



EMB145 – EMB135

AIRCRAFT
MAINTENANCE MANUAL

AIR INTAKE - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

- A. This section gives the procedure to remove/install the engine air intake. These procedures are applicable to the LH and RH engines.
- B. The sling has adjustable straps which permit adjustments on the longitudinal and lateral axes.
- C. After the removal, the air intake is kept in the nose-up position on its mounting flange. The mounting flange must be evenly held on padded or wooden supports during the period of storage.
- D. 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
71-60-01-000-801-A	ENGINE AIR INTAKE - REMOVAL	ALL
71-60-01-400-801-A	ENGINE AIR INTAKE - INSTALLATION	ALL



EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

TASK 71-60-01-000-801-A

EFFECTIVITY: ALL

2. ENGINE AIR INTAKE - REMOVAL

A. General

- (1) Obey the instructions below to remove the engine air intake.

B. References

REFERENCE	DESIGNATION
AMM TASK 71-11-01-000-801-A/400	ENGINE UPPER COWLING - REMOVAL
AMM TASK 71-12-01-000-802-A/400	ENGINE LOWER COWLING - REMOVAL
AMM TASK 71-13-01-000-801-A/400	NACELLE APRON - REMOVAL

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
411		Engine air intake
421		Engine air intake

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
GSE 150	LH/RH Nose Cowl Door Sling	To remove/install the air intake assembly	

E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Workstand	To get access to the work area	1
Commercially Available	Hoist	To lift the cowling	1

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
2	Do the task	In the work area

I. Preparation

SUBTASK 841-002-A



EMB145 – EMB135

AIRCRAFT
MAINTENANCE MANUAL

- WARNING:** • DO NOT TOUCH THE ENGINE COMPONENTS UNTIL THEY ARE COOL.
THE TEMPERATURE STAYS HOT AFTER THE ENGINE STOPS.
- MAKE SURE THAT THE ENGINE CONTROL MASTER SWITCH IS IN THE
“OFF” POSITION TO PREVENT AN ENGINE ACCIDENTAL OPERATION.

- (1) Open these circuit breakers and attach DO-NOT-CLOSE tags to them:
 - START 1/2.
 - ENGINE AIR INLET 1/2.
- (2) Put the workstand in the work area.
- (3) Remove the related components:
 - (a) Lower Cowling ([AMM TASK 71-12-01-000-802-A/400](#)).
 - (b) Upper Cowling ([AMM TASK 71-11-01-000-801-A/400](#)).
 - (c) Nacelle Apron ([AMM TASK 71-13-01-000-801-A/400](#)).

J. Removal ([Figure 401](#))

SUBTASK 020-002-A

WARNING: HEATED ANTI-ICE COMPONENTS CAN BURN YOU. MAKE SURE THAT THE ANTI-ICE COMPONENTS ARE COOL.

