

## Airworthiness Directive

**AD No.:** 2020-0174

**Issued:** 05 August 2020

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EU) 2018/1139 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 129 of that Regulation.

This AD is issued in accordance with Regulation (EU) 748/2012, Part 21.A.3B. In accordance with Regulation (EU) 1321/2014 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [Regulation (EU) 1321/2014 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

**Design Approval Holder's Name:**

AIRBUS

**Type/Model designation(s):**

A318, A319, A320 and A321 aeroplanes

**Effective Date:** 19 August 2020

**TCDS Number(s):** EASA.A.064

**Foreign AD:** Not applicable

**Supersedure:** This AD supersedes EASA AD 2019-0012 dated 24 January 2019.

### ATA 57 – Wings – Outer Flaps and Tabs – Identification/ Inspection (Improper Heat Treatment) / Replacement (Wrong Material)

**Manufacturer(s):**

Airbus, formerly Airbus Industrie

**Applicability:**

Airbus A318-111, A318-112, A318-121, A318-122, A319-111, A319-112, A319-113, A319-114, A319-115, A319-131, A319-132, A319-133, A320-211, A320-212, A320-214, A320-215, A320-216, A320-231, A320-232, A320-233, A321-111, A321-112, A321-131, A321-211, A321-212, A321-213, A321-231 and A321-232 aeroplanes, all manufacturer serial numbers (MSN).

**Definitions:**

For the purpose of this AD, the following definitions apply:

**The applicable SB:** Airbus Service Bulletin (SB) A320-57-1190 Revision 01 for the parts subject to improper heat treatment (IHT); and SB A320-57-1198 for the parts manufactured with wrong material (WM), as applicable.

**Suspected IHT part:** Outer flaps, having a serial number (s/n) as listed in Appendix 1 (for A318, A319 and A320 aeroplanes) or Appendix 2 (for A321 aeroplanes) of this AD, or a s/n which cannot be identified.

**Suspected WM part:** Outer flap tabs, having a s/n as listed in Appendix 2 (for A321 aeroplanes) of this AD, or a s/n which cannot be identified.

**Affected part:** A suspected IHT or WM part which did not pass (defect(s) found) a special detailed inspection (SDI) in accordance with the instructions of the applicable SB, except those that, after inspection, have been repaired in accordance with applicable Airbus approved repair instructions.

**Serviceable part:** A part which is not a suspected (IHT or WM) part; or a suspected (IHT or WM) part which has passed (no defect(s) found) an SDI in accordance with the instructions of the applicable SB; or a suspected (IHT or WM) part which did not pass an SDI in accordance with the instructions of the applicable SB and that, after that inspection, has been repaired in accordance with applicable Airbus approved repair instructions.

**Groups:** Group 1 aeroplanes are those that have a suspected IHT part installed.

Group 2 aeroplanes are those that have a suspected WM part installed.

Group 3 aeroplanes are those that do not have a suspected IHT nor a suspected WM part installed.

Note 1: Depending on aeroplane configuration, an aeroplane may be both Group 1 and Group 2.

#### Reason:

Airbus quality controls identified that several structural parts, installed on certain flaps on A320 family aeroplanes, were manufactured from improperly heat-treated materials, or with wrong material. Subsequent review identified the affected flaps and established that those flaps were installed on aeroplanes manufactured between November 2011 and February 2013. From February 2013, Airbus implemented measures into the manufacturing processes to ensure detection and prevention of installation of improperly heat-treated parts or parts manufactured with wrong material.

A detailed safety assessment was accomplished to identify the possible impact of affected parts on the aeroplane structure. The result of this structural analysis demonstrated the capability of the affected structure to sustain static limit loads, but failed to confirm that the affected structures meet the certified fatigue life.

This condition, if not detected and corrected, could lead to flap trailing edge failure, possibly resulting in reduced control of the aeroplane.

To address this unsafe condition, Airbus issued the applicable SB to provide inspection instructions for suspected parts. EASA issued AD 2019-0012 to require a one-time SDI of suspected WM parts for material identification and, depending on findings, replacement with serviceable parts.

Since that AD was issued, an updated list of suspected parts was identified.

For the reasons described above, this AD retains the requirements of EASA AD 2019-0012, which is superseded, includes updated lists of suspected (IHT and WM) parts, and requires a one-time SDI of suspected IHT parts and, depending on findings, accomplishment of applicable corrective action(s).



**Required Action(s) and Compliance Time(s):**

Required as indicated, unless accomplished previously:

**Inspection(s):**

- (1) For Group 1 aeroplanes: Within 72 months after the effective date of this AD, or before exceeding 144 months since the applicable reference date as defined, depending on the suspected part flap s/n, in Appendix 1 and 2 of this AD, whichever occurs first, accomplish a one-time SDI of each suspected IHT part, in accordance with the instructions of the applicable SB.
- (2) For Group 2 aeroplanes: Within 72 months after the effective date of this AD, or before exceeding 144 months since the applicable reference date as defined in Appendix 2 of this AD, whichever occurs first, accomplish a one-time SDI of each suspected WM part, in accordance with the instructions of the applicable SB.

**Corrective Action(s):**

- (3) If, during any SDI as required by paragraph (1) or (2) of this AD, as applicable, an affected part is identified, within the compliance time(s) as defined in paragraph (1) or (2) of this AD, as applicable, contact Airbus for approved instructions and, within the compliance time(s) specified in those instructions, accomplish those instructions accordingly.
- (4) Replacing an affected part on an aeroplane with a serviceable part, as defined in this AD, is an acceptable alternative method to comply with the requirements of paragraph (3) of this AD for that aeroplane, provided the compliance time(s) as defined in paragraph (1) or (2) of this AD, as applicable, are not exceeded. Part(s) replacement can be accomplished in accordance with the instructions of the applicable aircraft maintenance manual.

**Credit:**

- (5) An aeroplane having an MSN not identified in Appendix 1 or Appendix 2 of this AD is not affected by the requirements of paragraphs (1) and (2) of this AD, provided it has been determined that no suspected IHT and no suspected WM part is/are installed on that aeroplane. A review of aeroplane delivery and/or maintenance records is acceptable to make this determination, provided those records can be relied upon for that purpose and the s/n of the part(s) can be positively identified from that review.
- (6) Inspections and corrective action(s) for suspected IHT parts, accomplished on an aeroplane before the effective date of this AD in accordance with the instructions of Airbus SB A320-57-1190 at original issue, are acceptable to comply with the requirements of paragraph (1) of this AD, as applicable, for that aeroplane.

