

PREVOST

Instruction Sheet

IS-17901

Wabco Smart Trac ABS ECU Aftermarket Programming

MATERIAL

Kit #7770363 which includes the following parts:

| Part No. | Description | Qty |
|----------|--------------------------------------|-----|
| 641948 | Non-programmed Meritor Wabco ECU-ABS | 1 |
| IS-17901 | Instruction Sheet (EN) | 1 |
| FI-17901 | Instruction Sheet (FR) | 1 |

NOTE

Material can be obtained through regular channels.

Tools that may be required:

| Description | Qty |
|--|-----|
| Laptop with Meritor Wabco Toolbox version 12.4 or higher | 1 |
| Nexiq USB Link Diagnostic adaptor | 1 |
| 12 Volts Power Supply (for bench programming) | 1 |
| Bench programming adaptor harness (12V adapter to ECU) | 1 |
| 12 V Diagnostic adapter harness with switch & J1939 connection (for bench programming) | 1 |

PROCEDURE

Part 1 (page 2): Obtaining configuration file for all vehicles.

Part 2 (page 4): In vehicle configuration for Multiplex vehicles only.

Part 3 (page 6): Bench programming, necessary for non-multiplexed vehicles.



DANGER

Park vehicle safely, apply parking brake, stop engine. Prior to working on the vehicle, set the ignition switch to the OFF position and trip the main circuit breakers equipped with a trip button. On Commuter type vehicles, set the battery master switch (master cut-out) to the OFF position.

NOTE

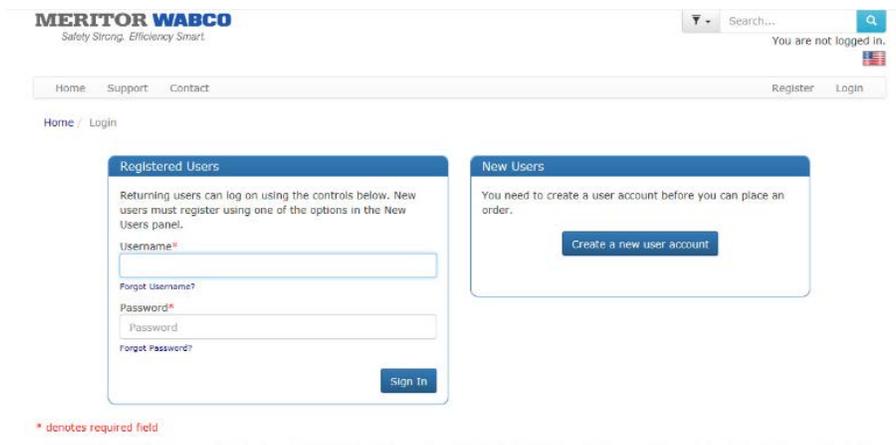
Additional support documents for this product can be found at: <http://www.meritorwabco.com/>

Meritor WABCO Aftermarket Programming allows users to configure a replacement pneumatic ABS ECU with a vehicle-specific configuration file. The procedures for obtaining the configuration file and configuring the ECU are below. This applies only to ECUs with this label:

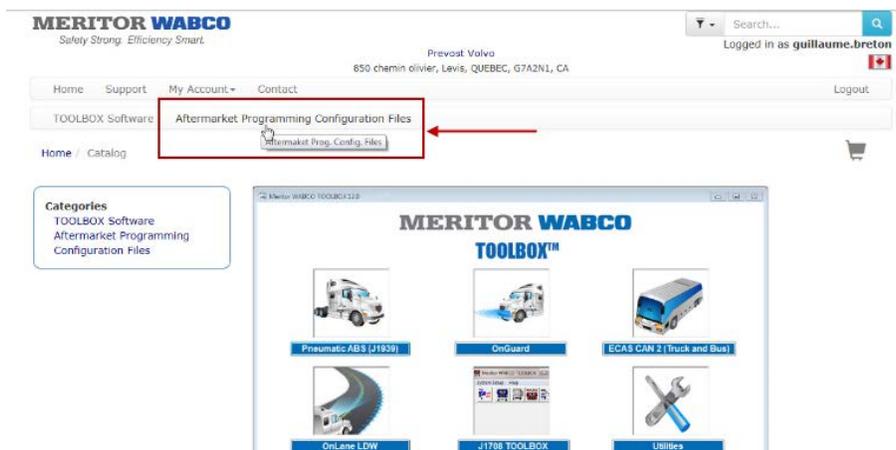
MUST BE PROGRAMMED!
<https://meritorwabco.snaon.com>

