



**Service Letter #:** SL02-35A42114

**Date:** 02/19/2010

**Part/Assembly #:** 35A-42114 Centering Pin

**Float Model Affected:** 3400 float model serial numbers 100 thru 387

**Symptom:** Possible shearing of nose wheel centering pin and subsequent wheel loss, due to improper maintenance.

A shearing of the 35A-42114 centering pin may occur, caused by an overpressure due to excessive greasing of the nose wheel swivel pin.

Excessive greasing is contrary to the instruction for continued airworthiness (ICA) and red warning placards (35A-42127) located on the nose landing gear bottom block (35A-42126).

**Approval:** This change is a minor change to the TSOA per 21.611(a) and does not require additional approval.

**Corrective Action:** Part number 35A-42114, Rev. A and previous shall be 35A-42114-1 and shall be removed from service per this service letter. 35A-42114-2 shall serve as replacement per engineering change notice (ECN) 1006.

Replace 35A-42114-1 centering pin, made of Acetal material, with supplied 35A-42114-2 centering pin of Nickel Aluminum Bronze per customer parts list drawing (35A-CPL-42100 Rev. 3), sent with this service letter, and perform steps 1, 4, 5 and 6 from the procedures below. Insert 35A-CPL-42100 Rev. 3 into your customer parts list drawing package, replacing any previous version of this drawing and its parts list.

**Nose Centering Pin (35A-42114-1) Replacement - Reference 35A-CPL-42100, Sheets 1 & 3.**

1. Remove centering pin according to exploded view.
2. Check wear on centering pin and assembly. This is done by noting that the tire will want to center in the trail position. There should be no more than 3/16" free travel, side to side, at the axle. There should be no more than 1/16" (.063") vertical movement of the nose block.
3. The heat treated pivot pin, part 35A-42110, is heat shrunk into the nose block. The nose block and pivot pin are supplied from Aerocet as an assembly. If the pivot pin is pressed out, the anodized surface is opened up causing dissimilar metal contact between the two components when reassembled.
4. Replace centering pin 35A-42114-1 with centering pin 35A-42114-2. Lightly grease all parts prior to reassembly using marine grade waterproof grease. **Be careful not to introduce too much grease around the compression spring causing it to hydraulic lock.**
5. Lightly grease through the grease fitting on the top of the bottom block. Initial amounts should be two **very** slow pumps with a conventional hand grease gun. Continually check pivoting action of the nose assembly to assure proper function, watching for hydraulic lock and proper vertical movement. If too much grease has been introduced, push down on the grease fitting check ball and rotate the nose gear 360 degrees a couple of times to expel excess amounts.
6. Introduction of grease through the grease fitting during normal operation should be minimal (**1/2 pump max of a hand grease gun per week**) always watching for hydraulic lock and any damage from grease gun pressure.

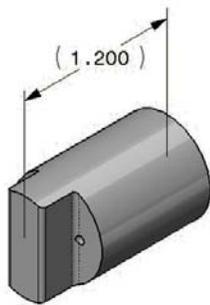
**Caution:** Be very slow introducing grease into the grease fitting on the bottom block in order to keep from putting too much pressure on the internal components. Grease guns can develop incredible force. Over greasing can cause damage to centering pin and other components.

**Compliance is Mandatory:** Before further flight, if float model is within affected serial number range.

The information contained in this service letter shall be considered an amendment to the instructions for continued airworthiness, and must be accomplished for ongoing airworthiness compliance in accordance with 14 CFR Part 43.13.

**Time required:** 30 minutes

35A-42114-1 Centering Pin (obsolete) made of Acetal material. Will be white or black in color.



35A-42114-2 Centering Pin (replacement) made of Nickel Aluminum Bronze material. Gold in color.

