

M250-B17 SERIES OPERATION AND MAINTENANCE

Table 602	
Inspection Checksheet	
Owner _____	Date _____
A/C Make/Model _____ S/N _____	Reg No. _____ TSN _____
Engine S/N _____	TSN _____ TSO _____
<p>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.</p> <p><b>CAUTION:</b> BEFORE UNDERTAKING ANY INSPECTION OR MAINTENANCE ACTION, CONSULT THE REFERENCED PARAGRAPHS OF THE OPERATION AND MAINTENANCE MANUAL. FAILURE TO DO SO COULD RESULT IN EQUIPMENT DAMAGE OR DESTRUCTION, POSSIBLY RESULTING IN PERSONNEL DEATH OR INJURY.</p>	

Item	Inspection/Maintenance Action	Reference	✓	Initial
<b>100 Hour Inspection</b>				
1	Examine the engine for loose or missing bolts, broken or loose connections, security of mounting accessories and broken or missing lock wire. Check accessible areas for obvious damage and evidence of fuel, air, or oil leakage. Loose connections also include the requirement to examine the slippage marks on all B-nut connections in the engine control system.	72-00-00 Engine Servicing		
2	Check mounting and support bolts to be sure they are tight, lockwired and in good condition. Check security of screws and rivets.	N/A		
3	Check accessible fuel system components, lines, and connections for security, damage or leakage. Accomplish with the boost pump on, if available.	N/A		
4	Inspect P <sub>c</sub> filter for proper clamping and security.	PARA 2.B., 73-20-03		
5	Until <a href="#">M250 TP CEB-A-1193</a> is complied with, inspect P <sub>c</sub> filter assembly as follows: Without disassembly or removal of the P <sub>c</sub> filter assembly from the mounting bracket, inspect using a 10x magnification glass 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 <a href="#">M250 TP CEB-A-1193</a> .	N/A		
6	Remove the Scroll-to-P <sub>c</sub> Filter Tube Assembly and inspect for cracks using 10x power glass. Pay particular attention to the flared ends of the tube for cracks, and to the areas beneath the floating ferrules for fretting damage. Tubes found to contain cracks and/or excessive fretting damage are to be replaced by new parts of the same part number as removed.	NA		

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Table 602 (cont)				
Item	Inspection/Maintenance Action	Reference	✓	Initial
	<u>100 Hour Inspection</u> (cont)			
6 cont	<u>NOTE:</u> Excessive fretting is present when the ferrule has chafed the tube sufficiently to wear a step in the tube that can be felt with a thumbnail or other inspection aid.			
7	With the Scroll-to-P <sub>c</sub> Tube Assembly still removed and using a 10x power glass, inspect the elbow in the compressor scroll for distress/cracks/proper alignment. No cracks are permissible.	N/A		
8	Check fuel and propeller system control linkage for freedom of operation, full travel and proper rigging. Check for excessively high throttle forces and security of linkage. Also check for loose or worn linkage and linkage bolts.	PARA 1.A., 76-00-00		
9	Examine compressor inlet guide vanes and visible blades and vanes for foreign object damage. Remove all foreign material that can be drawn into the compressor inlet.	PARA 5, 72-30-00		
10	Clean compressor with chemical wash solution if operating in a corrosive/erosive (contaminant laden) environment.	PARA 6.B., 72-30-00		
11	Examine compressor scroll for cracks or breaks at anti-ice valve and customer bleed ports. If cracks or breaks are detected, check engine for possible vibration causes.	PARA 1.C.(2), this section		
12	Examine for discharge air tube inserts that are cocked or backing out of the scroll. If cocked or loose inserts are detected, check engine for possible vibration causes.	PARA 4, 72-40-00 and PARA 1.C.(2), this section		
13	Visually inspect the compressor discharge tubes for cracks, damage, deterioration, or corrosion using a bright light and mirror as necessary. The compressor discharge tubes do not have to be removed. Perform a Leak Tec check for the installed compressor discharge tubes and FPI the removed tubes.	PARA 4, 72-40-00		
14	Check anti-icing valve for security, worn parts and proper operation. Valve need not be removed or disassembled unless a problem is detected.	PARA 3, 75-10-01		
15	Examine compressor mount inserts for looseness or oil leakage. Replace if loose and check engine for possible vibration causes.	PARA 4.E. and F., 72-60-00 and PARA 1.C.(2), this section		
16	Examine the turbine support assemblies and engine exhaust ducts for condition of welded joints, for cracks and buckling. Check exhaust duct clamps for correct installation, condition and torque. Reference appropriate airframe maintenance manual for torque.	PARA 8.A., 72-50-00		

