

Project No: **BDHRN002**Job Card No **0015**

Notif.No.: 10049061

Activity: **1002**

Rev No: 20000622

Model.: F900EX

Sheet 1 of 2

A/C Regn: **D-AHRN**

Serial No.: 096

Type: F900EX

Starting Phase: Inspect

Starting Work Centre: FALCON A/C TEAM

Job Description: Inspect LP Water Separator Components

ETOPS A/C: No

RVSM A/C: No

Warranty: -

ATA: 21

Check Type: 1A+ Inspection

Work Center	
FALCON A/C	

Zone: 100**Access Required for this task:**

194AR

Corrective Action

0001	Task carried out in accordance with the attached Customer Card that quotes the Operator code detailed below.					 Order: 80069251 Operation: 0010 Phase: Inspect - scheduling activity Work Center:FALCON A/C TEAM
	Accomplished		Inspected			
	Pers. No.	Date	Pers. No.	Date		
	Stamp		Stamp			
Completed & Confirmed on SAP IAW MOE 2.13.						
0002	Performed Leak Check During Run-Up					 Order: 80069251 Operation: 0020 Phase: Inspect - scheduling activity Work Center:FALCON A/C TEAM
	Accomplished		Inspected			
	Pers. No.	Date	Pers. No.	Date		
	Stamp		Stamp			
Completed & Confirmed on SAP IAW MOE 2.13.						

Defect Card Raised

Components Removed/Installed

	Part Number	Part Name	S/N	Location	Comm. Off/On
OFF					
ON					
OFF					
ON					

OEM Code: 21-52-19-200-801

Form No: JA-SAP-MTX-002

Operator Code: 21-52-19-200-801-01

Printed by: ADAMOVIC G

Project No: **BDHRN002**

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Sheet 2 of 2

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Starting Work Centre: FALCON A/C TEAM

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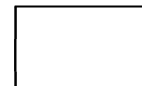
Check Type: 1A+ Inspection

Work Center	
FALCON A/C	

OFF					
ON					
OFF					
ON					

Occurance Report Raised? YES ☐

Operations Above & Notifications Completed IAW MOE 2.13.



OEM Code: 21-52-19-200-801

Operator Code: 21-52-19-200-801-01

Form No: JA-SAP-MTX-002

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Printed: 03.09.2012

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Print No: 1



FALCON 900EX AIRCRAFT MAINTENANCE MANUAL

TASK 21-52-19-200-801

INSPECTION / CHECK OF THE LP WATER SEPARATOR COMPONENTS

1. OVERVIEW OF THE JOB

Operation code: 21-52-19-200-801-01 LP water separator (**506HN**)

This procedure describes the following operations:

- The removal/installation of the LP water separator (**506HN**)
- The removal/installation and inspection of the coalescer
- The removal/installation of the coalescer sleeve
- The check of the LP water separator pressure-relief valve for sticking.

At least two operators are required for the removal and the installation of the fillet fairing (**194AR**).

At the end of this procedure, a leak check must be performed with the APU running.

NOTE: Three operators are required for the leak check (Refer to **TASK 21-00-00-790-801**).

2. LOGISTICS

A. References

Reference	Designation
• 20-41-00-900-809	REMOVAL / INSTALLATION OF FLEXINOX CLAMPS
• 21-00-00-790-801	LEAK CHECK OF THE AIR CONDITIONING SYSTEM
• 53-60-01-900-801	REMOVAL / INSTALLATION OF THE FUSELAGE FAIRINGS

B. Tools and Ground Support Equipment

Reference	Designation	Quantity
• F7XC202000008	TOOL BOX	

C. Ingredients and Consumable Products

Designation	Additional designation
• SILICONE GREASE	
• DETERGENT	

D. Spare Parts

Reference	Designation	Quantity
• R13200X250A21A6	O-RING	2
• R14000X200A21A6	O-RING	1
• R15000X300A21A6	O-RING	1

