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SERVICE BULLETIN
REVISION TRANSMITTAL SHEET

CL–600–2B19 Canadair Regional Jet (CRJ) Aircraft

SERVICE BULLETIN 601R–27–160

SUBJECT: Flight Controls – Horizontal Stabilizer Trim Actuator (HSTA) – Serialization of the HSTA Pins and Trunnions

This page transmits:
Revision D of Service Bulletin 601R–27–160, dated Oct 22/2015

For aircraft that have had the initial issue or Revision A of this service bulletin incorporated, it is necessary to do PART B of this service bulletin.
The changes in this revision have no effect on aircraft that have had Revision B or Revision C of this service bulletin incorporated.

Reason:

Revised Accomplishment Instructions, paragraph 2., to:

Add a note in the Job Set-Up section of PARTA
Add a step in the Procedure section of PART A
Add a note and change a table in the Procedure section of PART A
Add a note in the Job Close-Out section of PART A
Add a note in the Job Set-Up section of PART B
Add some steps and a note in the Procedure section of PART B
Add a note in the Job Close-Out section of PART B

This revision also includes small editorial changes that do not have an effect on the technical content.

Instructions:

Discard the copy of Service Bulletin 601R–27–160, Revision C, dated May 04/2015. Replace with the copy attached.

Service Bulletin History:

Initial issue, dated Sep 29/2011
Revision A, dated Oct 03/2012
Revision B, dated Feb 20/2015
Revision C, dated May 04/2015

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Technical Publications

THIS SERVICE BULLETIN IS SENT TO EACH OPERATOR. IF THE OPERATOR HAS LEASED AIRCRAFT, SEND THIS SERVICE BULLETIN TO THE LESSEE. IF THE OPERATOR HAS SOLD AIRCRAFT OR TRANSFERRED SPARES IN THE LAST SIX MONTHS, SEND THIS SERVICE BULLETIN TO THE NEW OWNER, UNLESS CONFIRMATION WAS RECEIVED THAT BOMBARDIER HAS INCLUDED THE NEW OPERATOR ON THE DISTRIBUTION LIST.

ATA SYSTEM: 27−42 NUMBER: 601R−27−160

SUBJECT: Flight Controls — Horizontal Stabilizer Trim Actuator (HSTA) — Serialization of the HSTA Pins and Trunnions

1. PLANNING INFORMATION

A. Effectivity

(1) Aircraft Affected:

Service Bulletin: CL−600−2B19 aircraft with serial numbers 7003 thru 7067, 7069 thru 7990, 8000 thru 8113.

Production: Aircraft serial number 8114 and subsequent serial numbers will have an equivalent modification incorporated before delivery.

NOTE: The instructions in this service bulletin are only applicable to the systems and parts installed at the time of delivery of the aircraft or as changed by Bombardier service bulletins. Before you do this service bulletin, examine all Supplemental Type Certificates (STCs), and Supplemental Type Approvals (STAs) or alternative action changes to make sure you can complete this service bulletin.

B. Reason

(1) Condition

The pins and the trunnions of the HSTA are not serialized. Therefore, it is not possible to keep a record of the life of the pins and the trunnions installed on the HSTA.
The pins and/or the trunnions of the HSTA can have a non-conformance report (NCR) condition, and it is possible that the pins and/or the trunnions of the HSTA are not properly identified.

(2) Evidence

Operators have reported HSTA pins and trunnions with a NCR condition.

(3) Objective/Benefit

This service bulletin gives the procedure to inspect the HSTA pins, the trunnions, and their attach holes, and the aircraft structure attach holes. This service bulletin also gives the procedure to identify and serialize the pins and the trunnions.
The inspection of the attach holes will make sure that the pins and the trunnions are installed correctly. The identification and the serialization of the pins and the trunnions, on the attachments of the HSTA, will give traceability and service history to agree with Federal Aviation Regulation FAR 25.1529.

C. Description

This service bulletin is divided into 2 parts: PART A and PART B.

PART A — Inspection and Serialization of the HSTA Pins, and Trunnions

Access panels are removed. Circuits breakers are opened. The HSTA is removed. An inspection is done to the HSTA pins, the trunnions, and their attach holes, and to the aircraft structure attach holes. The pins and the trunnions are identified, and serialized. If necessary, the pins and/or the trunnions are replaced. The HSTA is installed. Return-to-service tests are done.

PART B — Inspection of the Attach Holes of the HSTA Pins, and Trunnions

Access panels are removed. Circuits breakers are opened. The HSTA is removed. An inspection is done to the attach holes of the HSTA pins and trunnions, and to the aircraft structure attach holes. If necessary, the identification of the pins and/or the trunnions are changed. If necessary, the pins and/or the trunnions are replaced. The HSTA pins and the trunnions are examined for damage. The HSTA is installed. Return-to-service tests are done.

D. Compliance

Recommended service bulletin.

For aircraft that have not incorporated the initial issue or Revision A of this service bulletin.

Bombardier recommends that PART A of this service bulletin be done at no more than 5000 flight hours, or no later than 5 years from the initial release date of this service bulletin, or no later than the subsequent inspection of Airworthiness Limitation (AWL) 27–40–102 of the Maintenance Requirements Manual (MRM) Part 2, Appendix B, whichever comes first, or unless otherwise directed by the airworthiness authority of the operator.

For aircraft that have had the initial issue or Revision A of this service bulletin incorporated

Bombardier recommends that PART B of this service bulletin be done at no more than 9600 flight hours, or no later than 5 years from the release date of revision B of this service bulletin, which ever comes first, unless otherwise directed by the airworthiness authority of the operator.

For all aircraft

NOTE: If it is not possible to complete all the instructions in this service bulletin because of the configuration of the aircraft, speak with a representative of Bombardier in the Customer Response Center at +1–844–272–2720 (1–844–CRC–CRC0) or +1–514–855–8500 or e-mail at thd.crj@aero.bombardier.com for analysis and to get an approved disposition to complete this service bulletin.

This service bulletin affects Airworthiness Limitations (AWLs) and/or Damage Tolerance Inspections (DTIs). Reference applicable Pre/Post Modsum TC601R18078, TC601R18419, and/or service bulletin 601R–27–160 in the (MRM).

E. Approval

The technical content of this service bulletin has been approved under the authority of the TCCA Design Approval Organization No: DAO #93–Q–02.

F. Manpower

The man-hours given below are estimates for direct labor done by an experienced crew on an aircraft prepared for maintenance.

These estimates do not include the time necessary for:

–Administrative functions such as planning, liaising, familiarization, and report writing.

–Non-productive elapsed time such as rest time, having meals, and crew shift changes.

–Elapsed time such as for paint to dry, sealant to cure, and fuel tank venting.

–Preparation for modification (unless specified in the Accomplishment Instructions) such as cleaning and getting parts, tools, consumables, and ground equipment.

–Quality assurance inspections, troubleshooting and/or correction of discrepancies found when a task is done.

–All other activities that are not considered by Bombardier as directly related to the accomplishment of this procedure.

NOTE: For on-site labor assistance, please speak with a Fleet Services representative for an estimate. Call the Fleet Services Team through the CRC at 1–844–272–2720 (1–844–CRC–CRC0) or 1–514–855–8500 or e-mail at thd.crj@aero.bombardier.com.

PART A — Inspection and Serialization of the HSTA Pins, and Trunnions

It will take an estimated 22.0 man-hours to complete PART A of this service bulletin. The man-hours are divided in the table that follows (elapsed cure time is not included in the man-hour summary given above):

TASK	MAN-HOURS
(1) Job Set-Up	8.0
(2) Procedure	3.0
(3) Test	3.0
(4) Job Close-Out	8.0

NOTE: The man-hours for the procedure do not include the hours to replace damaged parts.

PART B — Inspection of the Attach Holes of the HSTA Pins and Trunnions

It will take an estimated 20.0 man-hours to complete PART B of this service bulletin. The man-hours are divided in the table that follows (elapsed cure time is not included in the man-hour summary given above):

TASK	MAN-HOURS
(1) Job Set-Up	8.0
(2) Procedure	1.0

TASK	MAN-HOURS
(3) Test	3.0
(4) Job Close-Out	8.0

NOTE: The man-hours for the procedure do not include the hours to replace damaged parts.

G. Material — Price and Availability

(1) The parts in the table that follows are/can be necessary to do this service bulletin and are available from Bombardier.

PART NUMBER	NAME	QTY	ALTERNATIVE PART NUMBER [1]
601R92309–3	Lower pin	2	601R92309–1 or 601R92309–1PP
601R92310–3	Upper pin	2	601R92310–1 or 601R92310–1PP
601R92386–3	Trunnion	4	601R92386–1
NAS42DD6–25	Spacer	4	–
NAS42DD8–25	Spacer	4	–
K601R92308–51 [2]	Trunnion	4	–
K601R92308–53 [2]	Lower pin	2	–
K601R92308–55 [2]	Upper pin	2	–
NAS1580A3R8DX	Bolt, 1st oversize	4	–
NAS1580A3R8DY	Bolt, 2nd oversize	4	–
NAS1580A3R13DX	Bolt, 1st oversize	4	–
NAS1580A3R13DY	Bolt, 2nd oversize	4	–
NAS8604D8	Bolt, nominal	4	–
NAS8604D8X	Bolt, 1st oversize	4	–
NAS8604D8Y	Bolt, 2nd oversize	4	–

[1] If the alternative part number is ordered, it is necessary to give a serial number and change the identification of the part as given in this service bulletin.

[2] These parts are necessary only if a NCR condition is found during the inspection.

(2) Please send a purchase order to the address below to schedule part delivery:

Bombardier
Service Bulletin Kit Support Team
123 Garratt Blvd, N42–24
Toronto, Ontario
Canada M3K 1Y5
Fax: 416-375-3060
Phone: 416-375-3920
e-mail: sbkits@aero.bombardier.com

Please contact the Service Bulletin Kit Support Team at the address above for terms and conditions.

(3) The kits in the tables that follow are available from Bombardier.

NOTE: For a list of kit contents, refer to paragraph 3.A.

KIT NUMBER	NAME
601R27–160K1[1]	HSTA – Laminated Shims Kit
601R27–160K2[1]	HSTA – Nominal Hardware Kit
601R27–160K3[2]	HSTA – Trunnion Oversize Hardware Kit
601R27–160K4[2]	HSTA – Pin Oversize Hardware Kit
[1] One kit for each aircraft. [2] One kit for each operator. To replace parts taken from the kit 601R27–160K3 and 601R27–160K4, speak with a representative of the Service Bulletin Kit Support Team at the address below.	

(4) Please send a purchase order to the address below to schedule kit delivery:

Bombardier
Service Bulletin Kit Support Team
123 Garratt Blvd, N42–24
Toronto, Ontario
Canada M3K 1Y5
Fax: 416-375-3060
Phone: 416-375-3920
e-mail: sbkits@aero.bombardier.com

Please contact the Service Bulletin Kit Support Team at the address above for terms and conditions.

(5) Refer to paragraph 3.B. for a list of consumables for this service bulletin.

For Business/Corporate Operators

All Business/Corporate operators (i.e. operators who do not have a commercial airline operation) refer to SB 800-00-004 for commercial policy coverage and logistics/planning arrangements (refer to www.cic.bombardier.com/technical library/service bulletins/challenger/850/SB 800-00-004).

To place an order for parts or kits, please call Bombardier Parts Logistics at 514-855-2999 or 1-866-538-1247.

H. Tooling — Price and Availability

There are no tool kits for this service bulletin. Refer to paragraph 3.C. for a list of special tools and equipment for this service bulletin.

I. Weight and Balance

Not changed.

J. Electrical Load Data

Not changed.

K. References

Refer to the SB Introduction document for definition or explanation of service bulletin content.

Restriction and/or Special Instruction (RSI) C–A275, Revision F

Modification Summary TC601R18078, Revision D–1

Modification Summary TC601R18419, Revision D

Generic Repair Engineering Order (GREO) 601R–27–42–007, Rev B or latest approved version

Generic Repair Engineering Order (GREO) 601R–27–42–008, Rev A, or latest approved revision

Aircraft Maintenance Manual (AMM)

Structural Repair Manual (SRM)

Maintenance Requirement Manual (MRM)

Nondestructive Testing Manual (NDTM)

For Bombardier reference only: PCA 05479 and PCA 06879

L. Other Publications Affected

Aircraft Maintenance Manual (AMM)

Aircraft Illustrated Parts Catalogue (AIPC)

Maintenance Requirement Manual (MRM)

M. Relationship Chart

PART A – Inspection and Serialization of the HSTA Pins, and Trunnions

PRE-SB PART NUMBER	NAME	POST-SB PART NUMBER	NAME
600–92383–5	Lower Pin	601R92309–3 or K601R92308–11 or K601R92308–33 or K601R92308–53	Lower Pin
600–92383–7	Lower Pin	601R92309–3 or K601R92308–13 or K601R92308–33 or K601R92308–53	Lower Pin
601R92309–1 [2]	Lower Pin	601R92309–3 or K601R92308–15 or K601R92308–33 or K601R92308–53	Lower Pin
601R92309–3	Lower Pin	601R92309–3 or K601R92308–33 or K601R92308–53	Lower Pin
NCR# xxxxxx–x [1]	Lower Pin	K601R92308–33 or K601R92308–53	Lower Pin
600–92384–5	Upper Pin	601R92310–3 or K601R92308–5 or K601R92308–35 or K601R92308–55	Upper Pin
600–92384–7	Upper Pin	601R92310–3 or K601R92308–7 or K601R92308–35 or K601R92308–55	Upper Pin
601R92310–1 [2]	Upper Pin	601R92310–3 or K601R92308–9 or K601R92308–35 or K601R92308–55	Upper Pin
601R92310–3	Upper Pin	601R92310–3 or K601R92308–35 or K601R92308–55	Upper Pin

PRE-SB PART NUMBER	NAME	POST-SB PART NUMBER	NAME
NCR# xxxxxx–x [1]	Upper Pin	K601R92308–35 or K601R92308–55	Upper Pin
601R92386–1	Trunnion	601R92386–3 or K601R92308–19 or K601R92308–31 or K601R92308–51	Trunnion
601R92386–3	Trunnion	601R92386–3 or K601R92308–31 or K601R92308–51	Trunnion
NCR# xxxxxx–x [1]	Trunnion	K601R92308–31 or K601R92308–51	Trunnion
[1] P/N NCR# xxxxxx–x Can be any numerical and/or letter combination which identifies a Non-Conformance Part (NCR) [2] Lower pin P/N 601R92309–1PP is an alternative to P/N 601R92309–1 and upper pin P/N 601R92310–1PP is an alternative to P/N 601R92310–1.			

PART B — Inspection of the Attach Holes of the HSTA Pins and Trunnions

PRE-SB PART NUMBER	NAME	POST-SB PART NUMBER	NAME
601R92309–3	Lower Pin	601R92309–3 or K601R92308–33 or K601R92308–53	Lower Pin
K601R92308–11	Lower Pin	601R92309–3 or K601R92308–11 or K601R92308–33 or K601R92308–53	Lower Pin
K601R92308–13	Lower Pin	601R92309–3 or K601R92308–13 or K601R92308–33 or K601R92308–53	Lower Pin
K601R92308–15	Lower Pin	601R92309–3 or K601R92308–15 or K601R92308–33 or K601R92308–53	Lower Pin

PRE-SB PART NUMBER	NAME	POST-SB PART NUMBER	NAME
NCR# xxxxxx–x [1]	Lower Pin	K601R92308–33 or K601R92308–53	Lower Pin
601R92310–3	Upper Pin	601R92310–3 or K601R92308–35 or K601R92308–55	Upper Pin
K601R92308–5	Upper Pin	601R92310–3 or K601R92308–5 or K601R92308–35 or K601R92308–55	Upper Pin
K601R92308–7	Upper Pin	601R92310–3 or K601R92308–7 or K601R92308–35 or K601R92308–55	Upper Pin
K601R92308–9	Upper Pin	601R92310–3 or K601R92308–9 or K601R92308–35 or K601R92308–55	Upper Pin
NCR# xxxxxx–x [1]	Upper Pin	K601R92308–35 or K601R92308–55	Upper Pin
601R92386–3	Trunnion	601R92386–3 or K601R92308–31 or K601R92308–51	Trunnion
K601R92308–19	Trunnion	601R92386–3 or K601R92308–19 or K601R92308–31 or K601R92308–51	Trunnion
NCR# xxxxxx–x [1]	Trunnion	K601R92308–31 or K601R92308–51	Trunnion
[1] P/N NCR# xxxxxx–x Can be any numerical and/or letter combination which identifies a Non-Conformance Part (NCR)			

2. ACCOMPLISHMENT INSTRUCTIONS

PART A – Inspection and Serialization of the HSTA Pins and Trunnions

Reference Information

REFERENCE	DESIGNATION
AMM 12–00–07–861–801	Connect External AC Power
AMM 20–21–00–910–801	Torque procedures for Threaded Fasteners
AMM 24–00–00–910–801	Electrical/Electronic Safety Precautions
AMM 27–40–00–710–802	Operational Test of the Horizontal Stabilizer Trim System
AMM 27–41–00–740–801	Functional Check (Ground Maintenance Test) of the HSTCU
AMM 27–42–01–000–801	Removal of the Horizontal-Stabilizer Trim Actuator (HSTA)
AMM 27–42–01–400–801	Installation of the Horizontal-Stabilizer Trim Actuator (HSTA)
AMM 51–26–00–110–801	Solvent Cleaning
AMM 55–32–05–000–806	Removal of the Middle Upper Fairing
AMM 55–32–05–400–806	Installation of the Middle Upper Fairing
AMM 55–32–05–000–807	Removal of the Middle Lower Fairing
AMM 55–32–05–400–807	Installation of the Middle Lower Fairing
NDTM 51–20–09–PART 1	Visual-Inspection Procedures
SRM 51–10–06	Damage
SRM 51–21–11	Corrosion Prevention Procedures
SRM 51–23–00	Pressure, Environmental, Fuel Tank and Firewall Sealing
SRM 51–25–06	Fluid-Resistant (FR) Epoxy Primer
SRM 51–25–16	Fluid-Resistant (FR) Polyurethane Topcoat

REFERENCE	DESIGNATION
SRM 51–26–00	Cleaning
SRM 51–40–11	How to Prepare Fastener Holes
SRM 51–41–02	Bolts, Screws and Related Items

Tolerance Information

Linear Tolerances		Angular Tolerance
X.XX in. (X.X mm)	X.XXX in. (X.XX mm)	+/–0° 30”
+/– 0.03 in.	+/– 0.010 in.	
+/– 0.8 mm	+/– 0.25 mm	

NOTE: The tolerances above apply to the dimensions given in this service bulletin, except when specified differently.

A. Job Set-Up

NOTE: The steps in the Job Set-Up section of this service bulletin are recommended steps. The steps give a recommendation to get access to the work area. This recommendation is to give a safe work area and to minimize possible damage to surrounding aircraft parts. Alternative steps can be used at the operator discretion.

(1) Obey all the electrical/electronic safety precautions (refer to AMM 24–00–00–910–801).

WARNING: PUT THE SAFETY DEVICES, THE WARNING SIGNS, AND THE WARNING PLACARDS IN POSITION BEFORE YOU START A PROCEDURE ON OR NEAR: FLIGHT CONTROLS FLIGHT CONTROL SURFACES COMPONENTS THAT MOVE. MAKE SURE THAT THERE ARE NO PERSONS OR EQUIPMENT ON OR NEAR THE FLIGHT CONTROL SURFACES. ACCIDENTAL MOVEMENT OF THE FLIGHT CONTROLS CAN CAUSE INJURIES TO PERSONS AND/OR DAMAGE TO EQUIPMENT.

(2) Install the applicable warning placards on the pilot’s and the copilot’s control wheels and the STAB TRIM/MACH TRIM panel.

CAUTION: MAKE SURE THAT THE REAR FUSELAGE SUPPORT IS PUT DIRECTLY BELOW THE RIVET LINE AT FS755.00 (37 INCHES AFT OF THE BAGGAGE COMPARTMENT DOOR). IF THE REAR FUSELAGE SUPPORT IS NOT DIRECTLY BELOW THE RIVET LINE, DAMAGE TO THE AIRCRAFT CAN OCCUR.

(3) Remove the access panels that follow:

PANEL	NAME	REFERENCE
Middle Upper Fairing	Access panel	AMM 55–32–05–000–806
Middle Lower Fairing	Access panel	AMM 55–32–05–000–807

B. Procedure

(1) If it is not possible to complete all the instructions in this service bulletin because of the configuration of the aircraft, speak with a representative of Bombardier in the Customer Response Center at +1–844–272–2720 (1–844–CRC–CRC0) or +1–514–855–8500 or e-mail at thd.crj@aero.bombardier.com for analysis and to get an approved disposition to complete this service bulletin.

NOTE: In the steps and the Figures of this service bulletin, lower pin P/N 601R92309–1PP is an alternative to P/N 601R92309–1 and upper pin P/N 601R92310–1PP is an alternative to P/N 601R92310–1.

Refer to Figure 1 and/or 2.

(2) Remove the HSTA (20), the trunnions (9), and the pins (1) and (13) from the aircraft (refer to AMM 27–42–01–000–801 and the steps that follow).

(3) Record the position of the removed trunnions (9), and the pins (1) and (13).

(4) Discard the cotter pins (2), (12), and (18), the laminated shims (8), the washers (10), the nuts (3), (11), and (17).

(5) Measure the diameter of the bolts (7), (15), and (19) that attach the trunnions (9), and do the steps that follow:

(a) Discard the bolt(s) (7), (15), and/or (19) that have a nominal diameter of 0.375 in. (9.53 mm).

Refer to Figure 1.

(b) For the bolt(s) (7), (15), and/or (19) that have an oversize diameter of 0.390 in. (9.91 mm) or more, do as follows:

1 It is permissible to keep the oversize bolt(s) (7), (15), and/or (19) for a subsequent step.

NOTE: It is possible that the bolt(s) (7), (15), and/or (19) with a different diameter can be necessary to install at the end of this procedure.

2 Make sure that the oversize bolt(s) (7), (15), and (19) are the correct length before the installation of the trunnions (9) in a subsequent step (refer to Table 5).

Refer to Figure 1 and/or 2.

(6) Measure the diameter of the bolts (6) and (14) that attach the upper pins (1) and the lower pins (13), and do the steps that follow:

Refer to Figure 2.

(a) For the bolt(s) (6) and/or (14) that have a nominal diameter of 0.189 in. (4.80 mm) do as follows:

1 It is permissible to keep the nominal diameter bolt(s) (6) and/or (14) for a subsequent step.

2 It is permissible to keep the washer(s) (4) and/or (16) for a subsequent step.

Refer to Figure 1.

(b) For the bolt(s) (6) and/or (14) that have an oversize diameter of 0.205 in. (5.21 mm) or more, do as follows:

1 It is permissible to keep the oversize diameter bolt(s) (6) and/or (14) for a subsequent step.

NOTE: It is possible that the bolt(s) (6) and/or (14) with a different diameter can be necessary to install at the end of this procedure.

2 Make sure that the oversize bolt(s) (6) and (14) are the correct length before the installation of the upper pins (1) and the lower pins (13) in a subsequent step (refer to Table 7 and Table 9).

3 Discard the washer(s) (4) and/or (16).

Refer to Figure 1 and/or 2.

(7) For the trunnions (9), do the procedure that follows.

NOTE: This procedure is applicable to all four trunnions (9). The procedure that follows is written for only one trunnion (9).

(a) Clean the aircraft structure with solvent where the trunnion was installed (refer to SRM 51–26–00).

(b) Measure the diameter of the two attach holes in the aircraft structure.

