

King Air B200 | Limitations

TRAINING REFERENCE ONLY — NOT A SUBSTITUTE FOR THE AFM

This document is a training summary compiled from the aircraft's POH/AFM. In any conflict, the FAA Approved Airplane Flight Manual for the specific airplane, including all applicable Temporary Changes and Supplements, is the governing authority. Verify limitations against the AFM for the serial number being flown.

Source: Raytheon (Beechcraft) Super King Air B200/B200C Pilot's Operating Handbook and FAA Approved Airplane Flight Manual, P/N 101-590010-147, Revision C7 (February, 2004) — Section 2, Limitations (pages 2-1 through 2-26), including Temporary Changes 101-590010-147CTC2 (In-Flight Beta Range), CTC3 (Structural Limitations), and CTC5 (Approved Deicing/Anti-icing Fluids). SIMCOM copy, airplane serials BB-854 thru BB-870.

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1. AIRSPEED

AIRSPEED LIMITATIONS

POH 2-3

The limitations included in this section have been approved by the Federal Aviation Administration, and they must be observed in the operation of the BEECHCRAFT Super King Air B200/B200C.

SPEED	KCAS	KIAS	REMARKS
Maneuvering Speed V_a (12,500 pounds)	182	181	Do not make full or abrupt control movements above this speed.
Maximum Flap Extension/Extended Speed V_{fe} — Approach Position - 40%	200	200	Do not extend flaps or operate with flaps in prescribed position above these speeds.
Maximum Flap Extension/Extended Speed V_{fe} — Full Down Position - 100%	155	157	Do not extend flaps or operate with flaps in prescribed position above these speeds.
Maximum Landing Gear Operating Speed V_{lo} — Extension	182	181	Do not extend or retract landing gear above the speeds given.
Maximum Landing Gear Operating Speed V_{lo} — Retraction	164	163	Do not extend or retract landing gear above the speeds given.
Maximum Landing Gear Extended Speed V_{le}	182	181	Do not exceed this speed with landing gear extended.
Air Minimum Control Speed V_{mca}	91	86	This is the lowest airspeed at which the airplane is directionally controllable when one engine suddenly becomes inoperative and the other engine is at take-off power. (See definition in Section 1.)
Maximum Operating Speed V_{mo} / M_{mo}	260 (.52 Mach)	259	Do not exceed this airspeed or Mach Number in any operation.

MARKING	KCAS VALUE OR RANGE	KIAS VALUE OR RANGE	SIGNIFICANCE
Red Line	91	86	Air Minimum Control Speed (V_{mca}).
White Arc	80 to 155	75 to 157	Full-flap Operating Range.
Wide White Arc	80 to 102	75 to 99	Lower limit is the Stalling Speed (V_{so}) at maximum weight with Full Flaps (100%) and idle power.
Narrow White Arc	102 to 155	99 to 157	Lower limit is the Stalling Speed (V_s) at maximum weight with Flaps Up (0%) and idle power. Upper limit is the maximum speed permissible with flaps extended beyond Approach (more than 40%).
White Triangle	200	200	Maximum Speed with Approach (40%) Flaps.
Blue Line	122	121	One-Engine-Inoperative Best Rate-of-Climb speed.
Red & White Hash-Marked Pointer	260 KCAS (259 KIAS) or value equal to .52 Mach, whichever is lower		Maximum Speed for any operation.

NOTE

* The airspeed indicator is marked in IAS values.

2. POWER PLANT

POWER PLANT LIMITATIONS

POH 2-4

NUMBER OF ENGINES	Two
ENGINE MANUFACTURER	Pratt & Whitney Canada (Longueuil, Quebec, Canada)
ENGINE MODEL NUMBER	PT6A-42
POWER LEVERS	Do not lift power levers in flight.

POWER PLANT LIMITATIONS — POWER LEVERS (TEMPORARY CHANGE)

TEMPORARY CHANGE

POH 1 of 2

Applicability: Temporary Change to the POH and FAA Approved AFM, P/N 101-590010-147CTC2, July 21, 1997.
Description: Provides a Limitation prohibiting the selection of Beta Range in flight. Airplane serials affected: BB-734, BB-793, BB-829, BB-854 thru BB-870, BB-874 thru BB-891, BB-894, BB-896 thru BB-911, BB-913 thru BB-1438, BB-1440 thru BB-1443; and BL-37 thru BL-138.

Do not lift the power levers in flight. Lifting the power levers in flight, or moving the power levers in flight below the flight idle position, could result in a nose-down pitch and a descent rate leading to aircraft damage and injury to personnel.

ENGINE OPERATING LIMITS

POH 2-5

The following limitations shall be observed. Each column presents limitations; the limits presented do not necessarily occur simultaneously. Refer to the Pratt & Whitney Engine Maintenance Manual for specific actions required if limits are exceeded.

OPERATING CONDITION	SHp	TORQUE FT-LBS (1)	MAX OBSERVED ITT °C	N1 RPM	N1 %	PROP RPM N2	OIL PRESS PSI (2)	OIL TEMP °C (3)(4)
Starting	—	—	1000 (5)	—	—	—	—	-40 (min)
Low Idle	—	—	750 (6)	21,000	56 (min)	—	60 (min)	-40 to 99
High Idle	—	—	—	—	(7)	—	—	-40 to 99
Take-off and Max Continuous	850	2230	800	38,100	101.5	2000	100 to 135	0 to 99
Max Cruise	850	2230 (8)	800	38,100	101.5	2000	100 to 135	0 to 99
Cruise Climb and Rec (Normal) Cruise	850	2230 (8)	770	38,100	101.5	2000	100 to 135	0 to 99
Max Reverse (9)	800	—	750	—	88	1900	100 to 135	0 to 99
Transient	—	2750 (5)	850	38,500 (10)	102.6 (10)	2200 (5)	—	0 to 104 (11)

