

まんがでわかる



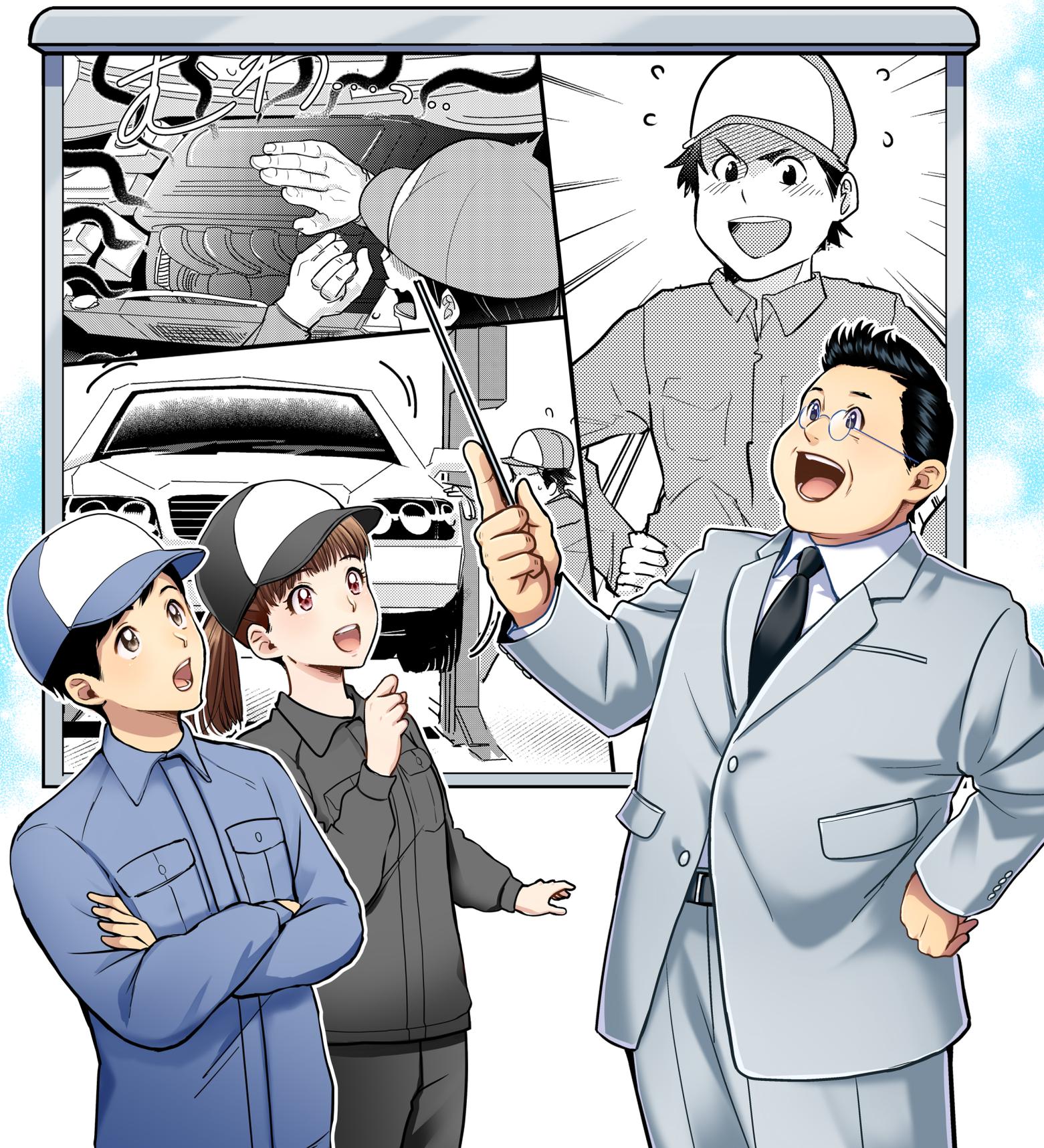
English

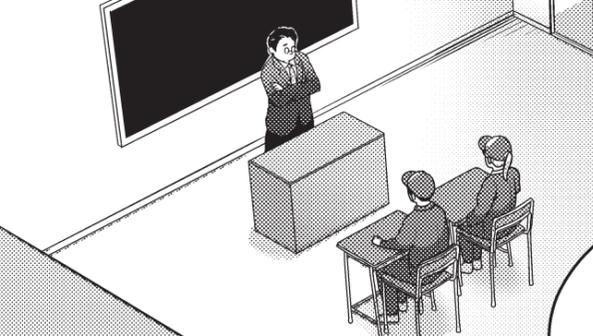
英語版

自動車整備業の安全衛生

Learn Through Manga

The Safety and Health of the Automobile Maintenance Industry



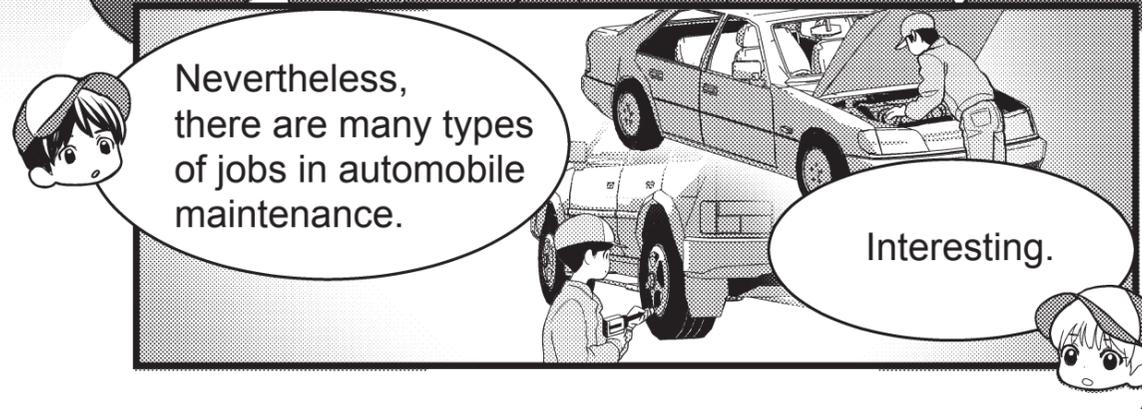


So!
Today, let's learn about
the safety and health of
the automobile maintenance industry.



It is a cool job
as it protects the safety of
people riding in cars.

That's right!



Nevertheless,
there are many types
of jobs in automobile
maintenance.

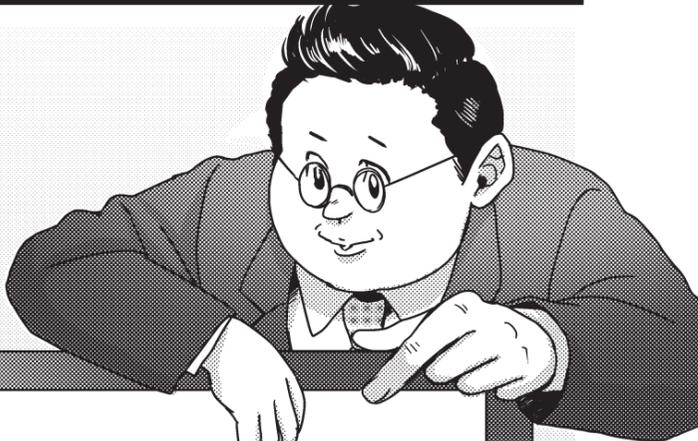
Interesting.



Now, let's look at the
actual occurrences of
work accidents!

Okay!

The main reasons for
work accidents consist of
the following.



Occurrences of Industrial Accidents

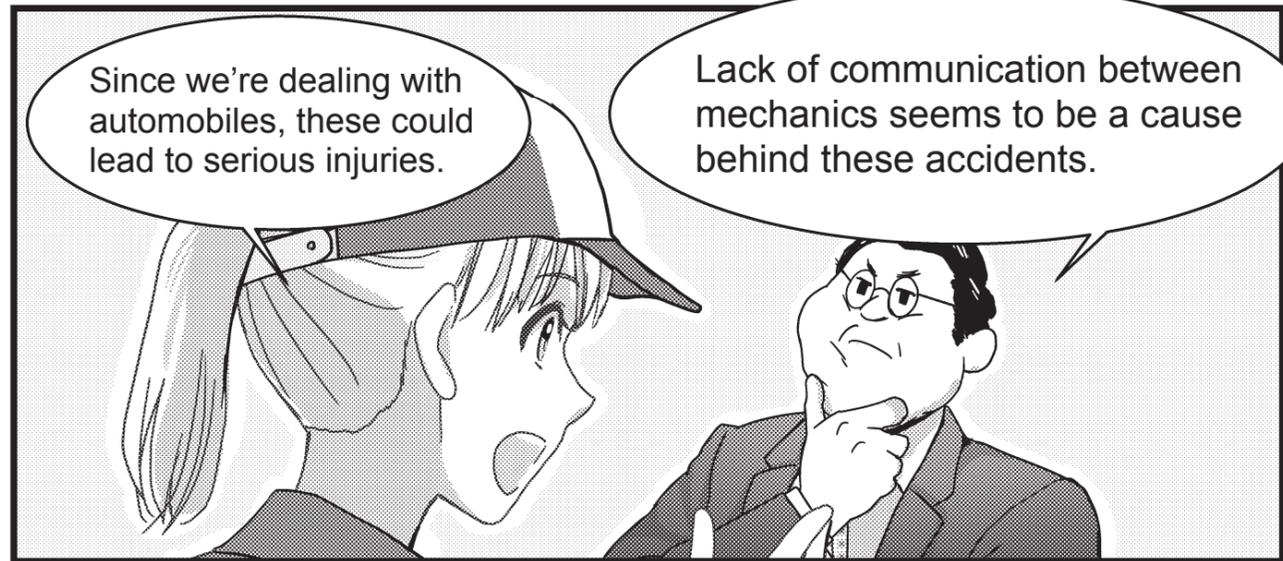
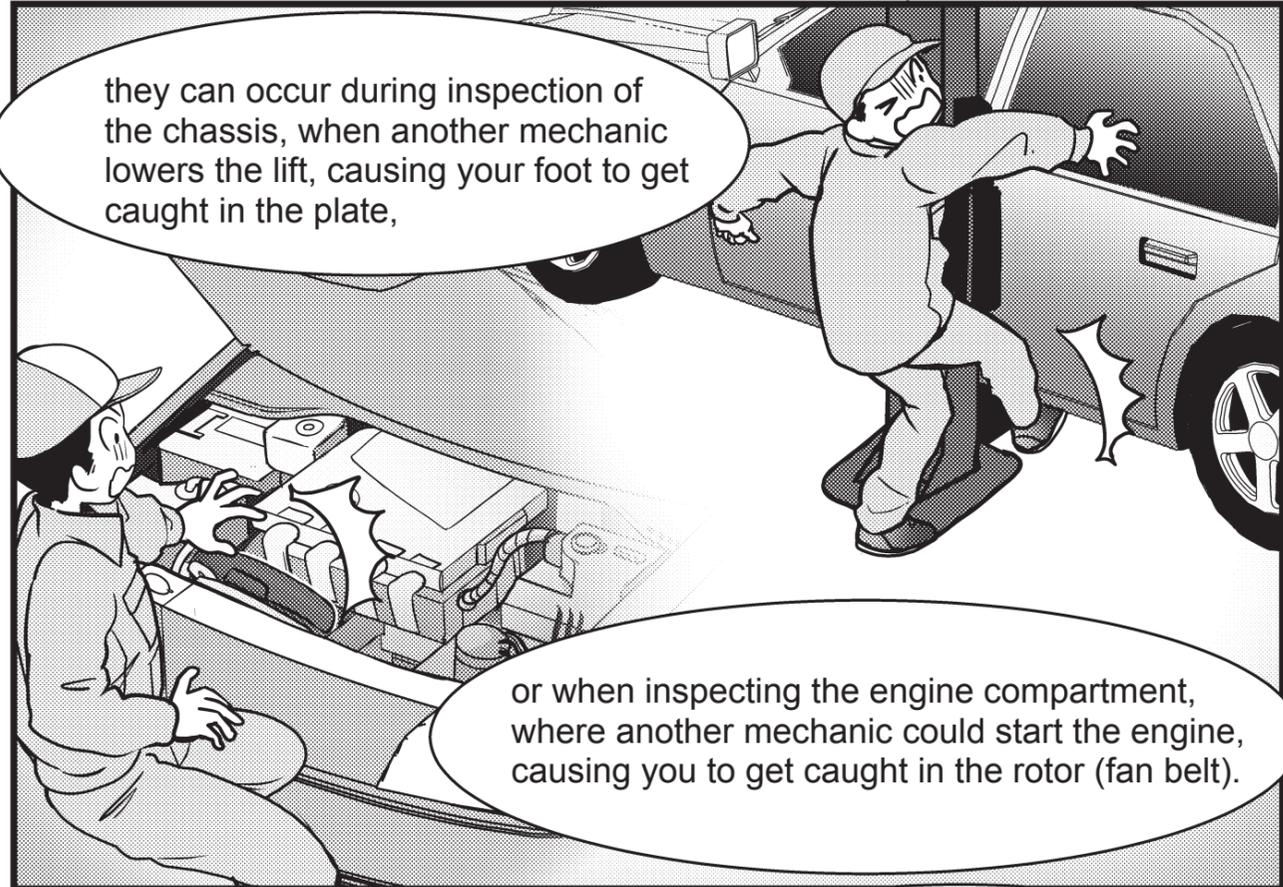
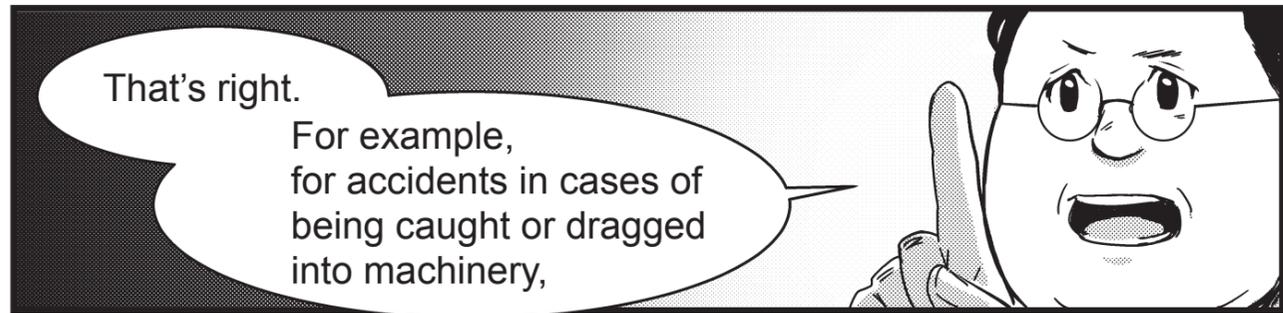
1	Falls from height	110 people
2	Caught or dragged into machinery	102 people
3	Tripping	79 people
4	Flying and falling objects	56 people
5	Reaction to motion / Improper motion	54 people

