## **BEECHCRAFT**

# **BONANZA 33, 35 and 36**

# 100-HOUR OR ANNUAL LONG FORM INSPECTION GUIDE (INCLUDES TURBOCHARGED AIRPLANES)

Reissued: March, 1985

OWNER'S NAME	ADDRESS	STATE	 E	ZIP
IDENTIFICATION NUMBER SERIAL NUMBER	HOURS DATE INSPECTI	ON COMPLETED	)	
SERVICING AGENCY	ADDRESS	STATE	ZIP	

The time periods for the inspections noted in this schedule are based on norms: usage under average environmental conditions. Airplanes operated in humid tropics, or in cold, damp climates, etc., may need more frequent inspections for wear, corrosion, lubrication, and or lack of maintenance. Under these adverse conditions, perform periodic inspections in compliance with this guide at more frequent intervals until the owner or operator can set his own inspection periods based or the contingencies of ffe'd experience. Airplanes operated commercially less than 100 hours a year must have a 100-Hour Inspection performed no later than 12 months following the date of the preceding 100-Hour Inspection. The 100-hour interval between performance of the procedures specified herein should NEVER be exceeded by more than 10 hours which can be used only if the additional time is required to reach a place where the inscectior can be satisfactorilly accomplished. However, any extension of a 100 hour interval must be subtracted from the following 100-hour interval, with no time extension, permitted. For example, if an inspection is done at 110 hours, the next inspection is due 90 hours later with no extension allowed.

#### NOTE

Ascertain that all placards are in place and legible whenever the airplane has been repainted or touched up after repairs. Replace any placards that have been inadvertently defaced or removed.

#### **NOTE**

Beech Aircraft's Recommended Inspection Program in accordance with FAR Parts 43 and 91 consists of, but is not limited to, inspection items listed in this Inspection Guide, any applicable Airworthiness Directives issued against the airframe or any equipment installed therein, conformity to Type Certificate Data Sheet and Maintenance Manual Airworthiness Limitations Ohapter (Chapter 4) as applicable.

The owner or operator is primarily responsible for maintaining the airplane in an airworthy condition, including compliance with all applicable Airworthiness Directives as specified in Part 39 of the Federal Aviation Regulations. It is further the respon-sibility of the owner or operator to ensure that the airplane is inspected in conformity with the requirements of Parts 43 and 91 of the Federal

Aviation Regulations. Beech Aircraft corporation has prepared this inspection guide to assist the owner or operator in meeting the foregoing responsibilities. This inspection guide is not intended to be all-inclusive, for no such guide can replace the good judgment of a certified airframe and power plant mechanic in the performance of his duties. As the one primarily responsible for the airworthiness of the airplane, the owner or operator should select only qualified personnel to maintain the airplane.

While this guide may be used as an outline, detailed information of the many systems and components in the airplane will be found in the various section chapters of ins shopamaintenance manual and the pertinent vendor publications. It is also recommended that reference be made to the applicable Maintenance Handbooks, previously issued Ser-vice Instructions, Beechcraft Service Bulletins, applicable FAA regulations and Publi-cations, Vendors Bulletins and Specifications for torque values, clearances, settings, tolerances,

and other requirements. It is the responsibility of the owner or operator to ensure that the airframe and power plant mechanic inspecting the airplane has access to the previously noted documents as well as to this inspection guide.

Beech Aircraft Corporation issues service information for the benefit of owners and operators in the form of two classes of Service Bulletins. MANDATORY (Red Border) Service Bulletins are changes, inespections or modifications that could affect safety. The factory considers compliance with these Service Bulletins mandatory. OPTIONAL (No Border) Service Bulletins cover changes, notifications, improvements or inspections which may benefit the owner. Due to the wide range of information covered by the OPTIONAL Service Bulletin, each owner or operator is responsible for conducting a thorough review of each Optional Service Bulletin to determine if compliance is required based on the applicability of the OPTIONAL Service Bulletin to his particular set of operating conditions.

In the final analysis it is the responsibility of the owner or operator to ensure that all previously issued Class I and II Service Instructions arid Beechcraft Service Bulletins which are pertirient to his particular operation are complied with.

## NOTE

In addition to the inspections prescribed by this schedule, the altimeter instrument and static system and all ATC transponders MUST be tested and inspected at 24-month intervals in compliance with the requirements specified in FAR Part 91.

A. OPERATIONAL INSPECTION	I	
STARTER - Check for proper operation to ensure starter disengagement when	, unusual noises and dragging. Check starter energized light (if in	stalled)
to ensure starter disengagement when	Mech Mech	Insp
. FUEL PRESSURE - Check for proper	fuel pressure limits and fluctuations.	
	Mech	Insp
. CYLINDER HEAD TEMPERATURE - 0	Check for proper operation, temperature and fluctuations.	
	Mech	Insp
. ALTERNATOR / GENERATOR - Check	for proper output and unusual noises.	
	Mech	Insp
	oper operation in test mode. Perform a functional test as outlined in a wiring for security and condition.	n Chapte
		n Chapte
Bonanza Series Maintenanoe Manual. Checl  5. STANDBY INSTRUMENT AIR (Airplan	wiring for security and condition.  Mech  me serials E-2164 and after, and EA-422 and after) - Check for pro	Insp
Bonanza Series Maintenanoe Manual. Checl	wiring for security and condition.  Mech  me serials E-2164 and after, and EA-422 and after) - Check for pro	Insp
Sonanza Series Maintenanoe Manual. Checles of the Sonanza Series Maintenanoe Manual. Checles of the Sonanza Series Maintenanoe Manual. Checles of the Sonanza Series of the Sona	Mech  me serials E-2164 and after, and EA-422 and after) - Check for proton.	Insp per oper Insp

