



TYPE-CERTIFICATE DATA SHEET

No. IM.E.228

for Engine
LTS101 series engines

Type Certificate Holder
Intermountain Turbine Services, Inc.
270 South 1060 West
Lindon, Utah 84042
USA

For Models:

LTS101-600A-2
LTS101-600A-3
LTS101-600A-3A
LTS101-650B-1
LTS101-650B-1A
LTS101-650C-2
LTS101-650C-3
LTS101-650C-3A
LTS101-700D-2
LTS101-750B-1
LTS101-750B-2
LTS101-750C-1
LTS101-850B-2



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I. General

1. Type / Models

LTS101 / LTS101-600A-2, -600A-3, -600A-3A, -650B-1, -650B-1A, -650C-2, -650C-3, -650C-3A, -700D-2, -750B-1, -750B-2, -750C-1, -850B-2

2. Type Certificate Holder

Intermountain Turbine Services, Inc.
270 South 1060 West
Lindon, Utah 84042
USA

3. Manufacturer

Intermountain Turbine Services, Inc.

Previous:
Honeywell International Inc.
111 South 34th Street
Phoenix, Arizona 85034
USA

4. Date of Application

23rd October 2006 for LTS101-600A-3A
19th June 2006 for LTS101-700D-2
22nd July 2009 for LTS101-850B-2

For all other models: Application had been made to individual European National Aviation Authorities (NAA) before 28 September 2003.

5. EASA Type Certification Date

EASA Type Certification of all LTS101 series engine models except the LTS101-600A-3A, and LTS101-700D-2 and LTS101-850B-2 is granted, in accordance with Article 2 paragraph 3(a)(i) of EU Commission Regulation EC 1702/2003, on the basis of EU Member State Validations prior to 28 September 2003, listed in the following table:

	CAA – U.K.	DGAC – France	LBA – Germany	Austro Control – Austria
LTS101-600A-2		M-IM 5 Edition 10 dated 10 July 1998 or earlier		TW 027 – ACG 13 June 1997



LTS101-600A-3				TW 027 – ACG 13 June 1997
LTS101-600A-3A	EASA Certification date: 30 July 2008			
LTS101-650B-1	Validation letter before 28 March 1989	M-IM 5 Edition 10 dated 10 July 1998 or earlier	Motor-Kennblatt Nr. 7016 08 December 1982	TW 027 – ACG 13 June 1997
LTS101-650B-1A				TW 027 – ACG 13 June 1997
LTS101-650C-2	Validation letter before 28 March 1989	M-IM 5 Edition 10 dated 10 July 1998 or earlier	Motor-Kennblatt Nr. 7016 20 May 1981	TW 027 – ACG 13 June 1997
LTS101-650C-3	Validation letter before 28 March 1989	M-IM 5 Edition 10 dated 10 July 1998 or earlier	Motor-Kennblatt Nr. 7016 20 May 1981	TW 027 – ACG 13 June 1997
LTS101-650C-3A			Motor-Kennblatt Nr. 7016 22 February 1989	TW 027 – ACG 13 June 1997
LTS101-700D-2	EASA Certification date: 25 February 2008			
LTS101-750B-1	Validation letter dated 28 March 1989	M-IM 5 Edition 10 dated 10 July 1998 or earlier	Motor-Kennblatt Nr. 7016 10 February 1987	TW 027 – ACG 13 June 1997
LTS101-750B-2		M-IM 5 Edition 10 dated 10 July 1998 or earlier		TW 027 – ACG 13 June 1997
LTS101-750C-1	Validation letter before 28 March 1989	M-IM 5 Edition 10 dated 10 July 1998 or earlier	Motor-Kennblatt Nr. 7016 22 February 1989	TW 027 – ACG 13 June 1997
LTS101-850B-2	EASA Certification date: 19 August 2010			

II. Certification Basis

1. State of Design Authority Certification Basis

See FAA TCDS E5NE



2. EASA Certification Basis

2.1. Airworthiness Standards

14 CFR 33 up to and including Amendment 5, effective 01 March 1974

2.2. Special Conditions (SC)

The following Special Condition applies to the LTS101-600A-2, LTS101-600A-3, LTS101-600A-3A and LTS101-700D-2.

