

# 2021 2.7L Performance Pac

Installation Instructions P/N:  
422235 (1521-PERFPK1IM)



ROUSHPERFORMANCE.COM | 800.59.ROUSH

# 2021 Bronco Air Induction Kit

## Installation Instructions

P/N: 422235 (1521-PERFPK1IM)



**Application: 2021 Bronco 2.3/2.7L**

**Important Note:**

Before installing your ROUSH Performance Product(s), read through the entire installation procedure and check to make sure all items are present. Contact ROUSH Customer Service at 1-800-59-ROUSH, weekdays from 9:00 AM to 5:00 PM EST, with any questions regarding it, missing parts or instructions that are unclear to you.

**NOTE: Auto Start Stop Disabled.**

**NOTE: Premium (91+) Fuel Required.**

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### PACKING LIST FOR 2021 BRONCO PERFORMANCE PAC

Description	Part Number	Quantity
Air Induction Kit	422233 (1521-9600)	
Air Box Lid Assembly (Lid/Lens)	PT00041966	1
Foam Seal Lid to Air Box (71" Length Pre-Cut)	FS00057647	1
Air Filter – Red (Dry)	PT00041970	1
ROUSH Badge PT00041667 1	PT00041667	1
RDT Calibration Flash Voucher Card	P1521-PP	1

### EQUIPMENT AND SUPPLIES REQUIRED

- Metric Socket Set (Deep and Shallow)
- Trim Removal Tool
- General Automotive Tools (Pliers, Needle Nose, etc.)

If you are missing any items, please call us toll free at 800-597-6274.

### LIMIT OF LIABILITY STATEMENT

The information contained in this publication was accurate and in effect at the time the publication was approved for printing and is subject to change without notice or liability. ROUSH Performance Products (RPP) reserves the right to revise the information presented herein or to discontinue the production of parts described at any time.

## SAFETY PRECAUTIONS



### **CAREFULLY READ THE IMPORTANT SAFETY PRECAUTIONS AND WARNINGS BEFORE PROCEEDING WITH THE INSTALLATION!**

Appropriate disassembly, assembly methods and procedures are essential to ensure the personal safety of the individual performing the kit installation. Improper installation due to the failure to correctly follow these instructions could cause personal injury or death. Read each step of the installation manual carefully before starting the installation.

- Always wear safety glasses for eye protection.
- Place ignition switch in the OFF position.
- Always apply the parking brake when working on a vehicle.
- Block the front and rear tire surface to prevent unexpected vehicle movement.
- If working with a lift, always consult vehicle manual for correct lifting specifications.
- Operate the engine only in well-ventilated areas to avoid exposure to carbon monoxide.
- Do not smoke or use flammable items near or around the fuel system.
- Use chemicals and cleaners in well-ventilated areas.
- Batteries produce explosive gases, which can cause personal injury. Therefore, do not allow flames, sparks or flammable substances to come near the battery.
- Keeps hands and any other objects away from the radiator fan blades.
- Keep yourself and your clothing away from moving parts when the engine is running.
- Do not wear loose clothing or jewelry that can get caught in rotating parts or scratch surface finishes.
- Allow the engine, cooling system, brakes and exhaust to cool before working on a vehicle.

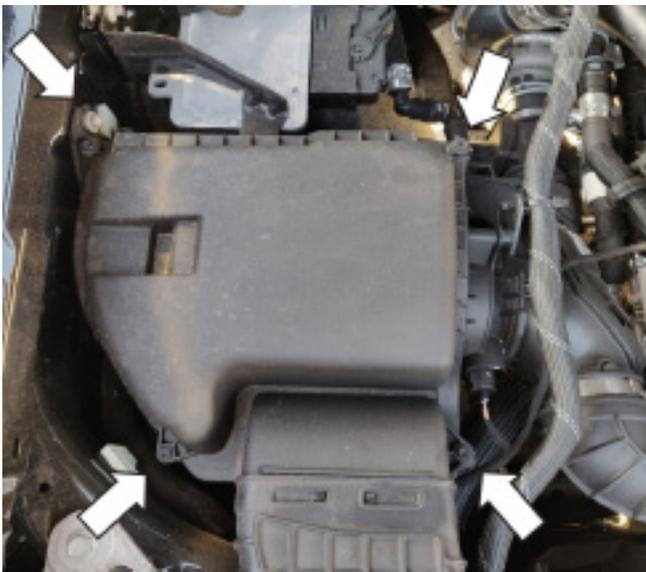
### **WORK SAFELY!**

Perform this installation on a good clean level surface for maximum safety and with the engine turned off.

## SECTION A – REMOVAL

The following section will guide you through the disassembly of the stock components. Special care should be taken to label fasteners and parts that are taken off during this procedure since many will be reused.

1. Cover both fenders with fender covers to protect the vehicle finish.
2. Open the hood of the vehicle and locate factory air box on passenger side.
3. Remove the four (4) screws that hold on the air intake lid using an 8 mm socket.



4. Remove the factory lid by using a small screwdriver or non-marring tool by inserting it here and twisting to release tension clips.



5. Remove the lid from the vehicle.
6. Remove the factory air filter by lifting up on the filter. There are no clamps to loosen.

