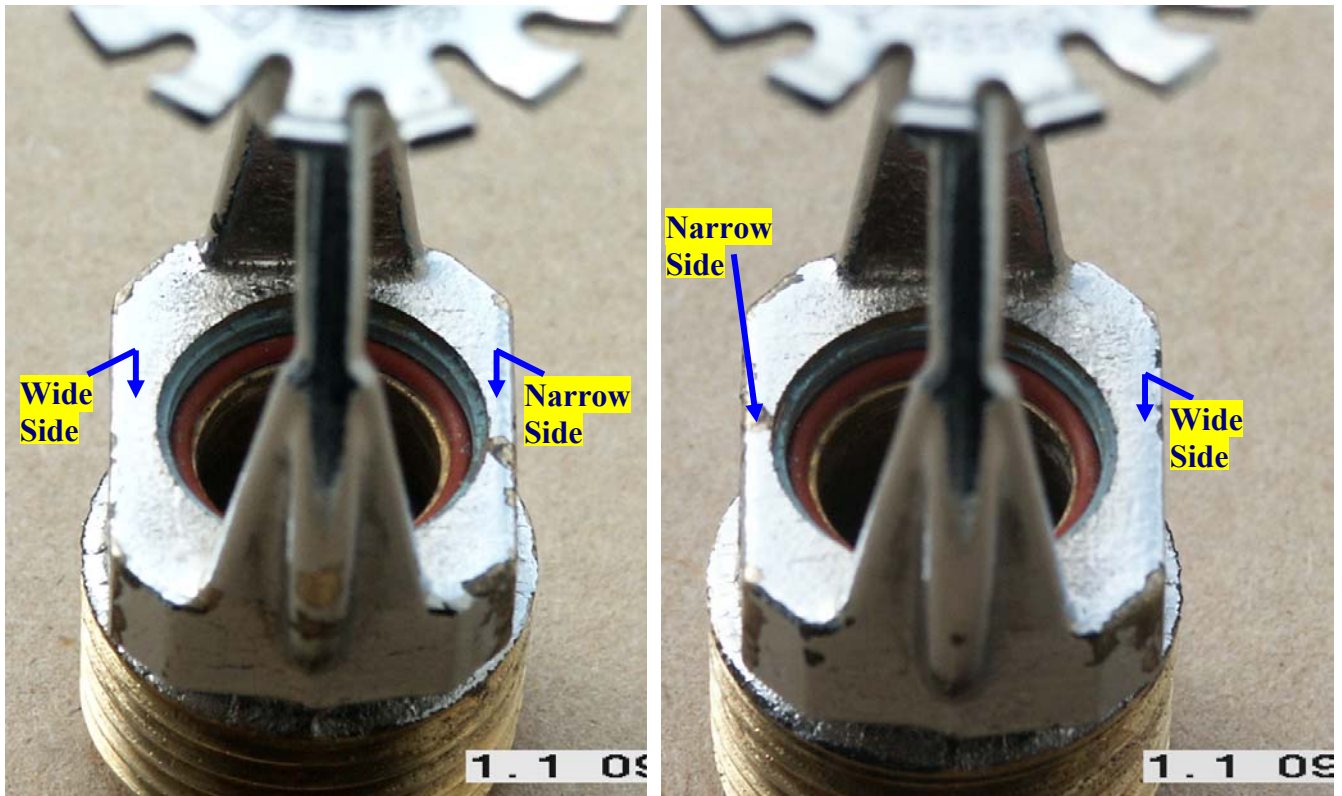
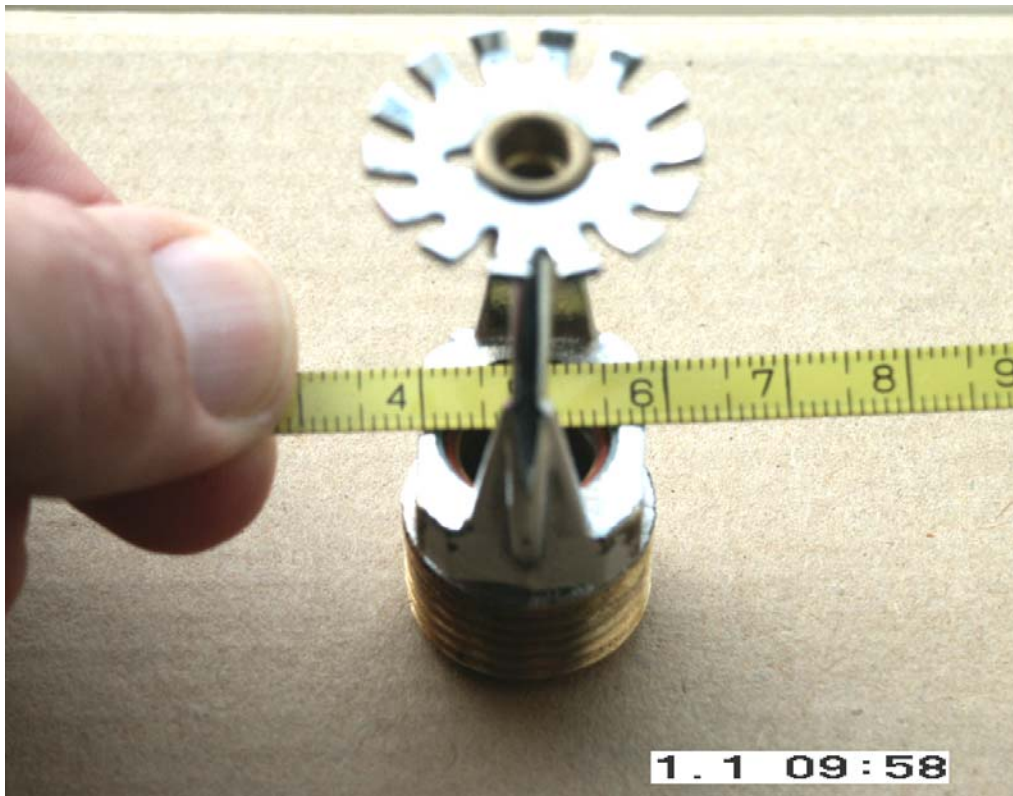


