## **Gradall Forklift Part**

Gradall Forklift Part - The Gradall excavator was the brainchild of two brothers Koop and ray Ferwerda. The excavator was founded In the 1940's through WWII, when there was a scarcity of workers. The brothers faced the problems of a depleted workforce due to the war. As partners in their Cleveland, Bakersfield construction company known as Ferwerda-Werba-Ferwerda they lacked the existing laborers in order to perform the delicate job of grading and finishing on their interstate projects. The Ferwerda brothers chose to build a machine that will save their business by making the slope grading task less manual, easier and more efficient.

The very first excavator prototype consisted of a device with two industrial beams on a rotating platform fixed to a used truck. There was a telescopic cylinder that 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 so as to add more strength. Additionally, they added a tilt cylinder that let the boom turn 45 degrees in both directions. A cylinder was placed at the rear of the boom, powering a long push rod to allow the equipment to be outfitted with either a bucket or a blade attachment.

1992 marked a significant year for Gradall with their introduction of XL Series hydraulics, the most amazing change in the company's excavators ever since their invention. These top-of-the-line hydraulics systems enabled Gradall excavators to deliver comparable power and high productivity on a realistic level to conventional excavators. The XL Series ended the initial Gradall equipment power drawn from gear pumps and low pressure hydraulics. These traditional systems successfully handled finishing work and grading but had a difficult time competing for high productivity jobs.

Gradall's new XL Series excavators showed more ability to dig and lift materials. With this series, the models were produced 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 even developed along with a load-sensing capability. Traditional excavators utilize an operator to choose a working-mode; where the Gradall system could automatically adjust the hydraulic power for the task at hand. This makes the operator's general task easier and also conserves fuel at the same time.

Once the new XL Series hydraulics became available in the market, Gradall was thrust into the very competitive industrial machine market which are meant to deal with excavating, demolition, pavement removal as well as different 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.