



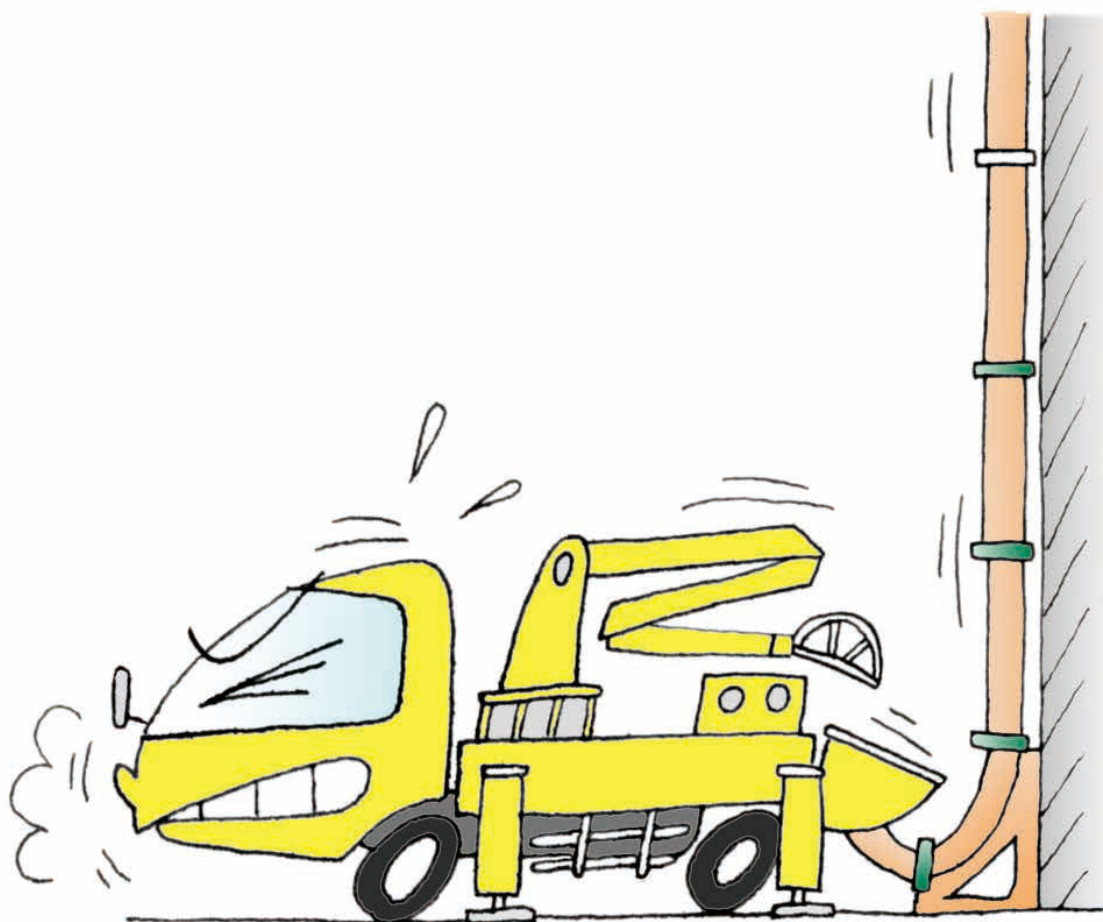
“Concrete Pumping”

