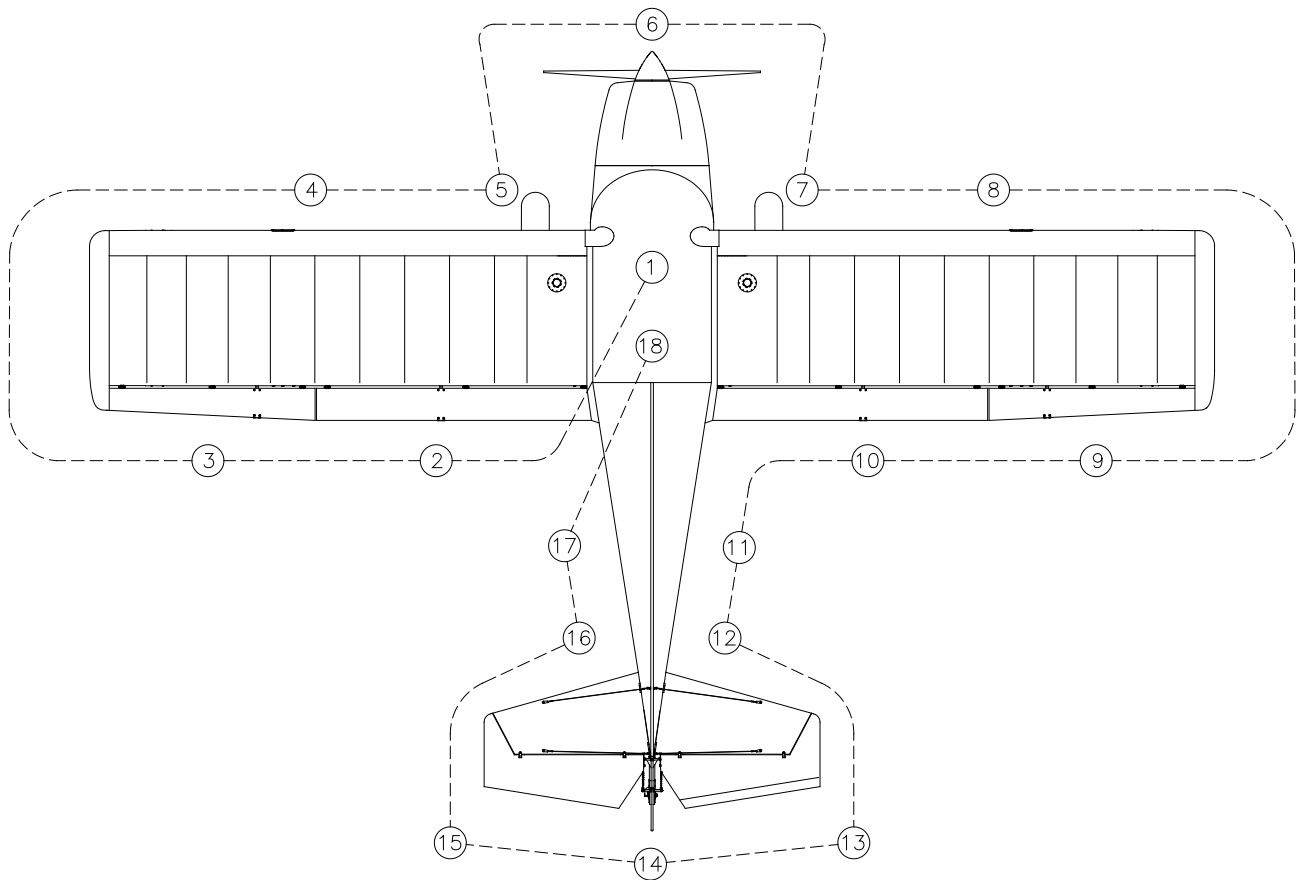


RANS S-20 RAVEN

PRE-FLIGHT INSPECTION

The following checklist is provided for guidance only. It is suggested that the owner of the aircraft adds items they deem necessary.

Visually inspect the aircraft for its general condition during the walk around. In addition to the items listed on the pre-flight checklist, look for signs of visible ice if applicable. The presence of ice on the aircraft wings and tail will adversely affect the aircraft's performance. In all cases, remove the ice **BEFORE** beginning any flight operations. Always exercise due care and good judgment. Remove visible moisture (water) from at least wings and tail surfaces because of its negative effects on performance of the aircraft.