Reference: Japan Industrial Safety and Health Association
Industrial Accidents Analysis Data : Automobile Repair Industry (2018).
(Updated August 2019)

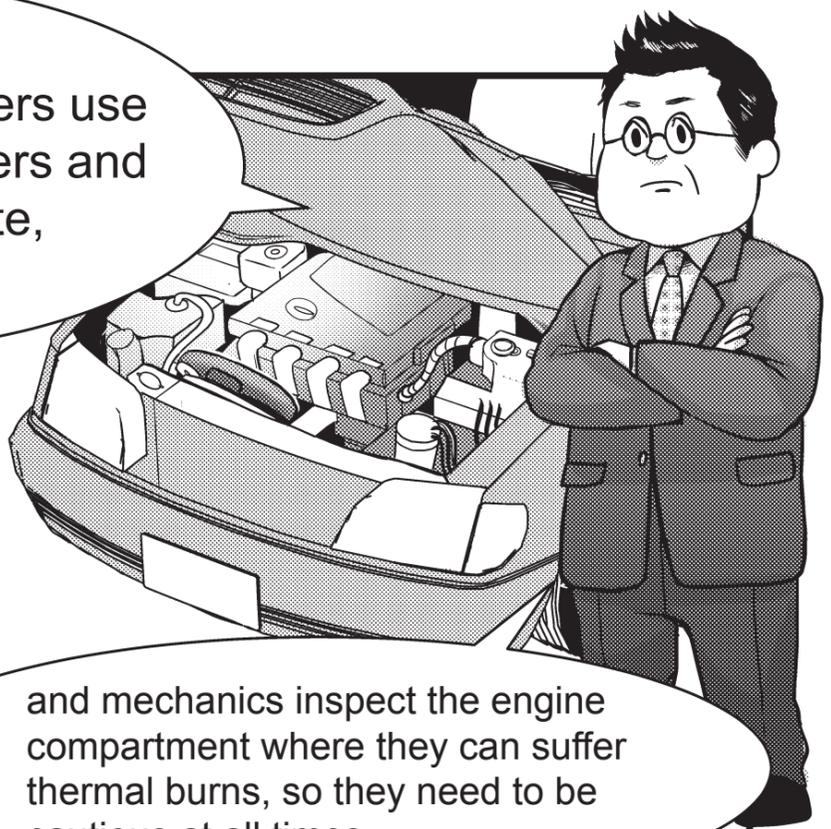


There are a lot of falls and falls
from height, and being caught or
dragged into machinery.





Furthermore, the workers use flammable parts cleaners and gasoline at the work site,



and mechanics inspect the engine compartment where they can suffer thermal burns, so they need to be cautious at all times.

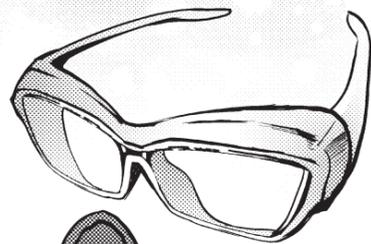
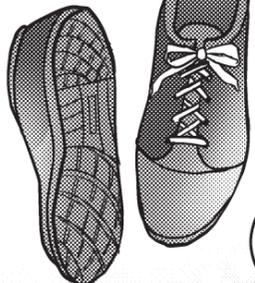
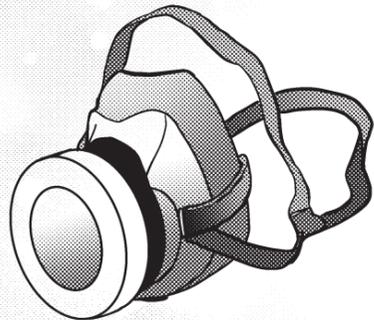


Catching fire can especially lead to major accidents, so that's dangerous!



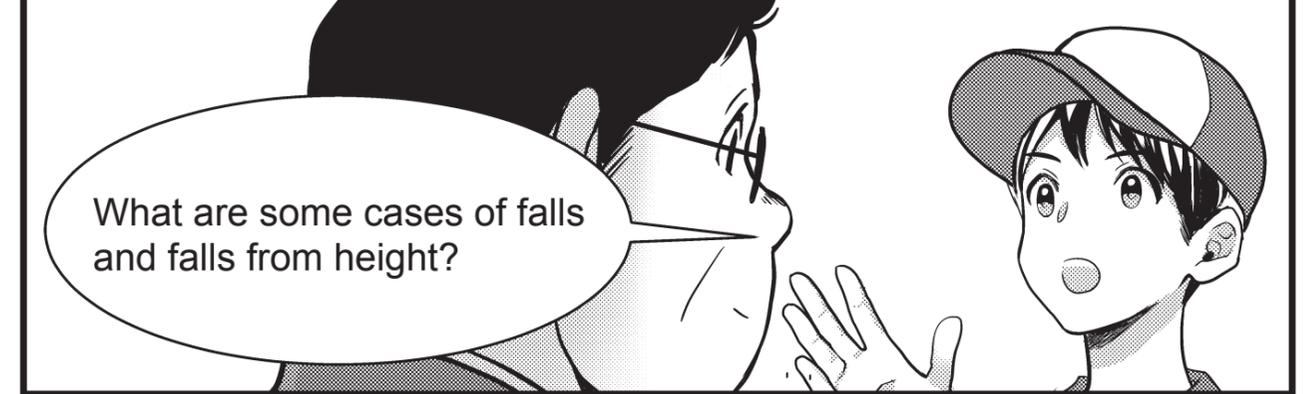
So, to work safely,

you have to prepare items that are designated by the rules



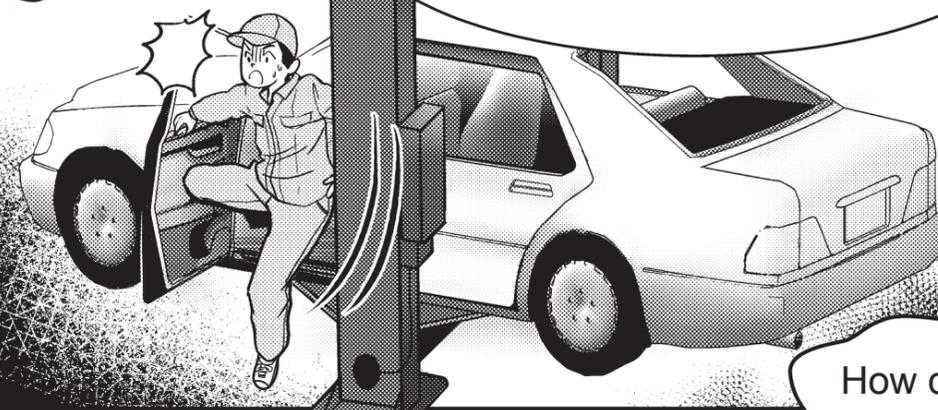
and wear them properly when working.

What are some cases of falls and falls from height?



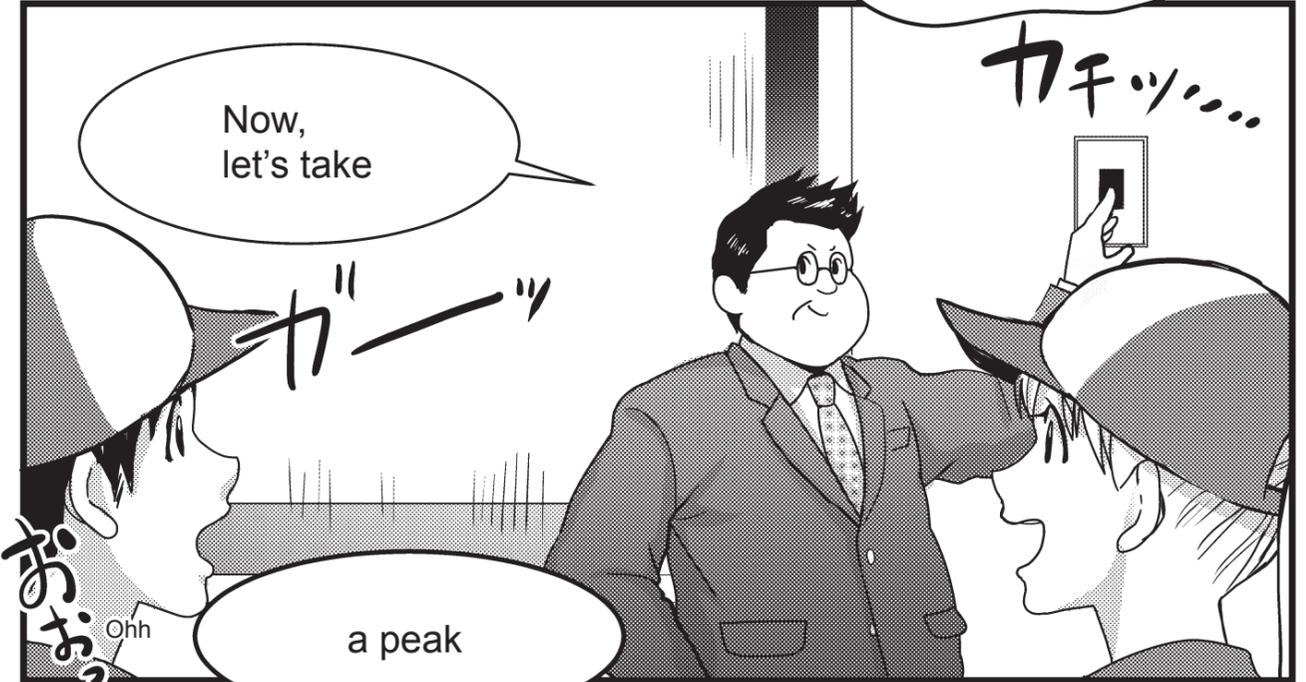
There are cases where mechanics would

accidentally fall when climbing down after inspection.



How dangerous!

Now, let's take



カチッ...

