Edelbrock E-Street
Electronic Fuel Injection System

Installation Instruction Manual
for #3600, #3602 & #3606
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Part #3600, 3602, 3606

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Part #3600, 3602, 3606  
Rev. 2/5/15 - QT  
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INTRODUCTION

Thank you for selecting the Edelbrock E-Street Electronic Fuel Injection (EFI) System. This is a universal, throttle body style, electronic fuel injection system, intended for most V8 engines originally equipped with carburetors and intake manifolds with square-bore 4150 style flanges (does not work on Point Type Ignition systems). Engines with Q-jet or Thermoquad Style manifolds will require an adapter to run the E-Street EFI system. The E-Street EFI system features an easy-to-use software, which is pre-installed onto a supplied 7” touch screen Android Tablet. The E-Street E-Tuner software and tablet will enable real-time system performance monitoring and fine tuning adjustments. The use of a laptop PC is not required for tuning. E-Street EFI offers you the most bang for your buck, along with out-of-the-box performance from a name you can trust....Edelbrock!

If you have any questions, do not hesitate to call our EFI Technical Support at: (800) 416-8628, 7am-5pm PST, Monday-Friday.

E-STREET SOFTWARE UPDATES

Edelbrock periodically releases improved versions of the pre-loaded E-Street software included in this kit. These updates include improvements to pre-installed calibration maps, additional calibration maps and updates to the user interface to improve the overall functionality of the software. It is highly recommended that you visit the Edelbrock website (www.edelbrock.com) to verify that you have the latest software before starting this installation. Please see Pages #39-40, or visit the Edelbrock website for step by step instructions on how to update your E-Street software.

It’s also a good idea to visit the Edelbrock Tech Page to verify you have the latest version of this E-Street EFI installation manual. You can do this by visiting the Edelbrock Tech page at www.edelbrock.com/automotive/misc/tech-center/ and searching for the E-Street part number. Verify the latest release using the date on the lower left hand corner of the page.

IMPORTANT WARNINGS

Before beginning the installation, use the enclosed checklist to verify that all components are present in the box. Inspect each component for damages that may have occurred in transit. If any parts are missing or damaged, contact Edelbrock Technical Support at (800) 416-8628, not your parts distributor.

WARNING: The Edelbrock E-Street EFI system will not work on Point Type Ignition systems.

CAREFULLY STUDY AND UNDERSTAND ALL INSTRUCTIONS BEFORE BEGINNING THIS INSTALLATION.
**NOTE:** The installation can be accomplished using common tools and procedures. However, it is highly recommended to have a solid understanding of automotive repairs and modifications, and be familiar with and comfortable working on your vehicle and your vehicle’s fuel system. If you do not feel comfortable working on your vehicle, it is recommended to have the installation completed by a professional mechanic.

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**PROPER INSTALLATION IS THE RESPONSIBILITY OF THE INSTALLER. IMPROPER INSTALLATION WILL VOID ALL MANUFACTURER’S STANDARD WARRANTIES AND MAY RESULT IN POOR PERFORMANCE AND/OR ENGINE OR VEHICLE DAMAGE.**

**WARNING:** The Edelbrock E-Tuner Tablet is intended to be used as a hands-free tuning display gauge and should only be used as such while driving. Any function that requires prolonged attention should only be performed after coming to a complete stop. Distracted driving is extremely dangerous and illegal in most states. If adjustments are to be made during driving, always stop the vehicle in a safe location before performing any adjustments, or have a passenger perform the necessary adjustments. Please check with your local laws for legal mounting locations in your vehicle.

**02 SENSOR INSTALLATION**
It is suggested that the 02 sensor threaded fitting be installed by a professional muffler shop prior to the installation of the Edelbrock E-Street EFI system. DO NOT drive the vehicle with the 02 sensor installed and not plugged in. An 02 sensor threaded fitting plug is provided for your convenience. Refer to Page #13 for the 02 sensor installation procedure.

**EMISSION CONTROLS**
The Edelbrock E-Street EFI system will not accept stock emissions control systems. Check your local emissions laws for requirements before installing the E-Street EFI system. *This system is not legal for use on pollution-controlled motor vehicles.*

**FUEL REQUIREMENTS**
Because the E-Street EFI system uses a wideband oxygen (02) sensor, unleaded fuel must be used at all times. **Using leaded fuels will damage the 02 sensor and void your warranty.** If leaded fuel is present in your fuel tank, the tank must be drained and filled with unleaded fuel. It is also recommended to have a full fuel tank before operating the vehicle *(after the installation)*.

**NOTE:** E85 fuels are not compatible with any E-Street EFI systems.

**AUTOMATIC TRANSMISSION CHECK**
For best performance, economy, and emissions, the transmission kick down and shift points must be checked before and after the E-street EFI installation.
IGNITION SYSTEM CHECK
Verify that all your ignition system components are operating properly. Verify ignition timing and spark advance curves have been properly set. High EMI suppression spark plug wires are necessary, do not use solid core spark plug wires. Resistor type spark plugs are necessary.

COOLING SYSTEM
The minimum requirement for the thermostat is 180°F.

RPM INPUT SIGNAL REQUIREMENTS
Engine Speed Signal to the E-Street ECU is a critical requirement for proper function of this EFI system. In order for the ECU to accurately calculate engine fuel requirements, a steady clean RPM signal from your ignition system, at all engine speeds, is critical. A noisy or inconsistent signal may appear on the tablet as a sudden unrelated spike in RPM signal or drop out to zero. These types of inconsistency in the RPM signal, when read by the ECU, can cause performance issues under any operating condition. In many cases if a poor RPM Signal is present, the vehicle will fire initially then die. This is the number one issue with most installations when the engine won’t run or operate properly. Please refer to the Tach Input Notes section on Page #19 for proper configuration of your RPM signal.

PRIMARY KIT COMPONENTS

EFI Throttle Body Assembly
7" Tablet
E-Street ECU
Throttle Body Gasket
Oxygen (02) Sensor

*Antiglare Screen Protector Included But Not Pictured
HARDWARE BAG #1

- 02 Sensor Threaded Fitting
- 1/2" to 3/8" Pipe Bushing Reducer
- 02 Sensor Threaded Fitting Plug
- Coolant Temp Sensor
- Sheet Metal Screw (4)
- Rubber Washer (8)
- Throttle Return Spring Bracket
- Throttle Return Spring

HARNESS BAG #2

- E-Street Main Harness
- Fuel Pump Harness
- Fan & A/C Trigger Pigtails (3)
- Tach Input Harness
- Tie Wraps (10)
TABLET COMPONENTS

Note: Images are for reference only and may not represent actual components.

Tablet Mounting Bracket
Mount Suction Cup
Wall Charger
Micro-USB Cable
Car Charger
TOOLS AND SYSTEM REQUIREMENTS
Use the following checklist for items needed.

- Wrench / Socket Set
- 7/8” Oxygen Sensor Socket or Equivalent
- Pliers (channel locks and hose clamp)
- Screwdrivers (Phillips and Flathead)
- Gasket Scraper or Equivalent
- Timing light
- Shop Rags
- Edelbrock Gasgacinch #9300
- Loctite 598 OEM High Temperature Silicone Gasket (O2 Sensor Compatible)
- Vehicle Wiring Diagram (if available)
- Thread Sealer
- High-Heat Anti-Seize Compound
- Throttle, Cruise Control & Trans. Kick-Down Mounting Bracket (See general Edelbrock catalog if necessary)
- 180°F Thermostat
- Resistor Type Spark Plugs (Use correct heat range for your particular application)
- High EMI Suppression Spark Plug Wires (DO NOT use solid core spark plug wires)
- EFI Fuel System (See fuel system recommendation on Page #17)
- Mechanical Fuel Pump Block Off Plate (Except for vehicles running a Fuel Sump System #3605, 3606, 3607 & 36052)
- Fuel fittings (Additional fittings may be required depending on routing preferences. Visit www.russell.com)
- 30 AMP Automotive Relay (If using electric fans or A/C Kick up - One relay required for each accessory)
COMPONENT LAYOUT

The Edelbrock E-Street EFI system delivers fuel and air to the engine via an induction system consisting primarily of a 4-barrel throttle body, dual fuel rails, and four fuel injectors. The induction system is fully assembled, tested, pressure checked, and flowed at the Edelbrock Factory. Avoid disassembling these components if possible.

4-BARREL THROTTLE BODY

The E-Street system uses a 4150 style flanged throttle body with four throttle blades arranged in a conventional 4-barrel pattern with staged secondaries. The air valve can flow up to 1000 CFM.
**NOTE:** ALL UNUSED VACUUM PORTS MUST BE CAPPED TO AVOID VACUUM LEAKS

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**FUEL RAILS**
The extruded aluminum fuel rail assemblies distribute the high pressure fuel to the injectors.

---

**FUEL INPUT**
-6 AN Male

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**PCV PORT**
For 3/8” Hose *(NOT FOR FUEL)*

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**TIMED VACUUM PORT**
3/16” - Vacuum is introduced off idle

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**MANIFOLD VACUUM PORT**
3/16” - Vacuum is present at idle

---

**MANIFOLD VACUUM PORT**
1/4” Vacuum is present at idle

---

**THROTTLE BODY IDLE SPEED SCREW**
The Electronic Control Unit (ECU) must be mounted away from moisture, excessive heat, and vibration. The fender well, or inner fender panel towards the front driver or passenger side near the battery are ideal locations.

To help prevent moisture from entering connector, avoid mounting the ECU with the Connector facing up.

Mounting the ECU inside the vehicle helps improve Bluetooth connectivity. Adjustments to the battery power and ground leads may be required.

If mounting the ECU in the engine compartment, position the ECU with the harness connector pointed towards the firewall.

NOTE: ALL UNUSED VACUUM PORTS MUST BE CAPPED TO AVOID VACUUM LEAKS

**POWER BRAKE PORT**
3/8” - Connect to brake booster (if equipped)

**IDLE AIR CONTROL (IAC) VALVE**

**FUEL INJECTORS**
The E-Street EFI system uses four high impedance, pintle-type, fuel injectors. The injectors are capable of flowing 60 lbs/hr at 43 psi. The injectors mount directly onto the throttle body, one at each port, for fuel delivery that is precisely controlled and instantaneously injected.

