

TITLE

LANDING GEAR - MAIN-LANDING-GEAR TORQUE-KNEE PINS REPLACEMENT

EFFECTIVITY

MODEL	SERIAL NUMBERS
B200GT	BY-207, BY-215, BY-224 thru BY-392
B200CGT	BZ-2
B200C	BL-141 thru BL-146
B200	BB-1704 thru BB-1813
B300	FL-266 thru FL-1243
B300C	FM-58 thru FM-95
1900D	UE-393 thru UE-439

NOTE: Upper Torque Knee Pins that are manufactured between September 2000 to November 2020, or if unknown.

NOTE: Lower Torque Knee Pins that are manufactured between March 2000 to October 2002 and between January 2015 to December 2020, or if unknown.

SPARES

Also affected are any upper and lower torque knee pins that are in spares stock that were manufactured between the dates listed in the previous notes.

REASON

An investigation on the torque knee pins revealed that some knees pins are not properly cadmium plated, primed, or topcoated.

DESCRIPTION

This service document provides parts and instructions to inspect the upper and lower torque knee pins and if necessary replace them with the new 101-810025-0003 Upper and 101-810026-0005 Lower Torque Knee Pins.

COMPLIANCE

MANDATORY. This service document must be accomplished at the next maintenance event where the wheels and brakes are removed.

A service document published by Textron Aviation may be recorded as *completed* in an aircraft log only when the following requirements are satisfied:

- 1) The mechanic must complete all of the instructions in the service document, including the intent therein.
- 2) The mechanic must correctly use and install all applicable parts supplied with the service document kit. Only with written authorization from Textron Aviation can substitute parts or rebuilt parts be used to replace new parts.
- 3) The mechanic or airplane owner must use the technical data in the service document only as approved and published.

April 11, 2023

MTB-32-02
Page 1 of 5

Textron Aviation Customer Service, P.O. Box 7706, Wichita, KS 67277, U.S.A. 1-316-517-5800

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MANDATORY**MTB-32-02**

- 4) The mechanic or airplane owner must apply the information in the service document only to aircraft serial numbers identified in the *Effectivity* section of the document.
- 5) The mechanic or airplane owner must use maintenance practices that are identified as acceptable standard practices in the aviation industry and governmental regulations.

No individual or corporate organization other than Textron Aviation is authorized to make or apply any changes to a Textron Aviation-issued service document or flight manual supplement without prior written consent from Textron Aviation.

Textron Aviation is not responsible for the quality of maintenance performed to comply with this document, unless the maintenance is accomplished at a Textron Aviation-owned Service Center.

APPROVAL

Textron Aviation received FAA approval for the technical data in this publication that changes the airplane type design.

FLIGHT CREW OPERATIONS

No Changes

CONSUMABLE MATERIAL

You must use the consumable materials that follow, or their equivalent, to complete this service document.

NAME	NUMBER	MANUFACTURER	USE
Corrosion Resistant Primer	K000574 (2oz Kit)	Textron Aviation Parts Distribution	Preferred corrosion resistant epoxy primer
Grease	Aeroshell 64 or Aeroshell 33	Commercially Available	To grease knee pins prior to installation.
Paint, Polyurethane (Top Coat)	Matterhorn White No. CA8800/F17865 (or equivalent that meets MIL-PRF-85285)	Commercially Available	Paint top coat.
Isopropyl Alcohol		Commercially Available	To clean the inner diameter of the torque knee pins.

TOOLING

No specialized tooling is required to complete this service document.

WEIGHT AND BALANCE INFORMATION

Negligible

REFERENCES

Super King Air 200 Series Aircraft Maintenance Manual
 Super King Air B200/B200CGT Fusion Maintenance Manual
 Super King Air B300/B300C Maintenance Manual
 Super King Air B300/B300C Fusion Maintenance Manual
 Model 1900D Airliner Maintenance Manual
 King Air Standard Practices Manual

