KÄRCHER

DATE: 11/28/2023

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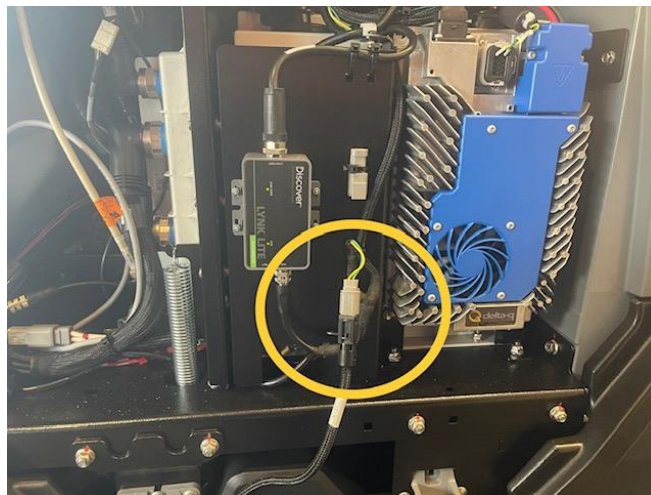**RE:**   KIRA CV60/1 Field Service Programming Instructions Rev 3

This memo details the process for updating the firmware on the Kira CV60/1. This does not cover process for updating the Deluxe CV60/1 (see *Deluxe_CV60/1_Field_Service_Programming_Instructions.pdf*)

This document is supporting documentation for detailing programming instructions for CV60/1 machines that will be used with the Karcher Machine Interface Suite.

Updating Firmware

1. Turn on the main breaker and reset the e-stop. Turn the key switch off.

2. Connect the service harness (8.645-398.0) to the service port (B-C32) inside the left door (see figure 16).

[Figure 16: B-C32 - Service Harness Connected to the Service Port]

3. Connect the PEAK USB CAN tool (8.645-399.0) to the service harness and computer.

4. From the main Karcher MIS menu make sure CV60/1 is selected in the drop-down box.

5. Make sure that CV60/1 is selected in the drop-down box and verify that the "PEAK 81" tool is recognized by the program. Press *Connect* (see figure 17).
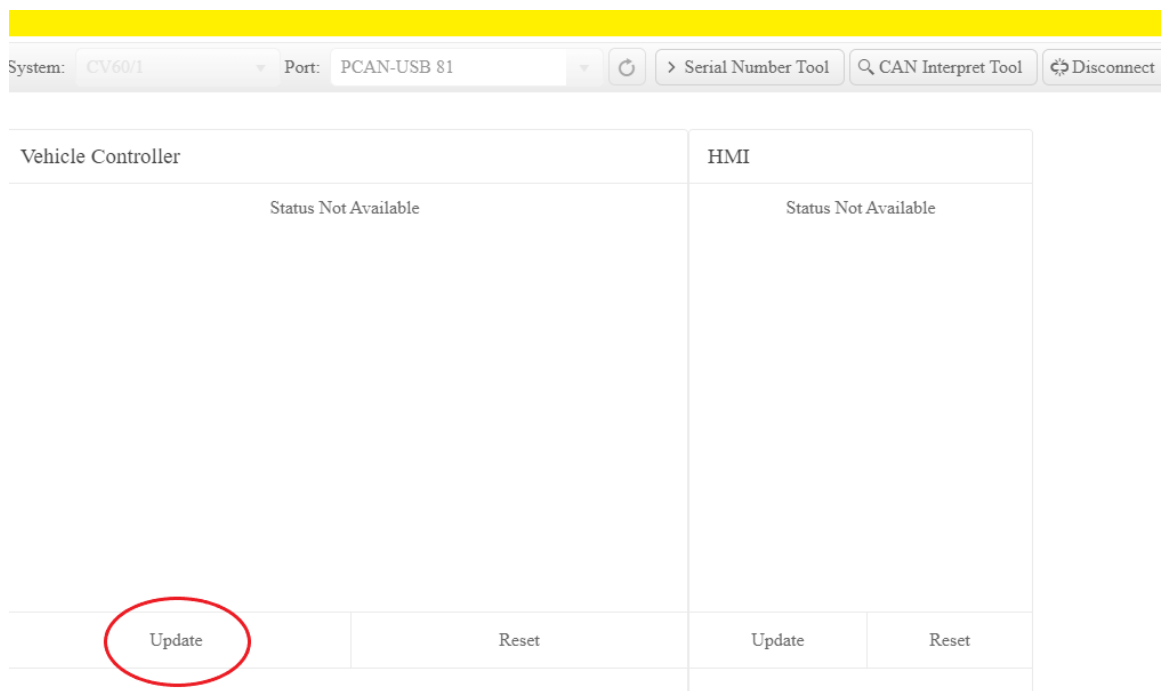
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[Figure 17: Connect the PEAK USB CAN Tool in Software]