**Parts Installation:**

- (7) From the effective date of this AD, it is allowed to install on any aeroplane a suspected (IHT or WM) part, provided that, following installation, the part is inspected as required by paragraph (1) or (2) of this AD, as applicable.
- (8) From the effective date of this AD, it is allowed to install on any aeroplane an affected part, provided that, following installation, Airbus approved instructions for that part are



accomplished, as required by paragraph (3) of this AD, or the part is replaced as specified in paragraph (4) of this AD.

#### Ref. Publications:

Airbus SB A320-57-1190 original issue dated 25 January 2017, or Revision 01 dated 05 September 2018.

Airbus SB A320-57-1198 original issue dated 24 January 2017, or Revision 01 dated 15 June 2020.

The use of later approved revisions of the above-mentioned documents is acceptable for compliance with the requirements of this AD.

#### Remarks:

1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.
2. This AD was posted on 04 June 2019 as PAD 19-100 for consultation until 02 July 2019 and republished as PAD 19-100R1 on 29 May 2020 for additional consultation until 26 June 2020. The Comment Response Documents can be found in the [EASA Safety Publications Tool](#), in the compressed (zipped) file attached to the record for this AD.
3. Enquiries regarding this AD should be referred to the EASA Programming and Continued Airworthiness Information Section, Certification Directorate. E-mail: [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu).
4. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this AD, and which may occur, or have occurred on a product, part or appliance not affected by this AD, can be reported to the [EU aviation safety reporting system](#). This may include reporting on the same or similar components, other than those covered by the design to which this AD applies, if the same unsafe condition can exist or may develop on an aircraft with those components installed. Such components may be installed under an FAA Parts Manufacturer Approval (PMA), Supplemental Type Certificate (STC) or other modification.
5. For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS – Airworthiness Office – IIASA; E-mail: [account.airworth-eas@airbus.com](mailto:account.airworth-eas@airbus.com).



## Appendix 1 – IHT Suspected Parts – A318 A319 A320 Aeroplanes (see Note 2 of this AD)

Note 2: The aeroplane MSN as identified in Appendix 1 of this AD are for reference only, based on aeroplane configuration at the time of Airbus delivery to the first operator

MSN	Outer LH flap s/n	Outer RH flap s/n	Reference date
4895	TB14809	TB14872	16 March 2012
4903	TB14946	TB14919	28 March 2012
4911	TB14911	TB14911	12 April 2012
4919	TB14891	TB14876	17 April 2012
4929	TB14984	TB14984	25 April 2012
4938	TB14909	TB14909	09 May 2012
4942	TB14977	TB14977	21 December 2011
4944	TB14948	TB14944	20 December 2011
4946	TB14955	TB14955	16 May 2012
4948	TB14951	TB14951	21 December 2011
4951	TB14954	TB14954	22 December 2011
4956	TB14956	TB14956	30 December 2011
4958	TB14958	TB14958	14 December 2011
4959	TB14959	TB14959	22 December 2011
4961	TB14961	TB14961	29 December 2011
4963	TB14963	TB14963	22 December 2011
4964	TB14964	TB14964	21 December 2011
4965	TB14965	TB14965	09 January 2012
4967	TB15022	TB14968	25 May 2012
4968	TB14950	TB14952	19 January 2012
4969	TB14969	TB14981	19 December 2011
4970	TB14997	TB14997	18 January 2012
4972	TB14972	TB14972	21 December 2011
4973	TB14930	TB14950	12 January 2012
4974	TB14970	TB14970	19 December 2011
4975	TB14975	TB14975	12 January 2012
4977	TB14866	TB14946	05 June 2012
4978	TB14978	TB14978	19 January 2012
4979	TB14979	TB14979	23 December 2011
4980	TB14980	TB14980	23 January 2012
4981	TB14973	TB14973	11 January 2012
4982	TB14982	TB14982	29 December 2011
4983	TB14983	TB14983	19 January 2012
4984	TB14974	TB14974	11 January 2012
4985	TB14985	TB14985	20 January 2012
4986	TB14986	TB14986	12 January 2012
4987	TB14990	TB14990	12 June 2012

MSN	Outer LH flap s/n	Outer RH flap s/n	Reference date
4988	TB14988	TB14988	10 February 2012
4989	TB14989	TB14995	25 January 2012
4990	TB14991	TB14989	12 January 2012
4991	TB14996	TB14996	26 January 2012
4992	TB14992	TB14992	11 February 2012
4993	TB14993	TB14999	30 January 2012
4995	TB14995	TB14993	27 March 2012
4996	TB15001	TB15001	31 January 2012
4997	TB15013	TB15013	20 June 2012
4998	TB14998	TB14998	19 January 2012
4999	TB15004	TB15004	31 January 2012
5000	TB15000	TB15000	17 January 2012
5001	TB15006	TB15005	07 February 2012
5002	TB15002	TB15002	23 January 2012
5003	TB15003	TB15003	01 February 2012
5004	TB15010	TB15014	06 February 2012
5005	TB15005	TB15007	30 January 2012
5006	TB15018	TB15018	29 February 2012
5007	TB15007	TB15008	26 January 2012
5008	TB14999	TB15030	17 February 2012
5010	TB15019	TB15017	20 February 2012
5011	TB15021	TB15026	17 February 2012
5012	TB15016	TB15016	02 February 2012
5013	TB14981	TB15010	03 July 2012
5014	TB15014	TB15027	13 July 2012
5015	TB15040	TB15033	17 February 2012
5016	TB15008	TB15020	31 January 2012
5017	TB15017	TB15024	23 February 2012
5018	TB15020	TB15023	14 June 2012
5019	TB15011	TB15021	08 February 2012
5020	TB15015	TB14991	03 February 2012
5021	TB15026	TB15011	22 February 2012
5022	TB14968	TB15022	23 July 2012
5023	TB15023	TB15015	13 February 2012
5024	TB15024	TB15031	23 February 2012
5026	TB15033	TB15040	24 February 2012
5027	TB15027	TB15036	09 February 2012



