

GUST LOCK SUPPORT - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to remove and install the LH/RH gust-lock supports.
- B. The gust-lock supports are attached to the rear spar of the horizontal stabilizer structure and they are the housing of the spring cartridges.
- C. The procedures in this section are given in the sequence below. The tasks identified with (♦) are part of the Scheduled Maintenance Requirements Document (SMRD).

TASK NUMBER	DESCRIPTION	EFFECTIVITY
55-12-02-000-801-A	GUST-LOCK SUPPORT - REMOVAL	ALL
55-12-02-400-801-A	GUST-LOCK SUPPORT - INSTALLATION	ALL

TASK 55-12-02-000-801-A

EFFECTIVITY: ALL

2. GUST-LOCK SUPPORT - REMOVAL

A. General

(1) This task gives the procedure to remove the LH/RH gust-lock supports.

B. References

REFERENCE	DESIGNATION
AMM TASK 27-71-14-000-801-A/400	SPRING-CARTRIDGE POSITION MECHANISM - REMOVAL
AMM TASK 55-36-00-000-801-A/400	TAIL BOOM - REMOVAL

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
321	321	Tail boom

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Acrylic spatula	To remove the sealant	

E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Protective Gloves	For protection of technician's hands	1
Commercially available	Safety Goggles	For protection of technician's eyes	1

F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
ASTM-D-740	Methyl Ethyl Ketone - MEK	AR

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Mechanics	Horizontal stabilizer

I. Preparation

SUBTASK 841-002-A

- (1) Set the gust lock system to the unlock position.
- (2) Remove rear fairings of the horizontal stabilizer. Refer to [AMM TASK 55-36-00-000-801-A/400](#).
- (3) Remove the spring-cartridge position mechanism. Refer to [AMM TASK 27-71-14-000-801-A/400](#).

J. Removal

SUBTASK 020-002-A

WARNING: MAKE SURE THAT THE RUDDER, HORIZONTAL STABILIZER, AND ELEVATOR CANNOT BE ACCIDENTALLY OPERATED. AN ACCIDENTAL OPERATION CAN CAUSE INJURY TO PERSONS.

- (1) Remove the bolts (1) and (2), washers (4) and (6), and nuts (5) and (3) to release the support from the horizontal stabilizer structure. Refer to [Figure 401](#).
- (2) Keep the removed shims (7), (8) and (9) for the support installation.

NOTE: These shims are necessary to keep the gust lock device aligned. If there are damaged shims, write their thickness and install (installation procedure) new shims with the same thickness as the shims removed to keep the system alignment.

- (3) With an acrylic spatula, remove the old sealant.

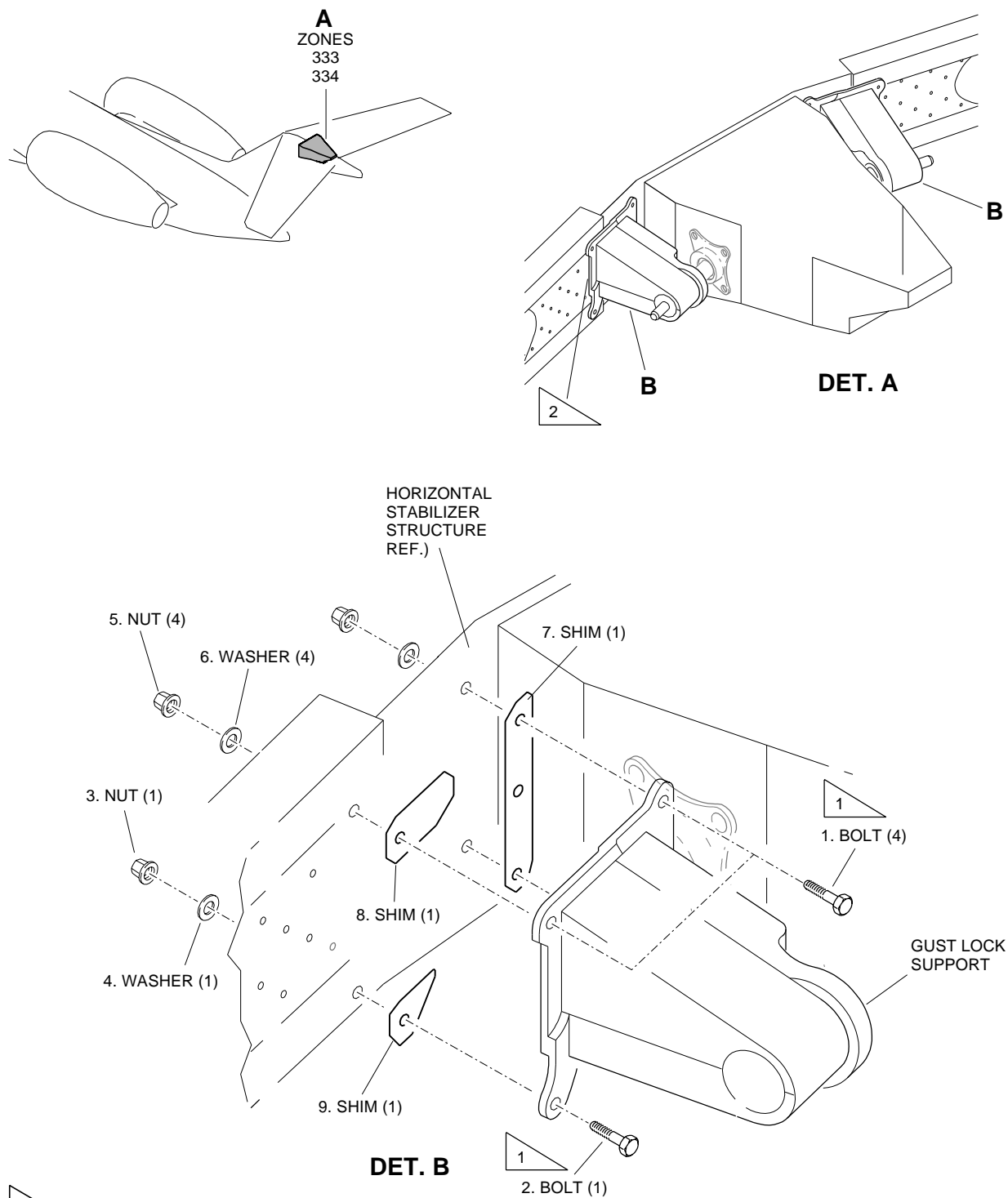
WARNING: BE CAREFUL WHEN YOU USE SOLVENTS BECAUSE THEY ARE A HEALTH AND FIRE HAZARD. USE SAFETY GOGGLES AND PROTECTIVE CLOTHING WHEN YOU HANDLE THEM. DO NOT BREATHE THEIR GASES AND WORK IN A WELL VENTILATED AREA.

