C

# INSPECTION

o avoid repetition throughout the inspection, general points to be checked are given below. In the inspection, aly the items to be checked are listed and details as to how to check, or what to check for, are excluded. ome items are optional equipment that may not be found on a particular airplane.

## CHECK AS APPLICABLE:

MOVABLE PARTS for lubrication, servicing, security of attachment, binding, excessive wear, safetying, proper operation, proper adjustment, correct travel, cracked fittings, security of hinges, defective bearings, cleanliness, corrosion, deformation, sealing, and tensions.

FLUID LINES AND HOSES for leaks, cracks, dents, kinks, chafing, proper radius, security, corrosion, deterioration, obstructions, and foreign matter.

METAL PARTS for security of attachment, cracks, metal distortion, broken spotwelds, corrosion, condition of paint, and any other apparent damage.

WIRING for security, chafing, burning, defective insulation, loose or broken terminals, heat deterioration, and corroded terminals.

BOLTS IN CRITICAL AREAS for correct torque in accordance with the torque values given in the chart in Section 1, when installed or when visual inspection indicates the need for a torque check.

FILTERS, SCREENS, AND FLUIDS for cleanliness, contamination and/or replacement at specified intervals. Do not use solvent to clean the induction air filters.

#### PLANE FILE.

re are miscellaneous data, information, and licenses that are a part of the airplane file. The following

To be displayed in the airplane at all times:

- Aircraft Airworthiness Certificate (Form FAA 1362).
- Aircraft Registration Certificate (Form FAA 500A).

To be carried in the airplane at all times:

- Airplane Radio Station License, if transmitter installed (Form FCC 404-2). 1. 2.
- Weight and Balance Report or latest copy of Repair and Alteration Form (Form FAA-337). 3.
- Airplane Equipment List.
- 4. Airplane Log Book.
- 5. Engine Log Books.
- Power Computer.

Idition to checking that these documents are up-to-date and in accordance with current Federal Air llations, check FAA Airworthiness Directives and Cessna Service Letters for compliance at the

### INE RUN-UP.

re beginning the step-by-step inspection, start, run up, and shut down the engine in accordance with uctions in the Owner's Manual. During the run-up, observe the following, making note of any discrep-

- Engine temperatures and pressures.
- Static rpm.

- Magneto drop (See Owner's Manual).
- Engine response to changes in power. Of
- Any unusual engine noises.
- Propeller response (See Owner's Manual).

|                 | 2014 annuel A.D. check   |
|-----------------|--|
|                 |  |
| 71-24-04        | Enzine boses fly, chick for explacement OK<br>Wing flap says ICW |
| 72-25-03        | Wine floo sand low   |
| 78-09-05        | Wire span cracks neft Due at 3518.5 his.                         |
| 84-26-02        | Induction air filters (Paper) hobably replace 6k.                |
| 97-26-17        | Contracted / Rolls Royce Engine ( Due at OVH) OX                 |
| 2094-21-05      | Kelly areogere bill NH histallel                                 |
| 2004-21-1681    | N/H  |
| 2011-10-09      | Seit valls Beg luspeelin 4/2/14                                  |
|                 | U  |
| Charles and the |  |
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| 面影響生物           |  |
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|                 |  |

- 7. Fuel tank selector valves; operate engines on each tank position and off position long enough to make sure the valves function properly.
- 8. Idling speed and mixture; proper idle cut-off. Ox
- 9.
- Ammeter and voltmeter. O E Suction gage and vacuum test selector valve. O C 10.
- Fuel flow indicator. 11.

After the inspection has been completed, an engine run-up should again be performed to ascertain that any discrepancies or abnormalities have been corrected.

#### SCOPE AND PREPARATION.

The 50-hour inspection includes a visual check of the engines, propellers, and aircraft exterior for any apparent damage or defects; an oil and filter element change on aircraft equipped with external oil filters; and accomplishment of lubrication and servicing requirements. Remove propeller spinners and engine cowling, and replace after the inspection has been completed.

It is recommended that the oil be changed on airplanes not equipped with external oil filters at least every 25 hours of engine operation. The servicing and lubrication charts, supplemented by detailed paragraphs in Section 2, recommend more frequent intervals in unusual environments or severe operating conditions.

The 100-hour (or periodic) inspection includes everything in the 50-hour inspection. Also loosen or remove all fuselage, wing, boom, empennage, and upholstery inspection doors, plates, and fairings as necessary to perform a thorough, searching inspection of the entire aircraft. Replace after the inspection has been completed.

