

ENGINE-INSPECTION/CHECK

WARNING: FAILURE TO PROPERLY INSPECT AND/OR REPAIR INDIVIDUAL COMPONENTS/PARTS COULD RESULT IN AN ENGINE FAILURE.

1. **General**

The check and inspection requirements for the engine are categorized into Preflight and Postflight Checks, Scheduled Inspections and Special Inspections.

Preflight checks are given in [Table 601](#). Preflight checks will be completed before the first flight of the day or before the next flight after extended maintenance.

Postflight checks are given in [Table 602](#). Postflight checks will be completed after the last flight of the day.

Scheduled Inspections are given in [Tables 603, 604, 605, 606, and 607](#).

NOTE: Scheduled Inspections given in Table 607 can only be used if the operator is using an approved third generation (HTS) MIL-PRF-23699 oil and an approved airframe mounted scavenge oil filter.

Special Inspections are given in [Table 608](#).

Phase Inspection Recommendations are given in [Table 609](#).

Detailed instructions and information on each item in check and inspection Tables is in the referenced Operation and Maintenance Manual paragraphs.

NOTE: Inspections may require using a bright light (flashlight or equivalent) and a mirror.

NOTE: When applicable, review engine records for compliance with all mandatory Bulletins, Inspections and Airworthiness Directives.

NOTE: Review Engine Records for Time and/or Cycle Limited Parts. Review Components, Accessories and Modules time between overhaul.

NOTE: When local conditions dictate, it is the responsibility of the operator to increase the scope and/or frequency of checks and/or inspections to assure an adequate level of serviceability and safety.

Operating and maintenance personnel should be alert to recognize signs of engine abnormal operation that may be indicative of an impending engine difficulty. Any or all of the following engine abnormalities may be indicative of an impending engine difficulty and should be investigated to determine the cause and the required corrective action.

NOTE: Cracks in the horizontal and/or vertical fireshield can be indicative of abnormally high engine vibration.

NOTE: Broken, cracked, or fretted fuel, lube, or air tubes can be indicative of abnormally high engine vibration.

NOTE: Polishing of tube assemblies in the tube clamping areas can be indicative of abnormally high engine vibration.

NOTE: N₁ rotor coast-down that is more rapid than what is normally experienced can be indicative of an impending engine difficulty. (Example: Coastdown from idle in 4-5 seconds can be indicative of binding in the N₁ rotor system.)

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Certificate of Compliance

Owner/Operator _____ Date _____

Aircraft Make/Model _____

S/N _____ Reg. No. _____ TSN _____

Engine S/N _____ TSN _____ TSO _____ Cycles _____

Type of Inspection _____

Signature _____

NOTE: Use this certificate or an equivalent means, to certify that all checks and inspections referenced in this certificate have been done. Attach completed check and inspection sheets. Keep this certificate and attached completed check and inspection sheets as a permanent part of the aircraft engine records.

NOTE: The following information will help when referencing chapter 72-00-00 in the following Tables (601-607).

Description and Operation starts on page 1.

Troubleshooting starts on page 101.

Servicing starts on page 301.

Adjustment/Test starts on page 501.

Inspection/Check starts on page 601.

Cleaning/Painting starts on page 701.

Storage Instructions starts on page 901.

TABLE 601

INITIAL	PREFLIGHT CHECKS	REFERENCE SECTION	REMARKS
	1. Check the general condition of the engine. Check all accessible areas for obvious loose bolts, broken or loose connections, security of attachment of all accessories, broken or missing safeties and evidence of fuel and oil leakage. 2. Check for and remove any foreign material which may be drawn into the compressor inlet. 3. Check oil supply level.	72-00-00, Table 101, Troubleshooting, Items 17 and 18.	Any sudden increase in oil consumption, refer to 72-00-00, Table 101, Troubleshooting. If the engine has been idle for more than 15 minutes, motor the engine for 30 seconds to scavenge any oil that may have drained into the gearbox from the oil tank. Failure to completely scavenge the oil from the gearbox will cause a false indication of high oil consumption.

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TABLE 602

INITIAL	POSTFLIGHT CHECKS	REFERENCE SECTION	REMARKS
	1. Check the general condition of the engine. Check all accessible areas for obvious loose bolts, broken or loose connections, security of attachment of all accessories, broken or missing safeties and evidence of fuel and oil leakage. WARNING: IF THE BLUE STAIN IS EVIDENT, THE FUEL CONTROL MUST BE CHANGED AND THE SOURCE OF THE LEAK MUST BE RECTIFIED BEFORE RETURN TO SERVICE OR THE NEW FUEL CONTROL WILL ALSO BE DAMAGED. 2. Visually check the compressor inlet and impeller for foreign object damage and dirt accumulation. NOTE: Anytime the aircraft has been operated in an atmosphere known (or suspected) to be corrosive, perform a water rinse of the compressor. NOTE: Engines installed in air frames equipped with particle separators designed such that the compressor inlet is not readily visible, inspect the particle separator for missing elements. If elements are missing, inspect compressor inlet for damage.	72–30–00 para 4. and para 5.B. 72–30–00, para 5.A. 72–00–00, para 1.A. (1), Engine– Inspection/ Check. 72–00–00, para 1.A. (2), Engine– Inspection/ Check.	A gearbox gearlock seal oil leak, fuel pump, or fuel pump seal fuel leak, or an O–ring seal oil leak can cause fuel control drive bearing grease “wash–out”. This grease leakage is evident by the presence of blue stain at the fuel control drain weep holes. After engine operation in an erosive environment (sand or dust) check the compressor inlet for damage. After engine operation in snow or icing conditions, check the compressor inlet for damage.

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TABLE 602 (cont)

INITIAL	POSTFLIGHT CHECKS	REFERENCE SECTION	REMARKS
	CAUTION: NORMAL ENGINES USE A MINIMAL AMOUNT OF OIL. HOWEVER, ANY SUDDEN INCREASE IN OIL CONSUMPTION IS INDICATIVE OF OIL SYSTEM PROBLEMS AND MUST BE CORRECTED.		
	3. Check oil supply level. NOTE: Check oil supply level within 15 minutes of engine shutdown.	72-00-00, Table 101, Trouble-shooting, Items 17 and 18.	If the engine has been idle for more than 15 minutes, motor the engine for 30 seconds to scavenge any oil that can drain into the gearbox from the oil tank. Failure to completely scavenge the oil from the gearbox will cause a false indication of high oil consumption. Some aircraft must be run to properly scavenge oil from the gearbox. Consult Aircraft Manual.
	4. Perform a general visual inspection of the outer combustion case (sheet metal and weld seams) for cracks. No cracks are allowed. Pay particular attention to the weld seams in the area of the igniter plugs, dummy plug, drain valves, fuel nozzle bosses, braze patch (AREA A and AREA B), and adjacent areas for cracks.	72-40-00, Figure 203.	
	5. Check for extension of impending oil filter bypass indicator. If indicator is extended, clean oil filter.	72-60-00, para 1.C.	It is possible for the impending oil filter bypass indicator to extend during a start of a cold soaked engine, giving an erroneous indication of a dirty oil filter. If the impending filter bypass indicator is extended, run the engine until the oil is at operating temperature and push the indicator button in. If the button remains in throughout the normal speed range of the engine, the filter does not require cleaning.
	6. Check for extension of impending fuel filter bypass indicator.	73-10-05, para 2. 73-20-02, para 5.A.	If indicator is extended, replace fuel filter. Inspect and clean fuel strainer in the fuel control. Ground run engine to assure proper operation of control system.

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Table 603

Inspection Checksheet

Owner _____ Date _____

A/C Make/Model _____ S/N _____ Reg. No. _____ TSN _____

Engine S/N _____ TSN _____ TSO _____

This inspection checksheet is to be used when performing scheduled inspections. This form can be locally reproduced and/or expanded to reflect the aircraft operating environment. Keep the completed sheets as a permanent part of the aircraft engine records. Detailed information regarding each inspection item is contained in the referenced Operation and Maintenance Manual paragraphs.

CAUTION: BEFORE UNDERTAKING ANY INSPECTION OR MAINTENANCE ACTION, CONSULT THE REFERENCED PARAGRAPHS OF THIS MANUAL. FAILURE TO FOLLOW THE RECOMMENDED INSTRUCTIONS IN THE MANUAL COULD RESULT IN EQUIPMENT DAMAGE OR DESTRUCTION, POSSIBLY RESULTING IN PERSONNEL DEATH OR INJURY.

Item	Inspection/Maintenance Action	REFERENCE SECTION	✓	Initial
	150 HOUR INSPECTION			
1	Inspect the engine for obvious loose bolts, broken or loose connections, security of mounting accessories, and broken or missing safeties. Check accessible areas for obvious damage and evidence of fuel and oil leakage.			
	Check B-nuts for presence and alignment of torque stripes. B-nuts with missing torque stripes must be loosened and retightened, before application of new torque stripes.			
2	Inspect the compressor impeller leading edges for damage.	72-30-00, para 4.B.		
3	Clean the compressor, as required, with a chemical wash solution if dirt buildup is evident.	72-30-00, para 5.B.		
4	Without disassembly, inspect the turbine and exhaust collector supports for condition of welded joints, cracks and buckling.	72-50-00, para 6.L. and para 8.B.		
5	Using a small mirror and a flashlight, inspect flow divider inside turbine and exhaust collector support for cracks or separated tack welds. If cracking of sheet metal or welds is found but limits are not exceeded, inspect every 25 hours until support is repaired, flow divider is removed, or limits are exceeded. Compliance with M250 CEB 72-3040 eliminates this inspection requirement.	72-50-00, para 6.L. and para 8.B.		

