiwin'ku, Elcho Island. And I am a qualified mechanic in light vehicles. I went to Darwin for schooling and back from school straight I got the job as a apprentice mechanic here at Galiwin'ku. The main part in my job I fix cars, I fix brakes, brake shoes, take the gear box out put a new clutch and fix steerings box and sometimes we go to homelands and fix generators over there. And sometimes we take fuels, fuel to homelands. And we do tyres here at the workshop and sometimes we help Ballander people – to work with them and also we fix all the every plant, like grader, backhoe. Sometimes we fix outboard motors, inboard motors and generators.

I finish year nine and I got my level three certificate in mechanic in light vehicles and also I got my ticket, level four in numeracy and literacy. I went to Batchelor College and that's all I got in my ticket.

I came here from school and it was bit easier for me to finish my levels with apprenticeship.







It's good about working here, I love working with the boys Yolngu boys and Ballander boys and we communicate each other and help each other on the works. I would like to encourage young people to go to school every day on time so they get better education – numeracy and literacy – and when they get older they'll probably get better job.



Activities - Mechanics

00:23 Seconds: Activity Introduction *Hi! Now you see what skills Cody, Justin and Jonathan need to use every day as mechanics. They talk about the different tools they use and how they use them. They talk about safety checks and replacing parts in light vehicles. There are so many things the fellows needed to learn to become mechanics and we've got a few of these ideas to share with you.*



Let's have a go! MECHANICS

Using Tools – Listen for Jonathan showing a few of the tools he uses and what they are used for

Hazard Control - Coby will show you how he ensures he is safe on the job

Ordering Parts – Listen for when Justin mentions using literacy and numeracy to order parts

Review



00.31 Seconds: Review

You've just learnt a little about the kind of skills the mechanics need to use every day. They have to think about how they use the tools, they think about how to prevent and control hazards while on the job. They think about why they need to use accurate measurements and reading skills to order and replace parts.

There's more to these blokes than meets the eye and they have the skills to do a really important job.



Slide Image	Activity 1 Using Tools
ACTIVITY 1 USING TOOLS	Activity 1 Using Tools In this story, listen for Jonathan showing a few of the tools he uses and what they are used for.
Image: Section of the sectio	Key Points This is what we will learn: • Using reference texts to find out which tool to use
Image: state stat	01:22 Minutes: Jonathan – Mechanic This is some of my tools. That's the Philips head screwdriver set. That one's got just a flat screwdriver, this is all different sort of tools, like this is like we call long nose plier, that one just a electric plier, just a crimping plier, and that one, probably you know, fits, this is just a shifter, mainly you use on the, just on the bikes. And that one, that one's we call just for wiring, cutting, and this is just we call um, sort of like um, locking plier, but this is just the normal and that one just like lifting something, this is just sort of like this, just flat, but that one just a little bit angle.







Each tool has a purpose and special ways to use and care for them. Knowing this information helps Jonathan do his job safely and to a good standard. When he was training as a mechanic, he learned about this from his teachers, as well as from information sheets.

Job Tip

Using the right size tool in the correct way for the right job is the best way to care for tools and other materials, They can be very expensive to replace.

Safety Tip Using the right tools for the right job can avoid injuries happening.

Jonathan would have read an information sheet similar to this to find out how tools are used.



















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Activity 2 Hazard Control

Activity 2 Hazard control

In this story, Cody will show you how he ensures he is safe on the job. It's called JHA, or Job Hazard Analysis. Cody had an induction that taught him the hazards specific to his site, but he also learned about safety in his training.

Key Points

This is what we will learn:

• Using a table to record information

02:59 Minutes: Coby - First Year Diesel Fitter Apprentice

My name is Coby, I'm a first year apprentice diesel fitter at ERA for Ranger Mine.

Every morning when I come into work, the team sits down and has a prestart meeting to tell us what we are basically going to do that day and let us know if there's any changes to safety on site.