SPONTANEOUS BURSTING OF A SPRINKLER

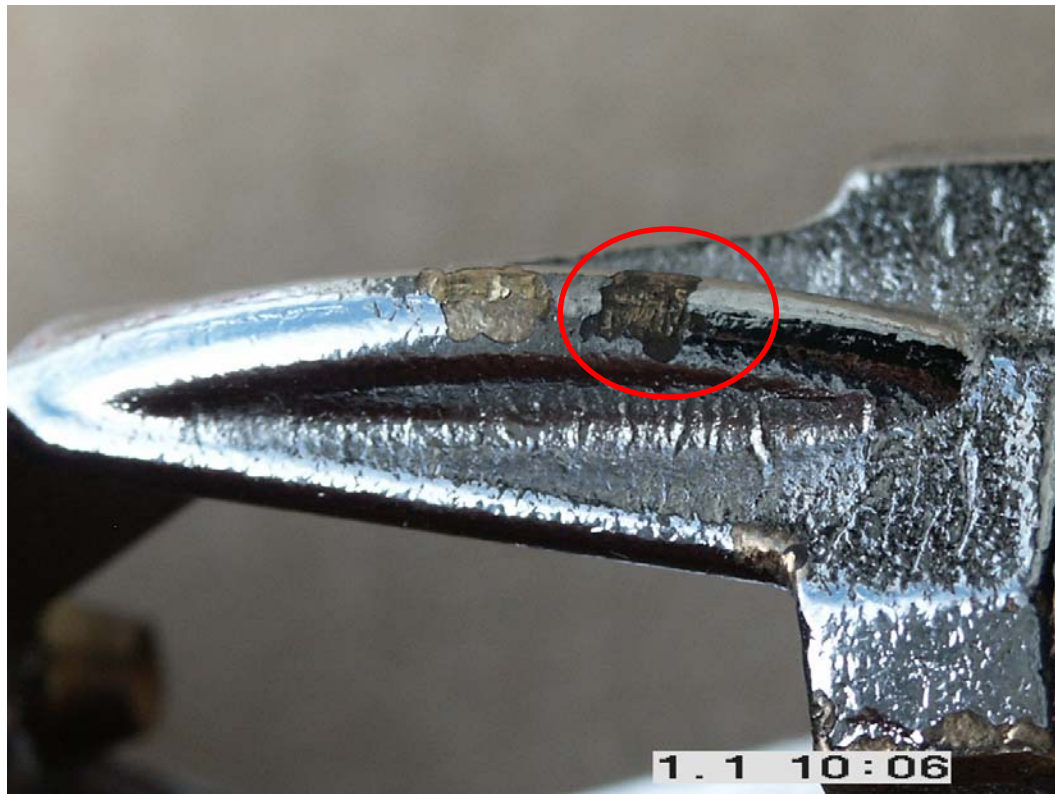


Photos of both sides of a Sprinkler



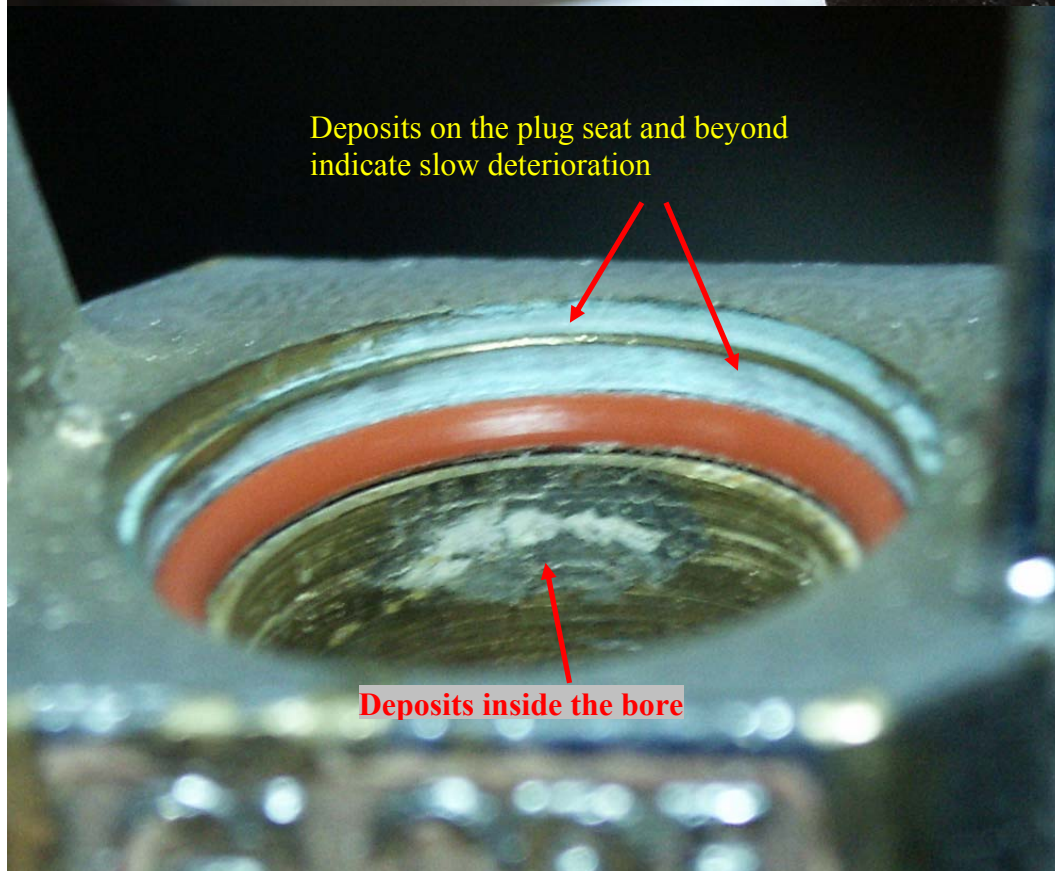
**The bore is of-center
by 0.5mm**

Photos of bursting head, Cont'd.,