**FUEL PRESSURE SENSOR**

**AUTOMATIC TRANS PORT**
1/4” - Connect to automatic transmission vacuum (if equipped)

ELECTRONIC CONTROL UNIT / SYSTEM ECU (Not Pictured)
MAIN HARNESS LAYOUT

Main EFI Harness

- Main Connector To ECU
- +12 Volt Switched
- 30A Fuse/Holder
- Main Relay
- Fuel Pump Relay
- Harness Connector
- Battery GROUND (-)
- Battery POSITIVE (+)
- Tach Input
- Injectors LF / RF
- Injectors LR / RR
- Fuel PSI
- Manifold Air Temp
- Coolant Temp
- Manifold Absolute Pressure (MAP)
- Throttle Position (TPS)
- Idle Air Control (IAC) Valve
- PC Comms
- Fuel Pump Harness included but not shown
The Edelbrock E-Street EFI system interprets overall engine operating conditions and fuel requirements based on readings from sensors that measure specific engine conditions. These sensors, with the exception of the O2 sensor and Coolant Temperature sensor, are designed as an integral part of the EFI system and require no installation. The O2 sensor must be installed in the exhaust system using an O2 sensor threaded fitting (included). The Coolant Temperature sensor must be installed onto the intake manifold in the coolant passage on the hot side of the thermostat.

The E-Street system includes eight electrical connections:

1) Manifold Air Temperature
2) Coolant Temperature
3) Throttle Position
4) Manifold Absolute Pressure
5) Idle Air Control
6) Fuel Rail Pressure
7) Exhaust Oxygen (O2)
8) Fuel Injectors (4) - Not Shown

MANIFOLD AIR TEMPERATURE SENSOR

This sensor connects to the Air Temp Sensor connector on the E-Street ECU main harness.

MANIFOLD ABSOLUTE PRESSURE SENSOR

This sensor connects to the MAP sensor connector on the E-Street ECU main harness.

COOLANT TEMPERATURE SENSOR

The Coolant Temperature sensor must be installed onto the intake manifold, in the coolant passage, on the hot side of the thermostat. Connect the sensor to the Coolant Temp connector on the E-Street ECU main harness.
THROTTLE POSITION SENSOR

This sensor connects to the Throttle Position Sensor (TPS) connector on the E-Street ECU main harness. DO NOT remove the TPS sensor as it is set from the factory.

IDLE AIR CONTROL

This valve connects to the Idle Air Control (IAC) connector on the E-Street ECU main harness.

FUEL PRESSURE SENSOR

This sensor connects to the Fuel Pressure (Fuel PSI) sensor connector on the E-Street ECU main harness.

ORIENTATION OF FUEL INJECTORS

The orientation of the fuel injectors is as follows:
- FL (Front Left)
- FR (Front Right)
- RL (Rear Left)
- RR (Rear Right)
WIDEBAND OXYGEN (O2) SENSOR INSTALLATION

The O2 sensor must be installed in the exhaust system using the supplied O2 sensor threaded fitting from Hardware Bag #1. The O2 sensor is required as it measures the oxygen content of the exhaust gas, which is used by the ECU to manage fuel delivery under closed loop control.

**NOTE:** It is suggested that the O2 sensor threaded fitting be installed by a professional muffler shop prior to the installation of the Edelbrock E-Street EFI system. DO NOT drive the vehicle with the O2 sensor installed and not plugged into the E-Street main harness. An O2 sensor threaded fitting plug is provided for your convenience.

**INSTALLATION PROCEDURE**

**WARNING:** A properly sealed exhaust system is critical for the E-Street EFI to function properly. Any air leaks in the exhaust system, upstream of the O2 sensor, will skew the O2 sensor’s output to the ECU, resulting in improper calibration that may result in damage to your engine. Improper installation of the O2 sensor and any damage that may result is not covered by any Edelbrock Warranty.

**NOTE:** Because of harness length constraints, it is highly recommended to install the O2 sensor and the E-Street ECU on the same side of the vehicle.

1. Verify that the header and tailpipe gaskets are all in good condition. It is recommended to replace any worn or torn gaskets as they may cause exhaust leaks, which can lead to inaccurate Air Fuel Ratio (AFR) readings. Also, make sure to torque all fasteners to manufacturer’s specifications to avoid any possible exhaust leaks.

2. The O2 sensor threaded fitting must be installed in the exhaust system approximately 4-8" after the header collector and before the catalytic converter (if equipped). This location must be approximately 10° above horizontal and within reach of the O2 sensor harness connector on the E-Street main harness.

3. Using a permanent marker, mark the drilling location on the exhaust system pipe. Check the proposed mounting location to ensure the clearance for the O2 sensor is adequate and that the O2 sensor connector on the main harness will reach the O2 sensor location. Make sure to take engine movement into consideration when checking for clearance.
4. Drill a 5/8” hole in the proposed mounting location. Deburr and clean the hole as needed.

5. Fit the provided threaded fitting onto the hole opening. Secure the threaded fitting with a clamp and weld the threaded fitting into place.

6. Once the installation of the threaded fitting is complete, make sure to clean the threads of the fitting to ensure it’s free of debris.

**NOTE:** The O2 sensor threaded fitting uses an M18 x 1.5 thread pitch.

7. If you are ready to install the E-Street EFI system, proceed to Step #9 to install your O2 sensor. Otherwise, if your E-Street system will be installed at a later time, temporarily install the O2 sensor threaded fitting plug supplied in the Hardware Bag #1 with a 7/8” wrench. This will allow you to drive the vehicle until the O2 sensor is installed.

8. When you are ready to begin installation of the E-Street System, remove the O2 sensor threaded fitting plug.

9. Apply a high-heat anti-seize compound (*not included*) to the threads of the O2 sensor and install into the threaded fitting using an 7/8” oxygen sensor socket or 7/8” wrench.

10. The O2 sensor will connect to the O2 sensor connector on the main E-Street ECU harness.

**E-STREET INSTALLATION**

**FUEL SYSTEM REQUIREMENTS**

E-Street EFI requires a high pressure fuel system providing 48-50 psi of fuel pressure with a flow rating of 57 GPH (215 liter/hr). The kit you purchased may have included a fuel system kit. Please refer to the fuel system installation instructions included with that kit, if applicable. If you have installed your own fuel system be aware that a fuel pump relay harness is necessary (Edelbrock #36054).

1. Remove the air cleaner, throttle linkage, vacuum and fuel lines from the factory carburetor.

2. Unbolt the carburetor and place shop rags inside the manifold plenum(s).

3. Clean all debris from the intake manifold.

4. Install the Coolant Temperature Sensor, from Hardware Bag #1, to the intake manifold coolant passage on the hot side of the thermostat. A 1/2” to 3/8” pipe reducer, in Hardware Bag #1, is supplied if needed.
5. Remove the shop rags from the intake manifold. Install the new E-Street EFI throttle body with the throttle linkage facing the driver side of the vehicle. Secure the throttle body using the supplied gasket and the factory studs and nuts.

6. Attach the throttle linkage and verify it moves freely without interference.

7. Find a suitable mounting location for the ECU (this should be on the same side of the vehicle as the O2 sensor). The fender well, or inner fender panel are ideal locations. Be sure the O2 sensor connection reaches the main harness connector, the battery power leads must be routed to the battery. **NOTE:** If necessary, the power leads may be extended to reach the battery. Use only 12 gauge wire or larger.

**NOTE:** It is recommended to mount the ECU in a location away from excess heat, vibration and possible water exposure. Generally, the ECU should be mounted as close as possible (10–15 feet) to where the E-Street Tablet will be located. It’s also recommended to mount the ECU as horizontal as possible (E-Street Logo facing upwards) with the harness connector pointing towards the cabin.

8. Using the supplied rubber washers and sheet metal screws from Hardware Bag #1, mount the ECU to the desired mounting location. The rubber washers must be used in between the mounting surface and the ECU to help absorb excessive vibration.

9. Connect the E-Street main harness to the appropriate sensors and injectors on the throttle body (refer to Pages #10-12 for harness diagram and sensor locations).

10. Find a suitable harness route in the engine compartment which leads to the ECU location. The harness fits best if routed from the throttle body back towards the firewall, across the firewall, then forward towards the ECU location.
NOTE: Avoid routing the harness near any ignition related components (ignition coil, distributor, spark plug wires). Also avoid routing near the headers, sharp edges, or any tight radius corners that may damage the harness.

11. Route the power leads on the main harness to the battery. Connect the RED POWER lead (+12 Volt) and the BLACK GROUND (-) lead to the appropriate battery terminals.

12. Securely mount the Fuse and Relay in an accessible location.

13. Connect the Pink/Black +12 Volt switched wire on the main harness to a +12 Volt switched power source that provides +12 Volts when the key is both “ON” and “CRANKING”.

NOTE: It is critical that the switched +12 Volt is constant during cranking. This is a common issue on vehicles with no start or hard to start issues. Do not connect this to the positive side of the coil.

14. Secure the harness and leads with tie wraps from Hardware Bag #2. Avoid over tensioning wire ties as this may damage the harness.

15. If not already complete, remove the previously installed 02 sensor threaded fitting plug from the threaded fitting in the exhaust system, and install the 02 sensor.

16. Connect the main harness lead labeled "02 Sensor" to the 02 sensor connector. Secure the 02 sensor lead as to avoiding contact with the exhaust pipes. Make sure to leave plenty of air space between the harness and the exhaust manifolds/headers.

17. Install the throttle return spring and bracket from Hardware Bag #1. Manifold bolt locations are ideal mounting points.

18. INSTALL THE FUEL DELIVERY SYSTEM. Please refer to the fuel system’s installation instructions for complete installation procedures.

NOTE: It is important to understand what type of Fuel System you are installing in your vehicle. Please refer to the following diagrams for a better understanding:
**Return-Style Fuel System:** Can use any fuel pump with a minimum flow rating of 57 GPH (215 liter/hr). Fuel pressure must be regulated to either 49-60 psi.

**Universal EFI Fuel Sump System:** Is provided with a high pressure fuel pump and regulator. Fuel pressure regulated to either 49 or 60 psi.
Fuel System Requirements:

**Returnless Fuel System (Discontinued):**

*DO NOT USE HARD FUEL LINE OF ANY TYPE*

![Fuel System Diagram]

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19. **A fuel pump relay harness is required. Damage to ECU will occur if not used.**

A Fuel Pump Relay Harness is included with your fuel system from Edelbrock. If you are using an existing fuel system or do not have a Fuel Pump Relay harness, one can be purchased separately as part #36054. Connect the fuel pump relay harness to the "Fuel Pump" connector on the E-Street EFI main harness and then to the fuel pump harness. The power lead on the relay harness must be connected to a constant +12 Volt source.
TACH SIGNAL INPUT SETUP

The Tach Input harness connector must be configured using the provided connector and leads. Refer to the diagram and connector source options to best configure the connector for your application. Only one of the following source configurations is required.

