

Gradall Forklift Parts

The Gradall excavator was the creation of two brothers Koop and ray Ferwerda. The excavator was established In the 1940's during WWII, when there was a shortage of workers. The brothers faced the problems of a depleted labor force because of the war. As partners in their Cleveland, Ohio construction business known as Ferwerda-Werba-Ferwerda they lacked the existing laborers to do 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 work easier, more efficient and less manual.

Their initial design model was a machine with two beams set on a rotating platform that was attached on top of a second-hand truck. A telescopic cylinder moved the beams forward and backward that enabled the fixed blade at the end of the beams to push or pull dirt. Shortly enhancing the initial design, the brothers made a triangular boom so as to add more strength. In addition, they added a tilt cylinder which let the boom turn 45 degrees in both directions. A cylinder was positioned at the back of the boom, powering a long push rod to enable the machinery to be outfitted with either a blade or a bucket attachment.

Gradall launched in 1992, with the introduction of the new XL Series hydraulics, the most ground-breaking adjustment in their machines ever since their creation. This new system of top-of-the-line hydraulics allowed the Gradall excavator to deliver comparable power and high productivity to the more traditional excavators. The XL Series ended the original 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 jobs.

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 great improvements in boom and bucket breakout forces. The XL Series hydraulics system was even developed together with a load-sensing capability. Traditional excavators make use of an operator to be able to pick a working-mode; where the Gradall system can automatically adjust the hydraulic power intended for the task at hand. This makes the operator's general task easier and also 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 excavation, demolition, pavement removal as well as other 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.