

**EASA PAD No. 06 - 214**  
**COMMENT RESPONSE DOCUMENT**  
**[closed for comments 15 September 2006]**

| PAD / DOC<br>PARAGRAPH<br>COMMENTED | COMMENT / PROPOSAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | AUTHOR OF<br>THE COMMENT         | DATE OF<br>COMMENT | PCM RESPONSE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
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| Compliance                          | <p>WITH REFERENCE TO THE FITMENT OF VALVES THAT DO NOT HAVE 'DI' ON THEM</p> <p>I refer to the compliance statement: -</p> <p>'For all aircraft, from the effective date of this AD, the installation of LG selector valve 40GA or LG door selector valve 41GA, that have not the duplicate inspection "DI" recorded on their amendment plates, is possible provided that it will be inspected within 800 FC after installation, in accordance with the instructions given in airbus service bulletin a320-32-1290.'</p> <p>If after, say a robbery of a valve that does not have DI on it but has received the test and is currently on a 20000FC repeat inspection interval, is it necessary to re-check the valve within 800FC of fitment to another aircraft?</p> <p>As there is no part number change of the components and no specific note in either the IPC or AMM for inspection requirements of non-conformant valves controlling compliance of this AD for replaced valves will prove to be difficult at best.</p> | Peter Riddick,<br>BA Engineering | 30-8-2006          | <p>The repeat inspection frequency is calculated on the basis of the Unit FC and not on the aircraft FC. If the unit has been inspected once on one aircraft and then due to some reasons it is installed on some other aircraft then the next due inspection should be identified by using the unit FC (not the aircraft FC).</p> <p>The PAD and SB refer to the aircraft FC because these units are on condition items therefore we assume that both the Selector valves (Gear and Door) may not have fully traceable histories.</p> <p>The AD has been written based of the assumption of a lack of history (see paragraph above), and consequently the inspections of the units within 800FC are justified.</p> <p>Nevertheless, provided that an operator has evidence that the units have already received the test, an alternative means of compliance may be acceptable to their National Authority.</p> |

