

## Gradall Forklift Part

Gradall Forklift Part - Through the period when World War II created a shortage of laborers, the well-known Gradall excavator was established in the 1940s as the brainchild of two brothers Ray and Koop Ferwerda. The brothers faced the problems of a depleted workforce due to the war. As partners in their Cleveland, Ohio construction business called Ferwerda-Werba-Ferwerda they lacked the existing laborers to do the delicate work of grading and finishing on their interstate projects. The Ferwerda brothers chose to make a machine which will save their company by making the slope grading work 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 that was used to move the beams backward and forward. This allowed 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. Additionally, they added a tilt cylinder which let the boom rotate 45 degrees in either direction. A cylinder was placed at the back of the boom, powering a long push rod to allow the machinery to be outfitted with either a bucket or a blade attachment.

Gradall launched in the year 1992, with the introduction of the new XL Series hydraulics, the most ground-breaking adjustment in their machines since their invention. This new system of top-of-the-line hydraulics allowed the Gradall excavator to deliver high productivity and comparable power to the more traditional excavators. The XL Series put an end to the initial Gradall equipment power drawn from gear pumps and low pressure hydraulics. These conventional systems effectively handled finishing work and grading but had a difficult 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 produced with a piston pump, high-pressure system of hydraulics which showed distinct improvement in boom and bucket breakout forces. The XL Series hydraulics system was even developed together with a load-sensing capability. Traditional excavators make use of an operator to be able to pick a working-mode; where the Gradall system can automatically adjust the hydraulic power meant for the work at hand. This makes the operator's general job easier and also saves fuel simultaneously.

When their XL Series hydraulics became available, Gradall was basically thrust into the highly competitive market of machinery designed to deal with pavement removal, excavation, demolition and different industrial jobs. Marketability was further improved with their telescoping boom due to its exclusive ability to work in low overhead areas and to better position attachments.