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Table 602 (cont)

Item	Inspection/Maintenance Action	Reference	✓	Initial
<u>100 Hour Inspection</u> (cont)				
17	<p>Wet spline starter-generator gearshafts (new production or those replaced in accordance with the Rolls-Royce Commercial Engine Bulletin (M250-B17 TP CEB-1056) do not need periodic inspection and lubrication. Clean and examine other starter-generator gearshaft. Clean the female splines of the starter-generator and the male splines of the starter generator with mineral spirits and a soft brush. Examine splines in accordance with 72-60-00, Starter-generator Gearshaft Internal Spline Inspection.</p> <p>Lubricate acceptable splines with grease (Aero-shell No. 22, or equivalent). Before reinstallation of the starter-generator, make sure torsional damper members of the starter-generator driveshaft are in hard contact with each other.</p>	<p>PARA 4.C., 72-60-00</p>		
<p><b>NOTE:</b> Inspect the starter-generator brushes for wear in accordance with the Aircraft Manual at the same time the spline inspection is made.</p>				
18	<p>Examine and clean the turbine pressure oil system check valve.</p>	<p>PARA 2.K., 72-60-00</p>		
<p><b>NOTE:</b> Check Valve P/N 23074872 and subsequent part numbers are not applicable to this inspection (these valves are considered "ON CONDITION").</p>				
19	<p>Inspect and clean pressure oil tube screen assembly.</p>	<p>Item 4, Table 202, 72-50-00</p>		
20	<p>Measure oil flow from the scavenge passage or external sump of the power turbine support and scavenge passage of gas producer turbine support. Record actual flow here: GP _____ PT _____</p>	<p>PARA 6.E., 72-50-00</p>		
21	<p>Examine, clean, and check magnetic drain plugs.</p>	<p>PARA 10, 72-00-00, Engine servicing</p>		
22	<p>Inspect and clean the fuel nozzle. If no airframe mounted fuel filter is installed, inspect the fuel nozzle filter.</p>	<p>73-10-03, Maintenance Practices</p>		
23	<p>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.</p>	<p>72-40-00, Table 202, items (1), (2), (3), (4),</p>		
24	<p>Clean the burner drain valve.</p>	<p>PARA 3, 72-40-00</p>		
25	<p>Inspect the ignition lead for burning, chafing, or cracking of conduit and loose connectors and broken lock wire.</p>	<p>74-20-02, Maintenance Practices</p>		

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Table 602 (cont)				
Item	Inspection/Maintenance Action	Reference	✓	Initial
26	Review engine records for compliance with all mandatory bulletins, inspections and airworthiness directives.	N/A		
27	Review engine records for time or cycle limited parts, components, accessories or modules.	N/A		
28	Enter component changes, inspection compliance, etc., in logbook as required.	N/A		
	<u>200 Hour Inspection</u>			
	In addition to the 100 hour inspection items, perform the following:			
29	Lubrication system maintenance			
	<b>NOTE:</b> Items designated with an asterisk (*) are to be accomplished on the same intervals as item 27*(a) (Oil Change).			
*a.	<p>Drain oil system.</p> <p style="text-align: center;">Oil changed at:</p> <p>100 hours: _____</p> <p>200 hours: _____</p> <p>300 hours: _____</p> <p>600 hours: _____</p> <p>The maximum oil change interval is 100 hours or 6 months, whichever occurs first. This limit can be extended if the following conditions are met.</p> <p>A. If an external scavenge oil filter system is installed the oil change interval can be increased to 200 hours or 6 months, whichever occurs first.</p> <p>B. With an approved HTS (Third Generation Oil), but no external scavenge oil filter system, the oil change interval can be increased to 300 hours or 12 months, whichever occurs first.</p> <p>C. With an approved HTS (Third Generation Oil), and an external scavenge oil filter system is installed, the oil change interval can be increased to 600 hours or 12 months, whichever occurs first.</p> <p><b>CAUTION:</b> SOME OPERATORS AND/OR HARSH ENVIRONMENTS CAN DICTATE OIL CHANGES AT MORE FREQUENT INTERVALS.</p> <p><b>NOTE:</b> See oil change flow chart for further detail. (See <a href="#">Figure 600</a>)</p> <p><b>NOTE:</b> External scavenge oil filter systems must have a valid STC (Supplemental Type Certificate).</p>	<a href="#">PARA 10.F., 72-00-00, Engine Servicing</a>		

