

ELECTRA

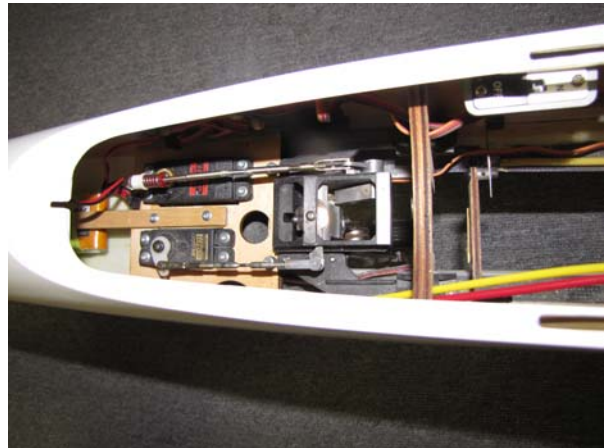
SERVO-OPERATED NOSE GEAR RETRACTION

Upgrade to 4-40 linkage

The nose gear retraction setup is similar to the main gear in that, the proper servo output arm and its positioning provide the correct amount of pre-load to the gear when extended as well as enough throw to close the door as the tire enters the gear bay. Use the Hanger 9 aluminum servo arm part # HAN 3531 included in the landing gear system. The retraction rod is made using 4-40 hardware supplied in the landing assembly package.

Unlike the main gear retract servo, the nose retract servo outputs through a single arm, thus it is more susceptible to bending. Extensive testing has found that **a plastic servo arm WILL fail**.

- ❑ Install the nose gear retract and steering servos and make up the pushrods as shown on the plans. Having already set up the main gear retraction sequence, the servo rotation is already set; it rotates counter clockwise to actuate the gear to the up position.
- ❑ Bolt a 2-56 ball and hex nut onto the Hanger 9 servo arm at the center location (1/2" of throw). Connect the servo, turn on the radio and select "Gear Up". Now place the horn onto the output shaft pointing aft.
- ❑ The clevis end of the retract pushrod goes on the outermost hole of the retract actuation arm with the "bow" in the up position. Adjust the length of the pushrod to be slightly longer (approx. 1/16") than where the keeper engages the ball on the output arm. Flex the nose strut aft and up to accomplish the pre-load. Adjust the pushrod to fit under this load.



Servo arm is at 12 o'clock position for gear down and secure locked.

Cycle the gear through extension and retraction noting a good solid "Down lock" and retracting well into the gear bay. Adjust the pushrod until it just begins to bow/flex slightly after the gear goes into down lock. When the installation is completed and testing meets this requirement, put some BLUE Loctite on the clevis/solder link threads only. This will allow adjustments to still be made using the ball connect.

FINISHED PRODUCT READY FOR INSTALLATION

"Bow" built into the rod is approximately a 5° bend.

