## **Gradall Forklift Parts**

Gradall Forklift Part - Throughout the period when WWII caused a scarcity of workers, the well-known Gradall excavator was founded in the 1940s as the brainchild of two brothers Koop and Ray Ferwerda. The brothers faced the problems of a depleted labor force due to the war. As partners in their Cleveland, Midland construction company called Ferwerda-Werba-Ferwerda they lacked the available workers to perform the delicate job of grading and finishing on their freeway projects. The Ferwerda brothers decided to build a machine which would save their company by making the slope grading work more efficient, less manual and easier.

Their initial design prototype was a device with two beams set on a rotating platform which was affixed atop a second-hand truck. A telescopic cylinder moved the beams back and forth which enabled the fixed blade at the end of the beams to pull or push dirt. Before long improving the very first design, the brothers built a triangular boom to add more strength. Additionally, they added a tilt cylinder which let the boom turn 45 degrees in either direction. A cylinder was placed at the back of the boom, powering a long push rod to enable the machinery to be outfitted with either a bucket or a blade attachment.

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 enabled Gradall excavators to deliver comparable power and high productivity on a realistic level to traditional excavators. The XL Series ended the first Gradall equipment power drawn from gear pumps and low pressure hydraulics. These conventional systems successfully handled grading and finishing work but had a difficult time competing for high productivity tasks.

The new XL Series Gradall excavators proved a significant increase in their digging and lifting ability. These models were made together with a piston pump, high-pressure hydraulics system which showed immense improvements in boom and bucket breakout forces. The XL Series hydraulics system was also developed together with a load-sensing capability. Traditional excavators use an operator in order to choose a working-mode; where the Gradall system could automatically adjust the hydraulic power meant for the job at hand. This makes the operator's general job easier and likewise conserves fuel simultaneously.

Once their XL Series hydraulics became available, Gradall was essentially thrust into the highly competitive market of machines meant to deal with excavation, demolition, pavement removal and several industrial jobs. Marketability was further enhanced with their telescoping boom because of its exclusive ability to work in low overhead areas and to better position attachments.