BY TEXTRON AVIATION

Multi-Engine Turboprop Communiqué

Communiqué ME-TP-0034
August 2023

ATA 00- King Air Models vs Marketing Designators

Effectivity: All King Air Models

Once an airplane is issued its Certificate of Airworthiness from the Federal Aviation Administration (FAA), this model airplane is assigned a model designator by the FAA. The official model designators are found in the Type Certificate Data Sheets as shown below.

As time has gone by, marketing designators have appeared such as the C90B, F90-1, 350, 350i, B300ER, 350ER, B300CER, 350CER, 260, 360. These new designators were created to distinguish out-going year models from new upcoming year models. These marketing designators could be the result of new interior features, upholstery, minor avionics upgrades, etc. However, the official FAA model designator remains unchanged.

	3A20 Revision 72 Hawker Beechcraft
65 (L-23F)	65-A90-1 (JU-21A)
A65	(U-21A)
A-65-8200	(RU-21A)
65-80	(RU-21D)
65-A80	(U-21G)
65-A80-8800	(RU-21H)
65-B80	65-A90-2 (RU-21B)
65-88	65-A90-3 (RU-21C)
65-90	65-A90-4 (RU-21E)
65-A90	(RU-21H)
70	
B90	
C90	
C90A	
C90GT	
E90	
H90 (T-44A)	
C90GTi	
	October 11, 2012

	A24CE Revision 110 Beechcraft
200	A100-1 (U-21J)
200C	A200 (C-12A)
200CT	A200 (C-12C)
200T	A200C (UC-12B)
B200	A200CT (C-12D)
B200C	A200CT (FWC-12D)
B200CT	A200CT (C-12F)
B200T	A200CT (RC-12D)
300	A200CT (RC-12G)
300LW	A200CT (RC-12H)
B300	A200CT (RC-12K)
B300C	A200CT (RC-12P)
B300C (MC-12W)	A200CT (RC-12Q)
B300C (UC-12W)	B200C (C-12F)
1900	B200C (UC-12M)
1900C	B200C (C-12R)
1900C (C-12J)	B200C (UC-12F)
1900D	B200GT
	B200CGT
	July 9, 2014

Type Certificate Data Sheet Model Designator For Reference Only

ATA 32 - Main Landing Gear Actuator Inspection for Cracks

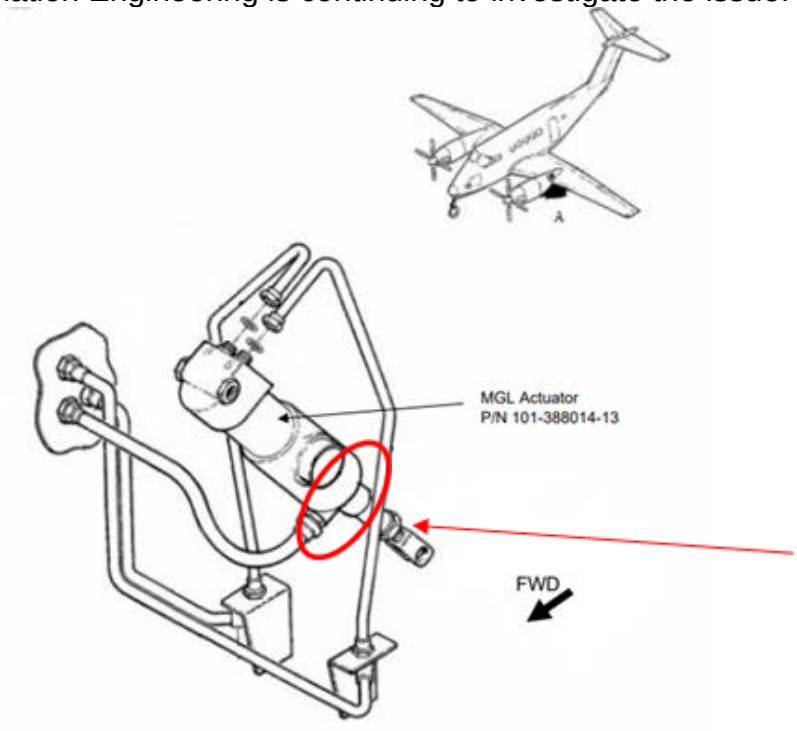
Effectivity: BB-1158, BB-1167, BB-1193 an after; BT-31 and after; BL-73 and after; BY-1 and after; BZ-1 and after; and earlier serials with kit 101-8018 (hydraulic gear installation); 300, B300 Series