NOTE

1. Torque limit applies within range of 1600 - 2000 propeller rpm (N2). Below 1600 propeller rpm, torque is limited to 1100 ft-lbs.
2. When gas generator speeds are above 27,000 rpm (72% N1) and oil temperatures are between 60°C and 71°C, normal oil pressures are: 100 to 135 psi below 21,000 feet; 85 to 135 psi at 21,000 feet and above. During extremely cold starts, oil pressure may reach 200 psi. Oil pressure between 60 and 85 psi is undesirable; it should be tolerated only for the completion of the flight, and then only at a reduced power setting not exceeding 1100 ft-lbs torque. Oil pressure below 60 psi is unsafe; it requires that either the engine be shut down, or that a landing be made at the nearest suitable airport, using the minimum power required to sustain flight. Fluctuations of plus or minus 10 psi are acceptable.
3. A minimum oil temperature of 55°C is recommended for fuel heater operation at take-off power.
4. Oil temperature limits are -40°C and 99°C. However, temperatures of up to 104°C are permitted for a maximum time of 10 minutes.
5. These values are time limited to 5 seconds.
6. High ITT at ground idle may be corrected by reducing accessory load and/or increasing N1 rpm.
7. At approximately 70% N1.
8. Cruise torque values vary with altitude and temperature.
9. This operation is time limited to 1 minute.
10. These values are time limited to 10 seconds.
11. Values above 99°C are time limited to 10 minutes.

EXTERNAL POWER LIMITS

POH 2-5

External power carts will be set to 28.0 - 28.4 volts and be capable of generating a minimum of 1000 amps momentarily and 300 amps continuously.

GENERATOR LIMITS

POH 2-5

In Flight — Sea Level to 31,000 feet altitude	100%
In Flight — Above 31,000 feet altitude	88%
Ground Operation	85%

Maximum sustained generator load is limited as shown above. During ground operation, also observe the following minimum gas generator (N1) speeds:

GENERATOR LOAD	MIN N1 — WITHOUT AIR CONDITIONING	MIN N1 — WITH AIR CONDITIONING *
0 - 75%	56%	62%
75% - 80%	60%	62%
80% - 85%	65%	65%

NOTE

* Right engine only.

STARTER LIMITS

POH 2-6

Use of the starter is limited to 40 seconds ON, 60 seconds OFF, 40 seconds ON, 60 seconds OFF, 40 seconds ON, then 30 minutes OFF.

PROPELLERS

POH 2-8

NUMBER OF PROPELLERS	2
PROPELLER MANUFACTURER	Hartzell Propeller, Inc. (Piqua, Ohio) or McCauley Propeller (Vandalia, Ohio)

PROPELLER HUB AND BLADE MODEL NUMBERS	HUBS	BLADES
Hartzell — Prior to BB-829, BL-37	HC-B3TN-3G or HC-B3TN-3N	T10178B-3R
Hartzell — BB-829 and After / BL-37 and After	HC-B3TN-3G or HC-B3TN-3N	T10178K-3R
McCauley — BB-1193 and After / BL-124 and After	3GFR34C702-☒	☒-100LA

NOTE

The letter appearing in place of the ☒ represents minor variations in the propeller hub or blades; they do not affect eligibility or interchangeability. Hartzell and McCauley propellers may be interchanged (in matched pairs only) on airplane serials BB-1193 and after, and BL-124 and after.

PROPELLER DIAMETER — Hartzell	98.5 inches only
PROPELLER DIAMETER — McCauley	98.0 inches
PROPELLER BLADE ANGLES AT 30-INCH STATION — Hartzell	Feathered +90°; Reverse -9°
PROPELLER BLADE ANGLES AT 30-INCH STATION — McCauley	Feathered +86.8°; Reverse -10°

PROPELLER ROTATIONAL SPEED LIMITS

POH 2-9

CONDITION	LIMIT
Transients not exceeding 5 seconds	2200 rpm
Reverse	1900 rpm
All other conditions	2000 rpm

PROPELLER ROTATIONAL OVERSPEED LIMITS

POH 2-9

The maximum propeller overspeed limit is 2200 rpm and is time-limited to five seconds. Sustained propeller overspeeds faster than 2000 rpm indicate failure of the primary governor. Flight may be continued at propeller overspeeds up to 2080 rpm, provided torque is limited to 1800 foot-pounds. Sustained propeller overspeeds faster than 2080 rpm indicate failure of both the primary governor and the secondary governor, and such overspeeds are unapproved.

INSTRUMENT	RED LINE — MIN	GREEN ARC — NORMAL	RED LINE — MAX
Interstage Turbine Temperature *	—	400°C to 800°C	800°C
Torque Meter	—	400 to 2230 ft-lbs	2230 ft-lbs
Propeller Tachometer (N2)	—	1600 to 2000 rpm	2000 rpm
Gas Generator Tachometer (N1)	—	—	101.5%
Oil Temperature	—	10°C to 99°C	99°C
Oil Pressure **	60 psi	100 to 135 psi	200 psi

NOTE

* Starting Limit (dashed red line): 1000°C.

** A dual-band yellow/green arc extends from 85 to 100 psi, indicating the extended range of normal oil pressures for operation at, or above, 21,000 feet.

3. FUEL**APPROVED ENGINE FUELS**

POH 2-6

COMMERCIAL GRADES	Jet A, Jet A-1, Jet B
MILITARY GRADES	JP-4, JP-5, JP-8

EMERGENCY ENGINE FUELS

POH 2-6

COMMERCIAL AVIATION GASOLINE GRADES	80 Red (formerly 80/87); 91/98; 100LL Blue **; 100 Green (formerly 100/130); 115/145 Purple
MILITARY AVIATION GASOLINE GRADES	80/87 Red; 100/130 Green; 115/145 Purple

NOTE

** In some countries this fuel is colored Green and designated “100L”.

LIMITATIONS ON THE USE OF AVIATION GASOLINE

POH 2-6

1. Operation is limited to 150 hours between engine overhauls.
2. Operation is limited to 20,000 feet pressure altitude (FL 200) or below if either standby pump is inoperative.
3. Crossfeed capability is required for climbs above 20,000 feet pressure altitude (FL 200).
4. Operation above 31,000 feet (FL 310) is prohibited.

APPROVED FUEL ADDITIVES — ANTI-ICING ADDITIVE

POH 2-7

Engine oil heats the fuel entering the fuel control. Using the minimum-oil-temperature graph in the AFM, enter at the known or forecast OAT to determine the minimum oil temperature required for each phase of flight. If the anticipated oil temperature is not at or above this minimum, anti-icing additive conforming to MIL-I-27686 or MIL-I-85470 must be added to the fuel. Refer to Section IV, NORMAL PROCEDURES, for blending procedures.