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Table 602 (cont)				
Item	Inspection/Maintenance Action	Reference	✓	Initial
	<u>200 Hour Inspection</u> (cont)			
b.	Remove, examine and clean the oil filter. Note accumulation of metal chips, debris or carbon particles. Conduct further inspection of the lube system and/or engine gear train/bearings if metal chips or debris are found. See <a href="#">items 34</a> and <a href="#">35</a> (300 Hour Inspection) if carbon particles are found.	<a href="#">PARA 1.C., 72-60-00, Item 2, Table 202, 72-50-00</a>		
	<b>NOTE:</b> Follow STC manufacturer's recommendations regarding replacement/cleaning of external oil filter elements. Inspect removed elements for any accumulations of metal chips, debris or carbon particles. It can prove helpful to cut apart disposable (paper) filter elements to facilitate this inspection. If chips, debris or carbon particles are found, proceed with additional inspection/maintenance as outlined in Item 27 b.			
c.	Examine magnetic chip detector plugs.	<a href="#">PARA 10, 72-00-00, Engine Servicing, Item 7, Table 202, 72-50-00</a>		
*d.	Refill oil system.	<a href="#">PARA 10.F., 72-00-00, Engine Service</a>		
	<u>300 Hour Inspection</u>			
	In addition to the 100 hour and appropriate 200 hour inspection items, perform the following:			
	<b>CAUTION:</b> INSPECTION FREQUENCY MUST BE BASED ON THE NATURE OF THE EROSIIVE AND/OR CORROSIVE ENVIRONMENT. THE OPERATING ENVIRONMENT CAN DICTATE A MORE FREQUENT INSPECTION INTERVAL WHEN OPERATING IN A CORROSIVE AND/OR EROSIIVE ENVIRONMENT FOR NON-COATED COMPRESSOR WHEELS, THE INSPECTION MUST NOT EXCEED 300 HOURS OR 6 MONTHS. FOR COATED COMPRESSOR WHEELS, INSPECTION MUST NOT EXCEED 300 HOURS OR 12 MONTHS. FOR COMPRESSOR BLISKS, INSPECTION MUST NOT EXCEED 300 HOURS OR 12 MONTHS. IF ANY WHEEL EXHIBITS CORROSION AND/OR EROSION, THE INSPECTION REQUIREMENT MUST REVERT BACK TO 300 HOURS OR 6 MONTHS.			
30	Inspect the compressor case, blades, and vanes when operating in an erosive and/or corrosive environment. 10X power magnification is recommended for corrosion pit inspection.	<a href="#">PARA 1.C.(9)</a> , this section and <a href="#">PARA 5, 72-30-00</a>		

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Table 602 (cont)			
<u>300 Hour Inspection (cont)</u>			
	<b>CAUTION:</b>	WHEN THERE IS EVIDENCE THAT THE FUEL PUMP FILTER HAS BEEN BYPASSED, THE GAS PRODUCER FUEL CONTROL INLET FILTER, THE FUEL NOZZLE FILTER, THE GOVERNOR FILTER AND THE HIGH PRESSURE FUEL FILTER, IF APPLICABLE MUST BE CLEANED. (REFER TO <a href="#">SPECIAL INSPECTIONS, TABLE 603</a> ) IF ANY CONTAMINATION IS FOUND IN THE FUEL NOZZLE FILTER, THIS WILL REQUIRE THAT THE FUEL CONTROL 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.	
31	If the aircraft is equipped with an engine fuel filter differential pressure warning system, replace the throw-away filter only when an indication of contamination is obtained or every 300 hours, whichever comes first. If the aircraft is not equipped with a differential pressure warning system, replace the fuel filter every 300 hours unless operating experience demonstrates that smaller time increments are advisable. Before discarding filter, inspect for signs of contaminants. If found, examine the entire fuel system and clean if necessary. Verify Step 32 has been completed before reassembly.	<a href="#">PARA 1.F., 73-10-01</a>	
32	Do a fuel pump bypass valve operation check when a fuel filter is replaced. <b>NOTE:</b> Applicable to Sundstrand/Pesco and Argo-Tech/TRW manufactured pumps only.	<a href="#">PARA 1.D., 73-10-01</a>	
33	Purge air from the filter bowl area of the single element pump.	<a href="#">PARA 2.E., 73-00-00</a>	
34	Remove and disassemble fuel nozzle. Clean and examine fuel nozzle filter assembly. Assemble and install fuel nozzle.	<a href="#">73-10-03</a>	
35	Examine and clean the No. 1 bearing oil pressure reducer.	<a href="#">PARA 3.A.(2), 72-30-00</a>	
36	Visually examine external sump. Clean internal carbonaceous deposits from sump.	<a href="#">PARA 6.F.(5), 72-50-00, Item 11, Table 202, 72-50-00</a>	
37	Examine the power turbine support scavenge strut. Clean internal carbonaceous deposits from strut.	<a href="#">PARA 6.F., 72-50-00, Item 10, Table 202, 72-50-00</a>	
38	Remove, clean and examine P <sub>c</sub> filter every 300 hours or earlier as engine performance dictates.	<a href="#">73-20-03, Maintenance Practices</a>	
39	Examine the thermocouple assembly (TOT/MGT).	<a href="#">PARA 2.B., 77-20-01, Maintenance Practices</a>	
	<u>Other Scheduled Inspections</u>		
	500 HR/1 YR		