The important points for Safety and health

Precautions for operating a concrete pump

(1) Concrete pump is under high pressure

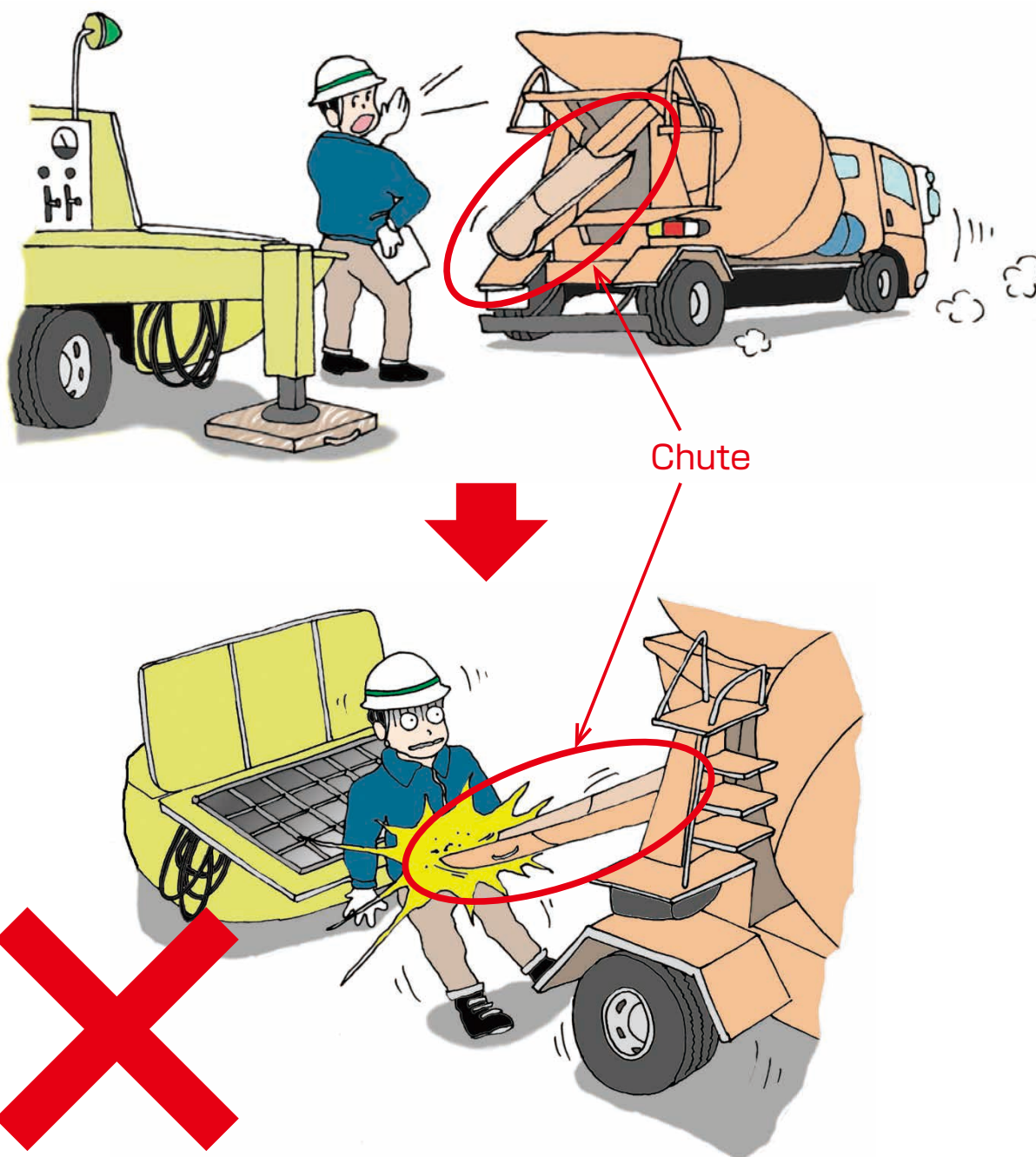
Concrete pumping is a dangerous work in which fresh concrete is transported with high pressure. Be aware that the higher the pressure required for pumping, the greater the risk of accidents.



