

ELEVATOR DEVICE Q&A

Plunger Gripper Device

Q: What is a plunger gripper?

A: A plunger gripper (life safety jacket) is a device that was installed on the hydraulic jack of an elevator that will clamp on to the lifting cylinder to prevent the elevator from descending at an uncontrollable speed due to a catastrophic failure of the hydraulic jack. This type of device was required to be installed on the hydraulic jack if the installation date of the elevator was before July 1st, 1974 and it could not be confirmed to be installed with a "safety bulkhead" on the hydraulic jack.

Q: Why am I being told that the "plunger gripper device has to be tested" and why wasn't this tested before?

A: The plunger gripper device is required to be tested every 5 years with the adoption of the A17.1 2016 code that went into effect May 1st, 2020. The plunger gripper device was initially tested at the time of installation and up until May 1st it was not clearly required to be tested after its installation. After performing your annual inspection, the certified elevator inspector determined that you have a plunger gripper installed and that he/she could not verify that the overspeed valve was tested in the last 60 months (5 years).

Q: When will testing on a "plunger gripper" be required?

A: Rated load testing of Plunger Gripper devices will begin on January 1, 2021 and shall be required at intervals of 60 months. The year and month the test will be determined by a 60-month incremental calculation from the initial registered installation date. Installations may be tested with scheduled full load testing of electric elevators if they are in the same location subject to approval of the Deputy Chief Elevator Inspector of Missouri. All Testing reports on plunger grippers will be submitted to the State of Missouri. Plunger grippers shall be tested with no load in the car on annual intervals.

Q: What will testing the plunger gripper device entail?

A: To test the plunger gripper device the rated load of the elevator will have to be loaded and the elevator tested with its full load. Certified weight carts will be used for this testing and the elevator maintenance provider will need a wheeled access to an elevator landing to load the weight carts. This will cause an inconvenience for your facility with the amount of time it takes to perform the test and the amount of noise from loading the certified weights. As you can imagine, this test requires more time to perform and you may see an increase on your inspection fee from the elevator maintenance provider/inspection company.

Q: Do all of my elevators at my facility have a plunger gripper device and how am I able to determine which ones have a plunger gripper device?

A: Unfortunately, there is no accurate "list" of elevators at this time that have the plunger gripper device installed on them. There are several factors that cannot be fully determined until a survey is performed by your maintenance provider/elevator inspection company.

Q: Once the test is completed, how will we know when it will be required again?

A: The test results will be logged into the state website and the plunger gripper device will be tagged/sealed with the date of test. Your elevator certificate should also have the date the test was performed under the "Last 5 Year Annual Inspection Date".