

**DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION**

E5NE Revision 20  <b>HONEYWELL</b>  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  October 24, 2011
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TYPE CERTIFICATE DATA SHEET NO. E5NE

Engines of models described herein conforming with this data sheet (which is part of Type Certificate No. E5NE) and other approved data on file with the Federal Aviation Administration (FAA), meet the minimum standards for use in certificated aircraft in accordance with pertinent aircraft data sheets and applicable portions of the Federal Aviation Regulations, provided they are installed, operated, and maintained as prescribed by the approved manufacturer's manuals and other approved instructions.

TYPE CERTIFICATE (TC) HOLDER: Honeywell International Inc.  
 111 South 34th Street  
 Phoenix, AZ 85034

TYPE CERTIFICATE HOLDER RECORD: The TC No. E5NE was originally issued to Avco Lycoming Engine Group, Stratford Division, Stratford, Connecticut. The TC was endorsed for transfer on July 20, 1982, and was reissued to Avco Lycoming Engine Group, Williamsport Division, Williamsport, Pennsylvania on August 16, 1982. The TC was again endorsed for transfer on January 29, 1987, and was reissued to Avco Lycoming Textron, Stratford Division, Stratford, Connecticut, on February 27, 1987. The TC was endorsed for a change in the holder's name on October 21, 1987, and was reissued to Textron Lycoming, Stratford Division, on October 28, 1987. The TC was endorsed for a change in the holder's name on January 27, 1995, and was reissued to AlliedSignal Inc. on January 31, 1995. The TC was reissued for a change in the holder's name to Honeywell International Inc. on December 14, 1999.

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LEGEND: "--" INDICATES "SAME AS PRECEDING MODEL" "----" INDICATES "DOES NOT APPLY" NOTICE: ALL PAGES ARE REFORMATTED. SIGNIFICANT CHANGES ARE BLACK-LINED.
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I. MODELS: LTS101	-600A-2	-600A-3	-650B-1	-650B-1A	-650C-2	-650C-3 -650C-3A
<b>TYPE</b>	Axial – centrifugal flow, free turbine, turboshaft. Single stage axial and single stage centrifugal compressor. Reverse flow annular combustor. Single stage gas generator turbine. Single stage power turbine.					
RATINGS (See NOTE 1) Maximum Continuous at sea level, hp.	590	--	550(1)	550	592	598
Takeoff (5 minutes) at sea level, hp.	615	--	550(2)	600	628	630
30 minute OEI Rating at sea level hp.	---	---	592(3)	600	650	--
2 1/2 minute OEI Rating at sea level hp.	---	---	592(4)	650	675	--

I. MODELS: LTS101	-750B-1	-750B-2	-750C-1	-600A-3A	-700D-2	-850B-2
<b>TYPE</b>	Axial – centrifugal flow, free turbine, turboshaft. Single stage axial and single stage centrifugal compressor. Reverse flow annular combustor. Single stage gas generator turbine. Single stage power turbine.					
RATINGS (See NOTE 1) Maximum Continuous at sea level, hp.	550(5)	658	653	625	650	746
Takeoff (5 minutes) at sea level, hp.	550(6)	690	684	650	732	780
30 minute OEI at sea level hp.	694(7)	708	702	---	---	807
2 1/2 minute OEI at sea level hp.	727(8)	742	735	---	---	838

- (1) Available to ambient temperature of 72°F (22°C)
- (2) Available to ambient temperature of 84°F (29°C)
- (3) Available to ambient temperature of 78°F (25°C)
- (4) Available to ambient temperature of 91°F (33°C)
- (5) Available to ambient temperature of 91°F (33°C)
- (6) Available to ambient temperature of 106°F (41°C)
- (7) For engines in compliance with SB LTS 101B-72-00-0161, NOTE 1 applies. 592 Hp available to ambient temperature of 100°F (38°C) for LTS101-750B-1 engines not in compliance with Honeywell SB No. LTS 101B-72-00-0161.
- (8) For engines in compliance with SB LTS101B-72-00-0161, NOTE 1, applies. 592 Hp available to ambient temperature of 115°F (46°C) for LTS101-750B-1 engines not in compliance with Honeywell SB No. LTS101B-72-00-0161.

