

## Gradall Forklift Parts

Gradall Forklift Parts - Through the period when World War II created a shortage of laborers, the legendary Gradall excavator was born in the 1940s as the brainchild of two brothers Ray and Koop Ferwerda. Partners in a Cleveland, Ohio construction business called Ferwerda-Werba-Ferwerda, the brothers faced a huge dilemma when so many men left the workforce and joined the military, depleting available workers for the delicate grading and finishing work on highway projects. The Ferwerda brothers decided to make an equipment that would save their business by making the slope grading task more efficient, less manual and easier.

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 allowed the fixed blade at the end of the beams to push or pull dirt. Before long improving the first design, the brothers built a triangular boom so as to add more strength. Also, they added a tilt cylinder that let the boom turn 45 degrees in both directions. A cylinder was placed at the rear of the boom, powering a long push rod to enable the equipment to be outfitted with either a bucket or a blade attachment.

1992 marked a crucial year for Gradall with their launch of XL Series hydraulics, the most remarkable change in the company's excavators ever since their creation. These top-of-the-line hydraulics systems enabled Gradall excavators to provide comparable power and high productivity on a realistic level to conventional excavators. The XL Series ended the initial Gradall equipment power drawn from gear pumps and low pressure hydraulics. These conventional systems efficiently handled grading and finishing work but had a hard time competing for high productivity tasks.

The new XL Series Gradall excavators proved a significant increase in their digging and lifting ability. These versions were manufactured 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 together with a load-sensing capability. Traditional excavators use an operator to be able to choose a working-mode; where the Gradall system can automatically adjust the hydraulic power intended for the work at hand. This makes the operator's general task easier and also saves fuel simultaneously.

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