Concrete pump vehicle that pumps ready-mixed concrete with high pressure

(2) Do not guide a ready-mixed concrete transport vehicle

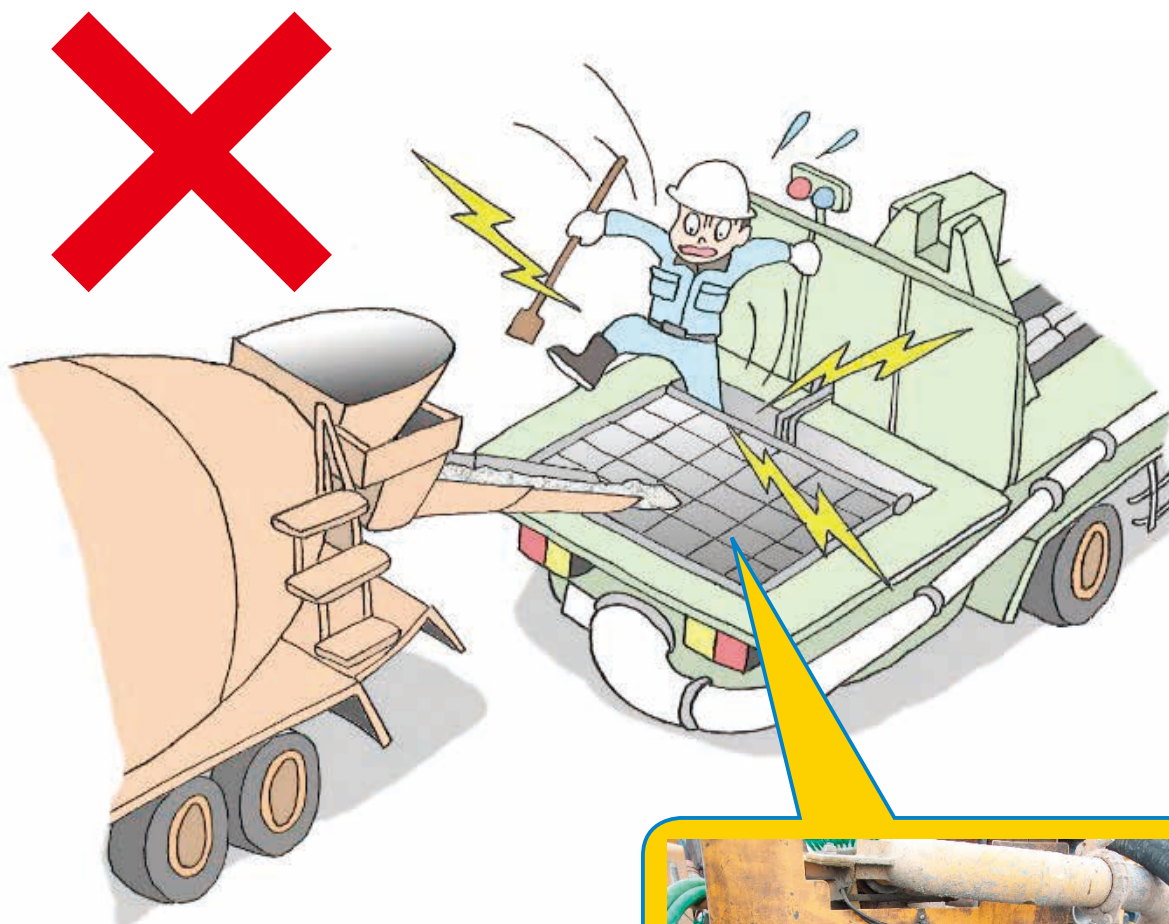
Do not guide a ready-mixed concrete transport vehicle (truck agitator), or handle the chute because it may cause a serious accident such as being caught between a truck agitator and a pump vehicle.



Example of an accident caught between a concrete pump vehicle and a truck agitator while guiding a truck agitator

