# SAFETY QUIZ TEST YOUR (TEAM) KNOWLEDGE !

European Lift Association

### HOW SAFE ARE YOU? HOW SAFE IS YOUR TEAM?

### ... WHEN WORKING ON LIFT?

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### A) What do you think of the situation?

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- b) This is a bit tricky, but this is acceptable if the mechanic is careful c) It is more effective to use a rag
- d) It is very dangerous as hand can be caught by the sheave



European

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- a) Wear protective gloves
- b) Log out and tag out the lift and move the sheave manually to do the work portion by portion
- c) Fix special tools onto the machine beam so that cleaning / lubricating can be done automatically
- d) Have a longer brush

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> The mechanic is trying to detect a noise in the hoistway following a customer complaint. He decides to ride the car in normal operation whilst on the top of the car.

### A) What do you think of the situation?

a) As long as he rides short distances, this is acceptableb) If he stays in the centre of the car, this is acceptablec) This is the most effective way to detect noise, no alternative!d) It is very dangerous as there is no control of the car

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The mechanic is trying to detect a noise in the hoistway following a customer complaint. He decides to ride the car in normal operation whilst on the top of the car.

B) What is the best way to manage the situation (several answers)? a) Ride in normal but keep the body within the perimeter of the car b) Never ride in normal but always on inspection mode c) Ride the car in normal from inside the car to get first clues d) Ride in normal only on short distances



This picture was taken at the 3rd floor. The mechanic is working in pit, assembling the car.

### A) What do you think of the situation (several answers)?

a) The opening is not protected, something can fall onto the mechanic below

- b) The opening is not protected but the mechanic wears his hard hat, so there is limited risk
- c) The barricade is too short, but this is the general contractor issue, not a problem I need to take care of
- d) The barricades are too low, someone can fall in the hoistway



This picture was taken at the 3rd floor. The mechanic is working in pit, assembling the car.

- a) Ask the general contractor to fix the guardrails and continue to work in pit
- b) Ask the general contractor to fix the guardrails and stop working in pit till the issue is fixed
- c) Install a proper protection covering the entire opening to protect from falling objects
- d) Ensure that the guardrail has the right dimensions with a toe guard 7





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The mechanic is working on the top of the car, greasing the counterweight guiderails. He is not wearing the body harness.

- a) This is dangerous, he could fall or trip under the top rail
- b) The top of car has guardrails is in place and this is sufficient
- c) If the mechanic holds onto the handrail, this is acceptable
- d) It is very unlikely that the mechanic would fall



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The mechanic is working on the top of the car, greasing the counterweight guiderails. He is not wearing the body harness.

- a) Instruct the mechanic to exclusively work on the front of the car
- b) Provide a fall protection equipment and train to its use
- c) Replace the guardrail for a compliant one
- d) Do nothing, the unit belongs to the customer and he won't pay for this



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During a re-roping activity, the mechanic is using a ladder to work on the sheave located on the top of the counterweight at 5 m above the floor.

- The mechanic only works a few minutes on the ladder, risk is limited a)
- The ladder can easily slide and the mechanic could fall in pit b)
- The ladder is positioned in front of the sheave and stabilized against c) the car buffer, risk of sliding is limited
- This is acceptable if the mechanic is keeping 3 points of contact while d) on the ladder 10



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During a re-roping activity, the mechanic is using a ladder to work on the sheave located on the top of the counterweight at 5 m above the floor.

- a) Install a proper working platform
- b) Ask the support of a colleague to secure the ladder
- c) If a working platform can't be used, secure the ladder from swinging by blocking the feet and attach the ladder with a sling
- d) Provide a fall protection equipment and train the mechanic on its use



In a re-roping operation, all the ropes have been removed and the car is suspended by one chain wrapped onto the guide bracket and the car beam.

- a) One chain is not enough as it could fail and the car would fall
- b) One chain is sufficient to suspend the car
- c) One chain is always enough if the safeties are triggered
- d) The chain will not fail because of the safety factor



In a re-roping operation, all the ropes have been removed and the car is suspended by one chain wrapped onto the guide bracket and the car beam.

### **B)** What is the best way to manage the situation ?

- a) Replace the chain by a rope sling
- b) Replace the chain by a textile sling
- c) Install a chain which can take at least 3 times the car load
- d) Install 1 chain each side and trigger the safeties

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The mechanic is on a call-back, taking measurements inside the controller.

- a) His multimeter has protected insulated probes, risk is limited
- b) The relays he is measuring are only 50 V AC, risk is limited
- c) The mechanic is directly exposed to live equipment and could be electrocuted
- d) The mechanic is directly exposed to live equipment, but only for a few seconds, so risk is limited 14

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The mechanic is on a call-back, taking measurement inside the controller.

- a) The mechanic must wear insulated gloves as a minimum
- b) The mechanic must take a stable position to prevent from slipping
- c) The mechanic must have received the proper certification to conduct the activity
- d) It is only important to remind the mechanic to be careful



2 units are running in the same hoistway and there is no separation between the lifts. The mechanic needs to check the bottom limit switch equipment in pit. The adjacent unit is still running.

