

**EMSD**  
**Lift Modernization**  
**Safe Use of Lifts and Escalators**

Script

Characters:

- Sing (Student)
  - Mrs. Lau (Resident)
  - Wan (Student)
  - Tung (Registered Lift Engineer)
  - Superman (Chairman of Owners' Corporation)
  - Mr. Ho (Property Management Officer)
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Scene 1:

Mr. Ho: It's been a while, isn't it?

Mrs. Lau: That's right, what's taking him so long?

Superman: What's matter, Mrs. Lau?

Mrs. Lau: I told Sing to pick up an umbrella at home, but it's been over ten minutes.

Superman: Maybe he couldn't find the umbrella?

Mrs. Lau: No way. I guess he's just being naughty, and playing something else.

Superman: You told him to go by himself?

Mrs. Lau: Yes, he's 8 years old already. He can handle it.

Sing: Help! Mommy.

Mrs. Lau: What's going on? Sing... , are you there, Sing?

Sing: Mommy, I am scared.

Mrs. Lau: What's happening? How could this happen?

Wan: We're trapped in the lift.

Mr. Ho: Don't be panic. Stay calm. I'll call a mechanic for help.

Mrs. Lau: Be quick.

Mrs. Lau: Don't be afraid, son.

Superman: Sing. Mechanics are coming soon.

Sing: I feel scared mom.

Wan: It's all your fault, jumping up and down, and playing the buttons. Now the lift is out of order. What should we do now?

Sing: I have no idea.

Mrs. Lau: What should we do, Chairman?

Superman: Don't worry.

Tung: Is there anyone trapped inside lift?

Mrs. Lau: Yes. Please bring my son out.

Tung: Stay calm. How many people are trapped inside?

Mr. Ho: Two kids.

Tung: Okay.

Sing: Mom, I won't play in the lift again.

Wan: Don't panic, just sit tight. Someone will get us out of here soon.

Tung: Come on, kid.

Mrs. Lau: Are you okay, son? You scared me.

Superman: It's all over. Thanks.

Mrs. Lau: Thanks.

Tung: You're welcome. But the lift of your building is really old. Thirty years something, maybe?

Superman: Yes I think so. I am the first-hand owner of the flat. And the lift was just installed when I moved in. It was the latest model in that moment.

Mr. Ho: Chairman, that's the latest model in thirty years ago. Changing with each new day, the new lifts are very different now.

Mrs. Lau: We use the lift every day, surely there must be wear and tear even though there is no broken part.

Superman: We do carry out the periodic maintenance and repair. If we to replace the lift, that would be very expensive.

Mrs. Lau: Chairman, safety comes first.

Tung: Actually, there are many enhancement solutions for the aged lifts. You could find a registered lift contractor to check the lift thoroughly, to see if there's any part required to be replaced or modernized. And so, the lift would become safer, more reliable and comfortable.

Superman: That's a good idea. Our owners' corporation will has a meeting

tonight, let's include it into the agenda.

Mrs. Lau: I'm all for it.

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Scene 2:

Superman: Fellow residents, I believe you're all aware of a lift trapping was happened today. We've been lucky, the two boys only got startled, luckily no one's hurt. But we must be vigilant, we should evaluate our lift's safety based on this incident.

Mrs. Lau: My suggestion is, the lift of our building is so old, let's replace with a new one.

Resident A: A lift replacement? That is costly. We can't afford it.

Mrs. Lau: If we don't, what if there's another accident?

Resident B: Or could we change the spare parts only, to make the lift safer?

Resident A: Sounds easy, but who knows which spare parts should be changed?

Superman: Fellow residents, I have an idea. We've been using our lift for over three decades. It is quite old indeed. How about we first invite our registered lift contractor to conduct a thorough check on it, and then make a decision later.

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Scene 3:

Tung: Tsuen, could you check the circuit board and intercom? Thanks

Tung: Hey kid. You've been looking for a while. Are you interested in lifts?

Wan: Yes.

Tung: Aren't you afraid? You were trapped inside once.

Wan: Yes I am. But that's exactly why I'm interested in its structure and what is considered as a safe lift.

Tung: That's interesting. Let me tell you the safety devices of a lift.

Wan: Great.