8. P	ROPELLER DEICER - Check for proper operation and amperage draw on ammeter.			
		Mech	Insp	
9.	OIL PRESSURE AND TEMPERATURE - Check for proper pressure, temperature lir	mits and unusual	fluctuations.	
		Mech	Insp	
	MAGNETOS - Check the performance of the magneto as outlined under the heading NC of the other strains of the magneto as outlined under the heading NC of the other strains are strained in the contract of the magneto as outlined under the heading NC of the other strains are strained in the other strains.	ORMAL PROLE	EDURES in the	appro-priate
		Mech	Insp	
11.	POWER CHECK - Refer to NORMAL PROCEDURES in the appropriate Pilot's Operat	ing Handbook.		
		Mech	Insp	
12.	AMMETER - Check for proper indication and unusual fluctuations.			
		Mech	Insp	
	HEATING AND VENTILATING SYSTEM - Check for proper operation, heat and airfloration.	ow output. Chec	k controls for fre	edom of
		Mech	Insp	
14.	FIREWALL SHUTOFF VALVE - Check for proper operation and freedom of movemen			
		Mech	Insp	
15.	IDLE RPM AND MIXTURE SETTINGS - Check for both proper rpm and mixture set operation.	tings. Check cor	ntrols for freedor	n of
		Mech	Insp	
16.	IDLE CUT-OFF - Check for proper operation and freedom of movement.			
		Mech	Insp	
17.	IGNITION SWITCH - Rotate the ignition switch through the OFF position to the extre firing, the switch is normal. If the engine continues to run with the switch held in the one magneto is still "hot" or ungrounded. When the switch is released from the past return to normal OFF and the engine should stop running. However, any ignition switce should be replaced.	past OFF position,	tion, it is an ind it should auton	ication that natically
		Mech	Insp	
18.	ALL ENGINE CONTROLS - With the engine running, check for proper operational lir friction locks for proper operation.	mits, engine resp	oonse and rigging	g. Check
		Mech	Insp	

19.	FUEL OUANTITY GAGES - Check for proper operation and unusual fluctuations.			
		Mech	Insp	]
20	AUXILIARY FUEL PUMP - Check pump for proper operation, unusual noise and fluc	tuations		
20.	THE THE THE THE THE CHECK PUMP FOR PROPER OPERATION, UNUSUAL HOUSE AND THE	Mech	Insp	1
			F	
21.	FUEL TANK SELECTOR - Check for proper operation and feel for positive detent and	proper placardi	ng.	1
		Mech	Insp	]
22.	ALL LIGHTS - Check for condition, attachment, cracked or broken lenses. Check switc looseness and operation.	hes, knobs and Mech	circuit breake	ers for
23.	STALL WARNING SYSTEM - Check for proper operation.	Mech	Insp	]
24	PADIO OPERATION CLASS			
24.	RADIO OPERATION - Check for proper operation, security of switches and knobs.	Mech	Insp	
25	FLAPS - Check for noisy operation, full travel and proper indication.			
23	TEATS - Check for holsy operation, full traver and proper indication.	Mech	Insp	
26.	PITOT HEAT - Check amperage draw on ammeter and for proper heating of the unit.			]
		Mech	Insp	
27.	FLIGHT INSTRUMENTS - Check for condition and proper operation.			<u>]</u>
		Mech	Insp	
28.	BRAKES - Check for condition and wear, ease of operation and proper release of the parchatter.	rking brake. C	heck for unusu	lal brake
	chanter.	Mech	Insp	]
29.	EMERGENCY LOCATOR TRANSMITTER - Check for proper operation and assure the returned to service.	at the ELT is a	rmed when the	airplane is
		Mech	Insp	
30.	AIR CONDITIONER - Operate the air conditioner and verify that the retractable condet position when turned on and returns to the retracted position when turned off. Check			

31.	OXYGEN SYSTEM - Functionally check the oxygen system for proper operation. Che operation.	ck the oxygen b	ottle shutoff va	lve for proper
	operation.	Mech	Insp	
32.	SWITCHES, CIRCUIT BREAKERS - Check for proper operation.			
		Mech	Insp	
	FLIGHT CONTROLS, TRIM CONTROLS AND TRIM INDICATOR -Check freedon		and proper oper	ation through
	full travel with and without flaps extended. Check electric trim controls for operatio	n. Mech	Insp	
		Wicch	msp	
	POWER PLANT			
1. C	OWLING SKIN - Check for deformation and obvious damage or cracks. Check for loo	se or missing riv	vets. Insp	
		Wicen	ттор	
2. C	OWLING STRUCTURE - Check for cracks and deformation. Check for loose or missi	ng rivets and co		·•
		Mech	Insp	
3. C	OWLING - Check for condition, security and adjustment of latches. Open the upper			cracks.
		Mech	Insp	
4. C	OWL FLAPS - Check for travel, deformation and security. Inspect for cracks.			
		Mech	Insp	
	PARK PLUGS - Clean, inspect, regap, test and replace as necessary. Tighten spark pluess condition and for proper attachment.	igs to proper to	orque and chec	k ignition
		Mech	Insp	
6. C	OMPRESSION - Perform differential compression test.			
	F	Mech	Insp	
7. B	ATTERY - Inspect for clean, tight connections and add distilled water to maintain a	level of 3/8 incl	n above the top	of the
sepa	rators. Inspect the vents and overflow tube for obstructions. Check for security and	nd proper attach		
Mak	e certain the battery is clean. Water or dirt on battery surfaces can cause the battery		T .	
		Mech	Insp	
	LUMBING - Inspect plumbing and associated accessories for condition (such as crack rance and secure against possible chafing.	ks) and attachm	ent. Check pl	ımbing
		Mech	Insp	
9. B	RAKE FLUID RESERVOIR - Check reservoir for security, attachment, open vent, pro	per fluid level ar	nd for leaks.	
		Mech	Insp	