Clutch Requirements: LTS101-600A-2 and LTS101-600A-3 – 14 CFR 29, Amendment 1, dated 12 August 1965, paragraph 29.923(j)

LTS101-600A-3A and LTS101-700D-2 – CS-29, initial issue dated 14 November 2003, paragraph CS 29.923(j) (equivalent to 14 CFR 29.923(j))

The following Special Condition applies to the LTS101-600A-3A, and LTS101-700D-2 and LTS101-850B-2.

Ingestion of Rain and Hail: CS-E, initial issue dated 24 October 2003, paragraph CS-E 790

2.3. Equivalent Safety Findings (ESF)

None

2.4. Deviations

None

2.5. Environmental Protection

Fuel Venting per ICAO Annex 16, Volume II, 2nd Edition, November 1993, Part 2, Chapter 2.



III. Technical Characteristics

1. Type Design Definition

The Type Design Definition is in accordance with the following Intermountain Turbine Services, Inc. Engine Parts Lists:

LTS101-600A-2	4-001-000-16
LTS101-600A-3	4-001-000-26
LTS101-600A-3A	4-001-000-31
LTS101-650B-1	4-001-000-12
LTS101-650B-1A	4-001-000-18
LTS101-650C-2	4-002-000-04
LTS101-650C-3	4-002-000-05
LTS101-650C-3A	4-002-000-07
LTS101-700D-2	4-001-000-33
LTS101-750B-1	4-001-000-25
LTS101-750B-2	4-001-000-28
LTS101-750C-1	4-002-000-06
LTS101-850B-2	4-001-000-42

and later approved Engine Parts Lists published in the applicable Engine Maintenance Manuals.

The Type Design Definition includes essential engine accessories but excludes the starter-generator.

2. Description

The engine comprises a single stage axial and single stage centrifugal compressor, reverse flow annular combustor, single stage gas generator turbine, single stage free power turbine driving a front-mounted reduction gearbox, and mechanical control system.

3. Equipment

The engine equipment list is included in the Type Design Definition.

4. Dimensions

	Overall Length mm	Overall Width mm	Overall Height mm
LTS101-600A-2	786	492	600
LTS101-600A-3	802	492	630
LTS101-600A-3A	802	492	630
LTS101-650B-1	789	470	644
LTS101-650B-1A	786	470	644
LTS101-650C-2	793	574	494
LTS101-650C-3	793	574	494
LTS101-650C-3A	795	574	494



LTS101-700D-2	802	492	630
LTS101-750B-1	789	470	644
LTS101-750B-2	823	504	627
LTS101-750C-1	795	574	512
LTS101-850B-2	789	470	644

5. Dry Weight

	Weight ⁽¹⁾ kg
LTS101-600A-2	115
LTS101-600A-3	120
LTS101-600A-3A	120
LTS101-650B-1	127
LTS101-650B-1A	115
LTS101-650C-2	109
LTS101-650C-3	109
LTS101-650C-3A	110
LTS101-700D-2	127 ⁽²⁾
LTS101-750B-1	134
LTS101-750B-2	124
LTS101-750C-1	111
LTS101-850B-2	128 ⁽²⁾

(1) Includes essential engine accessories but excludes the starter-generator.

(2) Dry weight does not include airframe mounted electronic overspeed controller (1.2kg)

6. Ratings

6.1 All Engine Operative:

	Power ⁽¹⁾ kW	
	Take-Off (5 minutes) Sea Level	Maximum Continuous Sea Level
LTS101-600A-2	459	440
LTS101-600A-3	459	440
LTS101-600A-3A	485	466
LTS101-650B-1	410 ⁽²⁾	410 ⁽³⁾
LTS101-650B-1A	447	410
LTS101-650C-2	468	441
LTS101-650C-3	470	446
LTS101-650C-3A	470	446



LTS101-700D-2	546	485
LTS101-750B-1	410 ⁽⁴⁾	410 ⁽⁵⁾
LTS101-750B-2	515	491
LTS101-750C-1	510	487
LTS101-850B-2	582	556

6.2 One Engine Inoperative (OEI):

	Power ⁽¹⁾ kW	
	30 Minute OEI Sea Level	2½ Minute OEI Sea Level
LTS101-600A-2		
LTS101-600A-3		
LTS101-600A-3A		
LTS101-650B-1	441 ⁽⁶⁾	441 ⁽⁷⁾
LTS101-650B-1A	447	485
LTS101-650C-2	485	503
LTS101-650C-3	485	503
LTS101-650C-3A	485	503
LTS101-700D-2		
LTS101-750B-1	518 ⁽⁸⁾	542 ⁽⁹⁾
LTS101-750B-2	528	553
LTS101-750C-1	523	548
LTS101-850B-2	602	625

