

Skin Repair Tools

A guide to Boeing-designed specialized tools for repair of damaged aircraft skins, with references to governing Boeing technical documents.

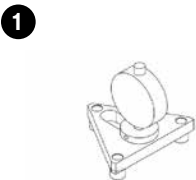
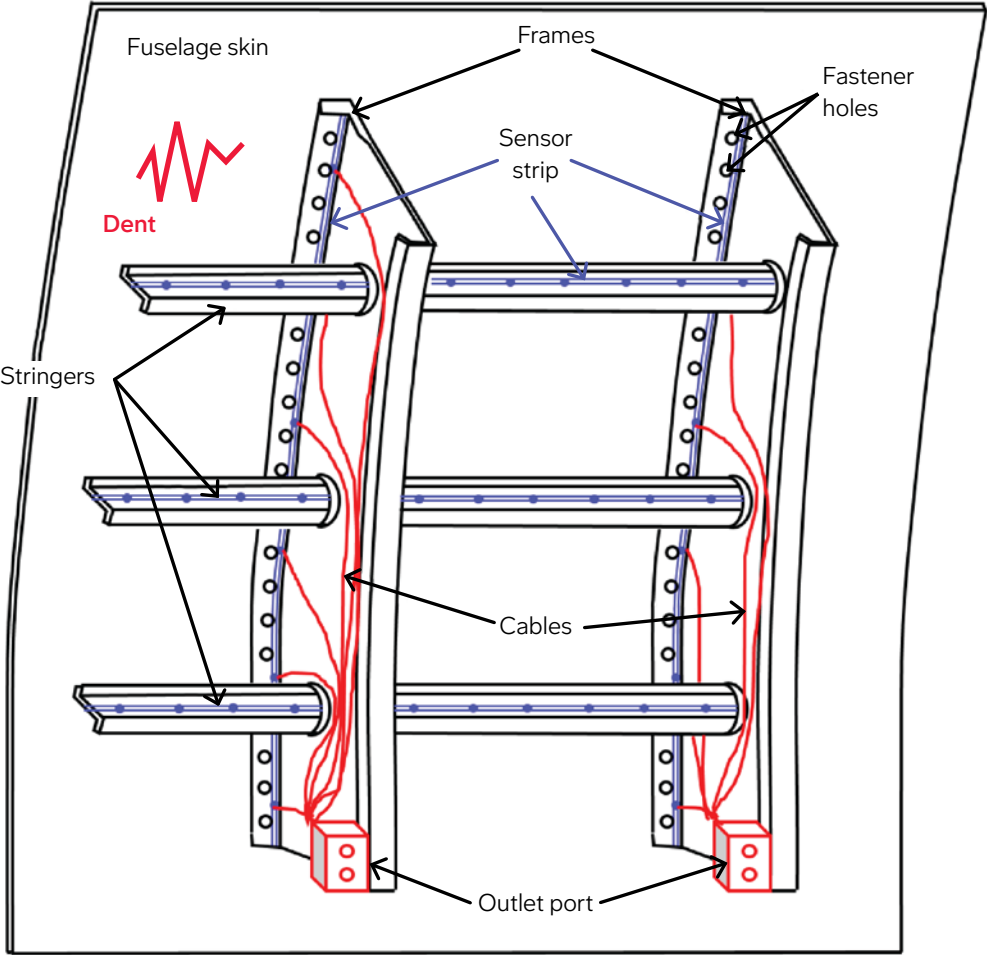
All Aircraft Models – Boeing and Airbus

Pacific Tool



Boeing-designed tools address 3 critical maintenance challenges.

- 1 Size the dent or defect
- 2 Establish and match skin contour shape
- 3 Use dinging tips to remove dents or defects



ST8721TBI
Depth indicator gauge



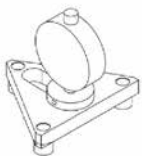
ST1716-A Kit
Back up and button plates



ST1716-A Kit
Dinging tips

Specific Tool Highlights

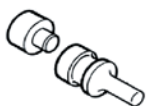
The most frequently used Boeing-designed tools for skin repair.



ST8721TB

Depth Indicator Gage

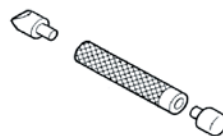
Three-point tripod holds dial indicator for checking depth/height of aircraft skin contours. Other shapes/foot configurations available.



