



ECCN
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AERONAUTICAL ACCESSORIES, INC.

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Technical Bulletin TB No. AA-09009 No Revision

SUBJECT:

**Energy Absorber Crew-seat Kit
P/N 206-130-001, 206-130-002**

**Aft Observer Seat Modification Kit
P/N 157-13005-01**

**Shoulder Harness Assembly
P/N 503471-203-1028, 503471-204-1028**

MODELS AFFECTED:

Bell Helicopter Textron model 206B helicopters with
Aeronautical Accessories, Inc.

206-130-001 Energy Absorber Crew-seat Kit installed in
accordance with STC SH8419SW.

206-130-002 Energy Absorber Crew-seat Kit installed in
accordance with STS SH8419SW.

157-13005-001 Aft Observer Seat Modification Kit installed
in accordance with STC SH8435SW.

503471-203-1028 Shoulder Harness Assembly
503471-204-1028 Shoulder Harness Assembly

COMPLIANCE:

The inspection listed in this Technical Bulletin is
recommended to be accomplished within 90 days. The
restraint system should be returned to AmSafe within 1
year if functioning properly. Restraint systems not
functioning properly should be returned to AmSafe for
immediate rectification.

**TECHNICAL BULLETIN
ENERGY ABSORBER CREW-SEAT KIT
AFT OBSERVER SEAT MODIFICATION KIT
SHOULDER HARNESS ASSEMBLY**

DESCRIPTION:

This Technical Bulletin is issued in response to a potential problem with the manual lock feature of the inertia reel restraint system. When the manual lock is initiated, the lock may not function as designed.

FAA/DER APPROVAL:

This Technical Bulletin contains no modification information that revises the approved configuration and therefore does not require FAA or other regulatory agency approval.

MANPOWER:

Inspection of the inertia reel is 15 minutes.
If removal of restraint system is required, 15 minutes per seat.

IF OWNERSHIP OF AIRCRAFT HAS CHANGED, PLEASE FORWARD THIS BULLETIN TO NEW OWNER

TECHNICAL BULLETIN
ENERGY ABSORBER CREW-SEAT KIT
AFT OBSERVER SEAT MODIFICATION KIT
SHOULDER HARNESS ASSEMBLY

ACCOMPLISHMENT INSTRUCTIONS:

SPECIAL TOOLS REQUIRED No special tools are required for inspection of the restraint system.

A spring balance capable of reading a force of 25lbs is required to test the restraint system if the system falls within the affected date code range.

PART A

1. Locate the inertia reel on the affected seat.
2. Remove reel cover.
3. Locate the date code on the inertia reel identification label per Appendices A and B, Figure 1.

NOTE

Although the lap belt and crotch strap assemblies also carry a serial number, these numbers cannot be used as the inertia reel identifier.

- a. If the date code is prior to 2/1/07 or after 11/30/08, no further action is required.
- b. If the date code falls in between 2/1/07 and 11/30/08, check the inertia reel for a label attached by AmSafe stating "Wheel Checked." See Appendices A and B, Figure 2.
 1. If the inertia reel includes the "Wheel Checked" label, no further action is required.
 2. If the inertia reel does NOT include the "Wheel Checked" label, proceed to step 4.
4. Inspect the restraint for continued airworthiness by the following:
 - a. Extend at least 18" of webbing without fully extending webbing.
 - b. Activate the manual lock by operating the manual lock handle.
 - c. Apply approximately 10-15 lbs of pulling force to the webbing. No more than 1" of webbing should extend.
 - d. Deactivate the manual lock by operating the manual lock handle. Accelerate (pull) webbing to verify that the inertia lock features of the shoulder harness reel lock the webbing. Apply 10-15 lbs of force to the webbing. No more than 1" of webbing should extend.
 - e. Repeat process 3 times at different extensions of the webbing.