E. Additional Spare Parts

Reference	Designation	Quantity
• B31WA3010-053	COALESCER	1
• 8954-012	COALESCER SLEEVE	1
• 33350CA048	LOCKWASHER	4
• FGFB252308112A1	SUPPORT	1
• FGFB252308122A1	SUPPORT	1
• FGFB721676A1	DRAIN LINE	1

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• 1501100400	FLEXIBLE SLEEVE	1
• 1354600400	FLEXIBLE SLEEVE	2
• FGFB721560001A2	TIE-BOLT	2

F. Energy

- ELECTRICAL
- PNEUMATIC

G. Access

Reference	Designation
• 194AR	LOWER UNDER-PYLON FAIRING

H. Miscellaneous

- NYLON THREAD BRAID, 0.2 MM (0.08 IN) DIA. (LOCAL PROCUREMENT)

3. PRELIMINARY STEP

- A. Remove fillet fairing ([194AR](#)) (Refer to [TASK 53-60-01-900-801](#)).

4. REMOVAL OF LP WATER SEPARATOR (506HN)

Refer to [fig. 1](#)

- A. Remove the drain line (1).
- B. On the drain line (1) (see Detail B side):
 - (1) Remove the two FLEXINOX clamps (2) (Refer to [TASK 20-41-00-900-809](#)).
 - (2) Remove the two tie-bolts (3) without disassembling their half-brackets (5).
- C. On the turbocooler ([504HN](#)) (see Detail A side):
 - (1) Remove the two FLEXINOX clamps (7) (Refer to [TASK 20-41-00-900-809](#)).
 - (2) Remove the two tie-bolts (8) without disassembling their half-brackets (9).
- D. Loosen the two retaining straps (11) without opening them.
- E. Remove the flexible sleeves (4) and (10).
- F. Support the LP water separator ([506HN](#)) and open the two retaining straps (11).
- G. Remove the LP water separator ([506HN](#)).

5. REMOVAL OF COALESCER (3)

Refer to [fig. 2](#)

- A. Loosen the clamp screw and remove clamp (7).
- B. Remove the two half-brackets (8).

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- C. Remove the LP water separator inlet fitting (1).
- D. Discard O-ring (2).
- E. Remove the coalescer (3) from the LP water separator body.
- F. Discard O-rings (5), (6) and (9).

6. INSPECTION OF COALESCER (3)

Refer to **fig. 2** and **fig. 3**

- A. If the coalescer sleeve (24) is torn, punctured or excessively dirty, replace it as follows:
 - (1) Cut the two lines of thread stitches located 70 mm (2.75 in.) from each end of the coalescer.
 - (2) Remove the pin (27), the six screws (26) and six nuts (25).
 - (3) Remove the coalescer support (3); discard the coalescer sleeve (24).
 - (4) Insert a new coalescer sleeve (24) ([8954-012](#)) into its support, aligning its longitudinal sewing line with the support weld seam.

NOTE: Once assembled in its support, the coalescer must be stretched correctly.
 - (5) Secure the coalescer sleeve (24) to its support front flange with the six screws (26) and six nuts (25).
 - (6) Tighten the six nuts (25) to a torque of 0.15 to 0.17 m.daN (13 to 15 in.lbf).
 - (7) Fit the pin (27), screw it without locking.
 - (8) Fasten the coalescer sleeve (24) to the support, making two lines of nylon thread braid stitches spaced every five holes approximately (28).

- B. Inspect the coalescer grid for cracks.

CAUTION: NEVER INSTALL A COALESCER WITH A CRACKED GRID.

- C. If a crack is found, replace the coalescer (3) ([B31WA3010-053](#)).

7. CHECK OF PRESSURE-RELIEF VALVE (4)

Refer to **fig. 2**

- A. Press the pressure-relief valve (4), and check that the valve rod moves freely and that the valve does not stick to its seat.
- B. If required, clean the pressure-relief valve (4) with **detergent**.

8. INSTALLATION OF COALESCER (3)

Refer to **fig. 2**

- A. Apply a light coat of **silicone grease** to a new O-ring (2) ([R15000X300A21A6](#)), a new O-ring (6) ([R14000X200A21A6](#)) and two new O-rings (5) and (9) ([R13200X250A21A6](#)).

