

## Gradall Forklift Parts

Gradall Forklift Part - The Gradall excavator was the idea of two brothers Koop and ray Ferwerda. The excavator was created in the 1940's during WWII, when there was a shortage of labourers. The brothers faced the problems of a depleted labor force due to the war. As partners in their Cleveland, Killeen construction company known as Ferwerda-Werba-Ferwerda they lacked the existing workers in order to do the delicate tasks of finishing and grading on their highway projects. The Ferwerda brothers opted to make an equipment that will save their company by making the slope grading work less manual, easier and more efficient.

Their initial design prototype was a device with two beams set on a rotating platform that was attached atop a second-hand truck. A telescopic cylinder moved the beams back and forth that allowed the fixed blade at the end of the beams to push or pull dirt. Shortly enhancing the first design, the brothers made a triangular boom so as to add more strength. As well, 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.

The year 1992 marked a momentous year for Gradall with their introduction of XL Series hydraulics, the most dramatic change in the company's excavators 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 put an end to 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 hard time competing for high productivity jobs.

The new XL Series Gradall excavators proved a significant increase in their digging and lifting ability. These models were manufactured 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 along with a load-sensing capability. Conventional excavators use an operator in order to pick a working-mode; where the Gradall system could automatically adjust the hydraulic power for the task at hand. This makes the operator's whole work easier and likewise conserves fuel at the same time.

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