カチッ

a peak

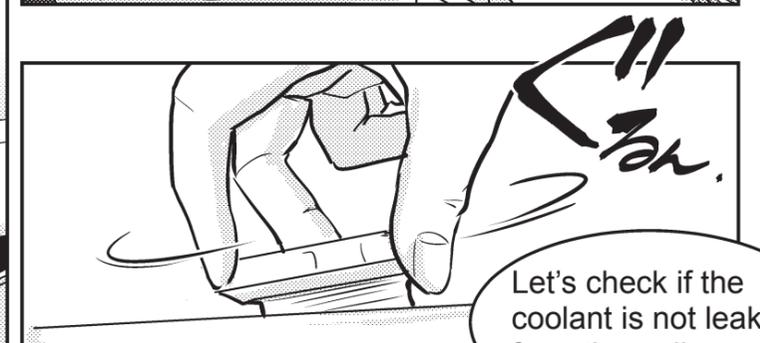
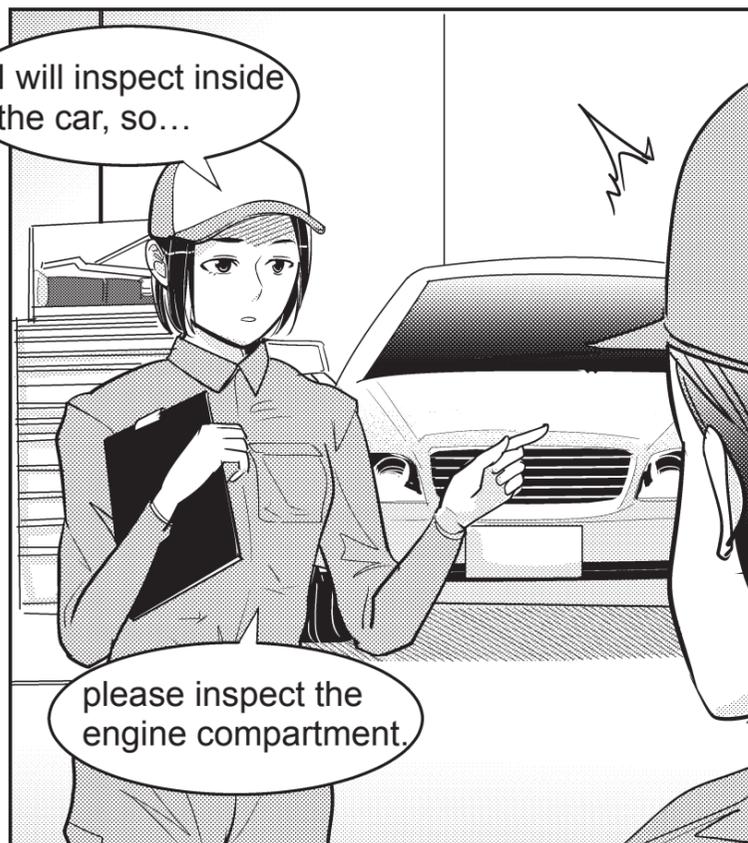
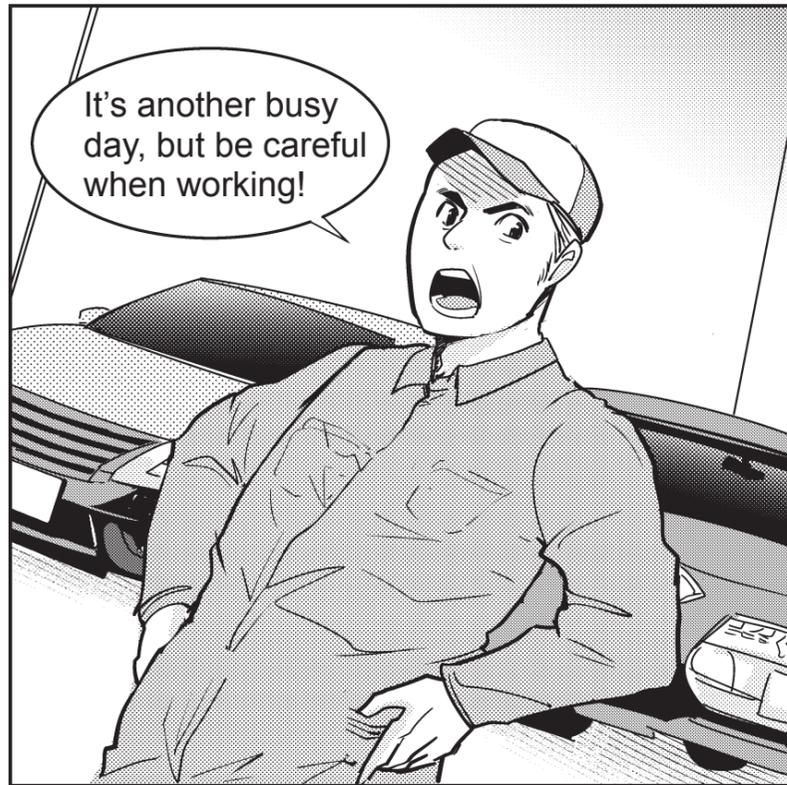
おっおっ Ohh

at the actual site.



1

Case 1:
Precautions for Pinch Points and High Temperatures
(When inspecting the engine compartment)



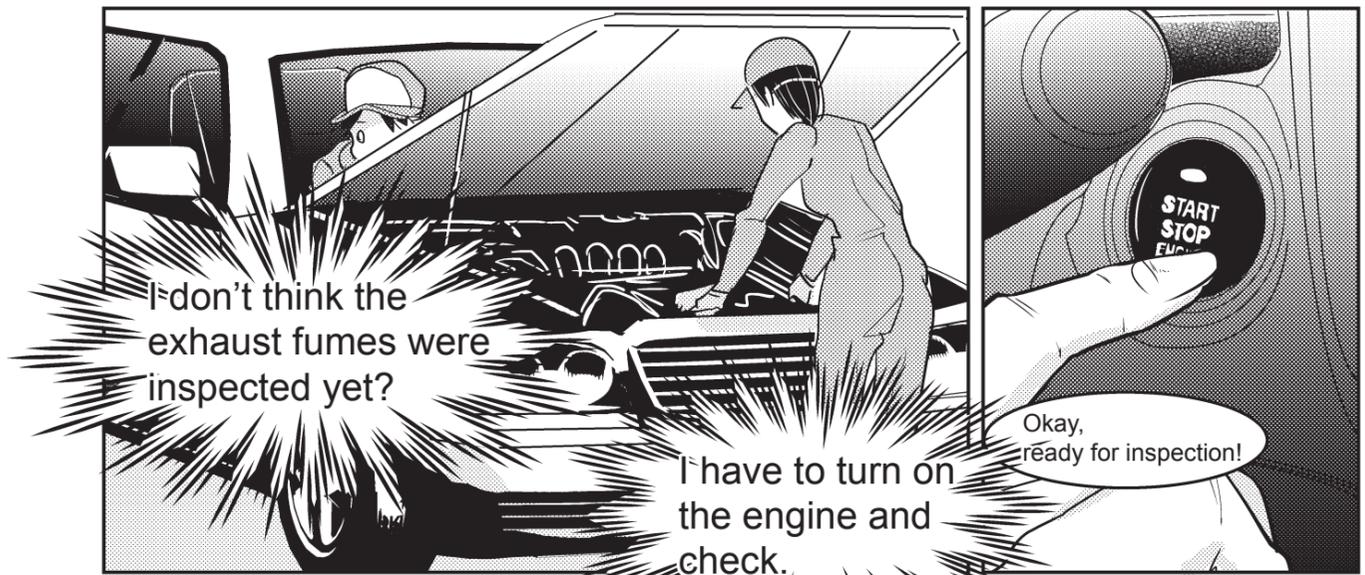


Oww!!!



What happened!?

The coolant seemed to be still hot...



I don't think the exhaust fumes were inspected yet?

I have to turn on the engine and check.

Okay, ready for inspection!



Focused on the fan belt task

I'm going to turn on the engine.

Please be careful.



You have to be careful when you're opening the radiator cap.

Leave the rest to me.

It even says it here.

Yes... Thank you....

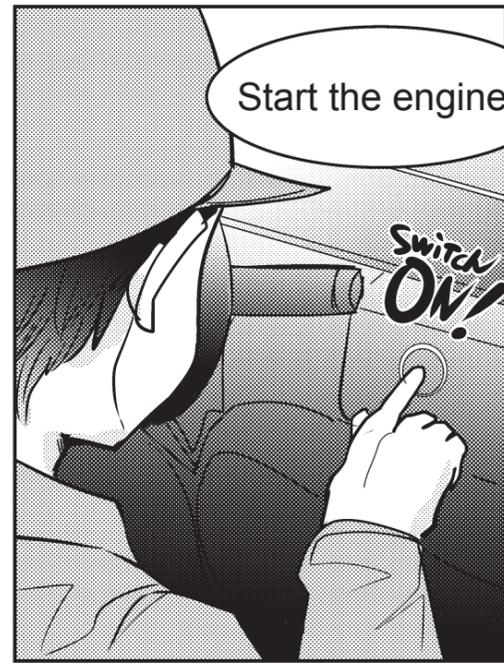


sigh

Gee, I was just entrusted with the job...



Anyway, I'll just do whatever I can do.



Start the engine!

Switch ON!



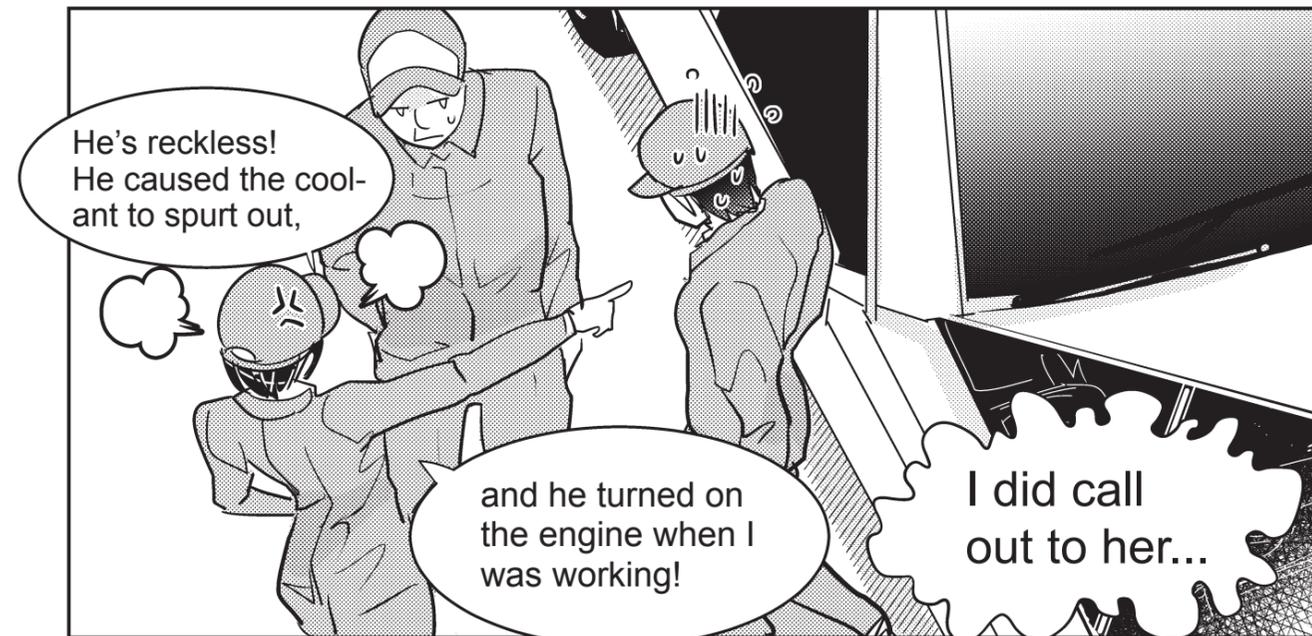
What?



It moved!?



Ahhhh!?



He's reckless!
He caused the coolant to spurt out,

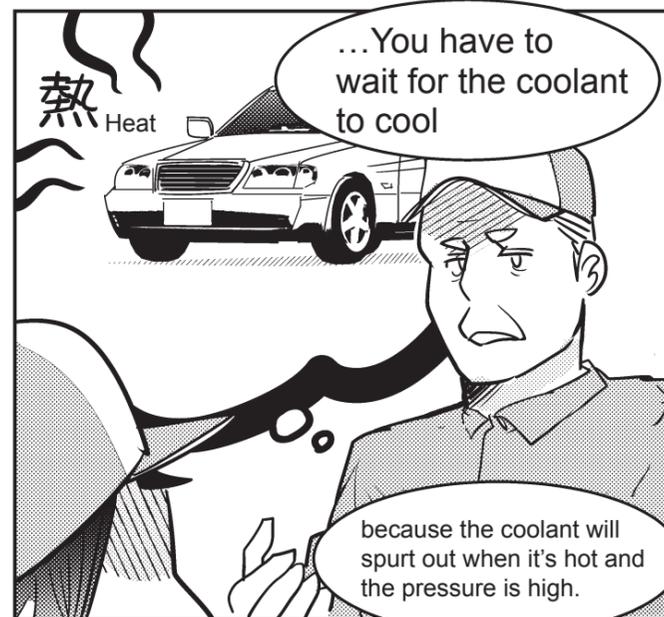
and he turned on the engine when I was working!

