Airborne Systems®

SERVICE BULLETIN: 2015-0001 Issued 23 Feb 2015

NOTE: This issue does not impact the flight characteristics or safety of the parachute system.

Subject: Intruder Main Parachute Bottom Surface Stitch Failure

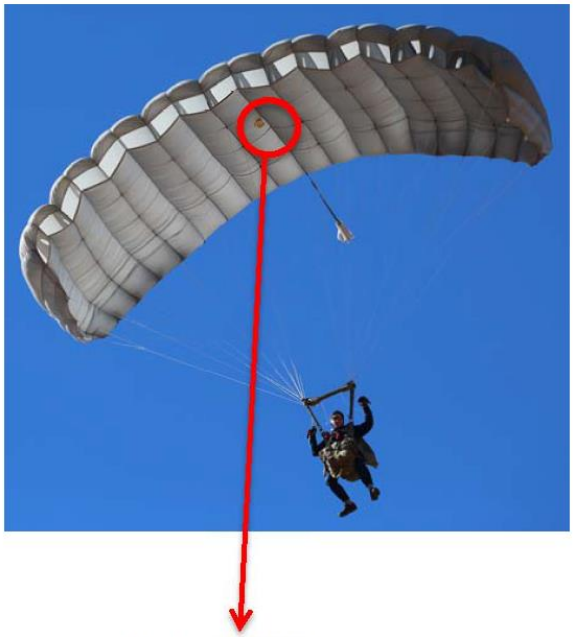
Affected Products:

The following products with a manufacturing date of February 2012 (stamped 02/12) through December 2014 (stamped 12/14) are affected by the service bulletin. The date of manufacture can be found in the stamped data block at the leading edge of the center bottom panel.

Parachute Type	Part Number
Intruder 300 FF/SL	8251000
Intruder 300 FF	8251500
Intruder 300 FF	8251501
Intruder 360 FF/SL	8252000
Intruder 360FF	8252500
Intruder 360 FF/SL	8255000
Intruder 360 FF	8255500

Issue Description

Using the Intruder 300 or Intruder 360 parachute in a freefall mode has resulted in reports of bottom surface damage. The damage consisted of broken stitches located at the bottom surface seam joining the center unloaded rib to the bottom surface panels. The stitches broke at the junction between the rib reinforcement tape located directly below the pilot chute attachment point and the bottom surface reinforcement tapes (See images below).



Damage Location

Broken stitches, bottom surface view

Junction between rib tape and bottom surface tape, view from inside the cell

This joint represents the weakest point in the load path. Therefore depending on the jumper weight and speed at parachute activation, the snatch force generated by the pilot chute can be sufficient to break the reinforcement stitch. Once the stitch rows are broken the load path is transferred onto the left and right panels of the top surface and to the reinforcement tapes on the loaded ribs. As a result, the stitch failure does not propagate any further.

Action Required

All canopies in the field should be inspected at the subject area described above and reinforced or repaired based on the following conditions:

Condition 1-

If no damage or stitch failure is found, the junction must be reinforced by placing a bartack at the junction between the existing stitch rows (See pictures below). Use a 42 stitch bartack, 1/8" wide X 3/4" long, sewn with size E nylon thread.

Condition 2-

If seam stitching has failed, but there is no further damage to cloth or reinforcement tape, the seam can be re-sewn. Remove all damaged stitching and re-sew using size E nylon thread. Match the spacing of the original stitching and overlap the existing stitching 2" to 4". After sewing, reinforce the junction as described in Condition 1.

Condition 3-

If seam stitching has failed, and there is damage to either the rib or bottom surface fabric, a repair can be performed by installing a ***Miscellaneous Patch*** as described in the appropriate technical manual. After installing the patch re-sew the seam using size E nylon thread. Match the spacing of the original stitching and overlap the existing stitching 2" to 4". After sewing, reinforce the junction as described in Condition 1. If there is damage to one or both of the 1" T3 reinforcement tapes, contact Airborne Systems for guidance.

View from inside the cell

Bottom surface view

The addition of the bartack increases the joint strength to approximately 300 lb. This solution has been fully tested for maximum operating speed and weight.

The repair may be performed by any properly equipped and authorized repair facility and the repair costs can be invoiced or passed onto Airborne Systems North America. Alternatively the parachute may be sent to Airborne Systems North America for repair, where it will be repaired free of charge.

For Additional Information:

Contact the following for additional inquires:

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