

## Gradall Forklift Parts

Gradall Forklift Part - During the period when World War II created a shortage of laborers, the famous Gradall excavator was born in the 1940s as the idea of two brothers Ray and Koop Ferwerda. Partners in a Cleveland, Ohio construction business referred to as Ferwerda-Werba-Ferwerda, the brothers faced a huge predicament when so many men left the labor force and signed up in the military, depleting existing laborers for the delicate finishing work and grading on highway projects. The Ferwerda brothers decided to build a machine which will save their company by making the slope grading job less manual, easier and more efficient.

The first excavator prototype consisted of a device with two industrial beams on a rotating platform fixed to a second-hand truck. There was a telescopic cylinder that was used to move the beams backward and forward. This allowed the fixed blade at the far end of the beams to push or pull the dirt. Shortly improving the very first design, the brothers built a triangular boom in order to add more strength. Furthermore, they added a tilt cylinder which let the boom rotate 45 degrees in both directions. A cylinder was placed at the back of the boom, powering a long push rod to enable the equipment to be equipped with either a blade or a bucket attachment.

1992 marked a momentous year for Gradall with their introduction of XL Series hydraulics, the most remarkable change in the company's excavators since their creation. These top-of-the-line hydraulics systems enabled Gradall excavators to provide high productivity and comparable power on a realistic level to conventional excavators. The XL Series ended the first Gradall equipment power drawn from gear pumps and low pressure hydraulics. These conventional systems successfully handled grading and finishing work but had a hard time competing for high productivity work.

The new XL Series Gradall excavators proved a significant increase in their lifting and digging ability. These versions were manufactured together with a piston pump, high-pressure hydraulics system that showed immense improvements in boom and bucket breakout forces. The XL Series hydraulics system was also developed with a load-sensing capability. Traditional excavators make use of an operator to be able to select a working-mode; where the Gradall system could automatically adjust the hydraulic power intended for the task at hand. This makes the operator's overall work easier and also saves fuel simultaneously.

Once their XL Series hydraulics became available, Gradall was basically thrust into the highly competitive market of equipment meant to deal with excavation, demolition, pavement removal as well as several industrial tasks. Marketability was further enhanced with their telescoping boom because of its exclusive ability to work in low overhead areas and to better position attachments.