ST1716-A Kit

Powered Dinging Tips

Used to remove various types of dents and dimples in aircraft skins. Designed with shank sizes to mate with standard rivet guns.



ST1716-A Kit

Manual Dinging Tips

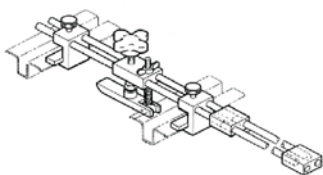
Used for gentle manual removal of various types of dents and dimples in aircraft skins. Three tip configurations for different types of damage.



ST1716-A Kit

Back Up & Button Plates

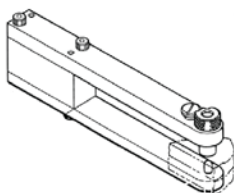
Plates used with powered dinging tips to match nominal fuselage shape, and to spread impact to avoid accidental contact damage.



ST1718

Stringer Clamp Pressure Assembly

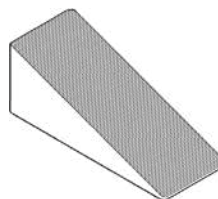
Applies pressure for removing dents and dings from inside the skin. Clamps onto stringer and is used to force skin into position. To be used with ST1716 and ST1717.



ST5701B

Piloted Hole Locator

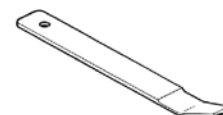
Used to locate holes in new aircraft skins requiring matching with frame and other structural component hole locations.



ST995

Fairing Wedge

Soft wedge used to separate sealed and/or riveted skin panels without causing damage. Customizable size configurations for all areas of the aircraft.



ST991A

Skin Wedge

Pry tool used to separate and/or relocate skin panels. Often used during cleaning & sealing.

3



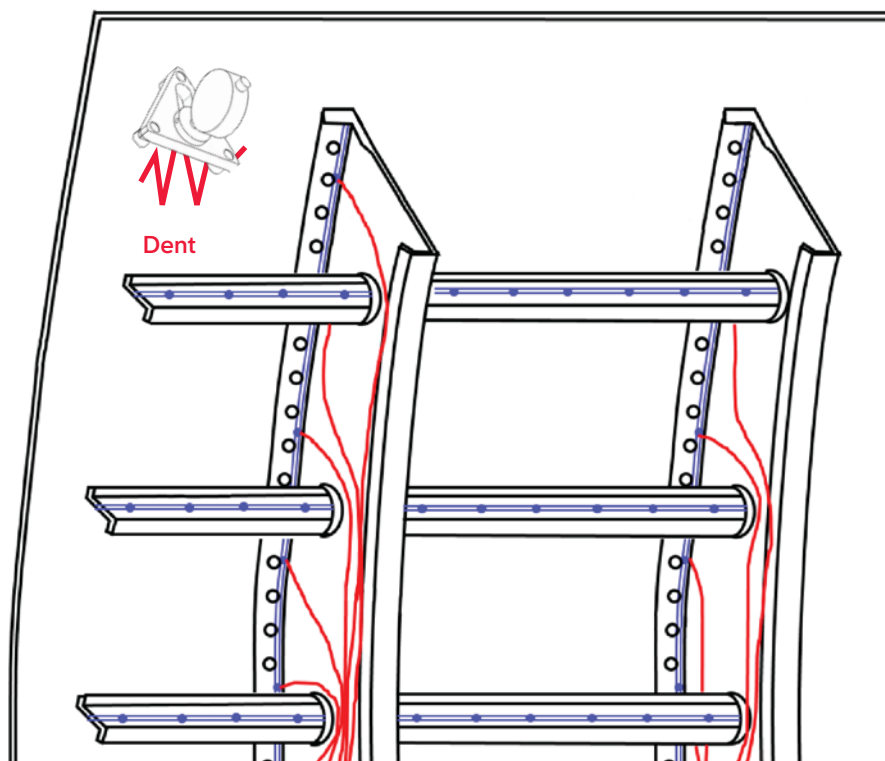
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Oct 05/96

Tool Explanation and References

Depth Indicator Gauge

ST8721TB

Gauge is placed over the dent or dimple and measures the depth and height, to ensure that damage falls within allowable rework/repair limits.



