

## Gradall Forklift Part

Gradall Forklift Parts - During the time when WWII created a scarcity of laborers, the well-known Gradall excavator was born in the 1940s as the creation of two brothers Koop and Ray Ferwerda. Partners in a Cleveland, Ohio construction company referred to as Ferwerda-Werba-Ferwerda, the brothers faced a huge predicament when so many men left the labor force and signed up in the military, depleting existing laborers for the delicate finishing work and grading on highway projects. The Ferwerda brothers decided to make a machine that will save their business by making the slope grading work less manual, easier and more efficient.

Their very first design prototype was a machine with two beams set on a rotating platform that was attached atop a used truck. A telescopic cylinder moved the beams back and forth that enabled the fixed blade at the end of the beams to pull or push dirt. Before long improving the first design, the brothers made a triangular boom in order to add more strength. Also, they added a tilt cylinder which let the boom turn 45 degrees in either direction. A cylinder was placed at the rear of the boom, powering a long push rod to enable the machine to be equipped with either a bucket or a blade attachment.

Gradall introduced in 1992, with the introduction of the new XL Series hydraulics, the most ground-breaking adjustment in their equipment since their creation. This new system of top-of-the-line hydraulics allowed the Gradall excavator to provide comparable power and high productivity 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.

The new XL Series Gradall excavators proved a significant increase in their lifting and digging ability. These versions were made together with a piston pump, high-pressure hydraulics system which showed immense improvements in boom and bucket breakout forces. The XL Series hydraulics system was even developed with a load-sensing capability. Traditional excavators use an operator in order to pick a working-mode; where the Gradall system could automatically adjust the hydraulic power intended for the task at hand. This makes the operator's general task easier and also saves fuel at the same time.

Once their XL Series hydraulics became available, Gradall was essentially thrust into the highly competitive market of machines meant to tackle excavation, demolition, pavement removal as well as various industrial work. Marketability was further enhanced with their telescoping boom due to its exclusive ability to better position attachments and to work in low overhead areas.