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- B. Install the new O-rings (5), (6) and (9).
- C. Install the coalescer (3) ([B31WA3010-053](#)) in the LP water separator body.
- D. Install the new O-ring (2).
- E. Install the LP water separator inlet fitting (1).
- F. Install the two half-brackets (8).
- G. Hold the two half-brackets (8) in position and install clamp (7).

9. PREPARATION BEFORE INSTALLATION

Refer to **fig. 1**

CAUTION: A TWISTED SUPPORT OR DRAIN LINE MAY CAUSE AN INCORRECT INSTALLATION OF THE FLEXIBLE SLEEVES.

- A. Make sure that the two supports of the LP water separator ([506HN](#)) are not twisted.
- B. Make sure that the support (12) of the decanting bowl (13) is not twisted.
- C. Make sure that the drain line (1) is not twisted.
- D. Make sure that the three flexible sleeves (4), (10) and (14) are in good condition.
- E. Make sure that the two tie-bolts (8) are not bent.
- F. Repair or replace the support(s) ([FGFB252308112A1](#))/ ([FGFB252308122A1](#)) of the LP water separator ([506HN](#)), if twisted.
- G. Repair the support (12) of the decanting bowl (13), if twisted.
- H. Replace the drain line (1) ([FGFB721676A1](#)), if twisted.
- I. Replace the flexible sleeve(s) (4) ([1354600400](#)), (10) ([1501100400](#)) and (14) ([1354600400](#)), if defective.
- J. Replace the tie-bolt(s) (8) ([FGFB721560001A2](#)), if defective (refer to paragraph "Adjustment of the Tie-bolts (8) (if necessary)").

10. INSTALLATION OF LP WATER SEPARATOR ([506HN](#))

Refer to **fig. 1**

CAUTION: AN INCORRECT INSTALLATION OF THE FLEXIBLE SLEEVES MAY CAUSE A CABIN DE-PRESSURIZATION OR A MALFUNCTION OF THE TURBINE ANTI-ICING VALVE.

- A. Detail C side:
 - Make sure that the flexible sleeve (14) and the two tie-bolts (15) are in correct position.

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NOTE 1: The sleeve-end beads (16) of the flexible sleeve (14) must abut on the end-fitting beads (17).

NOTE 2: The two tie-bolts (15) are fitted with a spacer (18). They are not adjustable.

- B. Position the LP water separator (**506HN**) and attach the two retaining straps (11).
- C. Do not tighten the two retaining straps (11).
- D. Install the two flexible sleeves (4) (Detail B side) and (10) (Detail A side).
- E. Detail B side:
 - (1) Install the drain line (1).
 - (2) Make sure that the flexible sleeve (4) remains in correct position.

NOTE: The sleeve-end beads (19) of the flexible sleeves (4) must abut on the end-fitting beads (20).
 - (3) Install the two tie-bolts (3).

NOTE: The two tie-bolts (3) are fitted with a spacer (21). They are not adjustable.
 - (4) Install the two FLEXINOX clamps (2) on the half-brackets (5) (Refer to **TASK 20-41-00-900-809**).
- F. Detail A side:
 - (1) Make sure that the flexible sleeve (10) remains in correct position.

NOTE: The sleeve-end beads (22) of the flexible sleeve (10) must abut on the end-fitting beads (23).
 - (2) Install the two tie-bolts (8).
 - (3) Install the two FLEXINOX clamps (7) on the half-brackets (9) (Refer to **TASK 20-41-00-900-809**).
- G. Tighten and lock the two retaining straps (11).
- H. Make sure that the three flexible sleeves (14), (4) and (10) remain in correct position.

11. ADJUSTMENT OF TIE-BOLTS (8) (IF NECESSARY):

Refer to **fig. 1** and **fig. 4**

NOTE: The two tie-bolts (8) must be adjusted with the same accuracy. Length adjustment may be necessary if the LP water separator, the supports of the LP water separator or the drain line (1) have been replaced.

- A. Unsafety the adjustment nuts (1) and (3) of the tie-bolt (8).
- B. Remove nut (1) with its lockwasher (2).
- C. Remove the half-bracket (4) with the lockwasher (2) of the second nut (3).
- D. Discard the two lockwashers (2).