**SECTION B – INSTALLATION**

1. Insert the new ROUSH high-capacity air filter(PT00041970) on the air tube and the factory lower air box tray. Prior to installation, the prefilter can be applied for extra dirt protection.
2. Install the cord seal (FS00057647) onto the air box lid by pressing into the retaining groove. Trimming with a razor blade is necessary to fit the inner

3. Wipe the lid with alcohol and install the ROUSH Badge (PT00041667) onto the air box lid by removing the backing tape and applying as shown.



4. Snap the new air box lid (PT00041966) onto the rubber snorkel inlet.



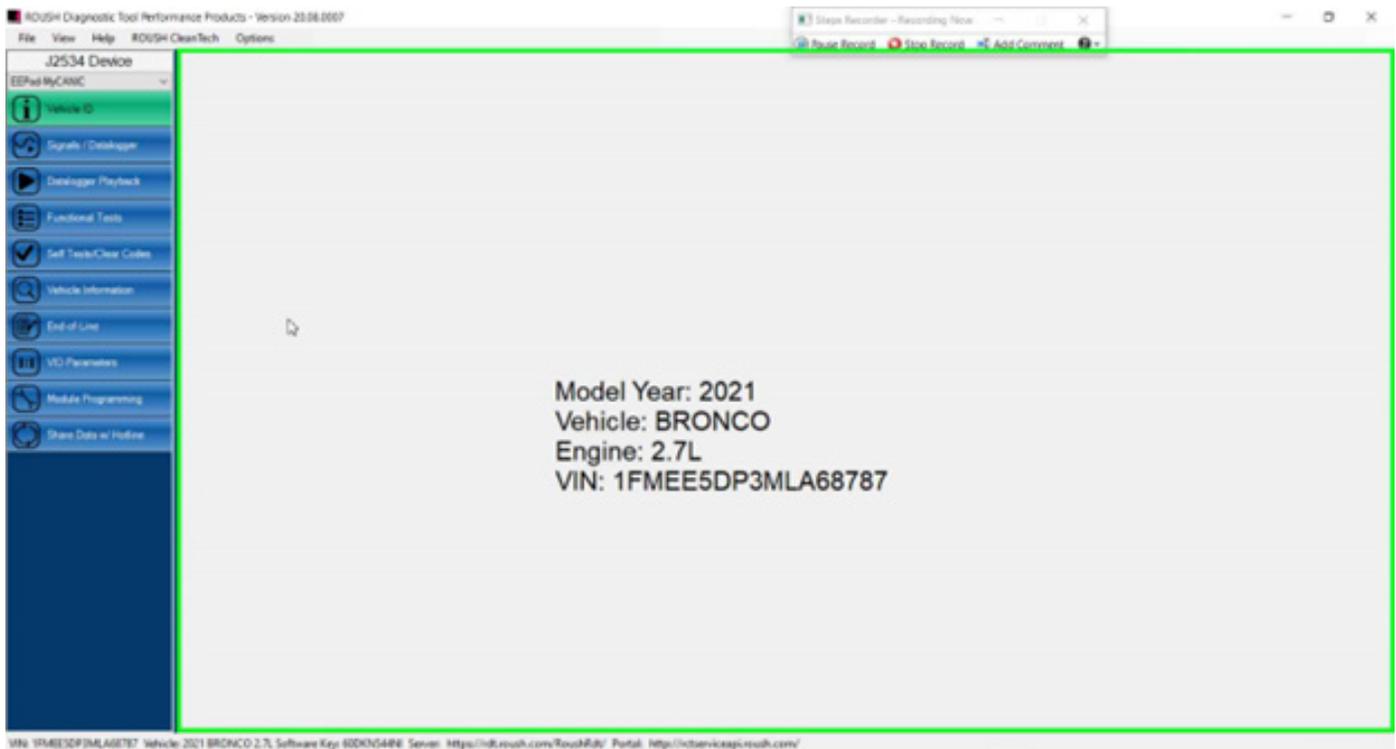
5. Install the lid onto the lower air box tray using the four (4) screws removed previously. Torque to 3Nm.



6. Start the vehicle and check for any leaks around air box lid. Make sure that the seal has not been distorted during installation.

## SECTION C - PCM FLASHING

1. If equipped with a SAE J2534 pass through device, download RDT (ROUSH Diagnostic Tool, <https://rdt.roush.com/RoushRDT/>) to flash vehicle PCM with ROUSH calibration.
2. Launch RDT and connect to vehicle using a J2534 device. The following screen will be displayed.

