AUDIO/VIDEO 9-1-1

Tech Bulletin: SB-AV9-1-1

Dated: 03/01/2006

Note: Edited by Parts ConneXion to add their SKU # cross-reference and text checked by CAIG - 07/26/07

- 1. Connector Maintenance
- 2. Vacuum Tube Maintenance
- 3. Fader Maintenance
- 4. Potentiometer Maintenance
- 5. Difference between 5% and 100% products

NOTE: Name change in 2006. ProGold becomes DeoxIT® GOLD, PreservIT becomes DeoxIT® SHIELD, CaiLube MCL becomes DeoxIT® FaderLube.

1. Connector Maintenance (RCA, XLR, BNC, DVI, COAX, etc.)

NOTE: If the part is used or in service, assume it's oxidized.

Metal surfaces:

- 1. Apply DeoxIT® contact cleaner to metal contact/connector surface. When connectors contain surface particles (dust, dirt, etc.) along with oxidation, use DeoxIT® spray with flushing solvent (#D5MS-15). When the surface is free from most surface particles, use DeoxIT® without a flushing solvent (#DN5MS-15).
- 2. Operate device to help displace contaminants from contact surface.
- 3. Repeat Step 1.
- 4. If surface is heavily oxidized, leaving DeoxIT® contact cleaner on overnight, is recommended.
- 5. The next day remove the contaminants lifted by DeoxIT® with lint free swab, cloth on accessible surfaces or repeat Step 1 to displace contaminants from contact surface. Process may need to be repeated if surface is heavily oxidized. When surface is clean, no residue on the cloth, finish with a couple short bursts of DeoxIT®.
- 6. For extended protection: After surface is clean, apply DeoxIT® GOLD (ProGold) for indoor applications or DeoxIT® SHIELD (PreservIT) for outdoor applications.

Plated metal surfaces and gold surfaces - used or in service (i.e. gold or other precious metal):

7. Follow the above procedure (Metal surfaces) to clean metal surface. Then finish with DeoxIT® GOLD (ProGold) to protect surfaces. Maintain thereafter with DeoxIT® GOLD (ProGold).

8. When connectors contain surface particles (dust, dirt, etc.) along with oxidation, use DeoxIT® GOLD (ProGold) spray with flushing solvent (#G5MS-15 Spray). When the surface is free from most surface particles, use DeoxIT® GOLD (ProGold) spray without flushing solvent (#GN5MS-15).

Plated metal and gold surfaces - new or with no visible oxidation on the surface:

9. Apply DeoxIT_® GOLD (ProGold) to contact/connector surface. When using 100% solution, wipe off excess. Maintain thereafter with DeoxIT_® GOLD (ProGold).

NOTES:

After applying DeoxIT® and DeoxIT® GOLD (ProGold), you may notice immediately or over the next several days a green or black coloration on connector surface. This represents dissolved oxides. Repeat cleaning process above and then apply DeoxIT® GOLD (ProGold) for indoor applications OR DeoxIT® SHIELD (PreservIT) for outdoor applications.

Recommended Applicators:

Spray Part No.'s:

DeoxiT Part No. and/or names	Parts ConneXion
SKU# (Nonflammable, non drip - quick dry, safe on plastics. Over 1	50 sprays per can)
DeoxIT _® , DN5MS-15, 14 g. DeoxIT _® GOLD (ProGold), GN5MS-15, 14 g.	CAIG- 67186 CAIG- 67192
DeoxiT Part No. and/or names	Parts ConneXion
SKU# (Briefly flammable, until solvent evaporates), flushing action -	slow dry.
DeoxIT _® , D5MS-15, 14 g.	CAIG-67258
DeoxIT _® GOLD (ProGold), G5MS-15, 14 g.	CAIG-67251
Non spray applicators DeoxiT Part No. and/or names SKU#	Parts ConneXion
	D100L-25C CAIG-67252
DeoxIT _® GOLD (ProGold), precision needle, 25 ml. Part No. (DeoxIT _® , brush bottle, 7.4 ml. Part No. (DeoxIT _®)	G100L-25C CAIG-67253 D100L-2DB CAIG-67188
•	G100L-2DB CAIG-67195
Deoxi i ® GOLD (Piogoid), brush bottle, 7.4 ml. Part No.	G100L-2DB CAIG-0/193

2. Vacuum Tube Maintenance

NOTE: Name change in 2006 from ProGold GxL to DeoxIT_® GOLD GxL. Part numbers will remain the same.

