## **Turbine Power Technologies, Inc.**



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## **300 Hour Inspection Sheet**

| Remove torches and check for cracks   |
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| Check thermocouples (D- From .1 to 2.5 $\Omega$ ) (E- From .7 to 1.4 $\Omega$ individual) |
| Borescope inspection of compressor turbine, power Turbine, compressor                     |
| turbine nozzle, inner and outer combustion chamber, stator lug supports and               |
| first stage compressor.   |
| Drain oil   |
| Check front and rear chip detectors (confirm light works)                                 |
| Replace or sonic clean main oil filter  |
| Remove 4 screen filters and check for metal or FOD  |
| Clean magnet on oil drain   |
| Add oil (Fill to max on dipstick, cold cycle turbine and fill to max, check again         |
| after start)  |
| Check spark plugs   |
| Check spark plug wires  |
| Check spark plug regulators (If applicable)   |
| Test igniters Left and Right  |
| Check for oil leaks   |
| Clean propeller governor, lubricate cables, joints and slides                             |
| Check beta block  |
| Remove propeller blades from hub and check for corrosion                                  |
| Check propeller bolts   |
| Check for corrosion on propeller  |
| Check propeller clamps  |
| Check spinner and bolts   |
| Remove starter generator  |
| Remove starter generator brushes and check. Spin commutator and check                     |
| bearings. Check and clean spline. Copper slip or anti-seize spline                        |
| Reinstall starter generator   |

| General inspection of all nuts, bolts, locking wire, engine mounts, cables, |
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| connections, oil leaks and electrics  |
| Remove and check mechanical fuel pump filter                                |
| Clean Fuel Control Unit and lubricate joints and slides                     |
| Bleed Fuel Control Unit (4 ports start lowest to top)                       |
| Check blow-off valve, if necessary, remove and clean                        |
| Check Isolating valve (ISOL-EMG Throttle)                                   |
| Check fuel pressure Min 18 PSI - Max 45 PSI (Preferred 28-32 PSI)           |
| Check oil pressure Min 30- Max 39   |
| Check N1 at idle Min 60%- Max 63%   |
| Check N1 for drop if boost pump turned off (If more than 3% bleed FCU       |
| again)  |
| Check voltage during start Min 20 volts.                                    |
| Check charging of generator   |
| Check ITT at idle 480 to 520 +-   |
| Check after shut down for irregular bearing noise from compressor and power |
| turbine   |
| Check for cracks on exhausts  |
| Check drains on fuel pump, Fuel Control Unit, hot section and EPA can.      |
| Start turbine and check parameters through first and second stage of start  |
| Perform engine spectrum analysis.   |
| Balance propeller.  |

Note: Airframe fuel filter must be 10 micron or better