

INDUSTRY ALERT

HAZARD

Log loader frame collapses after mounting pedestal fails

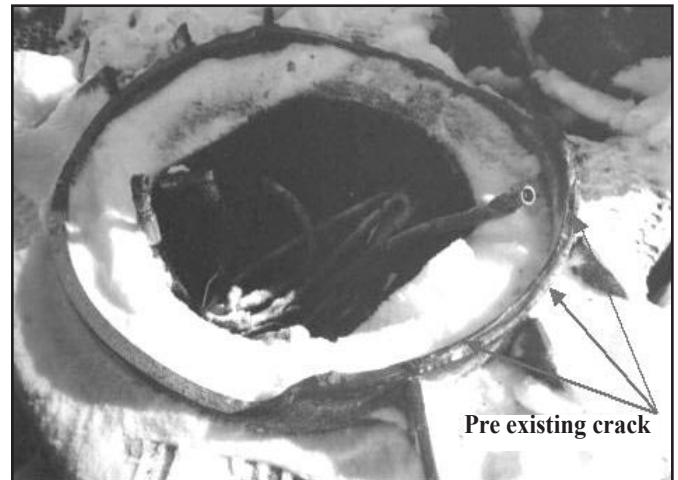
(Source: Ontario Ministry of Labour)

What happened?

A loader operator was lifting a load of logs when the machine's mounting pedestal (the circular portion of the loader frame directly below the swing bearing) suddenly failed. The loader collapsed and came to rest on the operator's cab.

Why did it happen?

Examination revealed that approximately one-quarter of the circumference of the mounting pedestal had been cracked for a period of time before the failure occurred. (See photo at right.)



How can it be prevented?

An OFSWA *Industry Alert* in November 2001 warned of the hazard of swing bearings on knuckleboom loaders breaking away, causing the loader to collapse and fall to the ground. A subsequent investigation found that several bolts in the turntable had been broken for some time, placing strain on the remaining bolts. Regular inspection and maintenance of the equipment were recommended to prevent such incidents.

Similar wear and tear were the cause of the failure of the loader's mounting pedestal in this incident. The cracks in the pedestal may have originated with a material or weld defect. Repeated impact loads from worn swing bearings or other loader components would have increased the probability of a crack developing and spreading around the pedestal.

Log loaders are lifting devices to which Section 51 of the Regulations for Industrial Establishments is applicable. Inspections of loaders conducted in order to comply with Section 51 must include the pedestal and its means of attachment to the vehicle in order to identify cracks and permit necessary repairs before a failure occurs. The equipment should be maintained according to the manufacturer's specifications and inspection schedules. The person who services and maintains the equipment should be knowledgeable of those specifications and have access to an owner's manual.

www.ofswa.on.ca