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SHOULDER HARNESS ASSEMBLY**

PART B

1. If the unit passes all tests:
 - a. Permanently mark the inertia reel identification label with Aeronautical Accessories, Inc. Technical Bulletin report number and the date of action (i.e. TB AA-09009 + date).
 - b. Permanently mark the inertia reel identification label with AmSafe Service Bulletin number and the date of action (i.e. for P/N 5024, label SB 5024-25-01 + date. For P/N 503471, label SB 503471-25-01 + date).
 - c. Return restraint system to AmSafe Aviation for rectification within 1 year for a component change in order to meet compliance regulations.
2. If the unit fails any of the tests, it should be removed and returned to AmSafe Aviation for immediate rectification. When mailing the restraint system, include the following:
 - Part Number and Serial Number / Date Code
 - Quantity
 - Reference : "Aeronautical Accessories, Inc. Technical Bulletin AA-09009" and "Service Bulletin 5024-25-01," or "Service Bulletin 503471-25-01".
 - Name of Airline / Operator
 - Shipping Address

Restraint systems should be mailed to either of the following:

Europe/Asia:

AmSafe Aviation UK
Tamian Way, Green Lane
TW4 6BL
Telephone: +44(0) 208 572 0321
Fax: +44(0) 208 572 2096

North America and other:

AmSafe Inc.
1043 N 47th Ave.
Phoenix, Arizona 85043
Telephone: +1 (602) 850-2850
Fax: +1 (602) 850-2812

BHT 206B

**TECHNICAL BULLETIN
ENERGY ABSORBER CREW-SEAT KIT
AFT OBSERVER SEAT MODIFICATION KIT
SHOULDER HARNESS ASSEMBLY**

TB No. AA-09009
No Revision

APPENDIX A

AMSAFE

Aviation

SERVICE BULLETIN

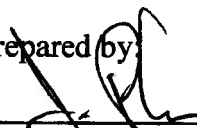
**EQUIPMENT / FURNISHINGS
FLIGHT COMPARTMENT**

**INSPECTION / CHANGE OF RESTRAINT SYSTEM ASSEMBLY
WITH INERTIA REEL AND MANUAL LOCK HANDLE**

**SERVICE BULLETIN NUMBER
5024-25-01
ISSUE 1**


ISSUED BY:
AMSAFE INC.
1043 N. 47th AVENUE
PHOENIX, AZ USA 85043
TEL: (602) 850-2850 FAX: (602) 850-2812

Prepared by:



1-9-09
Date
Jack Riley
Manager, Quality Assurance

Approved by:



1/9/09
Date
Brian Burns
Engineering Manager

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Date: 19 December 2008



SERVICE BULLETIN

RECORD OF REVISIONS

Retain this record at the front of the Service Bulletin. On receipt of a revision, amend as instructed in the letter of transmittal and record the incorporation of the revision on this sheet. Retain the letter of transmittal following record.

Issue	Changed by	Revisions	Approved	Release date
1	J. Riley	New document release	JR BB	01/12/09



SERVICE BULLETIN

1. PLANNING INFORMATION

A. Affectivity

This Service Bulletin is applicable to the below cited Restraint Systems incorporating both Inertia Reels and a Manual Lock. The affected part numbers included herein are identified on the product label as follows:

5024-X-XXX-XXXX

Traceability of affected assemblies is those that have been manufactured between February 07 through November 08 (X0207 through X1108) The date code information is found on the inertia reel identification label.

B. Classification

Mandatory

C. Compliance

Inspection: AmSafe recommends that the inspection listed in this Service Bulletin be done within 90 days of issue of this Service Bulletin.

Further action: Should further action be required, this must be done immediately. Should the unit function correctly, the unit shall be returned to AmSafe for a component change within 1 year after inspection.

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D. Reason

On 9th February 2007 an inertia reel component was revised to improve the manufacturing capability of the inertia reel assembly. Recent service installation history has revealed a rare interaction of the components due to tolerance issues that were not apparent in the qualification testing of that component. This interaction may cause the assembly to exhibit an inoperable condition on the inertia reel lock system. This Service Bulletin addresses the issue by requiring a mandatory replacement of the subject component / assembly. This replacement component eliminates the root cause of the problem.

E. Description

This Service Bulletin provides instruction for the Inspection of the Restraint System. AmSafe Aviation will stock a number of these assemblies to ensure that turn around will be immediate if needed. Following the Accomplishment Instructions of this Service Bulletin will not change the standard function or performance of the Restraint System.

F. Approval

This Service Bulletin contains no modification information that revises the approval configuration and therefore does not require FAA or other regulatory agency approval. This Service Bulletin has been approved by AmSafe only. The FAA TSO-C114 approval of the Restraint System is unaffected.

