



EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

STATIC DISCHARGING - ADJUSTMENT/TEST

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to do the functional check of the static dischargers installed on:
- Ailerons, wing tips or winglets, rudder, horizontal stabilizer and vertical stabilizer rear fairing.
 - Nose landing gear.
- B. 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
23-60-00-700-801-A ♦	STATIC DISCHARGERS - FUNCTIONAL CHECK	ALL



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TASK 23-60-00-700-801-A

EFFECTIVITY: ALL

2. STATIC DISCHARGERS - FUNCTIONAL CHECK

A. General

- (1) This task gives the procedures to check the ohmic resistance value and electrical continuity of all static dischargers installed.

B. References

REFERENCE	DESIGNATION
AMM MPP 23-60-01/400	- REMOVAL/INSTALLATION
AMM TASK 20-40-01-860-801-A/200	ENERGIZATION OF THE AIRCRAFT WITH AN EXTERNAL POWER SOURCE
AMM TASK 23-60-00-200-801-A/600	STATIC DISCHARGERS - VISUAL INSPECTION

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
561		LH Wing tip
573		LH Aileron
661		RH Wing tip
673		RH Aileron
327		Rudder
335		LH Horizontal stabilizer
336		RH Horizontal stabilizer
321		Vertical stabilizer rear fairing
711		Nose landing gear

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
GSE 036	Platform, hydraulic	To get access to the task area	
GSE 043	Test set, static discharger	To measure the ohmic resistance	
GSE 045	Milliohmmeter	To examine the dischargers for electrical continuity	
GSE 050	Multimeter - Digital	To measure AC/DC voltage, current, resistance, temperature, and frequency.	

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	On the structure

I. Preparation

SUBTASK 841-002-A

- (1) Put up the hydraulic platform at the necessary height.
- (2) Deenergize the aircraft ([AMM TASK 20-40-01-860-801-A/200](#)).

J. Functional Check of Static Dischargers ([Figure 501](#)) ([Figure 502](#)) ([Figure 503](#))

SUBTASK 720-002-A

- (1) Do the check of the trailing edge dischargers as follows:
 - (a) Connect the positive test lead of the megohmmeter (GSE 043) to the structure.
 - (b) Connect the negative test lead of the megohmmeter (GSE 043), together with a piece of cotton soaked in water, to the static discharger tip.
 - (c) Set the switch of the megohmmeter (GSE 043) to the green/red position.
 - (d) Measure the ohmic resistance between the structure and the discharger tip.
Result:
1 The ohmic resistance value read must be from 6 MΩ to 150 MΩ.
 - (e) If the value is out of that range, with a multimeter (GSE 050) measure the ohmic resistance between the structure and the discharger base.
Result:
1 The ohmic resistance value read must not be more than 3 MΩ.
 - (f) If the value is 3 MΩ or higher, replace the static discharger base.
 - (g) Repeat the step (d).
 - (h) If the value is out of that range, replace the static discharger wick.
- (2) Do the check of the NLG discharger as follows:
 - (a) Connect a test lead of the milliohmmeter (GSE 045) to the steel cable of the NLG discharger.
 - (b) Connect the other test lead of the milliohmmeter (GSE 045) to the nose landing gear grounding point.
 - (c) Do a check of the electrical continuity between the steel cable and the nose landing gear grounding point.
Result:
1 The ohmic resistance value must not be greater than 100 mΩ. If the value is out of that range, do a visual inspection ([AMM TASK 23-60-00-200-801-A/600](#)) or replace it ([AMM MPP 23-60-01/400](#)).



