

Technical Notes

Model A Additives for Fuel, Oil, & Water

By Lynn Sondenaa

I have had many people ask me about what additives I use in my Model A and why I use them. First let me lay down the ground rules for this article. This is my opinion, and I am not trying to sell you these products. The club is neutral on this. You need to make your own intelligent decision on their usage.

Ethanol gasoline does not have lead in it, so it must be replaced somehow to lubricate the valve train. I use Marvel Mystery Oil in the gasoline. There are lead additives available, but they are a carcinogenic (which can cause cancer).

A quick work about motor oil, the EPA banned the additive ZDDP in motor oil. They did that because the zinc and phosphorus are harmful to the catalytic converters. It causes them to fail. A common myth is that diesel motor oils like Chevron Delo 400 and Shell Rotella T have ZDDP in them. That is false; they do not have the ZDDP additive, because the oil could be used in passenger cars and pickups that have diesel engines. However most racing oils have ZDDP in them. You just need to read the label for contents. The following list covers fuel additives, radiator additives, oil additives, grease & oils, and some miscellaneous items.

Fuel Additives

Marvel Mystery Oil

- Add 4 ounces to 10 gallons of gasoline
- It lubricates the valves and valve guides
- It lubricates the fuel shut off valve
- It lubricates the carburetor float valve

STA-BIL

- Keeps fuel fresh, prevents gum & varnish
- Prevents corrosion from moisture
- Prevents ethanol-induced water attraction
- Use when not driving the Model A for a month or longer period
- Add 4 ounces to 10 gallons of gasoline

Sea Foam

- Same as STA-BIL
- It also acts as a cleaner

Radiator Additives

Water Wetter

- Reduces engine temperature

- Should be used with antifreeze
- Provides lubrication
- Add 12 ounces to 3 gallons of water

Hy-per Lube

- Reduces engine temperature
- Provides corrosion protection
- Add 16 ounces to 3 gallons of water

Ironite Thoro-flush

- Cleans engine and radiator
- Loosens and helps to remove rust, oil, grease and sludge
- Cleans radiator hoses
- This is a cleaner, not an additive
- Fill, run, flush, re-flush, refill

Ironite ceramic motor seal

- Seals leaking head gaskets
- Seals small cracks in cylinder head
- Seals small cracks in engine block
- Helps to stop coolant leaks
- Fill, run, drain, dry for 12 hours, refill

Antifreeze

- Provides corrosion protection
- Heat transfer protection
- Freeze protection
- Lubricates water-pump (not all brands of antifreeze do this)
- It has been tested and proven that it does not eat away babbitt in bearings

Oils & Additives

Royal Purple Synthetic Oil HPS

- Has zinc & phosphorus (ZDDP)
- Has anti-wear additives

Lucas engine break-in oil

- Has zinc & phosphorus (ZDDP)
- Add 16 ounces to 4 $\frac{1}{2}$ quarts of motor oil

Hy-Per Lube Zinc replacement

- Does not contain zinc or phosphorus (has modern replacement chemicals)
- Add 12 ounces to 4 $\frac{1}{2}$ quarts of motor oil

ZDDP Plus

- Adds zinc and phosphorus to oil

A Note on Engine Motor Oils

- HD (high detergent) helps to stop the build-up of harmful engine sludge & deposits
- It reduces varnish formation
- SAE multi-grade motor oils (10-30) could cause rear main bearing leaks to worsen

Grease & Oils for Component Parts

Royal Purple Synthetic assembly lube

- Prevents metal to metal contact
- Use on main bearings and rod bearings during assembly
- Use on camshaft & valve train during assembly
- Use to lubricate distributor bushings
- Use on steering bushings

Sta-lube engine assembly lube

- A high pressure, high heat lubrication
- Use on brake parts
- Use to lubricate speedometer cable
- Use on distributor cam

Dielectric grease

- Use on all electrical contacts
- Keeps moisture out
- Prevents corrosion
- Lubricates moving parts in the light switch body
- Lubricates the coil boots (spark plug boots if using them)

Lubriplate

- A white grease
- Use on door dovetails

Aladdin Magic Lube

- Water proof grease
- Use on neoprene & O rings
- Lubricate zippers either metal or plastic
- Lubricate snaps on open car tops

Misc. Items

Plastic-Kote black lacquer paint

- Resistant to gasoline
- Use to paint cast-iron sediment bowl
- Use to paint carburetor
- Use to paint engine splash pans

3-M black super weather strip & gasket adhesive

- Use to attach rubber to metal
- Use to attach weather stripping to wood or metal

3-M plastic & emblem adhesive

- Use to glue radiator shell emblem

3-M clear auto sealer

- An invisible seal
- Use to stop leaks after car has been painted
- Use on body seams
- Use on rain gutter seams
- Use on windshield seams

Leak Lock

- Used to stop fuel leaks at fittings

Muffler & tailpipe sealer by Permatex

- Use around the tailpipe clamp to stop metal to metal vibration

Battery protector & sealer

- Seals terminals
- Prevents corrosion
- Cuts current loss

Battery anti-corrosion washers

- Prevents terminal corrosion

Belt dressing

- Helps to prevent dry rot and cracking
- Quiets noise and squeaks on belts