G. Manpower

Inspection of the Restraint System is less than 15min per unit, when accomplished at maintenance level. Should removal of the Restraint System from the seat be required, the manpower for this is per the seat manufactures instructions.

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H. Warranty

AmSafe warranty remedies are available for those Restraint System listed in the Affectivity section of this Service Bulletin.

I. Material Cost and Availability

The complete Restraint Systems should be returned to AmSafe authorised repair station together with a Free of Charge purchase order containing the following information:

Part Number and Serial Number / Date Code:
Quantity:
Reference: "Service Bulletin 5024-25-01"
Name of Airline / Operator:
Shipping Address:

Restraint systems should be sent to either of the following locations:

Europe / Asia:

AmSafe Aviation UK
Tamian Way, Green Lane
TW4 6BL
Telephone: +44(0) 208 572 0321
Fax: +44(0) 208 572 2096

North American and other:

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SERVICE BULLETIN

J. Tooling – Price and Availability

A spring balance capable of reading a force of 25lb.

No other special tools, fixtures or equipment are required for the inspection of the restraint system.

K. Weight and Balance

This Service Bulletin has no affect on weight or balance.

L. Electrical Load Data

None

M. Software Accomplishment Summary

None

N. References

N/A

O. Other Publications Affected

None

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SERVICE BULLETIN

2. ACCOMPLISHMENT INSTRUCTION

1. The inspection of the restraint system does not require the restraint system to be removed from the seat.
2. Date Code Inspection. The date code can be found on the inertia reel identification label see Figure 1. For access to the inertia reel identification label please refer to the applicable seat manufactures instruction defined in their CMM.

If the date code is prior to 1 Feb 07 (X0207) or after 30 Nov 08 (X1108) no further action is required.

If the serial number is between 1 Feb 07 (X0207) and 30 Nov 08 (X1108), and the inertia reel does not include a label attached by AmSafe stating "Wheel Checked" (Figure 2) continue to step 3.

Important Note:

Although the lap belt and crotch strap assemblies also carry a serial number, these cannot be used as the lap belts or shoulder harness assembly (one or the other) may have been replaced by an airline operated during maintenance of the restraint systems.

3. Inspect the restraint for continued airworthiness by:
 - Extending at least 18" of webbing, but not fully extending the webbing.
 - Activate the manual lock by operating the manual lock handle.
 - Apply approximately 10 - 15 lbs of pulling force to the webbing and observe that no more than 1" of webbing can be extended.
 - Deactivate the manual lock by operating the manual lock handle. Accelerate (pull) webbing to verify that the inertia lock features of the shoulder harness reel also lock the webbing and with 10 - 15 lbs of pulling force to the webbing observe that no more than 1" of webbing can be extended. Repeat 3 times at different extensions of webbing.

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Should any of the above tests fail the unit should be returned to AmSafe for immediate rectification. Removal of the restraint system from the seat must be done in accordance with the seat manufactures CMM and restraint system shipped back to AmSafe Aviation (see section 1. I (Material and Cost Availability).

4. Should the restraint system shoulder harness pass the above tests described in step 3 then
 - Permanently mark the shoulder harness inertia reel identification label with the Service Bulletin number and date actioned i.e. “SB 5024-25-01 + Date”
 - This restraint system should be returned to AmSafe Aviation for rectification within 1 year as defined in Section 1.C Compliance.

Important Note

All restraint systems, within the date/serial number codes described in section 2.2, passing the inspection tests are still required to be replaced within the defined time period.