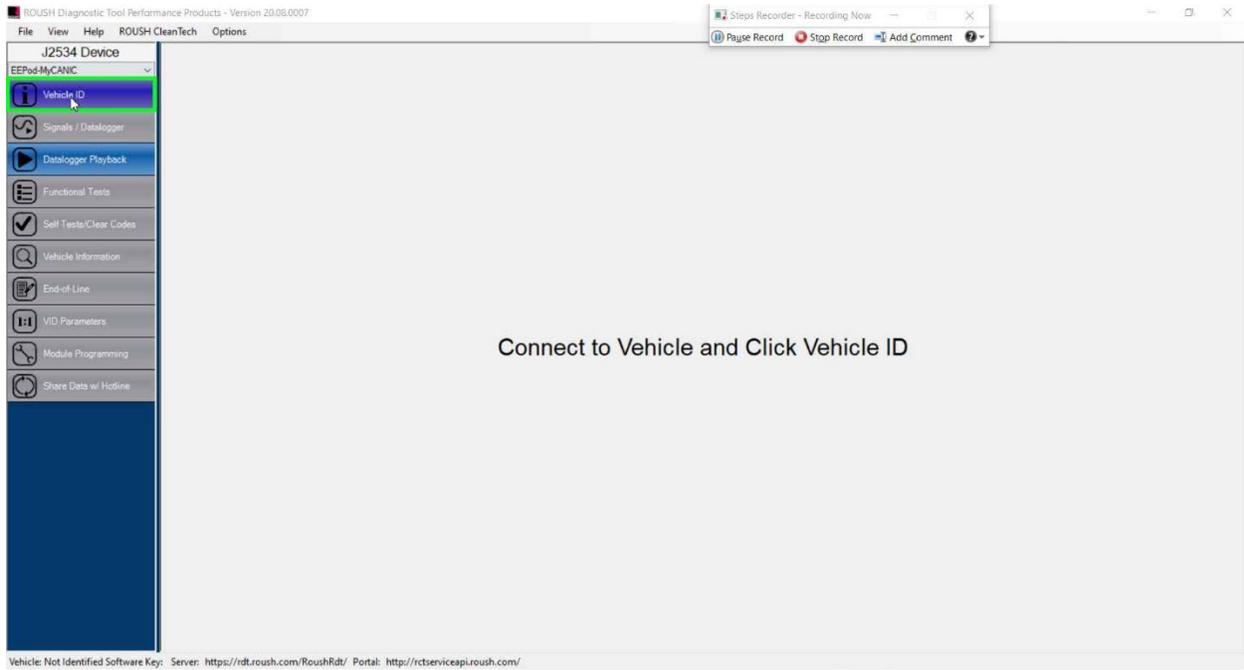


3. Locate voucher card (P1521-PP, found in 1521-PERFPK1). Enter Module Programming to install the ROUSH calibration for your Bronco. NOTE: See Appendix A for pictures that walk through the entire module programming process.
4. Once the PCM has been successfully re-calibrated, start the engine and check for unusual noises, dash service lights, and unusual operation. If problems are detected, immediately stop the engine or vehicle, diagnose, and repair the problem.

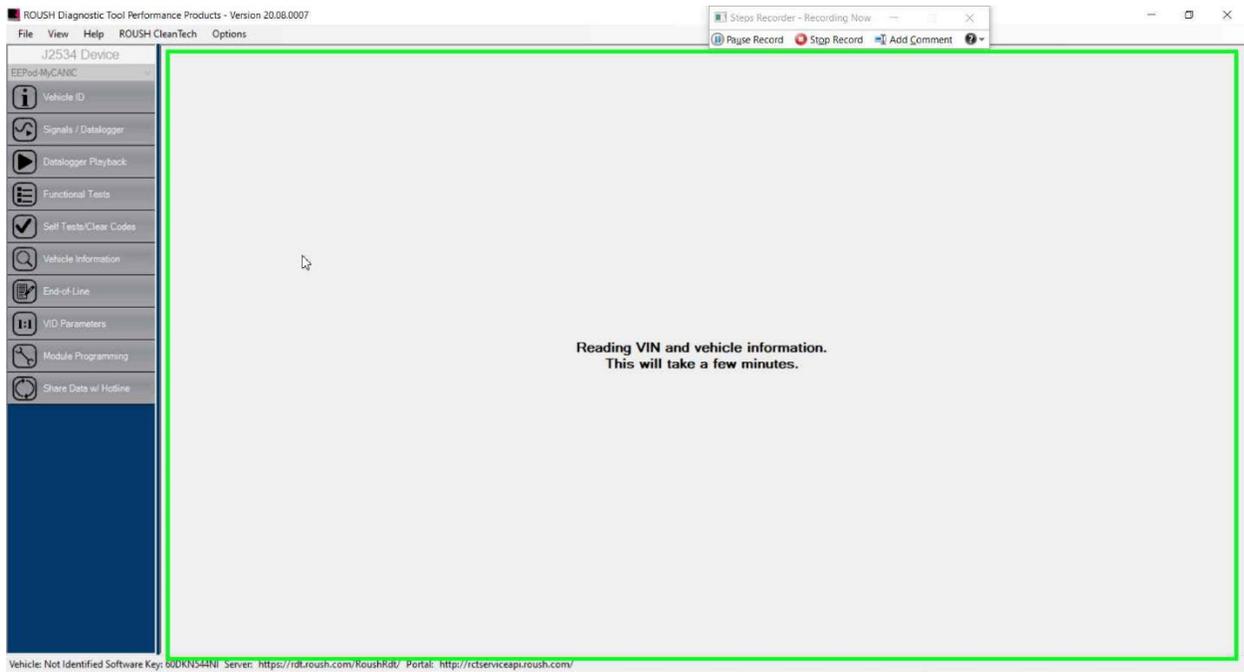
Congratulations, you can now go enjoy your new ROUSH Performance Pac Bronco!

