



### Subject: ServiceRanger 4 Connection Settings – Add Profile

#### Document Number: MDIB-0051

Date: August 15, 2022

Updated: July 8, 2024

#### **Description:**

To ensure Eaton® ServiceRanger 4 connectivity with a Transmission Electronic Control Unit (TECU) and Transmission Control Module (TCM) a proper connection settings profile is required.

SR	Settings - Eaton ServiceRanger 4	_ 🗆 X
Go To Connect		Activity Report
Go To Connect	Add Profile Select connection mode:   Vehicle Simulation Name Enter Name Communications Adapter Select at least one connection configuration. Select at least one connection Sel	
No Eaton Product Detected		Disconnected 🔇 😤

### **Transmission Models:**

- Endurant HD, XD
- UltraShift PLUS and Fuller Advantage Automated
- UltraShift Gen3 and Gen2 Transmissions

**Note:** AutoShift Gen1 Transmissions require ServiceRanger 2.80, refer to <u>Service</u> <u>Bulletin MDIB-0036</u>.

### Field Strategy:

### A. Identify ServiceRanger 4 Version

- **1.** Open ServiceRanger 4.
- 2. Go To "Settings".
- 3. Select "License".
- 4. Record ServiceRanger Version: 4.##.#####
  - a. If version is 4.12.1363 or greater, go to Step B.
  - b. If version is less than 4.12.1363, refer to <u>RRMT0041</u> and update to latest version. Go to <u>Step B</u>.

### **B. Use an Approved Communication Adapter**

- 1. Refer to <u>Vehicle Link Adapters</u> (select "Resources" tab).
- 2. Refer to communication adapter manufacturer and download device drivers software to computer. Go to <u>Step C</u>.

**CAUTION:** A hardwired USB connection between computer, communication adapter and vehicle diagnostic connector is required for programming a TECU and TCM. Do not use a wireless connection (Bluetooth or WiFi). Failure to use a hardwired USB connection when programming may result in a damaged TECU or TCM and void component warranty.

**Note:** A crossover cable may be required based on the OEM – Kenworth, Peterbilt and Volvo, and communication adapter: NEXIQ CAN 3 - CAN 1 (PN 406004), PACCAR Y - Cable (PN 42-02848) or equivalent.

## C. Identify Connection Setting

- 1. Go to <u>Recommended Connection Settings</u> section.
- 2. Based on OEM, identify and record connection setting. Go to Step D.

### D. Add a Profile in Connection Settings

- 1. Open ServiceRanger Physical connection to a vehicle or communication adapter is not required to add a profile.
- 2. Go To "Settings".
- 3. Select "Connection Settings".
- **4.** Select "+" Add Profile.
- 5. Select connection mode: "Vehicle".
- 6. Enter profile name.
- **7.** From the "Communications Adapter" drop down, select communication adapter.
- **8.** From J1587 Connection or J1939 Connection drop down, select connection setting recorded in **Step C**.
- 9. Select Save, go to Step E.

### E. Connect ServiceRanger 4 to Vehicle:

- 1. Connect Communication Adapter to computer and vehicle:
  - USB cable and connector to computer.
  - Diagnostic cable and connector to vehicle.
- 2. Key on with engine off.
- 3. Select "Connect".
  - If "Successfully Connected", process complete.
  - If "no Eaton product detected", go to <u>Step C</u>.
  - If "Connection Failed", go to <u>Step F</u>.

## F. Reset Communication Adapter and computer:

- 1. Key off.
- 2. Disconnect Communication Adapter from vehicle and computer.
- **3.** Reboot computer.
- **4.** Connect Communication Adapter to vehicle and computer.
- 5. Key on with engine off.
- 6. Open ServiceRanger 4.
- 7. Select "Connect".
  - If "Successfully Connected", process complete.
  - If "no Eaton product detected" or "Connection Failed", contact Eaton for further diagnostic instructions:
    - U.S. and Canada Help Line: +1-800-826-4357
    - Mexico Help Line: +52-800-800-6801

## **Service Bulletin – Product**

## **Recommended Connection Settings:**

#### OEM:

- Freightliner, Western Star
- Navistar
- <u>Kenworth, Peterbilt</u>
- <u>Volvo</u>
- <u>Bluebird</u>

#### Freightliner, Western Star:









#### Kenworth, Peterbilt (continued):

\*The following may assist in determining if vehicle is equipped with a Vehicle Electronic Control Unit (VECU):

• Vehicles equipped with a full digital display (dash) are equipped with a VECU, example below:



• Vehicles equipped with analog gauges and a digital display – Use digital display push-scroll dial, go to Truck Info, Chassis tab, scroll through list of components to determine if vehicle is equipped with a VECU or not:





# **Service Bulletin – Product**



# **Service Bulletin – Product**



• Go to <u>Step D</u>.

### Warranty Information:

Information only.

The material contained in this bulletin is product improvement information. Eaton Corporation is not committed to, or liable for, canvassing existing products. FSUD: 2022-FSUD-4425

#### Change Log

Date	Description	
7/8/2024	Updated Subject, Field Strategy and Recommended Connections	
	Settings sections, added links within document.	
7/1/2024	Updated Description and Field Strategy sections, added	
	Recommended Connections Setting section with revised process	
	flows.	
11/6/2023	Added edit profile example image and connection setting process	
	flow diagrams	
8/15/2022	Document created	