

## Gradall Forklift Part

Gradall Forklift Parts - The Gradall excavator was the brainchild of two brothers Koop and Ray Ferwerda. The excavator was founded in the 1940's through WWII, when there was a shortage of labourers. Partners in a Cleveland, Ohio construction business known as Ferwerda-Werba-Ferwerda, the brothers faced a huge dilemma when numerous men left the workforce and joined the military, depleting existing workers for the delicate finishing work and grading on highway projects. The Ferwerda brothers chose to build an equipment which will save their company by making the slope grading work more efficient, less manual and easier.

The initial 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 back and forth. This allowed the fixed blade at the far end of the beams to push or pull the dirt. Shortly enhancing the first design, the brothers made a triangular boom to be able to add more strength. Additionally, they added a tilt cylinder which let the boom rotate 45 degrees in either direction. A cylinder was positioned at the rear of the boom, powering a long push rod to enable the machinery to be equipped with either a bucket or a blade attachment.

Gradall introduced in the year 1992, with the introduction of the new XL Series hydraulics, the most innovative adjustment in their machinery ever since their invention. This new system of top-of-the-line hydraulics enabled the Gradall excavator to provide comparable power and high productivity to the more conventional excavators. The XL Series put an end to the original Gradall equipment power drawn from low pressure hydraulics and gear pumps. These traditional systems successfully handled finishing work and grading but had a hard time competing for high productivity tasks.

Gradall's new XL Series excavators showed more ability to lift and dig materials. With this series, the models were produced along with a piston pump, high-pressure system of hydraulics which showed noticeable improvement in boom and bucket breakout forces. The XL Series hydraulics system was also developed together with a load-sensing capability. Conventional excavators make use of an operator in order to choose a working-mode; where the Gradall system could automatically adjust the hydraulic power for the job at hand. This makes the operator's general work easier and also conserves fuel simultaneously.

When their XL Series hydraulics came onto the market, Gradall was basically thrust into the highly competitive market of equipment meant to deal with demolition, pavement removal, excavating as well as other industrial jobs. Marketability was further enhanced with their telescoping boom due to its exclusive ability to better position attachments and to work in low overhead areas.