

Learning by Ear – General Knowledge, Episode 8 “Why are car tires always black?”

Text: Lydia Heller

Redaktion: Maja Dreyer

Translation: Anne Thomas

Directing infos

People:

Announcer

Jenny: ca. 14-year-old girl

Jack: ca. 15-year-old boy

Miriam, Jenny's friend: ca. 14-year-old girl

Tom, Jack's brother: ca. 18-year-old boy

Locations:

Car workshop

Room in Miriam's house

Atmos / Sounds:

Radio is tootling away quietly in the background

Metal is clanking

Banging on metal with tool

Tightening up the screw with a wrench

Honing metal

Sanding metal (fast, slowly, interrupt abruptly)

Steps coming closer (1 x 1 person, 1 x 2 people)

A bag is thrown to the ground aggressively

Keys and coins jangle

Notebooks fall out

Notebooks / pieces of paper are stuffed back into a bag

A motor is running

Hitting the gas, revving up the engine

Engine revs down

Engine drowns

Coke bottle opened /fizzes over and sprays all over

Sound of drinking and happy breathing out ("ah sheer pleasure - -aahh!")

Putting the bottle back on the table ("glass on wood")

Plastic bag crackles

Hands rummage in material

INTRO (Announcer)

Hallo all of you who like learning with your ears -- a warm welcome to another radio play from our "Learning by Ear" "General Knowledge" series. This is where we answer questions that no -one usually asks because we all think we know the answer until we get put on the spot. The question Jack's come up with today is why car tires are always black. He and his brother Tom, who's a car mechanic, are trying to bring an old wreck back to life and Jack thinks it should have brightly-colored tires. Tom thinks the idea is completely stupid and Jenny is annoyed that Jack seems to be more interested in engines, car bodies, and tires than in her....

1. Scene:

1. Atmo: *(Jack and Tom are working on an old car, giving each other instructions...)*

Radio is tootling away quietly in the background
Metal is clanking
Banging on metal with tool
Tightening up the screw with a wrench

Between atmos (and on top of it too) Jack & Tom:

Tom: "Here, can you hold this for a sec? / Here you are!"

Jack: "OK!" *(groans -- lifting something heavy)*

Tom: "OK, that's enough! Now I need the number five wrench." *(rummaging in the tool box, tightens something)*

Jack: *(exerted)* "Do you think this old scrap of metal will ever see a road again?"

Tom: "Of course it will -- it will go racing down that road, let me tell you. *(bangs a piece of metal)* But first the engine needs to come out *(scrapes around on a metal pipe)* It's totally rusty.

Jack: "We also need new tires -- the old ones have been slashed."

2. Atmo: Honing metal
Steps coming closer (Jenny pops in)

Tom: (*whistles (man whistling after a woman type of whistle)*) "Hello there Jenny! A little bit of shine and beauty in our ugly humble car workshop!!"

Jenny: (*a bit annoyed by the cheap pulling technique*)

"Hello Tom! I was actually looking for Jack -- isn't he here?"

Jack: (*exerted, crawls out from under the car*)

"Yes, I am here! I just crawled under that car to check underneath (*shuffle, shuffle*) and look at the bodywork. (*by the by*) Hi Jenny!"

Jenny: (*happy, up for adventure*)

"Hi! Do you feel like..."

Jack: (*doesn't even listen to her and has already turned to Tom*) "Man! Tom! It doesn't look good from underneath. The exhaust is completely rusty."

Tom:

"Hmm, Joseph's probably got one lying around -- I'll ask him, he's a friend of mine."

Jenny: (*tries again but is unsure*)

"Jack?"

Jack: (*as if he only just noticed her*)

"Hey Jen! What's up?"

Jenny: (*unsure because of Jack's lack of attention but also getting a bit annoyed and hurt*)

"I wanted to know if you felt like..."

Jack: (*already talking again with Tom in the background*)

DW-Radio Learning By Ear General Knowledge: car tires

"And where can we get some new tires from, Tom?"

