



Service Information Letter: SIL-DK180-2020-001

SERVICE INFORMATION LETTER

FOR

LOW FREQUENCY UNDERWATER LOCATING DEVICE (LF-ULD)

DUKANE SEACOM, INC. PART NO.

DK180

PREPARED BY:

DUKANE SEACOM, INC

REVISION: B

ENG APPROVED:

DATE:

10 FEB 20

QA APPROVED:

DATE:

2/10/20



<h1>Service Information Letter</h1>	Doc No. SIL-DK180-2020-001
	Rev B
	Date: 10Feb2020
SUBJECT: LF-ULD's Manufactured with Suspected Counterfeit Parts	

I. PLANNING INFORMATION

A. EFFECTIVITY

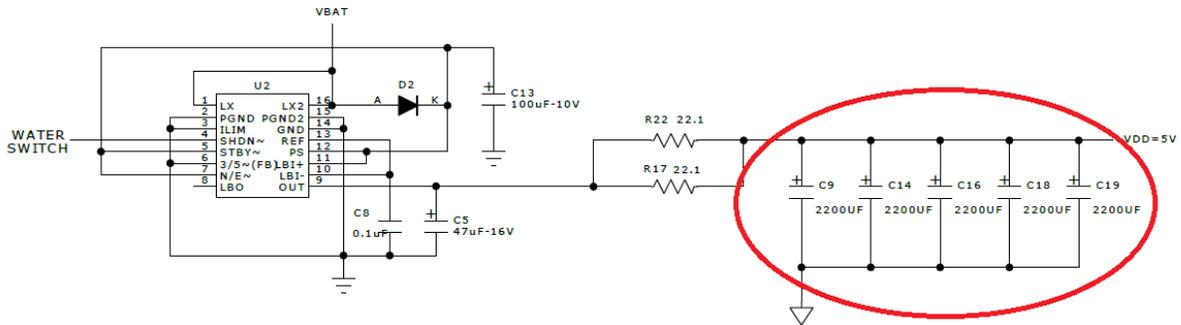
This service letter applies to the following Serial Numbers of Dukane Seacom Part Number DK180, Low Frequency Underwater Locating Device (LF-ULD):

DF10507	DF12024 to DF12078	DF12822 to DF12847
DF11132 to DF11186	DF12080 to DF12122	DF12849 to DF12873
DF11188 to DF11191	DF12125 to DF12172	DF12874 to DF12878
DF11193 to DF11253	DF12174 to DF12178	DF12880 to DF12881
DF11255 to DF11388	DF12180 to DF12297	DF12883 to DF12944
DF11390 to DF11397	DF12299 to DF12317	DF12946 to DF12958
DF11402 to DF11448	DF12319 to DF12329	DF12960 to DF12961
DF11479 to DF11577	DF12331 to DF12336	DF12963 to DF12980
DF11579 to DF11611	DF12339	DF12982 to DF12998
DF11613 to DF11645	DF12341 to DF12453	DF13000 to DF13040
DF11647 to DF11699	DF12455 to DF12617	DF13042 to DF13079
DF11701 to DF11747	DF12619 to DF12645	DF13080 to DF13116
DF11749 to DF11782	DF12647 to DF12663	DF13118 to DF13183
DF11785 to DF11800	DF12675 to DF12713	DF13186 to DF13194
DF11802 to DF11962	DF12717 to DF12722	DF13196 to DF13268
DF11964 to DF12022	DF12769 to DF12821	DF13270 to DF13413

B. REASON

Dukane Seacom's repair station has received ten (10) DK180 LF-ULDs with a reported failure of "does not operate" with battery voltage present. Troubleshooting these failures has isolated the cause to a failed bulk storage capacitor. Further investigation has caused Dukane Seacom to question the authenticity of these parts.

The DK180 utilizes five (5) parallel bulk storage capacitors on an internal 5Vdc voltage rail used to power its piezo ceramic transducer. The capacitors, part number UVK1A222MPD, are 2200uF Aluminum Electrolytic devices manufactured by Nichicon. An excerpt from the electrical schematic showing these devices is provided below:



In all ten (10) of the returned DK180s that presented these symptoms, it was confirmed that one of the five bulk storage capacitors within each ULD had failed in a short circuit condition, preventing power from reaching the transducer. The failed UVK1A222MPD capacitors appear not to have been manufactured by Nichicon.

C. REFERENCES

1. DK180 Technical Manual – 03-TM-0064 (“Technical Manual”)

D. RECOMMENDED ACCOMPLISHMENT INSTRUCTIONS

1. Current operators of affected DK180 LF-ULD’s referenced in Paragraph A above are encouraged to replace the device from service per the following recommendations:
 - a) Contact Dukane Seacom directly via email address DK180@rpcaero.com. This dedicated email address has been setup for managing this Service Information Letter. When responding, please provide a list of your affected DK180 Serial Numbers as well as the contact information you would like used for this activity.
 - b) Dukane Seacom customer service personnel will quickly respond to discuss options for either replacing or reworking the affected material.
 - i. For reworked units, Dukane Seacom will re-serialize the DK180 to positively identify that the suspected counterfeit parts have been removed from service.



E. INDUSTRY SUPPORT STATEMENT

1. Replacement of affected Electronics Modules within the list of Serial Numbers provided in Paragraph (A) will be accomplished by Dukane Seacom Free of Charge to operators.
2. Customers affected by this Service Information Letter should contact Dukane Seacom directly at the following email address:

DK180@rpcaero.com

3. Additional Contact Information

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