



AIRCRAFT  
MAINTENANCE MANUAL

LANDING GEAR TIRE TREAD FAILURE - INSPECTION/CHECK

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to do an inspection after failure of the landing-gear tire tread.
- B. These procedures are necessary to make sure that there is no failure in the debris zone.
- 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
05-50-15-200-801-A	LANDING-GEAR TIRE TREAD FAILURE - ALL EXTENDED LANDING GEAR	
05-50-15-200-802-A	LANDING-GEAR TIRE TREAD FAILURE - ALL RETRACTED LANDING GEAR	



EMB145 - EMB135

AIRCRAFT  
MAINTENANCE MANUAL

TASK 05-50-15-200-801-A

EFFECTIVITY: ALL

2. LANDING-GEAR TIRE TREAD FAILURE - EXTENDED LANDING GEAR

A. General

- (1) This task gives the procedures to do an inspection in the debris zones after the occurrence of a failure on the extended main or nose-landing-gear tire tread.
- (2) The results of these procedures will show if other, more accurate inspection is necessary.

B. References

REFERENCE	DESIGNATION
AMM TASK 32-00-01-910-801-A/200	LG SAFETY PIN - INSTALLATION AND REMOVAL
AMM TASK 32-30-00-700-801-A/500	EXTENSION AND RETRACTION SYSTEM - OPERATIONAL CHECK
AMM TASK 32-34-00-700-801-A/500	LG EMERGENCY EXTENSION - OPERATIONAL AND FUNCTIONAL CHECKS
AMM TASK 32-41-00-700-801-A/500	MAIN BRAKE SYSTEM - FUNCTIONAL CHECK
AMM TASK 32-50-00-700-802-A/500	NOSE WHEEL STEERING SYSTEM - QUICK ADJUSTMENT
RR MM TASK 05-50-00-200-804 - DO THE INSPECTION FOR FOREIGN OBJECT DAMAGE	-

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

Not Applicable

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	Outside the aircraft

I. Preparation

**SUBTASK 841-002-A**

- (1) Make sure that the safety pins of the landing gears are installed ( AMM TASK 32-00-01-910-801-A/200).



EMB145 – EMB135

AIRCRAFT  
MAINTENANCE MANUAL

J. Inspection After Main-Landing-Gear Tread Failure ([Figure 601](#))

SUBTASK 210-002-A

- (1) Examine the main landing gear and main landing gear wheelwell as follows:
  - (a) Examine all components in the debris hazard range inside the main landing gear compartment for signs of impact and, if they are found, examine for cracks, distortions, rupture, loose elements, or leakage ([Figure 601](#)).
  - (b) Examine the free-fall system for integrity.
  - (c) Examine the flap lower surface for signs of impact and, if they are found, examine for cracks, dents, or flaking paint.
  - (d) Examine the wing lower surface for signs of impact and, if they are found, examine for cracks, dents, or flaking paint.
  - (e) Do the Inspection for Foreign Object Damage RR MM TASK 05-50-00-200-804 - DO THE INSPECTION FOR FOREIGN OBJECT DAMAGE.
- (2) If signs of impact are found, do the following tasks, as applicable:
  - (a) Do an operational test of the landing-gear extension by the normal ([AMM TASK 32-30-00-700-801-A/500](#)) and free-fall ([AMM TASK 32-34-00-700-801-A/500](#)) systems.
  - (b) Do a functional test of the brake system ([AMM TASK 32-41-00-700-801-A/500](#)).
  - (c) Control the flaps to make sure that they are free to operate.

K. Inspection After Nose-Landing-Gear Tread Failure ([Figure 602](#))

SUBTASK 210-003-A

- (1) Examine the nose landing gear and nose landing gear wheelwell as follows:
  - (a) Examine all components in the debris hazard range inside the nose-landing-gear compartment for signs of impact and, if you find them, examine for cracks, distortions, rupture, loose elements, or leakage ([Figure 602](#)).
  - (b) Examine the free-fall system for integrity.
  - (c) Examine the front fuselage lower surface for signs of impact and, if you find them, examine for cracks, dents, or flaking paint.
  - (d) Examine the LH and RH wing lower surfaces for signs of impact and, if you find them, examine for cracks, dents, or flaking paint.
  - (e) Examine the LH and RH engine air inlets and rotors for signs of impact and, if you find them, examine for cracks, dents, or flaking paint.
- (2) If signs of impact are found, do the following tasks, as applicable:
  - (a) Do an operational test on the landing-gear extension by the normal ([AMM TASK 32-30-00-700-801-A/500](#)) and free-fall ([AMM TASK 32-34-00-700-801-A/500](#)) systems.
  - (b) Do a functional test on the steering system ([AMM TASK 32-50-00-700-802-A/500](#)).

