TURBINE BLADE WASH - MAINTENANCE PRACTICES

1. General

    A. Turbine blade wash is accomplished to remove deposit build- up accumulated on turbine blades during normal operation.

2. Turbine Blade Wash

    A. Wash Turbine Blades (Refer to Figure 201).

        NOTE: **Refer to Pilot's Operating Handbook for starter motor cycle limitations.**

        NOTE: **A minimum cool-down period of 40 minutes should be observed after engine running and prior to injecting rinse fluid.**

        NOTE: **Compressor turbine blade washing is to be accomplished using water of drinking quality (potable) only at ambient temperatures of 36�F and above, and a potable water/methanol solution at ambient temperatures below 36�F. Consult applicable Engine Maintenance Manual for solution strengths according to ambient temperature.**

      (1) Remove one of the two igniter plugs.

      (2) Install spray tube P/N PWC32271 in igniter plug boss and tighten spray tube finger tight. Ensure that arrow on tab of spray tube is directed toward engine reduction gearbox and is parallel with centerline of engine.

    CAUTION: **Delivery hose should be supported so as to prevent damage to the spray tube.**

      (3) Connect a suitable cleaning rig hose to the spray tube adapter. Water/solution supply delivery pressure is 40 psi.

      (4) Ensure engine ignition is off and aircraft bleed air is shut off.

    CAUTION: **Observe starter motor limitations.**

      (5) Carry out a 30 second motoring cycle, introducing the wash solution when the compressor attains a speed of approximately 5% Ng.
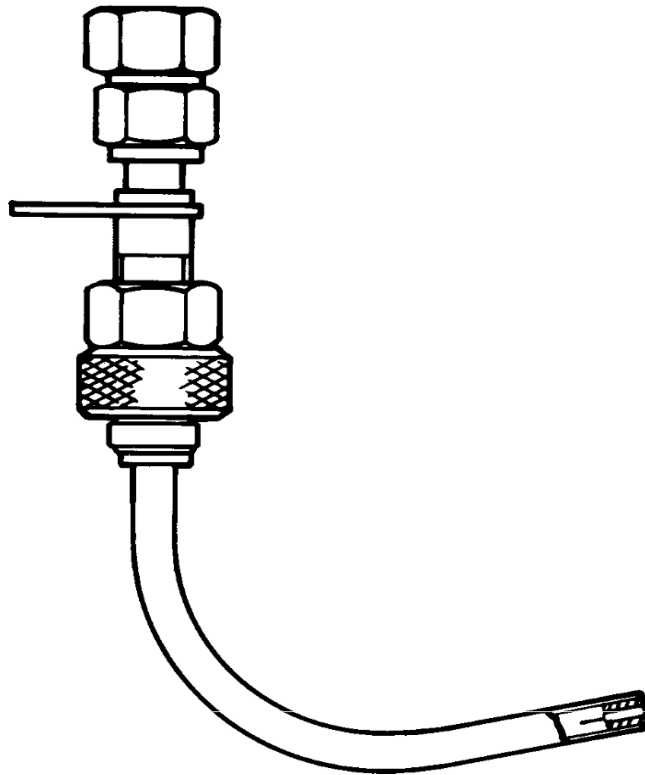
        NOTE: **Approximately one- half gallon of rinse solution will be passed through the compressor turbine during a 30 second cycle.**

    CAUTION: **When using a water/methanol solution, perform an additional 30 seconds dry motoring cycle after each washing cycle to purge engine of volatile fumes. Ensure prescribed starter cooling periods are observed.**

      (6) Repeat washing cycle as required to remove contaminants from turbine blades.

      (7) Remove spray tube assembly and reinstall igniter plug.

      (8) Perform two consecutive engine dry motoring runs, ensuring that starter running time limitations are not exceeded.

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Figure 201 : Sheet 1 : Trubine Blade Wash Spray Tube Assembly

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COMPRESSOR TURBINE BLADE WASH
SPRAY TUBE ASSEMBLY (P/N PWC32271)

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