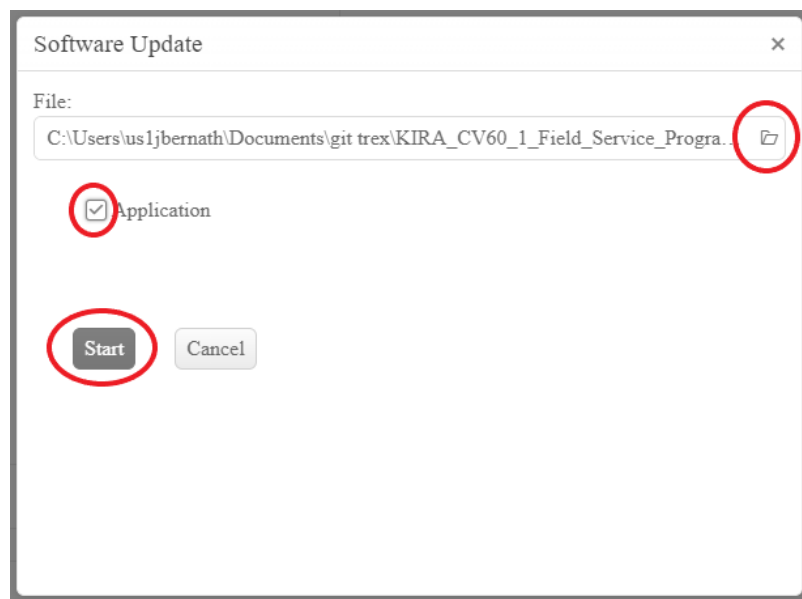6. In the *Vehicle Controller* Pane, select *Update* (see figure 18).

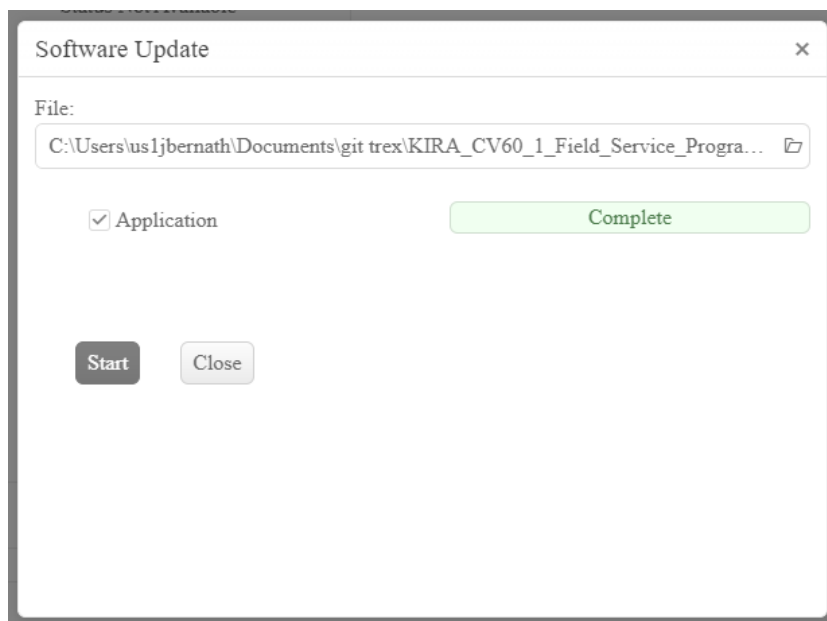[Figure 18: Vehicle Controller Update]

7. In the *File:* dialog box file (see figure 19), open the following.

    Karcher-MIS-main\Karcher-Floor-Care-Karcher-MIS-
    xxxxxxx\TREX_Firmware\Trex_VCM_Application_3_4_13\manifest.json