CAUTION

Prior to refueling, check with the fuel supplier to determine whether anti-icing additive has already been added. If required, it must be properly blended with the fuel to avoid deterioration of the fuel cell sealant. The additive concentration shall be a minimum of 0.10% and a maximum of 0.15% by volume. To assure proper concentration by volume of fuel on board, blend only enough additive for the unblended fuel.

FUEL BIOCIDES ADDITIVE

POH 2-7

Fuel biocide-fungicide BIOBOR JF in concentrations of 135 ppm or 270 ppm may be used in the fuel. BIOBOR JF may be used as the only fuel additive, or with anti-icing additive conforming to MIL-I-27686 or MIL-I-85470; used together the additives have no detrimental effect on fuel system components. Refer to the Super King Air 200 Series Maintenance Manual and to the latest revision of Pratt & Whitney Canada Engine Service Bulletin No. 3044 for concentrations, procedures, recommendations and limitations.

FUEL MANAGEMENT — USABLE FUEL

POH 2-7

Total Usable Fuel Quantity	544 gallons (3645 pounds)
Each Main Fuel Tank System	193 gallons (1293 pounds)
Each Auxiliary Fuel Tank	79 gallons (529 pounds)

NOTE

Gallons × 6.7 = pounds.

FUEL IMBALANCE

POH 2-7

Maximum allowable fuel imbalance between wing fuel systems is 1000 pounds.

FUEL CROSSFEED

POH 2-8

Crossfeeding of fuel is permitted only when one engine is inoperative.

WARNING

The airplane is approved for takeoff with one standby boost pump inoperative, but in such a case, crossfeed of fuel will not be available from the side of the inoperative standby boost pump.

FUEL GAGES IN THE YELLOW ARC

POH 2-8

Do not take off if fuel quantity gages indicate in the yellow arc or indicate less than 265 pounds of fuel in each main tank system.

AUXILIARY FUEL

POH 2-8

Do not put any fuel into the auxiliary tanks unless the main tanks are full.

Operation of either engine with its corresponding fuel pressure annunciator (L FUEL PRESS or R FUEL PRESS) illuminated is limited to 10 hours before overhaul or replacement of the engine-driven fuel pump.

NOTE

Windmilling time need not be charged against this time limit.

4. OIL

OIL SPECIFICATION

POH 2-8

Any oil specified by brand name in the latest revision of Pratt & Whitney Service Bulletin Number 3001 is approved for use in the PT6A-42 engine.

5. INSTRUMENT MARKINGS

MISCELLANEOUS INSTRUMENT MARKINGS

POH 2-10

FUEL QUANTITY INDICATORS — Yellow Arc (No-Takeoff Range)	0 to 265 pounds
CABIN DIFFERENTIAL PRESSURE GAGE — Green Arc (Approved Operating Range)	0 to 6.6 psi
CABIN DIFFERENTIAL PRESSURE GAGE — Red Arc (Unapproved Operating Range)	6.6 psi to end of scale
PNEUMATIC GAGE — Green Arc (Normal Operating Range)	12 to 20 psi
PNEUMATIC GAGE — Red Line (Maximum Operating Limit)	20 psi
GYRO SUCTION GAGE — Narrow Green Arc (Normal 35,000 to 15,000 feet)	2.8 to 4.3 in. Hg
GYRO SUCTION GAGE — Wide Green Arc (Normal 15,000 feet to Sea Level)	4.3 to 5.9 in. Hg
GYRO SUCTION GAGE — 35K mark on face of gage	3.0 in. Hg
GYRO SUCTION GAGE — 15K mark on face of gage	4.3 in. Hg

PROPELLER DEICE AMMETER

POH 2-11

Green Arc (Normal Operating Range)	14 to 18 amperes
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6. WEIGHT AND BALANCE

WEIGHT LIMITS

POH 2-11

Maximum Ramp Weight	12,590 pounds
Maximum Take-off Weight (All Except FAR Part 135)	12,500 pounds
Maximum Take-off Weight (FAR Part 135)	As limited by the Maximum Enroute Weight graph in Section V, PERFORMANCE
Maximum Landing Weight	12,500 pounds
Maximum Zero Fuel Weight	11,000 pounds

Maximum Weight in Baggage Compartment:

SERIAL / CONFIGURATION	WITH FOLD-UP SEATS	WITHOUT FOLD-UP SEATS
BB-1052, BB-1091 and after, BL-58 and after, and prior airplanes with Beech Kit #101-5068-1 installed	510 pounds	550 pounds
Prior to BB-1091 (except BB-1052) and prior to BL-58 without Beech Kit #101-5068-1 installed	370 pounds	410 pounds

CENTER OF GRAVITY LIMITS

POH 2-11

Aft Limit	196.4 inches aft of datum at all weights
Forward Limits	185.0 inches aft of datum at 12,500 pounds, with straight-line variation to 181.0 inches aft of datum at 11,279 pounds; 181.0 inches aft of datum at 11,279 pounds or less

DATUM

POH 2-11

The reference datum is located 83.5 inches forward of the center of the front jack point.

MEAN AERODYNAMIC CHORD (MAC)

POH 2-11

Leading edge of the MAC	171.23 inches aft of the datum
MAC length	70.41 inches

7. FLIGHT AND OPERATING LIMITS

MANEUVER LIMITS

POH 2-11

The BEECHCRAFT Super King Air B200 and B200C are Normal Category Airplanes. Acrobatic maneuvers, including spins, are prohibited.

FLIGHT LOAD FACTOR LIMITS

POH 2-11

FLAPS UP	FLAPS DOWN
+3.17 g	+2.00 g
-1.27 g	0.00 g

MINIMUM FLIGHT CREW

POH 2-11

One pilot.

