



SOARING ASSOCIATION OF CANADA

DAILY INSPECTION BOOK

Aide Mémoire

C -

Date Started

Date Completed

**Keep this book in the glider
at all times**

DAILY INSPECTIONS WHO MAY CONDUCT THEM

A Daily Inspection, DI, must be carried out on all gliders before flying each day. Approved Pilots may carry out DIs and sign out the aircraft as serviceable. All pilots should have their logbooks signed out as approved before carrying out a DI. All pilots must enter any minor defects that render the aircraft unserviceable.

Only an A.M.E. may make structural or control repairs and adjustments, and sign for them.

Make an entry in this DI book following de-rigging, and place the book on the pilot's seat. The journey log should also have an entry if the glider has been reassembled.

INSTRUCTIONS FOR USING THIS BOOK

1. Write clearly and in ink.
2. Do not postpone making entries in the book, do it immediately.
3. Defects that will need to be fixed, but which do not affect the serviceability of the aircraft should be described in the **SNAGS** pages at the end of this book. The person fixing the defect must make an entry in the same pages, and also cross out and initial the original entry of the minor defect, showing that it has been fixed.
4. Similarly any pilot who has reason to believe that the aircraft is **UNSERVICEABLE** must declare this in the book using a separate line on the snags pages for the purpose. In this case the book should be left on the seat of the aircraft and a (preferably) red **DO NOT FLY** tag, signed and dated, and tied to the control column. Check with an instructor, as a major snag should also be noted in the **journey logbook**.
5. The person responsible for de-rigging the aircraft must make an entry in the **SNAGS** pages at the end of this book, and leave the book on the pilot's seat..

Inspecting a typical glider is a simple and straightforward task. The qualities that are needed are care and honesty from careful training; the job must be done thoroughly. Don't sign out the aircraft as serviceable unless you can justify your reasons.

The objectives of carrying out these inspections are to ensure that no defect has occurred which might make the aircraft unsafe to fly. Defects can occur in four ways: wear and tear, maladjustment, careless handling, and/or severe flight or landing loads.

The last is the least common, but potentially most serious. Typical defects can include:

- Actual failure – cracked/buckling structure such as composites, metal, plywood or wood, frayed cable, glue failure, failed fittings, tear in fabric, loose rivets, etc;
- Missing components (fasteners, cotter pins, lock nuts)
- Deterioration – rusty steel and bolts, etc., rotting wood, brittle fabric, and cracking of gel-coat and paint;
- Excessive wear, looseness or lack of lubrication;
- Incorrect assembly, wrong adjustment, etc.;
- Foreign objects.

It is not practical to ensure an aircraft is airworthy by only inspecting items on a checklist, because to include every conceivable eventuality would need a very long list. What is required however is the careful inspection of a limited number of items that are more critical, and to rely on the sharp eyes and imagination of the person doing the inspection.

Once a fault has been discovered, it is necessary to find its cause and to ascertain the full extent of the defect. When you do this it is important not to jump to conclusions. For example if a control cable is found to be unusually slack it is unlikely that the cable has stretched, it is far more probable that a component has been bent, or a lever or pulley bracket has been strained.

The inspector should take nothing for granted and should devote his or her energies to actually inspecting the aircraft. Above all the inspector should realize what he or she does not know, and if in any doubt at all, should ask someone with more experience.

The actual **Daily Inspections must include** the items on the checklists that follow, as a minimum.

DAILY INSPECTION MASTER GUIDE CHECKLIST
See individual checklist sheets for each daily inspection

FRONT FUSELAGE

Front of fuselage is clean and free of damage;
Pitot and static ports free of obstructions – (do **not** blow into pitot).

COCKPIT open canopy.

Clean; free of foreign objects & junk in cockpit and storage compartment. All fasteners securely fastened;
Canopy - any cracks not drilled out? Clean? Condition of attachments, locking and canopy jettison mechanisms & witness wires intact, window, yaw string secure;
Controls - elevator, rudder and ailerons max. deflections, play, sloppiness of control cables/push rods, friction? All move *in the correct sense*? Trim tab should be *up* with lever forward;
Control cables for release, rudder, etc., turnbuckles, locking pins/safeties secure, no wear on guides, no frayed cables visible;
Operation of front and cg hooks, free of damage and dirt, check forward release, and back release of cg hook (winch ops);
Trim system -max deflections fore and aft incl. control surfaces;
Airbrakes/Spoilers and Flaps – max. extensions and positive locking when closed (airbrakes) and in all positions (flaps);
Wheel brake operation (test by moving glider) ;
Ballast weights – security of hold-down;
Harness - condition of straps and buckles; can the straps easily loosen?
Anchoring of straps to airframe;
Seats, back rests and cushions secure;
Instruments, radio etc., check operation, battery secured;
Placards and loading charts, and all pictograms legible.

FUSELAGE include whole fuselage.

Surface clean and free of damage (cracks in skin, gel coat, buckling of panels, loose rivets, etc);
Main, nose wheel assemblies (tire pressures), and/or skids secure & free from damage;
Undercarriage/gear suspension, and wheel brake hardware secure.

WING (PORT) remove aileron (and flap) locks.

