

# SERVICE LETTER SL46 66-12102-3

Release Date: 01/30/2020

1. **Service Letter No.:** SL46 66-12102-3
2. **Subject:** Fuselage Fittings
3. **Part/Assembly No.:** 66-12102-3
4. **Float Model Affected:** 6650 and 6750
5. **Compliance:**  **Mandatory**  **Recommended**  **Optional**
6. **Approval:** All information provided is in accordance with approved data.
7. **Corrective Action:** Non-required.
8. **Time Required:** 2 hours per side plus 1 hour per each hold drilled (4 to 6 hours total depending on need to drill holes in strut).
9. **Payments:**  Credit to Customer  Under Warranty  Customer Pays

## DESCRIPTION of CHANGE:

In order to reduce the chances of environmental hydrogen embrittlement particularly in marine environments, Aerocet has changed the 66-12102-2 fitting to 66-12102-3, having a different heat treatment.

Environmental hydrogen embrittlement occurs when hydrogen atoms are introduced over time through environmental exposure (soils and chemicals, including some cleaners, and water), corrosion processes (especially galvanic corrosion), cathodic protection, and/or from hydrogen generated by corrosion. The buildup of hydrogen within the material can lead to very high, localized stresses, which can produce fractures in the material over a relatively short period of time.

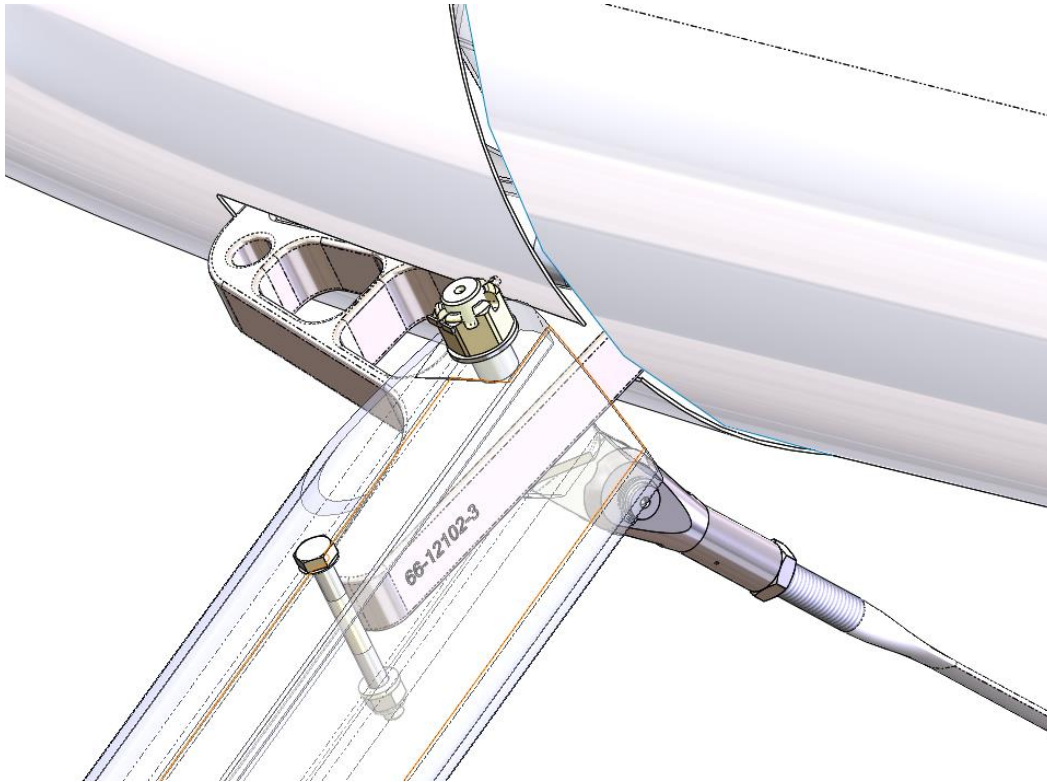
Aerocet highly recommends the “-2” fuselage fitting be replaced if, upon inspection, any potential corrosion or susceptibility (such as dings that might cause paint to chip off, etc.) is identified.

All installations after 01/24/2020 including Float Serial 170-171 will be provided with the “-3” fittings.