PUBLICATIONS AFFECTED

Super King Air B200/B200C Illustrated Parts Catalog

Super King Air B200/B200CGT Illustrated Parts Catalog

Super King Air B300/B300C Illustrated Parts Catalog

Model 1900D Airliner Illustrated Parts Catalog

ACCOMPLISHMENT INSTRUCTIONS

1. Prepare the airplane for maintenance.
 - A. Make sure that the airplane is electrically grounded.
 - B. Make sure that all switches are in the OFF/NORM position.
 - C. Disconnect electrical power from the airplane.
 - (1) Disconnect external electrical power.
 - (2) Disconnect the airplane battery.
 - D. Attach maintenance warning tags to the battery and external power receptacle that have **"DO NOT CONNECT ELECTRICAL POWER - MAINTENANCE IN PROGRESS"** written on them.
 - E. Attach maintenance warning tags to the landing gear handle that has **"DO NOT OPERATE LANDING GEAR - MAINTENANCE IN PROGRESS"** written on it.
2. Remove the left and right main landing gear wheels and brakes. (Refer to the applicable model, Maintenance Manual, Chapter 32, Main Landing Gear Wheel and Brake - Removal/Installation.)
3. Remove the 101-810025-1 Upper and 101-810026-1 Lower Torque Knee Pins as follows:
 - A. Deflate the landing gear strut by relieving pressure at the valve located on top of the strut.
 - B. Cut the lockwire from the clevis pin and remove the clevis pin from the upper torque knee pin. Tap the upper torque knee pin out and remove the upper torque knee.
 - C. Remove the cotter pin, washer and clevis pin from the lower torque knee pin. Tap the lower torque knee pin out and remove the lower torque knee.
4. Inspect the 101-810025-1 Upper and 101-810026-1 Lower Torque Knee Pins as follows:
 - A. If the ends or the inner diameter (ID) of the bore are coated with primer and no corrosion or Polyurethane Top Coat is found, go to Step 4. C.
 - B. If the ends or the inner diameter (ID) of the bore are not coated with primer and/or corrosion is found, go to Step 4. D.
 - C. Apply Polyurethane Top Coat as follows:
 - (1) Wipe and clean the ends and the inner diameter surfaces of each torque knee pin with Isopropyl Alcohol.
 - (2) Mask off the outer diameter (OD) CAD areas of each torque knee pin.
NOTE: No paint is permitted on the outer diameter bearing surfaces of the torque knee pins.
 - (3) Apply Polyurethane Topcoat to a dry film thickness of 2.0 to 3.0 mils following the manufacturer's directions for application and dry time. (Refer to the King Air Standard Practices, Manual, Chapter 20, Corrosion - Maintenance Practices.)
NOTE: The topcoat must meet specification of MIL-PRF-85285.
 - (4) Go to Step 5.
 - D. If corrosion is found on the inner diameter of the bore or the ends of any torque knee pin, then do as follows:
 - (1) Remove corrosion from each torque knee pin. (Refer to the King Air Standard Practices Manual, Chapter 20, Corrosion - Maintenance Practices.)

- (2) If the removed corrosion is more than 0.018 inch of the Inner Diameter (ID) of the torque knee pin, discard the pins and install new torque knee pins, then, go to Step 5.
- (3) If the removed corrosion is less than 0.018 inch of the Inner Diameter (ID) of the torque knee pin, use Isopropyl Alcohol to wipe and clean the inner diameter surface.
 - (a) Let the parts dry.
- (4) Mask off the outer diameter (OD) CAD areas of each torque knee pin.

NOTE: No paint or primer is permitted on the outer diameter bearing surfaces of the torque knee pins.

- (5) Apply Corrosion Resistant Primer following the manufacture directions for application and dry time. (Refer to the King Air Standard Practices Manual, Chapter 20, Corrosion - Maintenance Practices.)
- (6) Apply Polyurethane Topcoat to a dry film thickness of 2.0 to 3.0 mils following the manufacturer's directions for application and dry time. (Refer to the King Air Standard Practices, Manual, Chapter 20, Corrosion - Maintenance Practices.)

NOTE: The topcoat must meet specification of MIL-PRF-85285.

5. Install the repaired torque knee pins or the new 101-810025-0003 Upper and 101-810026-0005 Lower Torque Knee Pins as follows:

NOTE: It is permitted to install 101-810025-1 Upper and 101-810026-1 Lower Torque Knee Pins as an alternate that are built outside of the build date range as mentioned in effectivity section.

- A. Coat the upper and lower knee pins, bushing, and bolt with MIL-G-21164 (Aeroshell 64) or MIL-PRF-23827 Type 1 Grease (Aeroshell 33).

NOTE: MIL-G-21164 (Aeroshell 64) Grease is preferred.

NOTE: Make sure that you are not mixing both the greases.

- B. Position the lower torque knee in place. Tap the lower knee pin through the torque knee and the lug on the landing gear.

- (1) Safety the clevis pin and the washer with cotter pin. (Refer to the King Air Standard Practices Manual, Chapter 20, Fastener Locking Devices - Maintenance Practices.)

NOTE: Use the appropriate Model Illustrated Parts Catalog for the correct cotter pin part number for your airplane.

- C. Position the upper torque knee in place. Tap the upper torque knee pin through the torque knee and the lug on the landing gear brace and install the clevis pin.

- (1) Safety wire the clevis pin to the lockwire hole in the forward side of the piston retainer assembly of the gear using lockwire. (Refer to the King Air Standard Practices Manual, Chapter 20, Fastener Locking Devices - Maintenance Practices.)

NOTE: Use the appropriate Model Illustrated Parts Catalog for the correct cotter pin part number for your airplane.