MSN	Outer LH flap s/n	Outer RH flap s/n	Reference date
5029	TB15029	TB15034	28 February 2012
5030	TB15030	TB14969	10 February 2012
5031	TB19020	TB19020	16 March 2012
5032	TB15032	TB15032	01 August 2012
5033	TB15036	TB15019	28 February 2012
5034	TB15034	TB15039	02 March 2012
5036	TB15031	TB15029	20 February 2012
5037	TB15042	TB15042	29 February 2012
5039	TB15039	TB15047	08 March 2012
5040	TB15037	TB15037	21 December 2012
5041	TB15064	TB15091	10 August 2012
5042	TB15045	TB15045	06 March 2012
5043	TB15043	TB15043	23 February 2012
5045	TB15050	TB15050	15 March 2012
5046	TB15046	TB15046	22 March 2012
5047	TB15047	TB15006	23 March 2012
5048	TB15048	TB15048	28 February 2012
5050	TB15041	TB15041	09 March 2012
5051	TB15058	TB15060	17 August 2012
5052	TB15052	TB15052	04 April 2012
5053	TB15053	TB15053	27 March 2012
5055	TB15061	TB15055	16 March 2012
5056	TB15056	TB15056	03 April 2012
5057	TB15057	TB15057	02 March 2012
5058	TB15055	TB15058	20 March 2012
5060	TB15063	TB15063	14 March 2012
5061	TB15090	TB15090	29 August 2012
5062	TB15062	TB15062	29 March 2012
5063	TB15067	TB15067	29 March 2012
5064	TB15070	TB15070	12 April 2012
5066	TB15066	TB15066	25 April 2012
5067	TB15071	TB15071	22 March 2012
5068	TB15060	TB15068	16 March 2012
5069	TB15068	TB15061	23 March 2012
5070	TB15073	TB15073	13 March 2012
5071	TB15091	TB15150	05 September 2012
5072	TB15072	TB15072	02 April 2012
5073	TB15069	TB15069	23 April 2012
5075	TB15075	TB15075	29 March 2012
5076	TB15079	TB15079	26 March 2012
5078	TB15082	TB15082	10 April 2012
5079	TB15051	TB15051	21 March 2012
5080	TB15080	TB15080	04 April 2012

MSN	Outer LH flap s/n	Outer RH flap s/n	Reference date
5081	TB15081	TB15081	27 March 2012
5082	TB15112	TB15112	17 September 2012
5084	TB15084	TB15084	16 April 2012
5085	TB15153	TB15085	22 March 2012
5086	TB15086	TB15086	13 April 2012
5088	TB15088	TB15088	05 April 2012
5089	TB15076	TB15076	13 April 2012
5090	TB15078	TB15078	29 March 2012
5091	TB15135	TB15135	25 September 2012
5092	TB15092	TB15092	28 March 2012
5093	TB15093	TB15093	20 April 2012
5094	TB15094	TB15094	30 March 2012
5095	TB15095	TB15095	29 March 2012
5096	TB15096	TB15096	24 April 2012
5097	TB15089	TB15089	30 March 2012
5098	TB15098	TB15098	19 July 2013
5100	TB15144	TB15188	12 October 2012
5101	TB15101	TB15101	30 March 2012
5102	TB15102	TB15102	20 April 2012
5103	TB15107	TB15107	19 April 2012
5104	TB15104	TB15104	05 April 2012
5105	TB15103	TB15097	30 April 2012
5106	TB15106	TB15106	24 April 2012
5107	TB15097	TB15103	16 April 2012
5108	TB15108	TB15108	24 April 2012
5109	TB15109	TB15109	11 April 2012
5110	TB15142	TB15142	18 October 2012
5111	TB15111	TB15111	19 April 2012
5112	TB15113	TB15113	27 April 2012
5113	TB15105	TB15105	17 April 2012
5114	TB15114	TB15114	26 April 2012
5115	TB15115	TB15115	19 April 2012
5116	TB15116	TB15116	13 April 2012
5117	TB15117	TB15117	14 May 2012
5119	TB15119	TB15119	07 May 2012
5120	TB15120	TB15120	27 April 2012
5121	TB15190	TB15171	26 October 2012
5122	TB15122	TB15122	23 April 2012
5123	TB15123	TB15123	27 April 2012
5125	TB15125	TB15125	25 April 2012
5127	TB15130	TB15130	24 May 2012
5128	TB15128	TB15128	24 May 2012
5129	TB15129	TB15129	21 May 2012





MSN	Outer LH flap s/n	Outer RH flap s/n	Reference date
5130	TB15110	TB15110	22 May 2012
5131	TB15163	TB15064	02 November 2012
5132	TB15132	TB15132	23 May 2012
5134	TB15134	TB15134	14 May 2012
5135	TB15100	TB15100	07 May 2012
5136	TB15136	TB15136	08 May 2012
5137	TB15139	TB15139	16 May 2012
5138	TB15138	TB15138	15 May 2012
5139	TB15137	TB15137	18 May 2012
5140	TB15140	TB15140	10 May 2012
5141	TB15151	TB15190	13 November 2012
5142	TB15121	TB15121	16 May 2012
5143	TB15143	TB15143	10 May 2012
5144	TB15146	TB15144	10 May 2012
5145	TB15147	TB15147	23 May 2012
5146	TB15148	TB15148	08 May 2012
5147	TB15145	TB15145	31 May 2012
5148	TB15127	TB15127	08 June 2012
5149	TB15149	TB15149	24 May 2012
5150	TB15150	TB15146	11 May 2012
5151	TB15165	TB15165	03 December 2012
5152	TB15152	TB15152	20 June 2012
5153	TB15171	TB15153	07 June 2012
5155	TB15155	TB15155	25 May 2012
5156	TB15156	TB15156	05 June 2012
5157	TB15218	TB15288	23 November 2012
5158	TB15158	TB15158	23 May 2012
5159	TB15159	TB15131	11 June 2012
5161	TB15161	TB15161	16 June 2012
5162	TB15162	TB15162	24 May 2012
5163	TB15085	TB15163	18 June 2012
5165	TB15288	TB15141	07 December 2012
5166	TB15166	TB15166	15 June 2012
5167	TB15170	TB15167	31 May 2012
5168	TB15141	TB15168	15 June 2012
5170	TB15167	TB15170	07 June 2012
5171	TB15131	TB15159	12 July 2012
5172	TB15172	TB15172	18 June 2012
5174	TB15174	TB15174	31 May 2012
5175	TB15175	TB15175	10 July 2012
5176	TB15232	TB15225	14 December 2012
5178	TB15178	TB15178	08 June 2012
5179	TB15179	TB15179	21 June 2012

