SERVICE LETTER

SERVICE LETTER No. 080

122NL, 149NL, and 149NLR Series Starter Voltage Application

HARTZELL
ENGINE TECHNOLOGIES
MONTGOMERY, ALABAMA USA

2900 Selma Highway
Montgomery, AL 36108 USA
Tel: 334-386-5400 Fax: 334-386-5450

1. Planning Information

A. Effectivity

(1) Skytec 122NL, 149NL, and 149NLR series aircraft starters manufactured by Hartzell Engine Technologies (HET) are affected by this Service Letter (SL).

(2) Model/series engines affected are found in **Table 1** thru **Table 3** of this SL.

(a) **Table 1** - 122NL Starter/Engine Effectivity.

(b) **Table 2** - 149NL Starter/Engine Effectivity.

(c) **Table 3** - 149NLR Starter/Engine Effectivity.

CAUTION: DO NOT USE OBSOLETE OR OUTDATED INFORMATION. INFORMATION CONTAINED IN THIS SERVICE LETTER MAY BE SIGNIFICANTLY CHANGED FROM EARLIER REVISIONS. USE OF OBSOLETE INFORMATION MAY CREATE AN UNSAFE CONDITION THAT MAY RESULT IN DEATH, SERIOUS BODILY INJURY, AND/OR SUBSTANTIAL PROPERTY DAMAGE. REFER TO THE SKYTEC WEBSITE (SKYTEC. AERO) TO FIND THE MOST RECENT REVISION LEVEL OF THIS SERVICE LETTER.

B. Concurrent Requirements

(1) None

C. Reason

(1) As a product improvement effort, HET will no longer manufacture starters found in section 1.A that support a dual configuration as either 12v or 24v, switchable.

(a) As of 08 July 2019, the affected starters are manufactured for 12v applications only.

(2) Skytec starter series 122NL/EC, 149NL/EC, and 149NLR/EC manufactured by HET remain available for purchase in support of 24v applications.

D. Description

(1) This Service Letter advises the field of changes to affected starter series configuration.

(2) Affected starters currently installed on-aircraft may continue to operate in the 24v configuration without impact to functionability of the starter.

E. Approval

(1) This Service Letter has been approved by Hartzell Engine Technologies LLC.

SERVICE LETTER

122NL, 149NL, and 149NLR Series Starter
Voltage Application

    F. Manpower

        (1)   No additional man hours are required.

    G. References

        (1)   None

2. Material Required

    A. No material is required.

3. Contact Information

    A. Contact HET Product Support for all communications regarding the technical content of this Service Letter.

        (1) Phone +1.334.386.5400 (Option 2)

        (2) Fax +1.334.386.5450

        (3) E-mail at techsupport@HartzellEngineTech.com

        (4) Address

            Hartzell Engine Technologies LLC - ATTN: Product Support
            2900 Selma Highway
            Montgomery, AL 36108
            USA