Textron Aviation has seen some sporadic actuator cracks in the field on main landing gear actuator part numbers 101-388014-1/-13. Textron Aviation would recommend that any operator returning actuators for repair or overhaul bring this issue to the attention of the entity conducting the repair/overhaul. The overhauler should be advised to pay particular attention to the area surrounding the outer fillet radius on the actuating end of the actuator unit.

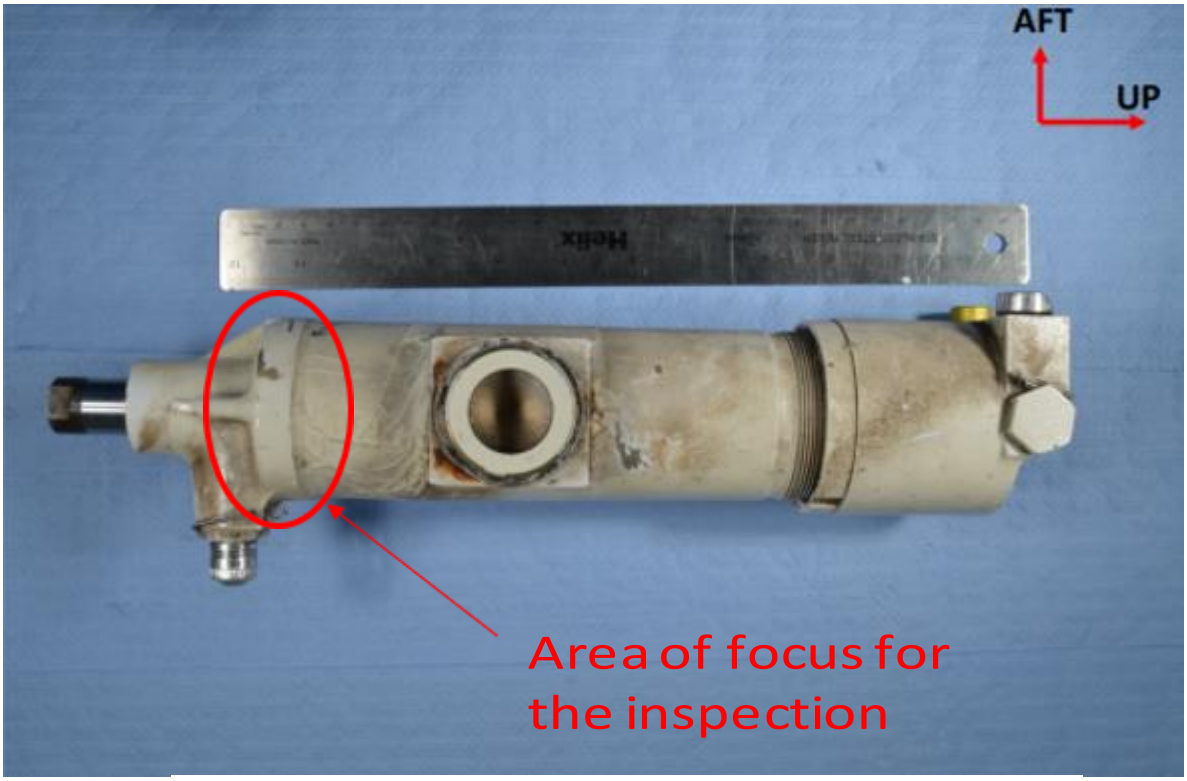
Based on laboratory inspections on three different cracks found in the field, the cracking is believed to have initiated from the inside of the actuator cylinder housing making it unlikely to be detected by a visual inspection until the crack has propagated through the thickness of the actuator cylinder housing to the outer surface.