- a) The mechanic knows that the adjacent unit is running, he will be very careful
- b) If there is a 1 m barrier in pit, the mechanic is protected
- c) It is dangerous as the mechanic could be hit by the adjacent unit
- d) If the mechanic is not coming close to the adjacent unit, the risk is limited

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2 units are running in the same hoistway and there is no separation between the lifts. The mechanic needs to check the bottom limit switch equipment in pit. The adjacent unit is still running.

- a) Install a screen to separate the pits only
- b) Install a screen to separate the pits up to the ladder
- c) Only prevent the adjacent unit from moving when the mechanic is working in pit
- A good lift professional is always very careful, so no need to disturb the customer by stopping the adjacent units

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The mechanic will be working on the scaffold to start the installation of the lift.

A) What do you think of the situation (several answers)?

- a) The scaffold does not have proper protective guardrails
- b) The scaffold can be accessed safely
- c) The wooden planks are adequately positioned
- d) The protection of the hoistway opening is not appropriate



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B) What is the best way to manage the situation (several answers)?
a) The scaffold must have proper guardrails in place
b) The scaffold must have a proper access mean by a secured ladder
c) The wooden planks must be firmly fixed on the scaffold
d) The hoistway opening should be fully covered and protected by a proper guardrail to prevent people from falling into the hoistway



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> The mechanic is installing the counterweight from the working platform. The platform is located 4 m high above the pit.

A) What do you think of the situation (several answers)?

- A) The mechanic is tied off to a life line, so he is protected
- B) The mechanic is not effectively protected by the harness since the hooking point is too far from his working place
- C) The planks are fixed on the support bar, this is sufficient
- D) The scaffold is not an adequate working platform



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> The mechanic is installing the counterweight from the working platform. The platform is located 4 m high above the pit.

- **B)** What is the best way to manage the situation (several answers)?
- a) Just add a planking between the 2 others to close the gap in the working platform
- b) Provide a safe working platform and check it before using it
- c) Keep the platform as it is and provide a life line where the hooking point is close to the work place
- d) Even if the platform is 100% safe, wear the fall protection equipment as an additional protection

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The mechanic is securing the car with the use of 2 slings, made of crosby clips and 10 mm ropes, suspended onto the beam located on top of the hoistway

A) What do you think of the situation (several answers)?

- a) Slings made of ropes have the capacity to secure the car
- b) The slings are not protected from sharp edges, this could damage them and cause the car to fall
- c) The crosby clips are not adequately installed
- d) The beam should be tested to ensure it can be used for rigging<sup>2</sup>

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The mechanic is securing the car with the use of 2 slings, made of crosby clips and 10 mm ropes, suspended onto the beam located on top of the hoistway

- a) Always use pre-fabricated slings which capacity is known
- b) Protect any sling from sharp edge
- c) Use other types of clips to prepare the home made sling
- d) Ensure that the beam is tested to the right capacity



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> The mechanic has temporary repaired a defective safety contact by putting a wire directly on the circuit in the hoistway. This was 7 days ago.

### A) What do you think of the situation (several answers)?

- a) Disabling a safety circuit is a dangerous practice that should never be conducted
- b) Disabling a safety circuit is a dangerous practice which can only be used only if the alternative methods didn't work and must follow very stringent rules
- c) Disabling a safety circuit is acceptable if this is only for a few days
- d) A shunt should never let in place on a unit left in operation for the public



The mechanic has temporary repaired a defective safety contact by putting a wire directly on the circuit in the hoistway. This was 7 days ago.

- a) Forbid to defeat a safety circuit all times
- b) Authorize to defeat a safety circuit only in exceptional circumstances and upon formal training
- c) Forbid to leave the unit in service with a defeated safety circuit
- d) Only require to install a tag on the shunt to inform about the jumper



Only part of the equipment has been shipped on site and some of the key tools, equipment, hoisting devices, life line are missing. The site is running late.

- a) I continue on an other job till all the missing equipments are delivered
- b) Missing tools and equipment don't really matter. I can work in the hoistway as I used to do it before
- c) I prepare home made tools or borrow from the other on-site contractors



My mechanics are ready to start the installation of a new unit. They call me because they say that the hoistway is not prepared as per the requirement

- a) I ask my mechanic not to start and I will inform the general contractor about this issue so that he can fix it
- b) Water in pit or missing hoistway protection is not a problem for us to start
- c) My mechanics are experienced, they know how to deal with that



### **SOLUTIONS**



To improve knowledge, all answers can be found in Basic Safety Practices for Lift published in ELA website

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75 cm

# **SITUATION 3**



This picture was taken at the 3rd floor. The mechanic is working in pit, assembling the car.

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- d) Ensure that the guardrail has the right dimensions with a toe guard <sup>34</sup>

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### **SITUATION 6**



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