Jodel D120A Maintenance Schedule

Precautions:

Sunlight is harmful to rubber, paint, Plexiglas etc. Water, if it accumulates and remains in the interior, may cause the glued joints to deteriorate. Consequently, do not leave your aircraft out of doors unnecessarily even if it is fine weather. In the event of rain or washing, make sure that the water does not accumulate and if necessary mop up!

Cleaning:

Wash with soap and water. Rinse thoroughly, but never with a hose jet. Polish the paintwork with a very slightly abrasive product. Do not use wax or silicon polish. To polish the Plexiglas use Plexipol or Perspex polish.

Daily Inspection:

CHECK:

1. The satisfactory external condition of the aircraft, particularly the lower parts.
2. The proper operation of the landing gear, balancing the aircraft by the ends of the wings.
3. The tyre pressures (20 psi).
4. The springs of the tailwheel.
5. The tension of the flying controls: when giving impulses with the stick there should be no detectable noise from flapping cables. In case of doubt, check with a cable tension gauge (17 – 30 lbs.) for elevator and aileron control. The rudder control has no initial tension.
6. The oil level in the engine.
7. Obvious traces of leakage of oil, fuel or exhaust.
8. Correct clearance of engine controls.
9. Condition of cowlings, airscrew, spinner and backplate.
10. Pitot head intakes and air vents of fuel tanks.
11. Check the main fuel filter by draining.

50 Hours Inspection:

1. Change engine oil every 25 hrs and oil filter cartridge every 50 hrs.

CHECK:

2. Oil strainer – flush with fuel and examine for metal debris.
3. Fuel filter.
4. Air intake filter.
5. Flush out the carburettor.
6. That no pipe wire or cable is being worn as a result of or friction or vibration.
7. The condition of the battery and the condition of the battery box.
8. The condition of brake lines and brakes.

LUBRICATION:

9. Using engine oil, lubricate the control surface hinges, bearings of the rudder bars, rudder bar return spring, spindle at the base of the control column.
10. The mechanism of the tailwheel (HMP Grease).

100 Hours Inspection:

In addition to the 50 Hours Inspection:

CHECK

1. The internal appearance of the fuselage, particularly the bottom of the rear fuselage and the floorboards of the cabin.
2. The tightening (moderate on wood) of the principle attachment points; 6 airscrew bolts, 4 engine bolts, 8 engine bearer bolts, 4 bolts for mainplane attachment, 4 bolts for tailplane attachment, 3 bolts for tail spring, 8 bolts for undercarriage and possibly the bolts for control surface hinges.
3. The control cables on their guides and pulleys and also check that they are not rubbing anywhere.
4. Low-pressure leak test of the airspeed indicator circuit.

5. Possible play in the undercarriage legs and the distance between the bottom of the axle of the wheels and the bottom of the lower guide of the fixed leg of the landing gear,

6. The condition of all baffles and air deflectors.

7. The state and secure attachment of all oil fuel and exhaust pipes and all electrical wiring.

CLEAN:

8. The filter on the carburettor inlet (fuel?)

9. The mobile sections of the undercarriage legs and grease appropriately.

LUBRICATE:

10. The engine controls.

11. The axles at the ends of the control cables.

12. The airbrake control.

13. The trim control.

N.B. Do NOT lubricate cables.

Special Inspection:

When going from a damp region to a hot, dry region

CHECK

1. The tension of the control cables

2. The tightness of all attachments (see 100 Hour Inspection Check 2), particularly the propeller and the tailplane.

Control Adjustments:

Aileron	20° up and down
Elevator	25° up and 20° down
Rudder	25° left and right.

Brake and Braking System:

The brakes are operated hydraulically by direct pedal pressure providing independent braking at each wheel. The braking system for each wheel is independent. The brake master cylinders are Scott designed and are situated between the rudder pedals. They are mounted on the inside of the bulkhead.

For non-existent braking:

CHECK:

1. the master cylinder for a broken diaphragm (the presence of brake fluid in the cockpit will indicate this).
2. for leaks in the brake system and loss of fluid.
3. the condition of the flexible brake pipes to the wheel cylinder.

For faulty, inefficient braking or excessive pedal movement:

CHECK:

1. for fluid leaks in the system(as above)
2. for scored brake drums
3. for worn brake linings
4. for the presence of oil, grease and rust on the brakes drums and linings.

To bleed the system:

1. Jack up the affected wheel
2. Unscrew the top bleed screw (valve) situated on the engine bulkhead (port or starboard)
3. Slacken off the bleed screw at the foot of the undercarriage.
4. Connect a brake fluid pump to the bottom bleed screw and pump fluid until air free fluid issues from the top bleed screw.
5. Close the top bleed screw (valve) and continue pumping until the wheel locks with the brake full on under pressure.
6. Lock the bottom bleed screw and remove the pump.
7. Release excess internal pressure through the top bleed screw valve until the brake is released.
8. Tighten the top bleed screw valve and test pedal pressure and brake action. (Pedal pressure should be slight and pressure felt).