Beechcraft

BY TEXTRON AVIATION

Multi-Engine Turboprop Communiqué

Communiqué ME-TP-0028
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ATA 00-Cabin and Cockpit Noise Levels

The typical cockpit and cabin noise levels for certain model King Airs is as follows:

350i
The average cabin noise 81 dBA, average cockpit noise is 85.5 dBA at FL250 KIAS, 75% engine torque and 1500 propeller rpm.

B200/B200GT
Four blade propeller, average cockpit 83.3 dBA, average cabin 79.1 dBA at FL250 and 75% torque. Three blade propeller, average cockpit 88.7 dBA, average cabin 82.5 dBA at FL250 and 75% torque.

C90A, C90B
The average noise level is 83 dBA, at FL250 at 75% torque and propeller at 1900 rpm.

C90GT
The average noise level is 86 dBA, at FL250 at 75% torque and propeller at 1900 rpm.

ATA 00- Over Fly Noise Levels
Effectivity: All

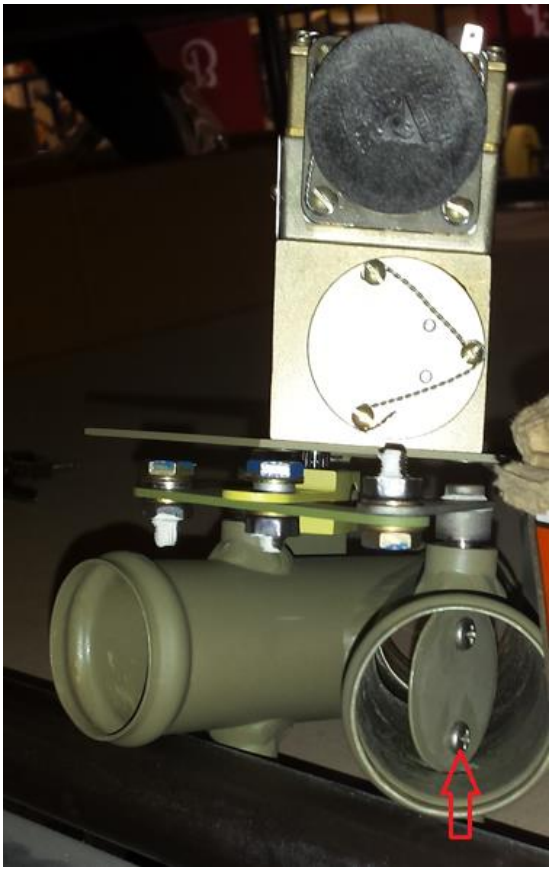
The take off and landing noise levels for the King Air are in the airplane's respective Pilot's Operating Handbook Section 4 under Noise Characteristics.

Please be aware that Pilot's Operating Handbooks on the older King Airs do not have this information as this information was not required by the FAA when these airplanes were certified.

ATA 21-Environmental Bleed Air Bypass Valve Butterfly
Effectivity: All except LJ-1 thru LJ-501

The environmental bleed air bypass valves control the bleed airflow through or around the heat exchanger. The direction of airflow is changed by a set of butterfly disks which are attached to the actuator shaft with two MS51957-26 screws. In the event that these screws come loose, the butterfly disks may fall off. Even though the bypass valves are operating properly electrically, they may still cause erratic cabin temperature issues. If this is the case, we recommend removing the connecting hoses and checking to make sure the butterfly disks are still in place. If not, the butterfly disk can be reinstalled and secured with Loctite 271. Refer to picture below.

Troubleshooting Note: For all airplanes except those with the Keith system and LJ-1 through LJ-501, the valves move from full hot to full cold and vice/versa in sequence with each other. If full hot going to full cold, the right valve will go to full cold and then the left valve will go full cold. If in full cold, the left will go full hot then the right will go to full hot. The Keith system runs both valves together at the same time.



ATA 24-Starter Generator Reliability Improvement
Effectivity: 300/B300

The vendor of the starter generator part number 23085-001 used on the King Air 300/B300 has published Service Letter 23085-001-24-02 to announce a product improvement that can be accomplished at the next overhaul.

The product improvement adds a dust shield to help prevent brush dust contamination and replaces the bearings with an improved version. Starter generators that have had this improvement incorporated will be marked with Mod "H".

All starter generators ordered from TAPD are upgraded to Mod "H". This change took place at build at FL-1247 and FM-98 and after.