Every day after the task of our pre-start, we will do a JHA which means Job Hazard Analysis where we go and find every hazard that we have to do for that task and see if we can make it safer. For the JHA we start off with every job step and we will find out what's the hazard and then we'll find a control for it and it is important because we are working with live machinery here.

Your three main steps in a JHA is to set out your job steps and then find out what hazards associate that task and then you'll find a control for that hazard. First thing for this area you have to be inducted, you have to know all the hazards and you have to have a tour going through to explain what hazards are in this area and how dangerous this area can possibly be.

This is a Take Five Book. We complete one of these every time we set a new task, it's pretty much a personal JHA for you and you go through a checklist of what could possibly happen in every task. And you find your own controls for that task. Ok so this is Take Five. You start every task







and you go through a checklist, if it's safe or not. You start with a description of the job you are doing and the date. And then your first thing is are you fit for your task, and pretty much it's a yes or no check list and on the other side of the page you have a hazard control where you identify your personal hazard and then you write down your control for the hazard. Identifying hazards is the first step undergoing every task. Every task will have a lot of dangerous hazards, from heat to noise to cuts, abrasions and so on. Your three main hazards we are going to look at today will be heat, working at heights and noise.

Coby's Job Hazard analysis book is the 'Take Five' book. He has to think about all the things he's going to do in his job tasks and how he will protect himself.



More Info

Employers could get in trouble if they don't ask for employees to do JHAs. Employers also have to provide inductions and do a lot of other work to ensure their workplace is safe.



Safety

Using the right tools for the right job can avoid injuries happening.

Thinking + Discuss

- Have you ever stopped before doing something to make sure you were going to do it safely?
 - Have you ever hurt yourself doing something?
- If you were riding a bike, what could you do to make sure you were doing it as safely as possible?
- Try to think of at least three things.







Answer

Look at the path in front of you, ride on the side of the road, keep your hands on your brakes, wear a helmet, listen for traffic, think of other road users, wear long sleeves and pants to protect your skin, wear bright colours at night, use lights at front and rear of your bike at night.









Possible hazards Record what he's thought about

Coby has to do two things with the Take Five booklet: think of the possible hazards and what he can do to control them, then record what he's thought about. The reason there is a booklet is because it makes him stop and think, and shows he's done a JHA.

Thinking

Now you'll see Coby talk about the first hazard, which is heat: What could he do to control the hazard?

00:36 Seconds: Coby - First Year Diesel Fitter Apprentice

For your heat hazard, heat can mainly come from the exhaust, from your engine oils, from your hydraulic lines, even from your diff here if it's been working all day it will be very hot and usually they run it up from the mine, to park it up and you'll be working on it not long after that.

Activity

Mark the hazard on the checklist, then drag the hazard and the control to the correct places in the table.









Activity Possible hazards

Activity Record what he's thought about

Thinking Now you'll see Coby talk about the last hazard, which is noise: What would he do to control the hazard?

01:20 Minutes: Coby – First Year Diesel Fitter Apprentice

Your last hazard is the noise and it can come from something as starting this truck up. These trucks are very noisy when they start up they are very loud. Our control is that we use ear plugs when it gets too loud and we also have a machine that monitors the noise in our workshop. It tells you when it is too loud and you should wear ear plugs.

This machine here pretty much monitors noise in the workshop. You have your three levels, you have green, green's okay, you don't need any hearing protection. When you hit yellow, it is advised you should wear hearing protection only if it's on for a long time. Once you hit red, the warning sign is that you should wear ear protection.

Activity

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Mark the hazard on the checklist, then drag the hazard and the control to the correct places in the table.











Activity complete Well done!