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- E. Slightly unscrew nut (3).
- F. Install the half-bracket (5) on the tie-bolt (8) with the two nuts (3) and (1) and two new lockwashers (2) ([33350CA048](#)).
- G. Install the two half-brackets (5) and (4) (**fig. 4**) on the flexible sleeve (10) (**fig. 1**).
- H. Install the two FLEXINOX clamps (7) (**fig. 1**) (Refer to [TASK 20-41-00-900-809](#)).
- I. Screw the nut (3) until it comes into contact with the half-bracket (5).
- J. Screw nut (1) until it comes into contact with the half-bracket (5).
- K. Tighten the two nuts (1) and (3) together.
- L. Safety the two nuts (1) and (3) with the lockwashers (2).

CAUTION: AN INCORRECT INSTALLATION OF THE FLEXIBLE SLEEVE MAY CAUSE A CABIN DE-PRESSURIZATION OR A MALFUNCTION OF THE TURBINE ANTI-ICING VALVE.

- M. Make sure that the flexible sleeve (10) is in correct position (**fig. 1**).

NOTE: The sleeve-end beads (22) of the flexible sleeve (10) must abut on the end-fitting beads (23).

12. LEAK CHECK

- A. Check for leaks at the LP water separator (Refer to [TASK 21-00-00-790-801](#)).

13. FINAL STEP

- A. Install fillet fairing (**194AR**) (Refer to [TASK 53-60-01-900-801](#)).

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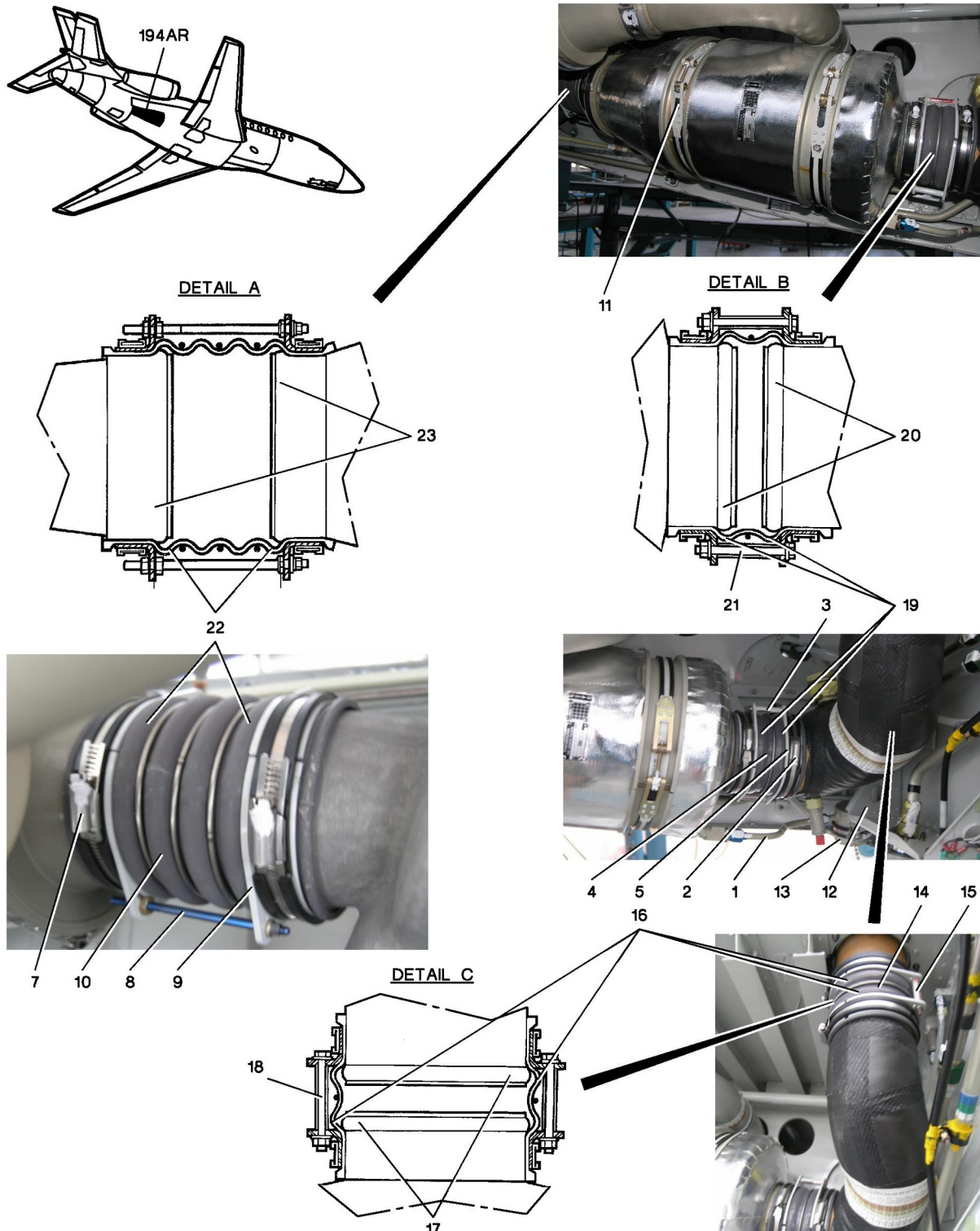