(3) Do not work on a hopper screen

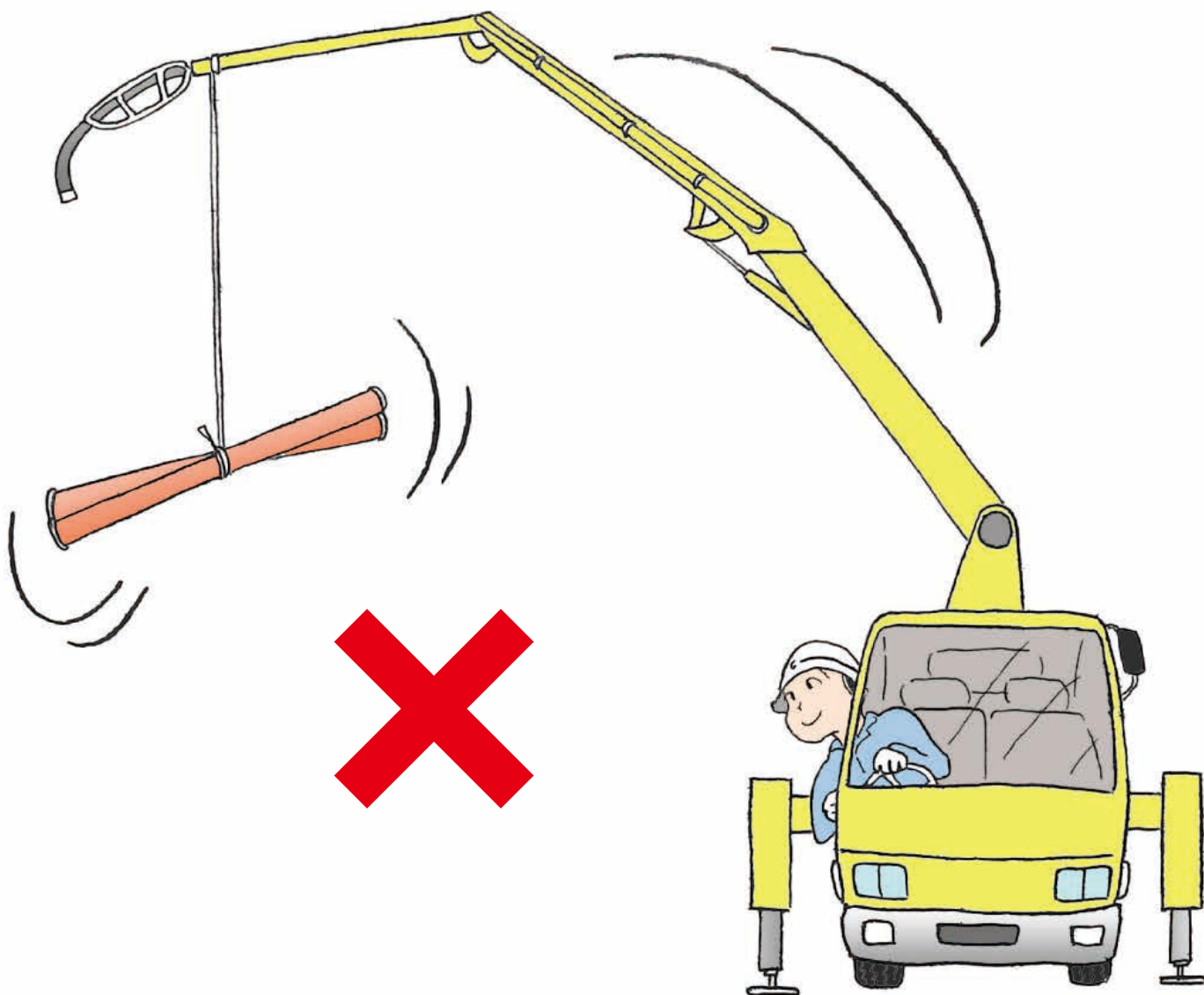
Do not work on a hopper screen as your foot drops into the hopper from the gap in the screen and get caught in the agitator if you get on the hopper screen.



Example of an accident involving a person dropping his/her foot through a gap in the hopper screen

(4) Prohibition of usage for other purposes

Lifting transport pipes and equipment with a boom may cause a load on the boom which breaks the boom itself. A boom should not be used for anything other than the primary use of the concrete pump vehicle.

