



Aircraft Industries



www.let.cz / pps@let.cz / +420 572 817 664
Aircraft Industries, a.s. / Na Záhonech 1177 / Kunovice 686 04 / Czech Republic

SERVICE LETTER

SL No. **L-410/011**

Aeroplane Type: **L-410**

Model(s): **All**

Date of Issue: **Mar 10, 2023**

Reason: Occurrence of the false signalization of some engine parameters.

Description: Check of connectors disconnected within the scope of an engine removal.

This service letter is issued to inform L-410 aircraft operators of the need to check all connectors before plugging them in during an engine installation.

Check all disconnected connectors for corrosion, damaged pins, impurities and moisture.

If water contamination is found, dry plug and socket by compressed dry, clean air.

If corroded pins are found, it is recommended to use [Kontakt 60](#) cleaning oil to remove contacts corrosion. Wash away dissolved corrosion products, grease and dirt with [Kontakt WL](#). Protect connectors against corrosion with [Kontakt 61](#). Mentioned agents can be replaced with available equivalent for relevant territorial areas.

Note: In case of serious damage, the connector must be replaced!

Oxide-dissolving contact cleaning oil

KONTAKT CHEMIE Kontakt 60

Description:

Cleaning agent for electrical contacts, with special additives for the dissolving of corrosion products.

General properties and applications:

KONTAKT CHEMIE Kontakt 60 is a contact cleaning oil which can be used to restore corroded electrical contacts. In aerosol form it is particularly suitable for service applications, it can be dispensed economically and accurately (with special spray tube). In addition to the corrosion-dissolving components, the spray contains a solvent mixture which also removes greasy or resinous residues. Problems with electrical contacts are caused in fact not just by corrosion but also by polluting gases which form coatings of low electrical conductivity on the contact surfaces ("polymers").

KONTAKT CHEMIE Kontakt 60 is also supplied as a concentrate. The concentrate is normally diluted with KONTAKT CHEMIE Kontakt WL and then has comparable properties with the aerosol. See also the special application instructions on page 2.

Technical data

Aerosol		
Flash point	ASTM D 56	< 0 °C
Density at 20°C	FEA 605	0,774 g/cm ³
Colour		Red transparent
Evaporation Rate	DIN 53 170	± 5
Concentrate = active ingredients		
Flash point	ASTM D56	Circa 200 °C
Density at 20°C	ASTM D 891	0,83 g/cm ³
Colour		Red transparent
Temperature Range	In house method	80 °C
Thinning Ratio Kontakt 60 Concentrate / Kontakt WL		1 Volume Part / 7 Volume Parts

Directions :

The easiest way to apply KONTAKT CHEMIE Kontakt 60 is to use the aerosol. A few droplets for each pair of contacts is generally sufficient.

The cleaning and oxide-dissolving action can be improved by mechanical support. If switching or connector contacts are readily accessible, they can be carefully wiped, for example, using cellulose, leather or cotton swabs.

If it is impossible to provide mechanical support, allow KONTAKT CHEMIE Kontakt 60 some 10 to 15 minutes to penetrate. Optimum results are obtained, if dissolved dirt and corrosion products are then rinsed off with KONTAKT CHEMIE Kontakt WL. After that, KONTAKT CHEMIE Kontakt 61 is applied as a protective film.

KONTAKT CHEMIE Kontakt 60 works in many cases even without after-treatment. However this increases the risk that corrosion damage will appear again after a short time. Contacts of fairly large plug connectors and robust relays can also be sprayed with KONTAKT CHEMIE Kontakt 40 to give them protection from corrosion. If you are certain that a contact is malfunctioning only because of contamination, resinification etc. and not due to corrosion, KONTAKT CHEMIE 61 can also be used directly without further pre-treatment.

When very large quantities of KONTAKT CHEMIE Kontakt 60 are being consumed, the use of the concentrate may be economic. It is diluted in accordance with the instructions.

When Kontakt 60 is used in serial production, plastics compatibility should be tested. Particular attention should be paid to plastics susceptible to stress-cracking (e.g. polycarbonate and polystyrene) and parts subjected to heavy mechanical loads.