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Table 603 (cont)				
Item	Inspection/Maintenance Action	REFERENCE SECTION	✓	Initial
	<u>150 HOUR INSPECTION</u> (cont)			
6	Inspect the engine fuel system for evidence of leakage. Check condition and security of fittings and tubing. Check fuel control lever for freedom of operation and full travel. Check condition and security of all linkages.	73-00-00, para 2.A.		
7	Inspect the engine mounts for condition and security.			
8	Perform a detailed visual inspection of the outer combustion case. Using a bright light (flashlight or equivalent), inspect all weld areas for cracks. Outer combustion cases without brazed reinforcement wire patches, comply with inspection requirements of 250 CEB-A-72-3115.	72-40-00, para 2.B.(1)		
9	Inspect electrical harness for loose, chafed, frayed, or broken wires and loose connectors.			
10	For aircraft with external energy absorbing ring installed, inspect ring upper bracket for cracks. Reference 250 CEB-A-72-3124, Revision No. 2			
	CAUTION: NORMAL ENGINES USE A MINIMAL AMOUNT OF OIL. HOWEVER, ANY SUDDEN INCREASE IN OIL CONSUMPTION IS INDICATIVE OF OIL SYSTEM PROBLEMS AND MUST BE CORRECTED.			
11	Check oil supply level. If the engine has been idle for more than 15 minutes, motor the engine for 30 seconds to scavenge any oil that may have drained into the gearbox from the oil tank. Failure to completely scavenge the oil from the gearbox will cause a false indication of high oil consumption. See Post Flight Check No. 3 .	72-00-00, Table 101 Trouble-shooting, items 17 and 18.		
	NOTE: Check oil supply level within 15 minutes of engine shutdown.			
12	Inspect for extension of impending oil filter bypass indicator. If indicator is extended, clean oil filter. It is possible for the impending oil filter bypass indicator to extend during a start of a cold soaked engine, giving an erroneous indication of a dirty oil filter. If the impending filter bypass indicator is extended, run the engine until the oil is at operating temperature and push the indicator button in. If the button remains in throughout the normal speed range of the engine, the filter does not require cleaning.	72-60-00, PARA 1.C.		

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TABLE 603 (cont)

Item	Inspection/Maintenance Action	REFERENCE SECTION	✓	Initial
	<u>150 HOUR INSPECTION</u> (cont)			
	CAUTION: WHEN THERE IS EVIDENCE THE AIRFRAME OR ENGINE FUEL FILTER HAS BEEN BYPASSED, THE GAS PRODUCER FUEL CONTROL INLET FILTER AND THE FUEL NOZZLE FILTER, MUST BE CLEANED. (REFER TO SPECIAL INSPECTIONS, 72-00-00, TABLE 608.) IF ANY CONTAMINATION IS FOUND IN THE FUEL NOZZLE FILTER, THE FUEL CONTROL MUST BE SENT TO AN AUTHORIZED REPAIR FACILITY FOR INTERNAL CLEANING. REFERENCE MUST ALSO BE MADE TO THE AIRFRAME MAINTENANCE MANUAL FOR FUEL SYSTEM MAINTENANCE FOLLOWING FUEL CONTAMINATION.			
13	Inspect for extension of impending fuel filter bypass indicator. If indicator is extended, replace fuel filter.	73-10-05, PARA 2.		
	Inspect fuel filter in the fuel control and the filter in the fuel nozzle. Ground run engine to assure proper operation of control system.	73-20-02, PARA 5.A.		
13.A	Clean and inspect the fuel nozzle. If no airframe mounted fuel filter is installed, inspect the fuel nozzle filter. Install fuel nozzle with proper number of spacers.	73-10-03		
14	Record component changes, inspections, and compliance with technical instructions as required. Report engine difficulties to Rolls-Royce and/or Authorized Maintenance Center (AMC) on M250 report, Form 8117-1 (Rev. 5-94) as required.			
15	Without disassembly, check the compressor discharge air tubes. Inspect for air leaks, dents, cracks, chafing, and proper clamping.	72-40-00, Table 203.		
16	Inspect compressor scroll for cracks. Pay particular attention to welded areas.			
17	Clean the burner drain valve. Ensure that the airframe overboard is clear. Refer to aircraft manual for maintenance procedures.	72-40-00, PARA 3.		
18	Inspect the anti-icing, bleed air, and overspeed solenoid valves for loose, chafed, frayed or broken wires, loose connections and security of attachment.			
19	Inspect the horizontal and vertical firewall shields for cracks. Continued sheet metal or tube cracking may be an indication of excessive engine, engine accessory, or airframe vibration.	72-50-00, PARA 6.K.		

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TABLE 603 (cont)

Item	Inspection/Maintenance Action	REFERENCE SECTION	✓	Initial
	<u>150 HOUR INSPECTION</u> (cont)			
20	Check fuel control and power turbine governor for proper rigging.	73-20-01, PARA 2.C. and 73-20-02, PARA 2.C.		
21	On power and accessory gearbox cover, check the applied torque on all turbine and exhaust collector support-to-gearbox retaining nuts. Torque must be 120-150 lb in. (14-17 N·m). Compliance with 250 CEB-72-3017 cancels this periodic inspection requirement.	72-50-00, PARA 1.B.		
22	Remove, clean, operationally test, and reinstall the magnetic drain plugs: a. Standard type - examine the chip detector end of the plugs for cracks. b. Quick disconnect - examine the locking pins and flanged inserts for wear. Torque 60-80 lb in. (6.8-9.0 Nm). No cracks are permitted. Examine each chip detector separately.	72-00-00, PARA 8.E.		
23	Inspect ignition lead for burning, chafing or cracking of conduit. Also, check for loose connectors and/or broken lockwire. Perform operational check of ignitors.	74-20-02, PARA 2. 74-20-01, PARA 2.B.		
24	Remove, inspect, clean and reinstall the oil filter.	72-60-00, PARA 1.C.		
25	Measure and record power turbine support pressure oil nozzle flow from scavenge oil strut. Record and retain flow record. Flow _____ Compare with previous flow. Any large deviation could indicate carbon buildup. While motoring N ₁ to 16-18% the minimum flow is 90cc in 15 seconds.	72-50-00, PARA 6.E.		

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TABLE 603 (cont)

Item	Inspection/Maintenance Action	REFERENCE SECTION	✓	Initial
	150 HOUR INSPECTION (cont)			
26	Drain the oil system and refill. Oil changed at: 150 hours: _____ 300 hours: _____ 600 hours: _____ 150 hours or 6 months max. time limit.	72-00-00, PARA 8.D., Engine-Servicing.		
	NOTE: With an STC approved external scavenge filter, the oil change interval is 300 hours or 6 months. NOTE: Use an approved high thermal stability (HTS) oil. The oil change interval is 300 hours or 12 months. NOTE: With an STC approved external scavenge oil filter, and using approved high thermal stability (HTS) oil. The oil change interval is 600 hours or 12 months. NOTE: Refer to M250 CSL-3126, Recommended Sequence, Engine Oil Change for additional instructions.			
27	Service oil filter. If excessive carbon is found in the filter, inspect the scavenge and pressure oil system. Refer to 72-50-00 PARA 6.E., 6.F., 6.G., 6.H., 7.A., and 7.B.	72-60-00, PARA 1.C.		
28	Inspect P _c filter for proper clamping and security	73-20-03		
29	Without disassembly or removal of the P _c filter assembly from the mounting bracket, inspect using a 10X magnification and a bright light to detect any signs of cracks, paying particular attention to both of the end fittings at their junction with the end walls. If cracks are detected, remove assembly and comply with M250 CEB-A-75-3017 .			
	NOTE: Compliance with M250 CEB-A-75-3017 eliminates this inspection requirement.			
30	Visually inspect the outer combustion case (sheet metal and weld seams) for cracks. Pay particular attention to the weld seams in the area of the igniter plugs, dummy plug, drain valves, fuel nozzle bosses, armpit braze patch and adjacent areas. Use a bright light and mirror as necessary. The OCC does not have to be removed. Perform a Leak Tec check for installed OCC's and an FPI for removed OCC's.	72-40-00 Para 2.B.(1), (2), (3) and (4)		

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TABLE 604				
Item	Inspection/Maintenance Action	REFERENCE SECTION	✓	Initial
	<u>300 HOUR INSPECTION</u>			
	In addition to the 150 hour inspection items, perform the following:			
1	Inspect compressor mount for cracks.	72-00-00, PARA 1.A. (3), Engine-Inspection/ Check.3		
2	Clean power turbine support scavenge oil strut.	72-50-00, PARA 6.G.		
3	Clean external sump.	72-50-00, PARA 6.G.		
4	Clean No. 1 bearing oil pressure reducer.	72-30-00, PARA 2.A. (1)		
5	Clean pressure oil fitting screen assembly.	72-50-00, PARA 6.G.		
	CAUTION EXTREME CARE MUST BE EXERCISED TO PREVENT TWISTING OF OIL NOZZLE DURING REMOVAL. DO NOT ATTEMPT TO STRAIGHTEN OR REUSE IF TWISTED.			
6	Clean power turbine pressure oil nozzle.	72-50-00, PARA 6.G.		
7	Remove and disassemble fuel nozzle. Clean and inspect fuel nozzle filter assembly. Assemble and install fuel nozzle.	73-10-03		
8	Remove, inspect, and reinstall the turbine pressure oil check valve.	72-60-00, PARA 2.K.		
	<u>NOTE:</u> Check Valve P/N 23074872 and subsequent part numbers are not applicable to this inspection (these valves are considered "ON CONDITION").			
9	Inspect the fourth-stage turbine wheel-to-exhaust collector inner cone clearance.	72-00-00, PARA 1.A. (4), Engine- Inspection/ Check.		
	<u>NOTE:</u> Compliance with M250 CEB 72-3044 eliminates this inspection requirement.			
10	Inspect the rear engine mount for security and excessive bearing wear.	72-00-00, PARA 1.A. (5), Engine-Inspection/ Check.		
11	Remove, clean inspect and reinstall the P _c filter. If engine performance deteriorates, P _c filter cleaning interval can have to be reduced.	73-20-03 PARA 2. and 3.		