Part 1: Obtaining Configuration File:

1. Log in to (or create an account) <https://meritorwabco.snaon.com/Login.aspx>



2. Click the Aftermarket Programming Configuration Files button



MERITOR WABCO
Safety Strong. Efficiency Smart.

Prevost Volvo
850 chemin olivier, Levis, QUEBEC, G7A2N1, CA

Home Support My Account Contact Logout

TOOLBOX Software Aftermarket Programming Configuration Files

Home / Catalog / Aftermarket Programming Configuration Files / Aftermarket Programming Configuration File

Aftermarket Programming Configuration File

The configuration file is provided based on the VIN and ECU part number being replaced.

Before ordering a programmable ECU or configuration file for Aftermarket Programming, ensure you meet all the requirements -

- **J1939 communication to ABS ECU** is required or **Bench Programming Unit** must be available
 - Verify communication to ECU by setting the protocol in TOOLBOX to J1939. Vehicles equipped with 6 pin diagnostic connector likely do not have J1939. You can also use chart below for J1939 verification.
 - If J1939 communication is not available, purchase a bench programming unit (PN S400 850 960 0) or a full programmed ECU at additional cost through Meritor. Meritor customer care (US) 1-888-725-9355, (Canada) 1-800-387-3889
 - If a Bench Programming Unit is available, the ECU can be programmed on the bench without installation on the vehicle. Please note that Bench Unit only works for pneumatic ABS ECU as of now.
- Any **J1939 RP1210 diagnostic adaptor** such as Nexiq USB Link-2 is required for programming
- Computer with **TOOLBOX diagnostics is required**. TOOLBOX 12.4 is required for 500kB vehicles.

Image shown may not be actual product.
Product and price information are subject to change without notice.

Part Details

3. Enter the following information when prompted:

- 17 digit VIN (required)
- ECU part number of the unit being replaced
- ECU part number of the new unit
- Serial number of the new unit

Part Details

VIN*
All 17 Characters

ECU Part Number Being Replaced*
10 Digits (400xxxxxx0)

New ECU Part Number*
10 Digits (400xxxxxx0)

New ECU Serial Number*
6 Digits (xxxxxxx)

I have read the limitations above and confirm that this vehicle supports J1939 communications.

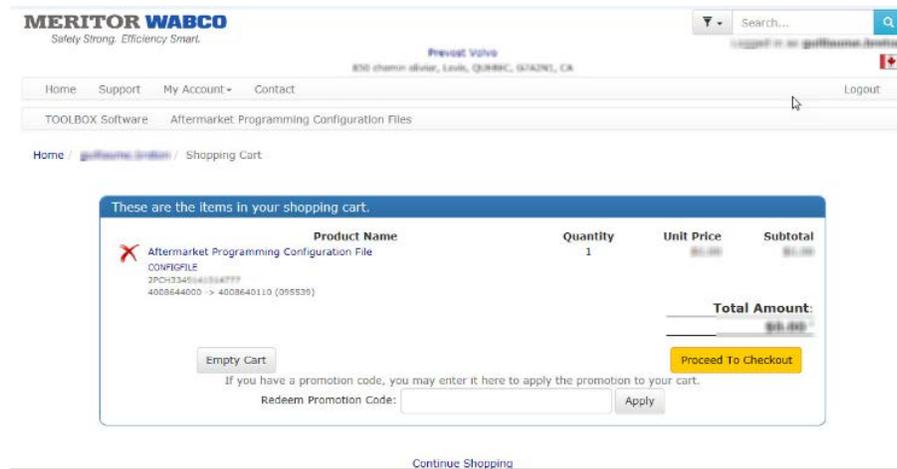
* denotes required field

4. Follow the step by step instructions to complete the configuration file purchase (add to cart, checkout...). *The price of the configuration file is included with the module purchase, the file will not be charged when clicking the "calculate price or checkout" button.*

- Proceed to checkout (\$0.00) to obtain the configuration file.
- Click on the file and save on the computer desktop other location accessible from TOOLBOX™.