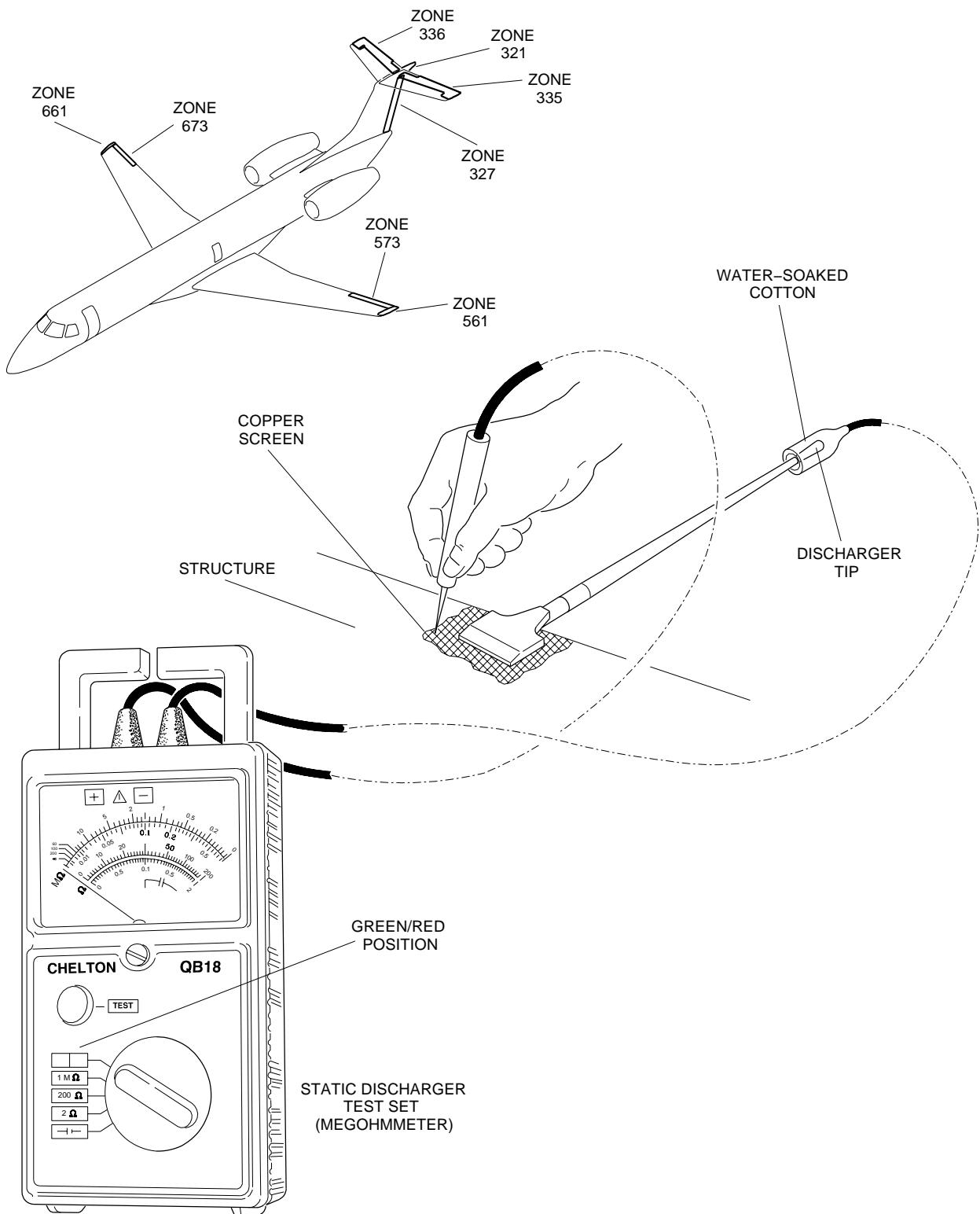
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K. Follow-on

SUBTASK 842-002-A

- (1) Remove the hydraulic platform.