TACH INPUT CONNECTOR DIAGRAM

TACH INPUT CONNECTOR SOURCES OPTIONS

Source One Pin A - NEGATIVE SIDE OF COIL (non CDI Ignition) With standard inductive ignitions, the negative post on the coil can be used as a RPM Trigger Input Source. If using the Negative Side of the coil as an RPM Trigger Input, use only the Tan/Yel lead provided in Pin A of the tach input connector. This is the only wire used and connects to the negative side of the coil. **DO NOT USE THIS SOURCE IF RUNNING A CDI BOX OR ANY TYPE OF IGNITION AMPLIFIER, ECU WILL BE DAMAGED.**

Source Two Pin B - CDI BOX IGNITION Hall type signal input. If using a Capacitive Ignition Box or any type of ignition amplifier with a designated hall type tach output signal, remove the Tan/Yel wire and insert only the Wht/Blk wire into Pin B. The Wht/Blk wire is the only wire used; it connects to the Tach Output pin or wire on a CDI Box. **NEVER CONNECT PIN B TO THE NEGATIVE SIDE OF COIL WHEN RUNNING A CDI BOX OR ANY AMPLIFIED IGNITION, ECU WILL BE DAMAGED.**
Source Three Pin B - DESIGNATED HALL TYPE TACH SIGNAL OR TACH ADAPTERS.
The Tach output pin on HEI Distributors and some other ignition systems tach sources are very dirty and cannot provide a clean tach signal to the ECU. In these situations a replacement HEI Module MSD part #83647 or tach adapter with Hall type output signal is recommended. The Hall type Signal output from either of these sources would connect to Pin B on the tach input connector. On MSD distributors this is usually a grey wire and is provided on some ready run distributors also. **DO NOT CONNECT TACH PIN ON HEI TO PIN B, ECU WILL BE DAMAGED.**

Pin C Ground Source - Pin C is provided for a ground source if necessary for some tach adapters and Mag or Hall type sensors.

**TACH INPUT SIGNAL NOTES:**

- The TACH pin on most HEI distributors do not provide a clean tach signal. The tach pin is the same as the negative side of the coil, this output is very noisy and inhibits excessive voltage spikes. Never connect the TACH pin to Pin B on the tach input connector. A MSD replacement module with a Hall Effect type output is recommended.

- Never connect the negative side of the coil to the tach input connector when using a CDI Box or any type of amplified ignition.

- Some aftermarket ignition systems have a feature that indicates the rev limiter setting on the tachometer when key ON power is activated. This indication is achieved by briefly cycling the ignition output. This brief cycling inadvertently pulses the injectors causing an overly rich or flooding condition. If your ignition system has this feature please review the installation instructions for disabling this function.

- If your vehicle starts initially then stalls, has a bad high speed misfire or exhibits unrelated spikes in RPM signal on the tablet at idle, there is a good chance you have a poor tach input signal.

- You cannot use solid core (typically copper) spark plug wires with this product. Solid core wires do not suppress electromagnetic interference (EMI) which will interfere with electronics in this product. A suppression style or spiral wound spark plug wires and resistor type plugs must be used.
FAN & A/C TRIGGER NOTES

Three pigtail leads are provided in Hardware Bag #2 to trigger the electric fan(s) and A/C kick up, if so equipped. The Fan trigger outputs from the ECU are low current switched GROUNDS that require a 30 AMP Automotive Relay (not included) for each output.

The Air Conditioner Switch Input signal to the ECU (Pin #7) from the vehicles A/C system must be a switched ground signal. In most applications this requires the use of a relay.

Installation instructions and diagrams are provided on Pages #56-57. Pinout diagram is available on the Main Harness Schematic section, Page #58.

NOTE: DO NOT connect E-Street ECU fan outputs directly to fan motors. DO NOT connect A/C compressor clutch switch directly to the E-Street ECU. DAMAGE TO ECU WILL OCCUR.

WARNING: DO NOT START THE VEHICLE UNTIL PROMPTED TO DO SO. PROCEED WITH THE VEHICLE SETUP SECTION. A PROPER BASE MAP CALIBRATION MUST BE LOADED TO THE E-STREET ECU BEFORE STARTING THE VEHICLE.

Once the Edelbrock E-Street EFI system and the fuel system have been installed, use the checklist below to verify the following requirements are complete before proceeding. This will ensure the best results and optimal performance.

- Is the battery fully charged?
- Has the battery been reconnected?
- Are all linkages connected and properly adjusted?
- Has wide open throttle been verified?
- Are all wiring harness connectors connected?
- Has the supplemental fuel system been installed?
- Has the fuel pump relay harness been connected?
- Has the fuel system been checked for leaks?
- Is the gas tank filled with unleaded fuel?
- Is the gas tank full? (Recommended for initial setup)
- Has the exhaust system been checked for leaks?
- Is the O2 sensor installed and connected?
- Have resistor type spark plugs been installed?
- Have High Suppression spark plug wires been installed?
- Is the tablet fully charged?

NOTE: Before proceeding to the Tablet Initial Setup procedure, it is highly recommended to read the E-Street Tablet Quick Start Guide on Pages #47-55 to familiarize yourself with the basic functions and operations of the tablet.
TABLET INITIAL SETUP AND STARTUP PROCEDURE

WARNING: The Edelbrock E-Tuner Tablet is intended to be a hands free tuning display gauge and should only be used as such while driving. Any function that requires prolonged attention should only be performed after coming to a complete stop. Distracted driving is extremely dangerous and illegal in most states. If adjustments are to be made during driving, always stop the vehicle in a safe location before performing any adjustments, or have a passenger perform the necessary adjustments. Please check with your local laws for legal mounting locations in your vehicle.

HOME MENU (E-TUNER HOME)

Basic Function:
This application is a wireless user interface to setup, adjust and monitor your E-Street EFI system.

How to Navigate the App:
All of the navigation buttons for this app are located along the bottom of the screen. “Home” and “Back” menu navigation will be located along the bottom left corner of the screen and will be visible on all menu pages. The “Home” icon will navigate directly to the “E-Tuner Home” menu. It is represented by the icon.

The “Back” icon will navigate to the previous menu page. It is represented by the icon. The following menus can be opened by selecting the respective icons:

Vehicle Setup: To run the Setup Wizard, manage ECU settings, or make tuning adjustments.

Gauge Displays: Monitor Live-Engine Data with the E-Tuner, Digital, or Dashboard display.

Settings: View current system information, connect to an ECU, or Check for available system updates.

Press the at any time for additional information with the specific screen.

How the Connection Status Buttons Work:
The connection status indicator is located in the upper right corner section of your tablet screen, to the left of the “Edelbrock” logo. You can press this icon to begin or stop a Bluetooth connection at any time. Due to variations in ECU mounting location, it may take at least 2–3 attempts to make a successful connection with the ECU. Please read the following to become familiar with the “3” connection statuses that the tablet will display:
**Status 1) Connected:**
This is shown as a Green “check mark” over the engine icon. When this is displayed, the tablet is currently connected to the E-Street ECU.

**Status 2) Not Connected:**
This is shown as a Red “X” mark over the engine icon. When this is displayed, the tablet is NOT currently connected to the E-Street ECU.

**Status 3) Connecting In-Progress:**
This is shown as a Yellow “hourglass” over the engine icon. When this is displayed, the tablet is trying to connect with the E-Street ECU.

**RUN THE SET UP WIZARD**

1. From the **E-TUNER HOME** menu, select the **Vehicle Setup** icon.

   **NOTE:** It’s highly recommended to read the help menu on each screen, as well as using the on screen directions, and instructions outlined in this installation manual.

2. In the Vehicle Setup menu, select the Setup Wizard icon to begin.

3. Set the Engine Displacement, in cubic inches, using the icons. Press to continue.

4. Select the Camshaft Profile used in your application. Press to continue.

   **NOTE:** This information is available on the Cam Card that came with the Cam or on the manufacturer’s specification sheet.

<table>
<thead>
<tr>
<th>Camshaft Selection</th>
<th>Camshaft Duration @ 0.050 Lift</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock</td>
<td>210° or Less</td>
</tr>
<tr>
<td>Mild</td>
<td>210° to 230°</td>
</tr>
<tr>
<td>Race</td>
<td>230° or Greater</td>
</tr>
</tbody>
</table>
5. Select the type of Fuel System installed on your application. See Fuel system notes on Pages #17-19 or the tablet help icon for information if you are not sure of fuel system type.

6. Turn the key to the “ON” position and verify Bluetooth connection then press to continue.

   **NOTE:** The ECU must have “KEY ON” power before moving to the next step!

7. The tablet will connect to the ECU as soon as the “Loading The Base Map” screen appears. Once a successful connection has been made, the Engine Connection Icon will show a green check mark and the progress bar will show the calibration loading process. This process may take a few minutes.

   ![Loading Base Map](image)

   **NOTE:** If a connection is not successful, press the icon to go back one screen. Make sure the correct fuel system is selected then press . The tablet will attempt to connect to the ECU and load a calibration. If you are still experiencing difficulties connecting, please refer to the Troubleshooting section.

8. Once a Calibration has been successfully loaded to the ECU, turn the key to the "OFF" position for 10 seconds and then back to the "ON" position. Press to continue.

9. Set the rev-limiter to a desired maximum RPM value that will prevent damage to your engine and press .

   a. Adjust the rev-limiter if needed. By default, the ECU will have a 6000 RPM limit.

   ![Set Rev-Limiter](image)

   **NOTE:** This is a fuel based rev-limiter. It will allow a 200-300 RPM overshoot of the set RPM.
10. Start the engine and let it warm up to operating temperature (At least 170°F). Adjust the Throttle Body Idle Screw as necessary to keep the engine running. When the “Idle Ready Status” indicator turns green, set the throttle body Idle speed screw to your desired Engine Idle RPM (Vehicle in Neutral w/ Parking Brake engaged).

![START ENGINE](image)

**NOTE:** Once the engine is at operating temperature, (170°F - 175°F), the Idle Ready Status will show. ![Engine is warmed up! You may now set the Idle Screw to desired Idle RPM.](image)

11. Once a desired Engine Idle RPM has been set with the Throttle Body Idle Screw, continue to the Idle RPM Control settings page.

12. The Idle Speed Target must be set using the icons to adjust the Idle Target value. This value is the idle speed that the Idle Control Valve will try to maintain during Idle mode conditions. The Idle Target value should be set 25-50 RPM lower than what was set with the Throttle Body Idle Speed Screw.

