## **Gradall Forklift Parts**

Gradall Forklift Parts - The Gradall excavator was the brainchild of two brothers Ray and Koop Ferwerda. The excavator was created In the 1940's throughout WWII, when there was a scarcity of labourers. The brothers faced the problems of a depleted workforce due to the war. As partners in their Cleveland, Ohio construction company called Ferwerda-Werba-Ferwerda they lacked the existing workers in order to do the delicate work of grading and finishing on their freeway projects. The Ferwerda brothers decided to make an equipment which will save their company by making the slope grading job less manual, easier and more efficient.

Their very first design model was a machine with two beams set on a rotating platform which was attached atop a second-hand truck. A telescopic cylinder moved the beams forward and backward which enabled the fixed blade at the end of the beams to pull or push dirt. Shortly enhancing the initial design, the brothers made a triangular boom in order to add more strength. Additionally, they added a tilt cylinder that let the boom rotate 45 degrees in both directions. A cylinder was positioned at the rear of the boom, powering a long push rod to allow the machine to be outfitted with either a blade or a bucket attachment.

Gradall introduced in 1992, with the introduction of the new XL Series hydraulics, the most innovative adjustment in their machinery ever since their creation. This new system of top-of-the-line hydraulics enabled 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 conventional systems successfully handled finishing work and grading but had a hard time competing for high productivity jobs.

Gradall's new XL Series excavators showed more ability to lift and dig materials. With this series, the models were made 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 likewise developed with a load-sensing capability. Traditional excavators utilize 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 work easier and even saves fuel at the same time.

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