

JIM KIMBALL ENTERPRISES, INC.

M14P CLEAN KIT SYSTEM OPERATION

This guide is for aircraft equipped with the JKE Clean Kit on an M14P engine. Systems are available for Yaks, Sukhois, etc. If you have a Pitts Model 12, please refer to the Pitts Model 12 Owners Manual document specifically for Model 12 operations.

Engine Starting:

A pre-start procedure is required for the M14P is much like that used on all radial engine aircraft. Follow these steps to ensure the best engine care.

1. Master and Mags are off.
2. Open intake drain if not open. It should still be open from storage with a can hanging on it.
3. Pull the prop thru a min of 6 revolutions, that's 18 blades for a 3 blade prop 12 blades for a 2 blader. This is to check of the presence of oil in the lower cylinders that could damage the engine during start up. Do not be alarmed if oil is observed dripping from the exhaust or the intake drain, this is normal. If there is enough oil in a cylinder to cause damage, the crank will not pull thru complete revolutions. If this occurs, remove the lower spark plugs and drain the oil from the cylinder. If the JKE clean kit is properly used, no hydraulic lock should be experienced.
4. Close intake drain valve.
5. Priming. Use the standard priming procedure you have been using for your airplane.
6. Starting. **Open engine oil shut off (Push forward). The starter will not work with the oil valve in the off position.** Start as normal for your airplane.
7. Run up and Warm Up. Pull prop to full course or low rpm. Advance throttle to 1500 to 1800 rpm and hold while oil temp rises. When the oil temp reaches the bottom of the green, reduce throttle, and increase rpm. Perform standard mag and prop cycle checks at 2000 rpm.
8. GO FLY!!!! Flip the Compressor Unload switch up after air pressure returns to 850PSI or higher. Flip switch down at shut down. This diverts the air from the compressor thru a line overboard keeping the oily goop out of the air system.

Engine Shut Down:

1. After landing and taxiing in, run the engine at 1200 RPM for a minute or so. Prop to full forward if not already there. Kill engine with the mag switch to off position.
2. Close or pull out the oil shut off valve cable T Handle such that it is fully extended and twist it to lock it in place. This shuts the oil valve blocking oil flow from the tank to the engine.
3. With master switch on, flip the oil scavenge switch up and allow the pump to run until it starts to skip, about 1 to 2 minutes. Then turn scavenge pump off and master off.
4. Check all switches off and that's it!!
5. Open intake drain just forward of Right Exhaust stack and leave it open to drain into a small bean can while the airplane sits.

Storage:

For storage after and between flights, place the exhaust cans on the tail pipes as well as the small can on the intake drain, open the drain first. Also, place a soda can on the vent pipe at the tail.