AMM Reference

TASK 05-51-18-210-801

SUBTASK 05-51-18-210-003

2./A./(5) Examine the external fuselage structure

2./A./(5)/(a)/7 Refer to SRM 51-10 for the analysis and continued service of airplanes with on-ground hail damage

TASK 57-31-21-400-801 (INSTALLATION)

SRM Reference

Chapter 51-10-01

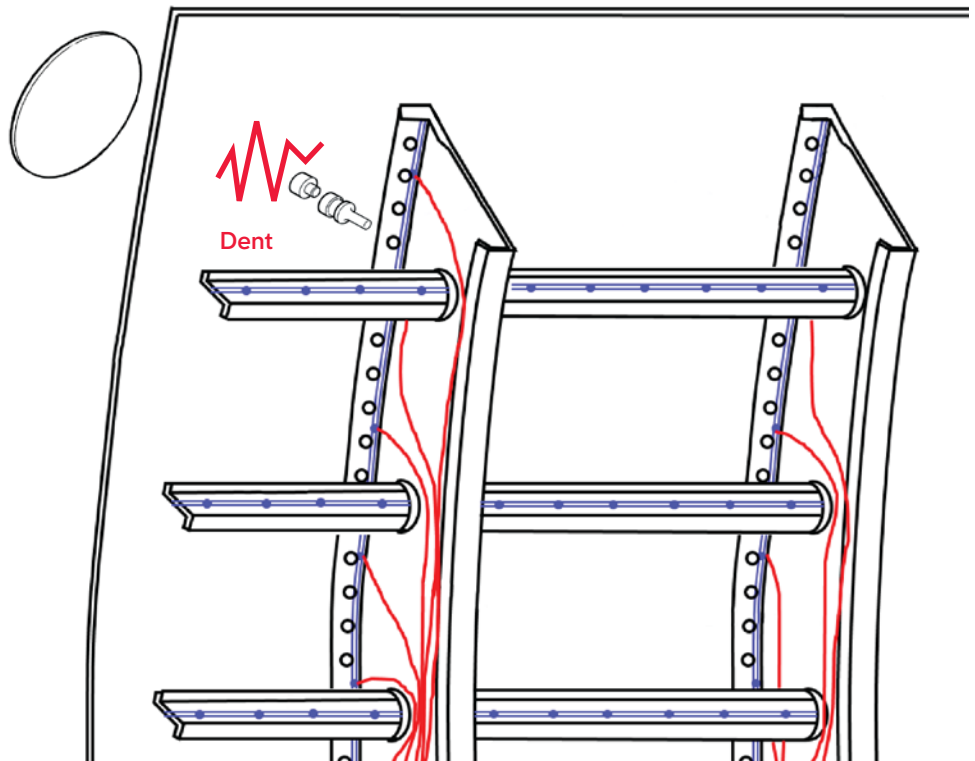
1./A. The 737 airplane requires an aerodynamically clean shape and smooth exterior for high performance. Unrepaired damage, unfilled dents (51-70-01) or repairs which change the shape or roughen the surface will be reflected in reduced performance. Every effort should be made to maintain original contour and exterior surface smoothness.

Tool Explanation and References

Dinging Tips, Backup Plates and Button Plates Kit

ST1716-A

Dinging tips can be selected from the kit for powered repair with a rivet gun, or a gentler manual repair. Used with back up plate specific to fuselage contour, to restore dents to original condition. Multiple tip configurations available for various damage types.



AMM Reference

TASK 05-51-18-210-801

SUBTASK 05-51-18-210-003

2./A./ (5) Examine the external fuselage structure
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TASK 57-31-21-400-801 (INSTALLATION)