13. After the Idle Target value has been set, continue to the Calibrate TPS Sensor page.

14. To calibrate the Throttle Position Sensor (TPS), the engine must be idling in neutral. Press the icon when ready to calibrate. **Do not touch the throttle pedal or throttle linkage during this procedure.**

![CALIBRATE TPS](image)
If idle quality becomes unstable or the engine dies at stops, it is recommended to re-verify the idle speed screw setting.

• Coolant temp must be above 170°F.
• Select Close IAC on idle tuning page.
• Adjust the throttle body/idle speed screw.
• Reset the idle target.
• Select next to reset TPS calibration.

Congratulations you have completed the E-Street Setup Wizard. Your E-Street ECU is now configured with a base map and the vehicle is ready to drive. To exit the Setup Wizard select FINISH Exit the Setup Wizard.

NOTE: Before driving your vehicle, it is highly recommended to read the Getting Familiar with the E-Street EFI section. Also note that it is recommended to drive cautiously and allow adequate time for the self-learning feature to complete.

If you have any questions, please contact the Edelbrock Tech Support at 1-800-416-8628 Monday-Friday from 7:00AM to 5:00PM PST.
GETTING FAMILIAR WITH E-STREET EFI

The key to the self-learning feature of the E-Street EFI is to initially drive your vehicle with smooth slow throttle transitions and accelerations. Try to drive the vehicle in a manner that employs all conditions; light load, heavy load, high RPM and low RPM.

During the self-learning process, the E-Street EFI system will constantly save Fuel Trim Modifications and store them to the E-Street ECU memory automatically. Fuel Trim Modifications and setup information will be stored in the ECU until deleted or erased by the user. Depending on your driving style and frequency of operation, this process will require adequate time to learn and adjust for inaccuracies during light acceleration, cruise, and some wide open throttle (WOT) conditions. Power failures and loss of connectivity will not erase any stored data in the ECU.

If you experience a situation where the engine is not performing properly, it helps to observe the Air Fuel Ratio Setpoint (AFR SP), Actual Air Fuel Ratio (AFR), and the percentage of fuel corrections being applied (AFR Cor). The E-Tuner display screen is most useful for these observations. Try to hold a steady RPM and Vacuum level at the point that the vehicle is struggling, as the E-Street EFI makes adjustments, the AFR Cor should start to decrease and the AFR SP and AFR bars should become aligned.

NOTE: There is no benefit to reloading the calibration once it has been loaded successfully. If you are not satisfied with the performance of your vehicle and would like to start over from the base calibration, proceed to VEHICLE SETUP _ MAP/ECU SETTINGS and reset both your Self-learn and ECU Modifiers. This will clear any self-learn corrections that have been applied to the calibration and any advanced settings you have modified. After resetting the ECU Defaults you have to proceed to the Advanced Setup and reset your idle target, idle/tps and any other necessary modifiers. If your vehicle unexpectedly starts performing poorly sometimes clearing the Self-learn Values alone can fix the issue.

The E-Street EFI system is equipped with a warning system to alert you of any sensor failures and/or if any of the preset parameters have been exceeded ie: temperatures, pressures, battery voltage, engine speed, etc. The channel values on any of the Gauge Display menu displaying the alert will be shaded red until the exceeded channel value returns to a normal operating range.

Once the Setup Wizard is complete, the tablet is only necessary to monitor system performance using the Gauge Displays and to make any desired modifications to the calibration in the Vehicle Setup section. All modifications made with the tablet after the completion of the Setup Wizard will require connectivity with the E-Street ECU and will be applied in real time.

The E-Street EFI will constantly monitor and apply fuel corrections to a fuel modifier table to optimize your vehicle performance. ECU Calibration, ECU Firmware, all setup configurations and fuel modifier table are saved in the ECUs memory. This memory is non volatile, complete power loss for extensive periods will have no effect on ECU memory.
The fuel pump is programmed to run for 5-8 seconds prior to key "ON", then it shuts off automatically until "CRANKING" is sensed. A momentary Fuel Injector Prime event is active at key on to assist engine starts.

Some vehicles may experience extended cranking time before the engine will start if the vehicle has been sitting overnight or long enough for the fuel system pressure to bleed down. To reduce cranking times during these situations it helps to key on for 2-3 seconds then key off and then start the engine. This helps build fuel pressure in the system so when the key is turned on the second time there is adequate fuel pressure during the cold start prime event. This procedure should only be necessary in the morning or after the vehicle sits for a prolonged time.

**FLOOD CLEAR:** In the event of fuel flooding during start up, a flood clear can be achieved by holding the throttle wide open for some duration during cranking. This shuts off all injectors and should assist in clearing the plenum of all raw fuel. If you have been working on your vehicle and have keyed on/off repeatedly with the battery connected you may experience difficulty starting your vehicle and a flood clear may be necessary.

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**ADVANCED SETUP MENU**

*Requires wireless connectivity with the E-Street ECU (Key on power). ECU must be connected, otherwise the system will display all default values for Advanced Tuning.

The Advanced Setup Menu section is provided to make modifications beyond the basic settings that were configured during the initial setup of your E-Street EFI.

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**ADVANCED SETUP**

1. **AIR FUEL RATIO** - Use this function to set the parameters for the idle air fuel ratio (AFR), Cruise AFR and WOT AFR. The Air Fuel Ratio Setpoints are a useful options for custom tuning your E-Street EFI System. These adjustments provide advantages over a carburetor by improving performance and increasing fuel economy. Refer to the help icon in this section for suggested AFR setpoint ranges.
a. The Idle AFR Setpoint is used to tune the vehicle for best idle quality and throttle response just off idle. The E-Street ECU will adjust fuel trims to meet this setpoint whenever the throttle is less than 12% and the Engine RPM is less than 1400 RPM. Engines with larger Camshaft Duration will generally require richer Air Fuel Ratios at Idle. Only closed loop mixture adjustment is active during idle conditions. Self-learn is not active. **Suggested Idle AFR Range 12.80 - 13.80.**

b. The Cruise AFR Setpoint is useful for improving fuel economy at moderate throttle openings and consistent RPMs. The E-Street ECU will adjust fuel trims to meet the cruise setpoint whenever the throttle is between 12% and 50% throttle and when the engine RPM is greater than 1400 RPM. The Cruise Air Fuel Ratio setpoint is usually the leanest of the three AFR Setpoints. **Suggest Cruise AFR Range 13.00–14.70.**

c. The Wide Open Throttle AFR Setpoint is used to tune engine performance whenever the Throttle Position has exceeded 50% and Engine RPM is greater than 1400 RPM. This is usually the richest (smaller AFR Setpoint value) of the three setpoints and can be affected by engine displacement, camshaft grind, vehicle gearing, vehicle weight and vehicle aerodynamics. This number should be tuned for best performance with no regard for fuel economy. Be aware that too lean of an AFR Setpoint (bigger setpoint value) for WOT could damage your engine. **Suggested WOT AFR Range 12.0 – 12.90.**

**NOTE:** The AFR Setpoint (AFR SP) and Actual AFR (AFR) can be monitored as bar graphs on the bottom of the E-Tuner Display. On the E-Tuner Display, the amount of Fuel Correction (AFR COR) being applied can also be monitored. As the E-Street ECU makes the necessary Fuel Trim adjustments to meet the AFR Setpoint (AFR SP), it will store the adjustments to the Self-learn Table. The amount of Fuel Correction (AFR COR) should become minimal and the Actual AFR (AFR) bar graph should become stable and aligned with the AFR Setpoint bar (AFR SP) during most driving conditions. Under certain conditions like hard acceleration and deceleration, it is normal to see excessive corrections (AFR COR) and erratic Actual AFR (AFR) readings.
2. ACCELERATION FUEL - The Accel Fuel Adjustments have the same functions as an accelerator pump on a carburetor. These adjustments add extra fuel in the event of a rapid throttle opening. The more rapidly you open the throttle the more fuel your engine requires to prevent hesitation. The numbers in these adjustments are representing a percentage of change applied to the base acceleration fuel tables. Changes to these values should not be made until the system has had adequate time to learn and apply changes to the base fuel map, especially during wide open throttle conditions.

ACCEL FUEL TUNING TIPS

a. Make changes in small increments to the PUMP SHOT and SHOT DURATION separately. Test how the throttle responds when revving the engine aggressively in neutral, then in gear from a dead stop. A lazy stumbling condition may indicate too much fuel. A delay in acceleration or pop back through the intake may indicate too little fuel. If the engine revs good initially then stumbles, try adjusting the SHOT DURATION. If the engine stumbles initially then accelerates, try adjusting the PUMP SHOT. Try to find an adjustment that works best in all conditions.

b. The PUMP SHOT controls the amount of additional fuel added for the Accel Fuel event. The Pump Shot has a range of ±10%. A 0% Pump Shot is the default setpoint that should perform adequately for most applications. Changes can be made in 1% increments.

c. The SHOT DURATION controls the duration of the Accel Fuel event. The shot duration has a range of 1.0 to 10.0. For most applications, 5.0 is the default value. Changes can be made in increments of 1.0.

NOTE: It is recommended that the Accel Fuel Setting be left at the default values until the vehicle has been driven at wide open throttle and the self-learn has had time to make necessary adjustment to the base fuel table.
3. **Idle Tuning / Cal TPS** - This feature allows modifications to the Idle Control functions and target idle speed. If changes to the idle speed are to be made, verify that the engine coolant temperature is above 170°F. The throttle must always read 10% at idle. To calibrate the Throttle Position Sensor (TPS), press ➡️ and follow the on-screen instructions.

**NOTE:** If the Engine is not warmed up to operating temperature (above 170°F), you will not be able to adjust the Idle Target.

4. **Fan Controls** - Two Cooling Fan Controls are provided. The default temperature for both controls is 172°F. When the E-Street EFI Coolant Temperature Sensor reads 172°F, both fan outputs will become active. The fan control outputs will shut off when Coolant Temperature drops approximately 10° below the setpoint. The active setpoints can be set to any desired temperature. The active setpoints can be staged to reduce coolant temperature oscillation when fans are activated. Ex: Fan 1= 180°F and Fan 2= 190°F.

**IMPORTANT NOTE:** The ECU Fan Control outputs are low current ground signals. DO NOT connect low output signals directly to the Fan Motors. These outputs must be used to trigger a relay which will trigger the vehicle’s Fan motors. Please refer to Pages #56-57 for diagrams and further information.