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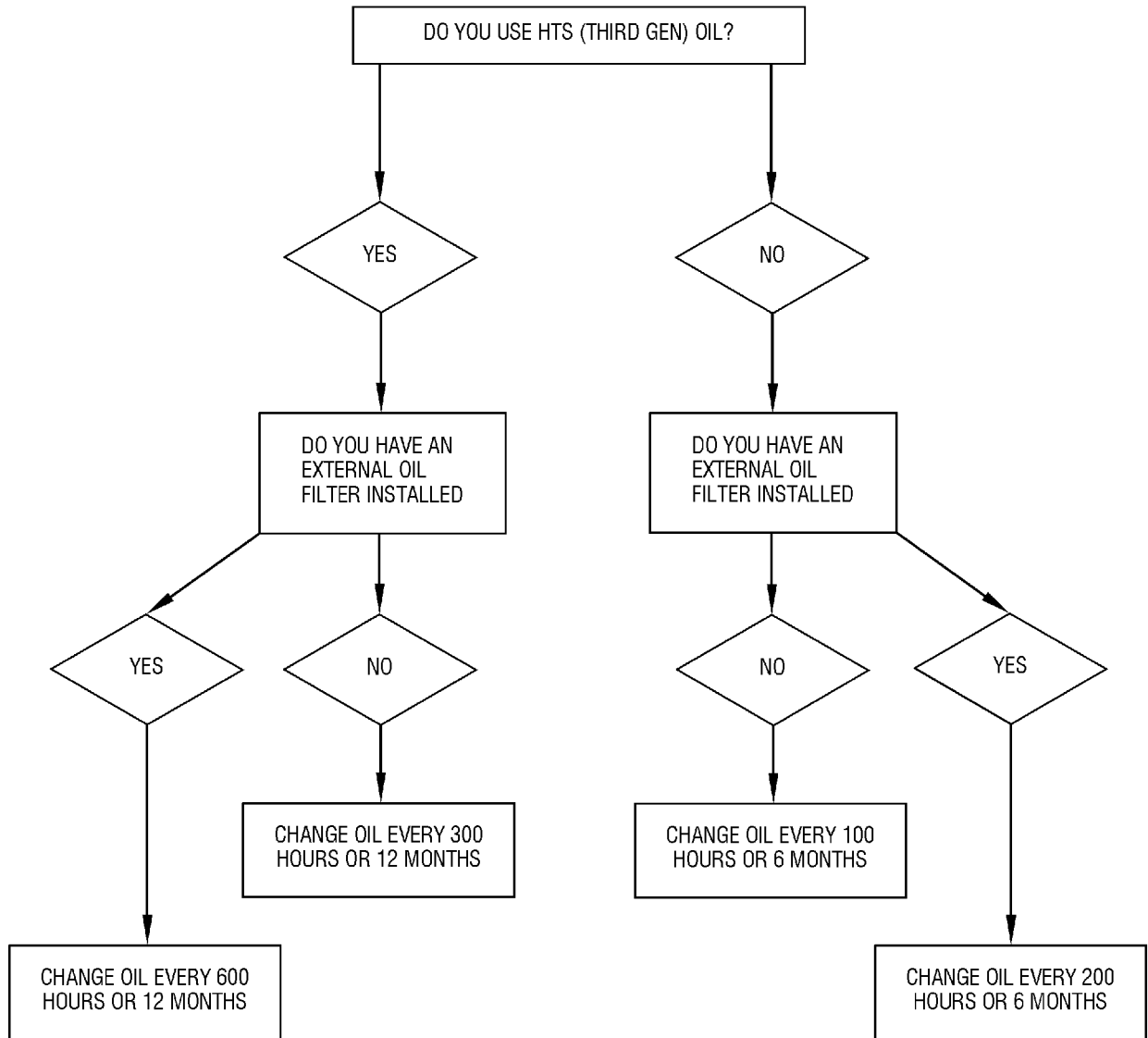
## M250-B17 SERIES OPERATION AND MAINTENANCE