Tom: *(doesn't know)*

"Um, er..."

Jack: *(excited)*

"Hey how cool would it be to have tires with colored stripes matching the paint?"

Tom:

"No way! I'm not gonna have an ugly multi-colored car. In any case, you can't get colored tires. They're always black!"

Jack: *(disbelieving, disappointed)*

"Seriously? Why? *(small pause then confused)* Listen, wasn't Jenny here just a minute ago?"

MUSIC

2. Scene:

1. Atmo: **A bag is thrown to the ground aggressively / Keys and coins jangle / Notebooks fall out**

Jenny: *(loud and really angry, fade text out under atmo -- she's already been angry for a while)*

"Do you see what I mean, Miriam? UNBELIEVABLE!!! Who does he think he is? But I'm telling you, I'm never..."

2. Atmo: **Notebooks / pieces of paper are stuffed back into a bag**

Miriam: *(intimidated, careful, questioning)*

"Jenny? Before you turn my whole room into a war zone, can you tell me why you're so angry?"

Jenny: *(pauses)*

"Didn't I say? *(breathes out)* Well I popped in to see Jack to see if he wanted to go for a Coke somewhere..."

Miriam: *(sympathetically)*

"And he said 'no'?"

Jenny: *(gets angry again)*

"Not at all -- he didn't say ANYTHING! He left me there talking to myself -- he couldn't be bothered to listen to me *(breathes out again angrily)* I wouldn't be surprised if he didn't even realize I was there in the first place..."

Miriam: *(confused)*

"Really? But that's not really his style *(a bit sad)*. Everyone knows that Jack would do anything for you!"

Jenny: (*hurt*)

"Yeah right! (*snapping*) Other things go before me apparently such as old bangers --- Jack is trying to bring this old wreck back to life. With his brother. The last thing they need to help them are girls like me!"

Miriam: (*thinking*)

"Hm. ... Why I wonder?"

Jenny: (*annoyed*)

"What do you wonder? You should have heard them both! As if they were speaking a secret language just because of this car! (*Imitating them*) 'Can you pass me the number 5 -- this differential is a pile of rubbish!' That kind of thing. (*hurt*) I mean what was I supposed to say?"

Miriam:

"Well I wonder whether you could help them. At least you could find out what all those words mean. I'm sure that would impress Jack! (*eagerly*) Why don't you? Maybe there are also some things those two themselves don't know about!"

Jenny:

"Hm (*suddenly a bit happier*) Well, Jack wanted colored tires for the car but Tom thought the idea was totally stupid and absurd. He said that car tires are always black anyway. Otherwise though..."

Miriam: (*up for adventure*)

"That's it -- let's go and find out about exactly that."

Jenny:

"What?"

Miriam:

"About whether brightly-colored car tires exist and, if not, why not." (*ordering, impatient*) Come on then!"

MUSIC

3. Scene:

1. Atmo: Car workshop (Atmo 1 in Scene 1)
A motor is running

Tom: *(on the atmo)*

"Step on it!"

2. Atmo: Hitting the gas, revving up the engine

Tom: *(frightened)*

"Not so much gas, you fool!"

3. Atmo: Engine revs down

Tom: *(shouting quickly)*

"And now try the clutch! The CLUTCH!"

4. Atmo: Motor drowns

Jack: *(not knowing what to do)*

"It's still running rich isn't it? Let's have a break now..."

5. Atmo: Coke bottle opened /fizzes over and sprays all over
Sound of drinking and happy breathing out ("ah sheer pleasure -
-aahh!")

Jack: *(exhausted)*

"Wow that's good! Man, we've really been working hard! But when the car is finally finished, we're gonna be the coolest guys on the block! I swear we will be *(drinks)*! What's the latest on our tires?"

Tom: *(cranky)*

"Nothing. *(takes a gulp)* Joseph doesn't have any after all, he said."