<b>I. MODELS:</b>	<b>LTS101</b>	<b>-600A-2</b>	<b>-600A-3</b>	<b>-650B-1</b>	<b>-650B-1A</b>	<b>-650C-2</b>	<b>-650C-3 -650C-3A</b>
REDUCTION GEAR RATIO (Output Shaft Speed to Power Turbine Speed)	0.1612	--	0.1654	0.1612	0.2632	--	
FUEL (See NOTE 2 and NOTE 16)	ASTM D1655 Jet A, A1, & B, MIL-DTL-5624 Grades JP-4, JP- 5, and JP-8 or equivalent	--	--	--	--	--	--
OIL (See NOTE 3)	MIL-PRF-7808 MIL-PRF-23699	--	--	--	--	--	--
PRINCIPAL DIMENSIONS							
Length, in. nominal	30.93	31.56	31.05	30.93	31.21	31.21(-3) 31.31(-3A)	
Height, in. nominal	23.64	24.80	25.36	--	19.45	--	
Width, in. nominal	19.37	--	18.52	--	22.60	--	
WEIGHT (Dry), lb. Maximum (includes essential engine accessories but excludes starter-generator)	253	265	281	253	240.3	240.3(-3) 243(-3A)	
C.G. LOCATION (dry weight)							
Aft of engine centerline of lower mount pads, in.	5.610	--	5.671	5.820	8.11	8.11(-3) 7.906(-3A)	
Below engine centerline, in.	1.880	--	1.812	1.720	0.641	0.641(-3) 0.598(-3A)	
Left of engine centerline looking Aft, in.	0.150	--	0.072	0.080	0.240	0.240(-3) 0.314(-3A)	

<b>I. MODELS:</b>	<b>LTS101</b>	<b>-750B-1</b>	<b>-750B-2</b>	<b>-750C-1</b>	<b>-600A-3A</b>	<b>-700D-2</b>	<b>-850B-2</b>
REDUCTION GEAR RATIO (Output Shaft Speed to Power Turbine Speed)	0.1654	--	0.2632	0.1612	0.1654	--	
FUEL (See NOTE 2 and NOTE 16)	ASTM D1655 Jet A, A-1, & B, MIL-DTL-5624 Grades JP-4, JP-5, and JP-8 or equivalent	--	--	--	--	--	--
OIL (See NOTE 3)	MIL-PRF-7808 MIL-PRF-23699	--	--	--	--	--	--
PRINCIPAL DIMENSIONS							
Length, in. nominal	31.05	32.36	31.31	31.56	--	31.05	
Height, in. nominal	25.36	24.68	20.15	24.80	--	25.36	
Width, in. nominal	18.52	19.86	22.60	19.37	--	18.52	
WEIGHT (Dry), lb. Maximum (includes essential engine accessories but excludes starter-generator)	295	273	244	265	279*	283	
C.G. LOCATION (dry weight)							
Aft of engine centerline of lower mount pads, in.	5.542	3.545	7.767	5.610	--	3.545	
Below engine centerline, in.	1.861	1.567	0.559	1.880	--	1.567	
Left of engine centerline looking aft, in.	-0.071	0.075	0.303	0.150	--	0.075	

\* For -700D-2, dry weight does not include airframe-mounted electronic overspeed controller of 2.7 lbs.