TABLE 604 (cont)

Item	Inspection/Maintenance Action	REFERENCE SECTION	✓	Initial
	<u>300 HOUR INSPECTION</u> (cont)			
	WARNING: PROPER TIGHTENING OF ENGINE TUBING CONNECTIONS IS CRITICAL TO FLIGHT SAFETY. CORRECT TORQUE VALUES MUST BE USED AT ALL TIMES. EXCESSIVE TORQUE ON PNEUMATIC SENSING SYSTEM CONNECTIONS RESULTS IN CRACKING OF THE FLARE CAUSING AN AIR LEAK WHICH CAN CAUSE FLAMEOUT, POWER LOSS OR OVERSPEED.			
12	Inspect N ₁ shafting.	72-50-00, PARA 6.A.		
	NOTE: Compliance with M250 CEB 72-3059, 72-3096, 72-3100, A-72-3134 (twin engine applications), and A-72-3135 (single engine applications) eliminates this inspection requirement.			
13	On power and accessory gearbox cover, check the applied torque on all turbine and exhaust collector support-to-gearbox retaining nuts. Torque must be 120-150 lb in. (14-17 N·m).	72-50-00, para 1.B.		
14	Inspect the thermocouple assembly (TOT/MGT).	77-20-01 PARA 2.B.		
15	Visually inspect the outer combustion case (sheet metal and weld seams) for cracks. Pay particular attention to the weld seams in the area of the igniter plugs, dummy plug, drain valves, fuel nozzle bosses, armpit braze patch and adjacent areas. Use a bright light and mirror as necessary. The OCC does not have to be removed. Perform a Leak Tec check for installed OCC's and an FPI for removed OCC's.	72-40-00 Para 2.B.(1), (2), (3) and (4)		

TABLE 605

Item	Inspection/Maintenance Action	REFERENCE SECTION	✓	Initial
	<u>600 HOUR INSPECTION</u>			
	The following inspection is required every 600 hours time since last inspection.			
1	Do the scavenge oil filter impending bypass function check as in Facet Service Bulletin No. 090589 (Ref. Rolls-Royce CSL 3116) for all aircraft equipped with an external scavenge filter system. Follow the Facet instructions and time intervals, or follow this recommended inspection interval each 600 hours.			

TABLE 606

Item	Inspection/Maintenance Action	REFERENCE SECTION	✓	Initial
	<u>2000 HOUR INSPECTION</u>			
	The following inspection is required every 2000 hours time since last inspection.			
1	Fuel control filter inspection.	73-20-02, PARA 5.A.		
2	Fuel nozzle filter inspection (if applicable)	73-10-03, PARA 3.C.		

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TABLE 606 (cont)

Item	Inspection/Maintenance Action	REFERENCE SECTION	✓	Initial
	<u>2000 HOUR INSPECTION</u> (cont)			
3	Remove and replace the low pressure fuel filter element. Before discarding filter, inspect for signs of contaminants. If any are found, inspect the entire fuel system and clean if necessary.	73-10-05, PARA 2.		
4	Inspect the combustion liner.	72-40-00, PARA 1.C.		
5	Inspect the outer combustion case for cracks using Leak-Tek and/or dye penetrant.	72-40-00, PARA 2.B.(2) (3), and (4)		
6	Inspect the compressor discharge air tubes.	72-40-00, PARA 4.C.		
7	Inspect the N ₂ overspeed mounting dampers.	73-21-00, PARA 7.B.		
8	Inspect the spur adapter gearshaft, compressor rotor splined adapter and associated impeller bore.	72-30-00, PARA 4.B.(2), 4.C. and 4.E.		
9	Inspect the turbine to compressor coupling, turbine splined adapter, power turbine inner shaft and turbine shaft-to-pinion gear coupling. Turbine to compressor coupling is part of the turbine assembly	72-50-00, PARA 6.A. and 6.B.		
10	Examine the power drivetrain gears. Disassembly of the gearbox is not necessary for this inspection.	CSL 3225		
	<u>NOTES:</u> Not applicable for: Torquemeter gear part number 23084248 and subsequent Power take-off gear part number 23084249 and subsequent Pinion gear part number 23084247 and subsequent. <u>NOTES:</u> The following inspections are recommended whenever the turbine or compressor is removed in-between the required 2000 hour inspection. Anytime the compressor is removed from the engine, visually inspect the aft end of the spur adapter gearshaft for worn or damaged splines. Anytime the turbine is removed from the engine visually inspect the splines on the following items, turbine-to-compressor coupling, turbine splined adapter, power turbine outer shaft and turbine shaft-to-pinion gear coupling for worn or damaged splines. If spline wear or damage is observed the appropriate maintenance action is required. (Refer to item 8 and 9 above). Inspection intervals must not exceed 2000 hours.			

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Table 607

Inspection Checksheet

Owner _____ Date _____

A/C Make/Model _____ S/N _____ Reg No. _____ TSN _____

Engine S/N _____ TSN _____ TSO _____

This inspection checksheet is to be used when performing scheduled inspections. This form may be locally reproduced and/or expanded to reflect the aircraft operating environment. Keep the completed sheets as a permanent part of the aircraft engine records. Detailed information regarding each inspection item is contained in the referenced Operation and Maintenance Manual paragraphs.

CAUTION: BEFORE UNDERTAKING ANY INSPECTION OR MAINTENANCE ACTION, CONSULT THE REFERENCED PARAGRAPHS OF THE OPERATION AND MAINTENANCE MANUAL. FAILURE TO FOLLOW THE RECOMMENDED INSTRUCTIONS IN THE MANUAL COULD RESULT IN EQUIPMENT DAMAGE OR DESTRUCTION, POSSIBLY RESULTING IN PERSONNEL DEATH OR INJURY.

NOTE: THIS INSPECTION CHECKLIST CAN ONLY BE USED IF THE OPERATOR IS USING AN APPROVED THIRD GENERATION (HTS) OIL AND AN APPROVED AIRFRAME MOUNTED SCAVENGE OIL FILTER.

NOTE: COMPLIANCE TO THE 150 HOUR AND 300 HOUR ITEMS IN THIS TABLE MUST BE PERFORMED AT LEAST EVERY 12 CALENDAR MONTHS OR BY HOURS, WHICHEVER OCCURS FIRST.

Item	Inspection/Maintenance Action	REFERENCE SECTION	✓	Initial
	150 HOUR INSPECTION			
1	Inspect for extension of impending oil filter bypass indicator. If indicator is extended, clean oil filter. It is possible for the impending oil filter bypass indicator to extend during a start of a cold soaked engine, giving an erroneous indication of a dirty oil filter. If the impending filter bypass indicator is extended, run the engine until the oil is at operating temperature and push the indicator button in. If the button remains in throughout the normal speed range of the engine, the filter does not require cleaning.	72-60-00, PARA 1.C.		

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Item	Inspection/Maintenance Action	REFERENCE SECTION	✓	Initial
	150 HOUR INSPECTION			
2	Clean and inspect the fuel nozzle. If no airframe mounted fuel filter is installed, inspect the fuel nozzle filter. Install fuel nozzle with proper number of spacers.	73-10-03		
	CAUTION: WHEN THERE IS EVIDENCE THE AIRFRAME OR ENGINE FUEL FILTER HAS BEEN BYPASSED, THE GAS PRODUCER FUEL CONTROL INLET FILTER AND THE FUEL NOZZLE FILTER, MUST BE CLEANED. (REFER TO SPECIAL INSPECTIONS, 72-00-00, TABLE 608.) IF ANY CONTAMINATION IS FOUND IN THE FUEL NOZZLE FILTER, THE FUEL CONTROL MUST BE SENT TO AN AUTHORIZED REPAIR FACILITY FOR INTERNAL CLEANING. REFERENCE MUST ALSO BE MADE TO THE AIRFRAME MAINTENANCE MANUAL FOR FUEL SYSTEM MAINTENANCE FOLLOWING FUEL CONTAMINATION.			
3	Inspect for extension of impending fuel filter bypass indicator. If indicator is extended, replace fuel filter. If contamination is present, inspect fuel filter in the fuel control and the filter in the fuel nozzle. Ground run engine to assure proper operation of control system.	73-10-05, PARA 2. 73-20-02, PARA 5.A.		
4	Visually inspect the outer combustion case (sheet metal and weld seams) for cracks. Pay particular attention to the weld seams in the area of the igniter plugs, dummy plug, drain valves, fuel nozzle bosses, armpit braze patch and adjacent areas. Use a bright light and mirror as necessary. The OCC does not have to be removed. Perform a Leak Tec check for installed OCC's and an FPI for removed OCC's.	72-40-00 Para 2.B.(1), (2), (3) and (4)		
	300 HOUR INSPECTION			
	In addition to the 150 hour inspection items, perform the following:			
1	Inspect the engine for obvious loose bolts, broken or loose connections, security of mounting accessories, and broken or missing safeties. Check accessible areas for obvious damage and evidence of fuel and oil leakage.			
	Check B-nuts for presence and alignment of torque stripes. B-nuts with missing torque stripes must be loosened and retightened, before application of new torque stripes.			
2	Inspect the compressor impeller leading edges for damage.	72-30-00, para 4.B.		
3	Clean the compressor, as required, with a chemical wash solution if dirt buildup is evident.	72-30-00, para 5.B.		
4	Without disassembly, inspect the turbine and exhaust collector supports for condition of welded joints, cracks and buckling.	72-50-00, para 6.L. and para 8.B.		

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Item	Inspection/Maintenance Action	REFERENCE SECTION	✓	Initial
	<u>300 HOUR INSPECTION</u> (cont)			
5	Using a small mirror and a flashlight, inspect flow divider inside turbine and exhaust collector support for cracks or separated tack welds. If cracking of sheet metal or welds is found but limits are not exceeded, inspect every 25 hours until support is repaired, flow divider is removed, or limits are exceeded. Compliance with M250 CEB 72-3040 eliminates this inspection requirement.	72-50-00 , para 6.L. and para 8.B.		
6	Inspect the engine fuel system for evidence of leakage. Check condition and security of fittings and tubing. Check fuel control lever for freedom of operation and full travel. Check condition and security of all linkages.	73-00-00 , para 2.A.		
7	Inspect the engine mounts for condition and security.			
8	Visually inspect the outer combustion case (sheet metal and weld seams) for cracks. Pay particular attention to the weld seams in the area of the igniter plugs, dummy plug, drain valves, fuel nozzle bosses, armpit braze patch and adjacent areas. Use a bright light and mirror as necessary. The OCC does not have to be removed. Perform a Leak Tec check for installed OCC's and an FPI for removed OCC's.	72-40-00 Para 2.B.(1), (2), (3) and (4)		
9	Inspect electrical harness for loose, chafed, frayed, or broken wires and loose connectors.			
10	For aircraft with external energy absorbing ring installed, inspect ring upper bracket for cracks. Reference M250 CEB-A-72-3124 , Revision No. 2			
	CAUTION: NORMAL ENGINES USE A MINIMAL AMOUNT OF OIL. HOWEVER, ANY SUDDEN INCREASE IN OIL CONSUMPTION IS INDICATIVE OF OIL SYSTEM PROBLEMS AND MUST BE CORRECTED. ENGINE DAMAGE CAN OCCUR.			
11	Check oil supply level. If the engine has been idle for more than 15 minutes, motor the engine for 30 seconds to scavenge any oil that may drain into the gearbox from the oil tank. Failure to completely scavenge the oil from the gearbox will cause a false indication of high oil consumption. See Post Flight Check No. 3.	72-00-00 , Table 101 Trouble-shooting , items 17 and 18.		
	NOTE: Check oil supply level within 15 minutes of engine shutdown.			
12	Record component changes, inspections, and compliance with technical instructions as required. Report engine difficulties to Rolls-Royce and/or Authorized Maintenance Center (AMC) on M250 report, Form 8117-1 (Rev. 5-94) as required.			