Table 602 (cont)

Item	Inspection/Maintenance Action	Reference	✓	Initial
	<u>Other Scheduled Inspections</u> (cont)			
40	Inspect all uncoated and coated P/N 6846278 and 6871338 power turbine outer coupling nuts for corrosion.	M250-B17 TP CSL-1030		
	<b>NOTE:</b> Compliance with Rolls-Royce Commercial Engine Bulletin M250-B17 TP CEB-1088 and/or M250-B17 TP CEB-1134 removes this inspection requirement.			
	600 HR			
41	Make an installation rotating balance of the engine and propeller assembly at intervals not to exceed 600 hours. See <a href="#">para 1.C.(12)</a> , for more information concerning rotating balance requirements.	<a href="#">PARA 1.C.(12)</a> , this section		
42	Do the scavenge oil filter impending bypass function check per Facet Service Bulletin No. 090589 (Refer to <a href="#">Rolls-Royce TP CSL 1119</a> ) for aircraft equipped with this type of external scavenge filter system. Follow the Facet instructions and time intervals, or follow this recommended inspection interval each 600 hours.	N/A		
43	Check the fuel pump drive shaft on Sundstrand single element pump for spline wear.	<a href="#">PARA 1.C., 73-10-01</a>		
	<b>NOTE:</b> This inspection is not required for Argo-Tech (TRW) fuel pumps or Sundstrand fuel pumps P/N 23003114 and subsequent.			
	1500 HR			
44	Replace the fuel control filter assembly.	<a href="#">PARA 4.A., 73-20-02</a>		
	1750 HR			
45	Deleted			
46	Examine compressor case, blades, and vanes. Inspection frequency must be made as necessary by operating environment and condition of the compressor at the last inspection. In erosive and/or corrosive environment, examine case at least every 300 hours. Do not exceed 1750 hours without case inspection. 10X power magnification is recommended for corrosion pit inspection.	<a href="#">Para 1.C.(9)</a> , this section and <a href="#">PARA 5., 72-30-00</a>		
47	Heavy Maintenance Inspection (HMI). Heavy maintenance inspection must consist of gas producer turbine rotor replacement and inspection of assembled components by Rolls-Royce Authorized Maintenance Center (AMC). It is the responsibility of the operator to assure that the total time cycle life limits of specific parts listed in Section 05 are not exceeded.	N/A		

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**M250 OIL CHANGE FLOWCHART**



**NOTE:** Engines with dry spline starter generators must change the oil at each 100 hours or 6 months regardless of oil type.

Oil Flow Chart  
Figure 600

ACS062XA

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Table 603				
Inspection Checksheet				
Owner _____		Date _____		
A/C Make/Model _____		S/N _____	Reg. No. _____	TSN _____
Engine S/N _____		TSN _____	TSO _____	

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**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.

<u>Item</u>	<u>Inspection/Maintenance Action</u>	<u>Reference</u>	<input type="checkbox"/>	<u>Initial</u>
	<u>150 Hour Inspection</u>			
1	Examine for discharge the air tube inserts that are cocked or backing out of the scroll. If cocked or loose inserts are detected, check the engine for possible vibration causes.	PARA 4, 72-40-00 and PARA 1.C.(2), this section		
2	Inspect and clean the fuel nozzle. If no airframe mounted fuel filter is installed, inspect the fuel nozzle filter.	73-10-03, Maintenance Practices		
3	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, Table 202, items (1), (2), (3), (4),		

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Table 603 (cont)  
Inspection Checksheet

