

AIRCRAFT REG. NO. _____ SERIAL NO. _____ MODEL NO. _____ DATE _____
 AIRCRAFT TOTAL TIME _____ WORK ORDER NO. _____ DATE COMPLETED _____

UH-1B 100HR./ANNUAL INSPECTION	MECHANIC
NOSE AREA	
1. Nose section exterior for damage, compartment interior for cleanliness, equipment for damage and loose connections, doors for secure latching.	
2. Back of instrument panel and all piping and wiring for loose connections, evidence of chafing and security.	
3. Pitot/Static ports for freedom of obstruction and cleanliness. Purge system with clean dry air (10-60 psi) if required.	
4. Window and windshield for damage and cleanliness.	
5. Test outside air temperature OAT gauge.	
CABIN AND LANDING GEAR AREA	
1. Cabin and exterior for damage, ventilators for obstruction, leaking, or damage and all surfaces for loose or missing access plates, chipping or peeling paint, marking for legibility, skin for cracks.	
2. Landing gear, cap assembly and bumpers for damage and security, cross tubes for excessive spread.	
3. Crew doors for positive latching and cargo door rollers, sliders for damage and proper operation.	
4. Cabin interior clean and clear of loose objects or tools, condition of sound proofing, if used. Legibility of markings, cargo tie downs for security, aft cabin wall for bonding separation.	
5. Fire extinguisher, bracket, seal, for damage and security, presence of inspection tag and proper location.	
6. First aid kit for designated location, condition and security.	
7. Seats for positive movement, locking in all positions, damage and security, inertial reels for positive locking and unlocking, damage and security.	
8. All instruments for cleanliness and damage, range markings for accuracy and legibility, lights for corrosion and missing bulbs or shields, rheostats and switches for missing or loose knobs.	
9. Compass correction card for availability and legibility, magnetic compass for liquid discoloration.	
10. Open inspection plates and access doors to gain access to the cabin structure and check for cracks and corrosion.	
11. Flight control linkage under deck for damage and security, collective pitch control stick for correct minimum friction load.	
12. Collective friction for wear every 300 hours.	
13. Heater ducts, valves and lines under deck for condition, damage and security.	
CENTER FUSELAGE AREA	
1. Fuel tank sump drains and fuel filter for water or other contamination, fuel supply lines for damage and evidence of leaks.	
2. Battery internal and external connections for arcing, corrosion, battery for security, leakage and cleanliness, service as required, vent lines for obstructions and kinking.	
3. External power receptacle, access door and caution light switch for condition and security.	
4. Oil cooler, duct, blower, screen and bleed air line for obstructions, damage and security, supporting structure for condition. Clean oil cooler screen and fan blade assembly. Check bearing for roughness or binding.	
5. Control linkage and hydraulic cylinders in fuselage below pylon for evidence of leaks from cylinders and connecting lines, damage and security, retainer for looseness, and sealant between rigid connecting	

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link and clevis rod end, if broken, remove tube assembly and check for corrosion and thread damage, repair sealant.	
6. Cyclic and collective cylinders for proper clearance between servo valve and input lever adjusting screw, security of the retainer and tab washer tangs are bent and making contact with flats on retainer.	
7. Cargo suspension assembly for security, manual release for wear. On non-swiveling type, manually test hook for rotational play indicating broken shear pin. Cleanliness and freedom of operation of safety latch.	
8. Fuel lines in area of transmission for proper clearance.	
9. All visible and accessible electrical wiring for chafing or damaged insulation and security of connections.	
10. Open access doors and inspection plates in fuselage behind cabin and below engine deck to gain access to structure and check for damage, cracks and corrosion.	
PYLON AREA	
1. Main rotor hub pillow block and grip reservoirs, hub assembly, counter-weight, blade grips, pitch horns and drag braces for condition, damage and security.	
2. Inspect rotating control system bolts.	
3. Wipe main rotor blade upper and lower surfaces with a clean soft cloth and inspect both surfaces and blade tips for damage, cracks, and visible indications of voids and bond separation, trailing edge for nicks and dents, scarf joints for erosion and corrosion. Wash blades with WD-40.	
4. Stabilizer dampers for full fluid levels, leakage and security, stabilizer bar tube for nicks, cracks, and security.	
5. Synchronized elevator control linkage for damage and security, bearings and bushings for wear and excessive play, collective levers for cracks, corrosion, damage, and security.	
6. Transmission cowling for damage, looseness, faulty latches, and security.	
7. Excessive wear of gimble bearings and attach bolts.	
8. Swashplate, scissor and sleeve, drive links, and connecting linkage for corrosion, damage, and security. 3 control lugs on swashplate inner ring for cracks. Trunion bearings and collective lever bearings between collective drive mast for excessive play. Grease	
9. Hydraulic system components and lines for evidence of leaks, damage, and security. Reservoir for fluid level and presence of contaminants, filter for appearance of red indicator button. Filler cap sediment screen for condition and cleanliness. Wipe clean all exposed hydraulic pistons with alcohol.	
10. Remove and replace hydraulic filter (paper element) and reservoir vent filter every 100 hours.	
11. Remove and replace hydraulic filter (metal element) every 1000 hours.	
12. Main input driveshaft couplings for evidence of grease leakage and clamps for security.	
13. Main input driveshaft couplings internal splines, inspect and lubricate every 600 hours or 12 months whichever comes first.	
14. Transmission for oil leaks, damage, and security. Sump for water contamination, external oil filter for bypass indication, sight gauge for cleanliness, damage, and security. Drain and refill every 900 hours or 12 months.	
15. Remove transmission sump oil filter (wafer disc screens) and electrical chip detector and check for contamination, then clean and reinstall. Check cases and quills for corrosion, oil leakage, oil lines and	