## APPENDIX A: BRONCO 2.7L MODULE PROGRAMMING

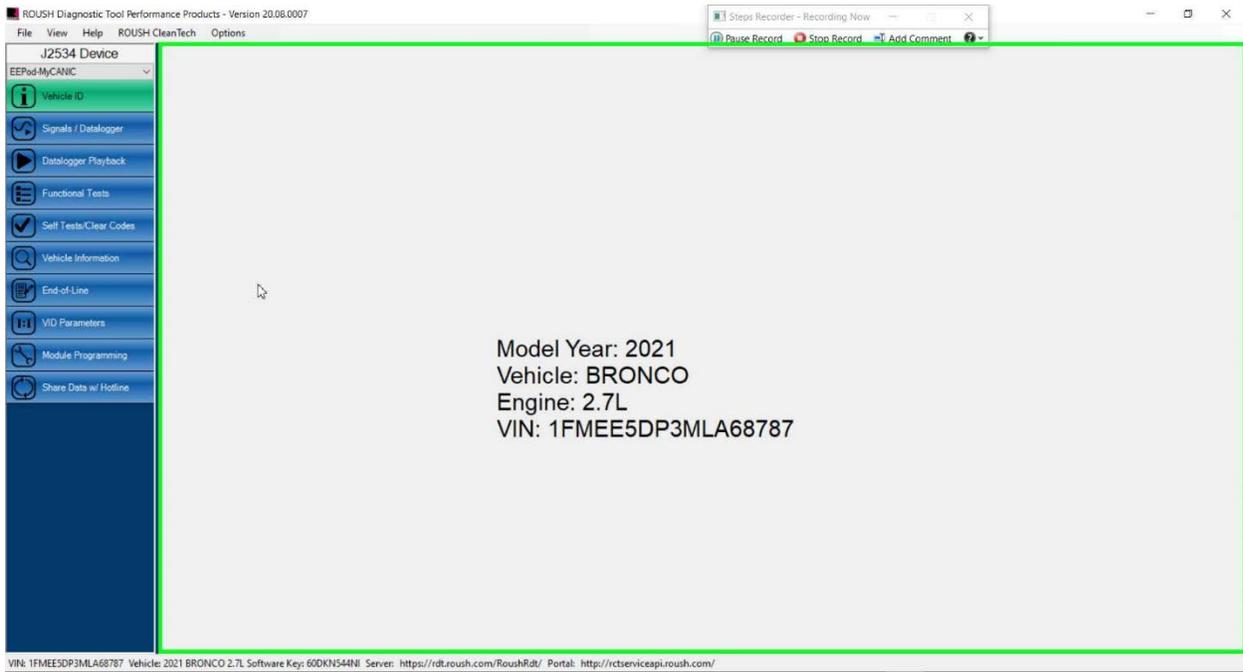
1.



