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SPARE PART(S) INSTALLATION

ITEM NO.S 046129 / 046606 / 046605
DESCRIPTION LKAT2 Noise Suppression Kit

BCS017

REVISION
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This instruction is a supplement to and does not supersede the instructions in the product user manual. If you do not have a manual, please contact DynAmp before proceeding. The product user manual should be the guide when a conflict occurs.

General Safety Guidelines:

- Use **CAUTION** during installation; high voltage and current may be present. Some Systems are grounded and contacting the Unit/System and the Bus Bar at the same time may result in **ELECTROCUTION**.

Specific other safety instructions:

Tools Needed:

- | | | | |
|---|--|--|--------------------------------------|
| <input type="checkbox"/> Dow Corning
#4 Compound
Provided | <input type="checkbox"/> Pliers | <input type="checkbox"/> Torque Wrench | X Wire Lugging Tool |
| | <input type="checkbox"/> Screw Starter | <input type="checkbox"/> Adjustable Wrench | X Wire Strippers |
| | X Screw Drivers | <input type="checkbox"/> Multimeter | <input type="checkbox"/> Other _____ |
| | <input type="checkbox"/> Solder Iron | <input type="checkbox"/> Organic Core Solder | <input type="checkbox"/> Other _____ |

General Instruction Guidelines:

See Attached Drawing Illustration Photo X Attached at bottom of this form

Written by RJM

Date 23 March 2015

Work Instructions:

DynAmp testing indicates the vast majority noise problems are coupled by conduction.

For test results, the customer should follow the step-by-step process outlined below so it is known where the noise is entering the LKAT system.

It is easy to add/remove the clamp-on ferrites to evaluate their effectiveness.

The order of installation probably does not really matter.

(If the customer is in a hurry, all devices can be installed at one time)

1.) Add (3) ZCAT clamp-on ferrites (DynAmp Item Number 046129) to the mains power wiring, as close as possible to the Metering Unit.
Check to see if the symptoms persists.

2.) If symptom persists, add (2) ZCAT clamp-on ferrites (DynAmp Item Number 046129) to each head cable as close as possible to the Metering Unit but leaving room for the core in step 3. If needed
Check to see if the symptoms persists.

3.) If symptom persists, add (1) Laird core (DynAmp Item Number 046606) to each Measuring Head Cable Assembly between the ZCATs and the Metering Unit.

NOTE : The customer will need to remove plugs P1 and P2 to install the cores.

Once installed, reconnect the head wires to P1 and P2.

Check to see if the problem persists.

4.) If the symptoms persists, repeat step 2.) for the output cable. Use (2) DynAmp Item Number 046129.

Check to see if the problem persists.

5.) If the symptoms persists, repeat step 3.) on the output cable (1) core only. Use (1) DynAmp Item Number 046606.

Check to see if the problem persists.

6. The final step, if required, install (1) Schaffner high performance line filter (DynAmp Item Number 046605) per system, connected in-line with the mains input power as close to the Metering Unit as possible. Requires the use of (2) DynAmp Item Number 025649 insulated lugs and (3) DynAmp Item Number 025650 insulated lugs per system. Reference Nidec LKAT2 Sigma Noise Suppression Kit pictures for lugs used on each terminal based on typical wire and wire diameters used for the mains wiring.

