## **Gradall Forklift Part**

Gradall Forklift Part - The Gradall excavator was the brainchild of two brothers Koop and ray Ferwerda. The excavator was created In the 1940's all through World War II, when there was a scarcity of labourers. Partners in a Cleveland, Ohio construction business called Ferwerda-Werba-Ferwerda, the brothers faced a huge dilemma 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 chose to build a machine that will save their company by making the slope grading work less manual, easier and more efficient.

Their initial design model was a machine with two beams set on a rotating platform which was attached atop a used truck. A telescopic cylinder moved the beams back and forth which allowed the fixed blade at the end of the beams to pull or push dirt. Soon improving the first design, the brothers made a triangular boom to add more strength. Additionally, they added a tilt cylinder that let the boom turn 45 degrees in both directions. A cylinder was placed 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 the year 1992, with the introduction of the new XL Series hydraulics, the most ground-breaking adjustment in their machinery since their invention. This new system of top-of-the-line hydraulics enabled the Gradall excavator to provide high productivity and comparable power to the more conventional excavators. The XL Series put an end to the initial Gradall equipment power drawn from gear pumps and low pressure hydraulics. These conventional systems successfully 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 lift and dig materials. With this series, the models were made 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. Traditional excavators make use of an operator to pick a working-mode; where the Gradall system could automatically adjust the hydraulic power intended for the job at hand. This makes the operator's general work easier and likewise conserves fuel at the same time.

When the new XL Series hydraulics reached the market, Gradall was thrust into the very competitive industrial machinery market which are designed to deal with excavating, demolition, pavement removal as well as various industrial tasks. The introduction of the new telescoping boom helped to further improve the excavator's marketability. The telescoping boom gives the excavator the ability to work in low overhead areas and to better position attachments.