Figure 1: REMOVAL/INSTALLATION OF LP WATER SEPARATOR

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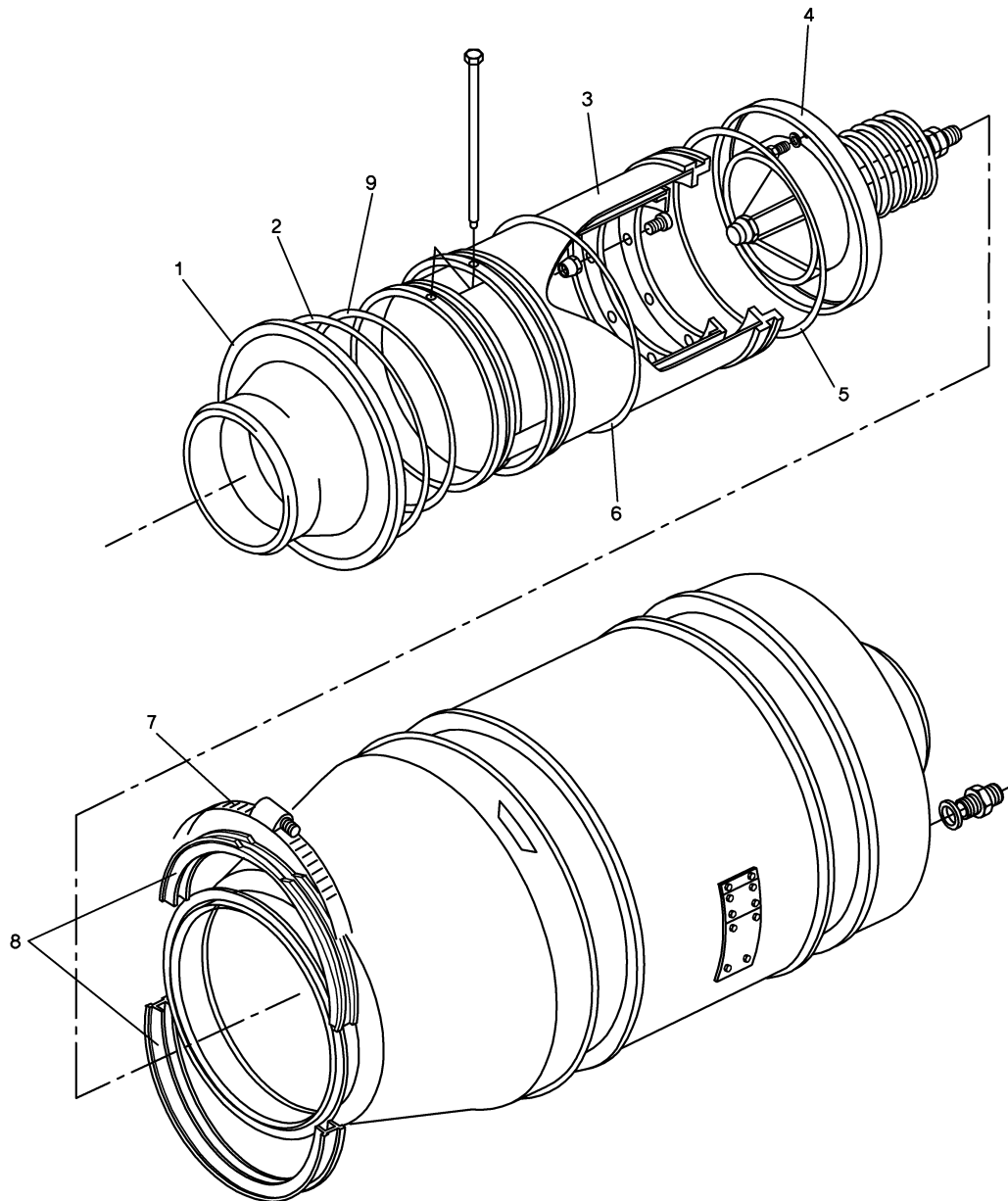