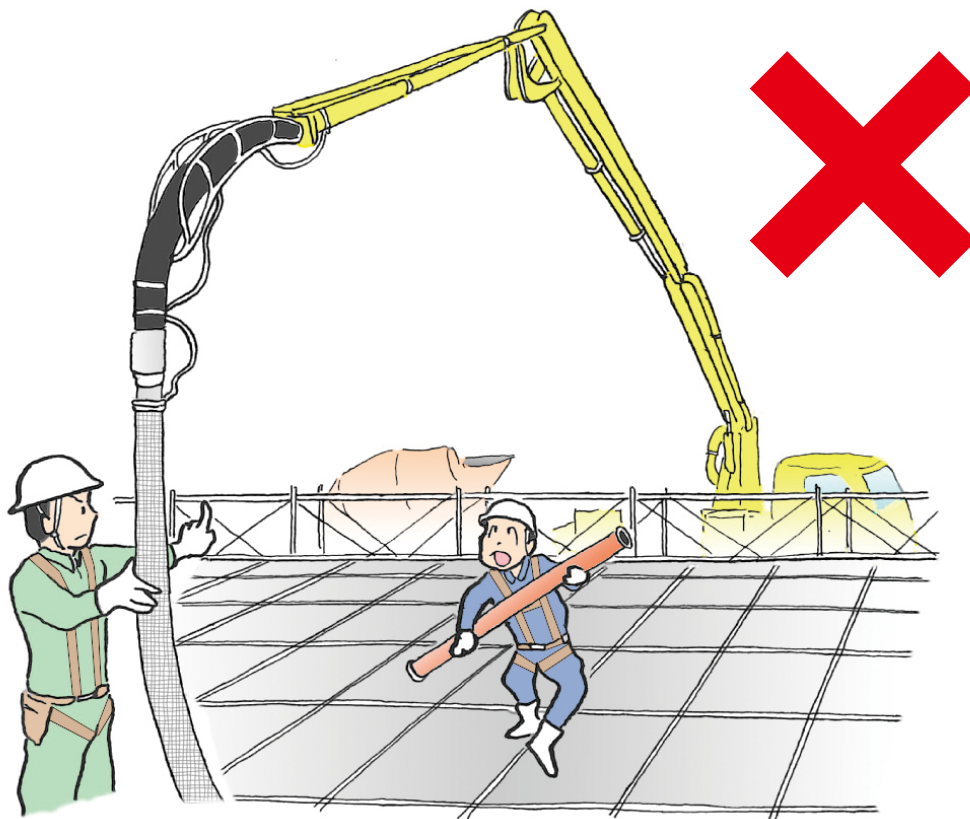


Prohibit use of a boom for other purposes

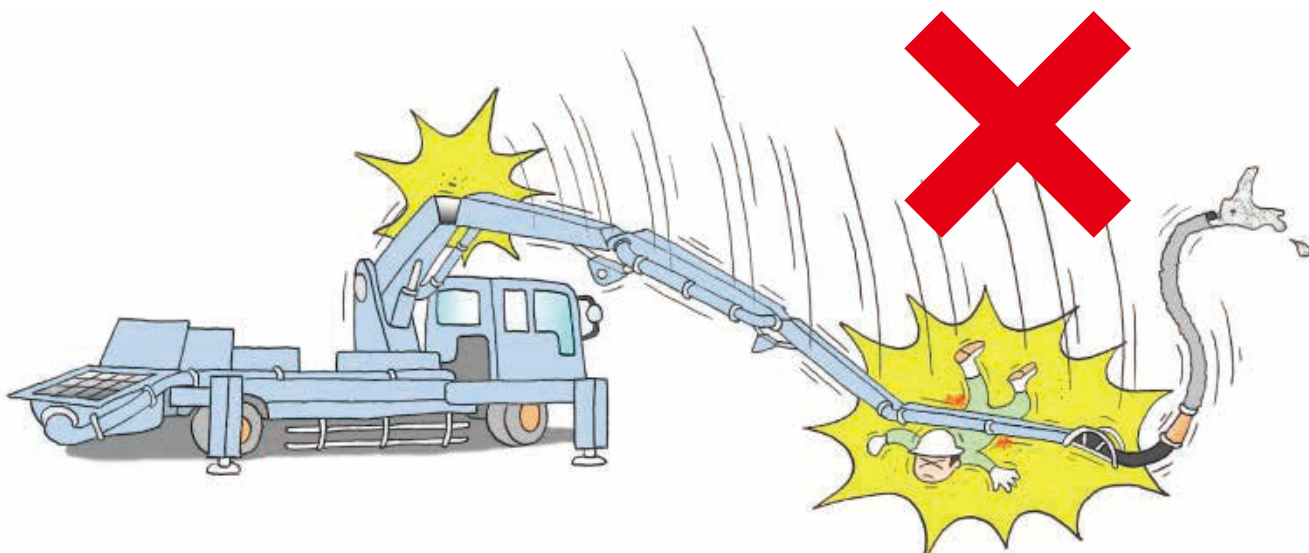
(5) Prohibition of work under a boom

Do not allow workers to enter directly under a boom.

There is a risk of getting a person involved in an accident if the boom breaks.