Upper and lower surfaces, leading and trailing edges clean and free of damage; look for loose rivets, cracks in gel coat, etc.
Aileron - gaps, hinges, control cable/rod attachments and lever arms (control horns), freedom of movement, seals and/or tapes;

Flaps, surfaces, hinges/slides, control attachments, seals and/or tapes;
Airbrakes/Spoilers and mechanisms; fit of caps into the wings.

WING ATTACHMENTS

Wing to fuselage attachments (including struts if present) and wing-to-wing attachment bolts/safety pins/safety latches, fairings & tapes.

TAIL ASSEMBLY remove rudder and elevator locks.

Fin general condition, surfaces clean, attachments and fairings;
Rudder general condition, surface clean, no visible damage, hinges clean and free to move, control attachments clean and free of wear;
Elevators & trim tabs clean and free to move, no damage, attachment of tailplane/horizontal stabilizer (incl. struts), safety locking pins, and all hinges and control attachments secure;
Tail wheel assembly (tire pressure), and/or skid secure & free from damage;
Fairings/seals and tapes secure.

WING (STARBOARD) remove aileron (and flap) locks.

Upper and lower surfaces, leading and trailing edges clean and free of damage; look for loose rivets, cracks in gel coat, etc.
Aileron - gaps, hinges, control cable/rod attachments and lever arms (control horns), freedom of movement, seals and/or tapes;
Flaps, surfaces, hinges/slides, control attachments, seals and/or tapes;
Airbrakes/Spoilers and mechanisms; fit of caps into the wings.

GENERAL EQUIPMENT

Cushions; are they an approved type and filled with energy absorbing foam (EAF)? Reject use of soft cushions;
Are all ballast weights/cushions that may be used in this aircraft able to be adequately secured in the cockpit?
Parachute(s) serviceable (pins not bent, no sign of mildew/rot?)
Barograph, GNSS/GPS flight data recorder, etc.

POSITIVE CONTROL CHECK*

Documents & journey log entries checked;

Add other items to this list as you acquire and start using them.

- * This check **MUST** be done if the aircraft has just been rigged, and it should be routinely done as part of every DI on club aircraft.

Check the details of all snags in the snag list at the end of the DI book.

Date

Each item check OK, ✓ or not OK, X

FRONT FUSELAGE

- Front of fuselage is clean and free of damage
- Pitot and static ports free of obstructions

COCKPIT open canopy

- Clean
- Canopy and yaw string
- Controls including trim system: function
- Control cables
- Operation of front and cg hooks
- Airbrakes/Spoilers and Flaps controls
- Wheel brake operation
- Ballast
- Harness
- Seats, back rests and cushions security
- Instruments, battery, radio, compass, etc.,
- Placards and loading charts, and all pictograms legible

FUSELAGE include whole fuselage

- Surface clean and free of cracks/dents, etc
- Main, nose wheel assemblies (tire pressures), skids
- Undercarriage/gear suspension, and brake

WING (PORT) remove aileron (and flap) locks

- Surfaces clean and free of cracks/dents, etc
- Aileron
- Airbrakes/Spoilers and Flaps
- Inspection ports if accessible

TAIL ASSEMBLY remove rudder and elevator locks

- Surfaces clean and free of cracks/dents, etc
- Fin, Rudder & tail wheel assy. (tire pressure), skid

- Elevators & trim tabs
- Fairings/seals and tapes secure

WING (STARBOARD) remove aileron (and flap) locks

- Surfaces clean and free of cracks/dents, etc
- Aileron
- Airbrakes/Spoilers and Flaps
- Inspection ports if accessible

WING ATTACHMENTS

- Wing to fuselage attachments (including struts if present)

GENERAL EQUIPMENT

- Extra cushions, correct type
- Parachute(s) serviceable
- Barograph, GNSS/GPS flight data recorder, etc.
- POSITIVE CONTROL CHECK***
- Documentation & journey log entries
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Add other items to this list as you acquire and start using them.

* MUST be done immediately after aircraft has been rigged, and must be done routinely as part of every DI on club aircraft.

Any Snags? make additional notes at end of this DI book.

Aircraft is serviceable (Yes / No)

DI completed by

Print Name

.....
Signature

DO NOT FLY

Glider Registration C -

Reason for unserviceability:

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Signed Name (Print) Date

DO NOT FLY

Glider Registration C -

Reason for unserviceability:

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Glider Registration C -

Reason for unserviceability:

.....
.....

Signed Name (Print) Date

Back Cover
CHECKLISTS

Take Off

Controls
Instruments
Straps
Trim/Ballast
Release
Canopy
Options – WROLL

Landing

Straps
Water/Wheel
Airspeed
Flaps
Traffic/radio call
Spoilers

Height Loss

Cockpit
Altitude
Location
Look out

Human Factors

Illness
Alimentation
Medications
Stress
Alcohol
Fatigue
Emotions

Options

Wind
Release
Obstacles
Landable areas
Launch interruptions

Off Field Landing

Slope
Shading
Stock
Length
Obstacles
Wind

Oxygen Use

Pressure
Regulator
Indicator
Connections
Emergency

Contest/Task

Weather data/Notams
GPS/PDA
Data logger
Water ballast
Declaration/task data
Map marked
Road map
Survival gear
Locator beacon/ELT
Food
Water
Pee Bag
Cell phone
Contact/crew numbers
Spare change for phone
Trailer Ready
Crew briefed