TABLE 1 – ATTACH HOLE DIMENSIONS – AIRCRAFT STRUCTURE AND TRUNNION			
DIAMETER OF THE ATTACH HOLES IN THE AIRCRAFT STRUCTURE	**DIAMETER OF THE ATTACH HOLES IN THE TRUNNION**	**HOLE CONDITION**	**NCR CONDITION**
0.375 to 0.380 in. (9.53 to 9.65 mm)	0.375 to 0.380 in. (9.53 to 9.65 mm)	Nominal	No
0.391 to 0.396 in. (9.93 to 10.06 mm)	0.391 to 0.396 in. (9.93 to 10.06 mm)	1st oversize	Yes
0.406 to 0.411 in. (10.31 to 10.44 mm)	0.406 to 0.411 in. (10.31 to 10.44 mm)	2nd oversize	Yes
0.438 to 0.443 in. (11.13 to 11.25 mm)	0.438 to 0.443 in. (11.13 to 11.25 mm)	Next size	Yes
0.453 to 0.458 in. (11.51 to 11.63 mm)	0.453 to 0.458 in. (11.51 to 11.63 mm)	1st oversize	Yes
0.469 to 0.474 in. (11.91 to 12.04 mm)	0.469 to 0.474 in. (11.91 to 12.04 mm)	2nd oversize	Yes
0.500 to 0.505 in. (12.70 to 12.83 mm)	0.500 to 0.505 in. (12.70 to 12.83 mm)	Next size	Yes

(8) If the diameter of the attach hole(s) in the aircraft structure do not agree with Table 1, speak with a representative of the Bombardier Customer Response Center at +1–844–272–2720 (1–844–CRC–CRC0) or +1–514–855–8500 or e-mail at thd.crj@aero.bombardier.com to get an approved disposition.

(9) If the diameter of the attach holes in the aircraft structure are a nominal dimension of 0.375 to 0.380 in. (9.53 to 9.65 mm) (refer to Table 1), do as follows:

(a) Measure the diameter of the attach holes in the trunnion (9).

(b) If the diameter of the attach hole(s) in the trunnion (9) is/are more than 0.380 in. (9.65 mm), do as follows:

1 Discard the trunnion (9).

2 Get a trunnion (9) P/N 601R92386–3 or alternative.

NOTE: Trunnion P/N 601R92386–1 is a permitted alternative if trunnion P/N 601R92386–3 is not available.

NOTE: The identification and the serialization procedure is not necessary because the trunnion P/N 601R92386–3 is identified and serialized.

3 Increase the diameter of the attach holes in the trunnion (9) to a diameter of 0.375 to 0.380 in. (9.53 to 9.65 mm) (refer to Table 1).

4 Remove the burrs and the sharp edges from the trunnion (9).

5 Apply a chemical conversion coating on the bare metal surfaces of the trunnion (9) (refer to SRM 51–21–11).

(c) If the diameter of the attach hole(s) in the trunnion (9) is/are a nominal dimension of 0.375 to 0.380 in. (9.53 to 9.65 mm), do as follows:

1 Do a detailed visual inspection of the trunnion (9) for gouge(s), scratch(es), and corrosion (refer to NDTM 51–20–09 PART 1).

2 If gouge(s), and/or scratch(es), and/or corrosion is/are found on the trunnion (9), do revision B or the latest approved revision of GREO 601R–27–42–007.

3 If the trunnion (9) cannot be repaired with revision B or the latest approved revision of GREO 601R–27–42–007, do as follows:

a Discard the trunnion (9).

b Get a trunnion (9) P/N 601R92386–3 or alternative.

NOTE: Trunnion P/N 601R92386–1 is a permitted alternative if trunnion P/N 601R92386–3 is not available.

NOTE: The identification and serialization procedure is not necessary because the trunnion P/N 601R92386–3 is identified and serialized.

c Increase the diameter of the attach holes in the trunnion (9) to a diameter of 0.375 to 0.380 in. (9.53 to 9.65 mm) (refer to Table 1).

d Remove the burrs and the sharp edges from the trunnion (9).

e Apply a chemical conversion coating on the bare metal surfaces of the trunnion (9) (refer to SRM 51–21–11).

(d) If the trunnion (9) is replaced with P/N 601R92386–3, record the serial number in the applicable logbooks.

(e) If the trunnion (9) is replaced with the trunnion P/N 601R92386–1, refer to step 2.B.(24) to change the identification to K601R92308–19 and to add a serial number.

(f) If the trunnion (9) is repaired with revision B or the latest approved revision of GREO 601R–27–42–007, or if no gouge(s), and/or scratch(es), and/or corrosion is/are found, do as follows:

1 For the trunnion (9) P/N 601R92386–1, refer to step 2.B.(24) to change the identification and to add a serial number.

2 For the trunnion (9) P/N 601R92386–3, the identification and serialization procedure is not necessary because the trunnion is identified and serialized.

(10) If the diameter of the attach hole(s) in the aircraft structure is/are an oversized dimension of more than 0.380 in. (9.65 mm) and equal to or less than 0.505 in. (12.83 mm) (refer to Table 1), do as follows:

(a) Measure the diameter of the related attach holes in the trunnion (9).

(b) If the diameters of the attach holes in the trunnion (9) agree with the diameter of the related attach holes in the aircraft structure (refer to Table 1), do as follows:

1 Make sure that the edge distance of the attach holes in the trunnion (9) are a minimum of 0.9D.

2 If the edge distance of the attach hole(s) in the trunnion (9) is/are less than 0.9D, speak with a representative of the Bombardier Customer Response Center at +1–844–272–2720 (1–844–CRC–CRC0) or +1–514–855–8500 or e-mail at thd.crj@aero.bombardier.com to get an approved disposition.

3 Do a detailed visual inspection of the trunnion (9) for gouge(s), scratch(es) and corrosion (refer to NDTM 51–20–09 PART 1).

4 If gouge(s), and/or scratch(es), and/or corrosion is/are found, do revision B or the latest approved revision of GREO 601R–27–42–007.

5 If the trunnion (9) cannot be repaired with revision B or the latest approved revision of GREO 601R–27–42–007, go to step 2.B.(11) for the replacement of the trunnion (9).

(c) If the diameter of the attach hole(s) in the trunnion (9) do not agree with the diameter of the related attach hole(s) in the aircraft structure (refer to Table 1), do as follows:

1 If the diameter of the related attach hole(s) in the trunnion (9) is/are larger than the related attach hole(s) in the aircraft structure, do as follows:

a Discard the trunnion (9).

b Go to step 2.B.(11) for the replacement of the trunnion (9).

2 If the diameter of the attach hole(s) in the trunnion (9) is/are smaller than the related attach hole(s) in the aircraft structure, do as follows:

a Increase the diameter of the attach hole(s) in the trunnion (9) to agree with the related NCR condition in the aircraft structure (refer to Table 1).

b Make sure that the edge distance for the attach holes in the trunnion (9) are a minimum of 0.9D.

c If the edge distance for the attach hole(s) in the trunnion (9) is/are less than 0.9D, speak with a representative of the Bombardier Customer Response Center at +1–844–272–2720 (1–844–CRC–CRC0) or +1–514–855–8500 or e-mail at thd.crj@aero.bombardier.com to get an approved disposition.

d Remove the burrs and the sharp edges from the trunnion (9).

e Apply a chemical conversion coating on the bare metal surfaces of the trunnion (9) (refer to SRM 51–21–11).

f Do a detailed visual inspection of the trunnion (9) for gouge(s), scratch(es), and corrosion (refer to NDTM 51–20–09 PART 1).

g If gouge(s), and/or scratch(es) and/or corrosion is/are found, do revision B, or the latest approved revision of GREO 601R–27–42–007.

h If the trunnion (9) cannot be repaired with revision B or the latest approved revision of GREO 601R–27–42–007, go to step 2.B.(11) for the replacement of the trunnion (9).

(d) If the trunnion (9) is repaired with revision B, or the latest approved revision of GREO 601R–27–42–007, or if no gouge(s), and/or scratch(es), and/or corrosion is/are found, go to step 2.B.(24) to change the identification and to add a serial number.

(11) To replace the trunnion (9) that has an oversized attach hole(s) (NCR condition) in the aircraft structure of more than 0.380 in. (9.65 mm) and equal to or less than 0.505 in. (12.83 mm) do as follows:

(a) Replace the trunnion (9) where there is a NCR condition with trunnion P/N K601R92308–51.

NOTE: The identification and the serialization procedure is not necessary as the trunnion P/N K601R92308–51 is identified and serialized.

(b) Align the center hole of the trunnion (9) with the center hole of the aircraft structure and attach temporarily.

(c) As necessary, make marks on the trunnion (9) to find the correct center points of the aircraft structure attach holes.

(d) Remove the temporarily attached trunnion (9) from the aircraft structure.

(e) Make sure that the edge distance for the attach holes in the trunnion (9) are a minimum of 0.9D.

(f) If the edge distance for the attach hole(s) in the trunnion (9) is/are less than 0.9D, speak with a representative of the Bombardier Customer Response Center at +1–844–272–2720 (1–844–CRC–CRC0) or +1–514–855–8500 or e-mail at thd.crj@aero.bombardier.com to get an approved disposition.

(g) Drill the center point of the attach holes in the trunnion (9) to a diameter of .098 in. (2.49 mm).

(h) Increase the diameter of the attach holes in the trunnion (9) to agree with the related NCR condition in the aircraft structure (refer to Table 1).

(i) Remove the burrs and sharp edges from the trunnion (9).

(j) Apply a chemical conversion coating on the bare metal surfaces of the trunnion (9) (refer to SRM 51–21–11).

(k) Record the serial number of the trunnion (9) in the applicable logbooks.

(12) For the upper pins (1), do the procedure that follows.

NOTE: This procedure is applicable to the two upper pins (1). The procedure that follows is written for only one upper pin (1).

(a) Clean the aircraft structure with solvent where the pin is attached (refer to SRM 51–26–00).

(b) Measure the diameter of the two attach holes in the aircraft structure.

TABLE 2 – ATTACH HOLE DIMENSIONS – AIRCRAFT STRUCTURE AND UPPER PIN			
DIAMETER OF THE ATTACH HOLES IN THE AIRCRAFT STRUCTURE	**DIAMETER OF THE ATTACH HOLES IN THE UPPER PIN**	**HOLE CONDITION**	**NCR CONDITION**
0.189 to 0.195 in (4.80 to 4.95 mm)	0.215 to 0.225 in (5.46 to 5.72 mm)	Nominal	No
0.205 to 0.210 in (5.21 to 5.33 mm)	0.225 to 0.235 in (5.72 to 5.97 mm)	1st oversize	Yes
0.221 to 0.226 in (5.61 to 5.74 mm)	0.239 to 0.249 in (6.07 to 6.32 mm)	2nd oversize	Yes
0.250 to 0.255 in (6.35 to 6.48 mm)	0.270 to 0.280 in (6.86 to 7.11 mm)	Next size	Yes
0.265 to 0.270 in (6.73 to 6.86 mm)	0.284 to 0.294 in (7.21 to 7.47 mm)	1st oversize	Yes
0.281 to 0.286 in (7.14 to 7.26 mm)	0.299 to 0.309 in (7.59 to 7.85 mm)	2nd oversize	Yes

(13) If the diameter of the attach hole(s) in the aircraft structure do not agree with the diameters in Table 2, speak with a representative of the Bombardier Customer Response Center at +1–844–272–2720 (1–844–CRC–CRC0) or +1–514–855–8500 or e-mail at thd.crj@aero.bombardier.com to get an approved disposition.

(14) If the diameter of the attach holes in the aircraft structure are a nominal dimension of 0.189 to 0.195 in. (4.80 to 4.95 mm) (refer to Table 2), do as follows:

(a) Measure the diameter of the attach hole(s) in the upper pin (1).

(b) If the diameter of the attach hole(s) in the upper pin (1) is/are more than 0.225 in. (5.72 mm) (refer to Table 2), do as follows:

1 Discard the upper pin (1).

2 Get an upper pin (1) P/N 601R92310–3 or alternative.

NOTE: Upper pin P/N 600–92384–5, or P/N 600–92384–7, or P/N 601R92310–1 are permitted alternatives if upper pin P/N 601R92310–3 is not available.

NOTE: If the upper pin (1) is replaced with P/N 601R92310–3, the identification and the serialization procedure is not necessary because the new part is identified and serialized.

(c) If the diameter of the attach holes in the upper pin (1) are a nominal dimension of 0.215 to 0.225 in. (5.46 to 5.72 mm) (refer to Table 2), do as follows:

1 Do a detailed visual inspection of the upper pin (1) for gouge(s), scratch(es), and corrosion (refer to NDTM 51–20–09 PART 1).

2 If gouge(s), and/or scratch(es), and/or corrosion is/are found, do revision A, or the latest approved revision of GREO 601R–27–42–008.

3 If the upper pin (1) cannot be repaired with revision A or the latest approved revision of GREO 601R–27–42–008, do as follows:

a Discard the upper pin (1).

b Get an upper pin (1) P/N 601R92310–3 or alternative.

NOTE: Upper pin P/N 600–92384–5 or 600–92384–7 or 601R92310–1 are permitted alternatives if P/N 601R92310–3 is not available.

NOTE: If the upper pin (1) is replaced with an upper pin P/N 601R92310–3, the identification and the serialization procedure is not necessary because the new part is identified and serialized.

(d) If the upper pin (1) is replaced with P/N 601R92310–3, record the serial number in the applicable logbooks.

(e) If the upper pin (1) is replaced with P/N 600–92384–5 or 600–92384–7 or 601R92310–1, go to step 2.B.(24) for the identification and the serialization procedure.

(f) If the upper pin (1) is repaired with revision A or the latest approved revision of GREO 601R–27–42–008, or if no gouge(s), and/or scratch(es), and/or corrosion is/are found do as follows:

1 For the upper pin (1) P/N 600–92384–5, or 600–92384–7, or 601R92310–1, refer to step 2.B.(24) to change the identification and to add a serial number.

2 For the upper pin (1) P/N 601R92310–3, the identification and serialization procedure is not necessary because the pin is identified and serialized.

(15) If the diameter of the attach hole(s) in the aircraft structure is/are an oversized dimension of more than 0.195 in. (4.95 mm) and equal to or less than 0.286 in. (7.26 mm) (refer to Table 2), do as follows:

(a) Measure the diameter of the attach holes in the upper pin (1).

(b) If the diameters of the attach holes in the upper pin (1) agree with the diameter of the related attach holes in the aircraft structure (refer to Table 2), do as follows:

1 Make sure that the edge distance for the attach holes in the upper pin (1) are a minimum of 0.9D.

2 If the edge distance for the attach hole(s) in the upper pin (1) is/are less than 0.9D, speak with a representative of the Bombardier Customer Response Center at +1–844–272–2720 (1–844–CRC–CRC0) or +1–514–855–8500 or e-mail at thd.crj@aero.bombardier.com to get an approved disposition.

3 Do a detailed visual inspection of the upper pin (1) for gouge(s), scratch(es), and corrosion (refer to NDTM 51–20–09 PART 1).

4 If gouge(s), and/or scratch(es) and/or corrosion is/are found, do revision A or the latest approved revision of GREO 601R–27–42–008.

5 If the upper pin (1) cannot be repaired with revision A or the latest approved revision of GREO 601R–27–42–008, go to step 2.B.(16) for the replacement of the upper pin (1).

(c) If the diameter of the attach hole(s) in the upper pin (1) do not agree with the diameter of the related attach hole(s) in the aircraft structure (refer to Table 2), do as follows:

1 If the diameter of the related attach hole(s) in the upper pin (1) is/are larger than the permitted diameter for the related attach hole(s) in the aircraft structure (refer to Table 2), do as follows:

a Discard the upper pin (1).

b Go to step 2.B.(16) for the replacement of the upper pin (1).

2 If the diameter of the attach hole(s) in the upper pin (1) is/are smaller than the related attach hole(s) in the aircraft structure (refer to Table 2), do as follows:

a Gradually drill or ream the related attach hole(s) of the upper pin (1) until the diameter is/are a minimum of 0.015 in. (0.39 mm) less than the specified hole dimension in Table 2 (refer to SRM 51–40–11).

CAUTION: BE CAREFUL WHEN YOU DRILL OR REAM THE ATTACH HOLE(S) AS THE MATERIAL IS MADE FROM HIGH STRENGTH STEEL.

b Make sure to use lubricant when you drill or ream the upper pin (1) (refer to SRM 51–40–11).

c Use a reamer to remove the last minimum 0.015 in. (0.39 mm) of material in the related attach hole(s) of the upper pin (1) to get the specified hole dimension in Table 2 (refer to SRM 51–40–11).

NOTE: The use of a reamer is the only permitted tool to get the last specified hole dimension.

CAUTION: BE CAREFUL WHEN YOU REAM THE ATTACH HOLE(S) AS THE MATERIAL IS MADE FROM HIGH STRENGTH STEEL.

d Make sure to use lubricant when you ream the upper pin (1) (refer to SRM 51–40–11).

e Make sure that the edge distance for the attach holes in the upper pin (1) are a minimum of 0.9D.

f If the edge distance for the attach hole(s) in the upper pin (1) is/are less than 0.9D, speak with a representative of the Bombardier Customer Response Center at +1–844–272–2720 (1–844–CRC–CRC0) or +1–514–855–8500 or e-mail at thd.crj@aero.bombardier.com to get an approved disposition.

g Remove the burrs and sharp edges from the upper pin (1).

h Apply fluid resistant primer on the bare metal surfaces of the upper pin (1) (refer to SRM 51–25–06).

i Do a detailed visual inspection of the upper pin (1) for gouge(s), scratch(es), and corrosion (refer to NDTM 51–20–09 PART 1).

j If gouge(s), and/or scratch(es) and/or corrosion is/are found, do revision A or the latest approved revision of GREO 601R–27–42–008.

k If the upper pin (1) cannot be repaired with revision A or the latest approved revision of GREO 601R–27–42–008, go to step 2.B.(16) for the replacement of the upper pin (1).

(d) If the upper pin (1) is repaired with revision A or the latest approved revision of GREO 601R–27–42–008, or if no gouge(s), and/or scratch(es), and/or corrosion is/are found, go to step 2.B.(24) to change the identification and to add a serial number.

(16) To replace the upper pin (1) that has an oversized attach hole(s) (NCR condition) in the aircraft structure of more than 0.195 in. (4.80 mm) and equal to or less than 0.286 in. (7.26 mm), do as follows:

(a) Replace an upper pin (1) where there is a NCR condition with upper pin P/N K601R92308–55.

NOTE: The identification and the serialization procedure is not necessary because the upper pin P/N K601R92308–55 is identified and serialized.

(b) Align the upper pin (1) with the center hole of the aircraft structure and attach temporarily.

(c) As necessary, make marks on the upper pin (1) to find the correct center points of the aircraft structure attach holes.

(d) Remove the temporarily attached upper pin (1) from the aircraft structure.

(e) Make sure that the edge distance for the attach holes in the upper pin (1) are a minimum of 0.9D.

(f) If the edge distance for the attach hole(s) in the upper pin (1) are less than 0.9D, speak with a representative of the Bombardier Customer Response Center at +1–844–272–2720 (1–844–CRC–CRC0) or+1–514–855–8500 or e-mail at thd.crj@aero.bombardier.com to get an approved disposition.

(g) Drill the center points of the attach holes in the upper pin (1) to a diameter of .098 in. (2.49 mm) (refer to SRM 51–40–11).

CAUTION: BE CAREFUL WHEN YOU DRILL THE ATTACH HOLES AS THE MATERIAL IS MADE FROM HIGH STRENGTH STEEL.

(h) Make sure to use lubricant when you drill or ream the upper pin (1) (refer to SRM 51–40–11).

(i) Gradually drill or ream the attach holes of the upper pin (1) until the diameters are a minimum of 0.015 in. (0.39 mm) less than the specified hole dimension in Table 2 (refer to SRM 51–40–11).

CAUTION: BE CAREFUL WHEN YOU REAM THE ATTACH HOLES AS THE MATERIAL IS MADE FROM HIGH STRENGTH STEEL.

(j) Make sure to use lubricant when you drill or ream the upper pin (1) (refer to SRM 51–40–11).

(k) Use a reamer to remove the last minimum 0.015 in. (0.39 mm) of material in the attach holes of the upper pin (1) to get the last specified hole dimension in Table 2. (refer to SRM 51–40–11).

NOTE: The use of a reamer is the only permitted tool to get the last specified hole dimension.

CAUTION: BE CAREFUL WHEN YOU REAM THE ATTACH HOLES AS THE MATERIAL IS MADE FROM HIGH STRENGTH STEEL.

(l) Make sure to use lubricant when you ream the upper pin (1) (refer to SRM 51–40–11).

(m) Remove the burrs and sharp edges from the upper pin (1).

(n) Apply fluid resistant primer on the bare metal surfaces of the upper pin (1) (refer to SRM 51–25–06).

(o) Record the serial number of the upper pin (1) in the applicable logbooks.

Refer to Figure 1.

(17) Do a visual inspection of the four oversize (NCR condition) spacers (5) for damage (refer to SRM 51–10–06 and to NDTM 51–20–09 PART 1).

(18) If damage to the oversize (NCR condition) spacer(s) (5) is/are found, replace the spacer(s) (5) as follows:

(a) For a spacer bolt diameter of 0.205 to 0.221 in. (5.21 to 5.61 mm) replace spacer (5) with P/N NAS42DD6–25 and do as follows:

1 Increase the diameter of the hole in the spacer(s) (5) to have a maximum clearance of 0.010 in. (0.25 mm) with the related bolt (6) diameter (refer to Table 7).

2 Remove burrs and sharp edges from the spacer(s) (5).

3 Apply a chemical conversion coating on the bare metal surfaces of the spacer(s) (5) (refer to SRM 51–21–11).

4 Apply one layer of fluid-resistant primer on the bare metal surfaces of the spacer(s) (5) (refer to SRM 51–25–06).

(b) For a spacer bolt diameter of 0.250 to 0.281 in. (6.35 to 7.14 mm) replace spacer (5) with P/N NAS42DD8–25 and do as follows:

1 Increase the diameter of the hole in the spacer(s) (5) to have a maximum clearance of 0.010 in. (0.25 mm) with the related bolt (6) diameter (refer to Table 7).

2 Remove burrs and sharp edges from the spacer(s) (5).

3 Apply a chemical conversion coating on the bare metal surfaces of the spacer(s) (5) (refer to SRM 51–21–11).

4 Apply one layer of fluid-resistant primer on the bare metal surfaces of the spacer(s) (5) (refer to SRM 51–25–06).

(19) For the lower pins (13), do the procedure that follows.

NOTE: This procedure is applicable to the two lower pins (13). The procedure that follows is written for only one lower pin (13).

(a) Clean the aircraft structure with solvent where the lower pin (13) is attached (refer to SRM 51–26–00).

(b) Measure the diameter of the two attach holes in the aircraft structure.

TABLE 3 – ATTACH HOLE DIMENSIONS – AIRCRAFT STRUCTURE AND LOWER PIN

DIAMETER OF THE ATTACH HOLES IN THE AIRCRAFT STRUCTURE	DIAMETER OF THE ATTACH HOLES IN THE LOWER PIN	HOLE CONDITION	NCR CONDITION
0.200 to 0.210 in. (5.08 to 5.33 mm)	0.190 to 0.200 in. (4.83 to 5.08 mm)	Nominal	No
0.215 to 0.225 in. (5.46 to 5.72 mm)	0.205 to 0.215 in. (5.21 to 5.46 mm)	1st oversize	Yes
0.231 to 0.241 in. (5.87 to 6.12 mm)	0.221 to 0.231 in. (5.61 to 5.87 mm)	2nd oversize	Yes
0.260 to 0.270 in. (6.60 to 6.86 mm)	0.250 to 0.260 in. (6.35 to 6.60 mm)	Next size	Yes

TABLE 3 – ATTACH HOLE DIMENSIONS – AIRCRAFT STRUCTURE AND LOWER PIN			
DIAMETER OF THE ATTACH HOLES IN THE AIRCRAFT STRUCTURE	**DIAMETER OF THE ATTACH HOLES IN THE LOWER PIN**	**HOLE CONDITION**	**NCR CONDITION**
0.275 to 0.285 in. (6.99 to 7.24 mm)	0.265 to 0.275 in. (6.73 to 6.99 mm)	1st oversize	Yes
0.291 to 0.301 in. (7.39 to 7.65 mm)	0.281 to 0.291 in. (7.14 to 7.39 mm)	2nd oversize	Yes

(20) If the diameter of the attach hole(s) in the aircraft structure do not agree with the diameters in Table 3, speak with a representative of the Bombardier Customer Response Center at +1–844–272–2720 (1–844–CRC–CRC0) or +1–514–855–8500 or e-mail at thd.crj@aero.bombardier.com to get an approved disposition.