SRM Reference

Chapter 51-10-01

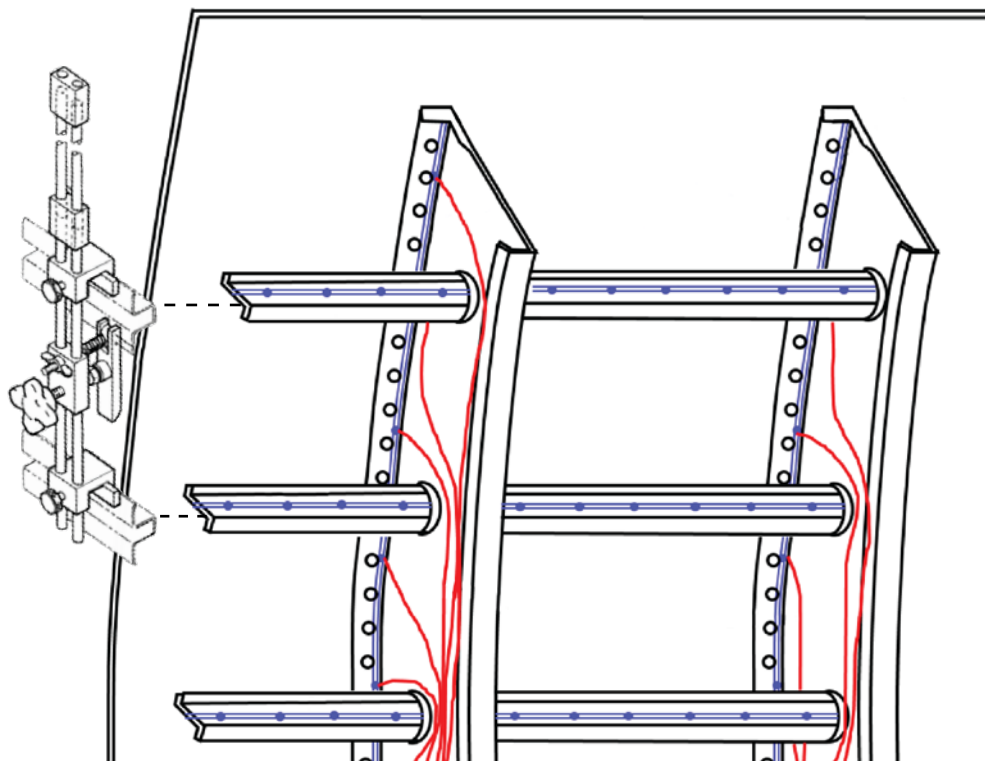
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Tool Explanation and References

Clamp Assembly

ST1718

Clamps onto stringer and is used to press dents back into nominal position. Often used with ST1716-A Kit items.



AMM Reference

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SUBTASK 05-51-18-210-003

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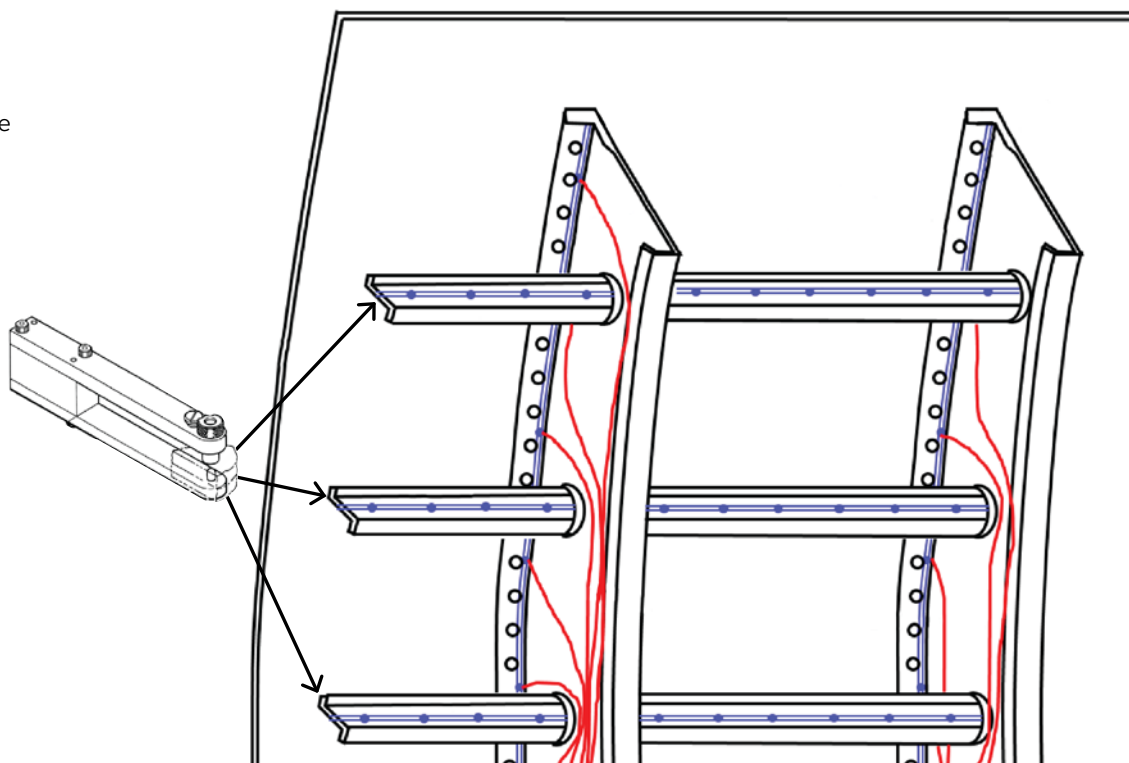
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Tool Explanation and References