Figure 2: REMOVAL - INSPECTION - INSTALLATION OF COALESCER

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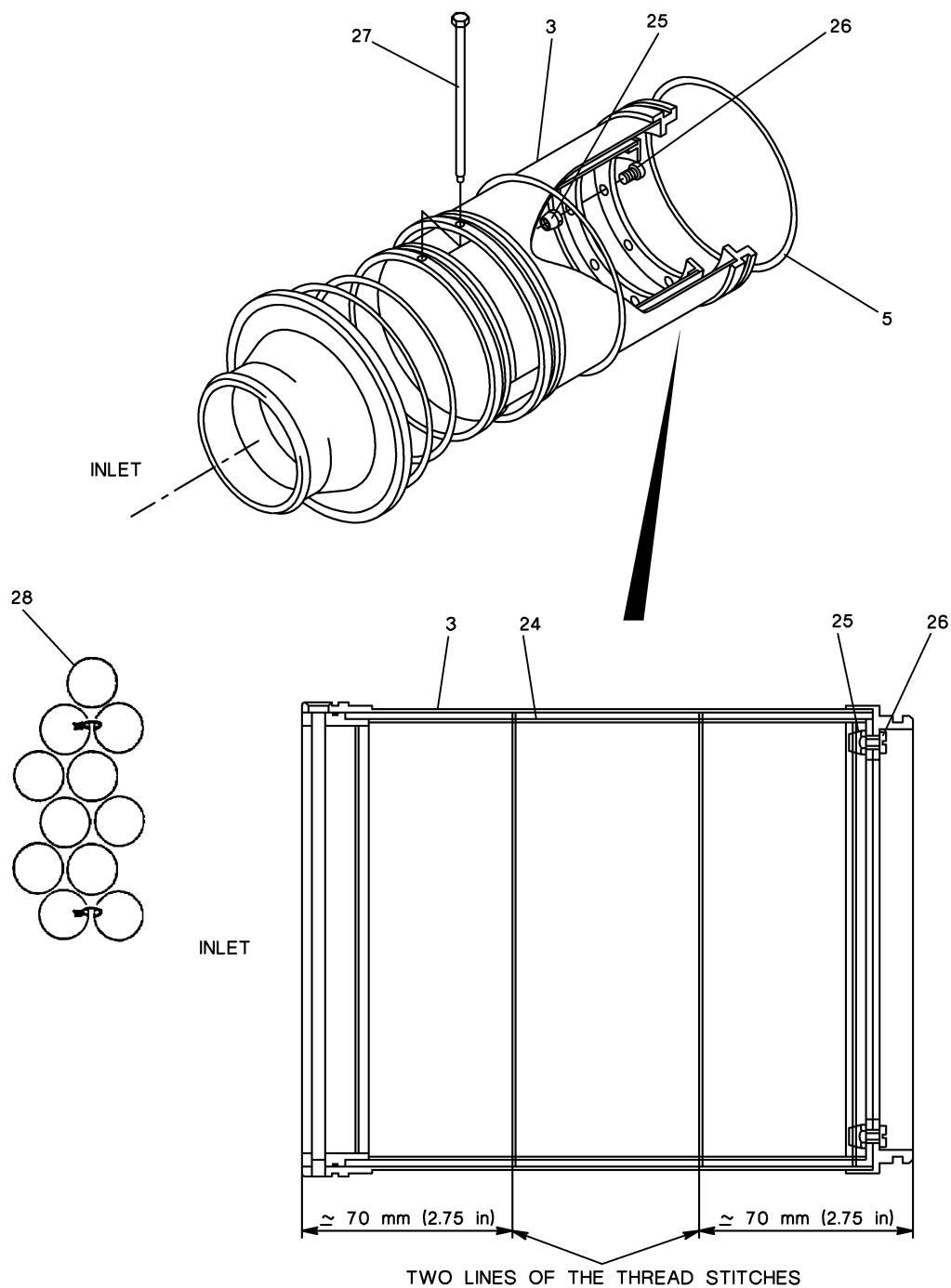