EFFECTIVITY: ALL

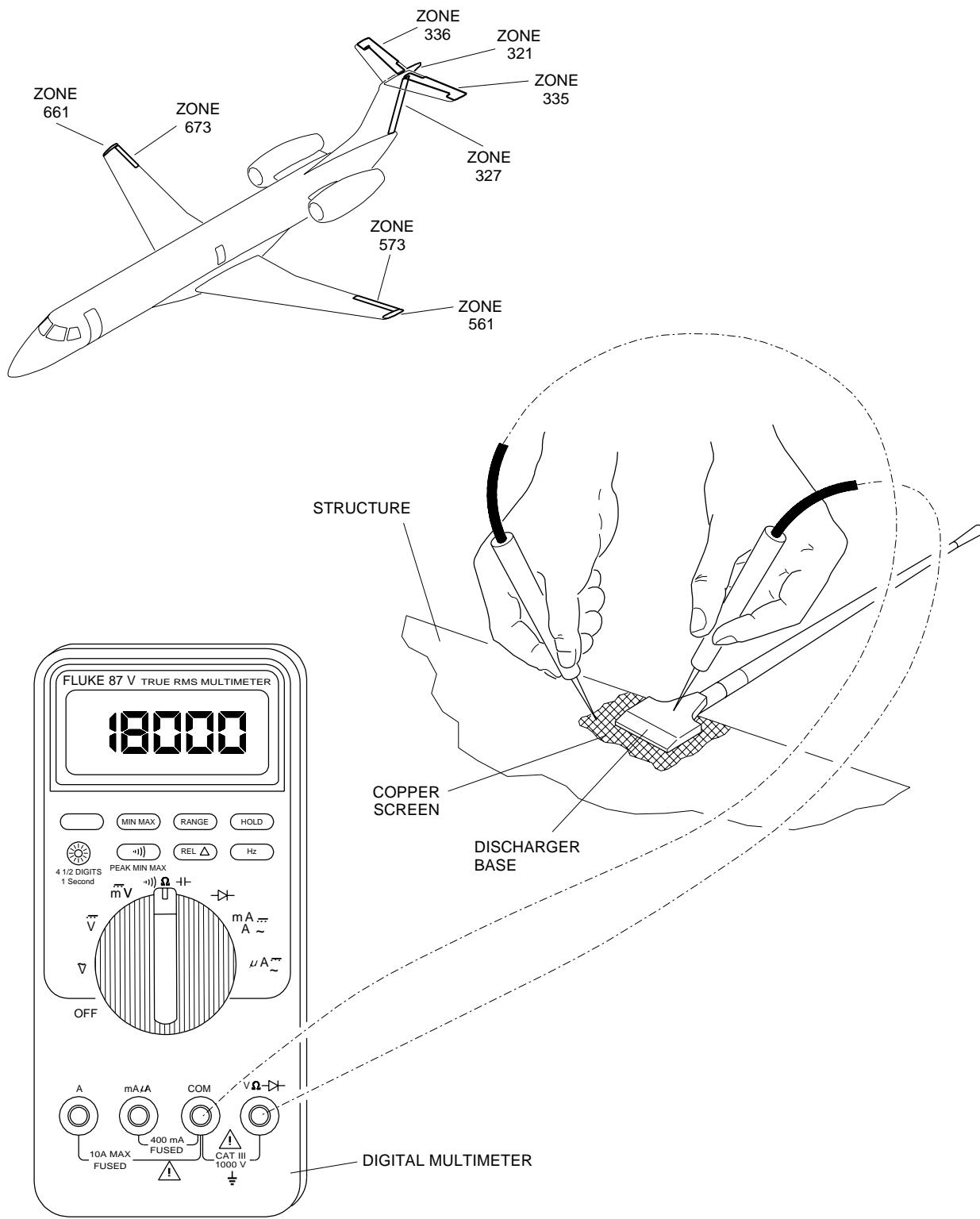
 Trailing Edge Static Dischargers - Functional Check
 Figure 501


