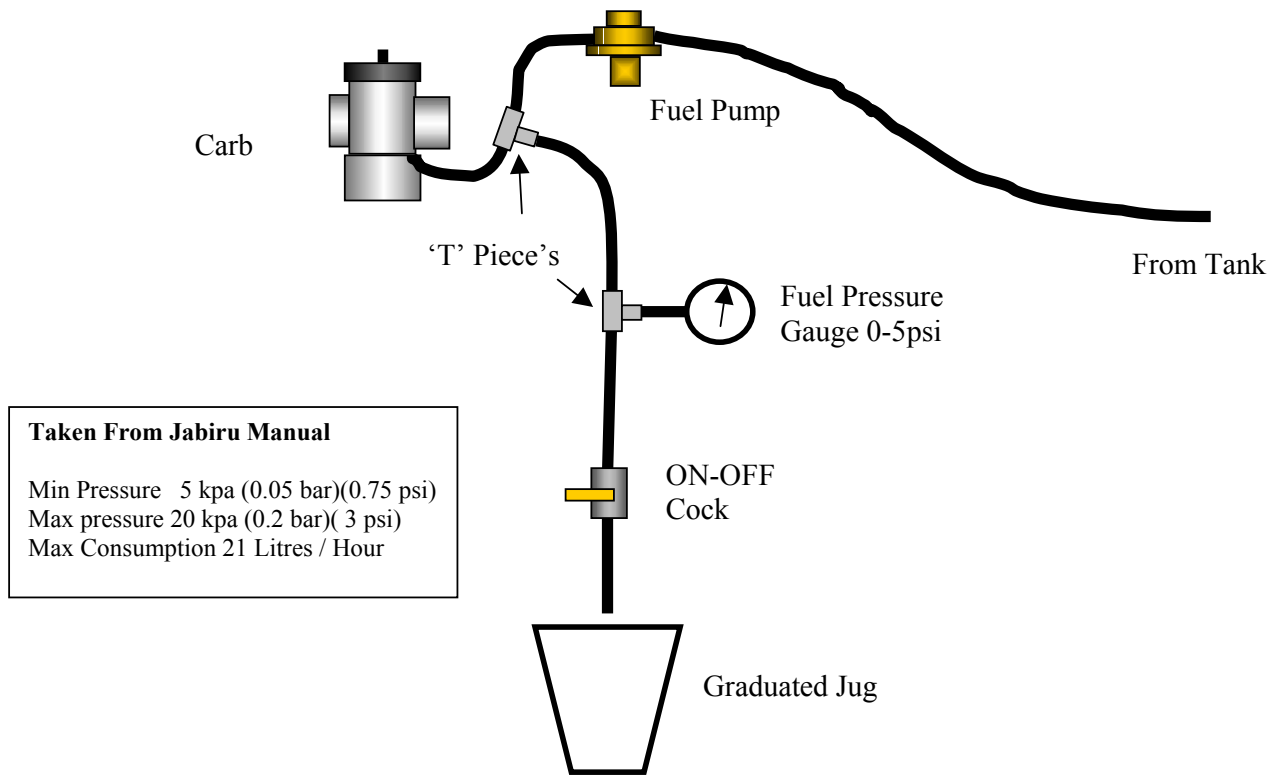


How to Check the Fuel Flow using the 'Bleed Off' Method



Connect up as shown in the diagram above. Minimum two people are needed for test.

Make sure the aircraft is secured and fuel cock in the diagram is closed. Start and warm up the engine. The second person has to man the fuel cock and take the measurement.

Take the engine to maximum revs, and the second person should open the fuel cock and set it so that 0.75psi is showing on the gauge (minimum allowable pressure)

Watch the fuel level in the jug and when it reach's a defined mark, start the stopwatch, after 15secs note the level of the fuel in the container, and shut off the fuel cock. Stop the engine.

Make note of the amount of fuel between the two marks e.g. 150ml.

The following calculation below is then done:-

150ml fuel bleed off at max revs in 15secs = 600 mls/min. $\times 60 = 36.0$ litres / hr.

Total supplied by pump at max revs is 36 + 21 (engine max consumption) = 57 L/hr

To comply to BCAR Section 'S' the fuel pump must be able to supply 125% of the fuel requirement at full power.

$$= \frac{57 \times 100}{21} = 271\%$$