(21) If the diameter of the attach hole(s) in the aircraft structure is/are a nominal dimension of 0.200 to 0.210 in. (5.08 to 5.33 mm) (refer to Table 3), do as follows:

(a) Measure the diameter of the attach holes in the lower pin (13).

(b) If the diameter of the attach hole(s) in the lower pin (13) is/are more than 0.200 in. (5.08 mm) (refer to Table 3), do as follows:

1 Discard the lower pin (13).

2 Get a lower pin (13) P/N 601R92309–3 or alternative.

NOTE: Lower pin P/N 600–92383–5 or 600–92383–7 or 601R92309–1 are permitted alternatives if P/N 601R92309–3 is not available.

NOTE: If the lower pin (13) is replaced with P/N 601R92309–3, the identification and serialization procedure is not necessary because the new part is identified and serialized.

(c) If the diameter of the attach holes in the lower pin (13) are a nominal dimension of 0.190 to 0.200 in. (4.83 to 5.08 mm) (refer to Table 3), do as follows:

1 Do a detailed visual inspection of the lower pin (13) for gouge(s), scratch(es), and corrosion (refer to NDTM 51–20–09 PART 1).

2 If gouge(s), and/or scratch(es), and/or corrosion is/are found, do revision A or the latest approved revision of GREO 601R–27–42–008.

3 If the lower pin (13) cannot be repaired with revision A or the latest approved revision of GREO 601R–27–42–008, do as follows:

a Discard the lower pin (13).

b Get a lower pin (13) P/N 601R92309–3 or alternative.

NOTE: Lower pin P/N 600–92383–5 or 600–92383–7 or 601R92309–1 are permitted alternatives if P/N 601R92309–3 is not available.

NOTE: If the lower pin (13) is replaced with lower pin P/N 601R92309–3, the identification and serialization procedure is not necessary because the new part is identified and serialized.

(d) If the lower pin (13) is replaced with P/N 601R92309–3, record the serial number in the applicable logbooks.

(e) If the lower pin (13) is replaced with P/N 600–92383–5 or 600–92383–7 or 601R92309–1, go to step 2.B.(24) for the identification and the serialization procedure.

(f) If the lower pin (13) is repaired with revision A or the latest approved revision of GREO 601R–27–42–008, or if no gouge(s), and/or scratch(es), and/or corrosion is/are found do as follows:

1 For the lower pin (13) P/N 600–92383–5, or 600–92383–7, or 601R92309–1, refer to step 2.B.(24) to change the identification and to add a serial number.

2 For the lower pin (13) P/N 601R92309–3, the identification and serialization procedure is not necessary because the pin is identified and serialized.

(22) If the diameter of the attach hole(s) in the aircraft structure is/are an oversized dimension of more than 0.215 in. (5.46 mm) and equal to or less than 0.301 in. (7.65 mm) (refer to Table 3), do as follows:

(a) Measure the diameter of the attach holes in the lower pin (13).

(b) If the diameter of the related attach holes in the lower pin (13) agree with the diameter of the related attach holes in the aircraft structure (refer to Table 3), do as follows:

1 Make sure that the edge distance for the attach holes in the lower pin (13) are a minimum of 0.9D.

2 If the edge distance for the attach holes in the lower pin (13) is/are less than 0.9D, speak with a representative of the Bombardier Customer Response Center at +1–844–272–2720 (1–844–CRC–CRC0) or +1–514–855–8500 or e-mail at thd.crj@aero.bombardier.com to get an approved disposition.

3 Do a visual inspection of the lower pin (13) for gouge(s), scratch(es), and corrosion (refer to NDTM 51–20–09 PART 1).

4 If gouge(s), and/or scratch(es) and/or corrosion is/are found, do revision A or the latest approved revision of GREO 601R–27–42–008.

5 If the lower pin (13) cannot be repaired with revision A or the latest approved revision of GREO 601R–27–42–008, go to step 2.B.(23) for the replacement of the lower pin (13).

(c) If the diameter of the attach hole(s) in the lower pin (13) do not agree with the diameter of the related attach hole(s) in the aircraft structure (refer to Table 3), do as follows:

1 If the diameter of the attach hole(s) in the lower pin (13) is/are larger than the related attach hole(s) in the aircraft structure (refer to Table 3), do as follows:

a Discard the lower pin (13).

b Go to step 2 B (23) for the replacement of the lower pin (13).

2 If the diameter of the attach hole(s) in the lower pin (13) is/are smaller than the permitted diameter to the related attach hole(s) in the aircraft structure (refer to Table 3), do as follows:

a Gradually drill or ream the related attach hole(s) of the lower pin (13) until the diameter is/are a minimum of 0.015 in. (0.39 mm) less than the specified hole dimension in Table 3 (refer to SRM 51–40–11).

CAUTION: BE CAREFUL WHEN YOU DRILL OR REAM THE ATTACH HOLE(S) AS THE MATERIAL IS MADE FROM HIGH STRENGTH STEEL.

b Make sure to use lubricant when you drill or ream the lower pin (13) (refer to SRM 51–40–11).

c Use a reamer to remove the last minimum 0.015 in. (0.39 mm) of material in the related attach hole(s) of the lower pin (13) to get the specified hole dimension in Table 3. (refer to SRM 51–40–11).

NOTE: The use of a reamer is the only permitted tool to get the last specified hole dimension.

CAUTION: BE CAREFUL WHEN YOU REAM THE ATTACH HOLE(S) AS THE MATERIAL IS MADE FROM HIGH STRENGTH STEEL.

d Make sure to use lubricant when you ream the lower pin (13) (refer to SRM 51–40–11).

e Make sure that the edge distance for the attach holes in the lower pin (13) are a minimum of 0.9D.

f If the edge distance of the attach hole(s) in the lower pin (13) is/are less than 0.9D, speak with a representative of the Bombardier Customer Response Center at +1–844–272–2720 (1–844–CRC–CRC0) or +1–514–855–8500 or e-mail at thd.crj@aero.bombardier.com to get an approved disposition.

g If necessary, do a countersink in the attach holes on the outboard side of the lower pin (13) to get the correct installation of the bolt (refer to SRM 51–41–02).

CAUTION: BE CAREFUL WHEN YOU DO A COUNTERSINK IN THE ATTACH HOLE(S) AS THE MATERIAL IS MADE FROM HIGH STRENGTH STEEL.

h Make sure to use lubricant when you countersink the lower pin (13) (refer to SRM 51–40–11).

i Remove the burrs and sharp edges from the lower pin (13).

j Apply fluid resistant primer on the bare metal surfaces of the lower pin (13) (refer to SRM 51–25–06).

k Do a detailed visual inspection of the lower pin (13) for gouge(s), scratch(es), and corrosion (refer to NDTM 51–20–09 PART 1).

l If gouge(s), and/or scratch(es) and/or corrosion is/are found, do revision A or the latest approved revision of GREO 601R–27–42–008.

m If the lower pin (13) cannot be repaired with revision A or the latest approved revision of GREO 601R–27–42–008, go to step 2.B.(23) for the replacement.

(d) If lower pin (13) is repaired with revision A or the latest approved revision of GREO 601R–27–42–008, or if no gouge(s), and/or scratch(es), and/or corrosion is/are found, go to step 2.B.(24) to change the identification and to add a serial number.

(23) To replace the lower pin (13) that has an oversized attach hole(s) (NCR condition) in the aircraft structure of more than 0.215 in. (5.46 mm) and equal to or less than 0.301 in. (7.65 mm) (refer to Table 3), do as follows:

(a) Replace a lower pin (13) where there is a NCR condition with P/N K601R92308–53.

NOTE: The identification and serialization procedure is not necessary because the lower pin P/N K601R92308–53 is identified and serialized.

(b) Align the lower pin (13) with the center hole of the aircraft structure and attach temporarily.

(c) As necessary, make marks on the lower pin (13) to find the correct center points of the aircraft structure attach holes.

(d) Remove the temporarily attached lower pin (13) from the aircraft structure.

(e) Make sure that the edge distance for the two attach holes in the lower pin (13) are a minimum of 0.9D.

(f) If the edge distance for the attach hole(s) in the lower pin (13) are less than 0.9D, speak with a representative of the Bombardier Customer Response Center at +1–844–272–2720 (1–844–CRC–CRC0) or +1–514–855–8500 or e-mail at thd.crj@aero.bombardier.com to get an approved disposition.

(g) Drill the center points of the two attach holes in the lower pin (13) to a diameter of .098 in. (2.49 mm) (refer to SRM 51–40–11).

CAUTION: BE CAREFUL WHEN YOU DRILL THE ATTACH HOLES AS THE MATERIAL IS MADE FROM HIGH STRENGTH STEEL.

(h) Make sure to use lubricant when you drill or ream the lower pin (13) (refer to SRM 51–40–11).

(i) Gradually drill or ream the two attach holes of the lower pin (13) until the diameters are a minimum of 0.015 in. (0.39 mm) less than the specified hole dimensions in Table 3 (refer to SRM 51–40–11).

CAUTION: BE CAREFUL WHEN YOU DRILL OR REAM THE ATTACH HOLES AS THE MATERIAL IS MADE FROM HIGH STRENGTH STEEL.

(j) Make sure to use lubricant when you drill or ream the lower pin (13) (refer to SRM 51–40–11).

(k) Use a reamer to remove the last minimum 0.015 in. (0.39 mm) of material in the attach holes of the lower pin (13) to get the last specified hole dimension in Table 3. (refer to SRM 51–40–11).

NOTE: The use of a reamer is the only permitted tool to get the last specified hole dimension.

CAUTION: BE CAREFUL WHEN YOU REAM THE ATTACH HOLES AS THE MATERIAL IS MADE FROM HIGH STRENGTH STEEL.

(l) Make sure to use lubricant when you ream the lower pin (13) (refer to SRM 51–40–11).

(m) Do a countersink in the attach holes on the outboard side of the lower pin (13) to get the correct installation of the bolt (14) (refer to SRM 51–41–02).

CAUTION: BE CAREFUL WHEN YOU DO A COUNTERSINK IN THE ATTACH HOLES AS THE MATERIAL IS MADE FROM HIGH STRENGTH STEEL.

(n) Make sure to use lubricant when you countersink the lower pin (13) (refer to SRM 51–40–11).

(o) Remove the burrs and sharp edges from the lower pin (13).

(p) Apply fluid resistant primer on the bare metal surfaces of the lower pin (13). (refer to SRM 51–25–06).

(q) Record the serial number of the lower pin (13) in the applicable logbooks.

Refer to Figure 3.

(24) Change the identification of the trunnions (9), the upper pins (1) and the lower pins (13) that are not damaged and add a serial number as follows:

NOTE: It is permitted to use this step to change the identification of the spare parts.

NOTE: If trunnions P/N 601R92386–3, or P/N K601R92308–51, lower pins P/N 601R92309–3 or P/N K601R92308–53, and upper pins P/N 601R92310–3 or P/N K601R92308–55 are used to replace the defective parts, it is not necessary to do this step.

PART NAME	PART NUMBER (PRE-MOD)	PART NUMBER WITHOUT NCR CONDITION (POST-MOD)	PART NUMBER WITH NCR CONDITION (POST-MOD)	SERVICE SERIAL NUMBER
Upper pin	600–92384–5	K601R92308–5	K601R92308–35 or K601R92308–55 [2]	SS/N RJ/XXXYYYYY [3]
Upper pin	600–92384–7	K601R92308–7	K601R92308–35 or K601R92308–55 [2]	SS/N RJ/XXXYYYYY [3]
Upper pin	601R92310–1 [4]	K601R92308–9	K601R92308–35 or K601R92308–55 [2]	SS/N RJ/XXXYYYYY [3]
Upper pin	601R92310–3	601R92310–3	K601R92308–35 or K601R92308–55 [2]	SS/N RJ/XXXYYYYY [3]
Lower pin	600–92383–5	K601R92308–11	K601R92308–33 or K601R92308–53 [2]	SS/N RJ/XXXYYYYY [3]
Lower pin	600–92383–7	K601R92308–13	K601R92308–33 or K601R92308–53 [2]	SS/N RJ/XXXYYYYY [3]
Lower pin	601R92309–1 [4]	K601R92308–15	K601R92308–33 or K601R92308–53 [2]	SS/N RJ/XXXYYYYY [3]
Lower pin	601R92309–3	601R92309–3	K601R92308–33 or K601R92308–53 [2]	SS/N RJ/XXXYYYYY [3]
Trunnion	601R92386–1	K601R92308–19	K601R92308–31 or K601R92308–51 [2]	SS/N RJ/XXXYYYYY [3]
Trunnion	601R92386–3	601R92386–3	K601R92308–31 or K601R92308–51 [2]	SS/N RJ/XXXYYYYY [3]
Trunnion	NCR# xxxxxx–x [1]	–	K601R92308–31 or K601R92308–51 [2]	SS/N RJ/XXXYYYYY [3]
Lower Pin	NCR# xxxxxx–x [1]	–	K601R92308–33 or K601R92308–53 [2]	SS/N RJ/XXXYYYYY [3]
Upper pin	NCR# xxxxxx–x [1]	–	K601R92308–35 or K601R92308–55 [2]	SS/N RJ/XXXYYYYY [3]

[1] Can be any numerical and/or letter combination which identifies a Non-Conformance Part (NCR)

[2] P/N K601R92308–51, P/N K601R92308–53, and P/N K601R92308–55 are replacement parts for a NCR condition.

[3] XXX, is for the three-letter airline designator code that the International Civil Aviation Organization (ICAO) gave to the airline.
YYYYY, is for the five-digit sequence number that the operator chose.

[4] Upper pin P/N 601R92310–1PP is an alternative to P/N 601R92310–1 and lower pin P/N 601R92309–1PP is an alternative to P/N 601R92309–1.

(a) If the ICAO airline designator code is not available, write the serial number as follows:

SS/N RJ/BA(aircraft serial number)–1 or subsequent number.

When the identification of the serial number is done on a spare part, the aircraft serial number of one of the aircraft of the fleet and a subsequent number is used.

Example:

AIRCRAFT SERIAL NUMBER	PART NUMBER	SERVICE SERIAL NUMBER
8999	K601R92308–9	SS/N RJ/BA8999–1
8999	K601R92308–9	SS/N RJ/BA8999–2
7900	K601R92308–15	SS/N RJ/BA7900–1
7901	K601R92308–15	SS/N RJ/BA7901–1
Spare	K601R92308–19	SS/N RJ/BA7901–2
7821	K601R92308–19	SS/N RJ/BA7821–1
7500	K601R92308–35	SS/N RJ/BA7500–1

(b) Prepare the surface for identification of the upper pins (1), the lower pins (13), and the trunnions (9) as follows:

1 If necessary, remove the initial identification.

2 Lightly rub the surface of the identification area with a Scotch Brite pad or alternative, and make sure not to remove the paint.

3 Clean the area with a solvent cleaner (refer to AMM 51–26–00–110–801).

(c) With indelible ink or an adhesive label, change the identification of the upper pins (1), the lower pins (13), and the trunnions (9) as follows:

1 If adhesive labels are used, cut the edge of the adhesive labels as necessary to get a correct fit with the surface of the parts.

2 Write the part number and the serial number on the upper pins (1) at approximately 0.52 in. (13.2 mm) and at approximately 0.10 in. (2.5 mm) from the edges of the upper pin (1) (refer to Figure 3).

3 Write the part number and the serial number on the lower pins (13) at approximately 0.52 in. (13.2 mm) and at approximately 0.13 in. (3.3 mm) from the edges of the lower pin (13) (refer to Figure 3).

4 Write the part number and the serial number on the trunnions (9) at one of the two locations that follows:

–At approximately 0.66 in. (16.8 mm) and at approximately 0.04 in. (1.1 mm) from the edges of the trunnion (9) (refer to Figure 3).

OR

–At two places (one location for the serial number and one location for the identification) approximately 0.40 in. from the attaching holes of the trunnion (9) and at approximately 0.05 in. from the edge of the trunnion (9) (refer to Figure 3).

(d) Apply a layer of clear polyurethane topcoat on the identification and the serial number of the upper pins (1), the lower pins (13), and the trunnions (9) (refer to SRM 51–25–16).

NOTE: For the installation of the adhesive labels, the clear polyurethane topcoat must be applied 0.25 in. (6.4 mm) more than the size of the adhesive labels.

(e) Make sure that you can read the identification and the serial number.

(25) Record the serial number of the trunnions (9), the upper pins (1) and the lower pins (13) in the applicable logbooks.

NOTE: To find the history of the part at the time of serialization refer to ATA Report 51–93–01 “Structural Maintenance Program Guidelines For Continuing Airworthiness” paragraph 4.6, “Removable Structural Components”. If a part has been mixed between aircraft certified at 51,000 lb MTOW and 53,000 lb MTOW, the intervals applicable to 53,000 lb MTOW must apply to the part.

Refer to Figure 1 and/or 2.

(26) Use AMM 27–42–01–400–801 with the steps that follow to install the HSTA (20), the trunnions (9), the upper pins (1), and the lower pins (13) with the bolts (6), (7), (14), (15), (19), the new laminated shim (8), the washers (4), (10), (16), the spacers (5), the nuts (3), (11), (17), and the cotter pins (2), (12), (18).

(a) Drill the holes of the new laminated shim(s) (8) to agree with the dimensions of the bolts (7), (15) and (19) (refer to Table 4).

(b) Remove the burrs and the sharp edges from the new laminated shim(s) (8).

(c) If the new laminated shim(s) (8) was/were peeled, apply a layer of fluid-resistant primer on the bare metal surfaces of the laminated shims (8) (refer to SRM 51–25–06).

(d) Make sure that the nuts (11), and the cotter pins (12) that are used to install the trunnions (9) and the HSTA (20) are new.

(e) If necessary, do a countersink to the attach holes of the lower pin (13) to get the correct installation of the bolt(s) (14) (refer to SRM 51–41–02).

(f) Make sure to use lubricant when you countersink the lower pin (13) (refer to SRM 51–40–11).

(g) If necessary, apply fluid resistant primer on the bare metal surfaces of the lower pin (13). (refer to SRM 51–25–06).

(h) Make sure that the nuts (3) and the cotter pins (2) that are used to attach the upper pins (1) and the HSTA (20) are new.

(i) Make sure that the nuts (17) and the cotter pins (18) that are used to attach the lower pins (13) and the HSTA (20) are new.

(j) Before the installation of the bolts (7), (15), (19), the washers (10), and the nuts (11), make sure that the hardware agrees with the hole dimensions of the aircraft structure and trunnion (9) (refer to Table 4).

NOTE: To prevent over-torque of the nuts (11), it is permitted to replace the washer P/N NAS1149F0632P with washer P/N NAS1149F0616P, or to add washer P/N NAS1149F0616P to washer P/N NAS1149F0632P.

NOTE: To prevent over-torque of the nuts (11), it is permitted to replace the washer P/N B0202013S2520–32 with washer P/N B0202013S2520–16, or to add washer P/N B0202013S2520–16 to washer P/N B0202013S2520–32.

NOTE: To prevent over-torque of the nuts (11), it is permitted to replace the washer P/N B0202013S2620–32 with washer P/N B0202013S2620–16, or to add washer P/N B0202013S2620–16 to washer P/N B0202013S2620–32.

NOTE: To prevent over-torque of the nuts (11), it is permitted to replace the washer P/N NAS1149F0732P with washer P/N NAS1149F0716P, or to add washer P/N NAS1149F0716P to washer P/N NAS1149F0732P.

NOTE: To prevent over-torque of the nuts (11), it is permitted to replace the washer P/N B0202013S2924–32 with washer P/N B0202013S2924–16, or to add washer P/N B0202013S2924–16 to washer P/N B0202013S2924–32.

NOTE: To prevent over-torque of the nuts (11), it is permitted to replace the washer P/N B0202013S3024–32 with washer P/N B0202013S3024–16, or to add washer P/N B0202013S3024–16 to washer P/N B0202013S3024–32.

NOTE: To prevent over-torque of the nuts (11), it is permitted to replace the washer P/N with washer P/N NAS1149F0816P, or to add washer P/N NAS1149F0816P to washer P/N NAS1149F0832P.

TABLE 4 – AIRCRAFT STRUCTURE AND TRUNNION – HOLE-DIMENSION/HARDWARE

DIAMETER OF THE ATTACH HOLES IN THE AIRCRAFT STRUCTURE	DIAMETER OF THE ATTACH HOLES IN THE TRUNNION	BOLT DIAMETER	BOLT P/N	NUT P/N WASHER P/N
0.375 to 0.380 in. (9.53 to 9.65 mm)	0.375 to 0.380 in. (9.53 to 9.65 mm)	0.375 in (9.53 mm)	NAS6206–( )D	MS17826–6 NAS1149F0616P and/or NAS1149F0632P
0.391 to 0.396 in (9.93 to 10.06 mm)	0.391 to 0.396 in (9.93 to 10.06 mm)	0.390 in (9.91 mm)	NAS6206–( )DX	MS17826–6 B0202013S2520–16 and/or B0202013S2520–32
0.406 to 0.411 in (10.31 to 10.44 mm)	0.406 to 0.411 in (10.31 to 10.44 mm)	0.406 in (10.31 mm)	NAS6206–( )DY	MS17826–6 B0202013S2620–16 and/or B0202013S2620–32
0.438 to 0.443 in (11.13 to 11.25 mm)	0.438 to 0.443 in (11.13 to 11.25 mm)	0.437 in (11.10 mm)	NAS6207–( )D	MS17826–7 NAS1149F0716P and/or NAS1149F0732P
0.453 to 0.458 in (11.51 to 11.63 mm)	0.453 to 0.458 in (11.51 to 11.63 mm)	0.453 in (11.51 mm)	NAS6207–( )DX	MS17826–7 B0202013S2924–16 and/or B0202013S2924–32
0.469 to 0.474 in (11.91 to 12.04 mm)	0.469 to 0.474 in (11.91 to 12.04 mm)	0.468 in (11.89 mm)	NAS6207–( )DY	MS17826–7 B0202013S3024–16 and/or B0202013S3024–32

TABLE 4 – AIRCRAFT STRUCTURE AND TRUNNION – HOLE-DIMENSION/HARDWARE				
DIAMETER OF THE ATTACH HOLES IN THE AIRCRAFT STRUCTURE	DIAMETER OF THE ATTACH HOLES IN THE TRUNNION	BOLT DIAMETER	BOLT P/N	NUT P/N WASHER P/N
0.500 to 0.505 in (12.70 to 12.83 mm)	0.500 to 0.505 in (12.70 to 12.83 mm)	0.500 in (12.70 mm)	NAS6208–( )D	MS17826–8 NAS1149F0816P and/or NAS1149F0832P

(k) Before the installation of the trunnions (9), make sure that the bolt(s) (7), (15), and (19) that have an oversize diameter of 0.390 in. (9.91 mm) or more have the correct P/N (refer to Table 5).