10. ENGINE OIL TANK OR SUMP - Check for cracks, leaks, proper fluid level, deformation	and security.		
	Mech	Insp	
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L			_
11. CRANKCASE - Check security of crankcase half bolts.		T	7
	Mech	Insp	
12 OH GUMB DRAING ANG GORFFING OL 1 1 C 1 1 ' d	1.0 1.4	· · · · · · · · · · · · · · · · · · ·	
12. OIL SUMP DRAINS ANO SCREENS - Clean screens, check for holes in the screens a torque after finstallation.	and for obstruc	tions. Check i	for proper
torque arter instanation.	Mech	Insp	7
	WICCII	Ilisp	1
13. OIL COOLER - Check oil cooler, lines and fittings for condition, security, chafing and l	eaks.		_
	Mech	Insp	7
-		F	4
14. PROPELLER AND MOUNTING BOLTS - Check for condition and security. Check the	tip of the blad	es for evidenc	e of lightning
strikes. If there is evidence of lightning strikes, consult the propeller manufacturer, the eng			
Corporation. Inspect the blades for cracks, dents, nicks, scratches, erosion, corrosion, secu	rity and mover	ment in the hu	<u>b</u> .
	Mech	Insp	
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L			_
15. PROPELLER SPINNER - Check for deformation, security and cracks.			
	Mech	Insp	
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16. PROPELLER HUB - Check for cracks, excessively leaking seals and condition.			-
	Mech	Insp	
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<u> </u>			<u></u>
17. ALTERNATOR/GENERATOR - Check for condition and attachment. Check wiring for the condition of the condition and attachment.	or proper attach	nment and pos	sible chafing.
Check for unusual noise.	3.6.1	т.	7
	Mech	Insp	
18. ALTERNATOR - Remove and disassemble the alternator as necessary to inspect the r	otor shaft bear	ings for condi	<b>」</b> tion and
replace if necessary. For Prestolite only, refer to BEECHCRAFT Service Bulletin 0546-38			tion and
Γ	Mech	Insp	7
-		F	4
19. STARTER - Check for condition, attachment and chafed or loose wires.			_
	Mech	Insp	
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20. GENERATOR/ ALTERNATOR BELT - Check for proper tension and worn or frayed con-	ndition. Check	tension adjust	ment bolt for
tightness.		Ī	-
	Mech	Insp	
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L			Ĺ
21. STANDBY GENERATOR - Check for condition, attachment, security of wires and for		_	7
	Mech	Insp	
			1

22. MAGNETOS - Check contact points for proper clearance. Points with deep pits or ex Inspect the cam follower felt pad for proper lubrication and clean the compartment with for proper connection, security and fraying. Check timing.	•		
	Mech	Insp	
23. MAGNETO PRESSURIZATION FILTER - Check for condition, cleanliness and securi	tv.		
	Mech	Insp	
24. CYLINDERS AND BAFFLES - Check cylinders and exhaust manifold for obvious leaks cracks and security. Check cylinders for broken cooling ffns and loose or missing base nu		cracks; check	baffles for
	Mech	Insp	
25. EXHAUST SYSTEM - Check for deformation, security, cracks, leaks, loose or missi condition which may occur due to normal internal erosion on stacks which have long serv		mps. Check for	thin wall
	Mech	Insp	
26. FIREWALL - Check for wrinkles, damage or cracks. Check all electrical and control accounts of the control and control accounts of the control acco	cess holes for p	roper sealing.	
	IVICCII	Шэр	
27. HOSE AND DUCTS - Check all fuel, oil and air hose or duct for leakage, cracks, det security.	rerioration and	damage. Check  Insp	fittings for
	WICCH	msp	
28. ENGINE ACCESSORIES - Check for condition, security and leaks. Check wiring, hos	es and tubes for Mech	chafing, securi	ty and leaks.
29. ENGINE MOUNTS - Check for cracks, corrosion and security. Inspect rubber cushion straps for condition and security.	s, mount bolts	and nuts and g	grounding
	Mech	Insp	
30. CABIN HEATER SYSTEM - Check for cracks, distortion, corrosion, leaks and obstruct Shop Manual, Section 10 of PEN 36-590001-3B Shop Manual or Chapter 21-40-00 of PEN 3			
subsequent).	Mech	Insp	
31. PROPELLER GOVERNOR - Check for leaks and control arm for security.			
	Mech	Insp	
32. ENGINE CONTROLS - Check controls and associated equipment for condition, attach			ı
	Mech	Insp	1
L			