Vacuum tubes generally operate at elevated temperatures. This requires a different approach to clean and protect the connector surfaces.

- 1. **First clean the surfaces.** Apply DeoxIT® contact cleaner **100%** to metal pins and sockets using a small foam lint-free swab. If you have DeoxIT® Spray, spray some onto tip of foam swab and apply to tube pins/socket. If you have DeoxIT® liquid, place small amount onto the tip of foam swab, then apply to tube pins/socket.
- 2. If surface is heavily oxidized, leaving DeoxIT® contact cleaner on overnight, is recommended.
- 3. The next day remove contaminants lifted by DeoxlT_® with lint free swab or cloth on accessible surfaces. Process may need to be repeated if surface is heavily oxidized. Surface is clean when no residue is present on the cloth.
- 4. Now that the surfaces are clean we need to protect them. Apply DeoxIT_® GOLD GxL (ProGold GxL) sparingly to pins and socket with lint-free swab. Remove excess with clean swab.

NOTES:

DeoxIT® does not necessarily remove any superficial discoloration (black tarnish) caused by oxidation or burn-in to the tube pins. This will, in no way adversely affect the performance of the equipment. DeoxIT® and DeoxIT® GOLD (ProGold) improves conductivity irregardless of this discoloration.

Recommended Applicators:

Non spray 100% applicators <u>DeoxiT Part No. and/or names</u>	Parts (ConneXion SKU#
DeoxIT®, precision needle, 25 ml DeoxIT® GOLD (ProGold), precision needle, 25 ml DeoxIT®, brush bottle, 7.4 ml DeoxIT® GOLD (ProGold), brush bottle, 7.4 ml	Part No. D100L-25C Part No. G100L-25C Part No. D100L-2DB Part No. G100L-2DB	CAIG-67188
Recommended Lint-Free Part No's: Swabs: DeoxiT Part No. and/or names	Parts (ConneXion SKU#
SWP-6: $1/4 \times 3/4 \times 4$ - $1/2$ ", qty 6. (Additional count sizes avail SWPX-6: $1/8 \times 1/2 \times 2$ - $3/4$ ", qty 6. (Additional count sizes avail		CAIG-67254 CAIG-67255
Cloths: DeoxiT Part No. and/or names	Parts	ConneXion SKU#
LFC-C/50: Cotton, qty 50. (Additional count sizes available LFC-P/50: Polypropylene, qty 50. (Additional count sizes available)	,	CAIG-67204 CAIG-67257

3. Fader Maintenance

NOTE: Name change in 2006 from CaiLube MCL to DeoxIT® FaderLube. Part numbers will remain the same.

The following guidelines have been established based on the experience and feedback of technical professionals, end users and our own years of testing and evaluation:

Routine Maintenance - general wear and tear:

- 1. Apply 1-2 bursts/drops of DeoxIT® FaderLube (CaiLube MCL) 100% to fader.
- 2. Manually operate faders 5-10 times to displace surface contaminants and distribute lubrication. It may be necessary to repeat this step the following day, depending on condition of fader.

Faders that have had drinks spilled on them are treated a bit differently:

Emergency Maintenance - drink spills, excessive dirt and moisture:

- 1. Apply 1-2 bursts of DeoxIT® FaderLube (CaiLube MCL) **5%** solution to contact surface.
- 2. Manually operate faders 5-10 times to remove/displace surface contaminants.
- 3. Apply 1-2 bursts/drops of DeoxIT_® FaderLube (CaiLube MCL) **100%** solution to cleaned surface, and manually operate the fader 5-10 times to replace lubrication necessary for proper function.