I did call out to her...



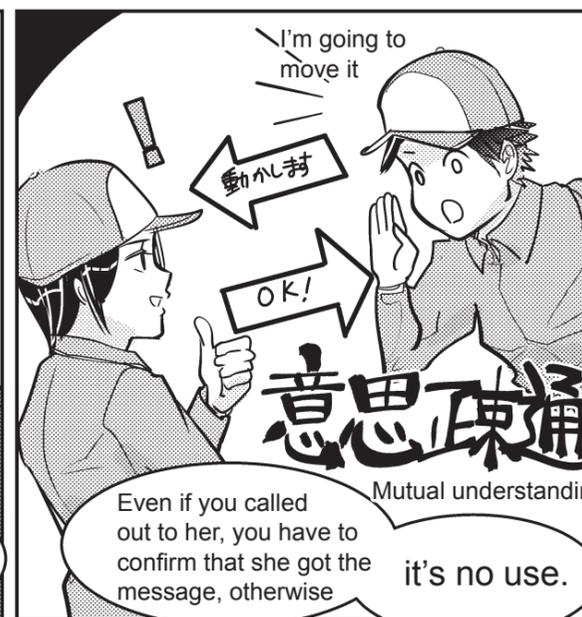
What's wrong!?

My hand was about to get caught in the fan belt.



...You have to wait for the coolant to cool

because the coolant will spurt out when it's hot and the pressure is high.



I'm going to move it

動かし封

OK!

意思疎通

Mutual understanding

Even if you called out to her, you have to confirm that she got the message, otherwise it's no use.



Did you do that to get back at me for warning you?

No, no, no, of course not!



What happened?

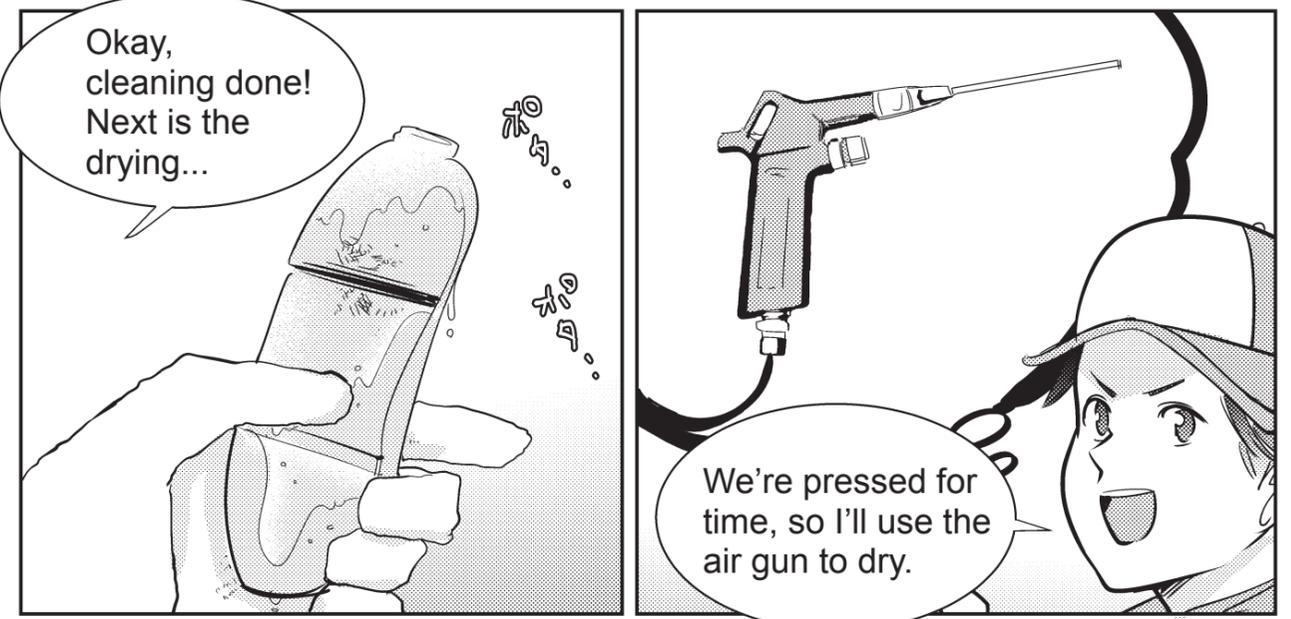
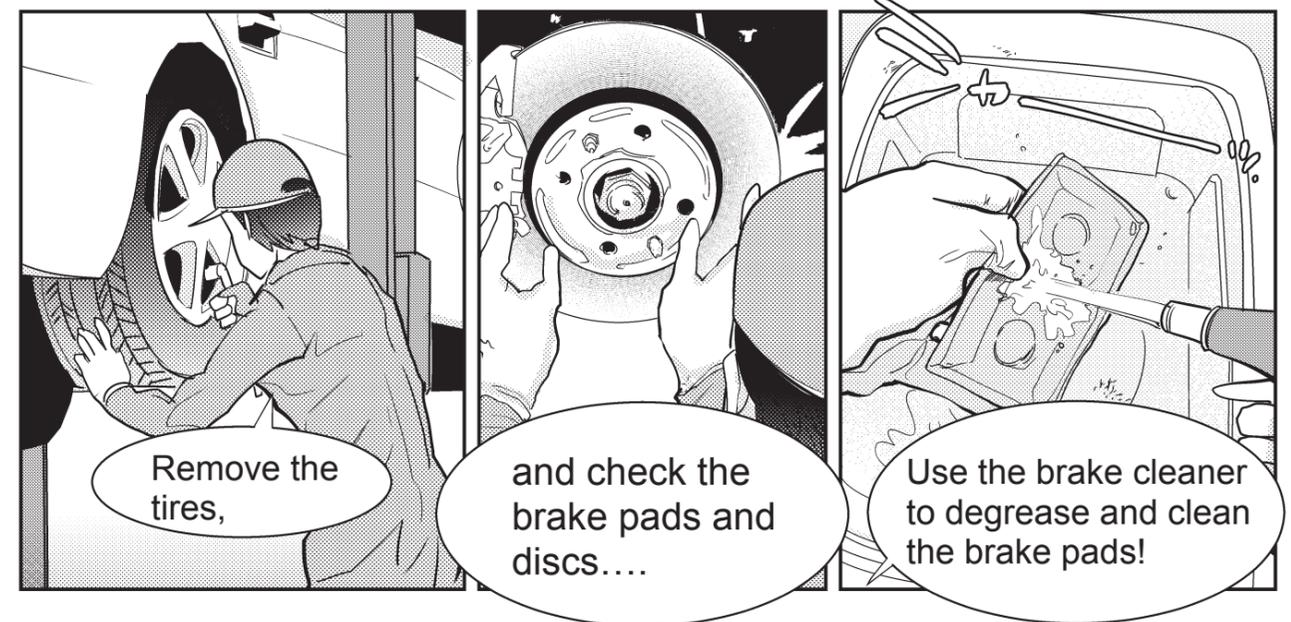
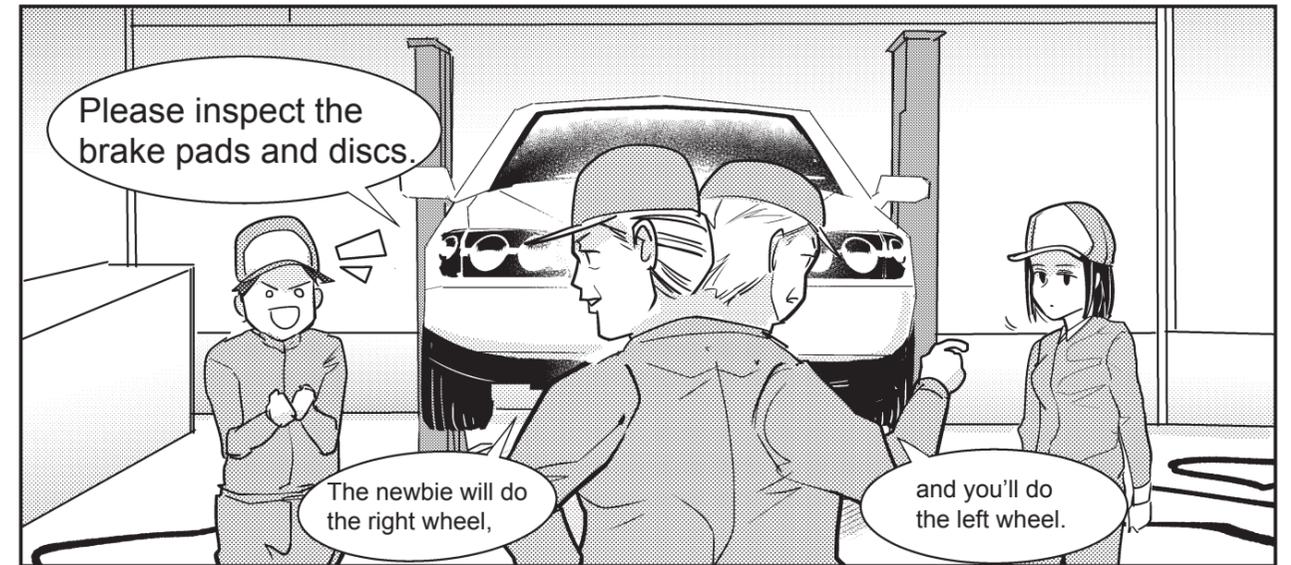
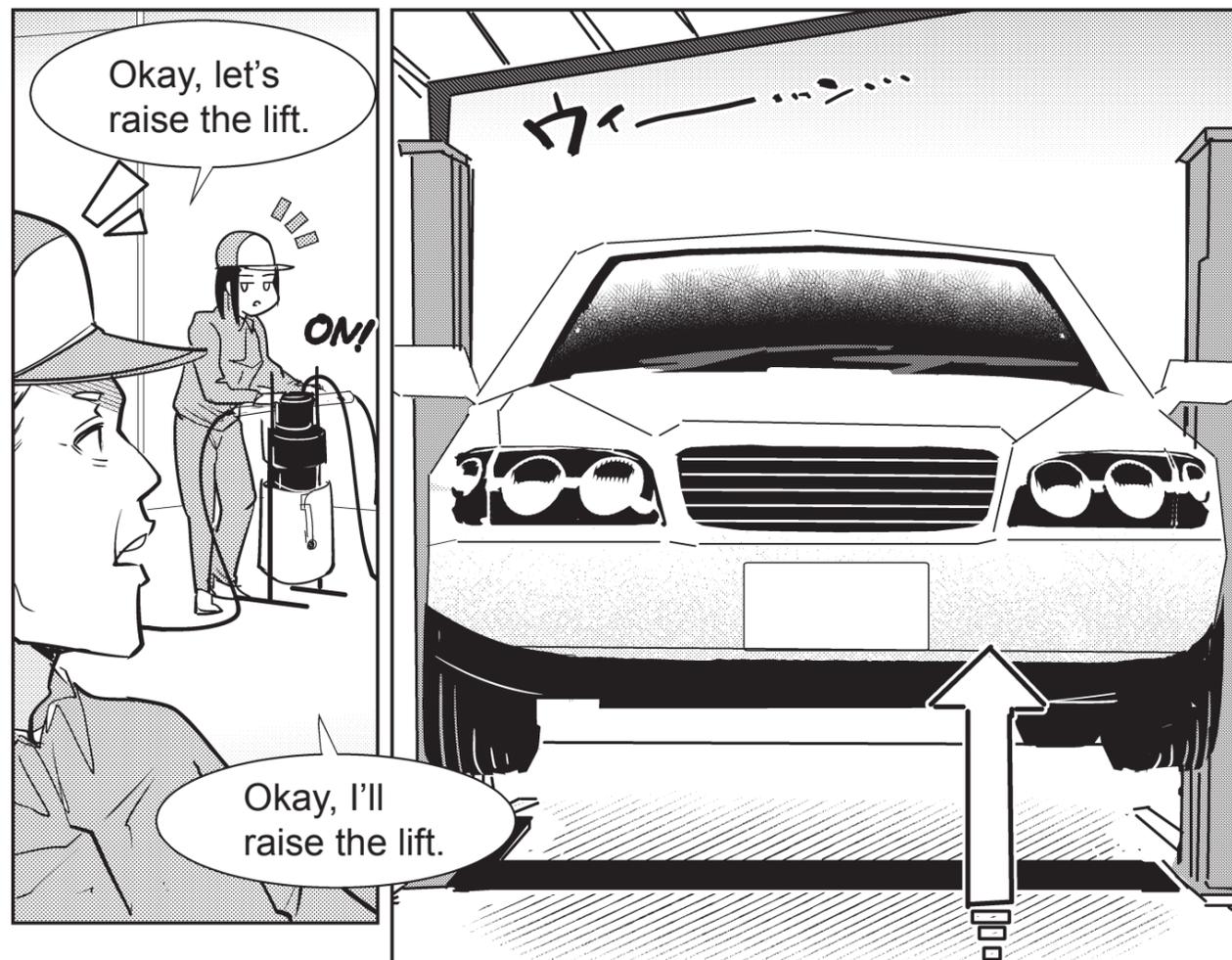


It was good that you took action by thinking on your own,

but you have to work with accuracy and not rush it.