SERVICE LETTER

SERVICE LETTER No. 080

122NL, 149NL, and 149NLR Series Starter
Voltage Application

HET Starter Series	Lycoming P/N	Engine Model	Engine Series
122NL	69953, 72279, 77879, 76210, LW-12787, LW-15483, LW-16207, 31A21210, 31A22102, 31A22106, 31A22112, 31A22361, 31A22473, 31B21211, 31B22103, 31B22107, 31B22113, 31B22362, 31B23590, 31B22473, 31B22475, 31B2246, LW-12960, LW-12960-85	O-235	-A, -A1, -AP, -B, -BP, -C, -C1, -C1A, -C1B, -C1C, -C2A, -C2B, -C2C, -E1, -E1B, -E2A, -E2B, -F1, -F1B, -F2A, -F2B, -G1, -G1B, -G2A, -G2B, -H2C, -J2A, -J2B, -K2A, -K2B, -K2C, -L2A, -L2C, -M1, -M2C, -M3C, -N2A, -N2C, -P1, -P2A, -P2C, -P3C
		O-290	-A, -AP, -B, -C, -CP, -D, -D2, -D2A, -D2B, -D2C
		O-320	-A1A, -A1B,-A2A, -A2B, -A2C, -A2D, -A3A, -A3B,-A3C, -B1A, -B1B, -B2A, -B2B, -B2C, -B2D, -B2E, -B3A, -B3B, -B3C, -C1A, -C1B, -C2A, -C2B, -C2C, -C3A, -C3B, -C3C, -D1A,-D1B, -D1C, -D1D, -D1F, -D2A, -D2B, -D2C, -D2F, -D2G, -D2H, -D2J, -D3G, -E1A, -E1B, -E1C, -E1F, -E1J, -E2A, -E2B, -E2C, -E2D, - E2F, -E2G, -E2H, -E3D, -E3H, -H1AD, -H1BD, -H2AD, -H2BD, -H3AD, -H3BD
		IO-320	-A1A, -A2A,-B1A, -B1B, -B1C, -B1D, -B1E, -B2A,-C1A, -C1B, -D1A, -D1B, -D1C, -E1A, -E1B, -E2A, -E2B, -F1A
		AIO-320	-A1A, -A1B, -A2A, -A2B, -B1B, -C1B
		AEIO-320	-D1B, -D2B, -E1A, -E1B, - E2A, -E2B
		O-340	-A1A, -A2A, -B1A
		O-360	-A1A, -A1AD, -A1C, -A1D, -A1F, -A1F6, -A1F6D, -A1G, -A1G6, -A1G6D, -A1H, -A1H6, -A1LD, -A1P, -A2A, -A2D, -A2E, -A2F, -A2G, -A2H, -A3A, -A3AD, -A3D, -A4A, -A4AD, -A4D, -A4G, -A4J, -A4K, -A4M, -A4N, -A4P, -A5AD, -B1A, -B1B, -B2A, -B2B, -B2C, -C1A, -C1C, -C1E, -C1F, -C1G, -C2A, -C2B, -C2C, -C2D, -C2E, -C4P, -C4F, -D1A, -D2A, -D2B, -E1AD, -E1A6D, -E2AD, -E1BD, -E2BD, -F1A6, -G1A6, -J2A
		HO-360	-A1A, -B1A, -B1B, -C1A
		HIO-360	-A1A, -A1B, -B1A, -B1B, -C1A, -C1B, -E1BD, -F1AD, -D1A, -G1A
		TO-360	-A1A6D, -C1A6D, -E1A6D, -F1A6D

Table 1 - 122NL Starter/Engine Effectivity (Cont'd →)

SERVICE LETTER

SERVICE LETTER No. 080

122NL, 149NL, and 149NLR Series Starter
Voltage Application

HET Starter Series	Lycoming P/N	Engine Model	Engine Series
(Cont'd)	(Cont'd)	IO-360	-A1A, -A1B, -A1B6, -A1B6D, -A1C, -A1D, -A1D6, -A1D6D, -A2A, -A2B, -A2C, -A3B6, -A3B6D, -A3D6D, -B1A, -B1B, -B1C, -B1D, -B1E, -B1F, -B1F6, -B1G6, -B2E, -B2F, -B2F6, -B4A, -C1A, -C1B, -C1C, -C1C6, -C1D6, -C1E6, -C1E6D, -C1F,-C1G6, -D1A, -E1A, -F1A,-J1AD, -J1A6D, -K2A, -L2A, -M1A, -M1B
		AIO-360	-A1A, -A1B, -A2A, -A2B, -B1B
		AEIO-360	-A1A, -A1B, -A1B6, -1E6, -A1C, -A1D, -A1E, -A2A, -A2B, -A2C, -B1B, -B1D, -B1F, -B1F6, -B1G6, -B2F, -B2F6, -B1H, -B4A, -H1A, -H1B
		HIO-360	-A1A, -A1B, -B1A, -B1B, -C1A, C1B, -D1A, -E1AD, -E1BD, -F1AD, -G1A
		TIO-360	-A1A, -A1B, -A3B6, -C1A6D
		O-540	-A1A, -A1A5, -A1B5, -A1C5, -A1D, -A1D5, -A2B, -A3D5, -A4A5, -A4B5, -A4C5, -A4D5, -B1A5, -B1B5, -B1D5, -B2A5, -B2B5, -B2C5, -B4A5, -B4B5, -D1A5, -E4A5, -E4B5, -E4C5, -F1A5, -F1B5, -G1A5, -G2A5, -H1A5, -H2A5, -H1A5D, -H2A5D, -H1B5D, -H2B5D, -J1A5D, -J2A5D, -J1B5D, -J2B5D, -J3A5D, -J1C5D, -J2C5D, -J1D5D, -J2D5D, -J3C5D, -L3C5D
		HIO-540	-A1A
		AEIO-540	-D4A5, -D4B5, -D4C5, -D4D5, -L1B5D, -L1B5, -L1D5
		TIO-540	-A1A, -A1B, -A2A, -A1C, -A2C, -C1A, - E1A, -F2BD, -G1A, -H1A, -J2B, - J2BD, -K1AD, -N2BD, -R2AD, -S1AD, -T2AD, -U2A, -V2AD, -W2A, -AA1AD, -AB1AD, -AB1BD, -AE2A, -AF1A, -AF1B, -AG1A, -AH1A, -AJ1A, -AK1A
		IO-720	-A1A, -A1B, -A1BD, -B1A, -B1B, -B1BD, -C1B, -C1BD, -D1B, -D1BD, -D1C, -D1CD