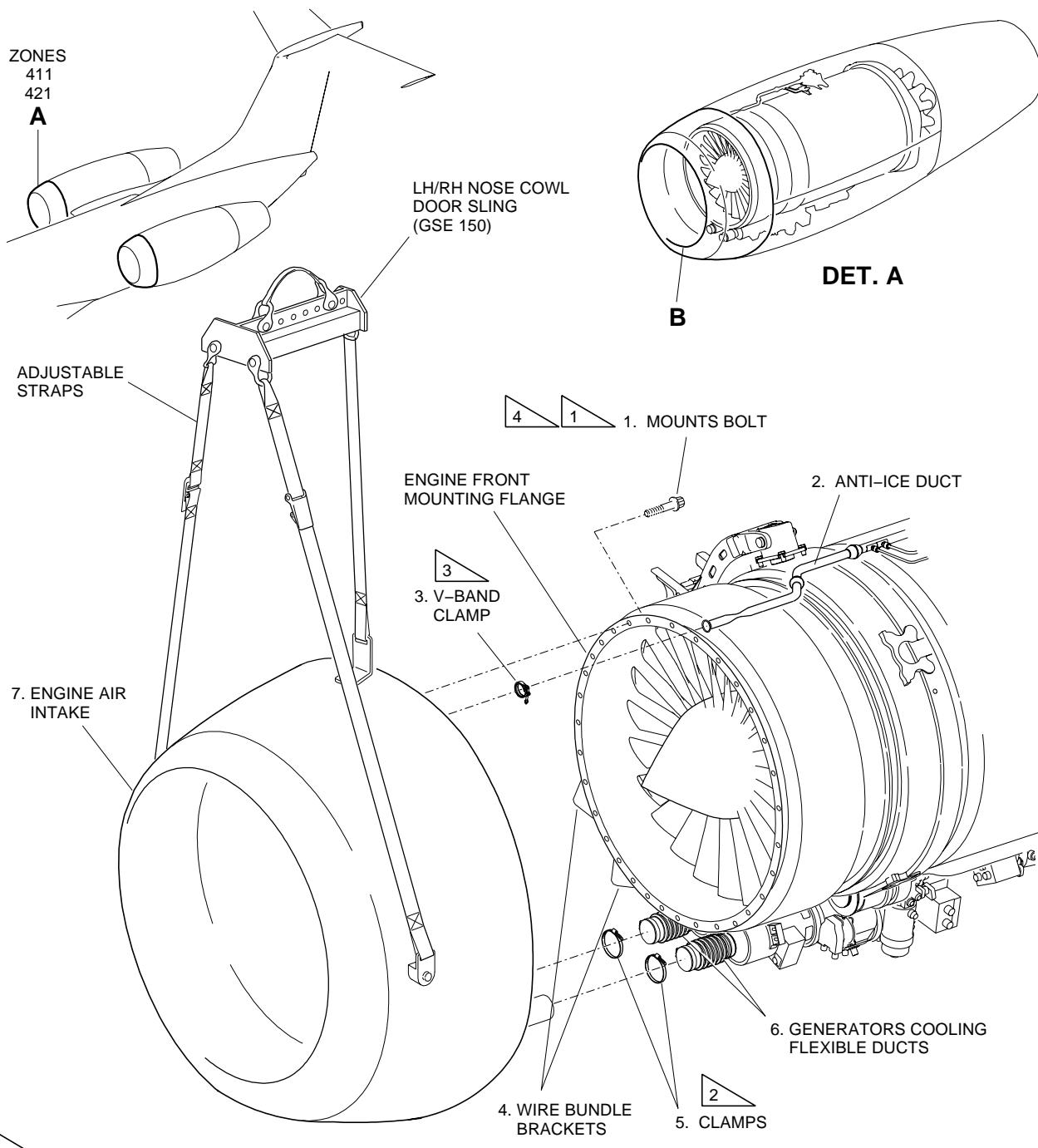
CAUTION: PUT CAPS ON THE DUCTS IMMEDIATELY AFTER YOU DISCONNECT THEM TO PREVENT ENTRY OF CONTAMINATION.

- (1) Install the LH/RH Nose Cowl Door Sling to the air intake.
- CAUTION:** ADJUST THE LH/RH NOSE COWL DOOR SLING TO HOLD ONLY THE WEIGHT OF THE AIR INTAKE. MORE WEIGHT CAN CAUSE DAMAGE TO THE AIR INTAKE AND SLING.
- (2) Put the hoist adjacent to the air intake, and attach it to the LH/RH Nose Cowl Door Sling. Adjust the height of the hoist correctly.
 - (3) Cut and remove the lockwire from the clamp (5).
 - (4) Loosen the clamps (5) and remove the generators cooling flexible ducts (6).
 - (5) Remove the wire bundle brackets (4).
 - (6) Loosen the clamp (3), and disconnect the anti-ice duct (2).
 - (7) Remove the mounting bolts (1).
 - (8) Pull the air intake forward to make it clear of the location pins. Put the air intake on the platform and away from the aircraft.
 - (9) Remove the hoist and the LH/RH Nose Cowl Door Sling from the air intake.