	Mech	msp	
			]
34. ELECTRICAL WIRING AND EQUIPMENT - Inspect electrical wiring and associate and attachment.	ed equipment a	nd accessories	for fraying
	Mech	Insp	1
			]
35. ALL DRAINS AND PLUGS - Check for condition, security and obstructions. Check for	or leaks and corr	ect tightness.	- -
	Mech	Insp	<u> </u> -
36. PRESSURE PUMP INTAKE FILTER - Inspect filter for condition, cleanliness and secu	rity Chack filt	er container for	cracks
30.1 KESSOKE 1 OWN TOTAKE 1 IETEK - Inspect their for condition, cleaniness and sect	Mech	Insp	Cracks.
			]
37. AIR CONDITIONER COMPRESSOR - Check for security and attachment. Check tension and worn or frayed condition. (See Section 2 and 3 of PEN 35-590096B Shop Mar			
3B Shop Manual or Chapters 12-10-00 and 21-50-00 of PEN 36-590001-9, or subsequent, N	Maintenance Ma	nual).	1
	Mech	Insp	
38. INDUCTION AIR FILTER - Check for condition, cleanliness and security.			j
	Mech	Insp	]
			]
39. INDUCTION SYSTEM AND ALTERNATE AIR - Check the hot and cold flexible air of Check the alternate aft valve for blockage, security, cracks, operation and wear.	ducts for delamin	nation of the i	nner lining.
	Mech	Insp	]
40 CARRANDETTOR MEAT CHOTTEN CL. 1 C. 11 L.			]
40. CARBURETOR HEAT SYSTEM - Check for blockage, security, operation and wear.	Mech	Insp	]
			1
41. CARBURETOR - Clean the screen and check for damage. Drain the inlet chamber a for leaks. Check the primer solenoid for operation and to ensure secure mounting.	and rear section	n. Install scree	en and check
for leaks. Check the printer solehold for operation and to ensure seedic mounting.	Mech	Insp	1
			]
42. FUEL INJECTION CONTROL VALVE - Clean the screen and check for damage. Ins		_	- 1
	Mech	Insp	-
43. FUEL INJECTION SYSTEM - Inspect all fuel injection components, lines and fittings f	for evidence of f	uel leaks, frayi	] ing and
cracking.			1
	Mech	Insp	-
44. OIL SEPARATOR (Vacuum System) - Clean the screen as directed in Section 3 of PE	EN 35-5p0096B \$	 Shop Manual (	or
subsequent). Check for condition, mounting and proper operation. Install the screen and	-	urity. Inspect for	
	IVICUI	Insp	-
45. VACUUM SYSTEM AIR FILTER (Located behind instrument panel) - Check for secu	rity of attachm	ent, replace as	] s required.

47. ELECT 1. Che 2. Che 3. Che and 4. Che  48. TURBO 1. Insp 2. Insp 3. Insp attach 4. Insp 6. Insp possib 7. Che 77-00- 8. Che  C. CAB 1. SKIN  2. STRUO  3. CABL rods, t associ			
47. ELECT 1. Che 2. Che 3. Che and 4. Che  48. TURBO 1. Insp 2. Insp 3. Insp attach 4. Insp 6. Insp possib 7. Che 77-00- 8. Che  C. CAB 1. SKIN  2. STRUO  3. CABL rods, t associ			
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1. Che 2. Che 3. Che 3. Che and 4. Che  48. TURBO 1. Insp 2. Insp 3. Insp attach 4. Insp 6. Insp possib 7. Che 77-00- 8. Che  C. CAB 1. SKIN  2. STRUO  3. CABL rods, t associ		Mech	Insp
1. Che 2. Che 3. Che 3. Che and 4. Che  48. TURBO 1. Insp 2. Insp 3. Insp attach 4. Insp 6. Insp possib 7. Che 77-00- 8. Che  C. CAB 1. SKIN  2. STRUO  3. CABL rods, t associ			
48. TURBO 1. Insp 2. Insp 3. Insp attach 4. Insp 6. Insp possib 7. Che 77-00- 8. Che  C. CAB 1. SKIN  2. STRUG  3. CABL rods, t associ	LECTRIC PROPELLER DEICER - Check as follows:  1. Check for service damage to the deicer heaters, brush rods, springs and brush.  2. Check the lead strap and all other clamps, connectors and wiring for electric.  3. Check the slip rings for roughness, cracks, burned or discolored areas and for and attachment.  4. Check deicer boots for wrinkles, loose or torn areas.	cal soundness, securi	ty and attachme
1. Insp 2. Insp 3. Insp attach 4. Insp 5. Insp 6. Insp possib 7. Che 77-00- 8. Che  C. CAB 1. SKIN  2. STRUG  3. CABL rods, t associ	F. Check delicer boots for withkies, loose of total areas.	Mech	Insp
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1. Insp 2. Insp 3. Insp attach 4. Insp 5. Insp 6. Insp possib 7. Che 77-00- 8. Che  C. CAB 1. SKIN  2. STRUG  3. CABL rods, t associ			
2. Insp 3. Insp 3. Insp attach 4. Insp 5. Insp 6. Insp possib 7. Che 77-00- 8. Che  C. CAB 1. SKIN  2. STRUG  3. CABL rods, t associ	URBOCHARGER SYSTEM - Check as follows:  1. Inspect the system for oil leaks, exhaust system leaks, cracks and attachmen		
C. CAB  1. SKIN  2. STRUG  3. CABL rods, t associ	3. Inspect the bypass valve (wastegate) for proper operation and inspect all link attachment. 4. Inspect all exhaust system components for worn or damaged areas, loose clared. Inspect lubrication system components for worn or damaged areas, loose clared. Inspect the upper deck pressure reference lines and the fuel injection reference possible chafing. 7. Check and calibrate the turbine inlet temperature in accordance with Section 6 or 77-00-00 of PEN 36-590001-9 Main tenance Manual (or subsequent). 8. Check manifold pressure controller linkage for wear.	mps, cracks and leak mps, cracks and leak mps, cracks and leak e manifold for loose	cs. connections, lea
<ol> <li>SKIN</li> <li>STRUG</li> <li>CABL rods, t associ</li> </ol>	"Check mannote prossure controller minage for wear.	Mech	Insp
<ol> <li>SKIN</li> <li>STRUG</li> <li>CABL rods, t associ</li> </ol>			
<ol> <li>SKIN</li> <li>STRUG</li> <li>CABL rods, t associ</li> </ol>			
<ol> <li>STRU</li> <li>CABL rods, t associ</li> </ol>	CABIN AND BAGGAGE COMPARTMENT		
3. CABL rods, t associ	SKIN - Inspect skins for deformation, cracks and loose or missing rivets. If day	mage is found, check	adjacent struct
3. CABL rods, t associ		Mech	Insp
3. CABL rods, t associ			
rods, t associ	STRUCTURE - Check for cracks and deformation. Check for loose or missing riv	vets and concealed da	ımage.
rods, t associ		Mech	Insp
rods, t associ			
	CABLES AND PULLEYS - Check the flight control components, cables and pr	cracks. Check contr	ol cables, pulle e cables that ha
A AII EI	rods, turn buckles, end fittings, castings, etc.) that have bulges, splits, bends, or cassociated equipment for condition, attachment, alignment, clearance and propertrands or evidence of corrosion. Check cables for proper tension at the first instance.	Mech	Insp
4. AILEI	rods, turn buckles, end fittings, castings, etc.) that have bulges, splits, bends, or cassociated equipment for condition, attachment, alignment, clearance and prope	Mech	Insp

