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To all owners of Afterburner rides with serials ending 001 to 036.

☒ For your information ☐ Urgent

Neede, 7 December 2009

From : A. Kroon

Subject : Service Bulletin FRB24-SB007
Order no. :
Our reference : FRB-24

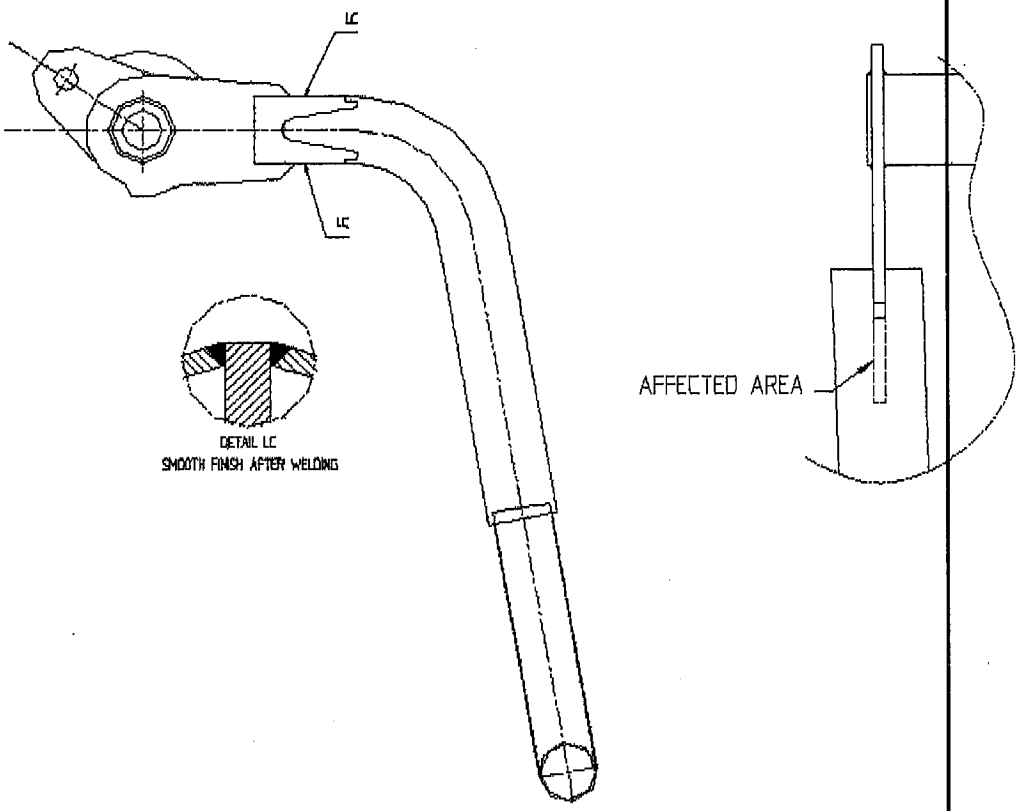
Bulletin No.:	FRB24-SB007
Ride:	Afterburner by KMG International BV
Relative Rides:	Serial numbers: KMG-XXXX-FRB-24-XXX-001 through and including KMG-XXXX-FRB-24-XXX-036
Date of Issue:	December 7th 2009
Date of compliance:	As soon as possible / before January 31st 2010.

Regarding: Visual inspection of over the shoulder restraints of passenger seats

Description
On recent investigation on one of the Afterburner rides, it was discovered that structural steel on some of the over the shoulder restraints showed indications in the weld area. These restraints were shipped back to KMG and underwent destructive testing and examination. It was discovered that the original weld was partially removed in the finishing process after welding, causing the weld area to be weakened in particular areas leaving no bonded material. These non-bonded areas have resulted into visual indications during a visual inspection after removing the foam on the steelwork.

Application
The affected weld area on the over the shoulder restraints is located on the end of the shoulder tube of the restraint where the tube is attached to the connection plate that connects the shoulder tube to the hinge tube. Each shoulder tube has four welds (two on the top side and two on the bottom side of the shoulder tube). Defects are found in the area where the connector plate ends in the shoulder tube as shown in detail LC in the situation shown below.

Situation



Procedure to inspect area

All over the shoulder restraints on the above mentioned machines need to be visually inspected on both shoulder tubes in the affected area. In this area the padding foam should be slit for four inches and pulled away from the steel to access the inspection area. Care should be taken to not rip the padding when folding it away.

After inspection / repair the uncovered area should be primed, painted and allowed to dry completely. Then the foam may be re-attached using a polyurethane based adhesive. The adhesive should be used on both the steel frame and the slit in the foam.

Procedure for repair

If indications are found in the above described inspection the following procedure should be used to repair the areas where the defects were found:

1. Clean all welding surfaces by removing paint, grease and dirt.
2. Grind out the indication by a thin grinding disc.
3. Check if all of the indications are ground deeply enough using MPI.
4. Re-weld the ground out gap by using SMAW (shielded metal arc welding) according to the above detail LC. The weld must be carried out with rod ASW E7015, according the weld detail LC above.
5. Smooth finish the weld according to drawing above by using a small grinder with a sanding paper disc.
6. Check the weld by visual inspection and magnetic inspection by a level I or higher NDT inspector.
7. Protect the steel against corrosion by covering the surface with paint.

8. Re attach the cut foam padding by using a polyurethane adhesive.

This repair is considered as a permanent repair procedure.

Annual inspection
Since this investigation has determined that the defects found are not a result of fatigue but are an isolated result of the manufacturing process, no additional annual inspection is needed on the affected areas. This directive applies to restraint bars with no defects as well as to bars after they have been repaired according to the procedure above.

Report
After completion of the procedures stated in this bulletin for either inspection or repair a report of the results must be submitted to KMG by email (factory@kmg.nl), fax message (+31-545-291306) or by postal mail to the above mentioned postal address.

Kind regards,

Albert Kroon
Product Manager
KMG International