

The overhaul/refurbishment process is typically based on the borescope inspection of each LM6000 CTG in conjunction with the total engine hours, the factored fired hours since the last repair and/or overhaul, and other applicable engine history. The following scope is planned for execution in order to return the engine to operations for this specific project:

General Engine Refurbishment Process

1. Receive CTG into Depot and Disassemble into Engine Modular Units

- Incoming inspection and photograph of CTG arrival
- Report of missing and damaged external hardware
- Disassemble into Engine Modular Units, clean and inspect as required
 - Low Pressure Compressor
 - High Pressure Compressor
 - Combustor Module
 - High Pressure Turbine
 - Low Pressure Turbine

2. Condition Based Overhaul of Accessories and SB Implementation

- Lube and scavenge pump with applicable SB implementation
- Hydraulic control unit, variable geometry pump and starter motor
- Engine actuators and implement applicable SB

3. Condition Based Bearing Overhaul or Replacement with new including Associated Work and SB implementation

- Disassemble the Compressor front frame, Compressor rear frame, Turbine rear frame, accessory gear box and inlet gear box
- Overhaul or replace with new of all engine bearings
- As required overhaul of cold end teflon seals (# 1 bearing and # 3 bearing)
- Inspect, clean and as required re-coat of Air Collector
- Implement all applicable SB's
- Reassemble with new consumables
- Inspect and as required overhaul of #1 bearing stationary air seal or replacement with new condition

4. Inlet Guide Vane (IGV), Low Pressure Compressor Rotor (LPCR), and Low Pressure Compressor Stator (LPCS) Repair

- Condition based IGV disassembly, strip, and recoat
- Condition based LPCR disassembly and disk/shaft overhaul
- Condition based LPCS disassembly and stage 3 shroud overhaul
- Labor and consumables to reassemble the IGV and LPC

5. Hot Section Overhaul

- Condition based overhaul of all airfoils, stage 1 and 2 blades and nozzles or replacement with new Chromalloy single crystal extended life hardware
- Condition based overhaul of HPT stage 1 and 2 shrouds or replace with new or OH
- Applicable SB implementation

6. Overhaul of the Combustion Chamber

- Condition based overhaul of Single-annular Combustor (SAC)

7. Clean, flow check and as needed overhaul of all 30 Fuel Nozzles

- Clean, flow and recertify 30 Fuel Nozzles

8. HPC Repair and SB Implementation

- As required overhaul of HPC rotor spools and stator cases
- As required overhaul of all damaged blades and vanes or replacement with new or serviceable condition hardware
- Applicable SB implementation

9. Assembly of the Engine

- Labor and consumables required to reassemble engine
- Applicable SB implementation

10. As Required Acceptance Test of Completed Engine

Typical SB Implementation for LM6000 Overhaul					
Service Bulletin No.	Title	Compliance Category	Compliance Level	Issue Date	Module
125	Balance Piston Replacement	C	F/D	25-Aug-99	LPT
128	No. 4 Bearing Rotating Air, Seal Inspection	C	D	12-Sep-07	HPC
148	Introduction of Improved, No. 1 Bearing Stationary and Rotating Air/Oil Seals	C	F/D	28-Jun-02	LPC
165	Safety-Wire LPT Rotor, XNSD Electrical Connector	C	F	15-Jan-02	LPT
172	Introduction of Improved Inlet Gearbox Spanner Nut	C	D	21-Aug-01	IGB
178	Lube and Scavenge Oil Manifold Nipple Replacement	C	F	30-Jan-02	GTA
181	Variable Bypass Valve Actuating Ring Bolt Inspection and Re-torque	C	F	25-Jul-02	CFF
202	Acoustic Sensor (Pressure Transducer) Adapter Replacement	C	F	18-Mar-04	GTA
203	Stg 5 VSV Lever Arm Improvement - High Boss Stator	O	F/D	12-Apr-04	HPC
212	LPC Stg 3 Bushings Replacement	R	F	2-Aug-04	LPC
213	HPC Stator Stg 3-5 VSV Bushings Replacement	C	F	4-Dec-06	HPC
220	Introduction of Inlet Gearbox Assembly PN 9185M71G31	C	D	17-Sep-07	IGB
229	Stage 3 through 5 High Pressure Compressor Rotor Blades	C	F/D	25-Jan-07	HPC
232	PX 36 Sensor Electrical connection Relocation	R	F/D	21-Sep-07	GTA
237	VBV Clevis Bolt Length Increase	R	F/D	4-Aug-04	CFF
239	Improved LPT Coupling Nut	C	F/D	29-Jan-09	LPT
240	Improved Forward Fan Shaft Coupling Nut	C	F/D	29-Jan-09	LPC