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Item	Inspection/Maintenance Action	REFERENCE SECTION	✓	Initial
	<u>300 HOUR INSPECTION</u> (cont)			
13	Without disassembly, check the compressor discharge air tubes. Inspect for air leaks, dents, cracks, chafing, and proper clamping.	72-40-00, Table 203.		
14	Inspect compressor scroll for cracks. Pay particular attention to welded areas.			
15	Clean the burner drain valve. Ensure that the airframe overboard is clear. Refer to aircraft manual for maintenance procedures.	72-40-00, PARA 3.		
16	Inspect the anti-icing, bleed air, and overspeed solenoid valves for loose, chafed, frayed or broken wires, loose connections and security of attachment.			
17	Inspect the horizontal and vertical firewall shields for cracks. Continued sheet metal or tube cracking may be an indication of excessive engine, engine accessory, or airframe vibration.	72-50-00, PARA 6.K.		
18	Check fuel control and power turbine governor for proper rigging.	73-20-01, PARA 2.C. and 73-20-02, PARA 2.C.		
19	On power and accessory gearbox cover, check the applied torque on all turbine and exhaust collector support-to-gearbox retaining nuts. Torque must be 120-150 lb in. (14-17 N·m). Compliance with M250 CEB-72-3017 cancels this periodic inspection requirement.	72-50-00, PARA 1.B.		
20	Remove, clean, operationally test, and reinstall the magnetic drain plugs: a. Standard type - examine the chip detector end of the plugs for cracks. b. Quick disconnect - examine the locking pins and flanged inserts for wear. Torque 60-80 lb in. (6.8-9.0 Nm). No cracks are permitted. Examine each chip detector separately.	72-00-00, PARA 8.E.		
21	Inspect ignition lead for burning, chafing or cracking of conduit. Also, check for loose connectors and/or broken lockwire. Perform operational check of ignitors.	74-20-02, PARA 2. 74-20-01, PARA 2.B.		

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Item	Inspection/Maintenance Action	REFERENCE SECTION	✓	Initial
	<u>300 HOUR INSPECTION</u> (cont)			
22	Remove, inspect, clean and reinstall the oil filter.	72-60-00, PARA 1.C.		
23	Measure and record power turbine support pressure oil nozzle flow from scavenge oil strut. Record and retain flow record. Flow _____ Compare with previous flow. Any large deviation could indicate carbon buildup. While motoring N₁ to 16-18% the minimum flow is 90cc in 15 seconds.	72-50-00, PARA 6.E.		
24	Drain the oil system and refill. Oil changed at: 300 hours: _____ 600 hours: _____	72-00-00, PARA 8.D., Engine-Servicing.		
	<u>NOTE:</u> With an STC approved external scavenge oil filter, and using approved high thermal stability (HTS) oil, the oil change interval is 600 hours or 12 months. <u>NOTE:</u> Refer to M250 CSL-3126, Recommended Sequence, Engine Oil Change for additional instructions.			
25	Service oil filter. If excessive carbon is found in the filter, inspect the scavenge and pressure oil system. Refer to 72-50-00 PARA 6.E., 6.F., 6.G., 6.H., 7.A., and 7.B.	72-60-00, PARA 1.C.		
26	Inspect P _c filter for proper clamping and security.	73-20-03		
27	Without disassembly or removal of the P _c filter assembly from the mounting bracket, inspect using a 10X magnification and a bright light to detect any signs of cracks, paying particular attention to both of the end fittings at their junction with the end walls. If cracks are detected, remove assembly and comply with M250 CEB-A-75-3017 .			
	<u>NOTE:</u> Compliance with M250 CEB-A-75-3017 eliminates this inspection requirement.			
28	Inspect compressor mount for cracks.	72-00-00, PARA 1.A. (3), Engine-Inspection/ Check.3		

Item	Inspection/Maintenance Action	REFERENCE SECTION	✓	Initial
	300 HOUR INSPECTION (cont)			
29	Clean power turbine support scavenge oil strut.	72-50-00, PARA 6.G.		
30	Clean external sump.	72-50-00, PARA 6.G.		
31	Clean No.1 bearing oil pressure reducer.	72-30-00, PARA 2.A. (1)		
32	Clean pressure oil fitting screen assembly.	72-50-00, PARA 6.G.		
	CAUTION: EXTREME CARE SHOULD BE EXERCISED TO PREVENT TWISTING OF OIL NOZZLE DURING REMOVAL. DO NOT ATTEMPT TO STRAIGHTEN OR REUSE IF TWISTED.			
33	Clean power turbine pressure oil nozzle.	72-50-00, PARA 6.G.		
34	Remove and disassemble fuel nozzle. Clean and inspect fuel nozzle filter assembly. Assemble and install fuel nozzle.	73-10-03		
35	Remove, inspect, and reinstall the turbine pressure oil check valve.	72-60-00, PARA 2.K.		
	NOTE: Check Valve P/N 23074872 and subsequent part numbers are not applicable to this inspection (these valves are considered "ON CONDITION").			
36	Inspect the fourth-stage turbine wheel-to-exhaust collector inner cone clearance.	72-00-00, PARA 1.A. (4), Engine-Inspection/Check.		
	NOTE: Compliance with M250 CEB 72-3044 eliminates this inspection requirement.			
37	Inspect the rear engine mount for security and excessive bearing wear.	72-00-00, PARA 1.A. (5), Engine-Inspection/Check.		
38	Remove, clean, inspect, and reinstall the P _c filter. If engine performance deteriorates, P _c filter cleaning interval may have to be reduced.	73-20-03 PARA 2. and 3.		
	CAUTION: PROPER TIGHTENING OF ENGINE TUBING CONNECTIONS IS CRITICAL TO FLIGHT SAFETY. CORRECT TORQUE VALUES MUST BE USED AT ALL TIMES. EXCESSIVE TORQUE ON PNEUMATIC SENSING SYSTEM CONNECTIONS RESULTS IN CRACKING OF THE FLARE CAUSING AN AIR LEAK WHICH CAN CAUSE FLAMEOUT, POWER LOSS OR OVERSPEED.			
39	Inspect N ₁ shafting.	72-50-00, PARA 6.A.		

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Item	Inspection/Maintenance Action	REFERENCE SECTION	✓	Initial
	<u>300 HOUR INSPECTION (cont)</u>			
	NOTE: Compliance with M250 CEB 72-3059 , 72-3096 , 72-3100 , A-72-3134 (twin engine applications), and A-72-3135 (single engine applications) eliminates this inspection requirement.			
41	Inspect the thermocouple assembly (TOT/MGT).	77-20-01 PARA 2.B.		
	<u>600 HOUR INSPECTION</u>			
	The following inspection is required every 600 hours time since last inspection.			
1	Do the scavenge oil filter impending bypass function check as in Facet Service Bulletin No. 090589 (Ref. Rolls-Royce CSL 3116) for all aircraft equipped with an external scavenge filter system. Follow the Facet instructions and time intervals, or follow this recommended inspection interval each 600 hours.			
	<u>2000 HOUR INSPECTION</u>			
	The following inspection is required every 2000 hours time since last inspection.			
1	Fuel control filter inspection.	73-20-02 , PARA 5.A.		
2	Fuel nozzle filter inspection (if applicable)	73-10-03 , PARA 3.C.		
3	Remove and replace the low pressure fuel filter element. Before discarding filter, inspect for signs of contaminants. If any are found, inspect the entire fuel system and clean if necessary.	73-10-05 , PARA 2.		
4	Inspect the combustion liner.	72-40-00 , PARA 1.C.		
5	Examine the outer combustion case for cracks using Leak-Tek and/or Fluorescent Penetrant Inspection (FPI).	72-40-00 , PARA 2.B.(2) (3) , and (4) .		
6	Inspect the compressor discharge air tubes.	72-40-00 , PARA 4.C.		
7	Inspect the N ₂ overspeed mounting dampers.	73-21-00 , PARA 7.B.		

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Item	Inspection/Maintenance Action	REFERENCE SECTION	✓	Initial
	<u>2000 HOUR INSPECTION</u>			
8	Inspect the spur adapter gearshaft, compressor rotor splined adapter and associated impeller bore.	72-30-00, PARA 4.B.(2), 4.C. and 4.E.		
9	Inspect the turbine to compressor coupling, turbine splined adapter, power turbine inner shaft and turbine shaft-to-pinion gear coupling. Turbine to compressor coupling is part of the turbine assembly.	72-50-00, PARA 6.A. and 6.B.		
	<u>NOTE:</u> Not applicable for: Torquemeter gear part number 23084248 and subsequent Power take-off gear part number 23084249 and subsequent Pinion gear part number 23084247 and subsequent.			
10	Examine the power drivetrain gears. Disassembly of the gearbox is not necessary for this inspection.	CSL 3225		
	<u>NOTES:</u> Not applicable for: Torquemeter gear part number 23084248 and subsequent. Power take-off gear part number 23084249 and subsequent. Pinion gear part number 23084247 and subsequent.			
	<u>NOTES:</u> The following inspections are recommended whenever the turbine or compressor is removed in-between the required 2000 hour inspection. Anytime the compressor is removed from the engine, visually inspect the aft end of the spur adapter gearshaft for worn or damaged splines. Anytime the turbine is removed from the engine, visually inspect the splines on the following items, turbine-to-compressor coupling, turbine splined adapter, power turbine outer shaft and turbine shaft-to-pinion gear coupling for worn or damaged splines. If spline wear or damage is observed the appropriate maintenance action is required. (Refer to item 8 and 9 above).			
	Inspection intervals must not exceed 2000 hours.			

