

Checking Landing Gear Fit and Alignment

Checking the landing gear hole alignment on the holes that attach the landing gear to the fuselage. If these holes are out of alignment with each other the gear attachment bolts can be difficult if not impossible to install.



Stepped alignment pin helps indicate alignment error.

Pin OD .500" accurately machined to snugly fit inside the 3/8" gear to fuselage attachment hole.

Note: The laser attachment device must be constructed/calibrated to ensure the laser beam is parallel with and concentric to the hole bore being checked.

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By placing this pin into the hole and placing the laser attachment device in the opposite gear attachment hole the difference in alignment between these holes can be determined.



Here, the laser attachment device placed in front gear leg attach hole of the left landing gear pointing aft to the alignment pin in rear gear leg hole. This provides a view of an alignment that would be “good”.

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Laser attachment device placed in rear gear leg attach hole of the same left landing gear pointing forward to the alignment pin in front gear leg hole. This provides a view of an alignment that is off centerline by $.250++$ ". This would make it difficult to install the rear gear leg attachment bolt.

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Laser attachment device placed in rear gear leg attach hole of right landing gear pointing forward to the alignment pin in front gear leg hole. This provides a view of an alignment that is off centerline by .312+”. This would make it difficult to install the gear leg attachment bolt.

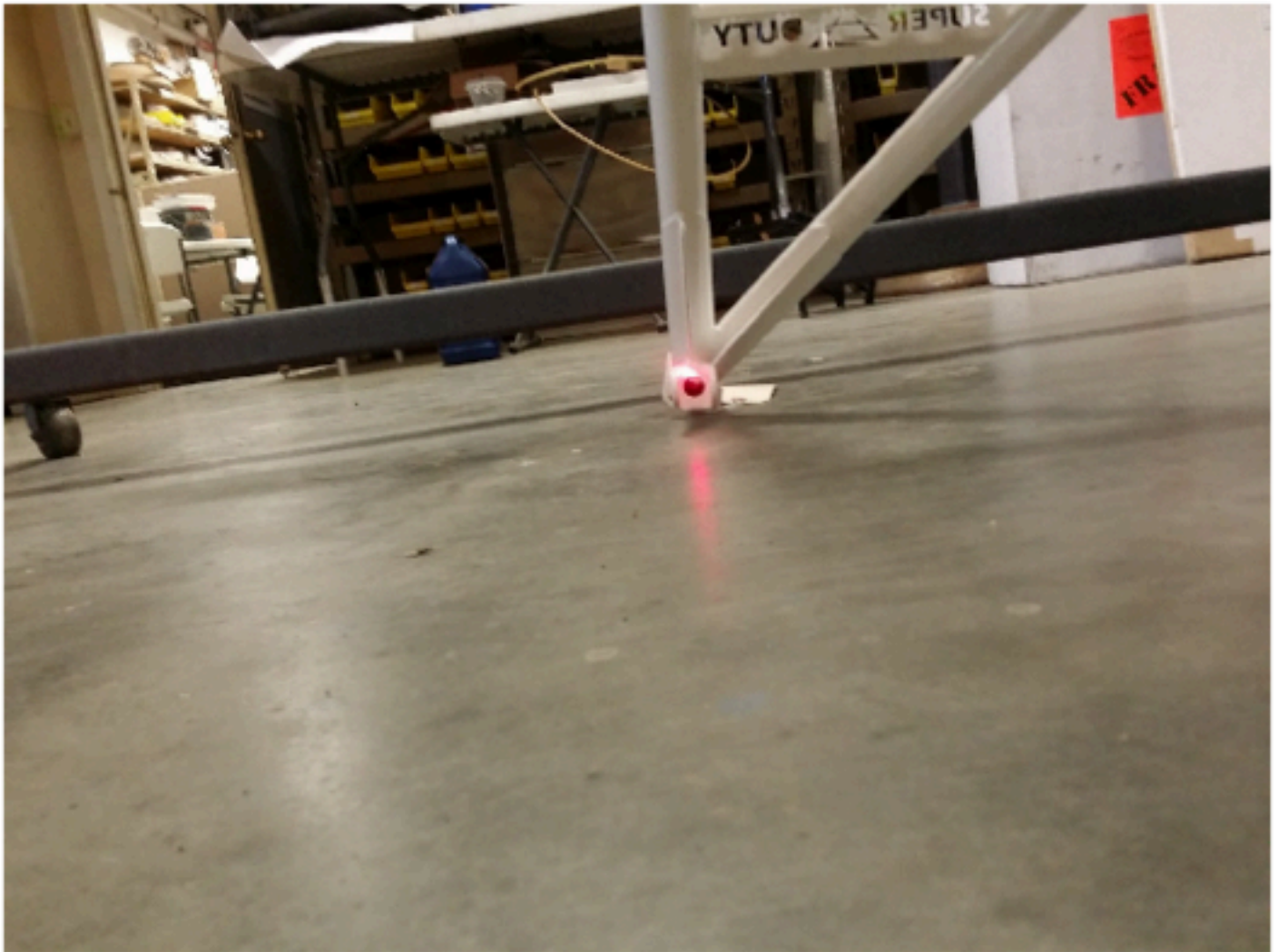
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Laser attachment device placed in the front gear leg attach hole of the same right landing gear pointing forward to the alignment pin in rear gear leg hole. This provides a view of an alignment that is off centerline by $.375+$ ". This would make it difficult to install the gear leg attachment bolt.

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By reconfiguring the laser attachment device, the alignment of the right and left axles and be checked for alignment to each other.



Laser attachment device reconfigured and attached to the bore of the left landing gear axle pointing towards the right landing gear axle. Only the fore and aft directions can be inspected as the vertical changes would come from the pivot motion of the landing gears at their attachment points on the fuselage. In this instance there is only a slight misalignment and could be considered “good”.

Checking Landing Gear Fit and Alignment



Laser attachment device reconfigured and attached to the bore of the right landing gear axle pointing towards the left landing gear axle. Only the fore and aft directions can be inspected as the vertical changes would come from the pivot motion of the landing gears at their attachment points on the fuselage. In this instance there is a misalignment of .750+” and corrective action might be considered.