MSN	Outer LH flap s/n	Outer RH flap s/n	Reference date
5181	TB15181	TB15181	13 June 2012
5182	TB15187	TB15187	16 June 2014
5183	TB15168	TB15242	21 December 2012
5184	TB15184	TB15184	11 June 2012
5185	TB15195	TB15195	28 June 2012
5187	TB15182	TB15182	19 June 2012
5188	TB15188	TB15151	05 July 2012
5189	TB15189	TB15185	29 June 2012
5190	TB15185	TB15189	28 June 2012
5191	TB15191	TB15191	14 June 2012
5193	TB15193	TB15193	22 June 2012
5194	TB15157	TB15157	29 June 2012
5195	TB15198	TB15196	22 June 2012
5196	TB15194	TB15194	29 June 2012
5198	TB15196	TB15198	29 June 2012
5200	TB15202	TB15202	12 July 2012
5201	TB15201	TB15201	26 June 2012
5202	TB15208	TB15208	09 July 2012
5203	TB15203	TB15203	18 July 2012
5204	TB15204	TB15204	13 July 2012
5206	TB15211	TB15211	12 July 2012
5207	TB15207	TB15207	28 June 2012
5208	TB15217	TB15217	05 July 2012
5209	TB15176	TB15176	30 July 2012
5211	TB15209	TB15209	18 July 2012
5212	TB15212	TB15212	10 July 2012
5213	TB15213	TB15213	29 June 2012
5214	TB15214	TB15214	05 July 2012
5215	TB15215	TB15215	19 July 2012
5216	TB15369	TB15352	11 January 2013
5217	TB15200	TB15200	13 July 2012
5218	TB15224	TB15224	10 August 2012
5219	TB15219	TB15219	10 July 2012
5220	TB15223	TB15220	27 July 2012
5221	TB15221	TB15221	08 August 2012
5222	TB15222	TB15222	12 July 2012
5223	TB14870	TB14708	30 July 2012
5224	TB15220	TB15223	07 August 2012
5225	TB15206	TB15206	25 July 2012
5226	TB15352	TB15262	18 January 2013
5228	TB15228	TB15228	26 July 2012
5229	TB15229	TB15229	20 July 2012
5230	TB15230	TB15230	16 July 2012



MSN	Outer LH flap s/n	Outer RH flap s/n	Reference date
5231	TB15231	TB15231	23 July 2012
5232	TB15236	TB15236	27 July 2012
5234	TB15234	TB15234	05 September 2012
5236	TB15225	TB15232	31 July 2012
5238	TB15240	TB15240	07 August 2012
5239	TB15239	TB15239	30 July 2012
5240	TB15183	TB15183	13 August 2012
5242	TB15243	TB15243	09 August 2012
5243	TB15238	TB15238	06 August 2012
5245	TB15216	TB15216	06 August 2012
5246	TB15245	TB15245	08 August 2012
5248	TB15242	TB15246	08 August 2012
5249	TB15255	TB15255	08 August 2012
5250	TB15250	TB15250	09 August 2012
5252	TB15249	TB15249	21 August 2012
5253	TB15253	TB15253	04 September 2012
5255	TB15248	TB15248	19 October 2012
5256	TB15258	TB15256	17 August 2012
5258	TB15260	TB15260	17 August 2012
5259	TB15259	TB15259	16 August 2012
5260	TB15252	TB15258	19 September 2012
5261	TB15256	TB15261	31 December 2012
5262	TB15266	TB15266	21 August 2012
5263	TB15263	TB15263	22 August 2012
5264	TB15264	TB15264	24 September 2012
5266	TB15378	TB15268	24 September 2012
5267	TB15267	TB15378	28 August 2012
5268	TB15268	TB15369	17 September 2012
5270	TB15270	TB15270	17 September 2012
5272	TB15272	TB15272	17 September 2012
5273	TB15273	TB15273	26 October 2012
5274	TB15280	TB15276	19 September 2012
5276	TB15274	TB15274	27 September 2012
5277	TB15277	TB15277	12 October 2012
5278	TB15278	TB15278	27 September 2012
5280	TB15281	TB15281	05 September 2012
5281	TB15285	TB15285	03 October 2012
5283	TB15283	TB15283	27 September 2012
5284	TB15284	TB15284	19 September 2012
5286	TB15389	TB15389	12 September 2012
5288	TB15246	TB15218	25 January 2013
5289	TB15289	TB15289	28 September 2012
5290	TB15290	TB15290	15 November 2012

MSN	Outer LH flap s/n	Outer RH flap s/n	Reference date
5291	TB15291	TB15291	05 October 2012
5293	TB15293	TB15293	26 September 2012
5294	TB15541	TB15544	15 January 2013
5296	TB15296	TB15296	24 September 2012
5298	TB15294	TB15294	26 September 2012
5299	TB15299	TB15299	16 October 2012
5301	TB15301	TB15301	28 September 2012
5302	TB15302	TB15280	03 October 2012
5304	TB15307	TB15307	04 October 2012
5305	TB15305	TB15305	05 October 2012
5307	TB15401	TB15304	04 October 2012
5308	TB15308	TB15407	18 October 2012
5310	TB15310	TB15310	31 October 2012
5311	TB15313	TB15313	09 October 2012
5312	TB15312	TB15312	17 October 2012
5313	TB15311	TB15311	23 October 2012
5315	TB15315	TB15315	09 October 2012
5316	TB15316	TB15316	25 October 2012
5318	TB15318	TB15318	10 October 2012
5319	TB15319	TB15319	07 November 2012
5320	TB15320	TB15320	16 October 2012
5322	TB15322	TB15322	19 November 2012
5323	TB15324	TB15324	18 October 2012
5324	TB15323	TB15323	18 October 2012
5325	TB15325	TB15325	18 October 2012
5326	TB15326	TB15326	18 October 2012
5327	TB15327	TB15327	17 December 2013
5329	TB15329	TB15329	19 October 2012
5330	TB15330	TB15330	24 October 2012
5331	TB15331	TB15331	24 October 2012
5333	TB15333	TB15333	02 November 2012
5334	TB15334	TB15334	14 November 2012
5335	TB15335	TB15335	25 October 2012
5337	TB15337	TB15337	31 October 2012
5338	TB15338	TB15338	30 October 2012
5339	TB15344	TB15344	30 October 2012
5341	TB15341	TB15341	31 October 2012
5342	TB15342	TB15342	29 October 2012
5344	TB15339	TB15339	30 October 2012
5345	TB15345	TB15345	06 November 2012
5347	TB15347	TB15347	09 November 2012
5348	TB15348	TB15348	13 November 2012
5349	TB15349	TB15349	07 November 2012





