

PREFLIGHT INSPECTION

Visually inspect the aircraft for its general condition during the walk around. In addition to the items listed on the preflight 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. It is also recommended to remove visible moisture (water) from at least wings and tail surfaces because of its negative effects on performance of the aircraft.

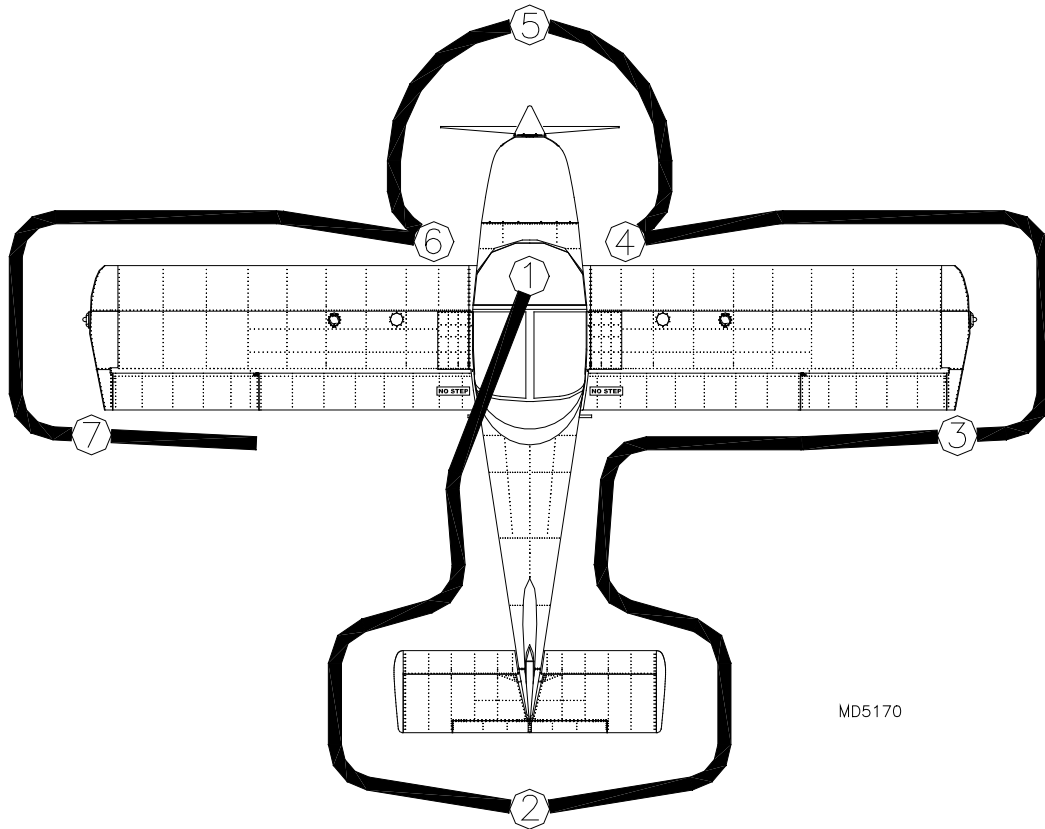


FIGURE 17E-1: PREFLIGHT INSPECTION SEQUENCE

The entire outer surface of the aircraft should be inspected for damage of any kind during the preflight inspection.

RANS S-19 VENTERRA

1 Cabin

- (1) Aircraft Flight Manual & Required Aircraft Documentation – AVAILABLE IN CABIN
- (2) Parking brake – SET
- (3) Ignition switch - OFF
- (4) Master switch - OFF
- (5) Avionics Master - OFF
- (6) Circuit Breakers - CHECK IN
- (7) Fuel Selector Valve - ON
- (8) Fuel Quantity Indicator – CHECK QUANTITY
- (9) Throttle Lever – MOVEMENT- free
- (10) Seats – ADJUST POSTION – CHECK PINS
- (11) Cabin – CHECK FOR FOREIGN ARTICLES
- (12) Baggage - SECURE
- (13) For Solo flight – SECURE passenger seat belt
- (14) Check fuselage.

2 Empennage

- (1) Vertical fin - CHECK
- (2) Control surfaces – CHECK freedom of movement and security
- (3) Tail Tie Down – DISCONNECT
- (4) Surface – CHECK for damage
- (5) Check fuselage.

3 Right Wing - Trailing Edge

- (1) Fuel quick drain valve on bottom of wing - DRAIN at least a cupful of fuel (using sampler cup) to check for water, sediment and proper fuel grade before first flight of day and after each refueling. If water is observed, take further samples until clear, and than gently rock the wings to move any additional contaminants to the sampling points. Take repeated sampling from all points until no contamination is found
- (2) Flap – CHECK security
- (3) Aileron – CHECK freedom of movement and security
- (4) Surface - CHECK for damage

4 Right Wing

- (1) Wing tip – CHECK security
- (2) Leading edge – CHECK condition, dents, nicks
- (3) Wing Tie Down - DISCONNECT
- (4) Fuel filler cap – CHECK secure
- (5) Main wheel tire – CHECK for proper inflation
- (6) Main Wheel – CHECK security, brake
- (7) Surface - CHECK - damage

RANS S-19 VENTERRA

5 Nose

WARNING – Do not stand within the arc of the propeller, check ignition off, throttle closed and park brake set before rotating the propeller by hand.

- (1) Fuel quick drain valve on bottom of cowling (left side) - DRAIN at least a cupful of fuel (using sampler cup) to check for water, sediment and proper fuel grade before first flight of day and after each refueling. If water is observed, take further samples until clear, and then gently rock the wings to move any additional contaminants to the sampling points. Take repeated sampling from all points until no contamination is found
- (2) Engine oil dipstick/ filler cap - CHECK oil level, then check filler cap secure. Prior to oil check turn the propeller several times by hand to pump oil from the engine into the oil tank, or let the engine idle for 1 min. This process is finished when air is returning back to the oil tank and can be noticed by a murmur from the open oil tank when the prop is turned by hand.
- (3) Carburetor and air filter – CHECK security
- (4) Radiator fluid over-flow bottle – CHECK fluid level
- (5) Propeller and spinner – CHECK for nicks, dents and security
- (6) Engine cooling air inlets and oil cooler – CHECK of obstructions
- (7) Engine cooling air outlet, radiator – CHECK of obstructions
- (8) Exhaust – CHECK – loose damage
- (9) Nose gear and attach – CHECK freedom of movement

6 Left Wing

- (1) Main wheel tire – CHECK for proper inflation
- (2) Main Wheel – CHECK security, brake
- (3) Fuel filler cap – CHECK secure
- (4) Wing Tie Down – DISCONNECT
- (5) Pitot tube – CHECK security
- (6) Leading edge – CHECK condition, dents, nicks
- (7) Wing tip – CHECK security
- (8) Surface – CHECK - damage

7 Left wing - Trailing Edge

- (1) Aileron – CHECK freedom of movement and security
- (2) Flap – CHECK security
- (3) Fuel quick drain valve on bottom of wing; - DRAIN at least a cupful of fuel (using sampler cup) to check for water, sediment and proper fuel grade before first flight of day and after each refueling. If water is observed, take further samples until clear, and then gently rock the wings to move any additional contaminants to the sampling points. Take repeated sampling from all points until no contamination is found
- (4) Surface – CHECK - damage