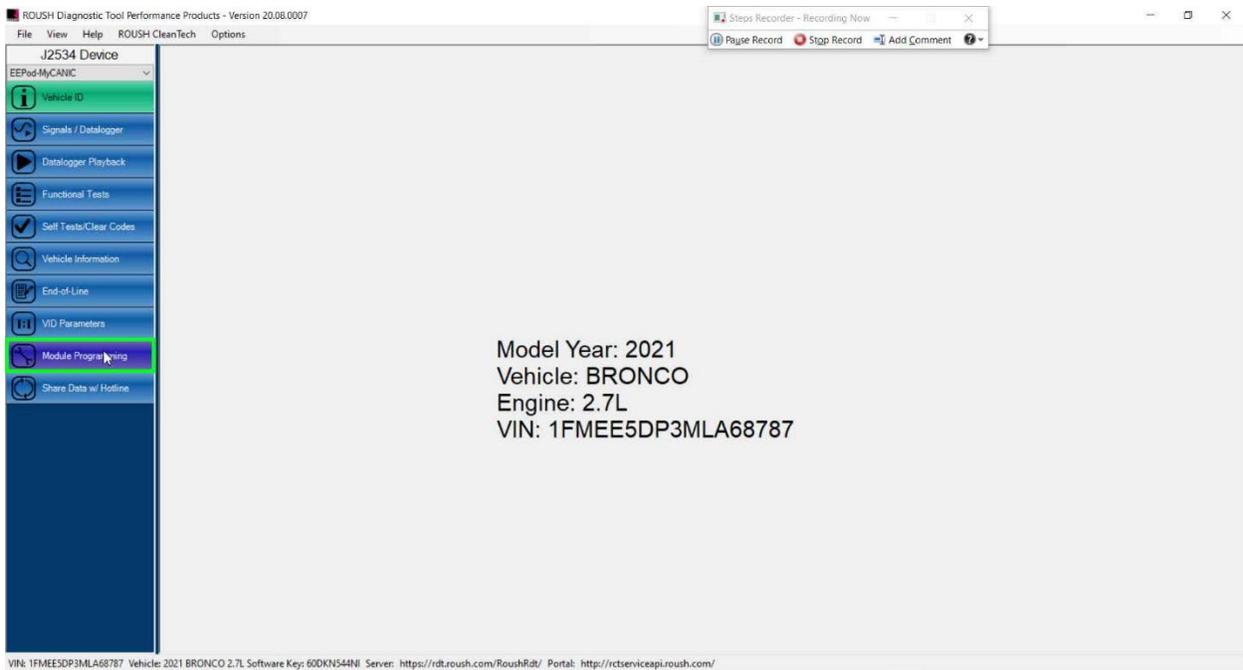
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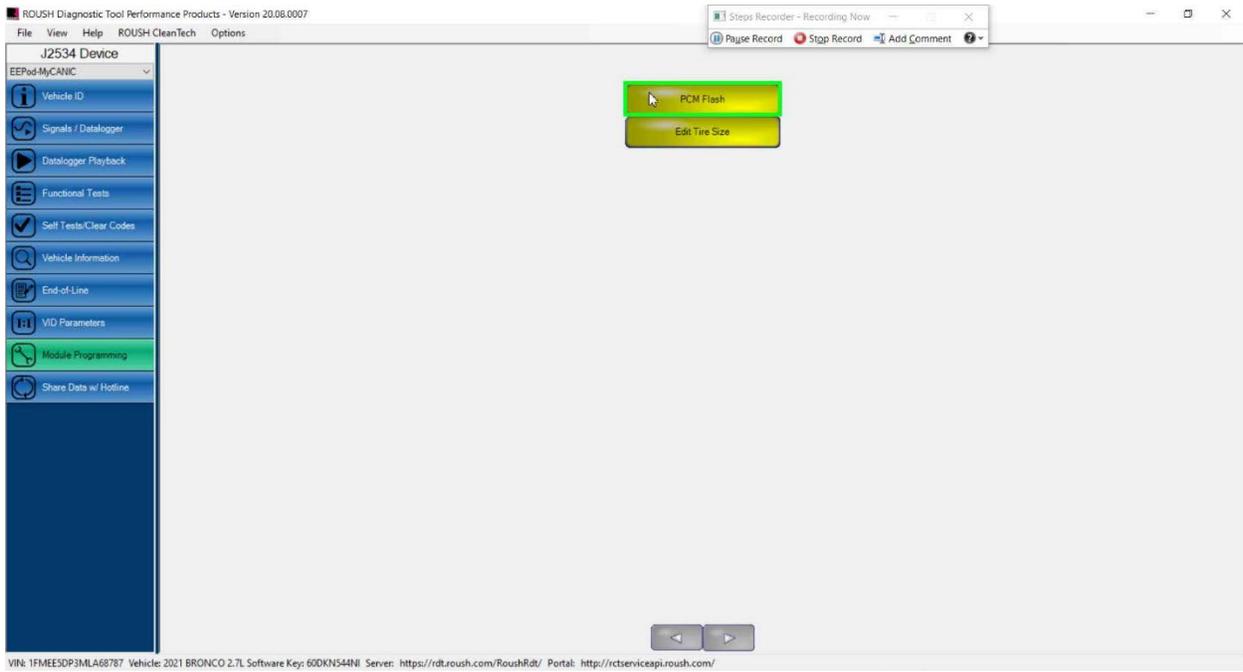
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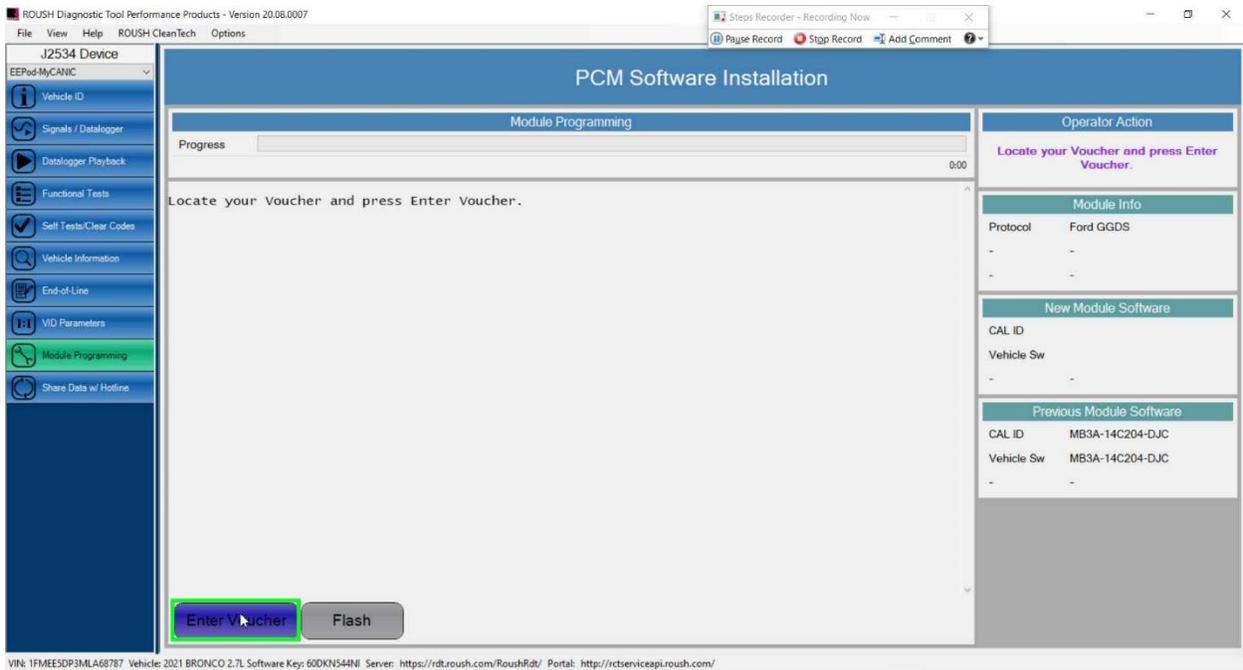
4.



