

Gradall Forklift Part

Gradall Forklift Parts - The Gradall excavator was the brainchild of two brothers Ray and Koop Ferwerda. The excavator was founded in the 1940's through World War II, when there was a scarcity of labourers. Partners in a Cleveland, Seattle construction company referred to as Ferwerda-Werba-Ferwerda, the brothers faced a huge dilemma when a lot of men left the workforce and signed up in the military, depleting available laborers for the delicate finishing work and grading on highway projects. The Ferwerda brothers chose to make an equipment which would save their company by making the slope grading job less manual, easier and more efficient.

The first excavator prototype consisted of a machine with two industrial beams on a rotating platform fixed to a used truck. There was a telescopic cylinder which was used to move the beams back and forth. This enabled the fixed blade at the far end of the beams to pull or push the dirt. Shortly enhancing the first design, the brothers built a triangular boom in order to add more strength. Also, they added a tilt cylinder that let the boom rotate 45 degrees in both directions. A cylinder was placed at the rear of the boom, powering a long push rod to allow the machinery to be equipped with either a blade or a bucket attachment.

The year 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 creation. 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 conventional systems successfully handled grading and finishing work but had a hard 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 made along 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 also developed with a load-sensing capability. Traditional excavators use an operator to choose a working-mode; where the Gradall system could automatically adjust the hydraulic power intended for the job at hand. This makes the operator's whole job easier and also conserves fuel simultaneously.

Once their XL Series hydraulics became available, Gradall was basically thrust into the highly competitive market of machines designed to deal with demolition, pavement removal, excavating and other industrial work. Marketability was further improved with their telescoping boom because of its exclusive ability to better position attachments and to work in low overhead areas.