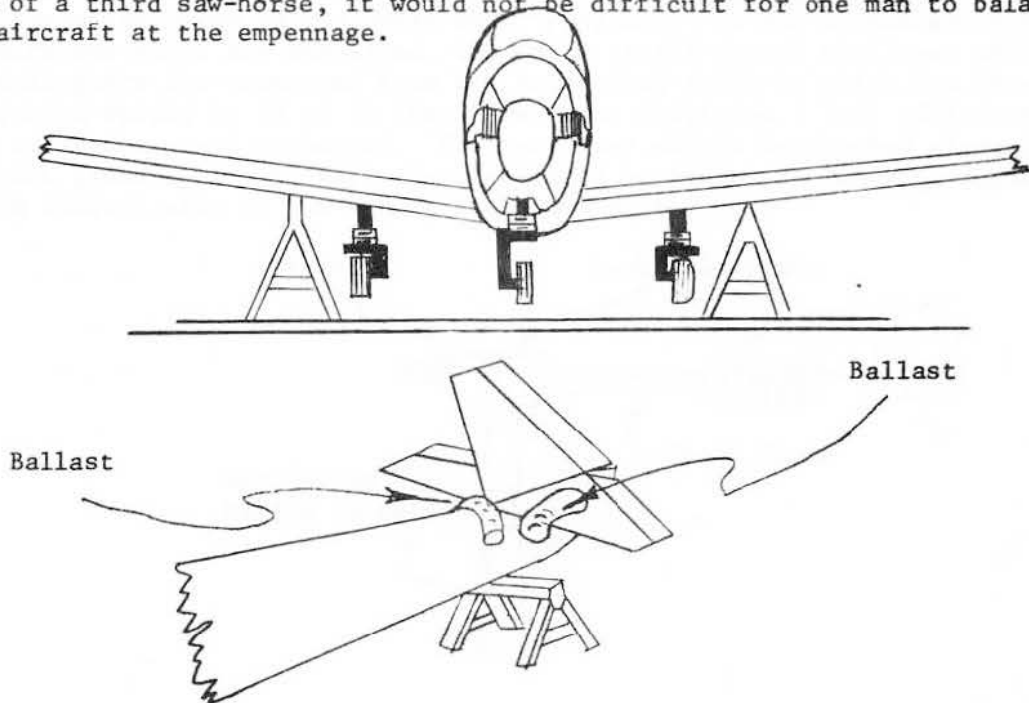


LANDING GEAR RIGGING INSTRUCTIONS

To check the rigging of the landing gear, the weight of the aircraft must be removed from the system.

Elevate the aircraft on three suitable saw-horses. Two of which are placed under the wing just outboard of each main gear, between the third and fourth ribs, approximately three feet from the fuselage skin. The saw-horses should be of sufficient length to extend from slightly behind the rear spar to the front spar, and preferably past the leading edge of the wing. This length is desired to minimize damage to the flaps and skin on the leading edge should the aircraft accidentally be rolled back or forward on the front spar while elevated on the horses. Should the tail be pushed down too far, a saw-horse extended behind the rear spar would rupture the flap fabric. Should the nose drop, rolling the aircraft onto the leading edge, the end of a saw-horse that did not extend beyond the spar would be pushed thru the leading edge skin.

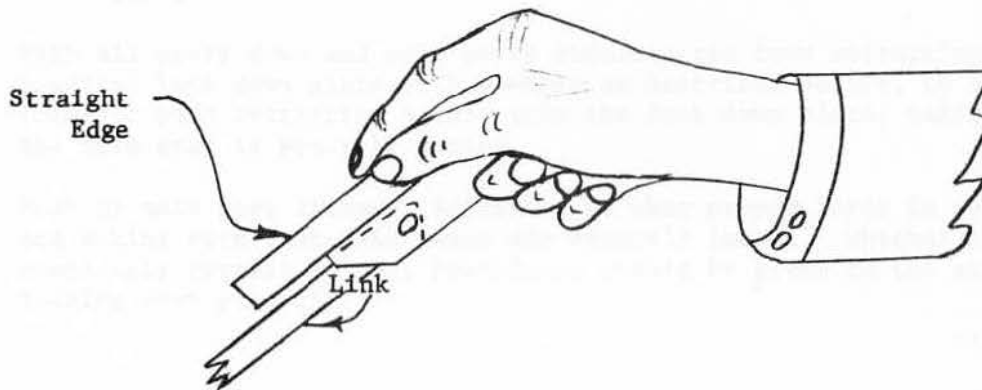
To step on the wing walk or enter the cockpit while the aircraft is elevated will naturally cause the nose to drop. This is prevented by placing the third saw-horse under the rear bulkhead of the fuselage and weighing down the empennage either by tying ballast to the tail bumper or placing it inboard on the stabilizer spar and on top of the fuselage just in front of the fin. In lieu of a third saw-horse, it would not be difficult for one man to balance the aircraft at the empennage.