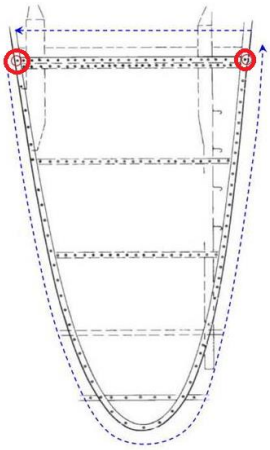
ATA 30- Type IV de-icing fluids
Effectivity: All

Textron Aviation Engineering has approved the use of Type IV de-ice fluids on all the King Air models. Approved Type IV fluids must meet SAE AMS 1428 Type IV specifications. This is already reflected on some of the newer Pilot's Operating Handbooks (POH). A Publication Change Request will be submitted against the POHs and Flight Manuals for those manuals where this is not the case. In the meantime, this article can be used to obtain approvals from your local Aviation Authorities to use Type IV de-ice fluids that meet the specification mentioned.

ATA 54-Turtle Back Fasteners
Effectivity: 200/B200; 300/B300

The introduction of the nacelle splice plate inspection has prompted repeated calls asking for the fasteners used on the turtle back since removal of the turtle back is required to replace the nacelle splice plates. The part number of the rivets used to install the turtle back can be found in the figure below.

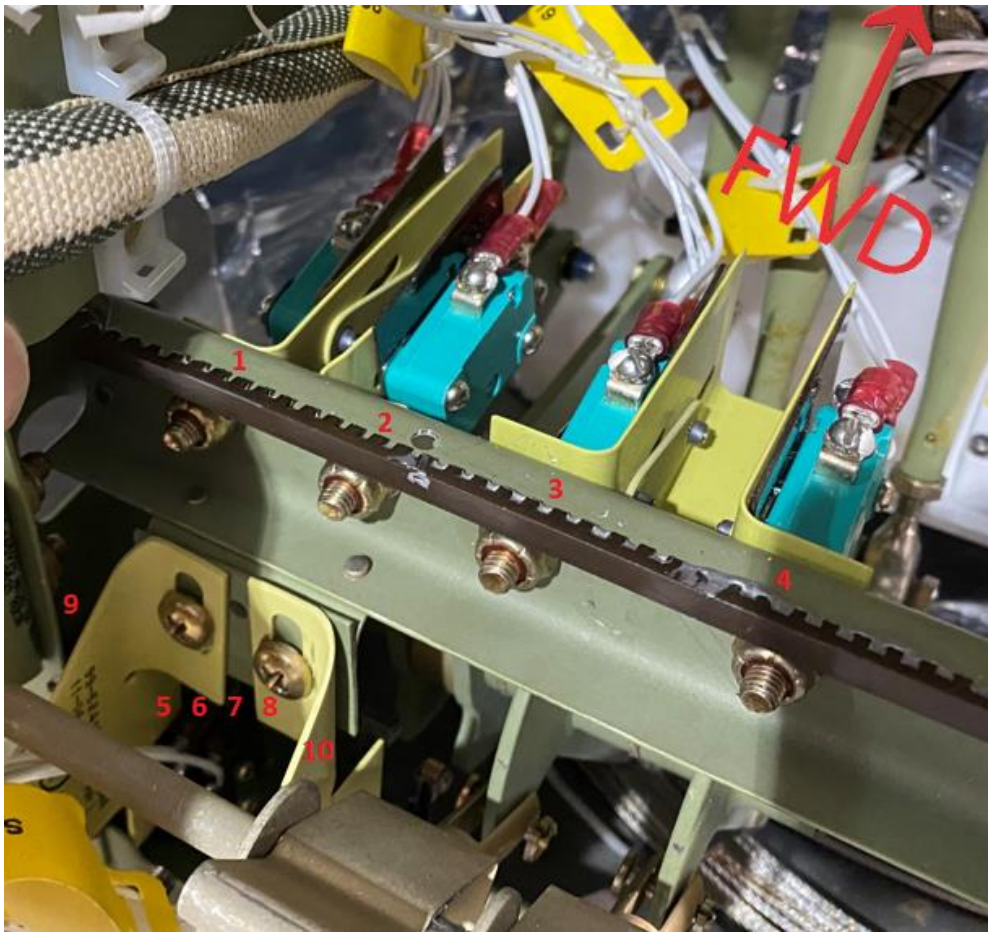
The fasteners in the red circles are MS20426E6-9.
The rest are a combination of MS20426AD5-5, -6 and -7 depending on the grip length.



