



APEX Aircraft Bureau de Navigabilité 1, route de Troyes 21121 DAROIS - France Tél +33 380 35 65 10 Fax +33 380 35 65 15 www.apex-aircraft.com	<h1>SERVICE BULLETIN</h1> <p>No. 020714</p>
HR200 – Assembly of the aileron rod on the bellcrank – replacement of the nut	
Supersedes : N/A	

ATA : 271

EFFECTIVITY

Models	Serial numbers affected
HR200/100 HR200/120 HR200/120B HR200/160 HR200/100S	ALL

COMPLIANCE

MANDATORY

Is the subject of an Airworthiness Directive

TIME OF COMPLIANCE

Within the next 50 hours with a tolerance of 10 hours to allow, in this case, the realisation of the work along with a scheduled maintenance inspection.

REASON

Depending on the type of ball bearing rod end, it was discovered that the assembly of the aileron rod on the bellcrank with a “thick” nut and a washer may not ensure 1.5 safety screw threads coming out once the nut is tightened.

DESCRIPTION

To make sure that the attachment of the ball bearing rod end on the aileron bellcrank is correct by using a thin nut instead of a “thick” nut.

APPROVAL

This document is a courtesy translation of its original French version. Whereas the original French version of the information and instructions is approved, this *translation* is *not* approved.

As a consequence, the observations below concerning approval are to be understood as applicable to the *original French version* of this Service Bulletin.

This Service Bulletin relates to the MAJOR change Nr 020714 which has been approved by the D.G.A.C.(French Civil Aviation Authority).

The French version of this Service Bulletin has been approved by the D.G.A.C. (letter G.S.A.C. No. 2003226).



MANPOWER

The instructions related in this Service Bulletin are only to be implemented by an individual/organization authorized by the relevant supervisory Authority.

The time required to implement the inspection is evaluated at about ½ hour.

MATERIAL

Supplies consist of old and new parts as listed in section 'MATERIAL INFORMATION' of this SB.

Spare parts can be procured from APEX PARTS (Tel: +33 380 35 61 98, Fax: +33 380 35 60 58)

TOOLING

Standard tools.

WEIGHT AND BALANCE

1. Aircraft

No significant influence.

REFERENCES

Aircraft illustrated parts catalogue HR200/R2000, issue April 2002 (drawing 121).

PUBLICATIONS AFFECTED

- A copy of this Service bulletin must be inserted in the Aircraft Illustrated Parts Catalogue until the next update.
- A copy of this Service bulletin must be inserted in the aircraft maintenance schedule until the next update.
- Service Letter 7: SB/SL list.

FEEDBACK

Please inform APEX Aircraft Airworthiness Office about the implementation of the inspection/change described in this Service Bulletin.

You may use:

- postal mail: address on the first page of this Service Bulletin,
- fax : (+33) (0) 380 356 515,
- e-mail: airworthiness@apex-aircraft.com,
- the APEX Aircraft web page: <http://www.apex-aircraft.com>.