MSN	Outer LH flap s/n	Outer RH flap s/n	Reference date
5351	TB15351	TB15351	09 November 2012
5352	TB15410	TB15267	01 February 2013
5353	TB15353	TB15353	09 November 2012
5355	TB15355	TB15355	13 November 2012
5356	TB15356	TB15356	04 December 2012
5358	TB15358	TB15358	09 November 2012
5359	TB15359	TB15359	13 November 2012
5360	TB15360	TB15360	20 November 2012
5361	TB15361	TB15361	23 November 2012
5362	TB15362	TB15362	16 November 2012
5363	TB15363	TB15363	20 November 2012
5364	TB15364	TB15364	13 November 2012
5365	TB15365	TB15365	15 November 2012
5366	TB15366	TB15366	06 March 2013
5367	TB15367	TB15367	20 November 2012
5369	TB15226	TB15226	06 February 2013
5370	TB15370	TB15370	15 November 2012
5371	TB15371	TB15371	27 November 2012
5372	TB15372	TB15372	20 November 2012
5373	TB15373	TB15373	30 November 2012
5375	TB15375	TB15375	28 November 2012
5376	TB15376	TB15376	04 December 2012
5378	TB15439	TB15252	01 March 2013
5379	TB15379	TB15379	26 November 2012
5380	TB15380	TB15380	19 November 2012
5381	TB15381	TB15381	29 November 2012
5383	TB15383	TB15383	04 December 2012
5384	TB15384	TB15384	27 November 2012
5386	TB15393	TB15393	30 November 2012
5387	TB15386	TB15386	05 December 2012
5389	TB15262	TB15286	04 March 2013
5390	TB15390	TB15390	30 November 2012
5391	TB15391	TB15391	26 November 2012
5393	TB15395	TB15395	10 December 2012
5394	TB15394	TB15396	27 December 2012
5395	TB15516	TB15516	13 December 2012
5396	TB15396	TB15394	21 December 2012
5397	TB15397	TB15397	13 December 2012
5398	TB15398	TB15398	13 December 2012
5399	TB15304	TB15401	10 December 2012
5400	TB15400	TB15400	28 December 2012
5401	TB15399	TB15399	19 December 2012
5403	TB15403	TB15403	19 December 2012

MSN	Outer LH flap s/n	Outer RH flap s/n	Reference date
5405	TB15405	TB15405	19 December 2012
5406	TB15406	TB15406	18 September 2013
5407	TB15411	TB15411	19 December 2012
5408	TB15408	TB15408	17 December 2012
5410	TB15286	TB15410	15 March 2013
5411	TB15407	TB15308	13 December 2012
5412	TB15412	TB15412	19 December 2012
5414	TB15414	TB15414	20 December 2012
5415	TB15415	TB15415	20 December 2012
5416	TB15426	TB15426	22 January 2013
5417	TB15417	TB15417	17 December 2012
5419	TB15419	TB15439	25 March 2013
5420	TB15420	TB15420	20 December 2012
5421	TB15421	TB15421	27 December 2012
5423	TB15423	TB15423	20 December 2012
5424	TB15556	TB15424	17 January 2013
5425	TB15425	TB15478	23 January 2013
5426	TB15416	TB15416	21 December 2012
5428	TB15428	TB15428	21 December 2012
5429	TB15434	TB15429	21 December 2012
5430	TB15442	TB15442	28 December 2012
5431	TB15431	TB15431	21 December 2012
5433	TB15433	TB15433	11 January 2013
5434	TB15429	TB15434	10 January 2013
5436	TB15436	TB15436	17 January 2013
5437	TB15437	TB15437	28 January 2013
5439	TB15480	TB15419	29 March 2013
5440	TB15440	TB15440	23 January 2013
5441	TB15441	TB15441	23 January 2013
5442	TB15446	TB15446	18 January 2013
5443	TB15448	TB15448	31 January 2013
5445	TB15445	TB15445	18 March 2013
5446	TB15452	TB15452	31 January 2013
5448	TB15453	TB15453	23 January 2013
5449	TB15449	TB15449	22 January 2013
5451	TB15484	TB15451	11 April 2013
5452	TB15458	TB15458	24 January 2013
5453	TB15474	TB15454	29 January 2013
5454	TB15454	TB15474	24 January 2013
5455	TB15455	TB15455	08 March 2013
5457	TB15479	TB15479	04 February 2013
5458	TB15443	TB15443	24 January 2013
5460	TB15482	TB15460	01 February 2013



MSN	Outer LH flap s/n	Outer RH flap s/n	Reference date
5461	TB15461	TB15461	28 January 2013
5463	TB15463	TB15463	30 January 2013
5464	TB15464	TB15464	11 February 2013
5466	TB15466	TB15466	30 January 2013
5467	TB15476	TB15476	14 February 2013
5468	TB15468	TB15468	31 January 2013
5471	TB15471	TB15471	24 April 2013
5472	TB15472	TB15472	04 February 2013
5473	TB15505	TB15511	14 February 2013
5474	TB15457	TB15457	12 February 2013
5476	TB15488	TB15488	21 February 2013
5477	TB15568	TB15486	11 February 2013
5478	TB15508	TB15483	20 February 2013
5479	TB15460	TB15568	19 February 2013
5480	TB15506	TB15480	24 April 2013
5482	TB15494	TB15482	25 February 2013
5483	TB15491	TB15499	14 March 2013
5484	TB15387	TB15484	27 April 2013
5486	TB15492	TB15494	21 February 2013
5487	TB15487	TB15487	27 February 2013
5488	TB15600	TB15491	21 February 2013
5489	TB15486	TB15489	15 February 2013
5491	TB15498	TB15498	19 March 2013
5492	TB15499	TB15492	18 February 2013
5493	TB15536	TB15507	28 February 2013
5494	TB15502	TB15502	01 March 2013
5496	TB15496	TB15430	21 February 2013
5497	TB15497	TB15497	05 March 2013
5498	TB15501	TB15501	06 March 2013
5499	TB15579	TB15520	28 February 2013
5501	TB15503	TB15503	20 March 2013
5502	TB15478	TB15505	27 February 2013
5503	TB15510	TB15510	08 March 2013
5505	TB15511	TB15579	27 February 2013
5506	TB15550	TB15506	11 May 2013
5507	TB15628	TB15515	14 March 2013
5508	TB15483	TB15508	27 February 2013
5510	TB15547	TB15425	12 March 2013
5511	TB15529	TB15529	28 February 2013
5512	TB15518	TB15628	20 March 2013
5514	TB15520	TB15514	13 March 2013

