

Motorola Solutions Technical Notification (MTN)

TITLE: Using KMF Master key with key ID 0 results in OTAR (Over-The-Air Rekeying) failures

TECHNOLOGY: ASTRO 25

SYMPTOMS:

When a TEK (Traffic Encryption Key) that has been assigned Key ID 0 is key loaded to the KMF CRYPTR using the Modify Master Key operation, the KMF Master Key Status will display "Correct Master Key." However, all OTAR operations will fail (except Clear Hello). Details of the failed operation will report the failure message, "General encryption error: Invalid Key", in the Operations Status window.

If the KMF CRYPTR is erased and the Reload Master Key operation is performed in an attempt to resolve the defect using the same key (even if the Key ID is changed to a non-zero value), the KMF Master Key Status will display "Master Key Status Unknown." KMF operations can be performed successfully using existing keys and CKRs (Common Key Reference). However, the KMF will not allow new keys, CKRs, or unit groups to be created.

MODELS / SYSTEM RELEASES / KITS / DATECODES AFFECTED:

A2019.2 / A2020.1 / A2020.HS / A2021.1 / A2022.1 / A2022.HS

Orderable model number: T7734A

Astro KMF CRYPTR versions: R03.07.04 or earlier

SEVERITY RECOMMENDATION:

High / Safety - Perform Immediately

ROOT CAUSE:

Software defect

DEFINITIVE TEST:

NA

WORKAROUNDS:

NA

CORRECTIVE ACTIONS:

A TEK with a Key ID 0 should never be used as a Master Key.

Note: According to the P25 standard, Key ID 0 is a reserved value which is used as a default Key ID by equipment which does not operate in a multi-key system.

RESOLUTIONS AND REPAIR PROCEDURES:

A special script must be used to clear the Master Key issue. If you are experiencing an issue listed in the Symptoms section, to recover, contact your MSI Technical support center for access to the script. Follow the instructions in the script's readme file.

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TIME TO IMPLEMENT/SYSTEM IMPACT:

Estimated time to implement - per machine - 15 minutes

Low - not time consuming, no loss of functionalities

PARTS REQUIRED (HARDWARE/SOFTWARE):

NA

REFERENCE THE FOLLOWING DOCUMENTS/PROCESSES FOR INSTALLATION PROCEDURES:

NA

WHEN TO APPLY RESOLUTION:

After failure _x_

Information only _x_

LABOR ALLOWANCE:

This is an informational bulletin. No labor warranty is implied, intended or authorized for U.S. Domestic Partners/Customers. Other regions should follow their own standard procedures.

If, after attempting to perform the solution steps, you are having issues with the resolution in the MTN then please contact your MSI Technical support center.

In NALA https://www.motorolasolutions.com/en_us/support.html

In EMEA https://www.motorolasolutions.com/en_xu/support.html

In Asia https://www.motorolasolutions.com/en_xp/support.html

SW ORDER FORM IS AVAILABLE UNDER THE LINK:

https://www.motorolasolutions.com/content/dam/msi/docs/robots/motorola-technical-notification/SW_order_form.pdf