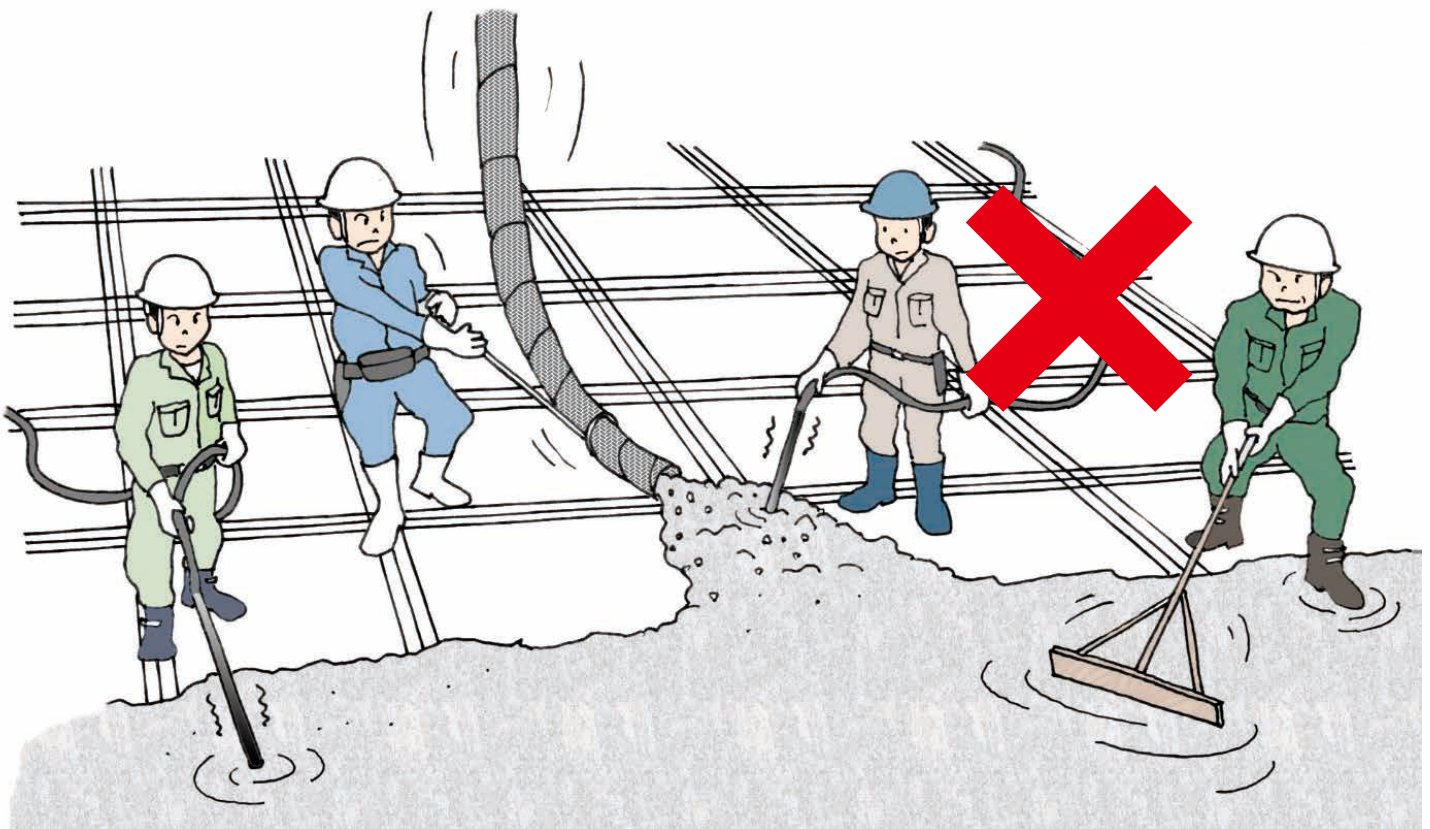
Prohibition of work under a boom



Example of a boom breakage accident

(6) Do not work at unreasonable speed

Pumping work at an unreasonable speed can cause rupture of transport pipes or may lead to accidents such as splashing of fresh concrete.