NOTE

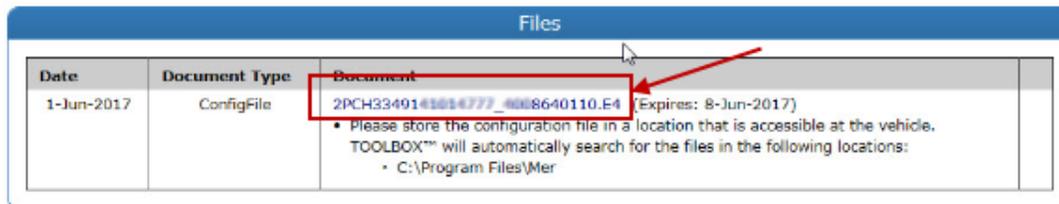
- Configuration File is valid for a limited number of days.



Thank you for your order!

Your order has been successfully entered into our system, you will receive an email shortly with the order details.

Your order reference number is MP-110-581



Part 2: Configuring the ECU on Multiplex vehicles:

NOTE

This part of the procedure is to be used with Multiplex equipped vehicles only (J1939 communication port).

- 2005 + H3 Series Vehicles (VIN 5-0168 and up)
- 2007 + X3 Series Vehicles (VIN 7-8933 and up)

1. Remove both vehicle ECU wake-up fuses from the vehicle (*F78 & F79*).
2. Install the new ABS ECU into the vehicle.
3. Connect a computer (with Wabco TOOLBOX™ installed) to the vehicle using a J1939 diagnostic adapter (i.e. Nexiq USB-Link™).



4. Open TOOLBOX™ version 12.4 or higher and select the Aftermarket Programming icon.



5. Follow the step by step instructions to configure the ECU
 - A green **PASS** box will appear when the ECU has been successfully configured (put back ECU F78 & F79 fuses).
 - A red **FAIL** box will appear if the ECU has not been successfully configured; contact OnTrac with the error code (i.e. A3) that appears in the dialog box

MERITOR WABCO

E4 Aftermarket Programming

```
Connecting to adapter...
Successfully connected to adapter NXULNK32
Reading ECU data...
Reading Aftermarket Programming configuration file...
Part number match between installed ECU and Aftermarket Programming configuration file.
Ensuring that Aftermarket Programming configuration data is valid for ECU part number...
Validating parameters against rule sets...
Reading ECU data...
Setting ECU parameters...
Updating checksums...
Clearing DTCs...
All DTCs cleared.
Final Result: PASS
Please proceed to PABS J1939 diagnostics to review DTCs.
```