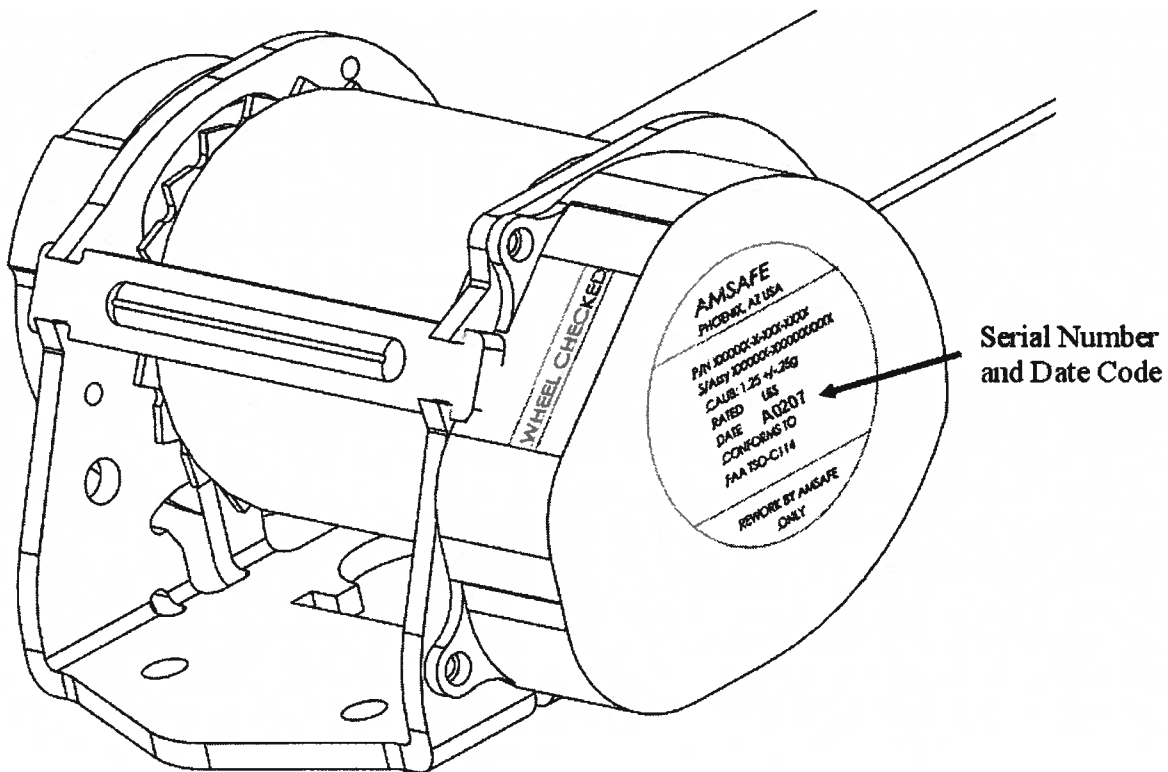


Figure 1 – Serial Number and Date Code Information

SERVICE BULLETIN

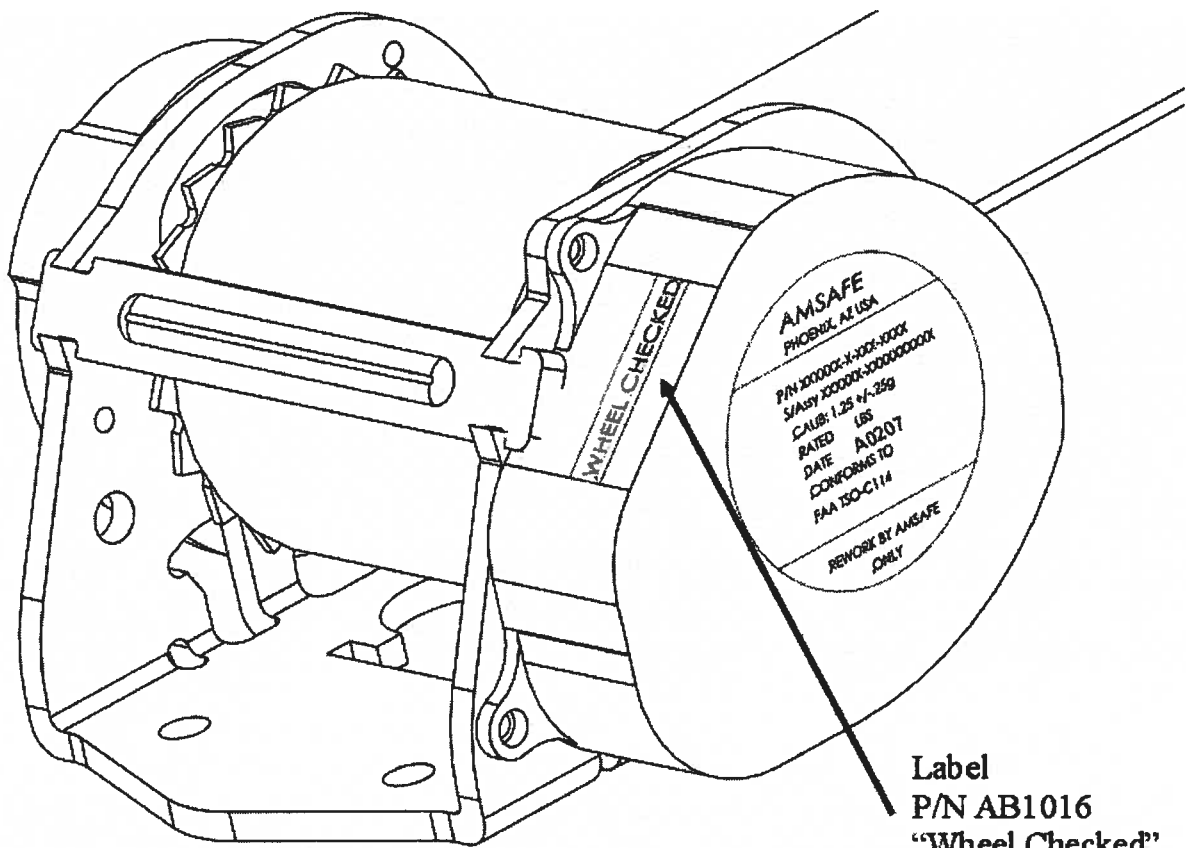


Figure 2 – Wheel Checked Label

**TECHNICAL BULLETIN
ENERGY ABSORBER CREW-SEAT KIT
AFT OBSERVER SEAT MODIFICATION KIT
SHOULDER HARNESS ASSEMBLY**

APPENDIX B

AMSAFE

Aviation

SERVICE BULLETIN

**EQUIPMENT / FURNISHINGS
FLIGHT COMPARTMENT**

**INSPECTION / CHANGE OF RESTRAINT SYSTEM ASSEMBLY
WITH INERTIA REEL AND MANUAL LOCK HANDLE**

**SERVICE BULLETIN NUMBER
503471-25-01
ISSUE 1**

ISSUED BY:
AMSAFE INC.
1043 N. 47th AVENUE
PHOENIX, AZ USA 85043
TEL: (602) 850-2850 FAX: (602) 850-2812

Prepared by




Jack Riley
Manager, Quality Assurance

1-9-09

Date

Approved by:



Brian Burns
Engineering Manager

11/9/09

Date

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1	J. Riley	New document release	JR BB	01/12/09

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SERVICE BULLETIN

1. PLANNING INFORMATION

A. Affectivity

This Service Bulletin is applicable to the below cited Restraint Systems incorporating both Inertia Reels and a Manual Lock. The affected part numbers included herein are identified on the product label as follows:

503471-XXX-XXXX

Traceability of affected assemblies is those that have been manufactured between February 07 through November 08 (X0207 through X1108) The date code information is found on the inertia reel identification label.

B. Classification

Mandatory

C. Compliance

Inspection: AmSafe recommends that the inspection listed in this Service Bulletin be done within 90 days of issue of this Service Bulletin.

Further action: Should further action be required, this must be done immediately. Should the unit function correctly, the unit shall be returned to AmSafe for a component change within 1 year after inspection.

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SERVICE BULLETIN

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On 9th February 2007 an inertia reel component was revised to improve the manufacturing capability of the inertia reel assembly. Recent service installation history has revealed a rare interaction of the components due to tolerance issues that were not apparent in the qualification testing of that component. This interaction may cause the assembly to exhibit an inoperable condition on the inertia reel lock system. This Service Bulletin addresses the issue by requiring a mandatory replacement of the subject component / assembly. This replacement component eliminates the root cause of the problem.

E. Description

This Service Bulletin provides instruction for the Inspection of the Restraint System. AmSafe Aviation will stock a number of these assemblies to ensure that turn around will be immediate if needed. Following the Accomplishment Instructions of this Service Bulletin will not change the standard function or performance of the Restraint System.

