

Pitch trim is applied to the stabilizer. Trim can be applied by electric trim switches, autopilot or a manual trim wheel. Electric and autopilot trim may be disengaged by cutout switches on the control stand in the event of a runaway or other malfunction.

Moving the control column in the opposite direction to electric trim will stop the trim, unless the STAB TRIM switch is set to OVERRIDE. This function could be used to control the pitch of the aircraft with trim say in the event of a jammed elevator.

The trim authority varies according to aircraft series and method of trim. The full range is only available with the manual trim wheel, but if at an extreme setting, electric trim can be used to return to the normal range. There are two electric trim switches on each control column, the right is for the direction and the left is an earth return for protection against spurious electrical signals.

The STAB TRIM light was only fitted to the 1/200 series.

Speed trim is applied to the stabilizer automatically at low speed, low weight, aft C of G and high thrust - i.e. on most take-offs. Speed trim is a dual channel system. Sometimes you may notice that the speed trim is trimming in the opposite direction to you, this is because the speed trim is trying to trim the stabilizer in the direction calculated to provide the pilot with positive speed stability characteristics. The speed trim system adjusts stick force so the pilot must provide significant amount of pull force to reduce airspeed or a significant amount of push force to increase airspeed. Whereas pilots are typically trying to trim the stick force to zero. Occasionally these may be in opposition.

As the mach increases, so the centre of pressure moves aft and the nose of the aircraft will tend to drop (mach tuck). **MACH TRIM** is automatically applied above M0.615 (classics & NG's), M0.715 (-1/200) to the elevators to counteract this and to provide speed stability.

***Trivia:** On the 737-100 to 500, the stab trim control wheels should be mounted with their white marks 90 +/- 15 degrees apart from the other wheel, so that in the event that the trim wheel handles need to be used, one handle will be in an accessible position (AMM 27-41-64, Page 402). This is not so for the 737-NG (27-41-61, Page 401).*