5.



6.



7.

The screenshot shows the Roush Diagnostic Tool interface for a J2534 Device. A 'PCM Software Installation' dialog is open, and a 'Redeem a Roush Voucher' window is overlaid on top. The voucher window contains a globe icon with a green arrow pointing down, and fields for 'Voucher Code' and 'Voucher Family'. Below these fields are 'Redeem Now' and 'Cancel' buttons. The background dialog shows 'Operator Action' with the instruction 'Enter your Voucher information to enable PCM Flash', 'Module Info' (Protocol: Ford GGDS), and 'New Module Software' (Vehicle Sw: -). At the bottom of the dialog are 'Enter Voucher' and 'Flash' buttons.

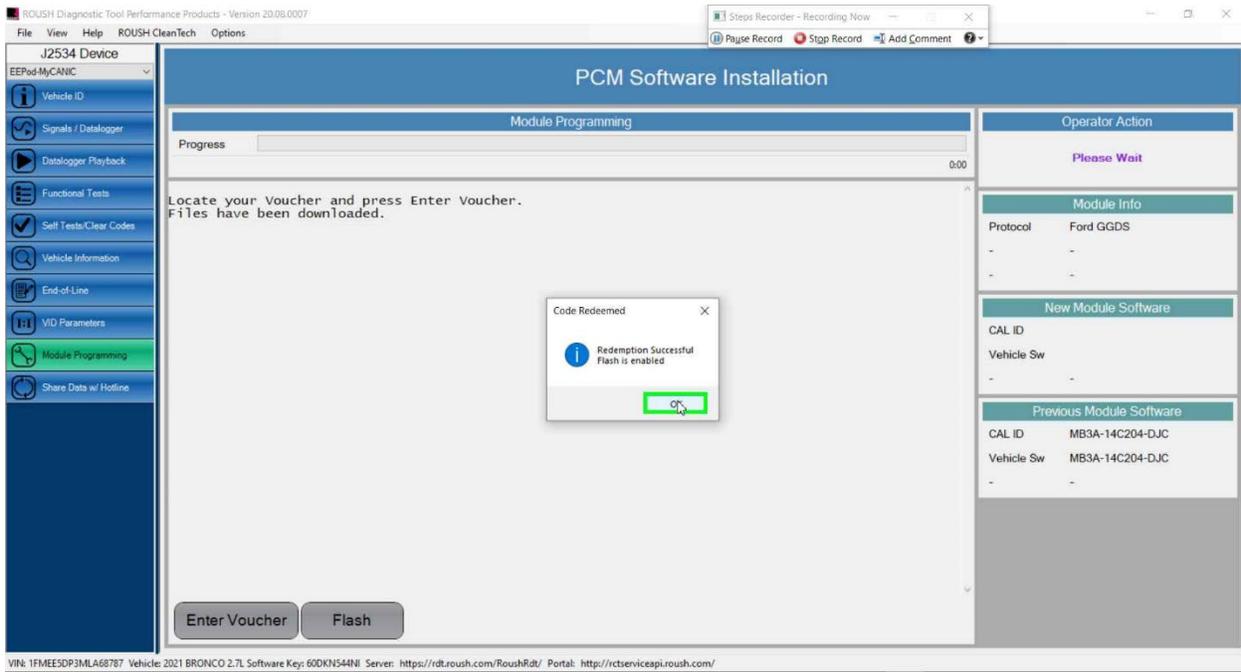
VIN: 1FME5DP3MLA68787 Vehicle: 2021 BRONCO 2.7L Software Key: 60DKN544NII Server: <https://rdt.roush.com/RoushRdt/> Portal: <http://rctserviceapi.roush.com/>

8.