MSN	Outer LH flap s/n	Outer RH flap s/n	Reference date
5515	TB15553	TB15518	15 March 2013
5516	TB15561	TB15387	17 May 2013
5517	TB15517	TB15517	21 March 2013
5518	TB15562	TB15553	20 March 2013
5520	TB15526	TB15493	13 March 2013
5521	TB15566	TB15496	26 March 2013
5522	TB15559	TB15559	25 March 2013
5524	TB15524	TB15664	19 March 2013
5525	TB15639	TB15639	26 March 2013
5526	TB15532	TB15600	14 March 2013
5527	TB15527	TB15527	26 March 2013
5529	TB15530	TB15526	21 May 2013
5530	TB15611	TB15536	22 March 2013
5531	TB15572	TB15531	05 April 2013
5532	TB15489	TB15532	28 June 2013
5533	TB15533	TB15566	05 April 2013
5535	TB15578	TB15533	28 March 2013
5536	TB15539	TB15611	15 March 2013
5537	TB15537	TB15572	10 April 2013
5539	TB15507	TB15539	15 March 2013
5540	TB15664	TB15585	05 April 2013
5541	TB15512	TB15512	18 March 2013
5544	TB15515	TB15547	21 March 2013
5547	TB15521	TB15556	25 March 2013
5550	TB15563	TB15550	03 June 2013
5551	TB15551	TB15551	29 March 2013
5553	TB15522	TB15521	28 March 2013
5556	TB15424	TB15562	26 March 2013
5559	TB15570	TB15525	04 April 2013
5561	TB15564	TB15561	07 June 2013
5562	TB15565	TB15565	19 June 2013
5563	TB15477	TB15563	26 June 2013
5565	TB15650	TB15570	02 April 2013
5566	TB15581	TB15581	04 April 2013
5570	TB15535	TB15535	08 April 2013
5572	TB15576	TB15576	09 April 2013
5576	TB15656	TB15656	18 April 2013
5578	TB15585	TB15578	17 April 2013



## Appendix 2 – WM and IHT Suspected Parts – A321 Aeroplanes (see Note 3 of this AD)

Note 3: The aeroplane MSN as identified in Appendix 2 of this AD are for reference only, based on aeroplane configuration at the time of Airbus delivery to the first operator

MSN	Flap LH S/N	Flap RH S/N	Tab LH	Tab RH	Reference date
4494	TB 14494	TB 14494	TB 14494	TB 14494	10 November 2010
4500	TB 14500	TB 14500	TB 14500	TB 14500	21 December 2010
4530	TB 14530	TB 14530	TB 14530	TB 14530	09 December 2010
4534	TB 14548	TB 14548	TB 14548	TB 14548	14 December 2010
4538	TB 14538	TB 14538	TB 14538	TB 14538	22 December 2010
4542	TB 14542	TB 14542	TB 14542	TB 14542	24 January 2011
4545	TB 14545	TB 14545	TB 14545	TB 14545	21 December 2010
4560	TB 14560	TB 14560	TB 14560	TB 14560	21 January 2011
4570	TB 14570	TB 14570	TB 14570	TB 14570	22 February 2011
4577	TB 14577	TB 14577	TB 14577	TB 14577	31 January 2011
4585	TB 14607	TB 14626	TB 14607	TB 14626	08 February 2011
4590	TB 14590	TB 14590	TB 14590	TB 14590	14 February 2011
4607	TB 14626	TB 14607	TB 14626	TB 14607	17 February 2011
4611	TB 14611	TB 14611	TB 14611	TB 14611	24 February 2011
4617	TB 14617	TB 14617	TB 14617	TB 14617	08 March 2011
4626	TB 14585	TB 14672	TB 14585	TB 14672	29 March 2011
4638	TB 14638	TB 14638	TB 14638	TB 14638	23 March 2011
4643	TB 14643	TB 14643	TB 14643	TB 14643	28 March 2011
4648	TB 14648	TB 14648	TB 14648	TB 14648	30 March 2011
4654	TB 14654	TB 14654	TB 14654	TB 14654	29 March 2011
4662	TB 14662	TB 14662	TB 14662	TB 14662	28 April 2011
4669	TB 14669	TB 14669	TB 14669	TB 14669	28 April 2011
4672	TB 14672	TB 14585	TB 14672	TB 14585	11 April 2011
4682	TB 14682	TB 14682	TB 14682	TB 14682	28 April 2011
4698	TB 14698	TB 14698	TB 14698	TB 14698	11 May 2011
4703	TB 14703	TB 14703	TB 14703	TB 14703	19 May 2011
4706	TB 14706	TB 14706	TB 14706	TB 14706	18 May 2011
4710	TB 14710	TB 14710	TB 14710	TB 14710	18 May 2011
4719	TB 14719	TB 14719	TB 14719	TB 14719	27 May 2011
4731	TB 14731	TB 14731	TB 14731	TB 14731	07 June 2011
4728	TB 14728	TB 14728	TB 14728	TB 14728	31 May 2011
4737	TB 14737	TB 14737	TB 14737	TB 14737	09 June 2011
4746	TB 14834	TB 14746	TB 14834	TB 14746	23 June 2011
4753	TB 14753	TB 14753	TB 14753	TB 14753	22 June 2011
4761	TB 14761	TB 14761	TB 14761	TB 14761	29 June 2011
4771	TB 14771	TB 14771	TB 14771	TB 14771	07 July 2011
4779	TB 14779	TB 14779	TB 14779	TB 14779	08 July 2011
4783	TB 14788	TB 14788	TB 14788	TB 14788	18 July 2011