8. Check the *Application* box (see figure 19).

9. Press *Start* (see figure 19).

[Figure 19: Program VCM]

10. If programming was completed successfully, "Complete" will be displayed in the progress bar (see figure 20).

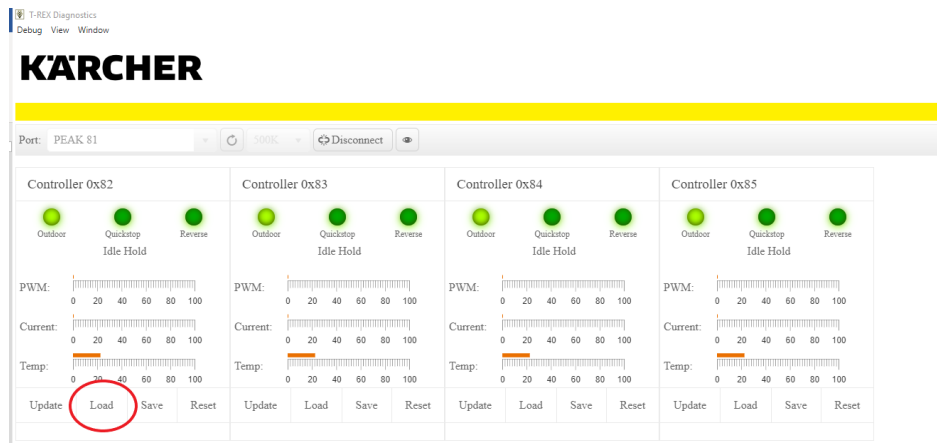[Figure 20: Successful Programming Message]

11. Turn the key switch on.

12. Select _Load_ in the _Controller 0x82_ Pane (see figure 21) and open the following.

    _Karcher-MIS-main\Karcher-Floor-Care-Karcher-MIS-xxxxxxx\TREX_Firmware\Trex_DMC_Configurations_3_4_13/SWEE000340B_EE_59_tract_82.ee_
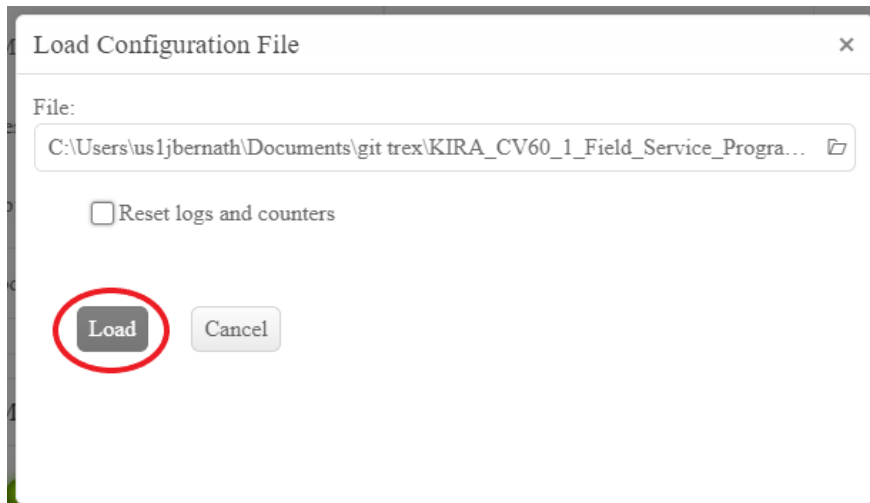
    Warning: The controllers are not always displayed in order from lowest to highest.

    Each controller must be programmed with the correct setting.

[Figure 21: Motor Controller Load]

13. Press _Load_ (see figure 22).

[Figure 22: Load Motor Controller Settings]

14. If programming was completed successfully "Configuration loaded from file" will be displayed in the lower right corner (see figure 23). Ignore the error message.

