

## Gradall Forklift Part

Gradall Forklift Part - The Gradall excavator was the brainchild of two brothers Ray and Koop Ferwerda. The excavator was founded in the 1940's through World War II, when there was a shortage of labourers. Partners in a Cleveland, Portland construction company referred to as Ferwerda-Werba-Ferwerda, the brothers faced a huge predicament when numerous men left the workforce and joined the military, depleting available laborers for the delicate finishing work and grading on highway projects. The Ferwerda brothers opted to build a machine which would save their business by making the slope grading job more efficient, less manual and easier.

The first excavator prototype consisted of a machine with two industrial beams on a rotating platform fixed to a second-hand truck. There was a telescopic cylinder which was utilized to move the beams backward and forward. This enabled the fixed blade at the far end of the beams to pull or push the dirt. Soon improving the initial design, the brothers built a triangular boom so as to add more strength. In addition, they added a tilt cylinder that let the boom rotate 45 degrees in either direction. A cylinder was placed at the rear of the boom, powering a long push rod to allow the equipment to be equipped with either a blade or a bucket attachment.

The year 1992 marked a significant year for Gradall with their launch of XL Series hydraulics, the most amazing change in the company's excavators ever since their creation. These top-of-the-line hydraulics systems enabled Gradall excavators to deliver high productivity and comparable power on a realistic level to traditional excavators. The XL Series ended 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 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 with a piston pump, high-pressure system of hydraulics which showed marked improvement in boom and bucket breakout forces. The XL Series hydraulics system was likewise developed together with a load-sensing capability. Conventional excavators utilize an operator in order to pick a working-mode; where the Gradall system could automatically adjust the hydraulic power meant for the task at hand. This makes the operator's general job easier and likewise saves fuel at the same time.

When the new XL Series hydraulics became available in the market, Gradall was thrust into the very competitive industrial machinery market that are meant to deal with demolition, pavement removal, excavating as well as several 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 better position attachments and to work in low overhead areas.