5. **Cold Start Enrichment** - The E-Street Base Map contains a cold start enrichment table that adds fuel to the base fuel map during cold start conditions. This table adds a calculated amount of fuel enrichment in conditions as cold as -3°F to 170°F. If your vehicle is having issues performing during cold start you can use this function to adjust the amount of cold start enrichment being applied. In most cases the base table works just fine. Cold start adjustments are applied in a linear percentage change to the overall cold start fuel enrichment table.

6. **ON / OFF Menu** - In some scenarios it may be necessary to enable or disable controls such as the Idle Control or Self-learning. These actions are provided for troubleshooting purposes only and should be performed with an Edelbrock technical service agent.
7. **Rev Limiter Adjustment** - Use this function to adjust the rev limiter. An Engine RPM Rev Limiter has been provided to protect against overrevs that may damage engine components. Default RPM on tablet is 6000 RPM. The Rev Limiter value may be adjusted in 50 RPM increments. When Engine RPM exceeds the setpoint, the Fuel Injectors will be shut off until engine speed drops below the setpoint.

**NOTE:** Although this is a fuel based limiter, there is no protection against over-revs from a down shift or mis-shift with a manual transmission.

**GAUGE DISPLAYS** - Select an icon to enter one of the three available displays. These menus can only be used while the tablet is connected to the ECU. If a connection is lost while on any of these gauges the tablet will attempt to auto-reconnect.

**CHANNEL ALARMS** - All E-Street displays have pre-programmed channel warnings to display in the event a channel exceeds a safe operating zone. The channel value will be shaded if a value exceeds its limits, as seen below in the Vacuum and Fuel Pressure readings.

**DIGITAL GAUGE DISPLAY** - This menu displays all the E-Street monitored parameters simultaneously.
**E-TUNER GAUGE DISPLAY** - This dashboard displays essential parameters to monitor proper E-Street performance: RPM, Throttle (TPS), Vacuum, Coolant, AFR Corr, AFR, AFR Setpoint, as well as active/inactive Closed Loop and Self-Learn indicators.

**E-DASHBOARD DISPLAYS** - There are 4 available views for live-data monitoring. Press CH 1, CH 2, CH 3 or CH 4 to switch between views.

**ADDITIONAL DETAILS ON THE E-TUNER DISPLAY GAUGES:**

**RPM** - The current engine speed will be displayed here in units of Revolutions per Minute (RPM). The current Rev-Limit setting will be shown as a thick red arc along the outer edge of the gauge.

This parameter can be adjusted from the Advanced Tuning Menu. If the engine RPM reaches the Rev-Limit, the gauge will be highlighted in red until the RPM drops below the limit.

**THROTTLE POSITION SENSOR (TPS)** - The TPS (Throttle Position Sensor) indicates how much the throttle blades are open inside the throttle body. The ECU reports throttle position as a percentage of “open-throttle.” Please note, that at Idle RPM, the Throttle should read 10%.
THE DIGITAL GAUGES:

VACUUM - Displays the absence of pressure inside the intake manifold. The amount of “negative pressure” is measured in units of inches of Mercury-gauge. Depending on the barometric pressure of the altitude at your location this gauge may not always read zero when at key on engine off conditions.

COOLANT - Displays the coolant temperature at the location of the coolant temperate sending unit in units of °F. The E-Street ECU depends on this measurement to function properly. Functions such as Fan Control, Cold-Start, Self-Learning, and Engine Idle Control are triggered at different Engine Coolant Temperatures.

AFR CORRECTION / O2 CORRECTION - The AFR “CORRection” is the amount of “fuel” being taken from or added to the engine by the ECU. The correction value is shown as a percentage (%) of fuel being adjusted to or from the base map. As the vehicle is driven and the self-learn function has time to adjust, this value should decrease. Some correction should always be expected as the system compensates for weather and driving conditions. During idle conditions the closed loop corrections works alone, there is no self-learning. The normal range of AFR corrections after self-learning is complete, should be around ±5%. If AFR Correction values exceeds ±25% consistently, you should contact Edelbrock Tech Support for assistance.

AFR AND AFR S.P. BAR GAUGES - The “Air-Fuel Ratio” and “Setpoint” bars provide a visual representation of the current engine performance conditions. The “AFR” is measured from the Wide Band Oxygen (O2) Sensor and is displayed as the “Ratio” of the Air and Fuel mixture leftover from the combustion process. The AFR “Setpoint” (SP), is the value the ECU is trying to achieve. This value is set in the Advanced Tuning section under Air Fuel Ratios, the AFR SP will change as the vehicles driving conditions change between Idle, Cruise and WOT.

To facilitate ECU Self-Learning and troubleshooting, it is recommended to hold both a steady throttle and vacuum level to match the AFR bar with the Setpoint bar. You should notice the AFR Correction value move closer to zero as the AFR and Setpoint match. Maintain a steady driving condition to insure the Closed-Loop and Self-Learning indicators remain “Green” during this process.

CLOSED LOOP INDICATOR - This light will switch between inactive (RED) and active (GREEN) states, and will indicate whether or not the ECU is actively controlling fuel corrections. The ECU will be in “Open Loop” mode (RED), for the first 25 seconds after the engine starts. After the Oxygen Sensor has reached operating temperature the “Closed Loop” mode (GREEN) light will activate. However, if the throttle is opened too aggressively, or if the engine enters a “transient” state, the indicator will switch off (RED).

SELF-LEARNING INDICATOR - This light functions similarly to the Closed Loop Indicator. Self-Learning will be inactive when the Engine is idling or below 170°F.
**MAP/ECU SETTINGS**

This section contains all the functions related to managing the ECU’s base software functions. Here you can reset the self-learn table and default values, back up and save calibrations, load new calibrations and firmware.

Press the Reset, Save, and Restore labels to view additional information for each category.

### RESET

**RESET SELF-LEARN**

This will clear all values in the Self-Learn table in the ECU. This is particularly useful if you are experiencing persistent hunting, surging at idle, or during certain driving conditions.

**RESET ECU MODIFIERS**

This will reset all the Advanced Tuning settings back to the default values. After defaults have been restored, you must re-calibrate the Idle Target and Throttle TPS sensor before driving the vehicle.

### BACKUP

- These features will allow you to back up the current engine map and calibration settings. Once your engine is running smoothly and the average AFR Correction numbers are minimal in most driving conditions, it is recommended to save the current configuration for backup purposes. All saved settings and maps are stored to the tablet and can be re-loaded to the ECU using the “Restore” options.

**SAVE CURRENT MAP**

- To Backup the Current Map on the ECU:
  
  - The ECU must be connected with the tablet.
  - Do NOT backup a Map while driving.
  
  1. Press the “READ” icon to open the current map on the ECU.
2. Press "SAVE" once the map name is displayed, all maps are saved to the Custom Map Folder.

**SAVE ECU SETTINGS**

- Why Backup Your ECU Settings?

Saving your E-Street ECU Settings periodically is good practice to provide multiple restore options for your vehicle. In the event of unexpected or undesirable driving performance, you can restore ECU settings to a known “optimal-running” calibration.

- Calibration Settings that will be saved:

  1. ECU Self-Learning map correction table
  2. Advanced Tuning parameters:
     - AFR Targets
     - Idle Target
     - TPS Calibration
     - Accel Fuel
     - Cold Start
     - Rev-Limiter
     - Fan Control
     - On/Off options

- To Backup ECU Settings:

  1. Press “READ” to open the current ECU Settings.
  2. Enter a description for the settings file.
  3. Press “SAVE”.

     Suggested naming conventions for ECU Settings files:
     - {Date}_{Brief Description}
     - Examples:
       - Nov10_Cruising
       - Dec19_ColdWeather

**RESTORE**

**WARNING**

- Please contact Edelbrock Tech Support before attempting to restore or load any Map, Firmware, or ECU Settings files if you are uncertain of the entire process. Improper uploads, dropped, connections, or incorrectly selected files can potentially damage/corrupt your ECU and/or engine.

- **DO NOT** load any Map, Firmware, or Settings file to the ECU while driving or if the engine is currently running. These procedures should only be done with Key-ON ECU power and the engine is Off.

**Always Power-Cycle the ECU after loading a Map or Firmware.**

  1. The App will disconnect automatically once a file is loaded.
  2. Turn the Ignition Key to the Off position.
  3. Wait 10 seconds.
  4. Turn the Ignition Key back to the On position.
Do NOT press the LOAD or READ icon multiple times after the initial press.

Follow these general guidelines for any file loading process:

1. Key-ON power to the ECU
2. Engine is Off (not running)
3. Bluetooth is Connected
   - Select the appropriate file
   - Press the “LOAD” icon to start sending the file to the ECU
   - When the file is finished loading, Power-Cycle the ECU
   - Press the “FINISH” icon to exit the menu.
4. Verify the new file under the System Info menu.

LOAD A MAP

Make sure you understand all warnings, guidelines, and procedures.
DO NOT load any Calibration Maps while driving the vehicle!

1. Select your Map file (.TAB). You can use your finger to swipe up or down the list if necessary.
   a. The menu will initially default to the Custom Maps directory.
   b. If you want to load a Base Map instead, press to switch the map directory.
      Press the same icon once more to switch back to the Custom Maps directory.
2. Press “LOAD” to send the map to the ECU.
3. Once loading is complete, Power-Cycle the ECU.
4. Press “FINISH” to exit the menu and re-connect to the ECU.

After you have finished loading a map, you will need to re-calibrate your Idle Target and TPS before driving the vehicle.

If you have an ECU Settings file saved, you can use the Restore ECU Settings menu to re-apply your Advanced Modifiers (including TPS calibration and Idle Target).

RESTORE ECU SETTINGS

Make sure you understand all warnings, guidelines, and procedures.
DO NOT load any ECU Settings while driving the vehicle!

Reloading ECU Settings will restore both the Self-Learn Table corrections and Advanced Tuning Modifiers.

1. Select your Settings (.VAL) file. You can use your finger to swipe up or down the list if necessary.
2. Press “LOAD” to send the map to the ECU.
3. Once loading is complete, Power-Cycle the ECU.
4. Press “FINISH” to exit the menu.

Tips:

- Restore an ECU settings file to save time from manually re-applying the Idle Target and TPS calibration.
- You can restore settings from a known “good” running condition to help troubleshoot performance concerns.
- If a new or updated Map is loaded, you can “Restore” the ECU Settings first, then “RESET” your self-learn table to optimize the new map and retain your current modifiers.

LOAD ECU FIRMWARE

Make sure you understand all warnings, guidelines, and procedures before loading firmware. Do NOT load a firmware while driving the vehicle!