A new and old mark indicates use of wrong tools while mounting and dismounting of sprinklers.

The red circle mark the older mounting mark



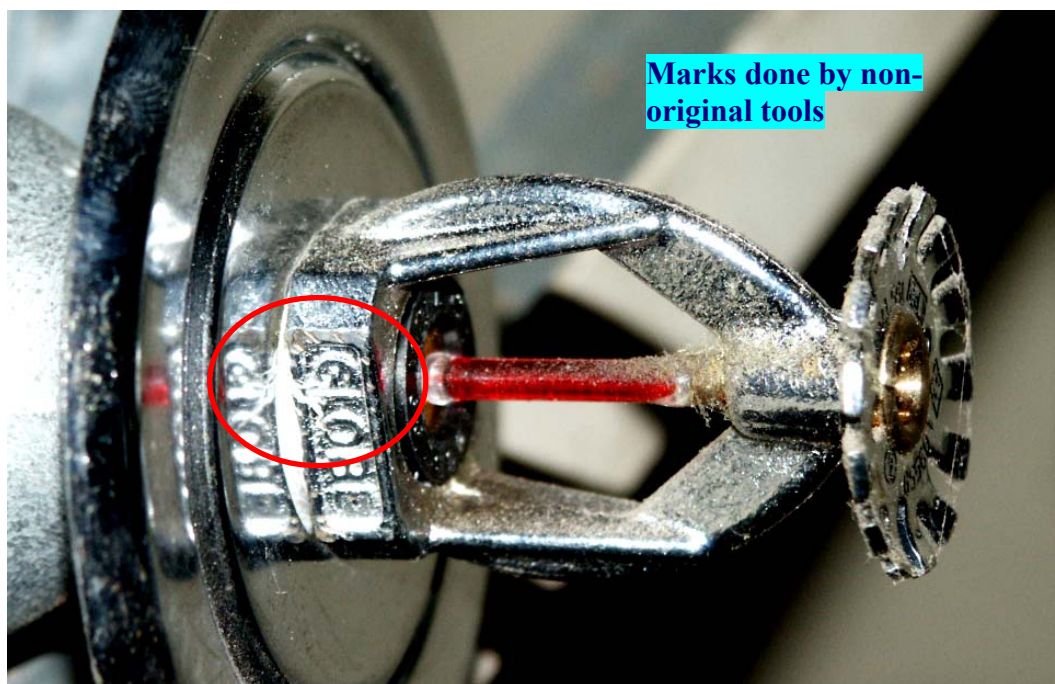
Deposits on the plug seat and beyond indicate slow deterioration