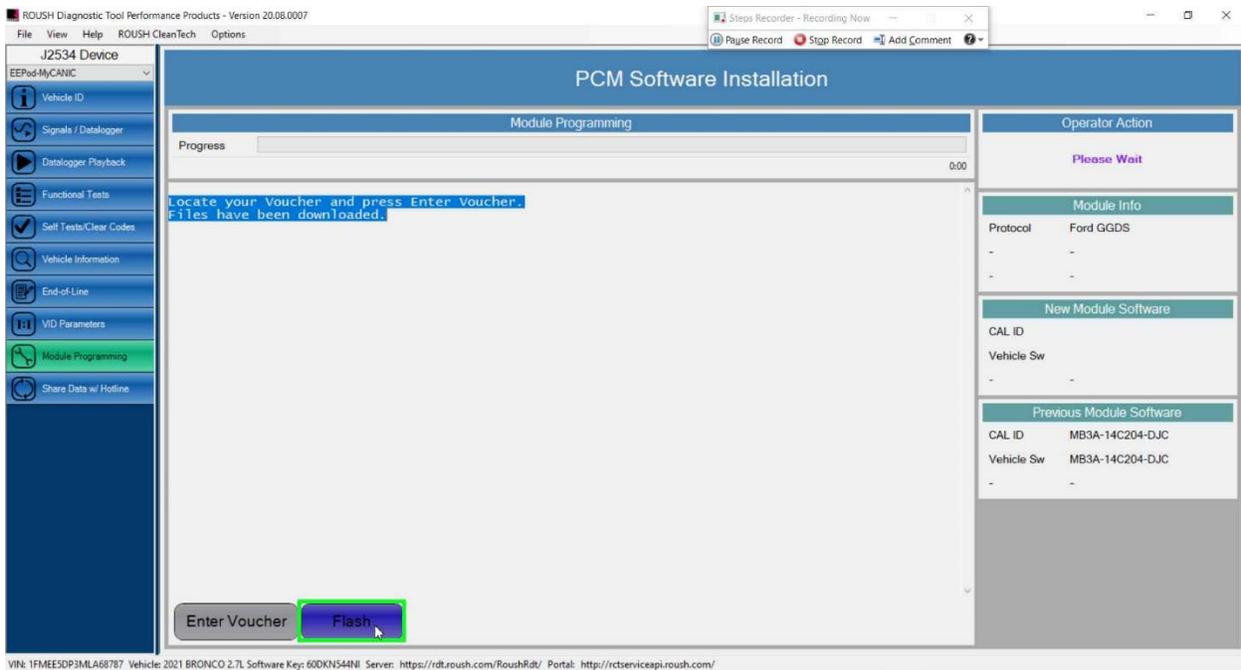
This screenshot is identical to the one above, but the 'Redeem Now' button in the 'Redeem a Roush Voucher' window is highlighted with a green border, indicating it is the active step in the process.

VIN: 1FME5DP3MLA68787 Vehicle: 2021 BRONCO 2.7L Software Key: 60DKN544NII Server: <https://rdt.roush.com/RoushRdt/> Portal: <http://rctserviceapi.roush.com/>

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10.



11.

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File View Help ROUSH CleanTech Options

J2534 Device

EEPed MyCANC

Vehicle ID

Signals / Datalogger

Datalogger Playback

Functional Tests

Self Tests/Clear Codes

Vehicle Information

End-of-Line

VID Parameters

Module Programming

Share Data w/ Hotline

### PCM Software Installation

Module Programming

Progress Elapsed Time 0:02

Locate your Voucher and press Enter Voucher.  
Files have been downloaded.

**Confirm Programming**

**!** You are about to install new software for the PCM.  
Please ensure that the only device plugged into the OBD port is your J2534 device.  
Please turn off all accessories to preserve optimum battery voltage.  
Flashing a vehicle with less than 12V is NOT recommended.

**OK**

Operator Action

**Please Wait**

**Module Info**

Protocol	Ford GGDS
-	-
-	-

**New Module Software**

CAL ID	
Vehicle Sw	
-	-

**Previous Module Software**

CAL ID	MB3A-14C204-DJC
Vehicle Sw	MB3A-14C204-DJC
-	-

Enter Voucher Flash

VIN: 1FME5DP3MLA68787 Vehicle: 2021 BRONCO 2.7L Software Key: 60DKN544NI Server: <https://rdt.roush.com/RoushRdt/> Portal: <http://rctserviceapi.roush.com/>

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ROUSH Diagnostic Tool Performance Products - Version 20.08.0007

File View Help ROUSH CleanTech Options

J2534 Device

EEPed MyCANC

Vehicle ID

Signals / Datalogger

Datalogger Playback

Functional Tests

Self Tests/Clear Codes

Vehicle Information

End-of-Line

VID Parameters

Module Programming

Share Data w/ Hotline

### PCM Software Installation

Module Programming

Progress Elapsed Time 0:04

Locate your Voucher and press Enter Voucher.  
Files have been downloaded.

**Info**

**!** Turn Key ON

**OK**

Operator Action

**Please Wait**

**Module Info**

Protocol	Ford GGDS
-	-
-	-

**New Module Software**

CAL ID	
Vehicle Sw	
-	-

**Previous Module Software**

CAL ID	MB3A-14C204-DJC
Vehicle Sw	MB3A-14C204-DJC
-	-

Enter Voucher Flash

VIN: 1FME5DP3MLA68787 Vehicle: 2021 BRONCO 2.7L Software Key: 60DKN544NI Server: <https://rdt.roush.com/RoushRdt/> Portal: <http://rctserviceapi.roush.com/>

13.

ROUSH Diagnostic Tool Performance Products - Version 20.08.0007

File View Help ROUSH CleanTech Options

J2534 Device

EEPdM/CANC

Vehicle ID

Signals / Datalogger

Datalogger Playback

Functional Tests

Self Tests/Clear Codes

Vehicle Information

End-of-Line

VID Parameters

Module Programming

Share Data w/ Hotline

### PCM Software Installation

Module Programming

Progress  Elapsed Time 0:41

Locate your Voucher and press Enter Voucher.  
Files have been downloaded.  
Writing Secondary Bootloader  
Writing Block 1  
Activating Secondary Bootloader  
Erasing Block 0  
Erasing Block 1  
Erasing Block 2  
Writing Block 0

Operator Action

Please Wait

Module Info

Protocol	Ford GGDS
-	-
-	-

New Module Software

CAL ID	-
Vehicle Sw	-
-	-

Previous Module Software

CAL ID	MB3A-14C204-DJC
Vehicle Sw	MB3A-14C204-DJC
-	-

Enter Voucher Flash

VIN: 1FMEESDP3MLA68787 Vehicle: 2021 BRONCO 2.7L Software Key: 60DKN54NII Server: https://rdt.roush.com/RoushRdt/ Portal: http://rctserviceapi.roush.com/

