Service Bulletin

SB 07-01 R2

Issued: 6/8/07
Revised: 2/6/08

BRS-172 Pick-up Collar Support Replacement

Compliance

Mandatory: BRS considers this service bulletin to be mandatory. Accomplish this service bulletin within the next 25 flight hours or 60 days, whichever comes first. Compliance time begins upon issue of this Service Bulletin.

This Service Bulletin has been revised in order to define the effectivity range, and to clarify the part number of the Pick-up Collar Support used in Kit 14125-01.

Effectivity

All BRS-172 systems with serial number range from 72001 to 72021.

Purpose

Some airplanes may exhibit a condition where upon activation of the BRS-172, the pick-up collar assembly may prematurely move off the launch tube and adversely affect rocket trajectory during deployment. This service Bulletin will correct this condition by installation of a new pick-up collar support and custom tension screws.

Description

This Service Bulletin provides for the replacement of the pick-up collar support and screws.

Warranty Information

BRS will cover parts costs for this Service Bulletin if the work is accomplished within the compliance period. BRS will cover the cost of labor for this Service Bulletin if the work is accomplished within two years of the installation date of the system. The warranty claim form must be properly filled out and submitted to BRS in order to obtain a warranty credit.

Manpower Requirements

1.0 man hours

Weight and Balance

N/A

Material Information

The following parts are required to comply with this Service Bulletin. Parts can be obtained through BRS.

For BRS-172 S/Ns 72001 - 720012, order Kit No. 14125-02:

Item No.	Description	BRS P/N	Qty
1	Pick-up Collar Support	014124-01	1
2	Screws, Aluminum	017104-01	2
3	AN 0321 Blue Locktite	005012-01	1

For BSR-172 S/Ns 72013 - 720021, order Kit No 14125-01:

Item No.	Description	BRS P/N	Qty
1	Pick-up Collar Support	014123-01	1
2	Screws, Aluminum	017104-01	2
3	AN 0321 Blue Locktite	005012-01	1

Accomplishment Instructions

1. Acquire necessary tools, equipment and supplies.
   a. Phillips screwdriver
   b. Flathead screwdriver
   c. 1/4" socket

2. Remove key from ignition

3. Remove activation handle box cover and install handle safety pin.

4. Remove rocket motor fairing from rocket motor mounting plate.

5. Remove Lexan cover from top of parachute canister.

6. Remove top of screw caps from nylon tension screws securing pick-up collar assembly to launch tube.

7. Remove and discard nylon tension screws.

8. Slide pick-up collar assembly off of rocket motor. Do not pull pick-up collar lanyards out of parachute canister. Perform work on top of parachute canister.

9. Remove screws securing existing pick-up collar support to pick-up collar.

10. Press retaining groove on pick-up collar support toward the rocket lanyard. Use fingers to pry rocket lanyard from opposite retaining groove and pivot the pick-up collar support until lanyard is disengaged from retaining grooves.

11. Discard existing pick-up collar support.

12. Inspect inner diameter of pick up collar for surface irregularities
    a. Acquire necessary tools, equipment and supplies.

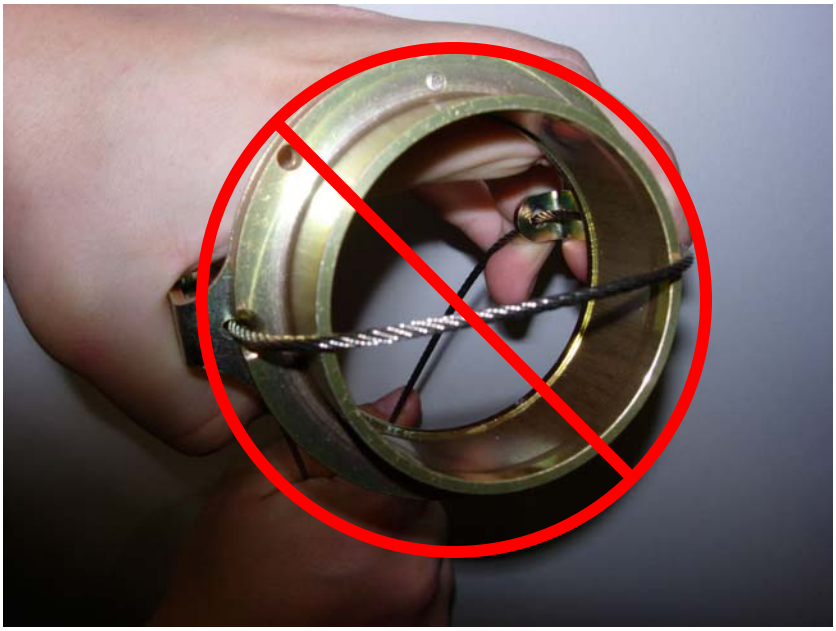
Description	Spec	Purpose
Half-round file		Remove bumps
Isopropyl Alcohol	TT-I-735 Grad A or B	Clean installation area
Cotton Cloth (clean & lint free)		Clean installation area
Primer		Seal

    b. Use half round file as required to remove bumps.
    c. Solvent clean with isopropyl alcohol
    d. Apply primer to affected areas