MAXIMUM OPERATING PRESSURE-ALTITUDE LIMITS

POH 2-12

Normal Operation	35,000 feet
Operation with Yaw Damp System Inoperative	17,000 feet

MAXIMUM OUTSIDE AIR TEMPERATURE LIMITS

POH 2-12

Sea Level to 25,000 feet pressure altitude	ISA +37°C
Above 25,000 feet pressure altitude	ISA +31°C

CABIN PRESSURIZATION LIMIT

POH 2-12

Maximum Cabin Pressure Differential	6.6 psi
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MAXIMUM OCCUPANCY LIMIT

POH 2-12

Fifteen (15), including crew.

SYSTEMS AND EQUIPMENT LIMITS

POH 2-12

LANDING GEAR CYCLE LIMITS — Landing gear cycles (1 up - 1 down) are limited to one every 5 minutes for a total of 6 cycles followed by a 15-minute cool-down period.

AFT-FACING SEATS — Only aft-facing seats (placarded as such on the leg crossmember) are authorized in the aft-facing position. The seatback of each occupied aft-facing seat must be in the fully raised position for takeoff and landing. The headrest should be positioned properly for the occupant.

STRUCTURAL LIMITATIONS (Prior to S/N BB-1193 and BL-73, Except BB-1158 and BB-1167)

POH 2-13

ITEM	LIFE
Cabin Door Forward and Aft Side Latches (or bayonets) (4) Safelife (B200 only)	5,000 cycles
Cabin Door Upper Latch Hooks (2) and Attaching Hardware (B200 only)	10,000 cycles
Cargo Door Cam-lock Actuator Cable Safelife (B200C only)	8,000 cycles
Wing and Associated Structure Fatigue Safelife	30,000 hours
Horizontal and Vertical Stabilizer	45,000 hours
Windshield Frame Screws	10,000 cycles
All Wing Attach Bolts, Nuts and Barrel Nut Assemblies: Inconel Components	Replace every 15 calendar years of installed bolt and nut time

NOTE

Refer to the Raytheon Aircraft Company Structural Inspection and Repair Manual and the Super King Air 200 Series Maintenance Manual for inspection and replacement procedures. The above lives are based on the airplane being used in the category of service for which it was originally designed (95% or more time from pressurized executive/corporate transportation, majority of cruise above 10,000 ft AGL, flight duration more than one hour). For other missions, notify Raytheon Aircraft Company Customer Support for a more appropriate life.

STRUCTURAL LIMITATIONS (BB-1158, BB-1167, BB-1193 and After, BL-73 and After)

POH 2-13

Refer to Chapter Four of the Super King Air 200 Series Maintenance Manual for structural limitations.

STRUCTURAL LIMITATIONS (TEMPORARY CHANGE) **TEMPORARY CHANGE**

POH 1 of 2

Applicability: Temporary Change to the POH and FAA Approved AFM, P/N 101-590010-147CTC3, May, 2011 (Hawker Beechcraft Corporation). Description: Replace Structural Limitations with reference to the Super King Air 200 Series Airworthiness Limitations Manual. Serials affected: BB-734, BB-793, BB-829, BB-854 thru BB-870, BB-874 thru BB-891, BB-894, BB-896 thru BB-911, BB-913 thru BB-1438, BB-1440 thru BB-1443; and BL-37 thru BL-138.

Refer to the Super King Air 200 Series Airworthiness Limitations Manual for structural limitations.

CARGO LIMITATIONS (All Serials)

POH 2-14

1. All cargo shall be properly secured by an FAA-approved cargo restraint system.
2. Cargo must be arranged to permit free access to all exits and emergency exits.

WARNING

Severe icing may result from environmental conditions outside of those for which the airplane is certificated. Flight in freezing rain, freezing drizzle, or mixed icing conditions (supercooled liquid water and ice crystals) may result in ice build-up on protected surfaces exceeding the capability of the ice protection system, or may result in ice forming aft of the protected surfaces. This ice may not be shed using the ice protection systems, and may seriously degrade the performance and controllability of the airplane.

1. During flight, severe icing conditions that exceed those for which the airplane is certificated shall be determined by the following visual cues. If one or more of these visual cues exists, immediately request priority handling from Air Traffic Control to facilitate a route or an altitude change to exit the icing conditions.
 - a. Unusually extensive ice accreted on the airframe in areas not normally observed to collect ice.
 - b. Accumulation of ice on the upper surface of the wing aft of the protected area.
 - c. Accumulation of ice on the propeller spinner farther aft than normally observed.
2. Since the autopilot may mask tactile cues that indicate adverse changes in handling characteristics, use of the autopilot is prohibited when any of the visual cues specified above exist, or when unusual lateral trim requirements or autopilot trim warnings are encountered while the airplane is in icing conditions.
3. All icing detection lights must be operative prior to flight into icing conditions at night. [This supersedes any relief provided by the Master Minimum Equipment List (MMEL).]

8. ICE AND RAIN PROTECTION

ICING LIMITATIONS

POH 2-12

Minimum Ambient Temperature for Operation of Deicing Boots	-40°C
Minimum Airspeed for Sustained Icing Flight	140 knots

Sustained flight in icing conditions with flaps extended is prohibited except for approach and landings.

ICE VANES, LEFT and RIGHT, shall be extended for operations in ambient temperatures of +5°C or below when flight free of visible moisture cannot be assured. ICE VANES, LEFT and RIGHT, shall be retracted for all takeoff and flight operations in ambient temperatures above +15°C.

NOTE

Once the manual override system is activated (any time the ICE VANE EMERGENCY MANUAL EXTENSION handle has been pulled out), do not attempt to operate the ice vanes electrically until the override assembly inside the engine cowling has been properly reset on the ground. Even after the manual extension handle has been pushed back in, the manual override system is still engaged.

APPROVED AIRPLANE DEICING/ANTI-ICING FLUIDS

POH 2-12

SAE AMS 1424 Type I; ISO 11075 Type I; SAE AMS 1428 Type II; ISO 11078 Type II. Approved SAE AMS 1428 Type IV fluids: Clariant Safewing MP IV 1957; Clariant Safewing MP IV 2001; UCAR ULTRA+ (approved for use down to -15°C); Octagon Max Flight Type IV.