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5.	LANDING GEAR GEARBOX AND ACTUATING LINKAGE - Check for leakage, we unusual noise. Check oil level by engaging and turning the emergency hand crank ½ on the worm gear. The oil level should be maintained no more than necessary to cover	turn to determ	ine that oil is b	eing picked up
	·	Mech	Insp	]
				1
6.	FLAP MOTOR AND SHAFTS - Check for condition, security and wear at all points. jam nuts for tightness.	Check cable h	ousing for secu	arity and check
		Mech	Insp	
				1
7.	AUXILIARY FUEL PUMP AND FUEL LINES - Check for condition, security and l cracks.	eaks. Check li	ines for signs o	f chafing or
		Mech	Insp	
				1
8.	BRAKE MASTER CYLINDER AND PARKING BRAKE VALVE - Check for conditio signs of chafing or cracks.	n, security and	l leaks. Chec	k lines for
		Mech	Insp	
				1
fair	RUDDER PEDALS - Check for freedom of movement. Check cables, push/pull rods rleads for proper routing, condition and security. Check rudder pedal fore and aft position sure positive lock.			
		Mech	Insp	1
			_	_
pul	CONTROL COLUMN, TRIM CONTROL AND INDICATOR (Electric and Manual) - C lleys, sprockets, bearings, actuators, chains and turn buckles for condition, security oper indication.			-
r		Mech	Insp	]
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	l			j
11.	ENGINE CONTROLS - Check for ease of operation through full travel. Check friction	locks for prope	er operation.	
		Mech	Insp	
				-
12.	ELECTRICAL WIRING AND EOUIPMENT - Check for condition, security and signs	of chafing		j
12.	EEEE THE WHILE WHILE EEEE THE EEEE TO CONTINUE SIGNS	Mech	Insp	1
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10		1*.*		J
13.	PLUMBING - Check all plumbing and connections for security, leakage and general co	Mech	Insp	1
		Wicen	Шэр	_
	WINDOWS AND DOORS - Inspect windows for scratches, crazing and general corachment. Check latching mechanism for proper engagement and ease of operation.	_	T	urity of
		Mech	Insp	
	· · · · · · · · · · · · · · · · · · ·		•	-