(Cont'd) **Table 1 - 122NL Starter/Engine Effectivity**

SERVICE LETTER

SERVICE LETTER No. 080

122NL, 149NL, and 149NLR Series Starter
Voltage Application

HET Starter Series	Lycoming P/N	Engine Model	Engine Series
149NL	76211, 76212, 76213, 76214, LW-11936, LW-14207, LW-14208, LW-14209, LW-14210, LW-14213, LW-14447, LW-15571, LW-15572, LW-15573, LW-15574, LW-15577, LW-16460, LW-18047, LW-18989, LW-18990, 31A21198, 31A22100, 31A22104, 31A22110, 31B23592, 31B22206, 31A22470, 31B22471, 31B22207, 31B21064, 31B22101, 31B22105, 31B22111, 31B2247	IO-235	-A, -A1, -AP, -B, -BP, -C, -C1, -C1A, -C1B, -C1C, -C2A, -C2B, -C2C, -E1, -E1B, -E2A, -E2B, -F1, -F1B, -F2A, -F2B, -G1, -G1B, -G2A, -G2B, -H2C, -J2A, -J2B, -K2A, -K2B, -K2C, -L2A, -L2C, -M1, -M2C, -M3C, -N2A, -N2C, -P1, -P2A, -P2C, -P3C
		0-290	-A, -AP, -B, - C, -CP, D, -D2, - D2A, -D2B, -D2C
		O-320	-A1A, -A1B, -A2A, -A2B, -A2C, -A2D, -A3A, -A3B, -A3C, -B1A, -B1B, -B2A, -B2B, -B2C, -B2D, -B2E, -B3A, -B3B, -B3C, -C1A, -C1B, -C2A, -C2B, -C2C, -C3A, -C3B, -C3C, -D1A, -D1B, -D1C, -D1D, -D1F, -D2A, -D2B, -D2C, -D2F, -D2G, -D2H, -D2J, -D3G, -E1A, -E1B, -E1C, -E1F, -E1J, -E2A, -E2B, -E2C, -E2D, -E2F, -E2G, -E2H, -E3D, -E3H, -H1AD, -H1BD, -H2AD, -H2BD, -H3AD, -H3BD
		IO-320	-A1A, -A2A, -B1A, -B1B, -B1C, -B1D, -B1E, -B2A, -C1A, -C1B, -D1A, -D1B, -D1C, -E1A, -E1B, -E2A, -E2B, -F1A
		AIO-320	-A1A, -A1B, -A2A, -A2B, -B1B, -C1B
		AEIO-320	-D1B, -D2B, -E1A, -E1B, -E2A, -E2B
		O-340	-A1A, -A2A, -B1A
		O-360	-A1A, -A1AD, -A1C, -A1D, -A1F, -A1F6, -A1F6D, -A1G, -A1G6, -A1G6D, -A1H, -A1H6, -A1LD, -A1P, -A2A, -A2D, -A2E, -A2F, -A2G, -A2H, -A3A¸ -A3AD, -A3D, -A4A, -A4AD, -A4D, -A4G, -A4J, -A4K, -A4M, -A4N, -A4P, -A5AD, -B1A, -B1B, -B2A, -B2B, -B2C, -C1A, -C1C, -C1E, -C1F, -C1G, -C2A, -C2B, -C2C, -C2D, -C2E, -C4P, -C4F, -D1A, -D2A, -D2B, -E1AD, -E1A6D, -E2AD, -E1BD, -E2BD, -F1A6, -G1A6, -J2A
		HO-360	-A1A, -B1A, -B1B, -C1A
		TO-360	-A1A6D, -C1A6D, -E1A6D, -F1A6D

Table 2 - 149NL Starter/Engine Effectivity (Cont'd →)