- (1) The engine ratings are based on dry sea level ICAO standard atmospheric conditions, with no external accessory loads and no air bleed. The quoted ratings are obtainable on a test stand with the fuel, oil, the reference intake and exhaust ducts as specified in the relevant Installation Instructions / Manual.
- (2) Available to ambient temperature of 29°C.
- (3) Available to ambient temperature of 22°C.
- (4) Available to ambient temperature of 41°C.
- (5) Available to ambient temperature of 33°C.
- (6) Available to ambient temperature of 25°C.
- (7) Available to ambient temperature of 33°C.
- (8) For LTS101-750B-1 engines in compliance with Intermountain Turbine Services, Inc. SB LTS 101B-72-00-0161, note (1) above applies. For LTS101-750B-1 engines not in compliance with Intermountain Turbine Services, Inc. SB LTS 101B-72-00-0161, 441 kW is available to ambient temperature of 40°C.
- (9) For LTS101-750B-1 engines in compliance with Intermountain Turbine Services, Inc. SB LTS 101B-72-00-0161, note (1) above applies. For LTS101-750B-1 engines not in compliance with Intermountain Turbine Services, Inc. SB LTS 101B-72-00-0161, 441 kW is available to ambient temperature of 48°C.



7. Control System

The control system is mechanical. Position inputs are required for the power lever, which controls gas generator speed, and the speed selector lever, which controls power turbine speed. Electronic overspeed protection is provided for the power turbine. See the applicable Installation Instructions / Manual for details specific to each engine.

8. Fluids (Fuel, Oil, Coolant, Additives)

See the applicable Engine Maintenance Manual for specific approved oil, fuel and additives.

9. Aircraft Accessory Drives

9.1 Starter-Generator Pad:

	Type	Rotation ⁽⁴⁾	Speed Ratio To Gas Generator	Maximum Torque Nm		
				Starting ⁽⁵⁾	Transient	Continuous
LTS101-600A-2	AND20001 Modified ⁽¹⁾	CW	0.2512	56	17 ⁽⁶⁾	5.2 ⁽⁷⁾
LTS101-600A-3 LTS101-600A-3A LTS101-650B-1 LTS101-650B-1A	AND20001 Modified ⁽¹⁾	CW	0.2512	56	17 ⁽⁶⁾	8.0 ⁽⁷⁾
LTS101-650C-2 LTS101-650C-3 LTS101-650C-3A	AND20001 Modified ⁽²⁾	CW	0.2512	56	17 ⁽⁶⁾	8.0 ⁽⁷⁾
LTS101-700D-2	AND20001 Modified ⁽¹⁾	CW	0.2512	56	17 ⁽⁶⁾	8.0 ⁽⁷⁾
LTS101-750B-1	AND20001 Modified ⁽²⁾	CW	0.2512	56	17 ⁽⁶⁾	8.0 ⁽⁷⁾
LTS101-750B-2	AND20001 Modified ⁽¹⁾	CW	0.2512	56	17 ⁽⁶⁾	8.0 ⁽⁷⁾
LTS101-750C-1	AND20001 Modified ⁽²⁾	CW	0.2512	56	17 ⁽⁶⁾	8.0 ⁽⁷⁾
LTS101-850B-2	AND20001 Modified ⁽¹⁾	CW	0.2512	65	17 ⁽⁶⁾	8.0 ⁽⁷⁾



9.2 Accessory Pad:

	Type	Rotation ⁽⁴⁾	Speed Ratio To Power Turbine	Maximum Continuous Torque Nm
LTS101-600A-2	AND20002 Modified ⁽¹⁾	CW	0.3265	8.5
LTS101-600A-3 LTS101-600A-3A				
LTS101-650B-1 LTS101-650B-1A	AND20002 Modified ⁽¹⁾	CW	0.3265	8.5
LTS101-650C-2 LTS101-650C-3 LTS101-650C-3A	AND20002 Modified ⁽¹⁾	CW	0.3406	8.5
LTS101-700D-2				
LTS101-750B-1				
LTS101-750B-2				
LTS101-850B-2				
LTS101-750C-1	AND20002 Modified ⁽¹⁾	CW	0.3406	8.5
LTS101-850B-2				