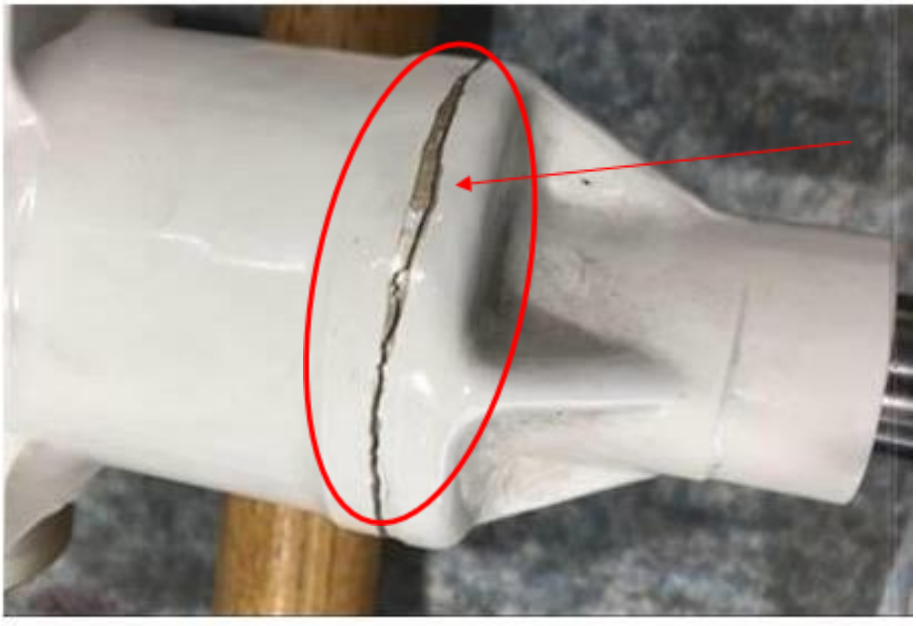
The supplier of this actuator unit has since made design improvements to the internal radius of the actuator housing to alleviate the stress concentration associated with the fillet radius and made it less susceptible to crack initiation.

Textron Aviation Engineering is continuing to investigate the issue.



Area of Focus





Example of Cracked Actuator

ATA 32 – Mechanical Landing Gear Emergency Extension Binding

Effective: LJ-1 thru LJ-1062; LW-1 and after; LA-1 thru LA-202; B-1 and after; BE-1 and after; BB-2 thru BB-1192; BL-1 thru BL-72.

The Pilot's Operating Handbook (POH) provides the flight crew with instructions on how to operate the emergency landing gear extension system. See sample below. This procedure cautions against continuing pumping the emergency landing gear handle after the three green gear down lights illuminate. Continue pumping of the emergency landing gear handle puts the emergency extension system in a bind. When this happens, the handle can no longer be moved making resetting the system impossible.

When the landing gear handle is lifted and turned clockwise as directed by the POH, this engages a ratchet assembly via an upper and lower link. This ratchet assembly is turning against the spring tensions and two pawls which engage the teeth of the ratchet assembly. When the handle is pumped after the green lights coming on, this puts a binding force between the teeth of the ratchet assembly and the pawls. To free the pawls from the teeth, we need to gain access to this area and pry the pawls free from the ratchet assembly teeth. This mechanism is located just aft of the landing gear handle under the floor. Once free, you are able to move the handle and reset the system. It is important to inspect the mechanism for any damage that may have occurred.

LANDING GEAR MANUAL EXTENSION

1. Airspeed - ESTABLISH 130 KNOTS.
2. Landing Gear Relay Circuit Breaker (pilot's subpanel) - PULL
3. Landing Gear Switch Handle - DOWN
4. Emergency Engage Handle - LIFT AND TURN CLOCKWISE TO THE STOP TO ENGAGE.
5. Extension Lever - PUMP up and down until the 3 green GEAR DOWN lights are illuminated.

CAUTION

Stop pumping when the 3 green GEAR DOWN lights illuminate. Further movement of the handle could damage the drive mechanism and prevent subsequent electrical gear retraction.