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PARA 1. (cont)

A. Checks and Inspections

The following items are details of checks in [Table 602, Postflight Checks](#), and [Tables 603, 604, 605, and 606](#), Scheduled Inspections. These items are referenced in the Section column of the applicable inspection.

(1) Erosion Inspection

If the aircraft is subjected to sand or dust ingestion, inspect compressor for erosion and monitor performance.

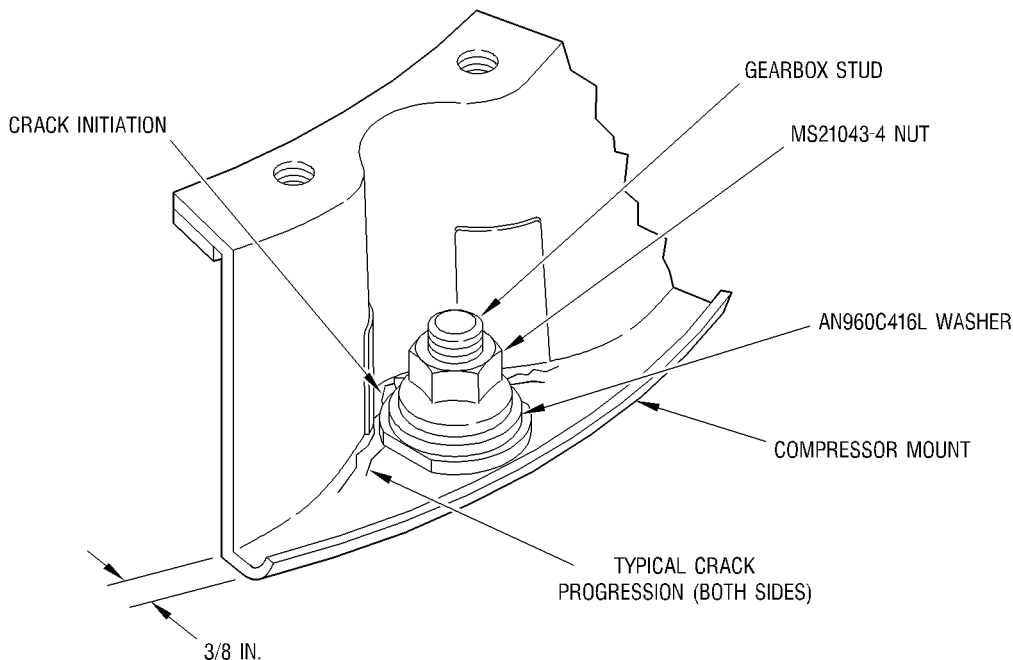
NOTE: If the aircraft is subjected to sand or dust ingestion, periodic compressor erosion inspection is recommended. The frequency of the inspection should be based on the degree of ingestion and condition of the compressor at the last inspection. The need for more frequent compressor wash may also be indicated.

(2) Snow Ingestion Inspection

Inspect the engine for snow, ice, or water damage as follows:

(a) Obtain access to the compressor inlet but do not disassemble any engine parts.

NOTE: Replace the compressor assembly if any mechanical damage, distortion, or bending is detected on the compressor front support struts or on the impeller.



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Compressor Mount Inspection
Figure 601

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PARA 1.A. (cont)

(3) Compressor Mount Inspection (300 hr Intervals)

Using a flashlight and mirror, inspect the sheet metal adjacent to the upper 3 gearbox attachment points. (See [Figure 601](#).) Cracks will tend to follow the circumference of the washer or the spacer fillet radius in the mount for 180°, then progress to the edge of the mount.

- (a) If only one crack is observed and it is within acceptable limits, the frequency of inspection must be increased to every 25 hours until the mount is replaced.
- (b) Replace mounts if any crack has progressed to within 3/8 in. (9.5 mm) of the mount edge.
- (c) Replace mounts if more than one crack is found.

(4) Check fourth-stage turbine wheel-to-exhaust collector inner cone clearance (300 hr interval if applicable)

NOTE: This inspection is required on all turbine assemblies prior to incorporation of P/N 6893075W, 23001996E, 23004240B and 23004509B exhaust collector and turbine support assemblies which have not been modified in accordance with [Rolls-Royce 250–C30 Commercial Engine Bulletin CEB 72–3044](#).

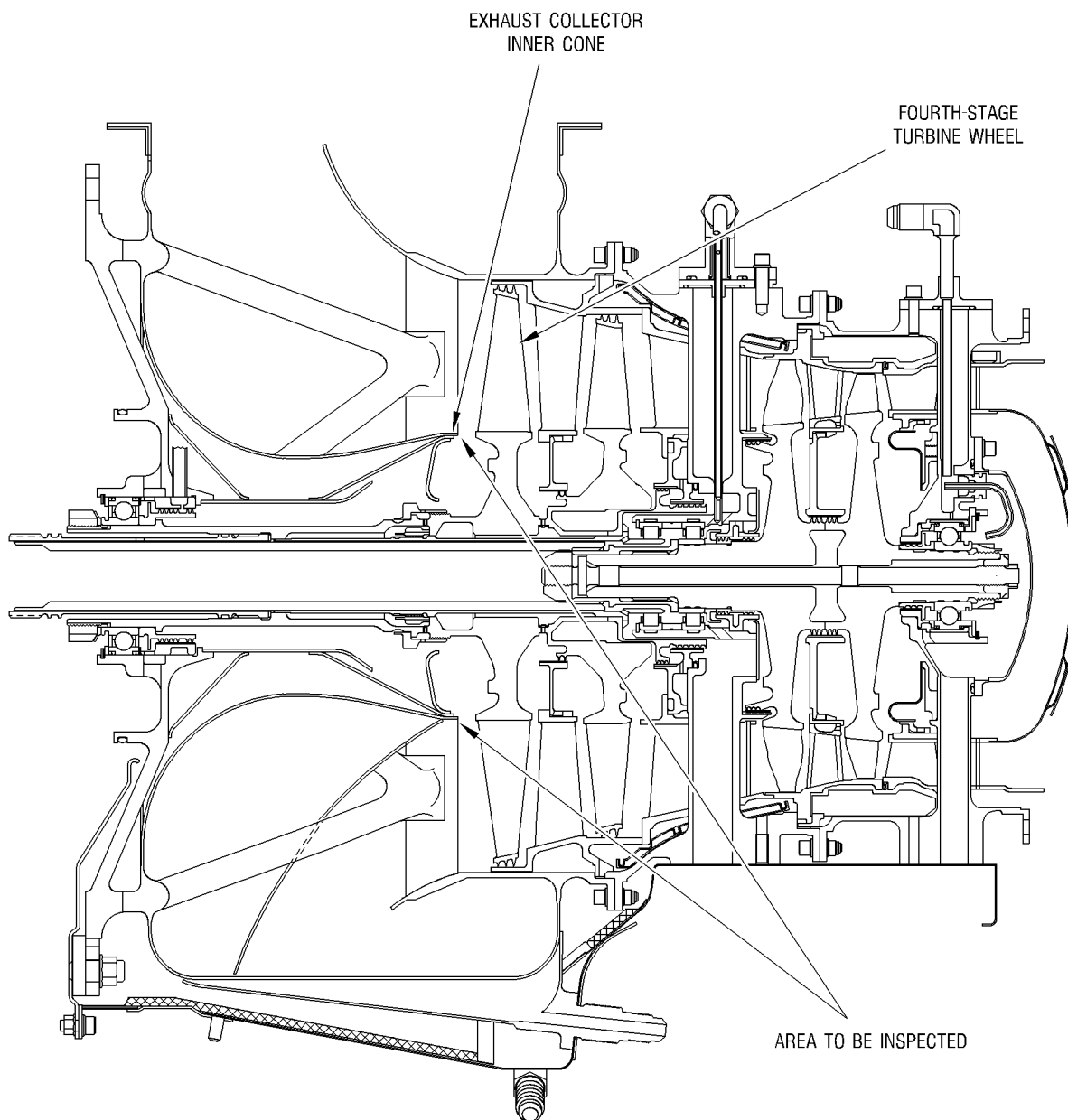
Using a flashlight and mirror, inspect the periphery of the cone edge and fourth-stage turbine wheel hub for 360° in the area indicated in [Figure 602](#).

- (a) There should be no indication of contact between the cone and the wheel as evidenced by a polished contact area on the wheel or cone.
- (b) If contact is noted, send the turbine to an overhaul facility for inspection of the fourth-stage wheel and modification of the turbine and exhaust collector support in accordance with [CEB 72–3044](#) is at operator's option, but no later than next overhaul.
- (c) If contact is not in evidence, continue operation. Modification of the turbine and exhaust collector support per [250 CEB 72–3044](#) is at operator's option, but no later than next overhaul.

(5) Rear Engine Mount Inspection (300 hr intervals)

Inspect the bearing in the rear engine mount for looseness every 300 hours. Send the rear mount to an overhaul facility for bearing replacement if any of the following wear limits are exceeded.

- (a) Axial movement 0.03 in. (0.76 mm)
- (b) Diametrical movement 0.012 in. (0.30 mm) (any plane)
- (c) Bearing outer ring-to-bore No looseness allowed



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Wheel-to-Inner Cone Clearance Inspection
Figure 602

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TABLE 608

INITIAL	SPECIAL INSPECTIONS	REFERENCE SECTION	REMARKS
	1. Hard landing. 2. Sudden stoppage of rotor. 3. Foreign object damage. a. Inspect the compressor. b. Inspect the first-stage turbine wheel blades, first-stage turbine nozzle, and nozzle shield. 4. Operation with inlet restricted. 5. Engine submerged.	72-00-00, PARA 1.B. (1), Engine-Inspection/Check. 72-00-00, PARA 1.B. (2), Engine-Inspection/Check. 72-30-00, PARA 3. 72-50-00, PARA 6.C. and 6.D. 72-00-00, PARA 1.B. (3), Engine-Inspection/Check. 72-00-00, PARA 1.B. (4), Engine-Inspection/Check.	Refer also to aircraft manufacturer's maintenance instructions.

