

**Standard 100 Hour Checklist :**

**ENGINE GENERAL STATUS**

- ATA-7000 Power plant 100 Hr. inspection.
- ATA-7001 Special inspections due.
- ATA-7002 Airworthiness directives.
- ATA-7003 Service bulletins.
- Research by (\_\_\_\_\_)
- ATA-7004 Service letters.
- ATA-7005 Service instructions.
- ATA-7006 Life limited parts.

**INSPECTION PREPARATIONS**

1. Perform maintenance run-up, record & enter discrepancies.
2. Protect aircraft finish.

Completed by (\_\_\_\_\_)

**COMPRESSION CHECK**

#1	#2	#3	#4	#5	#6

Compression checks by (\_\_\_\_\_)

**DRAIN OIL, FILTER & SCREEN INSPECTION**

1. Drain oil , sample, inspect oil pressure screen, clean, reinstall plug with news gasket, torque & safety wire.
2. Oil filter inspection, (magnetic) wash inspect oil suction screen, clean, Install new filter & safety wire.

Completed by (\_\_\_\_\_ ) Insp. (\_\_\_\_\_)

**PRELIMINARY INSPECTION & CONSIDERATIONS**

1. Pressure test exhaust system, muffler, heat exchanger & turbo components.
2. Remove and ship out items requiring outside repairs & service.

Completed by (\_\_\_\_\_ ) Insp. (\_\_\_\_\_)

**AIR CONDITIONING**

ATA-2150 Air conditioning compressor, belt tension, mounting, refrigerate lines & hoses.

Completed by (\_\_\_\_\_ ) Insp. (\_\_\_\_\_)

**ATA-2434 / ALTERNATOR #1**

1. Alternator, housing, security, terminals, wiring, boots, filter, brushes, slip ring, bearings, seals & cooling/rain shield.
2. Alternator out sensor drive, idler & belt tension.
3. Primary alternator 5 yr. / 300 hr. gear drive / 500 hr. belt drive internal insp./ lube.
4. (aerobatic gear drive alternator 100 hr)

Completed by (\_\_\_\_\_ ) Insp. (\_\_\_\_\_)

**ATA-2434 / ALTERNATOR #2**

1. Alternator, housing, security, terminals, wiring, boots, filter, brushes, slip ring, bearings, seals & cooling/rain shield.
2. Alternator out sensor drive, idler & belt tension.
3. Primary alternator 5 yr. / 300 hr. gear drive / 500 hr. belt drive internal insp./ lube.
4. (aerobatic gear drive alternator 100 hr)

Completed by (\_\_\_\_\_ ) Insp. (\_\_\_\_\_)

ATA-2434 / PRIMARY GENERATOR

- 1. Generator, housing, brushes, drive, idler & belt tension.
- 2. Bearings, commutator, mounting, cooling 300 Hr. generator internal inspection, terminals, wiring, boots & filter.

Completed by ( ) Insp. ( )

ATA-2434 / STAND-BY GENERATOR

- 1. Generator, housing, brushes, drive, Idler & belt tension.
- 2. Bearings, commutator, mounting, cooling 500 Hr. generator internal inspection, terminals, wiring, boots & filter.

Completed by ( ) Insp. ( )

FIRE PROTECTION

ATA-2610 Detection system.

ATA-2620 Extinguishing system-discharge tubes.

Completed by ( ) Insp. ( )

HYDRAULIC

ATA-2910 Hydraulic lines & hoses.

ATA-2913 Engine drive pump, mounting & drive.

Completed by ( ) Insp. ( )

ICE & RAIN PROTECTION

ATA-3060 Prop anti-ice/de-ice system.

ATA-3025 Thrust detector heat.

Completed by ( ) Insp. ( )

PNEUMATIC

ATA-3605 Air pumps & cooling shrouds.

ATA-3610 Distribution hoses.

ATA-3620 Carbon vane inspection.

Completed by ( ) Insp. ( )

ATA-3630 Oil separating.

ATA-3640 Pump inlet filtration.

VACUUM

ATA-3705 Vacuum pumps & cooling shroud.

ATA-3706 Induction stand-by system.