9.3 Spare Pad:

	Type	Rotation ⁽⁴⁾	Speed Ratio To Power Turbine	Maximum Continuous Torque Nm
LTS101-600A-2 LTS101-600A-3 LTS101-600A-3A	AND20000 Modified ⁽¹⁾⁽³⁾	CCW	0.5375	2.3
LTS101-650B-1				
LTS101-650B-1A	AND20000 Modified ⁽¹⁾⁽³⁾	CCW	0.5375	1.2
LTS101-650C-2 LTS101-650C-3 LTS101-650C-3A				
LTS101-700D-2				
LTS101-750B-1				
LTS101-750B-2				
LTS101-750C-1				
LTS101-850B-2				

- (1) Limit pad speed and maximum loads modified. See the applicable Installation Instructions / Manual for further details.
- (2) See Figure 6.7 of the applicable Installation Instructions / Manual for pad definitions.
- (3) Pad pilot diameter modified to 41.20 mm; pad spline pitch diameter modified to 11.64 mm.
- (4) CW=clockwise; CCW=counter-clockwise.
- (5) Engine starting torque and speed requirements are specified in the applicable Installation Instructions / Manual.
- (6) To be used in generator mode only, with a time limit of 30 seconds.



- (7) If the starter-generator rating is more than 150 amps, the continuous electrical load must be limited to 150 amps when the gas generator speed is less than 43,100 rpm.

10. Maximum Permissible Air Bleed Extraction

The maximum permissible air bleed extraction is 5% of the inlet airflow at standard sea level static conditions.

IV. Operating Limitation

1. Temperature Limits

1.1 Maximum Measured Gas Turbine Temperature:

	Temperature °C					
	2½ - Minute OEI	30- Minute OEI	Take-off (5 minutes)	Maximum Continuous	Starting	Transient ⁽¹⁾
LTS101-600A-2			782 ⁽²⁾	763	899 ⁽³⁾	843 ⁽³⁾
LTS101-600A-3			786 ^(2, 5)	765 ⁽⁵⁾	899 ⁽⁴⁾	847 ⁽⁴⁾
LTS101-600A-3A			786 ⁽²⁾	765	899 ⁽⁴⁾	847 ⁽⁴⁾
LTS101-650B-1	832	796	782 ⁽²⁾	763	899 ⁽³⁾	843
LTS101-650B-1A	807	771	771 ⁽²⁾	738	899 ⁽³⁾	843
LTS101-650C-2	832	796	782	763	899 ⁽³⁾	843
LTS101-650C-3	832	796	782	763	899 ⁽³⁾	843
LTS101-650C-3A	832	796	782	763	899 ⁽³⁾	843
LTS101-700D-2			923 ⁽²⁾	890	944 ⁽³⁾	944 ⁽²⁾
LTS101-750B-1	836	800	786 ⁽²⁾	765	899 ⁽⁴⁾	847 ⁽⁴⁾
LTS101-750B-2	822	799	786	765	899 ⁽⁴⁾	847 ⁽⁴⁾
LTS101-750C-1	822	799	786	765	899 ⁽⁴⁾	847 ⁽⁴⁾
LTS101-850B-2	892	875	848	828	915 ⁽⁴⁾	915 ⁽⁴⁾

- (1) The transient limits are not to be used for increased power operation during normal take-off.
(2) For the LTS101-600A-2, -600A-3 and -600A-3A engine models, the transient measured exhaust gas temperature must not exceed the take-off measured exhaust gas temperature for more than 22 seconds. For the LTS101-650B-1, -650B-1A, and -750B-1 engine models, the transient measured exhaust gas temperature must not exceed the take-off measured exhaust gas temperature for more than 22 seconds and never exceed 815°C at any time during normal take-off operation. For the LTS101-700D-2, the starting and transient measured gas temperatures must not exceed the take-off measured gas temperature for more than 30 seconds.
(3) Time limit 12 seconds above 832°C.
(4) Time limit 12 seconds above 836°C for the LTS101-600A-3, -600A-3A and -750B-1 engine models, and 12 seconds above 822°C for the LTS101-750B-2 and 750C-1 engine models, and 12 seconds above 892°C for the -850B-2 engine model.



- (5) Applicable only if Intermountain Turbine Services, Inc. SBs LT 101-72-50-0126 and LT 101-72-50-0157 are incorporated. For all other LTS101-600A-3 engines, the maximum measured gas temperature shall be 749°C at the take-off rating and 735°C at the maximum continuous rating.