15. INSTRUMENTS AND INSTRUMENT PANEL - Inspect instrument panel, sub panel attachment. Check all knobs for security. Inspect shock mounts, ground straps for cracl	•		condition and
	Mech	Insp	
16. SEATS, SEAT BELTS AND SHOULDER HARNESSES - Inspect cabin seats, seat be operation, condition and security of attachment. Inspect floorboards for condition and the seat stops.			
	Mech	Insp	
17. OXYGEN SYSTEM - Check condition of the oxygen system and check the oxygen ma	sks for cleanlin	ess and stowag	e.
	Mech	Insp	
18. VENTILATING SYSTEM - Check all fresh air and heat outlet vents for proper movem	ent and operation	n.	
	Mech	Insp	
19. FUEL SELECTOR VALVE - Inspect for leakage, security, freedom of movement, pro-	oper detent feel	and condition.	Clean strainers
and inspect for condition. Check for proper placarding.	Mech	Insp	
20. FILTERS - Inspect pressure system inline filter for condition, cleanliness and security. other individual instrument air filters and/or time change master filter on vacuum system Chart in Sectlon B of PEN 35-590096B Shop Manual, the Service Chart in Section 2 of P Overhaul And Replacement Schedule in Chapter 5-10-00 of PEN 36-590001-9 (or subseque	airplanes in acc EN 36-590001-	cordance with the 3B Shop Manua	he Service
	Mech	Insp	
21. EMERGENCY EXIT HATCH - Check emergency release handle and latch assembly moves out freely. Check the complete latch assembly for condition and all moving parts for installed, check for proper latching and seal. Resafety the emergency exit with .020 inc	or proper operat	ion. With the	hatch
22. STATIC SYSTEM - Check and drain water from the static lines.			
22. STATIC STSTEM - Check and drain water from the state lines.	Mech	Insp	
D WINCE AND CARDY THROUGH STRUCTURE			
<ul> <li>D. WINGS AND CARRY-THROUGH STRUCTURE</li> <li>1. SKIN - Check for deformation and obvious damage. Check for cracks, loose or missing adjacent structure. Check for indications of hard landing or excessive flight loading.</li> </ul>	rivets. If dan	mage is found,	check
	Mech	Insp	
2. STRUCTURE - Check for cracks, deformation and concealed damage. Check for loose of	or missing rivets	<u>.                                    </u>	
	Mech	Insp	
3. ACCESS DOORS AND PANELS - Inspect for cracks, proper fit and attachment.			
	Mech	Insp	

4. CABLES, PULLEYS AND TURNBUCKLES - Check the wing flight control components components (push rods, turn buckles, end fittings, castings, etc.) that have bulges, splits pulleys, and associated equipment for condition, attachment, alignment, clearance, and purposes at the first incomposition of the first incomposition.	, bends, or cra proper operation	ncks. Check co on. Replace cal	ontrol cables, oles that have
broken strands or evidence of corrosion. Check cables for proper tension at the first in	Mech	Insp	nerearter.
	WICCII	шър	
5. AILERONS - Check for condition and security. Check for cracks, loose or missing rivets		of movement. C	heck hinge
bearings and brackets for condition, push-pull rods for security and rod ends for corrosi		T	7
	Mech	Insp	
			1
6. FUEL TANKS, CAPS AND VENTS - Inspect fuel tank vent lines and filler caps as di	rected in Section	n 3 of PEN 35-	] 590096R Shop
Manual, Section B of PEN 36-590001-3B Shop Manual or Chapter 28-20-00 of PEN 36-59			
	Mech	Insp	1
		1	_
			]
7. PLUMBING - Check for leakage, chafing, condition and security.		1	-
	Mech	Insp	
			1
8. ELECTRICAL WIRING AND EQUIPMENT - Inspect for chafing, damage, security and	attachment		1
6. ELECTRICAL WIRING AND EQUITIVENT - Inspect for charing, damage, security and	Mech	Insp	1
	IVICOII	msp	_
9. FLAP LIMIT SWITCHES - Check for condition and security, freedom of operation.			_
	Mech	Insp	
			†
10 FLARG AND ACTUATORS OF 16 10 10 10 10 10 10 10 10 10 10 10 10 10	11 .	21 1 21 1:	]
10. FLAPS AND ACTUATORS - Check for condition, security, binding or chafing of act for cracks, loose or missing rivets. Check roller bearings and tracks for condition. Chec		-	
for cracks, loose of missing rivers. Check fonce bearings and tracks for condition. Chec	_		amage.
	Mech	Insp	
			1
11. FLAP POSITION TRANSMITTER - Check for security and operation.			J
11.1 LAI 1 OSITION TRANSMITTER - Check for security and operation.	Mech	Insp	1
	IVICOII	msp	_
			-
12. WING SPAR CAP - Inspect the wing spar cap for corrosion as outlined fn Section	4 of PEN 35-i	900968 Shop N	Ianual, Sectfon
3 of PEN 36-590001-38 Shop Manual or Chapter 57-00-00 of PEN 36-590001-9 (or subsequence)			_
	Mech	Insp	]
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			]
13. WING 80LTS - Check wing bolts for proper torque at the first 100-Hour fnspectfor after each refinstallation of the wing attach bolts. Refer to Section 4 of PEN 35-5900968 Shop Shop Manual or Chapter 57-00-00 of PEN 36-590001-9 (or subsequent) Maintenance Manual Popular Section 2015 (1997) and foregoing the section 2015 (1997) at the section 2015 (1997) and foregoing the section 2015 (1997) and foregoing the section 2015 (1997) at the secti	Manual, Sectf	on 3 of PEN 36	-590D01-38
crate Ron and frequency.	Mech	Inch	1
	IVICCII	Insp	
			•
14. RADAR ANTENNA COVER - Check the fiberglass for security, attachment and cracks			7
	Mech	Insp	