ATA-3706 Carbon vane inspection.

Completed by ( ) Insp. ( )

ATA-3707 Oil separator.

ATA-3710 Distribution, manifolds & hoses.

ENGINE COWLING

ATA-7111 Cowl flap system.

ATA-7112 Cooling baffles & seals.

ATA-7113 Cowling structure.

Completed by ( ) Insp. ( )

ATA-7114 Cowling skin.

ATA-7115 Latches, fasteners & chafe protection.

ATA-7116 Access doors.

ENGINE MOUNTING

ATA-7121 Engine mounting structure.

ATA-7122 Flex vibration dampners & orientation.

ATA-7123 Damper & mounting heat shields.

ATA-7128 Electrical bonding.

Completed by ( ) Insp. ( )

FIREWALL

ATA-7131 Firewall & sealing.

Completed by ( ) Insp. ( )

## ENGINE ELECTRICAL

ATA-7151 Electrical harness & protection.

Completed by (\_\_\_\_\_) Insp. (\_\_\_\_\_)

## ENGINE AIR INTAKE

ATA-7161 Air inlet duct, clean paper filters, replace at 500 hrs.

ATA-7162 Air inlet coupling, boot & flex ducts.

ATA-7166 Ram air, Housing & Valves.

ATA-7165 Inspect filters & install new foam elements.

Completed by (\_\_\_\_\_) Insp. (\_\_\_\_\_)

## ENGINE DRAINS / VENTS

ATA-7172 Crankcase breather & Remove carbon at exhaust junction.

ATA-7174 Accessory drains.

ATA-7173 Clean and inspect induction manifold drains & valves.

ATA-7175 System vents.

Completed by (\_\_\_\_\_) Insp. (\_\_\_\_\_)

## BASIC ENGINE

ATA-7210 Front section & reduction gearing.

Crankcase, Crank, Seal & Retainer.

Crankshaft RF @ 30" ST.: (\_\_\_\_) lbs.

Crankshaft end play spec (\_\_\_\_) Actual (\_\_\_\_)

ATA-7230 Cylinder assembly.

Lycoming Accessory Drive Belt Tension

New 3/8"	11-13 ft/lbs	132-156 in/lbs	used 3/8"	7-9 ft/lbs	84-108 in/lbs
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New 1/2"	13-15 ft/lbs	156-180 in/lbs	used 1/2"	9-11 ft/lbs	108-132in/lbs
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ATA-7231 Valve inspection.

ATA-7232 Push rod shrouds & rocker covers.

ATA-7234 Dry valve lash clearance Spec (\_\_\_\_)

ATA-7235 Tappets spec. In (\_\_\_\_) Ex (\_\_\_\_)

ATA-7240 Accessory drive & Starter drive.

Completed by (\_\_\_\_\_) Insp. (\_\_\_\_\_)

## FUEL DISTRIBUTION

ATA-7310 Engine fuel distribution, lines & hoses.

ATA-7326 Engine fuel system cooling & heating.

Completed by (\_\_\_\_\_) Insp.(\_\_\_\_\_)

## INJECTION FUEL METERING

ATA-7313 Clean fuel injector nozzles & check flow.

ATA-7314 Engine fuel pump -Replace diaphragm pumps @ 20 yrs.

ATA-7315 Primer system & diverter valve -Overhaul diaphragm fuel servo @ 20 yrs.

ATA-7320 Clean fuel system.

ATA-7325 Inspect fuel injection system.

Completed by (\_\_\_\_\_) Insp. (\_\_\_\_\_)

## CARBURETOR FUEL METERING

ATA-7314 Engine fuel pump, drain, flush carburetor bowl & check Bowl fuel level.

ATA-7315 Primer system & diverter valve- Inspect metal floats @ 1000 hrs. Clean primer Nozzles at 300 hrs.

ATA-7322 Carburetor & mounting.

ATA-7325 Inspect & clean fuel inlet screen.