TABLE 5 – TRUNNION – OVERSIZE BOLT DIAMETERS AND P/N's		
	UPPER TRUNNION	LOWER TRUNNION
BOLT DIAMETER	BOLT P/N	BOLT P/N
0.390 in (9.91 mm) 1st oversize	NAS6206–14DX and NAS6206–20DX	NAS6206–8DX
0.406 in (10.31 mm) 2nd oversize	NAS6206–14DY and NAS6206–20DY	NAS6206–8DY
0.437 in (11.10 mm) Next size	NAS6207–14D and NAS6207–20D	NAS6207–8D
0.453 in (11.51 mm) 1st oversize	NAS6207–14DX and NAS6207–20DX	NAS6207–8DX
0.468 in (11.89 mm) 2nd oversize	NAS6207–14DY and NAS6207–20DY	NAS6207–8DY
0.500 in (12.70 mm) Next size	NAS6208–14D and NAS6208–20D	NAS6208–8D

(l) Before the installation of the bolts (6), the washers (4), and the nuts (3), make sure that the hardware agrees with the hole dimensions of the aircraft structure and the upper pins (1) (refer to Table 6).

TABLE 6 – AIRCRAFT STRUCTURE AND UPPER PIN – HOLE-DIMENSION/HARDWARE

DIAMETER OF THE ATTACH HOLES IN THE AIRCRAFT STRUCTURE	DIAMETER OF THE ATTACH HOLES IN THE UPPER PIN	BOLT DIAMETER	BOLT P/N	NUT P/N WASHER P/N
0.189 to 0.195 in. (4.80 to 4.95 mm)	0.215 to 0.225 in. (5.46 to 5.72 mm)	0.189 in. (4.80 mm)	NAS1203–13D	MS17826–3 NAS1149F0332P
0.205 to 0.210 in. (5.21 to 5.33 mm)	0.225 to 0.235 in. (5.72 to 5.97 mm)	0.205 in. (5.21 mm)	NAS1580A3R13DX	MS17826–3 B0202013S1516–32
0.221 to 0.226 in. (5.61 to 5.74 mm)	0.239 to 0.249 in. (6.07 to 6.32 mm)	0.221 in. (5.61 mm)	NAS1580A3R13DY	MS17826–3 B0202013S1516–32
0.250 to 0.255 in. (6.35 to 6.48 mm)	0.270 to 0.280 in. (6.86 to 7.11 mm)	0.250 in. (6.35 mm)	NAS1204–13D	MS17826–4 NAS1149F0432P
0.265 to 0.270 in. (6.73 to 6.86 mm)	0.284 to 0.294 in. (7.21 to 7.47 mm)	0.265 in. (6.73 mm)	NAS1580A4R13DX	MS17826–4 B0202013S1716–32
0.281 to 0.286 in. (7.14 to 7.26 mm)	0.299 to 0.309 in. (7.59 to 7.85 mm)	0.281 in. (7.14 mm)	NAS1580A4R13DY	MS17826–4 B0202013S1816–32

(m) Before the installation of the upper pins (1), make sure that the bolt(s) (6) that have an oversize diameter of 0.205 in. (5.21 mm) or more have the correct P/N (refer to Table 7).

TABLE 7
UPPER PIN – OVERSIZE BOLT DIAMETERS AND P/N's

	UPPER PIN
BOLT DIAMETER	**BOLT P/N**
0.205 in. (5.21 mm) 1st oversize	NAS1580A3R13DX
0.221 in. (5.61 mm) 2nd oversize	NAS1580A3R13DY

TABLE 7 UPPER PIN – OVERSIZE BOLT DIAMETERS AND P/N's	
	UPPER PIN
BOLT DIAMETER	BOLT P/N
0.250 in. (6.35 mm) Next size	NAS1204–13D
0.265 in. (6.73 mm) 1st oversize	NAS1580A4R13DX
0.281 in. (7.14 mm) 2nd oversize	NAS1580A4R13DY

(n) Before the installation of the bolts (14), the washers (16), and the nuts (17), make sure that the hardware agrees with the hole dimensions of the aircraft structure and the lower pins (13) (refer to Table 8).

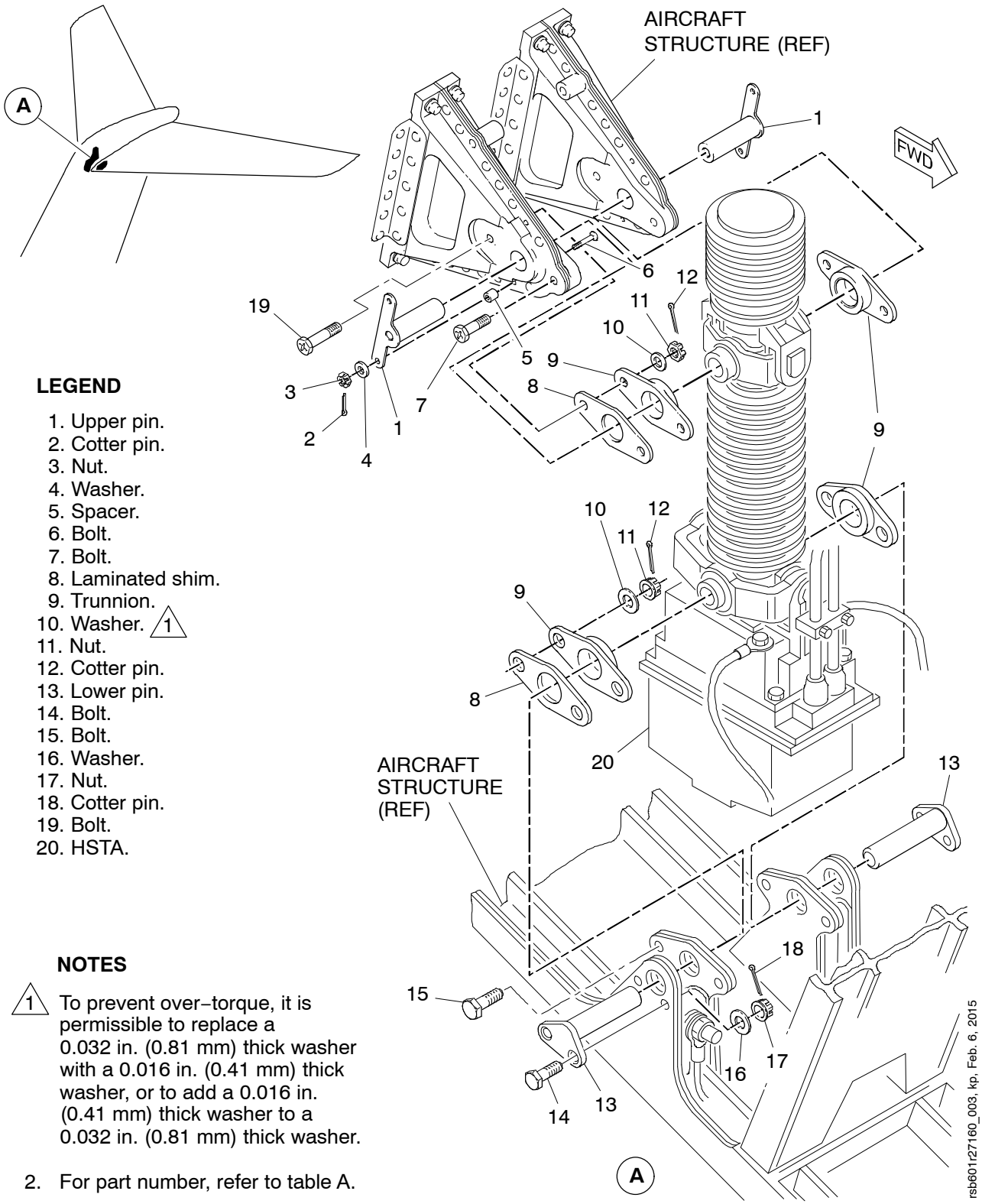
TABLE 8 – AIRCRAFT STRUCTURE AND LOWER PIN – HOLE-DIMENSION/HARDWARE				
DIAMETER OF THE ATTACH HOLES IN THE AIRCRAFT STRUCTURE	DIAMETER OF THE ATTACH HOLES IN THE LOWER PIN	BOLT DIAMETER	BOLT P/N	NUT P/N WASHER P/N
0.200 to 0.210 in. (5.08 to 5.33 mm)	0.190 to 0.200 in. (4.83 to 5.08 mm)	0.189 in. (4.80 mm)	NAS1203–8D	MS17826–3 NAS1149F0332P
0.215 to 0.225 in. (5.46 to 5.72 mm)	0.205 to 0.215 in. (5.21 to 5.46 mm)	0.205 in. (5.21 mm)	NAS1580A3R8DX	MS17826–3 B0202013S1516–32
0.231 to 0.241 in. (5.87 to 6.12 mm)	0.221 to 0.231 in. (5.61 to 5.87 mm)	0.221 in. (5.61 mm)	NAS1580A3R8DY	MS17826–3 B0202013S1516–32
0.260 to 0.270 in. (6.60 to 6.86 mm)	0.250 to 0.260 in. (6.35 to 6.60 mm)	0.250 in. (6.35 mm)	NAS8604D8	MS17826–4 NAS1149F0432P
0.275 to 0.285 in. (6.99 to 7.24 mm)	0.265 to 0.275 in. (6.73 to 6.99 mm)	0.265 in. (6.73 mm)	NAS8604D8X	MS17826–4 B0202013S1716–32
0.291 to 0.301 in. (7.39 to 7.65 mm)	0.281 to 0.291 in. (7.14 to 7.39 mm)	0.281 in. (7.14 mm)	NAS8604D8Y	MS17826–4 B0202013S1816–32

(o) Before the installation of the lower pins (13), make sure that the bolt(s) (14) that have an oversize diameter of 0.205 in. (5.21 mm) or more have the correct P/N (refer to Table 9).

TABLE 9
LOWER PIN – OVERSIZE BOLT DIAMETERS AND P/N's

	LOWER PIN
BOLT DIAMETER	**BOLT P/N**
0.205 in. (5.21 mm) 1st oversize	NAS1580A3R8DX
0.221 in. (5.61 mm) 2nd oversize	NAS1580A3R8DY
0.250 in. (6.35 mm) Next size	NAS8604D8
0.265 in. (6.73 mm) 1st oversize	NAS8604D8X
0.281 in. (7.14 mm) 2nd oversize	NAS8604D8Y

(p) Torque the installed fasteners (refer to AMM 20–21–00–910–801).



LEGEND

1. Upper pin.
2. Cotter pin.
3. Nut.
4. Washer.
5. Spacer.
6. Bolt.
7. Bolt.
8. Laminated shim.
9. Trunnion.
10. Washer. 1
11. Nut.
12. Cotter pin.
13. Lower pin.
14. Bolt.
15. Bolt.
16. Washer.
17. Nut.
18. Cotter pin.
19. Bolt.
20. HSTA.

NOTES

1. To prevent over–torque, it is permissible to replace a 0.032 in. (0.81 mm) thick washer with a 0.016 in. (0.41 mm) thick washer, or to add a 0.016 in. (0.41 mm) thick washer to a 0.032 in. (0.81 mm) thick washer.

2. For part number, refer to table A.

PART A — HSTA Pins and Trunnions — NCR Condition — Removal/Installation
Figure 1 (Sheet 1 of 4)

TABLE A				
ITEM	NAME		P/N	ALTERNATE PART
1	Upper pin	(Pre–Mod)	NCR #xxxxxx–x	
		(Post–Mod)	K601R92308–35	
			K601R92308–55	
2	Cotter pin	(Post–Mod)	MS24665–153	
3	Nut	(Post–Mod)	MS17826–3	
			MS17826–4	
4	Washer	(Post–Mod)	B0202013S1516–32	B0202013A1516–32
				B0202013–1516–32
			NAS1149F0432P	
			B0202013S1716–32	B0202013A1716–32
				B0202013–1716–32
			B0202013S1816–32	B0202013A1816–32
				B0202013–1816–32
5	Spacer	(Post–Mod)	NAS42DD6–25N	
			NAS42DD8–25N	
6	Bolt	(Post–Mod)	NAS1580A3R13DX	
			NAS1580AR13DY	
			NAS1204–13D	
			NAS1580A4R13DX	
			NAS1580A4R13DY	
7	Bolt	(Post–Mod)	NAS6206–14DX	
			NAS6206–14DY	
			NAS6207–14D	
			NAS6207–14DX	
			NAS6207–14DY	
			NAS6208–14D	
8	Laminated shim	(Post–Mod)	601R92303–17	
9	Trunnion	(Pre–Mod)	NCR #xxxxxx–x	
		(Post–Mod)	K601R92308–31	
			K601R92308–51	

rsb601r27160_004, kp, Feb. 6, 2015

PART A — HSTA Pins and Trunnions — NCR Condition — Removal/Installation
Figure 1 (Sheet 2 of 4)

TABLE A				
ITEM	NAME		P/N	ALTERNATE PART
10	Washer	(Post–Mod)	B0202013S2520–16	B0202013A2520–16
				B0202013–2520–16
			B0202013S2520–32	B0202013A2520–32
				B0202013–2520–32
			B0202013S2620–16	B0202013A2620–16
				B0202013–2620–16
			B0202013S2620–32	B0202013A2620–32
				B0202013–2620–32
			B0202013S2924–16	B0202013A2924–16
				B0202013–2924–16
			B0202013S2924–32	B0202013A2924–32
				B0202013–2924–32
			B0202013S3024–16	B0202013A3024–16
				B0202013–3024–16
			B0202013S3024–32	B0202013A3024–32
				B0202013–3024–32
			NAS1149F0716P	
			NAS1149F0732P	
			NAS1149F0816P	
			NAS1149F0832P	
11	Nut	(Post–Mod)	MS17826–6	
			MS17826–7	
			MS17826–8	
12	Cotter pin	(Post–Mod)	MS24665–300	
13	Lower pin	(Pre–Mod)	NCR #xxxxxx–x	
		(Post–Mod)	K601R92308–33	
			K601R92308–53	
14	Bolt	(Post–Mod)	NAS1580A3R8DX	
			NAS1580A3R8DY	
			NAS8604D8	
			NAS8604D8X	
			NAS8604D8Y	

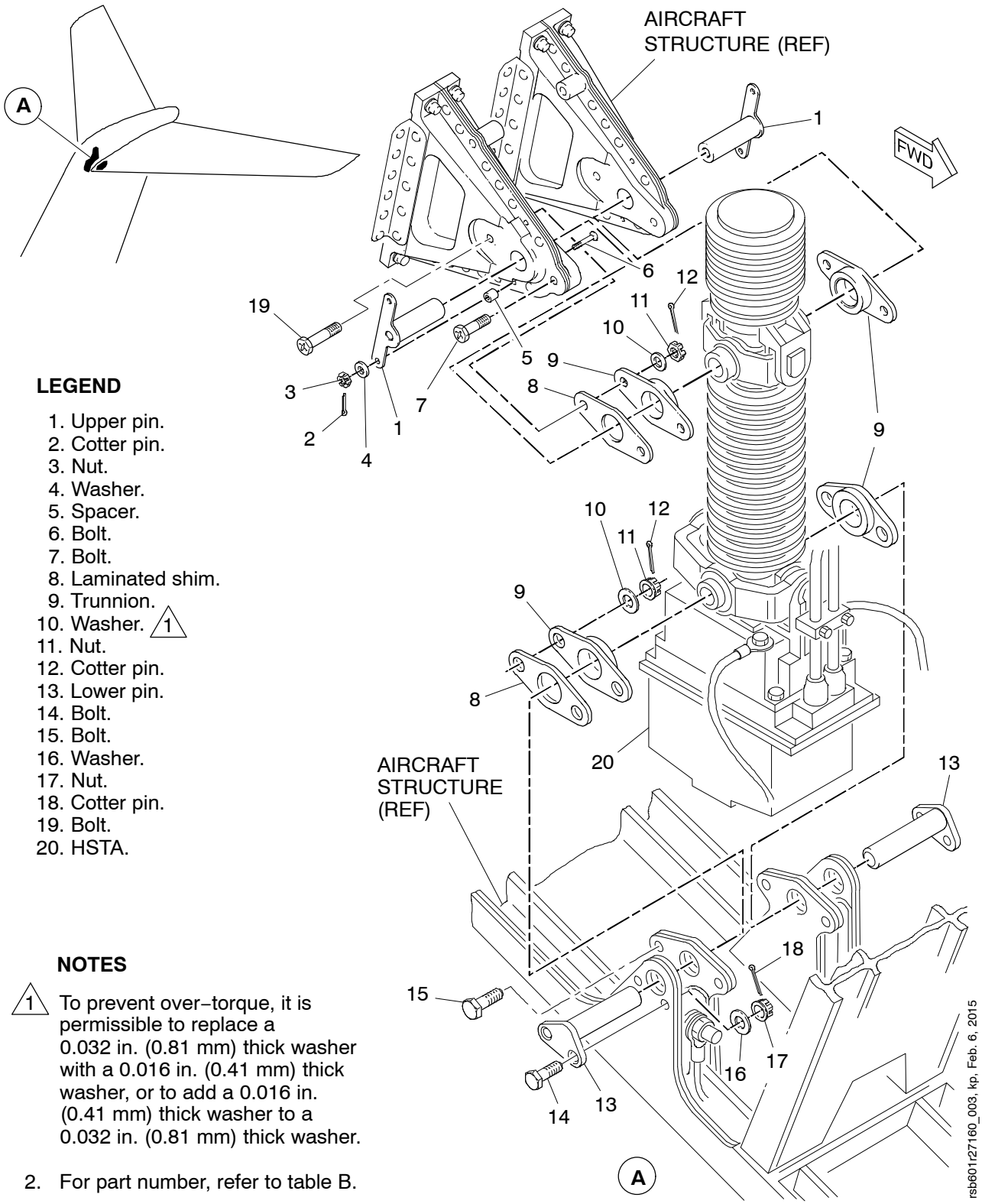
rsb601r27160_005, kp, Feb. 6, 2015

PART A — HSTA Pins and Trunnions — NCR Condition — Removal/Installation
Figure 1 (Sheet 3 of 4)

TABLE A				
ITEM	NAME		P/N	ALTERNATE PART
15	Bolt	(Post–Mod)	NAS6206–8DX	
			NAS6206–8DY	
			NAS6207–8D	
			NAS6207–8DX	
			NAS6207–8DY	
			NAS6208–8D	
16	Washer	(Post–Mod)	B0202013S1516–32	B0202013A1516–32
				B0202013–1516–32
			NAS1149F0432P	
			B0202013S1716–32	B0202013A1716–32
				B0202013–1716–32
			B0202013S1816–32	B0202013A1816–32
				B0202013–1816–32
17	Nut	(Post–Mod)	MS17826–3	
			MS17826–4	
18	Cotter pin	(Post–Mod)	MS24665–153	
19	Bolt	(Post–Mod)	NAS6206–20DX	
			NAS6206–20DY	
			NAS6207–20D	
			NAS6207–20DX	
			NAS6207–20DY	
			NAS6208–20D	

rsb601r27160_006, kp, Feb. 6, 2015

PART A — HSTA Pins and Trunnions — NCR Condition — Removal/Installation
Figure 1 (Sheet 4 of 4)



LEGEND

1. Upper pin.
2. Cotter pin.
3. Nut.
4. Washer.
5. Spacer.
6. Bolt.
7. Bolt.
8. Laminated shim.
9. Trunnion.
10. Washer. 1
11. Nut.
12. Cotter pin.
13. Lower pin.
14. Bolt.
15. Bolt.
16. Washer.
17. Nut.
18. Cotter pin.
19. Bolt.
20. HSTA.

NOTES

1. To prevent over–torque, it is permissible to replace a 0.032 in. (0.81 mm) thick washer with a 0.016 in. (0.41 mm) thick washer, or to add a 0.016 in. (0.41 mm) thick washer to a 0.032 in. (0.81 mm) thick washer.

2. For part number, refer to table B.

PART A — HSTA Pins and Trunnions — Nominal Condition — Removal/Installation
Figure 2 (Sheet 1 of 3)

TABLE B			
ITEM	NAME		P/N
1	Upper pin	(Pre–Mod)	600–92384–5
		(Post–Mod)	K601R92308–5
			601R92310–3
		(Pre–Mod)	600–92384–7
		(Post–Mod)	K601R92308–7
			601R92310–3
		(Pre–Mod)	601R92310–1
		(Post–Mod)	K601R92308–9
			601R92310–3
		(Pre–Mod)	601R92310–3
		(Post–Mod)	
2	Cotter pin	(Pre–Mod)	MS24665–134
		(Post–Mod)	MS24665–153
3	Nut	(Pre–Mod)	MS17826–3
		(Post–Mod)	
7	Bolt	(Pre–Mod)	NAS6206–14D
			S8225–06–14D
		(Post–Mod)	NAS6206–14D
8	Laminated shim	(Pre–Mod)	601R92303–17
		(Post–Mod)	
9	Trunnion	(Pre–Mod)	601R92386–1
		(Post–Mod)	K601R92308–19
			601R92386–3
		(Pre–Mod)	601R92386–3
		(Post–Mod)	
10	Washer	(Pre–Mod)	AN960–616L
		(Post–Mod)	NAS1149F0632P
11	Nut	(Pre–Mod)	MS17826–6
		(Post–Mod)	
12	Cotter pin	(Pre–Mod)	MS24665–134
			MS24665–283
		(Post–Mod)	MS24665–300

rsb601r27160_007, kp, Feb. 9, 2015

PART A — HSTA Pins and Trunnions — Nominal Condition — Removal/Installation
Figure 2 (sheet 2 of 3)

TABLE B			
ITEM	NAME		P/N
13	Lower pin	(Pre–Mod)	600–92383–5
		(Post–Mod)	K601R92308–11
			601R92309–3
		(Pre–Mod)	600–92383–7
		(Post–Mod)	K601R92308–13
			601R92309–3
		(Pre–Mod)	601R92309–1
		(Post–Mod)	K601R92308–15
			601R92309–3
		(Pre–Mod)	601R92309–3
		(Post–Mod)	
15	Bolt	(Pre–Mod)	NAS6206–8D
			S8225–06–8D
		(Post–Mod)	NAS6206–8D
18	Cotter pin	(Pre–Mod)	MS24665–134
		(Post–Mod)	MS24665–153
19	Bolt	(Pre–Mod)	NAS6206–20D
			S8225–06–20D
		(Post–Mod)	NAS6206–20D

rsb601r27160_008, kp, Feb. 9, 2015

PART A — HSTA Pins and Trunnions — Nominal Condition — Removal/Installation
Figure 2 (Sheet 3 of 3)

NOTES

1. XXX is for the three–letter airline designator that the International Civil Aviation Organization (ICAO) gave to the airline.
   The Accomplishment Instructions gives an alternate for the operators that do not have an ICAO code.
   YYYYY is the five–digit sequence number that the operator selected and recorded.

△2 For Upper pin P/N 601R92310–3 and K601R92308–55, the identification and serialization procedure is not necessary.

△3 For Trunnion P/N 601R92386–3 and K601R92308–51, the identification and serialization procedure is not necessary. It is permissible to divide the identification between the sides.

△4 For Lower pin P/N 601R92309–3 and K601R92308–53, the identification and serialization procedure is not necessary.

△5 The dimensions are approximate and shown as reference only.

△6 The letter Z shown in the part number is replaced with the applicable dash number listed in the legend for the upper pin (1) and the lower pin (13).