## CERTIFICATION BASIS

14 CFR part 33 effective February 1, 1965, as amended by 33-1, 33-2, 33-3, 33-4, and 33-5.

MODEL	APPLICATION DATE	TYPE CERTIFICATE ISSUED/AMENDED
LTS101-600A	APR 11, 1974	OCT 24, 1975
LTS101-600B	SEP 18, 1974	OCT 24, 1975
LTS101-650A	APR 11, 1974	OCT 24, 1975
LTS101-650C	APR 05, 1974	OCT 24, 1975
LTS101-600A-1	OCT 15, 1975	OCT 24, 1975
LTS101-600B-3	OCT 15, 1975	OCT 24, 1975
LTS101-650A-1	OCT 15, 1975	OCT 24, 1975
LTS101-600A-2	JUL 21, 1977	NOV 30, 1977
LTS101-600A-1	CANCELED	NOV 30, 1977
LTS101-600B-3	CANCELED	NOV 30, 1977
LTS101-650A-1	CANCELED	NOV 30, 1977
LTS101-650A-2	OCT 25, 1976	FEB 24, 1978
LTS101-650C-2	OCT 25, 1976	FEB 24, 1978
LTS101-650A	CANCELED	MAR 22, 1978
LTS101-650B-1A	FEB 08, 1979	FEB 15, 1979
LTS101-650C	CANCELED	MAR 01, 1979
LTS101-650C-3	MAY 08, 1980	JUN 10, 1980
LTS101-750A-1	DEC 03, 1980	APR 24, 1981
LTS101-650B-1	JAN 22, 1981	JUN 03, 1981
LTS101-750C-1	JAN 22, 1981	AUG 07, 1981
LTS101-650C-3A	SEP 08, 1983	JUL 13, 1984
LTS101-600A-3	MAR 19, 1984	JUL 13, 1984
LTS101-750A-3	JAN 04, 1983	SEP 21, 1984
LTS101-750B-2	FEB 14, 1985	NOV 08, 1985
LTS101-750B-1	MAR 31, 1983	JUN 17, 1986
LTS101-600A	CANCELED	APR 20, 1987
LTS101-600B	CANCELED	APR 20, 1987
LTS101-650A-2	CANCELED	APR 20, 1987
LTS101-750A-1	CANCELED	FEB 17, 1988
LTS101-750A-3	CANCELED	FEB 17, 1988
LTS101-600A-3A	MAR 16, 1999	JUL 21, 1999
LTS101-700D-2	JUN 30, 1999	FEB 13, 2004
LTS101-850B-2	DEC 13, 2002	FEB 13, 2004

## PRODUCTION BASIS

Production Certificate No. 413NM reissued on January 25, 2000, to Honeywell International Inc.

<b>NOTES</b>
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## NOTE 1.

Engine ratings are based on calibrated stand performance under the following conditions:

Static sea level standard conditions at 59°F and 29.92 in. Hg.

No air bleed, no duct losses, no external power extraction.

Exhaust configuration as specified in the applicable engine Installation Instructions or Manual.

## NOTE 2.

Engines will operate satisfactorily with fuel contaminated to the levels specified in the applicable engine Installation Instructions or Manual provided the fuel is introduced to the engine in accordance with the installation requirements.

## NOTE 3.

Mixing of these oil types is prohibited. See Engine Maintenance Manual for approved brands by type.

NOTE 4.

Maximum permissible gas generator operating speeds (r.p.m.):

<b>I. MODELS:</b>	<b>LTS101</b>	<b>-600A-2</b>	<b>-600A-3</b>	<b>-650B-1</b>	<b>-650B-1A</b>	<b>-650C-2</b>	<b>-650C-3 -650C-3A</b>
Transient		50,548	50,787(1)	50,548	--	--	--
2-1/2 Minute OEI		---	---	50,548	50,169	50,548	--
30 Minute OEI		---	---	50,169	49,255	50,169	--
Takeoff		49,638	49,830(1)	49,638	49,255	49,638	--
Maximum Continuous		49,159	49,255(1)	49,159	48,394	49,159	--
5 Minute Part Power		---	---	49,159	---	49,159	--

(1) Applicable only if Service Bulletin No. LT101-72-50-0126 and LT101-72-50-0157 are incorporated. For all other engines, the limits are the same as the -600A-2.