15. FUEL VENTS, AIR INLETS, PITOT TUBE AND STALL WARNING VANE - Check		d obstructions.	
	Mech	Insp	
16. DRAIN PORTS - Check the drain ports in the upper wing attach fittings to assure the	hev are open an	nd free of obstru	iction.
	Mech	Insp	
		1	
E. NOSE GEAR			
1. WHEEL AND TIRE - Check wheel for cracks and tire for wear, damage, condition and condition and wear.	d proper inflati	on. Check whee	el bearings for
	Mech	Insp	
2. LANDING GEAR STRUT - Inspect the shock strut and components for cracks, attachm	ent, proper infla	ntion and evider	ice of leakage.
	Mech	Insp	
2 ACTUATING UNIVACE Chalafan man at attach mainta Chalafan and a mainta	<u>_</u>		
3. ACTUATING LINKAGE - Check for wear at attach points. Check for cracks and securi	Mech	Inan	
	Mech	Insp	
4. GEAR DOORS AND LINKAGE - Check doors for damage and cracks to the structure	and skins. Che	ck linkage for	wear and
cracks at the attach points. Check for condition and security.		Z	
	Mech	Insp	
5. NOSE GEAR STEERING LINKAGE - Inspect linkages for tightness, condition and s	·		ondition.
	Mech	Insp	
6. SHIMMY DAMPER - Check for condition and attachment. Check attach points for cra	acks. Check flui	id level per the	Shop/
Maintenance Manual.		io io voi poi iii	, Shop,
	Mech	Insp	
		_	
7. STRUT FLUID LEVEL - Check and maintain the proper hydraulic fluid level in the str			
590096B and PEN 36-590001-3B Shop Manuals and in Chapter 12-20-00 of PEN 36-590001			e Manual.
	Mech	Insp	
8. STRUT AND A-FRAME HINGE 80LTS - Inspect for cracks and security of attachment.			
	Mech	Insp	
9. STATIC CABLE (If installed) - Inspect for condition and proper clearances and attachm			
	Mech	Insp	
l			
10. VISUAL INDICATOR - Check for condition.			
10. TISOTIS INDICATOR - CIRCR for condition.	Mech	Insp	
	1/10011	шэр	

<ul><li>F. MAIN GEAR AND BRAKES</li><li>1. BRAKES, LINES, LINING AND DISCS - Check for condition, wear and security. C</li></ul>	heck lines for chafi	ng and signs of le	eakage
cracks. Check discs for wear or warping. Check brake discs for cracks.		T	
	Mech	Insp	
2. WHEELS AND TIRES - Check wheels for cracks and tires for wear, damage, conditi for condition and wear.	on and proper inf	lation. Check wh	neel bea
	Mech	Insp	
3. ACTUATOR GEARBOX, MOTOR AND SWITCHES - Check for leakage, condi		Inco	
	Mech	Insp	
4. LANDING GEAR STRUTS - Inspect the shock struts and components for cracks, at	tachment, proper	inflation and ev	idence
leakage.			
	Mech	Insp	
5 ACTUATING LINVAGE Cheek for year and areaks at attach points. Cheek for acc	ndition and socurity	,	
5. ACTUATING LINKAGE - Check for wear and cracks at attach points. Check for con-	Mech	Insp	
	Wicch	Шэр	
6. GEAR DOORS AND LINKAGE - Check doors for damage and cracks to the structacks at the attach points. Check for condition and security. Determine that all clevis cotter pfns.			
cotter prins.	Mech	Insp	
		msp	
7. STRUT FLUID LEVEL - Check and maintain the proper hydraulic fluid level in the			
590096B and PEN 36-590001-3B Shop Manuals and in Chapter 12-20-00 of PEN 36-5			ice Mai
	Mech	Insp	
8. STRUT AND A-FRAME HINGE B0LTS - Inspect for cracks and security of attachm	ent		
6.51KC1 71VD 71 I KAWE III VOL BOLTS I II Spect for clacks and security of attaching	Mech	Insp	
	1/10011	шэр	
G. MAIN GEAR OPERATION			
NOTE			
Since hattery voltage is not sufficient to properly cycle the landing gear for this ins	enection use only a	n external nowe	er solli

Since battery voltage is not sufficient to properly cycle the landing gear for this inspection, use only an external power source capable of delivering and maintaining either 14.25 t.25 or 28.25 + .25 VDC (according to the airplane's electrical system) throughout the extension and retraction cycles when performing the landing gear retraction inspection.

For more specific information which may be necessary to accomplish the following items, refer to Section 5 of PEN 35-590096B Shop Manual, Section 5 of PEN 36-590001-3B Shop Manual or Chapter 32 of PEN 36-590001-9 (or subsequent) Maintenance Manual.

 $1.\ DOORS\,$  - Check door operation, fit and fair. Check for unusual noises.

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2. POSITION LIGHTS - Check for security, adjustment, wiring for breaks, condition of insulation, loose connections and proper indication.

	Mech	Insp	
3. WARNING HORN - Check for proper operation.			
	Mech	Insp	
4. UPLOCK CABLE TENSION - Check unlock cable mechanism for condition and securit	ty. Check unlock	cable for prop	er tensio
for possible fraying.	Mech	Insp	
5. EMERGENCY EXTENSION - Check system for freedom of operation and positive engunusual noise.	gagement of the o	down locks. Che	eck for
	Mech	Insp	
6. DOWNLOCK TENSION - Check for proper deflection force on the main gear knee joint	ts.		
	Mech	Insp	
7. UPLOCK ROLLERS - Check condition and clearance of unlock rollers and lubricate a Maintenance Manual. Check for binding.	s indicated in the	appropriate Sho	op/
	Mech	Insp	
8. LIMIT SWITCH RIGGING - Check for security and proper adjustment of the limit Manual for correct landing gear gearbox internal clearance.	swftches. Refe	er to the Shop /N	Maintena
	Mech	Insp	
9. SAFETY SWITCH - Check for security, proper rig and operation.			
	Mech	Insp	
10. GENERAL OPERATION - Place the airplane on jacks and cycle the landing gear wight swftches operate in conjunction with the position of the landing gear. Check the complete landing gear system.			ne position
complete among gene bjotem.	Mech	Insp	
11. DYNAMIC BRAKING ACTION - Verffy proper operation of dynamic braking acti 24-volt system).	on (12-volt syst	em) and dynam	ic brake 1
	Mech	Insp	

Mech

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#### **NOTE**

Since the battery voltage is not sufficient to properly cycle the landing gear for this inspection, use only an external power source capable of delivering and maintaining either  $14.25 \pm 25$  or  $28.25 \pm 25$  VDC (according to the airplane's electrical system) throughout the extension and retraction cycles when performing the landing gear retraction inspection.

