

Boeing Employees' Flying Association

RV-12iS Oil and Fueling Procedures



RV-12iS Oil System

- The RV-12iS is a dry sump oil system, this type of system allows for the oil to be stored in a separate reservoir.
- The RV-12 takes very little oil to fill to capacity, you will probably never add a full quart.
 - **RV-12 takes Aeroshell sport plus 4 ONLY.**
- When the engine is not running, the oil drains to the separate reservoir at the bottom of the system, not into the oil tank. So, we must move the oil back into the tank by burping the aircraft.

Checking and moving the oil into the tank

- 1. Remove oil cap**
 - a. Store in the oil access door
 - b. Leave dipstick resting in tank
- 2. Ensure BOTH 'LANE' and master switche(s) are in the off position and the key is not in the ignition.**
- 3. Turn the propeller in direction of rotation (counterclockwise)**
 - a. **If the propeller is ever turned clockwise report to management before flying.**
 - b. Turn the propeller in direction of rotation until gurgles (about 15-20 times)
 - c. Turn prop until you hit a compression stage (will be stiff) hold it there momentarily then continue turning prop.
- 4. The Gurgle**
 - a. As you turn the prop listen for the gurgle at the oil access door (sounds like a sink draining)
 - b. If you do not hear a gurgle, the process is not done!
- 5. Checking Oil Level after the "Gurgle"**
 - a. Remove the dipstick, wipe it with a clean dry towel, and put it back into the tank.
 - b. Lift the oil dipstick out again and check the oil level.
 - i. The flat portion of the stick is in the normal range.
 1. The difference between the top of the stick and the bottom of the stick is only 0.5 qts.
 - ii. **DO NOT OVERFILL OIL!**
 1. Generally, only a few ounces of oil are required.
- 6. Return dipstick and cap to the oil tank**

Place the dipstick back in the tank and put the oil cap back on the tank.

RV-12 Fueling Procedures

- The RV-12 has one 20.2 fuel tank: all usable.
 - Located behind the right seat.
 - Mechanical fuel is located on the top of the tank for viewing fuel levels.

1. Fueling the RV-12iS

- a. Ground the aircraft by the exhaust pipe
- b. Fuel the aircraft behind the airplane do not drag the fuel line over the aircraft wing.
- c. This is fuel on demand on aircraft.