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TABLE 608 (cont)

INITIAL	SPECIAL INSPECTIONS	REFERENCE SECTION	REMARKS
	6. Overtemperature operation. After engine operation at temperatures exceeding the operating limits inspect the following: a. Verify accuracy of MGT indicating system (TOT). b. Inspect thermocouples. c. Inspect first-stage turbine wheel blades, first-stage turbine nozzle, and nozzle shield. <u>NOTE:</u> If either the turbine first-stage wheel or first stage nozzle is rejected because of overtemperature, the complete turbine (gas producer and power turbine) must be removed and sent to an authorized Rolls-Royce Overhaul facility for inspection. d. Inspect outer combustion case. e. Inspect combustion liner.	72-00-00, Table 1, 2, 3, or 4, Engine-Description and Operation 77-20-01, PARA 2. 72-50-00, PARA 6.C. and 6.D. 72-40-00 PARA 2.B. 72-40-00 PARA 1.C.	Check engine/airframe interface of the TOT indicating system per airframe manual using a Barfield (or equivalent) system. Compare these results together with the reported temperature to more accurately determine the true temperature experienced. For example, if the aircraft gauge is indicating 30° low, when added to the reported temperature, an additional inspection may be required.

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TABLE 608 (cont)

INITIAL	SPECIAL INSPECTIONS	REFERENCE SECTION	REMARKS
	7. Hot start encountered. a. Verify accuracy of MGT indicating system (TOT) b. Inspect thermocouples. c. Inspect first-stage turbine wheel blades, first-stage turbine nozzle, and nozzle shield. d. Inspect outer combustion case. e. Inspect combustion liner. <u>NOTE:</u> If either the turbine first-stage wheel or first stage nozzle is rejected because of overtemperature, the complete turbine (gas producer and power turbine) must be removed and sent to an authorized Rolls-Royce Overhaul facility for inspection. 8. Oil temperature limit exceeded.	72-00-00, Table 1, 2, 3, or 4, Engine-Description and Operation 77-20-01, PARA 2. 72-50-00, PARA 6.C. and 6.D. 72-40-00, PARA 2.B. 72-40-00, PARA 1.C. 72-00-00, PARA 8.B., Engine-Servicing.	Check engine/airframe interface of the TOT indicating system per airframe manual using a Barfield (or equivalent) system. Compare these results together with the reported temperature to more accurately determine the true temperature experienced. For example, if the aircraft gauge is indicating 30° low, when added to the reported temperature, an additional inspection may be required.

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TABLE 608 (cont)

INITIAL	SPECIAL INSPECTIONS	REFERENCE SECTION	REMARKS
	8A. Engine operated for more than 30 seconds without oil pressure.	72-00-00, PARA 1.B.(11) Engine-Inspection/Check.	Any time the engine is operated for more than 30 seconds without oil pressure, maintenance action is required.
	9. Oil contamination.		
	a. Metal contamination.	72-00-00, PARA 8.E.	
	b. Carbon contamination.	72-50-00, PARA 6.G.	
	10. Installed engine inactive more than 45 days, preserve fuel and oil systems.	72-00-00, PARA 9.A., 9.C., and 9.D., Engine-Servicing.	
	11. Lighting strike inspection.	72-00-00, PARA 1.B. (5), Engine-Inspection/Check.	
	12. High engine compartment temperature.	72-00-00, PARA 1.B. (6), Engine-Inspection/Check.	
	13. Compressor On Condition Inspection.	72-00-00, PARA 1.B. (7), Engine-Inspection/Check.	
	14. Power and Accessory Gearbox On Condition Inspection.	72-00-00, PARA 1.B., (8), Engine-Inspection/Check.	

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TABLE 608 (cont)

INITIAL	SPECIAL INSPECTIONS	REFERENCE SECTION	REMARKS
	15. Power and Accessory Gearbox Cover on Condition Inspection.	72-00-00 PARA 1.B. (9), Engine- Inspection/ Check	
	16. Outer Combustion Case On Condition Inspection.	72-00-00 PARA 1.B.(10), Engine- Inspection/ Check	
	17. Oil system contamination inspection after the first 50 hours of operation on new, repaired, or overhauled engine.	72-00-00 PARA 1.B. (11), Engine- Inspection/ Check	
	18. Fuel Filter Bypass Inspect fuel filter, fuel control fuel filter, and fuel nozzle filter.	73-10-03, PARA 3.B. 73-10-05, PARA 1.,2., and 3. 73-20-02, PARA 5.A.	
	19. Replacement of fuel pump and/or fuel filter or fuel system connections being loosened.	73-00-00, PARA 1. and 2.	
	20. Fuel system contamination. (known high amounts of particle or microbiologicals) Inspect the fuel filter, fuel control fuel filter and the fuel nozzle filter.	73-20-02, PARA 5.A. 73-10-03, PARA 3.B. 73-10-05, PARA 1., 2., and 3.	

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B. Special Inspections

The following items are details of checks in [Table 608, Special Inspection](#), and are referenced in the Section column of the applicable inspection.

(1) Hard Landing Limits

- (a) The M250 engine is capable of sustaining load forces during abnormal landings up to 10g without any detrimental effect. When forces of 10g or less are experienced, the engine need not be removed from the aircraft for any special inspection as long as it is free of any external damage. Engines, fuel controls and power turbine governors that have sustained landing load forces exceeding 10g must be removed and sent to an overhaul facility.
- (b) There are various airframe structural components that can be used to determine the landing impact force experienced. The following criteria is furnished.

1 McDONNELL DOUGLAS HELICOPTER

Landing forces of 6-9g will cause yielding and/or failures of the landing gear struts and braces and if the web type pilot's seats are installed, seat structure will be collapsed. Landing forces of 10g will cause the pilot and co-pilot seat metal box frames to be buckled and/or wrinkled.

2 SIKORSKY AIRCRAFT

Landing forces of 3g or more will cause the main landing gear to deform. Landing forces in excess of 10g will cause the engine mounts to deform.

3 BELL MODEL 230 AIRCRAFT

Bell defines a hard landing as any incident or accident in which the impact of the helicopter with the ground causes severe pitching of the main rotor, allowing hard contact of hub with mast, results in cracking or yielding of the transmission or nodal beam support structure or imparts unusually high loads on the landing gear. Landing forces in excess of 10G will permit the cabin fuselage to touch the ground (or show evidence of having touched the ground). This applies to aircraft configured with standard or high skid landing gear and aircraft with retractable landing gear.

4 BELL MODEL 206L-3 AND L4

Bell defines a hard landing when the airframe landing skids and cross tubes deform to a degree that the cabin fuselage touches (or shows evidence of having touched) the ground.

(2) Sudden Stoppage/Engagement Inspection

NOTE: The following specific items and/or functions are the minimum required actions when performing a sudden stoppage page/engagement inspection. Each incident should be judged on an “as required” basis possibly requiring more than these minimum requirements. Engines involved in sudden stoppage/engagement do not require overhaul automatically. This judgement is the responsibility of the service facility performing the inspection.

NOTE: If the engine has to be removed from the airframe as a result of the main rotor sudden stoppage/engagement (Specified in paragraphs following), then the operator should take care to provide the distributor or Rolls-Royce Authorized Maintenance and Overhaul Center (AMOC) with all the details about the incident. This information should include a description of damage to the airframe power train and mounts, as well as any other pertinent information.

- (a) If the drive system component malfunctions or if an aircraft main rotor blade(s) strike an object and sustain damage which is repairable in accordance with aircraft manufacturer’s recommendations, perform the following:
- 1 Examine the magnetic drain plugs for metal. (Refer to [Magnetic Plug Inspection, PARA 8.E.](#), this section.)
 - 2 Inspect the engine inlet for foreign objects.
 - 3 Inspect the compressor for foreign object damage.
 - 4 Motor the engine and check for unusual noise.
 - 5 Operate the engine for 30 minutes on the ground. Examine the magnetic drain plugs for metal. (Refer to [Magnetic Plug Inspection, PARA 8.E.](#), this section.)
 - a On twin engine aircraft, single engine should be operated at 100% Nr and flat pitch.
 - b On single engine aircraft, engine should be operated at power required to make aircraft light on its skids.

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- (b) If a drive system component malfunctions or if the aircraft main rotor blade(s) strike an object during operation and sustain damage that requires the main rotor blade(s) or any aircraft main rotor blade(s) or any aircraft main rotor drive system component to be removed from service, remove the engine and perform the following:

- 1 Inspect the turbine shaft to pinion gear coupling and the power turbine outer shaft and pinion gear splines for evidence of damage, wear, and acceptability for further service. (Refer to [Power Turbine Outer Shaft Spline Inspection, 72-50-00, PARA 6.J.](#), and [Power Train Pinion Helical Gear Inspection, 72-60-00, PARA 4.B.](#)) Magnetic particle inspect the turbine shaft-to-pinion gear coupling.
- 2 Send the accessory gearbox to an overhaul facility for inspection per the 250-C30 Series Overhaul Manual, Pub. No. 14W3.
- 3 Inspect the compressor for foreign object damage.
- 4 After engine reassembly, operate the engine for 30 minutes on the ground. Examine the magnetic drain plugs for metal. (Refer to [Magnetic Plug Inspection, PARA 8.E.](#), this section.)
 - a On twin engine aircraft, each engine should be operated individually at 100% Nr and flat pitch.
 - b On single engine aircraft, engine should be operated at power required to make aircraft light on its skids.

NOTE: Test cell run may be substituted for the above 30 minute ground run.

- (c) If a drive system component malfunctions or the aircraft main rotor blade(s) strike an object during operation and the engine or transmission mounts are fractured or misaligned, return engine to a Rolls-Royce Authorized Maintenance and Overhaul Center (AMOC) for complete overhaul with the following exceptions. The accessories listed below must be bench tested in accordance with the 250-C30 Series Overhaul Manual, Pub No. 14W3, and meet all overhaul limits or hard landing inspection limits if specified separately.

- 1 Bleed Valve
- 2 Engine Driven Fuel Pump
- 3 Fuel Nozzle
- 4 Anti-Ice Valve
- 5 Electrical/Electronic Device
- 6 Fuel Control
- 7 Power Turbine Governor

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PARA 1. B. (cont)

(3) Compressor Inlet Air Blockage

Replace the compressor assembly if the engine has been operated with inlet air restricted due to foreign objects or materials which have become lodged in the compressor inlet. Tag the replaced compressor to show that the cause of removal was inlet air blockage and send to an Rolls–Royce approved repair facility for complete overhaul.