APPROVED AIRPLANE DEICING/ANTI-ICING FLUIDS (TEMPORARY CHANGE)

TEMPORARY CHANGE

POH 2 of 2

Applicability: Temporary Change to the POH and FAA Approved AFM, P/N 101-590010-147CTC5, July, 2024 (Textron Aviation). Description: Revise Approved Airplane Deicing/Anti-icing Fluids. Serials affected: BB-734, BB-793, BB-829, BB-854 thru BB-870, BB-874 thru BB-891, BB-894, BB-896 thru BB-911, BB-913 thru BB-1438, BB-1440 thru BB-1443; and BL-37 thru BL-138.

Approved Airplane Deicing/Anti-icing Fluids on pages 2-12 and 2-13 is revised to: ISO 11075 Type I; ISO 11078 Type II; SAE AMS 1424 Type I; SAE AMS 1428 Type II; SAE AMS 1428 Type III; SAE AMS 1428 Type IV.

9. WINDSHIELD AND WINDOWS

CRACKED OR SHATTERED WINDSHIELD

POH 2-13

The following limitations apply when continued flight is required with a cracked outer or inner ply of the windshield.

1. Continued flight with a cracked windshield is limited to 25 flight hours.
2. Windshields which have a shattered inner ply will have numerous cracks which obstruct forward vision and produce small particles or flakes of glass that can break free and interfere with the crew's vision; these must be replaced prior to the next flight unless a special flight permit is obtained from the local FAA Flight Standards District Office.
3. Crack(s) must not impair visibility.
4. Crack(s) must not interfere with the use of windshield wipers for flights requiring the wipers.
5. Windshield anti-ice must be operational for flights in icing conditions.
6. The following placard must be installed in clear view of the pilot:

MAXIMUM AIRPLANE ALTITUDE IS LIMITED TO 25,000 FEET. CABIN ΔP MUST BE MAINTAINED BETWEEN 2.0 AND 4.6 PSI DURING FLIGHT.

Windshields that have cracks in both the inner and outer plies must be replaced prior to the next flight unless a special flight permit is obtained from the local FAA Flight Standards District Office.

CRACK IN ANY SIDE WINDOW (COCKPIT OR CABIN)

POH 2-14

The following limitations apply when continued flight is required with a cracked outer or inner ply in any side window. These limitations do not apply to minor compression-type chips (clamshell) which may occur on the milled edge of cockpit side windows; refer to the Beech Super King Air 200 Series Maintenance Manual for disposition of such chips.

1. Continued flight is limited to 25 flight hours.
2. Flights must be conducted with the cabin depressurized. The following placard must be installed in clear view of the pilot:

PRESSURIZED FLIGHT IS PROHIBITED DUE TO A CRACKED SIDE WINDOW. CONDUCT FLIGHT WITH THE CABIN PRESSURE SWITCH IN THE DUMP POSITION.

10. PLACARDS

PLACARDS

POH 2-14B

On Overhead Panels in Pilot's Compartment:

OPERATION LIMITATIONS — THIS AIRPLANE MUST BE OPERATED AS A NORMAL CATEGORY AIRPLANE IN COMPLIANCE WITH THE OPERATING LIMITATIONS STATED IN THE FORM OF PLACARDS, MARKINGS AND MANUALS. NO ACROBATIC MANEUVERS INCLUDING SPINS ARE APPROVED. THIS AIRPLANE APPROVED FOR VFR, IFR, & DAY & NIGHT OPERATION & IN ICING CONDITIONS.

CAUTION

STALL WARNING IS INOPERATIVE WHEN MASTER SWITCH IS OFF. STANDBY COMPASS IS ERRATIC WHEN WINDSHIELD ANTI-ICE AND/OR AIR-CONDITIONING IS ON.

Aft of Overhead Light Control Panel:

AIRSPEEDS (IAS)	
MAX GEAR EXTENSION	181 KNOTS
MAX GEAR RETRACT	163 KNOTS
MAX GEAR EXTENDED	181 KNOTS
MAX APPROACH FLAP	200 KNOTS
MAX FULL DOWN FLAP	157 KNOTS
MAX MANEUVERING	181 KNOTS

Aft of Overhead Light Control Panel: OXYGEN — PASSENGER — MANUAL O'RIDE / PULL ON — SYS READY.

On Pilot's Window Sill: TURN OFF STROBE LIGHTS WHEN TAXIING IN VICINITY OF OTHER AIRCRAFT OR DURING FLIGHT THROUGH FOG OR CLOUDS. STD POSITION LIGHTS TO BE TURNED ON FOR ALL NIGHT OPERATIONS.

On Pilot's & Copilot's Window Sills:

WARNING

DO NOT SMOKE WHILE OXYGEN IS IN USE. WITH DILUTER-DEMAND CREW MASK FLOW STOPS WHEN BREATHING STOPS.

On Curved Pedestal Adjacent to Power Levers:

CAUTION

REVERSE ONLY WITH ENGINES RUNNING.

On Pedestal Near Cabin Pressurization Controller:

WARNING

DE-PRESSURIZE CABIN BEFORE LANDING.

Below Latch on Forward Side of Forward and Aft Partitions (B200) / Below Latch on Forward Side of Forward Partition and on Aft Side of Aft Partition (B200C): KICK HERE FOR EMERGENCY EVACUATION.

On Floor Aft of Pedestal (airplanes prior to BL-73 and BB-1193, except BB-1158 and BB-1167, not incorporating Beech Kit P/N 101-8018-1): LANDING GEAR ALTERNATE EXTENSION — 1. LIFT AND TURN HANDLE TO ENGAGE. 2. PUMP HANDLE UP AND DOWN UNTIL THREE GREEN GEAR LIGHTS ILLUM.

PLACARDS (continued)

On Floor Aft of Pedestal (airplanes BB-1158, BB-1167, BB-1193 and after, BL-73 and after, and prior airplanes incorporating Beech Kit P/N 101-8018-1): LANDING GEAR ALTERNATE EXTENSION — 1. REMOVE HANDLE FROM SECURING CLIP AND PUMP. 2. AFTER ALL THREE GREEN INDICATOR LIGHTS ARE ILLUMINATED AND FURTHER RESISTANCE IS FELT, SECURE HANDLE IN STOWED POSITION.

Below Right Circuit Breaker Panel: PILOT'S STATIC AIR SOURCE — NORMAL / ALTERNATE. SEE FLIGHT MANUAL PERFORMANCE SECTION FOR INSTR CAL ERROR.