Please ensure that a Bluetooth connection is stable for at least 3 minutes before attempting to re-flash the firmware. For best results, open the vehicle hood and bring the Tablet as close to your ECU as possible for the entire Firmware loading process.

The ECU may become damaged if the firmware fails to load due to a dropped connection. As a result, the Bluetooth may become unstable or unable to re-connect. Should this occur, please contact the Edelbrock Tech Support Line for assistance.

1. Select your ECU Firmware file (.HEX). You can use your finger to swipe up or down the list if necessary.
2. Press “LOAD” to send the firmware to the ECU.
3. Once loading is complete, Power-Cycle the ECU.
4. Press “FINISH” to exit the menu and re-connect to the ECU.

After you have finished flashing the firmware, you will need to re-calibrate your Idle Target and TPS before driving the vehicle.

Tips:

- A new or updated firmware should be flashed BEFORE a new/updated base map, as there may be some changes in the firmware that the new map will rely on. For more information on the current changes in Firmware or Base Maps, visit the EFI section of Edelbrock’s website: www.edelbrock.com
SYSTEM INFO:

Once connected to an ECU, you can verify the app version, ECU Firmware, ECU Serial #, and Calibration Map.

CONNECTION SETTINGS:

Only E-Street ECUs that are paired to the Tablet will be automatically listed in this menu. When opening this menu, any currently active ECU connections will be stopped.

TO CONNECT WITH AN ECU:

- Select the ECU, (highlighted in red), from the device list.
- Make sure the ECU has either Key-On power, or the engine is running.
- Press “OK” to start connecting.
- Please wait for the Tablet and ECU to connect.
- If successful, the connection status icon should display:

  ![Connection Status Icon]

  NOTE: The tablet will make three more attempts to connect to the ECU if the first attempt fails. Refer to the Troubleshooting section if you are still experiencing connectivity issues.

If your ECU is NOT listed, make sure it has Key-On power, and press the “ECU Search” icon.

Searching for an available ECU may take up to 30 seconds before being found.

Once your ECU is shown, proceed to follow the same connection procedures as above. The Tablet will ask you to confirm or enter in a “Pairing Code” before completing the process.
To Remove or “Un-Pair” an ECU, press the “Trash Can” icon:

This will delete the ECU from the Tablet. To connect to an un-paired ECU, follow the connection procedures previously described.

For more details on Bluetooth connections, please refer to the Tablet Quick Start Section and Troubleshooting section.

E-STREET UPDATES:

Starting with app version 2.0, all available updates released on the Edelbrock website can be downloaded directly from the internet to your tablet using this app.

This process will require an internet connection. Please connect the Tablet to an active Wi-Fi Network before proceeding to open the updates menu.

- The app will automatically search for any update to the E-Street System when this menu is opened.
- If any update(s) are available, press to start downloading files. The download process may take up to 5 minutes depending on your connection speed and amount of files being transferred.
- When the updates are completed, press once more to complete the process.

To verify the updates, please visit the Edelbrock Website for a list of changes and revisions. Generally, a new app version will include the most recent firmware and calibration maps, which can be used to update your ECU after installation.

If there are NO updates available, the Update menu will display a “No Updates Found” message. In addition, if your Tablet is NOT connected to the internet, you may receive this same message as well.

Please refer to the Tablet Quick Start Guide, for more details on the following:

- Connecting to the Internet on a Wi-Fi Network.
- Installing an updated Edelbrock App version.
- Transferring updates to your Tablet from a Computer if you are unable to connect to the internet.
TROUBLESHOOTING

VEHICLE DOES NOT START

• Is the Tach Input Connector configured properly?
  - Refer to TACH INPUT NOTES on Paged #19-20 for details.

• Does the E-Street system have adequate fuel pressure?
  - Check the Gauge Display Screens on the tablet to verify the fuel system is operating at 48-50 PSI (depending on fuel system used).

• Does the Fuel Pump run for 5-8 seconds with Key in the "ON" position?
  - Verify that the Pink/Black switched power wire on the E-Street harness has +12 Volts in the key "ON" and "CRANKING" positions.
  - Check the 30 amp fuse on the E-Street harness and replace if necessary.

• Has the Setup Wizard procedure been completed?
  - The Setup Wizard needs to be completed before the vehicle will start.

• If running a Fuel Sump system: Has the Fuel Sump been properly primed?

• Is your ignition system providing spark?

ENGINE STALLS UNEXPLAINABLY

• Is the fuel level below 1/4 tank?
  - Older vehicles have fuel tanks with poor fuel pick-up locations which may have difficulty "picking up" fuel especially when the fuel level is below 1/4 tank. This issue is enhanced when fuel levels are low and fuel sloshing is present. Try adding fuel to the tank to verify that this is not the issue.

• Is the idle speed screw on the throttle body properly set?
  - Refer to Page #31 or the Idle Tuning/Cal TPS section in Advanced Tuning on the tablet to properly adjust the idle speed screw.

• Has the E-Street system had sufficient driving time for the self-learning feature to apply the necessary fuel trim corrections?
  - In most cases, the vehicle just needs additional driving time to adequately correct the fuel trims. Refer to the Getting Familiar w/ E-Street EFI section on Page #27.
  - Improper initial ignition timing. Suggested initial ignition timing for E-Street is 18-20° BTDC.
  - Erratic tach input signal. See Pages #19-20, Tach Input Signal Notes.
IDLE HUNT OR SURGING

• Is the idle speed screw on the throttle body properly set?
  - Refer to Page #31 or the Idle Tuning/Cal TPS section in Advanced Tuning on the tablet to properly adjust the idle speed screw.

• Has the Throttle Position Sensor (TPS) been properly calibrated? Does the TPS read 10% at Idle on the tablet display screen?
  - Refer to Page #26 or the Idle Tuning/Cal TPS section in Advanced Tuning on the tablet to properly adjust the idle speed screw.
  - If the idle speed screw is properly set, and the TPS is still not at 10% when the engine is idling, you may have a faulty TPS sensor. Please contact the Edelbrock Tech Support team at 1-800-416-8628 for further assistance.

• Is the ignition timing properly set?
  - Verify ignition timing with timing light.

• Verify there are no vacuum leaks present.

• Verify exhaust system is properly sealed.

VEHICLE HAS POOR ACCELERATION

• Has the E-Street system had sufficient driving time for the self-learning feature to apply the necessary fuel trim corrections?
  - In most cases, the vehicle just needs additional driving time to adequately correct the fuel trims. Refer to the Getting Familiar w/ E-Street EFI section on Page #27.
  - To aid the self-learning feature, apply soft and slow throttle in the area of hesitation. This will allow the system to correct the Fuel Trims.
  - Erratic tach input signal. See Pages #19-20, Tach Input Signal Notes.

• Is the ignition timing properly set?
  - Verify ignition timing with timing light.

• If the vehicle continues to accelerate poorly, adjustments to the Accelerator Pump tune may be necessary.
  - Refer to the Accel Fuel Tuning Tips section on Page #30 or in the Advanced Setup section of the tablet.

POOR PERFORMANCE AT WIDE OPEN THROTTLE

• Has the E-Street system had sufficient driving time for the self-learning feature to apply the necessary fuel trim corrections?
  - In most cases, the vehicle just needs additional driving time to adequately correct the fuel trims. Refer to the Getting Familiar w/ E-Street EFI section on Page #27.
• The WOT Setpoints may be set too lean or too rich.
  - Refer to the Air Fuel Ratio section on Pages #28-29, or in the Advanced Setup section of the tablet.

• Is the fuel level below 1/4 tank?
  - Older vehicles have fuel tanks with poor fuel pick-up locations which may have difficulty "picking up" fuel especially when the fuel level is below 1/4 tank. This issue is enhanced when fuel levels are low and fuel sloshing is present. Try adding fuel to the tank to verify that this is not the issue.

• Inadequate fuel supply.
  - Check the Digital Display screen on the tablet to verify the fuel system is operating at 48-50 PSI (depending on fuel system used).

• Does Injector Duty Cycle exceed 100% on the Digital display of tablet at Wide Open Throttle.
  - If yes, increase the fuel pressure, or upgrade your fuel system.

• Verify exhaust system is properly sealed.

ENGINE SURGES DURING STEADY THROTTLE CRUISE

• Has the E-Street system had sufficient driving time for the self-learning feature to apply the necessary fuel trim corrections?
  - In most cases, the vehicle just needs additional driving time to adequately correct the fuel trims. Refer to the Getting Familiar w/ E-Street EFI section on Page #27 of this instruction manual.
  - Erratic tach input signal. See Page #20, Tach Input Signal Notes.

• The Cruise Setpoints may be set too lean.
  - Refer to the Air Fuel Ratio section on Pages #28-29, or in the Advanced Setup section of the tablet.

• Verify exhaust system is properly sealed.

• Try holding a steady throttle at point of issue to allow self-learn to adjust.

• Self-learn may be corrupted. Reset the "self-learn" feature. Refer to Page #35 for instructions or the Map/ECU Settings menu on the tablet.

LIGHT THROTTLE HESITATION DURING ACCELERATION

• Has the E-Street system had sufficient driving time for the self-learning feature to apply the necessary fuel trim corrections?
  - In most cases, the vehicles just needs additional driving time to adequately correct the fuel trims. Refer to the Getting Familiar w/ E-Street EFI section on Page #27.
- To aid the self-learning feature, apply soft and slow throttle in the area of hesitation. This will allow the system to correct the Fuel Trims.

- The Idle or Cruise Setpoints may be set too lean.
  - Refer to the Air Fuel Ratio section on Pages #28-29, or in the Advanced Setup section of the tablet.

ACTUAL AFR WON’T MEET AFR SETPOINT
- Does the fuel correction exceed 25% at idle when engine is warm?
  - Verify Fuel Pressure.
  - Is coolant temp above 170°F, self-learn not enabled below 170°F.

IDLE SPEED WON’T MATCH IDLE SPEED SETPOINT
- Is the Idle Speed Screw on the throttle body properly set?
  - Refer to the top of Page #26, or the Idle Tuning/Cal TPS section in Advanced Tuning on the tablet to properly adjust the idle speed screw.

- Has the Throttle Position Sensor (TPS) been properly calibrated? Does the TPS read 10% at Idle on Tablet Display Screen?
  - Refer to Item #3 on Page #31, or the Idle Tuning/Cal TPS section in Advanced Tuning on the tablet to properly calibrate the TPS.
  - If the idle speed screw is properly set, and the TPS is not at 10% when the engine is idling, you may have a faulty TPS sensor. Please contact the Edelbrock Tech Support team at 1-800-416-8628 for further assistance.