122NL, 149NL, and 149NLR Series Starter
Voltage Application

HET Starter Series	Lycoming P/N	Engine Model	Engine Series
(Cont'd)	(Cont'd)	IO-360	-A1A, - 1B, -A1B6, -A1B6D, -A1C, -A1D, -A1D6, -A1D6D, -A2A, -A2B, -A2C, -A3B6, -A3B6D, -A3D6D, -B1A, -B1B, -B1C, -B1D, -B1E, -B1F, -B1F6, -B1G6, -B2E, -B2F, -B2F6, -B4A, -C1A, -C1B, -C1C, -C1C6, -C1D6, -C1E6, -C1E6D, -C1F, -C1G6, -D1A, -E1A, -F1A, -J1AD, -J1A6D, -K2A, -L2A, -M1A, -M1B
		AIO-360	-A1A, -A1B, -A2A, -A2B, -B1B
		AEIO-360	-A1A, -A1B, -A1B6, -A1E6, -A1C, -A1D, -A1E, -A2A, -A2B, -A2C, -B1B, -B1D, -B1F, -B1F6, -B1G6, -B2F, -B2F6, -B1H, -B4A, -H1A, -H1B
		HIO-360	-A1A, -A1B, -B1A, -B1B, -C1A, -C1B, -D1A, -E1AD, -E1BD, -F1AD, -G1A
		TIO-360	-A1A, -A1B, -A3B6, -C1A6D
		IO-390	-A1A6, -A3A6
		O-540	-A1A, -A1A5, -A1B5, -A1C5, -A1D, -A1D5, -A2B, -A3D5, -A4A5, -A4B5, -A4C5, -A4D5, -B1A5, -B1B5, -B1D5, -B2A5, -B2B5, -B2C5, -B4A5, -B4B5, -D1A5, -E4A5, -E4B5, -E4C5, -F1A5, -F1B5, -G1A5, -G2A5, -H1A5, -H2A5, -H1A5D, -H2A5D, -H1B5D, -H2B5D, -J1A5D, -J2A5D, -J1B5D, -J2B5D, -J3A5D, -J1C5D, -J2C5D, -J1D5D, -J2D5D, -J3C5D, -L3C5D
		IO-540	-A1A5, -B1A5, -B1B5, -B1C5, -C1B5, -C1C5, -C2C, -C4B5, -C4B5D, -C4C5, -C4D5, -C4D5D, -D4A5, -D4B5, -D4C5, -E1A5, -E1B5, -E1C5, -G1A5, -G1B5, -G1C5, -G1D5, -G1E5, -G1F5, -J4A5, -K1A5, -K1A5D, -K1B5, -K1B5D, -K1C5, -K1D5, -K1E5, -K1E5D, -K1F5, -K1F5D, -K1G5, -K1G5D, -K1H5, -K1J5, -K1J5D, -K1K5, -K2A5, -L1A5, -L1A5D, -L1B5D, -L1C5, -M1A5, -M1A5D, -M1B5D, -M1C5, -M2A5D, -N1A5, -P1A5, -R1A5, -S1A5, -T4A5D, -T4B5, -T4B5D, -T4C5D, -U1A5D, -U1B5D, -V4A5D, -V4A5, -W1A5, -W1A5D, -W3A5D, -AA1A5, -AA1B5, -AB1A5, -AC1A5, -AC2A5, -AE1A5
		HIO-540	-A1A
		AEIO-540	-D4A5, -D4B5, -D4C5, -D4D5, -L1B5D, -L1B5, -L1D5

(Cont'd) **Table 2 - 149NL Starter/Engine Effectivity**

122NL, 149NL, and 149NLR Series Starter
Voltage Application

HET Starter Series	Lycoming P/N	Engine Model	Engine Series
149NLR	LW-10556, LW-14215, 31A22472, 31B23593, 31B22552, 31B22553	LIO-320	-B1A, -C1A
		LO-360	-A1G6D, -A1H6, -E1AD, -E1A6D, -E2AD, -E1BD, -E2BD
		LTO-360	-A1A6D, -E1A6D
		LIO-360	-C1E6
		LHIO-360	-C1A, -C1B, -F1AD
		LTIO-540	-F2BD, -J2B, -J2BD, -K1AD, -N2BD, -R2AD, -U2A, -V2AD, -W2A

Table 3 - 149NLR Starter/Engine Effectivity