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quills for damage, chafing and security.	
16. Pylon mounts for security, structure for cracks and loose or sheared rivets. Lift link for security to lift beam and transmission support case. Lift beam for cracks, loose or sheared rivets.	
17. Friction dampers for correct lost motion and damping rate every 300 hours.	
18. Friction dampers for damage and security.	
19. Generator brushes for freedom of movement in brush holder, leads for deterioration or evidence of chafing, springs for distortion and firm contact with brushes, brushes for wear, commutator for evidence of arcing, presence of oil or metal particles, and electrical connections for security.	
20. Mast for visible damage and corrosion. Sump case and support case for evidence of chafing with oil lines. Vent on transmission top case for obstructions or clogging.	
21. Replace external transmission oil filter element.	
22. Stabilizer bar assembly for damage, corrosion, and security. Bar weight for security and security to the tube. Cable retainer for proper clearance. Bar connecting linkage for damage, corrosion, and security.	
23. Sump case and support for evidence of chafing with oil lines.	
24. Quick disconnect for excessive in and out motion.	
ENGINE	
1. Engine cowling and fairing for loose or missing fasteners, damage, and security. Fire detector elements for security of attachment and connections. Engine work platform deck for bond separation.	
2. Airframe FOD screen for foreign material, air inlet filter for FOD, obstructions, and loose or missing fasteners. Gap between screen sections, not to exceed screen width.	
3. Separator, remove top airframe FOD screen assembly and upper air filter, clean sand and dust separator, foam and metal filter and inspect for damage.	
4. Inlet housing, guide vanes and first stage compressor blades for oil streak and FOD, housing filter, support pads, front and rear flange for cracks, nicks and corrosion.	
5. Engine oil tank for security, lines for leaks, condition, and security. Drain and refill every 100 hours or 12 months whichever comes first.	
6. Check chip detectors.	
7. Engine accessories and connection for condition, damage, and security.	
8. Engine compressor housing for cracks, scratches, corrosion, and security. Bleed band assembly for bends, cracks, and security. Air bleed actuator for cleanliness, condition, and security.	
9. Engine combustion chamber housing, exhaust diffuser, support cone, fireshield, and tail pipe for cracks, dents, and burned or buckled areas.	
10. Second stage turbine blades through exhaust diffuser for cracks, burns, dents, and missing blades.	
11. Engine mounts for cracks, damage, and security.	
12. Raise engine so mount bearings are free of pillow blocks. Check trunnion bearing for cracks and excessive play. If limits are exceeded or cracks are found, replace bearing.	

