

## Swedish Airworthiness Directive (SAD)

Swedish Transport Agency issued this SAD for aircraft regulated via Swedish national regulations, TSFS, and not for aircraft regulated by EASA. This SAD is not applicable for aircraft regulated by basic regulation (EU) 2018/1139.

Subject / Reason:	Cracks have been found in the Main landing gear cradle P/N 5801701- 10-1 during a FLIP program inspections. The inspection point is only covered in the FLIP inspection program. The ordinary inspection maintenance requirement does not cover inspection of the bracket of concern. If the cradle will break there will be a significant loss of margins of the main landing gear attachment to the fuselage. A broken cradle may lead to loss of the main landing gear attachment and could lead to a potential unsafe condition during landing.			
Applicability:	SAAB-MFI 15-200/200A			
Revision:	0			
Action:	Mandatory. First visual and NDT inspection to be performed on aircraft with more than 6500 Flight Hours accumulated and then repeated every 1500 Flight Hours. Aircraft with more than 6500 Flight Hours accumulated shall perform the first inspection within 200 Flight Hours from release of Service Bulletin, SB 15.030.			
Implementation:	At the latest December 31 2025			
Supporting documentation:	SB: SAAB MFI SB 15.030, 03 July 2024, "LANDING GEAR - MAIN LANDING GEAR - INSPECTION OF THE MAIN LANDING GEAR LEG CRADLES",			
Reference:	Swedish Transport Agency decision, TSL 2024-5182			
Effective date:	October 17 2024			
File reference no:	TSL 2024-5182			
Appendix:	SB: SAAB MFI SB 15.030			
Actions required according to this SAD is considered necessary to perform for the continuation of the airworthiness,				

Performed actions according to this SAD, must be recorded in the aircraft technical logbook, with reference to this SAD number.

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Service Bulletin

## LETTER OF TRANSMITTAL

## SERVICE BULLETIN SAAB MFI SB 15.030

TO: All holders of SAAB- MFI 15- 200/200A SERVICE BULLETIN.

This letter covers transmittal of the following Service Bulletin which should be included in the appropriate section of your folder.

Initial issue of Service Bulletin SAAB MFI SB 15.030, 03 July 2024, "LANDING GEAR - MAIN LANDING GEAR - INSPECTION OF THE MAIN LANDING GEAR LEG CRADLES", cover sheet and 13 pages.

Saab AB

Date: 03 July 2024

**Technical Information** 

# **SERVICE BULLETIN**

Number: SAAB MFI SB- 15.030

Date: 03 July 2024

Subject: LANDING GEAR - MAIN LANDING GEAR - INSPECTION OF THE MAIN LANDING GEAR LEG CRADLES

Mod. No. -



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LANDING GEAR - MAIN LANDING GEAR - INSPECTION OF THE MAIN LANDING GEAR LEG CRADLES

Mod No. -

### 1. PLANNING INFORMATION

#### A. EFFECTIVITY

(1) Aircraft:

All SAAB- MFI 15- 200/200A aircraft.

(2) Spares: N/A

#### B. REASON

A Flight Leader Inspection Program (FLIP) has been defined for the Saab- MFI 15- 200/200A aircraft with high number of accumulated flight hours. Cracks have been found in the main landing gear leg cradle P/N 5801701- 10- 1 (Ref. Parts Catalog T.O. 1T- 17- 4 figure 5- 1 item 13) during inspections according to FLIP. The inspection point is only covered in the FLIP inspection program. The ordinary inspection maintenance requirement, ref T.O. 1T-17-6, does not cover inspection of the bracket of concern.

If the cradle will break there will be a significant loss of margins of the main landing gear attachment to the fuselage. A broken cradle may lead to loss of the main landing gear attachment and could lead to a potential unsafe condition during landing.

#### C. DESCRIPTION

This Service Bulletin gives instructions for:

- Repetitive visual and non destructive testing inspections of the LH and RH main gear leg cradles
- Visual inspection of the taps
- Corrective Action.