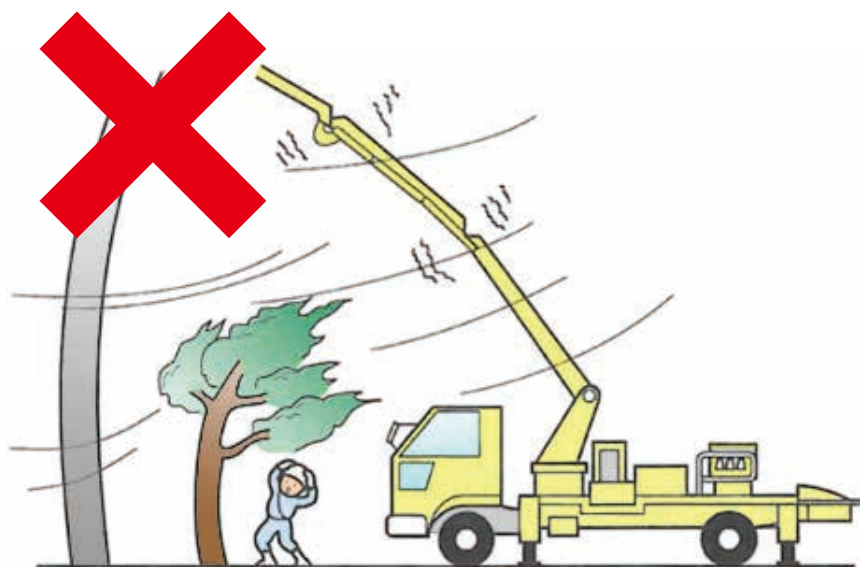


Concrete pumping work that matches the speed of pouring and compaction work

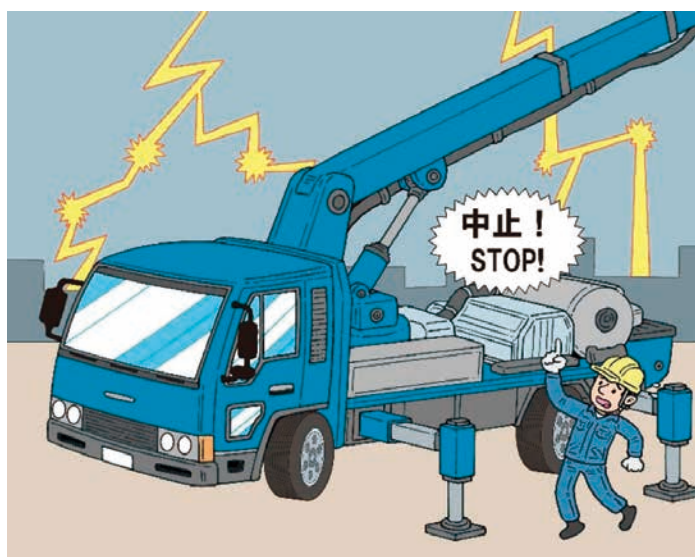
(7) Caution in boom work during strong winds and lightning strikes

Do not use a boom when the average wind speed is over 10 m/sec or higher in 10 minutes, or when the maximum instantaneous wind speed is 16 m/sec or higher.

Stop the operation and retractably hold the boom to prevent accidents when there is a risk of lightning.