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13. Electrical cable assembly, ignition coil lead, and exhaust thermocouple assembly for cracks, chafing, and security.	
14. Main and starting fuel manifolds for leaks and security. Fuel control power lever for freedom of movement through full range to each stop.	
15. Starting fuel nozzles, inspect, clean, check reinstall and or replace .	
16. Main fuel filter element-inspect and replace if micronic paper type-clean if metal screen type and reinstall.	
17. Fuel control cover assembly strainer-inspect, clean and reinstall. Replace servo filter.	
18. Inspect, clean, and reinstall fuel control inlet filter element.	
19. Power drive rotary booster pump for leaks, condition, and security.	
20. Remove, inspect, clean , and reinstall oil filter. Determine source of chips, if any.	
21. Check fuel and oil control hose assembly connections for leaks, condition, and security.	
22. Starter generator cooling fan used with 200 amp generator, inspect impeller nut for tightness and bearing for binding.	
23. Accessory drive gearbox assembly, over speed governor and tachometer drive assemblies for cracked flanges, leakage, and security.	
TAILBOOM AREA	
1. Inspect tailboom and vertical fin exterior skin for evidence of damage, cracks, loose or missing rivets, elevators and tail skid for condition, corrosion, and security.	
2. Open tailboom access door and driveshaft covers to inspect structure and longerons for cracks, damage, and corrosion.	
3. 90 degree gearbox attachment fittings for cracks, corrosion, and security. Silent chain grommet for wear.	
4. Inspect vertical fin rib along rivet row at fin station 10.08 left side for cracks. Inspection to be accomplished through top most lighting hole of the vertical fin forward spar with a flashlight and inspection mirror.	
5. Inspect vertical fin forward spar and vertical fin driveshaft cover attachment channel for cracks in the area directly below the 90 degree gearbox attachment fitting.	
6. Tail rotor driveshaft for foreign object damage, missing balance weights, hangers, covers, coupling clamps, for condition and security. Drive shaft couplings (7 places) for grease leakage and seal condition.	
7. Tailboom attachment bolts for condition and security. Fitting for cracks.	
8. 42 degree gearbox for oil leaks and security. Chip detector for security and proper operation, vent for obstruction. Drain and service.	
9. 90 degree gearbox for leaks and security. Chip detector for security and proper operation, vent for obstruction. Drain and service.	
10. Tail rotor hub and blade assembly, crosshead to slider retaining nuts and bolts (2 places) for condition and security.	
11. Tail rotor control for condition and security. Chain and sprocket for cleanliness and aft cable for condition and security.	

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12. Remove tail rotor control tube and check for excessive grease on the shaft, splines for wear and threads for brass metal particles.	
13. Remove tail rotor control quill assembly and check splines, threads, and sprocket for wear.	
14. Tail rotor grips and yokes, blade pitch change attachments bolts and nuts (4 places) for cracks, damage, corrosion, and security.	
15. Track and balance tail rotor assembly, if required. Check flapping motion for proper clearance between vertical fin and tail rotor blade tips.	
16. Tail rotor control and elevator control linkage in tailboom for condition, damage, and security. Bearings and bushings for excessive play, control cable for proper tension.	
17. Tail rotor driveshaft hanger bearings for roughness. Re-pack coupling (7 places) with proper grease every 600 hours or 12 months, whichever comes first.	
18. 42 degree gearbox input and output couplings due re-pack every 600 hours or 12 months, whichever comes first.	
19. 90 degree gearbox input and output couplings due re-pack every 600 hours or 12 months, whichever comes first.	
ALL AREAS	
1. Lubricate entire helicopter as per lubrication chart.	
2. Re-torque seal all bolts, nuts, etc. As needed.	
POWER ON	
1. Perform avionics check for function, condition, and security. Check that transponder certification is current.	
2. Check ELT batteries. ELT for function.	
3. Battery for 24 volts, caution lights for illumination on test position and fuel quantity indicator for function. Check with test switch.	
4. Engine control for free action through full range of travel, idle stop release and governor, rpm actuator for condition, security and proper operation.	
5. All interior and exterior lights, strobes, landing, search, dome, map, navigation, instrument, etc. Pitot heater for operation.	
6. Check fuel control emergency system solenoid valve during engine operation and listen for unusual noise during engine coastdown.	
7. Combustion chamber drain valve for no evidence of fuel draining overboard during engine operation and after coastdown or shutdown.	
8. Voltage regulators for proper adjustment, condition, and security.	
9. Cargo hook electrical release for proper operation.	
10. Main fuel filter for visual indication of clogged element, water in filter, or other contaminants. Check with boost pumps on.	
11. Rotate engine with starter (ignition off) and listen for unusual noises that might indicate binding. Do not exceed 10 seconds continuous starter operation.	
12. Check separator overboard vent during engine operation or prior to engine shutdown for airstream flow, Smooth flow indicates sand ejector operating satisfactorily.	

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RECORDS CHECK	
1. Check TDATA system for airframe and engine AD's. Make entries in logbook as applicable.	
2. Check engine and airframe records for status on life limited components.	
3. Make all appropriate logbook entries.	
SOME MANUALS USED (not all listed)	
TM55-1520-210-23-1	
TM55-2840-229-23-2	
TM-1520-210-23-3	
TM1-284-260-23P	
TM55-1520-210-23-2	
TM55-2840-229-23-1	