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The entire outer surface of the aircraft should be inspected for damage of any kind during the pre-flight inspection. This is especially important due the fact that the aircraft is fabric covered.

1.
 - Aircraft Flight Manual & Required Aircraft Documentation – AVAILABLE IN CABIN
 - Parking brake – SET
 - Ignition switch - OFF
 - Master switch - OFF
 - Avionics Master - OFF
 - Circuit Breakers - CHECK IN
 - Fuel Selector Valve - ON
 - Fuel Quantity – CHECK QUANTITY
 - Throttle Lever – MOVEMENT- free
 - Seats – ADJUST POSITION
 - Control Sticks - MOVEMENT- free and correct
 - Flap lever - Operation - free & correct
 - Cabin – CHECK FOR FOREIGN ARTICLES
 - Baggage - SECURE
 - For Solo flight – SECURE passenger seat belt
 - Fuselage interior - CHECK

2.
 - Wing Root connection - SECURE
 - Jury Struts - SECURE
 - Ribs in place
 - Flap hinge points - SECURE
 - Trailing edge spar - STRAIGHT & INTACT
 - Flap connections - INTACT

3.
 - Ribs in place
 - Aileron Hinge points - SECURE
 - Trailing edge spar - STRAIGHT & INTACT
 - Aileron connections - INTACT
 - Aileron - Operation - free & correct
 - Strut to Wing connection - SECURE

4.
 - Strut to Wing Connection - SECURE
 - Leading edge spar - STRAIGHT, DENT FREE & INTACT
 - Pitot/Static Tube - SECURE
 - Jury Strut Connections - SECURE
 - Wing tie down - DISCONNECT

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5.

- Main Gear - CHECK
- Main wheel tire - PROPERLY INFLATED
- Brakes - SECURE
- Fuel Filler Cap - CLOSED

6.

- Remove Cowling
- Fuel quick drain valve on bottom of cowling (left side); - DRAIN & CHECK for water, sediment and proper fuel grade.
- Engine oil dipstick/ filler cap - CHECK oil level, than check filler cap secure
- Carburetor and air filter – CHECK security
- Radiator fluid over-flow bottle – CHECK fluid level
- Propeller and spinner – CHECK for nicks, dents and security
- Engine cooling air inlets and oil cooler – CHECK of obstructions
- Engine cooling air outlet, radiator – CHECK of obstructions
- Exhaust – CHECK – loose or damaged
- TRIKE - NOSEWHEEL - CHECK

7. Repeat Step #5

8. Repeat Step #4

9. Repeat Step #3

10. Repeat Step #2

11.

- Tailcone - Check for bent tubes, holes or tears in the fabric.

12.

- Tail brace rods and attach hardware - CHECK
- Fuselage connections - CHECK
- Horizontal stabilizer and Vertical stabilizer - CHECK

13.

- Control surfaces - CHECK - free movement and SECURE
- Hinge points - SECURE

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14.
 - TAILDRAGGER - TAILWHEEL - CHECK - Rudder cable and springs - SECURE
 - TRIKE - CHECK - Rudder cable - CHECK - SECURE
 - Rudder - CHECK and SECURE
 - Tail tie down - DISCONNECT
15. Repeat Step #13
16. Repeat Step #12
17. Repeat Step #11
Fuel quick drain valve on bottom of fuselage behind Station 3 (left side); - DRAIN & CHECK for water, sediment and proper fuel grade.
18.
 - Climb aboard
 - Cockpit checklist - CHECK
 - Seat belts - SECURE
 - CONTROLS - FREE and CORRECT
 - Altimeter - SET
 - Communication radio - SET
 - Transponder - SET
 - Fuel – CHECK QUANTITY
 - Hour meter - Note reading and time
 - Engine controls - SET - throttle closed - choke on
 - CLEAR AREA!
 - Ignition switch - START
 - Choke - OFF
 - THROTTLE - SET - Smooth Idle
 - Weather - CHECK
 - Traffic - CHECK
 - HAVE FUN!!! - CHECK