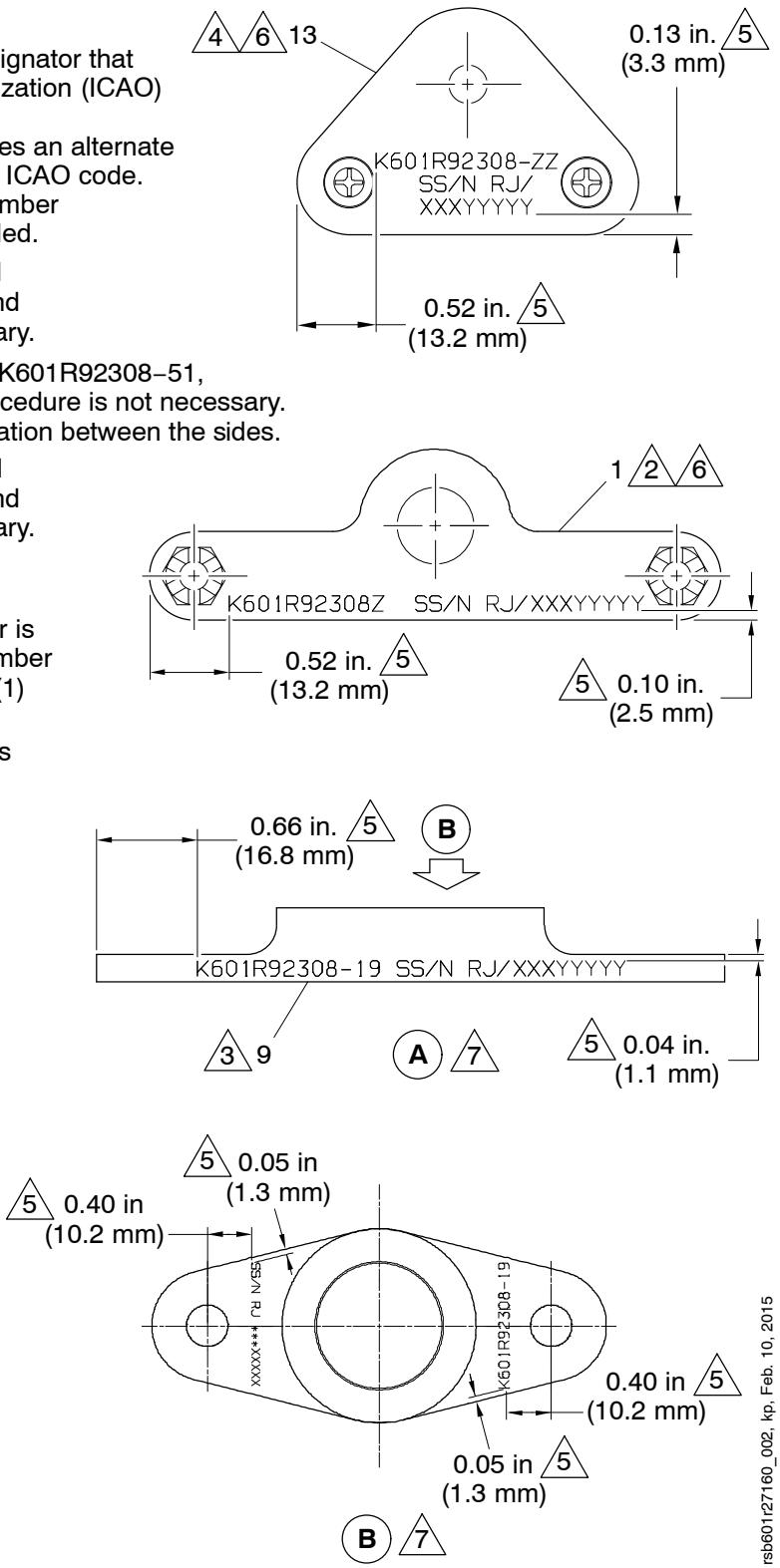
△7 The identification of the trunnion (9) is done with View A or B.

LEGEND

1. Upper pin
   600–92384–5 (Pre–Mod)
   K601R92308–5 (Post–Mod), or
   600–92384–7 (Pre–Mod)
   K601R92308–7 (Post–Mod), or
   601R92310–1 (Pre–Mod)
   K601R92308–9 (Post–Mod), or
   NCR #xxxxxx–x (Pre–Mod)
   K601R92308–35 (Post–Mod).

9. Trunnion
   601R92386–1 (Pre–Mod)
   K601R92308–19 (Post–Mod), or
   NCR #xxxxxx–x (Pre–Mod)
   K601R92308–31 (Post–Mod).

13. Lower pin
    600–92383–5 (Pre–Mod)
    K601R92308–11 (Post–Mod), or
    600–92383–7 (Pre–Mod)
    K601R92308–13 (Post–Mod), or
    601R92309–1 (Pre–Mod)
    K601R92308–15 (Post–Mod), or
    NCR #xxxxxx–x (Pre–Mod)
    K601R92308–33 (Post–Mod).



PART A — HSTA Pins and Trunnions — Identification and Serialization
Figure 3 (Sheet 1 of 1)

C. Job Close-Out

NOTE: The steps in the Job Close-Out section of this service bulletin, except for the return-to-service tests, are recommended steps. The steps give a recommendation to install components removed during the Job Set-Up. This recommendation is to make sure that the aircraft is safe and ready to return to service. Alternative steps can be used at the operator discretion.

(1) Remove all tools, equipment, and unwanted materials from the work area.

(2) Install the access panels that follow:

ACCESS	DESIGNATION	REFERENCE
Middle Upper Fairing	Access panel	AMM 55–32–05–400–806
Middle Lower Fairing	Access panel	AMM 55–32–05–400–807

(3) Apply external AC power to the aircraft (Refer to AMM 12–00–07–861–801).

(4) Do the operational test of the HSTA trim system (AMM 27–40–00–710–802).

(5) Do the functional test of the HSTCU (AMM 27–41–00–740–801).

(6) Remove the applicable warning placards from the pilot's and the copilot's control wheels and the STAB TRIM/MACH TRIM panel.

(7) When PART A of this service bulletin is completed, make this entry in the applicable logbooks: "Service Bulletin 601R–27–160, Revision D, Flight Controls – Horizontal Stabilizer Trim Actuator (HSTA) – Serialization of the HSTA Pins and Trunnions, PART A, incorporated."

PART B – Inspection of the Attach Holes of the HSTA Pins and Trunnions

Reference Information

REFERENCE	DESIGNATION
AMM 12–00–07–861–801	Connect External AC Power
AMM 20–21–00–910–801	Torque procedures for Threaded Fasteners
AMM 24–00–00–910–801	Electrical/Electronic Safety Precautions
AMM 27–40–00–710–802	Operational Test of the Horizontal Stabilizer Trim System
AMM 27–41–00–740–801	Functional Check (Ground Maintenance Test) of the HSTCU
AMM 27–42–01–000–801	Removal of the Horizontal-Stabilizer Trim Actuator (HSTA)
AMM 27–42–01–400–801	Installation of the Horizontal-Stabilizer Trim Actuator (HSTA)
AMM 51–26–00–110–801	Solvent Cleaning
AMM 55–32–05–000–806	Removal of the Middle Upper Fairing
AMM 55–32–05–400–806	Installation of the Middle Upper Fairing
AMM 55–32–05–000–807	Removal of the Middle Lower Fairing
AMM 55–32–05–400–807	Installation of the Middle Lower Fairing
SRM 51–10–06	Damage
SRM 51–21–11	Corrosion Prevention Procedures
SRM 51–23–00	Pressure, Environmental, Fuel Tank and Firewall Sealing
SRM 51–25–06	Fluid–Resistant (FR) Epoxy Primer
SRM 51–25–16	Fluid–Resistant (FR) Polyurethane Topcoat
SRM 51–26–00	Cleaning
SRM 51–40–11	How to Prepare Fastener Holes

REFERENCE	DESIGNATION
SRM 51–41–02	Bolts, Screws and Related Items

Tolerance Information

Linear Tolerances		Angular Tolerance
X.XX in. (X.X mm)	X.XXX in. (X mm)	+/–0° 30”
+/– 0.03 in.	+/– 0.01 in.	
+/– 0.8 mm	+/– .25 mm	

NOTE: The tolerances above apply to the dimensions given in this service bulletin, except when specified differently.

D. Job Set-Up

NOTE: The steps in the Job Set-Up section of this service bulletin are recommended steps. The steps give a recommendation to get access to the work area. This recommendation is to give a safe work area and to minimize possible damage to surrounding aircraft parts. Alternative steps can be used at the operator discretion.

(1) Obey all the electrical/electronic safety precautions (refer to AMM 24–00–00–910–801).

WARNING: PUT THE SAFETY DEVICES, THE WARNING SIGNS, AND THE WARNING PLACARDS IN POSITION BEFORE YOU START A PROCEDURE ON OR NEAR: FLIGHT CONTROLS FLIGHT CONTROL SURFACES COMPONENTS THAT MOVE. MAKE SURE THAT THERE ARE NO PERSONS OR EQUIPMENT ON OR NEAR THE FLIGHT CONTROL SURFACES. ACCIDENTAL MOVEMENT OF THE FLIGHT CONTROLS CAN CAUSE INJURIES TO PERSONS AND/OR DAMAGE TO EQUIPMENT.

(2) Install the applicable warning placards on the pilot’s and the copilot’s control wheels and the STAB TRIM/MACH TRIM panel.

CAUTION: MAKE SURE THAT THE REAR FUSELAGE SUPPORT IS PUT DIRECTLY BELOW THE RIVET LINE AT FS755.00 (37 INCHES AFT OF THE BAGGAGE COMPARTMENT DOOR). IF THE REAR FUSELAGE SUPPORT IS NOT DIRECTLY BELOW THE RIVET LINE, DAMAGE TO THE AIRCRAFT CAN OCCUR.

(3) Remove the access panels that follow:

PANEL	NAME	REFERENCE
Middle Upper Fairing	Access panel	AMM 55–32–05–000–806
Middle Lower Fairing	Access panel	AMM 55–32–05–000–807

E. Procedure

(1) If it is not possible to complete all the instructions in this service bulletin because of the configuration of the aircraft, speak with a representative of Bombardier in the Customer Response Center at +1–844–272–2720 (1–844–CRC–CRC0) or +1–514–855–8500 or e-mail at thd.crj@aero.bombardier.com for analysis and to get an approved disposition to complete this service bulletin.

Refer to Figure 4 and/or 5.

(2) Remove the HSTA (20), the trunnions (9), and the pins (1) and (13) from the aircraft (refer to AMM 27–42–01–000–801 and the steps that follow).

(3) Make sure that the removed trunnions (9), and the pins (1) and (13) have a serial number or are identified with a NCR part number.

NOTE: NCR# xxxxxx–x can be any numerical and/or letter combination which identifies a Non-Conformance Part (NCR).

(4) If the trunnion(s) (9) and/or the pin(s) (1) and/or (13) do not have a serial number or are not identified with a NCR part number, speak with a representative of Bombardier in the Customer Response Center at +1–844–272–2720 (1–844–CRC–CRC0) or +1–514–855–8500 or e-mail at thd.crj@aero.bombardier.com for analysis and to get an approved disposition to complete this service bulletin.

(5) Record the position of the removed trunnions (9), and the pins (1) and (13).

(6) Discard the cotter pins (2), (12), and (18), the laminated shims (8), the nuts (3), and (17).

(7) It is permissible to keep the bolts (7), (15), (19), the washers (10), and the nuts (11) for a subsequent step.

NOTE: It is possible that the bolt(s) (7), (15), and/or (19) with a different diameter can be necessary to install at the end of this procedure.

(8) Measure the diameter of the bolts (7), (15), and (19) that attach the trunnions (9) and do as follows:

(a) Make sure that any oversize bolt(s) (7), (15), and (19) are the correct length before the installation of the trunnions (9) in a subsequent step (refer to Table 5).

(9) Measure the diameter of the bolts (6) and (14) that attach the upper pins (1) and the lower pins (13) and do the steps that follow:

Refer to Figure 5.

(a) For the bolt(s) (6) and/or (14) that have a nominal diameter of 0.189 in. (4.80 mm) do as follows:

1 It is permissible to keep the nominal diameter bolt(s) (6) and/or (14) for a subsequent step.

2 It is permissible to keep the washer(s) (4) and/or (16) for a subsequent step.

Refer to Figure 4.

(b) For the bolt(s) (6) and/or (14) that have an oversize diameter of 0.205 in. (5.21 mm) or more, do as follows:

1 It is permissible to keep the oversize diameter bolt(s) (6) and/or (14) for a subsequent step.

NOTE: It is possible that the bolt(s) (6) and/or (14) with a different diameter can be necessary to install at the end of this procedure.

2 Make sure that the oversize bolt(s) (6) and (14) are the correct length before the installation of the upper pins (1) and the lower pins (13) in a subsequent step (refer to Table 7 and Table 9).

3 Discard the washer(s) (4) and/or (16).

Refer to Figure 4 and/or 5.

(10) For the trunnions (9), do the procedure that follows.

NOTE: This procedure is applicable to all four trunnions (9). The procedure that follows is written for only one trunnion (9).

(a) Clean the aircraft structure with solvent where the trunnion was installed (refer to SRM 51–26–00).

(b) Measure the diameter of the two attach holes in the aircraft structure.

TABLE 1 – ATTACH HOLE DIMENSIONS – AIRCRAFT STRUCTURE AND TRUNNION			
DIAMETER OF THE ATTACH HOLES IN THE AIRCRAFT STRUCTURE	**DIAMETER OF THE ATTACH HOLES IN THE TRUNNION**	**HOLE CONDITION**	**NCR CONDITION**
0.375 to 0.380 in. (9.53 to 9.65 mm)	0.375 to 0.380 in. (9.53 to 9.65 mm)	Nominal	No
0.391 to 0.396 in. (9.93 to 10.06 mm)	0.391 to 0.396 in. (9.93 to 10.06 mm)	1st oversize	Yes
0.406 to 0.411 in. (10.31 to 10.44 mm)	0.406 to 0.411 in. (10.31 to 10.44 mm)	2nd oversize	Yes
0.438 to 0.443 in. (11.13 to 11.25 mm)	0.438 to 0.443 in. (11.13 to 11.25 mm)	Next size	Yes
0.453 to 0.458 in. (11.51 to 11.63 mm)	0.453 to 0.458 in. (11.51 to 11.63 mm)	1st oversize	Yes
0.469 to 0.474 in. (11.91 to 12.04 mm)	0.469 to 0.474 in. (11.91 to 12.04 mm)	2nd oversize	Yes
0.500 to 0.505 in. (12.70 to 12.83 mm)	0.500 to 0.505 in. (12.70 to 12.83 mm)	Next size	Yes

(11) If the diameter of the attach hole(s) in the aircraft structure do not agree with Table 1, speak with a representative of the Bombardier Customer Response Center at +1–844–272–2720 (1–844–CRC–CRC0) or +1–514–855–8500 or e-mail at thd.crj@aero.bombardier.com to get an approved disposition.

(12) If the diameter of the attach holes in the aircraft structure are a nominal dimension of 0.375 to 0.380 in. (9.53 to 9.65 mm) (refer to Table 1), do as follows:

(a) Measure the diameter of the attach holes in the trunnion (9).

(b) If the diameter of the attach hole(s) in the trunnion (9) is/are more than 0.380 in. (9.65 mm), do as follows:

1 Discard the trunnion (9).

2 Get a trunnion (9) P/N 601R92386–3 or alternative.

NOTE: Trunnion P/N K601R92308–19 is a permitted alternative, if trunnion P/N 601R92386–3 is not available.

3 Increase the diameter of the attach holes in the trunnion (9) to a diameter of 0.375 to 0.380 in. (9.53 to 9.65 mm) (refer to Table 1).

4 Remove the burrs and the sharp edges from the trunnion (9).

5 Apply a chemical conversion coating on the bare metal surfaces of the trunnion (9) (refer to SRM 51–21–11).

(c) If the diameter of the related attach hole(s) in the trunnion (9) is/are a nominal dimension of 0.375 to 0.380 in. (9.53 to 9.65 mm), do as follows:

1 Examine the general condition of the trunnion (9) for damage(s) (refer to SRM 51–10–06).

2 If damage is found on the trunnion (9), do revision B or the latest approved revision of GREO 601R–27–42–007.

3 If the trunnion (9) cannot be repaired with revision B or the latest approved revision of GREO 601R–27–42–007, do as follows:

a Discard the trunnion (9).

b Get a trunnion (9) P/N 601R92386–3 or alternative.

NOTE: Trunnion P/N K601R92308–19 is a permitted alternative, if trunnion P/N 601R92386–3 is not available.

c Increase the diameter of the attach holes in the trunnion (9) to a diameter of 0.375 to 0.380 in. (9.53 to 9.65 mm) (refer to Table 1).

d Remove the burrs and the sharp edges from the trunnion (9).

e Apply a chemical conversion coating on the bare metal surfaces of the trunnion (9) (refer to SRM 51–21–11).

(d) If the trunnion (9) is replaced with P/N 601R92386–3 or K601R92308–19, record the serial number in the applicable logbooks.

(13) If the diameter of the attach hole(s) in the aircraft structure is/are an oversized dimension of more than 0.380 in. (9.65 mm) and equal to or less than 0.505 in. (12.83 mm) (refer to Table 1), do as follows:

(a) Measure the diameter of the attach holes in the trunnion (9).

(b) If the diameters of the related attach holes in the trunnion (9) agree with the diameter of the related attach holes in the aircraft structure (refer to Table 1), do as follows:

1 Make sure that the edge distance for the attach holes in the trunnion (9) are a minimum of 0.9D.

2 If the edge distance for the related attach hole(s) in the trunnion (9) is/are less than 0.9D, speak with a representative of the Bombardier Customer Response Center at +1–844–272–2720 (1–844–CRC–CRC0) or +1–514–855–8500 or e-mail at thd.crj@aero.bombardier.com to get an approved disposition.

3 Examine the general condition of the trunnion (9) for damage(s) (refer to SRM 51–10–06).

4 If damage(s) is/are found, do revision B or the latest approved revision of GREO 601R–27–42–007.

5 If the trunnion (9) cannot be repaired with revision B or the latest approved revision of GREO 601R–27–42–007, go to step 2.E.(14) for the replacement of the trunnion (9).

(c) If the diameter of the related attach hole(s) in the trunnion (9) do not agree with the diameter of the related attach hole(s) in the aircraft structure (refer to Table 1), do as follows:

1 If the diameter of the related attach hole(s) in the trunnion (9) is/are larger than the related attach hole(s) in the aircraft structure, (refer to Table 1), do as follows:

a Discard the trunnion (9).

b Go to step 2.E. (14) for the replacement of the trunnion (9).

2 If the diameter of the related attach hole(s) in the trunnion (9) is/are smaller than the related attach hole(s) in the aircraft structure, do as follows:

a Increase the diameter of the attach hole(s) in the trunnion (9) to agree with the related NCR condition in the aircraft structure (refer to Table 1).

b Make sure that the edge distance for the related attach holes in the trunnion (9) are a minimum of 0.9D.

c If the edge distance for the related attach hole(s) in the trunnion (9) is/are less than 0.9D, speak with a representative of the Bombardier Customer Response Center at +1–844–272–2720 (1–844–CRC–CRC0) or +1–514–855–8500 or e-mail at thd.crj@aero.bombardier.com to get an approved disposition.

d Remove the burrs and the sharp edges from the trunnion (9).

e Apply a chemical conversion coating on the bare metal surfaces of the trunnion (9) (refer to SRM 51–21–11).

f Examine the general condition of the trunnion (9) for damage(s) (refer to SRM 51–10–06).

g If damage(s) is/are found, do revision B or the latest approved revision of GREO 601R–27–42–007.

h If the trunnion (9) cannot be repaired with revision B or the latest approved revision of GREO 601R–27–42–007, go to step 2.E.(14) for the replacement of the trunnion (9).

(d) If the trunnion (9) is repaired with revision B or the latest approved revision of GREO 601R–27–42–007, or if no damage(s) is/are found, go to step 2.E.(27) to change the identification of the trunnion (9) to K601R92308–31.

(14) To replace the trunnion (9) that has an oversized attach hole(s) (NCR condition) in the aircraft structure of more than 0.380 in. (9.65 mm) and equal to or less than 0.505 in. (12.83 mm) (refer to Table 1), do as follows:

(a) Replace the trunnion (9) where there is a NCR condition with trunnion P/N K601R92308–51.

NOTE: The identification procedure is not necessary as the trunnion P/N K601R92308–51 is identified.

(b) Align the center hole of the trunnion (9) with the center hole of the aircraft structure and attach temporarily.

(c) As necessary, make marks on the trunnion (9) to find the correct center points of the aircraft structure attach holes.

(d) Remove the temporarily attached trunnion (9) from the aircraft structure.

(e) Make sure that the edge distance for the attach holes in the trunnion (9) are a minimum of 0.9D.

(f) If the edge distance for the attach hole(s) in the trunnion (9) is/are less than 0.9D, speak with a representative of the Bombardier Customer Response Center at +1–844–272–2720 (1–844–CRC–CRC0) or +1–514–855–8500 or e-mail at thd.crj@aero.bombardier.com to get an approved disposition.

(g) Drill the center point of the attach holes in the trunnion (9) to a diameter of .098 in. (2.49 mm) (refer to SRM 51–40–11).

(h) Increase the diameter of the attach holes in the trunnion (9) to agree with the related NCR condition in the aircraft structure (refer to Table 1).

(i) Remove the burrs and sharp edges from the trunnion (9).

(j) Apply a chemical conversion coating on the bare metal surfaces of the trunnion (9) (refer to SRM 51–21–11).

(k) Record the serial number of the trunnion (9) in the applicable logbooks.

(15) For the upper pins (1), do the procedure that follows:

NOTE: This procedure is applicable to the two upper pins (1). The procedure that follows is written for only one upper pin (1).

(a) Clean the aircraft structure with solvent where the pin attaches (refer to SRM 51–26–00).

(b) Measure the diameter of the two attach holes in the aircraft structure.

TABLE 2 – ATTACH HOLE DIMENSIONS – AIRCRAFT STRUCTURE AND UPPER PIN

DIAMETER OF THE ATTACH HOLES IN THE AIRCRAFT STRUCTURE	DIAMETER OF THE ATTACH HOLES IN THE UPPER PIN	HOLE CONDITION	NCR CONDITION
0.189 to 0.195 in (4.80 to 4.95 mm)	0.215 to 0.225 in (5.46 to 5.72 mm)	Nominal	No
0.205 to 0.210 in (5.21 to 5.33 mm)	0.225 to 0.235 in (5.72 to 5.97 mm)	1st oversize	Yes
0.221 to 0.226 in (5.61 to 5.74 mm)	0.239 to 0.249 in (6.07 to 6.32 mm)	2nd oversize	Yes
0.250 to 0.255 in (6.35 to 6.48 mm)	0.270 to 0.280 in (6.86 to 7.11 mm)	Next size	Yes

TABLE 2 – ATTACH HOLE DIMENSIONS – AIRCRAFT STRUCTURE AND UPPER PIN			
DIAMETER OF THE ATTACH HOLES IN THE AIRCRAFT STRUCTURE	**DIAMETER OF THE ATTACH HOLES IN THE UPPER PIN**	**HOLE CONDITION**	**NCR CONDITION**
0.265 to 0.270 in (6.73 to 6.86 mm)	0.284 to 0.294 in (7.21 to 7.47 mm)	1st oversize	Yes
0.281 to 0.286 in (7.14 to 7.26 mm)	0.299 to 0.309 in (7.59 to 7.85 mm)	2nd oversize	Yes

(16) If the diameter of the attach hole(s) in the aircraft structure do not agree with the diameters in Table 2, speak with a representative of the Bombardier Customer Response Center at +1–844–272–2720 (1–844–CRC–CRC0) or +1–514–855–8500 or e-mail at thd.crj@aero.bombardier.com to get an approved disposition.

(17) If the diameter of the attach holes in the aircraft structure are a nominal dimension of 0.189 to 0.195 in. (4.80 to 4.95 mm) (refer to Table 2), do as follows:

(a) Measure the diameter of the attach holes in the upper pin (1).