<b>I. MODELS:</b>	<b>LTS101</b>	<b>-750B-1</b>	<b>-750B-2</b>	<b>-750C-1</b>	<b>-600A-3A</b>	<b>-700D-2</b>	<b>-850B-2</b>
Transient		50,787	--	--	--	51,313	52,178
2-1/2 Minute OEI		50,787	--	--	---	---	51,938
30 Minute OEI		50,169	50,165	--	---	---	51,699
Takeoff		49,830	--	--	--	51,026	51,029
Maximum Continuous		49,255	--	--	--	50,164	50,455
5 Minute Part Power		49,255	--	--	---	---	---

NOTE 5.

Maximum permissible power turbine output shaft torque (ft.-lb.):

<b>I. MODELS:</b>	<b>LTS101</b>	<b>-600A-2</b>	<b>-600A-3</b>	<b>-650B-1</b>	<b>-650B-1A</b>	<b>-650C-2</b>	<b>-650C-3 -650C-3A</b>
Transient		594	--	649	--	419	--
2-1/2 Minute OEI		---	---	594	--	383	--
30 Minute OEI		---	---	594	541	369	--
Takeoff		541	--	519	541	357	--
Maximum Continuous		519	--	--	--	335	--
5 Minute Part Power		---	---	165	---	335	--
No Load (Autorotation)		0	--	--	--	--	--

<b>I. MODELS:</b>	<b>LTS101</b>	<b>-750B-1</b>	<b>-750B-2</b>	<b>-750C-1</b>	<b>-600A-3A</b>	<b>-700D-2</b>	<b>-850B-2</b>
Transient		725	--	480	641**	725**	--
2-1/2 Minute OEI		643	--	417	---	---	643
30 Minute OEI		614	--	397	---	---	614
Takeoff		597	--	387	583	618	597
Maximum Continuous		567	--	367	561	567	--
5 Minute Part Power		165*	--	343	---	---	---
No Load (Autorotation)		0	--	--	--	--	--

\* Approved for continuous operation at out put shaft speed up to 6,180 r.p.m. and output shaft torque up to 377 ft.-lb.

\*\* Time limit: 30 seconds above Takeoff torque limit.

NOTE 6. Maximum permissible output shaft speeds (r.p.m.):

I. MODELS:	LTS101	-600A-2	-600A-3	-650B-1	-650B-1A	-650C-2	-650C-3 -650C-3A
Transient		6,300	--	6,365	6,300	9,784	--
2-1/2 Minute OEI		---	---	6,120	6,085	9,545	--
30 Minute OEI		---	---	6,120	6,085	9,545	--
Takeoff		6,085	--	6,120	6,085	9,545	--
Maximum Continuous		6,085	--	6,120	6,085	9,545	--
5 Minute Part Power		---	---	6,365	---	9,930	--
No Load (Autorotation)		6,300	--	6,365	6,300	9,930	--

I. MODELS:	LTS101	-750B-1	-750B-2	-750C-1	-600A-3A	-700D-2	-850B-2
Transient		6,580*	--	9,930	7,200	7,404***	7,380***
2-1/2 Minute OEI		6,140	--	9,545	---	---	6,780
30 Minute OEI		6,140	--	9,545	---	---	6,780
Takeoff		6,140	--	9,545	6,780	--	--
Maximum Continuous		6,140	--	9,545	6,780	--	--
5 Minute Part Power		6,460**	--	9,930	---	---	---
No Load (Autorotation)		6,460	--	9,930	6,780	--	--

\*Time limit 12 seconds above 6,460 r.p.m.

\*\*Approved for continuous operation at output shaft speed up to 6,180 r.p.m. and output shaft torque up to 377 ft.-lb.

\*\*\*Time Limit: 5 seconds above 6,780 r.p.m.

