## **Gradall Forklift Parts**

Gradall Forklift Parts - During 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. The brothers faced the problems of a depleted workforce because of the war. As partners in their Cleveland, Gilbert construction business called Ferwerda-Werba-Ferwerda they lacked the existing workers so as to do the delicate job of grading and finishing on their interstate projects. The Ferwerda brothers decided to make a machine which would save their company by making the slope grading task less manual, easier and more efficient.

Their very first design prototype was a device with two beams set on a rotating platform that was affixed 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 push or pull dirt. Soon improving the first design, the brothers made a triangular boom to add more strength. What's more, they added a tilt cylinder that let the boom rotate 45 degrees in both directions. A cylinder was positioned at the back of the boom, powering a long push rod to allow the machine to be outfitted with either a blade or a bucket attachment.

The year 1992 marked a significant 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 comparable power and high productivity 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 efficiently 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 made with a piston pump, high-pressure system of hydraulics that showed noticeable improvement in boom and bucket breakout forces. The XL Series hydraulics system was even developed together with a load-sensing capability. Conventional excavators utilize an operator to select a working-mode; where the Gradall system can automatically adjust the hydraulic power for the task at hand. This makes the operator's general task easier and also saves fuel simultaneously.

When the new XL Series hydraulics reached the market, Gradall was thrust into the vastly competitive industrial machinery market which are designed to deal with demolition, pavement removal, excavating and other industrial jobs. The introduction of the new telescoping boom helped to further improve the excavator's marketability. The telescoping boom gives the excavator the ability to work in low overhead areas and to better position attachments.