(b) If the diameter of the attach hole(s) in the upper pin (1) is/are more than 0.225 in. (5.72 mm) (refer to Table 2), do as follows:

1 Discard the upper pin (1).

2 Get an upper pin (1) P/N 601R92310–3 or alternative.

NOTE: Upper pin P/N K601R92308–5, K601R92308–7, or K601R92308–9 are permitted alternatives, if P/N 601R92310–3 is not available.

(c) If the diameter of the attach holes in the upper pin (1) are a nominal dimension of 0.215 to 0.225 in. (5.46 to 5.72 mm) (refer to Table 2), do as follows:

1 Examine the general condition of the upper pin (1) for damage(s) (refer to SRM 51–10–06).

2 If damage(s) is/are found, do revision A or the latest approved revision of GREO 601R–27–42–008.

3 If the upper pin (1) cannot be repaired with revision A or the latest approved revision of GREO 601R–27–42–008, do as follows:

a Discard the upper pin (1).

b Get an upper pin (1) P/N 601R92310–3 or alternative.

NOTE: Upper pin P/N K601R92308–5, K601R92308–7, or K601R92308–9 are permitted alternatives, if P/N 601R92310–3 is not available.

(d) If the Upper pin (1) is replaced with P/N K601R92308–5, or K601R92308–7, or K601R92308–9, or 601R92310–3, record the serial number in the applicable logbooks.

(18) If the diameter of the attach hole(s) in the aircraft structure is/are an oversized dimension of more than 0.195 in. (4.95 mm) and equal to or less than 0.286 in. (7.26 mm) (refer to Table 2), do as follows:

(a) Measure the diameter of the attach holes in the upper pin (1).

(b) If the diameters of the attach holes in the upper pin (1) agree with the diameters of the related attach holes in the aircraft structure (refer to Table 2), do as follows:

1 Make sure that the edge distance for the related attach holes in the upper pin (1) are a minimum of 0.9D.

2 If the edge distance for the related attach hole(s) in the upper pin (1) is/are less than 0.9D, speak with a representative of the Bombardier Customer Response Center at +1–844–272–2720 (1–844–CRC–CRC0) or +1–514–855–8500 or e-mail at thd.crj@aero.bombardier.com to get an approved disposition.

3 Examine the general condition of the upper pin (1) for damage(s) (refer to SRM 51–10–06).

4 If damage(s) is/are found, do revision A or the latest approved revision of GREO 601R–27–42–008.

5 If the upper pin (1) cannot be repaired with revision A or the latest approved revision of GREO 601R–27–42–008, go to step 2.E.(19) for the replacement of the upper pin (1).

(c) If the diameter of the attach hole(s) in the upper pin (1) do not agree with the diameter of the related attach hole(s) in the aircraft structure (refer to Table 2), do as follows:

1 If the diameter of the related attach hole(s) in the upper pin (1) is/are larger than the permitted diameter for the related attach hole(s) in the aircraft structure (refer to Table 2), do as follows:

a Discard the upper pin (1).

b Go to step 2.E.(19) for the replacement of the upper pin (1).

2 If the diameter of the attach hole(s) in the upper pin (1) is/are smaller than the related attach hole(s) in the aircraft structure (refer to Table 2), do as follows:

a Gradually drill or ream the related attach hole(s) of the upper pin (1) until the diameters is/are a minimum of 0.015 in. (0.39 mm) less than the specified hole dimension in Table 2 (refer to SRM 51–40–11).

CAUTION: BE CAREFUL WHEN YOU DRILL OR REAM THE ATTACH HOLE(S) AS THE MATERIAL IS MADE FROM HIGH STRENGTH STEEL.

b Make sure to use lubricant when you drill or ream the upper pin (1) (refer to SRM 51–40–11).

c Use a reamer to remove the last minimum 0.015 in. (0.39 mm) of material in the related attach hole(s) of the upper pin (1) to get the specified hole dimension in Table 2 (refer to SRM 51–40–11).

NOTE: The use of a reamer is the only permitted tool to get the last specified hole dimension.

CAUTION: BE CAREFUL WHEN YOU REAM THE ATTACH HOLE(S) AS THE MATERIAL IS MADE FROM HIGH STRENGTH STEEL.

d Make sure to use lubricant when you ream the upper pin (1) (refer to SRM 51–40–11).

e Make sure that the edge distance for the related attach holes in the upper pin (1) are a minimum of 0.9D.

f If the edge distance for the related attach hole(s) in the upper pin (1) is/are less than 0.9D, speak with a representative of the Bombardier Customer Response Center at +1–844–272–2720 (1–844–CRC–CRC0) or +1–514–855–8500 or e-mail at thd.crj@aero.bombardier.com to get an approved disposition.

g Remove the burrs and sharp edges from the upper pin (1).

h Apply fluid resistant primer on the bare metal surfaces of the upper pin (1) (refer to SRM 51–25–06).

i Examine the general condition of the upper pin (1) for damage(s) (refer to SRM 51–10–06).

j If damage(s) is/are found, do revision A or the latest approved revision of GREO 601R–27–42–008.

k If the upper pin (1) cannot be repaired with revision A or the latest approved revision of GREO 601R–27–42–008, go to step 2.E.(19) for the replacement.

(d) If the upper pin (1) is repaired with revision A or the latest approved revision of GREO 601R–27–42–008, or if no damage(s) is/are found, go to step 2.E.(27) to change the identification of the upper pin (1) to K601R92308–35.

(19) To replace the upper pin (1) that has an oversized attach hole(s) (NCR condition) in the aircraft structure of more than 0.195 in. (4.80 mm) and equal to or less than 0.286 in. (7.26 mm), do as follows:

(a) Replace an upper pin (1) where there is a NCR condition with P/N K601R92308–55.

NOTE: The identification procedure is not necessary because the upper pin P/N K601R92308–55 is identified.

(b) Align the upper pin (1) with the center hole of the aircraft structure and attach temporarily.

(c) As necessary, make marks on the upper pin (1) to find the correct center points of the aircraft structure attach holes.

(d) Remove the temporarily attached upper pin (1) from the aircraft structure.

(e) Make sure that the edge distance for the attach holes in the upper pin (1) are a minimum of 0.9D.

(f) If the edge distance for the attach hole(s) in the upper pin (1) is/are less than 0.9D, speak with a representative of the Bombardier Customer Response Center at +1–844–272–2720 (1–844–CRC–CRC0) or+1–514–855–8500 or e-mail at thd.crj@aero.bombardier.com to get an approved disposition.

(g) Drill the center points of the attach holes in the upper pin (1) to a diameter of .098 in. (2.49 mm) (refer to SRM 51–40–11).

CAUTION: BE CAREFUL WHEN YOU DRILL THE ATTACH HOLES AS THE MATERIAL IS MADE FROM HIGH STRENGTH STEEL.

(h) Make sure to use lubricant when you drill or ream the upper pin (1) (refer to SRM 51–40–11).

(i) Gradually drill or ream the attach holes of the upper pin (1) until the diameters are a minimum of 0.015 in. (0.39 mm) less than the specified hole dimensions in Table 2 (refer to SRM 51–40–11).

CAUTION: BE CAREFUL WHEN YOU DRILL OR REAM THE ATTACH HOLES AS THE MATERIAL IS MADE FROM HIGH STRENGTH STEEL.

(j) Make sure to use lubricant when you drill or ream the upper pin (1) (refer to SRM 51–40–11).

(k) Use a reamer to remove the last minimum 0.015 in. (0.39 mm) of material in the attach holes of the upper pin (1) to get the last specified hole dimension in Table 2. (refer to SRM 51–40–11).

NOTE: The use of a reamer is the only permitted tool to get the last specified hole dimension.

CAUTION: BE CAREFUL WHEN YOU REAM THE ATTACH HOLES AS THE MATERIAL IS MADE FROM HIGH STRENGTH STEEL.

(l) Make sure to use lubricant when you ream the upper pin (1) (refer to SRM 51–40–11).

(m) Remove the burrs and sharp edges from the upper pin (1).

(n) Apply fluid resistant primer on the bare metal surfaces of the upper pin (1) (refer to SRM 51–25–06).

(o) Record the serial number of the upper pin (1) in the applicable logbooks.

Refer to Figure 4.

(20) Do a visual inspection of the four oversize (NCR condition) spacers (5) for damage (refer to SRM 51–10–06 and to NDTM 51–20–09 PART 1).

(21) If damage to the oversize (NCR condition) spacer(s) (5) is/are found, replace the spacer(s) (5) as follows:

(a) For a spacer with a bolt diameter of 0.205 (5.21 mm) or 0.221 in. (5.61 mm) replace spacer (5) with P/N NAS42DD6–25N and do as follows:

1 Increase the diameter of the hole in the spacer(s) (5) to have a maximum clearance of 0.010 in. (0.25 mm) with the related bolt (6) diameter (refer to Table 7).

2 Remove burrs and sharp edges from the spacer(s) (5).

3 Apply a chemical conversion coating on the bare metal surfaces of the spacer(s) (5) (refer to SRM 51–21–11).

4 Apply one layer of fluid-resistant primer on the bare metal surfaces of the spacer(s) (5) (refer to SRM 51–25–06).

(b) For a spacer with a bolt diameter of 0.250 in. (6.35 mm), and/or 0.265 in. (6.73 mm), and/or 0.281 in. (7.14 mm) replace spacer (5) with P/N NAS42DD8–25N and do as follows:

1 Increase the diameter of the hole in the spacer(s) (5) to have a maximum clearance of 0.010 in. (0.25 mm) with the related bolt (6) diameter (refer to Table 7).

2 Remove burrs and sharp edges from the spacer(s) (5).

3 Apply a chemical conversion coating on the bare metal surfaces of the spacer(s) (5) (refer to SRM 51–21–11).

4 Apply one layer of fluid-resistant primer on the bare metal surfaces of the spacer(s) (5) (refer to SRM 51–25–06).

Refer to Figure 4 and/or 5

(22) For the lower pins (13), do the procedure that follows.

NOTE: This procedure is applicable to the two lower pins (13). The procedure that follows is written for only one lower pin (13).

(a) Clean the aircraft structure with solvent where the lower pin (13) is attached (refer to SRM 51–26–00).

(b) Measure the diameter of the two attach holes in the aircraft structure.

TABLE 3 – ATTACH HOLE DIMENSIONS – AIRCRAFT STRUCTURE AND LOWER PIN			
DIAMETER OF THE ATTACH HOLES IN THE AIRCRAFT STRUCTURE	**DIAMETER OF THE ATTACH HOLES IN THE LOWER PIN**	**HOLE CONDITION**	**NCR CONDITION**
0.200 to 0.210 in. (5.08 to 5.33 mm)	0.190 to 0.200 in. (4.83 to 5.08 mm)	Nominal	No
0.215 to 0.225 in. (5.46 to 5.72 mm)	0.205 to 0.215 in. (5.21 to 5.46 mm)	1st oversize	Yes
0.231 to 0.241 in. (5.87 to 6.12 mm)	0.221 to 0.231 in. (5.61 to 5.87 mm)	2nd oversize	Yes
0.260 to 0.270 in. (6.60 to 6.86 mm)	0.250 to 0.260 in. (6.35 to 6.60 mm)	Next size	Yes
0.275 to 0.285 in. (6.99 to 7.24 mm)	0.265 to 0.275 in. (6.73 to 6.99 mm)	1st oversize	Yes
0.291 to 0.301 in. (7.39 to 7.65 mm)	0.281 to 0.291 in. (7.14 to 7.39 mm)	2nd oversize	Yes

(23) If the diameter of the attach hole(s) in the aircraft structure do not agree with the diameters in Table 3, speak with a representative of the Bombardier Customer Response Center at +1–844–272–2720 (1–844–CRC–CRC0) or +1–514–855–8500 or e-mail at thd.crj@aero.bombardier.com to get an approved disposition.

(24) If the diameter of the attach holes in the aircraft structure are a nominal dimension of 0.200 to 0.210 in. (5.08 to 5.33 mm) (refer to Table 3), do as follows:

(a) Measure the diameter of the attach holes in the lower pin (13).

(b) If the diameter of the attach hole(s) in the lower pin (13) is/are more than 0.200 in. (5.08 mm) (refer to Table 3), do as follows:

1 Discard the lower pin (13).

2 Get a lower pin (13) P/N 601R92309–3 or alternative.

NOTE: Lower pin P/N K601R92308–11, or K601R92308–13, or K601R92308–15 are permitted alternatives, if P/N 601R92309–3 is not available.

(c) If the diameter of the attach holes in the lower pin (13) are a nominal dimension of 0.190 to 0.200 in. (4.83 to 5.08 mm) (refer to Table 3), do as follows:

1 Examine the general condition of the lower pin (13) for damage(s) (refer to SRM 51–10–06).

2 If damage(s) is/are found, do revision A or the latest approved revision of GREO 601R–27–42–008.

3 If the lower pin (13) cannot be repaired with revision A or the latest approved revision of GREO 601R–27–42–008, do as follows:

a Discard the lower pin (13).

b Get a lower pin (13) P/N 601R92309–3 or alternative.

NOTE: Lower pin P/N K601R92308–11, or K601R92308–13, or K601R92308–15 are permitted alternatives, if P/N 601R92309–3 is not available.

(d) If the Lower pin (13) is replaced with P/N K601R92308–11, or K601R92308–13, or K601R92308–15, or 601R92309–3, record the serial number in the applicable logbooks.

(25) If the diameter of the attach hole(s) in the aircraft structure is/are an oversized dimension of more than 0.215 in. (5.46 mm) and equal to or less than 0.301 in. (7.65 mm) (refer to Table 3), do as follows:

(a) Measure the diameter of the attach holes in the lower pin (13).

(b) If the diameter of the attach holes in the lower pin (13) agree with the diameter of the related attach holes in the aircraft structure (refer to Table 3), do as follows:

1 Make sure that the edge distance for the attach holes in the lower pin (13) are a minimum of 0.9D.

2 If the edge distance for the attach hole(s) in the lower pin (13) is/are less than 0.9D, speak with a representative of the Bombardier Customer Response Center at +1–844–272–2720 (1–844–CRC–CRC0) or +1–514–855–8500 or e-mail at thd.crj@aero.bombardier.com to get an approved disposition.

3 Examine the general condition of the lower pin (13) for damage(s) (refer to SRM 51–10–06).

4 If damage(s) is/are found, do revision A or the latest approved revision of GREO 601R–27–42–008.

5 If the lower pin (13) cannot be repaired with revision A or the latest approved revision of GREO 601R–27–42–008, go to step 2.E.(26) for the replacement of the lower pin (13).

(c) If the diameter of the attach hole(s) in the lower pin (13) do not agree with the diameter of the related attach hole(s) in the aircraft structure (refer to Table 3), do as follows:

1 If the diameter of the related attach hole(s) in the lower pin (13) is/are larger than the related attach hole(s) in the aircraft structure (refer to Table 3), do as follows:

a Discard the lower pin (13).

b Go to step 2.E.(26) for the replacement of the lower pin (13).

2 If the diameter of the attach hole(s) in the lower pin (13) is/are smaller than the permitted diameter to the related attach hole(s) in the aircraft structure (refer to Table 3), do as follows:

a Gradually drill or ream the related attach hole(s) of the lower pin (13) until the diameter is/are a minimum of 0.015 in. (0.39 mm) less than the specified hole dimensions in Table 3 (refer to SRM 51–40–11).

CAUTION: BE CAREFUL WHEN YOU DRILL OR REAM THE ATTACH HOLE(S) AS THE MATERIAL IS MADE FROM HIGH STRENGTH STEEL.

b Make sure to use lubricant when you drill or ream the lower pin (13) (refer to SRM 51–40–11).

c Use a reamer to remove the last minimum 0.015 in. (0.39 mm) of material in the related attach hole(s) of the lower pin (13) to get the specified hole dimension in Table 3 (refer to SRM 51–40–11).

NOTE: The use of a reamer is the only permitted tool to get the last specified hole dimension.

CAUTION: BE CAREFUL WHEN YOU REAM THE ATTACH HOLE(S) AS THE MATERIAL IS MADE FROM HIGH STRENGTH STEEL.

d Make sure to use lubricant when you ream the lower pin (13) (refer to SRM 51–40–11).

e Make sure that the edge distance for the attach holes in the lower pin (13) are a minimum of 0.9D.

f If the edge distance of the attach hole(s) in the lower pin (13) is/are less than 0.9D, speak with a representative of the Bombardier Customer Response Center at +1–844–272–2720 (1–844–CRC–CRC0) or +1–514–855–8500 or e-mail at thd.crj@aero.bombardier.com to get an approved disposition.

g If necessary, do a countersink to the attach hole(s) on the outboard side of the lower pin (13) to get the correct installation of the bolt (14) (refer to SRM 51–41–02).

CAUTION: BE CAREFUL WHEN YOU DO A COUNTERSINK IN THE ATTACH HOLE(S) AS THE MATERIAL IS MADE FROM HIGH STRENGTH STEEL.

h Make sure to use lubricant when you countersink the lower pin (13) (refer to SRM 51–40–11).

i Remove the burrs and sharp edges from the lower pin (13).

j Apply fluid resistant primer on the bare metal surfaces of the lower pin (13) (refer to SRM 51–25–06).

k Examine the general condition of the lower pin (13) for damage(s) (refer to SRM 51–10–06).

l If damage(s) is/are found, do revision A or the latest approved revision of GREO 601R–27–42–008.

m If the lower pin (13) cannot be repaired with revision A or the latest approved revision of GREO 601R–27–42–008, go to step 2.E.(26) for the replacement.

(d) If the lower pin (13) is repaired with revision A or the latest approved revision of GREO 601R–27–42–008, or if no damage(s) is/are found, go to step 2.E.(27) to change the identification of the lower pin (13) to K601R92308–33.

(26) To replace the lower pin (13) that has an oversized attach hole(s) (NCR condition) in the aircraft structure of more than 0.215 in. (5.46 mm) and equal to or less than 0.301 in. (7.65 mm) (refer to Table 3), do as follows:

(a) Replace a lower pin (13) where there is a NCR condition with P/N K601R92308–53.

NOTE: The identification procedure is not necessary because the lower pin P/N K601R92308–53 is identified.

(b) Align the lower pin (13) with the center hole of the aircraft structure and attach temporarily.

(c) As necessary, make marks on the lower pin (13) to find the correct center points of the aircraft structure attach holes.

(d) Remove the temporarily attached lower pin (13) from the aircraft structure.

(e) Make sure that the edge distance for the attach holes in the lower pin (13) are a minimum of 0.9D.

(f) If the edge distance for the attach hole(s) in the lower pin (13) are less than 0.9D, speak with a representative of the Bombardier Customer Response Center at +1–844–272–2720 (1–844–CRC–CRC0) or +1–514–855–8500 or e-mail at thd.crj@aero.bombardier.com to get an approved disposition.

(g) Drill the center points of the attach holes in the lower pin (13) to a diameter of .098 in. (2.49 mm) (refer to SRM 51–40–11).

CAUTION: BE CAREFUL WHEN YOU DRILL THE ATTACH HOLES AS THE MATERIAL IS MADE FROM HIGH STRENGTH STEEL.

(h) Make sure to use lubricant when you drill or ream the lower pin (13) (refer to SRM 51–40–11).

(i) Gradually drill or ream the attach holes of the lower pin (13) until the diameters are a minimum of 0.015 in. (0.39 mm) less than the specified hole dimensions in Table 3 (refer to SRM 51–40–11).

CAUTION: BE CAREFUL WHEN YOU REAM THE ATTACH HOLES AS THE MATERIAL IS MADE FROM HIGH STRENGTH STEEL.

(j) Make sure to use lubricant when you drill or ream the lower pin (13) (refer to SRM 51–40–11).

(k) Use a reamer to remove the last minimum 0.015 in. (0.39 mm) of material in the attach holes of the lower pin (13) to get the last specified hole dimension in Table 3 (refer to SRM 51–40–11).

NOTE: The use of a reamer is the only permitted tool to get the last specified hole dimension.

CAUTION: BE CAREFUL WHEN YOU REAM THE ATTACH HOLES AS THE MATERIAL IS MADE FROM HIGH STRENGTH STEEL.

(l) Make sure to use lubricant when you ream the lower pin (13) (refer to SRM 51–40–11).

(m) Do a countersink in the attach holes on the outboard side of the lower pin (13) to get the correct installation of the bolt (14) (refer to SRM 51–41–02).

CAUTION: BE CAREFUL WHEN YOU DO A COUNTERSINK IN THE ATTACH HOLES AS THE MATERIAL IS MADE FROM HIGH STRENGTH STEEL.

(n) Make sure to use lubricant when you countersink the lower pin (13) (refer to SRM 51–40–11).

(o) Remove the burrs and sharp edges from the lower pin (13).

(p) Apply fluid resistant primer on the bare metal surfaces of the lower pin (13) (refer to SRM 51–25–06).

(q) Record the serial number of the lower pin (13) in the applicable logbooks.

Refer to Figure 6.

(27) Change the identification of the trunnion(s) (9), the upper pin(s) (1) and the lower pin(s) (13) that are not damaged and have oversized hole(s) (NCR condition) as follows:

NOTE: If trunnion P/N K601R92308–51, lower pin P/N K601R92308–53, and upper pin P/N K601R92308–55 are used to replace defective parts, it is not necessary to do this step.

NAME	PART NUMBER WITHOUT NCR CONDITION	PART NUMBER WITH NCR CONDITION
Upper pin	601R92310–3	K601R92308–35
Upper pin	K601R92308–5	K601R92308–35
Upper pin	K601R92308–7	K601R92308–35
Upper pin	K601R92308–9	K601R92308–35

NAME	PART NUMBER WITHOUT NCR CONDITION	PART NUMBER WITH NCR CONDITION
Lower pin	601R92309–3	K601R92308–33
Lower pin	K601R92308–11	K601R92308–33
Lower pin	K601R92308–13	K601R92308–33
Lower pin	K601R92308–15	K601R92308–33
Trunnion	601R92386–3	K601R92308–31
Trunnion	K601R92308–19	K601R92308–31
Trunnion	NCR# xxxxxx–x [1]	K601R92308–31
Lower Pin	NCR# xxxxxx–x [1]	K601R92308–33
Upper pin	NCR# xxxxxx–x [1]	K601R92308–35
[1] Can be any numerical and/or letter combination which identifies a NCR condition.		

(a) Prepare the surface for identification of the upper pins (1), the lower pins (13), and the trunnions (9) as follows:

1 If necessary, remove the initial identification.

2 Lightly rub the surface of the identification area with a Scotch Brite pad or alternative, and make sure not to remove the paint.

3 Clean the area with a solvent cleaner (refer to AMM 51–26–00–110–801).

(b) With indelible ink or an adhesive label, change the identification of the upper pins (1), the lower pins (13), and the trunnions (9) as follows:

1 If adhesive labels are used, cut the edge of the adhesive labels as necessary to get a correct fit with the surface of the parts.

2 Write the part number on the upper pins (1) at approximately 0.52 in. (13.2 mm) and at approximately 0.10 in. (2.5 mm) from the edges of the upper pin (1) (refer to Figure 6).

3 Write the part number on the lower pins (13) at approximately 0.52 in. (13.2 mm) and at approximately 0.13 in. (3.3 mm) from the edges of the lower pin (13) (refer to Figure 6).

4 Write the part number on the trunnions (9) at one of the two locations that follows:

–At approximately 0.66 in. (16.8 mm) and at approximately 0.04 in. (1.1 mm) from the edges of the trunnion (9) (refer to Figure 6).

OR

–At approximately 0.40 in. from the attaching holes of the trunnion (9) and at approximately 0.05 in. from the edge of the trunnion (9) at the opposite side of the serialization (refer to Figure 6).

(c) Apply a layer of clear polyurethane topcoat on the identification of the upper pins (1), the lower pins (13), and the trunnions (9) (refer to SRM 51–25–16).

