## **Gradall Forklift Parts**

Gradall Forklift Parts - The Gradall excavator was the brainchild of two brothers Ray and Koop Ferwerda. The excavator was created In the 1940's through World War II, when there was a shortage of labourers. The brothers faced the problems of a depleted workforce because of the war. As partners in their Cleveland, Ohio construction business called Ferwerda-Werba-Ferwerda they lacked the existing laborers so as to carry out the delicate work of grading and finishing on their highway projects. The Ferwerda brothers chose to build a machine that would save their business by making the slope grading task more efficient, less manual and easier.

Their very first design model was a machine with two beams set on a rotating platform which was attached atop a second-hand truck. A telescopic cylinder moved the beams back and forth which allowed the fixed blade at the end of the beams to pull or push dirt. Soon improving the first design, the brothers built a triangular boom to be able to add more strength. Moreover, they added a tilt cylinder which let the boom rotate 45 degrees in both directions. A cylinder was placed at the back of the boom, powering a long push rod to enable the machine to be equipped with either a bucket or a blade attachment.

Gradall introduced in 1992, with the introduction of the new XL Series hydraulics, the most innovative adjustment in their machines ever since their invention. This new system of top-of-the-line hydraulics allowed the Gradall excavator to provide high productivity and comparable power to the more conventional excavators. The XL Series put an end to the first Gradall equipment power drawn from low pressure hydraulics and gear pumps. These traditional systems effectively handled grading and finishing work but had a difficult time competing for high productivity work.

Gradall's new XL Series excavators showed more ability to dig and lift materials. With this series, the models were produced with a piston pump, high-pressure system of hydraulics which showed marked improvement in boom and bucket breakout forces. The XL Series hydraulics system was even developed together with a load-sensing capability. Conventional excavators use an operator to choose a working-mode; where the Gradall system can automatically adjust the hydraulic power for the work at hand. This makes the operator's overall task easier and even conserves fuel simultaneously.

When their XL Series hydraulics became available, Gradall was basically thrust into the highly competitive market of machines meant to tackle demolition, pavement removal, excavating and different industrial tasks. Marketability was further enhanced with their telescoping boom due to its exclusive ability to better position attachments and to work in low overhead areas.