<u>Item</u>	<u>Inspection/Maintenance Action</u>	<u>Reference</u>	<u>✓</u>	<u>Initial</u>
	<u>300 Hour Inspection</u>			
	In addition to the 150 hour inspection items, perform the following:			
1	Clean the compressor with chemical wash solution if operating in a corrosive or erosive (contaminant-laden) environment.	PARA 6.B., 72-30-00		
2	Examine the engine for loose or missing bolts, broken or loose connections, security of mounting accessories, and broken or missing lockwire. Check accessible areas for obvious damage and signs of fuel, air, or oil leakage. Loose connections also include the requirement to examine the slippage marks of all B-nut connections in the engine control system.	72-00-00 Engine Servicing		
3	Check the mounting and support bolts to be sure they are tight, lockwired, and in good condition. Check the security of screws and rivets.	N/A		
4	Check the accessible fuel system components, lines, and connections for security, damage, or leakage. Accomplish with the boost pump on, if available.	N/A		
5	Check the P <sub>c</sub> filter for proper clamping and security.	PARA 2.B., 73-20-03		
6	Until M250 TP CEB-A-1193 is complied with, inspect the P <sub>c</sub> filter assembly as follows: Without disassembly or removal of the P <sub>c</sub> filter assembly from the mounting bracket, inspect using a 10X magnification glass 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 the assembly and comply with M250 TP CEB-A-1193.	N/A		
7	Remove the Scroll-to-Pc Filter Tube Assembly and inspect for cracks using a 10X power glass. Pay particular attention to the flared ends of the tube for cracks and to the areas beneath the floating ferrules for fretting damage. Tubes found to contain cracks and/or excessive fretting damage are to be replaced by new parts of the same part number as removed.	N/A		
	<b>NOTE:</b> Excessive fretting is present when the ferrule has chafed the tube sufficiently to wear a step that can be felt with a thumbnail or other inspection aid.			
8	With the Scroll-to-Pc Tube Assembly still removed and using a 10X power glass, inspect the elbow in the compressor scroll for distress, cracks, and proper alignment. No cracks are permissible.	N/A		
9	Check the fuel and propeller system control linkage for freedom of operation, full travel, and proper rigging. Check for excessively high throttle forces and security of linkage. Also, check for loose or worn linkage and linkage bolts.	PARA 1.A, 76-00-00		
10	Examine the compressor inlet guide vanes and visible blades and vanes for foreign object damage. Remove all foreign material that can be drawn into the compressor inlet.	PARA 5, 72-30-00		

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Table 603 (cont) Inspection Checksheet				
Item	Inspection/Maintenance Action	Reference	✓	Initial
	<u>300 Hour Inspection (cont)</u>			
11	Examine the compressor scroll for cracks or breaks at the anti-ice air valve and customer bleed port. If cracks or breaks are detected, check the engine for possible vibration causes.	PARA 1.C.(2), this section		
12	Check the anti-icing valve for security, worn parts, and correct operation. The anti-icing valve does not need to be removed or disassembled unless a problem is detected.	PARA 3., 75-10-01		
13	Examine the compressor mount inserts for looseness or oil leakage. Replace if loose and check engine for possible vibration and causes.	PARA 4.E. and F., 72-60-00 and PARA 1.C.(2), this section		
14	Examine the turbine support assemblies and engine exhaust ducts for condition of welded joints and for cracks and buckling. Check the exhaust duct clamps for correct installation, condition, and torque. Reference the appropriate airframe maintenance manual for torque.	PARA 8.A., 72-50-00		
15	Wet spline starter-generator gearshafts (new production of those replaced in accordance with the Rolls-Royce Commercial Engine Bulletin (M250-B17 TP CEB-1056)) do not need periodic inspection and lubrication. Clean and examine the other starter-generator gearshaft. Clean the female splitlines of the starter-generator and the male splines of the starter-generator with mineral spirits and the soft brush. Examine the splines in accordance with 72-60-00, Starter-generator Gearshaft Internal Spline Inspection.  Lubricate acceptable splines with grease (Aero-shell No. 22 or equivalent). Before reinstallation of the starter-generator, make sure torsional damper members of the starter-generator driveshaft are in hard contact with each other.	PARA 4.C., 72-60-00		
	<b>NOTE:</b> Inspect the starter-generator brushes for wear in accordance with the Aircraft Manual at the same time the spline inspection is made.			
16	Examine and clean the turbine pressure oil system check valve.	PARA 2.K., 72-60-00		
	<b>NOTE:</b> Check Valve P/N 23074872 and subsequent part numbers are not applicable to this inspection (these valves are considered "ON CONDITION").			
17	Inspect and clean the pressure oil tube screen assembly.	Item 4, Table 202, 72-50-00		
18	Measure the oil flow from the scavenge passage or external sump of the power turbine support and scavenge passage of the gas producer turbine support.  GP _____ PT _____	PARA 6.E., 72-50-00		

