

STEP 39 Aileron & Collective Linkage (Helicopter Radio)

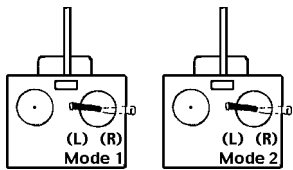
Helicopter Radio Setup

STEP 39

The Aileron linkage controls the side to side tilt of the swashplate which in turn causes the helicopter to pitch to the left or right (hence roll cyclic pitch).

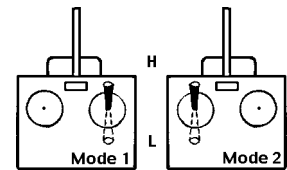
Attach two steel balls with two 2mm nuts at a distance of 10-11mm from the center of the servo (this range may vary depending on your particular radio) and 12-15 degrees ahead of the center of the servo using threadlock. The angle offset will eliminate any stress (wear) on the servo. With the radio turned on and the trim centered, attach the servo horn and Aileron Bellcrank Pushrods (F), some slight adjustment maybe necessary to have the swashplate sit level or 90 degrees to the main shaft when viewed from front or back. Move the Aileron stick completely in both directions to insure that there is no binding in the linkages.

For the Collective Servo, attach one steel ball with one 2mm nut to the servo horn at a distance of 10-12mm from the center of the servo using threadlock. With the Collective/Throttle stick on the radio in the center press the servo horn onto the collective servo so the ball is at 75-80 degrees to the servo as shown. Attach the Collective Arm Pushrod (D) and move the Collective stick completely in both directions to insure that there is no binding in the linkages.

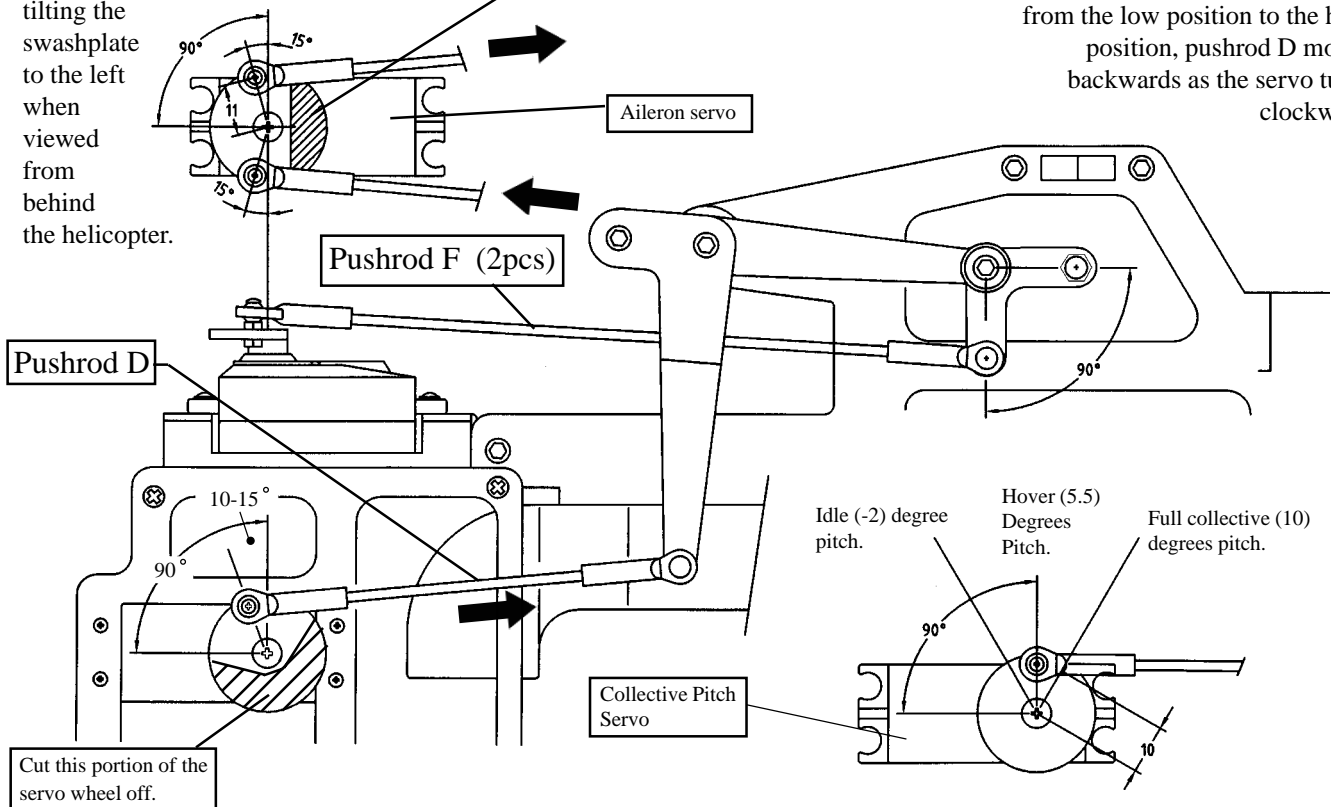


At the aileron stick is moved to the left the servo turns clockwise tilting the swashplate to the left when viewed from behind the helicopter.

1. Remove this section of the servo wheel to avoid the rod end binding against the servo wheel.
2. Optionally, the straight arm can be used however this tends to bind, for free movement use first method .



As the collective stick is moved from the low position to the high position, pushrod D moves backwards as the servo turns clockwise.



These pitch settings will be made later with a pitch gauge.