

## Gradall Forklift Part

Gradall Forklift Part - During the period when World War II created a shortage of workers, the famous Gradall excavator was established in the 1940s as the idea of two brothers Koop and Ray Ferwerda. The brothers faced the problems of a depleted labor force due to the war. As partners in their Cleveland, Inglewood construction business called Ferwerda-Werba-Ferwerda they lacked the existing laborers to be able to carry out the delicate tasks of finishing and grading on their interstate projects. The Ferwerda brothers opted to make a machine which will save their company by making the slope grading task less manual, easier and more efficient.

The very 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 back and forth. This enabled the fixed blade at the far end of the beams to push or pull the dirt. Soon improving the initial design, the brothers made a triangular boom to add more strength. What's more, 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 enable the machine to be outfitted with either a bucket or a blade attachment.

1992 marked a momentous year for Gradall with their introduction of XL Series hydraulics, the most remarkable change in the company's excavators ever since their invention. These top-of-the-line hydraulics systems allowed Gradall excavators to deliver high productivity and comparable power on a realistic level to conventional excavators. The XL Series ended the original Gradall equipment power drawn from gear pumps and low pressure hydraulics. These traditional systems effectively handled grading and finishing work but had a difficult time competing for high productivity jobs.

The new XL Series Gradall excavators proved a significant increase in their lifting and digging ability. These models were made along with a piston pump, high-pressure hydraulics system which showed great improvements in boom and bucket breakout forces. The XL Series hydraulics system was even developed together with a load-sensing capability. Traditional excavators utilize an operator to be able to pick a working-mode; where the Gradall system can automatically adjust the hydraulic power for the work at hand. This makes the operator's overall task easier and also conserves fuel at the same time.

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