NOTE: For the installation of the adhesive labels, the clear polyurethane topcoat must be applied 0.25 in. (6.4 mm) more than the size of the adhesive labels.

(d) Make sure that you can read the identification.

(28) Make sure that the serial number of the trunnions (9), the upper pins (1) and the lower pins (13) is/are recorded in the applicable logbooks.

NOTE: To find the history of the part at the time of serialization refer to ATA Report 51–93–01 “Structural Maintenance Program Guidelines For Continuing Airworthiness” paragraph 4.6, “Removable Structural Components”. If a part has been mixed between aircraft certified at 51,000 Lb MTOW and 53,000 Lb MTOW, the intervals applicable to 53,000 Lb MTOW must apply to the part.

Refer to Figure 4 and/or 5.

(29) Use AMM 27–42–01–400–801with the steps that follow to install the HSTA (20), the trunnions (9), the upper pins (1), and the lower pins (13) with the bolts (6), (7), (14), (15), (19), the new laminated shims (8), the washers (4), (10), (16), the spacers (5), the nuts (3), (11), (17), and the cotter pins (2), (12), (18)

(a) Drill the holes for the new laminated shim(s) (8) to agree with the dimensions of the bolts (7), (15) and (19) (refer to Table 4).

(b) Remove the burrs and the sharp edges from the new laminated shim(s) (8).

(c) If the new laminated shim(s) (8) was/were peeled, apply a layer of fluid-resistant primer on the bare metal surfaces of the laminated shim(s) (8) (refer to SRM 51–25–06).

(d) If necessary, do a countersink to the attach holes of the lower pin (13) to get the correct installation of the bolt(s) (14) (refer to SRM 51–41–02).

(e) Make sure to use lubricant when you countersink the lower pin (13) (refer to SRM 51–40–11).

(f) If necessary, apply fluid resistant primer on the bare metal surfaces of the lower pin (13). (refer to SRM 51–25–06).

(g) Make sure that the nuts (3) and the cotter pins (2) that are used to attach the upper pins (1) and the HSTA (20) are new.

(h) Make sure that the nuts (17) and the cotter pins (18) that are used to attach the lower pins (13) and the HSTA (20) are new.

(i) Before the installation of the bolts (7), (15), (19), the washers (10), and the nuts (11), make sure that the hardware agrees with the hole dimensions of the aircraft structure and trunnion (9) (refer to Table 4).

NOTE: To prevent over-torque of the nuts (11), it is permitted to replace the washer P/N NAS1149F0632P with washer P/N NAS1149F0616P, or to add washer P/N NAS1149F0616P to washer P/N NAS1149F0632P.

NOTE: To prevent over-torque of the nuts (11), it is permitted to replace the washer P/N B0202013S2520–32 with washer P/N B0202013S2520–16, or to add washer P/N B0202013S2520–16 to washer P/N B0202013S2520–32.

NOTE: To prevent over-torque of the nuts (11), it is permitted to replace the washer P/N B0202013S2620–32 with washer P/N B0202013S2620–16, or to add washer P/N B0202013S2620–16 to washer P/N B0202013S2620–32.

NOTE: To prevent over-torque of the nuts (11), it is permitted to replace the washer P/N NAS1149F0732P with washer P/N NAS1149F0716P, or to add washer P/N NAS1149F0716P to washer P/N NAS1149F0732P.

NOTE: To prevent over-torque of the nuts (11), it is permitted to replace the washer P/N B0202013S2924–32 with washer P/N B0202013S2924–16, or to add washer P/N B0202013S2924–16 to washer P/N B0202013S2924–32.

NOTE: To prevent over-torque of the nuts (11), it is permitted to replace the washer P/N B0202013S3024–32 with washer P/N B0202013S3024–16, or to add washer P/N B0202013S3024–16 to washer P/N B0202013S3024–32.

NOTE: To prevent over-torque of the nuts (11), it is permitted to replace the washer P/N with washer P/N NAS1149F0816P, or to add washer P/N NAS1149F0816P to washer P/N NAS1149F0832P.

TABLE 4 – AIRCRAFT STRUCTURE AND TRUNNION – HOLE-DIMENSION/HARDWARE				
DIAMETER OF THE ATTACH HOLES IN THE AIRCRAFT STRUCTURE	DIAMETER OF THE ATTACH HOLES IN THE TRUNNION	BOLT DIAMETER	BOLT P/N	NUT P/N WASHER P/N
0.375 to 0.380 in. (9.53 to 9.65 mm)	0.375 to 0.380 in. (9.53 to 9.65 mm)	0.375 in (9.53 mm)	NAS6206–( )D	MS17826–6 NAS1149F0616P and/or NAS1149F0632P
0.391 to 0.396 in (9.93 to 10.06 mm)	0.391 to 0.396 in (9.93 to 10.06 mm)	0.390 in (9.91 mm)	NAS6206–( )DX	MS17826–6 B0202013S2520–16 and/or B0202013S2520–32
0.406 to 0.411 in (10.31 to 10.44 mm)	0.406 to 0.411 in (10.31 to 10.44 mm)	0.406 in (10.31 mm)	NAS6206–( )DY	MS17826–6 B0202013S2620–16 and/or B0202013S2620–32
0.438 to 0.443 in (11.13 to 11.25 mm)	0.438 to 0.443 in (11.13 to 11.25 mm)	0.437 in (11.10 mm)	NAS6207–( )D	MS17826–7 NAS1149F0716P and/or NAS1149F0732P
0.453 to 0.458 in (11.51 to 11.63 mm)	0.453 to 0.458 in (11.51 to 11.63 mm)	0.453 in (11.51 mm)	NAS6207–( )DX	MS17826–7 B0202013S2924–16 and/or B0202013S2924–32
0.469 to 0.474 in (11.91 to 12.04 mm)	0.469 to 0.474 in (11.91 to 12.04 mm)	0.468 in (11.89 mm)	NAS6207–( )DY	MS17826–7 B0202013S3024–16 and/or B0202013S3024–32
0.500 to 0.505 in (12.70 to 12.83 mm)	0.500 to 0.505 in (12.70 to 12.83 mm)	0.500 in (12.70 mm)	NAS6208–( )D	MS17826–8 NAS1149F0816P and/or NAS1149F0832P

(j) Before the installation of the trunnions (9), make sure that the bolt(s) (7), (15), and (19) that have an oversize diameter of 0.390 in. (9.91 mm) or more have the correct P/N (refer to Table 5).

TABLE 5 – TRUNNION – OVERSIZE BOLT DIAMETERS AND P/N's		
	UPPER TRUNNION	LOWER TRUNNION
BOLT DIAMETER	BOLT P/N	BOLT P/N
0.390 in (9.91 mm) 1st oversize	NAS6206–14DX and NAS6206–20DX	NAS6206–8DX
0.406 in (10.31 mm) 2nd oversize	NAS6206–14DY and NAS6206–20DY	NAS6206–8DY
0.437 in (11.10 mm) Next size	NAS6207–14D and NAS6207–20D	NAS6207–8D
0.453 in (11.51 mm) 1st oversize	NAS6207–14DX and NAS6207–20DX	NAS6207–8DX
0.468 in (11.89 mm) 2nd oversize	NAS6207–14DY and NAS6207–20DY	NAS6207–8DY
0.500 in (12.70 mm) Next size	NAS6208–14D and NAS6208–20D	NAS6208–8D

(k) Before the installation of the bolts (6), the washers (4) and the nuts (3), make sure that the hardware agrees with the hole dimensions of the aircraft structure and the upper pins (1) (refer to Table 6).

TABLE 6 – AIRCRAFT STRUCTURE AND UPPER PIN – HOLE-DIMENSION/HARDWARE				
DIAMETER OF THE ATTACH HOLES IN THE AIRCRAFT STRUCTURE	DIAMETER OF THE ATTACH HOLES IN THE UPPER PIN	BOLT DIAMETER	BOLT P/N	NUT P/N WASHER P/N
0.189 to 0.195 in (4.80 to 4.95 mm)	0.215 to 0.225 in (5.46 to 5.72 mm)	0.189 in (4.80 mm)	NAS1203–13D	MS17826–3 NAS1149F0332P
0.205 to 0.210 in (5.21 to 5.33 mm)	0.225 to 0.235 in (5.72 to 5.97 mm)	0.205 in (5.21 mm)	NAS1580A3R13DX	MS17826–3 B0202013S1516–32
0.221 to 0.226 in (5.61 to 5.74 mm)	0.239 to 0.249 in (6.07 to 6.32 mm)	0.221 in (5.61 mm)	NAS1580A3R13DY	MS17826–3 B0202013S1516–32

TABLE 6 – AIRCRAFT STRUCTURE AND UPPER PIN – HOLE-DIMENSION/HARDWARE				
DIAMETER OF THE ATTACH HOLES IN THE AIRCRAFT STRUCTURE	DIAMETER OF THE ATTACH HOLES IN THE UPPER PIN	BOLT DIAMETER	BOLT P/N	NUT P/N WASHER P/N
0.250 to 0.255 in (6.35 to 6.48 mm)	0.270 to 0.280 in (6.86 to 7.11 mm)	0.250 in (6.35 mm)	NAS1204–13D	MS17826–4 NAS1149F0432P
0.265 to 0.270 in (6.73 to 6.86 mm)	0.284 to 0.294 in (7.21 to 7.47 mm)	0.265 in (6.73 mm)	NAS1580A4R13DX	MS17826–4 B0202013S1716–32
0.281 to 0.286 in (7.14 to 7.26 mm)	0.299 to 0.309 in (7.59 to 7.85 mm)	0.281 in (7.14 mm)	NAS1580A4R13DY	MS17826–4 B0202013S1816–32

(l) Before the installation of the upper pins (1), make sure that the bolt(s) (6) that have an oversize diameter of 0.205 in. (5.21 mm) or more have the correct P/N (refer to Table 7).

TABLE 7 UPPER PIN – OVERSIZE BOLT DIAMETERS AND P/N's	
	UPPER PIN
BOLT DIAMETER	BOLT P/N
0.205 in. (5.21 mm) 1st oversize	NAS1580A3R13DX
0.221 in. (5.61 mm) 2nd oversize	NAS1580A3R13DY
0.250 in. (6.35 mm) Next size	NAS1204–13D
0.265 in. (6.73 mm) 1st oversize	NAS1580A4R13DX
0.281 in. (7.14 mm) 2nd oversize	NAS1580A4R13DY

(m) Before the installation of the bolts (14), the washers (16), and the nuts (17), make sure that the hardware agrees with the hole dimensions of the aircraft structure and the lower pins (13) (refer to Table 8).

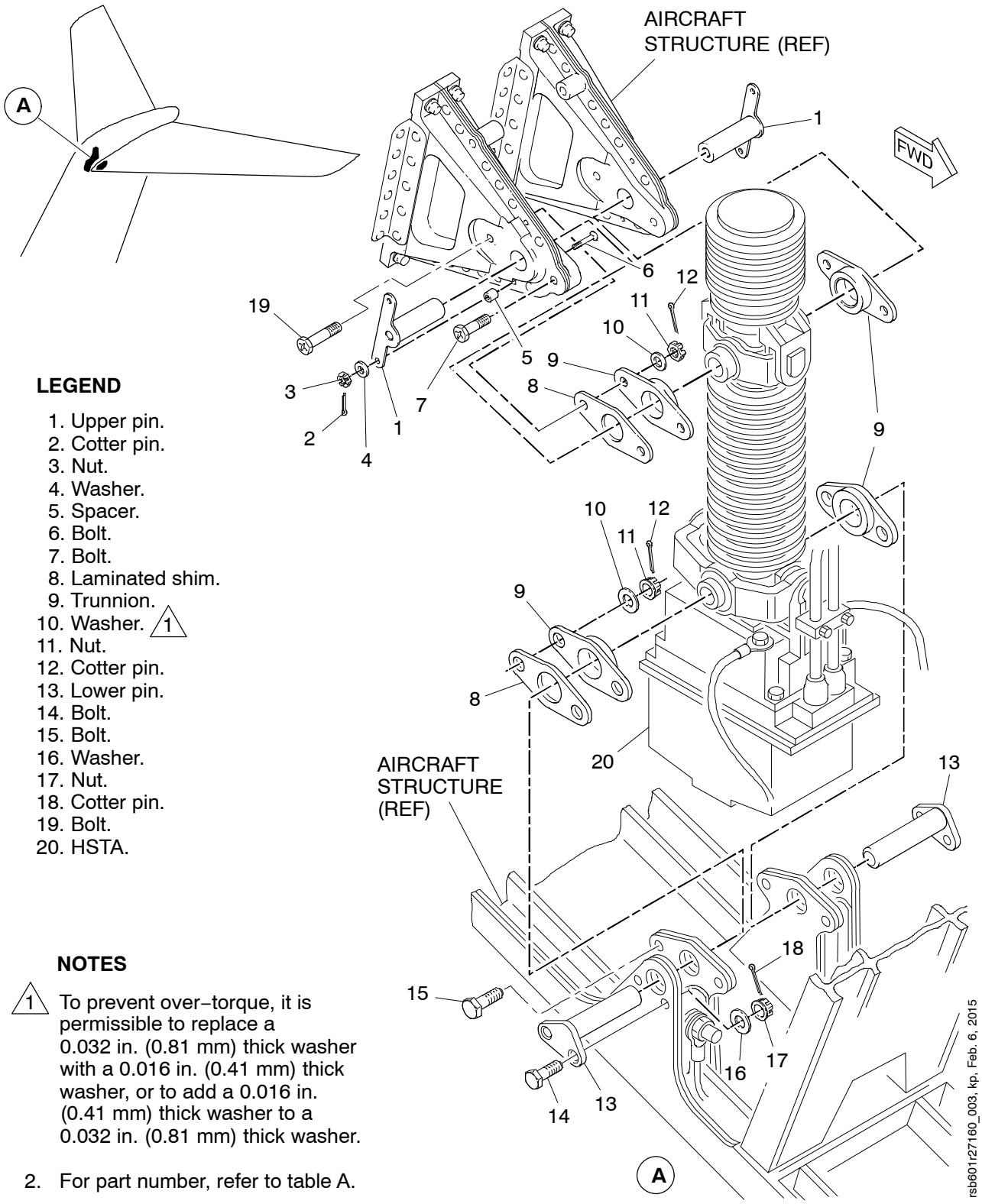
TABLE 8 – AIRCRAFT STRUCTURE AND LOWER PIN – HOLE-DIMENSION/HARDWARE				
DIAMETER OF THE ATTACH HOLES IN THE AIRCRAFT STRUCTURE	**DIAMETER OF THE ATTACH HOLES IN THE LOWER PIN**	**BOLT DIAMETER**	**BOLT P/N**	**NUT P/N** **WASHER P/N**
0.200 to 0.210 in (5.08 to 5.33 mm)	0.190 to 0.200 in (4.83 to 5.08 mm)	0.189 in (4.80 mm)	NAS1203–8D	MS17826–3 NAS1149F0332P
0.215 to 0.225 in (5.46 to 5.72 mm)	0.205 to 0.215 in (5.21 to 5.46 mm)	0.205 in (5.21 mm)	NAS1580A3R8DX	MS17826–3 B0202013S1516–32
0.231 to 0.241 in (5.87 to 6.12 mm)	0.221 to 0.231 in (5.61 to 5.87 mm)	0.221 in (5.61 mm)	NAS1580A3R8DY	MS17826–3 B0202013S1516–32
0.260 to 0.270 in (6.60 to 6.86 mm)	0.250 to 0.260 in (6.35 to 6.60 mm)	0.250 in (6.35 mm)	NAS8604D8	MS17826–4 NAS1149F0432P
0.275 to 0.285 in (6.99 to 7.24 mm)	0.265 to 0.275 in (6.73 to 6.99 mm)	0.265 in (6.73 mm)	NAS8604D8X	MS17826–4 B0202013S1716–32
0.291 to 0.301 in (7.39 to 7.65 mm)	0.281 to 0.291 in (7.14 to 7.39 mm)	0.281 in (7.14 mm)	NAS8604D8Y	MS17826–4 B0202013S1816–32

(n) Before the installation of the lower pins (13), make sure that the bolt(s) (14) that have an oversize diameter of 0.205 in. (5.21 mm) or more have the correct P/N (refer to Table 9).

TABLE 9 LOWER PIN – OVERSIZE BOLT DIAMETERS AND P/N's	
	LOWER PIN
BOLT DIAMETER	**BOLT P/N**
0.205 in. (5.21 mm) 1st oversize	NAS1580A3R8DX
0.221 in. (5.61 mm) 2nd oversize	NAS1580A3R8DY

TABLE 9 LOWER PIN – OVERSIZE BOLT DIAMETERS AND P/N's	
	LOWER PIN
BOLT DIAMETER	**BOLT P/N**
0.250 in. (6.35 mm) Next size	NAS8604D8
0.265 in. (6.73 mm) 1st oversize	NAS8604D8X
0.281 in. (7.14 mm) 2nd oversize	NAS8604D8Y

(o) Torque the installed fasteners (refer to AMM 20–21–00–910–801).



LEGEND

1. Upper pin.
2. Cotter pin.
3. Nut.
4. Washer.
5. Spacer.
6. Bolt.
7. Bolt.
8. Laminated shim.
9. Trunnion.
10. Washer. 1
11. Nut.
12. Cotter pin.
13. Lower pin.
14. Bolt.
15. Bolt.
16. Washer.
17. Nut.
18. Cotter pin.
19. Bolt.
20. HSTA.

NOTES

1. To prevent over–torque, it is permissible to replace a 0.032 in. (0.81 mm) thick washer with a 0.016 in. (0.41 mm) thick washer, or to add a 0.016 in. (0.41 mm) thick washer to a 0.032 in. (0.81 mm) thick washer.

2. For part number, refer to table A.

PART B — HSTA Pins and Trunnions — NCR Condition — Removal/Installation
Figure 4 (Sheet 1 of 4)

TABLE A				
ITEM	NAME		P/N	ALTERNATE PART
1	Upper pin	(Pre–Mod)	NCR #xxxxxx–x	
		(Post–Mod)	K601R92308–35	
			K601R92308–55	
2	Cotter pin	(Post–Mod)	MS24665–153	
3	Nut	(Post–Mod)	MS17826–3	
			MS17826–4	
4	Washer	(Post–Mod)	B0202013S1516–32	B0202013A1516–32
				B0202013–1516–32
			NAS1149F0432P	
			B0202013S1716–32	B0202013A1716–32
				B0202013–1716–32
			B0202013S1816–32	B0202013A1816–32
				B0202013–1816–32
5	Spacer	(Post–Mod)	NAS42DD6–25N	
			NAS42DD8–25N	
6	Bolt	(Post–Mod)	NAS1580A3R13DX	
			NAS1580A3R13DY	
			NAS1204–13D	
			NAS1580A4R13DX	
			NAS1580A4R13DY	
7	Bolt	(Post–Mod)	NAS6206–14DX	
			NAS6206–14DY	
			NAS6207–14D	
			NAS6207–14DX	
			NAS6207–14DY	
			NAS6208–14D	
8	Laminated shim	(Post–Mod)	601R92303–17	
9	Trunnion	(Pre–Mod)	NCR #xxxxxx–x	
		(Post–Mod)	K601R92308–31	
			K601R92308–51	

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PART B — HSTA Pins and Trunnions — NCR Condition — Removal/Installation
Figure 4 (Sheet 2 of 4)

TABLE A				
ITEM	NAME		P/N	ALTERNATE PART
10	Washer	(Post–Mod)	B0202013S2520–16	B0202013A2520–16
				B0202013–2520–16
			B0202013S2520–32	B0202013A2520–32
				B0202013–2520–32
			B0202013S2620–16	B0202013A2620–16
				B0202013–2620–16
			B0202013S2620–32	B0202013A2620–32
				B0202013–2620–32
			B0202013S2924–16	B0202013A2924–16
				B0202013–2924–16
			B0202013S2924–32	B0202013A2924–32
				B0202013–2924–32
			B0202013S3024–16	B0202013A3024–16
				B0202013–3024–16
			B0202013S3024–32	B0202013A3024–32
				B0202013–3024–32
			NAS1149F0716P	
			NAS1149F0732P	
			NAS1149F0816P	
			NAS1149F0832P	
11	Nut	(Post–Mod)	MS17826–6	
			MS17826–7	
			MS17826–8	
12	Cotter pin	(Post–Mod)	MS24665–300	
13	Lower pin	(Pre–Mod)	NCR #xxxxxx–x	
		(Post–Mod)	K601R92308–33	
			K601R92308–53	
14	Bolt	(Post–Mod)	NAS1580A3R8DX	
			NAS1580A3R8DY	
			NAS8604D8	
			NAS8604D8X	
			NAS8604D8Y	

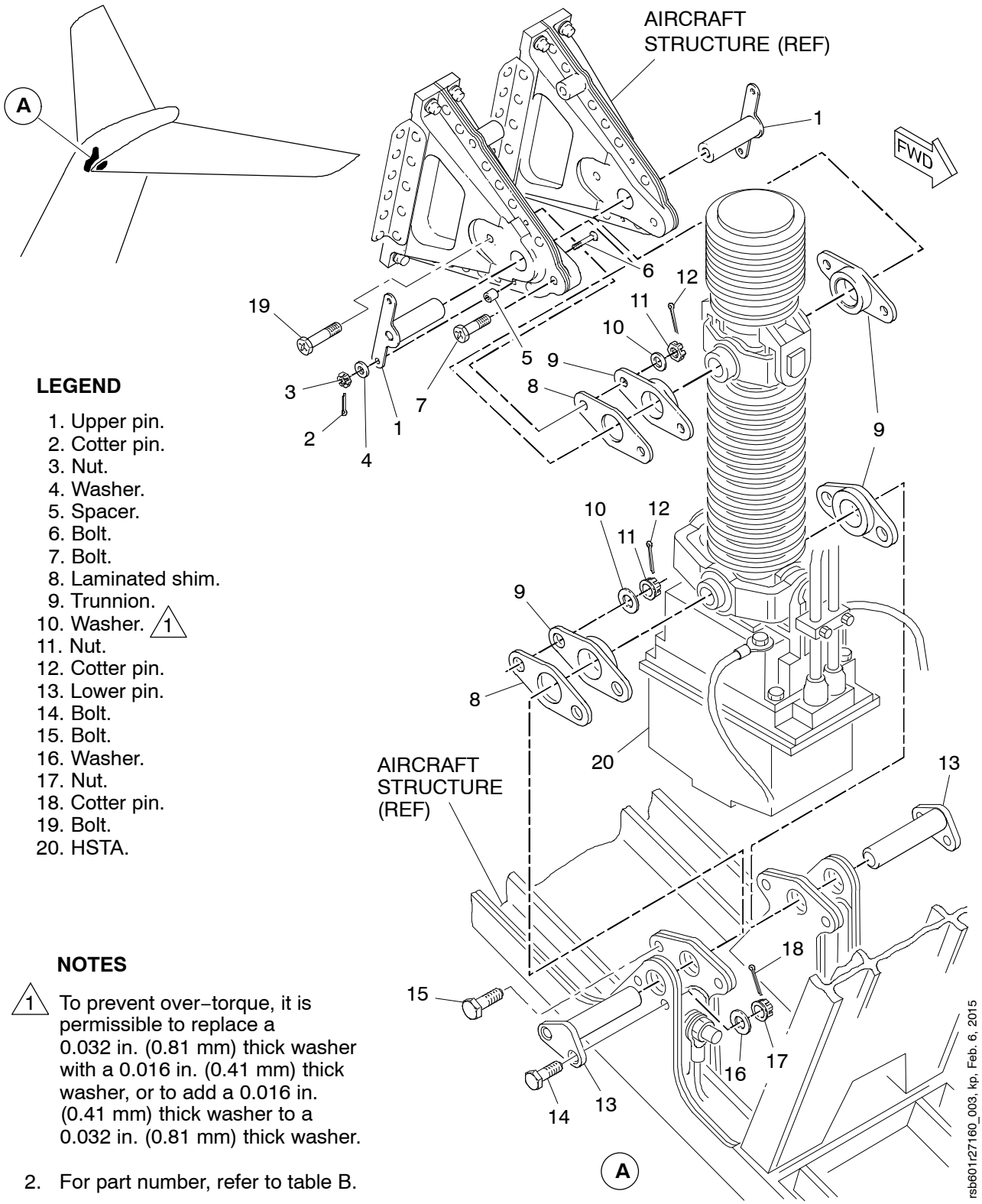
rsb601r27160_005, kp, Feb. 6, 2015

PART B — HSTA Pins and Trunnions — NCR Condition — Removal/Installation
Figure 4 (Sheet 3 of 4)

TABLE A				
ITEM	NAME		P/N	ALTERNATE PART
15	Bolt	(Post–Mod)	NAS6206–8DX	
			NAS6206–8DY	
			NAS6207–8D	
			NAS6207–8DX	
			NAS6207–8DY	
			NAS6208–8D	
16	Washer	(Post–Mod)	B0202013S1516–32	B0202013A1516–32
				B0202013–1516–32
			NAS1149F0432P	
			B0202013S1716–32	B0202013A1716–32
				B0202013–1716–32
			B0202013S1816–32	B0202013A1816–32
				B0202013–1816–32
17	Nut	(Post–Mod)	MS17826–3	
			MS17826–4	
18	Cotter pin	(Post–Mod)	MS24665–153	
19	Bolt	(Post–Mod)	NAS6206–20DX	
			NAS6206–20DY	
			NAS6207–20D	
			NAS6207–20DX	
			NAS6207–20DY	
			NAS6208–20D	

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PART B — HSTA Pins and Trunnions — NCR Condition — Removal/Installation
Figure 4 (Sheet 4 of 4)



LEGEND

1. Upper pin.
2. Cotter pin.
3. Nut.
4. Washer.
5. Spacer.
6. Bolt.
7. Bolt.
8. Laminated shim.
9. Trunnion.
10. Washer. 1
11. Nut.
12. Cotter pin.
13. Lower pin.
14. Bolt.
15. Bolt.
16. Washer.
17. Nut.
18. Cotter pin.
19. Bolt.
20. HSTA.