1.2 Maximum Oil Inlet Temperature:

	Ambient Temperature less than 38°C	Ambient Temperature at or above 38°C
LTS101-600A-2 LTS101-600A-3 LTS101-600A-3A LTS101-650B-1 ⁽¹⁾ LTS101-650B-1A	99°C	110°C ⁽²⁾
LTS101-650C-2 LTS101-650C-3 LTS101-650C-3A	105°C	110°C ⁽²⁾
LTS101-700D-2 LTS101-750B-1 LTS101-750B-2	99°C	110°C ⁽²⁾
LTS101-750C-1	105°C	110°C ⁽²⁾
LTS101-850B-2	99°C	110°C ⁽²⁾

- (1) 10°C minimum oil temperature for operation above ground idle. 65°C minimum oil temperature during sustained steady state power.
(2) Oil temperature limit also applies for OEI conditions.

2. Speed Limits

2.1 All Engine Operative:

		Speed rpm ⁽¹⁾⁽²⁾⁽³⁾		
		Take-Off (5 Minutes)	Maximum Continuous	Transient
LTS101-600A-2	Output Shaft Gas Generator	6,085 49,638	6,085 49,159	6,300 50,548
LTS101-600A-3	Output Shaft Gas Generator	6,085 49,830 ⁽⁴⁾	6,085 49,255 ⁽⁴⁾	6,300 50,787 ⁽⁴⁾
LTS101-600A-3A	Output Shaft Gas Generator	6,780 49,830	6,780 49,225	7,200 50,787
LTS101-650B-1	Output Shaft Gas Generator	6,120 49,638	6,120 49,159	6,365 50,548
LTS101-650B-1A	Output Shaft Gas Generator	6,085 49,225	6,085 48,394	6,300 50,548
LTS101-650C-2	Output Shaft	9,545	9,545	9,784



	Gas Generator	49,638	49,159	50,548
LTS101-650C-3	Output Shaft	9,545	9,545	9,784
	Gas Generator	49,638	49,159	50,548
LTS101-650C-3A	Output Shaft	9,545	9,545	9,784
	Gas Generator	49,638	49,159	50,548
LTS101-700D-2	Output Shaft	6,780	6,780	7,404 ⁽⁵⁾
	Gas Generator	51,026	50,164	51,313
LTS101-750B-1	Output Shaft	6,140	6,140	6,580 ⁽⁶⁾
	Gas Generator	49,830	49,255	50,787
LTS101-750B-2	Output Shaft	6,140	6,140	6,580 ⁽⁶⁾
	Gas Generator	49,830	49,255	50,787
LTS101-750C-1	Output Shaft	9,545	9,545	9,930
	Gas Generator	49,830	49,255	50,787
LTS101-850B-2	Output Shaft	6,780	6,780	7,380 ⁽⁵⁾
	Gas Generator	51,029	50,455	52,178

2.2 One Engine Inoperative (OEI) and Autorotation:

		Speed rpm ⁽¹⁾⁽²⁾⁽³⁾		
		2½ -Minute OEI	30-Minute OEI	Autorotatio n
LTS101-600A-2	Output Shaft			6,300
	Gas Generator			
LTS101-600A-3	Output Shaft			6,300
	Gas Generator			
LTS101-600A-3A	Output Shaft			6,780
	Gas Generator			
LTS101-650B-1	Output Shaft	6,120	6,120	6,365
	Gas Generator	50,548	50,169	
LTS101-650B-1A	Output Shaft	6,085	6,085	6,300
	Gas Generator	50,169	49,255	
LTS101-650C-2	Output Shaft	9,545	9,545	9,930
	Gas Generator	50,548	50,169	
LTS101-650C-3	Output Shaft	9,545	9,545	9,930
	Gas Generator	50,548	50,169	
LTS101-650C-3A	Output Shaft	9,545	9,545	9,930
	Gas Generator	50,548	50,169	
LTS101-700D-2	Output Shaft			6,780
	Gas Generator			
LTS101-750B-1	Output Shaft	6,140	6,140	6,460
	Gas Generator	50,787	50,169	
LTS101-750B-2	Output Shaft	6,140	6,140	6,460
	Gas Generator	50,787	50,165	
LTS101-750C-1	Output Shaft	9,545	9,545	9,930
	Gas Generator	50,787	50,165	
LTS101-850B-2	Output Shaft	6,780	6,780	6,780
	Gas Generator	51,938	51,699	



