



Notice Number: DF 1402

Supersedes: None

“SAFETY DIRECTIVE

Date of Notice: 15/06/2014 mm/dd/yyyy

Date Notice takes effect: 15/06/2014

Limitations for Completion: Only Dragonfly Aircraft equipped with Dual Caliper Brakes and 3/4” Axles.

Make and Model of the affected LSA: Pitman Air, Dragonfly 582/912 Aircraft SLSA and ELSA equipped with Dual Caliper Black Max Brakes and 3/4” Axles

Serial Numbers of the affected LSA: PA-912 126 through PA-912-127 and any Dragonfly Aircraft Retrofitted with 3/4” Axle and Dual Caliper Brakes

When Corrective Action must take place: ASAP As Soon As Practicable

Description of Correction Action: Enlarge 2 bolts and holes on each gear leg elbow and axle as described in attached Correction Instructions.

Who is Qualified to perform Corrective Action: LSRM (Light Sport Repairman Maintenance Rating) or A&P with appropriate skills.

NOTE: Always use proper Personal Protective Equipment and Safe Guards required by OSHA and/or your State or local Safety Authority.

Tools Required:

3/16” & 1/4” centering pins

Cobalt 1/4” drill Bits.

Drill Press with vise

Parts Needed:

2 each AN4-14A Certified Bolts

2 each AN4-15A Certified Bolts

4 each AN 365-428A Nuts

Where to obtain parts: Pitman Air LLC, Aircraft Spruce and Specialty, or suitable supplier of Certified Bolts.

Instructions for Completion:

Read through all steps before beginning work to make sure you have clear understanding of processes.

The process is to increase the size of 2 bolts on each main gear from 3/16" AN3 to 1/4" AN4 to provide additional rotational strength when Dual Caliper Brakes and 3/4" axles are used. These 2 bolt locations can be identified by referring to the Dragonfly Maintenance Manual Section 7 Steps 3 & 7.

NOTE: While the weight is off the gear, it is good time to inspect Bolts 3 & 5 in Section 2 for any signs of bending from hard landings.

Raise aircraft off gear **one side at a time** by jacking and blocking, By suitable means, Insure wind or pushing on Gear Leg while drilling, will not cause the aircraft to fall,. After one side is completed and re assembled, proceed to the other side.

Remove Wheels and Brakes and Calipers from the side you are working on.

Mark the top of Gear Elbow and Axles with tape if both sides are removed at the same time to ensure parts are reinstalled in the same location and orientation as removed. Right and Left Gear as well as Top and Bottom of Axle.

Remove Gear Elbow (bolt #7) and axle together to enlarge holes in Drill Press to insure proper alignment. For Hole #3, use bolt or pin on underside to insure alignment remains during drilling gear elbow/axle (#3). Letting drill push the pin or bolt out the other side as drilling through. Best to dull just the point of drill bit for this pushing action. Enlarge Hole for Bolt #7 in Elbow also in drill Press.

ALIGNMENT NOTE: Can align before drilling by placing 3/16" pin in drill press insuring alignment of old holes, clamp Elbow in position, then switch to 1/4" drill to bore correct size hole. Be sure there is room on the underside for the pin or bolt that gets pushed out as drilling progresses.

CAUTION: When enlarging holes, drill bit must be cutting appropriate amount of metal. Which is much less pressure than drilling an entire hole in fresh metal. This operation is only removing 1/32" around each hole. If you proceed to quickly it can break the cutting points of the drill bit or even break the drill bit. Drill Bit needs to be cutting metal to cool the bit cutting edge.

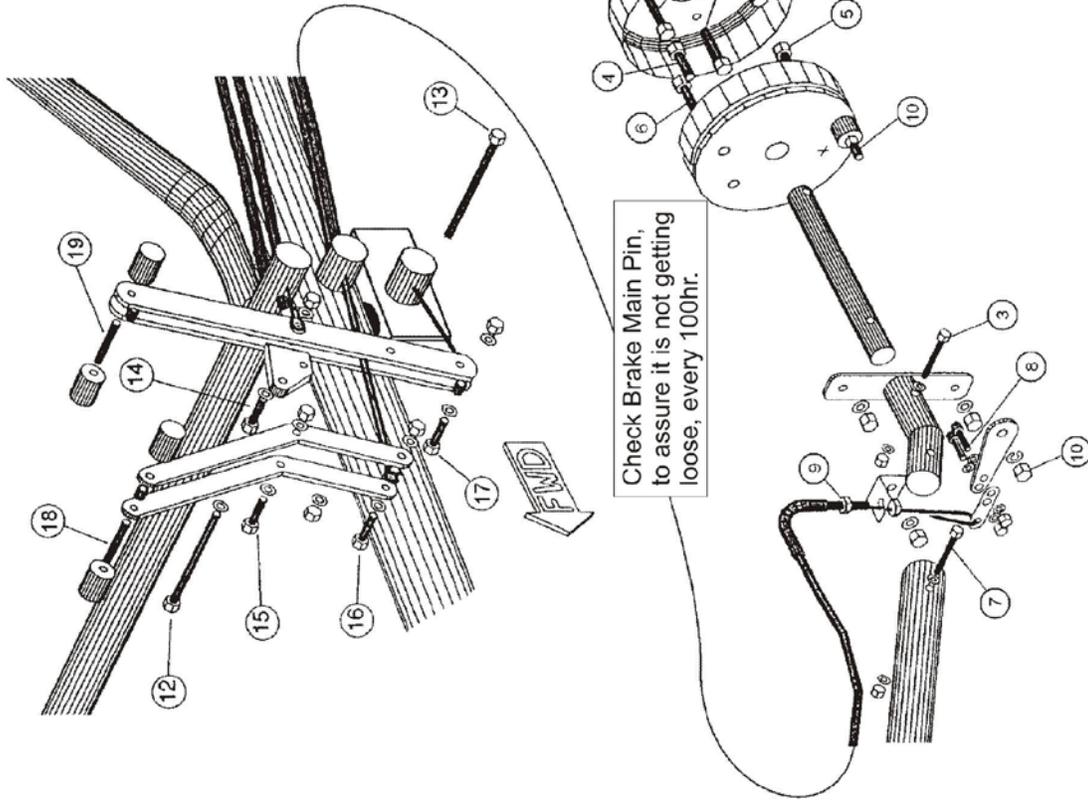
The lower hole in gear leg (bolt #7) can be drilled (enlarged) on the forward side. Be sure the drill is perpendicular to the Gear Leg while drilling. Then place the elbow into position with holes already enlarged to 1/4", then from the front side pass drill through front hole and holes in Elbow to drill aft hole in Gear Leg. This will help maintain alignment. Any misalignment can change the "Toe In" and the ground handling of the aircraft on the ground.

Re-Install Wheels Brakes and Calipers in the order as were removed. Brake information is found in Appendix B of the manual. Note: There is a spacer washer (Number 13 in first diagram in Appendix B) between caliper and hub to maintain disc alignment.

After completion, inspect all areas effected for proper installation and torques.

NOTE: Logbook Entries: Must be made that show the successful completion of corrective action, who, what, when. and parts used (including Batch and Date information), and from where they came, invoices etc.

Hydraulic Independent Brakes
 Front & Rear - Right & Left
 see Appendix B in back of manual



LEFT WHEEL

Drawing	07	Title	FWD WHEEL, THROTTLE & BRAKE
Pitman Air DRAGONFLY			
Date:	07/04/13		