Service Bulletin

SB 07-03

Issued: 8/1/07
Revised: 8/27/07

BRS-600 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 90 days, whichever comes first. Compliance time begins upon the revised issue date of this Service Bulletin.

Effectivity

All BRS systems that use a BRS-600 rocket motor.

Purpose

Some airplanes may exhibit a condition where upon activation of the rocket motor, 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 one year 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 hour

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 systems in which the rocket motor igniter is mounted to bottom of the rocket motor base order the following components:

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
4	Launch Tube - BRS600	003047-02	1
5	Anchor Block	14120-01	2
6	Screws, Machine, 4/40 x 5/16"	17002-01	4
7	Sticker, Dataplate Cover	006215-01	1

For systems in which the rocket motor igniter is mounted to side of the rocket motor base order the following components:

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
4	Launch Tube, Right Angle, BRS600	003046-02	1
5	Anchor Block	14120-01	2
6	Screws, Machine, 4/40 x 5/16"	17002-01	4
7	Sticker, Dataplate Cover	006215-01	1

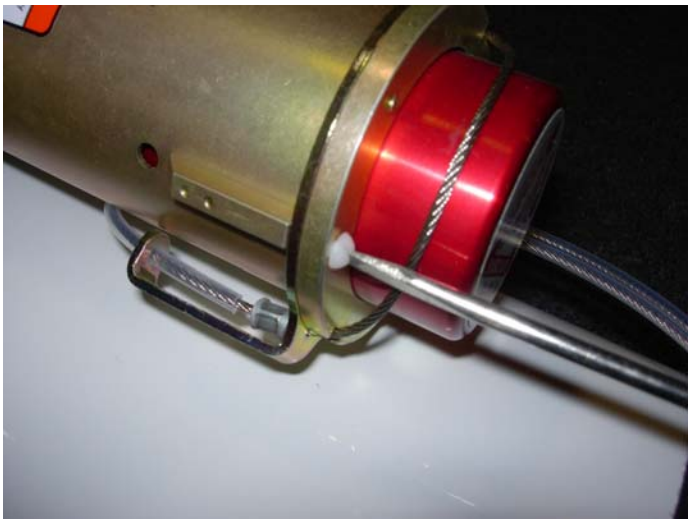
Note: Items 4 – 6 will be delivered pre-assembled.

Accomplishment Instructions

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

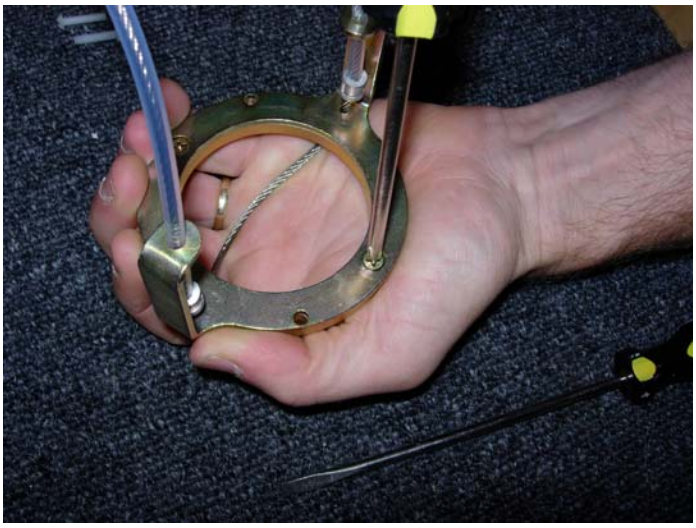
2. Insert that safety flag in activation handle.