Tung: A lift must have these five basic safety devices to be considered as safe. These include: suspension ropes with sufficient safety factors, door locking device, overspeed governor, car safety gear, and the buffer.

Tung: A lift is usually hoisted with two or more suspension ropes. The ropes' total load capacity should be twelve times or above of the lift's total rated load. If one rope has failed, the other can still sustain the lift to ensure the passenger safety.

Tung: The overspeed governor and the safety gear are the safety devices for the lift car when descending in an exceeding predetermined speed. In the case of overspeeding, the overspeed governor would lock the governor rope, activate the safety gear, and brake the lift. After the overspeed governor locks the governor rope, the safety gear is activated and grip the guide rails firmly and brake the lift car safely.

Tung: The buffer acts an additional safety protection. In the case of a lift failure, the buffer could reduce the crash impact of the lift car when it exceeds its travel.

Tung: As a result, if these 5 safety devices are working properly, the lift is said to be safe.

Wan: Tung, is our lift considered as safe?

Tung: Your lift is very old.

Superman: That means it's not safe?

Tung: Well, not exactly. With suitable enhancement works, your lift could be safe and reliable and could run in a prolonged life.

Mr. Ho: What enhancement works could be done?

Superman: Let's go into this way, Tung. The building works committee of our Owners' Corporation will meet tomorrow and discuss the safety issues of the lift. Would you have time to brief us on the lift modernization?

Tung: Sure.

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Scene 4:

Superman: Fellow members. There's a lift incident in our building earlier. I think it's time to modernize our lift which has been in service for over thirty years. Today, we cordially invite Tung, a registered engineer, to brief us on lift modernization. Over to you, Tung.

Tung: Thank you, Chairman. We all know lifts are machines, there is unavoidable wear and tear with everyday use. Your lift has been in service for over thirty years, you can't compete with today's technology standard of the current models. But, your lift is still in good condition. It can be safer and more reliable, with suitable enhancement works.

Tung: In general, there're seven solutions you could add or modernize for the aged lifts. First, install a double brake system. The aged lift might have only one set of brake. In case of a failure, the brake could be malfunctioned. The advantage of a double brake system /is that it has two sets of brake parts. Should one set fails, the other could ensure the safe operation of the lift. A modern double brake system has two sets of independent braking devices, each of which is normally electrical monitored.

Tung: Second, install the unintended car movement protection device. Unintended movement of the lift car could lead to injury when the lifts doors are opened and passengers are about to enter or exit. To prevent such accidents, you could install the built-in redundancy and self-monitoring device, for example, rope gripper, etc, to enhance the braking system, and to prevent unintended movement when the lift car is not stopped in a correct position.

Tung: Third, install an ascending car overspeed protection device. The lift might ascend over speed to the hoistway due to any malfunction and cause an accident. The ascending car overspeed protection device could automatically detect these abnormal movements, bring the lift car to a stop and prevent such accident.

Tung: Fourth, install a car door mechanical lock and door safety edge. Installing a car mechanical lock could prevent passengers from forced opening the doors. The doors of aged lift could hit the passengers when entering or exiting. By installing the modern door safety edge, the lift doors would automatically re-open when the doors close on the passengers to prevent similar injuries.

Tung: Fifth, install an intercom and a CCTV system. When passengers are trapped inside lift, they could communicate directly with management office personnel. In the meanwhile, the management office could notify the lift contractor and Fire Services Department immediately. Some advance intercom systems allow passengers to directly contact a 24-hour service centre of the registered contractor for immediate rescue.

Tung: The CCTV system comprises a camera, an alarm button, and a buzzer inside the lift car, and connects to the building's management office. Prompt actions could be taken in times of accident.

Tung: Sixth, install an obstruction switch to protect the suspension ropes. Excessive wear of suspension ropes is one of the major causes of rope breakage. When the movement of the lift car or counterweight is obstructed, and the motor is still in operation, it could cause excessive wear on the suspension ropes and sheaves. Installing an obstruction switch could prevent against this excessive damage during breakdown.

Tung: Seventh, adding the automatic rescue device. In case of a power failure, the automatic rescue device could maintain the lift in momentary operation and enable the trapped passengers to leave the lift car safely.

Tung: Among these seven enhancement solutions, I'd suggest you to put the first four to your priority, and you could consider the last three based on your actual needs. This is the end of my briefing. Chairman.