POOR VACUUM AT IDLE
- Is the ignition timing properly set?
  - Verify ignition timing with timing light. Suggested initial ignition timing for E-Street is 18-20° BTDC.

- Does the fuel correction exceed ±25% at idle when engine is warm?
  - Verify that the correct base Map was loaded during the Setup Wizard. Open the System Info menu on the tablet and compare your MAP with the CID and Camshaft listed on the Vacuum chart at the end of this manual.

- Verify there are no vacuum leaks present.

COLD START REQUIRES EXCESSIVE CRANKING ON STARTER.
- Cycle key a few times to build up fuel pressure.
ENGINE PERFORMS POORLY WHEN ACTUAL AFR AND AFR SETPOINT ARE ALIGNED.

- Check the exhaust system for any leaks, this will cause improper O2 readings which will throw off the O2 setpoints.

- Is the ignition timing properly set?
  - Verify ignition timing with timing light.

- Verify AFR setpoints are properly set.
  - Refer to the Air Fuel Ratio section on Pages #28-29, or in the Advanced Setup section of the tablet.

- Verify exhaust system is properly sealed.

BLUETOOTH CONNECTIVITY ISSUES

A majority of Bluetooth connectivity problems can be resolved by either restarting the tablet, switching the Bluetooth radio off then back on, or by standing closer to the ECU with the tablet. Please follow the General procedures first, then Advanced to troubleshoot. If there are still difficulties with Bluetooth Connectivity, contact Edelbrock Tech Support.

- General troubleshooting procedure:
  1. Turn ECU Off
  2. Restart Tablet
  3. Start Edelbrock App
  4. Turn ECU ON and attempt to re-connect through the E-Tuner app
  5. Once connected, start the engine

- Advanced troubleshooting procedure:
  1. Turn the ECU Off
  2. Unpair the ECU from the Android Bluetooth Settings
  3. Turn the Bluetooth Radio Off, then back On
  4. Turn On the ECU, but do NOT start the engine
  5. Search and Pair the ECU from the Android Bluetooth Settings*
  6. If successfully paired, start the Edelbrock App, then open the Connection Settings Menu
  7. Scan and select the Paired ECU. Press “OK” to start connecting
  8. If the E-Street app connects, you may now start the engine.

*Refer to the Tablet Quick start section for more details on accessing the Bluetooth Settings.

- Is the ECU paired to the Tablet?
  - If your ECU is not listed in the Connection Settings menu please follow the Bluetooth pairing procedures outlined in the Tablet Quick Start section.
• Does the ECU have Key-On Power?
  - Make sure the ECU has at least Key-ON power before connecting to the ECU. Stop
    any current attempts to communicate before re-connecting to the ECU.

• Has the ECU temperature exceeded 130°F?
  - The ECU may stop the Bluetooth data, and must cool down to re-connect.

• Is the tablet and/or vehicle battery sufficiently charged?
  - If the Tablet battery is too low (below 15%), Bluetooth and other wireless
    communication features may be temporarily switched off to conserve battery life.
  - The ECU requires at least +12 Volts to function. Otherwise, the Bluetooth may not
    have enough power to transmit data to the Tablet. Also, please verify that all ECU
    connectors are properly inserted.

• Are the ECU and Tablet positioned within at least 15 feet of each other?
  - For best results, the Tablet should have as minimal physical obstructions to the ECU
    as possible. Also verify ECU mounting location. See Step #7, Page #15.
  - Turn off or disable other Bluetooth-enabled devices while the Tablet is connecting to
    the ECU. (Ex: Radios, phones, headsets, Etc.)
  - If the ECU is located in the engine compartment, pop the hood and bring the tablet
    as close-as-possible to the ECU for the best chances of initially connecting.

• Was the ECU Firmware recently flashed?
  - If loading the firmware fails and Bluetooth has become unstable, contact Edelbrock
    Tech Support.
Edelbrock’s E-Street Tablet and App are intended to be used as “hands-free” display tools while driving. Please keep the tablet secured to the supplied vehicle mount at all times while driving, as distracted driving is extremely dangerous and illegal in most states. Any tablet feature or app function which requires prolonged attention or adjustment should only be performed while the vehicle is stopped in a safe location or by a passenger.

Please verify with your local laws for appropriate and legal mounting locations of the Tablet in your vehicle.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>☀️</td>
<td>Do NOT store (or charge) the tablet in a heated environment or in direct sunlight for prolonged periods of time. Heat may degrade the battery life and Bluetooth performance.</td>
</tr>
<tr>
<td>📡</td>
<td>Each tablet has a maximum operating temperature limit of 120°F. If the Tablet becomes too hot during usage, it may automatically shut off and may prevent you from powering on until the device has sufficiently cooled down.</td>
</tr>
<tr>
<td>🌞</td>
<td>Store the Tablet in a dry location. Do NOT use if submerged in water or liquids.</td>
</tr>
<tr>
<td>☑️</td>
<td>Contact Edelbrock Tech Support, not the Manufacturer, if you require assistance, or need replacement units or parts for your Tablet.</td>
</tr>
</tbody>
</table>

This guide will provide additional information for the general use of the E-Street Tablet, and is intended to be used in conjunction with the E-Street Installation Manual. The tablet model and accessories included in your E-Street kit may look different than the models used in this quick start guide. However, all functionality, buttons, and basic uses will be common for all Android Tablets.
First Steps:

1. Charge your Tablet **before initial use.** E-Street Tablets are typically shipped with 100% battery charge, however, the out-of-the-box charge may be less depending on delivery or purchase date.
   - Assemble the supplied Power Adapter, connect to a suitable outlet, and insert the USB cable to the appropriate ports on the charger and your Tablet.
   - The battery can be expected to last between 2–6 hours depending on your usage, and may take up to 4 hours to completely re-charge from 0%.

2. Power ON the Tablet.
   - Press and hold the Power Button for three seconds to start the tablet.
   - On most units, the power button will be located along the outer edge of the Tablet frame (shown below), and will typically have a \( \square \) symbol near it.

3. Once Powered-On, you can start the Edelbrock EFI App:
   - Press the Edelbrock Icon \( E \) and wait for the app to load:
Basic Layout of the Android Tablet

**NOTE:** The Android Home Menu (as pictured below) may appear different depending on your Tablet model supplied with your kit.

1. **Android Settings**
2. **File Manger**
3. **Navigation Buttons**

- **Back:** Return to a previous menu, cancel a selection, or close the Edelbrock App
- **Home:** Immediately opens the Android Home Page
- **Recent Apps:** View a list or history of recently used apps

**Android Settings Icons:**

Your Settings icon may differ depending on the model Tablet you have. Regardless of icon type, they will have the same basic functions.
File Manager:

The File Manager will be useful for managing all files, including all E-Street Maps, Firmware, and Instructions. For more details, see below:

The Edelbrock App Folder:

- CustomMaps
- Firmware
- Maps
- Datalog
- Help

Android Settings

The Settings covered in this guide are items which may be helpful for basic E-Street app functionality.

Bluetooth Settings:

Since the Edelbrock E-Street EFI system uses Bluetooth communication, it is important to know how to access and manage these connections from your Tablet.

1. Open the Android Settings
2. Select the “Bluetooth” settings option
3. The Bluetooth functions can be controlled by pressing the On/Off switch on the screen:
4. From this menu, you can see a list of all “paired” and “available” Bluetooth devices:

To “Pair” an available device, press on the device name. A popup message will ask you to enter a specific “pairing code” to complete the process.

- Bluetooth pairing request
- For E-Street ECUs (RNBT-xxxx) press Pair to confirm a pre-generated pairing code.

To “Unpair” a device, select the icon next to the Paired device name. Then, select “unpair” to remove this device from your Tablet. If you wish to communicate with that device again, you must “Pair” it.

NOTE: Bluetooth devices are position and range dependent. Even if a device is listed as “paired” or “available,” communications to the Tablet will be unstable or reduced if it is too far away or if there are too many obstructions (metal objects, bodies, etc) between the device and Tablet.
Wi-Fi Internet:
In order to use any internet related function or download E-Street system updates, your Tablet must be connected to the Internet via Wi-Fi network.
   • Open Android Settings and select the “Wi-Fi” settings option.
   • To use this function, make sure the Wi-Fi radio is enabled.

To connect to the internet:
Your Tablet must be within range of an active Wi-Fi network and you must know (or have permission to use) the corresponding network password. Select the network name or “ID”, and enter in the network password. If successful, the Tablet will automatically attempt to connect to that network whenever it is within range.

To remove a Wi-Fi network from the Tablet:
Select the network name and press "Forget".

App Manager:
Should the Edelbrock app or any Android app suddenly stop functioning, it is important to manually “stop” or “close” that app from the Tablet’s App Manager. Doing so will properly restore the apps ability to resume use.

1. Open the Android Settings, and select the “Apps” option.
2. Once in the App Manager, select the app that you wish to restart and press the “Force-Stop” icon.
3. You may now restart the app.

Security Settings:
   • Open the Android Settings, and select Security.
To ensure optimal performance with the E-Street app, the Tablet must have the “Unknown Sources” option enabled (checked) and “Lock Screen” disabled (none).
Display Settings:
The E-Street Tablet has a default screen brightness setting of approximately 80% and a 30 minute sleep timer. Adjust these options to suit your viewing preferences. Any changes will also affect the battery life.

File Manager: Identifying the Edelbrock File Folders

<table>
<thead>
<tr>
<th>File Type</th>
<th>Folder Location</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Android App (.APK)</td>
<td>“Edelbrock”</td>
<td>Main E-Street Folder. New installation (.APK) files are saved here.</td>
</tr>
<tr>
<td>Custom Map (.TAB)</td>
<td>“CustomMaps”</td>
<td>For custom built map or saved map/ECU settings files.</td>
</tr>
<tr>
<td>Base Maps (.TAB)</td>
<td>“Maps”</td>
<td>For all base maps used for the Setup Wizard.</td>
</tr>
<tr>
<td>Firmware (.HEX)</td>
<td>“Firmware”</td>
<td>For the ECU Firmware file.</td>
</tr>
<tr>
<td>Instructions (.PDF)</td>
<td>“Help”</td>
<td>For all installation instructions and manuals.</td>
</tr>
</tbody>
</table>

Tips for using the File Manager:

*Note: The File Manager app on your Tablet may look or function differently than what is covered in this manual, however, the basic concepts will be similar.*

- All tablets have a "root" or "main" file storage folder. You will be able to access your downloaded files, images, camera pictures, as well as manage the Edelbrock E-Street files.