NOTE 7. Maximum permissible temperatures:

Measured gas temperature °F (°C) as measured by thermocouples mounted in the combustor housing:

LTS101	-600A-2	-600A-3	-650B-1	-650B-1A	-650C-2	-650C-3 -650C-3A
Starting	1650* (899)	-- **	-- *	--	--	--
Transient	1550* (843)	1557 (847)**	1550 (843)	--	--	--
2-1/2 Minute OEI	---	---	1530 (832)	1485 (807)	1530 (832)	--
30 Minute OEI	---	---	1464 (796)	1420 (771)	1464 (796)	--
Takeoff	1440*** (782)	1447*** (786)(1)	1440*** (782)	1420*** (771)	1440 (782)	--
Maximum Continuous	1405 (763)	1409 (765)(1)	1405 (763)	1360 (738)	1405 (763)	--
5 Minute Part Power	---	---	1405 (763)	---	1405 (763)	--

(1) Applicable only if Service Bulletin No. LT 101-72-50-0126 and LT 101-72-50-0157 are incorporated. For all other -600A-3 engines, the maximum MGT at the takeoff rating shall be 1380°F (749°C) and 1355°F (735°C) at the maximum continuous rating.

LTS101	-750B-1	-750B-2	-750C-1	-600A-3A	-700D-2	-850B-2
Starting	1650** (899)	--	--	--	1731*** (944)	1679** (915)
Transient	1557** (847)	--	--	--	1731*** (944)	1679** (915)
2-1/2 Minute OEI	1537 (836)	1512 (822)	--	---	---	1637 (892)
30 Minute OEI	1472 (800)	1471 (799)	--	---	---	1608 (875)
Takeoff	1447*** (786)	1447 (786)	--	-- ***	1694*** (923)	1559 (848)
Maximum Continuous	1409 (765)	1409 (765)	--	--	1635 (890)	1523 (828)
5 Minute Part Power	1405 (763)	--	--	---	---	---

NOTE 7. Continued

\*Time limit 12 seconds above 1530°F (832°C).

\*\*Time limit 12 seconds above 1537°F (836°C) (-750B-1, -600A-3, and -600A-3A), and 12 seconds above 1512°F (822°C) (-750B-2, and -750C-1), and 12 seconds above 1637°F (892°C) (-850B-2).

\*\*\*For the LTS101-600A-2, -600A-3, and -600A-3A engine models, the transient measured exhaust gas temperature must not exceed the takeoff 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 takeoff measured exhaust gas temperature for more than 22 seconds and never exceed 1499°F (815°C) at any time during normal takeoff operation. For the LTS101-700D-2, the starting and transient measured gas temperatures must not exceed the takeoff measured gas temperature for more than 30 seconds.

The transient limits are not to be used for increased power operation during normal takeoff.

Maximum permissible component temperatures:

LTS101	-600A-2	-600A-3	-650B-1	-650B-1A	-650C-2	-650C-3 -650C-3A
<b>Zone Temperature (°F):</b>						
Gas Generator Speed Control	250	--	--	--	--	--
Ignition Exciter Box	250	--	--	--	--	--
Inlet Flow Actuator	410	--	--	--	--	--
Thermocouple Harness	---	---	---	---	---	---
Electrical Harness	---	---	---	---	---	---
Power Turbine Governor	280	--	--	--	--	--
Thermocouple Junction Block	450	--	--	--	--	--
Anti-Icing Valve	450	--	--	--	--	--
Torque Limiter	---	---	---	---	---	---
Fuel Manifold	---	---	---	---	350	--
Power Turbine Overspeed Trip (1)	250	--	160	250	--	160
Fuel Metering Unit	---	---	---	---	---	---
EFCS Alternator	---	---	---	---	---	---
Electronic Control Computer	---	---	---	---	---	---
MGT Transient Compensator	---	---	---	---	---	---

LTS101	-750B-1	-750B-2	-750C-1	-600A-3A	-700D-2	-850B-2
Gas Generator Speed Control	250	--	--	--	--	--
Ignition Exciter Box	250	--	--	--	--	--
Inlet Flow Actuator	410	--	--	--	--	--
Thermocouple Harness	---	---	---	---	---	---
Electrical Harness	---	---	---	---	---	---
Power Turbine Governor	280	--	--	--	--	--
Thermocouple Junction Block	450	--	--	--	--	--
Anti-Icing Valve	---	450	--	--	--	---
Torque Limiter	---	---	---	---	---	---
Fuel Manifold	---	---	---	---	---	---
Power Turbine Overspeed Trip (1)	160	250	160	250	160	160
Fuel Metering Unit	---	---	---	---	---	---
EFCS Alternator	---	---	---	---	---	---
Electronic Control Computer	---	---	---	---	---	---
MGT Transient Compensator	---	160	--	---	---	---

(1) Zone temperature limit of 250°F is for mechanical power turbine overspeed trip system mounted on the accessory pad marked "Alternator". All other engine models utilize an electronic overspeed system with a 160°F limit for the airframe-mounted box.