PASS

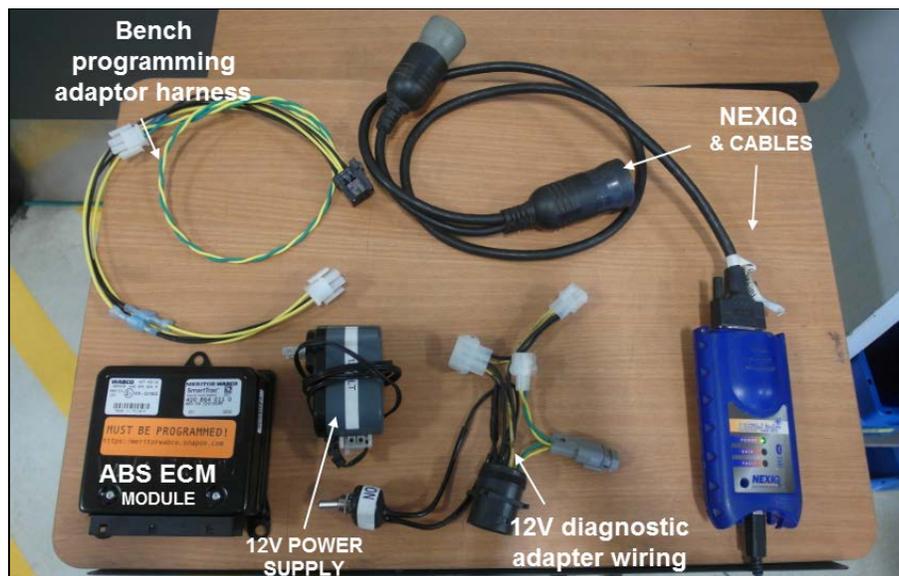


Part 3: Bench programming the ECU (Necessary for NON-Multiplex vehicles):

NOTE

This part of the procedure can be used for all vehicles, but is a mandatory step for Non-Multiplex vehicles (without J1939 communication port).

- 2005 and earlier H3 Series Vehicles (Up to VIN 5-0167)
- 2007 and earlier X3 Series Vehicles (Up to VIN 7-8932)

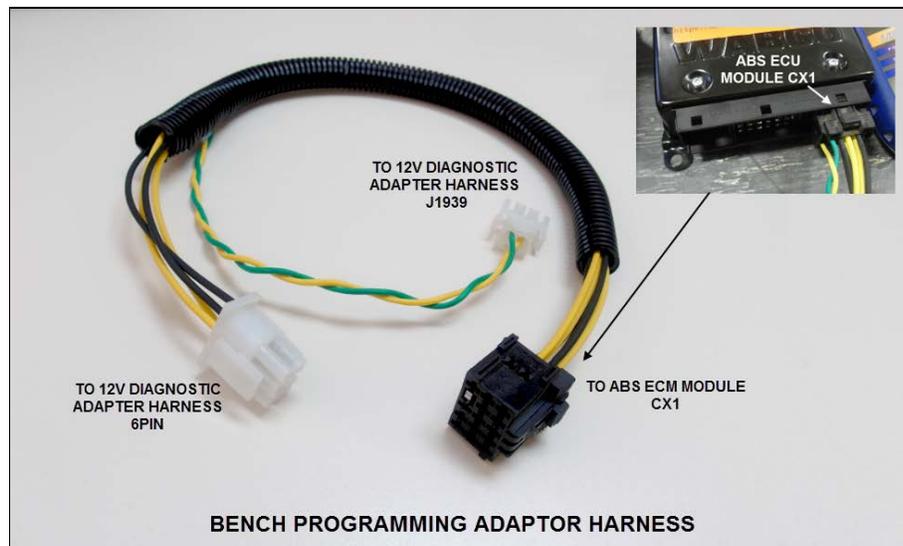
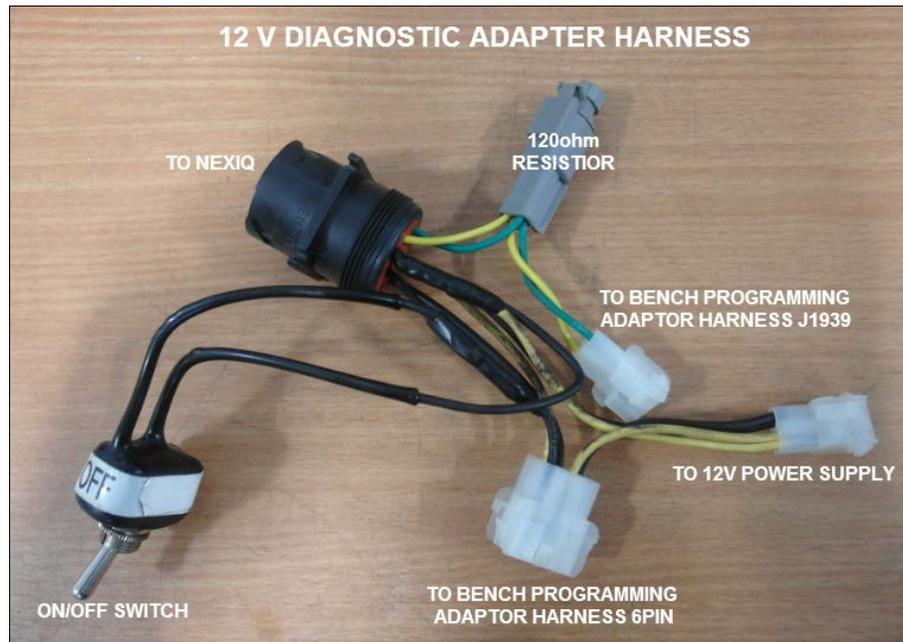


