What is an aileron gap-speed kit? A aileron gap speed kit consists of gap seals on the lower and upper aileron gaps that is an extension of the lower and upper wing skin from the rear spar to the leading edge of the aileron. The seals eliminate a high drag area plus reduce the amount of air leaking from the high pressure underside of the wing to the low pressure top side of the wing. The reduction in air leakage allows the wing to fly at a lower angle of attack for the same amount of lift, thus reducing drag. This aileron gap-speed kit is FAA STC’d and manufactured under a FAA PMA authority. Also available is a hardware kit 115H containing enough rivets to install the aileron gap kit.

A FASTER FAST SPEED, A SLOWER SLOW SPEED: It was discovered in NASA reports and proven by our own flight testing, that closing the gaps between the wing and aileron would decrease the drag and increase the lift. Following NASA’s suggestions and fine tuning through flight testing we have achieved the faster top speed and the slower slow speed. This kit will not convert your aircraft into a STOL aircraft, however, depending on the exact model and condition of your aircraft you can expect an increase in top speed of about 2% and a decrease in stall speed of about 2%.

A HIGHER RATE OF CLIMB: For the same reasons given for the increase in top speed, you will get a higher rate of climb from your aircraft. Again depending on the exact model and condition of your aircraft, you can expect an increase in the rate of climb of about 2%.

GREATER RANGE: Because the wing is now more efficient with Aircraft Development’s aileron gap speed kit, you will get more range with your aircraft. You will have a choice of how to take advantage of this additional range. If you fly the aircraft at the throttle setting normally used and take full advantage of the speed increase, your range will increase by about 1.5%. However, if you want to take full advantage of the range increase your speed kit can give you, throttle back until your cruise speed was the same as before you had the speed kit installed. With this throttle setting you can have a range increase of from about 1.5% to 2%. 
**HIGHER RATE OF ROLL:** This is an area where there is a very significant increase in performance. With the aileron seals installed the roll rate of the aircraft will come close to being 100% higher. The aileron seal kit in essence almost doubles the aileron authority. This is very significant in cross wind landings when one is flying near the stall speed and relying on aileron authority to make a safe landing. For student pilots in Cessna aircraft the aileron seal kit can be both a performance and safety enhancer.

**MORE BENEFITS:** The primary purpose of this kit was to aerodynamically clean up your airplane, and that is what this kit does. However, one not only gets these benefits of slower stall speed, higher rate of climb, greater roll rate etc. previously mentioned. But gets the side benefits of the fact that the slower stall speed and greater rate of climb add to the safety of take off and landings, by requiring less distance to take off and clear a 50 ft. obstacle. This does give you an additional margin of safety for the short field and high altitude take off and landings. It also increases the fuel efficiency of the aircraft. It is a fact that fuel costs are only going to increase in the future as oil supply diminishes and world consumption increases. *Another very important big benefit of this kit is it makes the aircraft more, stall spin resistant, a factor that is prevalent in general aviation accidents.*

**AND EVEN MORE BENEFITS:** If you combine Aircraft Development’s aileron gap seal kit with their flap gap seal kit there will even be greater performance increases. With the aileron gap seal and flap gap seal kits installed you can expect an increase in top speed of about 2% to 4%, a decrease in stall speed of about 4%, an increase in rate of climb of about 2% to 4%, and an increase in range of about 4%. Naturally these combined benefits will further enhance your fuel economy.

### CESSNA MODELS

<table>
<thead>
<tr>
<th>150, A150, 152, A152, 170B, 172, 175, 180, 182, 185, 205</th>
<th>AILERON GAP KIT NO. 115-100</th>
<th>HARDWARE KIT NO. 115H</th>
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**TABLE OF AILERON GAP-SEAL KIT / FAA CESSNA MODEL APPROVAL**

<table>
<thead>
<tr>
<th>KIT NO.</th>
<th>AILERON GAP-SEAL KIT APPLICABLE TO CESSNA MODELS</th>
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<tbody>
<tr>
<td>115-100</td>
<td>152, A152</td>
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<td>115-100</td>
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