Conditions which constitute blockage are power loss encountered following a restriction at the compressor inlet area while the engine is in operation. Blockage in flight can usually be verified by inspection after landing (blockage still exists). However, some blockage may be followed by ingestion before inspection can take place. Objects or materials which were large enough to have stopped at the inlet guide vanes before ingestion, or which causes a noticeable rise in TOT, can be considered to have caused compressor inlet blockage.

(4) Engine Submerged in Water

If the engine has been submerged in water, proceed as follows:

- (a) Contact Rolls–Royce or Distributor for recommended disposition.
- (b) Tag the engine indicating that it encountered submersion in water.

(5) Lightning Strike Inspection

Aircraft lightning strikes occur when the airframe can serve as a least–resistance bridge for the electrical bolt as it travels through the air. Consequently, aircraft extremities (tail pylon, blades, nose, landing gear, etc.) typically act as points of entry or exit.

However since the exact electrical path through the aircraft may not be readily traceable following a strike, the following guidelines are recommended:

- (a) In the event of a lightning strike in the immediate vicinity of the engine(s) (as evidenced by charring, burn marks or pitting associated with electrical arcing on the engine cowl, compartment or inlet) remove the engine(s) prior to further flight and send them to a Rolls–Royce approved repair facility for detailed teardown and inspection.
- (b) Where the aircraft is known or suspected of having been involved in a lightning strike and entry/exit points either cannot be determined or appear remote to the engine(s), perform the following:
 - 1 Inspect the engine compartment for evidence of lightning strike damage.
 - 2 Manually rotate N₁ and N₂ systems and check for binding and abnormal noise.
 - 3 Remove, clean, and inspect engine oil filter and chip detectors. (Refer to [72–60–00, PARA 1.C.](#) and [4.B.](#))

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- 4 Operate the engine for 30 minutes on the ground, and reexamine the magnetic drain plugs for metal. (Refer to [PARA 8.E.](#), this section.)
 - a On twin engine aircraft, each engine should be operated individually at 100% Nr and flat pitch.
 - b On single engine aircraft, engine should be operated at power required to make aircraft light on its skids.
- 5 Listen for abnormal noise on coastdown and abnormally short coastdown time.

(6) High Engine Compartment Temperature

If evidence such as charred or burned paint, burned or melted electrical equipment, broken, leaking, or damaged customer bleed air plumbing, etc., exists (indicating that the engine may have been subjected to high temperature), conduct the following special inspection:

- (a) Conduct a visual inspection of the engine exterior and engine compartment components for signs of heat damage. Replace damaged components or send them to an Rolls-Royce-approved repair facility for further inspection.
- (b) Visually inspect the engine electrical harness for heat damage. Replace harness if damaged.
- (c) Remove magnetic chip detector plug electrical connector. Short the center pin to ensure cockpit indication is provided.
- (d) Prior to returning aircraft to service, determine cause of high compartment temperature and repair as required. Check airframe manufacturer's exhaust system for proper adjustment and any discrepancies.
- (e) Check run engine(s) prior to the next flight in accordance with [72-00-00, Engine-Description and Operation, PARA 7.](#), conduct the following checks and repair as necessary:
 - 1 N₂ overspeed system test.
 - 2 Anti-icing system operation.
 - 3 Note any erratic or abnormal N₁ and/or N₂ speed or TOT indications.

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(7) On Condition Inspection -- Compressor

Anytime the impeller is removed, it must be fluorescent penetrant inspected if the log book indicates more than 3500 hours since it was last fluorescent penetrant inspected. (Refer to the Engine Overhaul Manual, Publ. No. 14W3 for inspection criteria.)

NOTE: Record compliance with this inspection in the appropriate section of the log book. Include date and hours.

(8) On Condition Inspection -- Power and Accessory Gearbox

Anytime the gearbox housing is separated from the cover at an authorized maintenance facility, all gears must be magnetic particle inspected if the log book indicates that more than 3500 hours have elapsed since the gears were new or last magnafluxed. (Refer to the engine Overhaul Manual, Pub. No. 14W3, for inspection criteria.)

NOTE: Record compliance with this inspection in the appropriate section of the log book. Include date and hours.

(9) On Condition Inspection--Power and Accessory Gearbox Cover

Anytime the gearbox is disassembled at an authorized maintenance facility, for replacement of a failed No. 2 1/2, 3 or 4 bearing, FPI or MPI inspect for cracks in the area of the casting boss supporting the bearing. (Refer to the Engine Overhaul Manual, Pub. No. 14W3, for inspection criteria.)

(10) On Condition Inspection--Outer Combustion Case

Anytime the outer combustion case is separated from the engine, visually inspect AREA A and AREA B, [Figure 203](#), for cracks by shining a bright light from the inside of the part and inspect in a darkened room. If the outer combustion case is at an Authorized Maintenance Facility, inspect per Overhaul Manual 72-40-00, Table 2.

(11) Oil System Contamination Inspection

After first 50 hours of operation on new, repaired or overhauled engine, check oil filter for contamination. Also, if decreased oil pressure is noticed during operation, check engine oil filter for contamination at that time. If debris is found, proceed as follows:

- (a) Drain oil system. Pay particular attention to any metallic debris in the oil. Swab the oil tank and note any foreign material.
- (b) Flush engine oil system and clean oil filter.
- (c) Reinstall filter and fill filter cavity with fresh oil. Fill oil tank with fresh oil.
- (d) Do a 30-minute ground run at power. (Refer to [Magnetic Plug Inspection, PARA 8.E.](#), this section.)
- (e) After ground run, remove and inspect filter. If filter shows not accumulated debris, release aircraft for flight. During the next 30 hours of operation, check engine oil filter at approximately 10-hour intervals to determine if additional debris has accumulated in the filter.

(12) Engine Operated With No Oil Pressure

Any engine operated for more than 30 seconds without oil pressure must be removed and sent to a Rolls-Royce Authorized Maintenance Center (AMC) for disassembly and inspection as defined by the M250-C30 Series Engine Overhaul Manual, Pub. No. 14W3.

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C. M250-C30 Phase Inspection Recommendation.

(1) Introduction

The following provides Rolls-Royce Engine Company recommended engine inspection schedule for those operators that desire to maintain their aircraft on a progressive type inspection programs. Other portions of this manual must also be consulted regarding the hour and cycle requirements on life limited parts and the recommended overhaul periods for the engine, modules, accessories, and components. (Refer to [Table 609](#))

The inspection intervals specified in this program are intended to be the maximum allowable. If an operator finds more frequent compliance with certain portions are required due to local or operational conditions, it is the responsibility of that operator to adjust the compliance times accordingly.

The inspection program as described is separated into Daily Inspections (preflight to be performed by flight or maintenance personnel), eight inspection events, and special inspections. At least one complete cycle (eight inspection events) must be completed every 12 calendar months to satisfy the FAA annual inspection requirement.

The inspection program may be started from new or after completion of a 300 hr inspection. Termination of the program is accomplished by the completion of a 300 hr inspection prior to reverting to the conventional 150/300/600 hr inspection program specified in this manual.

NOTE: Progressive inspection programs are organized to maintain the airworthiness of an aircraft. Engines, alone, cannot be inspected on a progressive inspection schedule. Consult the appropriate airframe manufacturer or their maintenance manuals for assistance in establishing an aircraft progressive inspection schedule.

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Table 609

Phase Inspection Recommendation

M250-C30 Phase Inspection Recommendation	Daily	50	100	150	200	250	300	6 mo	12 mo	SPL
Visual inspection of engine for general condition, leads, cracks, security of hardware and equipment, compressor for FOD.	A	B	B	B	B	B	B			
Check oil level within 15 minutes of shutdown.	C									
Inspection compressor inlet ducting for foreign material that could be drawn into the compressor.	D									
Compressor rinse is required if operated in a corrosive environment (after last flight of the day).	E									
Inspect impending fuel and oil bypass indicator.	F									
Compressor wash as indicated by condition and performance.							G			
Clean combustion drain valve.				H			H			
Chip detectors - remove, clean, and test. Inspect locking pins of the quick disconnect type.				I			I			
Remove, inspect, and clean the engine oil filter screen.				J			J			
Measure and record oil flow from No. 6/7 bearing scavenge sump.				K			K			
Change oil (whichever occurs first).							L	L	L	L
Clean No. 6/7 bearing scavenge oil strut.							M			
Clean No. 6/7 bearing pressure oil nozzle and screen.							N			
Clean No. 6/7 bearing external sump.							O			
Inspect and clean fuel nozzle.				P			P			
If no airframe or engine mounted filter is installed, inspect the fuel nozzle filter.										300
Perform scavenge filter bypass check.										600
Inspect fuel nozzle filter.										2000
Replace L.P. fuel filter element.										2000
N ₁ Shaft Joint Inspections.										2000
Hard Landing Inspection										X
Sudden Stoppage of the Rotor System.										X
Foreign Object Damage.										X
Operation with inlet restricted										X
Engine Submerged										X
Turbine Overtemperature Operation										X
Oil Temperature Exceedance										X
Review Records for Compliance			Q		Q		Q		Q	
NOTE: 1. All inspections noted as "Daily" may be performed by pilots whom have received training and instruction on how to perform the "Daily" instructions properly. The "Daily" inspections could then be incorporated into the preflight or post flight inspections. 2. At least one 300 hr cycle must be completed every 12 months. 3. Consult appropriate paragraphs for specific inspection requirements.										

72-00-00

PARA 1.C. (cont)

(2) Description of Inspections

- (a) This is a visual preflight inspection of the engine which is normally conducted by a pilot and is intended to be a visual inspection of the engine for general conditions, obvious fuel or oil leaks, general engine integrity, and inlet foreign object damage. This inspection does not require engine or airframe disassembly. Engine access is to be gained through the normal cooling access doors. The compressor inlet is not accessible on some installations due to particle separator installation. In this case, the pilot should assure himself of the integrity of the particle separator by looking for missing elements.
- (b) This inspection is to be accomplished by a mechanic. The engine or airframe should be disassembled as required to gain adequate access to the engine to assure complete inspection.