Diluted solutions of KONTAKT CHEMIE Kontakt 60 and the aerosol spray contain flammable solvents. Therefore the liquids must not be sprayed onto energised equipment. The solvent must be completely evaporated before the equipment is started up again. A period of at least 15 minutes is to be allowed for this. Local conditions may require a longer drying time, particularly when there is an insufficient flow of fresh air to the places being treated. Further information on safety can be found in the safety datasheet.

For special uses it is also possible to apply KONTAKT CHEMIE Kontakt 60 concentrate undiluted. An injection spray or an appropriate dispenser, for example, is suitable for this. The cleaning action on organic deposits (oils, greases, resin residues), however, is not so good as with the aerosol and this for a solution diluted as described in the instructions. It is advantageous, because of the high flash point, the concentrate can be used when potential sources of ignition are present..

Optimum contact cleaning in 3 phases

Phase 1: Kontakt 60 dissolves corrosion layers and thereby restores metallic contact.

Without phases 2 and 3 it is possible for corrosion to occur again after a certain period of time. This depends on the material and the ambient conditions.

Phase 2: Kontakt WL washes away dissolved corrosion products, grease and dirt.

Phase 3: Kontakt 61 forms a thin protective film which inhibits corrosion and wear.

Available :

Aerosol : 200 ml, 400 ml

Bulk : 1 l, 5 l (concentrate)

These values are not intended to be used as specifications. They are based on information we believe reliable. However, it is the user's responsibility to determine the suitability

1. GENERAL DESCRIPTION

Spray cleaner for the entire electronics. Solvent mixture with 5 active components to clean a variety of dirt. Free from CFC's and HCFC's.

2. FEATURES

KONTAKT WL is a universal cleaner with a broad application spectrum and a high material compatibility. It dries within minutes without leaving a residue. It dissolves reliably fatty and oily pollutants as well as water-soluble crystalline remains.

3. APPLICATIONS

As dirt remover for the entire electronics and mechanics e.g.

- Contact surfaces of plugs, potentiometers or relays
- Printed circuit boards, electronic components
- Fine mechanical gears and engines
- Housing and fittings
- Switch boxes and tools.

Also removes e.g. ball point and felt pen marks or resinified polymer residues on stored equipment. It is also optimally suited for the removal of residues after KONTAKT 60 has been used.

4. DIRECTIONS

- KONTAKT WL is best used from an aerosol can. For precision cleaning/dosing, please use the extension tube. The aerosol can be used upside down (360° valve) for hard to reach spots or parts. Carbon dioxide is used as propellant allowing a filling level of active ingredients equal to $\pm 97\%$.
- Spray KONTAKT WL generously. If possible, use a cloth to absorb any liquid which runs off. The type of materials in the neighbourhood of electrical contacts are not endangered by the liquid run-off, but washed-off dirt can cause malfunctions elsewhere in a piece of electrical equipment. If the cleaned contacts are readily accessible, the cleaning can be optimized by wiping, for example with a fluff-free, clean paper tissue. Most currently used materials in the production of electronic parts, housings and equipment, are compatible with KONTAKT WL. However, plastics sensitive to solvents (e.g. polystyrene, polycarbonate) or rubber should be tested on forehand.
- Electrical contacts and surfaces cleaned from corrosion dirt should be protected following the cleaning. For contacts we do recommend anti-corrosion protective oil KONTAKT 61.

- The product contains easily flammable solvents hence all sources of ignition should be removed while working with the product. Do not spray on energized equipment.

A safety data sheet (MSDS) according to EU directive 91/155/EEC and amendments is available for all CRC products.

5. TYPICAL PRODUCT DATA (without propellant)

Appearance	:	clear, colourless liquid
Smell	:	mild
Density at 20°C	:	0.77g/cm ³
Flashpoint	:	<0°C
Evaporation speed (ether = 1)	:	ca. 10

6. PACKAGING

All statements in this publication are based on service experience and/or laboratory testing. Because of the wide variety of equipment and conditions and the unpredictable human factors involved, we recommend that our products be tested on-the-job prior to use. All information is given in good faith but without warranty neither expressed nor implied.