Center of Cabin on Passenger Servicing Unit (B200C): NO SMOKING / FASTEN SEAT BELT.

PLACARDS (continued)

POH 2-17

On Cabin Side of Forward and Aft Partitions (B200): [No-smoking symbol and fasten-seat-belt symbol].

On Inside Surface of Each Oxygen Access Door: WARNING - DO NOT SMOKE WHILE OXYGEN IS IN USE. TO USE — PULL LANYARD PIN, DON MASK.

Below Emergency Exit Handle on Exit Lock Lever (visible only when Lever is in Locked Position) (B200): MUST BE UNLOCKED BEFORE TAKEOFF / LOCKED / EXIT LOCK.

On Emergency Exit Handle: EXIT-PULL.

On Window Frame Escutcheon Adjacent to Front Seats (chaise lounge): COUCH — NOT TO BE OCCUPIED AS CHAISE LONGUE DURING TAKE-OFF AND LANDING. (or CHAISE LOUNGE).

Stitched to the Aft End of the Couch Cushion (chaise lounge): NOT TO BE OCCUPIED AS CHAISE LOUNGE DURING TAKE-OFF AND LANDING.

PLACARDS (continued)

POH 2-18

On Inside Bottom of Couch Drawer (two-placed couch): COUCH LIMITATIONS — TOTAL WEIGHT OF OCCUPANTS NOT TO EXCEED 340 LBS. MAX WT OF DRAWER CONTENTS 30 LBS PER DRAWER. (or COUCH LIMITATIONS — MAX WT OF DRAWER CONTENTS 30 LBS PER DRAWER).

On Shoulder Harness Assembly For All Chairs: SHOULDER HARNESS MUST BE WORN DURING TAKE-OFF AND LANDING WITH SEAT IN OUTBD POSITION, SEAT BACK UPRIGHT AND HEADREST FULLY EXTENDED.

On Cupholders and Tables When Installed: STOW BEFORE TAKE-OFF AND LANDING.

On Trim Above Side Facing Seat (Forward of Baggage Area): FASTEN SEAT BELT DURING TAKEOFF AND LANDING.

On Window Frame Adjacent to Lateral-Tracking Seats When Installed: SEAT MUST BE LOCATED IN OUTBOARD POSITION FOR TAKEOFF AND LANDING.

On Outside Surface of First Aid Oxygen Access Door: FIRST AID OXYGEN — PULL.

PLACARDS (continued)

POH 2-19

On Inside Surface of First Aid Oxygen Access Door: WARNING - DO NOT SMOKE WHILE OXYGEN IS IN USE. TO USE — TURN VALVE ON, DON MASK. NOTE: CREW SYS MUST BE ON.

On Aft Compartment Sidewall Adjacent to Fold-Up Seats: FASTEN SHOULDER HARNESS AND SEAT BELT DURING TAKE OFF AND LANDING.

On Center of Aft Bulkhead (When Not Equipped with Fold-up Seats): COMPARTMENT CAPACITY 550 LBS (BB-1052, BB-1091 and after, BL-58 and after, and prior airplanes with Beech Kit No. 101-5068-1 or -5) — THIS INCLUDES BAGGAGE AND/OR EQUIPMENT AND/OR OPTIONAL FURNISHINGS. SEE WEIGHT AND BALANCE SECTION OF FLIGHT MANUAL FOR LOADING INSTRUCTIONS. (Prior to BB-1052, BB-1091 and BL-58: COMPARTMENT CAPACITY 410 LBS).

On Center of Aft Bulkhead (When Equipped with Fold-up Seats): TOTAL COMPARTMENT CAPACITY (INCLUDING BAGGAGE AND/OR PASSENGER) NOT TO EXCEED 510 POUNDS (BB-1052, BB-1091 and after, BL-58 and after, and prior airplanes with Beech Kit No. 101-5068-3). SEE WEIGHT AND BALANCE SECTION OF FLIGHT MANUAL FOR LOADING INSTRUCTIONS. (Prior to BB-1052, BB-1091 and BL-58: NOT TO EXCEED 370 POUNDS).

Above Coat Rod (Aft Compartment): CLOTHING ONLY.

Inside Airstair Door Behind Handle (B200): CAUTION - DO NOT OPEN DOOR WHEN CABIN IS PRESSURIZED. CAUTION - DO NOT ATTEMPT TO CHECK SECURITY OF CABIN DOOR BY MOVING DOOR HANDLE UNLESS CABIN IS DEPRESSURIZED AND AIRCRAFT IS ON THE GROUND. PUSH BUTTON & TURN HANDLE TO OPEN DOOR.

Inside Airstair Door Behind Handle (B200C): CAUTION - DO NOT OPEN OR CHECK SECURITY BY MOVING DOOR HANDLE WHILE AIRCRAFT IS PRESSURIZED AND/OR IN FLIGHT. PUSH BUTTON & TURN HANDLE TO OPEN DOOR.

Inside Airstair Door On Folding Step (B200 and B200C): LIFT STEP TO INSPECT DOOR LOCK.

Inside Airstair Door Between Folding Steps (B200 and B200C): WHEN HANDLE IS IN LOCKED POSITION - ARM SHOULD BE AROUND PLUNGER AS SHOWN.

On Escutcheon Near Upper Access Cover of Cargo Door (B200C): LOAD CARGO PER PILOT'S OPERATING HANDBOOK.

On Upper Access Cover of Cargo Door (B200C): CAUTION - DO NOT OPEN OR CHECK SECURITY BY MOVING DOOR HANDLE WHILE AIRCRAFT IS PRESSURIZED AND/OR IN FLIGHT.

PLACARDS (continued)

On Upper Access Cover of Cargo Door (B200C): CARGO DOOR LATCH HANDLE ACCESS.

On Cargo Door Upper Latch Handle (B200C): PUSH TO RELEASE.

On Lower Access Cover of Cargo Door (B200C): CARGO DOOR LOWER LATCH HANDLE ACCESS.

Inside Lower Access Cover of Cargo Door (B200C): CAUTION - DO NOT OPEN OR CHECK SECURITY BY MOVING DOOR HANDLE WHILE AIRCRAFT IS PRESSURIZED AND/OR IN FLIGHT. OPEN / CLOSED. LIFT HOOK TO RELEASE HANDLE.