- (1) Speed ratio Output Shaft to Power Turbine: 0.1612 for LTS101-600A-2, -600A-3, -600A-3A and -650B-1A; 0.1654 for LTS101-650B-1, -750B-1, -750B-2 and -700D-2 and -850B-2; 0.2632 for LTS101-650C-2, -650C-3, -650C-3A and -750C-1.
- (2) 100% Power Turbine speed: 37,000 rpm for LTS101-600A-2, -600A-3, -600A-3A and -700D-2; 36,281 rpm for LTS101-650B-1, -750B-1, and -750B-2 and -850B-2; 37,211 rpm for LTS101-650B-1A; 36,265 rpm for LTS101-650C-2, -650C-3, -650C-3A and -750C-1.
- (3) 100% Gas Generator speed: 47,870 rpm for all models.
- (4) Applicable only if Intermountain Turbine Services, Inc. SBs LT 101-72-50-0126 and LT 101-72-50-0157 are incorporated. For all other LTS101-600A-3 engines, the limits are the same as those for the -600A-2.
- (5) Time limit 5 seconds above 6,780 rpm.
- (6) Time limit 12 seconds above 6,460 rpm.

3. Maximum Permissible Output Shaft Torque Limits (Nm)

	Torque Nm				
	2½ - Minute OEI	30- Minute OEI	Take-off (5 minutes)	Maximum Continuous	Transient
LTS101-600A-2			733	704	805
LTS101-600A-3			733	704	805
LTS101-600A-3A			790	761	869 ⁽¹⁾
LTS101-650B-1	805	805	704	704	880
LTS101-650B-1A	805	733	733	704	880
LTS101-650C-2	519	500	484	454	568
LTS101-650C-3	519	500	484	454	568
LTS101-650C-3A	519	500	484	454	568
LTS101-700D-2			838	769	983 ⁽¹⁾
LTS101-750B-1	872	832	809	769	983
LTS101-750B-2	872	832	809	769	983
LTS101-750C-1	565	538	525	498	651
LTS101-850B-2	872	832	809	769	983

(1) Time limit 30 seconds above take-off limit.

4. Pressure Limits

4.1 Fuel Pump Inlet pressure:

For the LTS101-600A-2 and -600A-3 engine models, the fuel pressure limits are 103 kPa absolute minimum and 310 kPa absolute maximum. For all other engine models, the fuel system provides



suction lift capability without any external assistance. See the applicable engine Installation Instructions for further details.

4.2 Oil Pressure:

	Pressure kPa gauge			
	Normal Operation	Minimum Condition 1 ⁽³⁾	Minimum Condition 2 ⁽⁶⁾	Maximum Transient
LTS101-600A-2	552-689 ⁽²⁾	138 ⁽⁴⁾		1380 ⁽⁷⁾
LTS101-600A-3	621-689 ⁽²⁾	138 ⁽⁵⁾	345	827 ⁽⁸⁾
LTS101-600A-3A	621-689 ⁽²⁾	138 ⁽⁵⁾	345	827 ⁽⁸⁾
LTS101-650B-1	552-689 ⁽²⁾	276 ⁽⁵⁾	345	827 ⁽⁸⁾
LTS101-650B-1A	552-689 ⁽¹⁾	138 ⁽⁴⁾		1380 ⁽⁷⁾
LTS101-650C-2	552-689 ⁽²⁾	138 ⁽⁵⁾	345	827 ⁽⁸⁾
LTS101-650C-3				
LTS101-650C-3A				
LTS101-700D-2				
LTS101-750B-1	552-689 ⁽²⁾	276 ⁽⁵⁾	345	827 ⁽⁸⁾
LTS101-750B-2	621-689 ⁽²⁾	138 ⁽⁵⁾	345	827 ⁽⁸⁾
LTS101-750C-1	552-689 ⁽²⁾	138 ⁽⁵⁾	345	827 ⁽⁸⁾
LTS101-850B-2	552-689 ⁽²⁾	276 ⁽⁵⁾	345	827 ⁽⁸⁾

- (1) Maximum continuous power.
- (2) Maximum continuous and above with oil temperature greater than 65°C.
- (3) See notes (4) and (5) below for definition.
- (4) Flight idle and below.
- (5) Flight idle, oil inlet temperature greater than 10°C.
- (6) Flight idle, oil inlet temperature at or below 10°C.
- (7) Starting at ambient temperature less than -29°C for a duration not to exceed 2.5 minutes.
- (8) During oil warm up from 10°C to 65°C. Spikes to 2410 kPa gauge.

