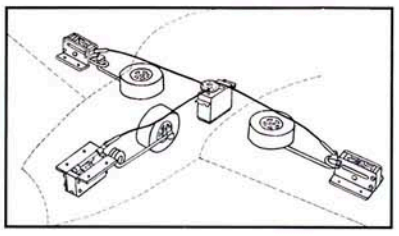
L101

Retract installation

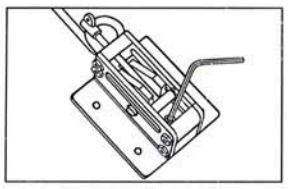


Shown above is a typical tricycle gear arrangement using one servo for activation. Any 170°-180° retract servo may be utilized to retract the gear, although it may be necessary to use a separate nose wheel retract servo, depending on the particular airplane. If a single servo is used, plug this servo into the retract channel of the receiver. If two servos are used, it will be necessary to use a Y-harness.

Mount the retract units firmly using hardwood rails anchored solidly to the wing. Sheet metal screws or bolts and blind nuts are recommended. It will be necessary to mount the nose wheel retract on rails to allow clearance for the actuator arm. Be sure to allow ample room for clearance of the steering arm. Nose gear steering should be brought forward from the rudder servo. Attach the actuating wire to each of the retract units and run them to the retract servo. Make slight bends in the wire to provide the most direct route with the least resistance. Be sure to allow room for the wheel to enter the wheel well. With the wires unattached to the servo, actuate the servo to the fully retracted position. Attach and adjust the clevises to provide fully locked gear in the up position. Actuate the servo to the extended position and make sure the gear moves to the down locked position. If the servo moves further than the down locked position causing the linkages to bind, move the clevices attached to the servo closer in on the servo arm, reducing travel on the linkage wire. If more travel is needed to fully lock the gear down, move to clevises further out on the servo arms.

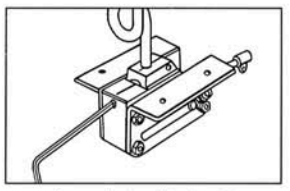
Warning: It is imperative that the landing gear lock up and down. If either side of the travel is not correct, it may cause over loading of the servo and consequently draining of your battery pack in a matter minutes.

In the configuration shown using one servo. it may be necessary to disconnect the nose wheel retract each time the wing is removed. Using a "Y" harness will allow use of (2) servos and will simplify wing removal and installation. Conventional gear airplanes would utilize the same installation procedure with the deletion of the nose wheel retract installation.



Up lock adjustment

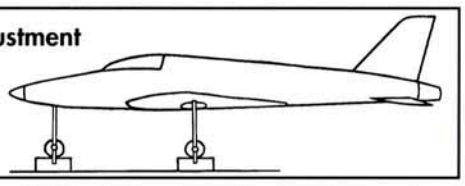
Shown above is the adjustment for the up lock position. Using a 2mm allen wrench adjust the up lock position to a point where the actuator arm engages easily but there is very little play in the retract.



Down lock adjustment

Shown above is the adjustment for the down lock position. Using a 2mm allen wrench adjust the down lock position to a point where the actuator arm engages easily but there is very little play. It may be necessary to adjust this from time to time due to wear of the moving parts.

Axle adjustment



Choose the wheels that will be used on the aircraft, mount them on adjustable axles, and fit them onto the landing gear struts. Set the wheels on equal thickness blocks as shown and adjust the attitude to a slightly nose high position and adequate propellor clearance is achieved.

Note:Retract the gear to be sure the wheels fit properly into the wheel wells. Lock the axles into place.

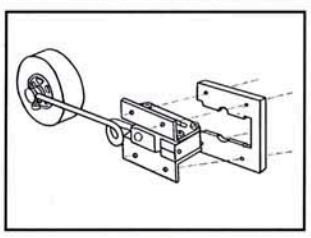
Note: Filing a flat spot on the side of the landing gear strut will assure correct wheel alignment. Trim off any excess landing gear strut.

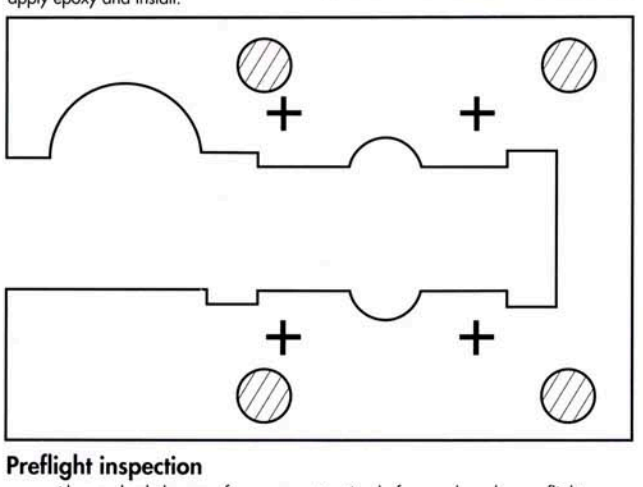
Wheel alignment

Check the alignment of the wheels for proper ground tracking. A slight toe-in on the main gear wheels helps stabilize the airplanes ground handling performance.

Foam Wing installation

The block shown can be used to install the retracts into either a foam wing or a built-up wing. The block should be made from 1/4" plywood and installed using a slow cure epoxy. When installing in a foam wing, added strength may be gained by drilling (4) 1/4" holes in the plate and installing (4) 1/4" dowels. Drill correspondng holes in the foam wing, apply epoxy and install.



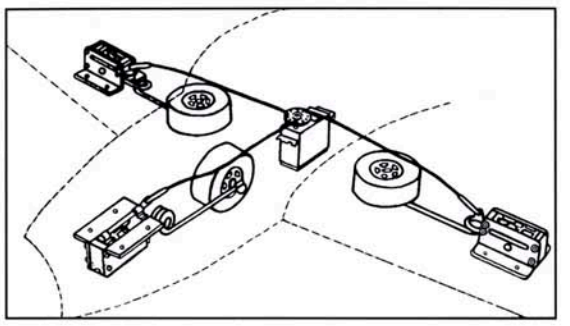


Preflight inspection

Always check the gear for proper retraction before each and every flight. Hard or fast landings may cause slight bending of the struts and thus misalignment of the wheels with the wheel wells.

L103

Retract installation



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Axle adjustment

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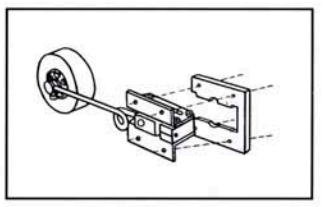

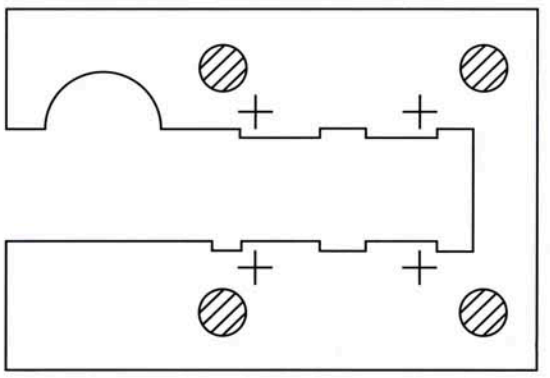

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