After that, the newbie always confirmed everything when working.

Case 2:
Precautions for Flying and Falling Objects
(When inspecting the chassis and undercarriage)





Let's pull the air hose from the ceiling, and...



okay, I can do this...

It's drying fast...

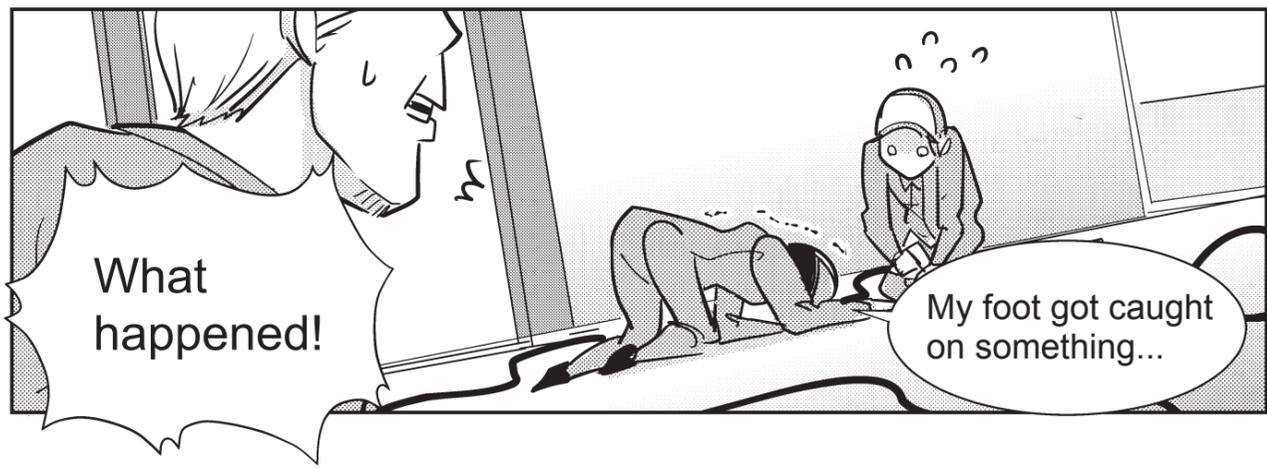


The dust that was stuck on the pad

flew into my eyes and mouth!



Ahhhh!?



What happened!

My foot got caught on something...



Inspection of the chassis and undercarriage is done.

Hmm? What happened, newbie?



Hey, the newbie isn't wearing safety glasses!



I should tell him right away.



What was it...?

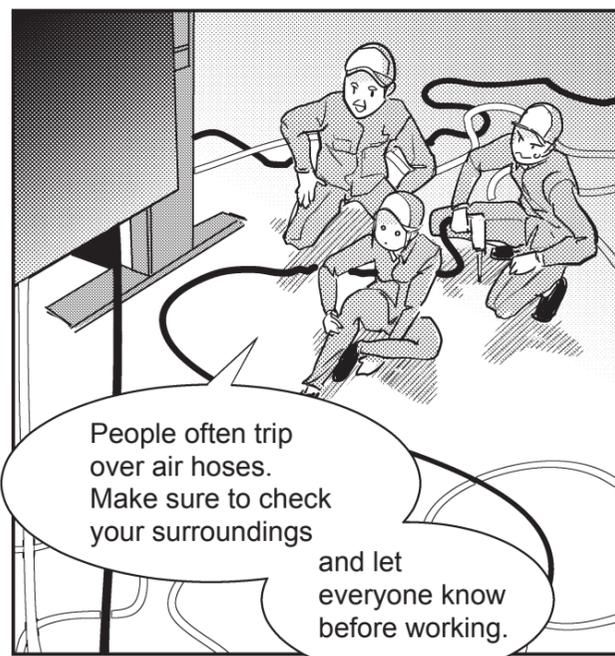


Oh, it's the air hose...



Do you have a grudge against me?

I'm sorry! I was just focused on my task!



People often trip over air hoses. Make sure to check your surroundings

and let everyone know before working.



OK!

I often forget to watch my step too, so I have to be careful.



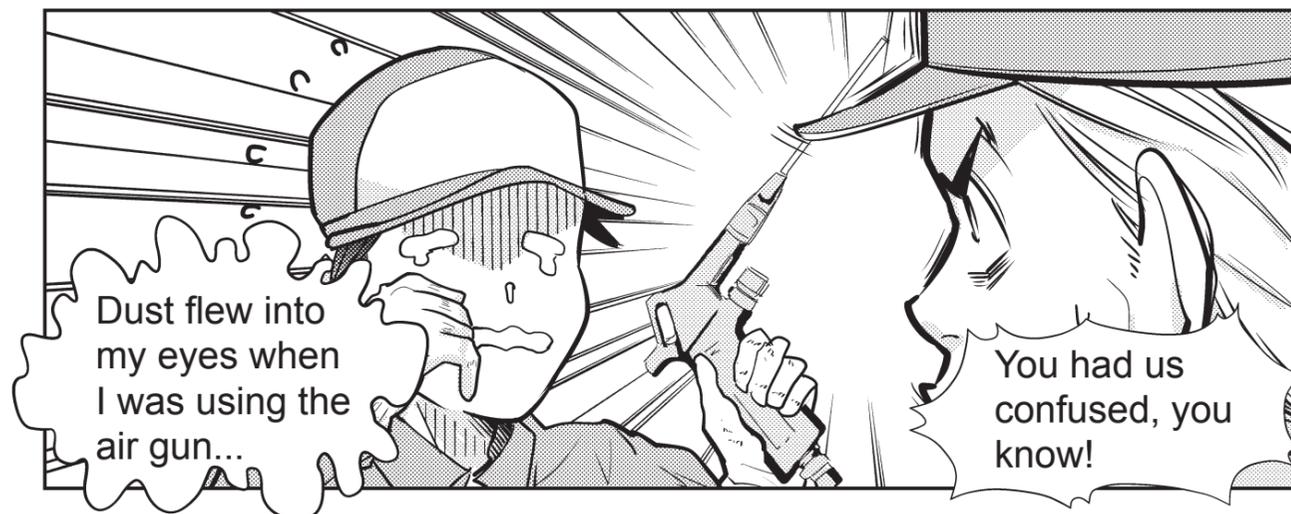
I'm sorry!

What!? He's crying... Was I too hard on him...!?



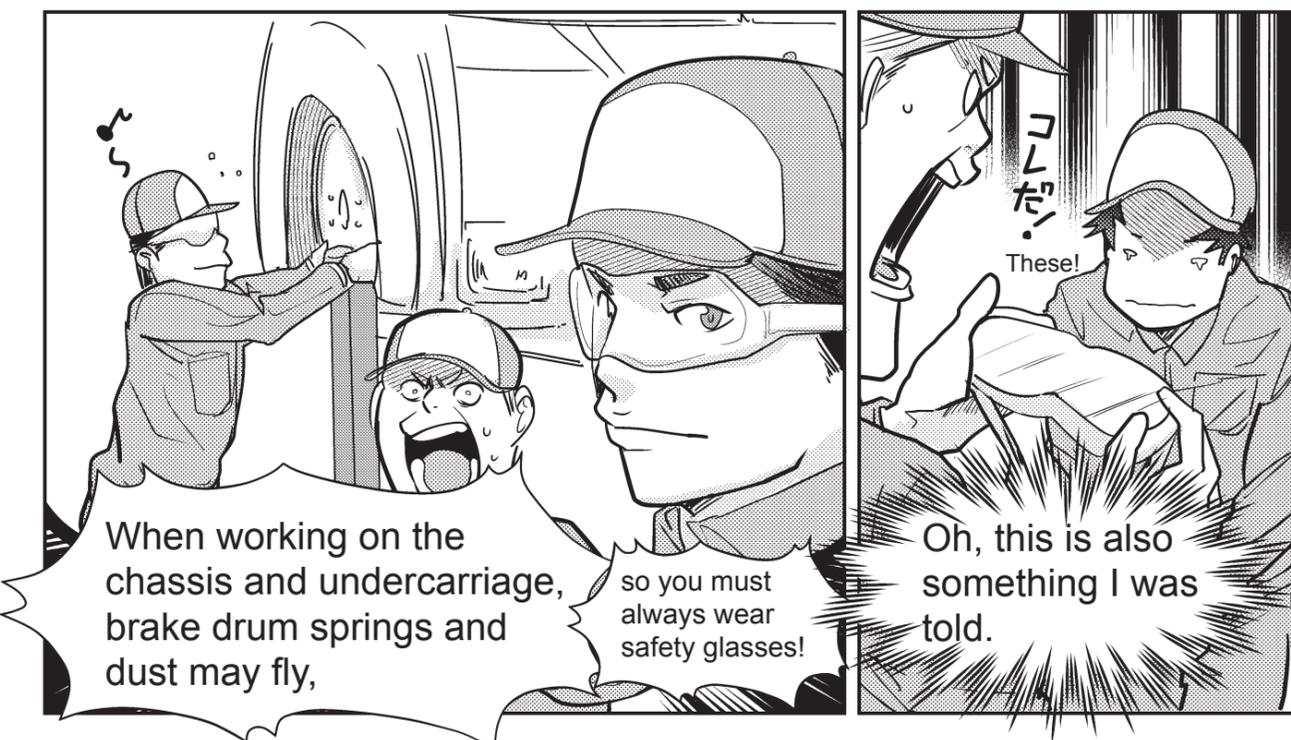
It's nothing to cry about....

No, it's not that...



Dust flew into my eyes when I was using the air gun...

You had us confused, you know!



When working on the chassis and undercarriage, brake drum springs and dust may fly,

so you must always wear safety glasses!



コレだ!

These!

Oh, this is also something I was told.



