

Script.Serial.KN02\_V5\_FORKLIFT\_GKN\_100004\_340B\_DC\_RF\_V1.0.0.0

FORKLIFT KNOV KN02 GKN 100004 340B DC RF Serial Script



## Overview

This script has been developed to support a maintenance checklist for Forklifts at customer GKN (Brazil). The forklift operator shall answer the several questions about the vehicle status. Depending on the answers the vehicle should be released for operation or blocked.

The script is not aimed at a particular forklift type or brand. It implements a process, controlling a low-cost keyboard, the KN02-Max. The KN02-Max has been fitted with a custom skin for MiX Telematics (shown above). This script is a customized version of the template

"Maintenance Checklist for Forklifts – V5".

The template has been modified to support:

- Customer: GKN
- 14 questions (10 with engine OFF, 4 with engine ON)
- Critical questions: (1, 2, 3, 11, 13, 14) => Mask 340Bh
- Mode of Operation: Change of driver
- Identification Mode: RFID Card (using keyboard's embedded RFID reader)
- Master Card ID- range: 0x04D5B7BD to 0x04D5B821
- Maintenance Card ID range 0x109647A4 to 0x10964808

See template documentation for details about the operation of the script.

This script can be used with the following devices:

1. MiX 4000
2. MiX 6000
3. FM3316 and FM3306 Communicators
4. FM3517i and FM3507i Communicators
5. FM3617i and FM3607i Communicators
6. FM3717i and FM3707i Communicators
7. FM3817i and FM3807i Communicators

## Version History

Reference	Version	Changes
<a href="#">ESCR-126</a>	v1.0.0.0	<p>First version for customer GKN. Based on Maintenance Checklist for Forklifts V5.</p> <ul style="list-style-type: none"> <li>- 14 questions (10 with engine OFF, 4 with engine ON)</li> <li>- Critical questions: (1, 2, 4, 11, 13, 14) =&gt; Mask 340Bh</li> <li>- Mode of Operation: Change of driver</li> <li>- Identification Mode: RFID Card (using keyboard's embedded RFID reader)</li> <li>- Master Card ID- range: 0x04D5B7BD to 0x04D5B821</li> <li>- Maintenance Card ID range 0x109647A4 to 0x10964808</li> </ul>
<a href="#">ESCR-126</a>	v1.0.0.0	Converted Script to Production.

## Supported Parameters

ACRONYM	PARAMETER NAME	PARAMETER DESCRIPTION	Return values/states (if applicable)
FKQID	FORK.Question_ID	Indicates the Question ID processed	Range 1 and 32
FKQTP	FORK.Question_Type	Indicates if a Question is critical or not*	0 = noncritical 1 = critical
FKQAW	FORK.Question_Answer	Indicates the Answer (YES/NO) received	0 = No 1 = Yes
FKDID	FORK.Driver_ID	Current Driver ID	
FKCHS	FORK.Checklist_Status	Indicates the current Checklist status	See table below
FKERR	FORK.Error_Msg	Reserved	Not used

STATUS	MEANING
0	Ignition is OFF (Vehicle not being used).
1	Vehicle has been released for use => checklist has been performed and no critical issues have been reported
2	Vehicle has been blocked => checklist has been performed and at least one critical issue was reported
3	Vehicle has been released => checklist not performed because it has been previously successfully performed in the same work shift or due to change of driver).
4	Vehicle has been released due to special authorization => Driver uses a forklift in special authorization mode
5	Vehicle in Maintenance Mode => attempt to use a vehicle in maintenance mode
6	First part of the Checklist has been finished and driver informs that engine was successfully turned ON
7	Vehicle has been released due to relocation - Driver uses a forklift in relocation mode
8	Attempt to use a forklift which has been blocked in the previous operation. A message has been displayed informing that the forklift has been previously blocked.
9	Checklist has been cancelled but vehicle is blocked=> ignition was turned off during checklist operation, but vehicle is blocked as a critical question got a negative answer
10	Checklist Part 1 has been started
11	Configuration has been aborted (maintenance or Admin menus) and Vehicle is blocked => ignition was turned off during checklist operation, but vehicle is blocked.
12	Checklist Part 3 has been started
13	Checklist cancelled (ignition was turned Off)
14	Vehicle has been enabled by Supervisor (using Admin Card)
15	Vehicle has been disabled by Supervisor (using Admin Card)
16	Vehicle remains enabled and unblocked
17	Admin Menu has been started
18	Vehicle remains disabled
19	Vehicle remains blocked
20	Unblock vehicle (using Admin Card) due to error in answering the checklist

21	Released vehicle due to special authorization by Admin=> (vehicle released for use during current work shift or till next change of driver
22	Released vehicle for relocation performed by Admin=> vehicle released for use during one trip, afterwards it is blocked again
23	Maintenance Menus has been started
24	Vehicle enabled by Maintenance
25	Vehicle remains enabled
26	Vehicle disabled by maintenance and out of maintenance
27	Vehicle disabled by maintenance and Into Maintenance
28	Vehicle is out of Maintenance
29	Vehicle remains in Maintenance
30	Configuration has been aborted (maintenance or Admin menus) => ignition was turned off during checklist operation. Vehicle is not blocked.
31	Attempt to use a disabled vehicle
32	Engine has been unblocked
33	Checklist Part 2 has been started

## Installation Notes

1. Direct connection between KNOV KN02 keyboard and OBC using the serial interface (DB9)
2. The serial port settings used are:
  - Baud Rate: 19200 bps
  - Byte Length: 8 bits
  - Flow Control: None
  - Parity: None
  - Stop Bits: 1 bit