

## Gradall Forklift Parts

Gradall Forklift Parts - The Gradall excavator was the creation of two brothers Ray and Koop Ferwerda. The excavator was established in the 1940's through WWII, when there was a scarcity of workers. The brothers faced the problems of a depleted workforce due to the war. As partners in their Cleveland, Ohio construction company known as Ferwerda-Werba-Ferwerda they lacked the available workers to do the delicate work of grading and finishing on their highway projects. The Ferwerda brothers chose to build an equipment which would save their company by making the slope grading work 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 that was utilized to move the beams backward and forward. This allowed the fixed blade at the far end of the beams to push or pull the dirt. Soon improving the first design, the brothers built a triangular boom to be able to add more strength. Also, they added a tilt cylinder which let the boom turn 45 degrees in both directions. A cylinder was positioned at the back of the boom, powering a long push rod to enable the equipment 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 ground-breaking adjustment in their equipment since their invention. This new system of top-of-the-line hydraulics enabled the Gradall excavator to deliver comparable power and high productivity to the more conventional excavators. The XL Series put an end to the initial Gradall equipment power drawn from gear pumps and low pressure hydraulics. These traditional systems effectively handled grading and finishing work 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 together 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 even developed with a load-sensing capability. Conventional excavators make use of an operator to choose 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 work easier and even conserves fuel at the same time.

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 as well as other industrial tasks. Marketability was further improved with their telescoping boom because of its exclusive ability to work in low overhead areas and to better position attachments.