This Technical Data Sheet may already have been revised at this moment for reason such as legislation, availability of components and newly acquired experiences. The latest and only valid version of this Technical Data Sheet will be sent to you upon simple request or can be found on our website: www.crcind.com.

We recommend you to register on this website for this product so you will be able to receive any future updated version automatically.

Version : 20710 03 1003 00

Date : 07 October 2004



Manufactured by :
CRC Industries Europe NV
Touwslagerstraat 1 – 9240 Zele – Belgium
Tel (32) (0) 52/45.60.11 Fax (32) (0) 52/45.00.34
www.crcind.com



1. GENERAL DESCRIPTION

Mineral oil based contact cleaner for all types of electrical contacts.

Cleans, lubricates, displaces moisture and prevents corrosion.

2. FEATURES

The solvent mix in KONTAKT 61 dissolves greasy dirt, oil and resinified deposits, forms a sliding and lubricating film, displaces moisture and protects against corrosion.

3. APPLICATIONS

- To clean dirty contacts (for corroded contacts we do recommend KONTAKT 60)
- To lubricate sliding and plug sockets, reduces the susceptibility to wear of contact surfaces
- To protect contact surfaces against moisture and corrosion

4. DIRECTIONS

The easiest way to apply KONTAKT 61 is from an aerosol can. An extension tube is also provided.

Spray liberally to clean contact surfaces. However to form a lubricating and protective film, a few droplets on each pair of contacts are sufficient.

The cleaning action from KONTAKT 61 can be improved by mechanical means as there are e.g. actuate the switch a few times, push the plug in and out. For extremely dirty or corroded contacts we do recommend our special contact cleaner KONTAKT 60.

KONTAKT 61 displaces moisture and forms a micron thin lubricating and protective film.

Under normal circumstances, this film does not affect the electrical conductivity. However at very low voltages of e.g. <1 volt, it is possible that the field force is insufficient to break through the oil film. In these cases individual testing is needed.

To reduce the wear and tear of soft noble metal (coated) contacts, we do recommend the use of our synthetic contact lubricant KONTAKT GOLD 2000.

KONTAKT 61 is also available as a concentrate without solvent. The dilution is done with bulk KONTAKT WL at a volume ratio of 1:7. When used in serial production, plastics should be tested for their compatibility, especially those plastics susceptible to stress-cracking.

When using KONTAKT 61 , all source of ignition should be removed. Do not spray on energized equipment.

A safety data sheet (MSDS) according to EU directive 91/155/EEC and amendments is available for all CRC products.



5. TYPICAL PRODUCT DATA (without propellant)

Aerosol

Density at 20°C	:	approx. 0.76 g/cm ³
Colour	:	bluish transparent
Flashpoint	:	<0°C
Evaporation rate (ether = 1)	:	approx. 5

Concentrate

Density at 20°C	:	approx. 0.78 g/cm ³
Colour	:	bluish transparent
Max. temperature	:	80°C
Flashpoint	:	approx. 200°C

6. PACKAGING

Aerosol:	12 x 200 ml; 12 x 400 ml
Bulk:	1 liter

All statements in this publication are based on service experience and/or laboratory testing. Because of the wide variety of equipment and conditions and the unpredictable human factors involved, we recommend that our products be tested on-the-job prior to use. All information is given in good faith but without warranty neither expressed nor implied.

This Technical Data Sheet may already have been revised at this moment for reason such as legislation, availability of components and newly acquired experiences. The latest and only valid version of this Technical Data Sheet will be sent to you upon simple request or can be found on our website: www.crcind.com.

We recommend you to register on this website for this product so you will be able to receive any future updated version automatically.

Version : 20705 03 1003 00
Date : 25 October 2004



Manufactured by :
CRC Industries Europe NV
Touwslagerstraat 1 – 9240 Zele – Belgium
Tel (32) (0) 52/45.60.11 Fax (32) (0) 52/45.00.34
www.crcind.com