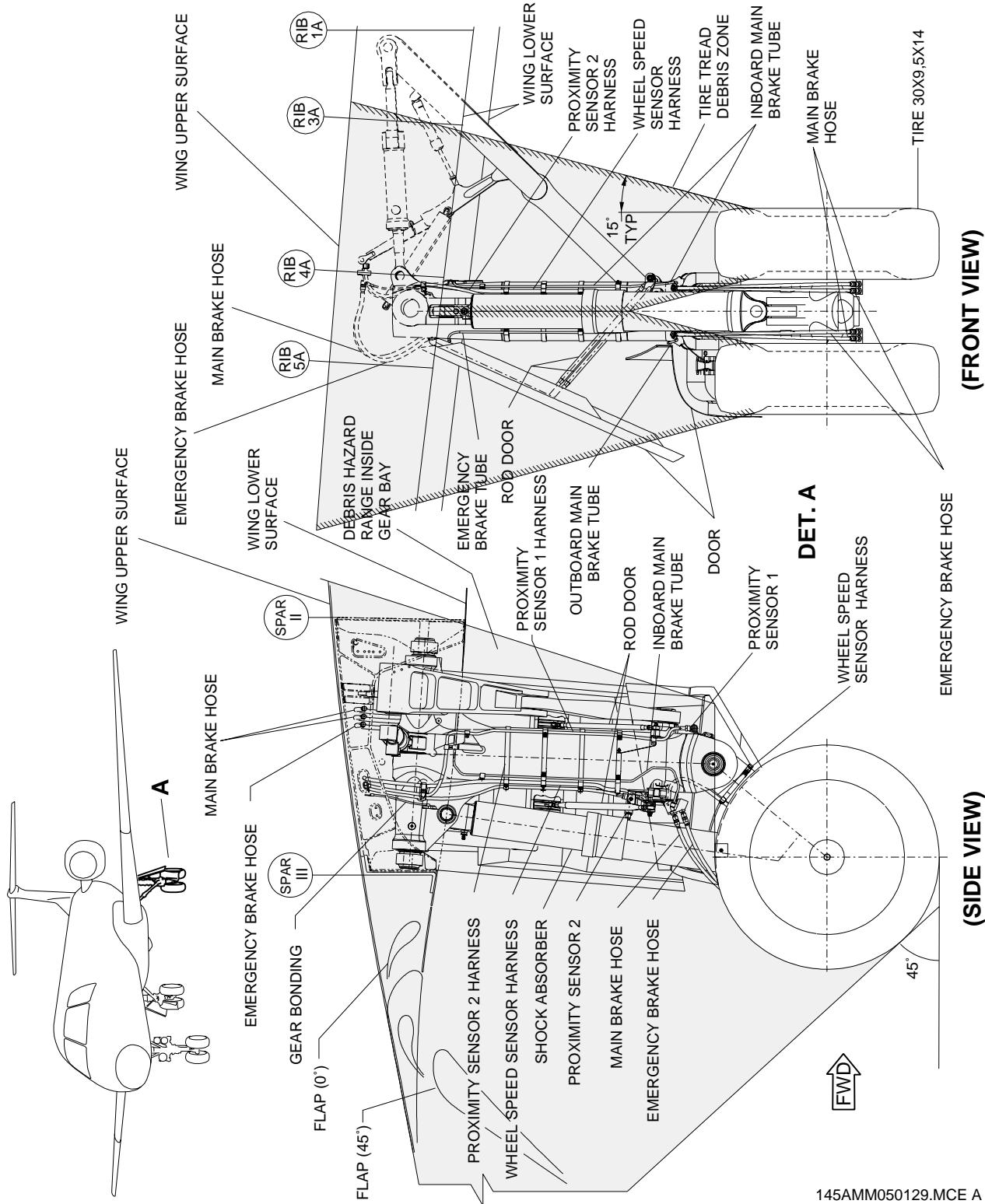


## AIRCRAFT MAINTENANCE MANUAL

### L. Follow-on

#### SUBTASK 842-002-A

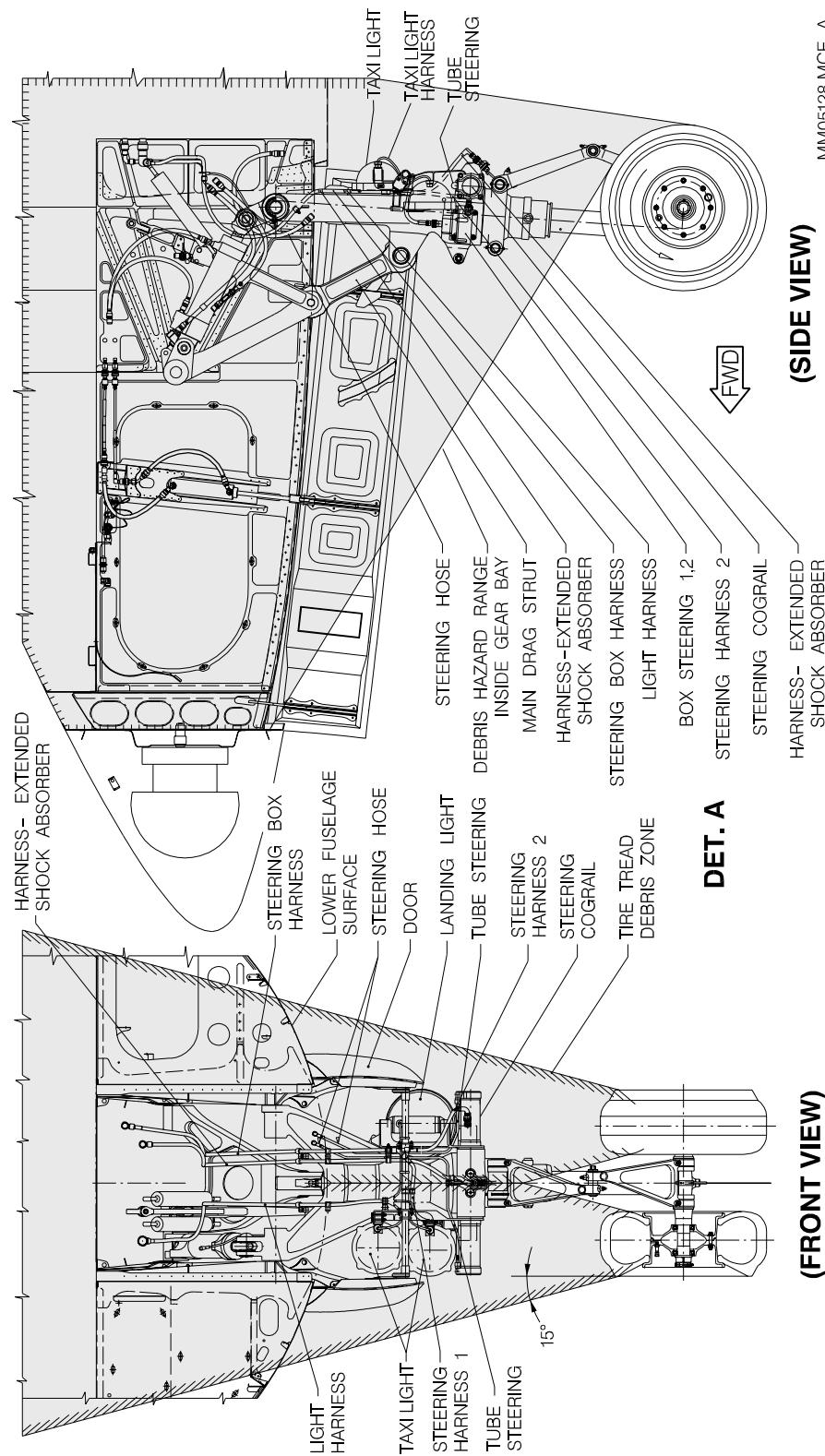
- (1) Remove the safety pins from the landing gear ([AMM TASK 32-00-01-910-801-A/200](#)).

**EFFECTIVITY: ALL**
**Landing-Gear Tire-Tread Failure - Main Landing Gear Inspection**
**Figure 601**


**EFFECTIVITY: ALL**

Landing-Gear Tire-Tread Failure - Nose Landing Gear Inspection

Figure 602



**TASK 05-50-15-200-802-A**
*EFFECTIVITY: ALL*
**3. LANDING-GEAR TIRE TREAD FAILURE - RETRACTED LANDING GEAR**
**A. General**

- (1) This task gives the procedures to do an inspection on the debris zones after the occurrence of a failure on the retracted main or nose-landing-gear tire tread.
- (2) The results from these procedures will show if another more accurate inspection is necessary.

