## **Gradall Forklift Part**

Gradall Forklift Parts - Through the period when WWII caused a scarcity of workers, the famous Gradall excavator was established in the 1940s as the brainchild of two brothers Ray and Koop Ferwerda. Partners in a Cleveland, Glendale construction company called Ferwerda-Werba-Ferwerda, the brothers faced a huge dilemma when so many men left the workforce and joined the military, depleting existing workers for the delicate grading and finishing work on highway projects. The Ferwerda brothers chose to make a machine that would save their company by making the slope grading work easier, more efficient and less manual.

Their initial design prototype was a device with two beams set on a rotating platform which was affixed on top of a used truck. A telescopic cylinder moved the beams forward and backward that enabled the fixed blade at the end of the beams to pull or push dirt. Before long improving the initial design, the brothers made a triangular boom to be able to add more strength. Furthermore, 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.

The year 1992 marked a crucial year for Gradall with their introduction of XL Series hydraulics, the most dramatic change in the company's excavators since their invention. 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 put an end to the original Gradall equipment power drawn from gear pumps and low pressure hydraulics. These traditional systems efficiently handled grading and finishing work but had a difficult time competing for high productivity work.

Gradall's new XL Series excavators showed more ability to dig and lift materials. With this series, the models were produced 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 likewise developed with a load-sensing capability. Traditional excavators make use of an operator 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 general work easier and likewise saves fuel at the same time.

Once the new XL Series hydraulics reached the market, Gradall was thrust into the extremely competitive industrial machine market that are meant to tackle demolition, pavement removal, excavating as well as different industrial work. The introduction of the new telescoping boom helped to further enhance the excavator's marketability. The telescoping boom gives the excavator the ability to better position attachments and to work in low overhead areas.