11. KINDS OF OPERATION

KINDS OF OPERATION LIMITS

The BEECHCRAFT Super King Air B200 and B200C are approved for the following types of operations when the required equipment is installed and operational as defined within the KINDS OF OPERATIONS EQUIPMENT LIST: 1. VFR Day; 2. VFR Night; 3. IFR Day; 4. IFR Night; 5. Known Icing Conditions.

KINDS OF OPERATIONS EQUIPMENT LIST

The following equipment list identifies the systems and equipment upon which type certification for each kind of operation was predicated. The listed items must be installed and operable unless: (1) the airplane is operated in accordance with a current FAA-issued Minimum Equipment List (MEL); or (2) an alternate procedure is provided in the POH/AFM for the inoperative state of the listed equipment. Numbers refer to the quantities required to be operative for a specified condition.

NOTE

The following list does not include all equipment required by the FAR Parts 91 and 135 Operating Requirements, nor components obviously required for the airplane to be airworthy (wings, empennage, engine, etc.).

ELECTRICAL POWER

POH 2-23

SYSTEM and/or COMPONENT	VFR DAY	VFR NIGHT	IFR DAY	IFR NIGHT	ICING
AC Volts/Frequency Meter	1	1	1	1	1
Battery	1	1	1	1	1
Battery Charge Monitor System and Annunciator	1	1	1	1	1
DC Generator	2	2	2	2	2
DC GEN Annunciator	2	2	2	2	2
DC Load Meter	2	2	2	2	2
Inverter	2	2	2	2	2
INVERTER Annunciator	1	1	1	1	1

ENGINE INDICATIONS

POH 2-23

SYSTEM and/or COMPONENT	VFR DAY	VFR NIGHT	IFR DAY	IFR NIGHT	ICING
ITT Indicator	2	2	2	2	2
Tachometer (Gas Generator)	2	2	2	2	2
Tachometer (Propeller)	2	2	2	2	2
Torque Indicator	2	2	2	2	2

ENGINE OIL

POH 2-23

SYSTEM and/or COMPONENT	VFR DAY	VFR NIGHT	IFR DAY	IFR NIGHT	ICING
Chip Detector System Including Annunciators	2	2	2	2	2
Oil Pressure Indicator	2	2	2	2	2
Oil Temperature Indicator	2	2	2	2	2
OIL PRESS Annunciator	2	2	2	2	2

ENVIRONMENTAL

POH 2-23

SYSTEM and/or COMPONENT	VFR DAY	VFR NIGHT	IFR DAY	IFR NIGHT	ICING
BL AIR FAIL Annunciators	2	2	2	2	2
ALT WARN Annunciator (Cabin)	1	1	1	1	1
Cabin Rate of Climb Indicator	1	1	1	1	1
Differential Pressure/Cabin Altitude Indicator	1	1	1	1	1
DUCT OVERTEMP Annunciator	1	1	1	1	1
Outflow Valve	1	1	1	1	1
Pressurization Controller	1	1	1	1	1
Safety Valve	1	1	1	1	1
Bleed Air Shutoff Valve	2	2	2	2	2

FIRE PROTECTION

POH 2-23

SYSTEM and/or COMPONENT	VFR DAY	VFR NIGHT	IFR DAY	IFR NIGHT	ICING
Engine Fire Detector System And Annunciators	2	2	2	2	2

FLIGHT CONTROLS

POH 2-23

SYSTEM and/or COMPONENT	VFR DAY	VFR NIGHT	IFR DAY	IFR NIGHT	ICING
Flap Position Indicator	1	1	1	1	1
Flap System	1	1	1	1	1
Stall Warning Horn	1	1	1	1	1
Trim Tab Position Indicator (Rudder, Aileron, Elevator)	3	3	3	3	3
Yaw Damp System	1	1	1	1	1

SYSTEM and/or COMPONENT	VFR DAY	VFR NIGHT	IFR DAY	IFR NIGHT	ICING
Engine Driven Boost Pump	2	2	2	2	2
Fuel Crossfeed System Including Annunciator	1	1	1	1	1
Standby Fuel Boost Pump	2	2	2	2	2
FUEL PRESS Annunciator	2	2	2	2	2
Fuel Quantity Indicating System Including Annunciators	2	2	2	2	2
Firewall Fuel Shutoff System Including Annunciators	2	2	2	2	2
Jet Transfer Pump	2	2	2	2	2
Motive Flow Valve	2	2	2	2	2
Fuel Flow Indicator	2	2	2	2	2

ICE AND RAIN PROTECTION

POH 2-23

SYSTEM and/or COMPONENT	VFR DAY	VFR NIGHT	IFR DAY	IFR NIGHT	ICING
Alternate Static Air Source	0	0	1	1	1
Engine Auto Ignition and Annunciators	2	2	2	2	2
Engine Anti-Ice System and Annunciators	2	2	2	2	2
Heated Fuel Vent	0	0	2	2	2
Heated Windshield (Left)	0	0	0	0	1
Pitot Heat	0	0	2	2	2
Pneumatic Pressure Indicator	0	0	1	1	1
Propeller Deicer System	0	0	0	0	1
Stall Warning Heat (Lift Transducer and Mounting Plate)	0	0	0	0	1
Surface Deicer System	0	0	0	0	1
Wing Ice Light (Left)	0	0	0	0	1

LANDING GEAR

POH 2-23

SYSTEM and/or COMPONENT	VFR DAY	VFR NIGHT	IFR DAY	IFR NIGHT	ICING
Landing Gear Position Indicator Lights	3	3	3	3	3
Landing Gear Handle Light	1	1	1	1	1
Landing Gear Aural Warning	1	1	1	1	1
Landing Gear Motor and Gearbox *	1	1	1	1	1
Alternate Landing Gear Extension System	1	1	1	1	1
Hydraulic Fluid Low Annunciator **	1	1	1	1	1
Landing Gear Hydraulic Power Pack **	1	1	1	1	1