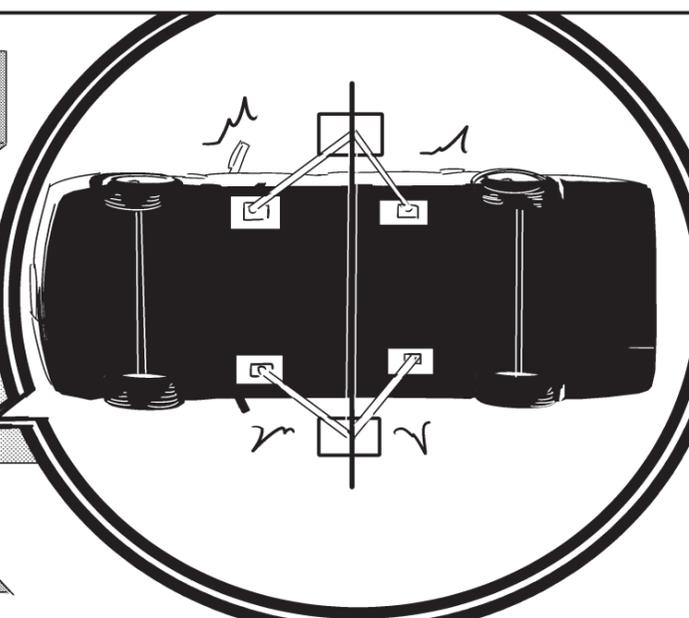
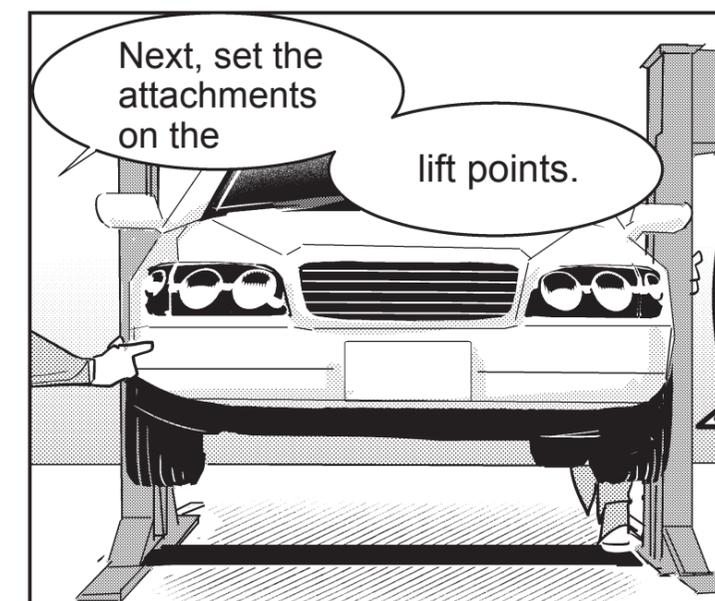
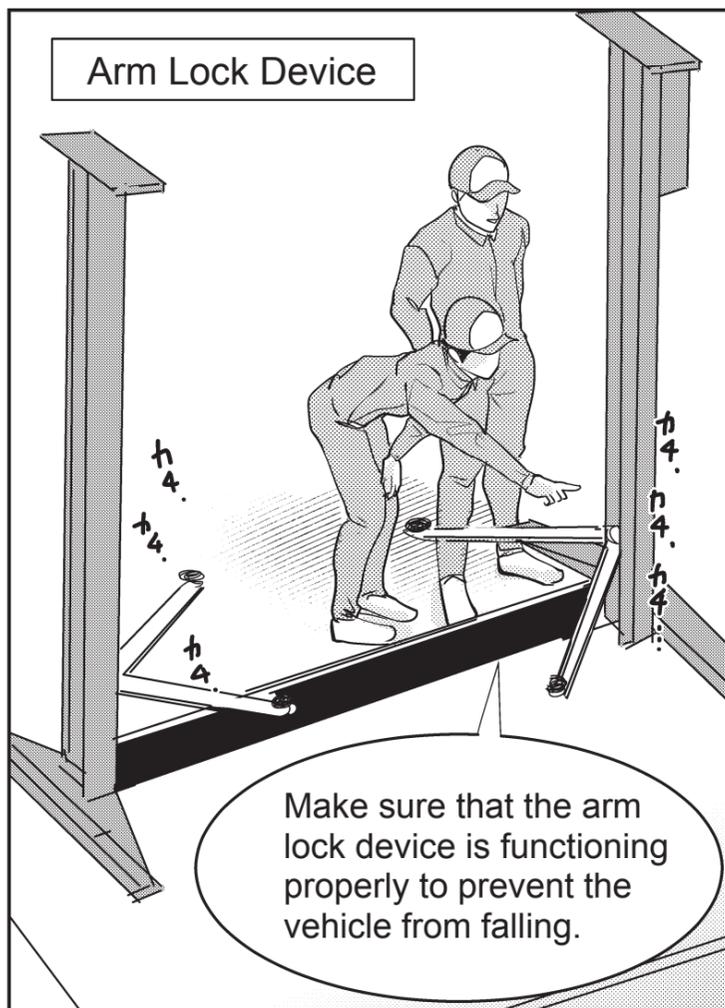
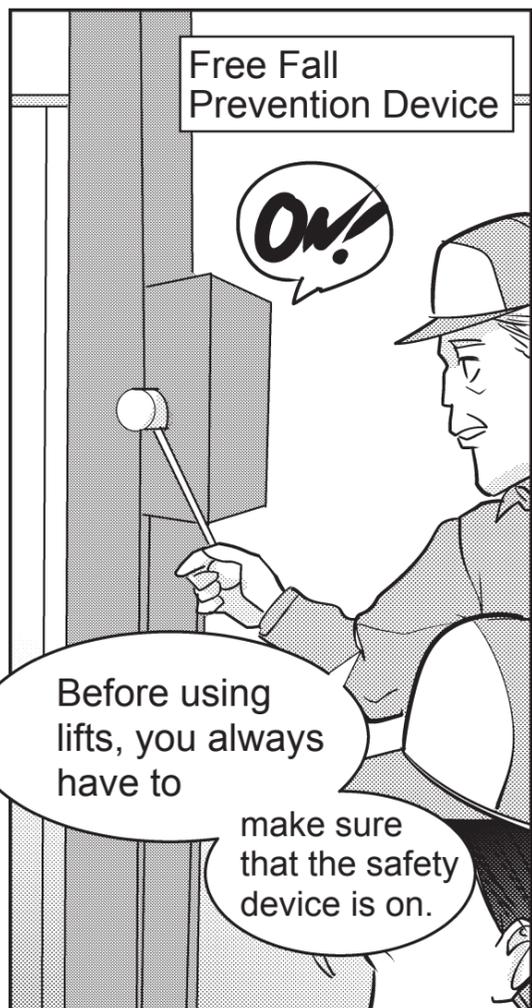
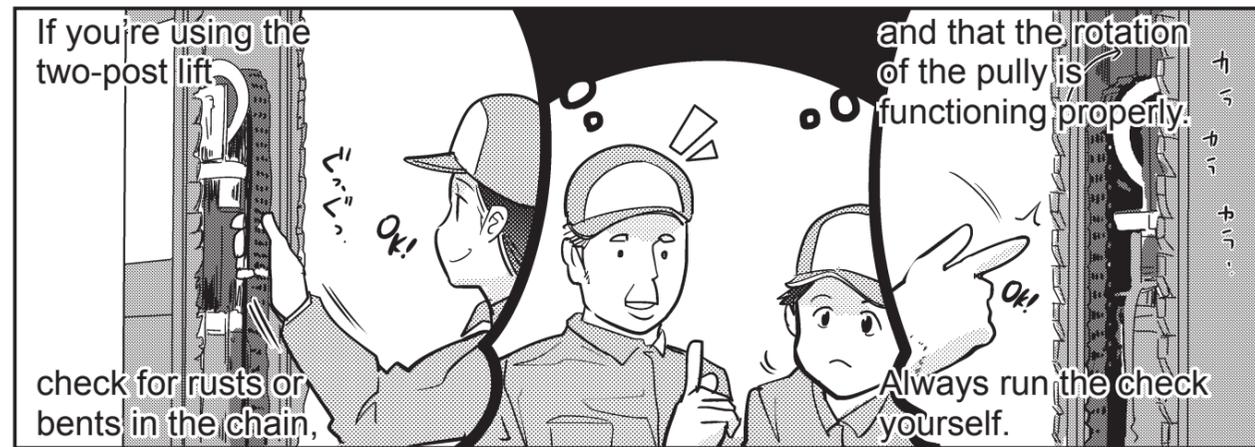
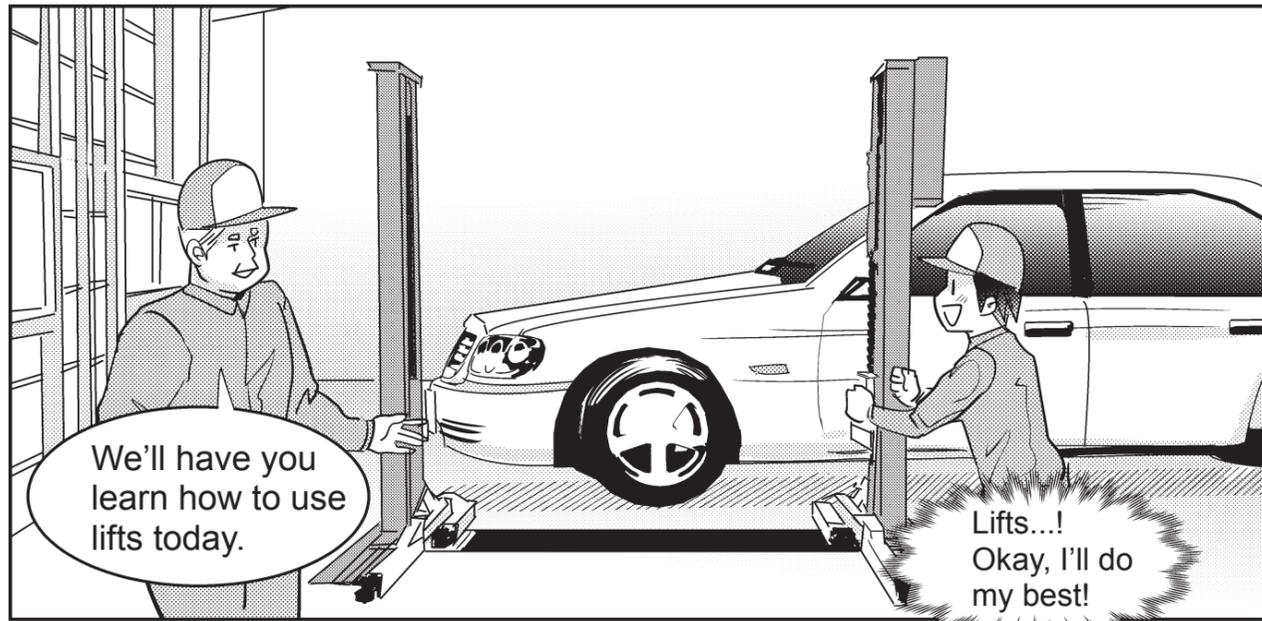
What! Do your eyes still hurt!?

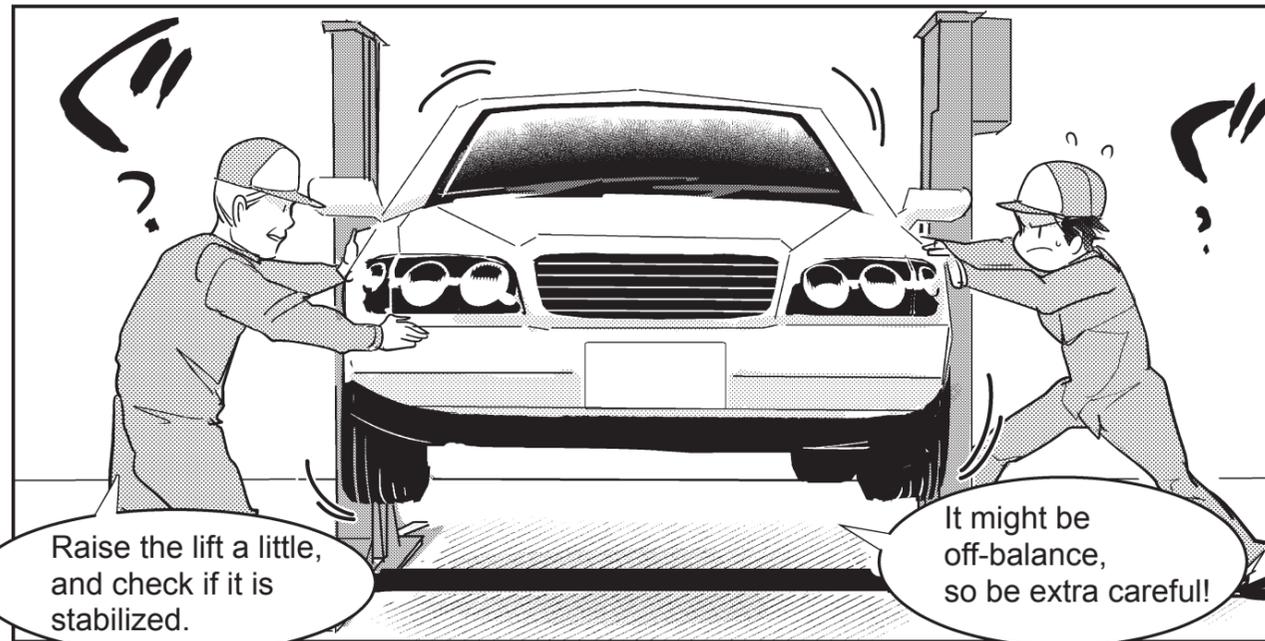
I'm crying out of frustration...

You're really misleading, you know!?

The senior remembered being scolded like this when he was younger.

