## **Gradall Forklift Parts**

Gradall Forklift Parts - The Gradall excavator was the brainchild of two brothers Koop and ray Ferwerda. The excavator was created In the 1940's throughout WWII, when there was a shortage of workers. Partners in a Cleveland, Ohio construction company referred to as Ferwerda-Werba-Ferwerda, the brothers faced a huge dilemma when a lot of men left the labor force and joined the military, depleting available workers for the delicate finishing work and grading on highway projects. The Ferwerda brothers opted to make a machine that would save their company by making the slope grading task less manual, easier and more efficient.

Their very first design model was a device with two beams set on a rotating platform that was affixed over a used truck. A telescopic cylinder moved the beams forward and backward which enabled the fixed blade at the end of the beams to push or pull dirt. Soon enhancing the very first design, the brothers built a triangular boom to add more strength. Moreover, they added a tilt cylinder which let the boom rotate 45 degrees in both directions. A cylinder was positioned at the back of the boom, powering a long push rod to enable the machine to be outfitted with either a blade or a bucket attachment.

1992 marked a crucial year for Gradall with their introduction of XL Series hydraulics, the most remarkable change in the company's excavators since their invention. These top-of-the-line hydraulics systems enabled Gradall excavators to provide comparable power and high productivity on a realistic level to conventional excavators. The XL Series put an end to the original Gradall equipment power drawn from gear pumps and low pressure hydraulics. These traditional systems effectively 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 dig and lift materials. With this series, the models were made with a piston pump, high-pressure system of hydraulics that showed marked improvement in boom and bucket breakout forces. The XL Series hydraulics system was even developed together with a load-sensing capability. Traditional excavators utilize an operator to choose a working-mode; where the Gradall system can automatically adjust the hydraulic power for the task at hand. This makes the operator's general task easier and also conserves fuel simultaneously.

As soon as their XL Series hydraulics became available, Gradall was essentially thrust into the highly competitive market of machines designed to deal with demolition, pavement removal, excavating and other industrial work. Marketability was further improved with their telescoping boom due to its exclusive ability to work in low overhead areas and to better position attachments.