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| General | <p>First of all, AFR would like to underline that the requested inspection has an important impact on A/C maintenance schedule as it is required to remove hydraulic equipments and jack the A/C to perform landing gear extension tests. For the older A/C (above 20 000 F/C) the 800F/C dead line is not in accordance with scheduled maintenance where this sort of work can be conducted (A/C jacking currently required only every 2 C checks). This will conduct to an heavy maintenance burden. Please could you detail how was defined the 800 F/C period (knowing that valves have already accumulated 20 000 F/C without problem)?</p> <p>On the AD requirements :</p> <p>a) effectivity is not in accordance with SB 32-1290 (limited to MSN 2391) : AIB SB has to be updated.</p> <p>b) This AD is dedicated to equipments but proposed launching is made according to A/C ageing. For AFR the ageing to be taken into account is the one of the selector valves installed (to cover possibility of an new valve installed on an old A/C and inversely).</p> <p>c) AD do not mention that installation of valves with mention "DI" is the final fix of the AD (cancel the requirement of repetitive identification and inspection) Please clarify this point and clearly mention that the fact to install both equipments with mention "DI" cancels the identification / inspection requirements of the AD on concerned A/C. The fact to reconduct for life valves identification as per para 3 of "compliance" is not acceptable knowing that valves are no more affected by mentioned issue.</p> <p>d) in the event of selector valve replacement without mention "DI" (last para of "compliance) please clearly mention that the 800F/C period to launch the test applies whatever the ageing of the A/C and / or the valves.</p> <p>Note :<br/>In addition please also find attached AFR comments addressed to AIB on SB A320-32-1290 :</p> <p>a) para D test :<br/>in this paragrapher it is requested to perform a fonctionnal extension and retraction test of the landing gears. But according to AMM if only the door selector valve 41GA is removed, the operationnal test of the</p> | Nicolas Gigandet,<br>Air France | 6-9-2006 | <p>The Selector Valves fitted to the older aircraft have been found more vulnerable to heavy leakages. A minor seal damage caused during assembly of the unit, can deteriorate in service and if left unattended, it can cause an uncommanded Gear or Door operation.</p> <p>The 800 FC allowable timescale for compliance was selected based on the experience from the inservice failed units.</p> <p>It is recognised that the 800 FC is not in line with recommended maintenance periods, however, this was determined as the maximum period commensurate with the potential hazard risk.</p> <p>AD requirements :<br/>a) The AD applicability always prevails on the SB.<br/>b) See response to comment above.<br/>c) Installation of the units marked with letters DI or DI-BE will cancel the repeat inspection. Refer second note given on SB page 21. See also AD Applicability : "Aircraft on which LG selector valve... have the duplicate inspection "DI"... are compliant with the requirements of this AD"</p> <p>Comments of SB A320-32-1290 :</p> <p>a) Full gear functional check has be done after the inspection. This is to ensure the correct installation</p> |
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|  | <p>landing gear doors is sufficient (refer to AMM task 32-31-34-400-001) Please detail to AFR the reason that conduct AIB to require in SB a full landing gear test even if LG selector valve 40GA is between the tolerances for leaks test and is not removed.<br/>If AIB confirm that fonctionnal extension and retraction test of the landing gears and A/C jacking is not required if 40 GA is not removed please update SB.</p> <p>b) para B inspection :<br/>first step of the inspection consist in a check of the leak rate with both 40 and 41 GA installed. SB procedure do not take into account the possibility to obtain a "total" leak rate for both equipments installed below 100 cc/min. In this case we can be sure that leak rate is between tolerances for each of the equipments so AFR do not see the interest to perform next SB step with 41GA removed.<br/>Please confirm to AFR that if leak rate at step B. 10) is below 100 cc/min then no further action is necessary and it is possible to "jump" directly to para E "close up".</p> <p>c) considering current application launching for A/C above 20 000cyc and number of affected A/C in AFR fleet, AFR will not have the time to perform the inspection on all A/C (especially if AIB confirm that A/C jacking is required at each time (refer to point a) of this message)). Please could AIB detail to AFR the reasons that conduct to define the 800F/C dead line for first application.</p> <p>In addition and in line with point a), AFR ask to AIB to study the possibility to obtain a grace period if a 40GA is over 100 cc/min in order to allow AFR to schedule A/C grounding and jacking. Maybe this could be conduct under the form of a file giving several grace periods according to leak rate measured.<br/>For example : from 101cc/min to 150cc/min : XXXcyc; from 151cc/min to 200cc/min : XXX cyc ....</p> <p>d) please could AIB clarify the actions to be performed in the event of during leak test a flow rate over 100cc/min is identified on a valve stamped "DI". Should AFR consider this valve serviceable or not? if yes what is the acceptable limit?<br/>Note : this situation can occur during test if only one of the valves of an A/C is stamped with "DI".</p> |  |  | <p>of the electrical connectors on the Selectors'solenoids (with no broken pins),and also to do hydraulic leakage check from all the disconnected unions / connections.<br/>Failure to do the full gear functional check after the SB embodiment may affect the serviceability of the Extension and Retraction systems.<br/>b) c) d) : Please note that SB 32-1290 has been revised and provide relevant instructions for this scenario.</p> |
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| Requirement | <p>One ATA member has observed that a duplicate inspection of the seal has since been introduced by the manufacturer of the LG selector valve 40GA and the LG door selector valve 41GA. The inspection is also included in their Component Maintenance Manual (CMM). Valves that have had the duplicate inspection will have been stamped on the amendment plate with the letters "DI". These valves will not require further inspection. However, review of Smiths CMM 32-31-34 Rev 13 dated May 19/04 does not indicate a Duplicate Inspection "DI" stamp on the amendment plate.</p> | Robert Peel,<br>Quality Director,<br>Air Transport<br>Association | 15-9-6 | <p>Smiths CMM has been amended to include procedure of marking letters DI.(ref. CMM 32-31-34, Rev May 19/04). See "WARNING" on page 716 of this CMM. Please note that the CMMs are being updated to include procedure for marking DI-BE.</p> |
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