13. Measure length of launch tube
    a. If measurement equals 7.5 inches (19.05 cm), install pick-up collar support part number (014124-01).
    b. If measurement equals 7.75 inches (19.69 cm), install pick-up collar support part number (014123-01).

14. Position replacement pick-up collar support as identified in Step 13 to upper side of pick-up collar.

WARNING: Position rocket lanyard around top outer diameter of pick-up collar support, NOT over top of rocket. Failure to comply will absolutely FAIL rocket deployment!

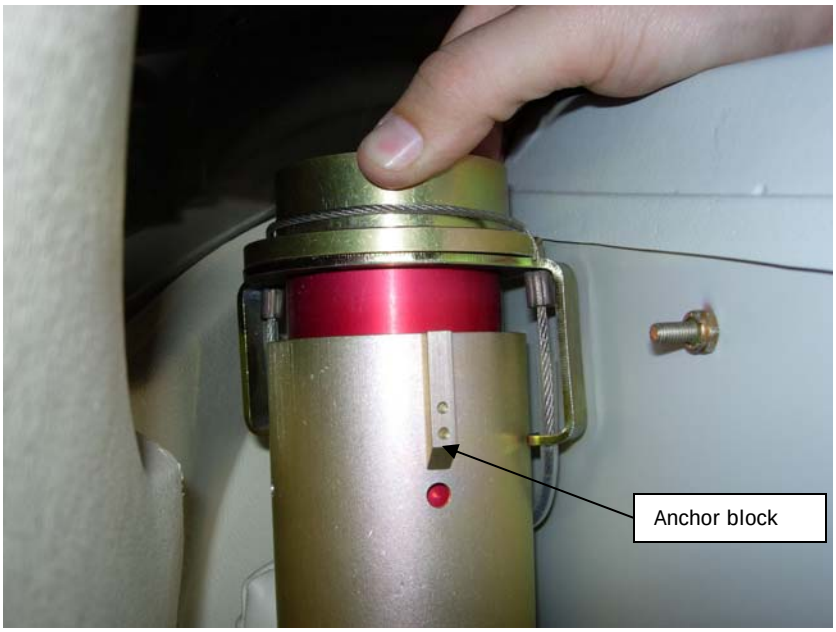


15. Position retaining groove of pick-up collar support to rocket lanyard. Pivot pick-up collar support until the rocket lanyard engages the opposite retaining groove.

16. Apply thread-lock to screws removed previously from pick-up collar.

17. Install screws securing pick-up collar support to pick-up collar.

18. Verify pick-up collar assembly slides freely on rocket.



19. Verify anchor blocks are perpendicular to pick-up collar assembly. If pick-up collar is not fully seated against the anchor blocks, use pliers to gently adjust anchor blocks as required.

20. Verify rocket alignment is centered inside launch tube.

21. Apply threadlock to aluminum tension screw.

22. Install aluminum tension screws securing pick-up collar assembly to rocket launch tube. Tighten aluminum screws until snug (less than 5 inch-pounds).

    CAUTION: Do not over tighten aluminum tension screws!

23. Feed the rocket lanyards back into the opening on the parachute canister.

24. Attach Lexan cover to top of parachute canister

25. Attach rocket motor fairing to rocket motor mounting plate.

26. Remove safety pin from activation handle.

27. Replace activation handle box cover.

Final Procedure

Complete aircraft records by noting compliance with BRS SB 07-01 in aircraft logbook. Send completed Compliance Response form to BRS Inc.

Compliance Response Form
for
Service Bulletin 07-01

BRS-172

It is necessary that BRS maintain a record of all airplanes in compliance with the requirements of this Service Bulletin. Additionally, BRS requires that this Service Bulletin response form be completed and returned in order to process any warranty claim.

Airplane Information

Airplane Information: _____

Serial Number: _____

Hour Meter Reading: _____

Service Facility Information

Service Facility Name: _____

Compliance Information

BRS Service Bulletin 07-01 was complied with on the referenced serial number airplane at the listed airplane hours.

Signature: _____

Title: _____ Date: _____

Comments: _____

_____

_____

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Return form to:

BRS, Inc.
Quality Control Manager
300 Airport Road
South St. Paul, Minnesota 55075