Slide Image	Activity 3 Ordering parts
ACTIVITY 3 ORDERING PARTS	Activity 3 Ordering parts In this story, listen for when Justin mentions using literacy and numeracy to order parts. He talks about replacing a lot of different parts as a light vehicle mechanic. In order to do this he needs to read the catalogue that the parts are listed in and order the right size of parts.
This is what we will learn: Key Points Meawing Reading for specific information	 Key Points This is what we will learn: Measuring bolts in mm Finding bolts in catalogues according to their measurements
	 O3:13 Minutes: Justin – Mechanic Literacy and numeracy are important for us so we can write the forms, fill the forms, and also when we go to other community or cities, we have to speak in English to communicate. On this car I was working on brakes and bearings, I put new bearings and also I put the new brake pad, I drained oil and also, on the rear tyre I fixed I put the new brake shoes and bearings. In here this is the um air filter and over here this is the fuel filter and this element filter and this one here is the where we put the steering fluid and over here, this is the um for the clutch and it's called master cylinder and this one here is the battery and this one, is a radiator. Radiator helps um water keep it cool and on near side here, it's the access pipe where the smokes goes out through their exhaust.

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	I put the new air cleaner on this car and also we put um fuel filter, new one, when we do service on the cars, we do a new air filter, fuel filter, and um oil filter over there, this one the side here, and sometimes we top all the fluid level, the oil levels and sometimes when the battery goes off, we just put new one in and sometimes we put new um wiper blades, wiper blades, because the homeland vehicles they go up the island more often so like every six month we do full service on the cars and sometimes we um community cars we also fix the privates and yeah, that's what we do here.
	Justin has to replace a lot of parts. Justin has to know the right size of parts to order. There are a lot of different parts he mentions. Another thing he would order a lot of is bolts.
	Bolts hold panels of the vehicles together. When Justin changes parts he would need to adjust all kinds of bolts. When a car has been damaged he would need to replace them.
	Bolts come in lots of different sizes. The sizes are determined by the diameter of the bolt shaft, not the head, which tells you what spanner to use. The measurement is done in three ways, but today we we'll use millimetres, mechanics use millimetres all the time.
Diameter is the distance across the middle of a circle; in this case indel of the boirs shaft:	More info Diameter is the distance across the middle of a circle; in this case it is the distance across the middle of the bolt's shaft.





Constant of the second se	Thinking + Discuss Where have you seen millimetres before?
Millimetres are also written as 'mm.' Centimetres are written as 'mm.' Centimetres There are 10mm in a cm.	More Info Millimetres are also written as 'mm'. Centimetres are written as 'cm'. There are 10mm in a cm.
This is how Justin would measure the diameter the bolt. Wark is the diameter if the bolt in millineers? Image: the diameter is the diameter if the bolt in millineers? Image: the diameter is the diamete	Activity This is how Justin would measure the diameter of the bolt:
Head The addition of the addit	Head The size of the bolt head tells Justin which spanner tool to use. Justin knows that if he uses one that's too big, it will damage the bolt. He learned this when he was first training. When Justin needs to replace a bolt, he needs to know more than just the size of the bolt head. He needs to know the diameter and the length of the shaft. Let's see how he does that.
BARK MAX-MET IP BARK-ABTIN BARK MAX-MET IP BARK ABTIN BARK MA	When Justin orders a bolt he needs to look for the diameter and the length of the bolts he needs in the catalogue. M8 means that the bolt is 8 mm in diameter.





skills Check: MB means that bolt has a diameter of 8mm. What would M12 mean? What would M12 mean?	Extension Skills Check: If M8 means the bolt is 8mm long, what would M10 mean? What would M12 mean?
Description End the bolt you just measured, is 12mm in diameter and 50mm logs. Non- Non-Net Net Net Net Net Net Net Net Net Net	Activity Find the bolt you just measured. It is 12mm in diameter and 50mm long.
What is the diameter of this bolt? What is the diameter of this bolt? What is the diameter of this bolt? What is the diameter of this bolt? User the bolt is millimeter? I form 1 form	Activity What is the diameter of this bolt? What is the diameter of the bolt in millimetres?
What is the length of this bolt? What is the dameters? What is the dameters?	Activity What is the length of this bolt?
Find the bolt you just measured, to 10mm in diameter and 75mm long. NUMBER OF THE ADDR - BT IN • In the ADDR - BT IN THE ADDR -	Activity Find the bolt you just measured. It is 10mm in diameter and 75mm long.