Completed by (\_\_\_\_\_) Insp. (\_\_\_\_\_)

#### ATA-7413 / STARTING IGNITION

1. Shower of sparks, slick start & wiring- 500 hr. impulse coupling inspection.
2. Start timing spec (\_\_\_\_) Actual (\_\_\_\_) Single (\_\_\_\_) LH (\_\_\_\_) RH (\_\_\_\_)

Completed by (\_\_\_\_) Insp. (\_\_\_\_)

#### ATA-7414 / MAGNETOS

1. Magneto housings, mounting plugs, vents, P-leads, internal timing, cam symmetry, blast tubes & cooling shrouds.
2. Timing BTC specs. LH (\_\_\_\_) RH (\_\_\_\_) actual LH (\_\_\_\_) RH (\_\_\_\_)
3. 500 hr / 5 yr. magneto internal inspection & lubrication LH (\_\_\_\_) RH (\_\_\_\_)

Completed by (\_\_\_\_) Insp. (\_\_\_\_)

#### MAGNETO PRESSURIZATION FILTERS

ATA-7415 Inspect & replace when contaminated.

Completed by (\_\_\_\_) Insp. (\_\_\_\_)

#### IGNITION HARNESS

ATA-7420 Ignition harness, shielding, grounding terminals, insulators, seals, springs & routing.

Completed by (\_\_\_\_) Insp. (\_\_\_\_)

#### ATA-7421 / SPARK PLUGS

1. Spark plug part # (\_\_\_\_), verify application, clean terminal wells & rotate per chart.
2. Cleaned, inspected, gapped to (\_\_\_\_) in. Install new gaskets, torque (\_\_\_\_) in / lbs.
3. Erosion gauged, tested, painted.

Completed by (\_\_\_\_) Insp. (\_\_\_\_)

#### IGNITION SWITCHING

ATA-7430 "P" leads, security & start wiring.

Completed by (\_\_\_\_) Insp. (\_\_\_\_)

#### AIR

ATA-7510 Carburetor. heat, alternate air & ram air.

ATA-7511 Induction, seals, couplings & clamps.

Completed by (\_\_\_\_) Insp. (\_\_\_\_)

#### ENGINE COOLING SYSTEM

ATA-7521 Cooling baffles, ties & supports.

ATA-7522 Baffle seals.

ATA-7523 Winterization baffles.

Completed by (\_\_\_\_) Insp. (\_\_\_\_)

#### ENGINE CONTROLS (engine compartment area)

ATA-7600 Engine control & linkage inspection.

ATA-7601 Prop synchronizing..

ATA-7602 Mixture control.

ATA-7603 Throttle control.

ATA-7604 Prop governor control.

ATA-7605 Alternate, ram air & carburetor heat.

ATA-7606 Turbo waste gate. (Non automatic)

ATA-7607 Cowl flap control.

Completed by (\_\_\_\_) Insp. (\_\_\_\_)



**PROPELLERS**

ATA-6105 Propeller & governor AD's.  
ATA-6110 Propeller assembly & lubrication.  
ATA-6111 Propeller blade, dress & paint.  
ATA-6112 Propeller de-ice boot section.  
ATA-6113 Propeller spinner section.  
Completed by ( ) Insp. ( )

ATA-6114 Propeller hub.  
ATA-6121 Propeller synchronizer.  
ATA-6122 Prop governor, lines & hoses.  
ATA-6123 Prop un-feathering, lines & hoses.

**SERVICING**

ATA-1200 Engine oil added ( ) quarts ( ) additive.  
Completed by ( ) Insp. ( )

**NITROGEN**

ATA-1260 Propeller dome.  
ATA-1261 Prop un-feather accumulator.  
Completed by ( ) Insp. ( )

**INTER SYSTEM DRESS INSPECTION**

1. Inspect all engine controls, wiring, & plumbing for routing, interference between systems & security.  
Completed by ( ) Insp. ( )

**FINAL**

Items not covered by "Check List"  
Correct any discrepancies  
Pressure inspect engine fuel system  
Pre Cowl, inspection completed  
Complete documentation  
Clean, cowl, close up  
Cowling inspection  
Post inspection run-up  
Date Completed  
AMT Signature  
Inspector

**SIGNATURE**

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**Note: This check list does not supersede Manufacture's publications!**