

## ZWICKY JACK TESTING

How quickly can the load be dropped? (if a train is coming can the team release weight and leave under track)?

If they stay up and the train goes over what will happen? Fail safe? Will they break or is it an easy repair? (assume about 15T or so)?

### During manufacturing

As part of the manufacturing test procedure the jacks are operated until the ram(s) are fully extended. At this point a force of 30 Lbs (14 Kg) is applied to the head. The release valve is then opened to check that the ram(s) retract smoothly and fully return within 30 seconds.

### Operational Procedure - When used in normal conditions

The release valve should be opened fully to retract the ram and then the operating lever removed. The jack can be left in place. If the ram(s) remain extended after the release valve has been opened they will retract once a load is applied.

If the release valve is not opened and the ram(s) are extended, then an applied load above 105% of the load capacity will open the overload valve. It depends on the size and speed of the load applied, above the load capacity, as to when the overload valve will close. No destructive damage should occur to the jack body. Some consumable parts may have to be replaced however.

### Following an overload

Any jack that has been overloaded must be examined and tested before being put back into service. Special attention should be paid to the overload valve spring, adjuster and plunger. These should be replaced if necessary.