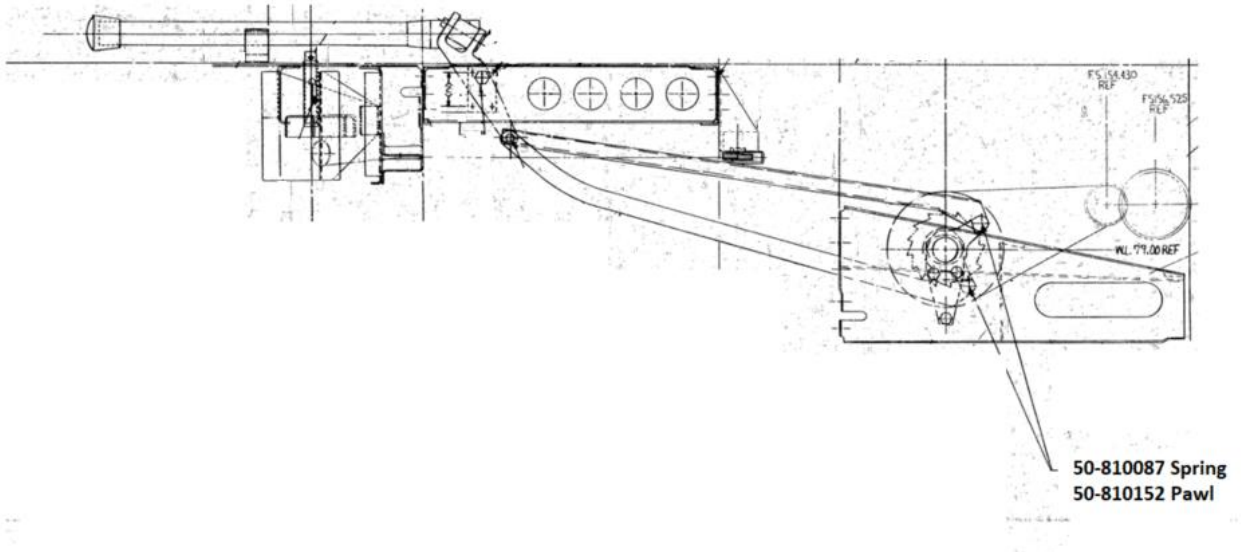
WARNING

If for any reason the green GEAR DOWN lights do not illuminate (e.g., in case of an electrical system failure), continue pumping until sufficient resistance is felt to ensure that the gear is down and locked, even though this procedure may damage the drive mechanism.

WARNING

After an emergency landing gear extension has been made, do not stow pump handle, move any landing gear controls, or reset any switches or circuit breakers until the airplane is on jacks, since the failure may have been in the gear-up circuit and the gear might retract on the ground. The landing gear cannot be retracted manually.

3-10 October, 1979



ATA 34 – Fusion High Resolution Terrain Database
Effectivity: LJ-2129 and after; BY-117, BY-207, BY-239, BY-250 and after; BZ-1 and after; FL-954, FL-1010, FL-1031 and after; FM-66 and after

When replacing an AFD on a Fusion Equipped King Air, reloading of databases is required. Most of them are available for download online, however the high-resolution terrain database (HRTDB) is not. The HRTDB is approximately 5 GB in size and cannot be shared via normal means. We recommend, when replacing displays, requesting that Rockwell Collins either preload this database or include a copy in the box as a special request when placing your order.

If you already have the display and need a new copy of the HRTDB, contact your local Rockwell Collins Field Service Representative for assistance in obtaining one.

ATA 56 – Windshield Wire Terminal Block Torque Values
Effectivity: All King Air Models