	<u>Requirement</u>	<u>Reference</u>
<u>1</u>	Inspect the engine for obvious loose bolts, broken or loose connections, security of mounting accessories, and broken or missing safeties. Check accessible areas for obvious damage and evidence of fuel and oil leakage.	
<u>2</u>	Inspect the compressor impeller leading edges for damage.	72–30–00, PARA 4.B.
<u>3</u>	Clean the compressor, as required, with a chemical wash solution if dirt buildup is evident.	72–30–00, PARA 5.
<u>4</u>	Inspect electrical harness for loose, chafed, frayed, or broken wires and loose connectors.	
<u>5</u>	Inspect the engine fuel system for evidence of leakage. Check condition and security of fittings and tubing. Check fuel control lever for freedom of operation and full travel. Check condition and security of all linkages.	73–00–00, PARA 2.A.
<u>6</u>	Inspect the engine mounts for condition and security.	
<u>7</u>	Inspect P _C filter for proper clamping and security	73–20–03
<u>8</u>	Inspect compressor scroll for cracks. Pay particular attention to welded areas.	
<u>9</u>	Inspect the anti-icing, bleed air, and overspeed solenoid valves for loose, chafed, frayed or broken wires, loose connections and security of attachment.	
<u>10</u>	Inspect the horizontal and vertical firewall shields for cracks.	72–50–00, PARA 6.K.

NOTE: Continued sheet metal or tube cracking may be an indication of excessive engine, engine accessory, or airframe vibration.

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PARA 1.C.(2) (cont)

<u>Requirement</u>	<u>Reference</u>
<u>11</u> Inspect ignition lead for burning, chafing or cracking of conduit. Also, check for loose connectors and/or broken lockwire.	74-20-02, PARA 2.
<u>12</u> Perform operational check of igniters.	74-20-01, PARA 2.B.
<u>13</u> Record component changes, inspections, and compliance with technical instructions as required. Report engine difficulties to Rolls-Royce and/or Distributor on Model 250 Report, Form 8117-1 (Rev.1-82) as required.	

- (c) Flight or maintenance personnel must check the engine oil level within 15 minutes following engine shut down.

<u>Requirement</u>	<u>Reference</u>
Check oil supply level within 15 minutes of engine shutdown.	72-00-00, Table 101.

NOTE: If the engine has been idle for more than 15 minutes, motor the engine for 30 seconds to scavenge any oil that may have drained into the gearbox from the oil tank. Failure to completely scavenge the oil from the gearbox will cause a false indication of high oil consumption. In some aircraft installation the engine must be started and run at idle for approximately one minute to assure proper gearbox scavenging before checking oil level if the aircraft has sat for more than 15 minutes.

CAUTION: NORMAL ENGINE USE A MINIMAL AMOUNT OF OIL. HOWEVER, ANY SUDDEN INCREASE IN OIL CONSUMPTION IS INDICATIVE OF OIL SYSTEM PROBLEMS AND MUST BE CORRECTED.

- (d) Flight or maintenance personnel should inspect the engine inlets prior to start up to assure the inlet plugs have been removed and there is no foreign material in the inlet that could be drawn into the compressor.

PARA 1.C.(2) (cont)

- (e) Flight and/or maintenance personnel must conduct a compressor rinse after the last flight of the day.

Requirement

Anytime the aircraft has been operated in an atmosphere known (or suspected) to be corrosive, perform a water rinse of the compressor.

Reference

72–30–00,
PARA 4.A.

NOTE: Operators should be aware that salt laden air may be encountered for 75–150 miles inland under certain weather conditions. If there is any doubt about the conditions in which your engines are operated, the compressors should be given a daily water rinse. Water will not damage the engine but salt and chemicals will.

- (f) Flight or maintenance personnel are to inspect fuel and oil impending bypass indicators.

Requirement

- 1 Inspect for extension of impending oil filter bypass indicator. If indicator is extended, clean oil filter.

Reference

72–60–00,
PARA 1.C.

NOTE: It is possible for the impending oil filter bypass indicator to extend during a start of a cold soaked engine, giving an erroneous indication of a dirty oil filter. If the impending filter bypass indicator is extended, run the engine until the oil is at operating temperature and push the indicator button in. If the button remains in throughout the normal speed range of the engine, the filter does not require cleaning.

- 2 Inspect for extension of impending fuel filter bypass indicator.

73–10–05,
PARA 2.

NOTE: If indicator is extended, replace fuel filter.

NOTE: Inspect fuel filter in the fuel control and in the fuel nozzle. Ground run engine to assure proper operation of control system.

- (g) Maintenance personnel must wash the engine compressor at least every 300 hours unless conditions dictate earlier compliance.

<u>Requirement</u>	<u>Reference</u>
Wash compressor	72-30-00, PARA 4.B.

- (h) Maintenance personnel are to clean and inspect the combustion drain valves.

<u>Requirement</u>	<u>Reference</u>
Inspect and clean the combustion drain valves.	72-40-00, PARA 3.

NOTE: Assure the airframe overboard drain lines are clear. Refer to airframe manual for procedures.

- (i) Maintenance personnel are to remove, inspect, clean, and test the engine chip detectors.

<u>Requirement</u>	<u>Reference</u>
1 Remove, clean, operationally test, and reinstall the magnetic drain plugs: <u>a</u> Standard type - examine the chip detector end of the magnetic drain plugs for cracks. <u>b</u> Quick disconnect - examine the locking pins and flanged inserts for wear.	72-00-00, PARA 8.E.

NOTE: Torque 60-80 lb in. (6.8 - 9.0 N·m). No cracks are acceptable. Check each chip detector separately.

PARA 1.C.(2) (cont)

- (j) Maintenance personnel are to remove, inspect for metal and carbon accumulation, clean, and reinstall the main engine pressure oil screen.

<u>Requirement</u>	<u>Reference</u>
Remove, inspect, clean and reinstall the oil filter.	72-60-00, PARA 1.C. 72-00-00, PARA 8.C., Engine- Servicing.

NOTE: If excessive carbon is found in the filter, inspect the scavenge and pressure oil system. Refer to 72-50-00 PARA 6.E., 6.F., 6.G., 6.H., 7.A., and 7.B.

- (k) Maintenance personnel are to measure and record the oil flow from the No. 6/7 bearing scavenge strut, maintain N_1 speed at 16-18%.

<u>Requirement</u>	<u>Reference</u>
Measure and record power turbine support pressure oil nozzle flow from scavenge oil strut. Record and retain flow record.	72-50-00, PARA 6.E.

Flow _____

Compare with previous flow. Any large deviation could indicate carbon buildup.

- (l) Maintenance personnel or flight personnel, provided complex aircraft disassembly is not required, may change the engine oil.

<u>Requirement</u>	<u>Reference</u>
Drain the oil system and refill.	72-00-00, PARA 8.C. Engine- Servicing

NOTE: See oil change time limits (Ref. Table 604, this section).

PARA 1.C.(2) (cont)

- (m) Maintenance personnel are to clean the No. 6/7 bearing power turbine scavenge strut.

<u>Requirement</u>	<u>Reference</u>
Clean power turbine support scavenge oil strut	72–50–00, PARA 6.G.

NOTE: The flow check specified in item (k.) must be accomplished after compliance with (m), (n), and (o) at 300 hr.

- (n) Maintenance personnel are to clean the No. 6/7 bearing external sump can.

<u>Requirement</u>	<u>Reference</u>
Clean power turbine external sump can.	72–50–00, PARA 6.G.

- (o) Maintenance personnel are to clean the power turbine pressure oil nozzle, screen, and fitting.

<u>Requirement</u>	<u>Reference</u>
<u>1</u> Clean pressure oil fitting & screen assembly.	72–50–00, PARA 6.G.
<u>2</u> Clean power turbine pressure oil nozzle.	72–50–00, PARA 6.G.

CAUTION: EXTREME CARE SHOULD BE EXERCISED TO PREVENT TWISTING OF OIL NOZZLE DURING REMOVAL. DO NOT ATTEMPT TO STRAIGHTEN OR REUSE IF TWISTED.

- (p) Maintenance personnel are to remove, inspect and clean the fuel nozzle.

<u>Requirement</u>	<u>Reference</u>
Clean and inspect the fuel nozzle.	73–10–03

NOTE: Install fuel nozzle with proper number of spacers.

PARA 1.C.(2) (cont)

- (q) Maintenance personnel are to review engine records at least every 12 months (annual inspection) or 100 hours, whichever occurs first to assure compliance with the following:

- 1 All outstanding FAA Airworthiness Directives (AD Notes) have been complied with, including those which institute reoccurring inspections.
- 2 All outstanding Alert Commercial Engine Bulletins in accordance with their individual compliance requirements.

NOTE: Operators must contact Aviall, Inc. to assure distribution of the following Model 250 Engine publications.

E-mail: sales@aviall.com or 250pubs@aviall.com
Website: www.aviall.com

From North America and Canada:

Phone: 1 (800) AVIALL-1 (800-284-2551)
Fax: 1 (800) FAXAVIA (800-329-2842)

Internationally:

Phone: (972) 586-1985
Fax: (972) 586-1980

- Operation and Maintenance Manual revision service
 - Illustrated Parts Catalog revision service
 - Commercial Engine Bulletins
 - Commercial Service Letters
 - Installation Bulletins
- 3 All outstanding Commercial Engine Bulletins in accordance with their individual compliance requirements.
 - 4 All component and module changes are correctly noted in the engine logbook.
 - 5 Accumulated hours and cycles must be reviewed against all part life limits to assure that neither the hour or cycle limit has not nor will not be exceeded prior to the next regularly scheduled inspection.
 - 6 Review records for recommended TBO conformance on those components or modules with established overhaul periods.

PARA 1.C. (cont)

Special Inspections600 Hour

To be performed by maintenance personnel in accordance with the instructions provided by the manufacturer of the scavenge filter.

Requirement

1. Perform scavenge oil filter impending bypass function.

Reference

Check per STC filter manufacturers recommended procedure.

■ 2000 Hour

To be performed by maintenance personnel.

Requirement

1. Remove and replace the low pressure fuel filter element. Before discarding filter, inspect for signs of contaminants. If any are found, inspect the entire fuel system and clean if necessary.
2. Inspect N₁ shafting.

Reference

[73–10–05, PARA 2.](#)

[72–30–00, PARA 4.B.\(2\)](#)

[72–30–00, PARA 4.C.](#)

[72–30–00, PARA 4.E.](#)

[72–50–00, PARA 6.B.](#)

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