Deposits inside the bore

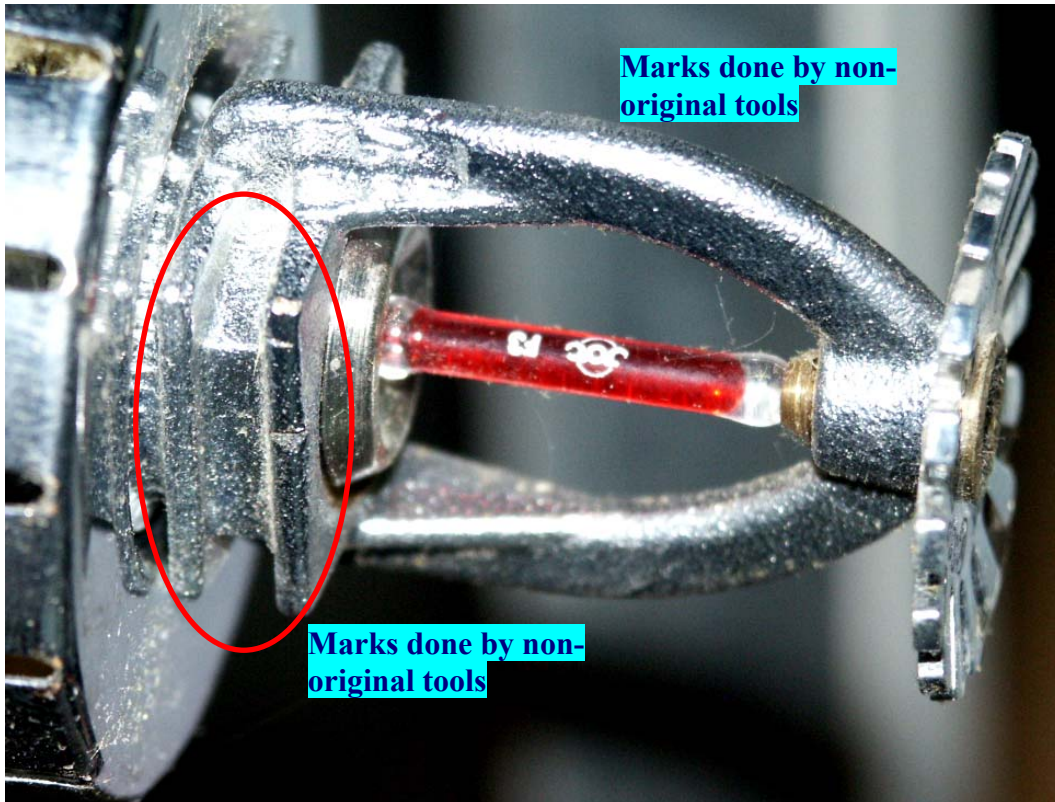
The wide side of the bore has deposits marks below and above the plug and seals.

- a. *The deposit below the seal indicates a wider gap between the Plug and the bore wall.*
- b. *The deposits above the seal indicate gradual seeping of water through the seal.*

Photos of other mishandled sprinklers:



Photos of other mishandled sprinkler, Cont'd.:



CONCLUSIONS

Two causes leading to the sprinkler failure were discovered in this case:

- Mishandling of the sprinkler by the installing contractor,
- Faulty sprinkler.

Yours faithfully,

Dan Arbel

DAN ARBEL RISK ENGINEERING Ltd.