|       |   | AS SP   | ECIF | - |
|-------|---|---|------|---|
|       |   | NOTE EACH 100 HG  | ours | ; |
|       |   | Numbers appearing in the "AS SPECIFIED" EACH 50 HOUR                | RS   |   |
|       | , B                                     | column refer to the data listed at the end of the inspection chart. |      |   |
| PROPE | LLER.                                   |   |      |   |
| 1.    | Spinner and spinner bu                  | lkhead  | •    |   |
| 2.    | Blades                                  |   | •    |   |
| 3.    | Hub                                     |   |      |   |
| 4.    | Fan (See paragraph 10                   | -39.)   | •    |   |
| 5.    | Mounting nuts                           |   | •    |   |
| 6.    | Governor and control-                   |   |      |   |
| 7.    | Unfeathering accumula                   | ator  |      |   |
|       |   |   |      |   |
| ENGIN | E COMPARTMENT.                          |   |      |   |
|       | for evidence of oil and for inspection. | nel leaks, then clean entire engine and compartment, if needed,     |      |   |
| 1.    | Engine oil, screen, fi                  | ller cap, dipstick, drain plug and external filter element          |      |   |
| 2.    | Oil cooler                              |   | •    |   |

| AS S       |  | ECI | FIE | 0  |
|------------|--|-----|-----|----|
| EACH 100 I |  | UR  | S   |    |
|            | EACH 50 HOURS  |     |     |    |
|            | Magnetic compass compensation  |     |     | 11 |
| /          | Instrument wiring and plumbing   |     |     | 1  |
| 12.        | Instrument panel, shockmounts, ground straps, cover, and decals and labeling   | 1   | •   |    |
| 13.        | Defrosting, heating, and ventilating systems, and controls   |     | •   |    |
| 14.        | Cabin upholstery, trim, sunvisors, and ash-trays   |     | •   |    |
| 15.        | Area beneath floor, lines, hoses, wires, and control cables  |     | •   |    |
| 16.        | Electrical horns, lights, switches, circuit breakers, fuses, and spare fuses   | •   |     |    |
| 17.        | Exterior lights  | •   |     |    |
| 18.        | Pitot and static systems   |     | •   |    |
| 19.        | Stall warning sensing unit, and pitot and stall warning heaters  |     | •   |    |
| 20.        | Radios and radio controls  |     | •   |    |
| 21.        | Radio antennas   |     | •   | -  |
| 22.        | Battery, battery box, and battery cables   |     | •   | -  |
| 23.        | Battery electrolyte level  | •   |     | 12 |
| 24.        | Oxygen system  |     | •   |    |
| 25.        | Oxygen supply, masks, and hoses  |     |     | 13 |
| 26.        | De-Ice system plumbing   |     | •   |    |
| 27.        | De-Ice system boots  |     | •   |    |
|            | w  |     |     |    |
|            |  |     |     |    |
|            |  |     |     |    |
|            | ROL SYSTEMS.   |     |     |    |
| In addi    | tion to the items listed below, always check for correct direction of movement, t travel, and correct cable tension. |     |     |    |
| 1.         | Cables, terminals, pulleys, pulley brackets, cable guards, turnbuckles, and fairleads                                |     | •   | -  |
| 2.         | Chains, terminals, sprockets, and chain guards   |     | •   | 1  |
| 3.         | Trim control wheels, indicators, actuator, and bungee  |     | •   | 1  |
| 4.         | Travel stops   |     |     | 1  |
| 5.         | All decals and labeling  |     | •   |    |
|            | ±  |     |     |    |

|         | and the second s |            |     |     |    |
|---------|--|------------|-----|-----|----|
|         |  | AS SPE     |     | _   |    |
|         | Name of the Control o | ACH 100 HO | ÚRS |     |    |
|         | EAC  | H 50 HOURS |     |     |    |
| FUEL SY | STEM.  |            |     |     |    |
| 1.      | Fuel strainers, drain valves, and controls   |            | •   | 1   |    |
| 2.      | Fuel strainer screens and bowls  |            | (   | •   | 1  |
| 3.      | Electric fuel pumps and electric connections   |            | •   | 1   |    |
| 4.      | Fuel tanks, fuel sump tanks, fuel lines, drains, filler caps, and placards   |            | 1   |     |    |
| 5.      | Drain fuel and check tank interior, attachment, and outlet screens   |            | 1   |     | 8  |
| 6.      | Fuel vents and vent valves   |            |     | 2   |    |
| 7.      | Fuel selector valves and placards  |            |     | •   |    |
| 8.      | Fuel quantity gages and transmitter units  |            |     | •   |    |
| 9.      | Vapor return lines and check valves  |            |     | •   |    |
|         |  |            |     |     |    |
| LANDIN  | IG GEAR.   |            |     | - 5 |    |
| 1.      | Brake fluid, lines and hoses, linings, discs, brake assemblies, and master cylinders   |            | 20  | •   |    |
| 2.      | Main gear wheels, wheel bearings, spring struts, tires, and fairings   |            |     | •   |    |
| 3.      | Main and nose gear wheel bearing lubrication   |            |     | ~   | 9  |
| 4.      | Torque link lubrication  |            | •   |     | 10 |
| 5.      | Nose gear strut and shimmy dampener servicing  |            |     | •   |    |
| 6.      | Nose gear wheels, wheel bearings, strut, steering system, shimmy dampener fairing, and torque links  | , tire,    |     | •   |    |
| 7.      | Parking brake system   |            |     |     | 1  |
|         |  |            |     |     |    |
| AIRFR   | AME.   |            |     |     |    |
| 1.      | Aircraft exterior  |            | •   | 1   | 1  |
| 2.      | Aircraft structure   |            |     |     | 1  |
| 3.      | Windows, windshield, and doors   |            |     | 1   |    |
| 4.      | Seats, stops, seat rails, upholstery, structure, and seat mounting   |            |     | -   |    |
| 5.      | Safety belts and attaching brackets  |            |     | -   |    |
| 6.      |  | s          |     |     |    |
| 7.      | Control lock, control wheel, and control column mechanism  |            |     | 1   |    |
| 8.      | . Instruments and markings   |            |     |     | 4  |
|         |  |            |     |     |    |