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ROUSH Diagnostic Tool Performance Products - Version 20.08.0007

File View Help ROUSH CleanTech Options

J2534 Device

EEPdM/CANC

Vehicle ID

Signals / Datalogger

Datalogger Playback

Functional Tests

Self Tests/Clear Codes

Vehicle Information

End-of-Line

VID Parameters

Module Programming

Share Data w/ Hotline

### PCM Software Installation

Module Programming

Progress  Elapsed Time 4:29

Locate your Voucher and press Enter Voucher.  
Files have been downloaded.  
Writing Secondary Bootloader  
Writing Block 1  
Activating Secondary Bootloader  
Erasing Block 0  
Erasing Block 2  
Writing Block 0  
Writing Block 1  
Writing Block 2  
Writing Block 3  
Writing Block 4  
Writing Block 5  
Checking for valid application.  
Resetting Module  
Clearing Codes

Info

⚠ Turn ignition off,  
open the door,  
wait a minimum of 15 seconds,  
turn ignition on to proceed

OK

Operator Action

Please Wait

Module Info

Protocol	Ford GGDS
-	-
-	-

New Module Software

CAL ID	-
Vehicle Sw	-
-	-

Previous Module Software

CAL ID	MB3A-14C204-DJC
Vehicle Sw	MB3A-14C204-DJC
-	-

Enter Voucher Flash

VIN: 1FMEESDP3MLA68787 Vehicle: 2021 BRONCO 2.7L Software Key: 60DKN54NII Server: https://rdt.roush.com/RoushRdt/ Portal: http://rctserviceapi.roush.com/

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ROUSH Diagnostic Tool Performance Products - Version 20.08.0007

File View Help ROUSH CleanTech Options

J2534 Device

EEPed-M/CANIC

Vehicle ID

Signals / Datalogger

Datalogger Playback

Functional Tests

Self Tests/Clear Codes

Vehicle Information

End-of-Line

VID Parameters

Module Programming

Share Data w/ Hotline

### PCM Software Installation

Module Programming

Progress Elapsed Time 4:35

Locate your Voucher and press Enter Voucher.  
Files have been downloaded.  
Writing Secondary Bootloader  
Writing Block 1  
Activating Secondary Bootloader  
Erasing Block 0  
Erasing Block 1  
Erasing Block 2  
Writing Block 0  
Writing Block 1  
Writing Block 2  
Writing Block 3  
Writing Block 4  
Writing Block 5  
Checking for valid application.  
Resetting Module  
Clearing Codes  
Key cycled  
Clearing Codes  
Reading vehicle information.  
Please wait. Updating the server. This may take up to two minutes.  
Server was updated.

Operator Action

Please Wait

Module Info

Protocol	Ford GGDS
-	-
-	-

New Module Software

CAL ID	GLPS-03P150-PYA
Vehicle Sw	GLPS-03P150-PYA
-	-

Previous Module Software

CAL ID	MB3A-14C204-DJC
Vehicle Sw	MB3A-14C204-DJC
-	-

Enter Voucher Flash

Info

Flash Complete.  
You may now disconnect from vehicle.

OK

VIN: 1FMEESDP3MLA68787 Vehicle: 2021 BRONCO 2.7L Software Key: 60DKN54NII Server: https://rdt.roush.com/RoushRdt/ Portal: http://rctserviceapi.roush.com/

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ROUSH Diagnostic Tool Performance Products - Version 20.08.0007

File View Help ROUSH CleanTech Options

J2534 Device

EEPed-M/CANIC

Vehicle ID

Signals / Datalogger

Datalogger Playback

Functional Tests

Self Tests/Clear Codes

Vehicle Information

End-of-Line

VID Parameters

Module Programming

Share Data w/ Hotline

### PCM Software Installation

Module Programming

Progress Elapsed Time 4:35

Locate your Voucher and press Enter Voucher.  
Files have been downloaded.  
Writing Secondary Bootloader  
Writing Block 1  
Activating Secondary Bootloader  
Erasing Block 0  
Erasing Block 1  
Erasing Block 2  
Writing Block 0  
Writing Block 1  
Writing Block 2  
Writing Block 3  
Writing Block 4  
Writing Block 5  
Checking for valid application.  
Resetting Module  
Clearing Codes  
Key cycled  
Clearing Codes  
Reading vehicle information.  
Please wait. Updating the server. This may take up to two minutes.  
Server was updated.  
Flash Complete.  
You may now disconnect from vehicle.

Operator Action

Please Wait

Module Info

Protocol	Ford GGDS
-	-
-	-

New Module Software

CAL ID	GLPS-03P150-PYA
Vehicle Sw	GLPS-03P150-PYA
-	-

Previous Module Software

CAL ID	MB3A-14C204-DJC
Vehicle Sw	MB3A-14C204-DJC
-	-

Enter Voucher Flash

VIN: 1FMEESDP3MLA68787 Vehicle: 2021 BRONCO 2.7L Software Key: 60DKN54NII Server: https://rdt.roush.com/RoushRdt/ Portal: http://rctserviceapi.roush.com/