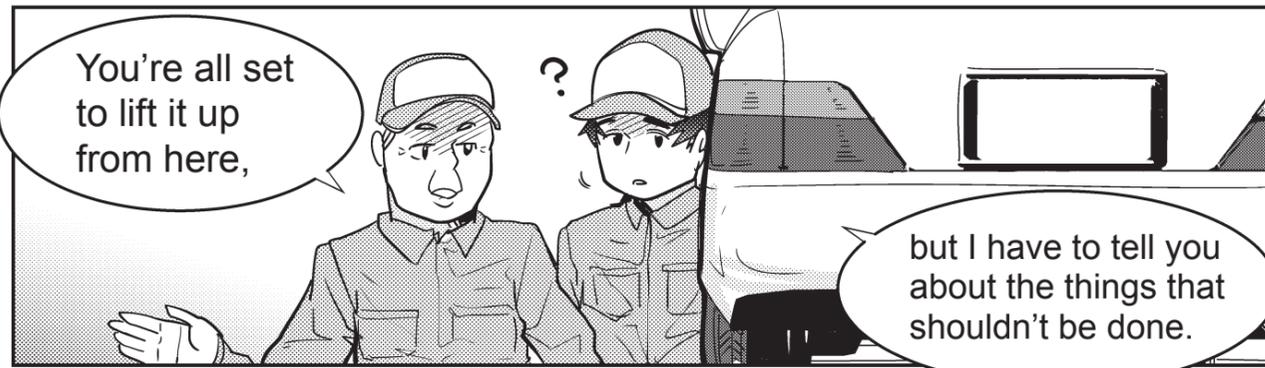
Case 3:
Working with Lifts
(How to use lifts safely)





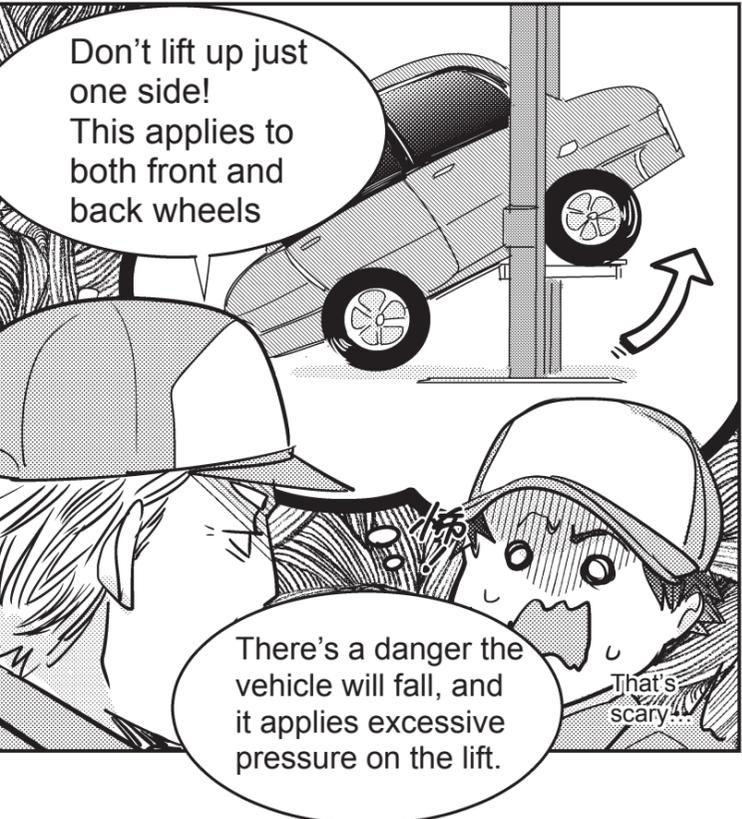
Raise the lift a little, and check if it is stabilized.

It might be off-balance, so be extra careful!



You're all set to lift it up from here,

but I have to tell you about the things that shouldn't be done.



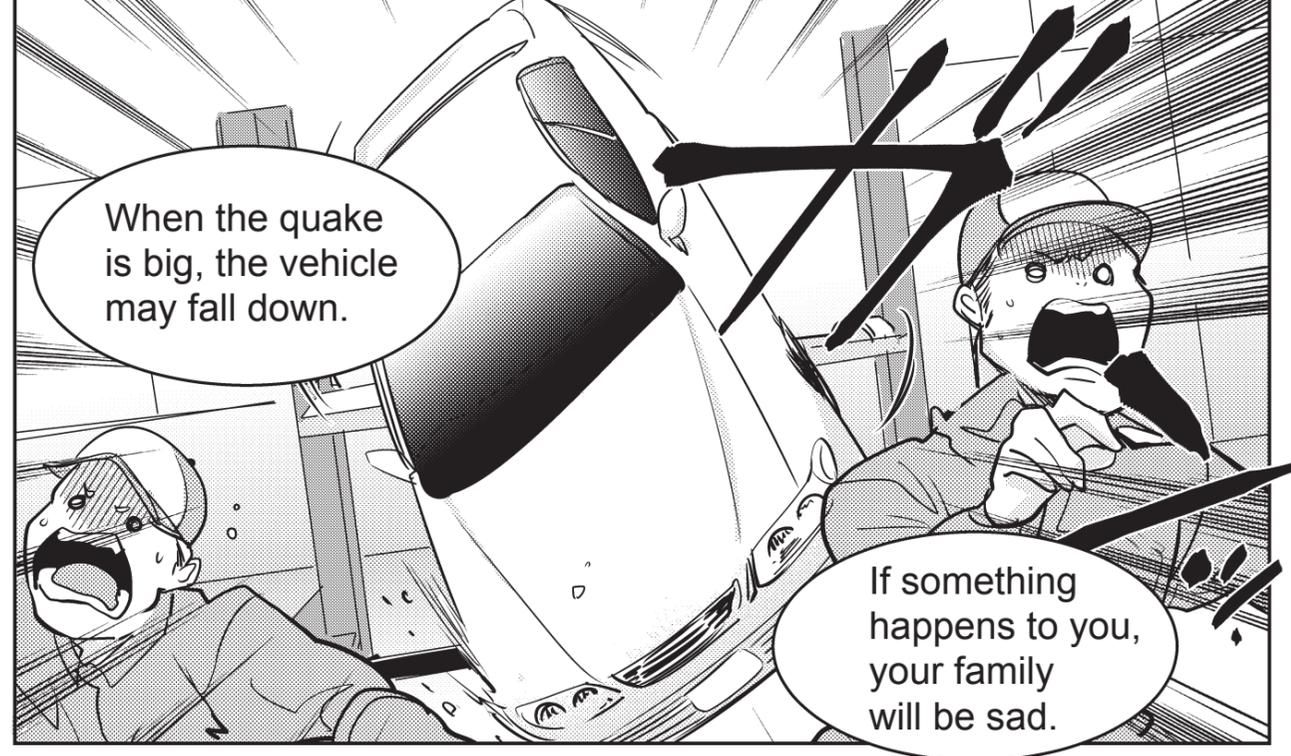
Don't lift up just one side! This applies to both front and back wheels

There's a danger the vehicle will fall, and it applies excessive pressure on the lift.

That's scary...



Another thing, when an earthquake occurs, just move away quickly.

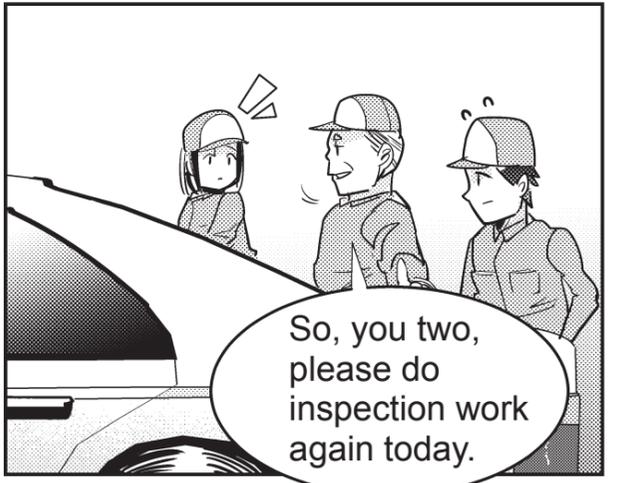


When the quake is big, the vehicle may fall down.

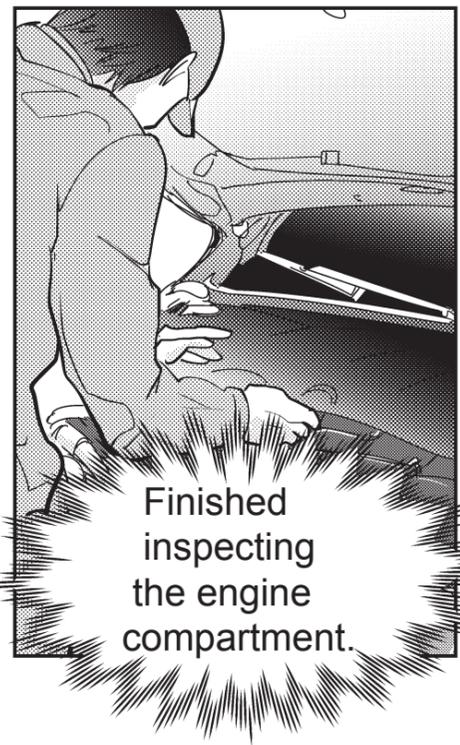
If something happens to you, your family will be sad.



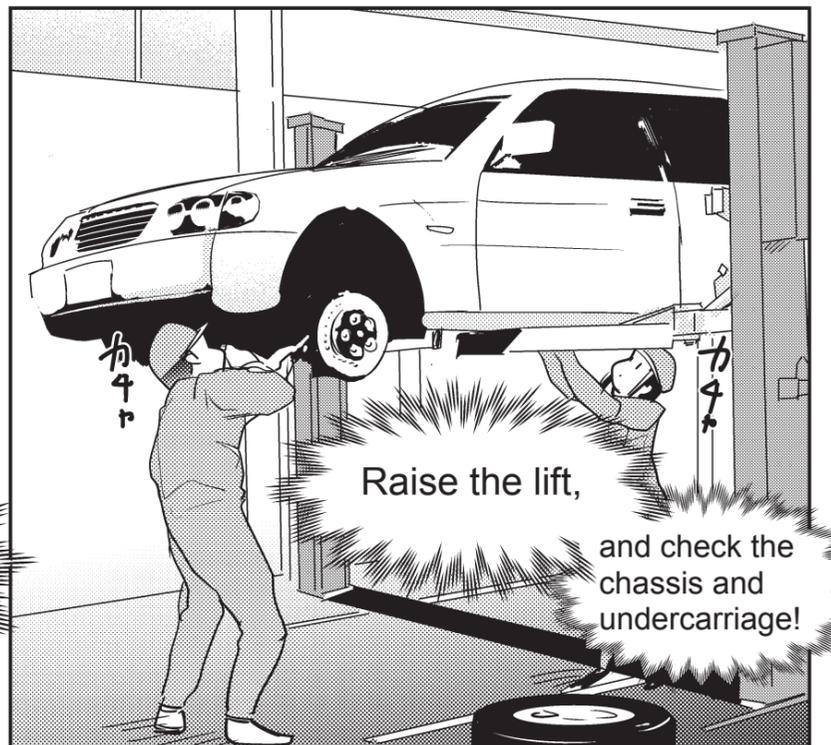
Thank you, chief!



So, you two, please do inspection work again today.



Finished inspecting the engine compartment.



Raise the lift, and check the chassis and undercarriage!



Forgetting to check just one thing may cause the vehicle to fall.

I have to be careful when I work...!



Okay... Perfect....



Phew, I finished it safely.

ON!

Hey!!

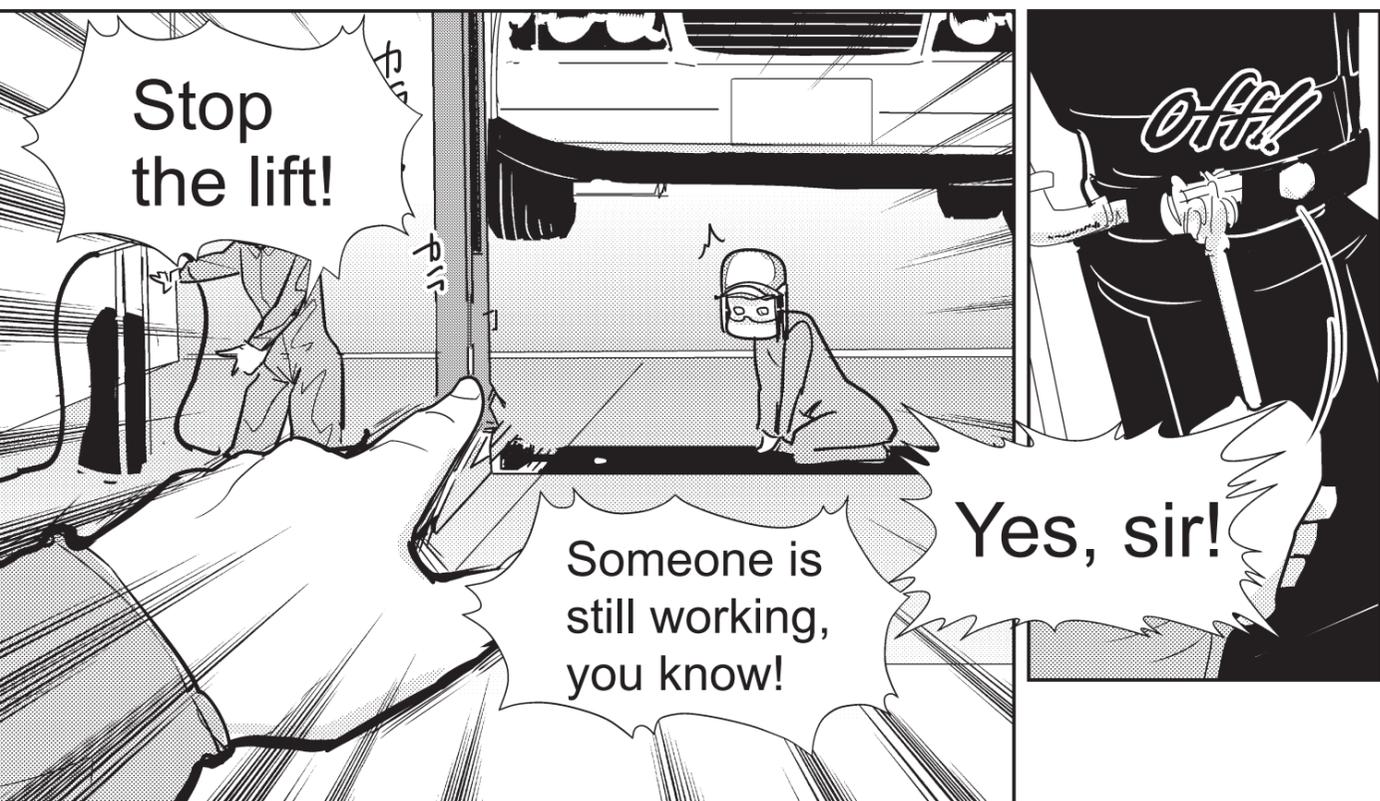


You lost your focus after you finished, didn't you!

