



Guidelines for Preparation for In-Service Aerial Device Inspection

Prior to Inspection

To perform the aerial device examination and test efficiently, fire department personnel should be prepared to:

- Remove applicable access panels and ladder slides prior to testing
- Remove diamond plate covers on turntables, outrigger cylinder cover plates, and hose troughs.
- Clean (wipe down) and degrease undercarriage, turntable, outriggers, torque box, and ladder or booms to provide clean, dry areas for the inspection of critical welds.

Note - Materials used for magnetic particle inspection will not function properly on a surface covered with foreign materials. Grease on the ladder will trap the magnetic particles making cleaning of the ladder difficult. There are, however, areas of the ladder, which should not be degreased since an absence of lubrication in these areas may hinder proper operation of the device. These areas are the ladders sliding and rolling components, such as baserail babbitt, ladder rollers and slide blocks and the rotation bearing, gear and pinion.

Conducting the Inspection

The following items are required to be provided by the Fire Department when conducting an aerial inspection:

- A level area with electricity and water.
- A trained and qualified operator.
- Sufficient space to operate the aerial device (overhead operation and full extension of the aerial while at zero degree elevation)
- Bracing to support light-duty ladders (aerial ladders having a tip load below 250 lb. when fully extended at zero degree elevation)
- If the device is equipped with a permanently attached water system with no onboard fire pump, a pumping apparatus capable of pressurizing the water system to its rated capacity should be available.
- If the device has a permanently attached water system with flow meters in the system, a pumping apparatus capable of supplying the system at its rated flow rate should be available.

Note - The unit will be out-of-service for approximately 8 hours while the inspection is being performed. However, should an emergency arise, our representative can quickly discontinue testing so the unit will be available for service.

After the Inspection

After completion of the inspection, the magnetic particles should be removed from the ladder and substructure surface as quickly as possible. Your personnel should pay special attention to sliding and rolling components of the ladder to ensure all magnetic particles are removed.