MSN	Flap LH S/N	Flap RH S/N	Tab LH	Tab RH	Reference date
4788	TB 14783	TB 14783	TB 14783	TB 14783	03 August 2011
4792	TB 14792	TB 14792	TB 14792	TB 14792	27 July 2011
SPARE PART	#N/A	#N/A	TB19023	TB19023	10 November 2010
4811	TB 14811	TB 14811	TB 14811	TB 14811	17 August 2011
4819	TB 14863	TB 14819	TB 14863	TB 14819	23 August 2011
4824	TB 14824	TB 14824	TB 14824	TB 14824	30 August 2011
4826	TB 14826	TB 14826	TB 14826	TB 14826	30 August 2011
4830	TB 14830	TB 14830	TB 14830	TB 14830	30 August 2011
4834	TB 14746	TB 14834	TB 14746	TB 14834	09 September 2011
4838	TB 14838	TB 14838	TB 14838	TB 14838	14 October 2011
4843	TB 14843	TB 14843	TB 14843	TB 14843	23 September 2011
4847	TB 14940	TB 14940	TB 14940	TB 14940	22 September 2011
4850	TB 14850	TB 14850	TB 14850	TB 14850	29 September 2011
4856	TB 14856	TB 14856	TB 14856	TB 14856	29 September 2011
4863	TB 14881	TB 14863	TB 14881	TB 14863	03 November 2011
4873	TB 14873	TB 14873	TB 14873	TB 14873	18 October 2011
4881	TB 14819	TB 14881	TB 14819	TB 14881	21 November 2011
4885	TB 14885	TB 14885	TB 14885	TB 14885	24 October 2011
4893	TB 14893	TB 14893	TB 14893	TB 14893	28 October 2011
4898	TB 14898	TB 14898	TB 14898	TB 14898	28 October 2011
4901	TB 14901	TB 14901	TB 14901	TB 14901	23 November 2011
4916	TB 14916	TB 14916	TB 14916	TB 14916	16 November 2011
4923	TB 14923	TB 14923	TB 14923	TB 14923	16 November 2011
4925	TB 14925	TB 14925	TB 14925	TB 14925	14 November 2011
4932	TB 14932	TB 14932	TB 14932	TB 14932	28 November 2011
4935	TB 14935	TB 14935	TB 14935	TB 14935	02 December 2011
4940	TB 14949	TB 14949	TB 14949	TB 14949	07 December 2011
4945	TB 14945	TB 14945	TB 14945	TB 14945	02 December 2011
SPARE PART	#N/A	#N/A	TB19024	TB19026	10 November 2010
4949	TB 14957	TB 14957	TB 14957	TB 14957	06 December 2011
4957	TB 14960	TB 14960	TB 14960	TB 14960	12 December 2011
4960	TB 14962	TB 14962	TB 14962	TB 14962	15 December 2011
4962	TB 14966	TB 14966	TB 14966	TB 14966	23 December 2011
4966	TB 14971	TB 14971	TB 14971	TB 14971	30 December 2011
4971	TB 15009	TB 15009	TB 15009	TB 15009	29 December 2011
4976	TB 14976	TB 14976	TB 14976	TB 14976	27 December 2011
4994	TB 14994	TB 14994	TB 14994	TB 14994	17 January 2012
5009	TB 15025	TB 15025	TB 15025	TB 15025	10 February 2012
5025	TB 15035	TB 15035	TB 15035	TB 15035	16 March 2012
5028	TB 15028	TB 15028	TB 15028	TB 15028	08 February 2012
5035	TB 15038	TB 15038	TB 15038	TB 15038	14 February 2012
5038	TB 15044	TB 15044	TB 15044	TB 15044	17 February 2012
5044	TB 14847	TB 14847	TB 14847	TB 14847	28 February 2012
5049	TB 15049	TB 15049	TB 15049	TB 15049	28 February 2012



MSN	Flap LH S/N	Flap RH S/N	Tab LH	Tab RH	Reference date
5054	TB 15054	TB 15054	TB 15054	TB 15054	29 February 2012
SPARE PART	#N/A	#N/A	TB19025	-	10 November 2010
SPARE PART	#N/A	#N/A	TB19027	TB19027	10 November 2010
5059	TB 15059	TB 15059	TB 15059	TB 15059	05 March 2012
5065	TB 15065	TB 15065	TB 15065	TB 15065	13 March 2012
5074	TB 15074	TB 15074	TB 15074	TB 15074	29 March 2012
5077	TB 15077	TB 15077	TB 15077	TB 15077	21 March 2012
5083	TB 15083	TB 15083	TB 15083	TB 15083	21 March 2012
5087	TB 15087	TB 15087	TB 15087	TB 15087	30 March 2012
5099	TB 15099	TB 15099	TB 15099	TB 15099	16 April 2012
5118	TB 15118	TB 15124	TB 15118	TB 15124	26 April 2012
5124	TB 15124	TB 15118	TB 15124	TB 15118	27 April 2012
5126	TB 15126	TB 15126	TB 15126	TB 15126	26 April 2012
5133	TB 15133	TB 15133	TB 15133	TB 15133	02 May 2012
5154	TB 15154	TB 15154	TB 15154	TB 15154	15 May 2012
5160	TB 15192	TB 15192	TB 15192	TB 15192	29 May 2012
5164	TB 15164	TB 15164	TB 15164	TB 15164	12 June 2012
5169	TB 15169	TB 15169	TB 15169	TB 15169	25 May 2012
5173	TB 15180	TB 15180	TB 15180	TB 15180	30 June 2012
5177	TB 15160	TB 15235	TB 15160	TB 15235	15 June 2012
5180	TB 15177	TB 15177	TB 15177	TB 15177	03 July 2012
5186	TB 15186	TB 15186	TB 15186	TB 15186	25 June 2012
5192	TB 15205	TB 15205	TB 15205	TB 15205	20 June 2012
5199	TB 15199	TB 15199	TB 15199	TB 15199	22 June 2012
5197	TB 15227	TB 15173	TB 15227	TB 15173	27 June 2012
5205	TB 15210	TB 15210	TB 15210	TB 15210	28 June 2012
5210	TB 15233	TB 15233	TB 15233	TB 15233	28 June 2012
5227	TB 15197	TB 15227	TB 15197	TB 15227	22 August 2012
5233	TB 15237	TB 15237	TB 15237	TB 15237	02 August 2012
5235	TB 15241	TB 15241	TB 15241	TB 15241	27 July 2012
5237	TB 15247	TB 15247	TB 15247	TB 15247	30 July 2012
5241	TB 15251	TB 15251	TB 15251	TB 15251	23 August 2012
5247	TB 15257	TB 15257	TB 15257	TB 15257	23 August 2012
5244	TB 15244	TB 15244	TB 15244	TB 15244	03 August 2012
5251	TB 15235	TB 15160	TB 15235	TB 15160	22 August 2012
5254	TB 15254	TB 15254	TB 15254	TB 15254	08 August 2012
5257	TB 15265	TB 15265	TB 15265	TB 15265	06 September 2012
5265	TB 15271	TB 15271	TB 15271	TB 15271	23 August 2012
5271	TB 15275	TB 15275	TB 15275	TB 15275	06 September 2012
5269	TB 15269	TB 15269	TB 15269	TB 15269	28 August 2012
5275	TB 15282	TB 15282	TB 15282	TB 15282	05 September 2012
5279	TB 15279	TB 15279	TB 15279	TB 15279	08 November 2012
5282	TB 15285	TB 15285	TB 15285	TB 15285	04 September 2012
5285	TB 15287	TB 15287	TB 15287	TB 15287	19 September 2012