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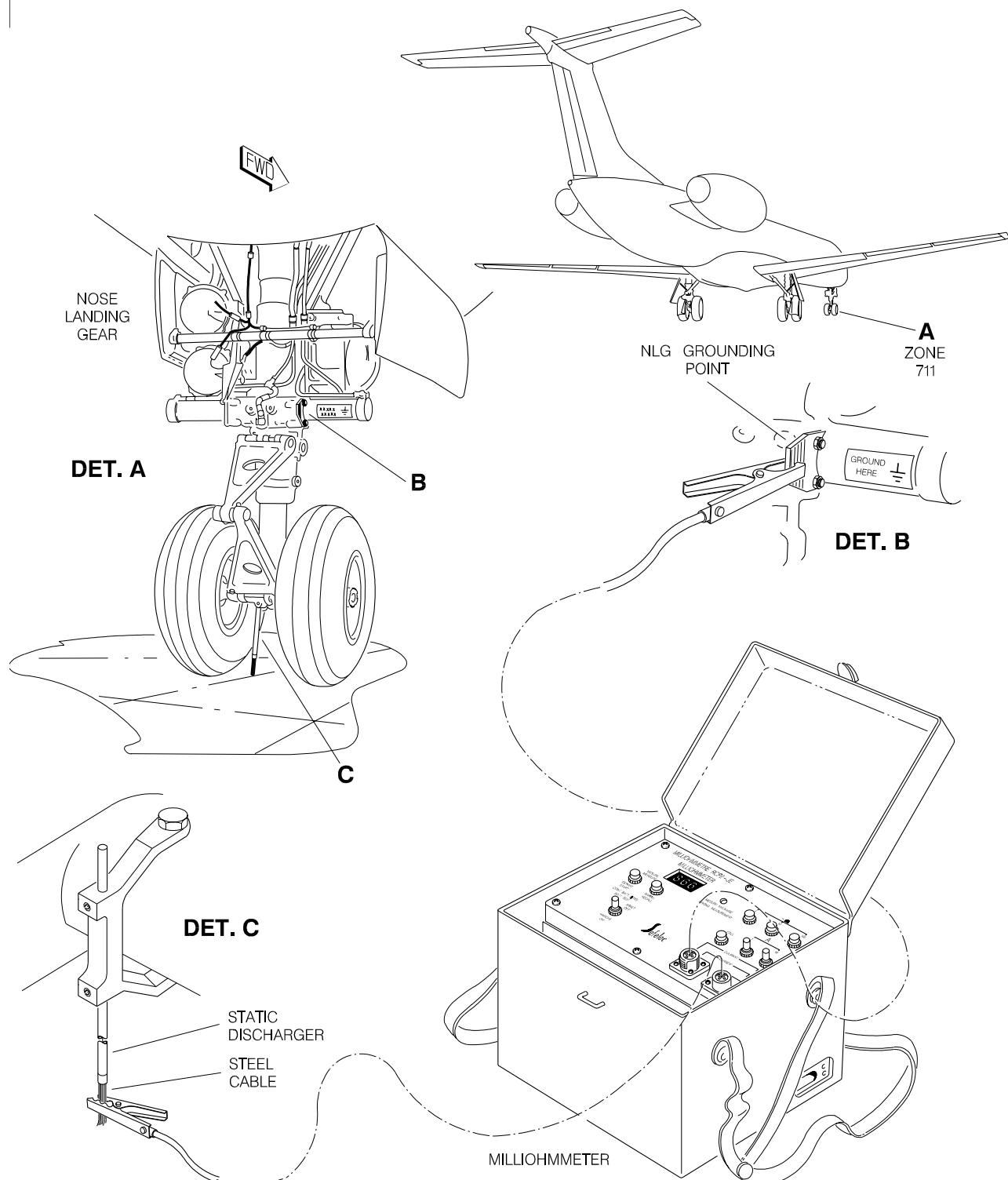
EFFECTIVITY: ALL

Static Dischargers Base - Functional Check

Figure 502



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EFFECTIVITY: ALL
NLG Static Dischargers - Functional Check
Figure 503


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