Piloted Hole Locator and Drill Guide

ST5701B

Locates pilot hole in underside of part and drill hole from top.



AMM Reference

TASK 05-51-18-210-801

SUBTASK 05-51-18-210-003

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TASK 57-31-21-400-801 (INSTALLATION)

SRM Reference

Chapter 51-10-01

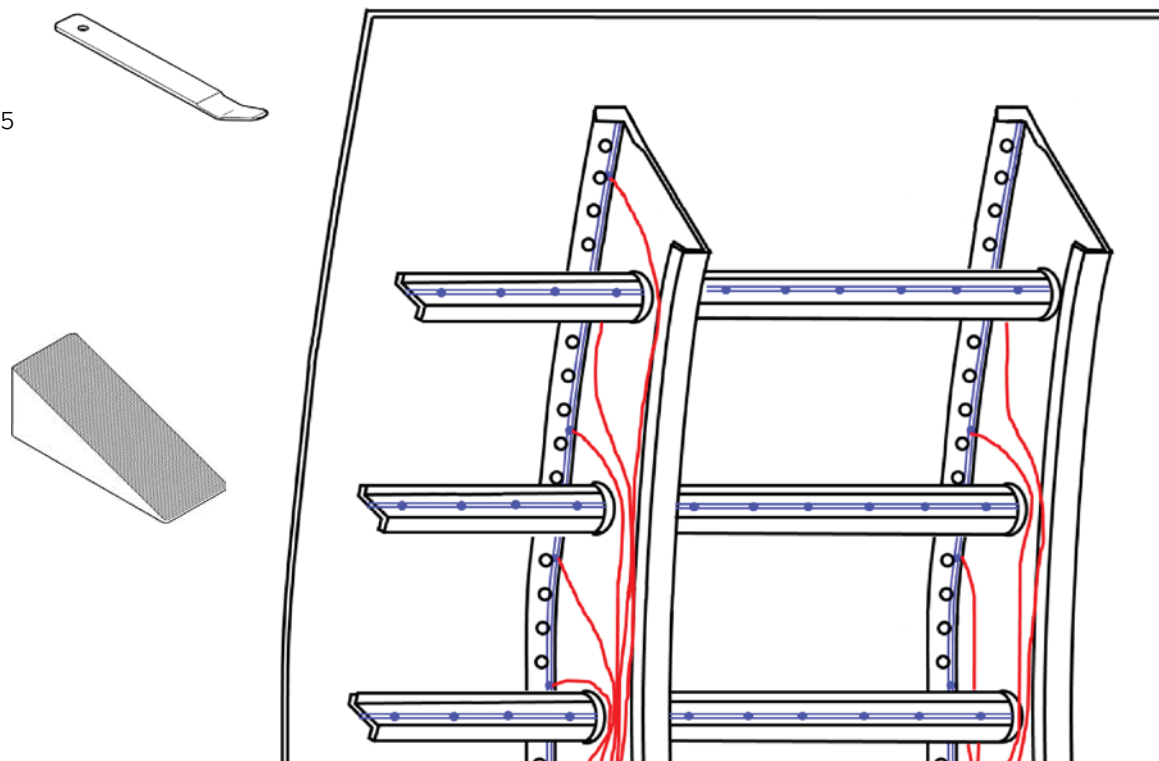
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Tool Explanation and References

Skin Wedges

ST995 and ST991A

ST991A (Above) and ST995 (Below) help separate the skin panels for removal, cleaning and sealing.



AMM Reference

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SUBTASK 05-51-18-210-003

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