TN20000
REV A, JUN-30-2014
INSTRUCTION – PRESERVATION KIT

Record of Revisions
When updated, this document is changed in its entirety

REV	DATE	DESCRIPTION	BY	APPROVAL
A	JUN-30-2014	Initial release of TN instruction	GDO	Digitally signed by Doug Evink DN: cn=Doug Evink, o=Tanis Aircraft Products, ou=Tanis Aircraft Products, email=Doug@tanisaircraft.com, c=US

General Overview:
This preservation (pickling) kit is designed to make it simpler and more convenient to take the steps required to prevent possible damage from engine inactivity. The kit contents are based on recommendations from engine manufacturers. Follow their service letters/bulletins for engine preservation. This kit uses MIL-C-6529C Type I concentrate that is mixed with mineral oil to produce oil that conforms to MIL-C-6529C Type II.

Kit Contents and Material Descriptions:

TU20000-4 (PKL-4)
- 4 desiccant plugs
- 3 Tyvek desiccant bags
- One 8 oz bottle w/sprayer of MIL-P-46002
- ½ gallon of MIL-C-6529C Type I concentrate
- Red streamers
- Duck tape
- Label for engine
- Documentation

TU20000-6 (PKL-6)
- 6 desiccant plugs
- 3 Tyvek desiccant bags
- One 12 oz bottle w/sprayer of MIL-P-46002
- 1 gallon of MIL-C-6529C Type I concentrate
- Red streamers
- Duck tape
- Label for engine
- Documentation

WARNINGS:

FOLLOW YOUR ENGINE MANUFACTURER'S SERVICE LETTERS AND BULLETINS. (CONTINENTAL, SIL99-1 AND LYCOMING, SL - L180B ARE INCLUDED WITH DOCUMENTATION.)

BEFORE HAND MOVING THE PROPELLER, READ AND FOLLOW ALL SAFETY RECOMMENDATIONS/PRECAUTIONS FROM YOUR AIRCRAFT AND ENGINE MANUFACTURE.

THE INCLUDED INSTRUCTIONS ARE GUIDELINES ONLY. THEY ARE NOT INTENDED TO REPLACE THE ENGINE MANUFACTURER'S SERVICE LETTERS AND BULLETINS.

Installation:

1. Drain oil from engine.
2. Mix preservative and aircraft mineral oil in a 1 to 3 ratio by volume.
   One "MIL-C-6529C Type 1" concentrated preservative compound (included in kit) added to three parts by volume of MIL-L-6082C (SAE J1966), Grade 1100, mineral aircraft engine oil. (Example: 1 quart of preservative added to 3 quarts of mineral oil makes 4 quarts of mixture.)
3. Fill engine with mixture to normal operating levels.
4. Operate the engine until proper temperatures are obtained as directed by the service letter/bulletin for your engine.
5. Verify aircraft/engine is ready to store:
   1. Magneto switches are connected to magnetos and that they are in the "OFF" position.
   2. Throttle position is "CLOSED".
   3. Mixture control is at "IDLE-CUT-OFF".
   4. Battery disconnected (optional).
   5. Brakes are set, wheels blocked, and tie-downs are installed (if required).
6. Disconnect all spark plug leads.
7. Remove top spark plug (protect plug ends).
8. Spray each cylinder with "MIL-P-46002 (NOX-RUST)" so the full cylinder is coated. This is done by rotating the crankshaft so the piston is fully retracted then spraying that cylinder. Continue to rotate and spray each cylinder till all cylinders have been sprayed.
9. When finished spraying each cylinder move the crank shaft so no piston is in the top dead center position. Then without moving the crank shaft, spray each cylinder one last time. DO NOT ROTATE CRANKSHAFT AFTER FINAL SPRAYING!
10. Install dehydrator plugs. Note: Inspect every 15 days for color change of plugs.
11. Place "desiccant" (moisture absorbing) bags in engine openings preferably before engine cools, cover with included tape and attach red warning streamers with each bag and location.
12. Install "DO NOT TURN PROPELLER - ENGINE PRESERVED" label on propeller or engine so it is easily seen and record the date of preservation on provided line.

REMOVAL AND RETURN TO SERVICE:

FOR RETURN TO SERVICE - SEE YOUR RELATED SERVICE BULLETIN

1. Remove all labels, tape, and desiccant bags.
2. Remove cylinder dehydrator plugs from spark plug holes, rotate propeller several revolutions by hand, and replace spark plugs and plug wires. Be sure to torque to proper specs.
3. Replace mixture in crankcase with regular oil per manufacture's recommendations.
4. Do required inspections per engine manufacture's service letters/bulletins.
5. Do normal preflight inspection.

COMMONLY ASKED QUESTIONS:

Q: Why is the mineral oil not included or is type II not included?
A: Shipping weight and shipping hazard issues.
Q: How much mixed MIL-C-6529C Type II oil will my kit make?
A: TU20000-6 includes enough concentrate to make 4 gallons or 16 qts. TU20000-4 includes enough concentrate to make 2 gallons or 8 qts.
Q: Can I use your kit for engines other then Continental and Lycoming?
A: Yes, as long as the engine manufacturer recommends the materials in it.
Q: What should I do if the engine is turned over while preserved?
A: Check that all desiccant bags are still in the correct location and reapply spray to all cylinders.
Q: Can I run my engine (flyaway) on this oil?
A: Yes, but it is not recommended that it is run for over 50 hours during the TBO cycle.

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