[Figure 23: Successful Programming Message]

15. Repeat step 11-14 for _Controller 0x83_, _Controller 0x84_ and _Controller 0x85_. Use the following files for each.

    Controller 0x83

    _Karcher-MIS-main\Karcher-Floor-Care-Karcher-MIS-xxxxxxx\TREX_Firmware\Trex_DMC_Configurations_3_4_13/SWEE000341B_EE_59_brush_83.ee_

    Controller 0x84

    _Karcher-MIS-main\Karcher-Floor-Care-Karcher-MIS-xxxxxxx\TREX_Firmware\Trex_DMC_Configurations_3_4_13/SWEE000342B_EE_59_vac_84.ee_

    Controller 0x85

    _Karcher-MIS-main\Karcher-Floor-Care-Karcher-MIS-xxxxxxx\TREX_Firmware\Trex_DMC_Configurations_3_4_13/SWEE000343B_EE_59_side_br_85.ee_

16. The Firmware has been successfully updated.
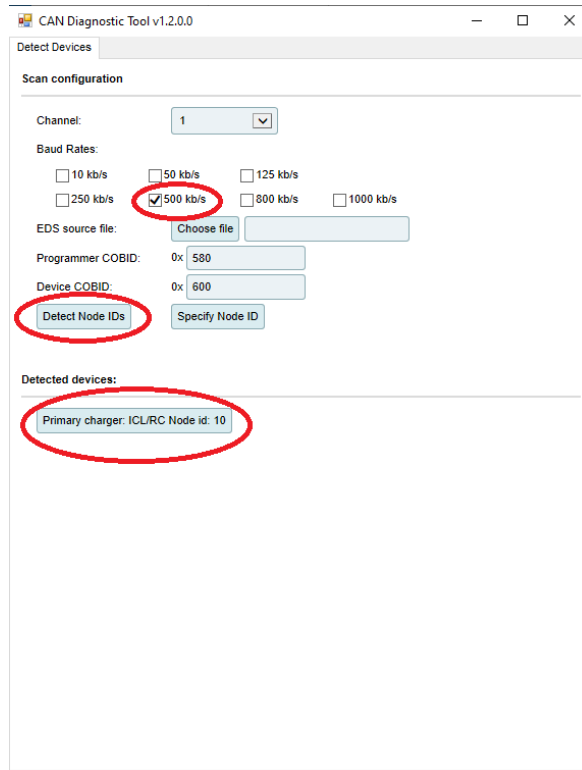

Updating Charger Configuration

17. Turn off the main breaker and turn the key switch off.

18. Plug the charger into AC power.

19. Connect the service harness (8.645-398.0) to the service port (B-C32) inside the left door (see figure 16).

20. From the _Charger CAN_Diagnostics_tool_v1.2.0_ package that was downloaded by clicking the "Download Documentation" button open the following:

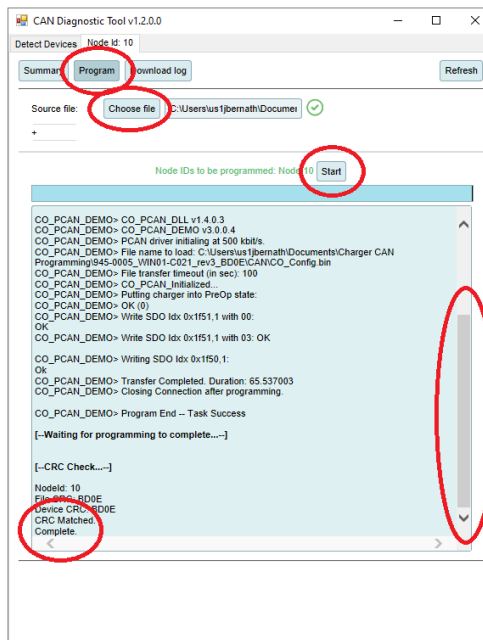   _Karcher-MIS\Charger CAN_Diagnostics_tool_v1.2.0\RC1\CAN Diagnostic Tool.exe_

21. Set the _Baud Rate:_ to 500Kb and press _Detect Node IDs_ (see figure 24).

22. After the charger has been detected, it will show up in the _Detected devices:_ window (see figure 24). Select it.

[Figure 24: Charger CAN Diagnostic Tool – Connect to Charger]

23. Press *Program* to use the programming Window (see figure 25).

[Figure 25: Charger CAN Diagnostic Tool – Charger Programming]

24. Select *Chose file*, open the following and press start (see figure 25).

    *Karcher-MIS-main\Karcher-Floor-Care-Karcher-MIS-
    xxxxxx\TREX_Firmware\Trex_Charger_Configuration\CAN\CO_Config.bin*

25. If programming was completed successfully "Complete" will be displayed at the bottom of the status window (see figure 25). Scroll down to view the bottom of the window.