5. Installation Assumptions:

The installation assumptions are quoted in the applicable Installation Instructions/Manual.

6. Time Limited Dispatch (TLD)

All engine systems and equipment must be functional prior to aircraft take-off. LTS101 series engines are not herein approved for Time Limited Dispatch with any systems or equipment inoperative.

For installed engines, consult the relevant Installation Instructions / Manual and rotorcraft MMEL.



7. ETOPS Capability

N/A

V. Operating and Service Instructions

	Maintenance Manual ⁽¹⁾	Overhaul Manual	Installation Instructions / Manual
LTS101-600A-2	LTS101-2.1	LTS101-3	101.14.24 21-11045
LTS101-600A-3	LTS101-2.1	LTS101-3	IM-8016 21-11045
LTS101-600A-3A	LTS101-2.1	LTS101-3	IM-8015 21-11045
LTS101-650B-1	LTS101-2.3	LTS101-3	101.14.36 21-11045
LTS101-650B-1A	⁽²⁾	⁽²⁾	101.14.50 LYC124.65
LTS101-650C-2	LTS101-2.2	LTS101-3	101.14.35 21-11045
LTS101-650C-3	LTS101-2.2	LTS101-3	101.14.35 21-11045
LTS101-650C-3A	LTS101-2.2	LTS101-3	101.14.35 21-11045
LTS101-700D-2	LTS101-2.1	LTS101-3	IM-8021 21-11045
LTS101-750B-1	LTS101-2.4	LTS101-3	83.101.11 21-11045
LTS101-750B-2	1H-65A-11-72-2B2	1H-65A-11-72-11B2	IM-8020 21-11045
LTS101-750C-1	LTS101-2.2	LTS101-3	101.14.32 21-11045
LTS101-850B-2	LTS101-2.4	LTS101-3	IM-8022 21-11045

(1) For Service Letters & Service Bulletins refer to SB and SL directory (LT 101- or LTS 101-prefix).

(2) The LTS101-650B-1A has not entered service and is not included in LTS101 service instructions.



VI. Notes

1. The LTS101 engines meet the 14 CFR 33.68 requirements concerning inlet icing provided that the additional requirements concerning induction system design and engine operation, defined in the applicable Installation Instructions / Manual, are met.
2. Engine maintenance program requirements are defined in Intermountain Turbine Services, Inc. Service Bulletin LT 101-71-00-0001. The engine components subjected to a limited service life are listed in Intermountain Turbine Services, Inc. Service Bulletin LT 101-71-00-0002. Compliance with these Service Bulletins is mandatory.
3. The LTS101 engine capability against ingestion of foreign matter, including bird strike and hail, has not been fully assessed. The protection of the engine against strike/ingestion of foreign matter is to be ensured by the powerplant installation on the rotorcraft.
4. For the LTS101-600A-2, LTS101-600A-3, LTS101-600A-3A and LTS101-700D-2, compliance with the Special Condition concerning the clutch was demonstrated using the option of no rotor brake. It is the responsibility of the installer to show compliance with the relevant requirements if the installation includes a rotor brake.
5. The installation must incorporate a control system stability accumulator in accordance with the applicable Installation Instructions / Manual.

SECTION: ADMINISTRATIVE

I. Acronyms and Abbreviations

Not Applicable

II. Type Certificate Holder Record

Since 15 November 2023:	Intermountain Turbine Services, Inc.
From 14 Dec. 1999 to 15 November 2023:	Honeywell International Inc.
From 31 Jan. 1995 to 14 Dec. 1999:	AlliedSignal
Until 31 Jan. 1995:	Textron Lycoming (previously: Avco Lycoming Engine Group)

III. Change Record

Issue	Date	Changes	TC issue
Issue 01	25 February 2008	Initial Issue.	25 February 2008
Issue 02	30 July 2008	Addition of LTS101-600A-3A and LTS101-700D-2 models	30 July 2008
Issue 03	27 May 2010	Editorial corrections	
Issue 04	19 August 2010	Addition of LTS101-850B-2 model	19 Aug. 2010
Issue 05	18 December 2023	Change of TC Holder	18 Dec 2023

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