It may be necessary to repeat this step the following day, depending on condition of fader.

NOTES:

If the drink spill does not involve the entire board, it is not necessary to treat the entire board with the three-step process.

Normally, we suggest removing any excess 100% product, wherever possible. In this case, we have accomplished this process through mechanical action.

Recommended Applicators:

DeoxIT Part No. and/or names Parts ConneXion SKU# DeoxIT® FaderLube (CaiLube MCL), 100% Spray, 57 g. Part No. F100S-L2 DeoxIT® FaderLube (CaiLube MCL), 100% Liquid, 25 ml DeoxIT® FaderLube (CaiLube MCL), 5% Spray, 142 g. Part No. F5S-H6 CAIG-67197

4. Potentiometer Maintenance

The following guidelines have been established based on the experience and feedback of technical professionals, end users and our own years of testing and evaluation:

Sealed pots:

- 1. Found in newer equipment, may be difficult to restore, and should probably be replaced.
- 2. Occasionally if the pots are not totally sealed, you may be able to treat it in an ultrasonic cleaner using a 10% solution of DeoxIT. Contact a CAIG representative for specific recommendations and instructions. Call 858.486-8388.

Unsealed pots:

Rotary pots respond best to DeoxIT® 100% spray or 100% liquid, depending on how they're mounted.

Recommended Maintenance:

- 1. Apply 1-2 bursts/drops DeoxIT_® 100% solution.
- 2. Manually operate pots 5-10 times to displace the surface contaminants and distribute DeoxIT_®.
- 3. Reapply DeoxIT_®.
- 4. It may be necessary to repeat this step the following day, depending on the condition of pot.

NOTES: Normally, we suggest removing any excess 100% product, wherever possible. In this case, we have accomplished this process through mechanical action.

Recommended Applicators:

DeoxiT Part No. and/or names		Parts ConneXion SKU#
DeoxIT _® , 100% spray, metered valve, 57 g	Part No. D100S-2	CAIG-67191
DeoxIT _® , precision needle, 25 ml	Part No. D100L-25C	CAIG-67252

5. The Difference Between the 5% and 100% Products

The following excerpt from the Tech Info Questions and Answers sheet addresses this guite well.

"Use the 5% spray or liquid to apply a thin coating of our products. Remember only a small amount is required on surface for maximum performance. The 5% solutions will ensure that only small amounts will remain on the surface. The solvent will also assist in flushing away loose dust, dirt, grease and other contamination."

To summarize:

- 1. The 5% solution has a carrier solvent, but after the solvent evaporates, what remains is 100% product.
- 2. Original 5% formula provides flushing action, but the 100% does not.
- 3. Two 5% spray versions are available.

Example: CAIG Part Nos.

a) Original formula: Flushing action, slow drying, flammable until solvent evaporates. Evaporation rate depends on ambient temperature, approx. 5 to 60 minutes for complete evaporation. 100% solution remains on surface.

Parts ConneXion SKU #

 D5MS-15,
 CAIG-67258

 D5S-6,
 CAIG-67259

 G5MS-15,
 CAIG-67251

 G5S-6,
 CAIG-67260

 F5MS-H15,
 CAIG-67199

 F5S-H6
 CAIG-67197

b) Nonflammable formula: No flushing action, quick drying. Solvent evaporates almost immediately. 100% solution remains on surface.

Example: CAIG Part Nos.	Parts ConneXion SKU #	
DN5MS-15,	CAIG-67186	
DN5S-6N,	CAIG-67190	
GN5MS-15,	CAIG-67192	
GN5S-6N	CAIG-67194	

4. Always wipe excess 100% solution with clean lint-free cloth or swab. Please refer to Fader Maintenance and Potentiometer Maintenance instructions for the exception to this advisory.

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