

Crescent Machine Company Jointer manufactured about 1918

by Scott Crosby

As well as I can determine, the Crescent Machine Company, of Leetonia, Ohio, manufactured this four-inch jointer from about 1908 to 1939.



Based on the patent dates on the blade drum, I believe this particular jointer was made about 1918. In any case, this jointer is approximately one hundred years old.



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The jointer's power source is a Dumore motor, manufactured by the Wisconsin Electric Company. The Wisconsin Electric Company operated from 1913 to 1929 (then changing its name to The Dumore Company), reinforcing the age of the jointer as being produced in that time period.

I have owned this jointer and its motor for more than forty-five years. They are still in active use.

In March of 2024, I decided to overhaul the jointer. The main issue was that the blades had acquired a couple of nicks at some point, and needed replacing. I also knew the jointer had not been cleaned since quite a few years before it had come into my possession – if ever. Given its age, there had been at least several prior owners: at least one since World War II, and at least one other prior to the war.

There were no blades available, of course, but a local machining company, **Crawford's Saw & Tool**, of Greer, South Carolina, was able to locate a company willing to custom-manufacture new 4-inch blades. That company made them in sets of three, so I ordered two sets, giving me the set I installed on the jointer, plus two spare sets of blades.

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The new blades were half the thickness of the originals. The blades and spacers fit in grooves in the jointer's roller, of course, so I had to make up appropriate-width spacers to install with the new blades.

The overhaul began with the removal of the jointer from its base, which it shares with the motor.



I had no instructions or parts descriptions to guide my efforts, so I took lots of detailed photos at every step, showing how pieces had been arranged prior to disassembly. I also placed each separate set of parts in a separate tray, to help relate the appropriate parts to each step of reassembly.

One of the first discoveries was how the motor's shaft was connected to the jointer.

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A hub with two studs is attached to the motor's shaft. A similar hub is attached to the barrel's shaft on the jointer.

At the junction of the two hubs is a rubber / plastic disc, which acts as a shock absorber to allow the whole assembly to endure the sudden changes of speed which can be expected in normal use.

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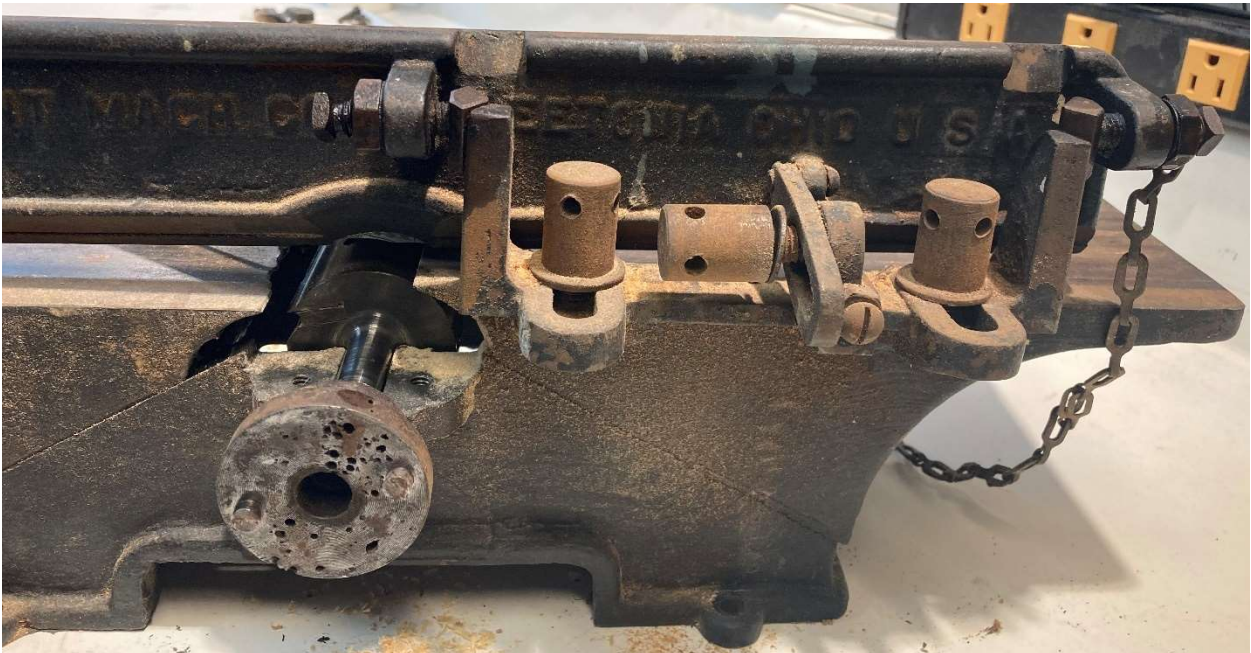


The old rubber disk was naturally quite worn, so I had a Neoprene disk made up with the same dimensions by another local company, **Dixie Rubber & Plastics**, of Greenville, SC. Given the costs, it made more sense to have two produced, to keep a spare on hand.

Crescent Machine Company Joints
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The old and new shock-absorbers for the motor-jointer connection.



This photo shows the jointer's motor-connection disk, with its two studs.
It also shows the arrangement of parts, which would prove invaluable in later reassembly

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The underside of the jointer, after removal from its baseplate.



Disassembled except for the two slides, with most residue removed

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Decades of residue, after full disassembly and prior to a full cleaning.

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Fully cleaned up and reassembled, with the new shock-absorbing grommet in place.

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Ready-to-run!

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