

## Gradall Forklift Part

Gradall Forklift Parts - The Gradall excavator was the brainchild of two brothers Ray and Koop Ferwerda. The excavator was established in the 1940's through World War II, when there was a shortage of labourers. Partners in a Cleveland, Ohio construction business referred to as Ferwerda-Werba-Ferwerda, the brothers faced a huge dilemma when a lot of men left the labor force and signed up in the military, depleting existing workers for the delicate grading and finishing work on highway projects. The Ferwerda brothers decided to build an equipment that would save their business by making the slope grading work easier, more efficient and less manual.

The very 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 backward and forward. This enabled the fixed blade at the far end of the beams to push or pull the dirt. Soon enhancing the very first design, the brothers made a triangular boom to add more strength. Additionally, they added a tilt cylinder that let the boom turn 45 degrees in both directions. A cylinder was positioned 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.

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

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 noticeable improvement in boom and bucket breakout forces. The XL Series hydraulics system was also developed with a load-sensing capability. Conventional excavators make use of an operator so as to select a working-mode; where the Gradall system could automatically adjust the hydraulic power for the work at hand. This makes the operator's overall task easier and even saves fuel at the same time.

As soon as the new XL Series hydraulics became available in the market, Gradall was thrust into the vastly competitive industrial machinery market which are designed to tackle excavating, demolition, pavement removal as well as several industrial tasks. The introduction of the new telescoping boom helped to further enhance the excavator's marketability. The telescoping boom gives the excavator the ability to better position attachments and to work in low overhead areas.