9. Gyro filter replacement ----

|     |  |           | ASSESSMENT OF REAL PROPERTY. |     |   |               |
|-----|--|-----------|------------------------------|-----|---|---------------|
|     |  | A         | S SPECI                      | FIE | D |               |
|     |  | EACH 1    | 00 HOUR                      | S   |   | ١             |
|     |  | EACH 50 H | OURS                         |     |   | ۱             |
| /   | Induction air filter   |           |                              |     | 3 |               |
| ľ   | Induction airbox, air valves, doors, and controls                        |           | 0                            |     |   | ١             |
| 4.  | Cold and hot air hoses   |           |                              |     |   |               |
| 5.  | Cold and hot air hoses   |           |                              |     |   | 2000          |
| 6.  | Engine baffles   |           |                              |     |   | CONTRACTOR OF |
| 7.  | Cylinders, rocker box covers, and push rod housings                      |           |                              |     |   | Charter       |
| 8.  | Crankcase, oil pan, accessory section, and front crankshaft seal         |           |                              |     |   |               |
| 9.  | All lines and hoses  |           |                              |     |   |               |
| 0.  | Intake and exhaust systems (Also see paragraph 10-84.)                   | P. V      | - 17                         |     |   |               |
| 1.  | Ignition harness Comp 1 15/80 79/30 79                                   | 130 7480  | 50 150                       |     |   |               |
| 12. | Intake and exhaust systems (Also see paragraph 10-84.)  Ignition harness | 9/80-74/5 | % Y8                         | 1   |   |               |
| 13. |  |           |                              |     |   |               |
| 14. | Electrical wiring  |           |                              |     |   |               |
| 15. | Vacuum pump and relief valve   |           |                              |     |   |               |
| 16. | Vacuum relief valve filter   |           |                              |     | 4 | CANAL STATE   |
| 17. | Engine controls and linkage  |           |                              |     |   |               |
| 18. | Engine shock mounts, engine mount structure, and ground straps           |           |                              | 1   | 1 |               |
| 19. | Cabin heater valves, doors, and controls                                 |           |                              |     |   |               |
| 20. | Starter, solenoid, and electrical connections                            |           | 9                            |     |   |               |
| 21. | Starter brushes, brush leads, and commutator                             |           |                              |     | 1 | )             |
| 22. | Alternator, and electrical connections                                   |           | (                            |     |   | _             |
| 23. | Alternator brushes, brush leads, and commutator                          |           |                              |     |   | O             |
| 24. | Voltage regulator mounting and electrical leads                          |           |                              |     |   |               |
|     |  |           | 1                            | - 1 | 1 |               |

|     | AS SPEC  | CIFIE | D |   |
|-----|--|-------|---|---|
|     | EACH 100 HOU   | RS    | 1 | ١ |
|     | EACH 50 HOURS  |       |   |   |
| 6.  | Flap rollers and tracks, flap position transmitter and linkage, flap position indicator, flap electric motor brake and transmission, and flap/elevator trim inter-connect system | •     | _ |   |
| 7.  | Elevator downspring system   | •     | 1 | ١ |
| 8.  | Rudder pedal assemblies and linkage  | •     |   | ١ |
| 9.  | Skin and structure of control surfaces and trim tabs   | •     | - | ١ |
| 10. | Balance weight attachment  | •     | - |   |

### NOTE

A high-time inspection is merely a 100-hour inspection with the addition of an engine overhaul at the Continentalrecommended overhaul period of 800 hours. At the time of engine overhaul, constant-speed propellers, governors, and engine accessories should also be overhauled.

- First 25 hours; each 100-hour inspection thereafter.
- 2 Each 25 hours, if not equipped with external oil filter. See paragraph 2-16.
- 3 Also see paragraph 2-17.
- At each instrument overhaul, replace filter.
- 5 Each 200 hours.
- 6 Each 500 hours.
- First 25 hours; each 100-hour inspection thereafter.
- At engine overhaul.
- 9 First 100 hours; each 500 hours thereafter.
- 10 Also see paragraph 2-40.
- 11 At engine overhaul.
- 12 Also see paragraph 2-18.
- 13 Anticipated requirements before each flight.