Superman: As the lift owners of the building, we're responsible for arranging a registered lift contractor to conduct periodic maintenance and repair of the lift. We must hire a registered lift contractor to carry out any alteration or modernization works. We must arrange a registered lift engineer to conduct a thorough examination and testing on the lift after the completion of works to ensure safety.

Superman: After hearing Tung's briefing, we must give some thoughts on how to carry out the lift modernization works.

Tung: May I remind you again here, in order to use the lifts properly, not only to ensure the hardware is up to standard, but also have a right attitude of lift usage. Take this incident as example, I know a kid was jumping and playing with the buttons which led to the incident. Please remember, to ensure the safe use of lifts, and a safe devices and proper usage are equally important.

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Scene 5:

(Three months later)

Mrs. Lau: That's great.

Mrs. Lau: Chairman. Uncle Tak.

Superman: Mrs. Lau.

Mrs. Lau: The lift feels like running smoother after the modernization works, and more safe too.

Superman: Great.

Tung: Hello, everyone.

Mrs. Lau: Tung. We've just completed the lift modernization, does it require examination so soon?

Tung: Not yet. I just pass here and drop off the booklets Guidelines of Safe Use of Lifts and Escalators for your reference.

Sing: Safe Use of Lifts? I know that already.

Wan: Do you? Have you forgotten that you were trapped because you're pressing the buttons mischievously?

Mrs. Lau: Study it carefully.

Tung: Children should be accompanied by adults when using the lift.

Tung: Don't panic when being trapped. Never try to open the lift doors by yourself.

Tung: Keep calm, and press the alarm button immediately and wait for rescue.

Tung: Don't use the lift in case of a fire.

Tung: Never kick, or use your hands, or with the cart and other goods to crash the lift doors at any time.

Tung: Never try to force open the lift doors at any time.

Tung: Stay clear of the lift doors or the door frame area, to prevent your fingers or other body parts from getting caught.

- Tung: Don't place your hands on the lift doors, to avoid your fingers getting caught when the doors open or close.
- Tung: Don't try to cram into a lift that is exceeding its capacity, or one that has sounded the overload signal.
- Tung: Don't interfere the lift operations by blocking the doors open with any equipment for your own convenience.
- Tung: Don't force open the emergency exit on top of the lift car.
- Tung: Don't climb onto the handrails, jump or play inside the lift.
- Tung: Don't affix stickers, don't do graffiti, damage the lift, or the CCTV lens.
- Tung: Don't press the buttons mischievously.
- Tung: Only use your finger to press the buttons, and not with other objects to avoid damages.
- Tung: While on escalators, hold onto the handrail tightly, stand firm within the yellow line. Don't stand on the yellow line.
- Tung: Lift your foot as you step on or off the escalator. Stand firm once you've stepped on the escalator and not to lose balance.
- Tung: Children must be accompanied by adults on escalators.
- Tung: Assist the elderly and those in need. Seniors with mobility problems are advised to use the lifts.
- Tung: Keep your feet away from the gaps between the steps and those between the skirting panel and the steps. Keep clear of the brush guard.
- Tung: When wearing open toes footwear such as slippers or sandals, be careful of the gaps between the steps and the skirting panel. Pay attention to the gaps when wearing long dresses.
- Tung: Lift the umbrella up when carrying one. Don't place the tip of the umbrella into the slots or in between the steps.
- Tung: Don't ride the escalator with carts, bicycles and other bulky objects. Avoid bringing strollers, fold them up when you're riding the escalator, and hold the baby in your arm.
- Tung: Never press the emergency stop button unless there's an emergency.
- Tung: Don't run on or play around the escalator.
- Tung: Don't sit on the escalator,
- Tung: Don't go in the opposite direction as the escalator.
- Tung: Don't extend any part of the body out of the escalator. Don't climb on the handrail.
- Tung: Don't go beyond or vandalise the obstruction guards.

Tung: Stand still, don't run around.

Sing: Got it. I'll remember the guidelines by heart. I won't make the mistake again.

Mrs. Lau: Good to know.

Mr. Ho: I'll place these booklets in the common area, so that everyone could have a browse.

Superman: Excellent. While the contractor helps us with the proper maintenance, and we follow the safety guidelines, then we could ensure the safety of riding lifts or the escalators.

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