1. Connect a computer (with Wabco TOOLBOX™ installed) to a J1939 diagnostic adapter (i.e. Nexiq USB-Link™).
2. Connect a 12 Volts diagnostic adapter harness (with J1939 connection) to the Nexiq diagnostic adapter.

NOTE

If a 12V diagnostic adapter harness with J1939 connection is not available, fabricate or modify an existing one using the schematic provided at the end of this document.

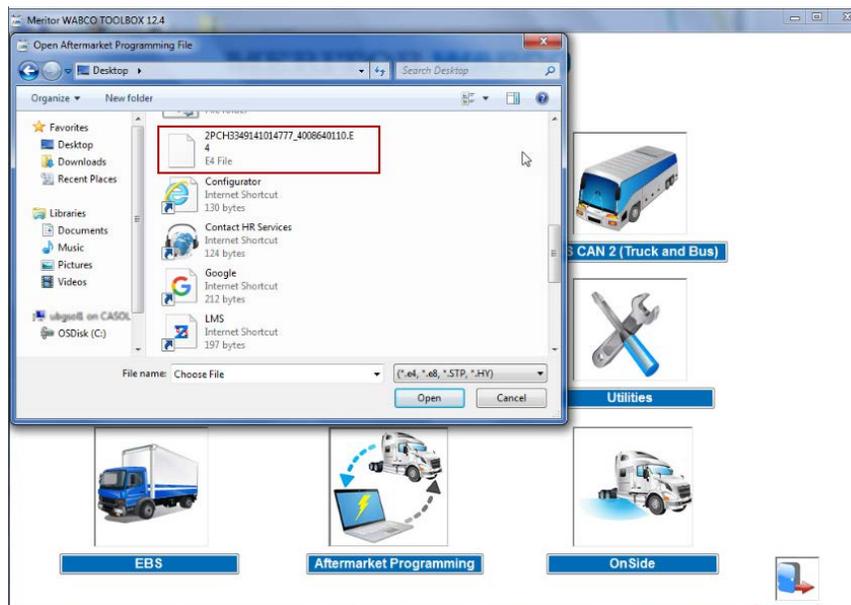
3. Connect a bench programming adaptor harness (6PIN connector) and J1939 connector (twisted green/yellow wires) to the 12V diagnostic adapter harness.



NOTE

If a bench programming adaptor harness is not available, fabricate one using the schematic provided at the end of this document.

4. Connect the bench programming adaptor CX1 connector (15PIN) to the new ABS ECU module CX1 Connection.
5. Connect a 12 Volt power supply to the 12V diagnostic adapter harness (make sure the 12V diagnostic adapter harness switch is set at the OFF position).
6. Open TOOLBOX™ version 12.4 or higher and select the Aftermarket Programming icon
7. Set the 12 Volt diagnostic adapter harness switch to the ON position.
8. Open the configuration file previously obtained.



- A green **PASS** box will appear when the ECU has been successfully configured
- A red **FAIL** box will appear if the ECU has not been successfully configured; contact OnTrac with the error code (i.e. A3) that appears in the dialog box



9. Remove the ABS ECU module orange “must be programmed” sticker and stick a precut or P-Touch label to the module body. Write the date and vehicle VIN on the label following the example below (label can be handwritten).

- If the module is to be shipped to a customer, do not include this procedure and related Wabco documents with the shipment.

| |
|--------------------|
| Programmed |
| Date: _____ |
| VIN: _____ |

HARNESS SCHEMATICS & PART LISTS