- (4) With a cloth soaked in MEK, clean the surface.

EFFECTIVITY: ALL

Gust Lock Support - Removal/Installation

Figure 401



1 TORQUE: 2.5 – 4.3 N.m (22 – 38 lb.in).

2 P/S870C-12 SEALANT IN THE MATING SURFACES

EM145AMM550101A.DGN

TASK 55-12-02-400-801-A
EFFECTIVITY: ALL

3. GUST-LOCK SUPPORT - INSTALLATION

A. General

(1) This task gives the procedure to install the LH/RH gust-lock supports.

B. References

REFERENCE	DESIGNATION
AMM TASK 27-71-00-700-801-A/500	ELECTROMECHANICAL GUST LOCK - OPERATION-AL CHECK
AMM TASK 27-71-01-700-801-A/500	ELECTROMECHANICAL ACTUATOR - FUNCTIONAL CHECK
AMM TASK 27-71-14-400-801-A/400	SPRING-CARTRIDGE POSITION MECHANISM - IN-STALLATION
AMM TASK 55-36-00-400-801-A/400	TAIL BOOM - INSTALLATION
FIM TASK 27-70-00-810-808-A	-
IPC 55-12-00	HORIZONTAL STABILIZER - SECONDARY STRUC-TURE
SRM 51-20-01-PR	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
321	321	Tail boom

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Torque wrench	To tighten the screws	

E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Protective Gloves	For protection of technician's hands	1
Commercially available	Safety Goggles	For protection of technician's eyes	1

F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
MIL-S-81733 TYPE IV-12	Sealant P/S 870C-12	AR

G. Expendable Parts

ITEM	IPC REFERENCE (VENDOR REFERENCE)	QTY
Secondary Structure	IPC 55-12-00	AR

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Mechanics	Horizontal stabilizer

I. Installation

SUBTASK 420-002-A

- (1) Make sure that the aircraft is in the same configuration as it was after the removal procedure.

CAUTION: MAKE SURE THAT THE SHIMS BETWEEN THE SUPPORT AND HORIZONTAL STABILIZER STRUCTURE HAVE THE SAME THICKNESS AND ARE INSTALLED IN THE SAME POSITION AS THEY WERE BEFORE THE REMOVAL. THIS IS NECESSARY TO KEEP THE GUST-LOCK SYSTEM ALIGNMENT.

- (2) Install the support in the horizontal stabilizer structure with the bolts (1) and (2), shims (7), (8) and (9), washers (4) and (6) and nuts (3) and (5). Refer to Figure 401.
- (3) Tighten the bolts (1). Refer to Figure 401.

NOTE: Apply a torque of 2.5 - 4.3 N.m (22 - 38 lbf.in).

WARNING: BE CAREFUL WHEN YOU USE SEALANTS. FOR HAZARD, PROTECTION, AND HANDLING OF MATERIAL, REFER TO ITS MATERIAL SAFETY DATA SHEET.

- (4) Apply Sealant P/S 870C-12.

NOTE: The sealant curing time changes with the environmental conditions. Refer to (SRM 51-20-01-PR).

J. Follow-on

SUBTASK 842-002-A

- (1) Install the spring-cartridge position mechanism. Refer to [AMM TASK 27-71-14-400-801-A/400](#).
- (2) Do the operational check of the electromechanical gust-lock system. Refer to [AMM TASK 27-71-00-700-801-A/500](#).
- (3) Do the operational check of the electromechanical actuator. Refer to [AMM TASK 27-71-01-700-801-A/500](#).

If the check of the actuator is not OK, do a check on the components of the electromechanical gust-lock mechanism for too large internal friction forces (FIM TASK 27-70-00-810-808-A).

- (4) Install rear fairings to the horizontal stabilizer ([AMM TASK 55-36-00-400-801-A/400](#)).
- (5) Set the gust lock system to the locked position.