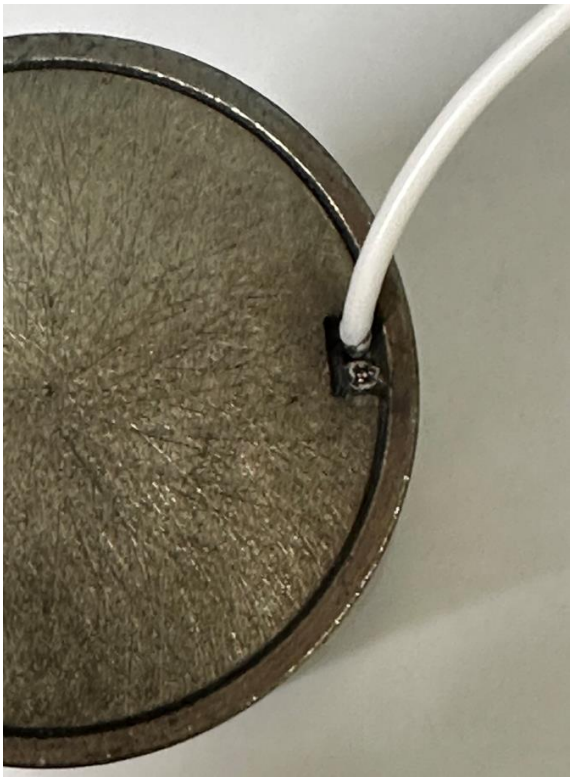
PPG's recommended torque values for the terminal block screws:

- All power or ground leads 10-32 screws should be torqued to 20-inch lbs.
- All sensor lead or 6-32 screws should be torqued to 10-inch lbs.

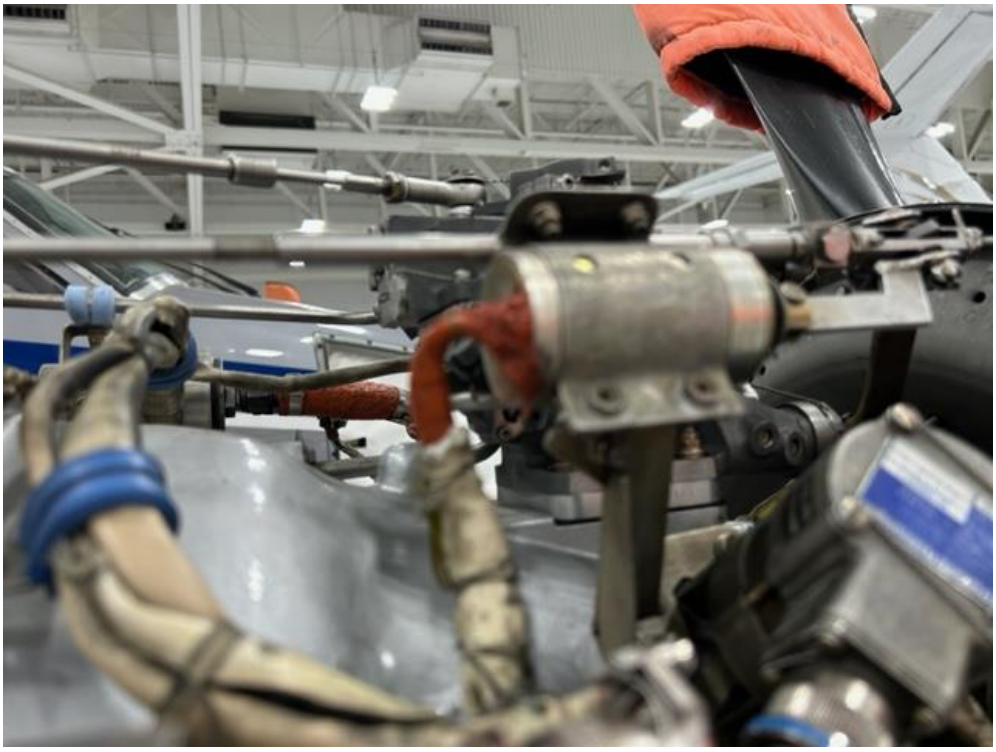
ATA 61 - Ground Idle Solenoid Wires
Effectivity: 300/B300

We have had reports of the ground idle solenoid system circuit breakers tripping. Investigation revealed that insulation of the wires of the solenoid at the point of exit have broken down allowing the wires to contact the solenoid body, tripping the circuit breaker. A possible solution is to add high temperature RTV at the point of exit such as RTV-736 or equivalent. See pictures below.

Ground Idle Solenoid without support or RTV



Ground Idle Solenoid with a Broken Wire



Ground Idle Solenoid with support and RTV