MSN	Flap LH S/N	Flap RH S/N	Tab LH	Tab RH	Reference date
5287	TB 15292	TB 15292	TB 15292	TB 15292	12 September 2012
5292	TB 15297	TB 15297	TB 15297	TB 15297	17 September 2012
5295	TB 15295	TB 15295	TB 15295	TB 15295	02 March 2015
5297	TB 15303	TB 15303	TB 15303	TB 15303	05 October 2012
5300	TB 15300	TB 15300	TB 15300	TB 15300	21 September 2012
5303	TB 15173	TB 15197	TB 15173	TB 15197	28 September 2012
5306	TB 15309	TB 15309	TB 15309	TB 15309	11 October 2012
5309	TB 15306	TB 15306	TB 15306	TB 15306	31 October 2012
5314	TB 15314	TB 15314	TB 15314	TB 15314	24 January 2013
5317	TB 15317	TB 15317	TB 15317	TB 15317	18 October 2012
5321	TB 15321	TB 15321	TB 15321	TB 15321	27 December 2012
5328	TB 15328	TB 15328	TB 15328	TB 15328	19 December 2012
5332	TB 15332	TB 15332	TB 15332	TB 15332	29 October 2012
5336	TB 15336	TB 15336	TB 15336	TB 15336	27 December 2012
5340	TB 15340	TB 15340	TB 15340	TB 15340	30 October 2012
5343	TB 15343	TB 15343	TB 15343	TB 15343	29 November 2012
5346	TB 15346	TB 15346	TB 15346	TB 15346	07 December 2012
5357	TB 15357	TB 15357	TB 15357	TB 15357	26 November 2012
5350	TB 15350	TB 15350	TB 15350	TB 15350	06 November 2012
5354	TB 15354	TB 15354	TB 15354	TB 15354	31 October 2012
5368	TB 15368	TB 15368	TB 15368	TB 15368	07 December 2012
5374	TB 15374	TB 15374	TB 15374	TB 15374	29 November 2012
5377	TB 15377	TB 15377	TB 15377	TB 15377	12 December 2012
5382	TB 15382	TB 15382	TB 15382	TB 15382	13 December 2012
5385	TB 15385	TB 15385	TB 15385	TB 15385	27 December 2012
5388	TB 15388	TB 15388	TB 15388	TB 15388	04 December 2012
5392	TB 15392	TB 15392	TB 15392	TB 15392	07 December 2012
5404	TB 15402	TB 15402	TB 15402	TB 15402	14 December 2012
5402	TB 15404	TB 15404	TB 15404	TB 15404	14 December 2012
5413	TB 15418	TB 15418	TB 15418	TB 15418	19 December 2012
5409	TB 15413	TB 15413	TB 15413	TB 15413	12 December 2012
SPARE PART	#N/A	#N/A	TB19028	TB19028	10 November 2010
5418	TB 15422	TB 15422	TB 15422	TB 15422	19 December 2012
5422	TB 15427	TB 15427	TB 15427	TB 15427	21 December 2012
5427	TB 15432	TB 15432	TB 15432	TB 15432	28 December 2012
5432	TB 15435	TB 15435	TB 15435	TB 15435	21 December 2012
5435	TB 15409	TB 15409	TB 15409	TB 15409	21 January 2013
5438	TB 15438	TB 15438	TB 15438	TB 15438	31 January 2013
5444	TB 15444	TB 15444	TB 15444	TB 15444	12 February 2013
5447	TB 15450	TB 15447	TB 15450	TB 15447	05 February 2013
5450	TB 15456	TB 15450	TB 15456	TB 15450	23 January 2013
5456	TB 15447	TB 15485	TB 15447	TB 15485	07 February 2013
5459	TB 15462	TB 15462	TB 15462	TB 15462	05 February 2013
5462	TB 15534	TB 15456	TB 15534	TB 15456	06 February 2013





MSN	Flap LH S/N	Flap RH S/N	Tab LH	Tab RH	Reference date
5465	TB 15470	TB 15465	TB 15470	TB 15465	12 February 2013
5470	TB 15475	TB 15470	TB 15475	TB 15470	26 September 2013
5469	TB 15469	TB 15469	TB 15469	TB 15469	20 March 2013
5475	TB 15481	TB 15475	TB 15481	TB 15475	19 February 2013
5481	TB 15459	TB 15490	TB 15459	TB 15490	26 February 2013
5485	TB 15490	TB 15481	TB 15490	TB 15481	22 February 2013
5490	TB 15485	TB 15459	TB 15485	TB 15459	06 March 2013
5495	TB 15495	TB 15495	TB 15495	TB 15495	25 March 2013
5500	TB 15500	TB 15500	TB 15500	TB 15500	14 March 2013
5509	TB 15504	TB 15509	TB 15504	TB 15509	18 March 2013
5504	TB 15509	TB 15504	TB 15509	TB 15504	25 March 2013
5513	TB 15513	TB 15513	TB 15513	TB 15513	25 March 2013
5519	TB 15519	TB 15519	TB 15519	TB 15519	15 April 2013
5523	TB 15523	TB 15523	TB 15523	TB 15523	27 March 2013
5528	TB 15528	TB 15528	TB 15528	TB 15528	27 March 2013
5534	TB 15549	TB 15534	TB 15549	TB 15534	02 April 2013
5538	TB 15543	TB 15543	TB 15543	TB 15543	09 April 2013
5543	TB 15546	TB 15546	TB 15546	TB 15546	16 April 2013
5546	TB 15465	TB 15549	TB 15465	TB 15549	17 April 2013
5549	TB 15555	TB 15555	TB 15555	TB 15555	18 April 2013
5555	TB 15558	TB 15558	TB 15558	TB 15558	17 April 2013
5558	TB 15573	TB 15538	TB 15573	TB 15538	22 April 2013
5567	TB 15567	TB 15573	TB 15567	TB 15573	25 April 2013
5573	TB 15575	TB 15575	TB 15575	TB 15575	26 April 2013
5575	TB 15582	TB 15582	TB 15582	TB 15582	26 April 2013
5582	TB 15584	TB 15584	TB 15584	TB 15584	07 May 2013
5584	TB 15588	TB 15588	TB 15588	TB 15588	07 May 2013
5588	TB 15594	TB 15594	TB 15594	TB 15594	17 May 2013
5594	TB 15603	TB 15603	TB 15603	TB 15603	15 March 2013
5603	TB 15606	TB 15606	TB 15606	TB 15606	30 March 2013
5606	TB 15538	TB 15567	TB 15538	TB 15567	23 March 2013
5633	TB 15633	TB 15633	TB 15633	TB 15633	01 July 2013
5636	TB 15636	TB 15644	TB 15636	TB 15644	03 June 2013
5644	TB 15644	TB 15636	TB 15644	TB 15636	13 June 2013
5647	TB 15647	TB 15647	TB 15647	TB 15647	19 June 2013
5655	TB 15655	TB 15655	TB 15655	TB 15655	21 June 2013
5659	TB 15659	TB 15659	TB 15659	TB 15659	20 June 2013
5663	TB 15663	TB 15663	TB 15663	TB 15663	18 June 2013
SPARE PART	#N/A	#N/A	TB19034	TB19034	10 November 2010