NOTE 8.

Fuel pressure limits and oil pressure and temperature limits:

Fuel pressure limits for the LTS101-600A-2, and -600A-3 engine models are 15 p.s.i.a. minimum and 45 p.s.i.a. 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.

Oil pressure and temperature (as measured by engine oil temperature bulb located at oil filter discharge) limits:

	Engine Models	Specified Range	Condition
Oil pressure during operation	LTS101-650B-1A	80-100 psig	Maximum continuous power
	LTS101-600A-2, -650B-1, -650C-2/C-3/C-3A, -750B-1, -750C-1, -700D-2, -850B-2	80-100 psig	Max. continuous and above with oil temperature greater than 150°F (65°C)
	LTS101-600A-3, -600A-3A, -750B-2	90-100 psig	
Minimum oil pressure	LTS101-600A-2 and -650B-1A	20 psig	Flight idle and below
	LTS101-600A-3, -600A-3A, -650C-2/C-3/C-3A, -750B-2, -750C-1, -700D-2	20 psig	Flight idle, oil inlet temperature greater than 50°F (10°C)
	LTS101-650B-1, -750B-1, -850B-2	40 psig	Flight idle, oil inlet temperature greater than 50°F (10°C)
	LTS101-600A-3, -600A-3A, -650B-1, -650C-2/C-3/C-3A, -750B-1/B-2, -750C-1, -700D-2, -850B-2	50 psig	Flight idle, oil inlet temperature at or below 50°F (10°C)
Maximum transient oil pressure (cold oil)	LTS101-600A-2, -650B-1A	200 psig	Starting at ambient temperature less than -20°F (-29°C) for a duration not to exceed 2.5 minutes
	LTS101-600A-3, -600A-3A, -650B-1, -650C-2/C-3/C-3A, -750B-1/B-2, -750C-1, -700D-2, -850B-2	350 psig (spikes) 120 psig	During oil warm up from 50°F (10°C) to 150°F (65°C)
Maximum oil inlet temperature	LTS101-650C-2/C-3/C-3A, -750C-1	220°F (105°C)	Ambient temperature less than 100°F (38°C)
	LTS101-600A-2, -600A-3, -600A-3A, -650B-1*, -650B-1A, -750B-1/B-2, -700D-2, -850B-2	210°F (99°C)	Ambient temperature less than 100°F (38°C)
	LTS101-600A-2, -600A-3, -600A-3A, -650B-1*, -650B-1A, -650C-2/C-3/C-3A, -750B-1/B-2, -750C-1, -700D-2, -850B-2	230°F** (110°C)	Ambient temperature at or above 100°F (38°C)
*50°F (10°C) minimum oil temperature for operation above ground idle. 150°F (65°C) minimum oil temperature during sustained steady state power.			
**Oil temperature limit also applies for one engine inoperative (OEI) conditions.			

NOTE 9.

Accessory drive provisions:

<b>LTS101 Description</b>	<b>-600A-2</b>	<b>-600A-3</b>	<b>-650B-1</b>	<b>-650B-1A</b>	<b>-650C-2</b>	<b>-650C-3 -650C-3A</b>
Starter Generator Pad Type	AND20001 Modified (3)	--	--	--	--	--
Rotation (viewing pad)	CW	--	--	--	--	--
Gear Ratio(1)	.2512	--	--	--	--	--
Maximum Torque (in-lb)						
Starting	500	--	--	--	--	---
Transient	150(5)	--	--	--	--	--
Maximum continuous	46(6)	71(6)	--	--	--	--
Accessory Pad Type	AND20002 Modified (3)	---	AND20002 Modified (3)	--	--	--
Rotation (viewing pad)	CW	---	CW	--	--	--
Gear Ratio(2)	0.3265	---	0.3265	--	0.3406	--
Maximum Torque (in-lb)						
Starting	---	---	---	---	---	---
Maximum continuous	75	---	75	--	--	--
Spare Pad Type	AND20000 Modified(3) (4)	--	---	AND20000 Modified(3) (4)	---	---
Rotation (viewing pad)	CCW	--	---	CCW	---	---
Gear Ratio(2)	0.5375	--	---	0.5375	---	---
Maximum Torque (in-lb)						
Starting	---	---	---	---	---	---
Maximum continuous	20	--	---	11	---	---

<b>LTS101 Description</b>	<b>-750B-1</b>	<b>-750B-2</b>	<b>-750C-1</b>	<b>-600A-3A</b>	<b>-700D-2</b>	<b>-850B-2</b>
Starter Generator Pad Type	AND20001 Modified (3)	--	--	--	--	--
Rotation (viewing pad)	CW	--	--	--	--	--
Gear Ratio(1)	0.2512	--	--	--	--	--
Maximum Torque (in-lb)						
Starting	500	--	--	580	--	--
Transient	150(5)	--	--	--	--	--
Maximum continuous	71(6)	--	--	--	--	--
Maximum applied torque	---	---	---	1,100 in-lb(7)	--	--
Accessory Pad Type	---	---	AND20002 Modified (3)	---	---	---
Rotation (viewing pad)	---	---	CW	---	---	---
Gear Ratio(2)	---	---	0.3406	---	---	---
Maximum Torque (in-lb)						
Starting	---	---	---	---	---	---
Maximum continuous	---	---	75	---	---	---
Spare Pad Type	---	---	---	AND20000 Modified (3)(4)	---	---
Rotation (viewing pad)	---	---	---	CCW	---	---
Gear Ratio(2)	---	---	---	0.5375	---	---
Maximum Torque (in-lb)						
Starting	---	---	---	---	---	---
Maximum continuous	---	---	---	20	---	---

## NOTE 9. Continued

- (1) With respect to gas generator.
- (2) With respect to power turbine.
- (3) Limit pad speed and maximum loads modified. See the applicable engine Installation Instructions or Manual for further details.
- (4) Pad pilot diameter modified to 1.622 in. Pad spline pitch diameter modified to .4583 in.
- (5) To be used in generating mode only, with a time limit of 30 seconds.
- (6) If the starter generator rating is more than 150 amps., the continuous electric load must be limited to 150 amps when the gas generator is less than 43,100 r.p.m.
- (7) Applied torque at the starter pad shall not exceed the value stated under any operating or failure condition.

CW - Clockwise, CCW - Counterclockwise

## NOTE 10

The LTS101-600A-2 engine model meets the FAA requirements for operation in icing conditions provided that the induction system design conforms to Honeywell International Inc. Kit Number 4-201-080-01, and a minimum of 37,080 r.p.m. gas producer speed is maintained.

The LTS101-600A-3, -600A-3A, -750C-1, and -700D-2 engine models meet the FAA requirements for operation in icing conditions provided that the induction system design conforms to Honeywell International Inc. Kit Number 4-201-080-01, and a minimum of 38,294 r.p.m gas generator speed is maintained.

The LTS101-650C-2, -650C-3, and -650C-3A engine models meet the FAA requirements for operation in icing conditions provided that a minimum of 37,080 r.p.m. gas producer speed is maintained.

The LTS101-650B-1A engine model meets the FAA requirements for operation in icing conditions provided that the induction system design conforms to Figure 6.8 of Honeywell International Inc. Installation Instructions 101.14.50, and a minimum bypass flow of 29% at an inlet referred flow rate of 4.8 lb./sec. is maintained.

The LTS101-650B-1 engine model meets the FAA requirements for operation in icing conditions provided that the induction system design conforms to Figure 18 of Honeywell International Installation Instructions 101.14.36.

