## **Gradall Forklift Part**

Gradall Forklift Parts - The Gradall excavator was the idea of two brothers Ray and Koop Ferwerda. The excavator was created In the 1940's throughout WWII, when there was a scarcity of workers. The brothers faced the problems of a depleted labor force due to the war. As partners in their Cleveland, Ohio construction company referred to as Ferwerda-Werba-Ferwerda they lacked the available laborers to be able to do the delicate work of grading and finishing on their highway projects. The Ferwerda brothers decided to make an equipment that will save their company by making the slope grading work easier, more efficient and less manual.

The first excavator prototype consisted of a device with two industrial beams on a rotating platform fixed to a used truck. There was a telescopic cylinder that was used to move the beams backward and forward. This enabled the fixed blade at the far end of the beams to pull or push the dirt. Soon improving the first design, the brothers made a triangular boom in order to add more strength. Furthermore, they added a tilt cylinder which let the boom turn 45 degrees in either direction. A cylinder was placed at the back of the boom, powering a long push rod to allow the machine to be equipped with either a blade or a bucket attachment.

Gradall launched in 1992, with the introduction of the new XL Series hydraulics, the most ground-breaking adjustment in their equipment since their creation. This new system of top-of-the-line hydraulics allowed the Gradall excavator to provide comparable power and high productivity to the more conventional excavators. The XL Series ended the original Gradall equipment power drawn from low pressure hydraulics and gear pumps. These traditional systems effectively handled finishing work and grading but had a difficult time competing for high productivity tasks.

Gradall's new XL Series excavators showed more ability to lift and dig materials. With this series, the models were produced along with a piston pump, high-pressure system of hydraulics that showed noticeable improvement in boom and bucket breakout forces. The XL Series hydraulics system was also developed along with a load-sensing capability. Conventional excavators make use of an operator to select a working-mode; where the Gradall system could automatically adjust the hydraulic power meant for the work at hand. This makes the operator's general job easier and even saves fuel simultaneously.

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