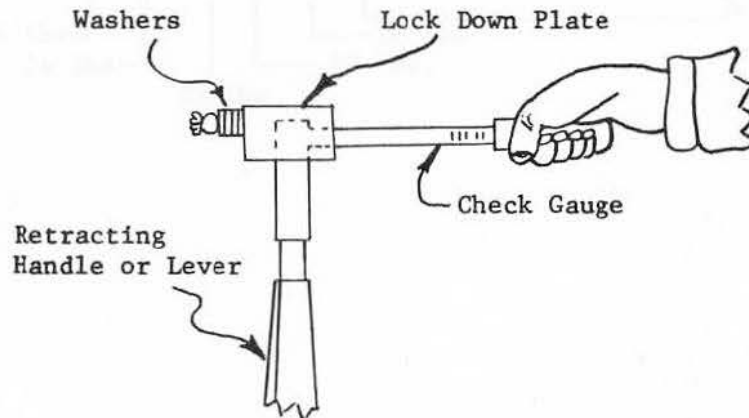
The following inspection and rigging processes must be carefully observed to be assured of trouble free landing gear service from your Mooney Mite.

1. INSPECTION

It has been found absolutely necessary for the over-center locks to be in the over-center position and that considerable force is required to change this position. To check whether the lock is over center lay a short straight edge along the top side of the lock as shown in the sketch.



When the straight edge and link are parallel the lock is over center. The locks are held in this position by the force required to place the retracting lever in the "GEAR DOWN" position. On new airplanes or ones in which new parts are installed, the force at the top of the lever with the main gears dis-connected from the retracting truss on which the lever is mounted should be 18 to 24 lbs. The force should be 2 lbs. additional with all three gears connected. The nose gear should be checked alone first, on which greater or less force is controlled by adding or removing washers on the forward side of the handle lock down plate.



The check gauge shown in sketch is calibrated for nose and main gear loads and may be purchased from Mooney Mite Aircraft Corporation.

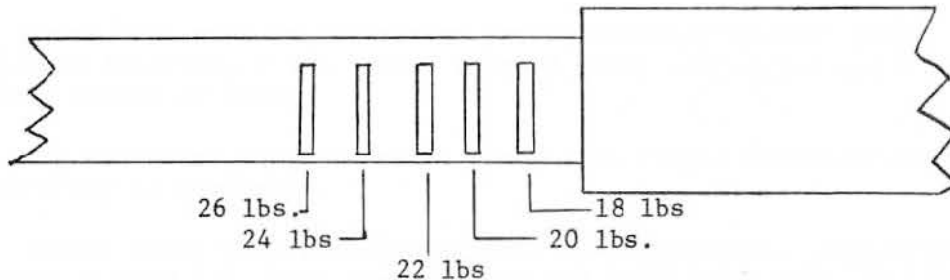
When checking the main gears a greater force is obtained by lengthening and less force by shortening the push-pull tubes operating these gears. This is done by adjusting the end fittings in the push-pull tubes at the nose gear retracting truss.

2. Rigging

With all gears down and main gears disconnected from retracting truss, position lock down plate with washers, as described before, to obtain recommended force to push retracting handle into the lock down plate, making sure that the nose gear is securely locked.

Hook up main gear linkage, adjusting so that proper force is obtained and making sure that main gears are securely locked. Whether the gears completely retract or not, precedence should be given to the gear's locking down properly.

CHECK GEAR CALIBRATION

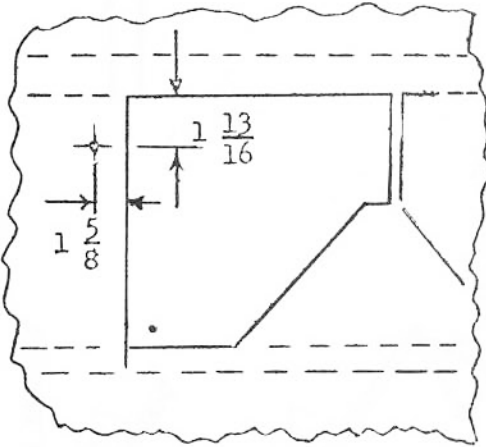


MAIN GEAR DOOR INSTALLATION INSTRUCTIONS

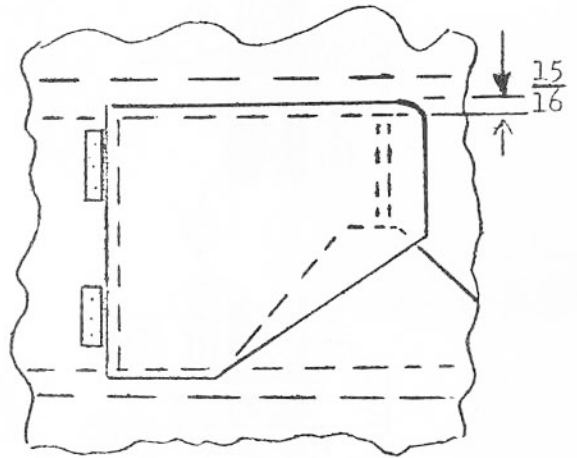
Place ship on horses in manner shown in manual and retract gear.
Measure front hinge center hole location as shown in Sketch # (1).
Hold gear door under wing and attach to wing with a metal screw in front hinge center hole.

Adjust gear door front edge as shown in Sketch # (2) with door held in this position place metal screw in center hole of back hinge. With a 9/64 drill, drill hole thru skin for other hinge holes, remove metal screws from hinge and drill holes on thru skin.

Attach gear doors to wing with machine screws making sure backing plate is inside wing.



Sketch # (1)



Sketch # (2)

Attach clamp to tube on landing gear as shown in sketch # (3).
Tighten bolt snug.

Connect door to clamp with adjustable link with screw end attached to door.
Extend and retract gear several times moving clamp if necessary until best position is found. Tighten clamp and secure clamp to tube by drilling # 40 hole thru clamp and tube and safetying with metal screw.

Adjust link until door fairs with wing with gear retracted.