#### D. COMPLIANCE

#### Mandatory.

First visual and NDT inspection to be performed on aircraft with more than 6 500 Flight Hours accumulated and then repeated every 1 500 Flight Hours. A/C with more than 6 500 Flight Hours accumulated shall perform the first inspections within 200 Flight Hours from release of this Service Bulletin.

This Service Bulletin is under Swedish Transport Agency (SCAA) consideration for a Swedish Airworthiness Directive.

The final compliance terms will be set by the SCAA Swedish Airworthiness Directive (SAD) when issued.

#### E. APPROVAL

The technical content of this Service Bulletin is approved under the authority of Swedish Transport Agency Design Organization Approval number AUB 283.

## Service Bulletin

### F. MANPOWER

Estimated time to complete this Service Bulletin is:

1 persons required.

Total manhours: 8

Labour cost at operators expense.

G. MATERIAL - COST AND AVAILABILITY Refer to Scan Avionics (Denmark).

### H. TOOLING

- Withdrawing and pushing tool (M10x1,5 mm), local manufacturing, made from steel (REF. FIG. 8).
- (2) Jack 5807033 (Qty 2).
- (3) Tooling and equipment for NDT inspection.
- I. WEIGHT AND BALANCE None.
- J. ELECTRICAL LOAD DATA Not affected.
- K. REFERENCES

Aircraft Maintenance Manual Parts Catalogue T.O. 1T- 17- 2 T.O. 1T- 17- 4

L. OTHER PUBLICATIONS AFFECTED Not affected.

### 2. ACCOMPLISHMENT INSTRUCTIONS

REF. FIG. 1, 2, 3, 4, 5, 6, 7, 8

- A. JOB SET- UP
  - (1) Before you start the SB, make sure:
    - Check that all documentation is or will be available
    - Check that the NDT equipment and personnel is or will be available.
  - (2) If not available, manufacture the withdrawing and pushing tool (REF. FIG. 8).
  - (3) Make the aircraft safe for maintenance.
    - (a) Put up a warning sign "DO NOT ENTER THE BAGGAGE COMPARTMENT" on the baggage door.
  - (4) Jack the aircraft (Ref. Maintenance Manual T.O. 1T-17-2 section 2-3).
  - (5) Remove the main gear legs (Ref. Maintenance Manual T.O. 1T-17-2 section 5-9). Follow the instructions as necessary to disconnect the brake line between the fuselage and the main landing gear leg.

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(6) Remove the taps from the cradle (LH and RH).

REF. FIG. 1, 2, 3

- (a) Install the withdrawing tool.
- NOTE: You must remove the taps (5, REF. FIG 1) one at a time.
  - Use the short thread bar (1A) and install the nut (2), the washer (3), the spacing sleeve (4) and the washer (5).
  - 2 Install the withdrawing tool into the threads of the tap (5, REF. FIG 1).
- (b) Remove the tap
  - 1 Use a suitable wrench and tighten the nut (2) until the tap (5, REF. FIG 1)) is loose.
  - <u>2</u> Remove the tap (5) from the cradle (1).
  - <u>3</u> Do the above steps (6)(a) and (b) and remove the other tap (5, REF. FIG 1) from the cradle (1).
- (7) Remove the cradle (LH and RH).

REF. FIG. 1

- (a) Remove the cradles (1).
- (b) Mark up the cradles with LH and/or RH.
- (c) Remove the bolts (7) and the pressure plates (6 and 8). Keep the parts for installation.