3. Remove and discard nylon tension screws securing pick-up collar assembly to launch tube..

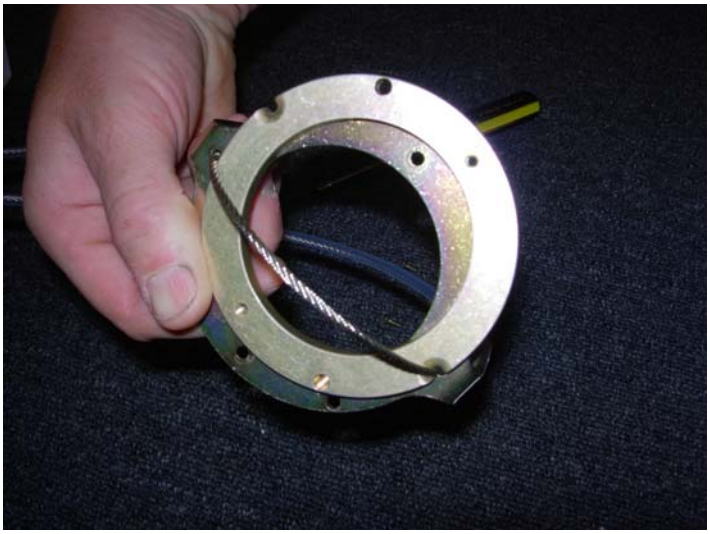


4. Slide pick-up collar assembly off of rocket motor. Do not pull pick-up collar lanyards out of parachute canister. Perform work on top of parachute canister.

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



6. 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.



7. Discard existing pick-up collar support.

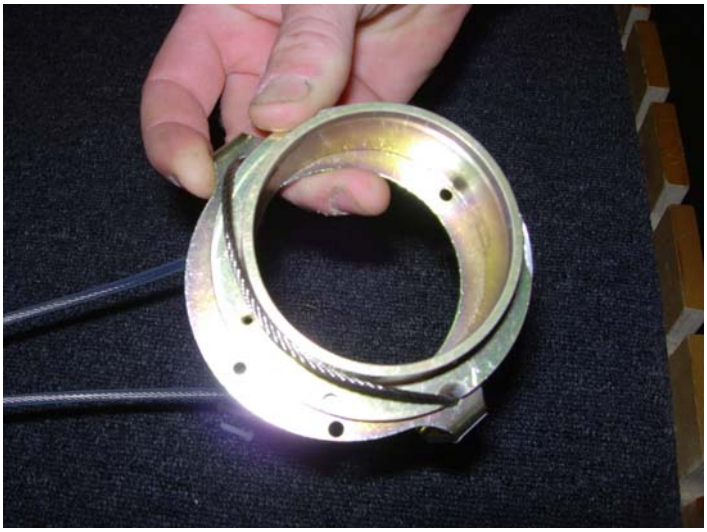
8. Inspect inner diameter of pick up collar for surface irregularities
   a. Acquire necessary tools, equipment and supplies.

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

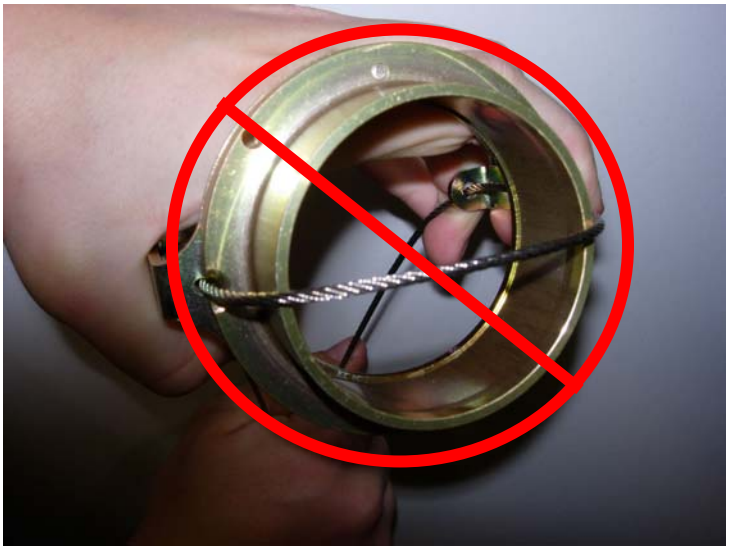
   b. Use half round file as required to remove bumps.
   c. Solvent clean with isopropyl alcohol
   d. Apply primer to affected areas

