

# Oil control ring solvent flush

*In a clean 5 gallon pail, add:*

*1 gallon Varsol (mineral spirits)*

*2 quarts MEK OR 1 quart MEK Substitute - ethyl acetate*

*2 quarts Xylene (paint store)*

*2 quarts Aeroshell W100*

1. Drain oil and do not replace drain plug. Remove Quick Drain or re o-ring when procedure is complete.
2. Place clean 5 gallon bucket to catch solvent out of oil drain.
3. Remove top plugs
4. Choose first cylinder and turn prop until piston is past Bottom Dead Center (BDC) and coming onto the compression stroke.
5. Pour 1 pint of flush into top spark hole of first cylinder.
6. Replace top plug in first cylinder and lightly tighten.
7. Rotate prop in the normal direction until feeling hydraulic lock.
8. Slowly continue turning prop (steady large force) to force liquid past piston rings and thru piston ring groove holes.
9. IF you can hear liquid squirting into the crankcase the ring is clear. If prop is difficult to turn and you do not hear squirting sound repeat steps 4-8 with additional solvent. You may need to do this 3-4 times.  
YOU WILL BE ABLE TO HEAR AND FEEL WHEN THE RING IS CLEAR

10. **If** the ring is clear and you will not run any more solvent thru this cylinder, stop turning the prop at with the piston at approximately TDC. Turn the prop backwards about 15 -20 degrees.
11. Remove bottom plug and pack area with rags to catch remaining flush in first cylinder.
12. Rock prop  $\pm$  10-20 degrees of TDC thru several times to expel remaining flush out of the plug holes. ROCKING THE PROP BACK AND FORTH AROUND TDC WITH THE PLUGS OUT WILL EMPTY THE CYLINER AND MAKE MUCH LESS OF A MESS.
13. Repeat steps 4-12 for remaining cylinders to be flushed.
14. Remove (open) inlets and outlets of turbo(s) to ensure removal of all solvent.
15. Replace all plugs, replace oil drain plug, change filter and refill with oil and one pint of Camguard.

NOTES:

**Caution: Solvents may soften o-rings in quick drains.**

Edward Kollin  
Technical Director  
Aircraft Specialties Lubricants  
[ebkollin@comcast.net](mailto:ebkollin@comcast.net)