LIGHTS

POH 2-23

SYSTEM and/or COMPONENT	VFR DAY	VFR NIGHT	IFR DAY	IFR NIGHT	ICING
Cockpit and Instrument Lighting System	0	1	0	1	0
CABIN DOOR Annunciator	1	1	1	1	1
Landing Lights	0	1	0	1	0
Position Lights	0	3	0	3	0
Anticollision Lights System	0	1	0	1	0

NAVIGATION INSTRUMENTS

POH 2-23

SYSTEM and/or COMPONENT	VFR DAY	VFR NIGHT	IFR DAY	IFR NIGHT	ICING
Airspeed Indicator (Left)	1	1	1	1	1
Altimeter (Left)	1	1	1	1	1
Magnetic Compass	1	1	1	1	1
Outside Air Temperature	1	1	1	1	1

OXYGEN

POH 2-23

SYSTEM and/or COMPONENT	VFR DAY	VFR NIGHT	IFR DAY	IFR NIGHT	ICING
Oxygen System	1	1	1	1	1

PROPELLER

POH 2-23

SYSTEM and/or COMPONENT	VFR DAY	VFR NIGHT	IFR DAY	IFR NIGHT	ICING
Prop Reversing System Including Annunciators	2	2	2	2	2
Prop Governor Test Switch	1	1	1	1	1
Prop Overspeed Governor	2	2	2	2	2
Propeller Primary Low-Pitch Stop	2	2	2	2	2

SYSTEM and/or COMPONENT	VFR DAY	VFR NIGHT	IFR DAY	IFR NIGHT	ICING
Instrument Air System	0	1	1	1	1
Gyro Suction Indicator	1	1	1	1	1

NOTE

* On airplanes prior to BL-73 and BB-1193 (except BB-1158 and BB-1167) not incorporating Beech Kit P/N 101-8018-1.

** On airplanes BB-1158, BB-1167, BB-1193 and after, BL-73 and after, and prior airplanes incorporating Beech Kit P/N 101-8018-1.

The above Kinds of Operations Equipment List does not include all specific flight instrument and communications/navigation equipment required by FAR Parts 91 and 135 Operating Requirements.

12. V-SPEED DEFINITIONS (GENERAL REFERENCE)

Takeoff and Initial Climb

V-Speed	Name	Meaning
V1	Takeoff decision speed	Maximum speed at which a reject may be initiated; at or above it the takeoff must be continued.
Vr	Rotation speed	Speed at which the pilot rotates to raise the nose.
Vlof	Lift-off speed	Speed at which the aircraft first becomes airborne.
V2	Takeoff safety speed	Target climb speed with the critical engine inoperative.
V2min	Minimum takeoff safety speed	Lowest allowable V2 .
Vef	Engine-failure speed	Speed at which the critical engine is assumed to fail (certification).
Vmu	Minimum unstick speed	Slowest speed at which the aircraft can safely lift off.
Vfto	Final takeoff speed	Speed in the final takeoff / climb segment.

Climb Performance

V-Speed	Name	Meaning
Vx	Best angle of climb	Most altitude gained per distance over the ground.
Vy	Best rate of climb	Most altitude gained per unit of time.
Vxse	Best angle, single-engine	Vx with one engine inoperative (multiengine).
Vyse	Best rate, single-engine	Vy with one engine inoperative — the blue line .

Stall Speeds

V-Speed	Name	Meaning
Vs	Stall speed	Minimum steady flight speed at which the aircraft is controllable.
Vs0	Stall speed, landing configuration	Stall with full flaps and gear down — bottom of the white arc.
Vs1	Stall speed, clean configuration	Stall in a specified (usually clean) configuration — bottom of the green arc.
Vsr	Reference stall speed	Certification reference stall speed.
Vsse	Safe single-engine speed	Minimum speed for intentionally cutting one engine.
Vsw	Stall warning speed	Speed at which the stall warning activates.

Airspeed Indicator Limit Speeds

V-Speed	Name	Meaning
Va	Design maneuvering speed	Maximum speed for full or abrupt control inputs without overstress.
Vno	Maximum structural cruising speed	Normal operating limit — top of the green arc, start of the yellow arc.
Vne	Never-exceed speed	The red line — never exceed.
Vfe	Maximum flap-extended speed	Top of the white arc.
Vle	Maximum landing-gear-extended speed	Maximum speed flying with the gear down.
Vlo	Maximum landing-gear-operating speed	Maximum speed to extend or retract the gear.
Vmo / Mmo	Maximum operating limit speed / Mach	Maximum operating airspeed and Mach number.

Approach and Landing

V-Speed	Name	Meaning
Vref	Landing reference speed	Threshold-crossing speed, typically 1.3 x Vs0 .
Vapp	Approach speed	Target speed on final approach.
Vbg	Best glide speed	Speed for maximum glide distance (best lift-to-drag ratio).

Multiengine Control

V-Speed	Name	Meaning
Vmc / Vmca	Minimum control speed (airborne)	Minimum speed to maintain control with the critical engine inoperative — red radial line.
Vmcg	Minimum control speed (ground)	Minimum control speed on the takeoff roll.
Vmcl	Minimum control speed (landing)	Minimum control speed in the landing configuration.
Vmbe	Maximum brake energy speed	Maximum speed from which the brakes can absorb a rejected takeoff.

Design and Certification Speeds

V-Speed	Name	Meaning
Vb	Design gust-intensity speed	Turbulence-penetration design speed.
Vc	Design cruising speed	Certification design cruising speed.
Vd / Vdf	Design / demonstrated diving speed	Certification dive speed.
Vf	Design flap speed	Certification design flap speed.
Vh	Maximum level-flight speed	Maximum speed in level flight at maximum continuous power.

NOTE

These are certification design speeds. They are rarely referenced in day-to-day operations.

Airspeed Indicator Colour Markings

V-Speed	Name	Meaning
White arc	Flap operating range	Vs0 to Vfe .
Green arc	Normal operating range	Vs1 to Vno .
Yellow arc	Caution range	Vno to Vne — smooth air only.
Red line	Never exceed	Vne .
Blue line	Best rate, single-engine	Vyse (multiengine).
Red radial	Minimum control speed	Vmc (multiengine).

NOTE

The colour markings are defined by the V-speeds above, so a change to a limitation speed changes the arc.