The LTS101-750B-1 engine model meets the FAA requirements of § 33.68, Amendment 10, for operation in icing conditions provided that the induction system design conforms to Figure 18 of Honeywell International Inc. Installation Instructions 83.101.11.

The LTS101-750B-2 engine model meet the FAA requirements of § 33.68, Amendment 10, for operation in icing conditions provided that the induction system design conforms to Figure 19 or Figure 19A of Honeywell International Inc. Installation Manual IM-8020. A minimum bypass flow of 29% at an inlet referred flow rate of 5.2 lb./sec. is required when equipped with the induction system design as depicted by Figure 19 of the Installation Manual.

The LTS101-850B-2 engine model meets the FAA requirements of § 33.68, Amendment 10, for operation in icing conditions provided that the induction system design conforms to Attachment 1 of Honeywell International Inc. Installation Manual IM-8022, Revision A, or later FAA approved revisions, and a maximum gas generator speed of 104.1 percent (all engines operating) and 106.1 percent (OEI) is not exceeded.

- NOTE 11. These engines have not been tested to evaluate the effects of bird and ice ball ingestion. The bird and ice ball ingestion characteristics of the airframe air inlet and engine combination are to be evaluated prior to approval of the engine installation.
- NOTE 12. Deleted (Revision 19)
- NOTE 13. Maximum permissible air bleed extraction is 5% of inlet airflow at the designed customer bleed port at standard sea level static conditions.
- NOTE 14. Certain engine parts are life limited. These limits are listed in FAA approved Honeywell International Inc. Service Bulletin Number LT 101-71-00-0002.
- NOTE 15. Engine starter torque and speed requirements are specified in the applicable engine Installation Instructions or Manual.
- NOTE 16. Approved type fuels and fuel additives are specified in the applicable engine Installation Instructions or Manual or LTS101 Operating Instruction, Honeywell document 21-11045.
- NOTE 17. 100% output shaft speed for the LTS101-650C-2, -650C-3A, and -750C-1 is 9545 r.p.m.; for the LTS101-700D-2 is 6120 r.p.m.; for the LTS101-650B-1, -650B-1A, -750B-1, -750B-2, and -850B-2 is 6000 r.p.m.; and for all other models is 5966 r.p.m.
- NOTE 18. 100% power turbine shaft speed for the LTS101-600A-2, -600A-3, -600A-3A, and -700D-2 is 37,000 r.p.m.  
100% power turbine shaft speed for the LTS101-650B-1, -750B-1, -750B-2, and -850B-2 is 36,281 r.p.m.  
100% power turbine shaft speed for the LTS101-650B-1A is 37,211 r.p.m.  
100% power turbine shaft speed for the LTS101-650C-2, -650C-3, -650C-3A, and -750C-1 is 36,265 r.p.m.
- NOTE 19. 100% gas generator speed equals 47,870 r.p.m. for all engine models.
- NOTE 20. The installation for all engine models must incorporate a control system stability accumulator(s) in accordance with the applicable engine Installation Instructions or Manual.
- NOTE 21. Engine maintenance program requirements are defined in FAA approved Honeywell International Inc. Service Bulletin Number LT 101-71-00-0001.
- NOTE 22. Deleted (Revision 15)
- NOTE 23. The LTS101-600A-3A, -650B-1, -650B-1A, -650C-2, -650C-3, -650C-3A, -700D-2, -750B-1, -750B-2, -750C-1, and -850B-2 engine models are equipped with a suction feed fuel system meeting the FAA requirements of § 33.67, Amendment 6. All other engine models require an aircraft boost pump to deliver fuel to the engine (see NOTE 8).
- NOTE 24. Deleted (Revision 16)
- NOTE 25. Deleted (Revision 16)
- NOTE 26. Installation of the LTS101-650B-1, -750B-1, -750B-2, and -850B-2 engine models must include a full flow scavenge oil strainer and chip detector to meet the FAA requirements of § 33.71, Amendment 6.

**-END-**