



Date: 8/06

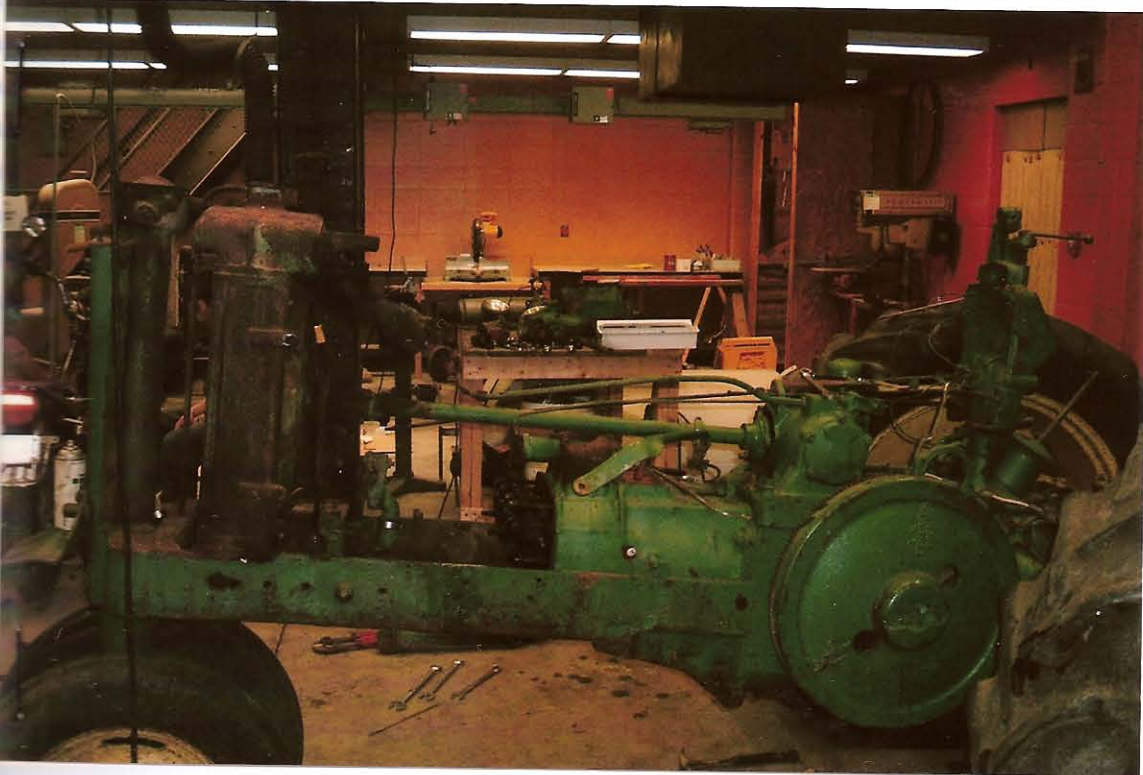
## Engine

The engine did not run, and after disassembly, we realized was totally shot. The original block was cracked the entire length of the block on the bottom side of one of the cylinders. Another block was located at Dennis Polk Equipment from New Paris Indiana and was machined by Woody's Machine Shop in Thorntown Indiana. The block that we acquired, which was the only block for that tractor that Polk's had at that time, was bored to 0.045' over with some pretty severe surface rust. It turned out that it had to be bored to 0.125" over to clean up and some new pistons were acquired from Polk's. Woody's machine also ground the valves and seats and surfaced the head, as well as checking the crankshaft for round. The engine was reassembled with now main bearings, all new gaskets from Jackson-Lee-Pearson John Deere in Frankfort, Indiana, and the new pistons and rings from Polk's. The camshaft and camshaft bearings as well as the governor system all checked out and needed no major repairs. The Manifold was abrasive blasted and coated with high temperature paint and the mounting studs were replaced. All of the engine work was done ourselves except for the machine work that was done by Woody's machine. We would like to give a special thanks to all three businesses that helped us with the engine. Jackson-Lee-Pearson supplied all parts that we acquired through them at cost. Dennis Polk and Associates gave us a 20% discount on all parts, and Woody's machine gave us a 25% discount on labor. We would also like to thank Buis oil of Noblesville, IN for giving us a discount on the Chevron SAE 30 oil that was used in the tractor. The biggest challenge of the engine was the shimming of the rod and main bearings and getting everything timed to specifications.

Pictures and descriptions on following pages.



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Pictures one and two engine before disassembly.

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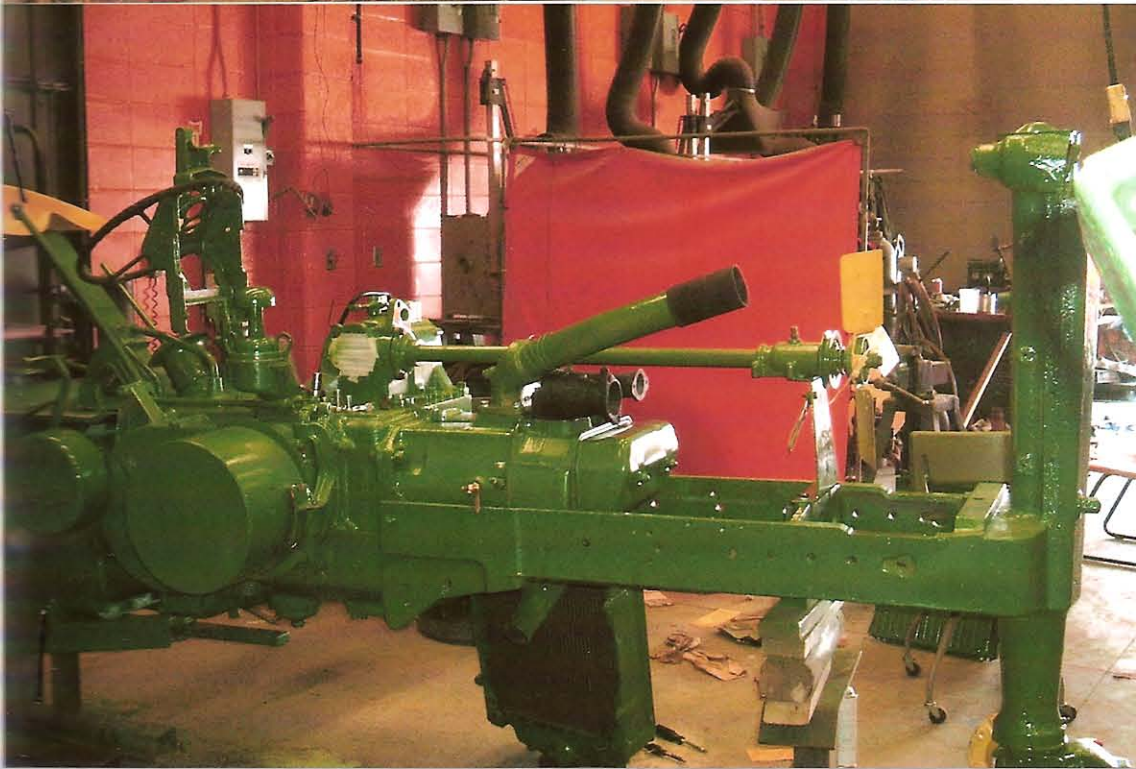


Picture three is engine after crankshaft installation before block installation and picture four is the installation of the bottom radiator hose mounting.

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Picture five is the installation of the valve cover and picture six is the finished engine.