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Table 603 (cont) Inspection Checksheet				
Item	Inspection/Maintenance Action	Reference	✓	Initial
	<u>300 Hour Inspection (cont)</u>			
19	Examine, clean, and check magnetic drain plugs.	PARA 10, 72-00-00, Engine Servicing		
20	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, Table 202, items (1), (2), (3), (4),		
21	Clean the burner drain valve.	PARA 3, 72-40-00		
22	Inspect the ignition lead for burning, chafing, or cracking of conduit and loose connectors and broken lockwire.	74-20-02, Maintenance Practices		
23	Review the engine records for compliance with all mandatory bulletins, inspections, and airworthiness directives.	N/A		
24	Review the engine records for time or cycle limited parts, components, accessories, or modules.	N/A		
25	Enter the component changes, inspection compliance, etc., in the logbook as required.	N/A		
26	Drain the oil system and refill.			
	Oil changed at: 300 hours/6 months: (Optional) _____ 600 hours/12 months: _____  Maximum oil change interval is 600 hours or 12 months, whichever occurs first. Some operators experience and/or harsh environments can dictate oil changes at more frequent intervals.	PARA 10.F., 72-00-00, Engine Servicing		
26A.	Remove, examine, and clean the oil filter. Note accumulation of metal chips, debris, or carbon particles. Conduct further inspection of the lube system and/or engine gear train/bearings if metal chips or debris are found. See items 33 and 34 (300 Hour Inspection) if carbon particles are found.	PARA 1.C., 72- 60-00, Item 2, Table 202, 72-50-00		
	<b>NOTE:</b> Follow the STC manufacturer's recommendations regarding replacement/cleaning of external oil filter elements. Inspect removed elements for any accumulations of metal chips, debris, or carbon particles. It can prove helpful to cut apart disposable (paper) filter elements to facilitate this inspection. If chips, debris, or carbon particles are found, proceed with additional inspection/maintenance as outlined in item 26b.			

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Table 603 (cont) Inspection Checksheet				
Item	Inspection/Maintenance Action	Reference	✓	Initial
<u>300 Hour Inspection (cont)</u>				
26B.	Examine the magnetic chip detector plugs.	PARA 10., 72-00-00, Engine Servicing, Item 7, Table 202, 72-50-00		
<b>CAUTION:</b> INSPECTION FREQUENCY MUST BE BASED ON THE NATURE OF THE EROSIIVE AND/OR CORROSIVE ENVIRONMENT. THE OPERATING ENVIRONMENT CAN DICTATE A MORE FREQUENT INSPECTION INTERVAL. WHEN OPERATING IN A CORROSIVE AND/OR EROSIIVE ENVIRONMENT FOR NON-COATED COMPRESSOR WHEELS, THE INSPECTION MUST NOT EXCEED 300 HOURS OR 6 MONTHS. FOR COATED COMPRESSOR WHEELS, INSPECTION MUST NOT EXCEED 300 HOURS OR 12 MONTHS. FOR COMPRESSOR BLISKS, INSPECTION MUST NOT EXCEED 300 HOURS OR 12 MONTHS. IF ANY WHEEL EXHIBITS CORROSION AND/OR EROSION, THE INSPECTION REQUIREMENT MUST REVERT BACK TO 300 HOURS OR 6 MONTHS.				
27	Inspect the compressor case, blades, and vanes, when operating in an erosive and/or corrosive environment. 10X power magnification is recommended for corrosion pit inspection.	PARA 1.C.(9), this section and PARA 5., 72-30-00		
<b>CAUTION:</b> WHEN THERE IS EVIDENCE THAT THE FUEL PUMP FILTER HAS BEEN BYPASSED, THE GAS PRODUCER FUEL CONTROL INLET FILTER, THE FUEL NOZZLE FILTER, THE GOVERNOR FILTER, AND THE HIGH-PRESSURE FUEL FILTER, IF APPLICABLE, MUST BE CLEANED. (REFER TO SPECIAL INSTRUCTIONS, TABLE 604) IF ANY CONTAMINATION IS FOUND IN THE FUEL NOZZLE FILTER, THIS WILL REQUIRE THAT THE FUEL CONTROL 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.				
28	If the aircraft is equipped with an engine fuel filter differential pressure warning system, replace the throw-away filter only when an indication of contamination is obtained or every 300 hours, whichever comes first. If the aircraft is not equipped with a differential pressure warning system, replace the fuel filter every 300 hours unless operating experience demonstrates that smaller time increments are advisable. Before discarding the filter, inspect for signs of contaminants. If contaminants are found, examine the entire fuel system and clean if necessary. Verify Step 31 has been completed before reassembly.	PARA 1.F., 73-10-01		
29	Do a fuel pump bypass valve operation check when a fuel filter is replaced. <b>NOTE:</b> Applicable to Sundstrand/Pesco and Argo-Tech/TRW manufactured pumps only.	PARA 1.D., 73-10-01		
30	Purge air from the filter bowl area of the single element pump.	PARA 2.E., 73-00-00		