9. Position replacement pick-up collar support to upper side of pick-up collar.

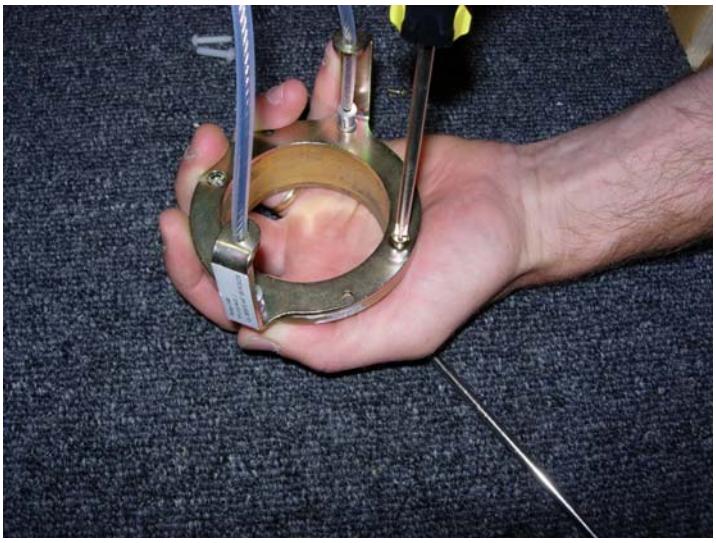
WARNING: Position rocket lanyard around top outer diameter of pick-up collar support, NOT over top of rocket. Failure to comply will absolutely FAIL rocket deployment!



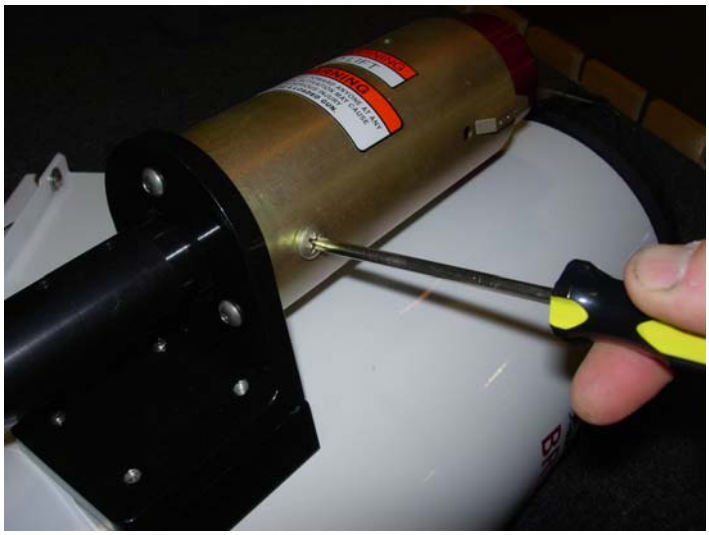
10. Position retaining groove of pick-up collar support to rocket lanyard. Pivot pick-up collar support until the rocket lanyard engages the opposite retaining groove.



11. Apply threadlock to screws removed previously from pick-up collar and attach new pick-up collar support to pick-up collar.



12. Remove two screws that attach the launch tube to the rocket motor base. Remove launch tube.



13. Slide new launch tube over base and align mounting screws. Apply thread locker to mounting screws and reinstall.

14. Remove dataplate sticker (with date of manufacture) from old launch tube. Trim excess plastic cover from around the edges. Reinstall on new launch tube with new dataplate cover.

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

16. 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.

17. Verify rocket alignment is centered inside launch tube.

18. Apply threadlock to aluminum tension screw.

19. Install aluminum tension screws securing pick-up collar assembly to rocket launch tube. Tighten aluminum screws until snug (less than 5 inch-pounds or 0.57 Newton-meters).

CAUTION: Do not over tighten aluminum tension screws!

20. Remove safety pin from activation handle.

Final Procedure

Complete aircraft records by noting compliance with SB 07-03 in aircraft logbook. Send completed Compliance Response form to BRS Inc.

Compliance Response Form
for
Service Bulletin 07-03

It is necessary that BRS maintain a record of all airplanes in compliance with the requirements of this rework instruction manual. Additionally, BRS requires that this Compliance Response Form be completed and returned in order to process any warranty claim.

Airplane Information

Airplane Information: _____

BRS Unit Model: _____

BRS Unit Serial Number: _____

Service Facility Information

Service Facility Name: _____

Address, Phone: _____

Compliance Information

BRS Service Bulletin 07-03 was complied with on the referenced serial number airplane at the listed airplane hours.

Task	Title/Signature	Date
Pick-up Collar & Shear Screws Replaced		
Launch tube replaced		

Comments: _____

_____

_____

_____

Return form to:

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