F. Approval

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G. Manpower

Inspection of the Restraint System is less than 15min per unit, when accomplished at maintenance level. Should removal of the Restraint System from the seat be required, the manpower for this is per the seat manufactures instructions.

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SERVICE BULLETIN

H. Warranty

AmSafe warranty remedies are available for those Restraint System listed in the Affectivity section of this Service Bulletin.

I. Material Cost and Availability

The complete Restraint Systems should be returned to AmSafe authorised repair station together with a Free of Charge purchase order containing the following information:

Part Number and Serial Number / Date Code:
Quantity:
Reference: "Service Bulletin 503471-25-01"
Name of Airline / Operator:
Shipping Address:

Restraint systems should be sent to either of the following locations:

Europe / Asia:

AmSafe Aviation UK
Tamian Way, Green Lane
TW4 6BL
Telephone: +44(0) 208 572 0321
Fax: +44(0) 208 572 2096

North American and other:

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SERVICE BULLETIN

J. Tooling – Price and Availability

A spring balance capable of reading a force of 25lb.
No other special tools, fixtures or equipment are required for the inspection of the restraint system.

K. Weight and Balance

This Service Bulletin has no affect on weight or balance.

L. Electrical Load Data

None

M. Software Accomplishment Summary

None

N. References

AmSafe CMM 25-11-41

O. Other Publications Affected

None

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SERVICE BULLETIN

2. ACCOMPLISHMENT INSTRUCTION

1. The inspection of the restraint system does not require the restraint system to be removed from the seat.
2. Date Code Inspection. The date code can be found on the inertia reel identification label see Figure 1. For access to the inertia reel identification label please refer to the applicable seat manufactures instruction defined in their CMM.

If the date code is prior to 1 Feb 07 (X0207) or after 30 Nov 08 (X1108) no further action is required.

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Important Note:

Although the lap belt and crotch strap assemblies also carry a serial number, these cannot be used as the lap belts or shoulder harness assembly (one or the other) may have been replaced by an airline operated during maintenance of the restraint systems.

3. Inspect the restraint for continued airworthiness by:
 - Extending at least 18" of webbing, but not fully extending the webbing.
 - Activate the manual lock by operating the manual lock handle.
 - Apply approximately 10 - 15 lbs of pulling force to the webbing and observe that no more than 1" of webbing can be extended.
 - Deactivate the manual lock by operating the manual lock handle. Accelerate (pull) webbing to verify that the inertia lock features of the shoulder harness reel also lock the webbing and with 10 - 15 lbs of pulling force to the webbing observe that no more than 1" of webbing can be extended. Repeat 3 times at different extensions of webbing.

Should any of the above tests fail the unit should be returned to AmSafe for immediate rectification. Removal of the restraint system from the seat must be done in accordance with the seat manufactures CMM and restraint system shipped back to AmSafe Aviation (see section 1. I (Material and Cost Availability)).

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4. Should the restraint system shoulder harness pass the above tests described in step 3 then
 - Permanently mark the shoulder harness inertia reel identification label with the Service Bulletin number and date actioned i.e. “SB 503471-25-01 + Date”
 - This restraint system should be returned to AmSafe Aviation for rectification within 1 year as defined in Section 1.C Compliance.

Important Note

All restraint systems, within the date/serial number codes described in section 2.2, passing the inspection tests are still required to be replaced within the defined time period.