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Table 603 (cont) Inspection Checksheet				
Item	Inspection/Maintenance Action	Reference	✓	Initial
<u>300 Hour Inspection (cont)</u>				
31	Remove and disassemble the fuel nozzle. Clean and examine the fuel nozzle filter assembly. Reassemble and install the fuel nozzle.	73-10-03		
32	Purge air from the filter bowl area of the single element pump.	PARA 2.E., 73-00-00		
34	Examine and clean the No. 1 bearing oil pressure reducer.	PARA 3.A.(2), 72-30-00		
35	Visually inspect the turbine external sump. Clean internal carbonaceous deposits from the sump.	PARA 6.E.(5), 72-50-00, Item 11, Table 202, 72-50-00		
36	Inspect the power turbine support scavenge strut. Clean internal carbonaceous deposits from the strut.	PARA 6.F., 72-50-00 Item 10, Table 202, 72-50-00		
37	Remove, clean and inspect the Pc filter every 300 hours or earlier as engine performance dictates.	73-20-03, Maintenance Practices		
38	Examine the thermocouple assembly (TOT/MGT).	PARA 2.B., 77-20-01, Maintenance Practices		
<u>Other Scheduled Inspections</u>				
500 Hour/1 Year				
1	Inspect all uncoated and coated P/N 6846278 and 6871338 power turbine outer coupling nuts for corrosion.	M250-817 TP CSL- 1030		
	<u>NOTE:</u> Compliance with Rolls Royce Commercial Engine Bulletin M250- B17 TP CEB-1088 and/or M250-B17 TP CEB-1134 removes this inspection requirement.			
<u>600 Hour Inspection</u>				
1	Make an installation rotating balance of the engine and propeller assembly at intervals not to exceed 600 hours. See <a href="#">PARA 1.C.(12)</a> for more information concerning rotating balance requirements.	PARA 1.C.(12), this section		
2	Do the scavenge oil filter impending bypass function check per Facet Service Bulletin No. 090589 (Ref. to Rolls-Royce TP <a href="#">CSL 1119</a> ) for aircraft equipped with this type of external scavenge filter system. Follow the Facet instructions and time intervals or follow this recommended inspection interval each 600 hours.	N/A		

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Table 603 (cont) Inspection Checksheet				
Item	Inspection/Maintenance Action	Reference	✓	Initial
	<u>600 Hour Inspection</u> (cont)			
3	Check the fuel pump drive shaft on the Sundstrand single element pump for spline wear.	PARA 1.C., 73-10-01		
	<b>NOTE:</b> This inspection is not required for Argo-Tech (TRW) fuel pumps or Sundstrand fuel pumps P/N 23003114 and subsequent.			
	<u>1500 Hour Inspection</u>			
1	Replace the fuel control filter assembly.	PARA 4.A., 73-20-02		
	<u>1750 Hour Inspection</u>			
1	Examine the compressor case, blades, and vanes. Inspection frequency must be made as necessary by operating environment and condition of the compressor at the last inspection. In an erosive and/or corrosive environment, examine the case at least every 300 hours. Do not exceed 1750 hours without case inspection. 10X power magnification is recommended for corrosion pit inspection.	Para 1,C.(9), this section and PARA 5., 72-30-00		
2	Heavy Maintenance Inspection (HMI). Heavy maintenance inspection must consist of gas producer turbine rotor replacement and inspection of assembled components by Rolls- Royce Authorized Maintenance Center (AMC). It is the responsibility of the operator to make sure that the total time cycle life limits of specific parts listed in Section 05 are not exceeded.	N/A		

## C. Special Inspections

Special inspections are required when the engine has been subjected to abnormal operating conditions, when engine damage is suspected, or when associated parts are removed from the engine. The special occurrence, the component or system to be inspected, and the nature of the inspection are given in [Table 604](#).

## (1) Gearbox-Compressor Mounting Insert Inspection

- (a) Examine the inserts for looseness when the compressor is removed from the gearbox. (Refer to [Insert Inspection, PARA 4.E., 72-60-00](#).)

## (2) Vibration Inspection

- (a) If engine vibration is suspected, or any of the vibration symptoms listed in the 100-hour inspection ([Table 602](#)) encountered, inspect the compressor and return it to an Authorized Maintenance Center (AMC) if any of the following conditions are encountered:

- 1 Remove the top half of the compressor case and check all blades and vanes for possible foreign object damage and/or for bent or distorted vanes. Blade and vane condition must be within the limits given in [Blade and Vane Inspection, PARA 5, 72-30-00](#).
- 2 Remove the compressor assembly from the engine.
- 3 Check the scroll outlet ports (turning vanes) for evidence of damage. Damage is indicative of impeller vane tip or shroud failure.

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