**B. References**

<i>REFERENCE</i>	<i>DESIGNATION</i>
AMM TASK 32-00-01-910-801-A/200	LG SAFETY PIN - INSTALLATION AND REMOVAL
AMM TASK 32-30-00-700-801-A/500	EXTENSION AND RETRACTION SYSTEM - OPERATIONAL CHECK
AMM TASK 32-34-00-700-801-A/500	LG EMERGENCY EXTENSION - OPERATIONAL AND FUNCTIONAL CHECKS
AMM TASK 32-41-00-700-801-A/500	MAIN BRAKE SYSTEM - FUNCTIONAL CHECK
AMM TASK 32-50-00-700-802-A/500	NOSE WHEEL STEERING SYSTEM - QUICK ADJUSTMENT
RR MM TASK 05-50-00-200-804 - DO THE INSPECTION FOR FOREIGN OBJECT DAMAGE	-

**C. Zones and Accesses**

Not Applicable

**D. Tools and Equipment**

Not Applicable

**E. Auxiliary Items**

Not Applicable

**F. Consumable Materials**

Not Applicable

**G. Expandable Parts**

Not Applicable

**H. Persons Recommended**

<i>QTY</i>	<i>FUNCTION</i>	<i>PLACE</i>
1	Does the task	Outside the aircraft

**I. Preparation**
**SUBTASK 841-003-A**

- (1) Make sure that the landing gear safety pins are installed ( [AMM TASK 32-00-01-910-801-A/200](#)).



EMB145 – EMB135

AIRCRAFT  
MAINTENANCE MANUAL

J. Inspection After Main-Landing-Gear Tread Failure - Retracted Landing Gear

SUBTASK 210-004-A

- (1) Do an inspection on the applicable areas of the aircraft structure and engine after a tire burst with subsequent landing-gear tread failure.
  - (a) Use a flashlight and a mirror, if necessary, to examine these areas (as applicable): Examine the main landing gear and main landing gear wheelwell as follows:
    - 1 The wheelwell.
    - 2 The emergency-extension system.
    - 3 The bottom skin panels of the wing and flaps.
    - 4 The bottom skin panels of the fuselage.
    - 5 The NLG doors.
    - 6 The MLG doors.
    - 7 The bottom panels of the horizontal stabilizer and elevators.
    - 8 The vertical stabilizer and rudder.
    - 9 The bottom and inboard skin panels of the nacelles/pylon.
    - 10 The skin panels of the thrust reverser.
  - (b) Make sure the areas show no signs of:
    - 1 Dents or impact damage.
    - 2 Cracks or distortion.
    - 3 Loose or missing components.
    - 4 Surface contamination.
    - 5 Damage to the surface finish.
    - 6 Leakage of hydraulic fluid.
- (a) Examine all components in the debris hazard range inside the main landing gear compartment for signs of impact and, if you find them, examine for cracks, distortions, rupture, loose elements, or leakage (Figure 601).
- (b) Examine the free-fall system for integrity.
- (c) Examine the flap lower surface for signs of impact and, if you find them, examine for cracks, dents, or flaking paint.
- (d) Examine the wing lower surface for signs of impact and, if you find them, examine for cracks, dents, or flaking paint.
- (e) Examine the engine air inlet and rotor for signs of impact and, if you find them, examine for cracks, dents, or flaking paint.



## AIRCRAFT MAINTENANCE MANUAL

- (2) If you find signs of impact, do the following tasks, as applicable:
  - (a) Do an operational test on the landing-gear extension by the normal ([AMM TASK 32-30-00-700-801-A/500](#)) and free-fall ([AMM TASK 32-34-00-700-801-A/500](#)) systems.
  - (b) Do a functional test on the steering system [AMM TASK 32-50-00-700-802-A/500](#).
  - (c) Do a functional test on the brake system ([AMM TASK 32-41-00-700-801-A/500](#)).
  - (d) Control the flaps to make sure that they are free to operate.

### SUBTASK 210-005-A

- (3) If you find damage in the areas above, refer to the SRM for the specific information applicable to your case.
- (4) If the SRM does not contain the information applicable to your case, get in touch with EMBRAER.

### SUBTASK 210-006-A

- (5) Do the Inspection for Foreign Object Damage RR MM TASK 05-50-00-200-804 - DO THE INSPECTION FOR FOREIGN OBJECT DAMAGE.

