## **Gradall Forklift Parts**

Gradall Forklift Parts - The Gradall excavator was the idea of two brothers Koop and ray Ferwerda. The excavator was founded In the 1940's during World War II, when there was a scarcity of labourers. Partners in a Cleveland, Concord construction business called Ferwerda-Werba-Ferwerda, the brothers faced a huge dilemma when so many men left the workforce and signed up in the military, depleting available laborers for the delicate finishing work and grading on highway projects. The Ferwerda brothers decided to make an equipment that would save their business by making the slope grading work easier, more efficient and less manual.

The very first excavator prototype consisted of a machine 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 back and forth. This allowed the fixed blade at the far end of the beams to push or pull the dirt. Soon improving the initial design, the brothers built a triangular boom in order to add more strength. Moreover, they added a tilt cylinder which let the boom rotate 45 degrees in either direction. A cylinder was positioned at the back of the boom, powering a long push rod to enable the machine to be equipped with either a bucket or a blade attachment.

Gradall launched in 1992, with the introduction of the new XL Series hydraulics, the most ground-breaking adjustment in their machinery ever since their invention. This new system of top-of-the-line hydraulics allowed the Gradall excavator to provide high productivity and comparable power to the more conventional excavators. The XL Series ended the initial Gradall equipment power drawn from gear pumps and low pressure hydraulics. These conventional systems efficiently handled grading and finishing work 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 produced together with a piston pump, high-pressure system of hydraulics that showed distinct improvement in boom and bucket breakout forces. The XL Series hydraulics system was even developed together with a load-sensing capability. Conventional excavators use an operator to select a working-mode; where the Gradall system could automatically adjust the hydraulic power for the job at hand. This makes the operator's overall work easier and also conserves fuel at the same time.

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