For more specific information which may be necessary to accomplish the following items, refer to Section 5 of PEN 35-590096B Shop Manual, Section 5 of PEN 36-590001-3B Shop Manual or Chapter 32 of PEN 36-590001-9 (or subsequent) Maintenance Manual.

Manual, Section 5 of PEN 36-590001-3B Shop Manual or Chapter 32 of PEN 36-59	90001-9 (or subsequent	) Maintenance N	/lanual.
1. DOORS - Check door operation, fit and fair. Check for unusual noise.			
	Mech	Insp	
2. NOSE GEAR UP TENSION - Check the up tension on the nose gear as indicated		nop/Maintenance	e Manual
	Mech	Insp	
B. DOWNLOCK TENSION - Check the down lock tension on the nose gear as Shop/Maintenance Manual.	indicated in the a	ppropriate	
	Mech	Insp	
4. GENERAL OPERATION - Place the airplane on jacks and cycle the landing ge			
switches operate in conjunction with the landing gear position. Check the condisystem.	ttion and operation of t	ne complete ian	ding gea
	Mech	Insp	
5. VISUAL INDICATOR - Inspect for proper adjustment and operation.			
	Mech	Insp	
6. NOSE GEAR STEERING - Check for condition and security.	Mech	Insp	
		1	
I. REAR FUSELAGE AND EMPENNAGE			
1. SKIN - Check for deformation, cracks and obvious damage. Check for loose or m	issing rivets. If damag	e is found, checl	k adjacer
structure.	Mech	Insp	
		P	
2. INTERNAL FUSELAGE STRUCTURE - Check for cracks and deformation. C	Lheck for loose and mis	sing rivets. Che	ck bulkhe
door posts, stringers and doublers for cores soon, cracks and buckles.		<del></del>	
	Mech	Insp	
3. STRUCTURE - Inspect the two most aft bulkheads for cracks, distortion, loose			
	Mech	Insp	

4. CABLES, PULLEYS AND TURNBUCKLES - Check the elevator and rudder flight control components, cables and pulleys. Replace control system components (push rods, turn buckles, end fittings, castings, etc.) that have bulges, splits, bends, or cracks. Check control cables, pulleys, and associated equipment for condition, attachment, alignment, clearance, and proper operation.

Replace cables that have broken strands or evidence of corrosion. Check cables for pr 100-Hours thereafter.	oper tension at the	first inspection	and every
	Mech	Insp	
5. CONTROL SURFACES - Check for deformation, cracks, security, freedom of moven rivets. Check for security of hinges and bond cable. Check the inboard elevator hinge mounting bolt holes.	casting (on the aft	bulkhead) for cr	_
	Mech	Insp	
6. TRIM TABS AND ACTUATORS - Check for security and wear. Check allowable fre and PEN 36-590001-3B Shop Manuals and per Chapter 27-30-00 of PEN 36-590001-9 hinges and trim tab actuator for security and wear. Check trim tabs for cracks and conti hinges per Section 2 of PEN 35-590096B Shop Manual, Section 2 of PEN 36-590001-3B 590001-9 (or subsequent) Maintenance Manual.	(or subsequent) I rol rods for attach Shop Manual or C	Maintenance Mament. Lubricate Chapter 12-20-00	anual. Check e trim tab
	Mech	Insp	
7. STATIC PORTS - Check for obstruction and clean as necessary.			
7. STATICT OKTS - Check for obstruction and clean as necessary.	Mech	Insp	
8. PLUMBING - Check for leakage, cracks, chafing, condition and security.			
6. I LONDING - Check for leakage, cracks, charing, condition and security.	Mech	Insp	
9. ELECTRICAL WIRING AND EQUIPMENT - Inspect for chafing, damage, security a	nd attachment		
9. ELECTRICAL WIRING AND EQUIPMENT - Hispect for channig, damage, security a	Mech	Insp	
10. STATIC LINES - Check condition of static lines and drain.			
	Mech	Insp	
11. ASSIST STEP BUNGEE - Inspect for condition and attachment.			
	Mech	Insp	
12. ANTENNAS - Check for condition and security			
	Mech	Insp	
J. GENERAL			
1. Airplane cleaned and serviced.			
•	Mech	Insp	
<ol> <li>Airplane lubricated, after cleaning, in accordance with the appropriate Shop/Mainte BEECHCRAFT Safety Communique No. 57 dated June 3, 1981.</li> </ol>	nance Manual lu	brication chart a	and
DEDCTION I Safety Communique No. 37 dated Julie 3, 1761.	Mech	Insp	
3. Inspect all placards to assure that they are easily readable and securely attached.			

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4. Assure that all airworthiness Directives, BEECHCRAFT Service Bulletins and previously issued Service Instructions are reviewed and complied with as required.

Mech	Insp

5. For a complete or annual inspection of the airplane, all items on the airplane that are noted in this guide should be inspected.

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	Me	ech			Insp		