- To move or transfer a file, you must first press and hold the item.
  - You can select multiple items by pressing all desired files one at a time.
  - Once selected, you should be able to press a “copy” or “cut” icon.
  - Now, you can navigate to the folder that the file will be transferred to.
  - Press the “paste” icon to finish the file transfer.

- Make sure to copy/cut and paste each Edelbrock E-Street file to the correct “Edelbrock” sub-folder.

- To delete a file or folder, hold the item to select it. Then press the “Delete” or “Trash Can” icon.
  - If the Edelbrock folder is accidentally deleted, simply close the Edelbrock app (if it is currently running), and restart the Edelbrock app. This will automatically restore the default system files. However, any new updates, downloads, or custom files will NOT be restored.

- To extract or open a package file, such as a “.ZIP,” select the file and press the “extract” option.
Updating the E-Street EFI app:

First, uninstall the current app.
1. Open Android Settings
2. Open the Apps Manager
3. Select the Edelbrock App

Then, install the new Edelbrock EFI app.
1. Open Your File Manager
2. Open the Edelbrock Folder
3. Select the New App

Finally, initialize the new files.
Close the app after installation. Open the File Manager → Edelbrock Folder and delete the Maps and Firmware folders. All new files will be initialized the next time you start the Edelbrock app.

The app update is now complete! You are ready to load a new map or firmware file to your E-Street ECU.

NOTE: All information regarding the most current app version will be available from Edelbrock’s E-Street EFI web page. To verify the app version on your Tablet, open the Edelbrock E-Street “System Info” menu.
If you are unable to access the internet on the Tablet, you can also update using a computer (PC):

- On your computer web browser, go to: www.edelbrock.com

All available updates for the E-Street system can be accessed from the EFI/E-Street page, or EFI/Support page. You must then connect your Tablet to a computer (shown below) and transfer all downloads to the correct “Edelbrock” folders on your E-Street Tablet.

To connect the Tablet to a computer (PC):

1. Power On the Tablet
2. Power On the Computer (PC)
3. Connect Tablet to PC, using a USB cable
4. Wait for the Tablet to initialize on the PC
5. Open the Tablet’s Storage Folder

   Note: If an Autoplay pop-up does not appear, you can open “My Computer” to access the Tablet.

6. Open the Edelbrock Folder

   Note: Your Tablet’s folder structure may be different than the sample shown below.

7. Drag & Drop to transfer files
8. Unplug the Tablet when finished

Once all E-Street files are transferred to the correct Edelbrock sub-folder, refer back to the “Updating the E-Street EFI App” procedures.
**General Tips:**

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
<th>Tip 1</th>
<th>Tip 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Battery" /></td>
<td>Indicates the Battery is charging. When the meter is “full,” battery charging is complete.</td>
<td>Indicates an “active” Wi-Fi internet connection. If Wi-Fi is disabled, this icon will not be displayed. If the Wi-Fi Network is unavailable, this icon will be “empty.” Wi-Fi connections can be managed from the Android Settings, Wi-Fi Options.</td>
<td>Indicates an “active” or enabled Bluetooth receiver on the Tablet. If Bluetooth is “off,” this icon may not be shown.</td>
</tr>
<tr>
<td><img src="image" alt="Power Off" /></td>
<td>• Your battery can be expected to last at least between 2–4 hours of continuous use while communicating to your E-Street EFI system. • Make sure to charge the tablet with an appropriate power adapter. Typically a computer and some vehicle adapters may not provide enough current to sufficiently charge it. • You will be notified to charge the tablet if the battery falls below 15%.</td>
<td><strong>Troubleshooting Tip #1:</strong> Powering the Tablet Off, can in most cases, resolve device unresponsiveness, frozen screens, or inconsistent Bluetooth connection attempts.</td>
<td><strong>Troubleshooting Tip #2:</strong> Try switching certain functions Off, then back On to “jump-start” a stuck wireless connection. (Bluetooth or Wi-Fi)</td>
</tr>
<tr>
<td><img src="image" alt="Google Play Store" /></td>
<td><strong>Google Play Store:</strong> Access and download a variety of apps for your Tablet. <em>Requires an active “Google” Account to be set up on the Tablet.</em>*</td>
<td><img src="image" alt="Google Chrome" /></td>
<td><strong>Google Chrome:</strong> Browse the internet using this app. You will be able to access the Edelbrock website: <a href="http://www.edelbrock.com">www.edelbrock.com</a>  <em>Requires an active Wi-Fi connection</em></td>
</tr>
<tr>
<td><img src="image" alt="Google Account" /></td>
<td><strong>To add a Google Account:</strong>  • Open Android Settings, scroll down to “Accounts,” and select: <img src="image" alt="Add account" />  • From the Pop-Up menu, select: <img src="image" alt="Google" />  • Follow the on-screen directions to set up an existing or new account: <img src="image" alt="Add a Google Account" /></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Power Off**

To turn the Tablet OFF, press and hold the “Power” button on the device for 2–3 seconds. Select “Power Off” from the options menu that pops up. Alternatively, you may hold the power button for longer to manually shut the tablet off.
FAN & A/C TRIGGER INSTALLATION

The diagrams provided on Page 45 are to assist in the installation of switch triggers for electric fans and AC kick up using the provide pigtails (not pre-installed). The E-Street EFI uses low voltage switched ground outputs for electric fan triggers and a low voltage switched ground AC kick up input. These triggers are controlled by the ECU using parameters defined in the E-Tuner software. The pinouts for the fan outputs are: Pinout 29 - Fan #1 and Pinout 30 - Fan #2 (See Pinout Diagram on Main Harness Schematic). The AC kick up trigger, Pinout 7, is a ground input used to bump the idle when the AC is switched on. The Fan trigger(s) and AC kick up trigger must be used in conjunction with a 30 AMP automotive relay (not included). Each accessory trigger will require its own 30 AMP automotive relay.

NOTE: Auxiliary Outputs are rated at 1.5 AMP max and must be configured to activate with a relay (not included). DO NOT connect ECU fan outputs directly to the fans. DO NOT connect AC compressor clutch switch directly to the E-Street ECU.

PIGTAIL INSTALLATION

To install the provided pigtails, use a small flathead screwdriver to push in the large locking tab (Image A). Insert the pigtail(s) to the appropriate pinout(s), on the harness side of the connector, until the pigtail is fully seated. When complete, push down on the two small tabs to re-lock the locking tab (Image B).
FAN & A/C TRIGGER DIAGRAM

FAN #1

RELAY

E-STREET MAIN HARNESS
FAN #1 PIN 29

FAN #1

(+)

GROUND (-)

E-STREET MAIN HARNESS
BATTERY (+)

FUSE

(30A)

FAN #2

RELAY

E-STREET MAIN HARNESS
FAN #2 PIN 30

FAN #2

(+)

GROUND (-)

E-STREET MAIN HARNESS
BATTERY (+)

FUSE

(30A)

AC KICK UP
RELAY

E-STREET MAIN HARNESS
PIN #7

AC KICK UP

(+)

GROUND (-)

AC COMPRESSOR
CLUTCH ACTIVATION SIGNAL

Part #3600, 3602, 3606
Rev. 2/5/15 - QT

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MAIN HARNESS SCHEMATIC

A full size harness schematic is available here: www.edelbrock.com/electronics/efi/3600-schematic.pdf
<table>
<thead>
<tr>
<th>CAL. I.D</th>
<th>FUEL SYSTEM TYPE</th>
<th>CUBIC INCHES RANGE</th>
<th>CATEGORY</th>
<th>CAMSHAFT DURATION @ 0.050 LIFT</th>
<th>GAUGE PRESSURE</th>
<th>IDLE VACUUM</th>
<th>IDLE SPEED</th>
</tr>
</thead>
<tbody>
<tr>
<td>35091</td>
<td>RETURN/SUMP 49 PSI</td>
<td>281-327</td>
<td>STOCK</td>
<td>210 OR LESS</td>
<td>19.0 - 15.0</td>
<td>700</td>
<td></td>
</tr>
<tr>
<td>35092</td>
<td>PWM 49 PSI</td>
<td>281-327</td>
<td>STOCK</td>
<td>210 OR LESS</td>
<td>19.0 - 15.0</td>
<td>700</td>
<td></td>
</tr>
<tr>
<td>35093</td>
<td>RETURN/SUMP 60 PSI</td>
<td>281-327</td>
<td>STOCK</td>
<td>210 OR LESS</td>
<td>19.0 - 15.0</td>
<td>700</td>
<td></td>
</tr>
<tr>
<td>35094</td>
<td>RETURN/SUMP 49 PSI</td>
<td>281-327</td>
<td>MILD</td>
<td>210 TO 230 DEG.</td>
<td>17.5 - 16.5</td>
<td>700</td>
<td></td>
</tr>
<tr>
<td>35095</td>
<td>PWM 49 PSI</td>
<td>281-327</td>
<td>MILD</td>
<td>210 TO 230 DEG.</td>
<td>17.5 - 16.5</td>
<td>700</td>
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In the best interest of Edelbrock LLC to provide our customers with the highest quality performance products. Edelbrock warrants the Edelbrock E-Street EFI System to be free from defects in both workmanship and materials for a period of one year from date of purchase, provided that the product is properly installed and subjected to normal use and service, is not used for racing or competition purposes and that the product is not modified or altered in any way unless specified by our instructions. Our warranty service and repair facility is located at 2700 California Street, Torrance, CA 90503. Customers requiring warranty assistance should contact the dealer from whom they purchased the product. In turn, the dealer will contact Edelbrock, and we will determine the method of satisfying the warranty. Should Edelbrock determine that the product needs to be returned to the factory, it should be accompanied by proof of purchase and a clear description of the exact problem. The product must be returned freight pre-paid. If a thorough inspection of the product by the factory indicates defects in workmanship or material, our sole obligation shall be to repair or replace the product. This warranty covers only the product itself and not the cost of installation or removal.

**EDELBROCK LLC SHALL NOT BE LIABLE FOR ANY AND ALL CONSEQUENTIAL DAMAGES OCCASIONED BY THE BREACH OF ANY WRITTEN OR IMPLIED WARRANTY PERTAINING TO THIS SALE, IN EXCESS OF THE PURCHASE PRICE OF THE PRODUCT SOLD.**

If you have any questions regarding this product or installation, please contact our Technical Department from 7:00 am - 5:00 pm, Pacific Standard Time, Monday through Friday at: 800-416-8628.