

DOCUMENT NUMBER: MTN-0034-23-NA

APC:

137

ISSUE DATE: Mar-2023

EXPIRATION DATE: 31-Mar-2024
Bulletin Type: Informational Only

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.

ANY USE NOT APPROVED BY MOTOROLA SOLUTIONS IS PROHIBITED. This Motorola Technical Notification (MTN) is issued pursuant to Motorola's ongoing review of the quality, effectiveness, and performance of its products. The information provided in this bulletin is intended for use by trained, professional technicians only, who have the expertise to perform the service described in the MTN. Motorola disclaims any and all liability for product quality or performance if the recommendations in this MTN are not implemented, or not implemented in compliance with the instructions provided here. Implementation of these recommendations may be necessary for the product to remain compliant with applicable laws or regulations. Please be advised that failure to implement these recommendations in the manner instructed may also invalidate applicable warranties, or otherwise impact any potential contractual rights or obligations. MOTOROLA, MOTO, MOTOROLA SOLUTIONS, and the Stylized M Logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license. All other trademarks are the property of their respective owners. ©2021 Motorola Solutions, Inc. All rights reserved.



DOCUMENT NUMBER: MTN-0034-23-NA

APC: 137

ISSUE DATE: Mar-2023

EXPIRATION DATE: 31-Mar-2024
Bulletin Type: Informational Only

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.

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.

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:

NΑ

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:

http://www.motorolasolutions.com/content/dam/msi/docs/robots/motorola-technical-notification/SW order form.pdf

ANY USE NOT APPROVED BY MOTOROLA SOLUTIONS IS PROHIBITED. This Motorola Technical Notification (MTN) is issued pursuant to Motorola's ongoing review of the quality, effectiveness, and performance of its products. The information provided in this bulletin is intended for use by trained, professional technicians only, who have the expertise to perform the service described in the MTN. Motorola disclaims any and all liability for product quality or performance if the recommendations in this MTN are not implemented, or not implemented in compliance with the instructions provided here. Implementation of these recommendations may be necessary for the product to remain compliant with applicable laws or regulations. Please be advised that failure to implement these recommendations in the manner instructed may also invalidate applicable warranties, or otherwise impact any potential contractual rights or obligations. MOTOROLA, MOTO, MOTOROLA SOLUTIONS, and the Stylized M Logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license. All other trademarks are the property of their respective owners. ©2021 Motorola Solutions, Inc. All rights reserved.