EFFECTIVITY: ALL

Engine Air Intake - Removal/Installation

Figure 401



1 INITIAL TORQUE: 4.51 Nm (40 lb.in)
FINAL TORQUE: 11.29 Nm (100 lb.in)

2 TORQUE (MAX): 2.03 Nm (18 lb.in)

3 TORQUE: 3.39 – 3.95 Nm (30 – 35 lb.in)

4 APPLY CA-1000

EM145AMM710012E.DGN



AIRCRAFT MAINTENANCE MANUAL

TASK 71-60-01-400-801-A

EFFECTIVITY: ALL

3. ENGINE AIR INTAKE - INSTALLATION

A. General

- (1) Obey the instructions below to install the engine air intake.
- (2) Before you install the engine air intake, refer to Service Bulletin 145-30-0057 revision 01 and on for eligible engine air intakes.

B. References

REFERENCE	DESIGNATION
AMM TASK 20-10-10-910-801-A/200	V-BAND CLAMPS - INSTALLATION
AMM TASK 71-11-01-400-801-A/400	ENGINE UPPER COWLING - INSTALLATION
AMM TASK 71-12-01-400-802-A/400	ENGINE LOWER COWLING - INSTALLATION
AMM TASK 71-13-01-400-801-A/400	APRON - INSTALLATION

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
411		Engine air intake
421		Engine air intake

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
GSE 150	LH/RH Nose Cowl Door	To remove/install the air intake assembly	

E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Workstand	To get access to the work area	1
Commercially available	Hoist	To lift the air intake	1
Commercially available	Torque wrench	To tighten the bolts	1

F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
MS 20995C32	Lockwire	AR
MEP 09-060	Corrosion Inhibiting Compound (CA-1000)	AR



EMB145 – EMB135

AIRCRAFT
MAINTENANCE MANUAL

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
2	Do the task	In the work area

I. Installation (Figure 401)

SUBTASK 420-003-A

CAUTION: WHEN YOU INSTALL THE AIR INTAKE, MAKE SURE THAT THE LOCATION SPIGOTS ARE CORRECTLY INSTALLED.

- (1) Lift and push the air intake to align the location pins with the receptacles on the engine flange.

WARNING: THE CA-1000 CORROSION INHIBITING COMPOUND IS TOXIC TO SKIN, EYES, AND RESPIRATORY TRACT. USE GOGGLES AND PROTECTIVE GLOVES. USE ONLY IN WELL VENTILATED AREAS. OBEY THE MANUFACTURES' HEALTH AND SAFETY INSTRUCTIONS.

- (2) Apply CA-1000 to the mounting bolts (1) and mounting flange, and install them.

- (a) When you install the mounting bolts (1), initially tighten them manually.

- (b) Apply initial torque to the mounting bolts (1). Refer to (Figure 401).

NOTE: It is recommended to use crisscross sequence to apply the torque.

- (c) Apply final torque to the mounting bolts (1). Refer to (Figure 401).

NOTE: It is recommended to use crisscross sequence to apply the torque.

CAUTION: REFER TO [AMM TASK 20-10-10-910-801-A/200](#) FOR CORRECT INSTALLATION OF V-CLAMPS.

- (3) Connect the anti-ice duct (2) and put the clamp (3). Refer to (Figure 401) for the torque values.

- (4) Install the wire bundle brackets (4).

- (5) Install the generators cooling flexible ducts (6) and install the clamps (5). Tighten the clamps (5). Refer to (Figure 401) for the torque values.

- (6) Safety the clamps (5) with lockwire.

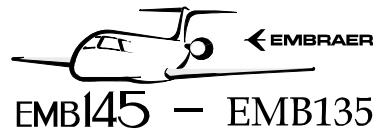
J. Follow-on

SUBTASK 840-002-A

- (1) Release the tension from the LH/RH Nose Cowl Door Sling and remove it from the air intake. Disengage the hoist from the LH/RH Nose Cowl Door Sling.

- (2) Install the related components:

- (a) Lower Cowling ([AMM TASK 71-12-01-400-802-A/400](#)).



EMB145 – EMB135

AIRCRAFT
MAINTENANCE MANUAL

- (b) Upper Cowling ([AMM TASK 71-11-01-400-801-A/400](#)).
- (c) Nacelle Apron ([AMM TASK 71-13-01-400-801-A/400](#)).
- (3) Remove the workstand from the work area.
- (4) Close these circuit breakers and remove the DO-NOT-CLOSE tags:
 - START 1/2.
 - ENGINE AIR INLET 1/2 .