#### B. INSPECTION

- (1) Clean the cradles and taps before inspection.
- WARNING: BE CAREFUL WHEN YOU USE THE CONSUMABLE MATERIALS. YOU MUST OBEY THE OPERATORS AND MANUFACTURERS HEALTH AND SAFETY INSTRUCTIONS. INJURY OR DEATH TO PERSONS CAN OCCUR.
  - (a) Use a lint- free cloth moist with MEK and clean the cradles and the taps. Let the cradles and taps become dry.
  - (b) Make sure the cradles and taps are clean before the inspection.
- (2) Do a detailed visual inspection of the cradles (LH and RH). Inspect for corrosion, fretting and crack damages.
- (3) Do a NDT inspection by penetrant or equal of the cradles (REF. FIG. 4).
- (4) Do a visual inspection of the taps. Inspect for corrosion, fretting and cracks.
- (5) If damage is observed, mark out the location and send the inspection form according to FIG. 4 to Saab AB.
- C. CORRECTIVE ACTION
  - (1) If corrosion, fretting or cracks are found on a cradle or a tap, make a note of the findings and replace the cradle and/or the tap.
  - (2) If only one damaged cradle or tap is replaced, the next inspection shall be performed after 1 500 Flight Hours.
  - (3) If both cradles and all taps are replaced, the next inspection shall be performed after 6 500 Flight Hours.

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- D. JOB CLOSE- UP
  - (1) Install the cradles to the fuselage brackets.

REF. FIG. 1

- (a) Make sure the cradle (1) and the taps (5) are clean before installation.
- (b) Apply grease (Mobilgrease 33 or Aeroshell 33) on the taps before installation.
- (c) If the same cradle as removed is to be installed, make sure it is installed at the same side of the fuselage as before removal.
- (d) Put the cradle (1) in correct position.
- (e) Apply the grease Mobilgrease 33 alt Aeroshell 33 on the taps (5) and put them in position in the cradle.
- (f) Install the pushing tool.

REF. FIG. 1, 5, 6

- <u>NOTE</u>: You must install the taps (5, REF. FIG 1) one at a time. There are two different thread bars for the pushing tool, one short and one long.
  - On the short thread bar (1A) or the long thread bar (1B) install the nut (2), the washer (3), the spacing sleeve (4) and the washer (5).
  - <u>2</u> Install the pushing tool into the threads of the tap (5, REF. FIG 1).
- (g) Install the taps (5, REF. FIG 1))
  - Use a suitable wrench and tighten the nut (2, REF. FIG. 5, 6) until the tap (5, REF. FIG 1) is fully installed.
  - 2 Do the above steps (1)(f) and (g) and install the other tap (5, REF. FIG 1).
- (h) Install the pressure plates (6 and 8) and the bolts (7).
- <u>NOTE</u>: The bolts (7) are tightened and safetied with lockwire at the installation of the main gear legs.
- (2) Replace the wear protection P/N 5801714-001 and 5801723-001.

REF. FIG. 7

- (a) Use a suitable tool and carefully remove the wear protections (10) and (11) from the landing gear leg (2).
- (b) Make sure the landing gear legs (2) are clean before installation.
- (c) Install the new wear protections (10) and (11) with Araldit AW 106/HV 953U (Ref. FIG 7). Make sure the joints of the wear protections (10) and (11) are in correct position.
- (d) Let the Araldit become hard before installation of the landing gear.
- (3) Install the main gear (Ref. Maintenance Manual T.O. 1T-17-2 section 5-10).
- (4) Remove all the tools and equipment from the work area. Make sure the work area is clean.
- (5) Remove the warning sign "DO NOT ENTER THE BAGGAGE COMPARTMENT" from the baggage door.
- (6) Make a note in the Technical Journal of the aircraft that this Service Bulletin has been performed. Also make a note when the next inspection shall be done.

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### 3. MATERIAL INFORMATION

A. Local Supply

Part Number	Nomenclature	<b>Designation</b>	<u>Qty</u>
Methyl- Ethyl- Ke- tone (MEK), TT- M- 261 or equivalent	Cleaning Agent	-	A/R
Araldit AW 106/HV 953U	Two component Epoxy	Wear Protec- tion	A/R
Commercial avail- able	Cloth, Lint-free	-	A/R
Mobilgrease 33 alt.	Grease	Taps	A/R
Aeroshell 33 or equivalent			

### B. Replacement Parts

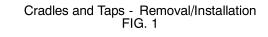
Part Number	Nomenclature	<b>Designation</b>	<u>Qty</u>
5801701-10-1	Cradle	-	On operator re- quest
	Item 1 - FIG 1		
5801714-001	Wear Protection	-	On operator re- quest
	Item 10 - FIG 7		
5801723-001	Wear Protection	-	On operator re- quest
	Item 11 - FIG 7		
5801702-001	Тар	-	On operator re- quest