Identification: Part numbers are marked on the fittings as they are provided from Aerocet. At the time of this writing, all existing parts are either -1 (Aluminum) or -2 (Stainless). All 66-12102-3 parts will be marked with engraved or inscribed part number on the aft lower leg of the part. The intent is that a borescope or similar device could be used to identify the -3 number without having to disassemble the strut from the fitting. (Additional means of marking may also be found, such as manufacturing information in the form of a non-engraved mark.)

If there is no aft leg, then the part is the aluminum 66-12101-1. (Replace with -3 per SL43 66-12102)

If there is an aft leg, but no engraving, then the part is 66-12101-2. (Replace with “-3”)



The above image shows a 66-12102-3 fitting with the engraved number on the aft-lower arm of the fitting. (FWD strut is transparent; view is aft-quartering, LHS, looking forward and inboard) (Note that the “-2” fitting is similar, but lacking the engraved number.)

For 66-12102-2 replacement, exchange the -2 with a -3. Inspect and re-use or replace hardware as necessary.

For 66-12102 or 66-12102-1 aluminum fitting replacement, see tables below for parts lists, and adjust the aircraft weight and balance.

Number	QTY	Pound	Weight	Fuselage Station	Moment
66-12102-2 or 66-12102-3	2	2.756	5.512	-1.977	10.897224

TABLE 1 STRUT AND FITTING INTERCHANGES		
STRUT	FWD FUSELAGE FITTING	NOTES
66-12126	66-12102-3	*NOTE 3 ON DRAWING

\*Note 3 below is from the installation drawing, 66-12020 for the 6650 or 66-11020 for the 6750.

③ WITH INSTALLATION OF 66-12102-2 FITTING, AN4-23A BOLT MUST BE INSTALLED AS SHOWN IN SHT 3. 66-12126 FWD STRUT TO BE MODIFIED WITH 1/4" HOLE, IF NONE EXISTING, AS SHOWN IN REFERENCE VIEWS OF FWD FITTINGS. APPLY CHEMICAL CONVERSION COATING TO BARE ALUMINUM. RECOMMEND USE OF HENKELS BONDERITE M-CR 1132 (ALODINE 1132) Touch-N-Prep Pen. (PAINT WILL NOT LIKELY ALLOW FASTENER CLEARANCE, SO IS NOT REQUIRED.)

TABLE 2 PARTS KIT FOR 66-12102-3 CORROSION RESISTANT FUSELAGE FITTING					
ITEM NO.	QTY	TYPE	PART NUMBER	DESCRIPTION	COMMENTS ALTERNATIVES
4	2	PART	66-12102-3	FUSELAGE FITTING, FWD	REFERENCE TABLE 1 FOR ACCEPTABLE COMBINATIONS
32	2	HRDWR	AN4-23A	BOLT – MACHINE, AIRCRAFT	IF DRILLED HOLE NEEDED
45	2	HRDWR	MS21044N4	NUT, SELF-LOCKING, REGULAR HIEGHT	(NEW)
48	2	HRDWR	MS24665-300	COTTER PIN	
52	2	HRDWR	NAS1149D0416K	WASHER, FLAT	(NEW)
53	2	HRDWR	NAS1149D0463K	WASHER, FLAT	(NEW)

NOTE: The following parts can be reused and are not a part of the service letter kit. If you choose to order new parts to replace these, please call our parts department.

TABLE 3 Reusable Parts					
ITEM NO.	QTY	TYPE	PART NUMBER	DESCRIPTION	COMMENTS ALTERNATIVES
2	2	PART	66-12126	STRUT, FWD	DRILL Ø.25 HOLE PER DTL IF REQ'D. NEW STRUTS WILL BEGIN TO HAVE THIS HOLE AFTER 7/18.
5	2	PART	66-12103	BOLT, CLOSE TOLERANCE	(REUSE EXISTING)
8	2	PART	66-12107	SPACER, FWD FUSELAGE FITTING	(REUSE EXISTING)
10	2	PART	66-12111-063	SHIM, FWD FUSELAGE	(REUSE EXISTING) ALT. USE -020, -032, -.040 OR NAS1149D08XX WASHERS AS NECESSARY TO ASSURE A TIGHT FIT
41	2	HRDWR	MS14144-8	NUT, SELF-LOCKING, LIGHTWEIGHT, CASTELLATED	(INSPECT, REPLACE OR REUSE EXISTING)
57	10	HRDWR	NAS1149D0863K	WASHER, FLAT	(INSPECT, REPLACE OR REUSE EXISTING)

-END-