

Piper J-4 Master Cylinder Information

The J-4, unlike most other early Piper models, did not use the Scott Master cylinder. It used a Wagner automotive style master cylinder. This master cylinder was used on the 1936 Dodge. In past years we have not been able to supply our customer with any information or with any parts for this cylinder. A few months ago I was contacted by a customer, Richard Wagner of Pt. Townsend, WA, who needed to overhaul one of these. After telling him we didn't have anything, he took the part to his local NAPA part store and found out they did have a rebuild kit that had the necessary seals. The kit is a MK-1 or Kit #1. Mr. Wagner installed the parts but found out that his master cylinder was still not operational. He took the parts to a local auto parts and machine shop, Hagen's in Puyallup, WA. Below is what Mr. Hagen informed Mr. Wagner:

Mr. Hagen found the seals swollen because they were not compatible with 5606 aviation hydraulic fluid. They are only compatible with D.O.T. 4 automotive type brake fluid. (Caution, post war Goodrich expander tubes and other "rubber" items are not compatible with D.O.T. 4 brake fluid.) However, our customer is using the Grove Brake conversion which will work with either style of brake fluid. Besides honing and cleaning out the reservoir, he discovered that there was an incorrect piston in this master cylinder. In the '30s, Wagner built an automotive and a truck version of this master cylinder. The pistons look exactly alike, but the difference is the stroke of the piston as determined by the push rod attached to it. The correct piston push rod will have a depth of 1.376". The truck style will have a depth of 1.950".

For future reference, Mr. Hagen may be contacted at:

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Mike Sellers

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