NOTES

1. To prevent over–torque, it is permissible to replace a 0.032 in. (0.81 mm) thick washer with a 0.016 in. (0.41 mm) thick washer, or to add a 0.016 in. (0.41 mm) thick washer to a 0.032 in. (0.81 mm) thick washer.

2. For part number, refer to table B.

PART B — HSTA Pins and Trunnions — Nominal Condition — Removal/Installation
Figure 5 (Sheet 1 of 3)

TABLE B			
ITEM	NAME		P/N
1	Upper pin	(Pre–Mod)	601R92310–3
			K601R92308–5
			K601R92308–7
			K601R92308–9
		(Post–Mod)	601R92310–3
			K601R92308–5
			K601R92308–7
			K601R92308–9
2	Cotter pin	(Pre–Mod)	MS24665–134
		(Post–Mod)	MS24665–153
3	Nut	(Pre–Mod)	MS17826–3
		(Post–Mod)	
7	Bolt	(Pre–Mod)	NAS6206–14D
		(Post–Mod)	
8	Laminated shim	(Pre–Mod)	601R92303–17
		(Post–Mod)	
9	Trunnion	(Pre–Mod)	601R92386–3
			K601R92308–19
		(Post–Mod)	601R92386–3
			K601R92308–19
10	Washer	(Pre–Mod)	AN960–616L
		(Post–Mod)	NAS1149F0616P
			NAS1149F0632P
11	Nut	(Pre–Mod)	MS17826–6
		(Post–Mod)	
12	Cotter pin	(Pre–Mod)	MS24665–134
			MS24665–283
		(Post–Mod)	MS24665–300

rsb601r27160_010, kp, Feb. 6, 2015

PART B — HSTA Pins and Trunnions — Nominal Condition — Removal/Installation
Figure 5 (Sheet 2 of 3)

TABLE B			
ITEM	NAME		P/N
13	Lower pin	(Pre–Mod)	601R92309–3
			K601R92308–11
			K601R92308–13
			K601R92308–15
		(Post–Mod)	601R92309–3
			K601R62308–11
			K601R92308–13
			K601R92308–15
15	Bolt	(Post–Mod)	NAS6206–8D
17	Nut	(Post–Mod)	MS17826–3
18	Cotter pin	(Pre–Mod)	MS24665–134
		(Post–Mod)	MS24665–153
19	Bolt	(Pre–Mod)	NAS6206–20D
		(Post–Mod)	

rsb601r27160_011, kp, Feb. 9, 2015

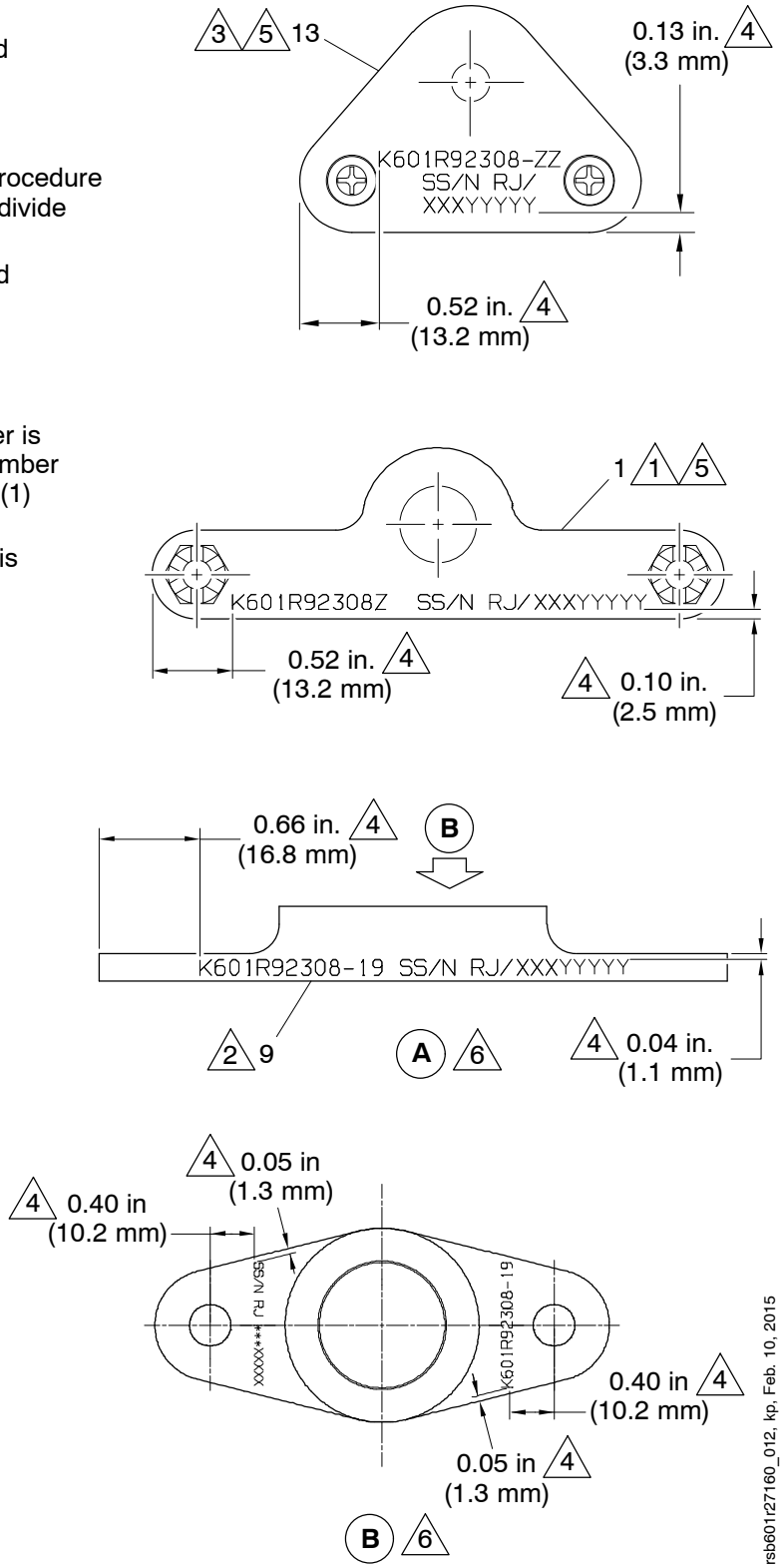
PART B — HSTA — Pins and Trunnions — Nominal Condition — Removal/Installation
Figure 5 (Sheet 3 of 3)

NOTES

1. For Upper pin P/N 601R92310–3 and K601R92308–55, the identification procedure is not necessary.
2. For Trunnion P/N 601R92386–3 and K601R92308–51, the identification procedure is not necessary. It is permissible to divide the identification between the sides.
3. For Lower pin P/N 601R92309–3 and K601R92308–53, the identification procedure is not necessary.
4. The dimensions are approximate and shown as reference only.
5. The letter Z shown in the part number is replaced with the applicable dash number listed in the legend for the upper pin (1) and the lower pin (13).
6. The identification of the trunnion (9) is done with View A or B.

LEGEND

1. Upper pin
   NCR #xxxxxx–x (Pre–Mod) or
   601R92310–3 (Pre–Mod) or
   K601R92308–5 (Pre–Mod) or
   K601R92308–7 (Pre–Mod) or
   K601R92308–9 (Pre–Mod) or
   601R92310–3 (Post–Mod) or
   K601R92308–5 (Post–Mod) or
   K601R92308–7 (Post–Mod) or
   K601R92308–9 (Post–Mod) or
   K601R92308–35 (Post–Mod) or
   K601R92308–55 (Post–Mod).
9. Trunnion
   NCR #xxxxxx–x (Pre–Mod) or
   601R92386–3 (Pre–Mod) or
   K601R92308–19 (Pre–Mod).
   601R92386–3 (Post–Mod) or
   K601R92308–19 (Post–Mod) or
   K601R92308–31 (Post–Mod) or
   K601R92308–51 (Post–Mod).
13. Lower pin
   NCR #xxxxxx–x (Pre–Mod) or
   601R92309–3 (Pre–Mod) or
   K601R92308–11 (Pre–Mod) or
   K601R92308–13 (Pre–Mod) or
   K601R92308–15 (Pre–Mod).
   601R92309–3 (Post–Mod) or
   K601R92308–11 (Post–Mod) or
   K601R92308–13 (Post–Mod) or
   K601R92308–15 (Post–Mod) or
   K601R92308–33 (Post–Mod) or
   K601R92308–53 (Post–Mod).



PART B — HSTA Pins and Trunnions — Identification
Figure 6 (Sheet 1 of 1)

F. Job Close-Out

NOTE: The steps in the Job Close-Out section of this service bulletin, except for the return-to-service tests, are recommended steps. The steps give a recommendation to install components removed during the Job Set-Up. This recommendation is to make sure that the aircraft is safe and ready to return to service. Alternative steps can be used at the operator discretion.

(1) Remove all tools, equipment, and unwanted materials from the work area.

(2) Install the access panels that follow:

ACCESS	DESIGNATION	REFERENCE
Middle Upper Fairing	Access panel	AMM 55–32–05–400–806
Middle Lower Fairing	Access panel	AMM 55–32–05–400–807

(3) Apply external AC power to the aircraft (Refer to AMM 12–00–07–861–801).

(4) Do the operational test of the HSTA trim system (AMM 27–40–00–710–802).

(5) Do the functional test of the HSTCU (AMM 27–41–00–740–801).

(6) Remove the applicable warning placards from the pilot's and the copilot's control wheels and the STAB TRIM/MACH TRIM panel.

(7) When PART B of this service bulletin is completed, make this entry in the applicable logbooks: "Service Bulletin 601R–27–160, Revision D, Flight Controls – Horizontal Stabilizer Trim Actuator (HSTA) – Serialization of the HSTA Pins and Trunnions, PART B, incorporated."

3. MATERIAL INFORMATION

A. Kit Information

KIT 601R27–160K1				
PART NUMBER	**QUANTITY**	**NAME**	**ALTERNATIVE PARTS**	**NOTES**
601R92303–17	3	Laminated Shim	–	–

KIT 601R27–160K2 [1]				
PART NUMBER	**QUANTITY**	**NAME**	**ALTERNATIVE PARTS**	**NOTES**
MS17826–6	9	Nut	–	–
MS24665–153	9	Cotter Pin	–	–
MS24665–300	9	Cotter Pin	–	–
NAS1149F0616P	9	Washer	–	–
NAS1149F0632P	9	Washer	–	–
NAS6206–14D	3	Bolt	–	–
NAS6206–20D	3	Bolt	–	–
NAS6206–8D	5	Bolt	–	–
[1] The kit can contain more hardware and/or material than necessary.				

KIT 601R27–160K3 [1]				
PART NUMBER	**QUANTITY**	**NAME**	**ALTERNATIVE PARTS**	**NOTES**
B0202013S2520–16	8	Washer	B0202013A2520–16 or B0202013–2520–16	–
B0202013S2520–32	8	Washer	B0202013A2520–32 or B0202013–2520–32	–

KIT 601R27–160K3 [1]				
PART NUMBER	**QUANTITY**	**NAME**	**ALTERNATIVE PARTS**	**NOTES**
B0202013S2620–16	8	Washer	B0202013A2620–16 or B0202013–2620–16	–
B0202013S2620–32	8	Washer	B0202013A2620–32 or B0202013–2620–32	–
B0202013S2924–16	8	Washer	B0202013A2924–16 or B0202013–2924–16	–
B0202013S2924–32	8	Washer	B0202013A2924–32 or B0202013–2924–32	–
B0202013S3024–16	8	Washer	B0202013A3024–16 or B0202013–3024–16	–
B0202013S3024–32	8	Washer	B0202013A3024–32 or B0202013–3024–32	–
MS17826–6	9	Nut	–	–
MS17826–7	9	Nut	–	–
MS17826–8	9	Nut	–	–
MS24665–302	9	Cotter pin	–	–
NAS1149F0716P	9	Washer	–	–
NAS1149F0732P	9	Washer	–	–
NAS1149F0816P	9	Washer	–	–
NAS1149F0832P	9	Washer	–	–
NAS6206–8DX	4	Bolt, 1st oversize	–	–
NAS6206–8DY	4	Bolt, 2nd oversize	–	–
NAS6206–14DX	2	Bolt, 1st oversize	–	–
NAS6206–14DY	2	Bolt, 2nd oversize	–	–

KIT 601R27–160K3 [1]				
PART NUMBER	**QUANTITY**	**NAME**	**ALTERNATIVE PARTS**	**NOTES**
NAS6206–20DX	2	Bolt, 1st oversize	–	–
NAS6206–20DY	2	Bolt, 2nd oversize	–	–
NAS6207–8D	4	Bolt, nominal	–	–
NAS6207–8DX	4	Bolt, 1st oversize	–	–
NAS6207–8DY	4	Bolt, 2nd oversize	–	–
NAS6207–14D	2	Bolt, nominal	–	–
NAS6207–14DX	2	Bolt, 1st oversize	–	–
NAS6207–14DY	2	Bolt, 2nd oversize	–	–
NAS6207–20D	2	Bolt, nominal	–	–
NAS6207–20DX	2	Bolt, 1st oversize	–	–
NAS6207–20DY	2	Bolt, 2nd oversize	–	–
NAS6208–8D	4	Bolt, nominal	–	–
NAS6208–14D	2	Bolt, nominal	–	–
NAS6208–20D	2	Bolt, nominal	–	–
[1] The kit can contain more hardware and/or material than necessary.				

KIT 601R27–160K4 [1]				
PART NUMBER	**QUANTITY**	**NAME**	**ALTERNATIVE PARTS**	**NOTES**
B0202013S1516–32	4	Washer	B0202013A1516–32 or B0202013–1516–32	–
B0202013S1716–32	4	Washer	B0202013A1716–32 or B0202013–1716–32	–
B0202013S1816–32	4	Washer	B0202013A1816–32 or B0202013–1816–32	–
NAS1149F0432P	4	Washer	–	–

KIT 601R27–160K4 [1]				
PART NUMBER	**QUANTITY**	**NAME**	**ALTERNATIVE PARTS**	**NOTES**
NAS1204–13D	4	Bolt, Nominal	–	–
MS17826–3	5	Nut	–	–
MS17826–4	5	Nut	–	–
MS24665–153	5	Cotter pin	–	–
NAS1580A4R13DX	5	Screw, 1st oversize	–	–
NAS1580A4R13DY	5	Screw, 2nd oversize	–	–
[1] The kit can contain more hardware and/or material than necessary.				

NOTE: For permitted alternative superseded parts, refer to the Parts Supersession Cross References Lists at www.iflybombardier.com under Resources – Engineering Documents.

NOTE: Some parts listed in the kit content of this service bulletin are supplied in a temporary condition of supply configuration. These parts are identified with a –SB, /SB, SB or other suffix after the Bombardier engineering part number. When the parts are installed, with the instructions given in the Accomplishment Instructions of this service bulletin, the parts agree with the requirements of the engineering configuration. Refer to the SB Introduction document for more explanation.

B. Consumable Information

The materials that follow are necessary to do this service bulletin and can be ordered from Bombardier or purchased directly from industry sources. If the material is ordered from Bombardier, there can be some lead time because of the shelf life of the material.

CONSUMABLES [1]			
SPECIFICATION	**QUANTITY**	**NAME**	**REFERENCE**
BAMS 516–007 Type 1	As necessary	Indelible ink	Commercially available
–	As necessary	Adhesive label maker	Commercially available
[1] Refer to AMM 51–31–00–990–801			

C. Special Tools and Equipment

There are no special tools and equipment for this service bulletin.

D. Disposition of Parts

PART A — Inspection and Serialization of the HSTA Pins and Trunnions

The table that follows shows the disposition of parts on the aircraft (or spares), and the relationship between these parts to the new parts to be installed during the incorporation of this service bulletin.

PRE-SB PART NUMBER	NAME	QUANTITY	DC	POST-SB PART NUMBER
600–92384–5	Upper Pin	2	DIS MOD MOD DIS	601R92310–3 or K601R92308–5 or K601R92308–35 or K601R92308–55
600–92384–7	Upper Pin	2	DIS MOD MOD DIS	601R92310–3 or K601R92308–7 or K601R92308–35 or K601R92308–55
601R92310–1 [2]	Upper Pin	2	DIS MOD MOD DIS	601R92310–3 or K601R92308–9 or K601R92308–35 or K601R92308–55
601R92310–3	Upper Pin	2	DIS MOD DIS	601R92310–3 or K601R92308–35 or K601R92308–55
NCR# xxxxxx–x [1]	Upper Pin	2	MOD DIS	K601R92308–35 or K601R92308–55
600–92383–5	Lower Pin	2	DIS MOD MOD DIS	601R92309–3 or K601R92308–11 or K601R92308–33 or K601R92308–53
600–92383–7	Lower Pin	2	DIS MOD MOD DIS	601R92309–3 or K601R92308–13 or K601R92308–33 or K601R92308–53

PRE-SB PART NUMBER	NAME	QUANTITY	DC	POST-SB PART NUMBER
601R92309–1 [2]	Lower Pin	2	DIS MOD MOD DIS	601R92309–3 or K601R92308–15 or K601R92308–33 or K601R92308–53
601R92309–3	Lower Pin	2	DIS MOD MOD DIS	601R92309–3 or K601R92308–15 or K601R92308–33 or K601R92308–53
NCR# xxxxxx–x [1]	Lower Pin	2	MOD DIS	K601R92308–33 or K601R92308–53
601R92386–1	Trunnion	4	MOD MOD MOD DIS	601R92386–3 or K601R92308–19 or K601R92308–31 or K601R92308–51
601R92386–3	Trunnion	4	DIS MOD MOD DIS	601R92386–3 or K601R92308–19 or K601R92308–31 or K601R92308–51
NCR# xxxxxx–x [1]	Trunnion	4	MOD DIS	K601R92308–31 or K601R92308–51

[1] P/N NCR# xxxxxx–x can be any numerical and/or letter combination which identifies a Non–Conformance Part (NCR).

[2] Lower pin P/N 601R92309–1PP is an alternative to P/N 601R92309–1 and upper pin P/N 601R92310–1PP is an alternative to P/N 601R92310–1.

Disposition code (DC):

DIS: Discard Part.
MOD: Modification: For modification of part, refer to the procedure given in this service bulletin.

PART B – Inspection of the Attach Holes of the HSTA Pins and Trunnions

The table that follows shows the disposition of parts on the aircraft (or spares), and the relationship between these parts to the new parts to be installed during the incorporation of this service bulletin.

PRE-SB PART NUMBER	NAME	QUANTITY	DC	POST-SB PART NUMBER
601R92310–3	Upper Pin	2	DIS MOD DIS	601R92310–3 or K601R92308–35 or K601R92308–55
K601R92308–5	Upper Pin	2	DIS MOD MOD DIS	601R92310–3 or K601R92308–5 or K601R92308–35 or K601R92308–55
K601R92308–7	Upper Pin	2	DIS MOD MOD DIS	601R92310–3 or K601R92308–7 or K601R92308–35 or K601R92308–55
K601R92308–9	Upper Pin	2	DIS MOD MOD DIS	601R92310–3 or K601R92308–9 or K601R92308–35 or K601R92308–55
NCR# xxxxxx–x [1]	Upper Pin	2	MOD DIS	K601R92308–35 or K601R92308–55
601R92309–3	Lower Pin	2	DIS MOD DIS	601R92309–3 or K601R92308–33 or K601R92308–53
K601R92308–11	Lower Pin	2	DIS MOD MOD DIS	601R92309–3 or K601R92308–11 or K601R92308–33 or K601R92308–53
K601R92308–13	Lower Pin	2	DIS MOD MOD DIS	601R92309–3 or K601R92308–13 or K601R92308–33 or K601R92308–53

PRE-SB PART NUMBER	NAME	QUANTITY	DC	POST-SB PART NUMBER
K601R92308–15	Lower Pin	2	DIS MOD MOD DIS	601R92309–3 or K601R92308–15 or K601R92308–33 or K601R92308–53
NCR# xxxxxx–x [1]	Lower Pin	2	MOD DIS	K601R92308–33 or K601R92308–51
601R92386–3	Trunnion	4	DIS MOD DIS	601R92386–3 or K601R92308–31 or K601R92308–51
K601R92308–19	Trunnion	4	DIS MOD MOD DIS	601R92386–3 or K601R92308–19 or K601R92308–31 or K601R92308–51
NCR# xxxxxx–x [1]	Trunnion	4	MOD DIS	K601R92308–31 or K601R92308–51
[1] P/N NCR# xxxxxx–x Can be any numerical and/or letter combination which identifies a Non–Conformance Part (NCR).				

Disposition code (DC):

DIS: Discard Part.
MOD: Modification: For modification of part, refer to the procedure given in this service bulletin.

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Service Bulletin No.: 601R-27-160				**Revision D**
Aircraft Serial Number:	**Date:**			
	STRONGLY DISAGREE	**DISAGREE**	**AGREE**	**STRONGLY AGREE**
Instructions to do the service bulletin are accurate. Comments:	-	-	-	-
Figure(s), picture(s), and/or Appendix were helpful to do the service bulletin. Comments:	-	-	-	-
Part(s) or kit(s) agreed with the service bulletin requirement. Comments:	-	-	-	-
The service bulletin was accomplished within the estimated time given. Comments:	-	-	-	-
Overall, I was satisfied with this service bulletin. Comments:	-	-	-	-

Operator:	**Service Centre:**
Name:	**Telephone or Fax:**
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