6. Install the left and right main landing gear wheels and brakes. (Refer to the applicable model, Maintenance Manual, Chapter 32, Main Landing Gear Wheel and Brake - Removal/Installation.)
7. Service the left and right main landing gear wheels and brakes. (Refer to the applicable model, Maintenance Manual, Chapter 12, Landing Gear System - Servicing.)
8. Remove the maintenance warning tags and connect the airplane battery.
9. Service the landing gear assemblies (after the brakes and wheels are installed). Cycle the landing gear for two full cycles and make sure there is no binding.

10. Make an entry in the airplane logbook that states compliance and method of compliance with this service document.

NOTE: Textron Aviation recommends that compliance with all service documents is reported to a maintenance tracking system provider.

- Complete a record of compliance. (Maintenance Transaction Report, Log Book Entry, or other record of compliance.)
- Put a copy of the completed record of compliance in the airplane logbook.
- Send a copy of the completed record of compliance to the maintenance tracking system provider used.

MATERIAL INFORMATION

The parts below may be necessary to complete this service document.

NEW P/N	QUANTITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
101-810025-0003 (or) 101-810025-1 (Alternate)	As Necessary	Upper Torque Knee Pin	101-810025-1	Discard out of limits, install new.
101-810026-0005 (or) 101-810026-1 (Alternate)	As Necessary	Lower Torque Knee Pin	101-810026-1	Discard out of limits, install new.

NOTE: Use the appropriate Model Illustrated Parts Catalog for the correct cotter pin part number for your airplane.

* Please contact your Regional Textron Aviation Parts Distribution Customer Support Team for current cost and availability of parts listed in this service document. Phone at 1-800-835-4000 (Domestic) or 1-316-517-5603 (International).

For more information, please visit the TAPD Support & Aftermarket Account Management website at <https://ww2.txtav.com/Parts/Promos/TAPD>.

Based on availability and lead times, parts may require advanced scheduling.

TITLE

LANDING GEAR - MAIN-LANDING-GEAR TORQUE-KNEE PINS REPLACEMENT

TO:

Beechcraft Model B200GT, B200CGT, B200C, B200, B300, B300C, and 1900D Aircraft Owner

REASON

An investigation on the torque knee pins revealed that some knees pins are not properly cadmium plated, primed, or topcoated.

COMPLIANCE

MANDATORY. This service document must be accomplished at the next maintenance event where the wheels and brakes are removed.

LABOR HOURS

WORK PHASE	LABOR-HOURS
Modification	16

MATERIAL AVAILABILITY

PART NUMBER	AVAILABILITY	COST
101-810025-0003 (or) 101-810025-1 (Alternate)	*	*
101-810026-0005 (or) 101-810026-1 (Alternate)	*	*

* Please contact your Regional Textron Aviation Parts Distribution Customer Support Team for current cost and availability of parts listed in this service document. Phone at 1-800-835-4000 (Domestic) or 1-316-517-5603 (International).

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Based on availability and lead times, parts may require advanced scheduling.

WARRANTY

This service document is *mandatory*. Eligible airplanes may qualify for parts and labor coverage to the extent noted in the *Labor Hours* and *Material Availability* sections of this document.

April 11, 2023

MTB-32-02
Page 1 of 2

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Eligibility: Airplanes identified within the serial number effectivity of this service document must have active Airframe warranty coverage on the original issue date of this document and the coverage must be active on the day the work is accomplished.

Parts Coverage: Textron Aviation-owned and Textron Aviation-authorized Service Facilities, operators, or other maintenance facilities may submit a claim for the parts required to accomplish this service document as defined in the *Material Availability* section of this document.

Labor Coverage: Textron Aviation-owned and Textron Aviation-authorized Service Facilities rated to perform maintenance on the specific model of Beechcraft Aircraft may submit a claim for the labor necessary to accomplish this service document as defined in the *Labor Hours* section of this document.

Credit Application: After this service document has been accomplished, a claim must be submitted to Textron Aviation within 30 days of the service document completion. Claims for compliance of this service document are to be filed as a W4 type claim.

Please submit your claim form online at ww2.txtav.com/Parts or email the completed Textron Aviation Claim Form to warranty@txtav.com. If submitted on-line a Return Authorization will be provided. If a paper claim is submitted your claim will be entered into the system and a Return Authorization will be sent to you.

The Return Authorization must accompany any required return parts (see *Material Availability*), to the point of purchase.

Parts to be returned to Textron Aviation Parts Distribution should be forwarded to:

Textron Aviation Parts Distribution
Warranty Administration
285 South Greenwich Road
Bldg B89, Docks 1-4
Wichita, KS 67206
USA

Expiration: April 11, 2025 (after this date the owner/operator assumes the responsibility for compliance costs)

Textron Aviation reserves the right to void continued airplane warranty coverage for the parts affected by this service document until the service document is accomplished.

NOTE: As a convenience, service documents are now available online to all our customers through a simple, free-of-charge registration process. If you would like to sign up, please visit the Customer Access link at www.support.txtav.com to register.