6. Atmo: Steps coming closer

Jenny: *(coming closer, triumphant, factual)*

"No wonder! This Volkswagen 1200 Beetle needs four-and-a-half 15-inch alloy wheels and 5.6 15-inch tires. At least, if you want to keep to the original design. But they're really expensive and hard to come by. Hi guys!"

Jack: *(surprised and thrown off guard)*

"Jenny! Hallo! Er what did you just say?"

Tom: *(also surprised, but he understood and is now looking at Jenny with curiosity (showing off to Jack:))* "That was the exact tire specification for our car, brother, and also the right analysis that we're gonna have a tough time getting them! *(coming on to Jenny)* Hey, not bad Jenny!!! I had no idea you were a car expert!"

Jenny: *(triumphant, feeling flattered)*

"Hm! Well, let's just say I know a whole lot of tire traders, who in turn know manufacturers, and basically by asking a whole lot of questions you can get a whole lot of answers!"

Jack: *(jealous, grumpy)*

"Oh! But actually we just wanted to know if these mysterious "15-inchers" also exist in bright colors."

Tom: *(quickly)*

"YOU wanted to know that Jack! *(smarmily to Jenny)* I know that car tires are always black. Ain't that right, my lady?"

Jenny: *(a little like a diva, enjoying her superiority)*

"Yep, that's right -- most car tires are black and there's a very simple reason -- tires are made of rubber. And as you know when rubber is raw it's soft and sticky like chewing gum and a kind of light brown color. Not really what you need for car tires. But if you add carbon black and make a compound the tire acquires the right

hardness. That's why it doesn't stick to the street or fall to pieces when the car brakes. Carbon black is obviously black and that's why tires are always black!"

Tom: (*superior, sure of himself*)

"That's what I was saying -- bright-colored tires are a stupid idea. Right, I have to carry on now..."

7. Atmo: Starts honing a piece of metal

Jenny: (*lecturing him*)

"Hang on a second! Most car manufacturers don't use carbon black anymore -- they use something called silica -- a chemical compound. It's much better than carbon black for the tires because of the bonding process -- the tires are more elastic and flexible, as well as adhesive -- they stick to the road better. And they get less damaged during braking. But the thing is that silica is colorless so manufacturers *can* add paint and make brightly-colored tires if they wanted to..."

Jack: (*impressed, full of hope*)

"Does that mean (**Putting the bottle back on the table ("glass on wood")**) Does that mean there are brightly-colored tires after all?"

Jenny: (*amused*)

"Hmm. Michelin manufactured some green and blue tires in the mid-1990s (*laughs*) but nobody wanted to buy them. They flopped completely! And that's when they stopped producing the tires and stuck to black."

Tom: (*showing off -- loud-mouthed*)

(**honing, voice in the distance**) "That's what I've been saying since the beginning -- the whole idea is totally stupid and even the customers realized!"

Jenny: (*laughing*)

"Except rich American gang bosses -- there's another story: (*laughs*) A few years back Michelin conducted another experiment and manufactured tires which had bright stripes on the side and on the caps -- red, yellow, blue etc. But the only people who bought them were the rich gang bosses from Los Angeles who thought they looked cool on their "gangmobiles". That way people could tell which gang the driver

**Plastic bag rustles,
Hands rummage in material**

Jenny: *(totally happy)*

"Tadaa: Real, hot!"

Tom: *(disappointed)*

"Slipcovers. Oh my god!"

Tom und Jack: *(angry, surprised, not knowing what to do)*

"They're pink!"

MUSIC

OUTRO (Announcer)

Tires and carbon black, compounds and gangs -- you see what stories are hidden behind seemingly boring questions? That's what Learning by Ear's "General Knowledge" series is all about. Thanks for listening to today's program by Lydia Heller and have fun doing your own research. If you want to hear the program again or find out more, visit our website www.dw-world.de/lbe and don't forget to tune in next time!