

Technical Notes

Model A Machining & Major Parts Tips

By Lynn Sondenaa

This is my personal opinion on Model A machining. It is not a reflection of the club, or the editor, just my opinion! First, when you choose a machine shop be sure they are familiar with the Model A. If you walk in the front door and they ask, "What is that part"? That is a red flag notice they just gave you, leave! Also ask how many parts **exactly** like this one have they machined. If this is their first part leave!

I will share a couple of stories with you. There was a Model A member who took his engine to a local machine shop to have valve work done on it. The machine shop specialized in building new car engines. They machined the valve guides and put in bronze valve inserts. These work fine on modern engines that have aluminum heads and high pressure oil systems, but on a cast iron engine that use the splash & drip oil system they will seize due to the lack of lubrication. It took about 2000 miles and the bronze inserts let go and glued themselves to the valves, spelling disaster for the Model A block. My second story is taken from a club way east of here. Two members put the modern main bearing bolts in their engines with the neoprene washers. The neoprene fatigues with time and heat. Now do you see where this going? Loose main bearing caps are not good, it causes Babbitt to fly. The second person loosened his caps after 5000 miles to check bearing clearances not realizing that the neoprene washers can only be torqued once, and then new washers need to be used. His came loose and tore up the main bearings.

Here are some businesses that I use for Model A machining. I feel they are honest, reliable, accurate and fast in their work. Most are close to the Portland, Vancouver area.

If you need a machine shop to hot tank the block, bore the cylinders, deck the surfaces and do the valve grinding. I used Rick New, who has been a machinist for years and comes with an excellent reputation.

Sandy Machine, Rick New, 36600 Hauglum Road, Sandy, Oregon 97055
503-668-9614

Crankshaft regrinding is cheaper than replacing the crankshaft. I use an outfit in Portland which does work for Frank Schurman and Tom Godish. It only cost about \$90 to regrind a crankshaft. It should be noted that the crankshaft should only be reground to .030 undersize. There is a famous engine rebuilder in southern California that regrinds their crankshafts to .040. A High Desert club member had their crankshaft break at the center main bearing while on tour. His engine was from Southern California.

Crank City Inc., 1109 SE Brooklyn Street, Portland, Oregon 97202
503-231-1936

Now maybe you would like to have your crankshaft and flywheel balanced and counter weighted. I had mine machined by PER.

Portland Engine Builders (PER), 1001 SE Hawthorne, Portland, Oregon
503-230-1276

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Camshaft can be repaired and reground at:

Oregon Cam Grinding, 5913 NE 127th Ave., Vancouver, Washington
360-256-7985

If you need your flywheel and pressure plate resurfaced and rebuild this is a company that does work for most of the Western United States model A parts venders. They will also reshoe brakes and arc them to your drums.

Automotive Friction Company, 20521 SE Hwy 212, Damascus, Oregon 97089
503-855-3670

To have the babbit poured on the main bearings, rod bearings, and fitting them to the crankshaft and rods I use Bill Barlow of the High Desert A's in Bend, Oregon. Part of the money goes to the club as a fund raiser.

Bill Barlow, 20378 Pine Vista Drive, Bend, Oregon 97702-9445
541-389-2694

This is a name of another machinist and engine assembly person that Bill Barlow recommends.

Mike Stenkamp, Bend, Oregon
541-382-1739

I also discovered the process used by H&H to seal their engines. This process is easy to do at home. It is called Irontite water jacket sealant process that seals cracks in the Model A block and radiator. It is designed primarily for the block. It is available in Portland at Jobbers Service 503-423-3384. It is a three part process. Irontite Thoro flush #468-9110-16, All weather seal #468-9130-16, Ceramic motor seal #468-9120-16.

Irontite by Kwik-Way Inc., 9860 Baldwin Pl., El Monte, California 91731
1-800-423-3384

Model A glass is available from the nation's largest maker of glass kits for A's. They sell to Mac's and Snyder's. It can be purchased direct saving on the cost plus the shipping.

Peninsula Glass Company, 6005 NE 121st Avenue, Vancouver, WA 98682
360-892-2029 extension 203 (Joe Kemp)

Model A radiators can be repaired or have a new core put in them by:

Harts Radiator, 501 Grade Street, Kelso, Washington 98626
360-425-6220

Model A bearings can be purchased locally. It is best to take the bearing so they can match it or have the manufacture and their part number.

McGuire Bearing Company, 947 SE Market Street, Portland, Oregon 97214
503-238-1570