Figure 3: REMOVAL/INSTALLATION OF COALESCER SLEEVE

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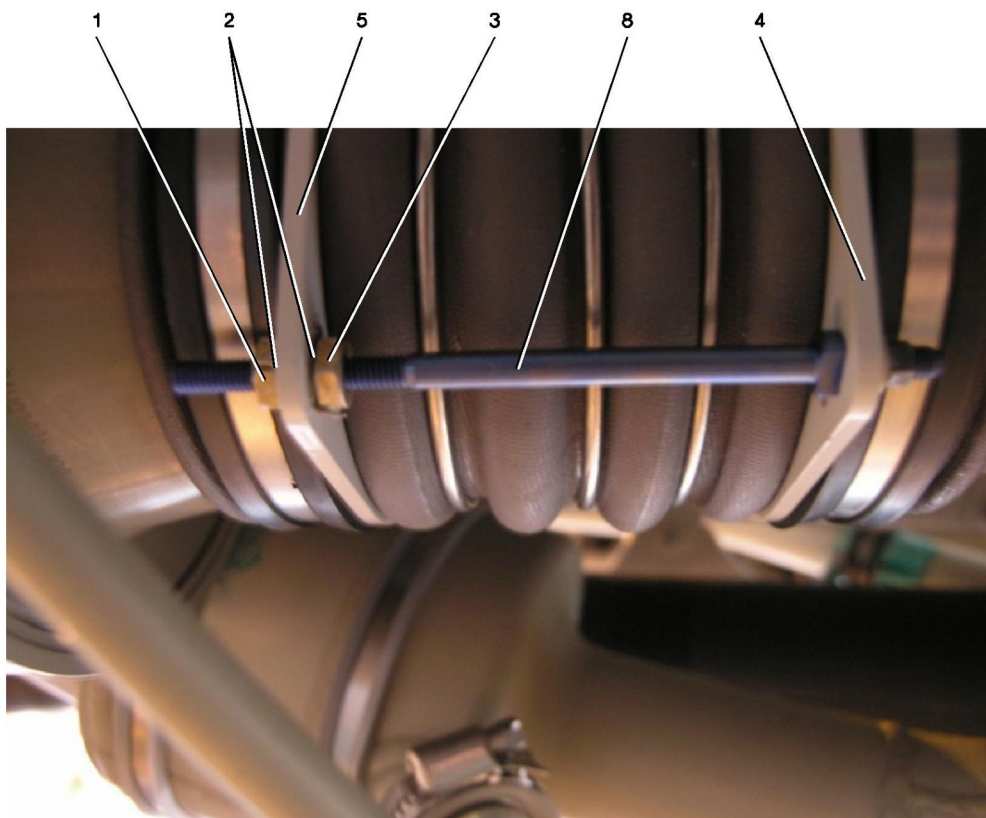


Figure 4: ADJUSTMENT OF TIE-BOLTS (8)