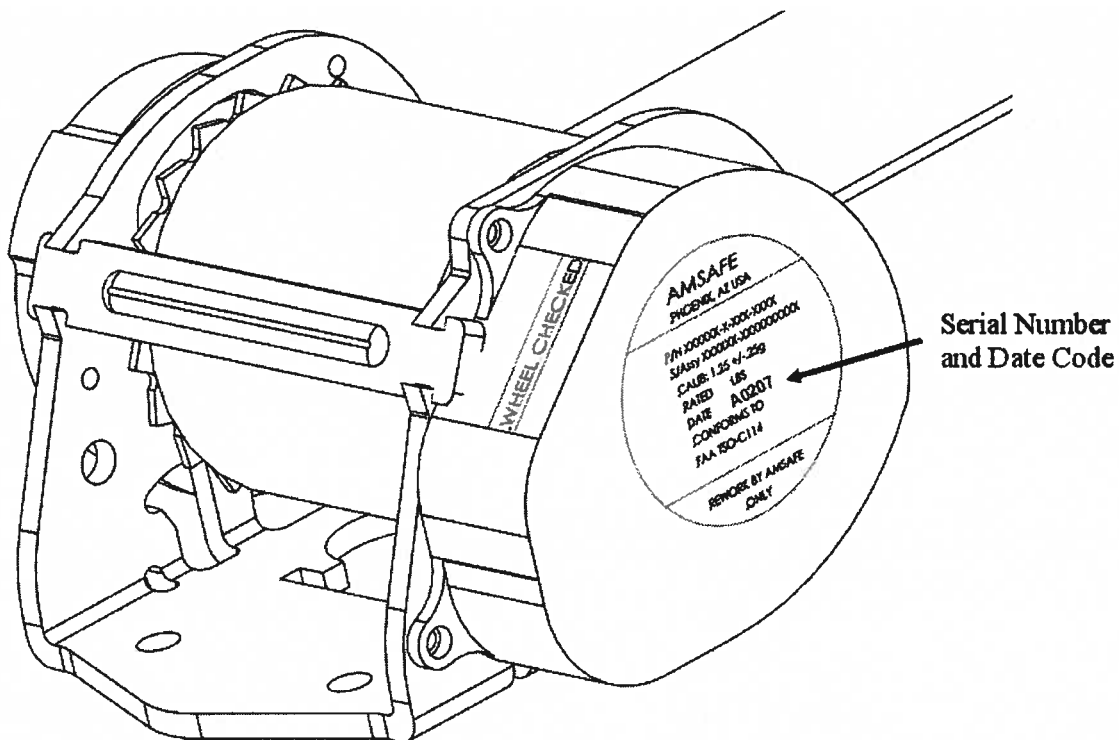


Figure 1 – Serial Number and Date Code Information

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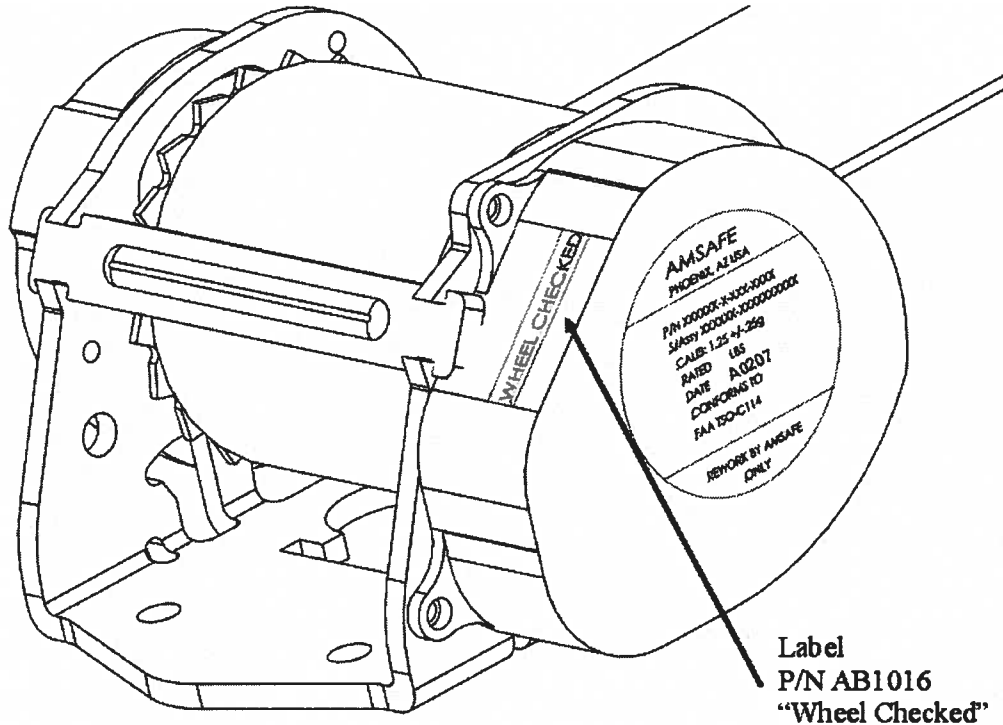


Figure 2 – Wheel Checked Label