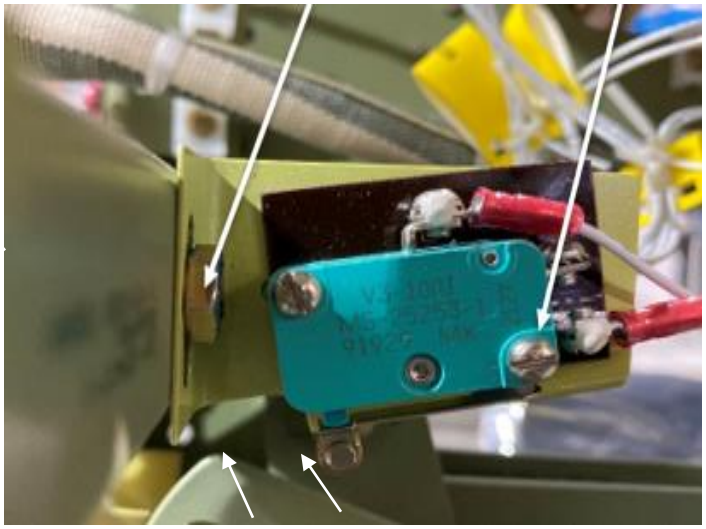
ATA 76-Pedestal Engine Control Switch Locations and Identification
Effectivity: B300

There are a number switches inside the pedestal associated with different systems on the airplane. Due to their location and proximity to each other it is difficult to tell what switch does what. The purpose of this article is to identify each switch and provide a visual representation of where they are.

1. Power lever sense Landing gear warning LH Ref. 32-60-09;
2. Power lever sense Landing gear warning RH Ref. 32-60-09;
3. No.1 Prop lever Reverse not Ready switch, Ref. 61-40-03;
4. No.2 Prop lever Reverse not Ready switch, Ref. 61-40-03;
5. 5,6,7, and 8 are Auto Feather Arm switches, Ref. 61-21-03;
6. 9 and 10 are Ground Idle Drop out switches, located with the outside of the bracket surrounding the Auto Feather Arm switches, Ref.76-10-15.



Proper adjustments are achieved by either mounting brackets, switch body or cam adjustments. Left reverse not ready switch shown.

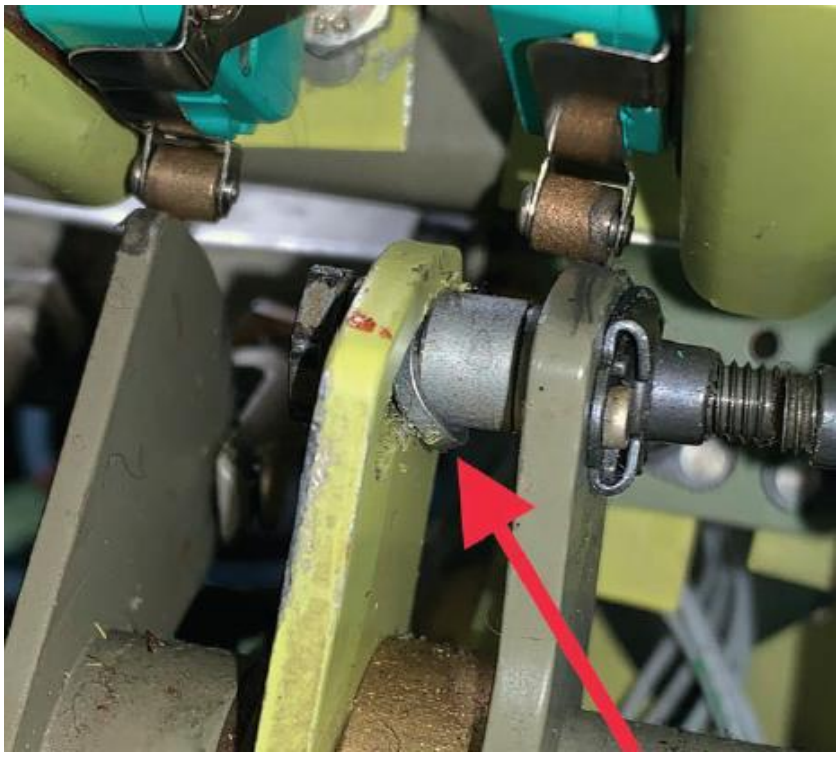


Power lever ground low pitch stop switch under power levers 76-10-17.

ATA 76- Adjustment of Power Lever Quadrant Micro Switches
Effectivity: B300

The set of micro switches installed on the power lever quadrant in the King Air control various systems in the airplane and they are critical to the safe operation of these systems. These switches need to be adjusted to the specifications found in the Maintenance Manuals. It is critical that these adjustments are done correctly. A short cut to this procedure is to bend the actuator arm which is not the correct procedure; this practice will lead to unreliable results and damage to other components associated with this installation. The pictures that follow provide samples of the damage that this practice causes. We have also included the correct adjustment technique that should be used.

Damaged Switch Actuators



Worn hardware (i.e. spacers, washers, worn cams) may prevent achievement of a positive switch adjustment. Replace worn hardware as required.