<u>NOTE</u>: The replacement parts may be ordered from Scan Avionics (Denmark). E- mail: SA@scanav.com

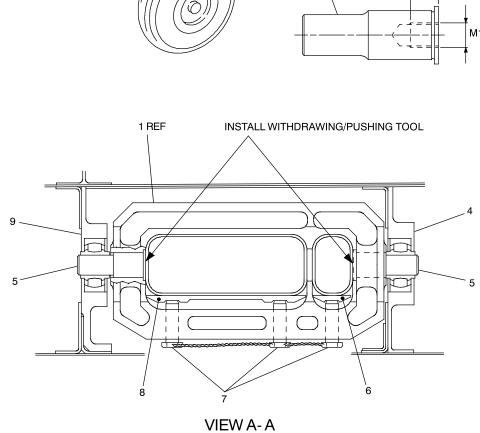


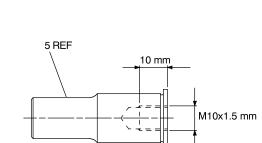
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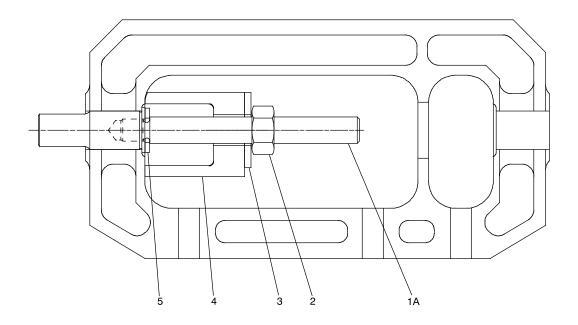
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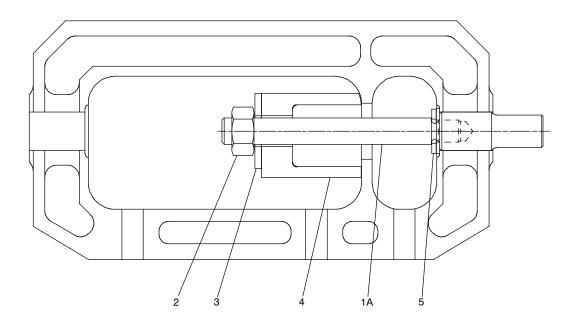
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Removal Tap - Withdrawing Tool - Short Thread Bar FIG. 2



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MFI-01099

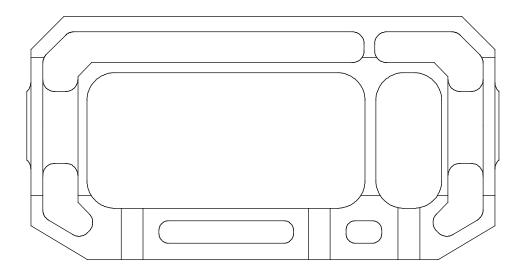
Removal Tap - Withdrawing Tool - Long Thread Bar FIG. 3



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CRADLE INSPECTION - TYPICAL LH AND RH

Operator:

A/C Serial No:

A/C Accumulated Flight Hours:

Date:

Send the form to Saab AB after the service bulletin has been performed.

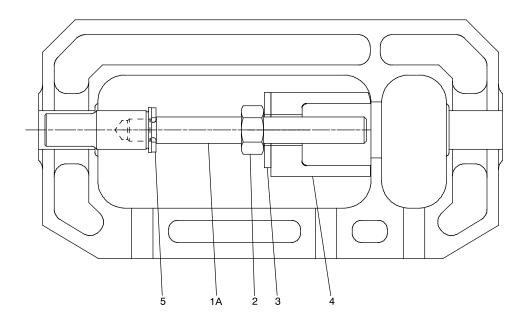
E-mail address: SMA.techsupport@saabgroup.com