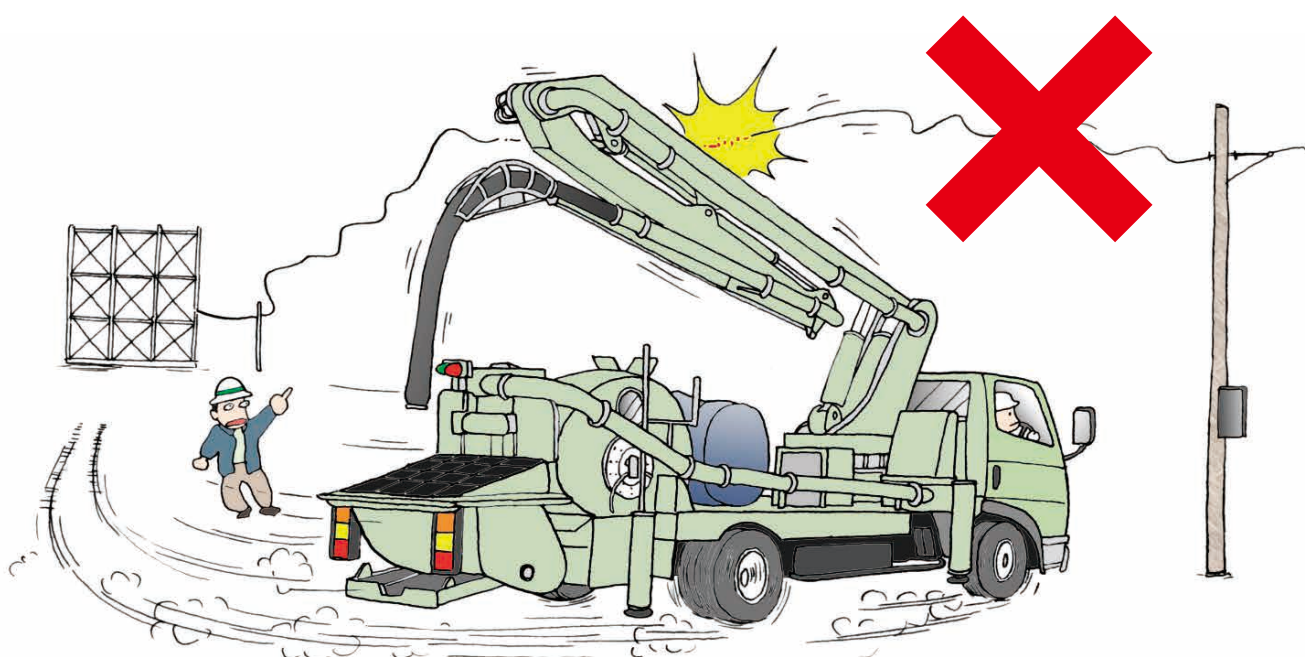
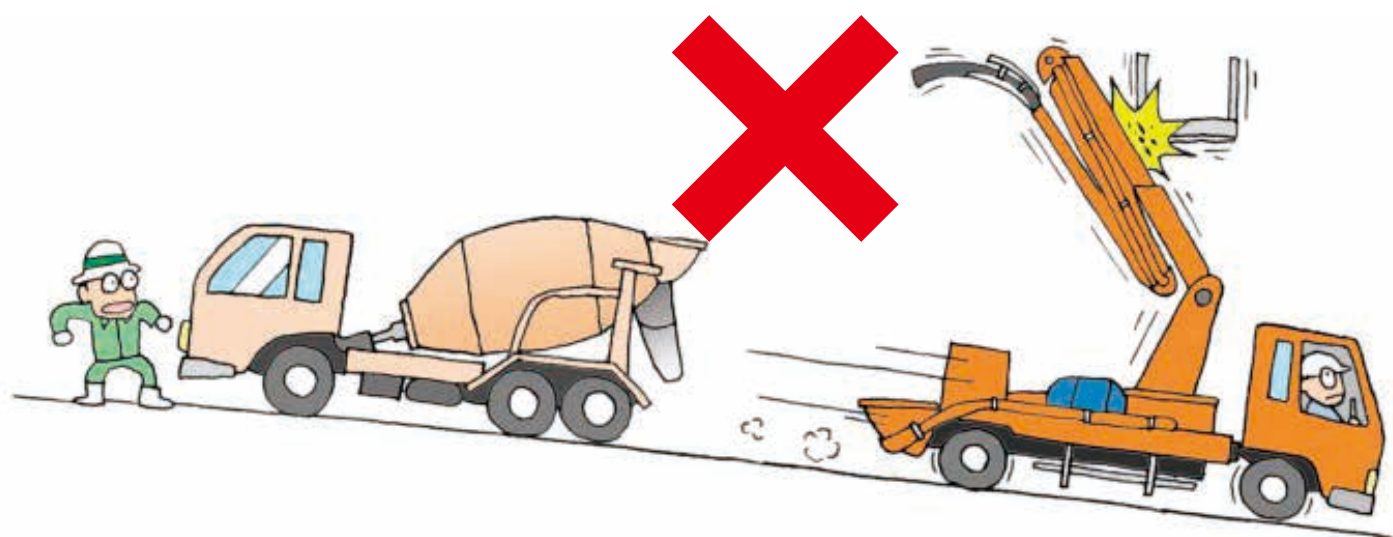
Prohibition of boom work in strong winds



Prohibition of boom work during lightning strike

(8) Move a pumping vehicle after retracting of a boom and outriggers

When moving a concrete pump vehicle in a site, to prevent accidents caused by contact with temporary objects or overhead wires, fully retract the boom and the outriggers, and securely use locking prevention devices such as the lock pin or chain before moving.



Example of a contact accident caused by traveling without retracting the boom