You have to let others know before lowering the lift!

And as a golden rule, you have to call out to others when

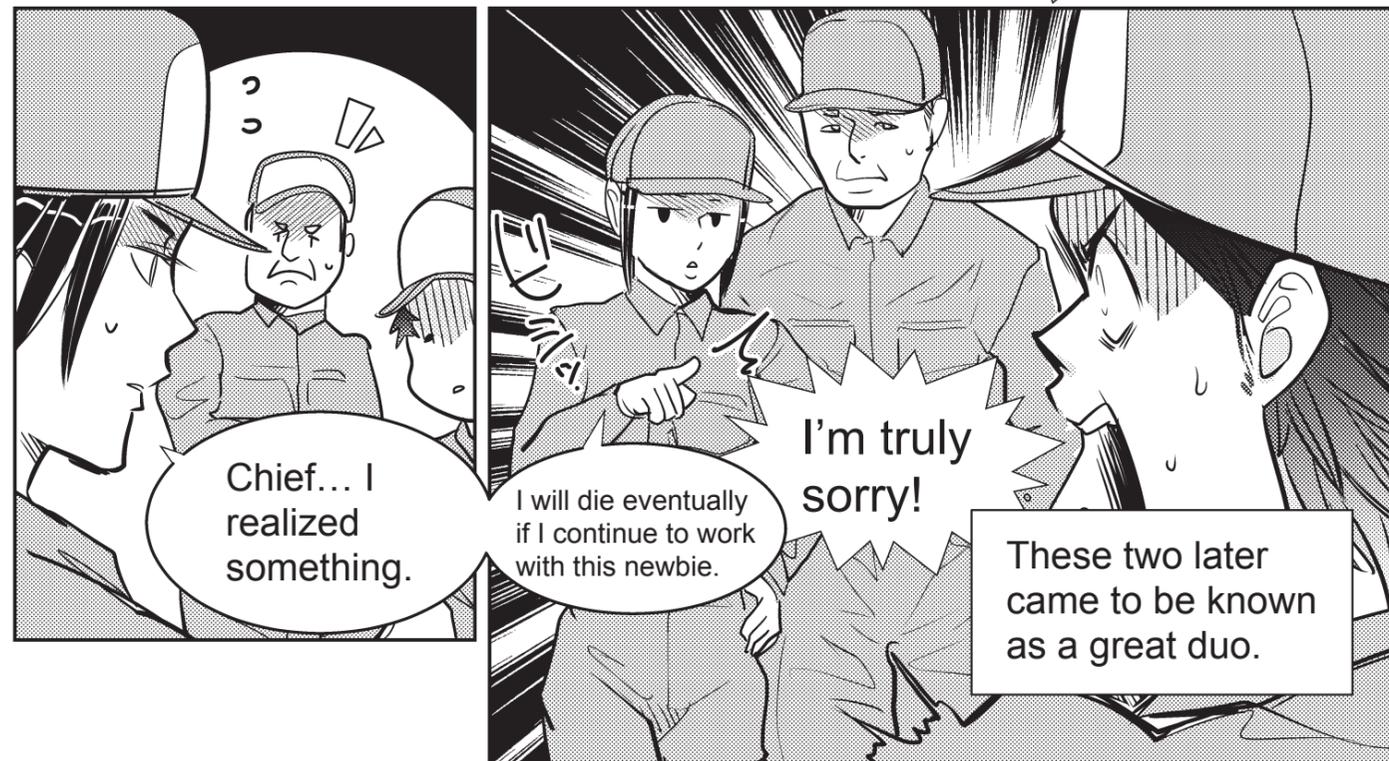
you're working on the undercarriage!



Stop the lift!

Someone is still working, you know!

Yes, sir!

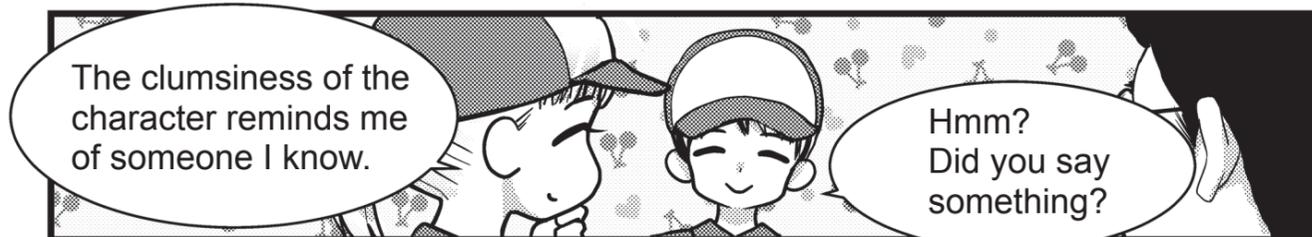


Chief... I realized something.

I will die eventually if I continue to work with this newbie.

I'm truly sorry!

These two later came to be known as a great duo.



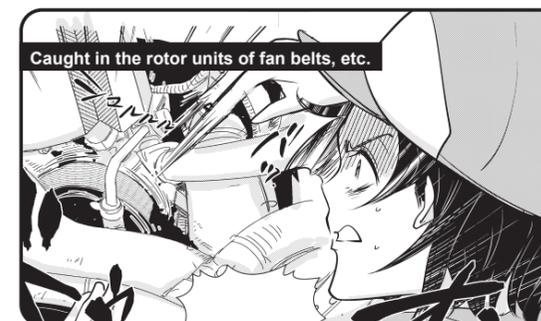
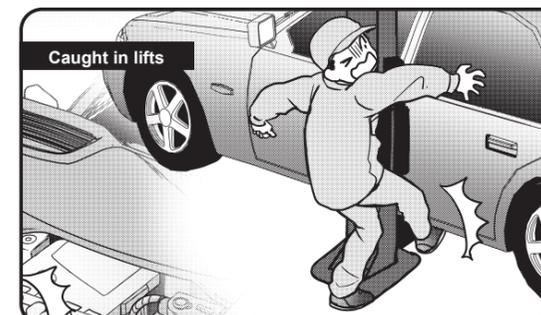
Precautions to Take in the Automobile Maintenance Industry



1 Burns



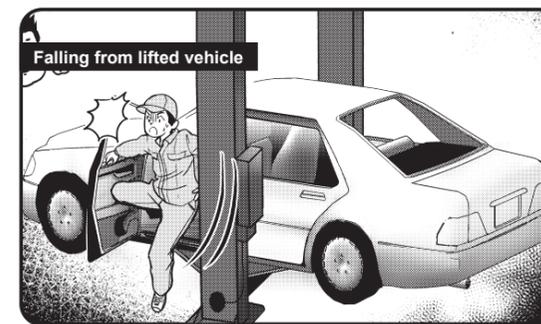
2 Becoming caught or dragged into machinery



3 Flying objects



4 Tripping and falls from height



Work accidents can happen to anyone, including you.



Remember that following the rules will protect your body, family, and life.

It is also important to have daily conversations with your coworkers in case of emergencies.



Okay!

I'll work hard and be careful of work accidents!



Good:good

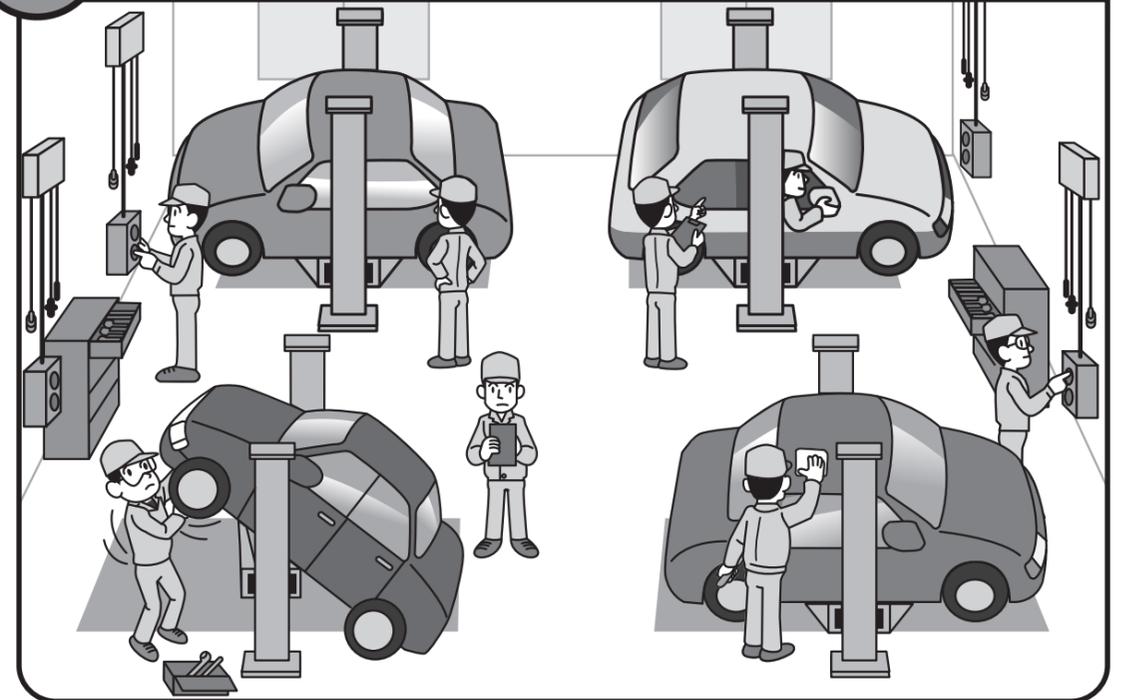
Learn Through Illustrations

Be Aware of the Dangers Existing in the Workplace!

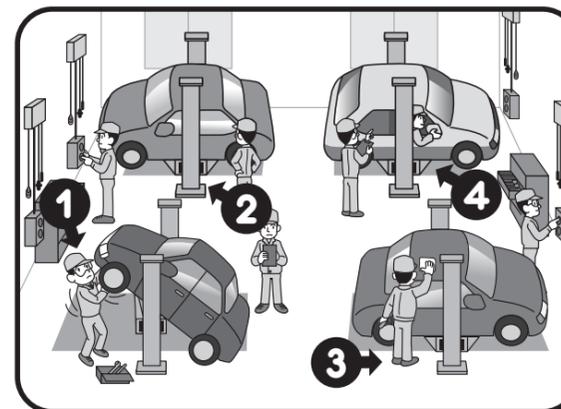
Hazard Prediction Training

(Kiken Yochi Training: KYT)

Q Let's think about where dangers exist!



A Here are the safety hazards!



- 1 Make proper use of the lifts
- 2 Check for stability before raising the lift



- 3 Do not go near the lift when it is being lowered
- 4 Do not ride on the raised vehicle



Let's see if you can spot any other potential hazards.



Learn Through Manga

The Safety and Health of the Automobile Maintenance Industry

Issued in March 2020

Published by: Ministry of Health, Labour and Welfare

Planning: Mizuho Information & Research Institute, Inc.

Supervised by: The Promotion Committee for Industrial Safety and Health

Teaching Material Preparation,

Working Group for the Preparation of Teaching Materials on Safety in
the Automobile Maintenance Industry

Production: Sideranch Inc.

For inquiries about this document, please contact:
Safety Division, Industrial Safety and Health Department,
Labour Standards Bureau of the Ministry of Health,
Labour and Welfare