MFI-01063

Cradles - Inspection FIG. 4



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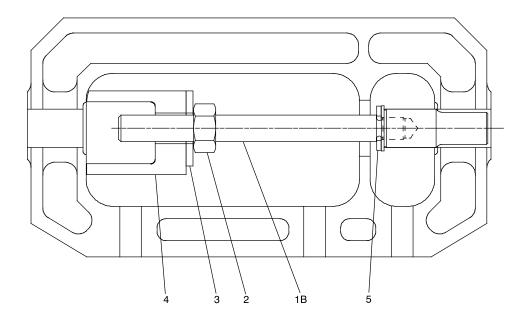
Installation Tap - Pushing Tool - Short Thread Bar FIG. 5



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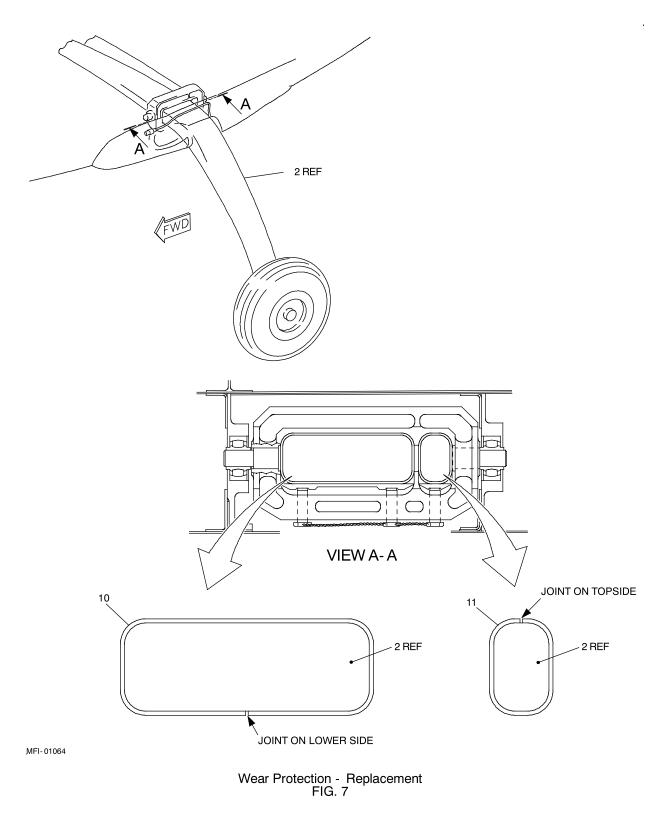
Installation Tap - Pushing Tool - Long Thread Bar FIG. 6



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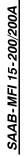
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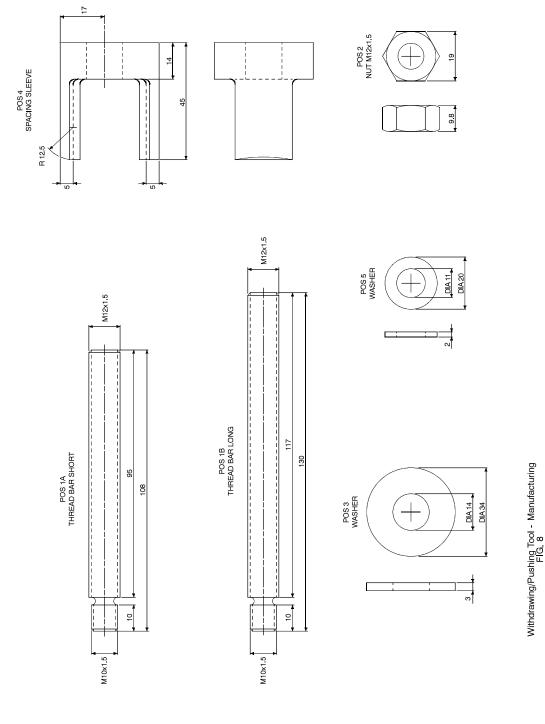


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DIA 14 DIA 38 NOTE: ALL DIMENSIONS IN METRIC. NO SCALE.

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