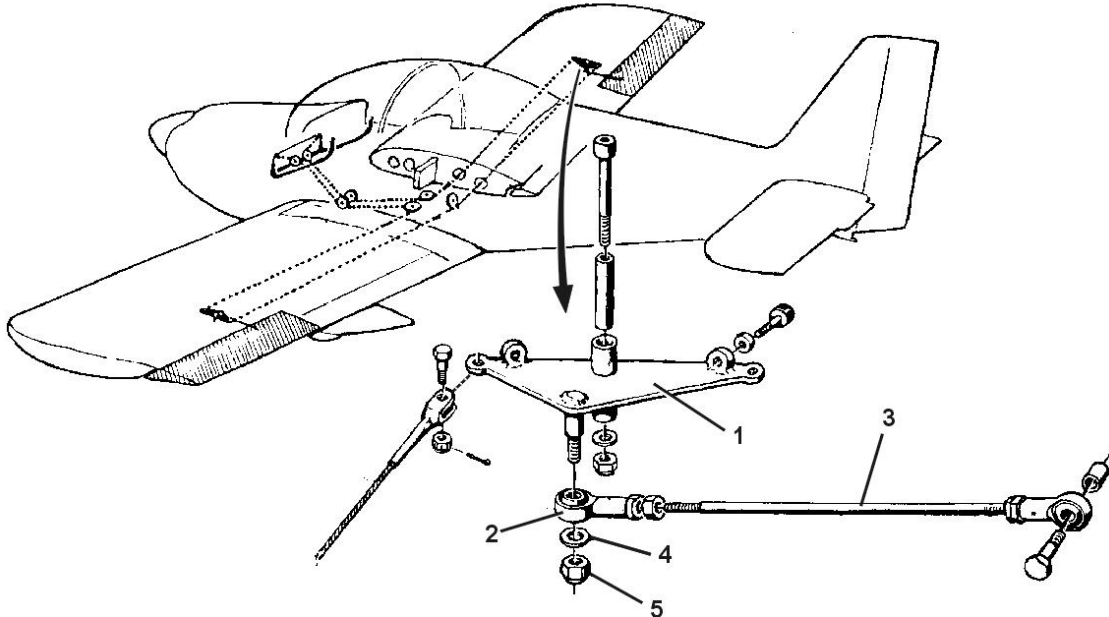


ACCOMPLISHMENT INSTRUCTIONS

The instructions described in this section are to be implemented on each wing.

The aileron rod (item 3) is attached to the aileron bellcrank (item 1) by means of:

- a rod end bearing (item 2) ;
- a washer (item 4) ;
- and a nut (item 5).



Two different mountings may be found:

1. mounting with rod end bearing Sarma 36537 B until April 1976 ;
2. mounting with rod end bearing Askubal since April 1976.

Today, these mountings use a washer (Ø8 x 16 x 1.5) and a "thick" nut Nylstop 8PA106.

The attachment using Askubal rod end bearing (mounting 2) does not allow enough safety screw threads coming out to properly lock the nut.

In case of not enough safety screw threads coming out, this SB recommends to install a thin nut 8TA10BE (and to remove the washer when mounting the Askubal rod end bearing).

1. Removal

- a) Remove the inspection door of the aileron bellcrank, located at the intrados.
- b) Check the number of screw threads coming out of the NYLSTOP nut (item 5). There must be at least 1.5 thread (1.5 thread in total excluding chamfer).
- c) If the number of threads coming out is enough, go on with paragraphs 4 "Installation".
- d) If the number of threads is not acceptable, it is then necessary to replace the thick nut (8PA106) by a thin nut (8TA10BE) : see paragraphs 2 and 3.

2. Disassembly

- a) Unscrew the thick nut.
- b) Remove the washer.



3. Modifications, inspection.

- a) Measure the thickness of the rod end bearing. If the thickness is:
 - superior or equal to 12 mm (0.47 in) (Askubal rod end bearing), the washer is to be removed.
 - inferior to 12 mm (0.47 in) (Sarma rod end bearing), the washer is to be added.

Note 1: It is necessary to check that the nut will not reach the thread root.

Note 2: If you come across an assembly with the Sarma rod end bearing, the washer is not to be removed for it prevents the nut from stopping on the smooth part of the bolt, before tightening, this owing to the fact that the Sarma rod end bearing is not as thick as the Askubal one.

- b) If necessary (§3a), put the washer in place.
- c) Replace Nylstop nut 8PA106 by nut 8TA10BE.
- d) Screw the nut and tighten moderately (1.2 to 1.5 daN.m) (106 to 133 lbf.in).
- e) Check the number of threads coming out from Nylstop nut. There must be a minimum of one thread and a half (1.5 thread).
- f) Check that the aileron control responds normally to the movements of the stick.

4. Installation

- a) Install the aileron inspection door.

ULTERIOR CHANGES

SARMA rod end bearing:

- a) Always place the washer.
- b) Both types of nuts (8PA106 or 8TA10BE) can be fitted (provided you check the number of threads coming out from the nut: at least 1.5).

Replacement of a rod end bearing:

Only ASKUBAL rod end bearings are available today (see below).

ASKUBAL rod end bearing:

- a) Never install a washer.
- b) Always use a thin nut 8TA10BE.



MATERIAL INFORMATION

New part number	Quantity	Key word	Old part number	Instructions
	2	NUT 8PA106	95.24.07.000	
95.24.27.000	2	NUT 8TA10BE		New parts
	2	WASHER (Ø8 x 16 x 1,5)	95.61.06.000	
<i>Contact APEX PARTS for current prices.</i>				